## 4. MAINTENANCE

# **A WARNING Electrical** — Disconnect electrical power before and during maintenance.

A. Electrical and mechanical inspection of all components must be performed regularly. It is recommended that inspection be performed a minimum of once a year.

#### B. CORD

Keep cord clean to assure smoothest automatic operation. Pull cord out to its full length and allow to retract through a dampened rag. Pull out full length again and allow to retract through a clean rag liberally applied with a silicone insulating lubricant. Dow Corning Compound 4 is recommended.

### C. CORD REPLACEMENT

**WARNING** Disconnect power before servicing. Replace cord with the same size and type that Is on reel.

Remove spring following SPRING REPLACEMENT instructions 4D. Disconnect cord lead wires from ring block. Remove cord clamp and existing cord. It is recommended that the replacement cord with terminals and proper length of lead wires be purchased from the manufacturer. If purchased elsewhere, insure that the proper size crimped terminals be used. Strip jacket and conductor insulation material using existing cord as a guide for the stripping lengths. Feed cord through slot in drum until cord jacket is approximately 5/8" beyond cord clamp. Attach cord clamp and connect lead wires to ring block. The lettering designations stamped into the drum, R. B. G. and W. refer to red, black, green, and white wire color code. Wind remaining cord on drum and feed cord through outlet. Attach ball stop assembly and accessories, that were on existing cord. Reassemble spring cartridge following SPRING REPLACE-MENT instructions 4D

**WARNING** Check continuity before connecting electrical power. The green wire Is grounded to the frame of the reel for all models and cannot be used as a power conductor.

### **D. SPRING REPLACEMENT:**

**A WARNING** Disconnect electrical power before servicing.

A CAUTION If reel has tension, it must be removed before replacement procedures. If reel will not develop tension or retract cord, proceed to instruction D3.

### 1. SPRING TENSION REMOVAL/RATCHET LOCKED OUT MODELS:

Disconnect end of cord from where it is attached to operating equipment and allow the cord drum to slowly RL5360 \_RL5360 \_RL5365 \_RL5367 \_RL5368 retract cord until spring tension is removed.

### 2. SPRING TENSION REMOVAL/RATCHET ENGAGED MODELS:

- Insure that ALL the cord is wrapped on drum to minimize spring tension.
- Pull out cord far enough to allow one full wrap of cord to be removed from drum and slowly allow cord to retract until ratchet engages. Loop cord over reelside and remove one full wrap of cord from drum. Repeat procedure until all tension is removed.

#### 3. SPRING CARTRIDGE REMOVAL:

Remove the three screws mounting the spring cartridge to drum and pull cartridge outward. Reverse procedure to replace spring cartridge making sure the inner spring hook engages ratchet hub. Adjust spring tension following SPRING TENSION instructions 2D.

**A** WARNING The spring cartridge is a sealed unit. DO NOT attempt to remove spring. Serious Injury could result from removal of spring from the cartridge.

### E. RINGS AND BRUSHES:

A WARNING DISCONNECT ELECTRICAL POWER **BEFORE SERVICING** 

Periodic check-up of the current collection unit should be a regular practice. Loss of brush spring tension, pitting of brushes, or scored surfaces call for immediate replacement before complete breakdown occurs. Dirt, oxidation, or other contaminants should be removed from rings and brushes.

#### 1. BRUSHES:

Brushes may be accessed after removal of cover. Disconnect lead wires and remove brush blocks and check for above conditions. Insure brushes are free floating in holders and that the brush spring operates properly.

### 2. SUP RINGS:

The slip rings may be viewed through the openings for the brush blocks. Look through both openings and rotate drum to check condition of the four circular rings.

### 3. SLIP RING REPLACEMENT:

Remove spring tension and spring cartridge per SPRING REPLACEMENT instructions 4D. Disconnect cable lead wires from ring block terminals and remove ratchet hub by loosening set screw. Remove washer and pull drum and reelside assembly off main shaft. Remove four screws holding ring block to drum and reelside assembly. Replace ring block and reverse procedure to reassemble. Set-up spring tension per spring tension instructions 2D.

