

## Aero-Motive Company

**W** A Woodhead Industries, Inc. Subsidiary

### IMPORTANT SAFETY INSTRUCTIONS

Please read this manual carefully and follow its instructions. Improper use or failure to follow these instructions could result in serious injury, death or property damage. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this manual for future reference.

The following safety precautions call attention to potentially dangerous conditions.



**DANGER:** Immediate hazards which **WILL** result in severe personal injury or death.



**WARNING:** Hazards or unsafe practices which **COULD** result in severe personal injury or death.



**CAUTION:** Hazards or unsafe practices which **MAY** result in *minor* personal injury or product or property damage.

### INSTALLATION

Mount swivel unit so conduit elbow may swivel freely without binding or interference when rotating. Mount swivel unit in any position by bolting through the four holes in the base. Use base as template for mounting hole pattern.

### ADJUSTMENT



**CAUTION:** Before wiring, be sure main power supply is turned off and locked out. Fuse protection should also be provided. Hazards or unsafe practices **MAY** result in *minor* personal injury or product or property damage.

#### **INLET:**

A one-inch NPT opening is provided in the side of the housing for conduit or a watertight cable connector. Remove inspection covers and bolts from top plate. Carefully lift cover with slip ring assembly attached. If bearing comes off with shaft, replace into base. Bring leads of cable, from base, out far enough to reach terminals on brushes. Connect leads to terminals, and replace cover with slip ring assembly into base. Replace inspection covers.




**WARNING:** To prevent personal injury, death or property damage, (before performing any service), always disconnect and lock out all electrical power. Fuse protection should be provided. Hazards or unsafe practices **COULD** result in severe personal injury or death.

#### **OUTLET:**

Connect conduit or cable with watertight connector to conduit elbow. Remove cover of conduit elbow to gain access to wires of slip ring leads. Proper supply conductors may be connected to the corresponding lead wires and check continuity. Replace cover elbow when wiring is completed and checked.

### SERVICE

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 **WARNING:** To prevent personal injury, death or property damage, (before performing any service), always disconnect and lock out all electrical power. Fuse protection should be provided. Hazards or unsafe practices COULD result in severe personal injury or death.

**SLIP RING:**

Remove inspection covers and disconnect as many lead wires to brush terminals as possible through openings in side of base. Remove bolts and lockwashers, & remove cover with slip ring assembly. If bearing comes off with shaft, remove, and replace back into base. Remove remaining leads connected to terminals on brush assembly. Unclip one end of brush assembly, and tilt outward so brush is removed from groove of slip ring. Continue on all others. On 35 amp. collector ring, remove cover of condulet elbow, and disconnect wire leads on slip ring. On 75 amp. collector ring, remove screws, lockwashers, and nuts, then disconnect lead wires from bottom of slip ring. Remove retaining ring from end of shaft. Loosen setscrews, and carefully slide collector ring off shaft. On 35 amp. collector ring, leads must be pulled out through shaft when removing collector ring. To reassemble, reverse above procedure. When replacing brushes onto slip ring, be sure that brushes are centered between insulators, and brush surface is making complete contact with ring. Brush holders should rotate 90 degrees from the preceding brush holder in a circular pattern.

**BRUSHES:**

Remove inspection covers. If brushes can be removed through the side openings, then disconnect leads to terminals, unclip brushes, and remove. If brushes cannot be reached by side openings, then use procedures outlined in Section above.

