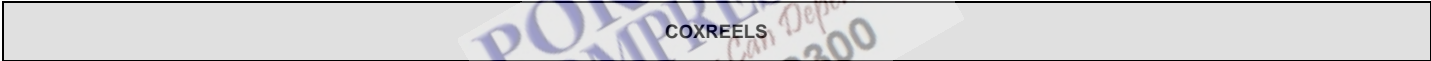
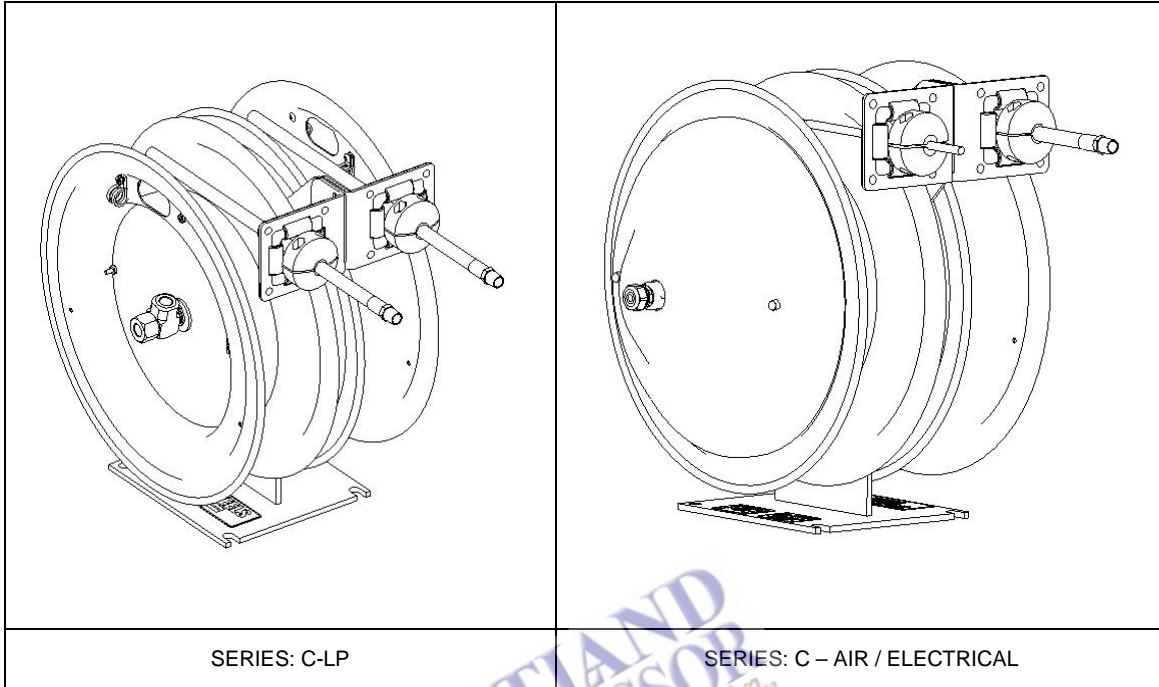




SPRING RETRACTABLE AIR/ELECTRIC REELS:
SERIES C (AIR/ELECTRIC)



The technical data and images which appear in this manual are for informational purposes only. **NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE CREATED BY THE DESCRIPTIONS AND DEPICTIONS OF THE PRODUCTS SHOWN IN THIS MANUAL.** COXREELS makes no warranty (and assumes no liability) as to function of equipment or operation of systems built according to customer design or of the ability of any of its products to interface, operate or function with any portions of customer systems not provided by COXREELS.

COXREELS agrees to repair or exchange the goods sold hereunder necessitated by reason of defective workmanship and material discovered and reported to COXREELS within two years after original invoice date.

Except where the nature of the defect is such that it is appropriate, in COXREELS' judgment, to effect repairs on site, COXREELS' obligation hereunder to remedy defects shall be limited to repairing or replacing (at COXREELS' option) FOB COXREELS Factory, any part returned to COXREELS at the risk and cost of Buyer. Defective parts replaced shall become the property of COXREELS.