# A CAUTION Check continuity before connecting electrical power.

#### F. LUBRICATION:

The spring has been lubricated at the factory and under normal operating conditions does not require further attention.

### 5. RECORDS:

Retain this instruction sheet for reference during inspection and maintenance procedures. Check box below that corresponds to catalog number on the Reelite nameplate for your records.

Date	of	insta	llation:

All statements, technical information and recommendations herein are based upon data and tests believed to be reliable. The accuracy or completeness of such data or test results are not guaranteed. Pursuant to EGS Appleton Electric LLC Terms and Conditions of Sales, because EGS Appleton neither knows nor controls the applications or conditions in which the product will be used, the purchaser must determine the appropriateness of the product for the Intended use and the product In such applications or conditions.



830154-1 **INSTRUCTION SHEET** 

### An Emerson/General Signal Joint Adventure

### **Applications**

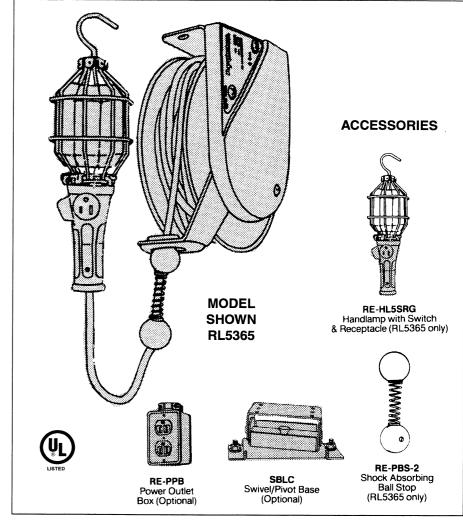
- · Commercial/industrial,50 foot portable cord reel for dry, indoor locations, designed to safely transfer a continuous retractable power supply, portable lighting or general utility service.
- · All steel construction, suitable for base down, ceiling or wall mounting.
- Typical applications include industrial/ MRO, warehouse, loading docks, commercial building, OEM machinery and equipment, OSHA regulated service garages, muffler and oil change shops, institutions and state agencies.
- · Design options for single or three phase power source 250 volt maximum and supplied with #16 or #14 gauge three conductor or #14 gauge four conductor SJOOW-A,300 volt cord.
- · Reel models are available with cable only or with various handlamp and accessory options.

#### **Features**

- · All steel construction provides added strength for rugged commercial/industrial dry location service.
- Available in 50 feet #16 gauge 3 conductor, 50 feet #14 gauge - 3 conductor, and 45 feet #14 gauge - 4 conductor. All with high visibility, yellow 300V jacket, U.L., CSA and OSHA approved oil resistant thermoset cord.
- · Collector ring and brush assembly rated at 15 amp,250 volt, three conductor (single phase) and four conductor (three phase) construction.
- Three foot lead in power cord provides portable connection installation.
- · Compact design offers long cable capacity in a small unit, advantageous to the OEM manufacturers.
- Overhung drum design offers simple field cable tension adjustment without cable disconnection.
- · Adjustable cable guide provides for various reel mounting positions.
- · Cable locking ratchet (included as standard) holds cable at desired length. Ratchet can be disengaged when constant cable tension is desired.
- · Reels having handlamp without switch in the handle are operated by an internal automatic switch located inside the reel. Power to the handlamp is actuated when cable is pulled out at any length and ratchet is locked. Power is automatically turned off when all cable is retracted back into the reel.

