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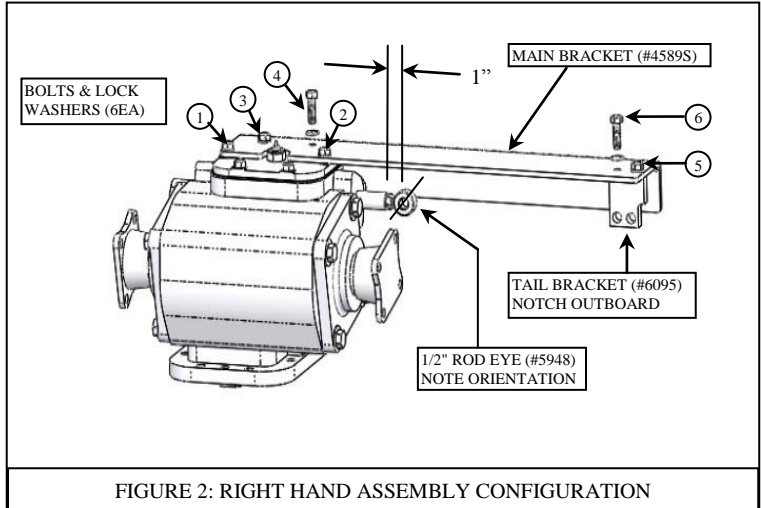
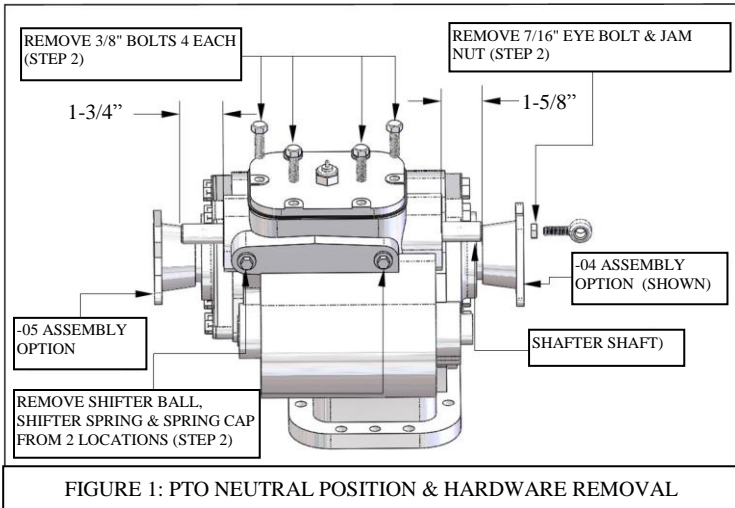
APSCO PC-7-2 Installation Instructions

(Used on Chelsea #860, 861, 862 & 863 Model PTO (-4 & -5 Assemblies))

