



August, 1987
Supersedes Renewal Parts Data 32-253-4C
dated March, 1985

Porcel-line Type DHP Magnetic Air Circuit Breakers/ Housing

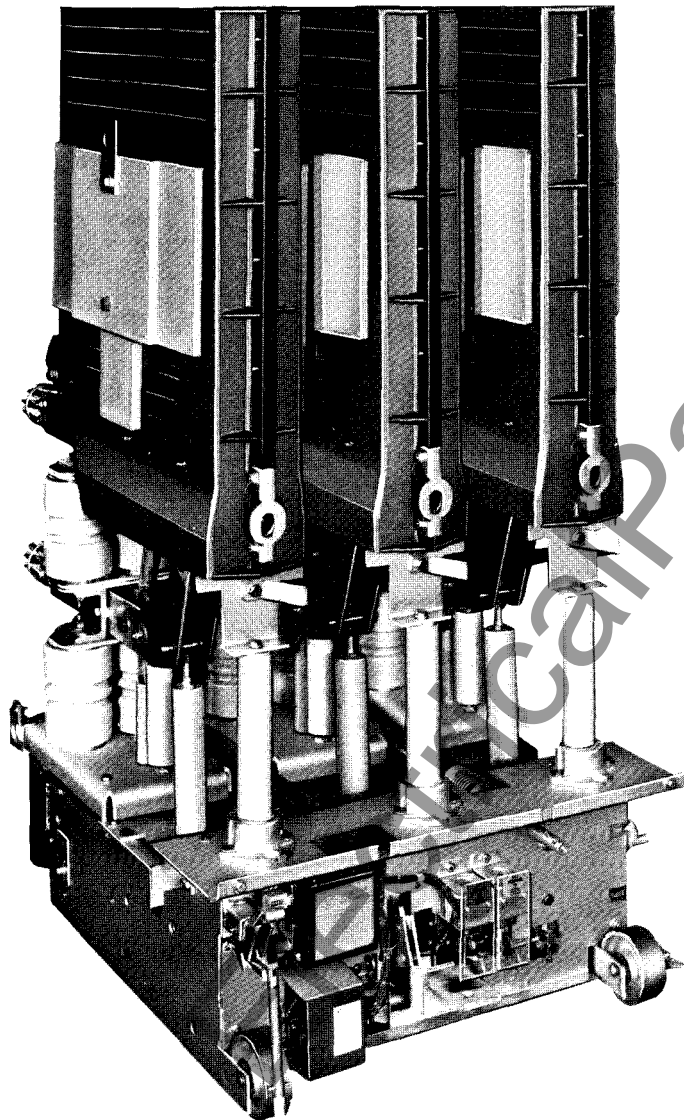


Figure 1. 150 DHP 500, 1200 Amperes with barrier removed.

NOTE: THIS PUBLICATION IS NOT INTENDED FOR APPLICATION TO BREAKERS HAVING SPECIAL SEISMIC REQUIREMENTS. FOR PARTS IDENTIFICATION ON THOSE BREAKERS, IT WILL BE NECESSARY TO CONTACT THE COMMERCIAL OPERATIONS DIVISION OF THE DISTRIBUTION AND CONTROL BUSINESS UNIT, WITH THE BREAKER SHOP ORDER NUMBER.

The following breakers are included in this publication

Circuit Breaker Type	Nominal Voltage Class —KV	Nominal 3 Phase MVA Class	Rated Continuous Current at 60 Hz —Amperes	Momentary Current Rating (Closing and Latching Capability) —KA RMS
50DHP75	4.16	75	1200	19
50DHP250	4.16	250	1200 2000	58
H50DHP250 ①	4.16	250	1200 2000	78 ①
50DHP350	4.16	350	1200 2000 3000	78
75DHP500	7.2	500	1200 2000 3000	66
150DHP500	13.8	500	1200 2000	37
H150DHP500 ①	13.8	500	1200 2000 3000	58 ①
150DHP750	13.8	750	1200 2000	58
150DHP750C	13.8	750	1200 2000 3000	58
H150DHP750C ①	13.8	750	1200 2000 3000	77 ①
150DHP1000	13.8	1000	1200 2000 3000	77

① Non-Standard Breaker with High Momentary Rating Available for Special Applications.

For complete information on Type DHP Breaker ratings, see Instruction Book 32-253-4A.

Index	Page
General Information.....	2
Common Parts.....	3-5 & 19
Pole Units	7-9
Arc Chutes and Barriers	11-13
Operating Mechanism.....	15-17
Levering Mechanism	18
Cast Mechanism Parts.....	20
DHP Housing Parts.....	21-38
Current Transformers	26-28
Aux. Compartment — PT, CPT, Fuse	29-35
Boots.....	36
Bus	37, 38
DFS-FSP Switch Parts	39
Accessories.....	39

NOTE: FOR BREAKERS HAVING CAST MECHANISMS (REF. I.B. 32-253-1) REFER TO PAGE 20 FOR PARTS AVAILABILITY.



Type DHP Magnetic Air Circuit Breakers

Parts Identification

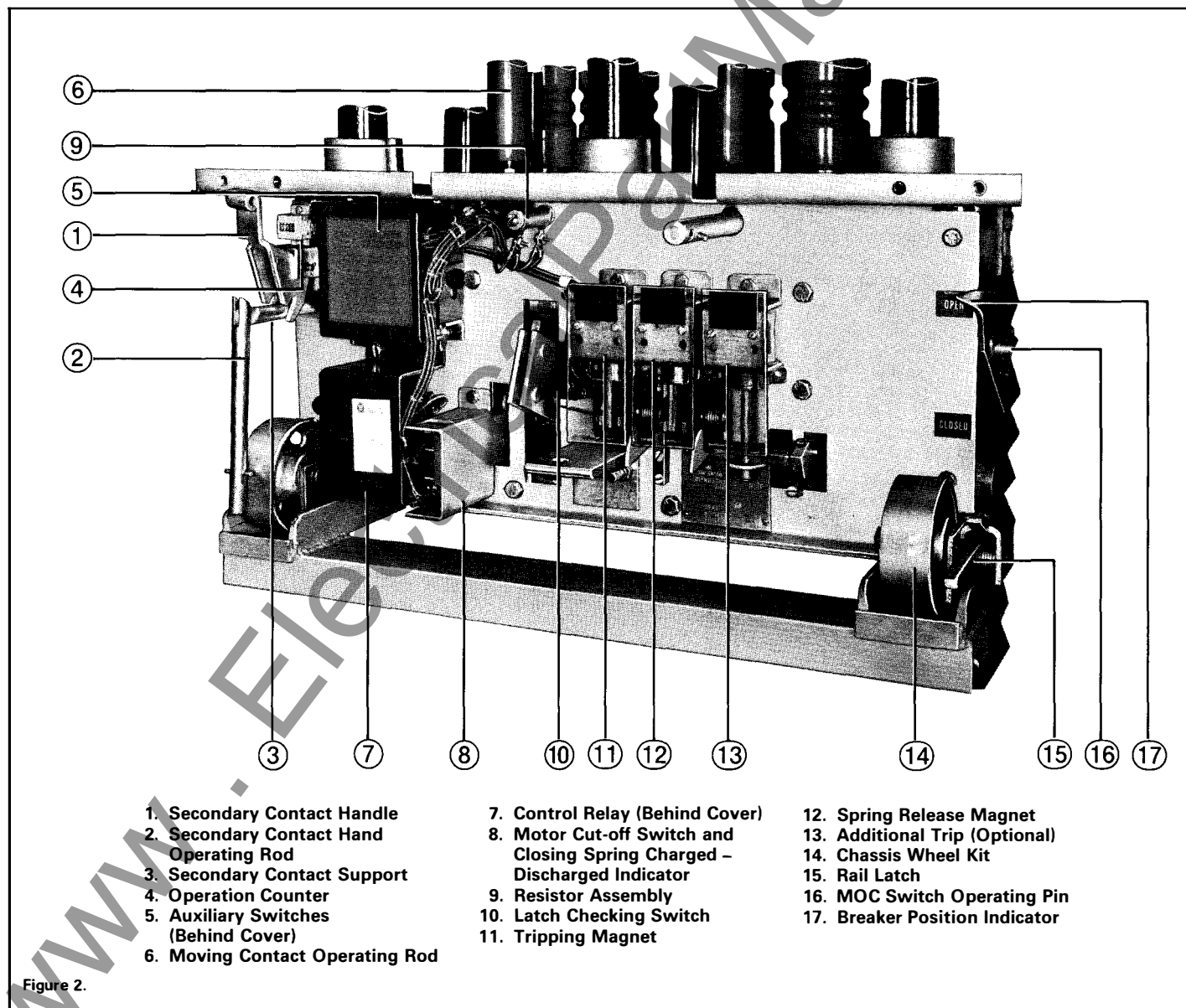
The illustrations in this Renewal Parts Data show parts and sub-assemblies which are identified by name and style number in the associated tabulations. Additional information and illustrations are shown in the figures in I.B. 32-253-4A, which show many sub-assemblies and detail parts in order to illustrate their function and location in the assembly. Some of the detail parts shown in the instruction book are recommended only as part of a sub-assembly to facilitate their replacement or installation in the field. The availability of parts and sub-assemblies is indicated by style number in the following data.

If the item in question cannot be identified by style number, refer to the figure number, name and item number as shown in this RPD along with the breaker type and its shop order number or style number as shown on the nameplate on the front of the breaker mechanism panel.

This nameplate information will also be required when adding components, which are not direct replacements, to a circuit breaker.

Ordering Information

1. Name item and give its style number. Specify quantity desired.
2. State breaker shop order number or style number.
3. State method of shipment desired.
4. Send all orders or correspondence to nearest Westinghouse Sales Office.



**Type DHP Magnetic Air Circuit Breakers****Items Common to All Breakers**

Description of Part	Figure Number	Item Number	Number Required for One Breaker	Style Number of Part
Breaker Position Indicator and MOC Switch Operating Pin	2	17	1	791A620G01
Rail Latch Assembly	2	15	1	792A083G01
Motor Cutoff Switch	2	8	1	8257A30H01 (2 Circuit) 4 Terminals 8257A30H02 (4 Circuit) 8 Terminals
Motor Cutoff Switch and Indicator (Less Switches)				591C993G07
Operating Rod Assembly	2	2	1	3838A54G01
Secondary Contact Handle Assembly	2	1	1	792A087G01
Operations Counter	2	4	1	592C040H01
Auxiliary Switch (Upper)	2	5	1	46A9047G04 ③
Auxiliary Switch (Lower)	2	5	1	46A9047G05 ③
Latch Checking Switch	2	10	1	784A907H01#
Spring Release Magnet	2	12	1	592C921G01 Plus Coil ② ●
Shunt Trip Magnet	2	11/13	1	
Wheels – Including Pins and Rings	2	14	1	792A085G01 (3 Inch) Set of 4 wheels 792A085G02 (4 Inch) each kit
Kit – Misc. Covers for Switches, 2 Relay, Located on Mech. Panel (Not Illustrated)			50DHP75 50DHP250/350 1200 and 2000 Amp	792A088G01
			50DHP350 3000A 75DHP and 150DHP	792A088G02
Secondary Contact Support	2	3	50DHP250/350 1200 and 2000 Amp 50DHP350-3000 Amp 75/150DHP — All	437D249G01 437D249G06 437D249G02
Control Items				Control Voltages
				24 V DC 48 V DC 125 V DC 250 V DC 115 V AC 60 HZ 230 V AC 60 HZ
Trip Coil	2	1		677C903G04 677C903G01 677C903G02 677C903G03 ① ①
Spring Release Coil	2	1		 677C903G01 677C903G02 677C903G03 677C903G05 677C903G06
Control Relay “Y”	2	1		 8257A30H03 8257A30H04 8257A30H05 8263A53G01 8263A53G02
Resistor Assembly	2/3	1		 73432ECOBD 73432ECOHE 73432ECOMB 502A006H13 502A006H15
				 25 Ohm 200 Ohm 750 Ohm 250 Ohm 750 Ohm

Control Items for Existing Breakers Having Solenoid Operated Mechanisms

	Control Voltages			
	5 KV		15 KV	
	125 V DC	250 V DC	125 V DC	250 V DC
	676631	676625	300P822G01 ⑤	300P823G01 ⑤
Close Coil			300P820G01 ⑤	300P821G01 ⑤
Control Relay “X” Resistor	423D181G02	423D181G03	423D181G02	423D181G03
	73432ECOQO	73432ECOQO	73432ECOQO	73432ECOQO
	2000 Ohm	7500 Ohm	2000 Ohm	7500 Ohm

① For Capacitor Trip Device 382D719G06 use Trip Coil 677C903G03.*
For Capacitor Trip Device 689C166G02 use Trip Coil 677C903G07.

② When ordering magnet, include proper coil from table shown above or specify shop order reference of breaker.

③ Breakers which have special seismic requirements are equipped with special switches: upper, 46A9047G15 and lower, 46A9047G16.

④ Link type (illustrated). For breakers having plunger type magnet, order 310C666G01 plus desired coil. See page 19 for illustration of the two magnet types. (link/plunger)

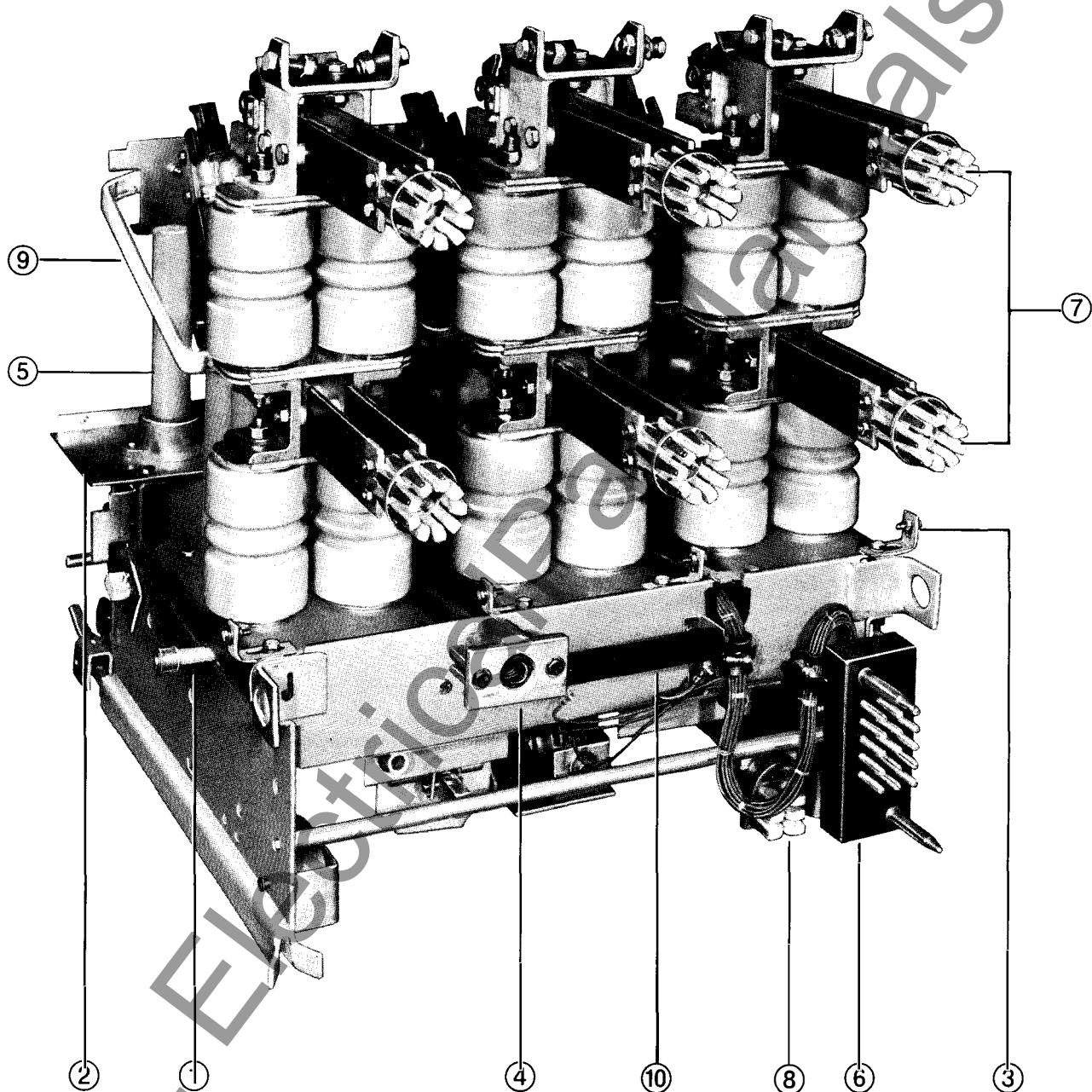
⑤ Applicable to breakers with 40 KA momentary current rating.

⑥ Applicable to breakers with 60 KA momentary current rating.

* Capacitor trip device 382D719G06 not available. When capacitor trip 689C166G02 is supplied – coil 677C903G07 must also be furnished.

Fabricated mechanisms only. For cast stored energy and solenoid mechanism – order 662A143H01.

Type DHP Magnetic Air Circuit Breakers



- 1. Shutter Roller
- 2. Barrier Mounting Pan
- 3. Barrier Mounting Clips
- 4. Levering Device Bearing Plate
- 5. Arc Chute Support

- 6. Secondary Contact Block
- 7. Primary Disconnecting Contact (Finger Cluster)
- 8. Ground Contact Cluster
- 9. Shunt Strap
- 10. Resistor (Ac Control)

Figure 3.

**Type DHP Magnetic Air Circuit Breakers****Items Common to All Breakers**

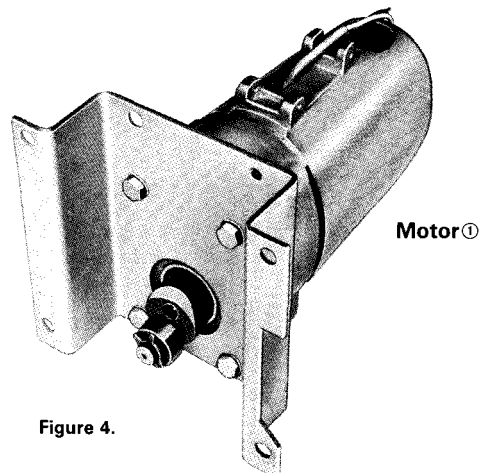
Description of Part	Fig. No.	Item No.	Required per Breaker	Breaker Type	Style Number of Part
Shutter Roller Kit	3	1	1	All	792A084G01
Barrier Mounting Pan	3	2	1	50DHP75/250 (1200/2000A) 50DHP350 (1200/2000A) 50DHP350 (3000A) 75/150DHP500/750 – All Ratings 150DHP750C/1000 – All Ratings	437B626G02 792A089G01 792A089G02 437D253G06 792A090G01
Barrier Mounting Clips	3	3	2 2 4 4 6	50DHP75/250 50DHP350 (1200/2000A) 50DHP350 (3000A) 75/150DHP500/750 150DHP750C/1000	3712A44H01 795A656H02 794A790H01 795A656H02 3615A83G01
Bearing Plate (Levering Device)	3	4	1 1	All (Except 50DHP350 3000A) 50DHP350 (3000A)	501B752H01 792A096G01
Secondary Contact Includes Block and Guide Pins	3	6	1	All	792A086G01
Ground Contact Cluster	3	8	1	All	310C665G01
Shunt Strap	3	9	3	50DHP75/250 – All Ratings 50DHP350 (1200/2000A) 50DHP350 (3000A) 75DHP500 (1200A) 75DHP500 (2000/3000A) 150DHP500 (1200A) 150DHP500 (2000/3000A) 150DHP750 (1200A) 150DHP750 (2000A) 150DHP750C 150DHP1000 (1200A) 150DHP750C 150DHP1000 (2000/3000A)	6898D75H01 3710A65H01 3710A65H02 9145D72H02 590C421H02 9145D72H01 590C421H01 9145D72H01 590C421H01 9145D73H01 589C029H01

Motors^①

Description of Part	Number Required for One Breaker	Style Number of Part
Motor	1	3755A95G01 for 125 V DC/115 V AC
Motor	1	3755A95G02 for 250 V DC/230 V AC
Motor	1	3755A95G03 for 48 V DC

For Breakers in the field having cast mechanisms, (I.B. 32-253-1), the replacement styles are:

For 5 KV Motor	1	442D127G01 125 V DC/115 V AC 442D127G02 250 V DC/230 V AC 442D127G03 48 V DC
For 15 KV Motor	1	442D127G04 125 V DC/115 V AC 442D127G05 250 V DC/230 V AC 442D127G06 48 V DC

