**CABLE INSTALLATION & REMOVAL**

Use the procedure detailed on HAZARDOUS DUTY CABLE REEL SEALING INSTRUCTIONS (bulletin 039789) which comes with sealing kit (available separately).

**CAUTION**

Carefully read and follow instructions supplied with separate sealing kit as well as instructions for sealing compound. Failure to properly follow those instructions could result in damage to equipment, personal injury or death.

1. Move machine serviced by reel to a position closest to reel.
2. Turn off all power to reel.
3. Remove collector cover and gasket.
4. Disconnect electric leads to and from collector.
5. Follow Steps 3–9, REMOVING OLD CABLE, on bulletin 039789.

**CABLE REMOVAL**

**CAUTION**

Always open all breakers and disconnect electrical power to reel. Failure to turn off electrical power could lead to serious injury or death.

1. Move machine serviced by reel to a position closest to reel.
2. Turn off all power to reel.
3. Remove collector cover and gasket.
4. Disconnect electric leads to and from collector.
5. Follow Steps 3–9, REMOVING OLD CABLE, on bulletin 039789.

**SPRING REPLACEMENT**

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.

**WARNING**

Do not attempt to relieve spring tension using spanner wrench. Doing so may result in personal injury.

**NOTE:** Do not attempt to remove spring if resistance is met or hub tends to rotate with shaft. Continue to rotate spaniel and strike end of shaft several sharp blows with a lead hammer or rubber mallet until shaft rotates freely and hub remains stationary.

1. Turn off all electric power.
2. Disconnect cable from machine junction box.
3. Wind all cable onto reel to relieve all spring tension.
4. Remove inspection cover from face of spring housing.
5. Remove (4) nuts which secure spring motor(s) to frame.
6. Remove (4) nuts which secure spring motor(s) to frame.
7. Slide spring motor(s) off shaft and disconnect.
8. Install replacement spring motor(s), pawls and pawl springs.
9. Tighten nuts (and extension bolts) securing spring housing.
10. Connect free end of cable to junction box on machine or adjust cable stop so that desired length of cable extends from reel.
11. Tension spring with spanner wrench. Refer to INSTALLATION section.
12. Replace inspection cover.

---

**INSTALLATION and MAINTENANCE INSTRUCTIONS**

**SZ-32 DIRECT DRIVE HAZARDOUS DUTY ELECTRIC CABLE REELS**

All units are provided with right hand rotation unless otherwise specified. This means that cable is pulled off spool top left or bottom right (spool rotates clockwise to wind cable) when viewing spring end of reel. See diagram on parts page.

**Clock-type springs**

Spring must be pretensioned at time of installation to ensure that tension is applied to cable at all times. A tension adjustment spanner wrench is provided with each reel.

**WARNING**

Some reels with large or multiple springs are equipped with a ratcheted adjustment wrench. Follow separate instructions for its use. Failure to use ratcheted wrench, on reels so equipped, could result in serious personal injury.

**NOTE:**

Some units are prelubricated and require no periodic maintenance.

**Periodically:**

A. Use compressed air to clean collector assembly and spring motor housing. Inspect collector assembly for brush wear and pitted slip rings.

B. Inspect cable for wear and check mounting bolts and nuts.

C. Check for broken springs by pulling about 2/3 cable off reel and observing “Broken Spring Indicators” on sides of spring canisters. See Fig. 3.

---

**INSTALLATION**

1. Insure that machinery to be serviced by reel is at position closest to reel.
2. Securely mount reel in desired position using 3/8”(M10) bolts. Be sure spool is aligned with cable run.
3. Position optional cable guide, if reel is so equipped.
4. Connect free end of cable to junction box on machine or adjust cable stop so that desired length of cable extends from reel.
5. Remove cover plate on spring housing to expose inner shaft. Shaft extends from reel.
6. Insert spanner wrench into holes in spring hub (Fig 2). Rotate wrench counterclockwise (for standard rotation). Number of 360° turns should match last digit in model number on serial plate. If model number includes an “R”, reel is reverse rotation and wrench must be rotated clockwise (See EXPLANATION on parts list page.)
7. Remove collector cover plate on spring housing to expose inner shaft. Shaft extends from reel.
8. Install replacement spring motor(s), pawls and pawl springs.
9. Tighten nuts (and extension bolts) securing spring housing.
10. Connect free end of cable to junction box on machine or adjust cord stop so that desired length of cord extends from reel.
11. Tension spring with spanner wrench. Refer to INSTALLATION section.
12. Replace inspection cover.

---

**MAINTENANCE**

**NOTE:**

On multi-spring reels, be sure to remove and save dowel pins which connect one spring hub with another. Also remove snap rings on shaft between spring housings.

---

**GLEASON REEL CORP.**

A Hubbell Company

P.O. Box 26 • 600 South Clark St.

