



## **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.

**NOTE:** Instruct operators in the safe, proper use and maintenance. Keep this manual for future reference.

## **INSTALLATION**



**WARNING:** Failure to read, understand or follow these instructions could lead to hazards or unsafe practices **COULD** result in severe personal injury or death.



**WARNING:** Disconnect power before servicing.



**CAUTION:** Instruct operators in the safe, proper use and maintenance of this product.

## **MOUNTING**

Mount on shaft that does not protrude beyond end of slip ring.

- 1 1/2" dia. shaft on AG 30, SR30, and SR40 series
- 7/8" dia. shaft on AG20, and SR20 series.

Four equally spaced mounting holes required to mount brush studs. Must be concentric with shaft and within .010" true position. Studs have one end 1/4-20 UNC-2A thread.

- 4.362" BC for AG30, SR30, and SR40 series 1 1/2" bore
- 3.004" BC for AG20, SR20 series 7/8" bore.

## **ASSEMBLY**

Slide slip ring on to shaft and tighten set-screws on hub. Install four brush studs to mounting holes (by customer) and tighten with nuts. Mount brush holders on studs, installing each one rotated 90 degrees from the last position so that brush pressure is distributed equally on ring. Make sure brushes are centered on ring. Clearance should be at least 1/4 inch between any two conductors, or conductor and ground.

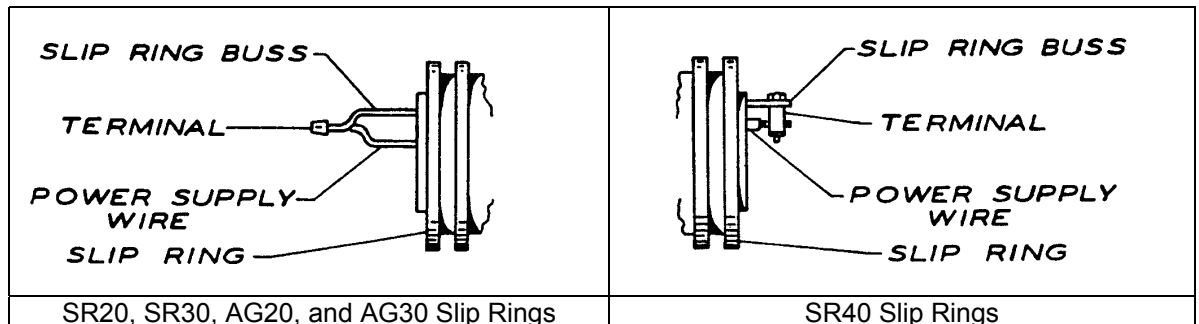
## OPERATION

### WIRING

Each lead must always be connected to corresponding brush and buss wire. Always provide slip ring with fuse protection. Chart below shows maximum lead wire size supplied or allowed with ring.

Models	Lead Wire	Models	Lead Wire	Models	Lead Wire
SR22-SR212	#12 AWG	SR32-SR38	#10 AWG	SR42-SR44	Max #4 AWG
AG22-AG212	#16 AWG	AG32-AG38	#16 AWG		

To complete wiring, connect one set of wires to brushes and other corresponding set of wires through main shaft to the slip ring buss--as illustrated.