# **RL5000 Series Heavy Duty Commercial/Industrial Cord Reels MODELS RL5360, RL5340, RL5365, RL5440**

TYPE SJOOW-A CORD • 16 to 14 GAUGE • 3 to 4 CONDUCTORS



# **Options**

- · Combination mounting base converts to a 330° ceiling swivel or a 100° wall pivot base.
- · Power outlet box of non-conductive rubber and plastic construction complete with two duplex 3-wire,15 amp. 125 volt receptacles.
- Three handlamps available.100 watt incandescent with reflector, switch and receptacle, 100watt incandescent (OSHA approved), and 13 watt fluorescent with ballast and switch in handle.

### **Standard Materials**

- Base, drum, spring cartridge cover and cable guide arm: steel.
- · Brush cover: aluminum.

- · Cable outlet guide: Acetal.
- · Collector rings: brass.
- Brushes: high density copper graphite.
- Cord is high visibility yellow type SJOOW-A - thermoset, 300 volt rated .

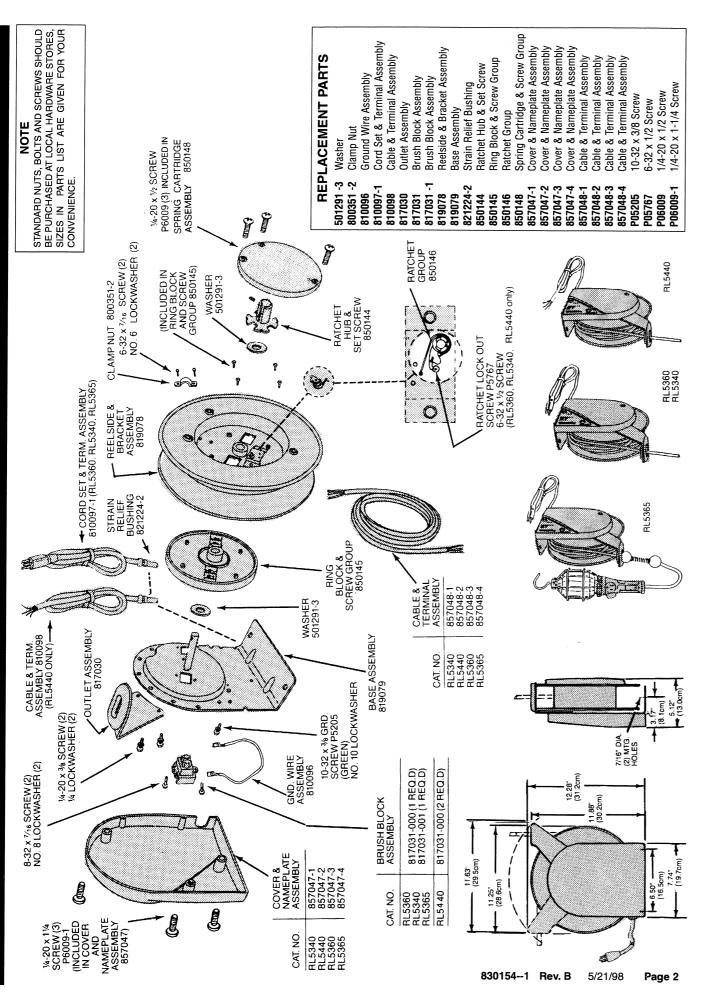
### Standard Finish

- Base and housing: Gray Hammer Epoxy/Polyester Powder Coat.
- Drum: Black Epoxy Powder Coat.

# Compliances

- UL listed 914H†
- N.E.C.
- OSHA
- † Reels with handlamps are UL Listed. Reels without handlamps are UL Recognized Components.

360, RL5340, RL5365, RL5440 Series Heavy Duty Comme RL5000



# **INSTALLATION AND MAINTENANCE INSTRUCTIONS**

- The RL5000 Series Reelites are intended for indoor, dry locations in accordance with the National Electric Code.
- THE REELS MEET THE REQUIREMENTS OF UL Standard 355 for General use Cord Reels.

# 1. WARNING AND CAUTION NOTES:

# MARNING General

- A. 1. Do not modify the cord reel in any way. Modification can affect safety and reliability.
  - 2. Improper use or failure to follow these instructions could result in death, serious injury or property damage.

