



# Circuit Breaker/Switchgear Renewal Parts Catalog

*(Low, Medium, and High Voltage)*



GE Support Services



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# GE Circuit Breaker/Switchgear Renewal Parts

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# GE Circuit Breaker/Switchgear Renewal Parts Catalog

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# GE Circuit Breaker/Switchgear Renewal Parts

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## Type AK / AKR Low Voltage Power Circuit Breakers

### Included in this Section

AKR low-voltage power circuit breakers are intended for use in commercial, industrial and utility applications. Designed for severe duty, AKR breakers are serviceable and suitable for mains, feeders and applications such as motor starting, capacitor switching/generator protection and resistance welding. They are fully rated; that is, the short time rating in most cases is equal to the short circuit rating providing the greatest opportunity for selectivity with downstream devices. The breakers are maintainable and meet ANSI Standard C37.13 and C37.16, as well as applicable UL Standards. There are five frame sizes from 800–4000 amperes with short circuit interrupting ratings to 200 kA symmetrical short circuit without fuses.

AK-2/2A-15

AK/AKU-25

AKR/AKRU-30S

### Equipment Identification and Nomenclature Guide

- Equipment Serial Number, Breaker Type, Closing Voltage/Frequency, and Connection Diagram Number (e.g. “B”) are most important for identification purposes.
- Breaker Nameplate is located to the left of the escutcheon on the breaker, and the Electrical Closing Mechanism Nameplate is located on the right of the escutcheon.

Example: **AK** \_ - **10** **D** - **2** **5** \_

| Code | General Type                        |
|------|-------------------------------------|
| AK   | Old style LVPC8                     |
| AKR  | New Style LVPC8                     |
| AKRU | Integrally fused version of AKR-30S |
| AKU  | Integrally fused version of AK-25   |

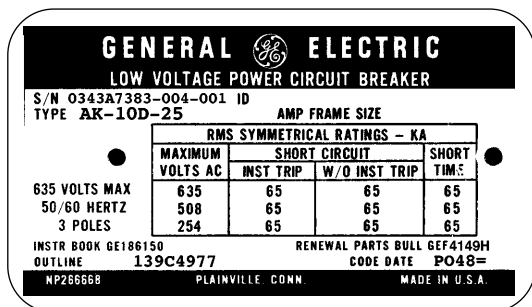
| Code           | Trip Device Type                             |
|----------------|--|
| 2              | EC   |
| 3 <sup>②</sup> | Power Sensor                                 |
| 4 <sup>②</sup> | ECS  |
| 5 <sup>②</sup> | SST  |
| 6 <sup>②</sup> | MicroVersa Trip                              |
| 7 <sup>②</sup> | MicroVersa Trip™ RMS-9                       |
| 8              | Epic MicroVersa Trip™                        |
| 9              | PowerLeader MVT+, MVTM                       |
| 10             | PowerLeader MVT+, MVTM with RMS9C Trip Units |
| N              | Non-Automatic                                |

<sup>②</sup> Discontinued

| Code  | Mounting Type                                 |
|-------|---|
| Blank | Drawout AKD Switchgear                        |
| A     | Drawout AKD-5/6 Switchgear                    |
| B     | Drawout AKR OEM Substructure                  |
| D     | Drawout AKD-8 Switchgear and OEM Substructure |
| S     | Stationary                                    |

| Code | Frame Size in Amperes |     |
|------|-----------------------|-----|
|      | AC                    | DC  |
| 25   | 600                   | 600 |
| 30S  | 800                   | —   |

<sup>①</sup> Suffix D is affixed to AKR designations to identify non-automatic DC models. e.g. AKR-NB-30D

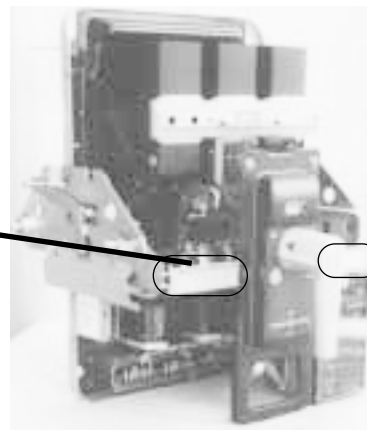
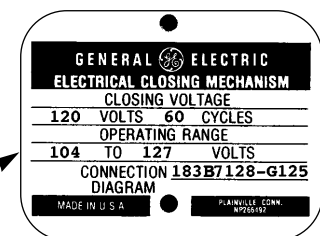


**GENERAL ELECTRIC**  
LOW VOLTAGE POWER CIRCUIT BREAKER  
S/N 0343A7383-004-001 ID  
TYPE AK-10D-25  
AMP FRAME SIZE

| MAXIMUM VOLTS AC | RMS SYMMETRICAL RATINGS - KA |               |           | SHORT CIRCUT TIME S |
|------------------|------------------------------|---------------|-----------|---------------------|
|                  | INST TRIP                    | W/O INST TRIP | INST TRIP |                     |
| 635              | 65                           | 65            | 65        | 65                  |
| 508              | 65                           | 65            | 65        | 65                  |
| 254              | 65                           | 65            | 65        | 65                  |

635 VOLTS MAX  
50/60 HERTZ  
3 POLES  
INSTR BOOK GE186150  
OUTLINE 139C4977  
RENEWAL PARTS BULL GEF4149H  
CODE DATE PO48=  
PLAINVILLE CONN. MADE IN U.S.A.

Breaker Nameplate

**GENERAL ELECTRIC**  
ELECTRICAL CLOSING MECHANISM  
CLOSING VOLTAGE  
120 VOLTS 60 CYCLES  
OPERATING RANGE  
104 TO 127 VOLTS  
CONNECTION 183B7128-G125  
DIAGRAM  
MADE IN U.S.A. PLAINVILLE CONN. NP265192

Electrical Closing Mechanism Nameplate

Figure 1: AK-2/2A-15 and AK/AKU-25 Power Circuit Breaker Nameplate Data



## 2 Low Voltage Circuit Breaker Parts

**Table 1–1, AK–2/2A–15, AK/AKU–25 and AKR/AKRU–30S Power Circuit Breaker**

| Fig. Ref. | Ref. No. | Description   | Catalog Number |       |               |            |             |
|-----------|----------|---|----------------|-------|---------------|------------|-------------|
|           |          |   | AK–2/2A–15     | AK–25 | AKU–25        | AKR–30S    | AKRU–30S    |
| 1A        | 1A/B     | Anti–Pump Relay “W” & “Y” – R Connection Diagram                          | Table 1B       |       |               |            |             |
| 1A, 1B    | 2        | Arc Quencher / Chute – AC   | 293B288G1      |       | 293B288G2     |            |             |
| 1A, 1B    | 3        | Arc Quencher Clamp / Retainer   | 269C273G2      |       |               |            |             |
| NI        | –        | Auxiliary Switch (Electroswitch) – 2A & 2B                                | 184L701AUG12   |       |               |            |             |
| 1H        | 4        | Auxiliary Switch (Electroswitch) – 5A & 5B                                | 184L701AUG13   |       |               |            |             |
| 1E        | 5        | Back Frame (Complete)   | N/A            |       | 184L700BFG23  |            |             |
| 1C        | 6        | Back Plate  | 107D7564P1     |       | 107D7564P2    |            |             |
| 1C        | 7        | Barrier between Phases  | 295B460P1      |       | N/A           |            |             |
| 1G        | 8        | Bell Alarm Assembly   | Table 1J       |       |               |            |             |
| NI        | –        | Bell Alarm Lockout Device   | 184L701BAG1    |       |               |            |             |
| 1A        | 9        | Closing Push Button Switch (includes insulator, mtg. hardware, and label) | 622C529G1      |       |               |            |             |
| 1A        | 10       | Closing Relay “X”   | Table 1B       |       |               |            |             |
| 1B        | 11       | Closing Solenoid Coil – Complete  | Table 1B       |       |               |            |             |
| 1B        | 12       | Contact Finger  | 192A9669P1     |       |               |            |             |
| NI        | –        | Control Relay   | N/A            |       | Table 1C      |            |             |
| NI        | –        | Control Relay Mounting  | N/A            |       | 343L747G74    |            |             |
| 1C, 1D    | 13       | Crossbar Assembly   | 269C277G1      |       |               |            |             |
| 1A        | 14       | Cut–off Switch Assembly   | N/A            |       | 622C505G1     |            |             |
| NI        | –        | Electrical Lockout Device for UNDV Device – AKD – 5                       | N/A            |       | 101C7842G1    |            |             |
| NI        | –        | Electrical Lockout Device for UNDV Device – Non AKD – 5                   | N/A            |       | 695C186G5     |            |             |
| 1A        | 15       | Escutcheon  | Table 1D       |       |               |            |             |
| NI        | –        | Flux Shift Trip Device  | N/A            |       | 323A6138G2    | 343L747G9  | 343L747G33  |
| 1F        | 16       | Front Frame and Mechanism, Electric Breaker                               | N/A            |       | 184L700FMG26  |            |             |
| 1F        | 16       | Front Frame and Mechanism, Electric w/ Handle                             | 184L700FMG27   |       | N/A           |            |             |
| 1F        | 18       | Front Frame and Mechanism, Manual Breaker                                 | N/A            |       | 184L700FMG25  |            |             |
| NI        | –        | Fuse Adapter  | N/A            |       | 669D843G1     | N/A        | 425D445G1   |
| NI        | –        | Fuse Mounting and OFLO – AKD  | N/A            |       | 184L700FLG3   | N/A        | 184L700FLG5 |
| NI        | –        | Fuse Mounting and OFLO – AKD– 5   | N/A            |       | 184L700FLG4   | N/A        | 184L700FLG5 |
| NI        | –        | Fuses   | N/A            |       | Table 1P      | N/A        | Table 1P    |
| 1A        | 19       | Handle (Operating / Charging)   | 669D807P1      |       | 286A8096G3    |            |             |
| 1C        | 20       | Insulation (under lower stud)   | 193A1873P1     |       |               |            |             |
| NI        | –        | Insulation for Stud, Arc Quencher Clamp                                   | 148A1926P4     |       |               |            |             |
| NI        | –        | Insulation for Upper Stud, Front  | 269C260G2      |       |               |            |             |
| 1C        | 21       | Insulation for Upper Stud, Rear   | 269C260G1      |       |               |            |             |
| NI        | –        | Lifting Device / Breaker Spreader   | 673D0500050201 |       | 0569B0595P001 |            |             |
| 1B        | 22       | Link and Bushing for Auxiliary Switch                                     | 846C0865G2     |       | 846C0865G2    |            |             |
| NI        | –        | Link Assembly (order with shaft asm.)                                     | 101C7891G2     |       | 101C7891G2    |            |             |
| 1C        | 23       | Lower Stud Assembly (not used on AK–3/3A)                                 | N/A            |       | 269C258G1     | 286A8711G1 |             |
| NI        | –        | Lubricant (red) / Grease for Drawout Breaker                              | 282A2048P9     |       |               |            |             |
| 1B        | 24       | Magnet / Armature Assembly (must supply control voltage when ordering)    | 622C521G3      |       | N/A           |            |             |
| 1K        | 25       | Maintenance Closing Handle  | 286A8863G1     |       |               |            |             |
| 1A        | 26       | Manual Trip Button  | 269C268P1      |       |               |            |             |
| NI        | –        | Movable Contact Pivot Pin (center pole)                                   | 269C280P1      |       |               |            |             |
| NI        | –        | Movable Contact Pivot Pin (outside pole)                                  | 269C280P2      |       |               |            |             |
| 1D        | 27       | Movable Contact Spring  | 412A208P1      |       |               |            |             |

NI: Not illustrated in section.

N/A: Not applicable.

**Table 1–1, AK–2/2A–15, AK/AKU–25 and AKR/AKRU–30S Power Circuit Breaker, Cont'd.**

| Fig. Ref.  | Ref. No. | Description  | Catalog Number |            |               |            |          |
|------------|----------|--|----------------|------------|---------------|------------|----------|
|            |          |  | AK–2/2A–15     | AK–25      | AKU–25        | AKR–30S    | AKRU–30S |
| 1B, 1C, 1D | 28       | Movable Main Contact Arm Assembly                          | 269C257G15     |            |               |            |          |
| 4A         | –        | MVT Tapped CTS (See Section 4)                             | N/A            | Table 4A   |               |            |          |
| 4B         | –        | MVT Fixed CT Sensor (See Section 4)                        | N/A            | Table 4B   |               |            |          |
| 4C         | –        | Neutral CT Sensor Disconnects (See Section 4)              | N/A            | Table 4C   |               |            |          |
| NI         | –        | MVT Neutral CT Sensor (See Section 4)                      | N/A            | Table 4E   |               |            |          |
| NI         | –        | MVT Sensor Amp Indicator (See Section 4)                   | N/A            |            | Table 4F      |            |          |
| NI         | –        | MVT Programmer Mounting (See Section 4)                    | N/A            |            | Table 4G      |            |          |
| 4E         | –        | MVT PM Programmer (See Section 4)                          | Table 4H       |            |               |            |          |
| 4F         | –        | MVT+ Programmer (See Section 4)                            | N/A            | Table 4H   |               |            |          |
| NI         | –        | Neutral Sensor Disconnect Plug – Cubicle (See Section 4)   | N/A            | 343L747G80 |               |            |          |
| 1A         | 30       | Open / Close Indicator                                     | 259C608G1      |            |               |            |          |
| NI         | –        | Open Fuse Lock–Out (OFLO) Control Device                   | N/A            | 108C9667G1 | N/A           | 108C9667G2 |          |
| NI         | –        | Operations Counter   | 845C264G1      |            |               |            |          |
| 1C         | 31       | Pivot  | 269C258G3      |            |               |            |          |
| 1B         | 32       | Primary Disconnect Assembly                                | Table 1E       |            |               |            |          |
| NI         | –        | Racking Crank  | 193A1990P1     |            | 568B731G1     |            |          |
| NI         | –        | Racking Mechanism for Drawout Breaker                      | N/A            |            | 184L700D0G37  |            |          |
| NI         | –        | Return Spring – Rear of Escutcheon                         | 148A2238P1     |            |               |            |          |
| 1A         | 29       | Secondary Disconnect (Movable) Device                      | Table 1F       |            |               |            |          |
| NI         | –        | Secondary Disconnect (Stationary) – Cubicle Mounted        | 21700011500    |            | 0176D7926G001 |            |          |
| 1A         | 33       | Shaft Assembly – Manual Breaker (order with link assembly) | 101C7891G1     |            |               |            |          |
| 1A, 1I     | 34       | Shunt Trip Device  | Table 1K, 1L   |            |               |            |          |
| 1C         | 35       | Spring (back of pivot)                                     | 269C280P8      |            |               |            |          |
| 1C         | 36       | Spring (outside poles)                                     | 412A250P1      |            |               |            |          |
| 1D         | 37       | Spring Clip  | 269C277P11     |            |               |            |          |
| NI         | –        | Spring Clip (center pole)                                  | 269C280P5      |            |               |            |          |
| NI         | –        | Spring for Manual Trip Button                              | 412A133P1      |            |               |            |          |
| 1B         | 38       | Spring for Primary Disconnect                              | 192A6990P166   |            |               |            |          |
| 1B         | 39       | Spring for Stationary Contact Assembly                     | 412A286P1      |            | 192A6990P387  |            |          |
| 1B         | 40       | Spring for Trip Latch                                      | 412A290P1      |            |               |            |          |
| NI         | –        | Stationary Main Contact – Brazed Tip in Center             | N/A            |            | 286A8858G3    |            |          |
| NI         | –        | Stationary Main Contact – Brazed Tip on Left               | N/A            |            | 286A8858G1    |            |          |
| NI         | –        | Stationary Main Contact – Brazed Tip on Right              | N/A            |            | 286A8858G2    |            |          |
| 1C, 1D     | 41       | Stationary Main Contact – Left                             | 805B910G1      |            | N/A           |            |          |
| 1C, 1D     | 42       | Stationary Main Contact – Right                            | 805B910G2      |            | N/A           |            |          |
| NI         | –        | Stud Connection  | N/A            |            | 286A8843P1    |            |          |
| 1C         | 43       | Stud, Arc Quencher Clamp                                   | 269C280P4      |            | 393A993P9     |            |          |
| 1C         | 44       | Support (intermediate)                                     | 269C280P6      |            |               |            |          |
| 1C         | 45       | Support (outside)  | 269C280P7      |            |               |            |          |
| NI         | –        | Terminal Board – 6 point                                   | 21700005000    |            | N/A           |            |          |
| 1L         | 46       | Terminal Board – 10 point                                  | 21700010000    |            | N/A           |            |          |
| NI         | –        | TRIP Label   | 269C268P12     |            |               |            |          |
| 1J         | 47       | Undervoltage Device With No UNDV Time Delay                | Table 1M       |            |               |            |          |
| NI         | –        | Undervoltage Device With UNDV Time Delay                   | Table 1N       |            |               |            |          |
| 1C, 1D     | 48       | Upper Stud Assembly  | N/A            |            | 569B582G1     |            |          |

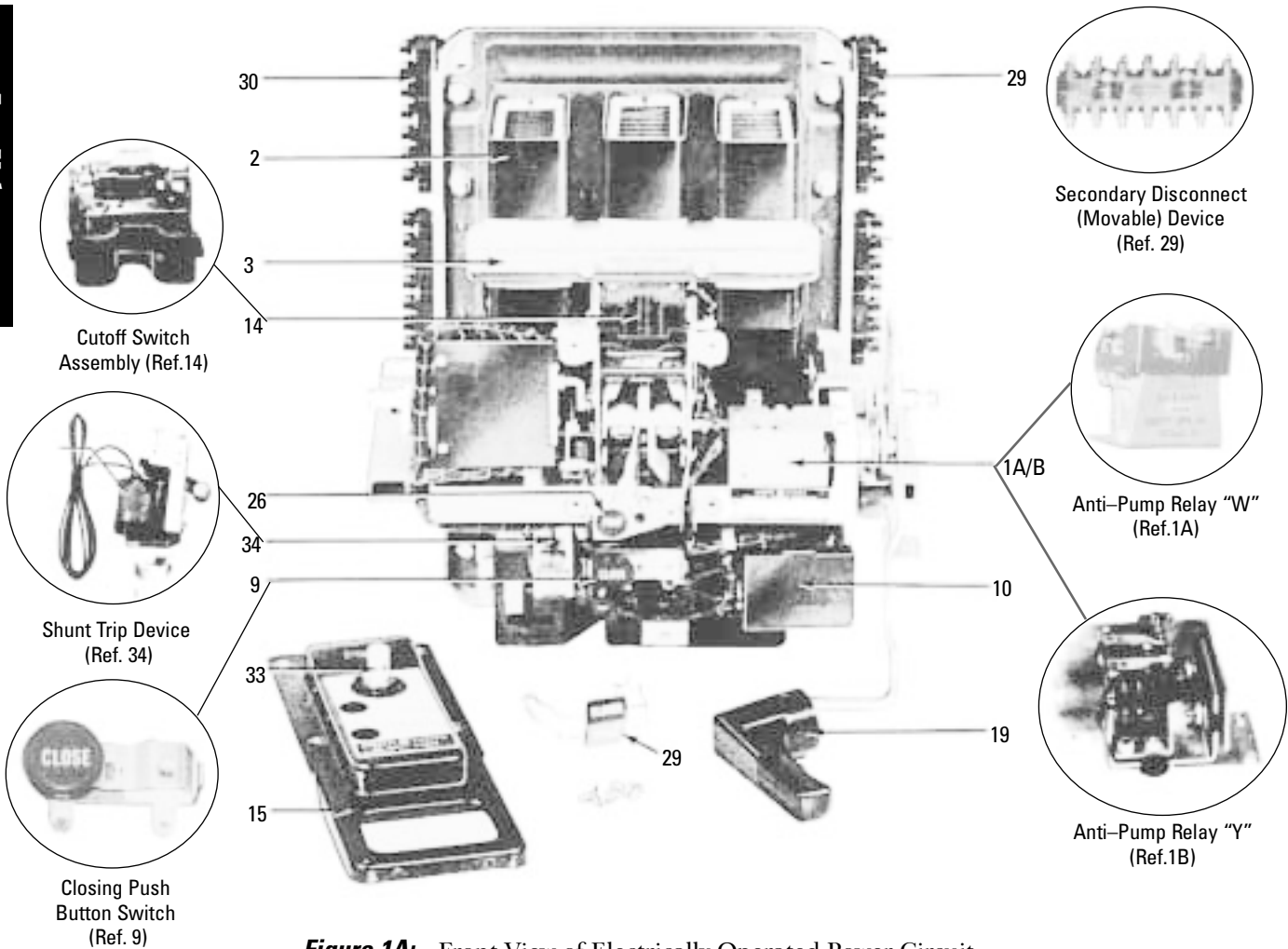
NI: Not illustrated in section.

N/A: Not applicable.





# 4 Low Voltage Circuit Breaker Parts



**Figure 1A:** Front View of Electrically Operated Power Circuit Breaker (Escutcheon removed and dismantled)

| <b>Table 1A, Front View of Power Circuit Breaker</b> |                 |   |                                 |                             |
|--|-----------------|---|---------------------------------|-----------------------------|
| <b>Fig. No.</b>                                      | <b>Ref. No.</b> | <b>Description</b>  | <b>Catalog Number</b>           |                             |
|  |                 |   | <b>AK-2/2A-15<br/>AK/AKU-25</b> | <b>AKR-30S<br/>AKRU-30S</b> |
| 1A   | 1A              | Anti-Pump Relay "W"—R Connection Diagram                                  | N/A                             | Table 1B                    |
| 1A   | 1B              | Anti-Pump Relay "Y"—R Connection Diagram                                  | Table 1B                        | N/A                         |
| 1A   | 2               | Arc Quencher/Chute-AC   | 293B288G1                       | 293B288G2                   |
| 1A   | 3               | Arc Quencher Clamp/Retainer   | 269C273G2                       |                             |
| 1A   | 9               | Closing Push Button Switch (includes insulator, mtg. hardware, and label) | 622C529G1                       |                             |
| 1B   | 10              | Closing Relay "X"   | Table 2B                        |                             |
| 1A   | 14              | Cut-off Switch Assembly   | 622C505G1#                      |                             |
| 1A   | 15              | Escutcheon  | Table 1C                        |                             |
| 1A   | 19              | Handle (Operating / Charging)   | 669D807P1                       | 286A8096G3                  |
| 1A   | 26              | Manual Trip Button  | 269C268P1                       |                             |
| 1A   | 29              | Open/Close Indicator  | 259C608G1                       |                             |
| 1A   | 30              | Secondary Disconnect (Movable)  | Table 1D                        |                             |
| NI   | —               | Secondary Disconnect (Stationary)—Cubicle Mounted                         | 21700011500                     | 0176D7926G001               |
| 1A   | 33              | Shaft Asm. (manual breaker) (order with link assembly)                    | 101C7891G1                      |                             |
| 1A, 1I   | 34              | Shunt Trip Device   | Table 1K, 1L                    |                             |

# Not available for AK-2/2A-15 Breaker  
N/A: Not applicable.

For more information contact your authorized GE sales representative or GE distributor.

**Table 1B, Relays and Closing Solenoid Coils –See Figure 1A**

| Breaker Type |                | AK-2/2A-15<br>AK/AKU-25 | AKR-30S<br>AKRU-30S |           |                   | AK-2/2A-15, AK/AKU-25<br>AKR/AKRU-30S |     |         |     |     |     |
|--------------|----------------|-------------------------|---------------------|-----------|-------------------|---------------------------------------|-----|---------|-----|-----|-----|
| Voltage (V)  | Frequency (Hz) | Anti-Pump "Y" Relay     | Anti-Pump "W" Relay | "K" Relay | Closing "X" Relay | Closing Solenoid Coil                 |     |         |     |     |     |
| 48           | DC             | 295B444                 | P2                  | 192A9771  | 192A9770          | 192A9770                              | P1  | 366A773 | G17 |     |     |
| 125          |                |                         | P3                  |           |                   |                                       | P1  |         | P13 | P2  | G13 |
| 250          |                |                         | P4                  |           |                   |                                       | P2  |         | P14 | P3  | G15 |
| 120          | 60             |                         | P5                  |           |                   |                                       | P3  |         | N/A | P4  | G1* |
|              |                |                         | 50                  |           |                   |                                       | P8  |         | P4  | P15 | P5  |
| 208          | 60             |                         |                     |           |                   |                                       |     |         | P11 | P5  | P16 |
|              |                |                         | 50                  | P6        | P7                | G4                                    |     |         |     |     |     |
| 240          | 60             |                         |                     | P17       | N/A               | N/A                                   | N/A |         | P8  | G5  |     |
|              |                |                         | 50                  |           |                   |                                       |     |         | P9  | G6# |     |
| 380          | 50             |                         |                     | P14       | N/A               | N/A                                   | N/A | N/A     | G7# |     |     |
|              |                | G8#                     |                     |           |                   |                                       |     |         |     |     |     |

\*\*Not recommended for AKD-8 application

# For AK-2/2A-15, AK/AKU-25 breakers only

The "Y", "W", and "X" Relays are used with type R Connection Diagrams. The "K" Relay is used with type B Connection Diagrams. The type of Connection Diagram is found on the Electrical Closing Mechanism nameplate.

**Table 1C, Control Relays\*\***

| Breaker Type        | Frequency (Hz) | Breaker Closing Voltage (V) | Catalog Number |
|---------------------|----------------|-----------------------------|----------------|
| AK-25<br>AKU-25     | 25             | 120                         | G8             |
|                     |                | 208                         | G11            |
|                     |                | 240                         | G14            |
|                     |                | 480                         | G18            |
|                     | 50             | 120                         | G7             |
|                     |                | 208                         | G10            |
|                     |                | 240                         | G13            |
|                     |                | 380                         | G15            |
|                     |                | 480                         | G17            |
|                     |                | 184L701CD                   | G6             |
|                     | 60             | 120                         | G6             |
|                     |                | 208                         | G9             |
|                     |                | 240                         | G12            |
|                     |                | 480                         | G16            |
|                     | DC             | 48DC                        | G3             |
| 125DC               |                | G4                          |                |
| 250DC               |                | G5                          |                |
| AKR-30S<br>AKRU-30S | 50             | 120                         | G24            |
|                     |                | 208                         | G26            |
|                     |                | 240                         | G28            |
|                     | 60             | 120                         | G23            |
|                     |                | 208                         | G2             |
|                     |                | 240                         | G27            |
|                     | DC             | 48DC                        | G20            |
|                     |                | 125DC                       | G21            |
|                     |                | 250DC                       | G22            |
|                     |                | 184L701CD                   |                |

\*\* Includes Anti-pump and Closing Relays, Cut-off Switch, and Closing Solenoid Coil



# 6 Low Voltage Circuit Breaker Parts

**Table 1D, Escutcheon –See Figure 1A**

| Breaker Type            | Local Switch | Operation | Catalog Number |     |
|-------------------------|--------------|-----------|----------------|-----|
| AK-2/2A-15<br>AK/AKU-25 | Yes          | Manual    | 343L747        | G37 |
|                         | No           |           |                | G38 |
|                         | Yes          | R-Elec    |                | G39 |
|                         | No           |           |                | G40 |
|                         | Yes          | H-Elec    |                | G41 |
|                         | No           |           |                |     |
| AKR/AKRU-30S            | Yes          | Manual    | 259C607        | G5  |
|                         | No           |           |                |     |
|                         | No           | R-Elec    |                | P15 |

**Table 1E, Primary Disconnect Assembly –See Figure 1B**

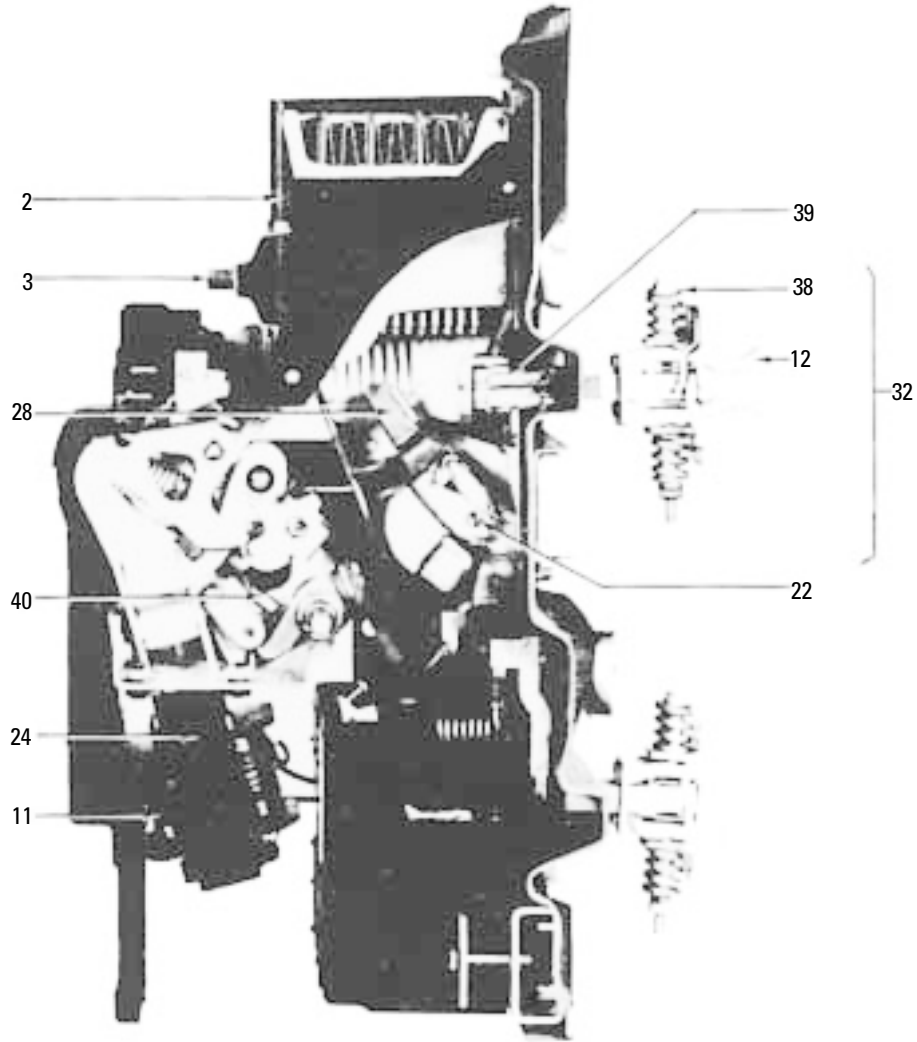
| Breaker Type            | AC/DC       | Trip Type | Stud  | Catalog Number |     |
|-------------------------|-------------|-----------|-------|----------------|-----|
| AK-2/2A-15<br>AK/AKU-25 | AC/DC       | MVT       | All   | 343L747        | G1  |
|                         |             | NA        | Lower |                |     |
|                         |             | SST       | All   |                |     |
|                         | DC (2 Pole) | EC        | Lower |                | G13 |
|                         | DC (3 Pole) |           | Lower |                | G14 |
| AKR-30S<br>AKRU-30S     | AC/DC       | All       | All   | 192A9668       | G15 |

**Table 1F, Secondary Disconnect (Movable) Device –See Figure 1A**

| Breaker Type            | Application |          | Secondary Terminal Block | Catalog Number |           |     |
|-------------------------|-------------|----------|--------------------------|----------------|-----------|-----|
| AK-2/2A-15<br>AK/AKU-25 | Stationary  | —        | 6-Point                  | 184L701TB      | G6        |     |
|                         |             |          | 10-Point                 |                | G10       |     |
|                         | Drawout     | AKD      | —                        | 7-Point        | 184L700D0 | G23 |
|                         |             |          |                          | 14-Point       |           | G24 |
|                         |             |          |                          | 21-Point       |           | G25 |
|                         |             |          |                          | 28-Point       |           | G26 |
|                         |             | AKD-5    |                          | 7-Point        |           | G27 |
|                         |             |          |                          | 14-Point       |           | G28 |
|                         |             |          |                          | 21-Point       |           | G29 |
|                         |             |          |                          | 28-Point       |           | G30 |
| AKR/AKRU-30S            | Stationary  | —        | 6-Point                  | 184L701TB      | G6        |     |
|                         |             | 10-Point | G10                      |                |           |     |
| AKRU-30S                | Drawout     | —        | 7-Point                  | 568B510        | G6        |     |
|                         |             |          | 14-Point                 |                | G3        |     |
|                         |             |          | 21-Point                 |                | G4        |     |
| AKR-30S                 |             |          | 7-Point                  |                | G5        |     |
|                         |             |          | 14-Point                 |                | G1        |     |
|                         | 21-Point    | G2       |                          |                |           |     |

—Any legitimate alternative condition.

For more information contact your authorized GE sales representative or GE distributor.



**Figure 1B:** Side View of Electrically Operated Power Circuit Breaker

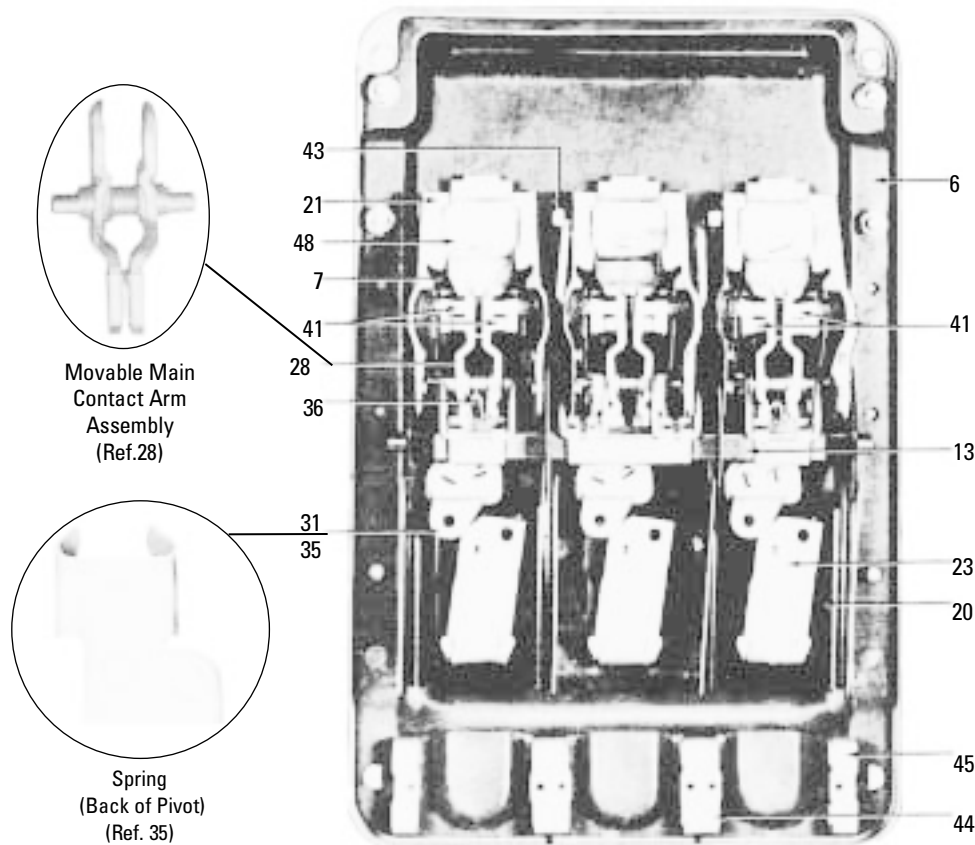
**Table 1G, Side View of Power Circuit Breaker**

| Fig. No. | Ref. No. | Description  | Catalog Number          |                     |
|----------|----------|--|-------------------------|---------------------|
|          |          |  | AK-2/2A-15<br>AK/AKU-25 | AKR-30S<br>AKRU-30S |
| 1A, 1B   | 2        | Arc Quencher/Chute-AC  | 293B288G1               | 293B288G2           |
| 1A, 1B   | 3        | Arc Quencher Clamp/Retainer  | 269C273G2               |                     |
| 1B       | 11       | Closing Solenoid Coil (Complete) for Electrically Operated Breaker | Table 1B                |                     |
| 1B       | 12       | Contact Finger   | 192A9669P1              |                     |
| 1B       | 22       | Link and Bushing for Auxiliary Switch                              | 846C865G1               |                     |
| 1B       | 24       | Magnet/Armature Assembly   | 622C521G3               | N/A                 |
| 1B       | 28       | Movable Main Contact Arm Assembly                                  | 269C257G15              |                     |
| 1B       | 32       | Primary Disconnect Assembly  | Table 1E                |                     |
| 1B       | 38       | Spring for Primary Disconnect                                      | 192A6990P166            |                     |
| 1B       | 39       | Spring for Stationary Contact Assembly                             | 412A286P1               | 192A6990P387        |
| 1B       | 40       | Spring for Trip Latch  | 412A290P1               |                     |

N/A: Not applicable.



