

# PROCEDURES FOR INSTALLATION OF POWER GEAR LEVELING SYSTEM JACKS



**LEVELING AND STABILIZATION** 

### Introduction

This document outlines the procedures for the installation of Power Gear leveling system jacks and supersedes Power Gear TIP Sheet #37 81-1220 Rev. 4 in its entirety.

#### **Procedures**

### Hose Installation

Route hose assemblies to avoid chafing on sharp corners or contact with extreme heat sources (i.e. exhaust manifolds or pipes). Where sharp corners are unavoidable, wrap the hose with plastic hose loom in the area where chafing can occur. Hoses must be routed at least 6" away from heat sources.

### **Fastener Connection**

All bolt/nut fasteners must be equally spaced on opposite sides of the leg mounting bracket.

**NOTE:** Preferred placement of the bolts is to use the top and bottom mounting holes on the leg weldment and have the middle set in the third hole from the top.

The leg mounting bracket should be located in the same location as the leg being removed. Or if new installation, it should be located to allow 8" - 10" ground clearance between the bottom of the jack shoe and the ground when parked on a flat, level surface.

All bolt/nut connections must have a locking mechanism on the threads to prevent loosening due to vibration, as follows:

- 1. A self-locking nut using a nylon insert or mechanical thread interference (welded onto a plate or loose) may be used.
- **2.** A spring lock washer may be used.
- 3. A bolt without a lock washer or self-locking nut MUST have Loctite® 277™ or an equivalent bonding agent applied to the threads. Apply bonding agent to one full leading thread on the full circumference.

Bolt	Grade	Torque (ft-lbs)
1/2" - 20	5	68-84
1/2" - 20	8	108-132



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## **Fastener Torque**

All fasteners (bolts and nuts) must be certified Grade 5 or stronger. Torque fasteners to the proper lubricated specification as follows:

### **SAE O-Ring Boss Fitting Installation**

All ports used on the valves and jacks are SAE O-ring boss ports. This style port utilizes an o-ring to seal the connection instead of metal to metal interference used on pipe fittings. The fittings should be installed as follows:

- **4.** Straight fittings:
  - Install with socket or open end wrench. Tighten with torque wrench within the range specified in the chart below. **DO NOT** over-tighten fittings.
- **5.** Elbows:

The elbow is designed to enable the final connection to point any direction.

- **A.** Screw hex jam nut, washer, and o-ring back as far as possible. This will allow full thread engagement.
- **B.** Screw fitting into female port until finger-tight.
- **C.** Screw the body of the elbow counterclockwise to point in the desired direction.
- **D.** Hold the body of the elbow and tighten with torque wrench within the range specified in the chart below. DO NOT over-tighten fittings.

LCI Install Torques, Hydraulic Products			
Connection	Specified Torque (in-lbs)	Specified Torque (ft-Ibs)	
JIC -4 (7/16-20)*	130-150	11-13	
JIC -6 (9/16-18)*	235-265	20-22	
SAE (ORB) -4 (7/16-20)	156-195	13-16	
SAE (ORB) -8 (3/4-16)	264-330	22-28	
SAE (ORB) -10 (7/8-14)	528-660	44-55	
ORFS -4 (9/16-18)	216-270	18-23	
ORFS -6 (11/16-16)	348-435	29-36	
ORFS -8 (13/16-16)	492-615	41-51	

<sup>\*</sup>Torque wrench assembly preferred, but in the absence of proper install tools the 2 hex flat method can be utilized. Complete the steps above, then wrench tighten 2 full flats on the hex of the fitting. This method to be used on connections without o-rings only.