

# INSTALLATION and MAINTENANCE INSTRUCTIONS

## UH21 UNIVERSAL HOSE REEL-DIRECT DRIVE



**NOTE:** These instructions are written for machine pull reels.  
If installing or servicing hand pull reel, use only those steps marked with hand .

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

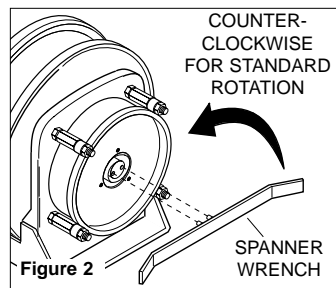
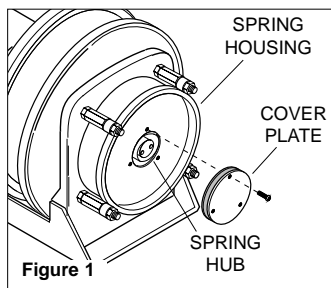
Clock-type springs provide power for automatic hose take-up. **Spring must be pretensioned at time of installation** to insure that tension is applied to hose at all times. A tension adjustment spanner wrench is provided with each reel.

### INSTALLATION

#### **WARNING**

If machine pull reel, move machinery to position closest to reel before adjusting spring tension. Adjusting tension with hose extended may result in damage to reel or personal injury.

1. Install hose if reel was purchased without hose. See instructions on page 4.
2. Insure that machinery to be serviced by reel is at position closest to reel.
3. Securely mount reel in desired position using 1/2"(M12). Be sure spool is aligned with hose run.
4. Position hose guide if supplied so hose pays-out as straight as possible through hose guide.
5. Connect free end of hose to connections on machine or adjust hose stop so that desired length of hose extends from reel.
6. Connect flexible supply lines to swivel fitting. See HOSE INSTALLATION REFERENCE DRAWING.  
**NOTE: Do not hard plumb to swivel fitting.**
7. Remove cover plate on spring housing to expose shaft and spring hub. (See Figure 1).
8. Insert spanner wrench into holes in spring hub (Fig 2). Rotate spanner wrench counter-clockwise. Number of 360° turns should match last digit in model number on serial plate.



#### **CAUTION**

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

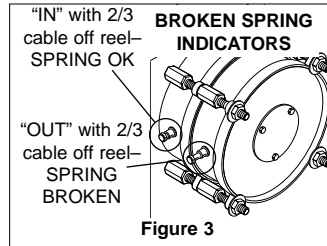
#### **WARNING**

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

#### **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.

### MAINTENANCE



**Periodically:** A. Inspect hose for wear and check mounting bolts and other hardware for tightness.  
B. Check for broken springs by pulling about 2/3 hose off reel and observing "Broken Spring Indicators" on sides of spring canisters (Fig. 3).

**NOTE:** Bearings and springs are prelubricated and require no periodic maintenance.

#### **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.

### SPRING REPLACEMENT

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

1. Turn off supply pressure to reel.
2. Insure that machinery to be serviced by reel is at position closest to reel. Disconnect hose from machine connections.
3. Wind all hose onto reel to relieve all spring tension.
4. Remove inspection cover from face of spring housing.
5. Rotate spool clockwise and observe inner shaft. Shaft should rotate clockwise and hub (with spring attached) should remain stationary.

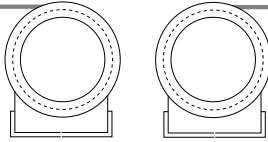
**NOTE: Do not attempt to remove spring if resistance is met or hub tends to rotate with shaft.** Continue to rotate spool and strike end of shaft several sharp blows with a lead hammer or rubber mallet until shaft rotates freely and hub remains stationary.

6. Remove (4) bolts which secure spring motor to frame.
7. Slide spring motor off shaft and discard.
8. Install replacement spring motor, pawls and pawl springs.