# 8 Low Voltage Circuit Breaker Parts

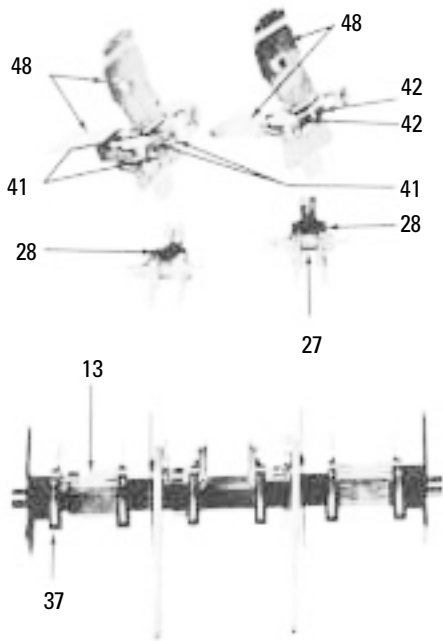


**Figure 1C:** Back View of Electrically Operated Power Circuit Breaker (Operating Mechanism Removed)

| <b>Table 1H, Back View of Power Circuit Breaker</b> |                 |  |                       |                  |                     |
|---|-----------------|--|-----------------------|------------------|---------------------|
| <b>Fig. No.</b>                                     | <b>Ref. No.</b> | <b>Description</b>                           | <b>Catalog Number</b> |                  |                     |
|   |                 |  | <b>AK-2/2A-15</b>     | <b>AK/AKU-25</b> | <b>AKR/AKRU-30S</b> |
| 1E  | 5               | Back Frame (Complete)                        | N/A                   | 184L700BFG23     | 184L700BFG22        |
| 1C  | 6               | Back Plate                                   | 107D7564P1            |                  |                     |
| 1C  | 7               | Barrier                                      | 295B460P1             |                  |                     |
| 1C, 1D  | 13              | Crossbar Assembly                            | 269C277G1             |                  |                     |
| 1F  | 16              | Front Frame Assembly, Electric               | 184L700FMG27          | 184L700FMG23     |                     |
| 1F  | 16              | Front Frame Assembly, Electric with Handle   | 184L700FMG26          | N/A              |                     |
| 1F  | 18              | Front Frame Assembly, Manual                 | 184L700FMG25          | 184L700FMG22     |                     |
| 1C  | 20              | Insulation (under lower stud)                | 193A1873P1            |                  |                     |
| NI  | –               | Insulation for Upper Stud, Front             | 269C260G2             |                  |                     |
| 1C  | 21              | Insulation for Upper Stud, Rear              | 269C260G1             |                  |                     |
| 1C  | 23              | Lower Stud Assembly (not used on AK-3/3A)    | N/A                   | 269C258G1        | 286A8711G1          |
| 1D  | 27              | Movable Contact Spring                       | 412A208P1             |                  |                     |
| 1B, 1C, 1D  | 28              | Movable Main Contact Arm Assembly            | 269C257G15            |                  |                     |
| 1C  | 31              | Pivot  | 269C258G3             |                  |                     |
| 1C  | 35              | Spring (back of pivot)                       | 269C280P8             |                  |                     |
| 1C  | 36              | Spring (outside poles)                       | 412A250P1             |                  |                     |
| 1D  | 37              | Spring Clip                                  | 269C277P11            |                  |                     |
| NI  | –               | Stationary Main Contact–Brazen Tip in Center | N/A                   | 286A8858G3       |                     |
| NI  | –               | Stationary Main Contact–Brazen Tip in Left   | N/A                   | 286A8858G1       |                     |
| NI  | –               | Stationary Main Contact–Brazen Tip in Right  | N/A                   | 286A8858G2       |                     |
| 1C, 1D  | 41              | Stationary Main Contact–Left                 | 805B910G1             | N/A              |                     |
| 1C, 1D  | 42              | Stationary Main Contact–Right                | 805B910G2             | N/A              |                     |
| 1C  | 43              | Stud, Arc Quencher Clamp                     | 269C280P4             | 393A993P9        |                     |
| 1C  | 44              | Support (intermediate)                       | 269C280P6             |                  |                     |
| 1C  | 45              | Support (outside)                            | 269C280P7             |                  |                     |
| 1C, 1D  | 48              | Upper Stud Assembly                          | 269C283G2             |                  |                     |

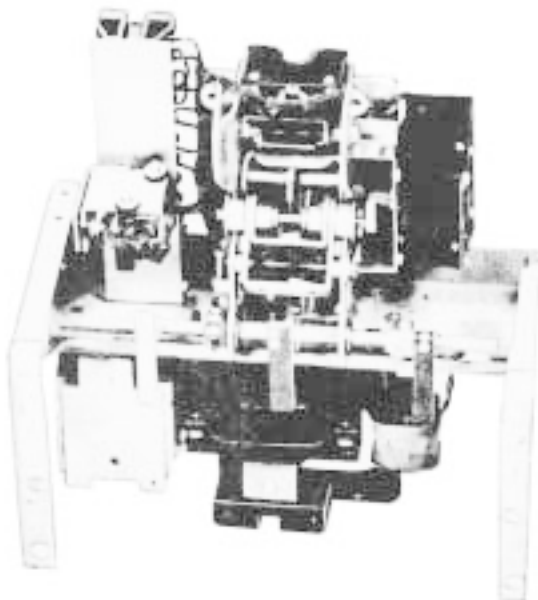
NI: Not illustrated in section. N/A: Not applicable.

For more information contact your authorized GE sales representative or GE distributor.

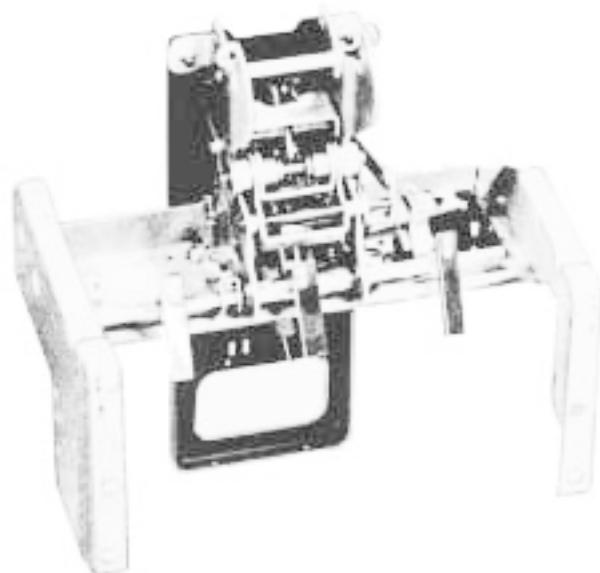


**Figure 1D:** Interior View of Moving/Stationary Contacts and Crossbar Assembly

**Figure 1E:** Back Frame (Complete)–(Ref. 5)



Electric–(Ref.16)



Manual–(Ref.18)

**Figure 1F:** Front Frame and Mechanism Assembly, Electric and Manual



# 10 Low Voltage Circuit Breaker Parts

**Table 1I, Auxiliary Switch (Electroswitch)  
–See Fig. 1G**

| Ref. No. | Description                              | Catalog Number |
|----------|--|----------------|
| 4        | Auxiliary Switch (Electroswitch)–2A & 2B | 184L701AUG12   |
| 4        | Auxiliary Switch (Electroswitch)–5A & 5B | 184L701AUG13   |

Note: 5A & 5B denotes a 5 stage auxiliary switch



**Figure 1G:** Auxiliary Switch (Electroswitch) 5A & 5B –(Ref.4)



**Figure 1H:** Bell Alarm Assembly –(Ref. 8)

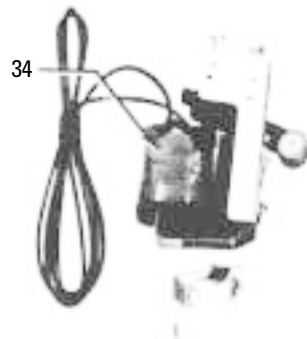
**Table 1J, Bell Alarm Assembly –See Figure 1H**

| Breaker Type | Lockout  | Bell Alarm Contacts | Catalog Number |
|--------------|----------|---------------------|----------------|
| AK–2/2A–15   | With**   | 1NO & 1NC           | 184L701BA      |
| AK/AKU–25    |          | 2NC                 |                |
| AKR/AKRU–30S | With–out | 2NO                 |                |

\*\*Lockout Device (184L701BAG1) must be ordered separately.  
NO=Normally Open, NC=Normally Closed

**Table 1K, Shunt Trip Device for Breakers with  
No Undervoltage Release –See Figures 1A, 1I**

| Breaker Type                            | Voltage Frequency (Hz) | Shunt Trip Voltage (V) | Catalog Number |
|---|------------------------|------------------------|----------------|
| AK–2/2A–15<br>AK/AKU–25<br>AKR/AKRU–30S | 25                     | 120                    | G8             |
|   |                        | 208                    | G11            |
|   |                        | 240                    | G14            |
|   |                        | 480                    | G18            |
|   |                        | 575                    | G21            |
|   | 50                     | 120                    | G7             |
|   |                        | 208                    | G10            |
|   |                        | 240                    | G13            |
|   |                        | 380                    | G15            |
|   |                        | 480                    | G17            |
|   |                        | 575                    | G20            |
|   |                        | 60                     | 70             |
|   | 120                    |                        | G6             |
|   | 208                    |                        | G9             |
|   | 240                    |                        | G12            |
|   | 480                    |                        | G16            |
|   | DC                     | 575                    | G19            |
|   |                        | 24DC                   | G2             |
|   |                        | 48DC                   | G3             |
|   |                        | 125DC                  | G4             |
|   |                        | 250DC                  | G5             |



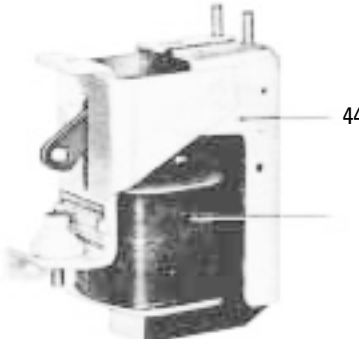
**Figure 1I:** Shunt Trip Device –(Ref. 34)

**Table 1L, Shunt Trip Device for Breakers with Undervoltage or Electrical Lockout—See Fig. 1A, 1I**

| Breaker Type | Frequency (Hz) | Shunt Trip Voltage (V) | Catalog Number |
|--------------|----------------|------------------------|----------------|
| AKRU-30S     | 50             | 120                    | G29            |
|              |                | 208                    | G30            |
|              |                | 240                    |                |
|              | 60             | 120                    | G28            |
|              |                | 208                    | G30            |
|              |                | 240                    |                |
|              | DC             | 45DC                   | G25            |
|              |                | 125DC                  | G26            |
|              |                | 250DC                  | G27            |

**Table 1M, Undervoltage Trip Device with No UNDV Time Delay—See Figure 1J**

| Breaker Type   | Frequency (Hz) | UNDV Volts (V) | Catalog Number |
|--|----------------|----------------|----------------|
| AK-2/2A-15<br>AK-25<br>AKU-25<br>AKR-30S<br>AKRU-30S | 25             | 120            | G8             |
|  |                | 208            | G11            |
|  |                | 240            | G14            |
|  |                | 480            | G18            |
|  |                | 575            | G21            |
|  | 50             | 120            | G7             |
|  |                | 208            | G10            |
|  |                | 240            | G13            |
|  |                | 380            | G15            |
|  |                | 480            | G17            |
|  |                | 575            | G20            |
|  |                | 60             | 120            |
|  | 208            |                | G9             |
|  | 240            |                | G12            |
|  | 480            |                | G16            |
|  | DC             | 575            | G19            |
|  |                | 24DC           | G2             |
|  |                | 48DC           | G3             |
|  |                | 125DC          | G4             |
|  |                | 250DC          | G5             |



**Figure 1J:** Undervoltage (UNDV) Device—(Ref. 47)

**Table 1N, Undervoltage Trip Device with UNDV Time Delay (Instaneous)—See Figure 1J**

| Breaker Type | UNDV Volts (V) | Catalog Number |
|--------------|----------------|----------------|
| AK-2/2A-15   | 240            | G13            |
| AK/AKU-25    | 380            | G15            |
| AKR/AKRU-30S | 480            | G17            |
|              | 575            | G20            |





# 12 Low Voltage Circuit Breaker Parts

**Table 1P, Miscellaneous Items**

| Fig. No. | Ref. No. | Description                | Catalog Number |
|----------|----------|----------------------------|----------------|
| 1K       | 25       | Maintenance Closing Handle | 286A8863G1     |
| 1L       | 46       | Terminal Board–10 point    | 21700010000    |



**Figure 1K:** Maintenance Closing Handle–(Ref.25)



**Figure 1L:** Terminal Board –(Ref. 46)

**Table 1Q1, Fuses (Gould–Shawmut)**

| Fuse Rating | Obsolete GE Catalog Number | Gould # Equiv. Catalog Number | Class |
|-------------|----------------------------|-------------------------------|-------|
| 150A        | GF8B150                    | A4J150                        | J     |
| 200A        | GF8B200                    | A4J200                        |       |
| 225A        | GF8B225                    | A4J225                        |       |
| 250A        | GF8B250                    | A4J250                        |       |
| 300A        | GF8B300                    | A4J300                        |       |
| 350A        | GF8B350                    | A4J350                        |       |
| 400A        | GF8B400                    | A4J400                        |       |
| 450A        | GF8B450                    | A4J450                        |       |
| 500A        | GF8B500                    | A4J500                        |       |
| 600A        | GF8B600                    | A4J600                        |       |
| 601A        | GF8B601                    | A4BY601                       | L     |
| 650A        | GF8B650                    | A4BY650                       |       |
| 700A        | GF8B700                    | A4BY700                       |       |
| 800A        | GF8B800                    | A4BY800                       |       |
| 1000A       | GF8B1000                   | A4BY1000 BG#                  |       |
| 1200A       | GF8B1200                   | A4BY1200 BG#                  |       |
| 1400A       | GF8B1400                   | N/A                           |       |
| 1600A       | GF8B1600                   | A4BY1600 BG#                  |       |
| 2000A       | GF8B2000                   | A4BY2000                      |       |
| 2500A STD   | GF8B2500                   | A4BY2500                      |       |

# Suffix or type BG denotes cut–out on tang.

General Electric Type J and L fuses are now obsolete, and no longer used in type AKRU low–voltage power circuit breakers.

Gould–Shawmut fuses are now used. The chart cross–references the obsolete GE catalog number and the replacement Gould–Shawmut catalog numbers.

**Table 1Q2, Allowable Fuse Sizes**

| Breaker Type | Rating Plug Rating | Max. Gould–Shawmut Class "L" Fuse Size | Min. Gould–Shawmut Class "L" Fuse Size | Min. Gould–Shawmut Class "J" Fuse Size |
|--------------|--------------------|--|--|--|
| AKU–25       | 600A and Below     | 1200A                                  | 800A                                   | 300A                                   |
| AKRU–30S     | 800A               | 1600A                                  | 1000A                                  | –                                      |
|              | 700A               | 1600A                                  | 800A                                   | –                                      |
|              | 600A               | 1600A                                  | 800A                                   | 600A                                   |
|              | 400A               | 1600A                                  | –                                      | 400A                                   |
|              | 300A               | 1600A                                  | –                                      | 300A                                   |
|              | 225A and Below     | 1600A                                  | –                                      | 300A                                   |

## Type AK / AKR Low Voltage Power Circuit Breakers

### Included in this Section

AKR low-voltage power circuit breakers are intended for use in commercial, industrial and utility applications. Designed for severe duty, AKR breakers are serviceable and suitable for mains, feeders and applications such as motor starting, capacitor switching/generator protection and resistance welding. They are fully rated; that is, the short time rating in most cases is equal to the short circuit rating providing the greatest opportunity for selectivity with downstream devices. The breakers are maintainable and meet ANSI Standard C37.13 and C37.16, as well as applicable UL Standards. There are five frame sizes from 800–4000 amperes with short circuit interrupting ratings to 200 kA symmetrical short circuit without fuses.

AKR/AKRU–30, AKR–30H      AKJ/AKJU–50, AKJ/AKJT– 50H      AK/AKU/AKT–50 (Obsolete Breaker)  
AKR/AKRU–50, AKR/AKRT–50H

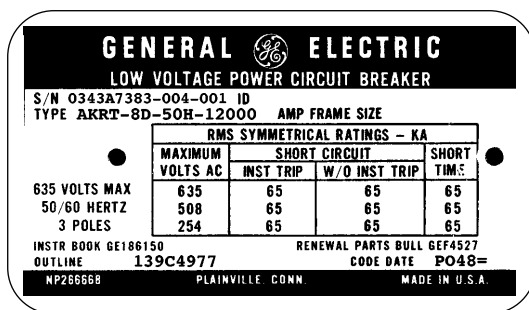
### Equipment Identification and Nomenclature Guide

- Equipment Serial Number, Breaker Type, Closing Voltage/Frequency, and Connection Diagram Number (e.g. “B”) are most important for identification purposes.
- Breaker Nameplate is located to the left of the escutcheon on the breaker, and the Electrical Closing Mechanism Nameplate is located on the right of the escutcheon.

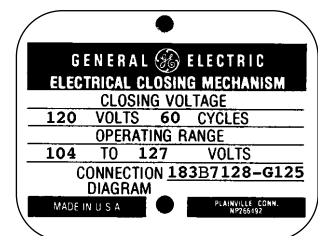
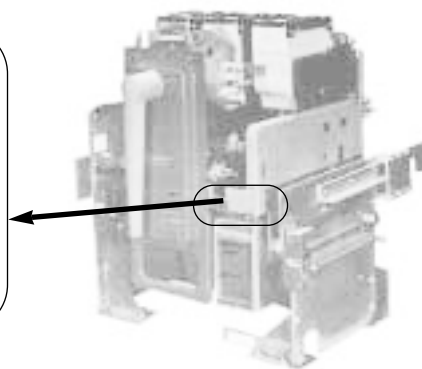
Example: **AKRT – 8 D – 5 0 H**

| Code | General Type                         | Code           | Trip Device Type                              | Code  | Mounting Type                                 | Code   | Frame Size in Amperes |      |
|------|--------------------------------------|----------------|---|-------|---|--|-----------------------|------|
| AKS  | AKR replacement for AK–50, AKJ–50    | 2              | EC  | Blank | Drawout AKD Switchgear                        | ①  | AC                    | DC   |
| AKST | AKRT replacement for AKT–50, AKJT–50 | 3 <sup>②</sup> | Power Sensor                                  | A     | Drawout AKD–5/6 Switchgear                    | 30, 30H  | 800                   | 800  |
| AKSU | AKRU replacement for AKU–50, AKJU–50 | 4 <sup>②</sup> | ECS   | B     | Drawout AKR OEM Substructure                  | 50, 50H  | 1600, 2000            | 2000 |
| AKR  | New Style LVPC8                      | 5 <sup>②</sup> | SST   | D     | Drawout AKD–8 Switchgear and OEM Substructure | ① Suffix D is affixed to AKR designations to identify non-automatic DC models. e.g. AKR–NB–30D |                       |      |
| AKRT | 2000A frame                          | 6 <sup>②</sup> | MicroVersa Trip                               | S     | Stationary                                    |  |                       |      |
| AKRU | Integrally fused version of AKR–50   | 7 <sup>②</sup> | MicroVersa Trip™ RMS–9                        |       |   |  |                       |      |
|      |                                      | 8              | Epic MicroVersa Trip™                         |       |   |  |                       |      |
|      |                                      | 9              | PowerLeader MVT+, MVTPM                       |       |   |  |                       |      |
|      |                                      | 10             | PowerLeader MVT+, MVTPM with RMS9C Trip Units |       |   |  |                       |      |
|      |                                      | N              | Non-Automatic                                 |       |   |  |                       |      |

② Discontinued



Breaker Nameplate



Electrical Closing Mechanism Nameplate (not shown)

Figure 2: AKR/AKRT Power Circuit Breaker Nameplate Data



# 14 Low Voltage Circuit Breaker Parts

**Table 2-1, AKR/AKR-30 and AKR-30H Power Circuit Breaker**

| Fig. Ref. | Ref. No. | Description   | Catalog Number |            |         |
|-----------|----------|---|----------------|------------|---------|
|           |          |   | AKR-30         | AKRU-30    | AKR-30H |
| 2D        | 1        | Adjustable Link for Manual Mechanism                                      | 192A9552G2     |            |         |
| 2D, 2F    | 2        | Adjusting Screw for Contact Assembly                                      | 192A9554P1     |            |         |
| 2A        | 3        | Anti – Pump Relay “W” – R Connection Diagram                              | Table 2B       |            |         |
| 2I        | 60       | Arc Quencher / Chute – AC   | 425D404G7      | 425D404G8  |         |
| NI        | –        | Arc Quencher / Chute – DC (2 Pole)  | 425D404G2      | N/A        |         |
| NI        | –        | Arc Quencher Retainer – AC  | 193A1169P1     |            |         |
| NI        | –        | Arc Quencher Retainer – DC  | 193A1348P1     | N/A        |         |
| 2E, 2F    | 4        | Arc Runner  | 192A9902G1     |            |         |
| 2L        | 61       | Auxiliary Switch (Electroswitch)  | Table 2M       |            |         |
| NI        | –        | Barrier (Horizontal)  | 139C4611P1     |            |         |
| NI        | –        | Barrier (Interphase) – Inside   | 568B545P1      |            |         |
| NI        | –        | Barrier (Vertical) – Outside Left   | 568B408G2      |            |         |
| NI        | –        | Barrier (Vertical) – Outside Right  | 568B408G1      |            |         |
| NI        | –        | Barrier (Vertical) Rivets – qty 2   | 791A862P66     |            |         |
| 2M        | 62       | Bell Alarm Assembly   | Table 2N       |            |         |
| 2C        | 5        | Blocking Plate Link   | 192A9629P1     |            |         |
| 2G        | 6        | Bracket and Lever Assembly  | 568B541G1      |            |         |
| 2D        | 7        | Buffer Paddle Assembly for Trip Shaft                                     | 192A9651G1     |            |         |
| 2D        | 8        | Channel Insulation  | 192A9631P1     |            |         |
| 2A        | 9        | Charge / Discharge Indicator  | 568B518G1      |            |         |
| NI        | –        | Charge / Discharge Label  | 192A7029P123   |            |         |
| NI        | –        | Charge / Discharge Spring   | 192A6990P151   |            |         |
| 2A        | 10       | Charging Motor  | Table 2B       |            |         |
| 2C        | 11       | CLOSE Button for Manual Breaker   | 192A9616G1     |            |         |
| NI        | –        | CLOSE Label   | 192A7029P147   |            |         |
| 2A        | 13       | Closing Push Button Switch (includes insulator, mtg. hardware, and label) | 192A9717G1     |            |         |
| NI        | –        | Closing Relay “X” – R Connection Diagram                                  | Table 2B       |            |         |
| 2A        | 14       | Closing Solenoid Coil (CC)  | Table 2B       |            |         |
| NI        | –        | Closing Solenoid – Remote   | Table 2O       |            |         |
| 2C        | 15       | Closing Solenoid Switchette (used in D.C. control only)                   | 192A7153P3     |            |         |
| 2C        | 16       | Closing Spring Assembly   | 192A9585G3     | 192A9585G4 |         |
| 2G        | 17       | Closing Spring Discharge Linkage  | 568B557G1      |            |         |
| NI        | –        | Contact Finger  | 192A9669P1     |            |         |
| NI        | –        | Control Relays (Includes Anti – Pump and Closing Relay)                   | Table 2C       |            |         |
| NI        | –        | Coupling Pin for Movable Contact Assembly                                 | 192A7573P111   |            |         |
| 2A        | 18       | Cut-off Switch (2NC)  | 009921661P002  |            |         |
| 2A        | 19       | Cut-off Switch (2NO)  | 009921661P001  |            |         |
| 2C        | 20       | Drawout Mounting Stud & Bracket Assembly – Front                          | 192A9685G1     |            |         |
| 2C        | 21       | Drawout Mounting Stud – Rear  | 192A6976P53    |            |         |
| NI        | –        | Electrical Lockout Device for UNDV Device                                 | 139C4628G1     |            |         |
| NI        | –        | Escutcheon, (Deep) – Electric Breaker, B-type D/O only                    | 568B265G2      |            |         |
| NI        | –        | Escutcheon, (Deep) – Manual Breaker, B-type D/O only                      | 568B265G1      |            |         |
| NI        | –        | Escutcheon, (Standard) – Electric Breaker                                 | 139C4612P1     |            |         |
| 2C        | 22       | Escutcheon, (Standard) – Manual Breaker made after June 1977              | 139C4610G1     |            |         |
| 2C        | 22       | Escutcheon, (Standard) – Manual Breaker made before June 1977             | 139C4610G3     |            |         |

NI: Not illustrated in section.

N/A: Not applicable.

**Table 2-1, AKR/AKR-30 and AKR-30H Power Circuit Breaker, Cont'd.**

| Fig. Ref. | Ref. No. | Description   | Catalog Number |           |         |
|-----------|----------|---|----------------|-----------|---------|
|           |          |   | AKR-30         | AKRU-30   | AKR-30H |
| NI        | –        | Flux Shift Trip Device                                | 425D366G85     |           |         |
| NI        | –        | Fuse Mounting Assembly                                | N/A            | Table 2L  | N/A     |
| NI        | –        | Fuses   | N/A            | Table 2J  | N/A     |
| 2A        | 24       | Gear / Ratchet and Roller Assembly                    | 343L731G1      |           |         |
| 2C        | 25       | Handle (Operating / Charging) for AKD-8               | 286A8096G1     |           |         |
| 2C        | 25       | Handle (Operating / Charging) for non AKD-8           | 425D403P1      |           |         |
| 2D        | 26       | Handle Crank Cam for Manual Breaker                   | 192A9536G2     |           |         |
| NI        | –        | Insulated Link Pin for Contact Assembly               | 192A7573P110   |           |         |
| NI        | –        | Insulating Coupling Link Assembly                     | 192A9664G2     |           |         |
| 2A        | 12       | “K” Relay – B Connection Diagram                      | Table 2B       |           |         |
| NI        | –        | Lifting Device / Breaker Spreader for OEM Equipment   | 0247B8961G002  |           |         |
| NI        | –        | Lifting Device / Breaker Spreader for AKD-8 Equipment | 673D0500050202 |           |         |
| 2D, 2F    | 27       | Link (Plastic) for Movable Contact Assembly           | 134C2127G1     |           |         |
| 2D        | 28       | Link (Steel) for Movable Contact Assembly             | 192A9841P1     |           |         |
| NI        | –        | Lubricant / Grease for Drawout Breaker                | 282A2048P9     |           |         |
| NI        | –        | Maintenance Closing Handle                            | 568B386G1      |           |         |
| NI        | –        | Mechanism Assembly, Electric Breaker                  | 139C4616G2     |           |         |
| 2D        | 29       | Mechanism Assembly, Manual Breaker                    | 139C4616G1     |           |         |
| 2C        | 30       | Molded Pole Base – AKD-6                              | 172RE350G1     |           |         |
| NI        | –        | Molded Pole Base – AKD-8                              | 911E318P1      |           |         |
| 2F        | 31       | Movable Main Contact – Left                           | N/A            |           |         |
| 2F        | 32       | Movable Main Contact – Right                          | N/A            |           |         |
| 2E        | –        | Movable Main Contact                                  | 192A9511G3     |           |         |
| 4B        | –        | MVT Fixed CT Sensor (See Section 4)                   | Table 4B       |           |         |
| 4C        | –        | MVT Neutral CT Sensor Disconnects (See Section 4)     | Table 4C       |           |         |
| NI        | –        | MVT Neutral CT Sensor (See Section 4)                 | Table 4E       |           |         |
| NI        | –        | MVT Sensor Amp Indicator (See Section 4)              | Table 4F       |           |         |
| NI        | –        | MVT Programmer Mounting (See Section 4)               | Table 4G       |           |         |
| 4E        | –        | MVT PM Programmer (See Section 4)                     | Table 4H       |           |         |
| 4F        | –        | MVT+ Programmer (See Section 4)                       | Table 4H       |           |         |
| 2D        | 34       | OPEN / CLOSE Indicator, Electric Breaker              | 568B522G1      |           |         |
| 2D        | 34       | OPEN / CLOSE Indicator, Manual Breaker                | 568B520G1      |           |         |
| 2D        | 35       | Open / Close Link to Main Shaft                       | 192A9542P1     |           |         |
| 2N        | 36       | Open Fuse Lock-Out (OFLO) – AKD-8                     | N/A            | 425D409G1 | N/A     |
| 2N        | 36       | Open Fuse Lock-Out (OFLO) – non AKD-8                 | N/A            | 425D370G1 | N/A     |
| NI        | –        | Open Fuse Lock-Out (OFLO) Harness                     | N/A            | Table 2Q  | N/A     |
| NI        | –        | Operations Counter                                    | 139C4626G1     |           |         |
| NI        | –        | Pawl, Driving   | 323A6080G1     |           |         |
| NI        | –        | Pawl, Holding / Ratchet                               | 323A6082G1     |           |         |
| NI        | –        | Pawl, Holding Pawl on Ratchet Roller Gear             | 323A6082G1     |           |         |
| 2F        | 37       | Pivot for Movable Contact                             | N/A            |           |         |
| 2E        | 64       | Pivot, Inner, for Movable Contact                     | 192A9882G1     |           |         |
| 2E        | 65       | Pivot, Outer, for Movable Contact                     | 192A9845P1     |           |         |
| 2F        | 38       | Pivot, Lower Left, for Movable Contact                | N/A            |           |         |
| 2F        | 39       | Pivot, Lower Right, for Movable Contact               | N/A            |           |         |

NI: Not illustrated in section.

N/A: Not applicable.



# 16 Low Voltage Circuit Breaker Parts

**Table 2-1, AKR/AKRU-30 and AKR-30H Power Circuit Breaker, Cont'd.**

| Fig. Ref. | Ref. No. | Description   | Catalog Number |           |         |
|-----------|----------|---|----------------|-----------|---------|
|           |          |   | AKR-30         | AKRU-30   | AKR-30H |
| 2F        | 40       | Pivot, Upper Left, for Movable Contact                | N/A            |           |         |
| 2F        | 41       | Pivot, Upper Right, for Movable Contact               | N/A            |           |         |
| NI        | –        | Pivot for Pawl Spring                                 | 192A9594P1     |           |         |
| NI        | –        | Pivot for Stationary Arcing Contact                   | N/A            |           |         |
| NI        | –        | Plunger for Stationary Arcing Contact                 | N/A            |           |         |
| NI        | –        | Positive Interlock                                    | 568B593G1      |           |         |
| 2J        | 66       | Primary Disconnect Assembly                           | Table 2H       |           |         |
| 2G        | 42       | Prop  | 192A9545G1     |           |         |
| NI        | –        | Racking Crank   | 193A1990P1     |           |         |
| 2H        | 43       | Racking Mechanism for Drawout Breaker                 | 139C4618G1     |           |         |
| NI        | –        | Racking Screw Shutter – Slide Door                    | 192A9618G1     |           |         |
| NI        | –        | Racking Screw Shutter Label                           | 192A7029P148   |           |         |
| NI        | –        | Racking Screw Shutter Spring                          | 192A6990P159   |           |         |
| NI        | –        | Rackout Plug Button                                   | N529P53B       |           |         |
| NI        | –        | Rubber Buffer – Left                                  | 568B378G1      |           |         |
| NI        | –        | Rubber Buffer – Right                                 | 568B378G2      |           |         |
| 2C, 2K    | 44       | Secondary Disconnect (Movable) Device                 | Table 2I       |           |         |
| NI        | –        | Secondary Disconnect (Stationary) – Cubicle Mounted   | 0176D7926G001  |           |         |
| NI        | –        | Secondary Disconnect Harness – Drawout Breakers       | 425D367G1      |           |         |
| NI        | –        | Secondary Disconnect Harness – Stationary Breakers    | 425D367G2      |           |         |
| NI        | –        | Secondary Disconnect Insulation                       | 192A9767P1     |           |         |
| 2E, 2F    | 45       | Shaft for Movable Contact Pivot                       | 192A9843P1     |           |         |
| 2O        | 56       | Shunt Trip Device                                     | Table 2R       |           |         |
| 2D        | 46       | Spring (Opening)                                      | 192A6990P153   |           |         |
| NI        | –        | Spring for CLOSE Button                               | 192A6990P143   |           |         |
| NI        | –        | Spring for Closing Spring Discharge Linkage (torsion) | 192A6990P157   |           |         |
| NI        | –        | Spring for Handle Return                              | 192A6990P142   |           |         |
| 2E, 2F    | 47       | Spring for Movable Contact Pivot                      | 192A6990P190   |           |         |
| NI        | –        | Spring for Pawl (torsion)                             | 192A6990P207   |           |         |
| 2E, 2F    | 48       | Spring for Stationary Contact Assembly                | 192A9509G1     |           |         |
| NI        | –        | Spring for Trip Button                                | 192A6990P370   |           |         |
| NI        | –        | Spring, inner, for Stationary Arcing Contact          | 192A9509G1     |           |         |
| NI        | –        | Spring, middle, for Stationary Arcing Contact         | 192A9509G1     |           |         |
| NI        | –        | Spring, outer, for Stationary Arcing Contact          | 192A9509G1     |           |         |
| 2E        | 58       | Stationary Arcing Contact                             | 192A9847G1     |           |         |
| 2F        | 49       | Stationary Arcing Contact – Left                      | N/A            |           |         |
| 2F        | 50       | Stationary Arcing Contact – Right                     | N/A            |           |         |
| 2F        | 51       | Stationary Intermediate Contact                       | N/A            |           |         |
| 2E, 2F    | 52       | Stationary Main Contact                               | 192A9847G2     |           |         |
| NI        | –        | Stud Connection – AC Breaker                          | 425D366G6      | 425D366G3 |         |
| NI        | –        | Terminal Board for Stationary Breaker – 10 point      | 192A8227P7     |           |         |
| NI        | –        | Terminal Board for Stationary Breaker – 6 point       | 192A8227P6     |           |         |
| 2C        | 53       | Trip Button and Rod                                   | 192A9572G2     |           |         |
| NI        | –        | TRIP Label  | 192A7029P126   |           |         |
| 2C        | 54       | Trip Paddle / Latch (Drawout)                         | 192A9605G1     |           |         |
| 2D        | 55       | Trip Shaft  | 568B524G1      |           |         |
| 2Q        | 57       | Undervoltage Device With No UNDV Time Delay           | Table 2S       |           |         |
| NI        | –        | Undervoltage Device With UNDV Time Delay              | Table 2T       |           |         |
| 2C        | 59       | Window, Clear Plastic                                 | 192A9613P1     |           |         |

NI: Not illustrated in section.

N/A: Not applicable.

For more information contact your authorized GE sales representative or GE distributor.