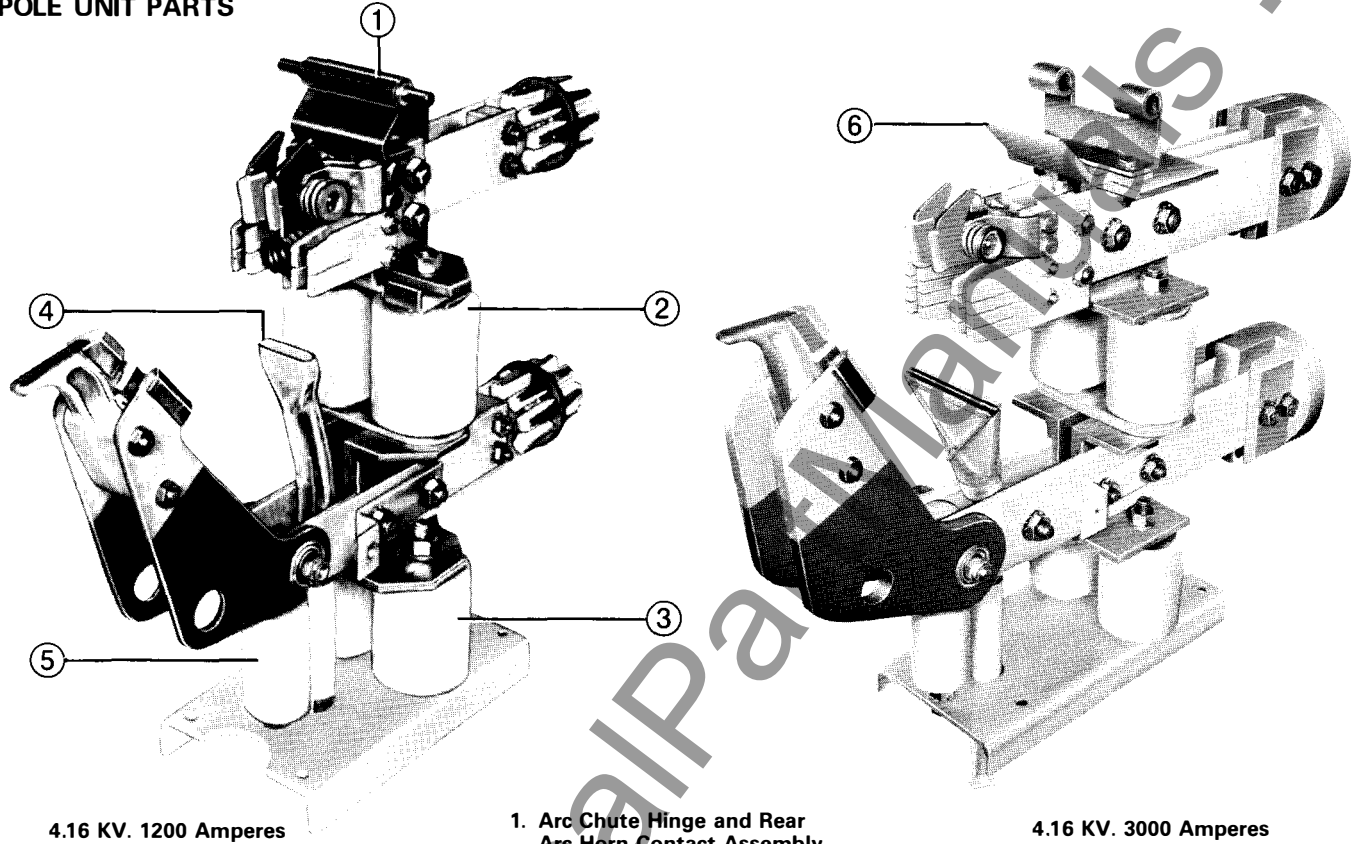
**Figure 4.**

^① For Breakers built prior to 1970, contact the local field sales office for referral to the Distribution and Control Business Unit for the current applicable motor.



Type DHP Magnetic Air Circuit Breakers

POLE UNIT PARTS



4.16 KV. 1200 Amperes

4.16 KV. 3000 Amperes

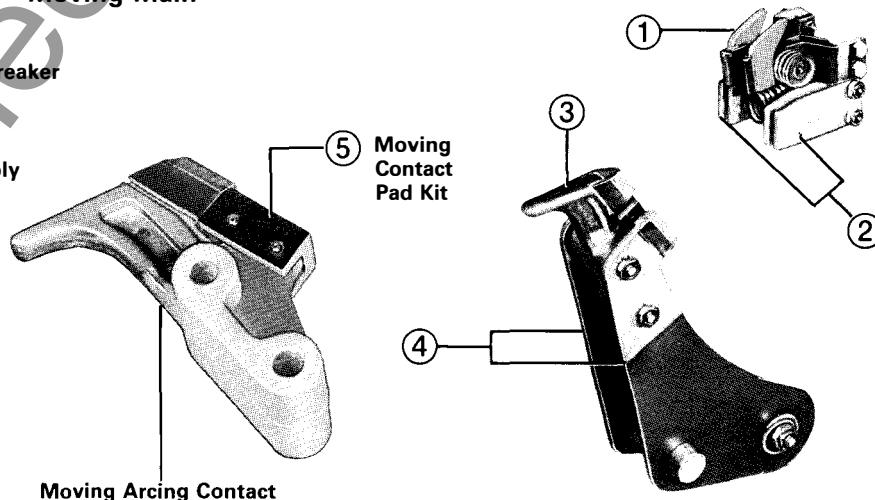
1. Arc Chute Hinge and Rear Arc Horn Contact Assembly
2. Pole Unit Insulator – Upper
3. Pole Unit Insulator – Lower
4. Puffer Tube Assembly
5. Porcelain Hinge Support Assembly
6. Rear Arc Horn Contact (3000A)

Figure 5.

COMPLETE CONTACT ASSEMBLY (Stationary Main and Arcing – Moving Main and Arcing)

(See Page 7 for SNO No. Contact/Breaker Application)

1. Stationary Arcing Contact
2. Stationary Main Contact Assembly
3. Moving Arcing Contact
4. Moving Main Contacts
5. Bumper Pad Kit
(Consists of 3 Pads and 6 Pins)



Moving Arcing Contact

Figure 6.

**Type DHP Magnetic Air Circuit Breakers****Pole Units**

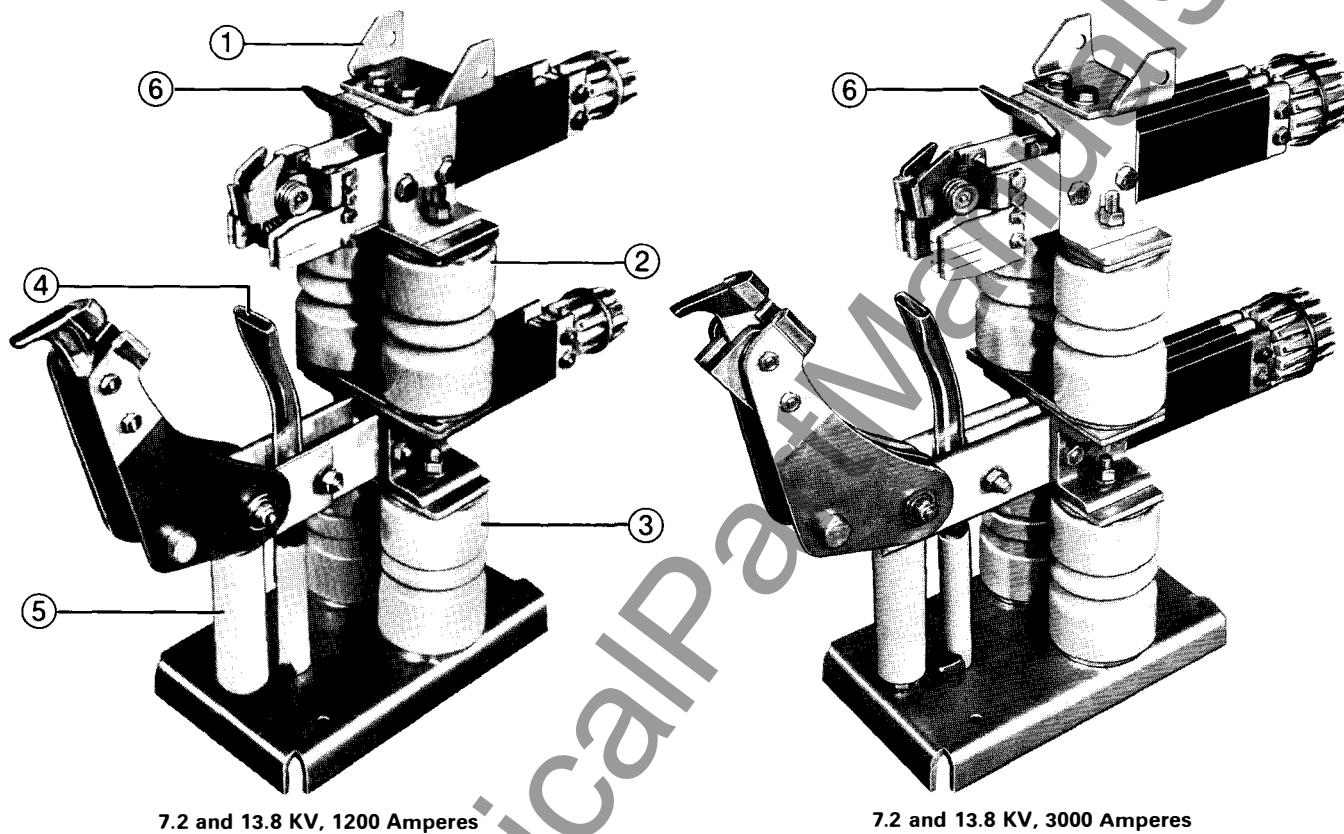
Description of Part	Fig. No.	Number Required for One 3 Pole Breaker	Continuous Current Rating—Amperes	1200A	1200A	1200A	2000A	1200A	2000A	3000A
			Breaker Type and Momentary Current Rating—KA	50DHP75 19 KA	50DHP250 58 KA	50DHP250 78 KA	50DHP250 58 & 78 KA	50DHP350 78 KA	50DHP350 78 KA	50DHP350 78 KA
Single Pole Unit Assembly Complete ^①	5	3	①	568F566G02	568F566G04	568F566G01	568F562G01	568F562G02	568F575G01	
Complete Contact Assembly (Stationary Main and Arcing – Moving Main and Arcing)	6	3		6426C73G01	6426C73G02	6426C73G03	6426C73G04	6426C74G01	6426C74G02	6426C74G03
Bumper Pad Kit (Consists of 3 Pads/6 Pins) ^{⑥⑥}	6	1		792A144G01	792A144G01	792A144G01	792A144G01	792A144G01	792A144G01	792A144G01
Porcelain Hinge Support Assembly	5	3		592C682G01	592C682G01	592C682G01	592C682G01	592C682G01	592C682G01	592C682G01
Moving Contact Operating Rod ^⑥	2	3		501B713G01	501B713G01	501B713G01	501B713G01	501B713G01	501B713G01	436B414G01
Primary Disconnecting Contact ^⑥	3	6		502A851G01	502A851G01	502A851G01	502A852G01	502A851G01	502A852G01	664A619G03
Arc Chute Support ^⑥	3	3	.....	.....	.....	.....	591C309G02	591C309G02	591C309G02	591C309G03
Kit – 2 Upper Pole ^② Unit Insulators	5	..	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②
Kit – 2 Lower Pole ^② Unit Insulators	5	..	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②	792A097G01 ②
Pole Unit (For Field Replacement) (Monolithic to PIP) ^④	5	..	568F447G01	568F447G02	568F447G04	568F447G03 568F447G05	④	④	④	
Puffer Tube Assembly ^⑥	5	3		507B993G01	507B993G01	507B993G01	507B993G01	693C248G01	693C248G01	693C248G02
Arc Chute Hinge/Contact Assembly	5	3		592C698G01	592C698G02	592C698G02	592C698G02	592C678H01	592C678H02	592C678H02
Rear Arc Horn Contact	5	3	.....	.....	.....	.....	592C677H02	592C677H02	592C677H02	592C677H02
Stationary Arcing Contact	6	3		501B812G01	501B812G01	501B812G01	501B812G01	501B812G01	501B812G01	501B812G01
Moving Arcing Contact	6	3		691C404G01	691C404G01	691C404G01	691C404G01	691C404G01	691C404G01	691C404G03

^① Complete pole unit assembly is not available for 50DHP75 breaker.^② Kit includes matched pair of insulators. Must be used together.^③ Less finger clusters and lift rod (operating rod). When ordering pole unit, also order one tube of adhesive, style 45793BX00F.^④ No replacement pole units are available. All ratings of 50DHP350 must be stiffened and braced, therefore contact the nearest Westinghouse Engineering Service facility for quote and assistance.^⑤ Included in complete contact assembly. Included with moving arcing contact.^⑥ These parts can be used on monolithic pole breakers.



Type DHP Magnetic Air Circuit Breakers

POLE UNIT PARTS



1. Arc Chute Hinge Assembly
2. Pole Unit Insulator - Upper
3. Pole Unit Insulator - Lower
4. Puffer Tube Assembly
5. Porcelain Hinge Support Assembly
6. Rear Arc Horn Contact

Figure 7.

COMPLETE CONTACT ASSEMBLY (Stationary Main and Arcing - Moving Main and Arcing)

(See Page 9 for SNO. No. Contact/Breaker Application)

1. Stationary Arcing Contact
2. Stationary Main Contact Assembly
3. Moving Arcing Contact
4. Moving Main Contact
5. Bumper Pad Kit
(Consists of 3 Pads and 6 Pins)

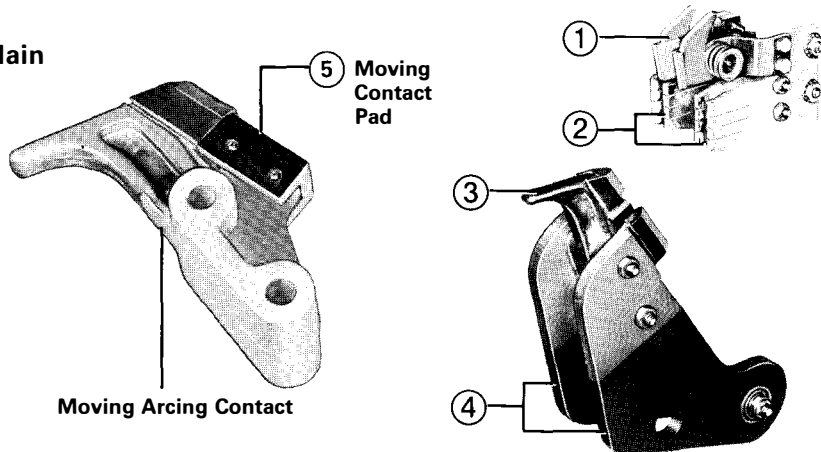


Figure 8.

**Type DHP Magnetic Air Circuit Breakers****Pole Units**

Continuous Current Rating—Amperes		1200A	2000A	1200A	1200A	2000A	3000A	3000A
Breaker Type and Momentary Current Rating—KA		75DHP500 66 KA	75DHP500 66 KA	150DHP750 58 KA	150DHP750 77 KA	150DHP750 58 & 77 KA	75DHP500 66 KA	150DHP750C 58 & 77 KA
		150DHP500 37 & 58 KA	150DHP500 37 & 58 KA	150DHP750C 58 KA	150DHP750C 77 KA	150DHP750C 58 & 77 KA	150DHP500 58 KA	150DHP1000 77 KA
					150DHP1000 77 KA	150DHP1000 77 KA		
Description of Part	Fig. No.	Number Required for One 3 Pole Breaker	Style Number of Part					
Single Pole Unit Assembly Complete Includes following: ①	7	3	568F444G01	567F984G05	568F444G01	568F444G02	567F984G05	568F261G03
			.....	.....	568F444G03	568F444G04	568F261G05	.....
Complete Contact Assembly (Stationary Main and Arcing – Moving Main and Arcing)	8	3	6426C75G01	6426C75G02	6426C77G01	6426C77G02	6426C77G03	6426C78G04
			6426C76G01	6426C76G02	6426C78G01	6426C78G02	6426C78G03	6426C79G03
			.....	.....	.....	6426C79G01	6426C79G02	.....
Bumper Pad Kit (Consists of 3 Pads/6 Pins) ⑤ ⑥	8	1	792A144G01	792A144G01	792A144G01	792A144G01	792A144G01	792A144G01
Porcelain Hinge Support Assembly	7	3	435B370G01	435B370G01	435B370G01	435B370G01	435B370G01	435B370G02
Moving Contact Operating Rod ⑥	2	3	501B713G02	501B713G02	501B713G02	501B713G02	501B713G02	501B713G02
Primary Disconnecting Contact ⑥	3	6	502A851G01	502A852G01	502A851G01	502A851G01	502A852G01	502A852G01
Arc Chute Support ⑥	3	3	677C892G03	677C892G03	677C892G02	677C892G02	677C892G02	591C723G05
			677C892G02	677C892G02	591C723G05	591C723G05	591C723G05	591C723G05
			.....	.....	.....	591C723G05	.....	.....
Kit – Insulators ② Upper Pole Unit	7	..	792A098G01	792A098G01	792A098G01	792A098G01	792A098G01	792A098G01
			②	②	②	②	②	②
Kit – Insulators ② Lower Pole Unit	7	..	792A098G02	792A098G02	792A098G02	792A098G02	792A098G02	792A098G02
			②	②	②	②	②	②
Pole Unit (For Field Replacement) (Monolithic to PIP) ③	7	..	568F487G01	568F487G02	568F487G01	④	568F487G02	④
			568F487G01	568F487G02	568F487G03	④	568F487G04	④
			.....	.....	.....	③	.....	.....
Puffer Tube Assembly ⑥	7	3	507B993G02	507B993G02	507B993G02	507B993G02	507B993G02	507B993G02
Arc Chute Hinge	7	3	3580A59H01	3580A59H01	3580A59H01	3580A59H01	3580A59H01	436B128G01
			3580A59H01	3580A59H01	436B128G01	436B128G01	436B128G01	436B128G01
			.....	.....	.....	436B128G01	.....	.....
Rear Arc Horn Contact	7	3	436B129H01	436B129H01	436B129H01	436B129H01	436B129H01	436B129H01
			436B129H01	436B129H01	436B129H01	436B129H01	436B129H01	436B129H01
			.....	.....	.....	436B129H01	.....	.....
Stationary Arcing Contact	8	3	501B812G01	501B812G01	501B812G01	501B812G01	501B812G01	501B812G03
			501B812G01	501B812G01	501B812G03	501B812G03	501B812G03	501B812G03
			.....	.....	.....	501B812G03	.....	.....
Moving Arcing Contact	8	3	691C404G01	691C404G01	691C404G01	691C404G01	691C404G01	691C404G04
			691C404G01	691C404G01	691C404G01	691C404G01	691C404G01	691C404G04
			.....	.....	.....	691C404G01	.....	.....

① Less finger cluster and lift rod (Operating rod). When ordering pole unit, also order 1 tube of adhesive style 45793BX00F.

② Kit includes matched pair of insulators. Must be used together.

③ The 150DHP1000 Breaker ratings were designed with PIP units, therefore, are subject to normal pole unit replacement.

④ No replacement pole unit available.

⑤ Included in complete contact assembly. Included with moving arcing contact.

⑥ These parts can be used on monolithic pole breakers.



