

INSTALLATION and MAINTENANCE INSTRUCTIONS

COMMERCIAL/INDUSTRIAL CORD REEL

SPRING OPERATED ELECTRIC CORD REEL

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 cord **when viewing reel from slip ring side**.

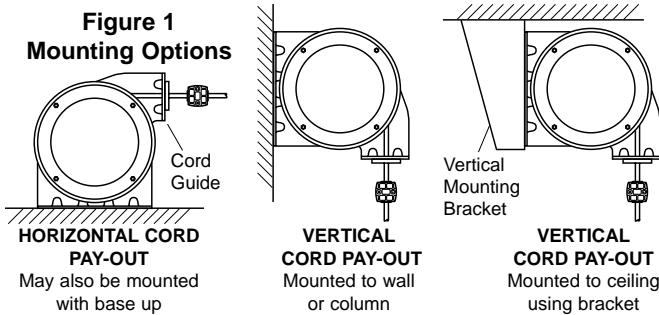
Clock-type springs provide power for cord take-up. Reel was pre-tensioned at factory. If installing new cord, pretension following steps under CORD INSTALLATION section.

INSTALLATION

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

NOTE:

Cord guide must be oriented so cord pays off reel **in a straight line** without bends. Reel may be mounted with base facing up or down, for horizontal cord payoff, or with base mounted to wall or other vertical surface, for vertical cord payoff. For ceiling mounting, use bracket included with reel (Fig. 1).



CAUTION

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

2. Pay-out cord to maximum working length. If spool locks up prior to reaching required length, either reel was over-tensioned or reel capacity has been exceeded. Rewind cord.
3. Adjust cord stop.
4. Attach outlet or lamp to cord end and make required electrical connections..
5. If no-lock operation is desired, disengage ratchet lock. See following section.
6. 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 loosening screw on ratchet lock (item 8 on parts list), sliding the screw to the bottom of the slot and retightening screw.

MAINTENANCE

Bearings and springs are prelubricated and require no periodic maintenance.

SPRING REPLACEMENT

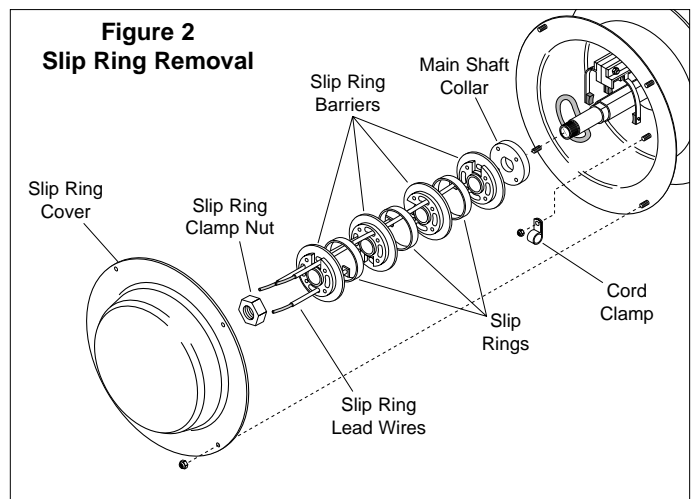
The unique SAFETYCHANGE® spring motor consists of a spring sealed within a housing. A replacement spring is supplied sealed in its housing and the old unit should be discarded completely.

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.

Please refer to Illustrated Parts List, back page, for disassembly/assembly order and terminology used in these instructions.

1. Turn off all electric power.
2. Remove cord stop and outlet or lamp from cord.
3. Wind cord onto reel to relieve **all** spring tension.
4. Remove slip ring cover. Remove wire nuts from slip ring lead wires (Fig. 2). Remove slip ring clamp nut, barriers, slip rings with lead wires and main shaft collar from main shaft.
5. Remove entire spool and spring motor assembly.
6. Remove nuts holding spring assembly to spool. Remove spring assembly from spool.
7. Mount new spring assembly on spool. Affix with eight nuts.
8. Reassemble reel by reversing above steps. Be sure flats in spring arbor and main shaft collar are seated on corresponding flat surfaces on main shaft.
9. Adjust spring tension. Refer to SPRING ADJUSTMENT.



