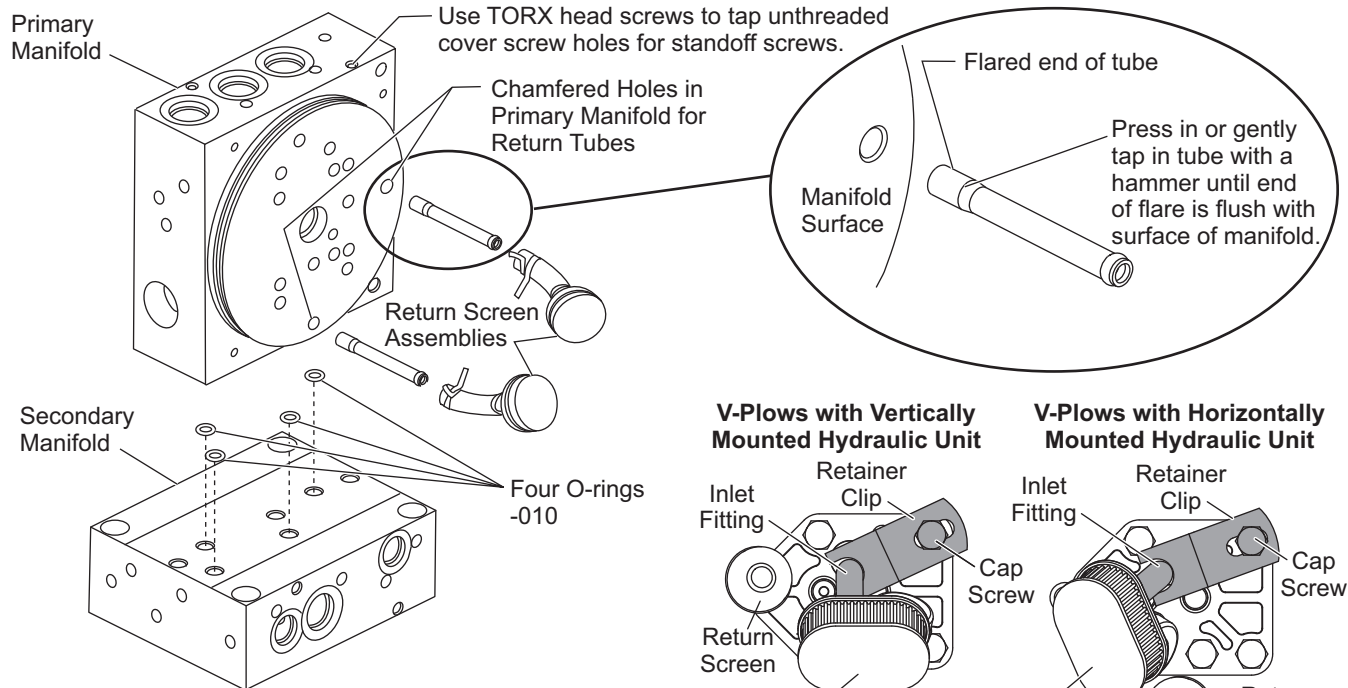


VALVE MANIFOLD ASSEMBLY INSTRUCTIONS

PRIMARY VALVE MANIFOLD ASSEMBLY PRIMARY MANIFOLD ASSEMBLY SECONDARY VALVE MANIFOLD ASSEMBLY SECONDARY MANIFOLD ASSEMBLY



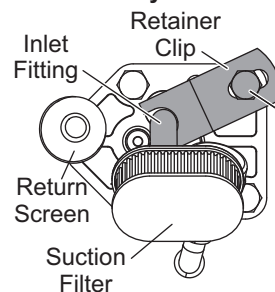
Use supplied fittings for NPTF hoses.
Use existing fittings for JIC flared hoses.

Primary Manifold Assemblies include:

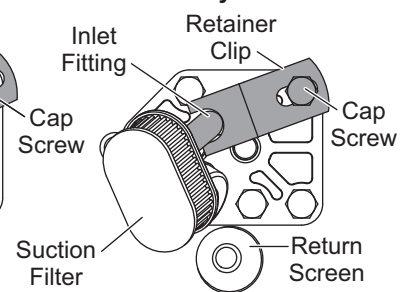
- a pump O-ring -013
- a reservoir O-ring 2-250
- reservoir fasteners

HYDRAULIC UNIT TORQUE SPECIFICATIONS		
Alternately, torque fasteners to torque specifications listed.		
Location	Fastener Size	Torque (in-lb)
Pump Cap Screws	5/16"-18 x 2-1/2" with Flat Washer or 5/16"-18 x 2-1/4" without Flat Washer	150–160
Motor Terminals (+ and -)	5/16"-24 Nut	50–60
Motor to Manifold Cap Screws	1/4"-20 x 6-1/4"	55–65
Reservoir Screws	#10-24 x 5/16"	30–35
Valve Cartridges	7/8" Hex	115–125
Coil Nuts	3/4" Hex Jam Nut	48–60
Cartridge/Coil Cover Screws	#8-32 x 1/2" or Standoff Screws	15–20
Check Valve	11/16" Hex Head	115–125
Hydraulic Unit Mount Bolts	3/8"-16 x 1" (No Washers) 1/4"-20 x 2-1/2" or 1/4"-20 x 3"	180–240 105–115
Secondary to Primary Manifold Cap Screws	1/4"-20 x 2-1/2"	105–115

V-Plows with Vertically Mounted Hydraulic Unit



V-Plows with Horizontally Mounted Hydraulic Unit



INSTALLING SAE O-RING FITTINGS

1. Turn jam nut on fitting as far back as possible.
2. Lubricate O-ring with clean hydraulic fluid.
3. Screw fitting into port by hand until the washer contacts port face and shoulder of the jam nut threads.
4. Unscrew fitting to proper position — no more than one full turn.
5. Using two wrenches, hold fitting body in position and tighten jam nut until the washer again contacts port face, then tighten an additional 1/8 to 1/4 turn to lock fitting in place. Final torque on the jam nut should be approximately 20 ft-lb.