**NOTE:** Pawl springs must be located between the pawls and the deepest section of the shaft grooves. Make sure that pawls and pawl springs are inserted flush with ends of shaft and hub or they may rub against inspection cover. See Fig 4, page 4.



**TO DETERMINE ROTATION OF REEL**

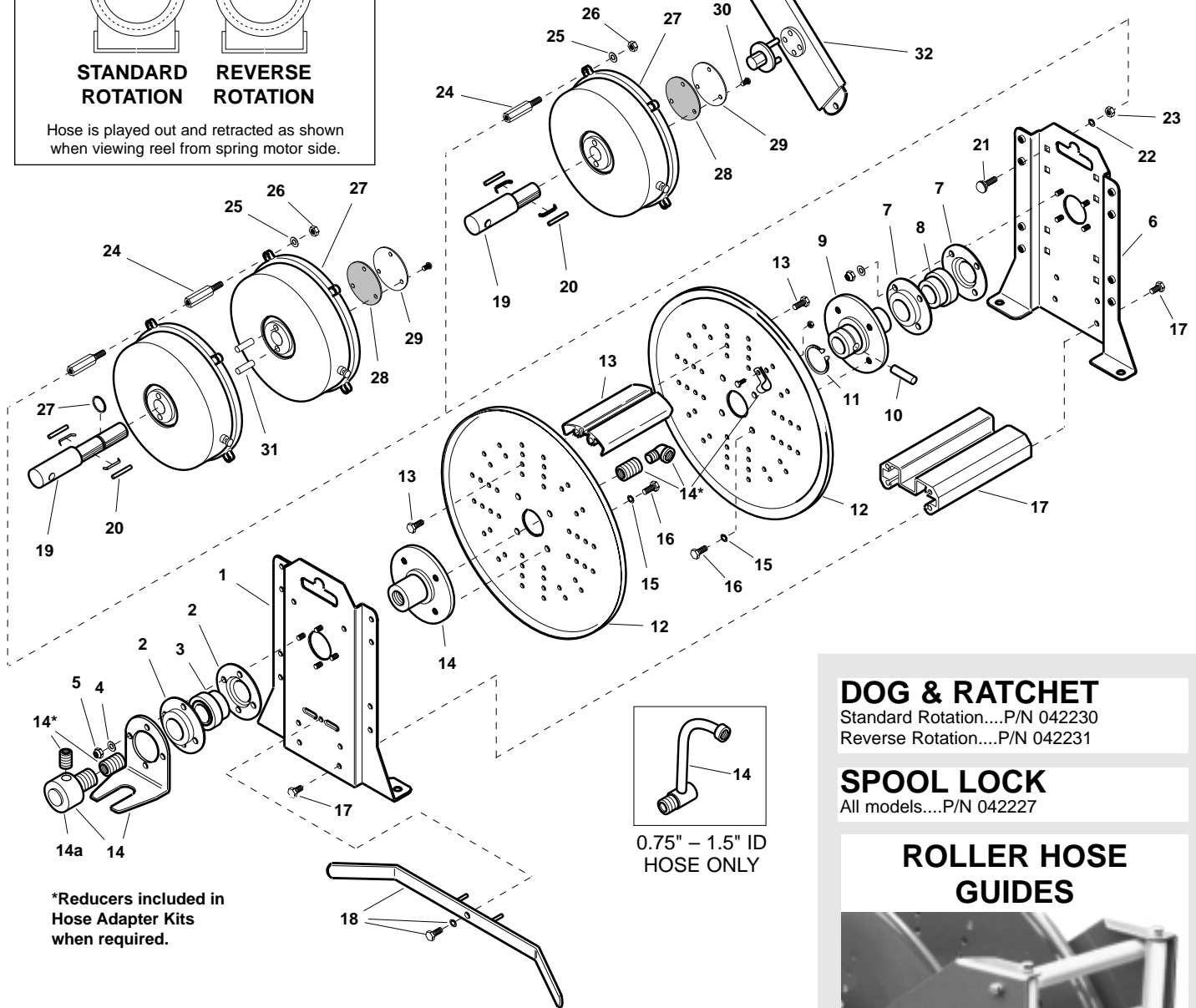


**STANDARD  
ROTATION**

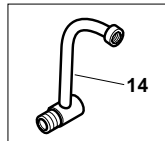
**REVERSE  
ROTATION**

Hose is played out and retracted as shown when viewing reel from spring motor side.