SLIP RING BRUSH REPLACEMENT

1. Turn off all electric power.
2. Remove slip ring cover.
3. Remove wire nuts connecting brush leads to output cord conductors (Fig. 7). Loosen set screw on grounding lug and remove brush lead. See ELECTRICAL CONNECTIONS.
4. Remove brushes from spring fingers. If entire brush holder assembly must be replaced, remove four nuts holding brush holder assembly to spool.
5. Reassemble in reverse order.
6. Check continuity of wiring.
7. Turn on power to reel..

SLIP RING REPLACEMENT

1. Turn off all electric power.
2. Remove slip ring cover.
3. Remove wire nuts from slip ring lead wires (Fig. 7). Remove slip ring clamp nut, barriers, slip rings with lead wires and main shaft collar from main shaft (Fig. 2).
4. Install new slip ring assembly by reversing step 3, above.
5. Replace brushes and, if necessary, brush holder assembly as described above.
6. Replace slip ring cover.
7. Check continuity of wiring.
8. Turn on power to reel.

CORD REMOVAL

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

1. Turn off all electric power.
2. Disconnect fixtures from cord. Remove cord stop and allow cord to retract onto spool. Ensure all tension is off spring by manually rotating spool (normally counter-clockwise when

CAUTION

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

- viewed from junction box side).
3. Remove cord from spool by looping over spool flange.
4. Remove slip ring cover
5. Remove wire nuts connecting brush leads to output cord conductors.
6. Cut wire ties bundling brush leads and cord conductors together (see ELECTRICAL CONNECTIONS).
7. Remove nut holding cord clamp to spool. Slide clamp off cord. Do not discard clamp.
8. Install new cord following directions, above right.

CORD INSTALLATION

Use the following procedure to replace cord. Refer to ELECTRICAL CONNECTIONS diagram (Fig. 7), following page.

1. Remove cord as shown, below left.
2. Unspool new cord 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 cord life.
3. Remove slip ring cover (if not removed).
4. Strip cord outer jacket and individual conductors to approximately same configuration as on cord being replaced.
5. Feed stripped end of cord through grommet in side of spool. Clamp cord to spool with cord clamp. Tighten nut onto clamp.
6. Using wire nuts, connect appropriate brush leads to black and white conductors on new cord. Connect remaining brush lead and green conductor to grounding lug.
7. Check continuity of wire.
8. Replace slip ring cover.
9. While holding spool stationary, wind cord onto spool by hand in a clock-wise direction (as viewed from slip-ring side). See Fig. 3.

Figure 3

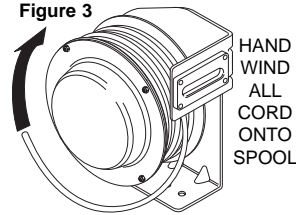
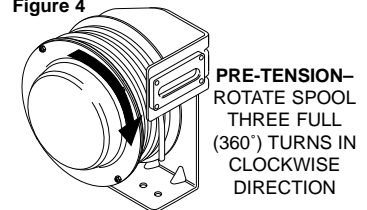


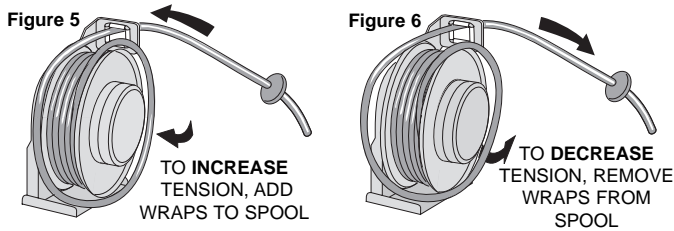
Figure 4



10. Pre-tension reel by rotating spool three full turns in clockwise direction (when viewed from slip ring side). See Fig. 4.
11. Engage ratchet lock to prevent spool from unwinding and feed cord end out through cord guide.
12. Attach and adjust cord stop. Install outlet or lamp on end of cord.
13. Turn on electric power to reel.