### MAINTENANCE



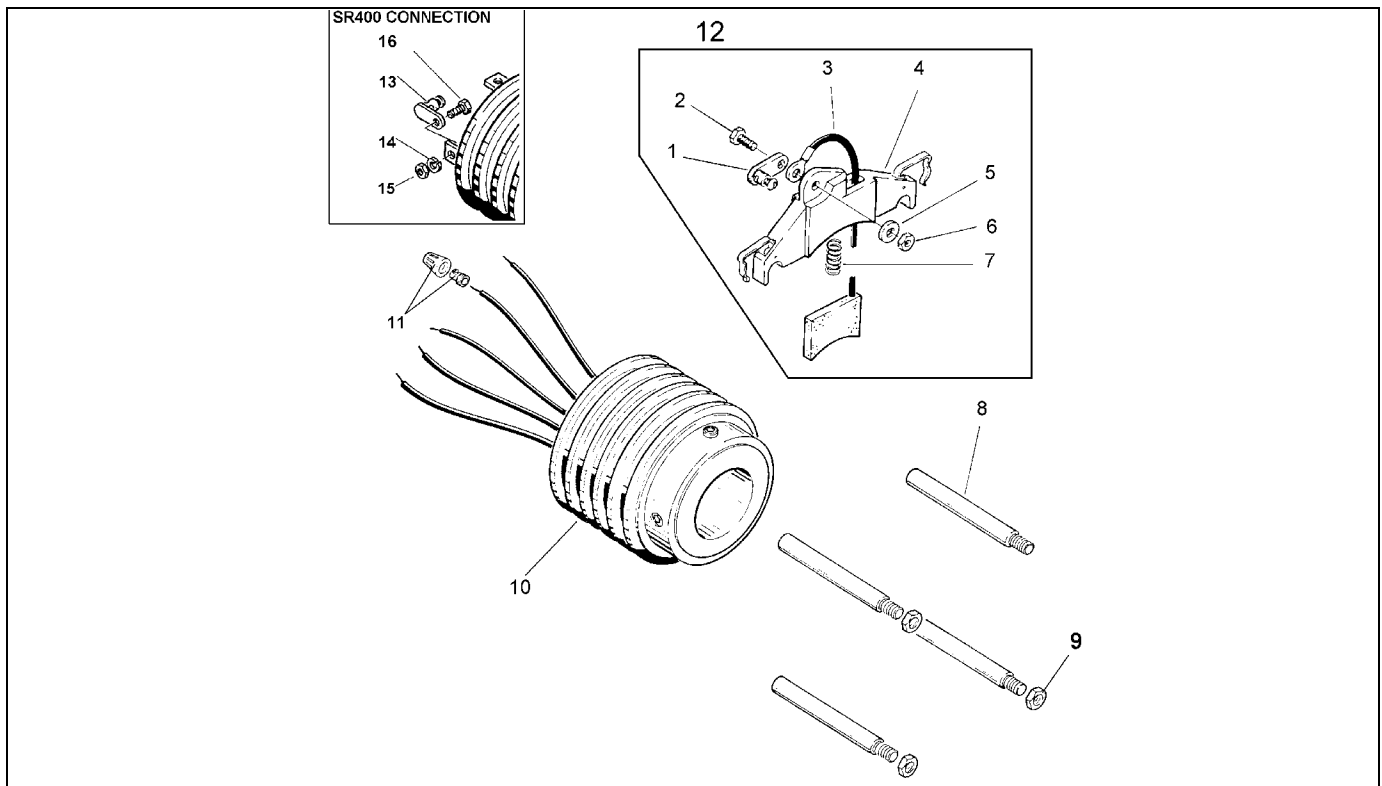
**CAUTION:** Wipe off any excess grease. Never treat ring surface with any type of lubricant cleaner. Hazards or unsafe practices **MAY** result in *minor* personal injury or product or property damage.

Grease may be required depending on the use and atmosphere. If required, place a light coat of nonconductive grease on riding surface of drive plate and end plate. Inspect brushes and slip rings periodically for wear and corrosion.

## SERVICE

All parts illustrated are available as repair parts. During disassembly and assembly of slip rings, always be careful to install parts in their proper places as illustrated. The brush and brush holder should always be centered between the insulators on the slip ring. The last brush should be mounted 90° from drive stud, to allow for needed clearance between drive stud and brush. Be sure that brush surface makes complete contact with ring. Clamp brush holder in place securely.