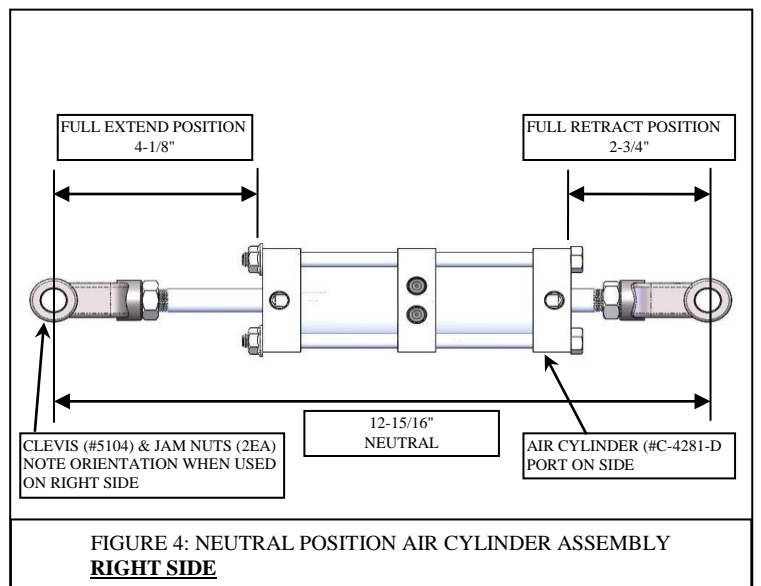
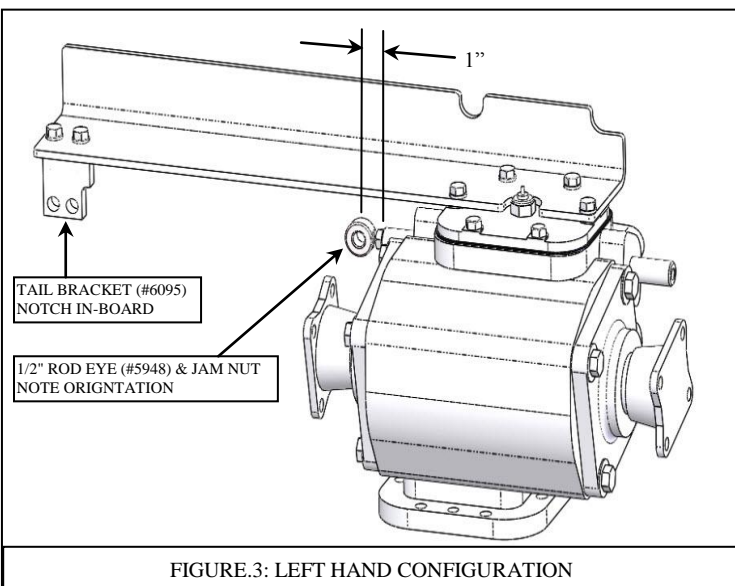
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Approved By: Frank Horn
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Bracket Installation

1. Place the PTO shifter shaft in neutral or center position (ref. dimensions, Fig. 1).
2. Remove the 4 PTO cover bolts, shifter ball, shifter spring, spring cap, the 7/16" rod eye bolt, and nut from PTO shifter shaft as shown (Fig. 1). Discard the 4 PTO cover bolts, shifter ball, shifter spring, the 7/16" rod eye bolt, and nut. Reinstall the spring cap and 2 bolts.



3. Position the supplied Main Bracket (#4589S) on cover plate as a Right Hand (RH) Assembly Configuration (Fig. 2), or as the optional Left Hand (LH) Configuration (Fig. 3).
4. Align 4 mounting holes in Main Bracket with the exposed cover holes. Install the 4 supplied 3/8"-16x1-1/4" long Grade 5 bolts and lock washers, finger tight in sequence shown (Fig. 2). Using same sequence, tighten bolts to 22-32 ft-lbs.
5. Position the supplied Tail Bracket (#6095) on the Main Bracket as appropriate for the RH Configuration (notched corner out-board, Fig. 2) or for the LH Configuration (notched corner in-board, Fig. 3). Attach Tail Bracket with 2 each 3/8"-16x1-1/4" long Grade 5 bolts and lock washers finger tight. While holding Tail Bracket parallel to Main Bracket., tighten bolts to 22-32 ft-lbs.
6. Install the supplied 1/2" hole Rod Eye Bolt (#5948) and 3/8"-24 Jam Nut as appropriate for a RH or LH Configuration. Thread Jam Nut and Rod Eye Bolt until they all bottom out finger tight, then back off about 4 turns to achieve approximately 1" dimension and orientation shown (Fig. 2 or 3). Lock this position finger tight until final adjustment and tightening.