**Table 2-2, AKR/AKJ-50/50H, AKRU/AKJU-50, AKRT/AKJT-50H Power Circuit Breaker**

| Fig. Ref. | Ref. No. | Description   | Catalog Number   |                    |                    |                      |
|-----------|----------|---|------------------|--------------------|--------------------|----------------------|
|           |          |   | AKR-50<br>AKJ-50 | AKRU-50<br>AKJU-50 | AKR-50H<br>AKJ-50H | AKRT-50H<br>AKJT-50H |
| 2D        | 1        | Adjustable Link for Manual Mechanism                                      | 192A9552G2       |                    |                    |                      |
| 2D, 2F    | 2        | Adjusting Screw for Contact Assembly                                      | 192A9554P1       |                    |                    |                      |
| 2A        | 3        | Anti – Pump Relay “W” – R Connection Diagram                              | Table 2B         |                    |                    |                      |
| 2I        | 60       | Arc Quencher / Chute – AC   | 425D404G9        |                    | 425D404G10         |                      |
| NI        | –        | Arc Quencher / Chute – DC (2 Pole)  | 425D404G1        | N/A                |                    |                      |
| NI        | –        | Arc Quencher Retainer – AC  | 193A1169P1       |                    |                    |                      |
| NI        | –        | Arc Quencher Retainer – DC  | 193A1348P1       | N/A                |                    |                      |
| 2E, 2F    | 4        | Arc Runner  | 568B504G1        |                    |                    |                      |
| 2L        | 61       | Auxiliary Switch (Electroswitch)  | Table 2M         |                    |                    |                      |
| NI        | –        | Barrier (Horizontal)  | 139C4611P1       |                    |                    |                      |
| NI        | –        | Barrier (Interphase) – Inside   | 568B545P1        |                    |                    |                      |
| NI        | –        | Barrier (Vertical) – Outside Left   | 568B408G2        |                    |                    |                      |
| NI        | –        | Barrier (Vertical) – Outside Right  | 568B408G1        |                    |                    |                      |
| NI        | –        | Barrier (Vertical) Rivets – qty 2   | 791A862P66       |                    |                    |                      |
| 2M        | 62       | Bell Alarm Assembly   | Table 2N         |                    |                    |                      |
| 2C        | 5        | Blocking Plate Link   | 192A9629P1       |                    |                    |                      |
| 2G        | 6        | Bracket and Lever Assembly  | 568B541G1        |                    |                    |                      |
| 2D        | 7        | Buffer Paddle Assembly for Trip Shaft                                     | 192A9651G1       |                    |                    |                      |
| 2D        | 8        | Channel Insulation  | 192A9631P1       |                    |                    |                      |
| 2A        | 9        | Charge / Discharge Indicator  | 568B518G1        |                    |                    |                      |
| NI        | –        | Charge / Discharge Label  | 192A7029P123     |                    |                    |                      |
| NI        | –        | Charge / Discharge Spring   | 192A6990P151     |                    |                    |                      |
| 2A        | 10       | Charging Motor  | Table 2B         |                    |                    |                      |
| 2C        | 11       | CLOSE Button for Manual Breaker   | 192A9616G1       |                    |                    |                      |
| NI        | –        | CLOSE Label   | 192A7029P147     |                    |                    |                      |
| 2A        | 13       | Closing Push Button Switch (includes insulator, mtg. hardware, and label) | 192A9717G1       |                    |                    |                      |
| NI        | –        | Closing Relay “X” – R Connection Diagram                                  | Table 2B         |                    |                    |                      |
| 2A        | 14       | Closing Solenoid Coil (CC)  | Table 2B         |                    |                    |                      |
| NI        | –        | Closing Solenoid – Remote   | Table 2O         |                    |                    |                      |
| 2C        | 15       | Closing Solenoid Switchette (used in D.C. control only)                   | 192A7153P3       |                    |                    |                      |
| 2C        | 16       | Closing Spring Assembly   | 192A9585G1       | N/A                | 192A9585G1         | N/A                  |
| 2G        | 17       | Closing Spring Discharge Linkage  | 568B557G1        |                    |                    |                      |
| NI        | –        | Contact Finger  | 192A9669P1       |                    |                    |                      |
| NI        | –        | Control Relays (Includes Anti – Pump and Closing Relay)                   | Table 2C         |                    |                    |                      |
| NI        | –        | Coupling Pin for Movable Contact Assembly                                 | 192A7573P111     |                    |                    |                      |
| 2A        | 18       | Cut-off Switch (2NC)  | 009921661P002    |                    |                    |                      |
| 2A        | 19       | Cut-off Switch (2NO)  | 009921661P001    |                    |                    |                      |
| 2C        | 20       | Drawout Mounting Stud & Bracket Assembly – Front                          | 192A9685G1       |                    |                    |                      |
| 2C        | 21       | Drawout Mounting Stud – Rear  | 192A6976P53      |                    |                    |                      |
| NI        | –        | Electrical Lockout Device for UNDV Device                                 | 139C4628G1       |                    |                    |                      |
| NI        | –        | Escutcheon, (Deep) – Electric Breaker, B-type D/O only                    | 568B265G2        |                    |                    |                      |
| NI        | –        | Escutcheon, (Deep) – Manual Breaker, B-type D/O only                      | 568B265G1        |                    |                    |                      |
| NI        | –        | Escutcheon, (Standard) – Electric Breaker                                 | 139C4612P1       |                    |                    |                      |
| 2C        | 22       | Escutcheon, (Standard) – Manual Breaker made after June 1977              | 139C4610G1       |                    |                    |                      |
| 2C        | 22       | Escutcheon, (Standard) – Manual Breaker made before June 1977             | 139C4610G3       |                    |                    |                      |
| NI        | –        | Flux Shift Trip Device  | 425D366G85       |                    |                    |                      |
| NI        | –        | Fuse Mounting Assembly  | N/A              | Table 2L           | N/A                |                      |
| NI        | –        | Fuses   | N/A              | Table 2J           | N/A                | Table 2J             |

NI: Not illustrated in section.

N/A: Not applicable.



# 18 Low Voltage Circuit Breaker Parts

**Table 2-2, AKR/AKJ-50/50H, AKRU/AKJU-50, AKRT/AKJT-50H Power Circuit Breaker**

| Fig. Ref. | Ref. No. | Description   | Catalog Number   |                    |                    |                      |
|-----------|----------|---|------------------|--------------------|--------------------|----------------------|
|           |          |   | AKR-50<br>AKJ-50 | AKRU-50<br>AKJU-50 | AKR-50H<br>AKJ-50H | AKRT-50H<br>AKJT-50H |
| 2A        | 24       | Gear / Ratchet and Roller Assembly                    | 343L731G1        |                    |                    |                      |
| 2C        | 25       | Handle (Operating / Charging) for AKD-8 & non AKD-8   | 568B386G1        |                    |                    |                      |
| 2D        | 26       | Handle Crank Cam for Manual Breaker                   | 192A9536G2       |                    |                    |                      |
| NI        | -        | Insulated Link Pin for Contact Assembly               | 192A7573P110     |                    |                    |                      |
| NI        | -        | Insulating Coupling Link Assembly                     | 192A9664G1       |                    | 192A9664G3         |                      |
| 2A        | 12       | "K" Relay - B Connection Diagram                      | Table 2B         |                    |                    |                      |
| NI        | -        | Lifting Device / Breaker Spreader for OEM Equipment   | 0247B8961G002    |                    |                    |                      |
| NI        | -        | Lifting Device / Breaker Spreader for AKD-8 Equipment | 673D0500050202   |                    |                    |                      |
| 2D, 2F    | 27       | Link (Plastic) for Movable Contact Assembly           | 134C2127G1       |                    |                    |                      |
| 2D        | 28       | Link (Steel) for Movable Contact Assembly             | 192A9597P1       |                    | 193A1411P1         |                      |
| NI        | -        | Lubricant / Grease for Drawout Breaker                | 282A2048P9       |                    |                    |                      |
| NI        | -        | Maintenance Closing Handle                            | 568B386G1        |                    |                    |                      |
| NI        | -        | Mechanism Assembly, Electric Breaker                  | 139C4616G2       |                    |                    |                      |
| 2D        | 29       | Mechanism Assembly, Manual Breaker                    | 139C4616G1       |                    |                    |                      |
| 2C        | 30       | Molded Pole Base - AKD-6                              | 172RE350G1       |                    |                    |                      |
| NI        | -        | Molded Pole Base - AKD-8                              | 911E318P1        |                    |                    |                      |
| 2F        | 31       | Movable Main Contact - Left                           | 192A9511G1       |                    | 192A9977G1         |                      |
| 2F        | 32       | Movable Main Contact - Right                          | 192A9511G2       |                    | 192A9977G2         |                      |
| 2E        | -        | Movable Main Contact                                  | N/A              |                    |                    |                      |
| 4B        | 2        | MVT Fixed CT Sensor (See Section 4)                   | Table 4B         |                    |                    |                      |
| 4C        | 3        | MVT Neutral CT Sensor Disconnects (See Section 4)     | Table 4C         |                    |                    |                      |
| NI        | -        | MVT Neutral CT Sensor (See Section 4)                 | Table 4E         |                    |                    |                      |
| NI        | -        | MVT Sensor Amp Indicator (See Section 4)              | Table 4F         |                    |                    |                      |
| NI        | -        | MVT Programmer Mounting (See Section 4)               | Table 4G         |                    |                    |                      |
| 4E        | 5        | MVT PM Programmer (See Section 4)                     | Table 4H         |                    |                    |                      |
| 4F        | 6        | MVT+ Programmer (See Section 4)                       | Table 4H         |                    |                    |                      |
| 2D        | 34       | OPEN / CLOSE Indicator, Electric Breaker              | 568B522G1        |                    |                    |                      |
| 2D        | 34       | OPEN / CLOSE Indicator, Manual Breaker                | 568B520G1        |                    |                    |                      |
| 2D        | 35       | Open / Close Link to Main Shaft                       | 192A9542P1       |                    |                    |                      |
| 2N        | 36       | Open Fuse Lock-Out (OFL) - AKD-8                      | N/A              | 425D409G1          | N/A                | 425D409G1            |
| 2N        | 36       | Open Fuse Lock-Out (OFL) - non AKD-8                  | N/A              | 425D370G1          | N/A                | 425D370G1            |
| NI        | -        | Open Fuse Lock-Out (OFL) Harness                      | N/A              | Table 2Q           | N/A                | Table 2Q             |
| NI        | -        | Operations Counter                                    | 139C4626G1       |                    |                    |                      |
| NI        | -        | Pawl, Driving   | 323A6080G1       |                    |                    |                      |
| NI        | -        | Pawl, Holding / Ratchet                               | 323A6082G1       |                    |                    |                      |
| NI        | -        | Pawl, Holding Pawl on Ratchet Roller Gear             | 323A6082G1       |                    |                    |                      |
| 2F        | 37       | Pivot for Movable Contact                             | 192A9912G1       |                    | N/A                |                      |
| 2E        | 64       | Pivot, Inner, for Movable Contact                     | N/A              |                    |                    |                      |
| 2E        | 65       | Pivot, Outer, for Movable Contact                     | N/A              |                    |                    |                      |
| 2F        | 38       | Pivot, Lower Left, for Movable Contact                | N/A              |                    | 192A9972P2         |                      |
| 2F        | 39       | Pivot, Lower Right, for Movable Contact               | N/A              |                    | 192A9972P1         |                      |
| 2F        | 40       | Pivot, Upper Left, for Movable Contact                | N/A              |                    | 192A9972P4         |                      |
| 2F        | 41       | Pivot, Upper Right, for Movable Contact               | N/A              |                    | 192A9972P3         |                      |
| NI        | -        | Pivot for Pawl Spring                                 | N/A              |                    | 192A9594P1         |                      |
| NI        | -        | Pivot for Stationary Arcing Contact                   | N/A              |                    | 192A9514P1         |                      |

NI: Not illustrated in section.

N/A: Not applicable.

**Table 2-2, AKR/AKJ-50/50H, AKRU/AKJU-50, AKRT/AKJT-50H Power Circuit Breaker**

| Fig. Ref. | Ref. No. | Description   | Catalog Number   |                    |                    |                      |
|-----------|----------|---|------------------|--------------------|--------------------|----------------------|
|           |          |   | AKR-50<br>AKJ-50 | AKRU-50<br>AKJU-50 | AKR-50H<br>AKJ-50H | AKRT-50H<br>AKJT-50H |
| NI        | –        | Plunger for Stationary Arcing Contact                 | 192A9544G1       |                    |                    |                      |
| NI        | –        | Positive Interlock                                    | 568B593G1        |                    |                    |                      |
| 2J        | 66       | Primary Disconnect Assembly                           | Table 2H         |                    |                    |                      |
| 2G        | 42       | Prop  | 192A9545G1       |                    |                    |                      |
| NI        | –        | Racking Crank   | 193A1990P1       |                    |                    |                      |
| 2H        | 43       | Racking Mechanism for Drawout Breaker                 | 139C4618G1       |                    |                    |                      |
| NI        | –        | Racking Screw Shutter – Slide Door                    | 192A9618G1       |                    |                    |                      |
| NI        | –        | Racking Screw Shutter Label                           | 192A7029P148     |                    |                    |                      |
| NI        | –        | Racking Screw Shutter Spring                          | 192A6990P159     |                    |                    |                      |
| NI        | –        | Rackout Plug Button                                   | N529P53B         |                    |                    |                      |
| NI        | –        | Rubber Buffer – Left                                  | 568B378G1        |                    |                    |                      |
| NI        | –        | Rubber Buffer – Right                                 | 568B378G2        |                    |                    |                      |
| 2C, 2K    | 44       | Secondary Disconnect (Movable) Device                 | Table 2I         |                    |                    |                      |
| NI        | –        | Secondary Disconnect (Stationary) – Cubicle Mounted   | 0176D7926G001    |                    |                    |                      |
| NI        | –        | Secondary Disconnect Harness – Drawout Breakers       | 425D367G1        |                    |                    |                      |
| NI        | –        | Secondary Disconnect Harness – Stationary Breakers    | 425D367G2        |                    |                    |                      |
| NI        | –        | Secondary Disconnect Insulation                       | 192A9767P1       |                    |                    |                      |
| 2E, 2F    | 45       | Shaft for Movable Contact Pivot                       | 192A9602P1       | 192A9985P1         |                    |                      |
| 2O        | 56       | Shunt Trip Device                                     | Table 2R         |                    |                    |                      |
| 2D        | 46       | Spring (Opening)                                      | 192A6990P153     |                    |                    |                      |
| NI        | –        | Spring for CLOSE Button                               | 192A6990P143     |                    |                    |                      |
| NI        | –        | Spring for Closing Spring Discharge Linkage (torsion) | 192A6990P157     |                    |                    |                      |
| NI        | –        | Spring for Handle Return                              | 192A6990P142     |                    |                    |                      |
| 2E, 2F    | 47       | Spring for Movable Contact Pivot                      | 192A6990P190     |                    |                    |                      |
| NI        | –        | Spring for Pawl (torsion)                             | 192A6990P207     |                    |                    |                      |
| 2E, 2F    | 48       | Spring for Stationary Contact Assembly                | 192A9509G1       |                    |                    |                      |
| NI        | –        | Spring for Trip Button                                | 192A6990P370     |                    |                    |                      |
| NI        | –        | Spring, inner, for Stationary Arcing Contact          | 198A6990P148     |                    |                    |                      |
| NI        | –        | Spring, middle, for Stationary Arcing Contact         | 192A6990P147     | N/A                |                    |                      |
| NI        | –        | Spring, outer, for Stationary Arcing Contact          | 192A6990P146     |                    |                    |                      |
| 2E        | 58       | Stationary Arcing Contact                             | N/A              |                    |                    |                      |
| 2F        | 49       | Stationary Arcing Contact – Left                      | 568B509G4        |                    |                    |                      |
| 2F        | 50       | Stationary Arcing Contact – Right                     | 568B509G3        |                    |                    |                      |
| 2F        | 51       | Stationary Intermediate Contact                       | 192A9505G2       |                    |                    |                      |
| 2E, 2F    | 52       | Stationary Main Contact                               | 192A9505G1       |                    |                    |                      |
| NI        | –        | Stud Connection – AC Breaker                          | 425D366G4        |                    |                    | 425D366G5            |
| NI        | –        | Terminal Board for Stationary Breaker – 10 point      | 192A8227P7       | N/A                | 192A8227P7         |                      |
| NI        | –        | Terminal Board for Stationary Breaker – 6 point       | 192A8227P6       | N/A                | 192A8227P6         |                      |
| 2C        | 53       | Trip Button and Rod                                   | 192A9572G2       |                    |                    |                      |
| NI        | –        | TRIP Label  | 192A7029P126     |                    |                    |                      |
| 2C        | 54       | Trip Paddle / Latch (Drawout)                         | 192A9605G1       |                    |                    |                      |
| 2D        | 55       | Trip Shaft  | 568B524G1        |                    |                    |                      |
| 2Q        | 57       | Undervoltage Device With No UNDV Time Delay           | Table 2S         |                    |                    |                      |
| NI        | –        | Undervoltage Device With UNDV Time Delay              | Table 2T         |                    |                    |                      |
| 2C        | 59       | Window, Clear Plastic                                 | 192A9613P1       |                    |                    |                      |

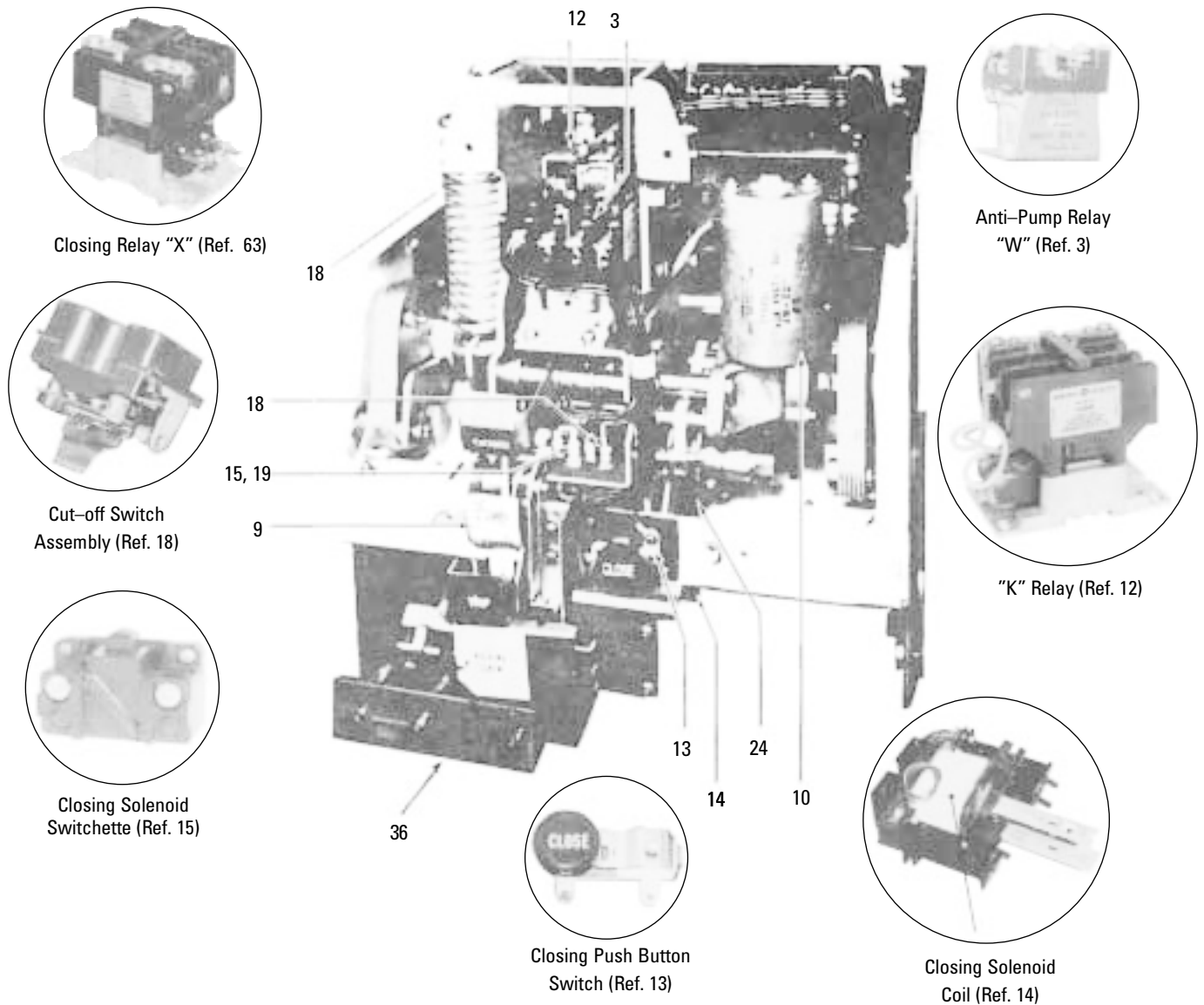
NI: Not illustrated in section.

N/A: Not applicable.





## 20 Low Voltage Circuit Breaker Parts



**Figure 2A:** Front View of Electrically Operated with Front Escutcheon Removed

**Table 2A, Front View of Power Circuit Breakers**

| Fig. No. | Ref. No. | Description   | Catalog Number |
|----------|----------|---|----------------|
| 2A       | 3        | Anti-Pump Relay "W" – R Connection Diagram                                | Table 2B       |
| 2A       | 9        | Charge/Discharge Indicator  | 568B518G1      |
| 2A       | 10       | Charging Motor  | Table 2B       |
| 2A       | 12       | "K" Relay – B Connection Diagram  | Table 2B       |
| 2A       | 13       | Closing Push Button Switch (includes insulator, mtg. hardware, and label) | 192A9717G1     |
| 2A       | 63       | Closing Relay "X"   | Table 2B       |
| 2A       | 14       | Closing Solenoid Coil (CC)  | Table 2B       |
| 2A       | 15       | Closing Solenoid Switchette (used in D.C. control only)                   | 192A7153P3     |
| 2A       | 18       | Cut-off Switch (2NC)  | 00921661P002   |
| 2A       | 19       | Cut-off Switch (2NO)  | 00921661P001   |
| 2A       | 24       | Gear/Ratchet and Roller Assembly  | 343L731G1      |

**Table 2B, Relays, Closing Solenoid Coil and Charging Motor—See Fig. 2A**

| Breaker Type   | Voltage (V) | Frequency (Hz) | Closing "X" Relay | Anti-Pump "W" Relay | "K" Relay | Closing Solenoid Coil | Charging Motor |          |         |    |
|--|-------------|----------------|-------------------|---------------------|-----------|-----------------------|----------------|----------|---------|----|
| AKR/AKRU-30<br>AKR-30H<br>AKR/AKRU-50<br>AKJ/AKJU-50<br>AKR/AKRT-50H<br>AKJ/AKJT-50H | 48          | DC             | 192A9770          | P1                  | P1        | P13                   | P1             | G4       |         |    |
|  | 125         |                |                   | P2                  | P2        | P14                   | P2             | G5       |         |    |
|  | 250         |                |                   | P3                  | P3        | N/A                   | P3             | G6       |         |    |
|  | 120         | 60             |                   | P4                  | 192A9771  | P4                    | P15            | 192A9794 | 568B596 | G5 |
|  |             | 50             |                   | P5                  |           |                       |                |          |         |    |
|  | 208         | 60             |                   | P6                  | P5        | P16                   | P6             | G6       |         |    |
|  |             | 50             |                   | P7                  |           |                       |                |          |         |    |
|  | 240         | 60             |                   | P8                  | P6        | P7                    |                |          |         |    |
|  |             | 50             |                   | P9                  |           |                       |                |          |         |    |

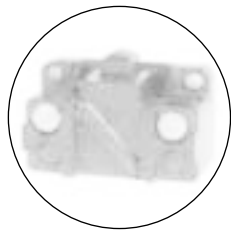
The "X", and "W" Relays are used with type R Connection Diagrams. The "K" Relay is used with type B Connection Diagrams. The type of Connection Diagram is found on the Electrical Closing Mechanism nameplate.

**Table 2C, Control Relays\*\***

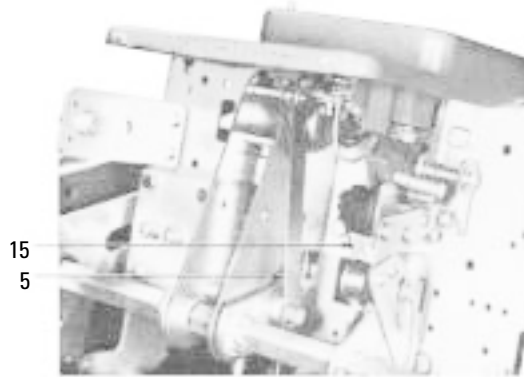
| Breaker Type   | Voltage Operation   | Closing Frequency | Voltage (V) | Catalog Number |
|--|---------------------|-------------------|-------------|----------------|
| AKR/AKRU-30<br>AKR-30H<br>AKR/AKRU-50<br>AKJ/AKJU-50<br>AKR/AKRT-50H<br>AKJ/AKJT-50H | B-Elec<br>(QC-Elec) | 50HZ              | 120         | G19            |
|  |                     |                   | 208         | G20            |
|  |                     |                   | 240         | G21            |
|  |                     | 60HZ              | 120         | G13            |
|  |                     |                   | 208         | G17            |
|  |                     |                   | 240         | G14            |
|  |                     | DC                | 48DC        | G18            |
|  |                     |                   | 125DC       | G15            |
|  |                     |                   | E-Elec      | 50             |
|  | 240                 | G31               |             |                |
|  | 60                  | 120               |             | G28            |
|  |                     | 240               |             | G30            |
|  | DC                  | 48DC              |             | G25            |
|  |                     | 125DC             |             | G26            |
|  | 250DC               | G27               |             |                |

\*\*Includes Relays, Cut-off Switch, Closing Solenoid Coil, and Charging Motor.





Closing Solenoid Switchette (Ref. 15)

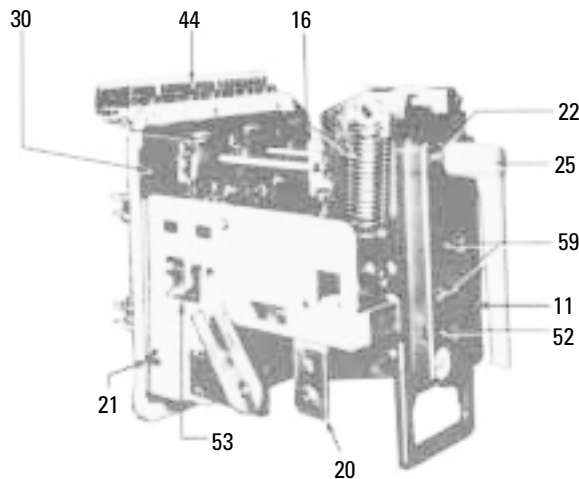


**Figure 2B:** Blocking Plate Link and Closing Switchette

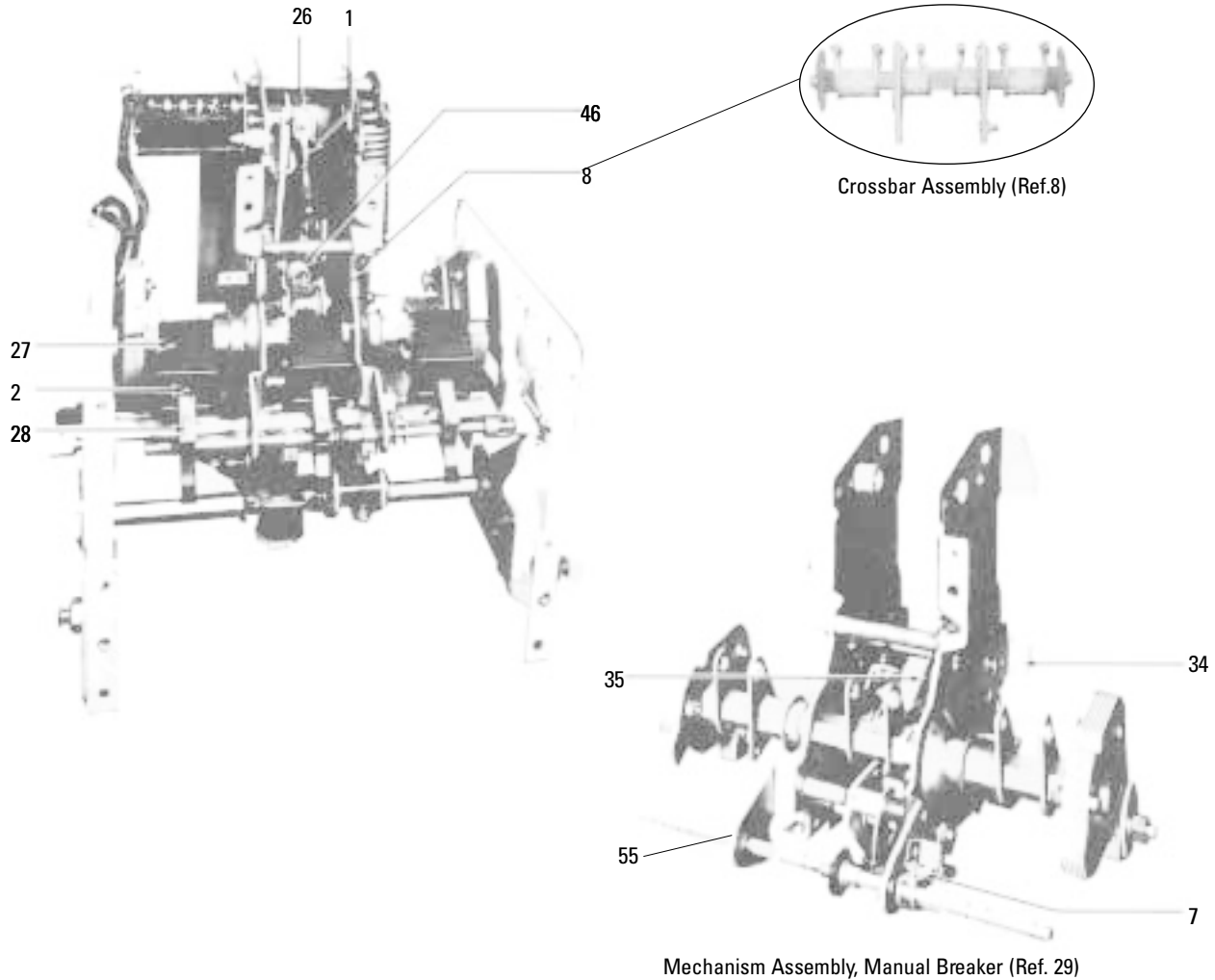
**Table 2D, Front View of Power Circuit Breakers**

| Fig. No. | Ref. No. | Description   | Catalog Number |
|----------|----------|---|----------------|
| 2B       | 5        | Blocking Plate Link   | 192A9629P1     |
| 2C       | 11       | CLOSE Button for Manual Breaker                               | 192A9616G1     |
| 2B       | 15       | Closing Solenoid Switchette (used in D.C. control only)       | 192A7153P3     |
| 2C       | 20       | Drawout Mounting Stud & Bracket Assembly – Front              | 192A9685G1     |
| 2C       | 21       | Drawout Mounting Stud – Rear                                  | 192A6976P53    |
| NI       | –        | Escutcheon, (Deep) – Electric Breaker, B-type D/O only        | 568B265G2      |
| NI       | –        | Escutcheon, (Deep) – Manual Breaker, B-type D/O only          | 568B265G1      |
| NI       | –        | Escutcheon, (Standard) – Electric Breaker                     | 139C4612P1     |
| 2C       | 22       | Escutcheon, (Standard) – Manual Breaker made after June 1977  | 139C4610G1     |
| 2C       | 22       | Escutcheon, (Standard) – Manual Breaker made before June 1977 | 139C4610G3     |
| 2C       | 25       | Handle (Operating/Charging) for AKD-8                         | 286A8096G1     |
| 2C       | 25       | Handle (Operating/Charging) for non AKD-8                     | 425D403P1      |
| 2C       | 30       | Molded Pole Base-AKD-6  | 172RE350G1     |
| 2C, 2K   | 44       | Secondary Disconnect (Movable) Device for Drawout Breakers    | Table 2I       |
| NI       | –        | Secondary Disconnect (Stationary) – Cubicle Mounted           | 0176D7926G001  |
| NI       | –        | Secondary Disconnect Harness – Drawout Breakers               | 425D367G1      |
| NI       | –        | Secondary Disconnect Harness – Stationary Breakers            | 425D367G2      |
| NI       | –        | Secondary Disconnect Insulation                               | 192A9767P1     |
| 2C       | 52       | Trip Button & Rod   | 192A9572G2     |
| 2C       | 53       | Trip Paddle/Latch (Drawout)                                   | 192A9605G1     |
| 2C       | 59       | Window, Clear Plastic   | 192A9613P1     |

NI: Not illustrated in section.