COXREELS shall only be obligated to make such repair or replacement if the goods have been used by Buyer only in service recommended. COXREELS is not responsible for defects which arise from improper installation, neglect, improper use of or from normal wear and tear.

COXREELS obligation shall be limited by the manufacturer's warranty (and is not further warranted by COXREELS) for all parts procured from others according to published data, specifications or performance information not designed by COXREELS.

COXREELS further agrees to replace or at COXREELS' option to provide a refund of the sales price of any goods that do not conform to applicable specifications or which differ from that agreed to be supplied which non-conformity is discovered and forthwith reported to COXREELS within 30 days after shipment to the Buyer. COXREELS' obligation to replace or refund the purchase price for non-conforming goods shall arise once the Buyer returns such goods FOB COXREELS Factory at the risk and cost of Buyer. Goods replaced by COXREELS shall become property of COXREELS.

COXREELS liability on any claim, whether in contract, tort (including negligence), or otherwise, for any loss or damage arising out of, connected with, or resulting from the manufacture, sale, delivery, resale, repair, replacement or use of any products or services shall in no case exceed the price paid for the product or services or any part thereof which give rise to the claim. In no event shall COXREELS be liable for consequential, special, incidental or other damages, nor shall COXREELS be liable in respect of personal injury or damage to property not the subject matter hereof unless attributable to gross misconduct of COXREELS, which shall mean an act or omission by COXREELS demonstrating reckless disregard of the foreseeable consequences thereof.

COXREELS is not responsible for incorrect choice of models or where products are used in excess of their rated and recommended capacities and design functions or under abnormal conditions. COXREELS assumes no liability for loss of time, damage or injuries to property or persons resulting from the use of COXREELS products. Buyer shall hold COXREELS harmless from all liability, claims, suits and expenses in connection with loss or damage resulting from operation of products or utilization of services, respectively, of COXREELS and shall defend any suit or action which might arise there from in Buyer's name – provided that COXREELS shall have the right to elect to defend any such suit or action for the account of Buyer. The foregoing shall be the exclusive remedies of the Buyer and all persons and entities claiming through the Buyer.

NOTE: All designs, specifications, and dimensional data contained in this publication are subject to change without notice.

**WARNING – APPLICATION**

- ❖ THE PRODUCTS IN THIS INSTALLATION AND MAINTENANCE MANUAL HAVE BEEN TESTED UNDER CONTROLLED LABORATORY CONDITIONS TO MEET SPECIFIC TEST CRITERIA. THESE TESTS ARE NOT INTENDED TO REFLECT THE PERFORMANCE OF THE PRODUCTS OR ANY OTHER MATERIAL IN ANY SPECIFIC APPLICATION, BUT ARE INTENDED TO PROVIDE THE USER WITH APPLICATION GUIDELINES. THE PRODUCTS ARE INTENDED FOR USE BY KNOWLEDGEABLE PERSONS HAVING THE TECHNICAL SKILL NECESSARY TO EVALUATE THEIR SUITABILITY FOR SPECIFIC APPLICATIONS.

**WARNING – USER RESPONSIBILITY**

- ❖ THE USER, THROUGH ITS OWN ANALYSIS AND TESTING, IS SOLELY RESPONSIBLE FOR MAKING THE FINAL SELECTION OF THE SYSTEM AND COMPONENTS AND ASSURING THAT ALL PERFORMANCE, ENDURANCE, MAINTENANCE, SAFETY AND WARNING REQUIREMENTS OF THE APPLICATION ARE MET.
- ❖ TO THE EXTENT THAT COXREELS PROVIDE COMPONENT OR SYSTEM OPTIONS BASED UPON DATA OR SPECIFICATIONS PROVIDED BY THE USER, THE USER IS RESPONSIBLE FOR DETERMINING THAT SUCH DATA AND SPECIFICATIONS ARE SUITABLE AND SUFFICIENT FOR ALL APPLICATIONS AND REASONABLY FORESEEABLE USES OF THE COMPONENTS OR SYSTEM.