Type DHP Magnetic Air Circuit Breakers

ARC CHUTE PARTS

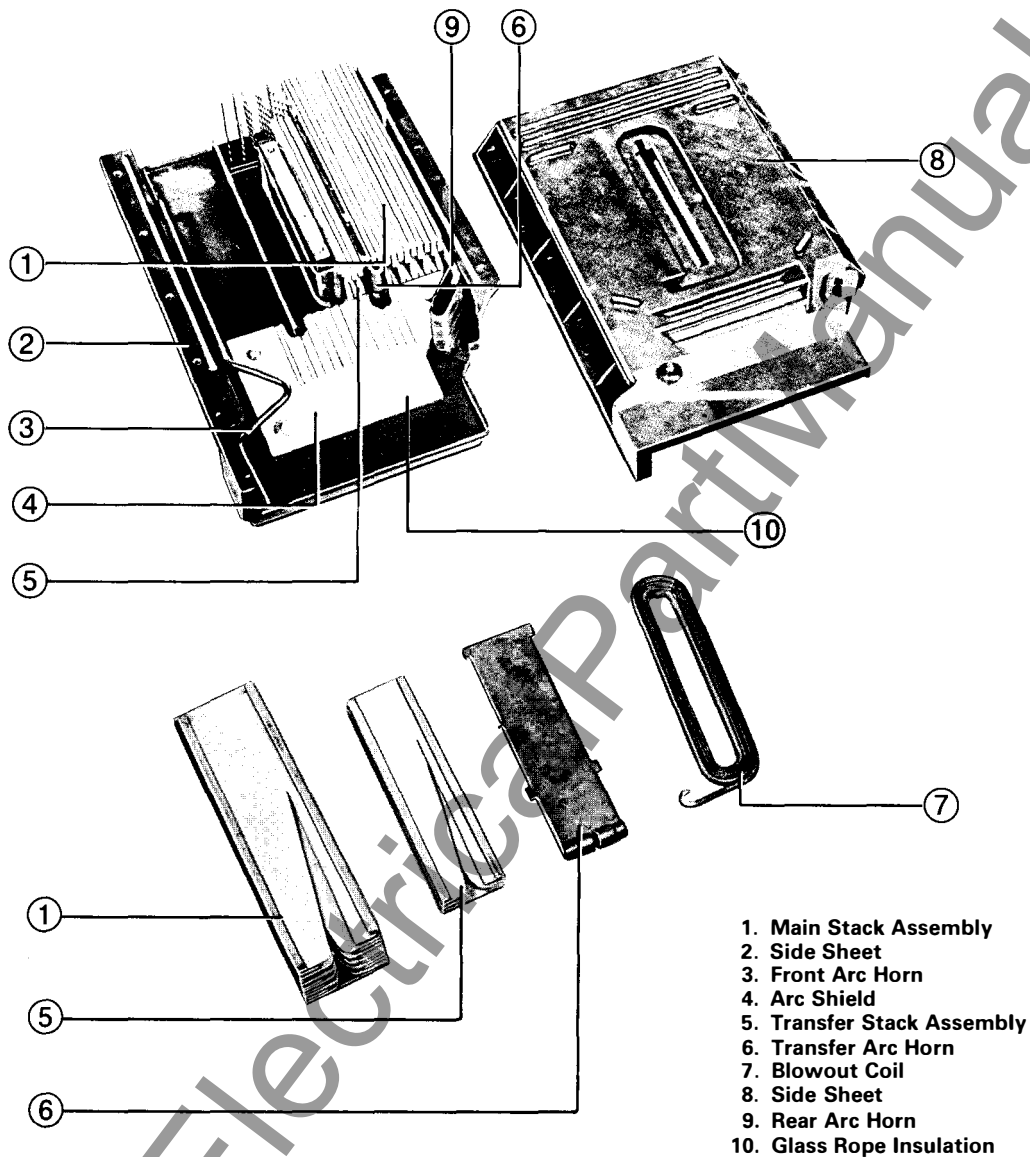


Figure 9. Partially Assembled View and Details of 50-DH-P250 Arc Chute



Type DHP Magnetic Air Circuit Breakers

Arc Chutes and Barriers^① 5 KV

Description of Part	Breaker Type		50DHP75 ^①	50DHP250	50DHP350
	Fig. No.	Number Required for One 3 Pole Breaker		All Ratings	All Ratings
Style Number of Part					
Arc Chute Complete	9	3	①	437D487G01	567F417G01
Main and Transfer Stack Assembly Kit	9	3	.....	6426C84G02	6426C84G03
Arc Shield - R.H.	9	3	.....	423D170H01	423D175H01
Arc Shield - L.H.	9	3	.....	423D170H02	423D176H01
Arc Shield - Bottom	11	6	.....	.....	436B420H01
Side Sheet - R.H.	9	3	.....	548F259G01	449D456G01
Side Sheet - L.H.	9	3	.....	548F260G01	449D455G01
Blow Out Coil	9	6	.....	310C716G01	591C353G01
Arcing Horn - Replacement Kit ^②	9	3	.....	792A134G01	792A135G01
Glass Rope Insulation	9	3	.....	41514CG41D	41514CG41D
Barrier Complete	10	1	6435C22G01 ^③	6435C22G01 ^③	449D459G03 for 1200/2000 Amp 567F414G02 for 3000 Amp
Barrier Front Panel	10	1	693C353G01 ^④	693C353G01 ^④	682C891G01 (1200-2000) 686C583G01 (3000)
Barrier Nylon Screw Kit	..	1	8242A64G01	8242A64G01	8242A64G01

- Complete arc chute and parts are not available for the 50DHP75 breaker. A complete 50DHP250 arc chute can be used as a replacement. When replacing an existing 50DHP75 arc chute with the 50DHP250 arc chute, the existing arc chute hinge at the top of the pole unit must also be replaced. Order style number 592C698G02.
- ② Kit consists of: One front, one rear and two center arc horns.
- ③ Replaces barrier style number 437D261G03 and 423D178G02. Must also order adaptor kit style number 6426C80G01. Adaptor kit style number 6426C80G01 consists of 4 mounting clips style number 8242A23G01 plus instruction drawing.
- ④ Do not use with barriers style number 437D261G03 or style number 423D178G02.

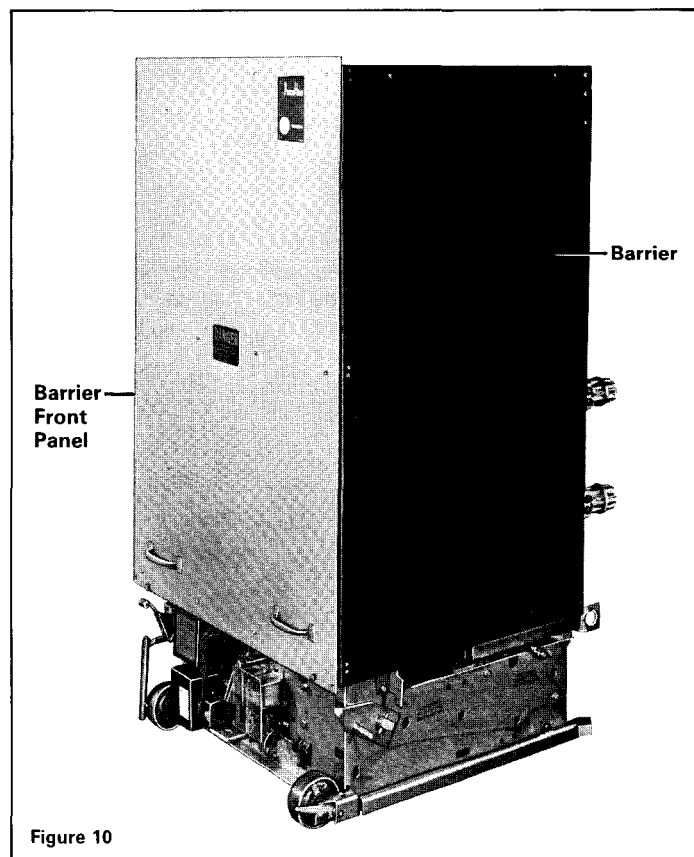


Figure 10



Type DHP Magnetic Air Circuit Breakers

ARC CHUTE PARTS

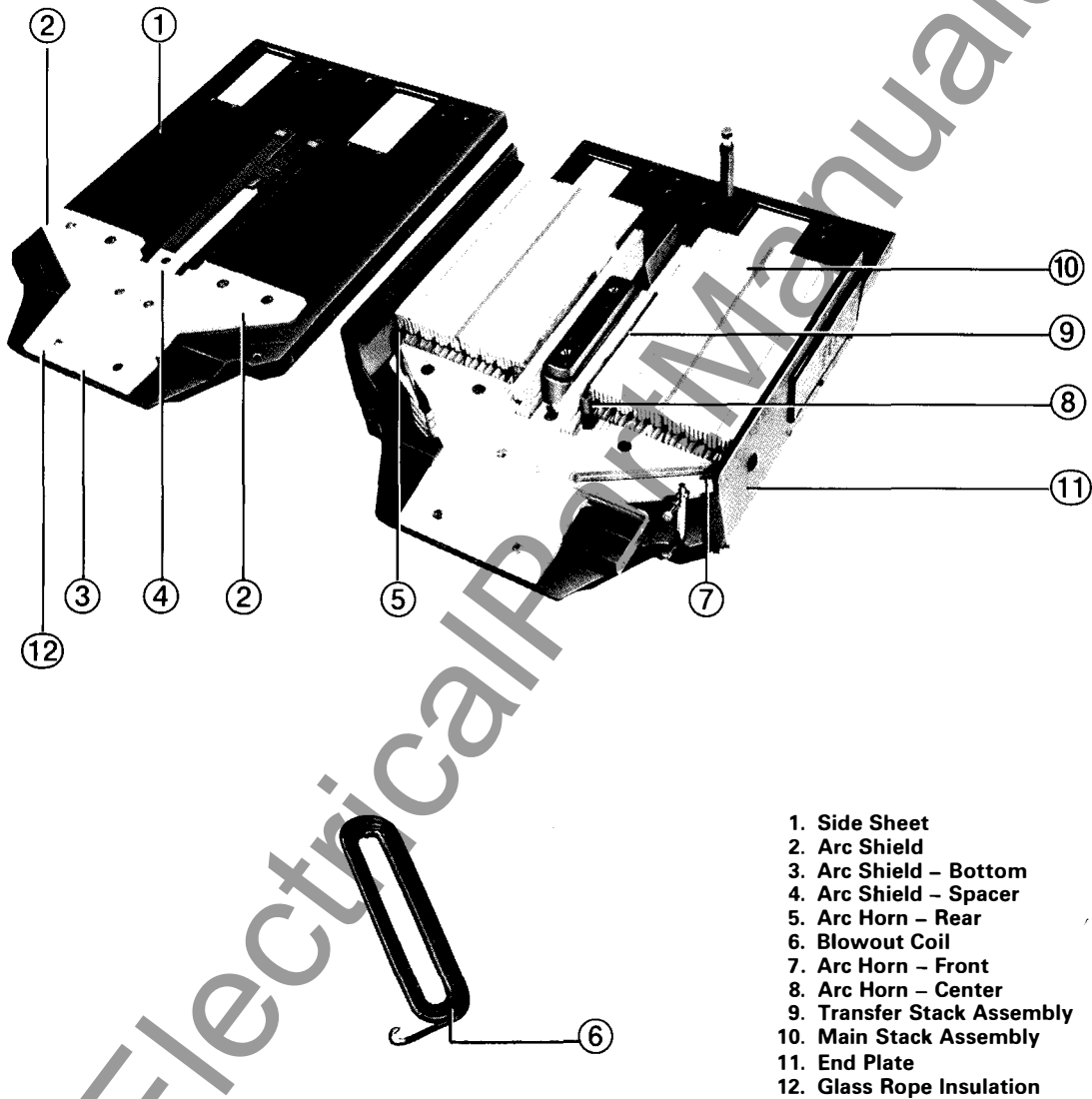


Figure 11. 150DHP750C Arc Chute

**Type DHP Magnetic Air Circuit Breakers****Arc Chutes and Barriers 15 KV**

		Breaker Type	75DHP500 All Ratings	150DHP500 All Ratings 150DHP750 All Ratings	150DHP750C All Ratings ②	150DHP1000 All Ratings ②
Description of Part	Fig. No.	Required for One 3 Pole Breaker	Style Number of Part			
Arc Chute Complete	11	3	567F532G01	546F997G02 546F997G06	567F843G01	568F264G01
Main and Transfer Stack Assembly Kit	11	3	6426C85G01	6426C85G02 6426C85G03	6426C86G01 ③	6426C86G02 ③
Arc Shield – R.H.	11	3	423D171H01	423D171H01		
Arc Shield – L.H.	11	3	423D172H01	423D172H01		
Arc Shield (consists of)						
Front Left – Rear Right	11	6			567F899H01	567F899H01
Front Right – Rear Left	11	6			567F899H02	567F899H02
Bottom	11	6			435B205H01	435B205H01
Spacer	11	6			809A322H01	809A322H01
Side Sheet – R.H.	11	3	548F261G01	548F261G01	567F931G01	567F931G01
Side Sheet – L.H.	11	3	548F262G01	548F262G01	567F931G01	567F931G01
End Plate	11	3			151D176G01	151D176G02
Blow Out Coil	11	6	591C379G01	310C411G01	591C698G01	591C698G01
Glass Rope Insulation	11	3	41514CG41D	41514CG41D	41514CG41D	41514CG41D
Arcing Horn Replacement Kit ①	11	3	792A136G01	792A137G01 792A139G01	792A138G01	792A138G01
Barrier Complete	10	1	546F995G01	546F995G01 547F009G01	567F844G01	568F166G01
Barrier Front Panel	10	1	437D276G01	437D276G01	151D179G01	151D179G02
Barrier Nylon Screw Kit	..	..	8242A64G01	8242A64G01	8242A64G01	8242A64G01

① Kit consists of: one front, one rear and two center arc horns.

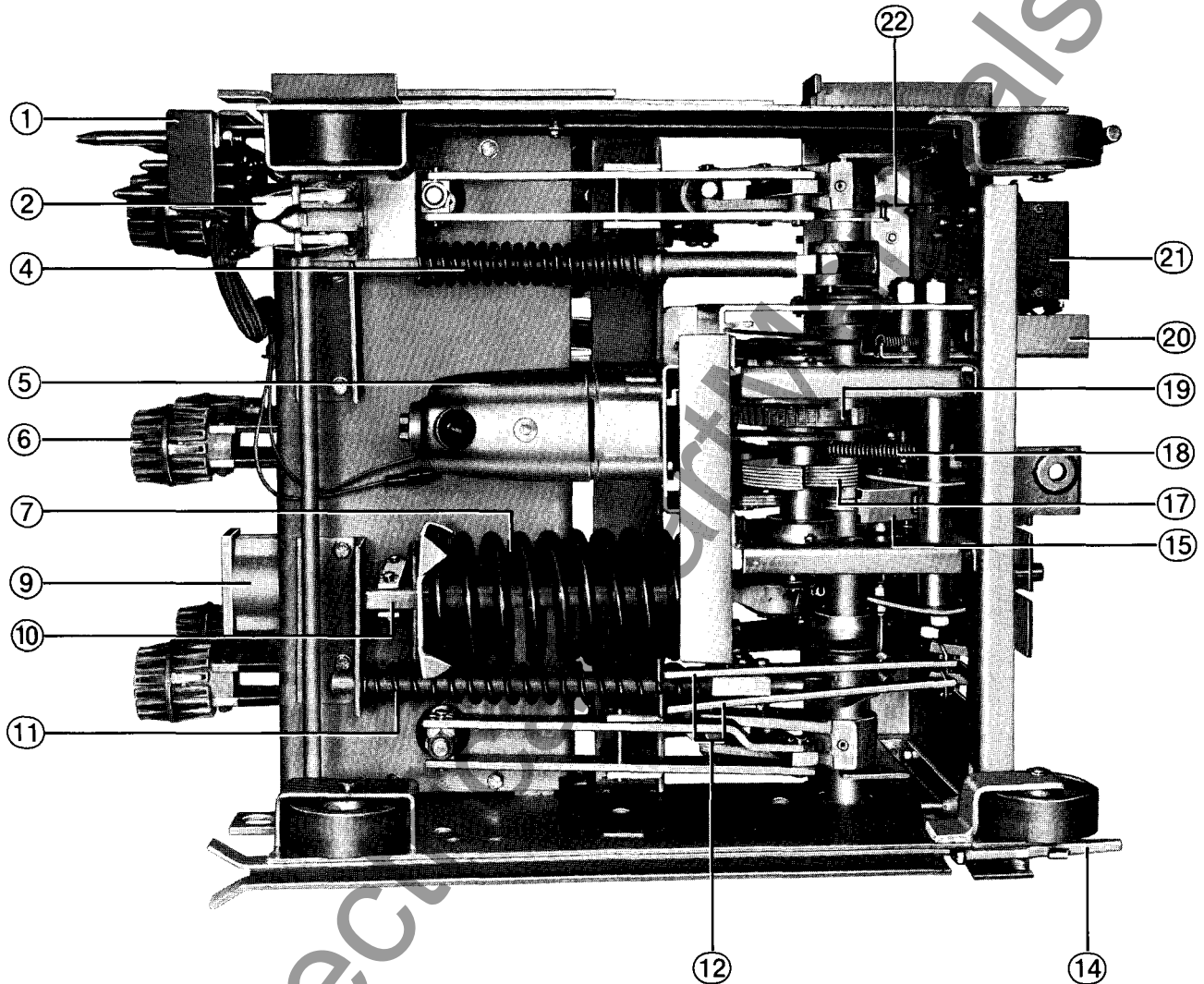
② When repairing or rebuilding arc chutes, order one copy of arc chute assembly steps 567F989 and one tube of adhesive 45793BX00F per arc chute

③ Kit includes gaskets for 150DHP750C
150DHP1000 Arc Chutes.



Type DHP Magnetic Air Circuit Breakers

CHASSIS PARTS



1. Secondary Contact Block
2. Ground Contact
4. Opening Spring, Left Hand
5. Spring Charging Motor
6. Primary Disconnecting Contact
7. Closing Spring
9. Levering-in Nut Housing
10. Connecting Rod
11. Opening Spring, Right Hand

12. Floor Tripper Levers
14. Rail Latch
15. Tripping Cam
17. Closing Cam
18. Mechanism Linkage Retrieving Spring
19. Ratchet Wheel
20. Motor Cut-off Switch and Spring Charge Indicator
21. Control Relay
22. Switch Operating Link (Auxiliary Switch)

Figure 12. Underside of 15.0 Kv Breaker



Type DHP Magnetic Air Circuit Breakers

Chassis Parts – All Breakers

Breaker Type	Misc. Springs Package – Kit	Mech. Assembly W/Close Spring W/O Spring Charge Motor	Mech. – Small Springs – Kit	Closing Spring ^①	Opening (Accelerating) Springs – Kit
50DHP75	6426C72G01	6426C81G01	6426C70G01	503B411H01	6426C71G01
50DHP250	6426C72G01	6426C81G01	6426C70G01	503B411H01	6426C71G01
50DHP350 – 1200 and 2000A	6426C72G01	6426C81G01	6426C70G01	503B411H01	6426C71G02
50DHP350 – 3000A	6426C72G02	6426C82G01	6426C70G01	509A893H01	6426C71G03
150DHP500 – 37 KA	6426C72G01	6426C83G01	6426C70G01	503B411H02	6426C71G04
75DHP500 – 66 KA					
H150DHP500					
150DHP750 – 58 KA	6426C72G01	6426C83G02	6426C70G01	503B411H05	6426C71G04
150DHP750C					
H150DHP750C – 77 KA	6426C72G01	6426C83G03	6426C70G01	503B411H05	6426C71G04
150DHP1000					

● Closing Spring Removal tool is available. Order Style 592C864G01

Miscellaneous Springs-Kit – Contents

1. Lev.-in-device interlock flat spring
2. Floor latch spring
3. Floor tripper spring
4. Lev.-in-device panel spring
- Lev.-in-device panel spring 50DHP350 – 3000A
5. Lev.-in-device nut and tube spring
- Lev.-in-device nut and tube spring 50DHP350-3000A
6. Secondary contact lever spring
7. Contact hinge spring
8. Operation counter spring
9. Motor cutoff switch and indicator spring

Mechanism Small Springs-Kit – Contents

1. Main roller reset spring
2. Mtr. ratchet lever spring
3. Man. ratchet lever spring
4. Trigger spring
5. Opening latch spring
6. Closing latch spring
7. Mtr. pawl spring
8. Man. pawl spring

Opening Springs-Kit – Contents

1. Panel kick-off spring 50DHP75/250/350-1200 and 2000 Amp
2. Contact kick-off spring
3. Accelerating spring 50DHP75/250/350 1200 and 2000 Amp
4. R.H. accelerating spring
5. L.H. accelerating 50DHP350 – 3000A
- R.H. accelerating spring
- L.H. accelerating spring
- 75/150DHP – All.

