

**Service Call:**

Installation of Tilt Pole Plumber (TPP)  
Hose Reel on a General Digger Derrick

**Tools Required:**

9/16", 5/8", and 3/4" wrenches  
3/8" ratchet and sockets

**Model(s):**

Generals 65, 80 and 95

## Tech Tip Safety Rules




### Danger


Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury. Many of the hazards identified in the operator's manual are also safety hazards when maintenance and repair procedures are performed.

### Do Not Perform Maintenance Unless:

- You are trained and qualified to perform maintenance on this machine.
- You read, understand and obey:
  - manufacturer's instructions and safety rules
  - employer's safety rules and worksite regulations
  - applicable governmental regulations
- You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this tech tip is a supplement to the service manual. Consult the appropriate service manual of your machine for safety rules and hazards.

 **WARNING**



Escaping fluid under pressure can penetrate skin causing serious injury.

Relieve pressure before disconnecting hydraulic lines. Keep away from leaks and pin holes. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

Fluid injected into skin must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene will result.

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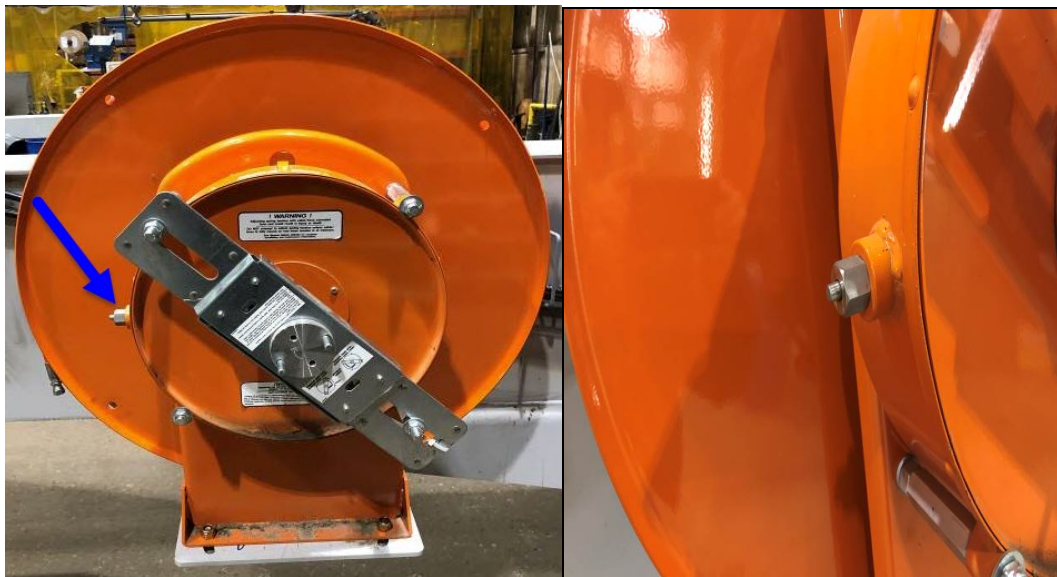
## Introduction

The following steps address the possible issues that may cause the pole plumber hoses to sag.

## Step 1

Check for broken springs by pulling out 2/3 of hose off the reel while observing the spring indicator on the side of the reel spring canister.

If the spring is broken the indicator will be popped out. In the pictures below, the spring indicator is not popped out indicating the springs are not broken.



## Step 2

If the spring indicator is popped out, replace the spring assembly.

## Step 3

If the spring indicator is showing a serviceable spring, disconnect the nonconductive TPP hoses at the bulkhead. Mark each hose and cap and plug fittings.



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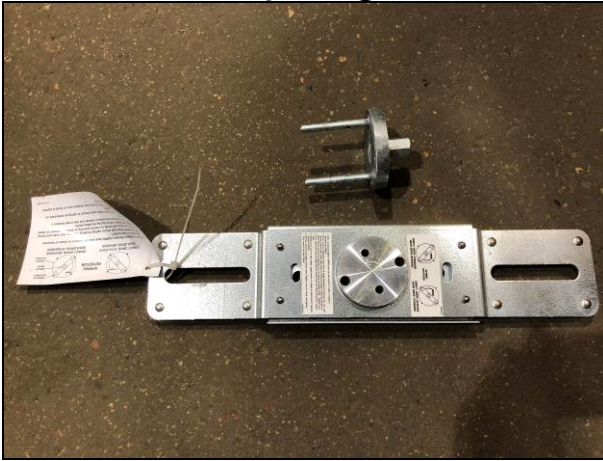
## Step 4

Fully wind up the hoses onto the reels to adjust the spring tension. At this point the spring tension is at its minimum.



## Step 5

Remove the attached spanner wrench from the hose reel by removing the two 3/4" lock nuts and washers to gain access to the 5-1/2" cover plate. Remove the 3 Phillips screws to expose the reel shaft and spring hub.



## Step 6

Determine the number of turns for the tensioning of the spring. On the back side of the reel is the reel data plate, which will indicate the number of turns and the direction to turn the spring hub under installation instructions.



GLEASON REEL CORP  
MAYVILLE, WISCONSIN  
ASSEMBLED IN U.S.A.

MODEL: K281001-6

SERIAL NO. 115971810-19

3000 LBS. P.S.I.

LUBRICATION DATA  
ALL BEARINGS ARE LUBRICATED AND SEALED FOR LIFE.  
SPRING IS OILED FOR LIFE.

INSTALLATION INSTRUCTIONS

REEL DESIGNED TO  LIFT  STRETCH  
 RETRIEVE  DRAG 50 FT. OF 3/8"  
TYPE DUAL CABLE AT 150 F.P.M.

OPERATING INSTRUCTIONS

REMOVE SMALL COVER FROM SPRING HOUSING.  
INSERT SPANNER WRENCH AND ROTATE SPRING  
 1 REVOLUTIONS  CLOCKWISE  
 COUNTER CLOCKWISE BEFORE OPERATING REEL.  
THIS WILL PRETENSION SPRING TO PRESCRIBED AMOUNT.

## Step 7

Insert the spanner wrench into the holes of the spring hub.

**Note:** The two mount studs for storing the spanner wrench will need to be removed to complete a full 360-degree revolution.



**Caution:** Do not exceed the number of turns indicated. Over-tensioning can cause a broken spring or sheared shaft.

## Step 8

Remove the spanner wrench and reconnect the 4 non-conductive hoses for proper tension.



The hoses should be riding on the roller guides and should require a slight hand pressure to move the hoses off the reels. Perform a functional check through the full extension and retraction of the hose reels.

## Step 9

When completed, reinstall the cover plate and store the spanner wrench.





## Step 10

If replacing the hoses or reel, repeat Steps 3 and 4. Rotate the reel counter-clockwise to gain access on the backside of the reel to remove the hoses.



When installing the new hoses to the fittings viewed through the connection windows, rotate the reel counter-clockwise to get the fitting closest to the spring in the connection window. Connect the longest hose to this fitting.

Rotate the reel counter-clockwise 180 degrees and attach the shorter hose to this fitting.

Continue to rotate the reel in the direction of free spring tension to wind up the hoses. At this point repeat Steps 5 through 9.