SPRING ADJUSTMENT

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



1. Pull about 10' of cord, allowing spool to rotate.

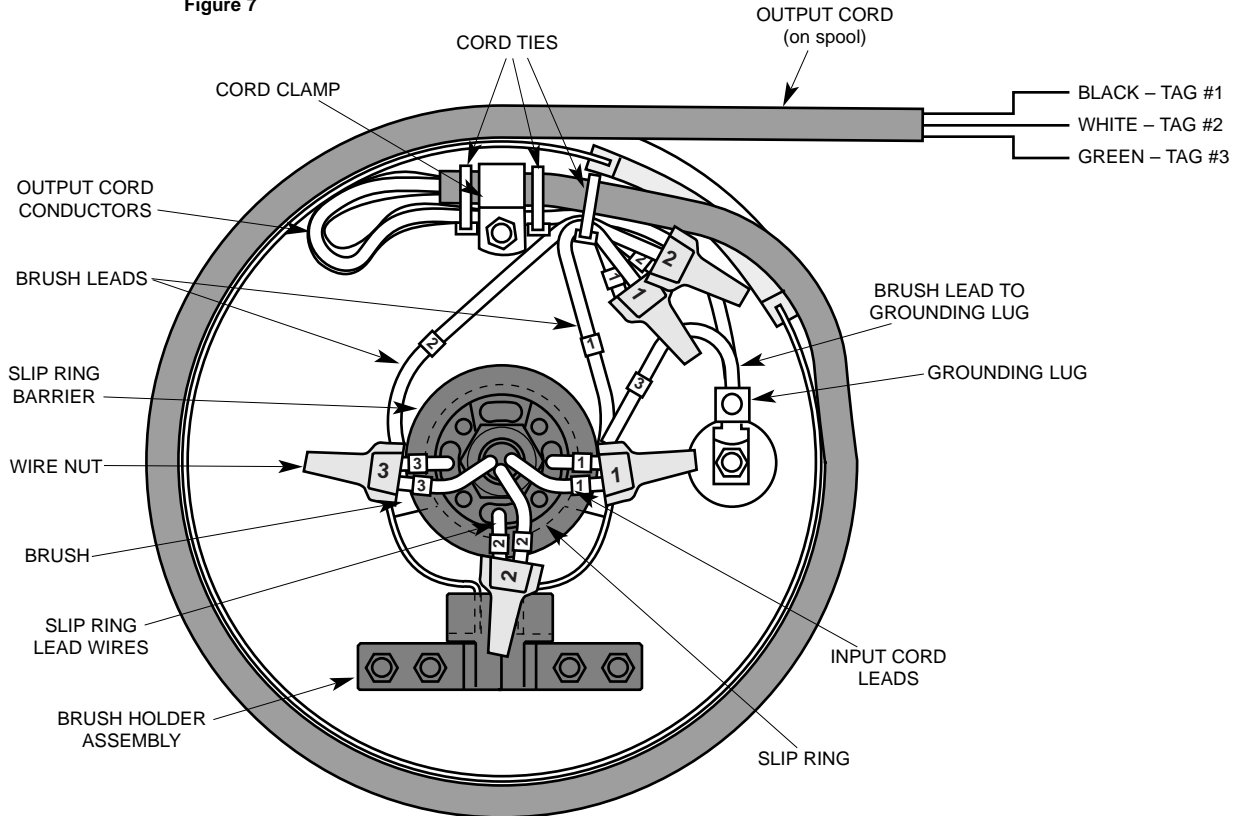
INCREASE TENSION: Without allowing spool to rotate, hand feed cord through hose guide until loop is large enough to slip onto spool. **Add** two or three wraps until desired tension is achieved. See Figure 5.

