

INSTALLATION and MAINTENANCE INSTRUCTIONS

HUBBELL SELECT

SPRING OPERATED ELECTRIC CABLE REELS

This reel is intended for hand pull only and was not designed for continuous duty cycle machine operation.

All units are provided with right hand rotation unless otherwise specified. This means that spool rotates counter-clockwise to wind cable **when viewing reel from slip ring side.**

Clock-type springs provide power for cable take-up. Reel was pre-tensioned at factory. If installing new cable, pretension following steps under CABLE INSTALLATION on back page.

INSTALLATION

1. Securely mount reel in desired position using 3/8"(M10) bolts. Be sure spool centerline is aligned with cable run.

CAUTION

If mounting overhead, provide safety chain between reel base and mounting surface to prevent accidental reel drop.

2. Position cable guide. Guide must be oriented so cable pays off reel **in a straight line** without bends.
3. Pay-out cable to maximum working length. At least one turn of cable should remain on spool. If spool locks up prior to reaching required length, either reel was over-tensioned or reel capacity has been exceeded.
4. Adjust cable stop.
5. Make electrical connections at cable end.
6. If machine pull application or if no-lock operation is desired, disengage ratchet lock. See following section.
7. Remove slip ring cover and connect individual supply conductors to slip ring leads. Replace cover.
8. Turn on power to reel.

RATCHET LOCK

Reel is shipped with ratchet lock "engaged". If constant spring tension is required, lock may be disengaged by locating and removing the selector plate anchor screw on the frame, rotating the selector plate to disengage position, and replacing and tightening the selector plate screw.

MAINTENANCE

Bearings and springs are prelubricated and require no periodic maintenance.

SPRING REPLACEMENT

The unique SAFETYCHANGE® spring motor consists of a spring sealed within a housing. A preplacement spring is supplied sealed in its housing and the old unit should be discarded completely.

1. Turn off all electric power.
2. Remove cable stop from cable.
3. Wind cable onto reel to relieve **all** spring tension.
4. Using a 3/16" Allen wrench, loosen socket head screw in main shaft clamp nut. Support spool and spin nut off shaft.

5. Remove entire spool and spring motor assembly from frame.

WARNING

Do not attempt to remove spring from its housing. Clock-type springs can be dangerous to handle. Removal of spring from housing could result in personal injury.

6. Remove V-Ring seal from spring assembly.
7. Remove nuts holding spring assembly and slide spring assembly off main shaft.
8. Slide new spring assembly onto shaft and reassemble reel by reversing above steps.
9. Adjust spring tension. Refer to INSTALLATION, Step 5.

SLIP RING REPLACEMENT

1. Turn off all electric power.
2. Remove cover from junction box. Disconnect input wiring.
3. Engage ratchet lock to prevent spool from rotating.
4. Remove locknuts holding slip ring cover and gasket. Remove cover.
5. Disconnect cable leads from slip ring terminals.
6. Loosen two set screws in collar using 1/8" Allen wrench. Pull slip ring assembly off shaft.
7. Install new slip ring assembly on shaft and re-assemble reel by reversing above steps.

CABLE REMOVAL

Use the following procedure to remove worn or damaged cable from reel prior to installation of new cable.

1. Turn off all electric power.
2. Disconnect cable from machine or other fixtures. Remove cable stop and allow cable to retract onto spool. Ensure all tension is off spring by manually rotating spool (normally counter-clockwise when viewed from junction box side).
3. Remove cable from spool by looping over spool flange and slip ring cover.
4. Remove slip ring cover
5. Disconnect cable leads from slip ring brush terminals.

CAUTION

Failure to relieve all spring tension prior to removing cable could result in damage to equipment or personal injury. Follow instructions carefully.

6. Loosen counternut on cable connector in spool and pull cable out.
7. Install new cable following directions on back page.