Use the following procedure to install hydraulic hoses.

Note: Overtorquing JIC hose fitting ends will result in a fractured fitting.

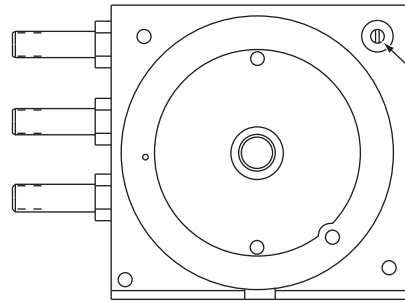
1. Screw flare nut onto fitting flare and hand tighten.
2. Align hose so there are no twists or sharp bends.
3. Using two wrenches, hold the hose in position and tighten flare nut 1/8 to 1/4 turn beyond hand tight. Final torque on the flare nut should be approximately 20 ft-lb.

VALVE MANIFOLD ASSEMBLY INSTRUCTIONS

PRIMARY VALVE MANIFOLD ASSEMBLY
PRIMARY MANIFOLD ASSEMBLY
SECONDARY VALVE MANIFOLD ASSEMBLY
SECONDARY MANIFOLD ASSEMBLY

QUILL ADJUSTMENT

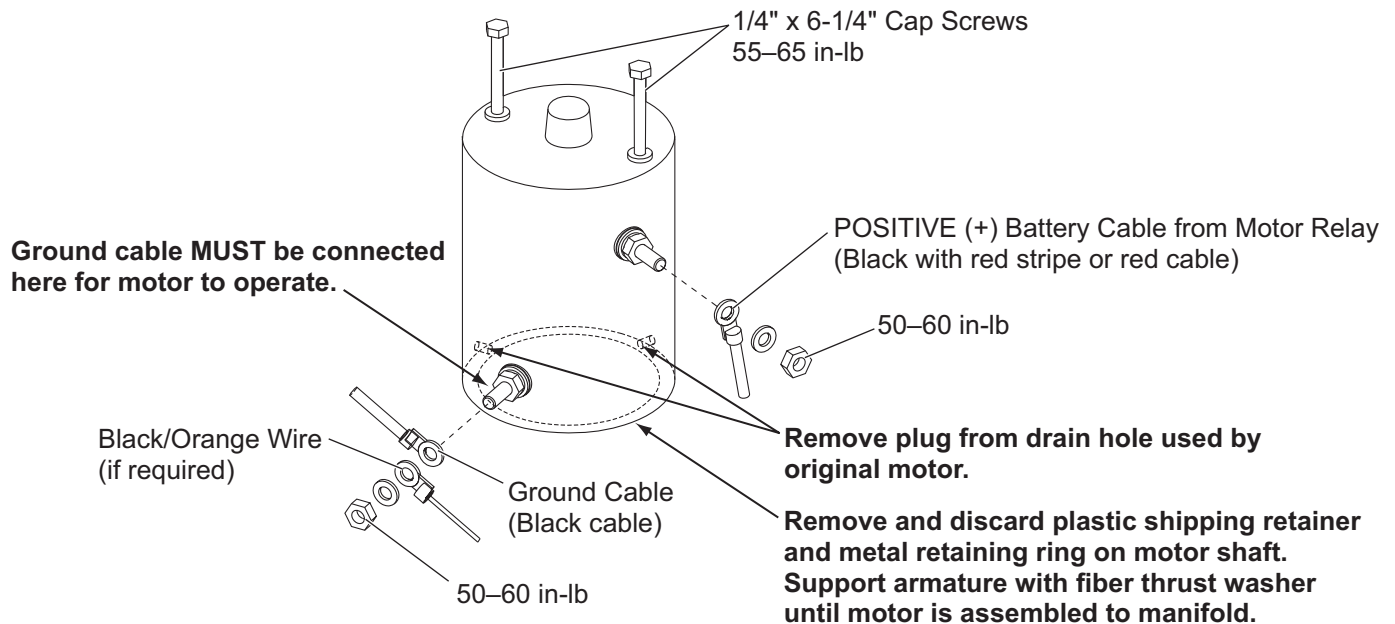
Primary manifolds feature an adjustable quill to change blade drop speed.



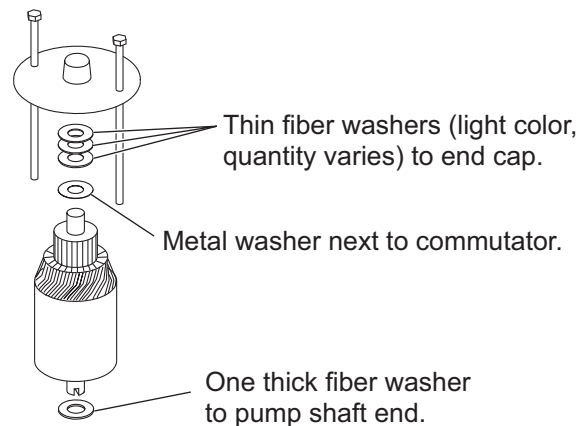
Quill – Turn in to decrease blade drop speed.
Turn out to increase blade drop speed.
Turning in too far will affect raise speed.

Motor Side of Primary Manifold

REPLACEMENT MOTOR INSTALLATION



If armature is accidentally allowed to slip out of motor frame, proper washer placement is critical.



The company reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used.

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