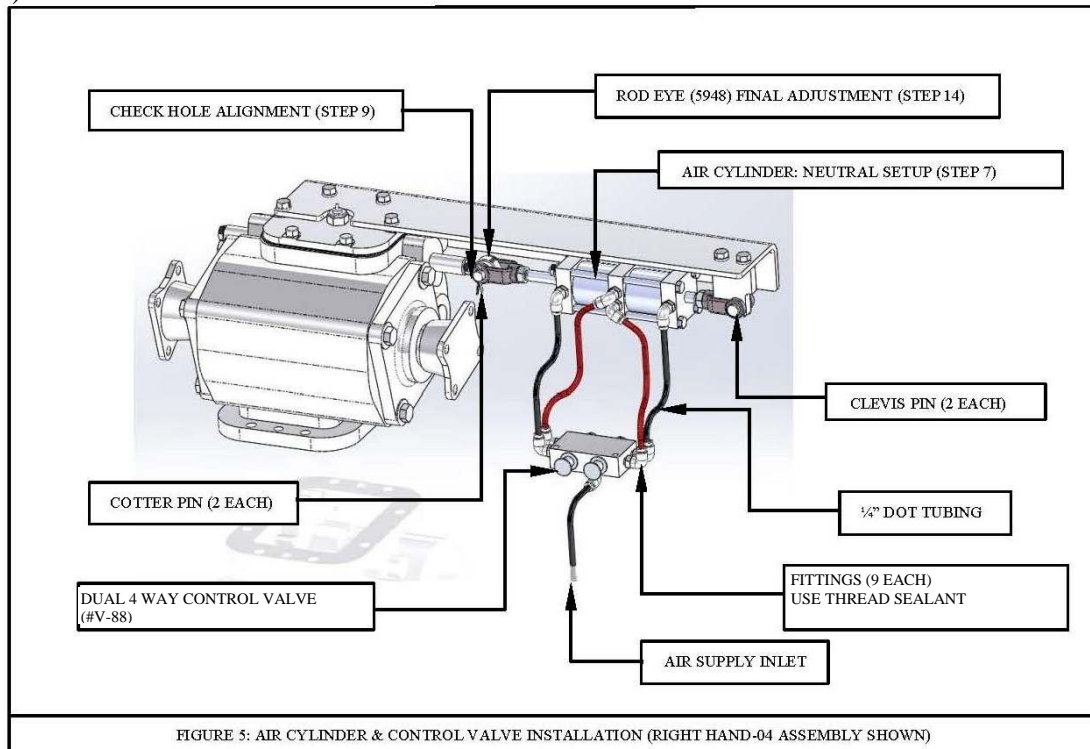
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Air Cylinder and Control Valve Installation

7. Thread the 2 supplied Clevis Ends (#5104) and 1/2"-20 Jam Nuts onto supplied Air Cylinder (#C-4281-D) shaft ends until Clevis bottoms out finger tight. Then back off Clevis ~2 turns to achieve approximately the 2-3/4" (retracted) and 4-1/8" (extended) dimensions and orientation shown (Fig. 4). Maintain this position and tighten Jam Nuts to 55-80 ft-lbs against Clevis.
8. With Air Cylinder Assembly in "Neutral" (one cylinder fully retracted and one fully extended) and with Clevis position and orientation as per step 7, attach retracted Clevis to the Tail Bracket using supplied 1/2" dia. Clevis Pin (#3163) and 1/8" dia. Cotter Pin (#2357).
9. Engage extended Clevis end of Air Cylinder Assembly onto Rod Eye Bolt and align 1/2" dia. holes. Check hole concentricity, if adjustments are correct Clevis Pin should freely insert in hole without force while maintaining full extend/retract positions. If this condition was not achieved by initial rough-in adjustments, disengage the Clevis from the Rod Eye, turn the finger-tightened Rod Eye in half-turn increments in direction as required to achieve desired alignment so that Clevis Pin freely inserts through aligned holes. Temporarily install Clevis Pin without Cotter Pin until final adjustment is made (step 14).
10. Install Dual 4 Way Control Valve (#V-88) in desired location as required.
11. Apply thread sealant to all fittings and install into valve and cylinders.
12. Route 1/4" DOT Tubing from Control Valve location to Air Cylinder and air supply source. Connect tubing as shown (Fig. 5).



Valve/Cylinder Operation & Final Adjustment

13. With both knobs at the "in position" on control valve, PTO will be in Neutral. With only one knob at the "out position", PTO will shift to Forward while the other Knob "out" will shift to Reverse.
14. Make final check of Rod Eye adjustment. With air supply "ON" and control valve in Neutral position, the Rod Eye Clevis Pin should be able to be removed and re-inserted freely. Check that the same condition exists for Forward and Reverse positions. If Pin does not insert freely in all 3 positions, re-adjust Rod Eye as required to achieve this condition. Finally, insert Clevis Pins and Cotter Pins. Spread Cotter Pins as required. Tighten Rod Eye Jam Nut to 22-32 ft-lbs against shift shaft.