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



\*Reducers included in  
Hose Adapter Kits  
when required.



0.75" - 1.5" ID  
HOSE ONLY

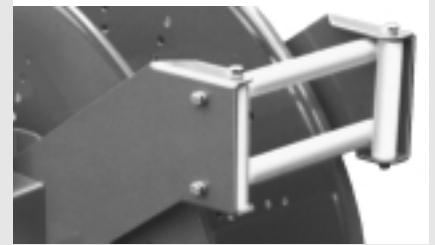
**DOG & RATCHET**

Standard Rotation....P/N 042230  
Reverse Rotation....P/N 042231

**SPOOL LOCK**

All models....P/N 042227

**ROLLER HOSE  
GUIDES**



**HORIZONTAL (shown)**

SPOOL WIDTH	PART NUMBER
6"	042195
8"	042196
10"	042197
12"	042198
14"	042199

**VERTICAL**

SPOOL WIDTH	PART NUMBER
6"	042270
8"	042271
10"	042272
12"	042273
14"	042274

**HOSE STOPS**

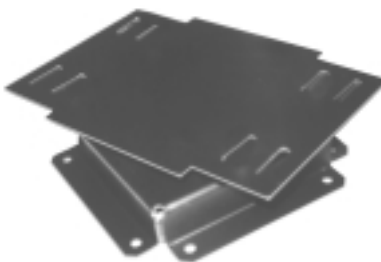


TYPE  
A  
3.00" O.D.

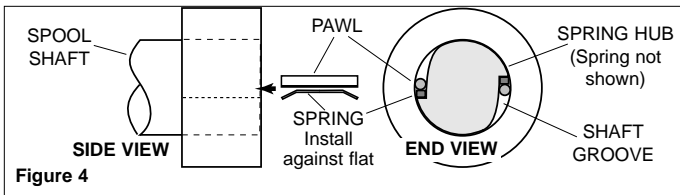
TYPE  
B  
3.50" O.D.

PART NUMBER	TYPE	FITS O.D.s MIN - MAX
037529	B	0.44 - 0.62
037531	A	0.62 - 0.75
037532	A	0.75 - 1.05
037533	A	1.06 - 1.30
037535	B	0.75 - 1.05
037536	B	1.06 - 1.38
037537	B	1.39 - 1.55
041845	B	1.56 - 1.87
041846	B	1.88 - 2.06

**340° PIVOT BASE**



SPOOL WIDTH	PART NUMBER
4"-6"	042284
8"-10"	042285
12"-14"	042286



- 9. Tighten bolts securing spring housing to reel frame.
- 10. Connect free end of hose to connections on machine or adjust hose stop so that desired length of hose extends from reel.
- 11. Tension spring with spanner wrench. Refer to **INSTALLATION** section.
- 12. Replace inspection cover.

### HOSE REMOVAL

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

- 1. Move machine serviced by reel to a position closest to reel. Spring will still be under pre-tension at this point.
- 2. Turn off supply pressure to reel.
- 3. Disconnect hose from machine or other attachments. Remove hose stop, if installed, and allow hose to retract onto spool. Ensure all tension is off spring by manually rotating spool (normally clockwise when viewed from spring side).