HUBBELL SELECT DIRECT DRIVE ELECTRIC CABLE REEL REPLACEMENT PARTS LIST

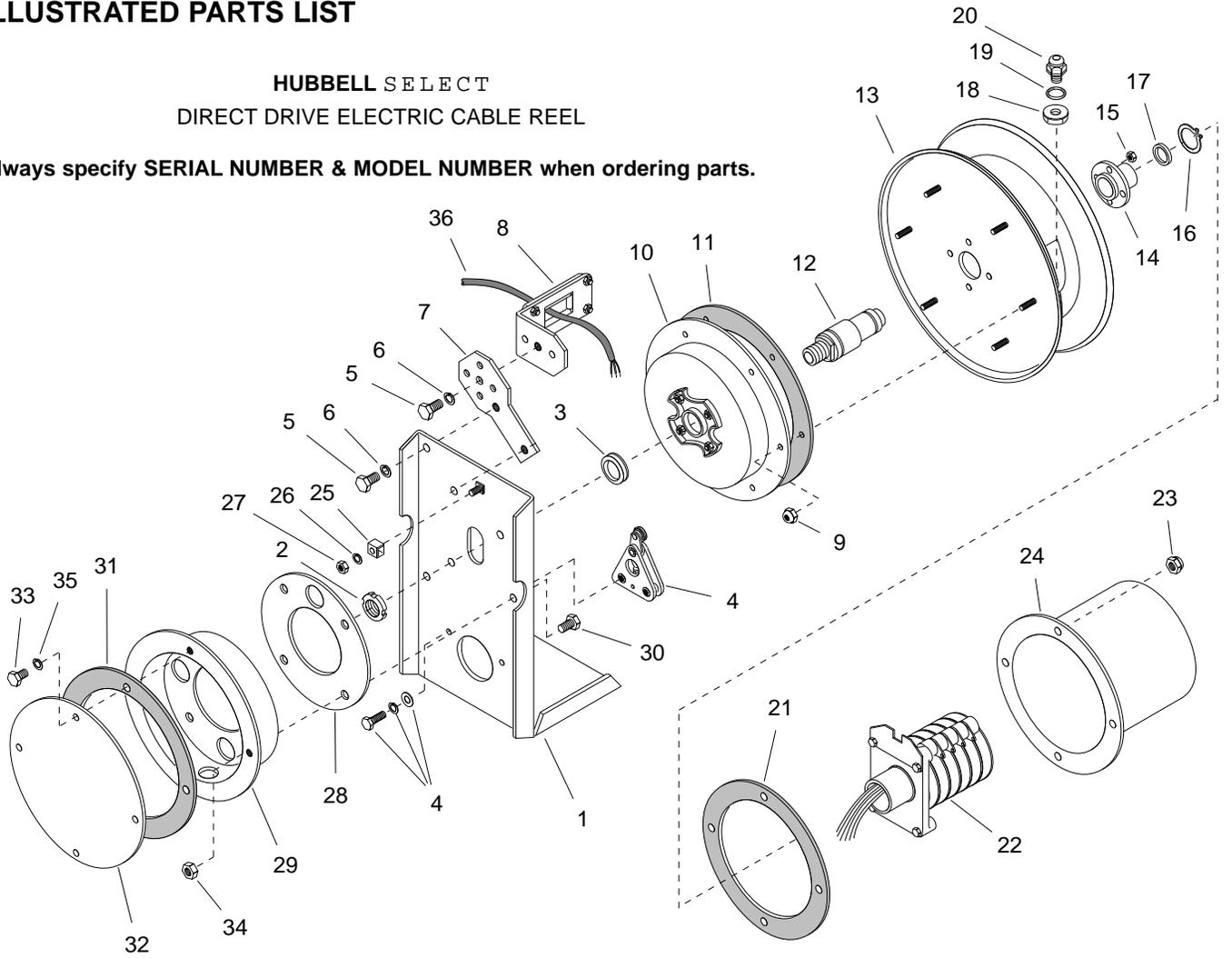
ITEM	KIT NO.	DESCRIPTION	QTY.
1	602501BU	Frame Assembly	1
2	021484	Clamp Nut	1
3	025032	'V'-Ring Seal	1
4	604093	Locking Dog Repair Kit (Includes mounting hardware)	1
5	028132	Hex Head Capscrew, M10 x 25L	3
6	028138	Lockwasher, M10	3
7	602502BU	Mount Bracket	1
8	602504BU	Roller Guide Assembly	1
9	028144	Lock Nut, M5 x 0.8	6
10	05059846	Spring Assembly	1
11	021494	Spring Gasket	1
12	027445	Shaft	1
13	602518GG	Spool Assembly	1
14	027444	Flange Bushing, 14" Reel	1
15	028144	Lock Nut, M5 x 0.8	4
16	107185	Retaining Ring	1
17	027456	Thrust Washer, 14" & 16" Reel	1
18	021513	Counter Nut	1
19	104336	O-Ring	1
20	022805	Cable Connector, 0.38-0.50 Cable Dia.	1
20	021510	Cable Connector, 0.50-0.70 Cable Dia.	1
21	018042	Cover Gasket	1

