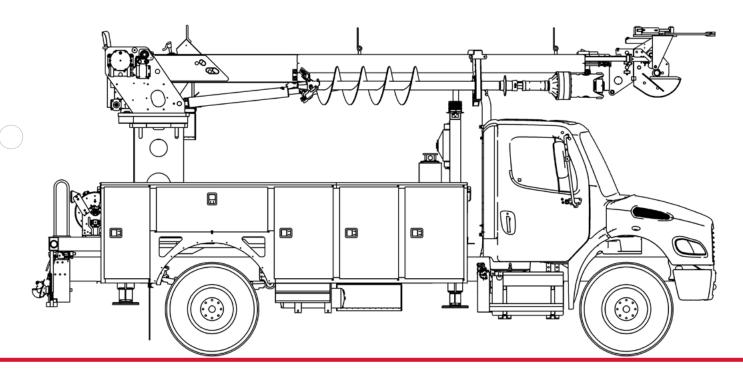


SETTING PRESSURES ON A PILOT CONTROLLED DIGGER DERRICK

NO. 98





SERVICE CALL: SETTING PRESSURES ON A PILOT CONTROLLED DIGGER DERRICK



MODEL(S): ALL TEREX DIGGER DERRICKS WITH PILOT CONTROLS



TOOLS NEEDED:
PRESSURE GAUGE
ALLEN WRENCHES
ASSORTMENT OF WRENCHES

PHONE: 1-844-TEREX4U (1-844-837-3948) | EMAIL: <u>UTILITIES.SERVICE@TEREX.COM</u>

WARNING



Injection Hazard

Fluid escaping under pressure can penetrate skin and result in death or serious injury.



Relieve pressure before disconnecting hydraulic lines.

Stay clear of leaks and pin holes. Use a piece of cardboard or wood to search for leaks. Do not use hand.

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



TECH TIP 98 | RELEASED 04.17.2023 | VERSION 1.0 ©TEREX UTILITIES. ALL RIGHTS RESERVED



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.

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TECH TIP#98



| Install the pressure gauge | STEP 1 - STEP 3



| Adjust system pressure

STEP 4 - STEP 6



| Stall out the digger or winch function



| Install gauge on G2

| Set the pressure

STEP 8 - STEP 10

Determine if the unit being serviced is pilot operated. If the unit has pilot controls, it will have joysticks similar to the picture below at the command post. Refer to the quick reference in the maintenance manual and/or the ID Placard on the unit for pressure settings.



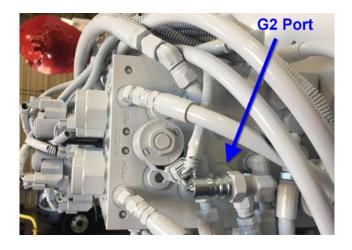
STEP 2

Verify that the hydraulic pump small section goes to the outrigger control valve and install a pressure gauge at the inlet side. Set the inlet relief to 300 psi higher than system pressure.



STEP 3

Install the pressure gauge on the main manifold on the side of the turret in port G2. The port will be on the right side of the valve.





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.

Set the system pressure by dead heading a function. Use the relief valve low (RVL) cartridge to adjust system pressure. CC to increase and CCW to decrease. The cartridge is on the bottom of the valve assy.



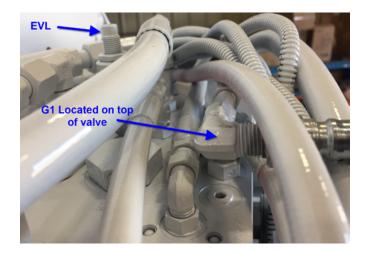
STEP 5

Squeeze the enable and read the pressure gauge at port G2. This value is the enable valve logic low (EVL) pressure. It should read 250 psi. Adjust the cartridge as needed. This is opposite the RVL, on top of the valve.



STEP 6

Remove the pressure gauge and reinstall it on port G1 by the EVL cartridge.



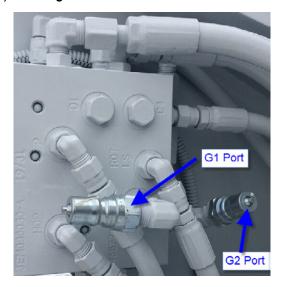
Stall out the digger or the winch function, and set pressure according to the quick reference chart or the placard on the unit. Adjust the RVH cartridge. (RVH=relief valve high)

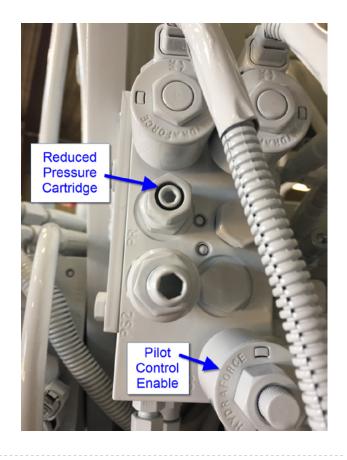


Note: Some units may have a planetary winch assembly which will require a higher pressure than the digger. The digger circuit at the slide tube will have a cross over relief to reduce this pressure down to the 2300 psi required for the digger.



Move the pressure gauge to the HOP manifold and install it on port G2. With the unit running check the reduced/pilot pressure. Set this pressure to 350 psi using the pressure reduced (PR) cartridge.





STEP 9

Move the pressure gauge to port G1 on the HOP manifold.

STEP 10

Boom up all the way and verify system pressure is shown on the pressure gauge. Adjust the RVL as needed. If the boom will not come down, then HOP will need to be checked and adjusted as necessary.

Reference **Tech-tip 10** for the HOP adjustment.



FOR FURTHER ASSISTANCE,
CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM

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