**MAINTENANCE**

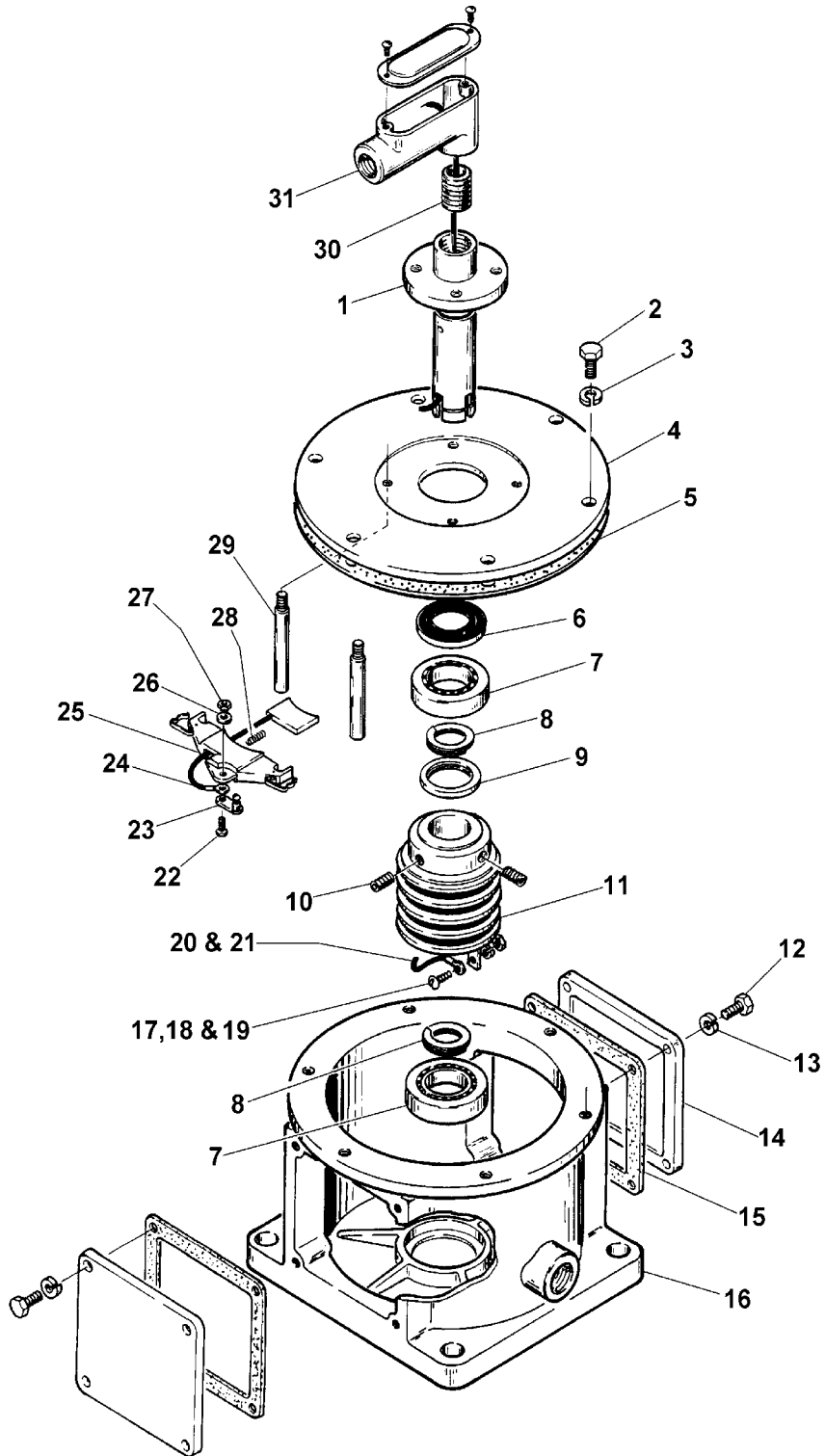
**LUBRICATION:**

All bearings are permanently lubricated, and further lubrications is neither recommended or required

**INSPECTION:**

A periodic inspection should be made to insure proper alignment and contact of brushes to rings.

## REPLACEMENT PARTS



Reference Number *	Part Number	Qty.	Description
1	4090900000	1	Assembly; Shaft
2	00031P0005	6	Bolt; 5/16-18 x 3/4"
3	00101P0014	6	Washer; Lock 5/16"
4	5873500001	1	Cover Housing
5	4090700000	1	Gasket