**WARNING – SAFETY**

- ❖ READ ALL SAFETY INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE, OR MAINTAIN THIS PRODUCT. ONLY QUALIFIED PERSONNEL SHOULD UNDERTAKE THE INSTALLATION AND COMMISSIONING OF THIS PRODUCT. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE.
- ❖ FAILURE TO FOLLOW RECOMMENDED APPLICATION INFORMATION AND RECOMMENDED PROCEDURES FOR SELECTION, INSTALLATION, CARE, MAINTENANCE AND STORAGE OF REEL ASSEMBLY, SWIVEL, HOSE, COUPLINGS OR HOSE ASSEMBLIES MAY RESULT IN FAILURE TO PERFORM PROPERLY AND MAY RESULT IN DAMAGE TO PROPERTY AND SERIOUS BODILY INJURY.
- ❖ FOLLOW GOOD MAINTENANCE PRACTICES – ESTABLISH A PROGRAM OF INSPECTION, TESTING AND REPLACEMENT OF REEL COMPONENTS, ACCESSORIES AND OR BRACKETS FROM FACTORS INCLUDING:
 - SEVERITY OF APPLICATION, FREQUENCY OF EQUIPMENT USE, AND PAST PERFORMANCE OF REEL COMPONENTS
- ❖ ONLY PROPERLY TRAINED PERSONS SHOULD INSPECT, TEST OR SERVICE REEL AND HOSE/CABLE ASSEMBLIES. PERIODIC UPDATING OF TRAINING IS RECOMMENDED. DOCUMENT MAINTENANCE, INSPECTIONS AND TESTING.
- ❖ **PROP 65 WARNING:** Handling of brass material on this product exposes you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. "WASH HANDS AFTER USE"

SAFETY**PRESSURE WARNINGS**

- This equipment should be properly installed before use in accordance with local codes and ordinances.
- The pressure to and from the hose reel should be released and disconnected from the hose reel before any service functions are performed.
- This hose reel must not be used for pressure greater than the rating listed in the COXREELS catalog / website www.coxreels.com.

**OPERATIONAL WARNINGS**

- Exercise care when handling the hose reel during normal operation. Some hose reels have a rotating drum powered by a spring under tension or chain, sprocket and gears.
- Do not use hose different from that for which the reel is intended. Changes in diameter, weight per foot, length of hose or flexibility (Minimum Bend Radius) will affect the operation of the reel.
- Mounting hardware and fasteners should be installed to maintain tightness under vibration and checked periodically to ensure tightness.
- Overhead installation mountings should be such that the reel is not supported by bolts in tension. A safety chain, cable, enclosure or netting is strongly recommended to minimize damage and/or possible injury in the event of a mounting failure.

**MAINTENANCE WARNINGS**

- Modification of the equipment may cause excessive wear and will void the warranty. Contact COXREELS regarding changes or modifications of equipment which could affect reliability or safety.
- **DO NOT DISASSEMBLE A SPRING MOTOR FOR ANY REASON!** Serious personal injury could result. Some hose reels are equipped with a spring under tension. Contact COXREELS for assistance.

800-COX-REEL
Toll Free Fax: 800-229-REEL
Email: info@coxreels.com

**SPECIFICATIONS & LISTINGS**

- The identified Series of Hose Reel products within this manual are not certified or listed by any independent certifying or regulatory body.
- This series of hose reels is intended for industrial use and are provided with permanent mounting means, with the exception of the portable reel models.

