

Installation

When unpacking a track cable cylinder, BE EXTRA CAREFUL NOT TO SCRATCH OR MAR THE NYLON COVERING ON THE CABLE. The cylinder may be mounted by use of the bolt holes in head. When attaching the bearing block to a driven mechanism, be sure it is in perfect alignment and that the load does not exceed the specifications listed in the catalog.

Pretensioning Instructions

All track cable cylinders are shipped without being pretensioned. They must be tensioned after mounting to insure the maximum service life of the unit.

To pretension a track cylinder, remove one of the guide shafts to gain access to the terminals to adjust the cable tension. Block the load some distance from the end of travel to keep the cylinder from bottoming. Next, apply pressure 15 to 20 percent higher than the actual pressure required to move the load. When the load is stopped externally before the piston bottoms, the relief valve or regulator setting becomes the load pressure.

When pressurized, one cable will become tight while the other becomes slack. Manually take up the slack in the cable. Release the pressure and block the load from the other side. Repeat the manual adjustment on the other cable. Release pressure and remove the blocks. Reinstall the guide shaft which had been removed. Return the regulator to its original setting.

Additional manual adjustment should not be needed initially, after the cylinder has been pretensioned. It is suggested, however, that the cable tension be checked periodically, from a preventive maintenance standpoint.

To Rebuild Cylinder

1. Remove the cylinder from machinery.
2. Remove the guide shafts, then disconnect cables from bearing block and remove pulleys on both ends of cylinder.
3. Remove one head from cylinder by removing the four cap screws.
4. Pull piston towards the removed head and remove from the tube.
5. Disconnect cables from piston. (See Cable Assembly/Disassembly Instructions at right.) Then remove the other cylinder head from tube and disengage cable from it.
6. Install new U-cups and O-rings on pistons.
7. See Cable Assembly/Reassembly Instructions below. Always lubricate seals with oil when installing.
8. Put one cable end through each cylinder head. Reattach one head to tube and connect the end of one cable to the piston. Then connect the other cable to the piston.
9. Push piston back into tube by gently tucking in the U-cup. Mount head back on cylinder with the cap screws. Replace pulleys and connect cables to bearing block.
10. Pretension cables according to the pretensioning instructions.

11. Operate cylinder back and forth by hand several times to be sure it is properly assembled before applying pressure.
12. Reinstall cylinder on machinery. **Note:** Apply (Blue) Loctite® #242 or equivalent to threaded cable terminal before connecting to the piston.

If the cylinder identification tag is missing, measure the overall length of cylinder, including the heads on both ends. Then refer to catalog dimensional drawing to determine stroke length

SNAP IN/OUT CABLE ASSEMBLY INSTRUCTIONS

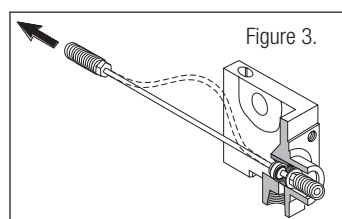
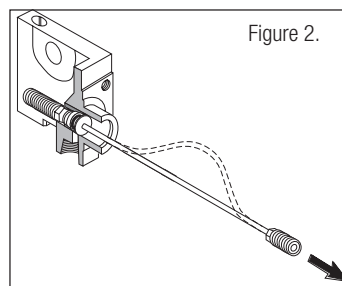
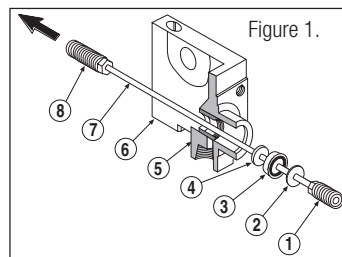
Your Tolomatic Track Cable Cylinder has been designed to allow assembly and disassembly of cable assemblies from the cylinder heads without the use of tools.

Disassembly: (Refer to Figure 1 & 2)

1. Holding onto cylinder Head (6), pull Piston Terminal (1) until Bearing Block Terminal (8) is against Washer (4).
2. Put a small amount of slack in Cable (7) as shown in Figure 2.
3. Impart a "snap" action to Piston Terminal (1).
4. With the imparting "snap" action, Washer (2) will release allowing the removal of the complete cable assembly.

Reassembly: (Refer to Figure 1 & 3)

1. Holding onto cylinder Head (6), string Bearing Block Terminal (8) through Gland (5) until Washer (2), U-cup (3) and Washer (4) are held flush against one another by Piston Terminal (1).
2. Put a small amount of slack in Cable (7) as shown in Figure 3.
3. Impart a "snap" action to Bearing Block Terminal (8).
4. With the imparting snap action, Washer (2) will snap into Gland (5).
5. Move the Cable (7) in the opposite direction as shown in Figure 2, to verify if Washer (2) is seated in Gland (5). If not, repeat steps 1-4.



MAINTENANCE

Cylinder should be kept as clean as possible around the pulleys, glands, guide shafts, etc. Always use air that is adequately lubricated with SAE 10 or 20 non-detergent oil. Pulleys have permanently lubricated bearings and require no maintenance.