Auxiliary Switch Operating Link (Ref. Fig. 2. and Fig. 12, Item 22)

All DHP breakers except 50DHP350, 3000 A.....	437D248G01
50DHP350, 3000 A.....	437D248G03
DVP All ratings.....	3586A94G01

Connecting Link (between two auxiliary switches)

All DHP and DVP breakers	3836A53H01
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Type DHP Magnetic Air Circuit Breakers

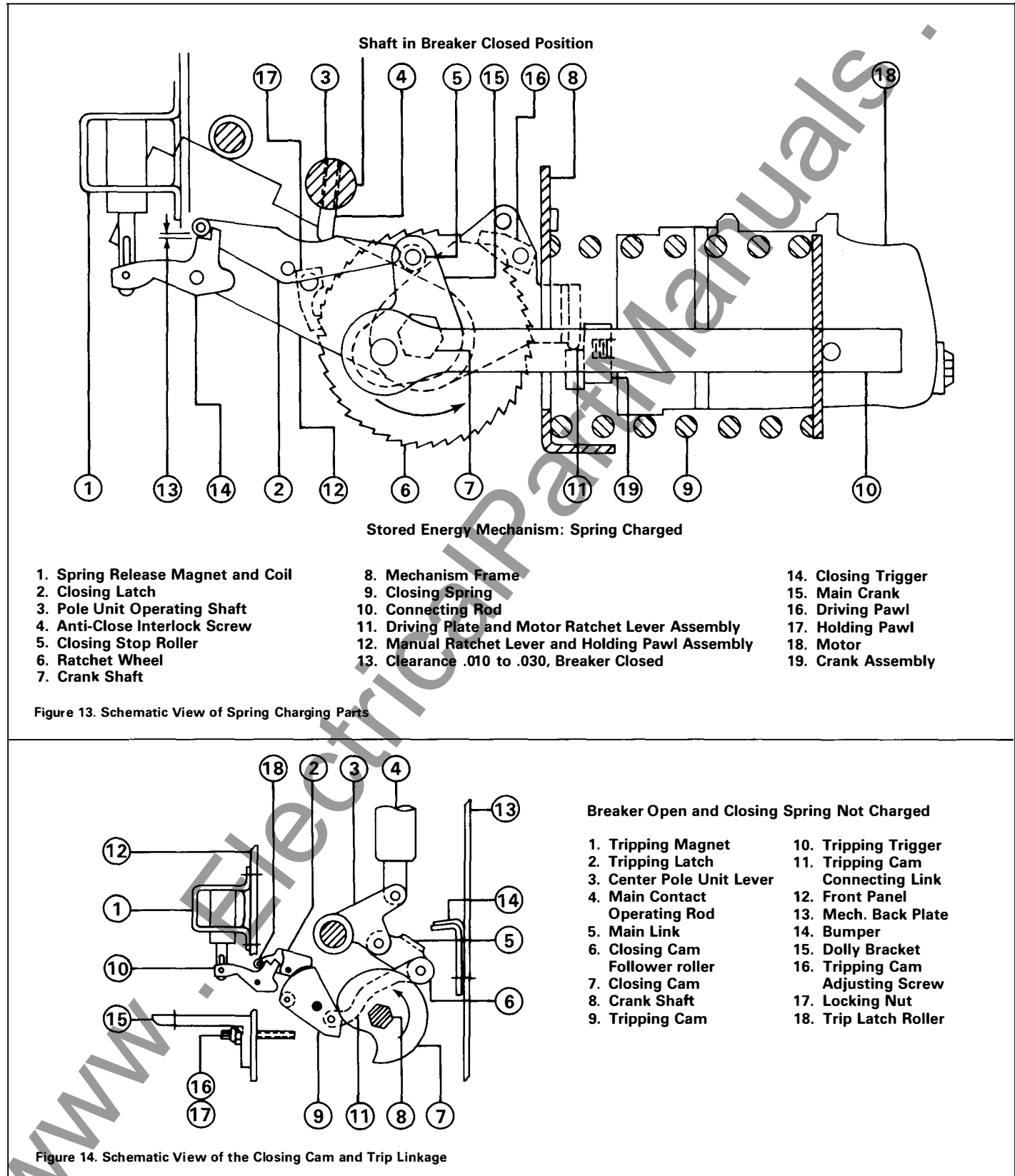


Figure 13. Schematic View of Spring Charging Parts

Figure 14. Schematic View of the Closing Cam and Trip Linkage



Type DHP Magnetic Air Circuit Breakers

Chassis Parts – All Breakers Having Fabricated Stored-Energy Mechanism

Description of Part	Figure Number	Breaker Type	Style Number of Part
Closing Latch and Trigger Assembly Kit	13	All (Link Type) All (Plunger Type)	792A116G01 ① 792A116G02 ①
Tripping Latch and Trigger Assembly Kit	14	All (Link Type) All (Plunger Type)	792A117G01 ② 792A117G02 ②
Ratchet and Cam Assembly Less Crank Assembly	15	50DHP250/350 1200/2000A 50DHP350 – 3000A and all 75/150 Breakers	792A120G01 792A120G02
Cutoff Switch Cam, End Washer and Retainer Bolt	15	All Breakers	792A119G01
Close and Trip Linkage	15	All Breakers	503B365G01
Crank Assembly	15	50DHP250/350 1200/2000A 50DHP350 – 3000A and all 75/150 Breakers	691C009G01 691C010G01
Trip Cam Adj. Screw and Nut	14	All Breakers	792A118G01
Fastener Kit (DHP)(Not Illustrated)		All Breakers	8184A69G01 ③
Fastener Kit (DVP)(Not Illustrated)		All Breakers	8065A19G01 ③
Driving and Holding Pawl-Kit (Not Illustrated) All Breakers		All Breakers	6426C87G01 ④

① Consists of Items 2 and 14 Figure 13

② Consists of Items 2 and 10 Figure 14

③ Kit contains sufficient X-washers, E-rings, Truarc rings, etc., for one breaker.

④ Includes pins, springs, hardware.

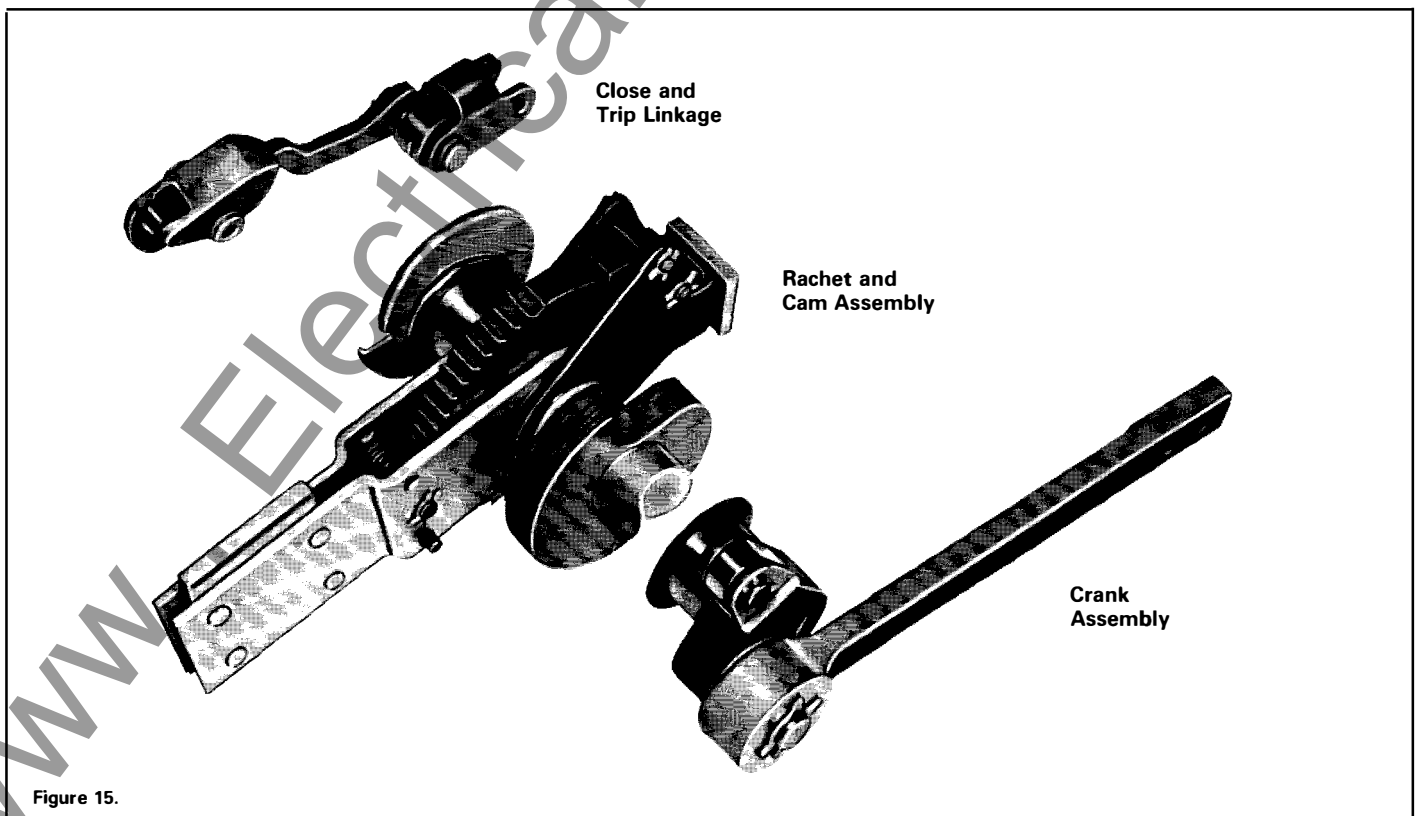
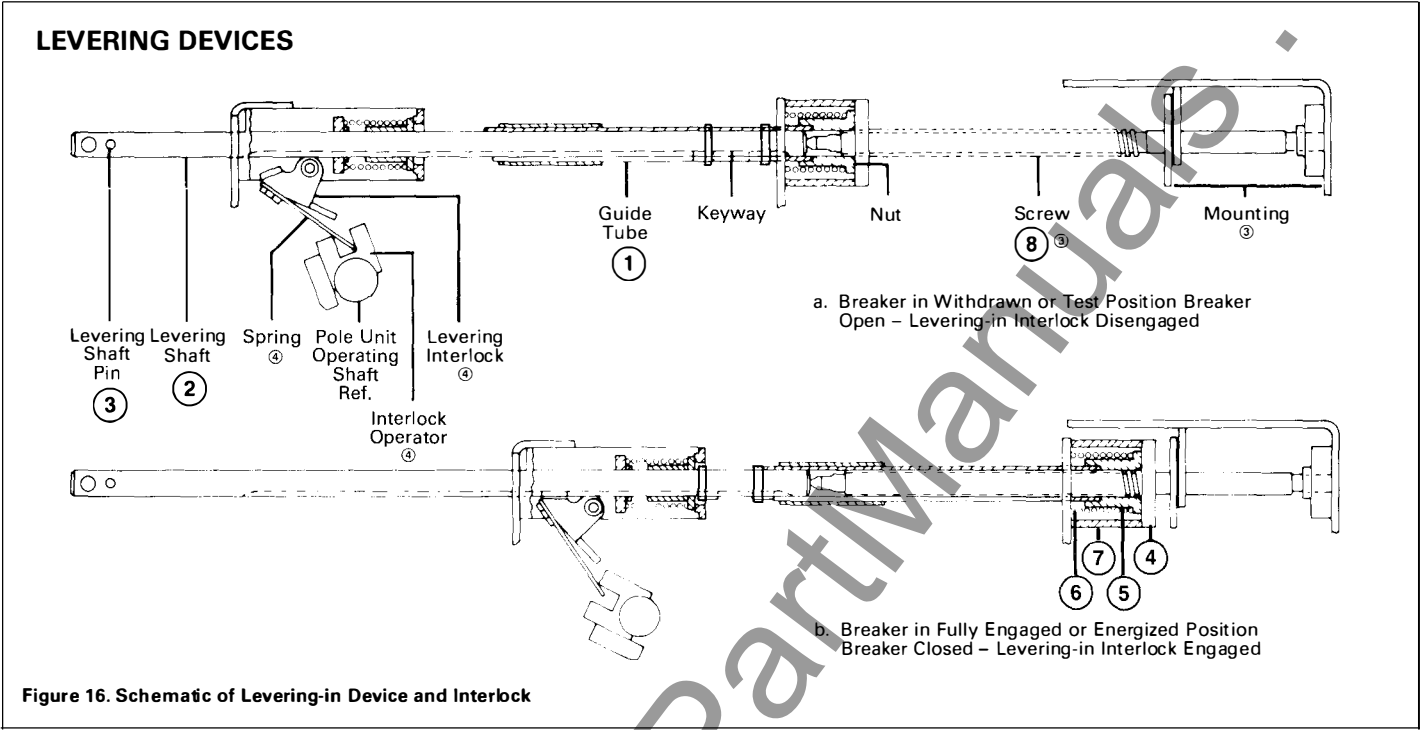


Figure 15.

Type DHP Magnetic Air Circuit Breakers



Breaker	Levering-in Assembly Replacement Kit ①	Tube and Nut Assembly ②	Interlock Kit ④	Breaker	Levering-in Screw Figure 16 Item 8
50DHP75 50DHP250	8068A62G01	8252A34G01	8257A77G01	50DHP75 50DHP250	423D184G01
50DHP350 1200/2000 A	8068A62G02	8252A34G01	8257A77G01	50DHP350 1200/2000 A	140D010G01
50DHP350 3000 A	8068A62G04	8252A36G01	8257A77G02	50DHP350 3000 A	449D384G01
75/150DHP500 150DHP750 150DHP750C 150DHP1000	8068A62G03	8252A35G01	8257A77G03 8257A77G03 8257A77G03 8257A77G03	75/150DHP500 1200/2000 A 2500/3000/3750 A	423D184G02 568F073G04 ⑤
				150DHP750C/1000 1200/2000 A 2500/3000/3750 A	423D184G02 568F073G04

Note: The levering-in assembly replacement kit, the tube and nut assembly and the levering-in screw will fit all DHP breakers.

The Interlock Kit will not fit breakers with cast stored-energy mechanisms and solenoid mechanisms.

① Levering-in Assembly Replacement Kit consists of (bold numbers in drawing above):

1. Tube and Nut Assembly
2. Shaft Assembly
3. Levering Shaft Pin
4. Back Plate
5. Spring
6. Washer
7. Spacer
8. Screw

Assembly Drawing

② The tube and nut assembly is available as a separate entity for breakers built after 1982. For breakers built prior to 1982, the levering-in assembly kit must be ordered.

③ The schematic view above shows the screw and mounting which are part of the breaker housing; and the spring, pole unit operating shaft and levering interlock which are on the breaker. None of these items are part of the Replacement Kit.

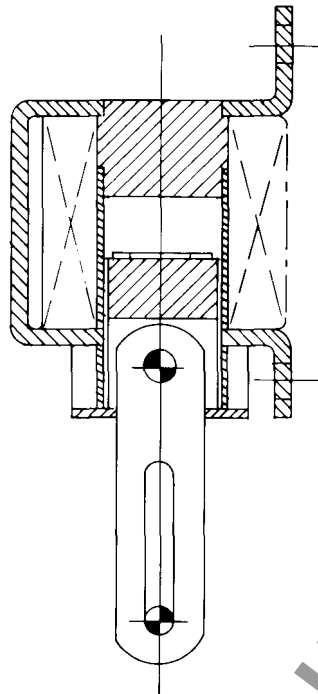
④ Interlock Kit consists of levering interlock, spring, and interlock operator.



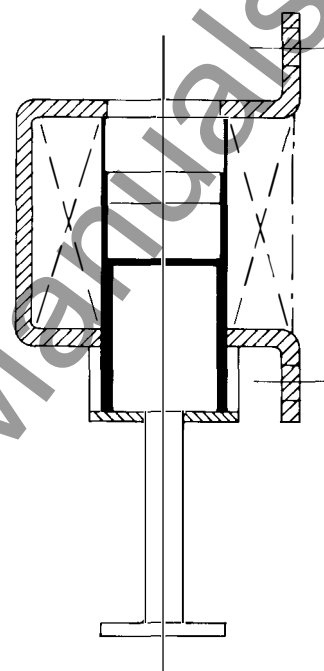
Control Items – Continued from Page 3

Type DHP Magnetic Air Circuit Breakers

SPRING RELEASE/SHUNT TRIP MAGNETS



Magnet – Link Type
Ref. Dwg. 592C921
1980 to Date



Magnet – Plunger Type
Ref. Dwg. 310C666
Prior to 1980

Figure 17.

Undervoltage Trip Device – Not Applicable to Breakers with Cast Stored Energy or Solenoid Operated Mechanisms.

In order to replace an existing undervoltage device, without the coil, for application to any DHP breaker, order Style Number 590C950G02. Refer to Table below for coil style/rating identification.

In order to add an undervoltage attachment to any existing DHP breaker, refer to the following Table^①.

50DHP75/250	1200/2000 Amp	693C611G01 ^②
50DHP350	1200/2000 Amp	693C611G02 ^②
50DHP350	3000 Amp	693C611G03 ^②
75/150DHP	1200/2000/3000A	693C611G04 ^②

Undervoltage Coils

48 VDC	6911D45G09
125 VDC	6911D45G05
250 VDC	6911D45G01
Capacitor Time Delay	677C904G01

^① Included with this assembly are the following:
Mechanism Panel
Undervoltage Trip – Less the Coil
Undervoltage Reset Lever
Adjustable Shunt Trip

^② Undervoltage coil must be ordered separately.



Type DHP Magnetic Air Circuit Breakers

Parts for Breakers Having Cast Stored Energy Mechanisms

Ref. I.B. 32-253-1 Breaker Ref. Drawings 122D122 – 122D123 – 122D124

Closing Latch and Trigger-Kit	Fig. 7a, Page 22 Items 2 and 14. All Breaker Ratings	792A244G01
Trip Latch and Trigger-Kit	Fig. 8a, Page 23 Items 2 and 10. All Breaker Ratings	792A245G01
Driving Pawl-Kit	Fig. 7a, Page 22 All Breaker Ratings	792A246G01
Holding Pawl-Kit	Fig. 7a, Page 22 All Breaker Ratings	437B497G02
Closing Springs-Kit	50DHP75/150/250 75DHP250/150DHP150/250/500 150DHP750	792A248G01 792A248G02 792A248G03
Small Springs-Kit	All Breaker Ratings	691C012G01

Parts for Breakers Having Cast Solenoid Operated Mechanisms

Trip Latch and Trigger-Kit	Fig. 10a Page 25 Items 1 and 13 50DHP 150DHP	792A247G01 792A247G02
Small Springs-Kit	50DHP 75/150DHP	691C013G01 691C013G02

Parts for Breakers Having Cast Stored Energy and Solenoid Operated Mechanisms

Latch Check Switch	Fig. 11a Page 26 Item 12 All ratings	662A143H01
Miscellaneous Springs-Kit	All ratings	691C011G01
Opening Springs-Kit	50DHP- Cast Stored Energy 75/150DHP- Cast Stored Energy 50DHP- Cast Solenoid 75/150DHP- Cast Solenoid	691C014G01 691C014G02 691C014G03 691C014G04

Moving Contact – Operating Rod (Lift Rod). Please refer to Pages 7 or 9, for correct style identity for *all* DHP breakers.

Puffer Tube Assembly. Please refer to Pages 7 or 9, for correct style identity for *all* DHP breakers.

**Type DHP Housings****DHP Housing – Parts****Shutter Assembly Complete****Figure 18 Item 1**

50DHP250	1200/2000A	437D937G01
50DHP350	1200/2000A	792A121G01
50DHP350	3000A	449D767G01
75/150DHP500/750	1200/2000A	437D938G01
150DHP750C/1000	1200/2000A	437D938G03
75/150DHP500/750	2500 to 3750A	792A141G01
150DHP750C/1000	2500 to 3750A	792A142G01

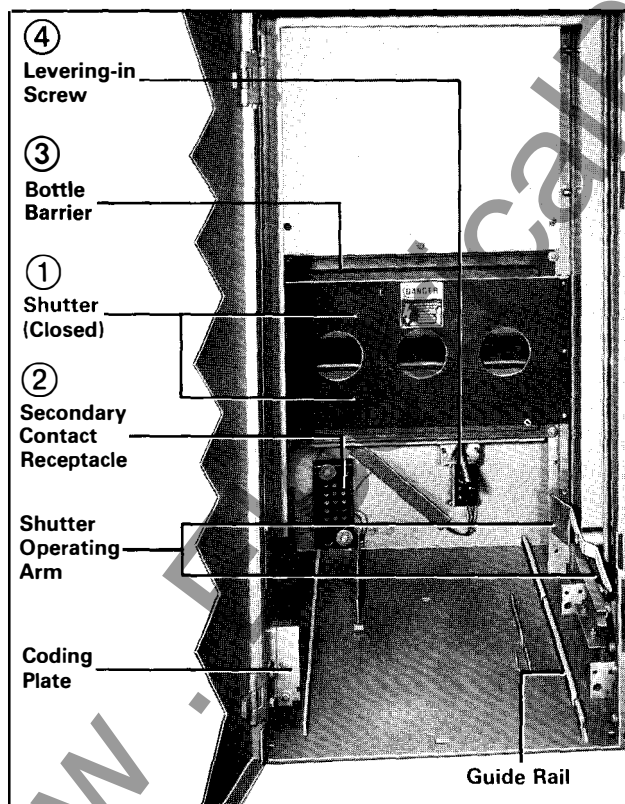
Shutter Only

50DHP250/350	1200/2000A	437D937G02
50DHP350	3000A	449D767G02
75/150DHP500/750	1200/2000A	437D938G02
150DHP750C/1000	1200/2000A	437D938G02
75/150DHP500/750	2500 to 3750A	151D697G01
150DHP750C/1000	2500 to 3750A	151D697G01

Secondary Contact Receptacle**Figure 18 Item 2**

All Breakers

4A7850A05

**Figure 18. Indoor 50DHP250 Breaker Housing with Shutter Closed****Bottle Barrier****Figure 18 Item 3**

50DHP250/350	1200A 2000A	502A540H01 502A540H02
50DHP350	3000A	449A774G01
75/150DHP	1200/2000A 2000/3000A 3750A	502A542H02 592C527G01 792A143G01

Levering-in Screw**Figure 18 Item 4**

All Ratings: See Fig. 16, page 18.