# WARNING Electrical

- Disconnect electrical power before and during installation, adjustments, and maintenance.
  - 2. Do not overload. The amperage and voltage indicated on the nameplate of the reel must not be exceeded.
  - 3. The green wire is grounded to the frame of the reel for all models and cannot be used as a power conductor.
- 4. Always connect reel to a three blade grounded outlet for models equipped with a three blade plug. (4-wire models must be connected to system ground.)
- 5. Use only rated lamp size on handlamp equipped models.

# **WARNING Operational/Maintenance**

- C. 1. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this instruction sheet for future reference.
  - 2. Do not induce excessive stress on cord. Adjust cord outlet properly. Follow cord outlet instructions 2B.
  - 3. Check cord jacket frequently for damage, replace as necessary.
  - 4. Do not allow cord to retract without restraining the retraction speed.
  - 5. Do not engage ratchet mechanism abruptly. Abrupt engagement induces excessive shock loads.
  - 6. Do not exceed the unwind capacity of the cord. It is suggested that a minimum of one wrap of cord remain on the drum at all times to minimize tension against cord clamp and lead wires.

## 2. INSTALLATION AND ADJUSTMENTS:

**WARNING Electrical** — Disconnect electrical power before Installation and adjustments.

### A. MOUNTING:

Reel may be mounted in any position that allows the mainshaft to be horizontal and the center line of the drum in line with cord payout.

### B. CORD OUTLET:

The cord outlet can be adjusted in multiple positions in an arc around the base, by means of two screws that are accessible after removal of cover. Adjust the outlet to a position so that the cord feeds through the opening in a straight line without bends.

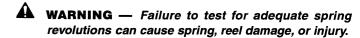
### **C. RATCHET ENGAGEMENT:**

Models RL5360, RL5340, and RL5440 are furnished without accessories and are set-up for constant tension duty. To engage the ratchet mechanism, if required, remove the spring cartridge following the spring replacement instructions 4D.

- Remove the set screw which locks out the pawls.
- Rotate the drum one full turn in either direction to ensure that the ratchet mechanism is engaging properly.
- Replace the spring cartridge and follow the spring tension instructions 2D. All other models have an accessory attached and furnished with the ratchet mechanism engaged.

#### D. SPRING TENSION:

- 1. Pretension (initial spring set-up) is required to retract all the cord on the reel drum and has been provided at the factory, for the size and length of cord furnished with each
- 2. To pretension the reel after maintenance or adjustment procedures, insure that all the cord is wrapped on the drum.
- Pull cord out far enough to allow one full wrap of cord to be placed back on drum. Hold drum from turning by engaging ratchet, if so equipped, or block drum to prevent rewinding.
- Loop cord over reelside and place one full wrap of cord on drum. Repeat procedure to place a total of two pretension turns on reel.
- Pull cord out completely to ensure enough spring revolutions remain to retract all the cord on the reel drum.



## 3. OPERATION:

- A. Models with an accessory attached to the end of cord are provided with a cord locking ratchet mechanism engaged. Models without an accessory attached are provided with the ratchet mechanism locked out (constant tension duty).
- **B.** Ratchet engaged models:
- 1. The ratchet mechanism is designed to hold the cord at the desired length and may be engaged approximately every 90° of drum rotation.
- 2. To engage ratchet, pull out cord to the desired length, and slowly allow cord to retract until held. Repeat procedure if cord is not held.
- 3. To release ratchet, pull out cord a few inches and guide cord back onto the reel. Repeat procedure if cord does not retract.

### **A** CAUTION

DO NOT allow cord to retract without restraining the retraction speed. Injury may occur to operator and / or damage may occur to the cord reel.

#### C. RATCHET LOCKED OUT MODELS:

Constant tension duty models automatically rewind any excess or slack cord on to the reel drum. To engage ratchet, if required, follow instructions 2C, Ratchet Engagement.