ITEM	KIT NO.	DESCRIPTION	QTY.
22	02816301	Slip Ring Assembly, 1-4 Pole, 30A	1
23	028144	Lock Nut, M5 x 0.8	4
24	602583BU	Slip Ring Cover	1
25	01555101	Grounding Lug	1
26	028139	Lockwasher, Internal Tooth	1
27	028144	Lock Nut, M5 x 0.8	1
28	021479	Gasket, Junction Box	1
29	602588BU	Junction Box	1
30	028131	Hex Head Capscrew, M10 x 20L	3
31	018042	Cover Gasket	1
32	602589BU	Junction Box Cover	1
33	028136	Taptite Screw, M6 x 1 6L	4
34	028146	Lock Nut, M10 x 1.5	3
35	028140	Lockwasher, M6	4
36	See Nameplate	Cable, Model Number**	1
		**Example: G14-A03-B0302 = 30 Ft. 3/C #16AWG Cable	
		OPTIONAL ACCESSORIES	
	602070	Cable Stop, 0.25"-0.46" Dia. Cable	Option
	602072	Cable Stop, 0.50"-0.75" Dia. Cable	Option
	602540BU	Swivel Base	Option

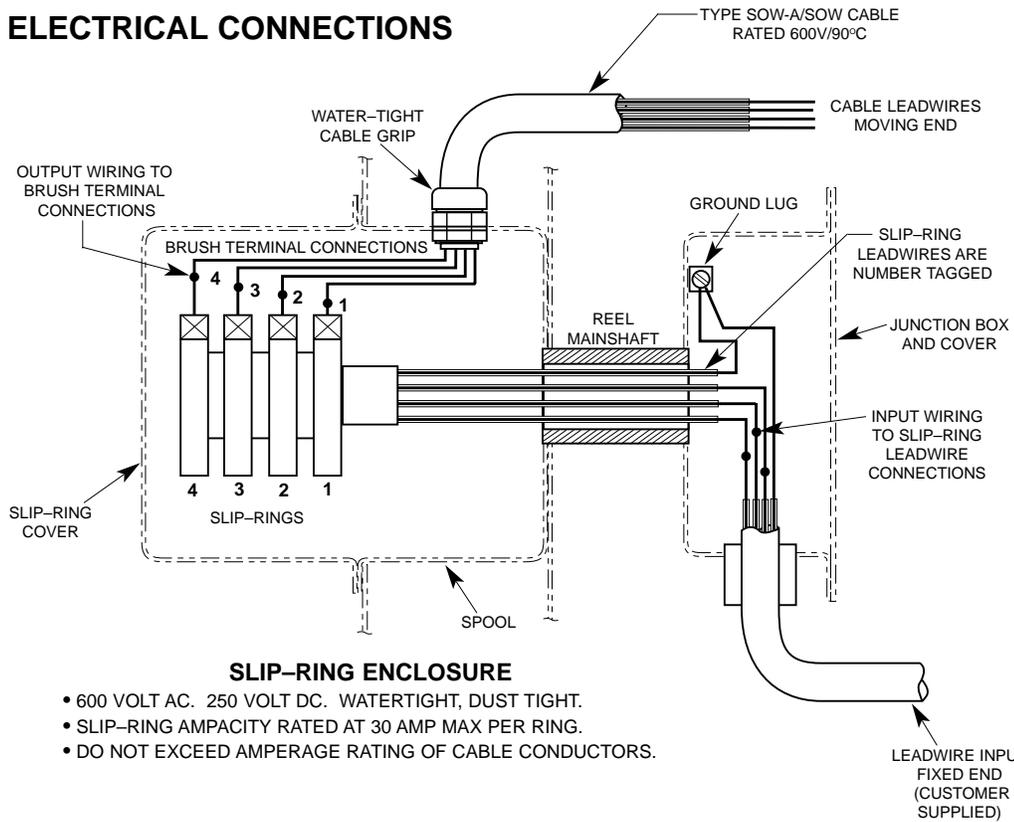
ILLUSTRATED PARTS LIST

HUBBELL SELECT DIRECT DRIVE ELECTRIC CABLE REEL

Always specify SERIAL NUMBER & MODEL NUMBER when ordering parts.



ELECTRICAL CONNECTIONS



NOTE:
Wire size, wire connectors, connection sequence, and connection methods must comply with National Electrical code and Local Electrical ordinances. If in doubt, contact a local electrical contractor or electrical inspector.

COLOR SEQUENCE FOR TYPE SOW-A CABLE

FOUR CONDUCTOR CABLE

- # 1 - BLACK
- # 2 - WHITE
- # 3 - RED
- # 4 - GREEN (ground)

NOTE: If only three conductors are required, cap off red conductor with wire nut provided.

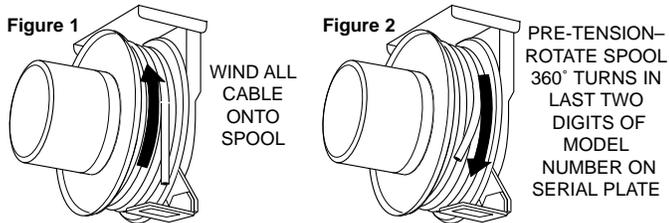