## REPLACEMENT PARTS



### SR20 & AG20 SERIES

#### Reference

Number	Part Number	Qty.	Description
1	C70280310	1/ring	Lug terminal
2	00030P0217	1/ring	Screw #10-24x5/8
3	5851400000 6154800000	1/ring	Brush Only, Copper-Graphite (Models: SR2x) Brush Only, Silver Tipped (Models: AG2x)
4	Not Available		
5	5773300000	1/ring	Washer #10
6	00160P0050	1/ring	Nut #10-24
7	00600P0002 Incl w/ #9	1/ring	Spring Model SR2xx Spring, Model AG2xx
8	M253600XX	4	Brush Stud SR/AG-22,-23 ,-24 (XX)=17, SR/AG-25 ,-26 =18, SR/AG-27 ,-28=19, SR/AG-29 ,-210=20 SR/AG-211 ,-212 =21
9	C22030210	4	1/4-20 Jam Nut
10	58567000XX H96420XXX	1 1	Sub-Assembly; SR22 (XX)=01, SR23=21, SR24=22, SR25=04, SR26=23, SR27=06, SR28=24, SR29=08, SR210=25, SR211=10, SR212=26, Sub-Assembly Silver; AG22 (XX)=101, AG23=102, AG24=103, AG25=104, AG26=105, AG27=106, AG28=107, AG29=005, AG210=108, AG211=007, AG212=109,
11a	00903P0001	1/ring	Splice Cap
11b	00904P0001	1/ring	Insulator
12	6053700000 6155000000	1 1	Brush assembly complete for SR2xx I (Items 9-15) Brush assembly complete for AG2xx I (Items 9-15)

**SR30 & AG30 SERIES**

Reference			
Number	Part Number	Qty.	Description
1	C70280310	1/ring	Lug terminal
2	00030P0217	1/ring	Screw #10-24x5/8
3	5850200000 6154900000	1/ring	Brush Only, Copper-Graphite (Models: SR3x) Brush Only, Silver Tipped (Models: AG3x)
4	6050600000	1/ring	Brush holder only
5	5773300000	1/ring	Washer #10
6	00160P0050	1/ring	Nut #10-24
7	00600P0002 00600P0016	1/ring	Spring Model SR3x Spring, Model AG3x
8	M253600XX	4	Brush Stud SR/AG-32(XX)=32, SR/AG-33 =56, SR/AG-34=33, SR/AG-35=44, SR/AG-36=51, SR/AG-37=45, SR/AG-38=52, SR/AG-39=27.
9	C22030210	4	1/4-20 Jam Nut
10	H96420XXX	1	Sub-Assembly; SR32 (XXX)=200, SR33=201, SR34=202, SR35=203, SR26=204, SR37=205, SR38=206 , SR39=207
	H96410XXX	1	Sub-Assembly Silver; AG32 (XXX)=006, AG33=007, AG34=008, AG35=009, AG36=010, AG37=011, AG38=012
11a	00903P0001	1/ring	Splice Cap
11b	00904P0001	1/ring	Insulator
12	H97620007	1/ring	Brush assembly complete for SR3xx
	H97620010		Brush assembly complete for AG3xx

**SR40 SERIES**

Reference			
Number	Part Number	Qty.	Description
1	C70280311	1/ring	Lug terminal
2	00030P0110	1/ring	1/4-20 X 3/4 HHCS
3	5850500000	1/ring	Brush Only, Copper-Graphite (Models: SR4xx)
4	6134500000	1/ring	Brush holder only.
5	00126P0050	1/ring	Washer 1/4
6	C22430113	1/ring	Nut 1/4-20
7	00600P0002	1/ring	Spring Model
8	M253600xx	1	Brush Studs SR42 (xx)=17, SR43=18, SR44=19.
9	C22030210	4	1/4-20 Jam Nut
10	H96420XXX	1	Sub Assy. Collector Ring; SR42 (xx)=400, 43=401, 44=402.
11	Not Applicable		
12	H97620004	1/ring	Brush assembly complete for SR4x
13	C70280311	1/ring	Lug
14	00101P0030	1/ring	1/4 Lockwasher
15	00152P0005	1/ring	1/4-20 Hex Nut brass
16	00030P0120	1/ring	1/4-20 X 3/8 HHCS brass

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