**Figure 2C:** Manually Operated AKR-50 Breaker (Drawout type A) with Arc Quenchers and Barriers Removed



**Figure 2D:** Internal View of Front Frame and Mechanism Assembly, Manually Operated AKR-50 Breaker

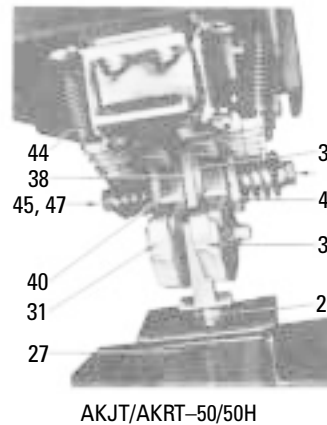
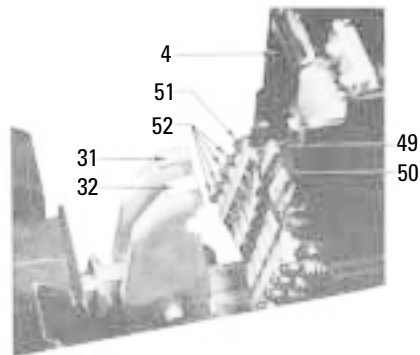
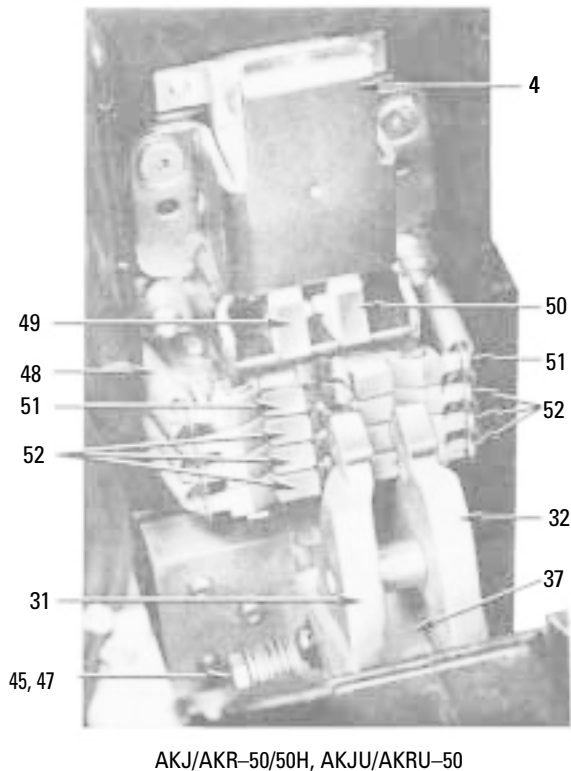
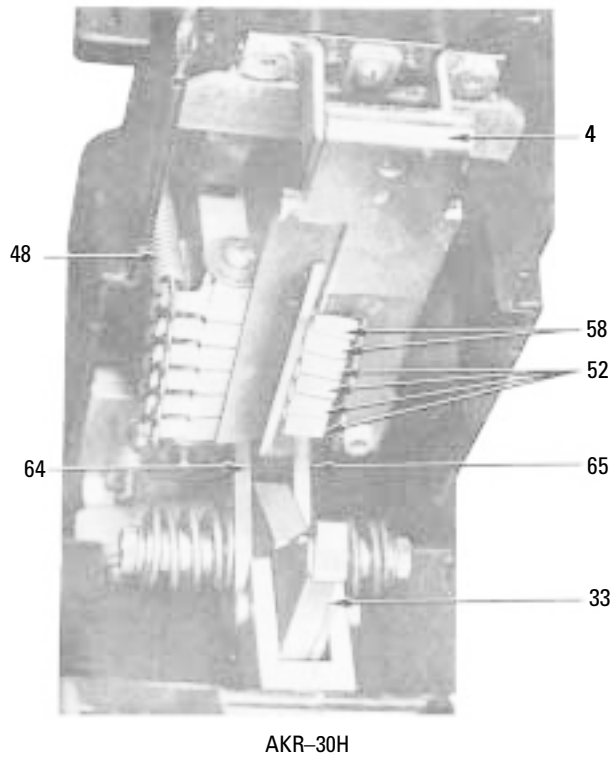
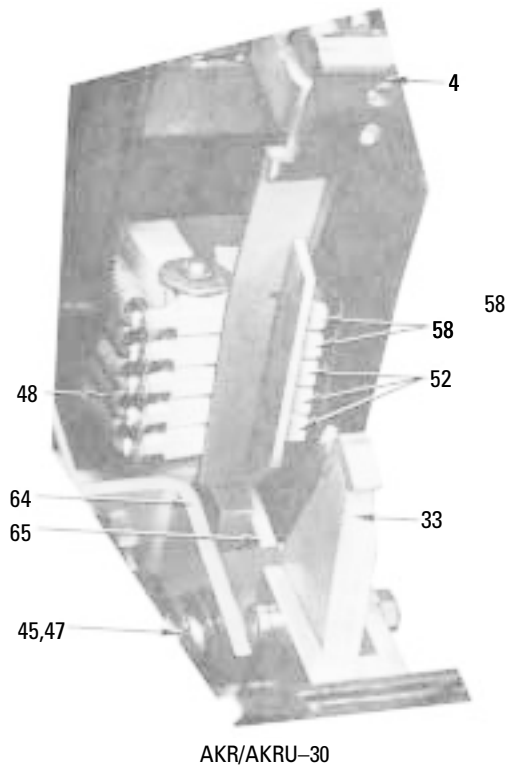
| <b>Table 2E, Internal View of Power Circuit Breakers</b> |          |   |                       |                  |                    |
|--|----------|---|-----------------------|------------------|--------------------|
| Fig. No.   | Ref. No. | Description                                 | Catalog Number        |                  |                    |
|  |          |   | AKR-30/30H<br>AKRU-30 | AKR-50<br>AKR-50 | AKRU-50<br>AKJU-50 |
| 2D   | 1        | Adjustable Link for Manual Mechanism        | 192A9552G2            |                  |                    |
| 2D, 2F   | 2        | Adjusting Screw for Contact Assembly        | 192A9554P1            |                  |                    |
| 2D   | 7        | Buffer Paddle Assembly for Trip Shaft       | 192A9651G1            |                  |                    |
| 2D   | 8        | Channel Insulation                          | 192A9631P1            |                  |                    |
| 2D   | 26       | Handle Crank Cam                            | 192A9536G2            |                  |                    |
| 2D, 2F   | 27       | Link (Plastic) for Movable Contact Assembly | 134C2127G1            |                  |                    |
| 2D   | 28       | Link (Steel) for Movable Contact Assembly   | 192A9841P1            | 192A9597P1       | 193A1411P1         |
| NI   | -        | Mechanism Assembly, Electrical Breaker      | 139C4616G2            |                  |                    |
| 2D   | 29       | Mechanism Assembly, Manual Breaker          | 139C4616G1            |                  |                    |
| 2D   | 34       | OPEN/CLOSE Indicator, Electric Breaker      | 568B522G1             |                  |                    |
| 2D   | 34       | OPEN/CLOSE Indicator, Manual Breaker        | 568B520G1             |                  |                    |
| 2D   | 35       | OPEN/CLOSE Link to Main Shaft               | 192A9242P1            |                  |                    |
| 2D   | 46       | Spring (Opening)                            | 192A6990P153          |                  |                    |
| 2D   | 55       | Trip Shaft                                  | 568B524G1             |                  |                    |

NI: Not illustrated in section.



# 24 Low Voltage Circuit Breaker Parts

Low Voltage  
Circuit Breaker Parts



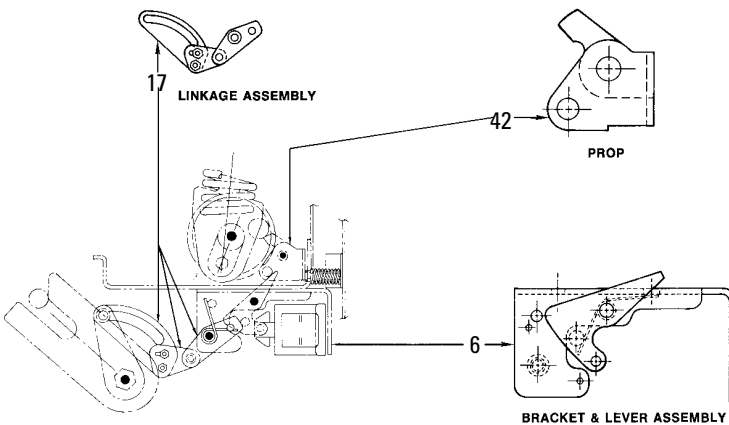
**Figure 2F:** AKJ/AKR-50/50H, AKJU/AKRU-50 and AKJT/AKRT-50/50H Contact Structure (one pole)

For more information contact your authorized GE sales representative or GE distributor.

**Table 2F, Internal View of Power Circuit Breakers**

| Fig. No. | Ref. No. | Description                                 | Catalog Number         |                        |              |
|----------|----------|---|------------------------|------------------------|--------------|
|          |          |   | AKR/AKRU-30<br>AKR-30H | AKR/AKRU-50<br>AKR-50H | AKRT-50H     |
| 2D, 2F   | 2        | Adjusting Screw for Contact Assembly        | 192A9554P1             |                        |              |
| 2E, 2F   | 4        | Arc Runner                                  | 192A9902G1             | 568B504G1              |              |
| 2G       | 6        | Bracket and Lever Assembly                  | 568B541G1              |                        |              |
| 2G       | 17       | Closing Spring Discharge Linkage Assembly   | 568B557G1              |                        |              |
| 2D, 2F   | 27       | Link (Plastic) for Movable Contact Assembly | 134C2127G1             |                        |              |
| 2F       | 31       | Movable Contact-Left                        | N/A                    | 192A9511G1             | 192A9977G2   |
| 2F       | 32       | Movable Contact-Right                       | N/A                    | 192A9511G2             | 192A9977G1   |
| 2E       | 33       | Movable Main Contact                        | 192A9511G3             | N/A                    |              |
| 2F       | 37       | Pivot for Movable Contact                   | N/A                    | 192A9912G1             | N/A          |
| 2E       | 64       | Pivot, Inner, for Movable Contact           | 192A9882G1             | N/A                    |              |
| 2E       | 65       | Pivot, Outer, for Movable Contact           | 192A9845P1             | N/A                    |              |
| 2F       | 38       | Pivot, Lower Left, for Movable Contact      | N/A                    |                        | 192A9972P2   |
| 2F       | 39       | Pivot, Lower Right, for Movable Contact     | N/A                    |                        | 192A9972P1   |
| 2F       | 40       | Pivot, Upper Left, for Movable Contact      | N/A                    |                        | 192A9972P4   |
| 2F       | 41       | Pivot, Upper Right, for Movable Contact     | N/A                    |                        | 192A9972P3   |
| 2G       | 42       | Prop  | 192A9545G1             |                        |              |
| 2H       | 43       | Racking Mechanism for Drawout Breaker       | 139C4618G1             |                        |              |
| 2E, 2F   | 45       | Shaft for Movable Contact Pivot             | 192A9843P1             | 192A9602P1             | 192A9985P1   |
| 2E, 2F   | 47       | Spring for Movable Contact Pivot            | 192A6990P190           | 192A6990P152           | 192A6990P190 |
| 2E, 2F   | 48       | Spring for Contact Assembly                 | 192A9509G1             |                        |              |
| 2E       | 58       | Stationary Arcing Contact                   | 192A9847G1             | N/A                    |              |
| 2F       | 49       | Stationary Arcing Contact-Left              | N/A                    | 568B509G4              |              |
| 2F       | 50       | Stationary Arcing Contact-Right             | N/A                    | 568B509G3              |              |
| 2F       | 51       | Stationary Intermediate Contact             | N/A                    | 192A9505G2             |              |
| 2E, 2F   | 52       | Stationary Main Contact                     | 192A9847G2             | 192A9505G1             |              |

N/A: Not applicable.


**Figure 2G:** Closing Spring Interlock

**Figure 2H:** Drawout Racking Mechanism (Ref.43)


**Table 2G, Arc Quencher/Chute and Arc Quencher Retainer**

| Breaker Type  | AC/DC | Arc Quencher/Chute | Arc Quencher Retainer |             |
|---------------|-------|--------------------|-----------------------|-------------|
| AKR-30        | DC    | 425D404            | G2                    | 193A1348 P1 |
| AKRU-30       | AC    |                    | G7                    | 193A1169 P1 |
| AKR-30H       |       |                    | G8                    |             |
| AKR/AKJ-50    | DC    |                    | G1                    | 193A1348 P1 |
| AKRU/AKJU-50  | AC    |                    | G9                    | 193A1169 P1 |
| AKR/AKJ-50H   |       |                    | G10                   |             |
| AKRT/AKJT-50H |       |                    |                       |             |



**Figure 2I:** Arc Quencher/Chute-AC (Ref. 60)

**Table 2H, Primary Disconnect Assembly**

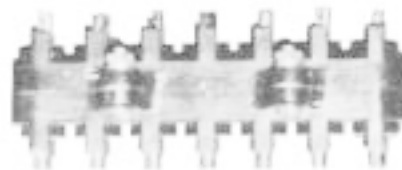
| Breaker Type                 | Catalog Number | Stud  | Group Number |             |            |
|------------------------------|----------------|-------|--------------|-------------|------------|
|                              |                |       | Left Pole    | Center Pole | Right Pole |
| AKJ-50/50H                   | 192A9668       | Upper | G6           | G1          | G6         |
|                              |                | Lower | G7           | G1          | G7         |
| AKJT-50/50H                  |                | Upper | G9           | G8          | G9         |
|                              |                | Lower | G10          | G8          | G10        |
| AKJU-50 with 300-2000A Fuses |                | Upper | G1           | G1          | G1         |
|                              |                | Lower | G1           | G1          | G1         |
| AKR-30/30H                   |                | Upper | G2           | G2          | G2         |
|                              |                | Lower | G3           | G3          | G3         |
| AKR-50<br>AKRT-50H           |                | Upper | G1           | G1          | G1         |
|                              |                | Lower | G1           | G1          | G1         |
| AKRU-30                      |                | Upper | G4           | G4          | G4         |
|                              |                | Lower | G3           | G3          | G3         |
| AKRU-50 with 300-2000A Fuses | Upper          | G1    | G1           | G1          |            |
|                              | Lower          | G1    | G1           | G1          |            |
| AKRU-50 with 2500A Fuses     | 568B589        | Upper | G1           | G1          | G1         |
|                              | Lower          | G1    | G1           | G1          |            |



**Figure 2J:** Primary Disconnect Assembly (Ref. 66)

**Table 2I, Secondary Disconnect (Movable) Devices for Drawout Breaker**

| Breaker Type                     | Terminal Points | Catalog Number |    |
|----------------------------------|-----------------|----------------|----|
| AKRU-30/50<br>AKJU-50            | 7pt             | 568B510        | G6 |
|                                  | 14pt            |                | G3 |
|                                  | 21pt            |                | G4 |
| AKR-30/50, AKJ-50<br>AKR-30H/50H | 7pt             |                | G5 |
|                                  | 14pt            |                | G1 |
| AKJ/AKRT/AKJT-50H                | 21pt            | G2             |    |



**Figure 2K:** Secondary Disconnect (Movable) Device (7pt) (Ref. 44)

General Electric Type J and L fuses are now obsolete, and no longer used in type AKRU low-voltage power circuit breakers.

Gould-Shawmut fuses are now used. The chart cross-references the obsolete GE catalog number and the replacement Gould-Shawmut catalog numbers.

| <b>Table 2J, Fuses (Gould-Shawmut)</b>   |                                |                       |                                      |              |
|--|--------------------------------|-----------------------|--------------------------------------|--------------|
| <b>Breaker Type</b>  | <b>Obsolete GE Fuse Rating</b> | <b>Catalog Number</b> | <b>Gould # Equiv. Catalog Number</b> | <b>Class</b> |
| AKR/AKRU-30<br>AKR-30H<br>AKR/AKRU-50<br>AKJ/AKJU-50<br>AKR/AKRT-50H<br>AKJ/AKJT-50H | 150A                           | GF8B150               | A4J150                               | J            |
|  | 200A                           | GF8B200               | A4J200                               |              |
|  | 225A                           | GF8B225               | A4J225                               |              |
|  | 250A                           | GF8B250               | A4J250                               |              |
|  | 300A                           | GF8B300               | A4J300                               |              |
|  | 350A                           | GF8B350               | A4J350                               |              |
|  | 400A                           | GF8B400               | A4J400                               |              |
|  | 450A                           | GF8B450               | A4J450                               | L            |
|  | 500A                           | GF8B500               | A4J500                               |              |
|  | 600A                           | GF8B600               | A4J600                               |              |
|  | 601A                           | GF8B601               | A4BY601                              |              |
|  | 650A                           | GF8B650               | A4BY650                              |              |
|  | 700A                           | GF8B700               | A4BY700                              |              |
|  | 800A                           | GF8B800               | A4BY800                              |              |
|  | 1000A                          | GF8B1000              | A4BY1000 BG #                        |              |
|  | 1200A                          | GF8B1200              | A4BY1200 BG #                        |              |
|  | 1400A                          | GF8B1400              | N/A                                  |              |
| 1600A  | GF8B1600                       | A4BY1600 BG #         |                                      |              |
| 2000A  | GF8B2000                       | A4BY2000              |                                      |              |
| 2500A STD  | GF8B2500                       | A4BY250               |                                      |              |

#Suffix or type BG denotes cut-out on tang.

| <b>Table 2K, Allowable Fuse Sizes</b> |                    |  |  |  |
|---------------------------------------|--------------------|--|--|--|
| <b>Breaker Type</b>                   | <b>Rating Plug</b> | <b>Max. Gould-Shawmut Class "L" Fuse</b> | <b>Min. Gould-Shawmut Class "L" Fuse</b> | <b>Min. Gould-Shawmut Class "J" Fuse</b> |
| AKRU/AKJU-50<br>AKRT/AKJT-50H         | Rating             | Size                                     | Size                                     | Size                                     |
|                                       | 1600A              | 2500A                                    | 2500A                                    | —  |
|                                       | 1200A              | 2500A                                    | 1600A                                    | —  |
|                                       | 1000A              | 2500A                                    | 1000A                                    | —  |
|                                       | 800A               | 2500A                                    | 800A                                     | —  |
|                                       | 700A               | 2500A                                    | 700A                                     | —  |
|                                       | 600A               | 2500A                                    | —  | 600A                                     |
|                                       | 500A               | 2500A                                    | —  | 500A                                     |
| 400A and Below                        | 2500A              | —  | 450A                                     |  |





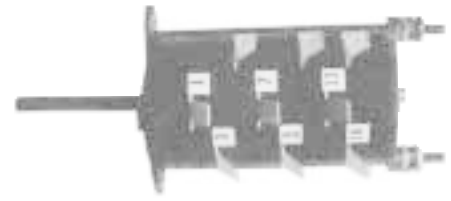
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| <b>Table 2L, Fuse Mounting Assembly</b> |                       |                  |                       |     |
|---|-----------------------|------------------|-----------------------|-----|
| <b>Breaker Type</b>                     | <b>Application</b>    | <b>Fuse Rate</b> | <b>Catalog Number</b> |     |
| AKRU-30                                 | AKD-5<br>and<br>AKD-6 | 225A             | 125D408               | G17 |
|   |                       | 300A             |                       | G7  |
|   |                       | 350A             |                       |     |
|   |                       | 400A             |                       |     |
|   |                       | 450A             |                       | G10 |
|   |                       | 500A             |                       |     |
|   |                       | 600A             |                       |     |
|   |                       | 800A             |                       | G13 |
|   |                       | 1000A            |                       | G14 |
|   | 1200A                 |                  |                       |     |
|   | 1600A                 |                  |                       |     |
|   | AKD-8                 | 225A             |                       | G26 |
|   |                       | 300A             |                       | G22 |
|   |                       | 350A             |                       | G23 |
|   |                       | 400A             |                       |     |
|   |                       | 450A             |                       |     |
|   |                       | 500A             |                       | G24 |
|   |                       | 600A             |                       |     |
| 800A                                    |                       |                  |                       |     |
| 1000A                                   |                       | G25              |                       |     |
| 1200A                                   |                       |                  |                       |     |
| 1600A                                   |                       |                  |                       |     |
| AKRU-50                                 | AKD-5<br>and<br>AKD-6 | 450A             | 425D408               | G10 |
|   |                       | 500A             |                       |     |
|   |                       | 600A             |                       |     |
|   |                       | 800A             |                       | G1  |
|   |                       | 1000A            |                       | G2  |
|   |                       | 1200A            |                       |     |
|   |                       | 1600A            |                       |     |
|   |                       | 2000A            |                       | G6  |
|   |                       | 2500A            |                       |     |
|   | 450A                  | G20              |                       |     |
|   | 500A                  |                  |                       |     |
|   | 600A                  |                  |                       |     |
|   | 800A                  |                  |                       | G21 |
|   | 1000A                 |                  |                       |     |
|   | 1200A                 |                  |                       |     |
|   | 1600A                 |                  |                       |     |
|   | 2000A                 |                  |                       |     |
|   | 2500A                 |                  |                       |     |
|   | **                    |                  |                       |     |

\*\* G27 For vertical lower studs  
G6 For horizontal lower studs

| <b>Table 2M, Auxiliary Switch (Electroswitch)</b>                              |                            |                       |     |
|--|----------------------------|-----------------------|-----|
| <b>Breaker Type</b>  | <b>Aux Switch Contacts</b> | <b>Catalog Number</b> |     |
| AKR/AKRU-30, AKR-30H<br>AKR/AKRU-50, AKJ/AKJU-50<br>AKR/AKRT-50H, AKJ/AKJT-50H | 6A & 6B                    | 568B571               | G14 |
|  | 5A & 5B*                   |                       | G16 |
|  | 3A & 3B                    |                       | G15 |
|  | 2A & 2B*@                  |                       | G13 |

\*For Manually operated breakers only.  
@ 2A & 2B with shunt trip is not allowed.  
Note: 6A & 6B Auxiliary Switch Contacts denotes a 6 stage Auxiliary Switch



**Figure 2L:** Auxiliary Switch (Electroswitch) 6A & 6B-(Ref. 61)

| <b>Table 2N, Bell Alarm Assembly</b>     |                           |                 |                       |
|--|---------------------------|-----------------|-----------------------|
| <b>Breaker Type</b>                      | <b>Bell Alarm Lockout</b> | <b>Contacts</b> | <b>Catalog Number</b> |
| AKR-30/50<br>AKRU/AKJ-50<br>AKR/AKRT-50H | Yes                       | 1 NO & 1NC      | 139C4625              |
|  |                           | 2 NC            |                       |
|  |                           | 2 NO            |                       |
| AKR-30/50<br>AKRU/AKJ-50<br>AKR/AKRT-50H | No                        | 1 NO & 1NC      | 139C4625              |
|  |                           | 2 NC            |                       |
|  |                           | 2 NO            |                       |

NO=Normally Open  
NC=Normally Closed



**Figure 2M:** Bell Alarm Assembly -(Ref. 62)

| <b>Table 2O, Closing Solenoid-Remote</b> |                  |                                    |                       |
|--|------------------|------------------------------------|-----------------------|
| <b>Breaker Type</b>                      | <b>Frequency</b> | <b>Breaker Closing Voltage (V)</b> | <b>Catalog Number</b> |
| AKR/AKRU-30<br>AKR-30H                   | 50HZ             | 120                                | G6                    |
|  |                  | 208                                | G9                    |
|  |                  | 240                                | G7                    |
| AKR/AKRU-50<br>AKJ/AKJU-50               | 60HZ             | 120                                | G1                    |
|  |                  | 208                                | G8                    |
|  |                  | 240                                | G2                    |
| AKR/AKRT-50H<br>AKJ/AKJT-50H             | DC               | 48DC                               | G3                    |
|  |                  | 125DC                              | G4                    |
|  |                  | 250DC                              | G5                    |

| <b>Table 2P, Open Fuse Lockout</b>       |                                     |                       |
|--|-------------------------------------|-----------------------|
| <b>Breaker Typer</b>                     | <b>Description</b>                  | <b>Catalog Number</b> |
| AKRU-30<br>AKRU/AKJU-50<br>AKRT/AKJT-50H | Open Fuse Lock-Out (OFLO)-AKD- 8    | 425D370G1             |
|  | Open Fuse Lock-Out (OFLO)-non AKD-8 | 425D409G1             |

| <b>Table 2Q, Open Fuse Lockout Harness</b> |                    |                  |                       |
|--|--------------------|------------------|-----------------------|
| <b>Breaker Type</b>                        | <b>Application</b> | <b>Fuse Rate</b> | <b>Catalog Number</b> |
| AKRU-30                                    | AKD - 8            | —                | G1                    |
| AKRU/AKJU-50                               | —                  |                  | G4                    |
| AKRU/AKJU-50                               | —                  | 2500A            | G3                    |
| AKRT/AKJT-50H                              | —                  | —                | G5                    |

—Any legitimate alternative condition.



**Figure 2N:** Open Fuse Lock-Out (Ref. 36)

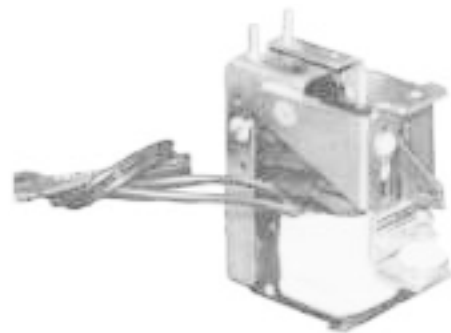


| <b>Table 2R, Shunt Trip Device –See Fig. 2P</b>                                      |                       |                               |                       |
|--|-----------------------|-------------------------------|-----------------------|
| <b>Breaker Type</b>  | <b>Frequency (Hz)</b> | <b>Shunt Trip Voltage (V)</b> | <b>Catalog Number</b> |
| AKR/AKRU-30<br>AKR-30H<br>AKR/AKRU-50<br>AKJ/AKJU-50<br>AKR/AKRT-50H<br>AKJ/AKJT-50H | 50                    | 120                           | G6                    |
|  |                       | 208                           | G12                   |
|  |                       | 240                           | G13                   |
|  |                       | 380                           | G14                   |
|  |                       | 480                           | G9                    |
|  |                       | 575                           | G15                   |
|  | 60                    | 70                            | G16                   |
|  |                       | 120                           | G5                    |
|  |                       | 208                           | G11                   |
|  |                       | 240                           | G7                    |
|  |                       | 277                           | G19                   |
|  |                       | 480                           | G8                    |
|  |                       | 575                           | G10                   |
|  | DC                    | 12DC                          | G17                   |
|  |                       | 24DC                          | G1                    |
|  |                       | 48DC                          | G2                    |
|  |                       | 125DC                         | G3                    |
|  |                       | 250DC                         | G4                    |



**Figure 2P:** Shunt Trip Device (Ref. 56)

| <b>Table 2S, Undervoltage Device with No UNDV Time Delay –See Fig. 2Q</b>            |                       |  |                       |    |
|--|-----------------------|--|-----------------------|----|
| <b>Breaker Type</b>  | <b>Frequency (Hz)</b> | <b>Elec Lockout or UNDV Voltage(V)</b> | <b>Catalog Number</b> |    |
| AKR/AKRU-30<br>AKR-30H<br>AKR/AKRU-50<br>AKJ/AKJU-50<br>AKR/AKRT-50H<br>AKJ/AKJT-50H | 50                    | 120                                    | G8                    |    |
|  |                       | 208                                    | G10                   |    |
|  |                       | 240                                    | G17                   |    |
|  |                       | 380                                    | G16                   |    |
|  |                       | 480                                    | G13                   |    |
|  |                       | 575                                    | G15                   |    |
|  | 60                    | 120                                    | G7                    |    |
|  |                       | 208                                    | G9                    |    |
|  |                       | 240                                    | G11                   |    |
|  |                       | 480                                    | G12                   |    |
|  |                       | 575                                    | G14                   |    |
|  |                       | DC                                     | 24DC                  | G1 |
|  |                       |  | 48DC                  | G2 |
|  | 125DC                 |  | G3                    |    |
|  | 250DC                 |  | G4                    |    |



**Figure 2Q:** Undervoltage Device (Ref. 57)

| <b>Table 2T, Undervoltage Device with UNDV Time Delay</b> |  |                       |
|---|--|-----------------------|
| <b>Breaker Type</b>                                       | <b>Elec Lockout or UNDV Voltage(V)</b> | <b>Catalog Number</b> |
| AKR/AKRU-30, AKR-30H                                      | 208                                    | 139C4622              |
| AKR/AKRU-50, AKJ/AKJU-50                                  | 240                                    |                       |
| AKR/AKRT-50H  | 125DC                                  |                       |
| AKJ/AKJT-50H  | 250DC                                  |                       |

## Table 2U, AK/AKU/AKT-50 Power Circuit Breaker

**AK-50 Power Circuit Breaker Obsolescence Statement:** The AK-50 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150H. The notes column identifies as obsolete those parts that are no longer available. The reference number listed refers to the GEF-4150H reference number.

| <i>GEF-4150H<br/>Ref. No.</i> | <i>Description</i>                     | <i>Catalog Number</i> | <i>Notes</i>     |
|-------------------------------|--|-----------------------|------------------|
| 185                           | Adjusting plate                        | 887B387G1             | Manual Breaker   |
| 215                           | Anti rebound hook and slider           | 801B138G4             | Obsolete         |
| 168B                          | Anti-pump relay (W)                    | Table GEF-4149H-B     | Electric Breaker |
| 54                            | Arc quencher tie bar, AK-2/3-50        | 9921630P3             | Obsolete         |
| 54                            | Arc quencher tie bar, AK-2A/3A-50      | 9921630P2             | Obsolete         |
| 38                            | Arc quencher, AK-50 DC, AKU-50, AKT-50 | 238D674G2             | Obsolete         |
| 38                            | Arc quencher, AK-50 AC                 | 238D674G1             | Obsolete         |
| 177                           | Auxiliary switch, 3 stage              | 192S9791P3            | Electric Breaker |
| 183                           | Auxiliary switch coupling              | 127A6439P1            |                  |
| 178                           | Auxiliary switch crank bracket         | 411A952G1             |                  |
| 179                           | Auxiliary switch link assembly         | 887B386G2             | Electric Breaker |
| 179                           | Auxiliary switch link assembly         | 887B386G1             | Manual Breaker   |
| 182                           | Auxiliary switch operating rod         | 127A6463G2            |                  |
| 177                           | Auxiliary switch, 2 stage              | 192A9791P2            | Manual Breaker   |
| 177                           | Auxiliary switch, 5 stage              | 192A9791P5            | Manual Breaker   |
| 177                           | Auxiliary switch, 6 stage              | 192A9791P6            | Electric Breaker |
| 128                           | Bearing                                | 393A796P3             | Electric Breaker |
| 144                           | Bearing                                | 698C995P2             | Manual Breaker   |
| 3                             | Block, AK-50 AC                        | 117A512P1             |                  |
| 3                             | Block, AK-50 DC, AKU-50, AK-50         | 452A542P1             |                  |
| 103                           | Buffer assembly                        | 457A627G1             |                  |
| 120                           | Buffer pin                             | 698C993P4             | Manual Breaker   |
| 123                           | Buffer stop nut                        | 393A993P24            | Manual Breaker   |
| 121                           | Buffer support                         | 698C993P3             | Manual Breaker   |
| 122                           | Buffer washer                          | 698C993P5             | Manual Breaker   |
| 78                            | Cam                                    | 6414743P1             | Obsolete         |
| 226                           | Charge indicator label                 | 698C997P4             |                  |
| 188                           | Charged and discharged indicator       | 365B268G2             | Electric Breaker |
| 62                            | Clamp                                  | 192A9567P1            |                  |
| 214                           | Clamp                                  | 192A9567P1            | \$\$\$           |
| 84                            | Clevis                                 | 412A413P3             |                  |
| 168                           | Closing relay (X)                      | Table GEF-4149H-B     | Electric Breaker |
| 168C                          | Closing solenoid                       | Table GEF-4149H-B     | Electric Breaker |
| 222                           | Closing switch                         | 805B949G1             | Obsolete         |
| 104                           | Counter weight                         | 383A671G2             |                  |
| 83                            | Coupling                               | 6555414P2             |                  |
| 64                            | Coupling                               | 174V536P1             | Obsolete         |
| 126                           | Crank (includes outer race of bearing) | 698C992G4             | Manual Breaker   |
| 55                            | Cross bar                              | 267B101P2             |                  |
| 160                           | Cu-off switch "G"                      | 192A7153P8            | Electric Breaker |
| 162                           | Cut-off switch "F"                     | 192A7153P7            | Electric Breaker |
| 163                           | CUT-off switch cover                   | 371A235P1             | Electric Breaker |
| 165                           | Cut-off switch lever bracket           | 371A234G1             | Electric Breaker |
| 164                           | Cut-off switch mounting bracket        | 371A233G1             | Electric Breaker |

\$\$\$Refers to -A Breakers only (e.g. AK-2A-50-1).



**Table 2U, AK/AKU/AKT-50 Power Circuit Breaker**

**AK-50 Power Circuit Breaker Obsolescence Statement:** The AK-50 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150H. The notes column identifies as obsolete those parts that are no longer available. The reference number listed refers to the GEF-4150H reference number.

| <b>GEF-4150H Ref. No.</b> | <b>Description</b>   | <b>Catalog Number</b> | <b>Notes</b>     |
|---------------------------|--|-----------------------|------------------|
| 166                       | Cut-off switch retainer  | 394A133P9             | Electric Breaker |
| 167                       | Cut-off switch spacer  | 192A8404P41           | Electric Breaker |
| 161                       | Cut-off switch insulation  | 193A9729P1            | Electric Breaker |
| 65                        | Dowel pin  | 127A6493P2            | Obsolete         |
| 195                       | Drawout racking mechanism assembly   | 238D689G1             | Obsolete         |
| 58                        | Front escutcheon (blue)  | 698C997P5             | Obsolete         |
| 58                        | Front escutcheon (blue)  | 805B975P2             | Obsolete         |
| 58                        | Front escutcheon (w/o closing switch, black)                               | 275B997P2             | Electric Breaker |
| 58                        | Front escutcheon (with closing switch, black)                              | 805975P1              | Obsolete         |
| 58                        | Front escutcheon, AK - 2 - 50  | 689C997P1             | Manual Breaker   |
| 158                       | Gasket motor   | 6447101P1             | Electric Breaker |
| 158A                      | Gasket, gear box end plate   | 6447102P1             | Electric Breaker |
| 181                       | Groove pin   | 21325042500           |                  |
| 61                        | Hand, trip paddle  | 6203939P3             | Obsolete         |
| 57                        | Handle   | 286A8096G2            |                  |
| 142                       | Indicator  | 698C996G1             | Manual Breaker   |
| 150                       | Indicator crank assembly   | 698C995G2             | Manual Breaker   |
|                           | Indicator Label  | 259C608P3             | Manual Breaker   |
| 148                       | Indicator lever assembly   | 698C995G1             | Manual Breaker   |
| 21                        | Insulating tube  | 6447741P1             | Obsolete         |
| 218                       | Insulation   | 362A494P1             |                  |
| 10                        | Insulation for stationary arcing contacts, AK - 50 AC                      | 459A373P3             | Obsolete         |
| 10                        | Insulation for stationry arcing contacts, AK - 50 DC, AKU - 50, AKT - 50   | 459A373P1             |                  |
| 176                       | Intantaneous undervoltage devic,   | Table GEF-4149H-A     |                  |
| 202                       | Interlock link assembly  | 846C0839G1            | \$\$\$           |
| 204                       | Jam nut  | 21500060000           | \$\$\$           |
| 106                       | Latch  | 848C0487P1            |                  |
| 205                       | Latch  | 846C839P1             | \$\$\$           |
| 89                        | Latch bolt   | V6444916P1            |                  |
| 208                       | Latch spring   | 846C0839P10           | \$\$\$           |
| 90                        | Latch, Electric Breaker  | 6414764P1             | Electric Breaker |
| 26                        | Leaf spring for movalbe main contacts                                      | 452A529P1             | Obsolete         |
| 9                         | Leaf spring for stationary arcing contacts, AK - 50 AC                     | 433A319P2             |                  |
| 9                         | Leaf spring for stationary arcing contacts, AK - 50 DC, AKU - 50, AKT - 50 | 433A319P1             |                  |
| 36                        | Leaf spring for stationary main contacts                                   | 449A995P1             | Obsolete         |
| 53                        | Lifting bracket, left  | 372A275G4             | %%%              |
| 52                        | Lifting bracket, right   | 372A275G3             | %%%              |
| 95                        | Link assembly  | 457A622G1             |                  |
| 20                        | Link for movable arcing contact, AK - 50 AC & DC, AKU - 50, AKT - 50       | 275B975P1             | Obsolete         |
| 17                        | Link for movalbe main contact  | K6404784P4            |                  |
| 197                       | Link spring  | 412A135P1             | Obsolete         |
| 119                       | Lower spring guide assembly pin  | 6447032P2             | Manual Breaker   |
| 119                       | Lower spring guide assembly pin  | 9447032P1             | Electric Breaker |
| 28                        | Lower stud   | 6414314P2             |                  |

\$\$\$Refers to -A Breakers only (e.g. AK-2A-50-1).

For more information contact your authorized GE sales representative or GE distributor.