Truck-Operated Cell Switch (TOC)**Figure 20**

In order to replace or add a switch to an existing unit:

Replacement Kit	1 Switch	792A091G01
-----------------	----------	------------

In order to add a TOC switch assembly to any DHP gear:

For 50DHP250	All	
1 Switch Installation Kit		792A092G01
2 Switch Installation Kit		792A092G02
3 Switch Installation Kit		792A092G03

For 50DHP350	1200/2000 Amp	
1 Switch Installation Kit		792A093G01
2 Switch Installation Kit		792A093G02
3 Switch Installation Kit		792A093G03

For 50DHP350	3000 Amp	
1 Switch Installation Kit		792A094G01
2 Switch Installation Kit		792A094G02
3 Switch Installation Kit		792A094G03

For 75/150-DHP	All	
1 Switch Installation Kit		792A095G01
2 Switch Installation Kit		792A095G02
3 Switch Installation Kit		792A095G03

NOTE : For MOC Information, See Page 24

Type DHP Housings

Bottle Assemblies^①

Figure 19

50DHP250/350	1200 Amp	792A132G01^②
50DHP250/350	2000 Amp	792A133G01^②
50DHP350	3000 Amp	449D854G01
75/150DHP	1200 Amp	126D753G01
	2000 Amp	126D753G02
	3000 Amp	568F080G01

- The original DHP design had bottle assemblies that mounted on a horizontal mounting plate. This design changed around 1966 for the 15 kV gear and around 1968 for the 5 kV gear. For style number identification and configuration of these old assemblies, please refer to Page 23, this publication.

^② Glass polyester bottle replaces porcelain assembly.

Space Heaters

Heaters, to minimize condensation, are furnished as standard equipment on all outdoor equipment. One heater is mounted in the lower rear of the breaker module and another in the lower part of the line module. These heaters are operated at half-voltage for long life.

They are visible in Figure 8 I.B. 32-253-B dated May, 1979.

Standard Styles/Ratings Are:

3614A50H01 use for 250W at approx. 125 Volts
3614A50H02 use for 250W at approx. 250 Volts
3614A50H03 use for 375W at approx. 125 Volts
3614A50H04 use for 375W at approx. 250 Volts
3614A50H04 use for 95W at approx. 125 Volts
3614A50H05 use for 100W at approx. 250 Volts

Breaker Position Interlock^③

Figure 19

50DHP250	1200/2000A	792A146G01
50DHP350	1200/2000A	792A146G02
50DHP350	3000A	792A146G03
75/150-DHP	All	792A146G04

^③ Same hardware as MOC switch pan assembly.

Pull Fuse Holder Assembly without Fuses^④

2 Pole, 30 Amp	347A062H03
2 Pole, 60 Amp	783A603H01

● See page 37 for fuses.

Terminal Block with Marking Strip

8 Point	8261A60G02
12 Point	8261A60G03

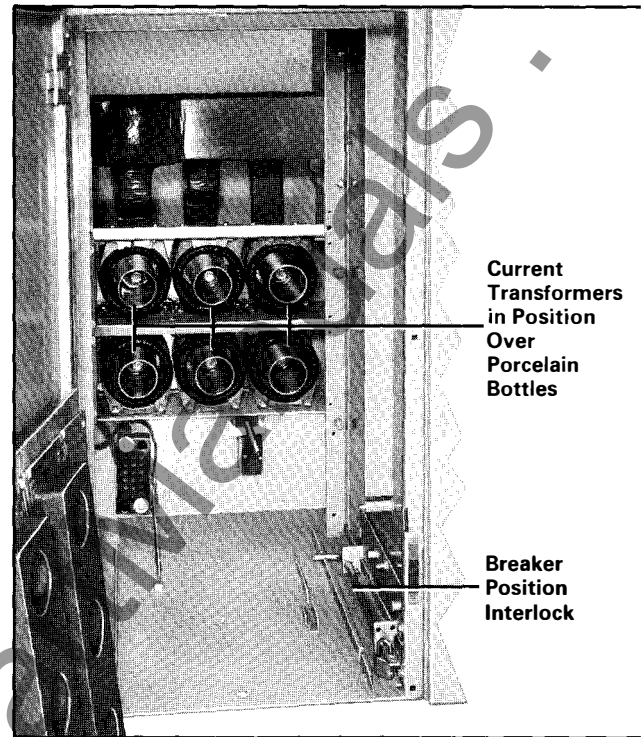


Figure 19. Indoor Housing with Insulating Shutter and Barriers Removed: Front View Showing Current Transformers, Main Bus and Main Bus Taps, Main Disconnect Contacts and Supports

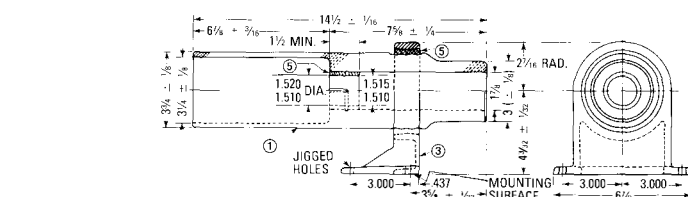
Type DHP Housings

Porcelain Main Contact Mounting Bottles (Old Design)

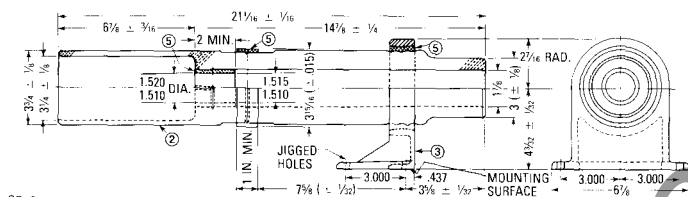
The *original DHP* design had bottle assemblies that mounted on a horizontal mounting plate. The design change to new vertical type mountings went into effect, for 15 kV units, around 1966 and for 5 kV units, around 1968.

The old horizontal mounted bottles are identified as follows:

For 5 kV – 1200 Amp



GB 1

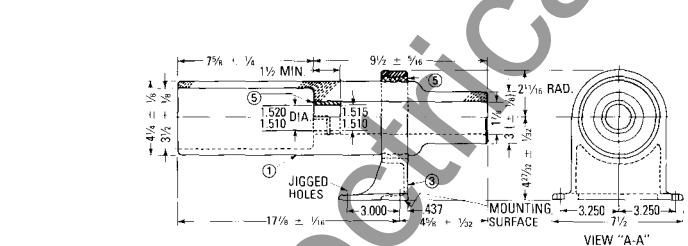


GR 2

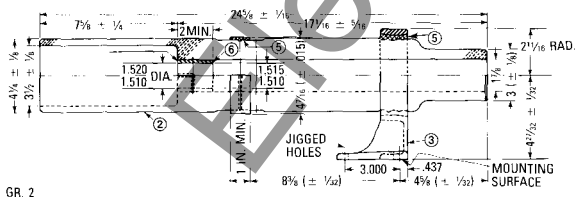
437D911G01 – Upper (Short)①

437D911G02 – Lower (Long) ①

For 15 kV – 1200 Amp



GR. 2



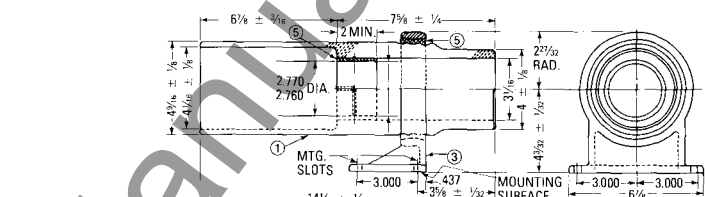
437D917G01 – Upper (Short)①

437D917G02 – Lower (Long) ①

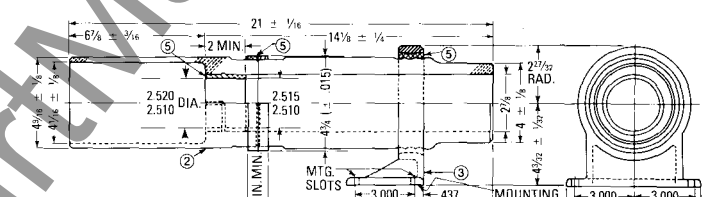
NOTE: When ordering any of the above bottles for field replacement, a copy of drawing 658A430 must be ordered for instructional purposes. In addition to the drawing, for every three bottles ordered, a four ounce tube of silastic rubber 45793BX00F must also be ordered.

August, 1987

For 5 kV – 2000 Amp



GB

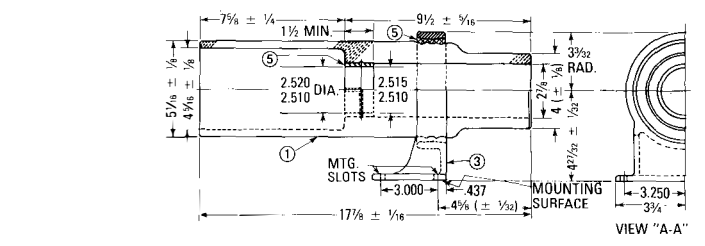


GR. 2

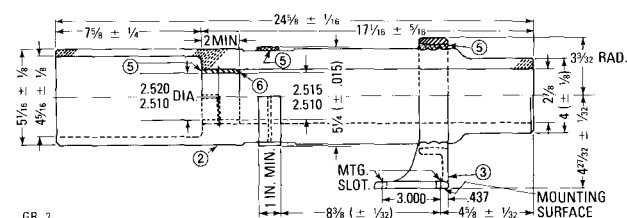
437D914G01 – Upper (Short)●

437D914G02 – Lower (Long) ①

For 15 kV – 2000 Amp



VIEW "A-A"



GR 2

437D920G01 – Upper (Short)①

437D920G02 – Lower (Long) ①

① A quantity of three each, upper and lower, per cell, is normally required.

Type DHP Housings

Mechanism-Operated Cell Switch (MOC-Switch)

Figure 20

In order to replace or add a switch to an existing unit.

Replacement kit all DHP breakers except 750C/1000

1 Switch **792A147G01**

2 Switch **792A147G02**

750C/1000 Breakers – 1 Switch **792A148G01**

2 Switch **792A148G02**

In order to add a MOC switch assembly to any DHP unit.

50DHP250 1200/2000 Ampere

Operates in Connected/Test Position

1 Switch – Installation Kit **693C612G01**

2 Switch – Installation Kit **693C612G02**

3 Switch – Installation Kit **693C612G03**

Operates in Connected Position Only

1 Switch – Installation Kit **693C612G04**

2 Switch – Installation Kit **693C612G05**

3 Switch – Installation Kit **693C612G06**

50DHP350 1200/2000 Ampere

Operates in Connected/Test Position

1 Switch – Installation Kit **693C613G01**

2 Switch – Installation Kit **693C613G02**

3 Switch – Installation Kit **693C613G03**

Operates in Connected Position Only

1 Switch – Installation Kit **693C613G04**

2 Switch – Installation Kit **693C613G05**

3 Switch – Installation Kit **693C613G06**

50DHP350 3000 Ampere

Operates in Connected/Test Position

1 Switch – Installation Kit **693C614G01**

2 Switch – Installation Kit **693C614G02**

3 Switch – Installation Kit **693C614G03**

Operates in Connected Position Only

1 Switch – Installation Kit **693C614G04**

2 Switch – Installation Kit **693C614G05**

3 Switch – Installation Kit **693C614G06**

75/150DHP500/750 – All Ratings

Operates in Connected/Test Position

1 Switch – Installation Kit **693C615G01**

2 Switch – Installation Kit **693C615G02**

3 Switch – Installation Kit **693C615G03**

Operates in Connected Position Only

1 Switch – Installation Kit **693C615G04**

2 Switch – Installation Kit **693C615G05**

3 Switch – Installation Kit **693C615G06**

150DHP750C/1000 – All Ratings

Operates in Connected/Test Position

1 Switch – Installation Kit

2 Switch – Installation Kit

3 Switch – Installation Kit

693C616G01

693C616G02

693C616G03

Operates in Connected Position Only

1 Switch – Installation Kit

2 Switch – Installation Kit

3 Switch – Installation Kit

693C616G04

693C616G05

693C616G06

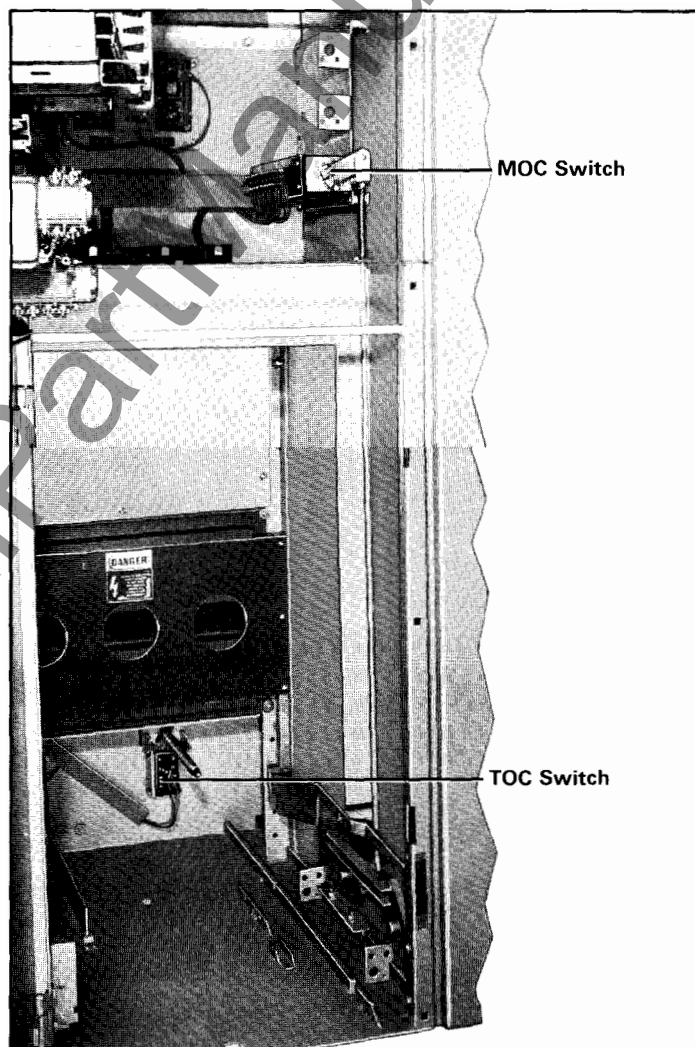
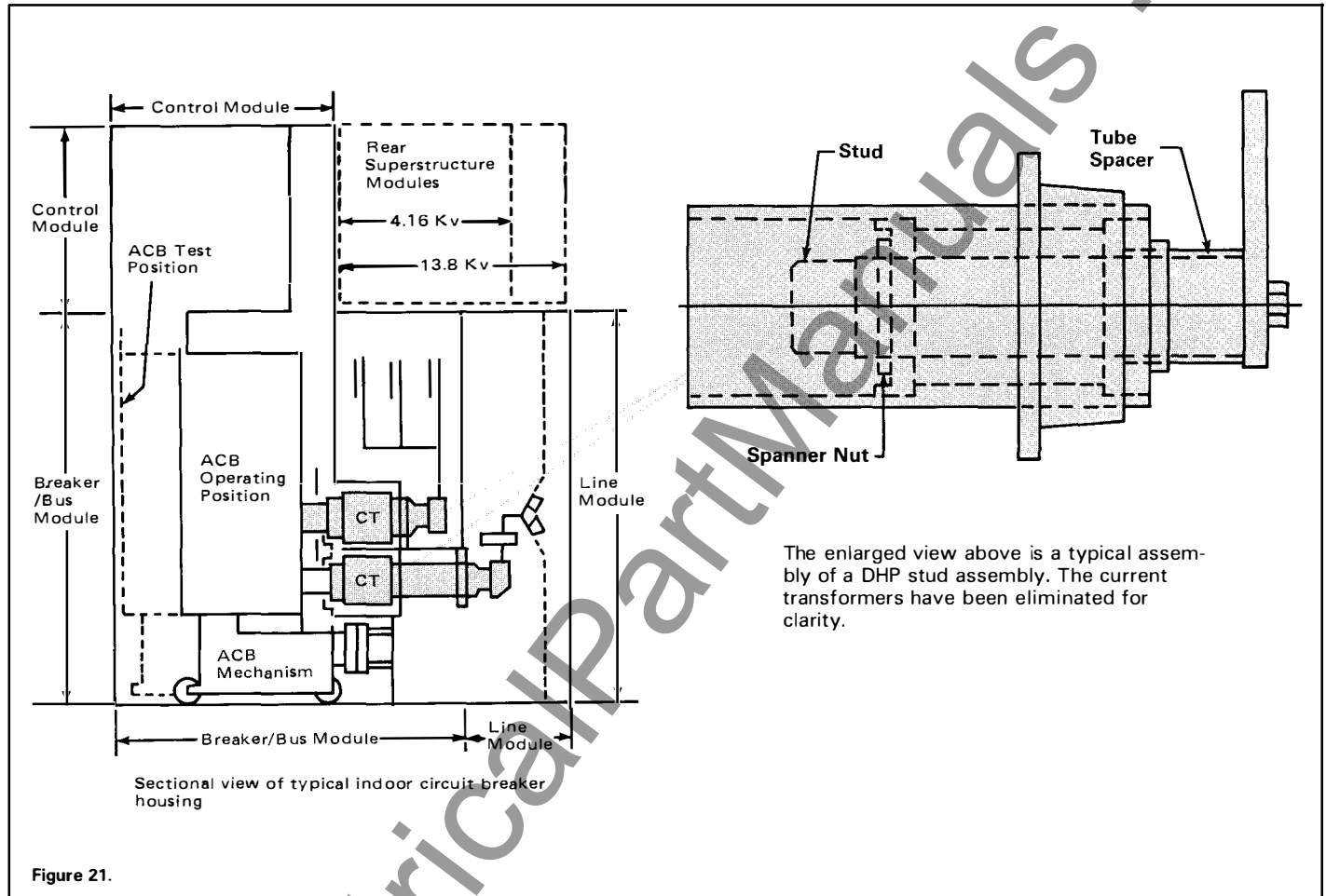


Figure 20. Indoor 50DHP250 Circuit Breaker Housing with MOC and TOC Switches

**Type DHP Housings****Primary Contact – Stud Assemblies^①****Figure 21.**

The following kits include the stud, tube spacer and spanner nut.

50DHP 250/350 1200 Amp		50DHP350 3000 Amp		75/150 DHP 2000 Amp	
Top Stud (Bus)	792A123G01	Top Stud (Bus)	792A125G01	Top Stud (Bus)	792A130G01
Bottom Stud (Feeder)	792A123G02	Bottom Stud (Feeder)	792A125G02	Bottom Stud (Feeder)	792A130G02
Bottom Stud (Bus Tie Unit)	792A123G03	75/150DHP 1200 Amp		Bottom Stud (4th Position CT)	792A130G03
Bottom Stud (4th Position CT)	792A123G04	Top Stud (Bus)	792A129G01	75/150 DHP 2500 to 3750 Amp	
50DHP 250/350 2000 Amp		Bottom Stud (Feeder)	792A129G02	Top Stud (Bus)	792A131G01
Top Stud (Bus)	792A124G01	Bottom Stud (4th Position CT)	792A129G03	Bottom Stud (Feeder)	792A131G02
Bottom Stud (Feeder)	792A124G02			Bottom Stud (4th Position CT)	792A131G03
Bottom Stud (Bus Tie Unit)	792A124G03				
Bottom Stud (4th Position CT)	792A124G04				

^① The original DHP design had studs that were brazed to the risers and bottle assemblies that mounted on a horizontal mounting plate. This design was provided to around the year 1966 for 15 kV units and 1968 for 5 kV units. If a new stud is required for units built in the above time frame, with brazed studs, risers and horizontally

mounted bottles, it will have to be made special. Furnish shop order number, riser and stud position, in unit number, to the E. & I.S. Division for assistance. (All six stud-riser assemblies could be different). The assembly will include a bottle.



Type DHP Housings

Type RCT Current Transformers

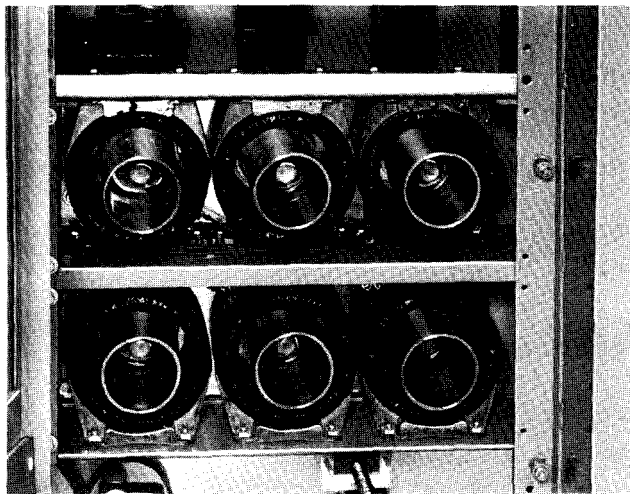


Figure 22.

