

# **TESTING YOUR HYDRAULIC TORQUE WRENCH**

#### 1. VISUAL INSPECTION

Prior to testing hydraulic torque wrenches, a visual inspection should be done. The visual inspection should include looking for:

- 1. Cracked, bent, or damaged couplers
- 2. Swivel Assembly damage
  - Cracked swivel block
  - Loose swivel assembly
  - Swivel post retaining ring is attached
- 3. Loose end cap
- 4. Cracked or damaged housing

When testing hydraulic torque wrenches, make sure the pump functions correctly and is set to 10,000 PSI before the tool is connected.Connect the tool to the hose and test the tool using the pump remote. ADVANCE and RETRACT the tool several times. Make sure the tool functions properly and the pump pressure builds 10,000 PSI / 700 BAR in the ADVANCE position.

#### 2. TOOL DOES NOT ADVANCE OR RETRACT

If your tool does not ADVANCE or RETRACT, check the following:

- 1. Are the couplers loose or damaged?
  - Tighten and/or replace couplers
- 2. Ratchet
  - Replace ratchet if the teeth are stripped, missing or damaged
- 3. Drive Pawl Assembly
  - Check drive pawl springs for damage
  - Inspect drive pawl for damage

Please go to the next page for more trouble-shooting methods.

#### 3. TOOL DOES NOT BUILD IN THE ADVANCE POSITION

If your tool does not build 10,000 PSI in the ADVANCE position and there are no external leaks, the tool has an <u>internal</u> leak. Internal leaks are located in two areas: the Swivel Assembly and the Cylinder.

- 1. Swivel Assembly Tool will not build over 2,000 PSI
  - Replace damaged swivel seals
  - Inspect swivel post for wear and/or damage
  - Inspect swivel block for damage
- 2. Cylinder Tool will not build over 6,000 to 7,000 PSI
  - Check the piston and cylinder O-ring for wear and/or damage
  - Inspect the piston assembly for wear and /or damage
  - Inspect cylinder wall for excessive wear

#### 4. IF TOOL HAS AN EXTERNAL LEAK

- 1. Swivel Assembly
  - Bent or broken couplers
  - Worn and/or damaged seals
  - Cracked or damaged swivel block
  - Damaged swivel post
- 2. Cylinder
  - Worn and/or damaged cup seals
  - Loose end cap
  - Worn and /or damaged piston assembly
  - Damaged housing

## If your tool's square drive rocks back and forth, check the following.

1. Lever Assembly

**5. SQUARE DRIVE ROCKS** 

- Lever mounting screws are too tight
- Levers cracked and/or damaged
- 2. Reaction Pawl Assembly
  - Damaged reaction pawl spring
  - Damaged reaction pawl
- 3. Ratchet

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