**PRESSURE & TEMPERATURE RATING**

- All reels covered in this manual with or without hose have specific P.S.I. ratings. (Please refer to the COXREELS catalog, website or contact Customer Service for reel specific data). Reels should not be used at pressures greater than the rating of the hose, swivel, plumbing or overall reel rating.
- Multipurpose hose is installed with tube compounded for maximum oil resistance. Hose can be used for air, water, oil and many other chemical applications.
- Operational temperature ranges vary across the wide range of hose options. (Please refer to the COXREELS catalog, website or contact Customer Service for hose specific data). Hose reels should not be used at temperatures below or above the rating of the hose.
- The operational rating of a reel not equipped with hose is determined by the capacity of the installed hose. The pressure rating of the reel without hose must not be greater than the operational capacity of a reel. (Please refer to the COXREELS catalog, website or contact Customer Service for reel/hose specific data). Variations in the OD of higher rated hose will affect the operational capacity of the reel.

**LABELS & MARKINGS**

Hose Reels with and without hose

- The marking of the hose reel provide with or without hose includes the following
 - The label on the frame includes the COXREELS name and Logo, the product catalog number, the individual product serial number, PSI rating and what type and length of hose intended for use on the reel.
 - The maximum pressure rating for every hose reel supplied without hose is marked on the COXREELS Identification Label. In absence of this information, refer to website, catalog, or customer service. Actual rating is determined by the installed hose and is not to exceed the indicated maximum operational rating. The pressure rating of the hose installed on reels provided without hose must be marked on the label upon installation.

**PERSONAL SAFETY**

- Ensure reel has been properly installed before connecting supply line.
- Before connecting to reel, be certain supply line does not exceed rated pressure of the hose reel or voltage / amperage rating on cable reel.
- Thoroughly review the "Hose Installation" instructions to properly install hose.
- Perform "Operational Check" per instructions to ensure reel is operating properly.
- If a leak should occur after applying pressure to the reel, immediately turn off pressure source and discontinue supply line pressure.



WARNING: Prevent static sparking. When working around flammables, ensure that the hose reel, hose, and equipment are properly grounded.

INSTALLATION



WARNING: READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE, OR MAINTAIN THIS PRODUCT. ONLY QUALIFIED PERSONNEL SHOULD UNDERTAKE THE INSTALLATION AND COMMISSIONING OF THIS PRODUCT. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE.



WARNING: REEL SHOULD NOT BE INSTALLED ABOVE 15 FEET MAXIMUM FROM THE FLOOR.

PERSONAL SAFETY

- Ensure reel has been properly installed before connecting supply line. Note: Reel should NOT be installed above 15 feet maximum from the floor.
- Before connecting to reel, be certain supply line does not exceed rated pressure of the air side and specifications of electrical side.
- If reel was purchased without hose, thoroughly review the "Hose Installation" instructions to properly install hose.
- If reel was purchased without cable, thoroughly review the "Cable Installation" instructions to properly install cable.
- Perform "Operational Check" per instructions to ensure reel is operating properly. NEVER use a spring retractable reel that is not performing as intended.
- If a leak should occur after applying pressure to the reel, immediately turn off supply source and discontinue supply line pressure.
- Inspect for frayed, worn, or lacerated hose or cable prior to using reel.
- When pulling on cord side of reel, always use cord itself. Never pull on the attachment.
- Use only compressed air on the "Air Side" of reel. Electrical hazards exist when operating with water or other substances.

MOUNTING OF REEL

- Reel is supplied with guide arm in standard positions as shown in figure 1.0.
- Guide arm may be adjusted to desired location as shown in figure 2.0.
- Remove swivel on air side of reel.
- Remove retaining clip and spacer from axle.
- Carefully pull out reel drum approximately 1" from center post or just enough to access arm guide bolts.
- Remove bolts and reposition arm guide to desired location.
- Re-assemble reel in reverse order.
- To mount reel to a solid structure you will need four 7/16" or M12 bolts, washers, and nuts. Four masonry bolts may be used depending on mounting application. Mounting hardware is NOT provided. The mounting base of the reel has two ½" slots and two ½" holes. Mounting patterns will vary depending on model.
- Loosely fit two pieces of mounting hardware to ceiling/floor/or wall so that reel can be slid into position. Fit reel. Install two pieces of hardware in other end of reel. Securely fasten all bolts and nuts.