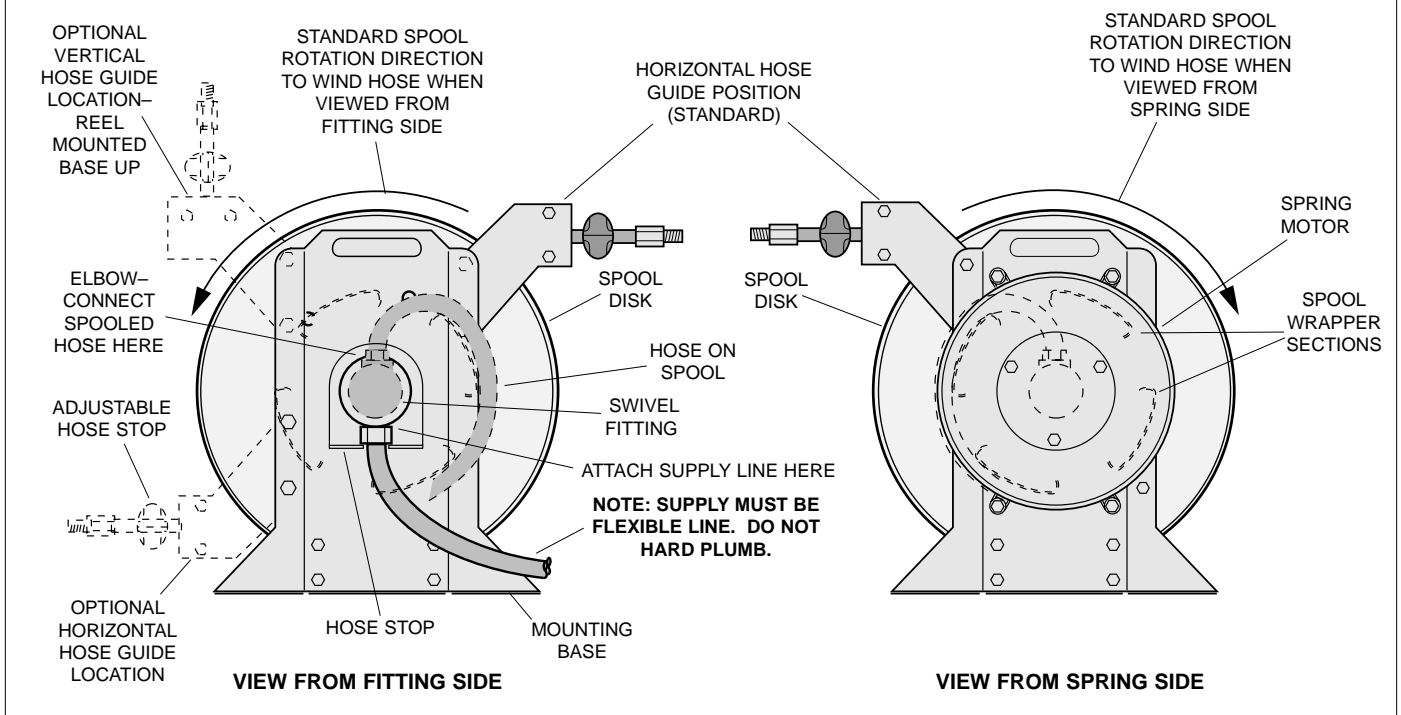
- 4. Unwrap hose without allowing spool to turn.
- 5. Disconnect hose from elbows inside spool wrapper.
- 6. Install new hose following directions below.

### HOSE INSTALLATION

Use the following procedure to replace hose or if reel was ordered without hose. Refer to **HOSE INSTALLATION REFERENCE DRAWING**, below.

- 1. Unspool new hose 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 hose life.
- 2. Insert hose end through guide and connect to elbows inside spool wrapper. (See drawing below.)
- 5. Wind the hose onto the reel spool by hand rotating spool in direction it turns free of spring tension. (Normally clockwise when viewed from spring side)
- 6. Adjust hose stop (not used on machine pull reel).
- 7. Complete working end connections.
- 8. Pretension reel and complete installation as described in **REEL INSTALLATION** section.

### HOSE INSTALLATION REFERENCE DRAWING



**GLEASON REEL CORP.**  
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Mayville, WI 53050-0026  
Phone 920-387-4120 • Fax 920-387-4189