SLIP-RING ENCLOSURE

- 600 VOLT AC. 250 VOLT DC. WATERTIGHT, DUST TIGHT.
- SLIP-RING AMPACITY RATED AT 30 AMP MAX PER RING.
- DO NOT EXCEED AMPERAGE RATING OF CABLE CONDUCTORS.

CABLE INSTALLATION

Use the following procedure to replace cable. Refer to CABLE INSTALLATION REFERENCE DRAWING, below.

- Unspool new cable from shipping spool and lay out to eliminate twist.
NOTE: This step is not essential, but will aid in winding operation of the reel and prolong cable life.
- Remove slip ring cover.
- Loosen counter nut on cable connector (nut is inside slip ring housing).
- Feed one end of the cable through cable connector in spool and into the slip ring side. (See drawing below).
- Connect individual conductors to appropriate collector brushes on slip ring assembly using crimp fitting or similar connection method.
- Tighten cable connector in spool. **Do not over-tighten.**
- Wind the cable onto the reel spool by hand rotating spool in direction it turns free of spring tension. (Normally counter-clockwise when viewed from junction box side)
- Replace slip ring cover and gasket.



- Pre-tension reel by rotating spool in clockwise direction (when viewed from slip ring side). Full 360° turns should match last digit in model number on serial plate. See fig. 2.
- Engage ratchet lock to prevent spool from unwinding and feed cable end out through cable guide.
- Attach and adjust cable stop.