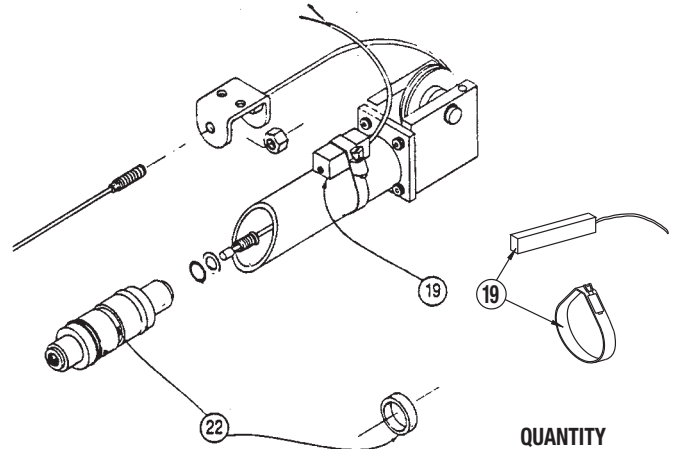
Your Tolomatic Track Cable Cylinder will give you many cycles of trouble free service. However, should a leak occur, a rebuilding kit can be obtained which enables you to replace all seals in the cylinder to return it to its proper operating condition.

REED SWITCHES

NOTE: Form A Reed Switches should not be used in TTL logic circuits. A voltage drop caused by the L.E.D. indicator will result. For applications where TTL circuits are used, please contact Tolomatic.

WARNING: An ohmmeter is recommended for testing Reed Switches. NEVER use an incandescent light bulb as a high current rush may damage the switch. Reed and TRIAC switches are only recommended for signalling position, not directly powering solenoids. For shifting a solenoid, a relay or resistor is recommended between it and the switch. Switch ratings must not be exceeded at any time

| CONFIG. CODE ORDERING | | |
|---------------------------------------|------|---|
| MOUNTING HARDWARE & FE CONN. INCLUDED | | |
| ITEM | CODE | DESCRIPTION |
| 19. | BT | SWITCH KIT, REED, FORM C, 5M |
| | BM | SWITCH KIT, REED, FORM C, QD MALE CONN. |
| | RT | SWITCH KIT, REED, FORM A, 5M |
| | RM | SWITCH KIT, REED, FORM A, QD MALE CONN. |
| | CT | SWITCH KIT, TRIAC, 5M |
| | CM | SWITCH KIT, TRIAC, QD MALE CONN. |



| ITEM | PART NO. | DESCRIPTION | QUANTITY | |
|------|-----------|-------------|----------|-------|
| | | | TC15 | TCM15 |
| 22. | 1075-1019 | MAGNET | | 1 |

NOTE: When ordered female connector & all mounting hardware is included

To Order Retrofit Kits

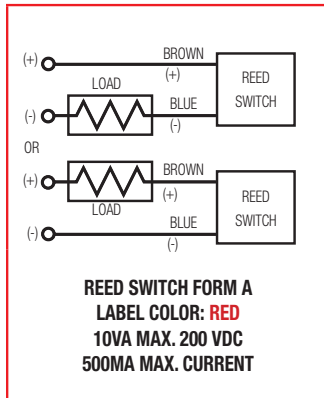
All Switch Kits come with 1 switch and mounting hardware.

Retrofit ordering method: **SWTC** □ □ □ □

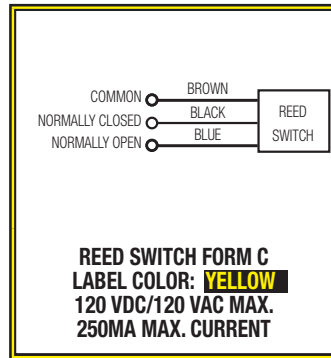
EXAMPLE: **SWTC10RT**

Switch Kit Model Size Switch Type Code

Universal Switch Wiring Diagrams and Label Color Coding

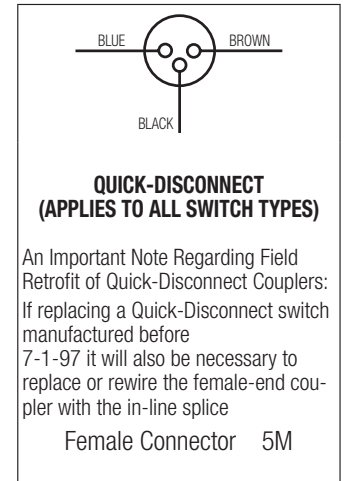
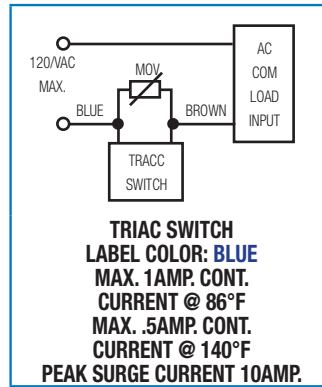


NOTE: The side of the switch with the groove indicates the sensing surface. This must face toward the magnet.



For complete Reed and TRIAC Switch Performance Data, refer to the [Tolomatic Pneumatic Products Catalog](#).

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 Viton® is a registered trademark of the E.I. Du Pont de Nemours Co., www.dupont.com



| SWITCH TYPE CODE | |
|------------------|---|
| BT | FORM C REED SWITCH WITH 5-METER LEAD |
| BM | FORM C REED SWITCH WITH 5-METER LEAD AND QD |
| RT | FORM A REED SWITCH WITH 5-METER LEAD |

| SWITCH TYPE CODE | |
|------------------|---|
| RM | FORM A REED SWITCH WITH 5-METER LEAD AND QD |
| CT | TRIAC SWITCH WITH 5-METER LEAD |
| CM | TRIAC SWITCH WITH 5-METER LEAD AND QD |



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