Mayville, WI 53050 • 920-387-1420 • Fax 920-387-4189

Printed in USA

Bulino No. 04425.a

CONTINUED ON BACK PAGE
### SZ-32 DIRECT DRIVE HAZARDOUS DUTY CABLE REEL REPLACEMENT PARTS LIST

#### NOTE:
Applicable mounting hardware included with each kit.

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#### WARNING
Failure to carefully follow instructions in Seal Kit could result in reel that does not meet Hazardous Duty Certification.

#### NOTE:
Please consult factory for optional accessories: roller guides, ratchet lock, limit switch, hoop guides, spool lock, and swivel base. If Collector Assembly was CSA approved, so advise factory when ordering parts.

### MODEL NUMBER EXPLANATION

#### SPRING DIAMETER
- **SZ**: 32
- **32**: 80
- **80**: 2

#### FRAME SERIES
- **R**: 10

#### NO. OF POLES
- **10**: 1

#### AMPS
- **10**: 3

#### NO. OF SPRINGS
- **10**: 35

#### CORE DIAMETER
- **10**: 75

#### PRETENSION TURNS
- **10**: 125

#### CODE
- **10**: 20

### INDICATES REVERSE ROTATION
NO LETTER INDICATES STANDARD ROTATION.
### Illustrated Parts List

**SZ-32 Direct Drive Hazardous Duty Electric Cable Reels**

#### Always specify SERIAL NUMBER & MODEL NUMBER when ordering parts. If COLLECTOR ASSEMBLY (item 22) was CSA approved, so advise factory when ordering parts.

#### SZ-32 Direct Drive Hazardous Duty Cable Reel Replacement Parts List

**NOTE:** Applicable mounting hardware included with each kit.

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**Model Number Explanation**

#### AMPACITY

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<td>250</td>
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**Indicates Reverse Rotation. No Letter Indicates Standard Rotation.**

---

**Failure to carefully follow instructions in Seal Kit could result in reel that does not meet Hazardous Duty Certification.**

**NOTE:** Please consult factory for optional accessories: roller guides, ratchet lock, limit switch, hoop guides, spool lock, and swivel base. If Collector Assembly was CSA approved, so advise factory when ordering parts.

---

### Illustrated Diagram

- **Standard/Reverse:**
  - Cable is popped out and retracted as shown when viewing reel from spring motor side.

- **Determine Rotation of Reel:**
  - Failure to carefully follow instructions in Seal Kit could result in reel that does not meet Hazardous Duty Certification.

---

**Always specify SERIAL NUMBER & MODEL NUMBER when ordering parts. If COLLECTOR ASSEMBLY (item 22) was CSA approved, so advise factory when ordering parts.**

---

**Failure to carefully follow instructions in Seal Kit could result in reel that does not meet Hazardous Duty Certification.**

**NOTE:** Please consult factory for optional accessories: roller guides, ratchet lock, limit switch, hoop guides, spool lock, and swivel base. If Collector Assembly was CSA approved, so advise factory when ordering parts.

---

**Failure to carefully follow instructions in Seal Kit could result in reel that does not meet Hazardous Duty Certification.**

**NOTE:** Please consult factory for optional accessories: roller guides, ratchet lock, limit switch, hoop guides, spool lock, and swivel base. If Collector Assembly was CSA approved, so advise factory when ordering parts.
CABLE INSTALLATION & REMOVAL
Use the procedure detailed on HAZARDOUS DUTY CABLE REEL SEALING INSTRUCTIONS (bulletin 039789) which comes with sealing kit (available separately).

CAUTION
Carefully read and follow instructions supplied with separate sealing kit as well as instructions for sealing compound. Failure to properly follow those instructions could result in damage to equipment, personal injury or death.

CABLE REMOVAL
CAUTION
Always open all breakers and disconnect electrical power to reel. Failure to turn off electrical power could lead to serious injury or death.

1. Move machine serviced by reel to a position closest to reel. Springs will still be under pre-tension at this point.
2. Turn off all power to reel.
3. Remove collector cover and gasket.
4. Disconnect electric leads to and from collector.
5. Follow Steps 3–9, REMOVING OLD CABLE, on bulletin 039789.

Figure 2

All units are provided with right hand rotation unless otherwise specified. This means that cable is pulled off spool top left or bottom right (spool rotates clockwise to wind cable) when viewing spring end of reel. See diagram on parts page.

Clock-type springs provide power for automatic cable take-up. Spring must be properly tensioned at time of installation to ensure that tension is applied to cable at all times. A tension adjustment spanner wrench is provided with each reel.