SPRING ADJUSTMENT

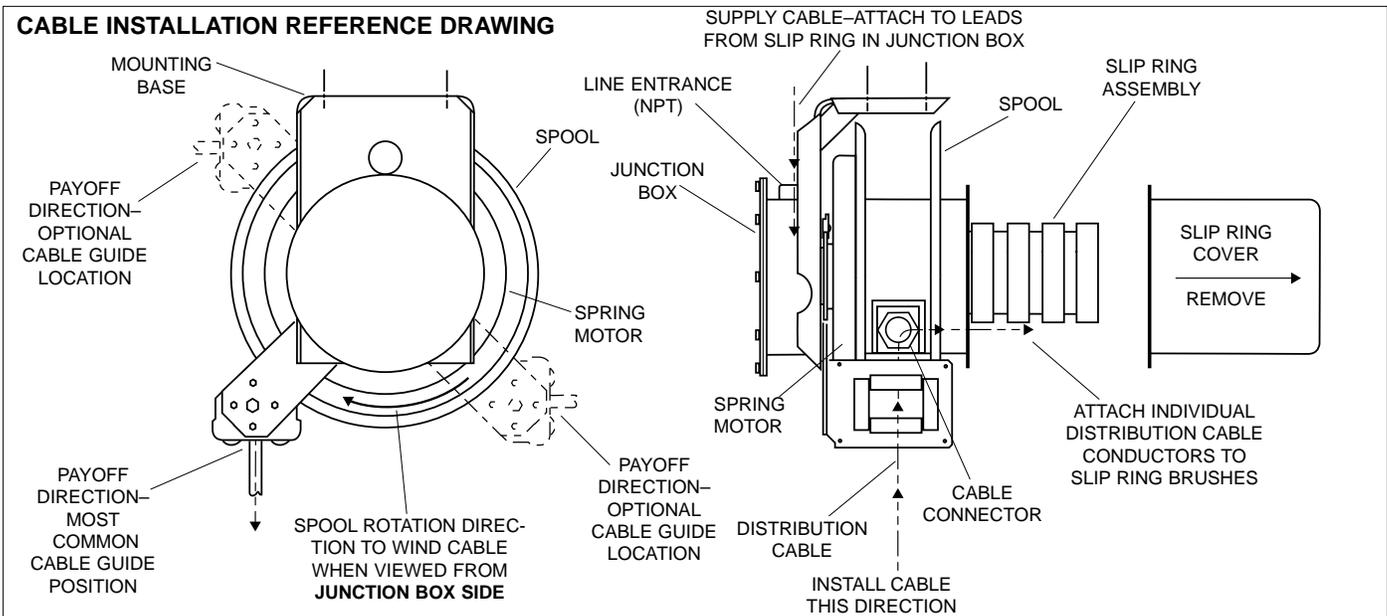
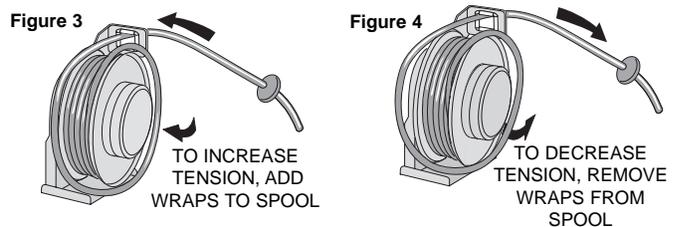
Adjust tension by adding wraps (increasing tension) or removing wraps (decreasing tension) from the spool.

- Pull about 10' of cable, allowing spool to rotate.

INCREASE TENSION: Without allowing spool to rotate, hand feed cable through hose guide until loop is large enough to slip onto spool. **Add** two or three wraps until desired tension is achieved. See Figure 3.

DECREASE TENSION: Without allowing spool to rotate, hand feed cable back through guide to provide slack. **Remove** one or two wraps from spool. See Figure 4.

- Test reel operation.



P.O. Box 26
600 South Clark St.
Mayville, WI 53050
Phone 920-387-5195