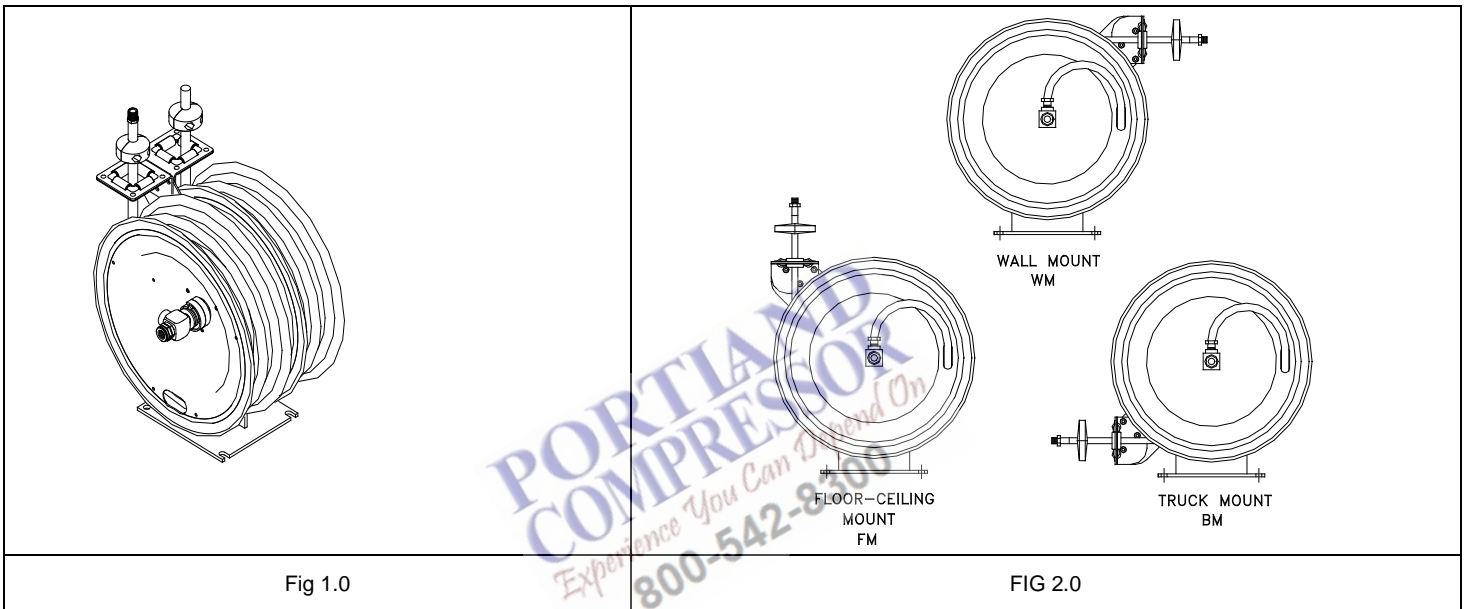


Fig 1.0

FIG 2.0

INSTALLATION OF INLET HOSE

- Apply thread sealant to inlet hose and connect to the swivel joint on reel. Note: A swivel type connector is required on supply line.
- **DO NOT** over tighten and damage swivel or threads.



CAUTION: IT IS IMPORTANT TO USE A "FLEXIBLE" INLET HOSE. DO NOT USE SOLID PIPING OR RESTRAIN INLET HOSE AS TO CAUSE ANY SIDE FORCE ON SWIVEL JOINT. THE WARRANTY IS VOID IF NOT PROPERLY INSTALLED.

- Flush some product through the system before connecting inlet hose to the source. Connect end to supply source.
- Install inlet hose into swivel assembly by hand tightening, followed by ½ turn with wrench. **DO NOT** over tighten as it may damage swivel.
- If reel includes hose (Otherwise, See Installation of Hose), flush some product through system before connecting end fitting, nozzle, or tool.
- Apply thread sealant to outlet hose fitting. Connect end, nozzle, or tool as desired.
- If hose stopper adjustment is required to allow easy reach of end fitting or tool. Latch reel at approximate desired location; loosen (two) ball stop bolts. Move ball stop and tighten bolts. Unlatch reel.