## Table 2U, AK/AKU/AKT-50 Power Circuit Breaker

**AK-50 Power Circuit Breaker Obsolescence Statement:** The AK-50 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150H. The notes column identifies as obsolete those parts that are no longer available. The reference number listed refers to the GEF-4150H reference number.

| <i><b>GEF-4150H<br/>Ref. No.</b></i> | <i><b>Description</b></i>  | <i><b>Catalog Number</b></i> | <i><b>Notes</b></i> |
|--------------------------------------|--|------------------------------|---------------------|
| 157                                  | Lubricant for gear box   | 393A991P1                    | Electric Breaker    |
| 221                                  | Maintenance Handle   | 568B386G1                    | Electric Breaker    |
| 159                                  | Motor  | 5P66MA6A                     | Electric Breaker    |
| 159                                  | Motor  | 5P66MA7A                     | Electric Breaker    |
| 203                                  | Mounting stud  | 192A6976P53                  | \$\$\$              |
| 220                                  | Movable primary disconnect ( not used on AKT)                            | 192A9668G1                   |                     |
| 220A                                 | Movable primary disconnect (for AKT only)                                | 132C2655G1                   |                     |
| 11                                   | Moving arcing contact, AK – 50 AC  | K9921572G2                   |                     |
| 11                                   | Moving arcing contact, AK – 50 DC, AKU – 50, AKT – 50                    | K921572G2                    |                     |
| 15                                   | Moving intermedieate contact   | 193A1126G7                   |                     |
| 14                                   | Moving main contacts   | 193A1126G8                   |                     |
| 154                                  | O Ring for plug  | 393A992P2                    | Electric Breaker    |
| 186                                  | Open and close indicaotr link  | 6203934P1                    | Electric Breaker    |
| 187                                  | Open and close indicator   | 265B268G1                    | Electric Breaker    |
| 151                                  | Open–close label   | 259C608P3                    | Manual Breaker      |
| 56                                   | Opening spring , AC (AKU or AKT)   | 6509813P1                    |                     |
| 56                                   | Opening spring , AC (not used on AKU or AKT)                             | 6509914P1                    | Obsolete            |
| 56                                   | Opening spring, DC   | 6509813P1                    |                     |
| 196                                  | Pawl spring  | 365A313P1                    |                     |
| 118                                  | Pawl spring rollers  | 698C996P13                   | Manual Breaker      |
| 117                                  | Pawl spring support (lower)  | 698C996G4                    | Manual Breaker      |
| 116                                  | Pawl spring support (upper)  | 698C996G5                    | Manual Breaker      |
| 136                                  | Pawl with spring (front)   | 698C985G2                    | Manual Breaker      |
| 135                                  | Pawl with spring (rear)  | 698C985G1                    | Manual Breaker      |
| 51                                   | Phase barrier  | 6414763P1                    |                     |
| 85                                   | Pin  | 412A405P414                  |                     |
| 87                                   | Pin  | 647744P1                     |                     |
| 97                                   | Pin  | 6447091P1                    |                     |
| 141                                  | Pin  | 698C991P10                   | Manual Breaker      |
| 206                                  | Pin  | 6076401P12                   | \$\$\$              |
| 184                                  | Pin  | 6076402p203                  |                     |
| 74                                   | Pin  | 174V531P1                    | Obsolete            |
| 96                                   | Pin  | 6447099P1                    |                     |
| 189                                  | Pin for indicator  | 174V532P1                    | Electric Breaker    |
| 18                                   | Pin for movable arcing contact link, AK – 50                             | 6647153P3                    |                     |
| 18                                   | Pin for movable arcing contact link, AK – 50 DC, AKU – 50, AKT – 50      | 6447153P1                    |                     |
| 16                                   | Pin for movable main contact   | 452A528P1                    |                     |
| 22                                   | Pin for side link  | 6203081P1                    |                     |
| 37                                   | Pivot fpin for stationary main contacts                                  | 6447734P2                    |                     |
| 31                                   | Pivot pin for mobalbe main contacts                                      | 293B287P3                    |                     |
| 29                                   | Pivot pin for movable main contacts                                      | 452A564G1                    |                     |
| 8                                    | Pivot pin for sstationary arcing contacts, AK – 50 DC, AKU– 50, AKT – 50 | 6404793P2                    |                     |
| 8                                    | Pivot pin for stationary arcing contacts, AK – 50 AC                     | 6404793P3                    |                     |
| 153                                  | Plug   | 6447398P1                    | Electric Breaker    |

\$\$\$Refers to –A Breakers only (e.g. AK–2A–50–1).



**Table 2U, AK/AKU/AKT-50 Power Circuit Breaker**

**AK-50 Power Circuit Breaker Obsolescence Statement:** The AK-50 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150H. The notes column identifies as obsolete those parts that are no longer available. The reference number listed refers to the GEF-4150H reference number.

| <b>GEF-4150H Ref. No.</b> | <b>Description</b>  | <b>Catalog Number</b> | <b>Notes</b>     |
|---------------------------|---|-----------------------|------------------|
| 77                        | Prop  | 419A366P1             |                  |
| 92                        | Prop  | 698C993G1             |                  |
| 138                       | Prop  | 698C991G5             | Manual Breaker   |
| 93                        | Prop shaft bearing  | 377A871P2             |                  |
| 140                       | Prop spring   | 412A280P1             | Manual Breaker   |
| 109                       | Prop stop   | 412A412P2             |                  |
| 129                       | Ratchet assembly  | 698C987G2             | Manual Breaker   |
| 156                       | Ratchet pin   | 372A283P1             | Electric Breaker |
| 107                       | Reset latch   | 889B0410G1            |                  |
| 88                        | Reset latch, Electric Breaker                             | 568B272G1             | Electric Breaker |
| 19                        | Retainer  | 394A133P9             | Obsolete         |
| 67                        | Retainer  | 394A133P1             | Obsolete         |
| 69                        | Retainer  | 394A133P16            | Obsolete         |
| 75                        | Retainer  | 2132506200            |                  |
| 94                        | Retainer  | 394A133P9             |                  |
| 134                       | Retainer  | 394A133P28            | Manual Breaker   |
| 139                       | Retainer  | 394A133P3             | Manual Breaker   |
| 190                       | Retainer for indicator                                    | 394A133P1             | Electric Breaker |
| 115                       | Retaining ring  | 394A133P4             |                  |
| 23                        | Retainer  | 394A133P10            |                  |
| 207                       | Rivet   | 177L292P53            | \$\$\$           |
| 145                       | Rod   | 127A6493P3            | Manual Breaker   |
| 132                       | Roll pin  | 394A137P12            | Manual Breaker   |
| 143                       | Roll pin  | 394A137P11            | Manual Breaker   |
| 210                       | Screw (left)  | 177L292P58            | Obsolete         |
| 212                       | Screw (right)   | 177L292P59            | \$\$\$           |
| 217                       | Secondary disconnect device (7 point) Breaker mounted     | 184I803SDG1           | Obsolete         |
| 216                       | Secondary disconnect support                              | 265B237P1             |                  |
| 201                       | Shaft   | 888B420P2             | \$\$\$           |
| 131                       | Shaft assembly  | 698C990G2             | Manual Breaker   |
| 171                       | Shunt trip coil   | Table GEF-4149H - A   |                  |
| 170                       | Shunt trip device   | Table GEF-4149H - A   |                  |
| 169                       | Shunt trip device support                                 | 449A537P1             |                  |
| 24                        | Side link, left   | 457A624G2             |                  |
| 24                        | Side link, right  | 457A624G1             |                  |
| 1                         | Spacer  | 568B650P1             | Obsolete         |
| 112                       | Spacer  | 148A1946P10           |                  |
| 114                       | Spacer  | 148A1946P1            |                  |
| 219                       | Spacer  | 6176109P72            |                  |
| 209                       | Spacer (left)   | 148A1946P5            | \$\$\$           |
| 211                       | Spacer (right)  | 148A1946P6            | Obsolete         |
| 191                       | Spacer for indicator                                      | 6176109P7             | Electric Breaker |
| 33                        | Spacer for stationay main contact stop                    | 453A116P3             | @@@              |
| 33                        | Spacer for stationay main contact stop - Electric Breaker | 423A116P2             | ***, %%%         |

\*\*\*Original Breaker had no suffix letter or numeral (e.g. AK-2-50 vs. AK-2-50-1).

@@@Does not include AK-2 electrical breakers with no suffix or numeral.

\$\$\$Refers to -A Breakers only (e.g. AK-2A-50-1).

%%%Refers to breakers without a -A (e.g. AK-2-50-1).

For more information contact your authorized GE sales representative or GE distributor.

## Table 2U, AK/AKU/AKT-50 Power Circuit Breaker

**AK-50 Power Circuit Breaker Obsolescence Statement:** The AK-50 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150H. The notes column identifies as obsolete those parts that are no longer available. The reference number listed refers to the GEF-4150H reference number.

| GEF-4150H<br>Ref. No. | Description   | Catalog Number | Notes            |
|-----------------------|---|----------------|------------------|
| 30                    | Spacer for terminal   | 6203981P9      |                  |
| 91                    | Spring  | 6403348P1      |                  |
| 133                   | Spring  | 127A8306P1     | Manual Breaker   |
| 149                   | Spring  | 412A0292P1     | Manual Breaker   |
| 76                    | Spring  | 412A140P1      | Obsolete         |
| 147                   | Spring  | 412A267P1      | Manual Breaker   |
| 137                   | Spring arm  | 846C817G1      | Manual Breaker   |
| 192                   | Spring for indicator  | 365A305P1      | Electric Breaker |
| 155                   | Spring for ratchet pin  | 6509871P1      | Electric Breaker |
| 6                     | Spring for stationary arcing contacts, (inner)                | 6509859P1      |                  |
| 5                     | Spring for stationary arcing contacts, (outer)                | 6509858P1      |                  |
| 34                    | Spring for stationary main contacts                           | 6509893P1      |                  |
| 34                    | Spring for stationary main contacts                           | 412A0287P1     | Obsolete         |
| 101                   | Spring guide (lower)  | 6447353P1      |                  |
| 98                    | Spring guide (upper)  | 6447331P1      |                  |
| 124                   | Spring guide assembly ( closing)                              | 273B569G9      | Electric Breaker |
| 124                   | Spring guide assembly (closing)                               | 889B0408G1     | Manual Breaker   |
| 7                     | Spring guide for stationary arcing contact springs            | 6447046P1      |                  |
| 99                    | Spring reset (inner)  | 148A2213P1     |                  |
| 100                   | Spring reset (outer)  | 148A2214P1     |                  |
| 102                   | Spring support assembly                                       | 6203914G1      |                  |
| 174                   | Static time delay, AC or DC                                   | TAKYUVT        |                  |
| 4                     | Stationary arcing contact AK - 50 AC & DC, AKU - 50, AKT - 50 | 295B408G3      | @@@              |
| 13                    | Stationary intermediate contact (includes barrier)            | 193A1127G1     |                  |
| 12                    | Stationary main contact                                       | 293B221G5      |                  |
| 32                    | Stop for stationary main contacts                             | 453A116P1      |                  |
| 2                     | Stop, AK - 50 AC  | 9921587P1      | Obsolete         |
| 2                     | Stop, AK - 50 DC, AKU - 50, AKT - 50                          | 449A994P3      |                  |
| 127                   | Support   | 393A554P1      | Electric Breaker |
| 125                   | Support (includes bearing less outer race)                    | 698C992G5      | Manual Breaker   |
| 130                   | Support Assembly  | 698C988G3      | Manual Breaker   |
| 25                    | Terminal  | 452A569G2      | Obsolete         |
| 193                   | Terminal board (4 point)                                      | 6293908G185    | Obsolete         |
| 193                   | Terminal board (6 point)                                      | 6293908G168    | Obsolete         |
| 194                   | Terminal board support  | 6423721P4      | Obsolete         |
| 194                   | Terminal board support  | 9921543P1      | Obsolete         |
| 59                    | Trip button and rod assembly                                  | 411A904G5      |                  |
| 60                    | Trip button spring  | 412A139P1      |                  |
| 110                   | Trip paddle   | 269C267G5      |                  |
| 213                   | Trip paddle   | K6203939P5     | \$\$\$           |
| 66                    | Trip shaft (center)   | 276B250P2      |                  |
| 63                    | Trip shaft (outside)  | 276B250P1      |                  |
| 68                    | Trip shaft bearing (side sheets and mechanism frame)          | 192A9653P4     |                  |
| 105                   | Trip shaft return spring Latch                                | 6403366P1      |                  |

@@@Does not include AK-2 electrical breakers with no suffix or numeral.

\$\$\$Refers to -A Breakers only (e.g. AK-2A-50-1).





## 36 Low Voltage Circuit Breaker Parts

**Table 2U, AK/AKU/AKT-50 Power Circuit Breaker**

**AK-50 Power Circuit Breaker Obsolescence Statement:** The AK-50 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150H. The notes column identifies as obsolete those parts that are no longer available. The reference number listed refers to the GEF-4150H reference number.

| <b>GEF-4150H<br/>Ref. No.</b> | <b>Description</b>                         | <b>Catalog Number</b> | <b>Notes</b>   |
|-------------------------------|--|-----------------------|----------------|
| 111                           | Trip shaft stop                            | 6447767P1             |                |
| 146                           | Tube                                       | 698C995P14            | Manual Breaker |
| 180                           | Tube                                       | 6447157P1             |                |
| 175                           | Undervoltage device coil                   | Table GEF-4149H - A   |                |
| 172                           | Undervoltage device support                | 423A380P1             |                |
| 198                           | Upper side sheet                           | 669D0819G1            | Obsolete       |
| 199                           | Upper side sheet                           | 669D0819G2            | Obsolete       |
| 113                           | Upper spring guide assembly pin            | 6447010P1             |                |
| 35                            | Upper stud, AK - 50 AC                     | 293B240G1             |                |
| 35                            | Upper stud, AK - 50 DC, AKU - 50, AKT - 50 | 293B240G2             |                |
| 200                           | Wheel                                      | 888B420P1             | \$\$\$         |
| 223                           | Window                                     | 174V535P1             | Obsolete       |
| 225                           | Window (charge indicator)                  | 698C997P2             |                |
| 224                           | Window (open and close)                    | 269C272P8             | Manual Breaker |

\$\$\$Refers to -A Breakers only (e.g. AK-2A-50-1).

## Type AK / AKR Low Voltage Power Circuit Breakers

### Included in this Section

AKR low-voltage power circuit breakers are intended for use in commercial, industrial and utility applications. Designed for severe duty, AKR breakers are serviceable and suitable for mains, feeders and applications such as motor starting, capacitor switching/generator protection and resistance welding. They are fully rated; that is, the short time rating in most cases is equal to the short circuit rating providing the greatest opportunity for selectivity with downstream devices. The breakers are maintainable and meet ANSI Standard C37.13 and C37.16, as well as applicable UL Standards. There are five frame sizes from 800–4000 amperes with short circuit interrupting ratings to 200 kA symmetrical short circuit without fuses.

|              |         |                           |
|--------------|---------|---------------------------|
| AKS/AKSU-50  | AKR-75  | AK-75 (Obsolete Breaker)  |
| AKS/AKST-50H | AKR-100 | AK-100 (Obsolete Breaker) |

### Equipment Identification and Nomenclature Guide

- Equipment Serial Number, Breaker Type, Closing Voltage / Frequency, and Connection Diagram Number (e.g. “B”) are most important for identification purposes.
- Breaker Nameplate is located to the left of the escutcheon on the breaker, and the Electrical Closing Mechanism Nameplate is located on the right of the escutcheon.

Example: **AKR** \_ - **10 D** - **7 5** \_

| Code | General Type                         |
|------|--------------------------------------|
| AK   | Old style LVPC8                      |
| AKS  | AKR replacement for AK-50, AKJ-50    |
| AKST | AKRT replacement for AKT-50, AKJT-50 |
| AKSU | AKRU replacement for AKU-50, AKJU-50 |
| AKR  | New Style LVPC8                      |

| Code           | Trip Device Type                             |
|----------------|--|
| 2              | EC   |
| 3 <sup>②</sup> | Power Sensor                                 |
| 4 <sup>②</sup> | ECS  |
| 5 <sup>②</sup> | SST  |
| 6 <sup>②</sup> | MicroVersa Trip                              |
| 7 <sup>②</sup> | MicroVersa Trip™ RMS-9                       |
| 8              | Epic MicroVersa Trip™                        |
| 9              | PowerLeader MVT+, MVTM                       |
| 10             | PowerLeader MVT+, MVTM with RMS9C Trip Units |
| N              | Non-Automatic                                |

<sup>②</sup> Discontinued

| Code  | Mounting Type                                 |
|-------|---|
| Blank | Drawout AKD Switchgear                        |
| A     | Drawout AKD-5/6 Switchgear                    |
| B     | Drawout AKR OEM Substructure                  |
| C     | Drawout AKD-6 Switchgear (AKR-75/100 only)    |
| D     | Drawout AKD-8 Switchgear and OEM Substructure |
| S     | Stationary                                    |
| W     | 33" Wide Stationary (AKR-100 only)            |
| F     | OEM Substructure (AKR-100 only)               |

| Code | Frame Size in Amperes |      |
|------|-----------------------|------|
|      | AC                    | DC   |
| ① 50 | 1600, 2000            | 2000 |
| 75   | 3200                  | 4000 |
| 100  | 400                   | 6000 |

<sup>①</sup> Suffix D is affixed to AKR designations to identify non-automatic DC models. e.g. AKR-NB-30D

**GENERAL ELECTRIC**  
LOW VOLTAGE POWER CIRCUIT BREAKER

S/N 0343A7383-004-001 ID  
TYPE AKR-10D-75

AMP FRAME SIZE

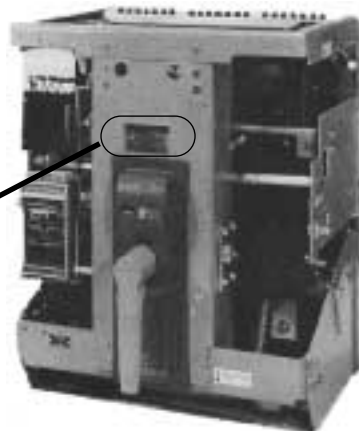
| MAXIMUM VOLTS AC | RMS SYMMETRICAL RATINGS - KA |               | SHORT TIME |
|------------------|------------------------------|---------------|------------|
|                  | INST TRIP                    | W/O INST TRIP |            |
| 635              | 65                           | 65            | 65         |
| 508              | 65                           | 65            | 65         |
| 254              | 65                           | 65            | 65         |

635 VOLTS MAX  
50/60 HERTZ  
3 POLES

INSTR BOOK GE186150 RENEWAL PARTS BULL GEF4527  
OUTLINE 139C4977 CODE DATE P048=

NP266888 PLAINVILLE, CONN. MADE IN U.S.A.

Breaker Nameplate



**GENERAL ELECTRIC**  
ELECTRICAL CLOSING MECHANISM

CLOSING VOLTAGE  
120 VOLTS 60 CYCLES

OPERATING RANGE  
104 TO 127 VOLTS

CONNECTION 183B7128-G125  
DIAGRAM

MADE IN U.S.A. PLAINVILLE, CONN. NP266888

Electrical Closing Mechanism Nameplate (Not Shown)

Figure 3: AKR-10D-75 Power Circuit Breaker Nameplate Data



**Table 3-1, AKS/AKSU-50 & AKS/AKST-50H Power Circuit Breakers**

| Fig. No. | Ref. No. | Description   | Catalog Number |            |            |            |
|----------|----------|---|----------------|------------|------------|------------|
|          |          |   | AKS-50         | AKSU-50    | AKS-50H    | AKST-50H   |
| 3A       | 1        | Anti-Pump Relay "W" – R Connection Diagram                                | Table 3B       |            |            |            |
| NI       | –        | Anti – Walk Device  | N/A            |            |            |            |
| 3R       | 2        | Arc Quencher / Chute  | 161D6507G3     |            |            |            |
| NI       | –        | Arc Runner  | 201C9003P1     |            |            |            |
| 3N       | 3        | Auxiliary Switch (Electroswitch)  | Table 3M       |            |            |            |
| 3I       | 4        | Back Frame Assembly, Complete – 25" Wide                                  | 425D349G14     |            | 425D349G15 |            |
| 3I       | 4        | Back Frame Assembly, Complete – 33" Wide                                  | N/A            |            |            |            |
| 3O       | 5        | Bell Alarm Assembly   | Table 3N       |            |            |            |
| 3A       | 6        | Charging Motor with Driving Pawl  | Table 3B       |            |            |            |
| NI       | –        | Closing Push Button Switch (includes insulator, mtg. hardware, and label) | 192A9717G3     |            |            |            |
| 3A       | 8        | Closing Relay "X" – R Connection Diagram                                  | Table 3B       |            |            |            |
| 3A       | 9        | Closing Solenoid Coil   | Table 3B       |            |            |            |
| 3A       | 10       | Closing Solenoid Switchette (used in D.C. control only)                   | 192A7153P3     |            |            |            |
| NI       | –        | Contact Finger  | 192A9669P1     |            |            |            |
| NI       | –        | Control Relays (Includes Anti – Pump and Closing Relay)                   | Table 3C       |            |            |            |
| 3I       | 12       | Crossbar Assembly With Anti-rebound Hook and Buffer Assembly              | 139C4412G6     |            |            |            |
| 3S       | 14       | Cut-off Switch Assembly – B Connection Diagram                            | 139C4458G2     |            |            |            |
| 3S       | 14       | Cut-off Switch Assembly – DC  | 139C4458G3     |            |            |            |
| 3S       | 14       | Cut-off Switch Assembly – R Connection Diagram                            | 139C4458G1     |            |            |            |
| 3I       | 15       | Drive Pin for Movable Arcing Contact                                      | V6447153P1     |            |            |            |
| 3I       | 15       | Drive Pin for Movable Main Contact  | 193A1698P4     |            |            |            |
| NI       | –        | Driving Pawl  | 323A6079G1     |            |            |            |
| NI       | –        | Electrical Lockout Device for UNDV Device                                 | 139C4419G1     |            |            |            |
| 3B       | 16       | Escutcheon  | Table 3D       |            |            |            |
| 3T       | 17       | Flux Shift Trip Device  | 425D389G89     |            |            |            |
| 3C-3F    | 18, 19   | Front Frame   | Table 3E       |            |            |            |
| NI       | –        | Fuses   | N/A            | Table 3V-1 | N/A        | Table 3V-1 |
| NI       | –        | Fuse Mounting Assembly  | N/A            | Table 3W   | N/A        | Table 3W   |
| 3G, 3H   | 20       | Fuse Roll-Out Element   | N/A            |            |            | TAK83FCB   |
| NI       | –        | Gear / Ratchet and Roller Assembly  | 568B252G1      |            |            |            |
| NI       | –        | Handle (Operating / Charging)   | 286A8096G2     |            |            |            |
| 3J       | 21       | Heat Sinks, Inner (All Phases)  | N/A            |            |            |            |
| NI       | –        | Heat Sinks, Outer (Phase B Only)  | N/A            |            |            |            |
| NI       | –        | Holding Pawl  | 192A9982G1     |            |            |            |
| 3A       | 7        | "K" Relay – B Connection Diagram  | Table 3B       |            |            |            |
| NI       | –        | Lifting Device / Breaker Spreader   | 0247B8528G001  |            |            |            |
| 3I       | 22       | Link (Insulated) for Center Pole  | 323A6026P1     |            |            |            |
| 3I       | 22       | Link (Insulated) for Outside Pole   | 193A1299P1     |            |            |            |
| 3I       | 23       | Lower Stud  | N/A            |            |            |            |
| NI       | –        | Lubricant / Grease for Drawout Breaker                                    | 282A2048P9     |            |            |            |
| NI       | –        | Maintenance Closing Handle  | 568B386G1      |            |            |            |
| NI       | –        | Motor Operating Gearbox Assembly  | 425D278G1      |            |            |            |
| 3I       | 24       | Movable Arcing Contact  | K9921572G3     |            |            |            |
| 3I       | 25       | Movable Intermediate Contact – Left                                       | 193A1126G9     |            |            |            |
| 3I       | 25       | Movable Intermediate Contact – Right                                      | N/A            |            |            |            |
| 3I       | 26       | Movable Main Contact – Left   | 193A1126G10    |            |            |            |
| 3I       | 26       | Movable Main Contact – Right  | N/A            |            |            |            |
| 4A       | –        | MVT Tapped CT Sensor (See Section 4)                                      | Table 4A       |            |            |            |
| 4B       | –        | MVT Fixed CT Sensor (See Section 4)                                       | Table 4B       |            |            |            |
| 4C       | –        | MVT Neutral CT Sensor Disconnects (See Section 4)                         | Table 4C       |            |            |            |

NI: Not illustrated in section.

N/A: Not applicable.

**Table 2-1, AKS/AKSU-50 & AKS/AKST-50H Power Circuit Breakers**

| Fig. No. | Ref. No. | Description   | Catalog Number |            |         |             |
|----------|----------|---|----------------|------------|---------|-------------|
|          |          |   | AKS-50         | AKSU-50    | AKS-50H | AKST-50H    |
| NI       | –        | MVT Neutral CT Sensor (See Section 4)                         | Table 4E       |            |         |             |
| NI       | –        | MVT Programmer Mounting (See Section 4)                       | Table 4G       |            |         |             |
| 4E       | –        | MVT PM Programmer (See Section 4)                             | Table 4H       |            |         |             |
| 4F       | –        | MVT+ Programmer (See Section 4)                               | Table 4H       |            |         |             |
| 3U       | 27       | Open Fuse Lock-Out (OFLO) Device                              | N/A            | 121C2870G2 | N/A     | 121C2870G2  |
| NI       | –        | Open Fuse Lock-Out (OFLO) Harness                             | N/A            | 425D368G5  | N/A     | 425D368G2   |
| NI       | –        | Operations Counter – Electric Breaker                         | 568B413G1      |            |         |             |
| NI       | –        | Operations Counter – Manual Breaker                           | 568B410G1      |            |         |             |
| NI       | –        | Pawl, Driving   | 323A6079G1     |            |         |             |
| NI       | –        | Pawl, Holding / Ratchet                                       | 192A9982G2     |            |         |             |
| 3I       | 28       | Pin (Steel) for Movable Arcing Contact                        | 193A1296P5     |            |         |             |
| 3I       | 28A      | Pin (White Plastic) for Movable Arcing Contact                | 192A7573P297   |            |         |             |
| 3I       | 29       | Pin for Stationary Arcing Contact                             | N/A            |            |         |             |
| 3I       | 30       | Pivot Pin for Movable Main Contact                            | N/A            |            |         |             |
| 3I       | 31       | Pole Unit – Center Pole for AKR – 4, –5                       | N/A            |            |         |             |
| 3I       | 31       | Pole Unit – Center Pole for AKR – 6, –7, –8                   | N/A            |            |         |             |
| 3I       | 31       | Pole Unit – Outside Pole (Phase A or C) for AKR – 4, –5       | N/A            |            |         |             |
| 3I       | 31       | Pole Unit – Outside Pole (Phase A or C) for AKR – 6, –7, –8   | N/A            |            |         |             |
| NI       | –        | Positive Interlock – Left Side                                | N/A            |            |         |             |
| NI       | –        | Positive Interlock – Right Side                               | N/A            |            |         |             |
| 3J       | 32       | Primary Disconnect – Finger Type / Drawout Breaker            | 192A9668G12    |            |         | 192A9668G13 |
| 3J       | 32       | Primary Disconnect – Finger Type / Stationary Breaker         | N/A            |            |         |             |
| 3L       | 33       | Primary Disconnect – Tube Type                                | N/A            |            |         |             |
| NI       | –        | Racking Crank   | 568B731G1      |            |         |             |
| 3M       | 34       | Racking Mechanism for Drawout Breaker                         | N/A            |            |         |             |
| 3K       | 35       | Secondary Disconnect (Movable) Device for Drawout Breakers    | Table 3J       |            |         |             |
| NI       | –        | Secondary Disconnect (Movable) Device for Stationary Breakers | N/A            |            |         |             |
| NI       | –        | Secondary Disconnect (Stationary) – Cubicle Mounted           | 0176D7926G001  |            |         |             |
| NI       | –        | Secondary Disconnect Harness – Drawout Breakers               | N/A            |            |         |             |
| 3P       | 36       | Shunt Trip Device   | Table 3O       |            |         |             |
| NI       | –        | Shunt Trip Device (2nd)                                       | N/A            |            |         |             |
| NI       | –        | Side Link – Left (1 per pole)                                 | 193A1277G1     |            |         |             |
| NI       | –        | Side Link – Right (1 per pole)                                | 193A1277G2     |            |         |             |
| NI       | –        | Spring for Stationary Arcing Contact – Inner                  | K6509859P1     |            |         |             |
| NI       | –        | Spring for Stationary Arcing Contact – Outer                  | K6509858P1     |            |         |             |
| NI       | –        | Spring for Stationary Intermediate Contact                    | 412A288P1      |            |         |             |
| 3I       | 37       | Spring for Stationary Main Contact                            | 412A288P1      |            |         |             |
| 3I       | 38       | Stationary Arcing Contact                                     | 295B408G3      |            |         |             |
| 3I       | 39       | Stationary Intermediate Contact – Left                        | N/A            |            |         |             |
| 3I       | 39       | Stationary Intermediate Contact – Right                       | 193A1127G1     |            |         |             |
| 3I       | 40       | Stationary Main Contact – Left                                | N/A            |            |         |             |
| 3I       | 40       | Stationary Main Contact – Right                               | 193A1124G1     |            |         |             |
| 3Q       | 41       | Undervoltage Device With No UNDV Time Delay                   | Table 3R       |            |         |             |
| NI       | –        | Undervoltage Device With UNDV Time Delay                      | Table 3Q       |            |         |             |
| 3J       | 42       | Upper Connectors and Fingers                                  | N/A            |            |         |             |
| NI       | –        | Upper Left Support for Stationary Breaker 25”                 | 193A1969G3     |            |         |             |
| NI       | –        | Upper Left Support for Stationary Breaker 33”                 | N/A            |            |         |             |
| NI       | –        | Upper Right Support for Stationary Breaker 25”                | 193A1969G4     |            |         |             |
| NI       | –        | Upper Right Support for Stationary Breaker 33”                | N/A            |            |         |             |
| 3I       | 43       | Upper Stud & Terminal Assembly                                | N/A            |            |         |             |

NI: Not illustrated in section.

N/A: Not applicable.



**Table 3-2, AKR-75/100 Power Circuit Breakers**

| Fig. No. | Ref. No. | Description   | Catalog Number |            |
|----------|----------|---|----------------|------------|
|          |          |   | AKR-75         | AKR-100    |
| 3A       | 1        | Anti-Pump Relay "W" – R Connection Diagram                                | Table 3B       |            |
| NI       | –        | Anti – Walk Device  | 217C8243G1     |            |
| 3R       | 2        | Arc Quencher / Chute  | 161D6507G1     | 161D6507G2 |
| NI       | –        | Arc Runner  | N/A            |            |
| 3N       | 3        | Auxiliary Switch (Electroswitch)  | Table 3M       |            |
| 3I       | 4        | Back Frame Assembly, Complete – 25" Wide                                  | 425D291G31     | 425D291G32 |
| 3I       | 4        | Back Frame Assembly, Complete – 33" Wide                                  | N/A            | 425D291G33 |
| 3O       | 5        | Bell Alarm Assembly   | Table 3N       |            |
| 3A       | 6        | Charging Motor with Driving Pawl  | Table 3B       |            |
| NI       | –        | Closing Push Button Switch (includes insulator, mtg. hardware, and label) | 192A9717G3     |            |
| 3A       | 8        | Closing Relay "X" – R Connection Diagram                                  | Table 3B       |            |
| 3A       | 9        | Closing Solenoid Coil   | Table 3B       |            |
| 3A       | 10       | Closing Solenoid Switchette (used in D.C. control only)                   | 192A7153P3     |            |
| NI       | –        | Contact Finger  | 192A9669P1     |            |
| NI       | –        | Control Relays (Includes Anti – Pump and Closing Relay)                   | Table 3C       |            |
| 3I       | 12       | Crossbar Assembly With Anti-rebound Hook and Buffer Assembly              | 139C4412G1     |            |
| 3S       | 14       | Cut-off Switch Assembly – B Connection Diagram                            | 139C4458G2     |            |
| 3S       | 14       | Cut-off Switch Assembly – DC  | 139C4458G3     |            |
| 3S       | 14       | Cut-off Switch Assembly – R Connection Diagram                            | 139C4458G1     |            |
| 3I       | 15       | Drive Pin for Movable Arcing Contact                                      | V6447153P1     |            |
| 3I       | 15       | Drive Pin for Movable Main Contact  | 193A1698P4     |            |
| NI       | –        | Driving Pawl  | 323A6079G1     |            |
| NI       | –        | Electrical Lockout Device for UNDV Device                                 | 139C4419G1     |            |
| 3B       | 16       | Escutcheon  | Table 3D       |            |
| 3T       | 17       | Flux Shift Trip Device  | Table 3U       |            |
| 3C-3F    | 18, 19   | Front Frame   | Table 3E       |            |
| NI       | –        | Fuses   | Table 3V-2     |            |
| NI       | –        | Fuse Mounting Assembly  | N/A            |            |
| 3G, 3H   | 20       | Fuse Roll-Out Element   | TAK83FCB       | TAK94FCB   |
| NI       | –        | Gear / Ratchet and Roller Assembly  | 568B252G1      |            |
| NI       | –        | Handle (Operating / Charging)   | 286A8096G2     | N/A        |
| 3J       | 21       | Heat Sinks, Inner (All Phases)  | 569B622P3      | 569B622P4  |
| NI       | –        | Heat Sinks, Outer (Phase B Only)  | 569B622P1      | 569B622P2  |
| NI       | –        | Holding Pawl  | 192A9982G1     |            |
| 3A       | 7        | "K" Relay – B Connection Diagram  | Table 3B       |            |
| NI       | –        | Lifting Device / Breaker Spreader   | 0247B8528G001  |            |
| 3I       | 22       | Link (Insulated) for Center Pole  | 323A6026P1     |            |
| 3I       | 22       | Link (Insulated) for Outside Pole   | 193A1299P1     |            |
| 3I       | 23       | Lower Stud  | 139C4470G1     | 139C4470G2 |
| NI       | –        | Lubricant / Grease for Drawout Breaker                                    | 282A2048P9     |            |
| NI       | –        | Maintenance Closing Handle  | 568B386G1      |            |
| NI       | –        | Motor Operating Gearbox Assembly  | 425D278G1      |            |
| 3I       | 24       | Movable Arcing Contact  | K9921572G3     |            |
| 3I       | 25       | Movable Intermediate Contact – Left                                       | 193A1126G9     |            |
| 3I       | 25       | Movable Intermediate Contact – Right                                      | 193A1126G7     |            |
| 3I       | 26       | Movable Main Contact – Left   | 193A1126G10    |            |
| 3I       | 26       | Movable Main Contact – Right  | 193A1126G8     |            |
| 4A       | –        | MVT Tapped CT Sensor (See Section 4)                                      | Table 4A       |            |
| 4B       | –        | MVT Fixed CT Sensor (See Section 4)                                       | Table 4B       |            |
| 4C       | –        | MVT Neutral CT Sensor Disconnects (See Section 4)                         | Table 4C       |            |

NI: Not illustrated in section.

N/A: Not applicable.

For more information contact your authorized GE sales representative or GE distributor.