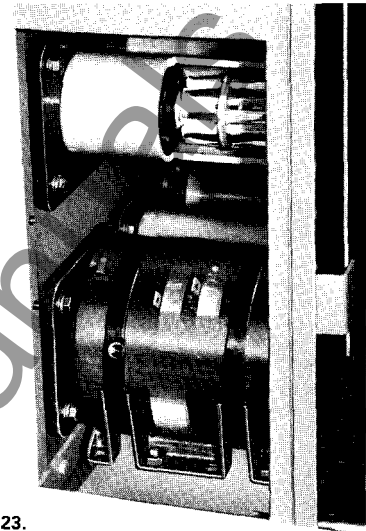


Figure 23.

Ring Type Current Transformer

The RCT is designed for metering and relaying on insulated conductors in medium voltage (5-15 kV) switchgear. Impregnated tape insulation permits high performance at low cost. Window sizes vary with conductor size and insulation thickness for different current and voltage requirements.

Ratings

Mechanical Rating: 180 x Rated current
 Thermal Rating: 100 x Rated current for one second
 Continuous Current Rating: 133% of rated primary current at 30°C Ambient for ratings below 2000 Amps. Units 2000 amperes and above must be rated 100% of rated current.
 Frequency: 60 Hz

The numbers in the designations RCT-5 and RCT-15 do not refer to insulation class but to voltage class of switchgear where the current transformer is normally mounted on porcelain bottles. All RCT's have 100 volt insulation for indoor use.

Selector Guide (See Footnote Page 27)

Primary Current Rating ^①	ANSI Metering Accuracy			Relay Accuracy Class	Current Style Number	Superseded Style Number
	B0.1	B0.5	B2.0			
RCT-15						
75	0.6	2.4	..	C20	593C304G01	300P797G01
100	0.6	2.4	..	C50	593C311G01	300P798G01
150	0.6	1.2	..	C50	593C321G01	300P799G01
200	0.6	0.6	2.4	C100	593C332G01	300P800G01
300	0.3	0.6	1.2	C100	593C352G01	300P801G01
400	0.3	0.3	0.6	C200	593C372G01	300P802G01
600	0.3	0.3	0.6	C200	593C403G01	300P803G01
800	0.3	0.3	0.6	C100	593C421G01	300P804G01
1000	0.3	0.3	0.3	C200	593C434G01	300P794G01
1200	0.3	0.3	0.3	C200	593C443G01	300P805G01
1500	0.3	0.3	0.3	C200	593C472G01	300P806G01
2000	0.3	0.3	0.3	C200	593C484G01	300P807G01
3000	0.3	0.3	0.3	C100	593C553G01	300P808G01
4000	0.3	0.3	0.3	C100	593C581G01	300P850G01
RCT-7						
2000	0.3	0.3	0.3	C400	593C516G01	...
2500	0.3	0.3	0.3	C400	593C537G01	...
3000	0.3	0.3	0.3	C400	593C572G01	...
4000	0.3	0.3	0.3	C200	593C592G01	...

① Secondary current is 5 amperes at primary current.

**Type DHP Housings****RCT Transformers****Selector Guide (contd.)**

Primary Current Rating ^①	ANSI Metering Accuracy			Relay Accuracy Class	Current Style Number	Superseded Style Number
	B0.1	B0.5	B2.0			
RCT-5						
75	0.6	2.4	..	C20	593C303G01	300P782G01
100	0.6	2.4	..	C20	593C310G01	300P783G01
150	0.6	1.2	..	C50	593C320G01	300P784G01
200	0.6	1.2	2.4	C50	593C330G01	300P785G01
300	0.6	1.2	2.4	C20	593C350G01	300P786G01
400	0.3	1.2	2.4	C100	593C370G01	300P787G01
600	0.3	0.3	0.6	C100	593C400G01	300P788G01
800	0.3	0.3	0.6	C50	593C420G01	300P789G01
1200	0.3	0.3	0.3	C100	593C440G01	300P790G01
1500	0.3	0.3	0.3	C100	593C470G01	300P791G01
2000	0.3	0.3	0.3	C100	593C480G01	300P792G01
RCT-9						
150	1.2	2.4	..	C50	593C323G01	300P590G01
200	0.6	1.2	4.8	C100	593C336G01	300P591G01
300	0.6	1.2	2.4	C100	593C356G01	300P592G01
400	0.3	0.6	1.2	C200	593C377G01	300P593G01
600	0.3	0.3	1.2	C200	593C410G01	300P594G01
800	0.3	0.3	0.6	C200	593C425G01	300P595G01
1000	0.3	0.3	0.6	C200	593C437G01	300P640G01
1200	0.3	0.3	0.3	C200	593C452G01	300P596G01
1500	0.3	0.3	0.3	C200	593C474G01	300P597G01
2000	0.3	0.3	0.3	C200	593C499G01	300P598G01
2500	0.3	0.3	0.3	C200	593C533G01	300P620G01
3000	0.3	0.3	0.3	C100	593C560G01	300P599G01
4000	0.3	0.3	0.3	C200	593C584G01	300P600G01
5000	0.3	0.3	0.3	C200	593C601G01	300P721G01

^① Secondary current is 5 amperes at primary current.

Type BYZ Zero Sequence Current Transformers

The BYZ current transformer is used for ground fault detection in medium voltage switchgear. The outgoing cables are run through the BYZ. An imbalance in the total current in the cables will produce a current in the BYZ. The BYZ is normally connected to an ITH relay to supply the intelligence to trip the breaker. The ITH relay is available from the Relay and Telecommunications Division, Coral Springs, FL 33065.

All DHP Application

Rating	ID	Style Number
50:5	4.75	592C102G01
50:5	7.50	684C188G02
100:5	4.75	592C102G03
100:5	7.50	684C188G04

NOTE: When ordering an RCT, RTL or BYZ, to insure proper fit/application, please contact the Commercial Operations Division with the shop order number of the switchgear, the unit number involved and the desired position of the RCT under consideration. Enter orders direct on the Measurement and Control Division, LVIT Dept., Raleigh, NC 27611.



Type DHP Housings

RTL Transformers^①

Selector Guide (See Note Page 27)

Primary Current Rating	Style Number①	ANSI Meter Accuracy			Relay Accuracy
		B0.1	B0.5	B2.0	
Type RTL-5					
150	3834A03G01	0.6	2.4	...	C20
200	3834A04G01	0.6	2.4	...	C20
250	3834A05G01	0.6	2.4	...	C20
300	3834A06G01	0.6	2.4	...	C20
400	3834A07G01	0.3	1.2	2.4	C50
600	3834A09G01	0.3	0.3	2.4	C50
800	3834A10G01	0.3	0.3	1.2	C50
1000	3834A11G01	0.3	0.3	1.2	C50
2000	3834A14G01	0.3	0.3	0.3	C100
Type RTL-15					
150	3834A23G01	0.6	2.4	...	C20
200	3834A24G01	0.6	2.4	...	C20
250	3834A25G01	0.6	2.4	...	C20
300	3834A26G01	0.6	2.4	2.4	C20
400	3834A27G01	0.3	1.2	2.4	C50
600	3834A29G01	0.3	0.3	2.4	C50
800	3834A30G01	0.3	0.3	1.2	C50
1000	3834A31G01	0.3	0.3	1.2	C50
1200	3834A32G01	0.3	0.3	0.3	C100
1500	3834A33G01	0.3	0.3	0.3	C100
Type RTL-7					
2000	3834A34G01	0.3	0.3	0.3	C100
2500	3834A35G01	0.3	0.3	0.3	C100
3000	3834A36G01	0.3	0.3	0.3	C100
4000	3834A37G01	0.3	0.3	0.3	C100

① RTL Transformer Mounting Plate:

RTL-5: Style 3470B39G02

RTL-7: Style 3470B40G02

RTL-15: Style 3470B40G02

Mounting plates are not supplied as part of RTL trans-

formers and must be ordered separately.

Order from Measurement and Control Division, LVIT

Dept., Raleigh, NC 27611 when ordering RTL

Transformers.



Type DHP Housings

Auxiliary Compartment DHP Rotating Auxiliary Parts

Rotating Auxiliary Equipment

Since the beginning of DHP type switchgear in 1963, the rotating equipment has undergone one major redesign. This change occurred in mid-1971.

The changes were as follows:

1. Primary contacts were changed from butt type to knife blade.
2. Secondary contacts location was changed to obtain a more reliable contact wiping action. At the time the contact blocks were also changed.
3. A rotating shutter was added.
4. The method and location for grounding the equipment in disconnected position was changed.
5. The stationary equipment, compartment and porcelains, changed little. All lever arms and pivot points were maintained.
6. The rotating equipment had the most changes. The secondary contacts were relocated. The mounting for the shutter link was modified and the fuse mounting assembly was changed.

For rebuilding or replacement of parts it is necessary to determine whether the equipment has butt or knife blade primary contacts. See Figure 24 – Butt Type, and Figure 25 – Knife Blade Type. The same figures also apply, generally, for operating transformers and disconnect fuses.

Recommendations

For units built prior to mid-1971 with butt-type contacts (Fig. 24), the only parts available are fuses. If any other parts require replacement, it will be necessary to rebuild the entire PT, CPT or fuse compartment. Order the appropriate cradle assembly and installation kit. Strip the compartment and rebuild it per the instructions in the installation kit.

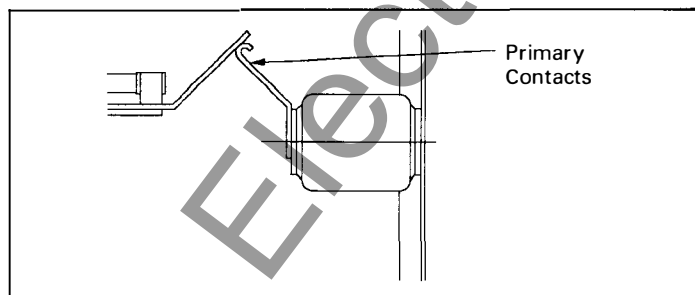


Figure 24. Butt-Type Contacts

For units built after mid-1971 with knife blade contacts (Fig. 25) all parts are available and may be ordered from the appropriate tables.

PT Compartment – Potential Transformers

If the contacts are knife blade-type (Fig. 25) select parts required from tables on page 32.

If the contacts are butt-type (Fig. 24) select PT cradle assembly from tables on page 31 and PT cradle installation kit from tables on page 30. Strip out the compartment, including the rear barrier item 22, and the bottom barrier item 21, on page 32. The door and door link remain intact.

CPT Compartment – Operating Transformers

If the contacts are knife blade-type (Fig. 25), select parts required from tables on page 34.

If the contacts are butt-type (Fig. 24), select CPT cradle and CPT installation kit from tables on page 33. Strip out the compartment, including the rear barrier item 22, and the bottom barrier item 21, on page 34. The door and door link remain intact.

Disconnect Fuse Compartment

If the contacts are knife blade-type (Fig. 25), select parts required from tables on page 35.

If the contacts are butt-type (Fig. 24), select fuse cradle, upper and lower stationary contacts, bottom barrier and ground bar from table on page 35.

Note: Standard hardware is not included with any cradle or installation kit. Existing hardware can be used again. If bolts or nuts are needed, standard SAE grade 5 bolts or nuts can be purchased locally. Special X-washers are included with the installation kits or may be ordered as hardware kit style 8257A78G01.

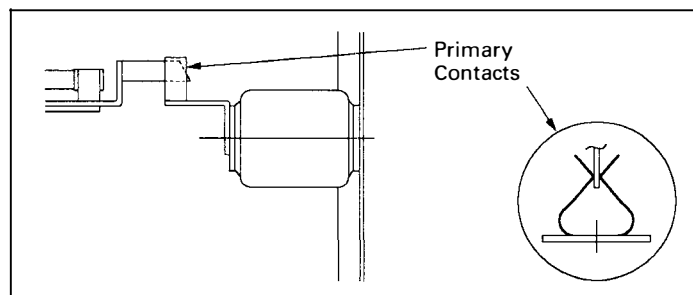


Figure 25. Knife Blade Contacts



Type DHP Housings

Auxiliary Compartment

PT Compartment – Potential Transformers

If the contacts are knife blade type, select parts required from lists on page 32.

If the contacts are butt type, select PT cradle assembly from page 31 and PT cradle installation kit from lists on page 30. Strip out the compartment including the rear barrier item 22, and the bottom barrier item 21, on page 32. The door and door link remain intact.

Potential Transformers^⑤

Voltage	Type	Style Numbers		Fuse Rating
		L-L	L-G	
2400	VIY-60	7525A54G01	7525A55G01 ^①	2A – 2.5 kV
4200	VIY-60	7525A54G02	7525A55G02 ^③	.5A – 5 kV
4760	VIY-60	7525A54G03	7525A55G03 ^②	.5A – 5 kV
4800	VIZ-11	7525A75G03	7525A73G03 ^①	.5A – 5 kV
7200	VIZ-11	7525A70G05	7525A71G05 ^①	.5A – 7.5 kV
8400	VIZ-11	7525A70G07	7525A71G07 ^①	.5A – 7.5 kV
12000	VIZ-11	7525A70G08	7525A71G08 ^①	.5A – 15 kV
13200	VIZ-11	.....	7525A71G09 ^①	.5A – 15 kV
14400	VIZ-11	7525A70G10	7525A71G10 ^①	.5A – 15 kV
4160 ^④	VIY-60	.....	7525A55G01	.5A – 5 kV
7200 ^④	VIZ-11	.....	7525A73G02	.5A – 7.5 kV
8400 ^④	VIZ-11	.....	7525A73G03	.5A – 15 kV
12000 ^④	VIZ-11	.....	7525A71G05	.5A – 15 kV
13200 ^④	VIZ-11	.....	7525A71G06	.5A – 15 kV
14400 ^④	VIZ-11	.....	7525A71G07	.5A – 15 kV

Potential Transformer Cradle Installation Kit

Arrangement	Style Numbers	
	5 kV – 26 In Wide	15 kV
1 PT Line-to-Ground	1D86292G01	1D86293G01
2 PT Line-to-Ground	1D86292G02	1D86293G02
3 PT Line-to-Ground	1D86292G03	1D86293G03
2 PT Line-to-Line	1D86292G03	1D86293G03
1 PT Line-to-Line	1D86292G04	1D86293G04

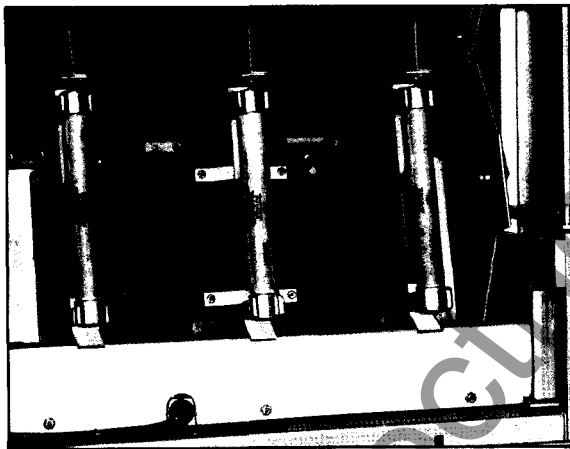


Figure 26. 15 kV Potential Transformer

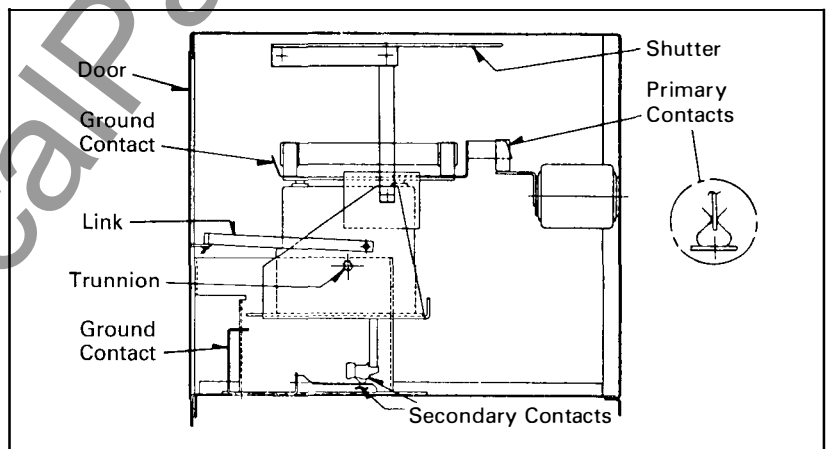


Figure 27. Trunion Mounted Potential Transformers. Connected Position (Door Closed)

- ① Also used for ground detection.
- ② Also used for 4700 volt ground detection.
- ③ Ground detection.
- ④ Does not include cradle.
- ⑤ Potential transformers can be ordered directly from: Measurement and Control Division, LVIT Dept., Raleigh, NC 27611.



Type DHP Housings

Auxiliary Compartments

PT Compartment – Potential Transformers

5 kV PT Cradle Assembly Including PT's – 26 In Wide

No. of PT's	PT Connection	Fuse kV	PT Type	PT Primary Volts	PT Ratio	Cradle Style Number
1	L-G	2.5	VIY 60	2400	20/1	8073A54G01
2	L-G	2.5	VIY 60	2400	20/1	8073A54G02
3 ^③	L-G	2.5	VIY 60	2400	20/1	8073A54G03
3 ^①	L-G	2.5	VIY 60	2400	20/1	8073A54G04
1	L-G	5.0	VIY 60	4200	20/1	8073A54G05
2	L-G	5.0	VIY 60	4200	20/1	8073A54G06
3 ^③	L-G	5.0	VIY 60	4200	20/1	8073A54G07
3 ^①	L-G	5.0	VIY 60	4200	35/1	8073A54G08
3 ^①	L-G	5.0	VIY 60	4760	40/1	8073A54G09
1	L-L	2.5	VIY 60	2400	20/1	8073A54G10
2	L-L	2.5	VIY 60	2400	20/1	8073A54G11
1	L-L	5.0	VIY 60	4200	35/1	8073A54G12
1	L-L	5.0	VIY 60	4760	40/1	8073A54G13
2	L-L	5.0	VIY 60	4200	35/1	8073A54G14
2	L-L	5.0	VIY 60	4760	40/1	8073A54G15
3 ^③	L-G	5.0	VIY 60	4200	35/1	8073A54G16
3 ^③	L-G	5.0	VIY 60	4760	40/1	8073A54G17
1	L-G	5.0	VIY 60	4760	40/1	8073A54G18
2	L-G	5.0	VIY 60	4760	40/1	8073A54G19

7.5/15 kV DHP Line-to-Line PT Cradle Assembly Including PT's

No. of PT's	No. of Fuses	Fuse kV	PT Type	L-L Volts Max.	PT Ratio	Cradle Style Number
1	2	5	VIZ-11	4800	40/1	8065A93G01
2	3	5	VIZ-11	4800	40/1	8065A93G02
1	2	7.5	VIZ-11	6900/7500	60/1	8065A93G03
2	3	7.5	VIZ-11	6900/7500	60/1	8065A93G04
1	2	7.5	VIZ-11	9000	70/1	8065A93G05
2	3	7.5	VIZ-11	9000	70/1	8065A93G06
1	2	15	VIZ-11	12500	100/1	8065A93G07
2	3	15	VIZ-11	12500	100/1	8065A93G08
1	2	15	VIZ-11	13500/15000	120/1	8065A93G09
2	3	15	VIZ-11	13500/15000	120/1	8065A93G10
2	4	5	VIZ-11	4800	40/1	8065A93G11
2	4	7.5	VIZ-11	6900/7500	60/1	8065A93G12
2	4	7.5	VIZ-11	9000	70/1	8065A93G13
2	4	15	VIZ-11	12500	100/1	8065A93G14
2	4	15	VIZ-11	13500/15000	120/1	8065A93G15

7.5/15 kV DHP Line-to-Ground PT Cradle Assembly Including PT's

No. of PT's	Fuse kV	PT Type	L-L Volts Max.	PT Ratio	Cradle Style Number
1	5	VIZ-11	4800	40/1	8065A94G01
2	5	VIZ-11	4800	40/1	8065A94G02
3	5	VIZ-11	4800	40/1	8065A94G03
3 ^①	5	VIZ-11	4800	40/1	8065A94G04
1	7.5	VIZ-11	6900	60/1	8065A94G05
2	7.5	VIZ-11	6900	60/1	8065A94G06
3	7.5	VIZ-11	6900	60/1	8065A94G07
3 ^①	7.5	VIZ-11	6900	60/1	8065A94G08
1 ^②	7.5	VIZ-11	7500	35/1	8065A94G09
2 ^②	7.5	VIZ-11	7500	35/1	8065A94G10
3 ^②	7.5	VIZ-11	7500	35/1	8065A94G11
1	7.5	VIZ-11	9000	70/1	8065A94G12
2	7.5	VIZ-11	9000	70/1	8065A94G13
3	7.5	VIZ-11	9000	70/1	8065A94G14
3 ^①	7.5	VIZ-11	9000	70/1	8065A94G15
1 ^②	15	VIZ-11	9000	40/1	8065A94G16
2 ^②	15	VIZ-11	9000	40/1	8065A94G17
3 ^②	15	VIZ-11	9000	40/1	8065A94G18
1	15	VIZ-11	12500	100/1	8065A94G19
2	15	VIZ-11	12500	100/1	8065A94G20
3	15	VIZ-11	12500	100/1	8065A94G21
3 ^①	15	VIZ-11	12500	100/1	8065A94G22
1	15	VIZ-11	12500	60/1	8065A94G23
2	15	VIZ-11	12500	60/1	8065A94G24
3	15	VIZ-11	12500	60/1	8065A94G25
1	15	VIZ-11	13800	110/1	8065A94G26
2	15	VIZ-11	13800	110/1	8065A94G27
3	15	VIZ-11	13800	110/1	8065A94G28
3 ^①	15	VIZ-11	13800	110/1	8065A94G29
1 ^②	15	VIZ-11	13800	63.5/1	8065A94G30
2 ^②	15	VIZ-11	13800	63.5/1	8065A94G31
3 ^②	15	VIZ-11	13800	63.5/1	8065A94G32
1	15	VIZ-11	13800	120/1	8065A94G33
2	15	VIZ-11	13800	120/1	8065A94G34
3	15	VIZ-11	13800	120/1	8065A94G35
3 ^①	15	VIZ-11	13800	120/1	8065A94G36
1 ^②	15	VIZ-11	15000	70/1	8065A94G37
2 ^②	15	VIZ-11	15000	70/1	8065A94G38
3 ^②	15	VIZ-11	15000	70/1	8065A94G39

① Ground detection.