OPERATIONAL CHECK

- Check reel for correct operation by slowly pulling out hose/cable. A clicking noise will be heard after each half revolution of the drum.
- **LATCH** the reel. Pull out the hose/cable and allow it to slightly retract after the first, second or third "click" is heard.
- **UNLATCH** the reel. Slowly pull the hose/cable until the clicking noise stops, and then allow the hose/cable to retract. The hose/cable stopper should rest against the roller guide.



CAUTION: DO NOT ALLOW HOSE/CABLE TO RETRACT WITHOUT RESTRAINING RECOIL SPEED. NEVER LET GO OF THE HOSE/CABLE WHEN REWINDING.

- Apply line pressure and inspect for leaks. Periodically check hose for improper wear and swivel for possible leaks.
- Reels are shipped with approximately three pre-wraps of tension. This is adequate for most applications. However, if your application requires more or less tension, see "Spring Tension Adjustment" instructions.
- Lubrication is NOT required.



INSTALLATION OF OUTLET HOSE



NOTE: Before proceeding, ensure that you are installing the proper size, length and type of hose that the reel is rated for. Consult factory if unsure of rating. Damage may occur if wrong hose is installed.

- Securely stabilize the reel.
- Wind the reel drum clockwise (facing the swivel) until the spring is tight.
- **Use Extreme Caution!** Back off approximately two turns and lock the reel drum to keep from rotating.
- Insert the MALE fitted end of the hose through the roller guide arm and through the cutout in the side of the drum flange.
- The MALE hose fitting should now be on the outside of the drum. Apply thread sealant, connect hose fitting to the swivel joint and secure the hose rigid with the (two) hose clamps.
- **CAREFULLY** release the locking ratchet and **SLOWLY** allow the hose to retract onto the reel.

SPRING TENSION ADJUSTMENT

- Release line pressure prior to making spring adjustments.
- Disconnect inlet hose.
- Pull out approximately 6 feet (2m) of hose and latch the drum.
- Add or subtract one wrap of hose as desired to acquire the proper tension on the reel.



NOTE: Spring tension adjustment is accomplished by adding wraps of hose around the drum (to increase tension) or subtracting wraps of hose (to decrease tension).



CAUTION: Improper tensioning of spring or adding too many pre-wraps may cause damage to spring mechanism. Only authorized personnel should make adjustments.

- Unlatch drum and check for proper tension. Connect Inlet hose.

SWIVEL SEAL REPLACEMENT

- Remove inlet hose from swivel.
- Remove swivel from reel by unscrewing swivel from shaft. Disconnect hose from swivel.
- Remove retaining ring on swivel; pull out shaft from body.
- Replace the seals, lubricate and reassemble swivel.
- Fit hose to swivel then fit swivel to reel. **Do not over-tighten.**
- Reconnect inlet hose and test for leakage.

REPLACEMENT/INSTALLATION OF OUTPUT CABLE

- Disconnect power source.
- Wind the Reel Drum clockwise (facing the cover) until the Spring is tight.
- **Use Extreme Caution!** Back off approximately two turns and lock the Reel Drum from rotating.
- Remove Input Strain Relief Cap. Remove Cover.
- Disconnect existing Output Cable Wires from Brushes & Ground, remove Cable Clamps/Strain Relief bushing and remove cable from reel.