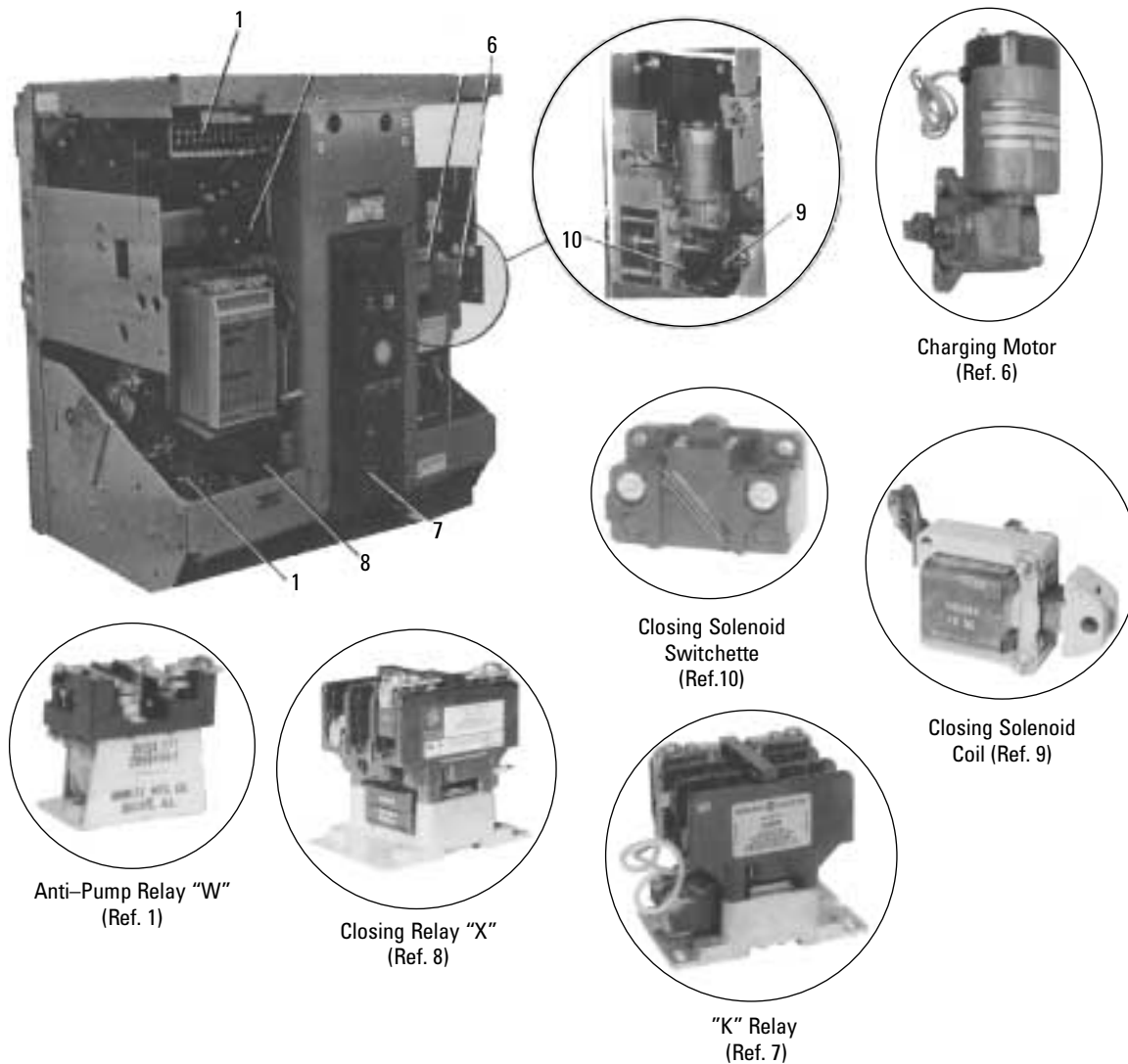
**Table 3–2, AKR–75/100 Power Circuit Breakers, Cont’d.**

| Fig. No. | Ref. No. | Description   | Catalog Number |              |
|----------|----------|---|----------------|--------------|
|          |          |   | AKR–75         | AKR–100      |
| NI       | –        | MVT Neutral CT Sensor (See Section 4)                         | Table 4E       |              |
| NI       | –        | MVT Programmer Mounting (See Section 4)                       | Table 4G       |              |
| 4E       | –        | MVT PM Programmer (See Section 4)                             | Table 4H       |              |
| 4F       | –        | MVT+ Programmer (See Section 4)                               | Table 4H       |              |
| 3U       | 27       | Open Fuse Lock–Out (OFLO) Device                              | 121C2870G3     | 121C2870G4   |
| NI       | –        | Open Fuse Lock–Out (OFLO) Harness                             | 425D368G2      |              |
| NI       | –        | Operations Counter – Electric Breaker                         | 568B413G1      |              |
| NI       | –        | Operations Counter – Manual Breaker                           | 568B410G1      |              |
| NI       | –        | Pawl, Driving   | 323A6079G1     |              |
| NI       | –        | Pawl, Holding / Ratchet                                       | 192A9982G2     |              |
| 3I       | 28       | Pin (Steel) for Movable Arcing Contact                        | 193A1296P5     | 193A1296P3   |
| 3I       | 28A      | Pin (White Plastic) for Movable Arcing Contact                | 192A7573P297   | 192A7573P298 |
| 3I       | 29       | Pin for Stationary Arcing Contact                             | K6404793P4     | K6404793P5   |
| 3I       | 30       | Pivot Pin for Movable Main Contact                            | 193A1296P2     | 193A1298P1   |
| 3I       | 31       | Pole Unit – Center Pole for AKR – 4, –5                       | 425D301G1      | 425D301G2    |
| 3I       | 31       | Pole Unit – Center Pole for AKR – 6, –7, –8                   | 161D6506G5     | 161D6506G6   |
| 3I       | 31       | Pole Unit – Outside Pole (Phase A or C) for AKR – 4, –5       | 425D301G3      | 425D301G4    |
| 3I       | 31       | Pole Unit – Outside Pole (Phase A or C) for AKR – 6, –7, –8   | 161D6506G7     | 161D6506G8   |
| NI       | –        | Positive Interlock – Left Side                                | 193A1406G1     |              |
| NI       | –        | Positive Interlock – Right Side                               | 568B699G1      |              |
| 3J       | 32       | Primary Disconnect – Finger Type / Drawout Breaker            | Table 3G       |              |
| 3J       | 32       | Primary Disconnect – Finger Type / Stationary Breaker         | Table 3H       |              |
| 3L       | 33       | Primary Disconnect – Tube Type                                | 568B384P1      |              |
| NI       | –        | Racking Crank   | 568B731G1      |              |
| 3M       | 34       | Racking Mechanism for Drawout Breaker                         | Table 3K       |              |
| 3K       | 35       | Secondary Disconnect (Movable) Device for Drawout Breakers    | Table 3J       |              |
| NI       | –        | Secondary Disconnect (Movable) Device for Stationary Breakers | 425D367G4      |              |
| NI       | –        | Secondary Disconnect (Stationary) – Cubicle Mounted           | 0176D7926G001  |              |
| NI       | –        | Secondary Disconnect Harness – Drawout Breakers               | 425D367G3      |              |
| 3P       | 36       | Shunt Trip Device   | Table 3O       |              |
| NI       | –        | Shunt Trip Device (2nd)                                       | Table 3P       |              |
| NI       | –        | Side Link – Left (1 per pole)                                 | 193A1277G1     |              |
| NI       | –        | Side Link – Right (1 per pole)                                | 193A1277G2     |              |
| NI       | –        | Spring for Stationary Arcing Contact – Inner                  | K6509859P1     |              |
| NI       | –        | Spring for Stationary Arcing Contact – Outer                  | K6509858P1     |              |
| NI       | –        | Spring for Stationary Intermediate Contact                    | 412A288P1      |              |
| 3I       | 37       | Spring for Stationary Main Contact                            | 412A288P1      |              |
| 3I       | 38       | Stationary Arcing Contact                                     | 295B408G3      |              |
| 3I       | 39       | Stationary Intermediate Contact – Left                        | 193A1127G2     |              |
| 3I       | 39       | Stationary Intermediate Contact – Right                       | 193A1127G1     |              |
| 3I       | 40       | Stationary Main Contact – Left                                | 193A1125G2     |              |
| 3I       | 40       | Stationary Main Contact – Right                               | 193A1124G1     |              |
| NI       | 41       | Undervoltage Device With No UNDV Time Delay                   | Table 3R       |              |
| NI       | –        | Undervoltage Device With UNDV Time Delay                      | Table 3Q       |              |
| 3J       | 42       | Upper Connectors and Fingers                                  | 139C4549G3     | 139C4549G4   |
| NI       | –        | Upper Left Support for Stationary Breaker 25”                 | 193A1969G1     |              |
| NI       | –        | Upper Left Support for Stationary Breaker 33”                 | N/A            | 193A1969G5   |
| NI       | –        | Upper Right Support for Stationary Breaker 25”                | 193A1969G2     |              |
| NI       | –        | Upper Right Support for Stationary Breaker 33”                | N/A            | 193A1969G6   |
| 3I       | 43       | Upper Stud & Terminal Assembly                                | 425D288G1      | 425D288G2    |

NI: Not illustrated in section.

N/A: Not applicable.





**Figure 3A:** Front View of Control Component

| <b>Table 3A, AKR-75/100 Power Circuit Breakers</b> |                 |   |                                     |                           |
|--|-----------------|---|-------------------------------------|---------------------------|
| <b>Fig. No.</b>                                    | <b>Ref. No.</b> | <b>Description</b>                                      | <b>Catalog Number</b>               |                           |
|  |                 |   | <b>AKS/AKSU-50<br/>AKS/AKST-50H</b> | <b>AKR-75<br/>AKR-100</b> |
| 3A   | 1               | Anti-Pump Relay "W"-R Connection Diagram                | Table 3B                            |                           |
| 3A   | 6               | Charging Motor with Driving Pawl                        | Table 3B                            |                           |
| 3A   | 7               | "K" Relay-B Connection Diagram                          | Table 3B                            |                           |
| 3A   | 8               | Closing Relay "X"-R Connection Diagram                  | Table 3B                            |                           |
| 3A   | 9               | Closing Solenoid Coil                                   | Table 3B                            |                           |
| 3A   | 10              | Closing Solenoid Switchette (used in D.C. control only) | 192A7153P3                          |                           |
| 3B   | 16              | Escutcheon  | Table 3D                            |                           |
| 3C-3F  | 18              | Front Frame (Electric Breaker) Complete-25" Wide        | Table 3E                            |                           |

**Table 3B, Relays, Closing Solenoid Coil and Charging Motor –See Figures 3A**

| Breaker Type                              | Voltage (V) | Frequency (Hz) | Closing "X" Relay | Anti-Pump "W" Relay | "K" Relay | Closing Solenoid Coil | Charging Motor |     |          |     |     |    |
|---|-------------|----------------|-------------------|---------------------|-----------|-----------------------|----------------|-----|----------|-----|-----|----|
| AKS/AKSU-50<br>AKS/AKST-50H<br>AKR-75/100 | 48          | DC             | 192A9770          | P1                  | 192A9771  | 192A9770              | 568B596        | P13 | 192A9794 | P11 | G4  |    |
|   | 125         |                |                   | P2                  |           |                       |                | P2  |          | P14 | P12 | G5 |
|   | 250         |                |                   | P3                  |           |                       |                | P3  |          | N/A | P13 | G6 |
|   | 120         | 60             |                   | P4                  | P4        | P15                   | P14            | G5  |          |     |     |    |
|   |             | 50             |                   | P5                  |           |                       | P15            |     |          |     |     |    |
|   | 208         | 60             |                   | P6                  | P5        | P16                   | P21            | G6  |          |     |     |    |
|   |             | 50             |                   | P7                  |           |                       | P23            |     |          |     |     |    |
|   | 240         | 60             |                   | P8                  | P6        |                       | P16            |     |          |     |     |    |
|   |             | 50             |                   | P9                  |           |                       | P17            |     |          |     |     |    |

**Table 3C, Control Relays\*\***

| Breaker Type                              | Voltage Operation   | Closing Frequency (Hz) | Voltage (V) | Catalog Number |     |
|---|---------------------|------------------------|-------------|----------------|-----|
| AKS/AKSU-50<br>AKS/AKST-50H<br>AKR-75/100 | B-Elec<br>(QC-Elec) | 50                     | 120         | 425D302        | G16 |
|   |                     |                        | 208         |                | G19 |
|   |                     |                        | 240         |                | G22 |
|   |                     | 60                     | 120         |                | G17 |
|   |                     |                        | 208         |                | G20 |
|   |                     |                        | 240         |                | G23 |
|   |                     | DC                     | 48DC        |                | G13 |
|   |                     |                        | 125DC       |                | G14 |
|   |                     |                        |             |                |     |
|   | E-Elec              | 50                     | 120         | G28            |     |
|   |                     |                        | 240         | G30            |     |
|   |                     | 60                     | 120         | G29            |     |
|   |                     |                        | 240         | G31            |     |
|   |                     | DC                     | 48DC        | G25            |     |
|   |                     |                        | 125DC       | G26            |     |
|   | 250DC               | G27                    |             |                |     |

\*\* Includes Anti-pump and Closing Relays, Cut-off Switch, and Closing Solenoid Coil

**Table 3D, Escutcheon**

| Breaker Type  | Operation | Application  | Local Close Switch | Trip Type | Catalog Number |    |
|---|-----------|--------------|--------------------|-----------|----------------|----|
| AKS-50<br>AKSU-50<br>AKS-50H<br>AKST-50H<br>AKR-75<br>AKR-100 | Electric  | AKD-8        | Yes                | —         | 568B446        | G4 |
|   |           |              | No                 |           |                | G5 |
|   |           | Substructure | Yes                |           | 568B451        | G1 |
|   |           |              | No                 |           |                | G2 |
|   |           | —            | Yes                |           | MVT            | G7 |
|   |           |              | No                 |           | MVT            | G8 |
|   | Manual    | AKD-8        | —                  | 568B446   | G6             |    |
|   |           |              | Substructure       |           | G3             |    |
|   |           | —            | MVT                |           | 568B451        | G9 |
|   |           |              | —                  |           |                | G3 |

—Any legitimate alternative condition.

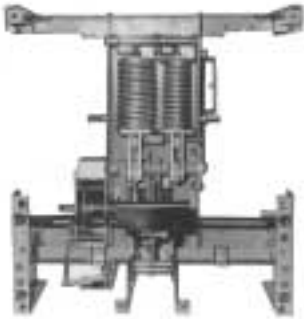


Figure 3B: Escutcheon –(Ref. 16)





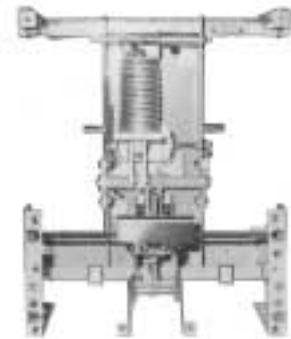
| <b>Table 3E, Front Frame – See Fig. 3C, 3D, 3E, 3F</b> |                  |                       |     |
|--|------------------|-----------------------|-----|
| <b>Breaker Type</b>                                    | <b>Operation</b> | <b>Catalog Number</b> |     |
| AKST-50H   | Manual           | 425D287               | G5  |
|  | Electrical       | 425D289               | G9  |
| AKSU-50<br>AKS-50/50H                                  | Manual           | 425D287               | G4  |
|  | Electrical       | 425D289               | G7  |
| AKR-75   | Electrical       | 425D289               | G13 |
| AKR-100 (25")  |                  |                       | G14 |
| AKR-100 (33")  |                  |                       | G15 |
| AKR-75   | Manual           | 425D287               | G1  |
| AKR-100 (25")  |                  |                       | G3  |
| AKR-100 (33")  |                  |                       | G2  |



**Figure 3C:** Electric Front Frame (back view)–(Ref. 18)



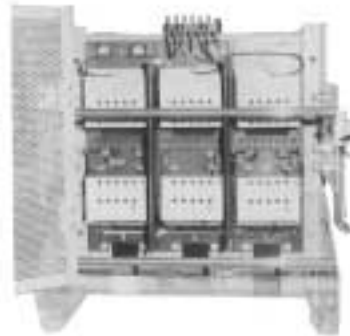
**Figure 3D:** Electric Front Frame (side view)–(Ref. 18)



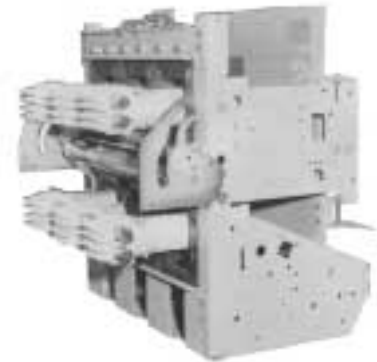
**Figure 3E:** Manual Front Frame (back view)–(Ref. 19)



**Figure 3F:** Manual Front Frame (side view)–(Ref. 19)



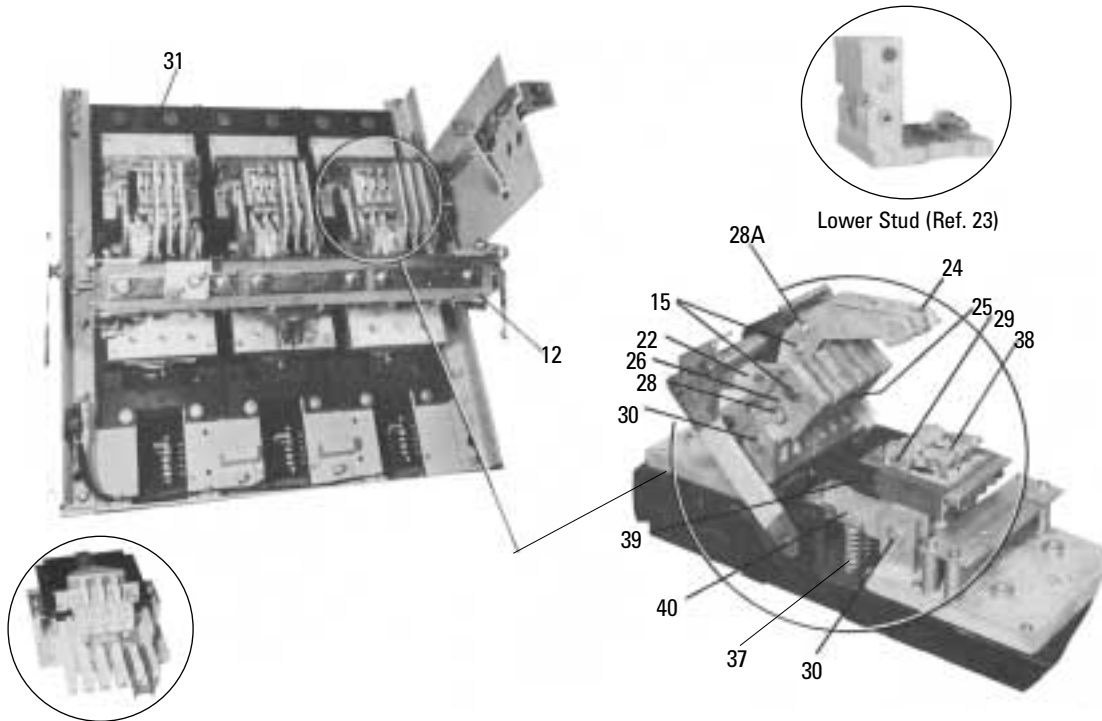
**Figure 3G:** Fuse Roll-Out Element (front view/cage open)–(Ref. 20)



**Figure 3H:** Fuse Roll-Out Element (side & back view)–(Ref. 20)

**Table 3F, AKR-75/100 Power Circuit Breakers**

| Fig. No. | Ref. No. | Description  | Catalog Number              |            |              |
|----------|----------|--|-----------------------------|------------|--------------|
|          |          |  | AKS/AKSU-50<br>AKS/AKST-50H | AKR-75     | AKR-100      |
| 3I       | 12       | Crossbar Assembly With Anti-rebound Hook and Buffer Assembly | 139C4412G6                  | 139C4412G1 |              |
| 3I       | 15       | Drive Pin for Movable Arcing Contact                         | V6447153P1                  |            | V6447153P2   |
| 3I       | 15       | Drive Pin for Movable Main Contact                           | 193A1698P4                  |            | 193A1698P3   |
| 3G, 3H   | 20       | Fuse Roll-Out Element  | TAK83FCB                    |            | TAK94FCB     |
| 3I       | 22       | Link (Insulated) for Center Pole                             | 323A6026P1                  |            |              |
| 3I       | 22       | Link (Insulated) for Outside Pole                            | 193A1299P1                  |            |              |
| 3I       | 23       | Lower Stud   | N/A                         | 139C4470G1 | 139C4470G2   |
| 3I       | 24       | Movable Arcing Contact                                       | K9921572G3                  |            |              |
| 3I       | 25       | Movable Intermediate Contact-Left                            | 193A1126G9                  |            |              |
| 3I       | 25       | Movable Intermediate Contact-Right                           | N/A                         | 193A1126G7 |              |
| 3I       | 26       | Movable Main Contact-Left                                    | 193A1126G10                 |            |              |
| 3I       | 26       | Movable Main Contact-Right                                   | N/A                         | 193A1126G8 |              |
| 3I       | 28       | Pin (Steel) for Movable Arcing Contact                       | 193A1296P5                  |            | 193A1296P3   |
| 3I       | 28A      | Pin (White Plastic) for Movable Arcing Contact               | 192A7573P297                |            | 192A7573P298 |
| 3I       | 29       | Pin for Stationary Arcing Contact                            | N/A                         | K6404793P4 | K6404793P5   |
| 3I       | 30       | Pivot Pin for Movable Main Contact                           | N/A                         | 193A1296P2 | 193A1298P1   |
| 3I       | 31       | Pole Unit-Center Pole for AKR - 4, -5                        | N/A                         | 425D301G1  | 425D301G2    |
| 3I       | 31       | Pole Unit-Center Pole for AKR - 6, -7, -8                    | N/A                         | 161D6506G5 | 161D6506G6   |
| 3I       | 31       | Pole Unit-Outside Pole (Phase A or C) for AKR - 4, -5        | N/A                         | 425D301G3  | 425D301G4    |
| 3I       | 31       | Pole Unit-Outside Pole (Phase A or C) for AKR - 6, -7, -8    | N/A                         | 161D6506G7 | 161D6506G8   |
| 3I       | 37       | Spring for Stationary Main Contact                           | 412A288P1                   |            |              |
| 3I       | 38       | Stationary Arcing Contact                                    | 295B408G3                   |            |              |
| 3I       | 39       | Stationary Intermediate Contact-Left                         | N/A                         | 193A1127G2 |              |
| 3I       | 39       | Stationary Intermediate Contact-Right                        | 193A1127G1                  |            |              |
| 3I       | 40       | Stationary Main Contact-Left                                 | N/A                         | 193A1125G2 |              |
| 3I       | 40       | Stationary Main Contact-Right                                | 193A1125G1                  |            |              |
| 3I       | 43       | Upper Stud and Terminal Assembly                             | N/A                         | 425D288G1  | 425D288G2    |



Upper Stud and Terminal Assembly (Ref. 43)

**Figure 3I:** Back Frame Assembly-Ref. 4



**Table 3G, Primary Disconnects  
(Finger Type/Drawout Breakers)**

| <i>Breaker</i>         | <i>AC/DC</i> | <i>Application</i> | <i>Catalog Number</i> |          |     |
|------------------------|--------------|--------------------|-----------------------|----------|-----|
| AKS/AKSU-50<br>AKS-50H | —            | AKD                | 192A9668              | G12      |     |
|                        |              | AKD-5              |                       |          |     |
|                        |              | Substructure       |                       |          |     |
| AKST-50H               |              | AKD                |                       | 139C4528 | G13 |
|                        |              | AKD-5              |                       |          |     |
|                        |              | Substructure       |                       |          |     |
| AKR-75                 | AC           | AKD                | 139C4528              |          | G1  |
|                        |              | AKD-5              |                       |          |     |
|                        |              | AKD-6              |                       |          | G25 |
|                        |              | AKD-8              |                       |          |     |
|                        | DC           | Substructure       |                       | G7       |     |
|                        |              | AKD                |                       |          |     |
|                        |              | AKD-5              |                       |          | G5  |
|                        |              | AKD-6              |                       |          |     |
| AKR-100                | AC           | AKD-8              | 139C4528              | G2       |     |
|                        |              | Substructure       |                       |          |     |
|                        |              | AKD                |                       | G4       |     |
|                        |              | AKD-5              |                       |          |     |
|                        | DC           | AKD-6              |                       | G8       |     |
|                        |              | AKD-8              |                       |          |     |
|                        |              | Substructure       |                       |          | G6  |
|                        |              | AKD                |                       |          |     |

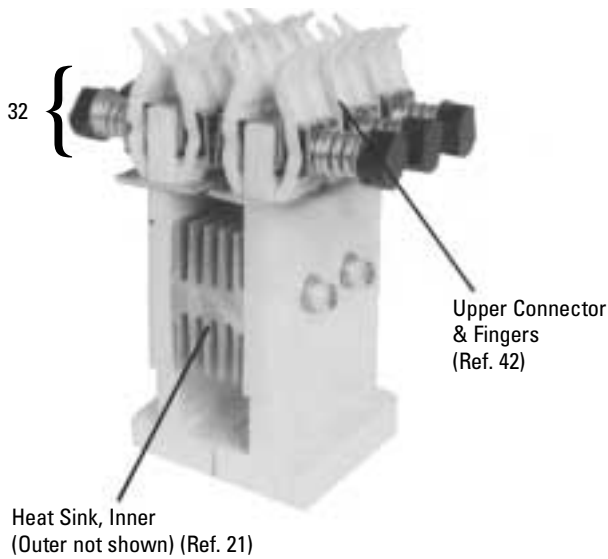
—Any legitimate alternative condition.

**Table 3H, Primary Disconnects Assembly  
(Finger Type/Stationary Breakers)**

| <i>Breaker Type</i> | <i>AC/DC</i> | <i>Upper Stud</i> | <i>Lower Stud</i> | <i>Catalog Number</i> |     |
|---------------------|--------------|-------------------|-------------------|-----------------------|-----|
| AKR-75<br>AKR-100   | AC           | Horizontal        | Horizontal        | 139C4528              | G19 |
|                     |              |                   | Vertical          |                       | G20 |
|                     |              | Vertical          | Horizontal        |                       | G21 |
|                     |              |                   | Vertical          |                       | G22 |
|                     | DC           | Horizontal        | Horizontal        |                       | G13 |
|                     |              |                   | Vertical          |                       | G14 |
|                     |              | Vertical          | Vertical          |                       | G15 |
|                     |              |                   | Horizontal        |                       | G16 |

**Table 3I, Secondary Disconnect (Movable Device for Stationary Breakers)**

| Fig. No. | Ref. No. | Description   | Catalog Number              |            |            |
|----------|----------|---|-----------------------------|------------|------------|
|          |          |   | AKS/AKSU-50<br>AKS/AKST-50H | AKR-75     | AKR-100    |
| 3J       | 21       | Heat Sinks, Inner (All Phases)                                | N/A                         | 569B622P3  | 569B622P4  |
| NI       |          | Heat Sinks, Outer (Phase B only)                              | N/A                         | 569B6223P1 | 569B6223P2 |
| 3J       | 32       | Primary Disconnect-Finger Type / Drawout Breaker              | Table 3G                    |            |            |
| 3J       | 32       | Primary Disconnect-Finger Type / Stationary Breaker           | N/A                         | Table 3H   |            |
| 3L       | 33       | Primary Disconnect-Tube Type                                  | N/A                         | 568B384P1  |            |
| 3M       | 34       | Racking Mechanism for Drawout Breaker                         | N/A                         | Table 3K   |            |
| 3K       | 35       | Secondary Disconnect (Movable) Device for Drawout Breakers    | Table 3J                    |            |            |
| NI       | -        | Secondary Disconnect (Movable) Device for Stationary Breakers | N/A                         | 425D367G4  |            |
| 3J       | 42       | Upper connector and Fingers                                   | N/A                         | 139C4549G3 | 139C4549G4 |



**Figure 3J:** Upper Connector, Fingers & Heat Sinks



**Figure 3K:** Secondary Disconnect (Movable) Device (7 Pt)  
Contact Tip not shown - (Ref. 35)



**Figure 3L:** Primary Disconnect (Tube-Type)  
-(Ref. 33)

**Table 3J, Secondary Disconnect (Movable) Device for Drawout Breaker—See Figure 3K**

| Breaker                     | Application | Terminal Pts | Catalog Number |
|-----------------------------|-------------|--------------|----------------|
| AKS/AKSU-50<br>AKS/AKST-50H | —           | 7pt          | G7             |
|                             |             | 14pt         | G8             |
|                             |             | 21pt         | G9             |
| AKR-75                      | —           | 7pt          | G1             |
|                             |             | 14pt         | G2             |
|                             |             | 21pt         | G3             |
| AKR-100                     | AKD<br>and  | 7pt          | G4             |
|                             |             | 14pt         | G5             |
|                             | AKD-5       | 21pt         | G6             |
|                             |             | AKD-6<br>and | 7pt            |
|                             | 14pt        |              | G2             |
|                             | AKD-8       | 21pt         | G3             |

—Any legitimate alternative condition.



**Table 3K, Racking Mechanism for Drawout Breakers**

**–See Figure 3M**

| <i>Breaker Type</i> | <i>Operation</i> | <i>Application</i> | <i>Catalog Number</i> |    |
|---------------------|------------------|--------------------|-----------------------|----|
| AKR-75              | Electric         | AKD                | 425D293               | G2 |
|                     |                  | Substructure       |                       | G1 |
| AKR-100             |                  | AKD                |                       | G3 |
|                     |                  | Substructure       |                       | G1 |
| AKR-75              | Manual           | AKD                |                       | G5 |
|                     |                  | Substructure       |                       | G4 |
| AKR-100             |                  | AKD                |                       | G6 |
|                     |                  | Substructure       |                       | G4 |



**Figure 3M:** Racking Mechanism for Drawout Breaker–(Ref. 34)

**Table 3L, Accessories for Power Circuit Breakers**

| Fig. No. | Ref. No. | Description                      | Catalog Number |            |
|----------|----------|----------------------------------|----------------|------------|
|          |          |                                  | AKR-75         | AKR-100    |
| 3R       | 2        | Arc Quencher/Chute #             | 242B7020G3     | 242B7020G4 |
| 3N       | 3        | Auxiliary Switch (Electroswitch) | Table 3M       |            |
| 3O       | 5        | Bell Alarm Assembly              | Table 3N       |            |
| 3S       | 14       | Cut-off Switch Assembly          | Table 3T       |            |
| 3P       | 36       | Shunt Trip Device                | Table 3O, 3P   |            |
| 3Q       | 41       | Undervoltage Device              | Table 3Q, 3R   |            |

# As of January 1989, the AKR-75/100 breaker design incorporates asbestos-free arc chute. Older models of these breakers will require an Asbestos-Free Replacement Kit (see Modifications Section, page 225).



**Figure 3N:** Auxillary Switch (Electroswitch) –(Ref. 3)

**Table 3M, Auxiliary Switch (Electroswitch)**

| Breaker Type                                     | Application           | # Poles | Aux Switch Contacts   | Catalog Number |     |
|--|-----------------------|---------|-----------------------|----------------|-----|
| AKS/AKSU-50<br>AKS/AKST-50H<br>AKR-75<br>AKR-100 | AKD-5<br>and<br>AKD-6 | 3       | 6A & 6B               | 139C4526       | G10 |
|  |                       |         | 5A & 5B*              |                | G22 |
|  |                       |         | 3A & 3B               |                | G11 |
|  |                       |         | 2A & 2B* <sup>@</sup> |                | G23 |
|  |                       | 2       | 6A & 6B               |                | G4  |
|  |                       |         | 5A & 5B*              |                | G15 |
|  |                       |         | 3A & 3B               |                | G2  |
|  |                       |         | 2A & 2B* <sup>@</sup> |                | G13 |
| AKS/AKSU-50<br>AKS/AKST-50H<br>AKR-75<br>AKR-100 | AKD-8                 |         | 6A & 6B               | 139C4526       | G28 |
|  |                       |         | 5A & 5B*              |                | G27 |
|  |                       |         | 3A & 3B               |                | G26 |
|  |                       |         | 2A & 2B* <sup>@</sup> |                | G25 |

\*For Manually operated breakers only.  
<sup>@</sup> 2A & 2B with shunt trip is not allowed.  
 Note: 6A & 6B Auxiliary Switch Contacts denotes a 6 stage Auxiliary Switch.

**Table 3N, Bell Alarm Assembly**

| Breaker Type                | Lockout | Bell Alarm Contacts | Catalog Number |     |
|-----------------------------|---------|---------------------|----------------|-----|
| AKS/AKSU-50<br>AKS/AKST-50H | Yes     | 1 NO & 1 NC         | 425D305        | G10 |
|                             |         | 2 NO                |                | G11 |
|                             |         | 2 NC                |                | G12 |
|                             | No      | 1 NO & 1 NC         |                | G7  |
|                             |         | 2 NO                |                | G8  |
|                             |         | 2 NC                |                | G9  |
| AKR-75<br>AKR-100           | Yes     | 1NO & 1NC           | 425D305        | G4  |
|                             |         | 2NO                 |                | G5  |
|                             |         | 2NC                 |                | G6  |
|                             | No      | 1NO & 1NC           |                | G1  |
|                             |         | 2NO                 |                | G2  |
|                             |         | 2NC                 |                | G3  |



**Figure 3O:** Bell Alarm Assembly



| <b>Table 30, Shunt Trip Device –See Figure 3P</b> |                       |                               |                       |     |
|---|-----------------------|-------------------------------|-----------------------|-----|
| <b>Breaker Type</b>                               | <b>Frequency (Hz)</b> | <b>Shunt Trip Voltage (V)</b> | <b>Catalog Number</b> |     |
| AKS/AKSU-50<br>AKS/AKST-50H<br>AKR-75<br>AKR-100  | 25                    | 120                           | 139C4454              | G9  |
|   |                       | 208                           |                       | G12 |
|   |                       | 240                           |                       | G16 |
|   |                       | 480                           |                       | G20 |
|   |                       | 575                           |                       | G23 |
|   | 50                    | 120                           |                       | G8  |
|   |                       | 208                           |                       | G11 |
|   |                       | 240                           |                       | G14 |
|   |                       | 380                           |                       | G17 |
|   |                       | 480                           |                       | G19 |
|   |                       | 575                           |                       | G22 |
|   | 60                    | 70                            |                       | G6  |
|   |                       | 120                           |                       | G7  |
|   |                       | 208                           |                       | G10 |
|   |                       | 240                           |                       | G13 |
|   |                       | 277                           |                       | G25 |
|   |                       | 480                           |                       | G18 |
|   |                       | 575                           |                       | G21 |
|   | DC                    | 12DC                          |                       | G24 |
|   |                       | 24DC                          |                       | G1  |
|   |                       | 32DC                          |                       | G2  |
| 48DC  |                       | G3                            |                       |     |
| 125DC   |                       | G4                            |                       |     |
| 250DC   |                       | G5                            |                       |     |



**Figure 3P:** Shunt Trip Device (Ref. 36)

| <b>Table 3P, 2nd Shunt Trip Device</b> |                       |                                 |                       |    |
|--|-----------------------|---------------------------------|-----------------------|----|
| <b>Breaker Type</b>                    | <b>Frequency (Hz)</b> | <b>Voltage Shunt Trip-2 (V)</b> | <b>Catalog Number</b> |    |
| AKR-75/100                             | 60                    | 120                             | 201C9031              | G3 |
|  |                       | 240                             |                       | G4 |
|  | DC                    | 125DC                           |                       | G1 |
|  |                       | 250DC                           |                       | G2 |

For more information contact your authorized GE sales representative or GE distributor.