DECREASE TENSION: Without allowing spool to rotate, hand feed cord back through guide to provide slack. **Remove** one or two wraps from spool. See Figure 6.

2. Test reel operation.

ELECTRICAL CONNECTIONS

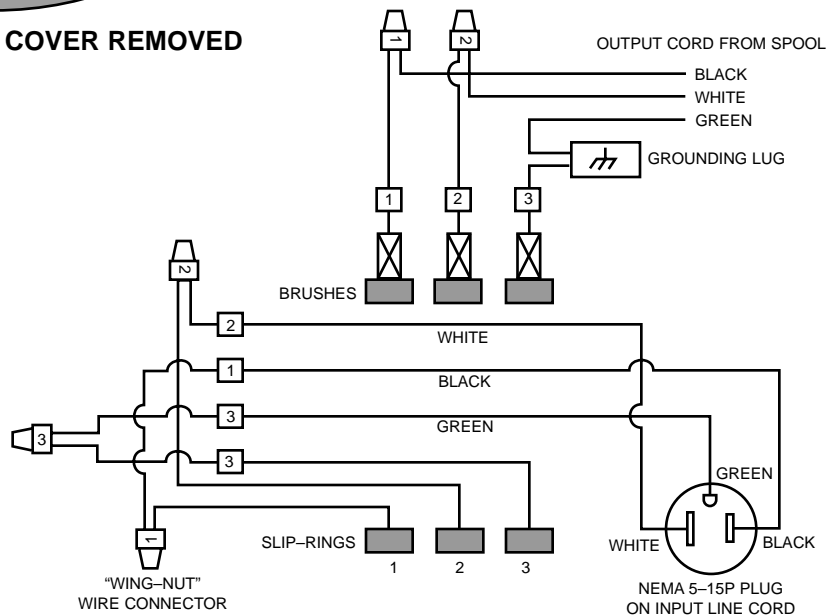
Figure 7



VIEW WITH SLIP RING COVER REMOVED

SLIP-RING DATA

- SLIP-RING AMPACITY RATED AT 20 AMP MAX PER RING.
- DO NOT EXCEED AMPERAGE RATING OF CORD CONDUCTORS.