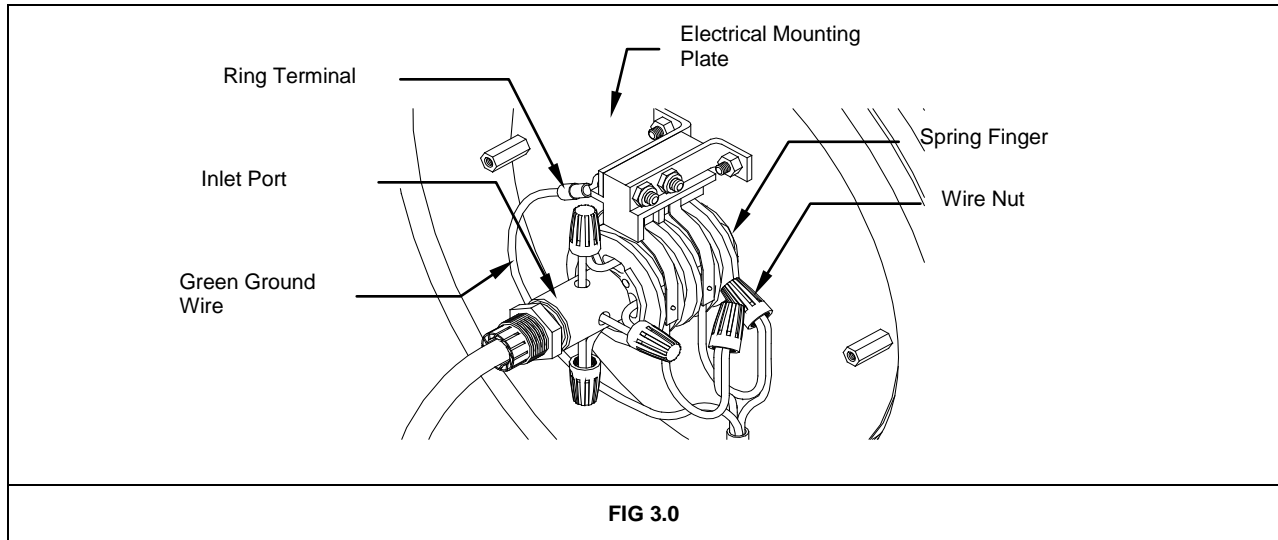


NOTE: Be sure to note which wire goes to which Brush.

- Insert the bare wire end of the Cable through the Roller Guide Arm and through the cut-out in the side of the Drum Flange.
- The bare wire end should now be on the outside of the Drum. Secure the Cable using the Cable Clamps/Strain Relief Bushing allowing approximately 10" of Cable through second Clamp/Bushing.
- Attach Ring Terminal to the Green Wire on the Output Cable and secure to Stud Post. Connect other wires, by color, to their respective Brush. **(Wire path must begin and end with the same color.)**
- Install Cover and replace input strain relief cap.
- **CAREFULLY** release the Locking Ratchet and **SLOWLY** allow the Cable to retract onto the Reel.

SLIP RING BRUSH REPLACEMENT

- Disconnect power source.
- Remove input strain relief cap. Remove cover. See Figure 3.0.
- Disconnect brush from wire and remove spring finger.
- Reverse above procedure to re-assemble.



SPRING CANISTER REPLACEMENT (AIR SIDE)

- Pull out approximately 3 feet (1m) of hose and latch the reel.
- Remove outlet nozzle, gun or tool and hose stopper.
- Carefully unlatch the reel and **firmly hold the drum**. Allow the drum to **slowly** unwind until it stops.
- Remove the retaining ring, spacer and swivel unit.
- Remove the two nuts located on the support post side inside the drum cavity. **Do not** attempt to remove the spring canister nuts.
- Pull spring canister off drum and axle shaft.
- Reverse above procedure to re-assemble.
- Re-tension the reel by turning the drum three complete turns clockwise (from swivel side) and latch the drum.
- Feed the hose through the hose guide. Fit hose stopper, then unlatch the drum. Hose stopper should sit snugly against the hose guide.



CAUTION: Release line pressure prior to making any repairs or adjustments to the reel.