② Apply on solidly grounded systems only.

③ Metering.



Type DHP Housings

Auxiliary Compartment
PT Compartment

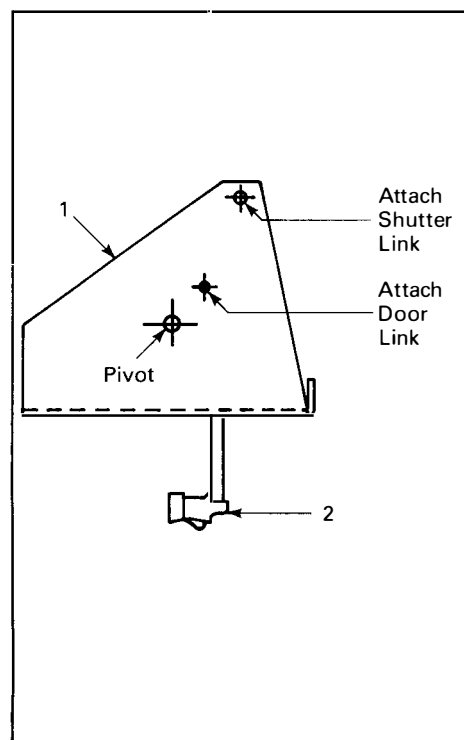


Figure 28. Typical Side View, Cradle Assembly

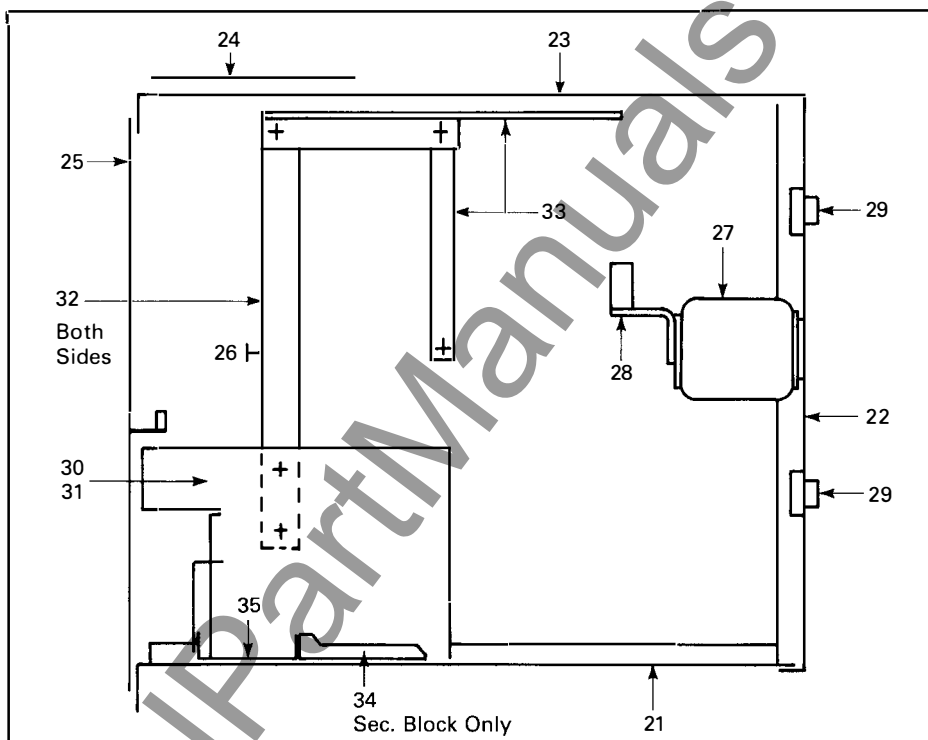


Figure 30. Typical Compartment Side View

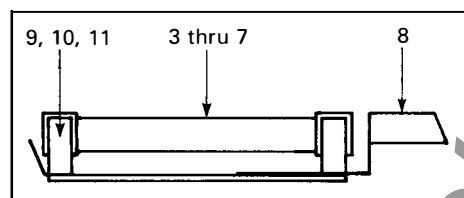


Figure 29. Typical Side View, Fuse Mounting Assembly (F.M.A.)

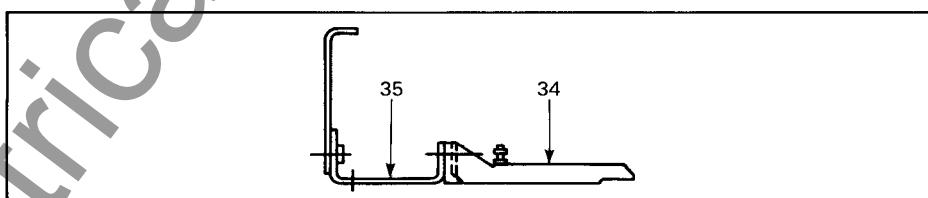


Figure 31. Typical Side View, Secondary Contact Assembly.

Moving Parts

	Style Numbers	
	5 kV	15 kV
1 Cradle①	698B436G01	698B436G02
2 Secondary Block	589C141G01	589C141G01
3 F.M.A. 2A 2.5 kV	698B437G01	.....
4 F.M.A. .5A 5 kV	698B437G02	.....
5 F.M.A. .5A 5 kV	.....	698B438G01
6 F.M.A. .5A 7.5 kV	.....	698B438G02
7 F.M.A. .5A 15 kV	.....	698B438G03
8 Main Contact	809A352H01	803A590H01
9 Fuse Clip 2.5 kV	42518-B	—
10 Fuse Clip	85D0146H01	85D0146H01
11 Fuse Clip Spring	85D0146H02	85D0146H02
12 Fuse 2A 2.5 kV	677C592G04	.....
13 Fuse .5A 5 kV	677C452G01	677C452G01
14 Fuse .5A 7.5 kV	.....	677C452G02
15 Fuse .5A 15 kV	.....	677C452G03
16 Door Link	809A355G01	809A598G01
17 Secondary Block Spacer	.....	3709A67H01
18 F.M.A. Mounting Hardware	698B439G01	698B439G02

① Includes moving secondary contact block.

Stationary Parts

	Style Numbers	
	5 kV	15 kV
21 Barrier, Bottom	442D125G01	442D125G03
22 Barrier, Rear	437D971H15	437D973H16
23 Barrier, Top	437D971H09	437D973H09
24 Barrier, Pos. 1	500 MVA Only	809A378H01
25 Door	437D997G01	437D997G03
26 Door Latch	504A758G01	504A758G01
27 Post Insulator	8289A17H03	8289A17H01
28 Main Contact	8235A17G01	8235A17G02
29 Cable Bushing	503A309G03	128A022G03
30 Cradle Support, L.H.	442D139G11	442D139G03
31 Cradle Support, R.H.	442D139G12	442D139G04
32 Shutter Support (2)	795A734G01	795A734G03
33 Shutter	151D157G01	140D757G01
34 Secondary Block	589C142G01	589C142G01
35 Secondary Contact Assembly	592C655G03	592C656G01
36 Fuse Block, 3P, 30A	784A548H02	784A548H02
37 Fuse, 6A 120 V	73482AJ00G	73482AJ00G
38 Special Hardware	8257A78G01	8257A78G01

**Type DHP Housings****Auxiliary Compartment
CPT Compartment**

If the contacts are knife blade-type, select required parts from tables on page 34.

Control Power Transformer Cradle Installation Kit

5 kV, 26 In. Wide	Style Number	7.5 and 15.0 kV	Style Number
5 kVA, 5A Fuse, L-G	1D86295G01	5 kVA, 7.5 kV, 5A Fuse, L-G	1D86294G01
10/15 kVA, 5A Fuse, L-G	1D86295G02	10/15 kVA, 7.5 kV, 5A Fuse, L-G	1D86294G02
5 kVA, 10A Fuse, L-G	1D86295G03	5 kVA, 15 kV, 5A Fuse, L-G	1D86294G03
10/15 kVA, 10A Fuse, L-G	1D86295G04	10/15 kVA, 15 kV, 5A Fuse, L-G	1D86294G04
5/10 kVA, 5A Fuse, L-L	1D86295G05	5/10/15 kVA, 7.5 kV, 5A Fuse, L-L	1D6294G05
10/15 kVA, 10A Fuse, L-L	1D86295G06	5/10/15 kVA, 15 kV, 5A Fuse, L-L	1D6294G06

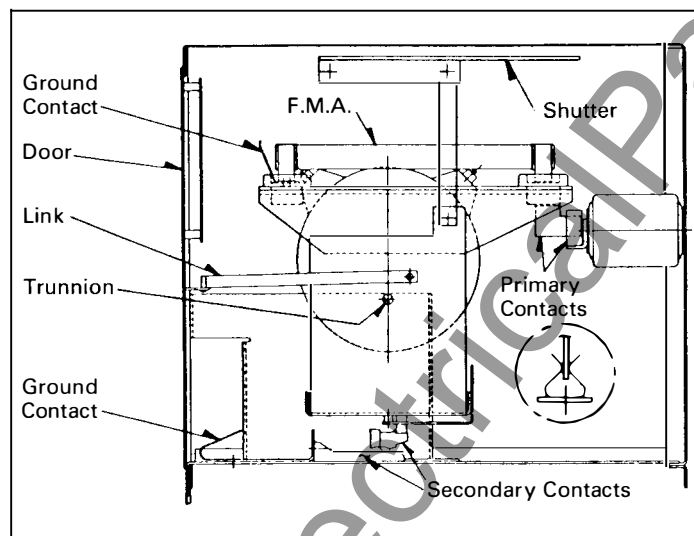


Figure 32. Trunnion Mounted Control Power Transformer, Connected Position (Door Closed)

If the contacts are butt-type, select CPT cradle and CPT installation kit from tables on this page. Strip out the compartment, including the rear barrier item 22, and the bottom barrier item 21, on page 34. The door and door link remain intact.

**5 kV, 1 Phase, CPT Cradle Assembly,
26 In. Wide (Including CPT)**

Trans-former	Fuse Amps	CPT Connection	CPT Primary Volts	Cradle Style Number
5	5	L-L	2400	3581A03G01
10	10	L-L	2400	3581A03G02
15	10	L-L	2400	3581A03G03
5	5	L-L	4200	3581A03G04
10	5	L-L	4200	3581A03G05
15	10	L-L	4200	3581A03G06
5	5	L-L	4760	3581A03G07
10	5	L-L	4760	3581A03G08
15	10	L-L	4760	3581A03G09
5	5	L-G	4200	3581A03G10
10	10	L-G	4200	3581A03G11
15	10	L-G	4200	3581A03G12

**7.5/15 kV, 1 Phase, CPT Cradle Assembly
(Including CPT)**

Trans-former	Fuse Amps	CPT Connection	CPT Primary Volts	Cradle Style Number
5	5	L-L	7200	3814A01G01
10	5	L-L	7200	3814A01G02
15	5	L-L	7200	3814A01G03
5	5	L-L	12470	3814A01G04
10	5	L-L	12470	3814A01G05
15	5	L-L	12470	3814A01G06
5	5	L-L	13200	3814A01G07
10	5	L-L	13200	3814A01G08
15	5	L-L	13200	3814A01G09
5	5	L-L	13800	3814A01G10
10	5	L-L	13800	3814A01G11
15	5	L-L	13800	3814A01G12
5	5	L-G	9000	3814A01G13
10	5	L-G	9000	3814A01G14
15	5	L-G	9000	3814A01G15
5	5	L-G	12500	3814A01G16
10	5	L-G	12500	3814A01G17
15	5	L-G	12500	3814A01G18
5	5	L-G	13200/15000	3814A01G19
10	5	L-G	13200/15000	3814A01G20
15	5	L-G	13200/15000	3814A01G21



Type DHP Housings

Auxiliary Compartment CPT Compartment

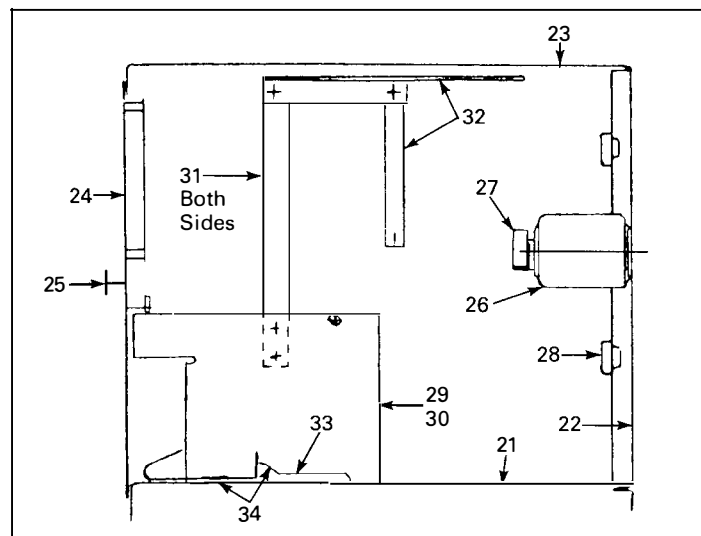


Figure 33. Typical Side View Showing Stationary Parts

Moving Parts

Description	Style Numbers
1 Cradle, 5 kV ^③	697B514G01
2 Cradle, 15 kV ^③	697B514G02
3 5 kV F.M.A., 5-10A 5 kV ^④	6501C99G01
4 15 kV F.M.A., 5-10A 5 kV ^④	6501C99G02
5 15 kV F.M.A., 5-10A 7.5 kV ^④	6501C99G03
6 15 kV F.M.A., 5-10A 15 kV ^④	6501C99G04
7 Fuse, 5A, 5 kV	677C453G01
8 Fuse, 10A, 5 kV	677C453G04
9 Fuse, 5A, 7.5 kV	677C453G02
10 Fuse, 10A, 7.5 kV	677C453G05
11 Fuse, 5A, 15 kV	677C453G03
12 Fuse, 10A, 15 kV	677C453G06
13 Secondary Block (New)	591C498G08
14 Secondary Block (Old)(2)	18B1225G09

Stationary Parts

Description	Style Numbers	
	5 kV	15 kV
21 Barrier, Bottom	425D125G02	425D125G03
22 Barrier, Rear	437D971H16	437D973H16
23 Barrier, Top	437D971H09	437D973H09
24 Door	437D997G09	151D337G01
25 Door Latch	504A758G01	504A758G01
26 Post Insulator	8289A17H03	8289A17H01
27 Main Contact	8235A17G03	8235A17G04
28 Cable Bushing	503A309G03	128A022G03
29 Cradle Support, L.H.	442D139G01	442D139G05
30 Cradle Support, R.H.	442D139G02	442D139G06
31 Shutter Support (2)	795A734G01	795A734G03
32 Shutter	140D756G01	140D758G01
33 Secondary Block	591C497G01	591C497G01
34 Secondary Contact Assembly	435B358G01	435B341G01
36 Secondary Contact Block (2)	502A681G01	502A681G01
37 'AB' Breaker Interlock, Pos. ⑤	139D684G01	139D684G02
38 'AB' Breaker Interlock, Pos. ⑤	139D684G03	139D684G04
39 Special Hardware	8257A78G01	8257A78G01

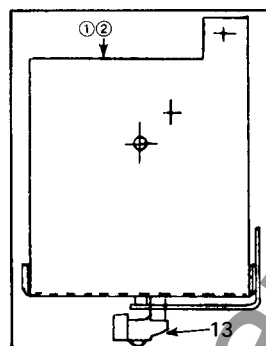


Figure 34. End View, Cradle

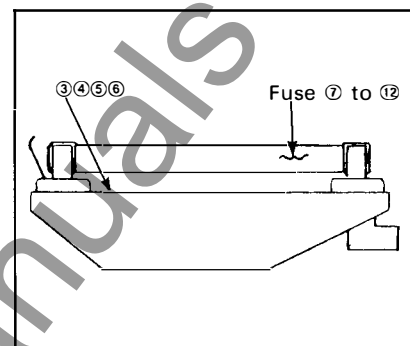


Figure 35. Typical Fuse Mounting Assembly (F.M.A.)

Operating Transformers

Voltage	kVA	Conn.	Style Number	Fuse	Rating
2400 ^①	5	L-L	506A004H01	5A	5 kV
2400 ^①	10	L-L	506A004H02	10A	5 kV
2400 ^①	15	L-L	506A004H03	10A	5 kV
4200	5	L-L	506A004H05	5A	5 kV
4200	10	L-L	506A004H06	5A	5 kV
4200	15	L-L	506A004H07	10A	5 kV
4760	5	L-L	506A004H09	5A	5 kV
4760	10	L-L	506A004H10	5A	5 kV
4760	15	L-L	506A004H11	10A	5 kV
7200 ^②	5	L-L	506A004H13	5A	7.5 kV
7200 ^②	10	L-L	506A004H14	5A	7.5 kV
7200 ^②	15	L-L	506A004H15	5A	7.5 kV
9000	5	L-G	506A004H25	5A	7.5 kV
9000	10	L-G	506A004H26	5A	7.5 kV
9000	15	L-G	506A004H27	5A	7.5 kV
12470	5	L-L	506A004H17	5A	15 kV
12470	10	L-L	506A004H18	5A	15 kV
12470	15	L-L	506A004H19	5A	15 kV
13200	5	L-L	506A004H21	5A	15 kV
13200	10	L-L	506A004H22	5A	15 kV
13200	15	L-L	506A004H23	5A	15 kV
13800	5	L-L	506A004H31	5A	15 kV
13800	10	L-L	506A004H32	5A	15 kV
13800	15	L-L	506A004H33	5A	15 kV
13.2/15.0	5	L-G	506A004H28	5A	15 kV
13.2/15.0	10	L-G	506A004H29	5A	15 kV
13.2/15.0	15	L-G	506A004H30	5A	15 kV

① These transformers and fuse also used for 4200V L-G.

② These transformers with 5A 15kV fuse also used for 12500 V L-G.

③ Cradle does not include F.M.A. or transformer.

④ F.M.A. for L-L connection. For L-G connection, remove right hand connection strap.

⑤ For EB, EHB and F frame breakers only.



Type DHP Housings

Auxiliary Compartment Rotating Disconnect Fuse Compartment

If the contacts are knife blade-type, select required parts from tables below.

Cradle Assembly

Rating	Style Numbers		
	1 Fuse	2 Fuses	3 Fuses
2A 2.5 kV Fuse	139D680G01	139D680G02	139D680G03
15A 2.5 kV Fuse	139D680G04	139D680G05	139D680G06
20A 2.5 kV Fuse	139D680G07	139D680G08	139D680G09
25A 2.5 kV Fuse	139D680G10	139D680G11	139D680G12
.5A 5 kV Fuse	139D680G19	139D680G20	139D680G21
5A 5 kV Fuse	139D680G22	139D680G23	139D680G24
10A 5 kV Fuse	139D680G25	139D680G26	139D680G27
15A 5 kV Fuse	139D680G28	139D680G29	139D680G30
20A 5 kV Fuse	139D680G31	139D680G32	139D680G33
25A 5 kV Fuse	139D680G34	139D680G35	139D680G36
5A 7.5 kV Fuse	568F426G01	568F426G02	568F426G03
10A 7.5 kV Fuse	568F426G04	568F426G05	568F426G06
.5A 15 kV Fuse	568F426G19	568F426G20	568F426G21
5A 15 kV Fuse	568F426G22	568F426G23	568F426G24
10A 15 kV Fuse	568F426G25	568F426G26	568F426G27
25A 15 kV Fuse	568F426G28	568F426G29	568F426G30

If the contacts are butt-type, order the following: one Item 21 and a fuse cradle assembly, plus items 27, 28 to suit. Use existing parts relocated on Item 21 and change our contacts (the bottom contacts were relocated).