SCHEMATIC

"WING-NUT" WIRE CONNECTOR 5 REQUIRED

NEMA 5-15P PLUG ON INPUT LINE CORD

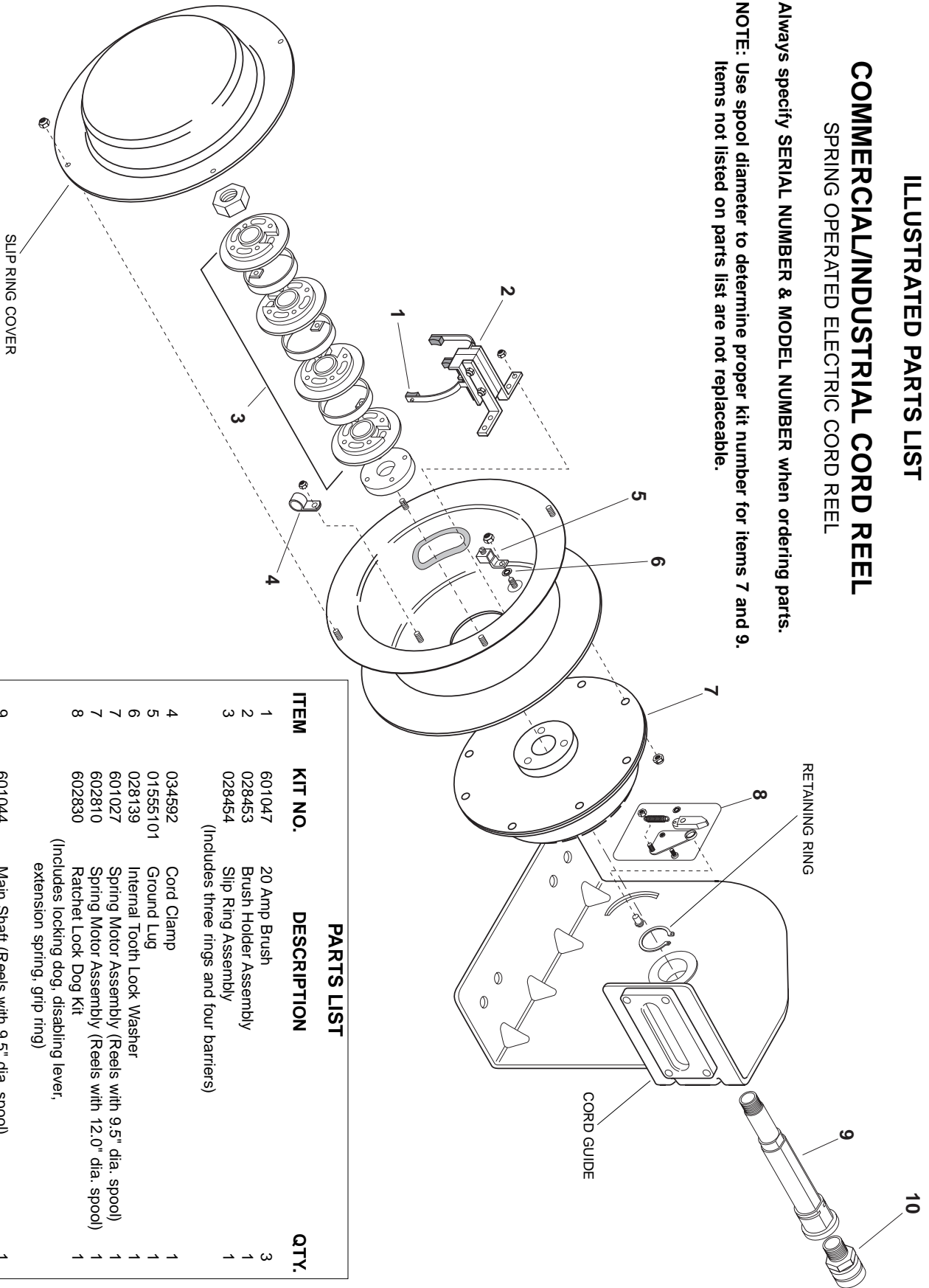
ILLUSTRATED PARTS LIST

COMMERCIAL/INDUSTRIAL CORD REEL

SPRING OPERATED ELECTRIC CORD REEL

Always specify **SERIAL NUMBER & MODEL NUMBER** when ordering parts.

NOTE: Use spool diameter to determine proper kit number for items 7 and 9.
Items not listed on parts list are not replaceable.



PARTS LIST

ITEM	KIT NO.	DESCRIPTION	QTY.
1	601047	20 Amp Brush	3
2	028453	Brush Holder Assembly	1
3	028454	Slip Ring Assembly (Includes three rings and four barriers)	1
4	034592	Cord Clamp	1
5	01555101	Ground Lug	1
6	028139	Internal Tooth Lock Washer	1
7	601027	Spring Motor Assembly (Reels with 9.5" dia. spool)	1
7	602810	Spring Motor Assembly (Reels with 12.0" dia. spool)	1
8	602830	Ratchet Lock Dog Kit (Includes locking dog, disabling lever, extension spring, grip ring)	1
9	601044	Main Shaft (Reels with 9.5" dia. spool)	1
9	602804	Main Shaft (Reels with 12.0" dia. spool)	1
10	60104802	Cord Connector	1



Workplace Solutions

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