6	00703P0002	1	Seal
7	00376P0025	2	Bearing; 3/8x1" x 7/16 w.
8	00582P0003	2	Ring; External Retaining 1-1/2" Shaft
9	4091900000	1	Collar
10	4068100001	2	Screw; Set
11	5429700005	1	Assembly; Collector Ring (3 con. @ 35 amp.) (Su33)
	5492700006	AR	Assembly; Collector Ring (4 con. @ 35 amp.) (Su34)
	5492700007	AR	Assembly; Collector Ring (6 con. @ 35 amp.) (Su36)
	5492700008	AR	Assembly; Collector Ring (8 con. @ 35 amp.) (Su38)
	5631500003	AR	Assembly; Collector Ring (3 con. @ 75 amp.) (Su73)
	5631500004	AR	Assembly; Collector Ring (4 con. @ 75 amp.) (Su74)
12	00030P0111	8	Bolt; 1/4-20 x 5/8
13	00101P0030	8	Washer; Lock 1/4"
14	4090300001	2	Cover; Inspection
15	4090800000	2	Gasket
16	4090100001	1	Housing
17	00030P0120	1 per conductor*	Screw; 1/4-20 x 3/8 (75 amp. only) (Su7x)
18	00101P0030	1 per conductor*	Washer; 1/4" (75 amp. only) (Su7x)
19	00152P0005	1 per conductor*	Nut; 1/4-20 (75 amp. only) (Su7x)
20	00041P0125	1 per conductor*	Terminal; #6 AWG. (75 amp. only) (Su7x)
21	5492500002	1 per conductor*	Wire; 20-7/8" of #6 AWG. 75amp. (Su7x )
22	00030P0217	1	Screw; #10-24 x 5/8 (35 amp.) (Su3x)
	00030P0110	1+	Screw; 1/4-20 x 3/4" (75 amp. only) (Su7x)
23	00042P0010	1	Terminal; Lug (35 amp.) (Su3x)
	00042P0020	1+	Terminal; Lug (75 amp. only) (Su7x)
24	5850200000	1	Assembly; Brush (35 amp.) (Su3x)
	5850500000	1+	Assembly; Brush (75 amp. only) (Su7x)
25	6050600000	1	SUB-Assembly; Brush holder (35 AMP.) (Su3x)
	6134500000	1+	SUB-Assembly; Brush holder (75 amp. only) (Su7x)
26	5773300000	1	Washer; .128 ID (35 amp.) (Su3x)
	00126P0050	1+	Washer; 1/4" (75 amp. only) (Su7x)
27	00160P0050	1	Nut; #10-24 (35 amp.) (Su3x)
	00160P0025	1+	Nut; 1/4-20 (75 amp. only) (Su7x)
28	00600P0002	1	Spring (35 amp. and 75 amp.)
29	5851500000	4	Stud; ( 3 con. @ 35 amp., 4 con. @ 35 amp.) (Su33) (Su34)
	5851600000	4+	Stud; ( 6 con. @ 35 amp., 3 con. @ 75amp.) (Su36) (Su73)
	5851700000	4+	Stud; ( 8 con. @ 35 amp, 4 con. @ 75 amp.) (Su38) (Su74)
30	00828P0005	1	Nipple; 1" NPT.
31	01160P0007	1	Condulet
<b>KITS</b>			
32	H97620007	AR	Assembly; Complete Brush (35 amp.)- Includes 22-28 (Su3x)
33	H97620004	AR	Assembly; Complete Brush (75 amp.)- Includes 22-28 (Su7x)

**+ For 75 amp. only**

Aero-Motive Company	AKAPP Electro Industrie	Aero-Motive (UK) Limited	Woodhead Asia PTE LTD	Woodhead Canada LTD.
<b>W</b> A Woodhead Industries Inc. Subsidiary PO Box 2678 Kalamazoo, MI 49003-2678 (616) 337-7700 (800)-999-8559 FAX: (800) 333-6119	<b>W</b> A Woodhead Industries Inc. Subsidiary Nijverheidsweg 14 Box 54 NL-3771 ME Barneveld NL-3771 AB Barneveld Holland 011-31-3420-14022 FAX: 011-31-3420-92384	<b>W</b> A Woodhead Industries Inc. Subsidiary Rassau Industrial Estate Ebbw Vale Gwent NP3 5SD United Kingdom (0495) 350436 FAX: (0495) 350877	<b>W</b> A Woodhead Industries Inc. Subsidiary 401 Commonwealth Drive #04-04 Haw Par Technocentre Singapore 0314 (65) 479 6533 FAX: (65) 479 3588	<b>W</b> A Woodhead Industries Inc. Subsidiary 1090 Brevik Place Mississauga Ontario L4W 3Y5 Canada (905) 624-6518 FAX: (905) 624-9151