Stationary Parts

Description	Style Numbers	
	5 kV	15 kV
21. Barrier, Bottom	437D971H11	6899D67H01
22. Barrier, Rear	437D971H02	437D973H02
23. Barrier, Top	437D971H09	437D973H09
24. Door	437D997G02	437D997G04
25. Door Latch	504A758G01	504A758G01
26. Post Insulator	8289A17H03	8289A17H01
27. Main Contact Upper	8235A18G01	8235A18G03
28. Main Contact Lower	8235A18G02	8235A18G04
29. Cable Bushing	503A309G03	128A022G03
30. Side Support, L.H.	438D002G02	438D002H06
31. Side Support, R.H.	438D002G01	438D002H05
32. Pivot Retainer (2)	504A761H02	504A761H01
33. Ground Bar	438D001H01	438D003H01
34. Ground Bar	803A806H01	803A806H02
35. Operating Link	803A792G01	803A791G01
36. Special Hardware	8257A78G01	8257A78G01

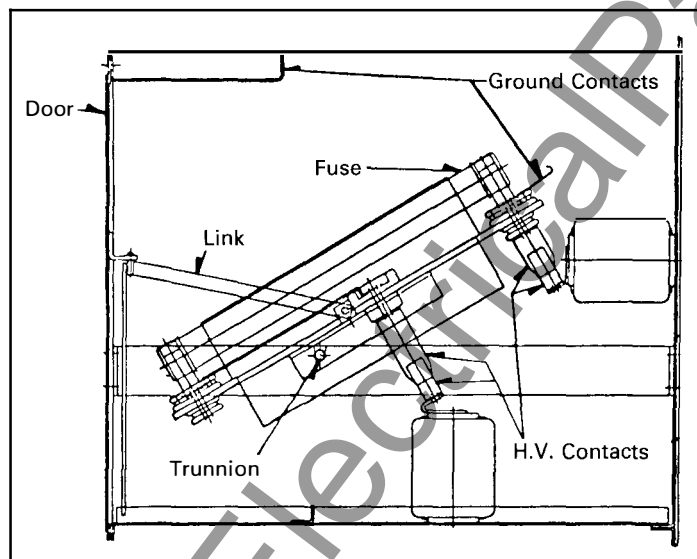


Figure 36. Disconnect Fuse Compartment (15 kV shown)

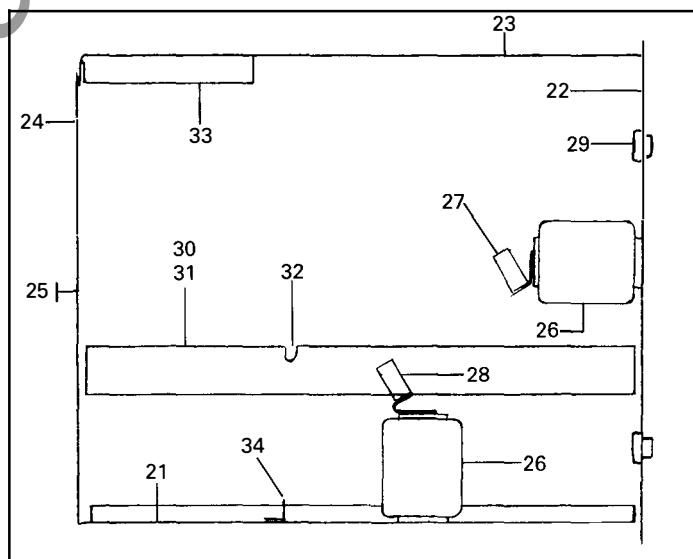


Figure 37. Typical Side View Showing Stationary Parts

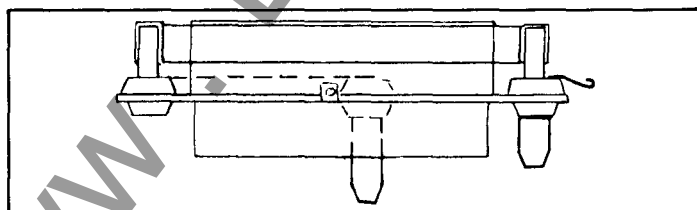
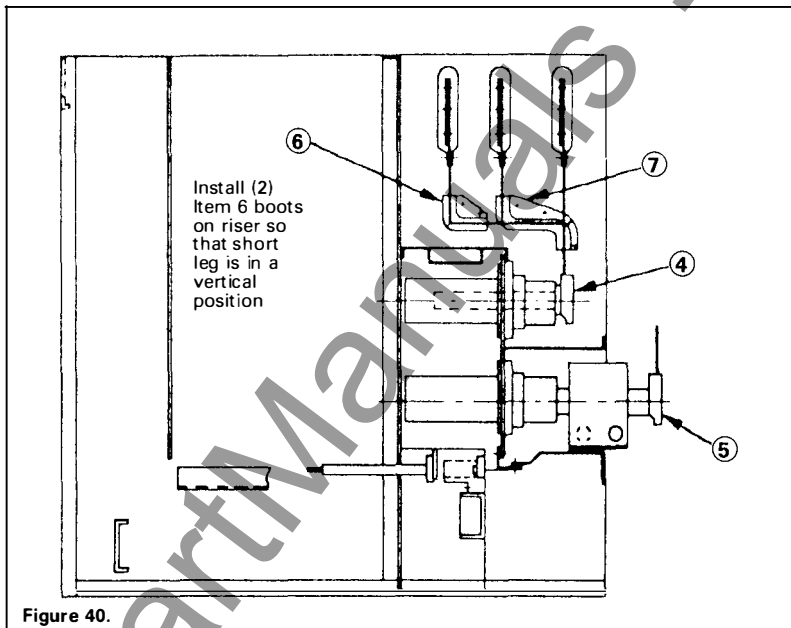
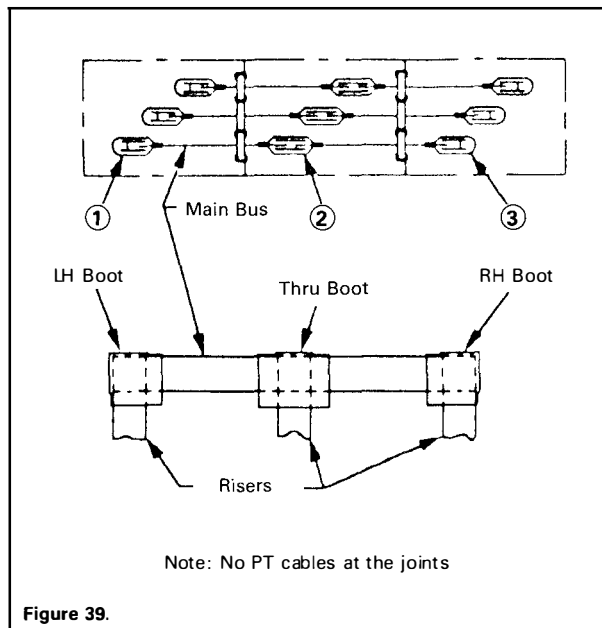


Figure 38. Fuse Cradle Assembly (15 kV shown)

Type DHP Housings

Boots



Only the most common boots are listed and available from this catalog. Other boots can be ordered from:

Eger Products Inc.
P.O. Box 14467
Cincinnati, OH 45214

Main Bus	Risers	L. H. End Boot 1	Center Boot 2	R. H. End Boot 3
1200A .50 x 4 Cu	.50 x 3 Cu	125D022H14	125D021H02	125D022H02
1200A .50 x 4 Al	.50 x 4 Al	125D022H17	125D021H05	125D022H05
2000A .50 x 6 Cu	1200A .50 x 3 Cu	125D022H15	125D021H03	125D022H03
	2000A .75 x 4 Cu	125D702H07	125D701H03	125D702H05
2000A .50 x 8 Al	1200A .50 x 4 Cu	125D022H19	125D021H07	125D022H07
	2000A .75 x 4 Cu	125D702H08	125D701H04	125D702H06
3000A .50 x 8 Cu	1200A .50 x 3 Cu	125D022H16	125D021H04	125D022H04
	2000A .75 x 4 Cu	125D702H08	125D701H04	125D702H06
	3000A Cu	Tape ^①	Tape ^①	Tape ^①

Riser Size	Bottle Boot 4 or 5	Riser Boot 6 ^②	Riser Boot 7
1200A .50 x 3 Cu	126D754H01	449D541H01	449D542H01
1200A .50 x 4 Al	126D754H02	449D541H02	449D542H02
2000A .75 x 4 Cu	126D754H03	449D541H03	449D542H03
3000A 1.0 x 6 Cu	Tape ^①	Tape ^①	Tape ^①

Note: Boot hardware kit 8257A74G01 contains enough nylon bolts and nuts for 25 to 35 boots.

① These joints are taped. Order taping kit 3710A12G01, page 37.
② - 2 required per riser.

**Type DHP Housings****Main Bus, Risers, Insulation Tubing**

Main bus bars and/or risers cut to size, bent and drilled are not available from this catalog. If assistance is required, contact the nearest Westinghouse Engineering Service Facility.

Only copper bus bar is available. On installations where the main bus is aluminum, copper bus may be substituted since both the aluminum and copper bus bar are silver plated.

The insulation tubing will fit full, round-edge copper or aluminum bus bars.

Standard Sizes of Bus Bars

Copper bus full round edge/silver plated.

96 inches of .250 in. tk. x 2	in. wide	8062A08H03
96 inches of .250 in. tk. x 4	in. wide	8062A08H07
96 inches of .5 in. tk. x 3	in. wide	8062A08H12
96 inches of .5 in. tk. x 4	in. wide	8062A08H13
96 inches of .5 in. tk. x 6	in. wide	8062A08H15

Other sizes of bus bars may be ordered from:

Hussy Metals
9624 Cincinnati/Columbus Rd.
Suite 314
Cincinnati, OH 45241

Insulation Tubing (Noryl) for Main Bus

96 inches of .276 x 2.033 x .132 radius x .125 wall thk. (.250 x 2 copper)	8065A39H01
96 inches of .276 x 4.033 x .132 radius x .125 wall thk. (.250 x 4 copper)	8065A39H09
96 inches of .526 x 3.033 x .257 radius x .125 wall thk. (.5 x 3 copper)	8065A39H03
96 inches of .526 x 4.033 x .257 radius x .125 wall thk. (.5 x 4 copper)	8065A39H04
96 inches of .526 x 6.043 x .257 radius x .125 wall thk. (.5 x 6 copper)	8065A39H05

Other sizes of tubing may be ordered from:

Custom Extrusion, Inc.
Box 517
Sheffield, Mass. 01257

Potential Transformer Fuses

5 kV		
2400 Volt 2 Ampere		677C592G04
4200 Volt 0.5 Amp.		677C452G01
15 kV		
4200 Volt	0.5 Ampere	677C452G01
7200 Volt	0.5 Ampere	677C452G02
14400 Volt	0.5 Ampere	677C452G03

Control Power Transformer Fuses

5 kV		
2.4 kV 15 Ampere		678C240G01
2.4 kV 25 Ampere		678C240G03
5 kV 5 Ampere		677C453G01
5 kV 10 Ampere		677C453G04
5 kV 15 Ampere		678C240G04
5 kV 25 Ampere		678C240G06
15 kV		
7.5 kV	5 Ampere	677C453G02
7.5 kV	10 Ampere	677C453G05
15 kV	5 Ampere	677C453G03
15 kV	10 Ampere	677C453G06
15 kV	25 Ampere	678C240G12

Taping Kit — 3710A12G01**Potential Transformer Secondary Fuses — Non-Renewable — Non-Indicating^①**

250 Volt — Ferrule Type		600 Volt — Ferrule Type	
1 Amp	73482AJOOB — Bussman Cat. NON 1	1 Amp	73482AKOOB — Bussman Cat. NOS 1
3 Amp	73482AJOOD — Bussman Cat. NON 3	3 Amp	73482AKOOD — Bussman Cat. NOS 3
6 Amp	73482AJOOG — Bussman Cat. NON 6	6 Amp	73482AKOOG — Bussman Cat. NOS 6
10 Amp	73482AJOOH — Bussman Cat. NON 10	10 Amp	73482AKOOH — Bussman Cat. NOS 10
15 Amp	73482AJOOJ — Bussman Cat. NON 15	15 Amp	73482AKOOJ — Bussman Cat. NOS 15
20 Amp	73482AJOOK — Bussman Cat. NON 20	20 Amp	73482AKOOK — Bussman Cat. NOS 20
25 Amp	73482AJOOL — Bussman Cat. NON 25	25 Amp	73482AKOOL — Bussman Cat. NOS 25
30 Amp	73482AJOOM — Bussman Cat. NON 30	30 Amp	73482AKOOM — Bussman Cat. NOS 30
40 Amp	73482AJOOP — Bussman Cat. NON 40	60 Amp	73482AKOOS — Bussman Cat. NOS 60
60 Amp	73482AJOOS — Bussman Cat. NON 60		

^① The secondary fuses listed above are standard for DHP assemblies and can be ordered through the Westinghouse Electric Supply Company using the Bussman catalog number.

Type DHP Housings

Porcelain Bus Support

Figure 41.

50DHP 250/350 All Ratings

.5 × 4 Bus	437D923G02	3 Required
.5 × 6 Bus	437D923G03	3 Required
.5 × 8 Bus	437D923G04	3 Required

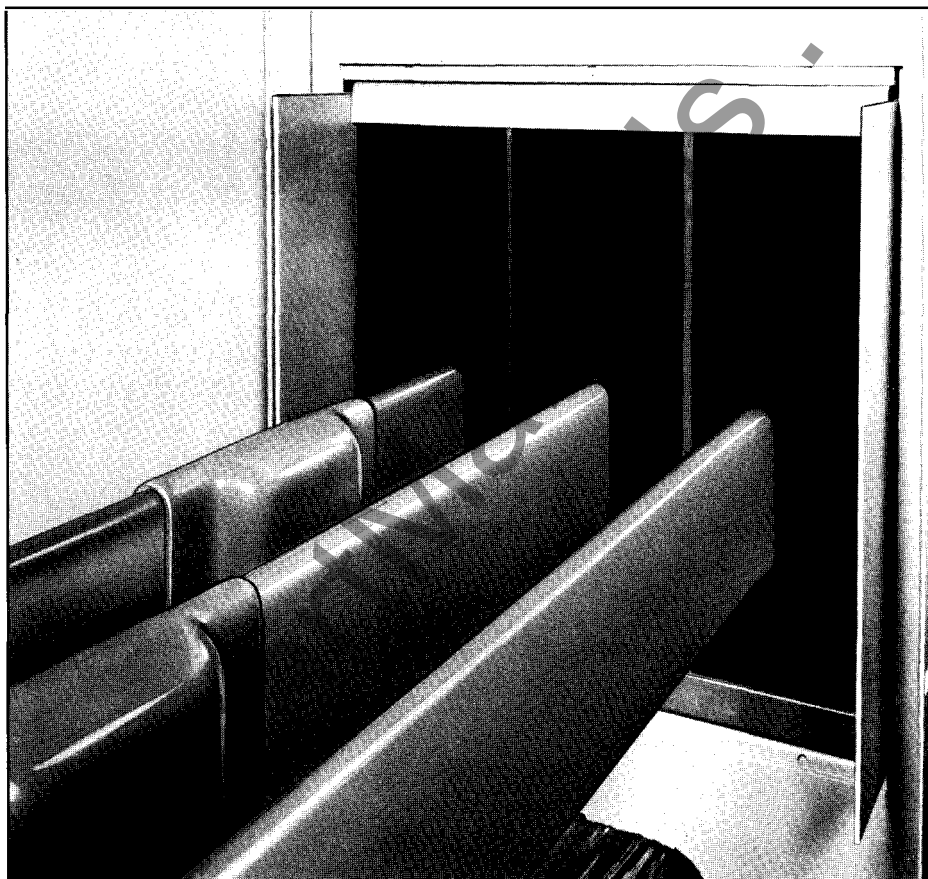
75/150 DHP All Ratings

.5 × 4 Bus	437D923G06	2 Required ^①
.5 × 4 Bus	437D923G10	1 Required ^①
.5 × 6 Bus	437D923G07	2 Required ^②
.5 × 6 Bus	437D923G11	1 Required ^②
.5 × 8 Bus	437D923G08	2 Required ^②
.5 × 8 Bus	437D923G12	1 Required ^③

● Set of 3 required for .5 × 4 Bus

② Set of 3 required for .5 × 6 Bus

③ Set of 3 required for .5 × 8 Bus



Porcelain Bus Support

Buses and joints are made of flat aluminum bar completely insulated. Copper conductor is available as an option. The bus insulation is flame retardant tubing. Each conductor of the main bus is held in a one piece

porcelain support at the wall between adjacent units. Bus structure is also front accessible by removing cover just above upper primary contact cover.

Figure 41.

Porcelain-Standoff Insulator

Figure 42.

5 and 15 kV Application **437D924G01**

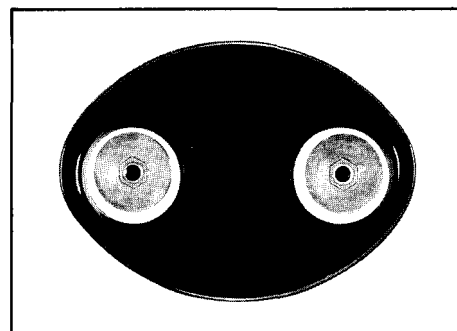


Figure 42.

**Type DHP Accessories****DFS and FSP Switch Parts**

All parts for DFS or FSP switches including main and arcing blades, arc chutes, barriers, and fuse clips are available from:
Cleveland/Price, Inc.
14000 Route 993
Trafford, PA 15085

Accessories for DHP Switchgear

Description of Accessory	Style Number	Application
Maintenance Handle	503B141G01	All breakers except 50DHP350, 150DHP750C and 150DHP1000
	590C456G01	
Levering-in Crank	509A931G01	All breaker ratings
Arc Chute Lifter (Not required with 50DHP75 and 50DHP250)	591C719G01 677C888G01	50DHP350 All 7.5 and 15 kV breakers except 150DHP750C and 150DHP1000
	678C320G02	150DHP750C and 150DHP1000
Arc Chute Remover	591C718G01	For 50DHP350 only
Turning Dolly	677C889G01 677C889G03	All breakers except 150DHP750C and 150DHP1000
Transfer Truck		For outdoor aisleless assemblies
	6896D31G01	5 kV and 26" wide 50DHP350, 1200/2000A
	6896D31G04	All 7.5 and 15 kV (Except 150DHP750C and 150DHP1000) and 36" wide 50DHP350, 3000A
	6896D31G02	150DHP750C and 150DHP1000
Test Cable	449D205G01	All breaker ratings
Test Plug	1164046	All breaker ratings
Spanner Nut Wrench	502A850G01	All breaker ratings, except 50DHP350, 3000A.
	795A462G01	50DHP350, 3000A.
Test Cabinet with Jumper	8346A28G09 8346A28G10 8346A28G11	All breaker ratings, Any D.C. All breaker ratings, Any A.C. Close, standard D.C. trip All breaker ratings, stored energy, any A.C. close, capacitor trip
Handle and Latch Kit	792A122G01 792A140G01	For formed door – all breaker ratings For flat door – all breaker ratings
Touch Up Paint	32220BW00S 32220BV00T	Indoor – light gray – standard 16 ounce spray can Outdoor – exterior – dark gray one quart can
Lubrication		Refer to I.B. 32-253-4A, Page 40, for recommendations on lubrication.
Molybdenum Disulphide Grease	53701QB12J	Breaker mechanism – 14 oz. tube
Graphite grease	53701AN00T	Breaker main contacts – quart can
Hardware – Standard hardware such as bolts, nuts, washers, etc. are not listed in this data. Such items should be purchased locally. Hardware should be a minimum of SAE Grade 5.		
Adhesive	45793BX00F	Required for all pole units, puffer tubes, 750C/1000 arc chutes and 7.5/15 kV PT cable bushings



Type DHP Magnetic Air Circuit Breakers

Printed in USA

Westinghouse Electric Corporation
Distribution and Control Business Unit
Commercial Operations Division
5 Parkway Center
Pittsburgh, PA 15220

August, 1987