**Table 3Q, Undervoltage Device for Breakers with UNDV Time Delay**

| Breaker Type | UNDV or Elec. Lockout Voltage (V) | Catalog Number |     |
|--------------|-----------------------------------|----------------|-----|
| AKS/AKSU-50  | 208                               | 139C4477       | G24 |
|              | 240                               |                | G5  |
| AKS/AKST-50H | 125DC                             |                | G6  |
| AKR-75/100   | 250DC                             |                |     |



**Figure 3Q:** Undervoltage Device (Ref. 41)

**Table 3R, Undervoltage Device for Breakers with No UNDV Time Delay (Instantaneous)–See Figure 3Q**

| Breaker Type                                     | UNDV Volts (V) | Volt Frequency (Hz) | Catalog Number |     |
|--|----------------|---------------------|----------------|-----|
| AKS/AKSU-50<br>AKS/AKST-50H<br>AKR-75<br>AKR-100 | 120            | 25                  | 139C4477       | G9  |
|  | 208            |                     |                | G12 |
|  | 240            |                     |                | G16 |
|  | 480            |                     |                | G20 |
|  | 575            |                     |                | G23 |
|  | 120            | 50                  |                | G8  |
|  | 208            |                     |                | G11 |
|  | 240            |                     |                | G14 |
|  | 380            |                     |                | G17 |
|  | 480            |                     |                | G19 |
|  | 575            | 60                  |                | G22 |
|  | 120            |                     |                | G7  |
|  | 208            |                     |                | G10 |
|  | 240            |                     |                | G13 |
|  | 480            |                     |                | G18 |
| 575  | DC             | G21                 |                |     |
| 24DC   |                | G1                  |                |     |
| 48DC   |                | G2                  |                |     |
| 125DC  |                | G3                  |                |     |
|  | 250DC          |                     | G4             |     |





| <b>Table 3S, Arc Quencher/Chute</b> |              |                       |    |
|-------------------------------------|--------------|-----------------------|----|
| <b>Breaker Type</b>                 | <b>AC/DC</b> | <b>Catalog Number</b> |    |
| AKS/AKSU-50                         | AC           | 161D6507              | G3 |
| AKS/AKST-50H                        |              |                       | G1 |
| AKR-75                              |              |                       | G2 |
| AKR-100                             |              |                       |    |



**Figure 3R:** Arc Quencher/Chute (Asbestos-free shown)–(Ref. 2)

| <b>Table 3T, Cut-off Switch Assembly</b> |  |                       |
|--|--|-----------------------|
| <b>Breaker Type</b>                      | <b>Description</b>                           | <b>Catalog Number</b> |
| AKS/AKSU-50                              | Cut-off Switch Assembly–B Connection Diagram | 139C4458G2            |
| AKS/AKST-50H                             | Cut-off Switch Assembly–DC                   | 139C4458G3            |
| AKR-75/100                               | Cut-off Switch Assembly–R Connection Diagram | 139C4458G1            |



**Figure 3S:** Cut-Off Switch Assembly (Ref. 14)

| <b>Table 3U, Miscellaneous for Power Circuit Breakers</b> |                 |   |                       |                |
|---|-----------------|---|-----------------------|----------------|
| <b>Fig. No.</b>   | <b>Ref. No.</b> | <b>Description</b>                      | <b>Catalog Number</b> |                |
|   |                 |   | <b>AKR-75</b>         | <b>AKR-100</b> |
| 3T  | 17              | Flux Shift Trip Device–25" Wide Breaker | 425D385G90            |                |
| 3T  | 17              | Flux Shift Trip Device–33" Wide Breaker | N/A                   | 425D385G91     |
| 3U  | 27              | Open Fuse Lock-Out (OFLO)               | 121C2870G3            | 121C2870G4     |



**Figure 3T:** Flux Shift Trip Device (Ref. 17)



**Figure 3U:** Open Fuse Lock-Out Device (OFLO)–(Ref. 27)

| <b>Table 3V-1, Fuses (Gould-Shawmut)</b> |                                   |                                      |              |   |
|--|-----------------------------------|--------------------------------------|--------------|---|
| <b>Fuse Rating</b>                       | <b>Obsolete GE Catalog Number</b> | <b>Gould # Equiv. Catalog Number</b> | <b>Class</b> |   |
| 150A                                     | GF8B150                           | A4J150                               | J            |   |
| 200A                                     | GF8B200                           | A4J200                               |              |   |
| 225A                                     | GF8B225                           | A4J225                               |              |   |
| 300A                                     | GF8B300                           | A4J300                               |              |   |
| 325A                                     | GF8B325                           | A4J325                               |              |   |
| 400A                                     | GF8B400                           | A4J400                               |              |   |
| 450A                                     | GF8B450                           | A4J450                               |              |   |
| 500A                                     | GF8B500                           | A4J500                               |              |   |
| 600A                                     | GF8B600                           | A4J600                               |              |   |
| 601A                                     | GF8B601                           | A4BY601                              |              | L |
| 650A                                     | GF8B650                           | A4BY650                              |              |   |
| 700A                                     | GF8B700                           | A4BY700                              |              |   |
| 800A                                     | GF8B800                           | A4BY800                              |              |   |
| 1000A                                    | GF8B1000                          | A4BY1000 BG <sup>1</sup>             |              |   |
| 1200A                                    | GF8B1200                          | A4BY1200 BG <sup>1</sup>             |              |   |
| 1400A                                    | GF8B1400                          | –                                    |              |   |
| 1600A                                    | GF8B1600                          | A4BY1600 BG <sup>1</sup>             |              |   |
| 2000A                                    | GF8B2000                          | A4BY2000                             |              |   |
| 2500A STD                                | GF8B2500                          | A4BY2500                             |              |   |
| 3000A                                    | GF8G3000                          | A4BY3000 <sup>2</sup>                |              |   |
| 4000A                                    | GF8F4000                          | A4BY4000 <sup>3</sup>                |              |   |

General Electric Type J and L fuses are now obsolete, and no longer used in type AKRU low-voltage power circuit breakers.

Gould-Shawmut fuses are now used. The chart cross-references the obsolete GE catalog number and the replacement Gould-Shawmut catalog numbers.

<sup>1</sup> Suffix or type BG denotes cut-out on tang.

<sup>2</sup> Used on TAK8SS02 Fuse Carriage.

<sup>3</sup> Used on TAK9SS02 Fuse Carriage.

| <b>Table 3V-2, Allowable Fuse Sizes for AKR-75, AKR-100</b> |                           |   |   |   |
|---|---------------------------|---|---|---|
| <b>Breaker Type</b>   | <b>Rating Plug Rating</b> | <b>Max. Gould-Shawmut Class "L" Fuse Size</b> | <b>Min. Gould-Shawmut Class "L" Fuse Size</b> | <b>Min. Gould-Shawmut Class "J" Fuse Size</b> |
| AKRU-75   | 3200A and Below           | 3000A   | 2000A   | N/A   |
| AKRU-100  | 4000A and Below           | 4000A   | 2000A   | N/A   |

| <b>Table 3W, Fuse Mounting Assembly</b> |                    |                  |                       |
|---|--------------------|------------------|-----------------------|
| <b>Breaker Type</b>                     | <b>Application</b> | <b>Fuse Rate</b> | <b>Catalog Number</b> |
| AKSU-50<br>AKST-50H                     | AKD                | 600A             | 425D355               |
|   |                    | 800A             |                       |
|   |                    | Other            |                       |
|   | AKD-5              | 600A             | 425D353               |
|   |                    | 800A             |                       |
|   |                    | Other            |                       |



**Table 3–3, AK–75 Obsolete Power Circuit Breaker**

**AK–75 Power Circuit Breaker Obsolescence Statement:** The AK–75 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <b>GEF–4150 Ref. No.</b> | <b>Description</b>                           | <b>Catalog Number</b> | <b>Notes</b>        |
|--------------------------|--|-----------------------|---------------------|
| 161                      | "O" ring for plug                            | 393A992P1             | OBSOLETE            |
| 194                      | Adjusting plate                              | 698C996G3             | OBSOLETE            |
| 194                      | Adjusting plate                              | 887B387G3             | Electrical Breakers |
| 195                      | Adjusting plate                              | 372A320P1             | OBSOLETE            |
| 211                      | Anti rebound hook and slider                 | 801B138G2             | OBSOLETE            |
| 211                      | Anti rebound hook and slider                 | 238C191P1             | OBSOLETE            |
| 212                      | Anti rebound hook and slider                 | 801B138G4             | OBSOLETE            |
| 48                       | Arc quencher plate AC                        | 6414485P2             | OBSOLETE            |
| 48                       | Arc quencher plate, DC                       | 293B244P1             | @@@                 |
| 48                       | Arc quencher plate, DC                       | 6414485P2             | OBSOLETE            |
| 64                       | Arc quencher tie bar                         | 372A305P1             | OBSOLETE            |
| 64                       | Arc quencher tie bar                         | 372A305P7             | OBSOLETE            |
| 64                       | Arc quencher tie bar                         | 372A305P5             |                     |
| 47                       | Arc quencher, AC                             | 238D674G4             | OBSOLETE            |
| 47                       | Arc quencher, AC                             | 175L303G3             | OBSOLETE            |
| 47                       | Arc quencher, DC                             | 175L303G2             | OBSOLETE            |
| 47                       | Arc quencher, DC                             | 293B242P1             | OBSOLETE            |
| 188                      | Auxiliary switch bracket                     | 6555155P1             | OBSOLETE            |
| 192                      | Auxiliary switch coupling                    | 127A7439P1            | OBSOLETE            |
| 187                      | Auxiliary switch crank bracket               | 411A952G1             |                     |
| 190                      | Auxiliary switch link assembly               | 848C411G1             | OBSOLETE            |
| 190                      | Auxiliary switch link assembly               | 887B386G1             | OBSOLETE            |
| 190                      | Auxiliary switch link assembly               | 887B386G2             | OBSOLETE            |
| 195                      | Auxiliary switch operating rod               | 127A6463G2            | OBSOLETE            |
| 183                      | Auxillary switch, 2 stage                    | 6353562G2             | OBSOLETE            |
| 183                      | Auxillary switch, 3 stage                    | 6353562G3             | OBSOLETE            |
| 183                      | Auxillary switch, 5 stage                    | 6353532G5             | OBSOLETE            |
| 183                      | Auxillary switch, 6 stage                    | 6353562G6             | OBSOLETE            |
| 60                       | Baffle, AC                                   | 372A498G1             | OBSOLETE            |
| 60                       | Baffle, DC                                   | 372A498G2             | OBSOLETE            |
| 1                        | Base for pole unit                           | 195A8807G1            | OBSOLETE            |
| 1                        | Base for pole unit                           | 256C751P1             | OBSOLETE            |
| 135                      | Bearing                                      | 393A7969P3            | OBSOLETE            |
| 151                      | Bearing                                      | 698C995P2             | OBSOLETE            |
| 36                       | Block  | 457A624G2             | OBSOLETE            |
| 6                        | Block, AC                                    | 452A542P1             |                     |
| 52                       | Block, AC                                    | 371A206P2             | OBSOLETE            |
| 52                       | Block, AC                                    | 6203945P1             | OBSOLETE            |
| 6                        | Block, DC                                    | 449A996P3             | %%%                 |
| 6                        | Block, DC                                    | 449A996P2             | \$\$\$              |
| 52                       | Block, DC                                    | 371A206P3             | OBSOLETE            |
| 52                       | Block, DC                                    | 6203945P2             | OBSOLETE            |
| 189                      | Bracket for breaker without auxiliary switch | 273B595G1             | OBSOLETE            |
| 100                      | Buffer assembly                              | 457A627G1             |                     |
| 100                      | Buffer assembly                              | 433A216G1             | OBSOLETE            |
| 127                      | Buffer pin                                   | 698C993P4             |                     |

@@@Does not include electrical breakers with no suffix or numeral.

\$\$\$Refers to –A Breakers only (e.g. AK–2A–75–1)

%%%Refers to breakers without a –A (e.g. AK–2–75–1)

### Table 3–3, AK–75 Obsolete Power Circuit Breaker

**AK–75 Power Circuit Breaker Obsolescence Statement:** The AK–75 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <b>GEF–4150 Ref. No.</b> | <b>Description</b>                        | <b>Catalog Number</b> | <b>Notes</b>        |
|--------------------------|---|-----------------------|---------------------|
| 130                      | Buffer stop nut                           | 393A993P24            | OBSOLETE            |
| 128                      | Buffer support                            | 698C993P3             |                     |
| 129                      | Buffer washer                             | 698C993P5             |                     |
| 88                       | Cam                                       | 6414743P1             | OBSOLETE            |
| 51                       | Cap, AC                                   | 6555518P2             | OBSOLETE            |
| 51                       | Cap, DC                                   | 6555518P1             | OBSOLETE            |
| 39                       | Center main arcing contact pin            | 6203981P10            | OBSOLETE            |
| 198                      | Charged and discharged indicator          | 265B268G2             | Electrical Breakers |
| 111                      | Clevis                                    | 412A413P3             | @@@                 |
| 111                      | Clevis                                    | 412A413P1             | OBSOLETE            |
|                          | Clip                                      | 459A375G1             | OBSOLETE            |
|                          | Clip                                      | 6447449P1             | OBSOLETE            |
| 175                      | Closing relay                             | Table 4395A           | Electrical Breakers |
| 131                      | Closing spring assembly                   | 889B0408G2            | Manual Breakers     |
| 131                      | Closing spring assembly                   | 273B569G9             | Electrical Breakers |
| 101                      | Counterweight                             | 383A671G2             | @@@                 |
| 101                      | Counterweight                             | 394A140P1             | OBSOLETE            |
| 110                      | Coupling                                  | 6555414P1             | OBSOLETE            |
| 76                       | Coupling                                  | 174B536P1             | OBSOLETE            |
| 134                      | Crank                                     | 698C992G10            | OBSOLETE            |
| 134                      | Crank                                     | 259C615G1             | OBSOLETE            |
| 134                      | Crank                                     | 801B154G2             | OBSOLETE            |
| 134                      | Crank                                     | 801B154G4             | OBSOLETE            |
| 134                      | Crank                                     | 698C992G4             | OBSOLETE            |
| 65                       | Cross bar                                 | 267B125P1             |                     |
| 169                      | Cut–off switch (F)                        | 192A7153P7            |                     |
| 167                      | Cut–off switch (G)                        | 192A7153P8            |                     |
| 170                      | Cut–off switch cover                      | 371A235P1             | Electrical Breakers |
| 168                      | Cut–off switch insulation                 | 174V521P1             | OBSOLETE            |
| 172                      | Cut–off switch lever bracket              | 371A234G1             | Electrical Breakers |
| 171                      | Cut–off switch mounting bracket           | 371A233G1             | Electrical Breakers |
| 173                      | Cut–off switch retainer                   | 394A133P9             | Electrical Breakers |
| 174                      | Cut–off switch spacer                     | 6176109P17            | OBSOLETE            |
| 77                       | Dowel pin                                 | 127A6493P2            | OBSOLETE            |
| 205                      | Drawout racking mechanism                 | 549D466P1             | OBSOLETE            |
| 205                      | Drawout racking mechanism                 | 669D0817P1            | OBSOLETE            |
| 205                      | Drawout racking mechanism                 | 175L317G4             | OBSOLETE            |
| 70                       | Front escutcheon (black)                  | 698C997P1             | OBSOLETE            |
| 70                       | Front escutcheon (blue)                   | 698C997P5             | OBSOLETE            |
| 70                       | Front escutcheon (blue)                   | 805B975P2             | OBSOLETE            |
| 69                       | Front escutcheon (w/o closing switch,)    | 275B997P2             | OBSOLETE            |
| 69                       | Front escutcheon (with closing switch)    | 275B997P1             | OBSOLETE            |
| 165A                     | Gasket between gear housing and end plate | 6447102P1             | Electrical Breakers |
| 165                      | Gasket between gear housing and motor     | 6447101P1             | Electrical Breakers |
| 73                       | Hand trip paddle                          | 6203939P1             | %%%                 |
| 73                       | Hand trip paddle                          | K6203939P5            | \$\$\$              |

@@@Does not include AK–2–75 electrical breakers with no suffix or numeral.

\$\$\$Refers to –A Breakers only (e.g. AK–2A–75–1)

%%%Refers to breakers without a –A (e.g. AK–2–75–1)



**Table 3–3, AK–75 Obsolete Power Circuit Breaker**

**AK–75 Power Circuit Breaker Obsolescence Statement:** The AK–75 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <b>GEF–4150 Ref. No.</b> | <b>Description</b>   | <b>Catalog Number</b> | <b>Notes</b>        |
|--------------------------|--|-----------------------|---------------------|
| 74                       | Hand trip paddle clamp   | 192A9567P1            |                     |
| 67                       | Handle   | 6548046P3             | OBSOLETE            |
| 67                       | Handle   | 286A8096G2            | Manual Breakers     |
| 68                       | Handle and Buffer assembly                                     | 116B7107G1            | OBSOLETE            |
| 45                       | Horizontal stationary stud                                     | 256C754G1             | %%%                 |
| 149                      | Indicator (when ordering indicator include label Ref. No. 158) | 698C996G1             | Manual Breakers     |
| 157                      | Indicator crank assembly                                       | 698C995G2             | OBSOLETE            |
| 155                      | Indicator lever assembly                                       | 698C995G1             | OBSOLETE            |
| 155                      | Indicator lever assembly                                       | 698C995G3             | OBSOLETE            |
| 58                       | Inner barrier, AC & DC   | 6414492P1             | OBSOLETE            |
|                          | Instantaneous undervoltage device AC                           | 269C282G2             |                     |
|                          | Instantaneous undervoltage device DC                           | 269C282G5             | OBSOLETE            |
| 27                       | Insulating tube  | 6447741P2             |                     |
| 14                       | Insulation for stationary arcing contacts, AC                  | 459A373P1             | @@@                 |
| 14                       | Insulation for stationary arcing contacts, AC                  | 6555406P2             | ***                 |
| 14                       | Insulation for stationary arcing contacts, DC                  | 459A173P2             | @@@                 |
| 14                       | Insulation for stationary arcing contacts, DC                  | 6555406P1             | ***                 |
| 31                       | Intermediate movable contacts                                  | 193A1126G1            | @@@                 |
| 31                       | Intermediate movable contacts                                  | 2603975G2             | OBSOLETE            |
| 218                      | Label (charge indicator)                                       | 698C997P4             | OBSOLETE            |
| 103                      | Latch  | 848C0487P2            | OBSOLETE            |
| 103                      | Latch  | 433A214G1             | OBSOLETE            |
| 105                      | Latch bolt   | V6444916P1            |                     |
| 42                       | Leaf spring for movable main contact                           | 433A318P1             | @@@                 |
| 42                       | Leaf spring for movable main contact                           | 6555117P1             | ***                 |
| 13                       | Leaf spring for stationary arcing contacts, AC                 | 433A319P1             | @@@                 |
| 13                       | Leaf spring for stationary arcing contacts, DC                 | 433A319P2             | @@@                 |
|                          | Leaf Spring for stationary main contacts                       | 433A320P1             | OBSOLETE            |
| 63                       | Lifting bracket, left  | 372A275G2             |                     |
| 63                       | Lifting bracket, left  | 372A275G4             | OBSOLETE            |
| 62                       | Lifting bracket, right   | 372A275G1             |                     |
| 62                       | Lifting bracket, right   | 372A275G3             | OBSOLETE            |
| 89                       | Link assembly  | 175L315G40            | OBSOLETE            |
| 33                       | Link assembly for main movable contact                         | K6404784P4            | OBSOLETE            |
| 33                       | Link assembly for main movable contact                         | 6404784p3             | OBSOLETE            |
| 89                       | Link assembly]   | 457A622G1             | @@@                 |
| 26                       | Link for movable arcing contact                                | 275B975P1             | OBSOLETE            |
| 26                       | Link for movable arcing contact                                | 383A681P1             | ***                 |
| 26                       | Link for movable arcing contact                                | 383A681P2             | ***                 |
| 26                       | Link for movable arcing contact, DC                            | 127A6457P1            | @@@                 |
| 207                      | Link spring  | 412A135P1             | OBSOLETE            |
| 126                      | Lower spring guide assembly pin                                | 6647032P2             | Manual Breakers     |
| 126                      | Lower spring guide assembly pin                                | 6647032P1             | Electrical Breakers |
| 46                       | Lower stud head  | 238D674G2             |                     |
| 164                      | Lubricant for gear box   | 393A991P1             |                     |
| 59                       | Magnet, AC   | 371A205P2             | OBSOLETE            |

\*\*\*Only available for AK–2–75 breakers with no suffix letter or numeral.

@@@Does not include AK–2–75 electrical breakers with no suffix or numeral.

%%%Refers to breakers without a –A (e.g. AK–2–75–1)

**Table 3–3, AK–75 Obsolete Power Circuit Breaker**

**AK–75 Power Circuit Breaker Obsolescence Statement:** The AK–75 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <b>GEF–4150 Ref. No.</b> | <b>Description</b>                                      | <b>Catalog Number</b> | <b>Notes</b>        |
|--------------------------|---|-----------------------|---------------------|
| 59                       | Magnet, DC  | 452A523P1             | OBSOLETE            |
| 41                       | Main contact pivot pin                                  | 6203981P12            | OBSOLETE            |
| 30                       | Main movable contact                                    | 193A1126G2            | @@@                 |
| 30                       | Main movable contacts                                   | 6203978G1             | OBSOLETE            |
| 166                      | Motor, 115 volts, 25, 50, 60 cycles and 125 volt DC     | 5P99MA6               | OBSOLETE            |
| 166                      | Motor, 208–230 volts, 25, 50, 60 cycles and 250 volt DC | 5P66MA7               | OBSOLETE            |
| 22                       | Movable arcing contact                                  | K9921572G2            |                     |
| 22                       | Movable arcing contact (DC only)                        | 6404753P1             |                     |
| 186                      | Movable contact   | 127A6728P1            | OBSOLETE            |
| 60                       | Muffler and Baffle assembly, AC                         | 175L303G39            | OBSOLETE            |
| 60                       | Muffler and Baffle assembly, DC                         | 175L303G40            | OBSOLETE            |
| 197                      | Open and close indicator                                | 265B268G1             | OBSOLETE            |
| 197                      | Open and close indicator                                | 265B268G3             | ***                 |
| 196                      | Open and close indicator link                           | 6555156G1             | OBSOLETE            |
| 196                      | Open and close indicator link                           | 6203934P1             | OBSOLETE            |
| 158                      | Open–close label  | 259C608P3             | Manual Breakers     |
| 66                       | Opening spring  | 6509813P1             |                     |
| 116                      | Overcurrent device trip paddle                          | 889B0424P10           | OBSOLETE            |
| 206                      | Pawl spring   | 365A313P1             | ***                 |
| 125                      | Pawl spring rollers                                     | 698C996P13            | Manual Breakers     |
| 124                      | Pawl spring support (lower)                             | 698C996G4             | Manual Breakers     |
| 123                      | Pawl spring support (upper)                             | 698C996G5             | Manual Breakers     |
| 143                      | Pawl with spring (front)                                | 698C985G2             | Manual Breakers     |
| 142                      | Pawl with spring (rear)                                 | 698C985G1             | Manual Breakers     |
| 61                       | Phase barrier   | 267B129P1             |                     |
| 90                       | Pin   | 6447099P1             |                     |
| 92                       | Pin   | 6447099P1             | OBSOLETE            |
| 112                      | Pin   | 412A405P414           |                     |
| 113                      | Pin   | 6447744P1             | OBSOLETE            |
| 148                      | Pin   | 698C991P10            | Manual Breakers     |
| 82                       | Pin   | 174V531P1             | OBSOLETE            |
| 193                      | Pin for auxiliary switch linkage                        | 6076402P203           | OBSOLETE            |
| 199                      | Pin for indicator                                       | 174V532P1             | Electrical Breakers |
| 199                      | Pin for indicator                                       | 174V561P1             | OBSOLETE            |
| 23                       | Pin for movable arcing contact lin, AC                  | 6447153P1             |                     |
| 23                       | Pin for movable arcing contact lin, AC                  | 6447153P4             | OBSOLETE            |
| 23                       | Pin for movable arcing contact link, DC                 | 6447153P2             |                     |
| 28                       | Pin for side link                                       | 6555600P1             |                     |
| 32                       | Pivot pin for main movable contacts                     | 6447192P1             |                     |
| 9                        | Pivot pin for stationary arcing contact, AC             | 6404793P2             |                     |
| 9                        | Pivot pin for stationary arcing contact, DC             | 6404793P1             |                     |
| 15                       | Pivot pin for stationary main contacts                  | 6203921P8             |                     |
| 160                      | Plug  | 6447398P1             | OBSOLETE            |
| 56                       | Pocket barrier, left                                    | 6414494P1             | OBSOLETE            |
| 56                       | Pocket barrier, right                                   | 6414494P2             | OBSOLETE            |
| 87                       | Prop  | 419A366P1             | OBSOLETE            |

\*\*\*Only available for AK–2–75 breakers with no suffix letter or numeral.

@@@Does not include AK–2–75 electrical breakers with no suffix or numeral.



**Table 3–3, AK–75 Obsolete Power Circuit Breaker**

**AK–75 Power Circuit Breaker Obsolescence Statement:** The AK–75 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <b>GEF–4150 Ref. No.</b> | <b>Description</b>                         | <b>Catalog Number</b> | <b>Notes</b>        |
|--------------------------|--|-----------------------|---------------------|
| 107                      | Prop                                       | 698C993G1             | Manual Breakers     |
| 145                      | Prop                                       | 698C91G4              | Manual Breakers     |
| 108                      | Prop                                       | 9921596G1             | OBSOLETE            |
| 147                      | Prop spring                                | 412A280P1             |                     |
| 114                      | Prop stop                                  | 412A412P2             |                     |
| 136                      | Ratchet assembly                           | 698C987G1             | OBSOLETE            |
| 163                      | Ratchet pin                                | 372A283P1             | OBSOLETE            |
|                          | Reduction gear unit assembly (quick close) | 177K362G3             | OBSOLETE            |
| 159                      | Reduction gear unit assembly (standard)    | 177L362G2             | OBSOLETE            |
| 104                      | Reset Latch                                | 889B0410G1            | @@@                 |
| 104                      | Reset Latch                                | 9921607G3             | OBSOLETE            |
| 85                       | Retainer                                   | 394A133P10            | OBSOLETE            |
| 91                       | Retainer                                   | 394S133P11            | OBSOLETE            |
| 109                      | Retainer                                   | 2132506000            |                     |
| 141                      | Retainer                                   | 394A133P28            |                     |
| 146                      | Retainer                                   | 394A933P3             | OBSOLETE            |
| 200                      | Retainer for indicator pin                 | 394A133P7             | Electrical Breakers |
| 79                       | Retainer for trip shaft                    | 394A133P1             |                     |
| 81                       | Retainer for trip shaft bearing            | 394A133P16            |                     |
| 122                      | Retaining ring                             | 394A133P4             | OBSOLETE            |
| 152                      | Rod  | 127A6493P3            |                     |
| 139                      | Roll pin                                   | 394A137P12            |                     |
| 150                      | Roll pin                                   | 394A137P11            |                     |
| 115                      | Screw for prop stop                        | 411A984P1             | OBSOLETE            |
| 213                      | Secondary disconnect device (7 point)      | 386A110G2             |                     |
| 138                      | Shaft assembly                             | 698C990G1             | OBSOLETE            |
| 178                      | Shunt trip coil                            | Table 4395A           |                     |
| 177                      | Shunt trip device                          | 622C502G1             |                     |
| 176                      | Shunt trip device support                  | 449S537P1             |                     |
| 57                       | Side barrier                               | 64144939P1            | OBSOLETE            |
| 38                       | Side link shield pin                       | 6555423P2             |                     |
| 35                       | Side link, left                            | 457A624G2             |                     |
| 35                       | Side link, left                            | 175L30G37             | OBSOLETE            |
| 34                       | Side link, right                           | 457A624G1             | @@@                 |
| 34                       | Side link, right                           | 175L304G37            | ***                 |
| 50                       | Side support, left                         | 265B248P2             | OBSOLETE            |
| 50                       | Side support, left                         | 6404723P2             | OBSOLETE            |
| 49                       | Side support, right                        | 265B2485P2            | OBSOLETE            |
| 49                       | Side support, right                        | 6404723P1             | OBSOLETE            |
| 5                        | Spacer                                     | 293B223P3             | @@@                 |
| 53                       | Spacer                                     | 6555111P1             | OBSOLETE            |
| 83                       | Spacer                                     | 457A681P3             | OBSOLETE            |
| 84                       | Spacer                                     | 457A681P1             | OBSOLETE            |
| 209                      | Spacer (left)                              | 148A1946P7            | OBSOLETE            |
| 210                      | Spacer (right)                             | 148A1946P8            | OBSOLETE            |
| 1                        | Spacer for base                            | 372A440P1             | OBSOLETE            |

\*\*\*Only available for AK–2–75 breakers with no suffix letter or numeral.

@@@Does not include AK–2–75 electrical breakers with no suffix or numeral.

\$\$\$Refers to –A Breakers only (e.g. AK–2A–75–1)

%%Refers to breakers without a –A (e.g. AK–2–75–1)

For more information contact your authorized GE sales representative or GE distributor.

### Table 3–3, AK–75 Obsolete Power Circuit Breaker

**AK–75 Power Circuit Breaker Obsolescence Statement:** The AK–75 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <i>GEF–4150<br/>Ref. No.</i> | <i>Description</i>                                      | <i>Catalog Number</i> | <i>Notes</i>        |
|------------------------------|---|-----------------------|---------------------|
| 201                          | Spacer for indicator                                    | 6176109P7             | OBSOLETE            |
| 93                           | Spacer for pin Ref. No. 92                              | 148A1932P5            | OBSOLETE            |
| 44                           | Spacer for stationary main contact stop                 | 453A116P3             |                     |
| 121                          | Spacer for upper spring guide assembly pin (left side)  | 148A1946P1            | @@@                 |
| 119                          | Spacer for upper spring guide assembly pin (middle)     | 148A41946P3           | OBSOLETE            |
| 118                          | Spacer for upper spring guide assembly pin (right side) | 148A1946P10           | @@@                 |
| 53                           | Spacer, AC  | 372A464P2             | OBSOLETE            |
| 53                           | Spacer, DC  | 452A524P2             | OBSOLETE            |
| 86                           | Spring  | 412A140P1             | OBSOLETE            |
| 106                          | Spring  | 6403348P1             |                     |
| 140                          | Spring  | 127A8306P1            |                     |
| 154                          | Spring  | 412A267P1             |                     |
| 156                          | Spring  | 412A292P1             |                     |
| 144                          | Spring arm  | 846C817G1             | OBSOLETE            |
| 202                          | Spring for indicator                                    | 365S305P1             | Electrical Breakers |
| 208                          | Spring for racking mechanism                            | 846C0839P10           | OBSOLETE            |
| 162                          | Spring for ratchet pin                                  | 6509871P1             | OBSOLETE            |
| 12                           | Spring for stationary arcing contacts (inner) AC & DC   | 6509859P1             |                     |
| 11                           | Spring for stationary arcing contacts (outer) AC & DC   | 6509858P1             |                     |
| 21                           | Spring for stationary main contact                      | 412A0288P1            | @@@                 |
| 21                           | Spring for stationary main contact                      | 6509811P1             | ***                 |
| 98                           | Spring guide (lower)                                    | 6447353P1             | OBSOLETE            |
| 94                           | Spring guide (upper)                                    | 6447331P1             |                     |
| 10                           | Spring guide for stationary arcing contact springs      | 6447046P1             |                     |
| 95                           | Spring reset  | 6403393P1             | OBSOLETE            |
| 96                           | Spring reset (inner)                                    | 148A2214P1            | @@@                 |
| 97                           | Spring reset (outer)                                    | 148A2213P1            | @@@                 |
| 99                           | Spring support assembly                                 | 6203914G1             |                     |
| 182                          | Static timing device, 125 V DC                          | TAKYUVT–1             |                     |
| 182                          | Static timing device, 230V 60Hz                         | TAKYUVT–3             |                     |
| 182                          | Static timing device, 250V DC                           | TAKYUVT–2             |                     |
| 8                            | Stationary arcing contact, AC or DC                     | 295B408G3             | ***                 |
| 8                            | Stationary arcing contact, DC                           | 6203966G1             | @@@                 |
| 184                          | Stationary contact, center                              | 389A865G1             | OBSOLETE            |
| 185                          | Stationary contact, outside                             | 389A865G2             | OBSOLETE            |
|                              | Stationary intermediate contact                         | 6203979G2             | OBSOLETE            |
| 18                           | Stationary intermediate contact (includes barrier)      | 193A1127G1            | @@@                 |
| 17                           | Stationary main contact                                 | 293B221G5             |                     |
|                              | Stationary main contact                                 | 6203979G1             | OBSOLETE            |
| 55                           | Steel back plat, AC                                     | 371A209P2             | OBSOLETE            |
| 55                           | Steel back plate, AC                                    | 6203944P1             | OBSOLETE            |
| 55                           | Steel back plate, DC                                    | 6203944P2             | OBSOLETE            |
| 55                           | Steel back plate, DC                                    | 452A524P1             | OBSOLETE            |
| 43                           | Stop for stationary main contacts                       | 449A993P1             | ###                 |
| 43                           | Stop for stationary main contacts                       | 6414518P2             | ***                 |
| 7                            | Stop, AC  | 449A994P3             |                     |

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@@@Does not include AK–2–75 electrical breakers with no suffix or numeral.

%%%Refers to breakers without a –A (e.g. AK–2–75–1)





### Table 3-3, AK-75 Obsolete Power Circuit Breaker

**AK-75 Power Circuit Breaker Obsolescence Statement:** The AK-75 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF-4150 reference number.

| GEF-4150 Ref. No. | Description  | Catalog Number | Notes           |
|-------------------|--|----------------|-----------------|
| 7                 | Stop, AC   | 412A444P1      |                 |
| 7                 | Stop, DC   | 296B223P1      |                 |
| 7                 | Stop, DC   | 412A444P3      |                 |
| 45                | Stud, drawout  | 256C850P1      |                 |
| 137               | Support assembly                                     | 698C988G1      | OBSOLETE        |
| 132               | Support for crank                                    | 698C992G5      | OBSOLETE        |
| 133               | Support for crank                                    | 393A554P1      | OBSOLETE        |
| 54                | Support, AC  | 372A464P2      | OBSOLETE        |
| 54                | Support, AC  | 6414486P1      | OBSOLETE        |
| 54                | Support, DC  | 452A524P2      | OBSOLETE        |
| 54                | Support, DC  | 6414424P1      | OBSOLETE        |
| 203               | Terminal board (4point)                              | 6293908G185    | OBSOLETE        |
| 204               | Terminal board (6 point)                             | 6293908G168    | OBSOLETE        |
| 71                | Trip button and rod assembly                         | 411A904G5      | ###             |
| 71                | Trip button and rod assembly                         | 411A904G2      | ***             |
| 72                | Trip button spring                                   | 412A139P1      |                 |
| 78                | Trip shaft (center)                                  | 276B250P2      |                 |
| 75                | Trip shaft (outside)                                 | 276B250P2      |                 |
| 80                | Trip Shaft bearing (side sheets and mechanism frame) | 377A871P5      |                 |
| 102               | Trip shaft return spring                             | 412A269P1      | OBSOLETE        |
| 102               | Trip shaft return spring                             | 412A234P1      | OBSOLETE        |
| 117               | Trip Shaft stop                                      | 6447767P1      |                 |
| 153               | Tube   | 698C995P14     |                 |
| 180               | Undervoltage device coil                             | Table 4395A    |                 |
| 179               | Undervoltage device support                          | 423A380P1      | OBSOLETE        |
| 120               | Upper spring guide assembly pin                      | 6647010P1      | OBSOLETE        |
| 120               | Upper spring guide assembly pin                      | 6647010P2      | OBSOLETE        |
| 3                 | Upper stud (drawout, AC and DC)                      | 291B967G1      | %%%             |
| 1                 | Upper stud (drawout, AC)                             | 6414522G1      | OBSOLETE        |
| 1                 | Upper stud (drawout, DC)                             | 6414543G1      | OBSOLETE        |
| 3                 | Upper stud (stationary, AC and DC)                   | 293B207G1      | @@@, %%%        |
| 4                 | Upper stud head (AC)                                 | 293B225G1      | @@@             |
| 4                 | Upper stud head (DC)                                 | 291B969G1      | @@@             |
| 1                 | Upper stud, horizontal (stationary, AC)              | 6414521G1      | OBSOLETE        |
| 1                 | Upper stud, horizontal (stationary, DC)              | 276B174G1      | OBSOLETE        |
| 1                 | Upper stud, veritcal (stationary, AC)                | 6414521G2      | OBSOLETE        |
| 1                 | Upper stud, veritcal (stationary, DC)                | 276B174G2      | OBSOLETE        |
| 45                | Vertical stationary stud                             | 248C754P1      | %%%             |
| 24                | Washer   | 9921652P1      |                 |
| 40                | Washer, AC breaker                                   | 6447773P1      | OBSOLETE        |
| 40                | Washer, AC breaker                                   | 6447773P2      | OBSOLETE        |
| 40                | Washer, DC breaker                                   | 6447773P1      | OBSOLETE        |
| 40                | Washer, DC breaker                                   | 6447773P2      | OBSOLETE        |
| 215               | Window   | 174V535P1      | OBSOLETE        |
| 217               | Window (charge and dlscharge)                        | 698C997P2      | OBSOLETE        |
| 216               | Window (open and close)                              | 269C272P8      | Manual Breakers |

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@@@Does not include AK-2-75 electrical breakers with no suffix or numeral.

%%%Refers to breakers without a -A (e.g. AK-2-75-1)

For more information contact your authorized GE sales representative or GE distributor.