CABLE INSTALLATION REFERENCE DRAWING

INSTALLATION and MAINTENANCE INSTRUCTIONS

GLEASON REEL CORP.
P.O. Box 26 • 600 South Clark St.
Mayville, WI 53050-0026
Phone 920–387–4120 • Fax 920–387–4189

All reels with large or multiple springs are equipped with a ratcheted adjustment wrench. Follow separate instructions for its use. Failure to use ratcheted wrench, on reels so equipped, could result in serious personal injury.

WARNING
Do not attempt to relieve spring tension using spanner wrench. Doing so may result in personal injury.

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.

NOTE: If reel is equipped with ratcheted adjustment wrench, follow instructions on separate sheet.

NOTE: Reels containing more than one spring, the hubs are connected at the factory. Therefore, by lightening the outer spring, the inside spring(s) will be tightened.

4. Tighten nuts (and extension bolts) securing spring motor(s) off shaft and discard.
5. Install spool shafts and spring hub. (See Figure 1).
6. Insert spanner wrench into holes in spring hub (Fig 2). Rotate wrench counterclockwise (for standard rotation). Number of 360° turns must match last digit in model number on serial plate. If model number includes an ‘R’, reel is reverse rotation and wrench must be rotated clockwise. (See EXPLANATION on parts list page.)
7. Move machine serviced by reel to a position closest to reel. Springs will still be under pre-tension at this point.
8. Turn off all power to reel.
9. Remove inspection cover from face of spring housing.
10. Connect free end of cable to junction box on machine or adjust cable stop so that desired length of cable extends from reel.
11. Remove collector plate on spring housing to expose shaft and spring hub. (See Figure 1).
12. Replace inspection cover.

NOTE:

Bearings and springs are pre-lubricated and require no periodic maintenance.

SPRING REPLACEMENT

Do not attempt to remove spring if resistance is met or hub tends to rotate with shaft.

Continue to rotate spool and strike end of shaft several sharp blows with a lead hammer or rubber mallet until shaft rotates freely and hub remains stationary.

6. Remove (4) nuts which secure spring motor(s) off shaft.
7. Slide spring motor(s) off shaft and discard.

NOTE: On multi-spring reels, be sure to remove and save dowel pins which connect one spring hub with another. Also remove snap rings on shaft between spring housings.

8. Install replacement spring motor(s), pawls and pawl springs.

NOTE: Pawl springs must be located between the pawls and the deepest section of the shaft groove. Make sure that pawls and pawl springs are inserted flush with ends of shaft and hub or they may rub against inspection cover.

NOTE: On reels containing more than one spring, the hubs are connected at the factory. Therefore, by lightening the outer spring, the inside spring(s) will be tightened.

7. Remove collector cover and connect individual supply conductors to collector terminals.

NOTE: Do not exceed number of turns indicated on serial plate. Over-tensioning can cause a broken spring, sheared shaft or other damage.

NOTE: If reel is equipped with ratcheted adjustment wrench, refer to INSTALLATION section.

Periodically:
A. Use compressed air to clean collector assembly and collector housing. Inspect collector assembly for brush wear and pitted slip rings.

B. Inspect cable for wear and check mounting bolts and locknuts for tightness.

C. Check for broken springs by pulling about 2/3 cable off reel and observing “Broken Spring Indicators” on sides of spring canisters. See Fig. 3.

NOTE: Bearings and springs are pre-lubricated and require no periodic maintenance.

CAUTION

Do not attempt to relieve spring tension using spanner wrench. Doing so may result in personal injury.

Figure 3

NOTE: Do not attempt to remove spring if resistance is met or hub tends to rotate with shaft.

Continue to rotate spool and strike end of shaft several sharp blows with a lead hammer or rubber mallet until shaft rotates freely and hub remains stationary.

6. Remove (4) nuts which secure spring motor(s) off shaft.
7. Slide spring motor(s) off shaft and discard.

NOTE: On multi-spring reels, be sure to remove and save dowel pins which connect one spring hub with another. Also remove snap rings on shaft between spring housings.

8. Install replacement spring motor(s), pawls and pawl springs.

NOTE: Pawl springs must be located between the pawls and the deepest section of the shaft groove. Make sure that pawls and pawl springs are inserted flush with ends of shaft and hub or they may rub against inspection cover.

NOTE: Do not exceed number of turns indicated on serial plate. Over-tensioning can cause a broken spring, sheared shaft or other damage.

NOTE: If reel is equipped with ratcheted adjustment wrench, follow instructions on separate sheet.

NOTE: Reels containing more than one spring, the hubs are connected at the factory. Therefore, by lightening the outer spring, the inside spring(s) will be tightened.

7. Remove collector cover and connect individual supply conductors to collector terminals.

NOTE: Do not exceed number of turns indicated on serial plate. Over-tensioning can cause a broken spring, sheared shaft or other damage.

NOTE: If reel is equipped with ratcheted adjustment wrench, follow instructions on separate sheet.

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