SPRING CAN REPLACEMENT (ELECTRICAL SIDE)

- Pull out approximately 3 feet (1m) of cable and latch the reel.
- Release all spring tension by removing five wraps of cable from reel.
- Carefully unlatch the reel and **firmly hold the drum**. Allow the drum to **slowly** unwind until it stops.
- Remove the input strain relief cap. Remove two acorn nuts to take off cover.
- Refer to figure 3.0 to become familiar with components before performing the following steps.
- Disconnect wires at wire nuts. Remove inlet port from the main axle.
- Remove two coupling nuts located on the electrical mounting plate. Allow the electrical assembly to swing out of the way.
- Remove two spring canister mounting nuts from opposite side of drum assembly.
- Pull spring canister off drum shaft.
- Reverse above procedure to re-assemble.
- Re-tension the reel by turning the drum three complete turns and latching in place. Follow "Spring Tension Adjustment" procedure.



CAUTION: Disconnect from power source prior to making any repairs or adjustments to the reel.


REPLACEMENT/INSTALLATION OF LEAD-IN CABLE


- Remove Input Strain Relief Cap. Remove Cover.
- Disconnect existing Lead-in Cable Wires from Slip Rings and remove Lead-in Cable. **Note: Be sure to note which wire goes to which Slip Ring.**
- Strip insulation from Cable approximately 2" from Cable end, exposing the individual wires.
- Thread Cable through Strain Relief Cap, Strain Relief, Cover and Inlet Port, respectively. Thread each wire through the holes provided in the Inlet Port.
- Connect wires to Slip Rings using Wire Nuts. **(Wire path must begin and end with the same color.)**
- Install Cover and secure in place. Replace input strain relief.



TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	REMEDY
HOSE/CABLE WILL NOT FULLY RETRACT	a) Outlet nozzle or attachment is too heavy. b) Spring is fatigued. c) Field installed hose/cable is too long.	a) Add spring tension. See "Spring Tension Adjustment". b) Add spring tension. See "Spring Tension Adjustment". Replace Spring Canister if required. c) Call local Distributor for correct specified hose/cable length.
HOSE/CABLE WILL NOT RETRACT AT ALL	Spring has lost all tension or has possibly broken.	a) Reinstall Spring Tension b) Replace Spring Canister. See "Spring Canister Replacement".
REEL WILL NOT LATCH	a) Incorrect operation. b) Dog spring or locking cam is broken or worn.	a) Reel latches on first, second, third or fourth "click". after forth "click" it automatically rewinds. b) Replace dog spring or locking cam.
NO ELECTRICAL POWER AT OUTPUT END OF CABLE.	a) Wires are severed. b) Wires have become disconnected. c) Slip ring / brushes are worn	a) Replace entire cable. See instructions. b) Check all connections ensuring they are properly wired. c) Replace slip ring / brushes. See instructions.
BREAKER OR FUSE IS REPEATEDLY BLOWN.	a) Application does not conform to the electrical rating of the reel. b) Wires are broken or shorted. c) Field installed cable was not wired properly.	a) Check electrical rating on reel label. Do not attempt to use a reel that is not rated properly for the application. b) Check wiring path on reel to determine if wires are broken or shorted. Correct problem. See instructions for wiring. c) Review wiring. See instructions to correct problem.
FLUID LEAKS FROM SWIVEL	Swivel seals are damaged or worn.	Replace swivel seals. See "Swivel Seal Replacement". Caution: Be sure leak is not at Hose Fitting!
HOSE/CABLE LOCKS UP WHEN FULLY EXTENDED	Hose/cable clamp is in the incorrect position.	Relocate hose/cable clamp to optional location.
SWIVEL ASSEMBLY IN NOT MOVING FREELY OR LOCKING UP	a) Inlet hose fitting has been over-tightened b) Inlet hose is not flexible causing side force on swivel.	Remove and examine swivel assembly for damage. Replace as necessary. Properly tighten inlet hose. Hand tighten fitting, plus ½ turn with wrench.

 **WARNING:** Use extreme caution when operating or servicing electrical cable reels. Personal injury or death can occur even under low voltage! Only qualified service technicians should troubleshoot and repair these products.

 Observe all applicable NEC, OSHA, and local codes when operating or installing these products.