### Table 3-4, AK-100 Obsolete Power Circuit Breaker

**AK-100 Power Circuit Breaker Obsolescence Statement:** The AK-100 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF-4150 reference number.

| <b>GEF-4150<br/>Ref. No.</b> | <b>Description</b>                                   | <b>Catalog Number</b> | <b>Notes</b>     |
|------------------------------|--|-----------------------|------------------|
| 161                          | "O" ring for plug                                    | 393A992P1             | Electric Breaker |
| 194                          | Adjusting plate                                      | 698C996P8             | OBSOLETE         |
| 194                          | Adjusting plate                                      | 127S6458P1            | OBSOLETE         |
| 195                          | Adjusting plate                                      | 372S321P1             | OBSOLETE         |
| 211                          | Anti rebound hook and slider                         | 801B138G2             | OBSOLETE         |
| 211                          | Anti rebound hook and slider                         | 238C191P1             | OBSOLETE         |
| 212                          | Anti rebound hook and slider                         | 801B138G4             | OBSOLETE         |
| 64                           | Arc quencher tie bar                                 | 372A305P2             | OBSOLETE         |
| 64                           | Arc quencher tie bar                                 | 372A305P8             | OBSOLETE         |
| 64                           | Arc quencher tie bar                                 | 372A305P6             | OBSOLETE         |
| 47                           | Arc quencher, AC and DC                              | 238F674G4             | OBSOLETE         |
| 188                          | Auxiliary switch bracket                             | 6555155P1             | OBSOLETE         |
| 192                          | Auxiliary switch coupling                            | 127A6439P1            | @@@              |
| 190                          | Auxiliary switch link assembly                       | 848C413G1             | OBSOLETE         |
| 190                          | Auxiliary switch link assembly                       | 887B386G4             | OBSOLETE         |
| 195                          | Auxiliary switch operating rod                       | 127A6463G2            | OBSOLETE         |
| 183                          | Auxiliary switch, 2 stage                            | 192A9791P2            |                  |
| 183                          | Auxiliary switch, 3 stage                            | 192A9791P3            |                  |
| 183                          | Auxiliary switch, 5 stage                            | 192A9791P5            |                  |
| 183                          | Auxiliary switch, 6 stage                            | 192A9791P6            |                  |
| 19                           | Barrier assembly for stationary intermediate contact | 175L304G39            | OBSOLETE         |
| 1                            | Base for pole unit                                   | 195A8807G2            | OBSOLETE         |
| 1                            | Base for pole unit                                   | 256C752P1             | OBSOLETE         |
| 135                          | Bearing  | 393A796P3             | OBSOLETE         |
| 151                          | Bearing  | 698C995P3             | OBSOLETE         |
| 6                            | Block  | 449A996P2             | OBSOLETE         |
| 189                          | Bracket for breaker without auxiliary switch         | 273B595G1             | OBSOLETE         |
| 37                           | Bracket for side link                                | 6555167P1             | OBSOLETE         |
| 37                           | Bracket for side link                                | 6555167P2             | OBSOLETE         |
| 100                          | Buffer assembly                                      | 457A627G1             |                  |
| 100                          | Buffer assembly                                      | 433A216P1             | OBSOLETE         |
| 127                          | Buffer pin   | 698C993P4             | Manual Breaker   |
| 130                          | Buffer stop nut                                      | 393A993P24            | OBSOLETE         |
| 128                          | Buffer support                                       | 698C993P3             | Manual Breaker   |
| 129                          | Buffer washer  | 698C993P5             | Manual Breaker   |
| 88                           | Cam  | 6414743P1             |                  |
| 39                           | Center main arcing contact pin                       | 6203981P6             |                  |
| 198                          | Charged and discharged indicator                     | 265B268G2             |                  |
| 74                           | Clamp for hand trip paddle                           | 192A9567P1            | OBSOLETE         |
| 111                          | Clevis   | 412A413P3             | @@@              |
| 111                          | Clevis   | 412A413P1             | ***              |
| 20                           | Clip   | 459A375G1             | OBSOLETE         |
| 20                           | Clip   | 6447449P1             | OBSOLETE         |
| 175                          | Closing relay  | Table 4396            | Electric Breaker |
| 131                          | Closing spring assembly                              | 889B0408G3            | Manual Breaker   |
| 131                          | Closing spring assembly                              | 889B0408G4            | OBSOLETE         |

\*\*\* Only available for AK-2-100 breakers with no suffix letter or numeral.

@@@ Does not include AK-2-100 electrical breakers with no suffix or numeral.



**Table 3-4, AK-100 Obsolete Power Circuit Breaker**

**AK-100 Power Circuit Breaker Obsolescence Statement:** The AK-100 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF-4150 reference number.

| <i>GEF-4150<br/>Ref. No.</i> | <i>Description</i>                           | <i>Catalog Number</i> | <i>Notes</i>        |
|------------------------------|--|-----------------------|---------------------|
| 131                          | Closing spring assembly                      | 273B569G7             | Electric Breaker    |
| 131                          | Closing spring assembly                      | 273B569G10            | Electric Breaker    |
| 101                          | Counterweight                                | 383A671G2             | @@@                 |
| 101                          | Counterweight                                | 394A140P1             | OBSOLETE            |
| 76                           | Coupling                                     | 174V536P1             | @@@                 |
| 110                          | Coupling                                     | 6555414P1             |                     |
| 134                          | Crank  | 698C992G9             | Manual Breaker      |
| 134                          | Crank  | 259C615G1             | OBSOLETE            |
| 134                          | Crank  | 801B154G1             | OBSOLETE            |
| 134                          | Crank  | 801B154G3             | Electric Breaker    |
| 65                           | Cross bar                                    | 267B127P1             | OBSOLETE            |
| 169                          | Cut-off switch (F)                           | 192A1753P7            | Electric Breaker    |
| 167                          | Cut-off switch (G)                           | 192A7153P8            | Electric Breaker    |
| 170                          | Cut-off switch cover                         | 371A235P1             | Electric Breaker    |
| 168                          | Cut-off switch insulation                    | 174V521P1             | OBSOLETE            |
| 172                          | Cut-off switch lever bracket                 | 371A234G1             | Electric Breaker    |
| 171                          | Cut-off switch mounting bracket              | 371A233G1             | Electric Breaker    |
| 173                          | Cut-off switch retainer                      | 2132506000            | Electric Breaker    |
| 174                          | Cut-off switch spacer                        | 6176109P17            | OBSOLETE            |
| 77                           | Dowel pin                                    | 127A6493P2            | @@@                 |
| 205                          | Drawout racking mechanism assembly           | 549D476P1             | OBSOLETE            |
| 205                          | Drawout racking mechanism assembly           | 669D0818P1            | OBSOLETE            |
| 205                          | Drawout racking mechanism assembly           | 175L317G7             | OBSOLETE            |
| 70                           | Front escutcheon (black)                     | 698C997P1             | Manual Breakers     |
| 70                           | Front escutcheon (blue)                      | 698C997P5             | Manual Breakers     |
| 70                           | Front escutcheon (blue)                      | 805B975P2             | Electrical Breakers |
| 69                           | Front escutcheon (w/o closing switch, black) | 175B997P2             | ***                 |
| 69                           | Front escutcheon (with closing switch,)      | 275B997P1             | OBSOLETE            |
| 165A                         | Gasket between gear housing and end plate    | 6447102P1             | Electric Breaker    |
| 165                          | Gasket between gear housing and motor        | 6447101P1             | Electric Breaker    |
| 73                           | Hand trip paddle                             | K6203939P1            | %%%                 |
| 73                           | Hand trip paddle                             | K6203939P5            | \$\$\$              |
| 67                           | Handle                                       | 286A8096G2            |                     |
| 68                           | Handle and buffer assembly                   | 116B7107G1            | OBSOLETE            |
| 45                           | Horizontal stationary stud                   | 256C724G1             | %%%                 |
| 149                          | Indicator                                    | 698V996G1             | Manual Breaker      |
| 157                          | Indicator crank assembly                     | 698C995G2             | Manual Breaker      |
| 155                          | Indicator lever assembly                     | 698C995G1             | Manual Breaker      |
| 182                          | Instantaneous undervoltage device            | Table 4396            |                     |
| 27                           | Insulating tube                              | 6447741P3             |                     |
| 14                           | Insulation for stationary arcing contacts    | 459A373P2             | @@@                 |
| 14                           | Insulation for stationary arcing contacts    | 6555406P1             | ***                 |
| 30                           | Intermediate movable contact                 | 293B220G2             | @@@                 |
| 31                           | Intermediate movable contact                 | 6203978G3             | OBSOLETE            |
| 218                          | Label (charge indicator)                     | 698C997P4             | OBSOLETE            |

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@@@ Does not include AK-2-100 electrical breakers with no suffix or numeral.

%%% Refers to breakers without a -A (e.g. AK-2-100-1)

**Table 3-4, AK-100 Obsolete Power Circuit Breaker**

**AK-100 Power Circuit Breaker Obsolescence Statement:** The AK-100 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF-4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF-4150 reference number.

| <b>GEF-4150<br/>Ref. No.</b> | <b>Description</b>                                      | <b>Catalog Number</b> | <b>Notes</b>     |
|------------------------------|---|-----------------------|------------------|
| 103                          | Latch   | 848C0487P2            | OBSOLETE         |
| 103                          | Latch   | 433A214G1             |                  |
| 105                          | Latch bolt  | V6444916P1            |                  |
| 42                           | Leaf spring for movable main contact                    | 433A318P1             |                  |
| 42                           | Leaf spring for movable main contact                    | 449A991P1             | @@@              |
| 42                           | Leaf spring for movable main contact                    | 6555117P1             | ***              |
| 42                           | Leaf spring for movable main contact                    | 6203948P1             | OBSOLETE         |
| 13                           | Leaf spring for stationary arcing contacts, AC          | 433A319P1             |                  |
| 13                           | Leaf spring for stationary arcing contacts, DC          | 433A319P2             |                  |
| 16                           | Leaf spring for stationary main contacts                | 433A320P1             | OBSOLETE         |
| 16                           | Leaf spring for stationary main contacts                | 449A995P1             | OBSOLETE         |
| 89                           | Link assembly   | 457A622G1             | @@@              |
| 89                           | Link assembly   | 175L315G40            | OBSOLETE         |
| 32                           | Link assembly for main movable contact                  | 127A6417G1            | OBSOLETE         |
| 33                           | Link assembly for main movable contact                  | 419A364P1             | OBSOLETE         |
| 26                           | Link for movable arcing contact                         | 275B975P1             | OBSOLETE         |
| 26                           | Link for movable arcing contact                         | 383A681P1             | OBSOLETE         |
| 26                           | Link for movable arcing contact                         | 383A681P2             | OBSOLETE         |
| 26                           | Link for movable arcing contact, DC                     | 127A6457P1            | @@@              |
| 207                          | Link spring   | 412A135P1             | OBSOLETE         |
| 126                          | Lower spring guide assembly pin                         | 6447032P2             | Manual Breaker   |
| 126                          | Lower spring guide assembly pin                         | 6447032P1             | Electric Breaker |
| 46                           | Lower stud head   | 227F157P1             | OBSOLETE         |
| 164                          | Lubricant for gear box                                  | 393A991P1             | Electric Breaker |
| 41                           | Main contact pivot pin                                  | 6203981P7             |                  |
| 30                           | Main movable contacts                                   | 293B220G8             | @@@              |
| 30                           | Main movable contacts                                   | 6203978G1             | OBSOLETE         |
| 316                          | Maintenance closing handle                              | 568B386G1             | Electric Breaker |
| 166                          | Motor, 115 volts, 25, 50, 60 cycles and 125 bolt DC     | 5P66MA6A              | OBSOLETE         |
| 166                          | Motor, 208-230 volts, 25, 50, 60 cycles and 250 volt DC | 5P66MA7A              | OBSOLETE         |
| 22                           | Movable arcing contact                                  | K9921572G2            |                  |
| 22                           | Movable arcing contact (DC only)                        | 6404753P1             |                  |
| 197                          | Open and close indicator                                | 265B268G3             |                  |
| 196                          | Open and close indicator link                           | 6555156G1             | OBSOLETE         |
| 158                          | Open-close label  | 259C608P3             | Manual Breaker   |
| 66                           | Opening spring  | 6509813P1             |                  |
| 116                          | Overcurrent device trip paddle                          | 889B0424P10           | OBSOLETE         |
| 206                          | Pawl spring   | 365A313P1             | %%%              |
| 125                          | Pawl spring rollers                                     | 698C996P13            | Manual Breaker   |
| 124                          | Pawl spring support (lower)                             | 698C996G4             | Manual Breaker   |
| 123                          | Pawl spring support (upper)                             | 698C996G5             | Manual Breaker   |
| 143                          | Pawl with spring (front)                                | 698C985G2             | Manual Breaker   |
| 142                          | Pawl with spring (rear)                                 | 698C985G1             | Manual Breaker   |
| 61                           | Phase barrier   | 267B129P1             |                  |
| 82                           | Pin   | 175V531P1             |                  |
| 90                           | Pin   | 6447099P1             |                  |

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@@@ Does not include AK-2-100 electrical breakers with no suffix or numeral.

%%% Refers to breakers without a -A (e.g. AK-2-100-1)



**Table 3–4, AK–100 Obsolete Power Circuit Breaker**

**AK–100 Power Circuit Breaker Obsolescence Statement:** The AK–100 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <b>GEF–4150 Ref. No.</b> | <b>Description</b>                      | <b>Catalog Number</b> | <b>Notes</b>     |
|--------------------------|---|-----------------------|------------------|
| 92                       | Pin                                     | 6447091P1             |                  |
| 112                      | Pin                                     | 412A405P414           |                  |
| 113                      | Pin                                     | 6447744P1             | OBSOLETE         |
| 148                      | Pin                                     | 698C991P10            | Manual Breaker   |
| 193                      | Pin for auxiliary switch linkage        | 6076402P203           | @@@              |
| 199                      | Pin for indicator                       | 174V561P1             | OBSOLETE         |
| 23                       | Pin for movable arcing contact link     | 6447153P2             |                  |
| 28                       | Pin for side link                       | K6203981P5            |                  |
| 31                       | Pivot pin for main movable contact      | 6447172P2             |                  |
| 9                        | Pivot pin for stationary arcing contact | 6404793P1             |                  |
| 15                       | Pivot pin for stationary main contacts  | 6203981P7             |                  |
| 160                      | Plug                                    | 6447398P1             | OBSOLETE         |
| 87                       | Prop                                    | 419A366P1             |                  |
| 107                      | Prop                                    | 698V993G1             | Manual Breaker   |
| 107                      | Prop                                    | 9921596G1             | OBSOLETE         |
| 145                      | Prop                                    | 698C991G4             | Manual Breaker   |
| 108                      | Prop shaft bearing                      | 377A871P2             | OBSOLETE         |
| 147                      | Prop spring                             | 412A280P1             | Manual Breaker   |
| 114                      | Prop stop                               | 412A412P2             | @@@              |
| 136                      | Ratchet assembly                        | 698C987G1             | OBSOLETE         |
| 163                      | Ratchet pin                             | 372A283P1             | Electric Breaker |
| 159                      | Reduction gear unit assembly            | 177L362G3             | OBSOLETE         |
| 104                      | Reset latch                             | 568B303G1             | @@@              |
| 104                      | Reset latch                             | 9921607G3             | OBSOLETE         |
| 85                       | Retainer                                | 394A133P10            |                  |
| 91                       | Retainer                                | 21325063000           |                  |
| 109                      | Retainer                                | 2132506000            |                  |
| 141                      | Retainer                                | 394A133P28            | OBSOLETE         |
| 146                      | Retainer                                | 394A133P3             | Manual Breaker   |
| 29                       | Retainer for 1/2 in. pins               | 2132506200            |                  |
| 25                       | Retainer for 3/8 in. pin                | 2132506000            | OBSOLETE         |
| 79                       | Retainer for trip shaft                 | 394A133P1             |                  |
| 81                       | Retainer for trip shaft bearing         | 394A133P16            |                  |
| 122                      | Retaining ring                          | 394A133P4             | OBSOLETE         |
| 152                      | Rod                                     | 127A6493P4            | OBSOLETE         |
| 139                      | Roll pin                                | 394A137P12            | Manual Breaker   |
| 150                      | Roll pin                                | 394A137P11            | Manual Breaker   |
| 115                      | Screw for prop stop                     | 411A984P1             | OBSOLETE         |
| 213                      | Secondary disconnect device (7 point)   | 386A110G2             |                  |
| 138                      | Shaft assembly                          | 698C990G1             | Manual Breaker   |
| 177                      | Shunt trip device                       | Table 4396            |                  |
| 178                      | Shunt trip device coil                  | Table 4396            |                  |
| 176                      | Shunt trip device support               | 449A537P1             |                  |
| 38                       | Side link shield pin                    | 6555423P3             |                  |
| 35                       | Side link, left                         | 457A624G2             | @@@              |
| 35                       | Side link, left                         | 175L304G38            | OBSOLETE         |

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### Table 3-4, AK-100 Obsolete Power Circuit Breaker

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| <b>GEF-4150<br/>Ref. No.</b> | <b>Description</b>                                      | <b>Catalog Number</b> | <b>Notes</b>     |
|------------------------------|---|-----------------------|------------------|
| 34                           | Side link, right  | 457A624G1             | @@@              |
| 4                            | Side link, right  | 175L304G37            | ***              |
| 5                            | Spacer  | 293B223P3             |                  |
| 83                           | Spacer  | 457A681P3             | OBSOLETE         |
| 84                           | Spacer  | 457A681P1             | OBSOLETE         |
| 209                          | Spacer (right or left)                                  | 148A1946P9            | OBSOLETE         |
| 191                          | Spacer for auxiliary switch bracket                     | 148A1932P6            | OBSOLETE         |
| 2                            | Spacer for base   | 372A440P1             |                  |
| 201                          | Spacer for indicator                                    | 6176109P7             | OBSOLETE         |
| 44                           | Spacer for stationary main contact stop                 | 453A116P3             | @@@              |
| 121                          | Spacer for upper spring guide assembly pin (left side)  | 148A1946P4            | OBSOLETE         |
| 119                          | Spacer for upper spring guide assembly pin (middle )    | 148A1946P3            | OBSOLETE         |
| 118                          | Spacer for upper spring guide assembly pin (right side) | 148A1946P2            | OBSOLETE         |
| 86                           | Spring  | 412A140P1             | OBSOLETE         |
| 106                          | Spring  | 6403348P1             |                  |
| 140                          | Spring  | 127A8306P1            | Manual Breaker   |
| 156                          | Spring  | 412A0292P1            | Manual Breaker   |
| 154                          | Spring  | 412A267P1             | Manual Breaker   |
| 208                          | Spring (for racking mechanism)                          | 846C0839P10           | OBSOLETE         |
| 144                          | Spring arm  | 846C817G1             | OBSOLETE         |
| 202                          | Spring for indicator                                    | 365A305P1             | Electric Breaker |
| 162                          | Spring for ratchet pin                                  | 6509871P1             | Electric Breaker |
| 12                           | Spring for stationary arcing contacts (inner)           | 6519859P1             |                  |
| 11                           | Spring for stationary arcing contacts (outer)           | 6509858P1             |                  |
| 21                           | Spring for stationary main contact                      | 412A0288              | OBSOLETE         |
| 21                           | Spring for stationary main contact                      | 6403370P1             | OBSOLETE         |
| 98                           | Spring guide (lower)                                    | 6447353P1             | OBSOLETE         |
| 94                           | Spring guide (upper)                                    | 6447331P1             |                  |
| 10                           | Spring guide for stationary arcing contact springs      | 6447046P1             | OBSOLETE         |
| 95                           | Spring reset  | 6403393P1             | OBSOLETE         |
| 96                           | Spring reset (inner)                                    | 148A2214P1            | @@@              |
| 99                           | Spring support assembly                                 | 6203914G1             | @@@              |
| 182                          | Static timing device, 125 V DC                          | TAKYUVT-1             |                  |
| 182                          | Static timing device, 230V 60 Hz                        | TAKYUVT-3             |                  |
| 182                          | Static timing device, 250 V DC                          | TAKYUVT-2             |                  |
| 8                            | Stationary arcing contact                               | 295B408G3             | @@@              |
| 8                            | Stationary arcing contact                               | 6203966G1             | ***              |
| 8                            | Stationary arcing contact                               | 295B408G1             | OBSOLETE         |
| 18                           | Stationary intermediate contact                         | 6203979G3             | OBSOLETE         |
| 18                           | Stationary intermediate contact (includes barrier)      | 459A385G1             | OBSOLETE         |
| 17                           | Stationary main contact                                 | 293B221G5             | @@@              |
| 17                           | Stationary main contact                                 | 6203979G1             | OBSOLETE         |
| 7                            | Stop  | 293B233P1             |                  |
| 43                           | Stop for stationary main contacts                       | 449A991P1             | @@@              |
| 43                           | Stop for stationary main contacts                       | 6548047P2             | OBSOLETE         |
| 97                           | String reset (outer)                                    | 148A2213P1            | @@@              |

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**Table 3–4, AK–100 Obsolete Power Circuit Breaker**

**AK–100 Power Circuit Breaker Obsolescence Statement:** The AK–100 is no longer a manufactured breaker. Many of the items originally identifies as renewal parts have become unavailable. The following parts list is a reproduction of parts found in Bulletin GEF–4150. The notes column identifies those parts that are no longer available. The reference number listed refers to the GEF–4150 reference number.

| <b>GEF–4150 Ref. No.</b> | <b>Description</b>                                   | <b>Catalog Number</b> | <b>Notes</b>     |
|--------------------------|--|-----------------------|------------------|
| 45                       | Stud, drawout  | 248C754P2             | OBSOLETE         |
| 137                      | Support assembly                                     | 698C998G1             | OBSOLETE         |
| 132                      | Support for crank                                    | 698C992G5             |                  |
| 133                      | Support for crank                                    | 393A554P1             |                  |
| 203                      | Terminal Board (4 point)                             | 6293908G185           | OBSOLETE         |
| 204                      | Terminal board (6 point)                             | 6293908G168           | OBSOLETE         |
| 181                      | Time delay undervoltage device                       | Table 4396            |                  |
| 71                       | Trip button and rod assembly                         | 411A904G5             | @@@              |
| 71                       | trip button and rod assembly                         | 411A904G2             | ***              |
| 72                       | Trip button spring                                   | 412A139P1             |                  |
| 78                       | Trip shaft (center)                                  | 394A133P1             |                  |
| 75                       | Trip shaft (outside)                                 | 276B250P4             |                  |
| 80                       | Trip shaft bearing (side sheets and mechanism frame) | 192S9653P4            |                  |
| 102                      | Trip shaft return spring                             | 412A269P1             | OBSOLETE         |
| 102                      | Trip shaft return spring                             | 412A234P1             | OBSOLETE         |
| 117                      | Trip shaft stop                                      | 6447767P1             |                  |
| 153                      | Tube   | 698C995P13            | Manual Breaker   |
| 180                      | Undervoltage device coil                             | Table 4396            |                  |
| 179                      | Undervoltage device support                          | 423A380P1             | OBSOLETE         |
| 120                      | Upper spring guide assembly pin                      | 6447010P2             | OBSOLETE         |
| 3                        | Upper stud (drawout)                                 | 6414520G1             | OBSOLETE         |
| 3                        | Upper stud (drawout)                                 | 291B967G2             | @@@              |
| 3                        | Upper stud (stationary)                              | 293B207G1             | @@@              |
| 4                        | Upper stud head                                      | 293B224G1             | OBSOLETE         |
| 3                        | Upper stud, horizontal (stationary)                  | 6414516G1             | OBSOLETE         |
| 3                        | Upper stud, vertical (stationary)                    | 6414546G2             | OBSOLETE         |
| 45                       | Vertical stationary stud                             | 256C724G2             | %%%              |
| 24                       | Washer   | 9921652P1             |                  |
| 40                       | Washer   | 6447773P1             | OBSOLETE         |
| 40                       | Washer   | 6447773P2             | OBSOLETE         |
| 215                      | Window   | 174V535P1             | OBSOLETE         |
| 217                      | Window (charge and discharge)                        | 698C997P2             | OBSOLETE         |
| 216                      | Window (open and close)                              | 269C272P8             | Electric Breaker |

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%%% Refers to breakers without a –A (e.g. AK–2–100–1)

## MVT Programmings and Related Parts

**Table 4-1, MVT Programmings and Related Parts**

| Fig. No. | Ref. No. | Description                            | Table Number |
|----------|----------|--|--------------|
| 4A       | 1        | MVT Tapped CT Sensor                   | Table 4A     |
| 4B       | 2        | MVT Fixed CT Sensor                    | Table 4B     |
| 4C       | 3        | MVT Neutral CT Sensor Disconnects      | Table 4C     |
| 4D       | 4        | MVT Flux Shift Trip Device             | Table 4D     |
| NI       | —        | MVT Neutral CT Sensor                  | Table 4E     |
| NI       | —        | MVT Sensor Amp Indicator               | Table 4F     |
| NI       | —        | MVT Programmer Mounting                | Table 4G     |
| 4E       | 5        | MVT PM Programmer                      | Table 4H     |
| 4F       | 6        | MVT+ Programmer                        | Table 4H     |
| NI       | —        | Neutral Sensor Disconnect Plug-Cubicle | 343L747G80   |

**Table 4A, MVT Tapped CT Sensor –See Figure 4A**

| Breaker Type                 | Tap Setting | Tapped Sensor Catalog Number |     |
|------------------------------|-------------|------------------------------|-----|
| AK-25<br>AKU-25              | 200A        | 568B632                      | G26 |
|                              | 225A        |                              | G25 |
| AKST-50H                     | —           | 193A1439                     | G16 |
| AKS-50<br>AKSU-50<br>AKS-50H | 300A        |                              | G14 |
|                              | 400A        |                              | G15 |
|                              | 600A        |                              |     |
|                              | 800A        |                              |     |
|                              | 1200A       |                              |     |
|                              | 1600A       |                              |     |

—Any legitimate alternative condition will suffice.



**Figure 4A:** MVT Tapped CT Sensor (Ref. 1)



**Figure 4B:** MVT Fixed CT Sensors (Ref. 2)



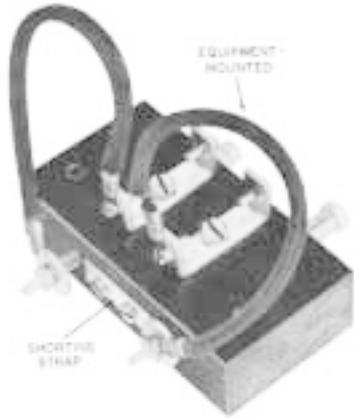


**Table 4B, MVT Fixed CTS – See Figure 4B on page 67**

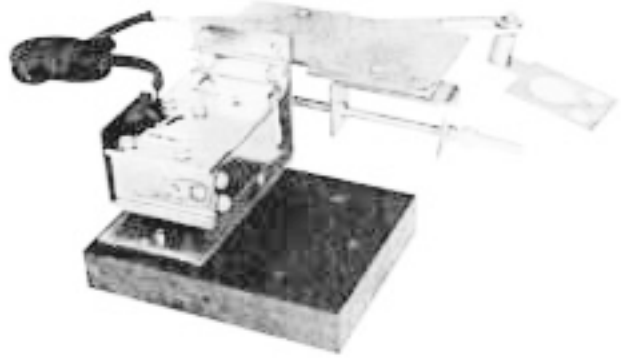
| Breaker                      | Instantaneous Sensor Rate | Function         | Catalog Number |          |      |
|------------------------------|---------------------------|------------------|----------------|----------|------|
| AK-25<br>AKU-25              | 150A                      | —                | 139C4970       | G227     |      |
|                              | 225A                      |                  |                | G228     |      |
|                              | 600A                      |                  |                | G229     |      |
| AKR-30S<br>AKRU-30S          | 150A                      | Adjust-High **   | 139C4970       | G218     |      |
|                              |                           | Fixed-High       |                | G206     |      |
|                              |                           | —                |                | G221     |      |
|                              | 400A                      | Adjust-High **   |                | G209     |      |
|                              |                           | Fixed-High       |                | G223     |      |
|                              |                           | —                |                | G211     |      |
|                              | 800A                      | Adjust-High **   |                | 139C4970 | G218 |
|                              |                           | Fixed-High       |                |          | G206 |
|                              |                           | —                |                |          | G221 |
| AKR-30<br>AKRU-30            | 150A                      | Adjust-High **   | 139C4970       | G209     |      |
|                              |                           | —                |                | G223     |      |
|                              | 400A                      | Adjust-High **   |                | G211     |      |
|                              |                           | —                |                | G176     |      |
|                              | 800A                      | Adjust-High **   |                | G25      |      |
|                              |                           | —                |                | G179     |      |
| AKR-30H                      | 150A                      | Adjust-High **   | 139C4970       | G28      |      |
|                              |                           | —                |                | G181     |      |
|                              | 400A                      | Adjust-High **   |                | G30      |      |
|                              |                           | —                |                | G96      |      |
|                              | 800A                      | Adjust-High **   |                | G30      |      |
|                              |                           | —                |                | G98      |      |
| AKR-50<br>AKRU-50            | 800A                      | Adjust-High **   | 139C4970       | G32      |      |
|                              | 1600A                     | Adjust-High **   |                | G251     |      |
| AKST-50H                     | 2000A                     | —                | 139C4970       | G249     |      |
| AKS-50<br>AKSU-50<br>AKS-50H | 800A                      | —                |                | G250     |      |
|                              | 1600A                     |                  | G187           |          |      |
| AKR-50H                      | 800A                      | Adjust-High **   | 139C4970       | G30      |      |
|                              |                           | —                |                | G189     |      |
|                              | 1600A                     | Adjust - High ** |                | G32      |      |
| AKRT-50H                     | 2000A                     | Adjust - High ** | 139C4970       | G190     |      |
|                              |                           | —                |                | G33      |      |
| AKR-75                       | 3000A                     | —                | 139C4970       | G37      |      |
|                              | 3200A                     | Adjust - High ** |                | G104     |      |
|                              |                           | —                |                | G38      |      |
| AKR-100                      | 4000A                     | Adjust - High ** | 139C4970       | G105     |      |
|                              |                           | —                |                | G39      |      |

— Any legitimate alternative condition will suffice.

\*\*The high range instantaneous function for Powerleader breakers is not adjustable.



**Figure 4C:** MVT Neutral CT Sensor Disconnect (Ref. 3)



**Figure 4D:** MicroVersaTrip® Flux Shift Trip Device (Ref. 4)

**Table 4C, MVT Neutral CT Sensor Disconnects –See Figure 4C**

| Breaker Type  | Application | Catalog Number |     |
|---------------|-------------|----------------|-----|
| AK-25         | Stationary  | 343L747        | G67 |
| AKU-25        |             |                | G62 |
| AKR-30S       | Drawout     | 343L870        | G9  |
| AKRU-30S      |             |                |     |
| AKR/AKRU-30   | Stationary  | N/A            |     |
| AKR-30H       |             | 425D366        | G55 |
| AKR/AKJ-50    | AKD-5/6     |                |     |
| AKRU/AKJU-50  |             | 425D366        | G26 |
| AKR/AKJ-50H   | Drawout     |                |     |
| AKRT/AKJT-50H |             | 425D354        | G14 |
| AKS/AKSU-50   | Stationary  |                |     |
| AKS/AKST-50H  | Drawout     | 425D354        | G15 |
| AKR-75        | Stationary  |                |     |
| AKR-100       | Drawout     | 425D385        | G55 |

**Table 4D, MVT Flux Shift Trip Device –See Figure 4D**

| Breaker Type    | Catalog Number |     |
|-----------------|----------------|-----|
| AK-25           | 343L747        | G2  |
| AKU-25          |                |     |
| AKR-30S         | 343L747        | G33 |
| AKRU-30S        |                |     |
| AKR/AKRU-30     | 425D366        | G85 |
| AKR-30H         |                |     |
| AKR/AKJ-50      |                |     |
| AKRU/AKJU-50    |                |     |
| AKR/AKJ-50H     |                |     |
| AKRT/AKJT-50H   | 425D385        | G89 |
| AKS/AKSU-50     |                |     |
| AKS/AKST-50H    | 425D385        | G90 |
| AKR-75          |                |     |
| AKR-100 (25")   |                |     |
| AKR - 100 (33") | 425D385        | G91 |



**Table 4E, MVT Neutral CTS**

| <b>Breaker Type</b>                       | <b>Sensor Rate</b> | <b>Catalog Number</b> |
|---|--------------------|-----------------------|
| AK-25<br>AKU-25                           | 200A               | TSVG206BK             |
|   | >225A              |                       |
|   | —                  | TSVG225BK             |
| AKR-30S                                   | 150A               | TSVG303B              |
| AKRU-30S                                  | 400A/800A          | TSVG508B              |
| AKR-30                                    | 150A               | TSVG303B              |
| AKRU-30                                   | 400A               |                       |
| AKR-30H                                   | 800A               | TSVG508B              |
| AKR/AKJ-50<br>AKRU/AKJU-50<br>AKR/AKJ-50H | 1600A              | TSVG516B              |
| AKRT/AKJT-50H                             | 2000A              | TSVG620B              |
| AKS-50                                    | 300A/400A          | TSVG508B              |
| AKSU-50                                   | 600A/800A          | TSVG516B              |
| AKS-50H                                   | 1200A/1600A        |                       |
| AKST-50H                                  | 2000A              | TSVG620B              |
| AKR-75                                    | 3000A              | TSVG830B              |
|   | 3200A              | TSVG832B              |
| AKR-100                                   | 4000A              | TSVG940B              |

—Any legitimate alternative condition will suffice.

**Table 4F, MVT Sensor Amp Indicator**

| <b>Breaker</b>                            | <b>Sensor Rate</b> | <b>Catalog Number</b> |     |
|---|--------------------|-----------------------|-----|
| AKR-30S                                   | 150A               | 343L870               | G10 |
| AKRU-30S                                  | —                  |                       | G11 |
| AKR-30                                    | 150A               | 425D366               | G28 |
| AKRU-30                                   | —                  |                       | G29 |
| AKR-30H                                   |                    |                       |     |
| AKR/AKJ-50<br>AKRU/AKJU-50<br>AKR/AKJ-50H | —                  | 425D366               | G29 |
| AKRT/AKJT-50H                             |                    |                       | G30 |
| AKS-50<br>AKSU-50<br>AKS-50H              | —                  | 425D385               | G51 |
| AKST-50H                                  |                    |                       | G52 |
| AKR-75<br>AKR-100                         |                    |                       | G3  |

—Any legitimate alternative condition will suffice.

| <b>Table 4G, MVT Programmer Mounting</b>   |                             |                      |                           |                       |              |
|--|-----------------------------|----------------------|---------------------------|-----------------------|--------------|
| <b>Breaker</b>   | <b>PowerLeader</b>          | <b>Operation</b>     | <b>Application</b>        | <b>Catalog Number</b> |              |
| AK-25<br>AKU-25  | No                          | Manual &<br>Electric | AKD &<br>AKD-5            | 343L747               | G91          |
| AKR-30S<br>AKU-30S   |                             | Manual               | AKD-8                     |                       | G93          |
|  |                             | R-Electric           |                           |                       | G94          |
| AKR-30<br>AKRU-30<br>AKR-30H<br>AKR/AKJ-50<br>AKRU/AKJU-50<br>AKR/AKJ-50H<br>AKRT/AKJT-50H |                             | Stationary           | AKD-5<br>and<br>AKD-6     |                       | Not Required |
|  |                             |                      |                           | AKD-8                 | 425D366      |
|  |                             | AKR-75<br>AKR-100    | All                       | 425D385               | G4           |
|  |                             |                      |                           | 323A6140              | G1           |
|  |                             | AK-25<br>AKU-25      | Manual &<br>Electric      | AKD-8                 | 343L747      |
| AKR-30S<br>AKRU-30S  |                             | Manual<br>R-Electric | G94                       |                       |              |
| AKR-30<br>AKRU-30<br>AKR-30H<br>AKR/AKJ-50<br>AKRU/AKJU-50<br>AKR/AKJ-50H<br>AKRT/AKJT-50H |                             | Yes                  | Manual<br>and<br>Electric | All                   | 425D366      |
|  | 323A6140                    |                      |                           |                       | G3           |
|  | 425D385                     |                      |                           |                       | G4           |
|  | AKS/AKSU-50<br>AKS/AKST-50H |                      |                           |                       |              |
| AKR-75<br>AKR-100  |                             |                      |                           |                       |              |



### Table 4H, MVT Plus & PM (RMS9C) Trip Unit Replacements

More detailed information can be found in “Trip Device Conversion Kits” section on page 219 to 224.

To determine a replacement MVT Plus or PM (RMS9C vintage) obtain the following information: breaker type, existing trip unit catalog number, existing rating plug and/or CT

Caution: Always order a replacement with the same features and options of the existing trip unit unless a thorough investigation of the application has been done. For example, if a breaker originally had fixed high range instantaneous, then the breaker and application probably requires this to be maintained. Likewise, high range instantaneous may not be able to be added without upgrading the breaker CTs.



**Figure 4E:** MVT PM Programmer (Ref. 5)



**Figure 4F:** MVT+ Programmer (Ref. 6)