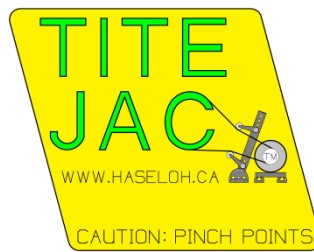


456C HG Pump Jack Tite-Jac™ Mounting Instructions

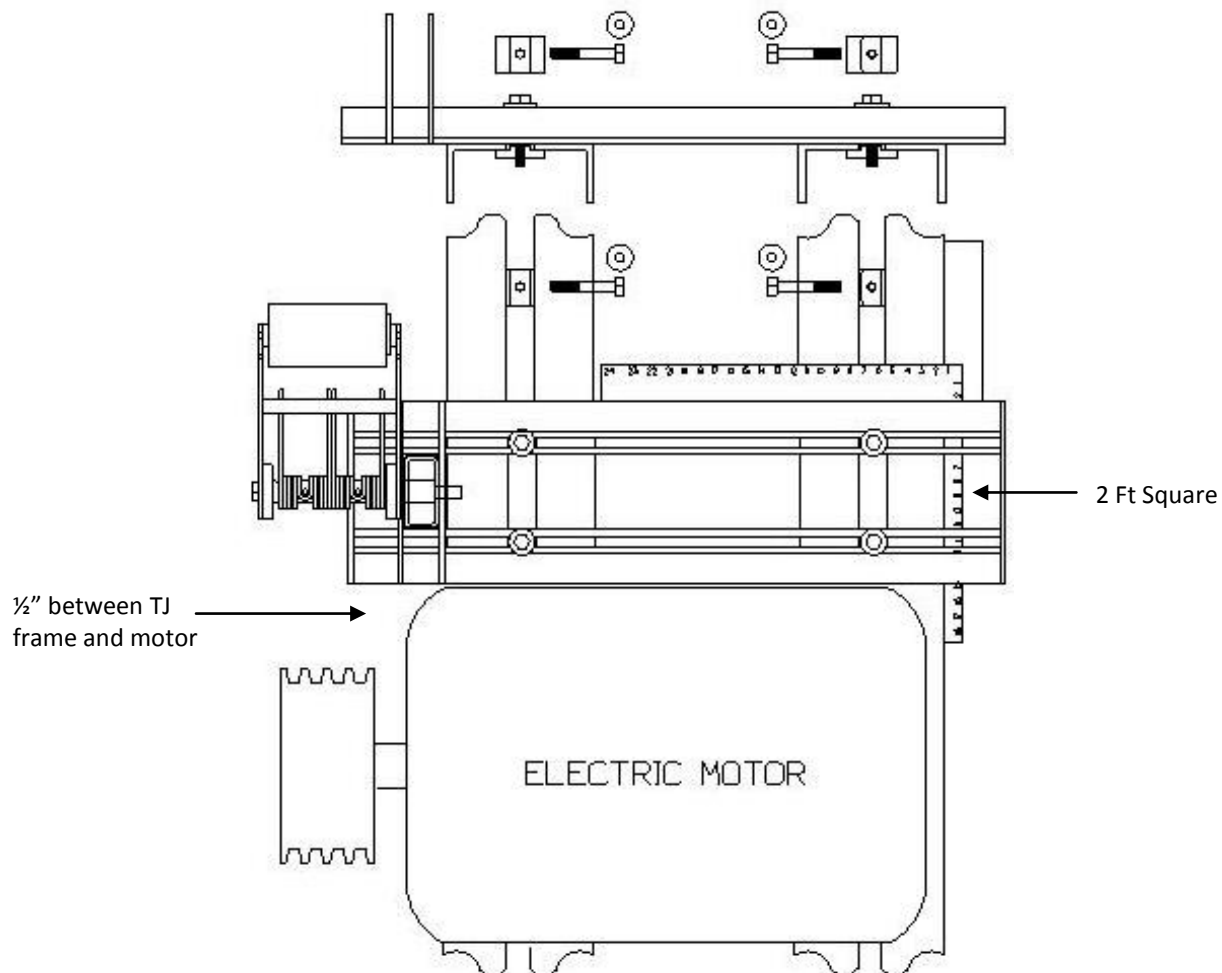


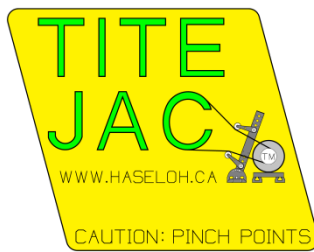


456C HG Pump Jack mounting instructions for Tite-Jac™

Tite-Jac™ is a twin belt tensioner that can be used and adjusted for both left and right hand drive pump jacks. The Tite-Jac™ comes with all mounting hardware associated with the 254HD Pump Jack. This is a maintenance free system as all pivot points and idlers are on sealed ball bearings.

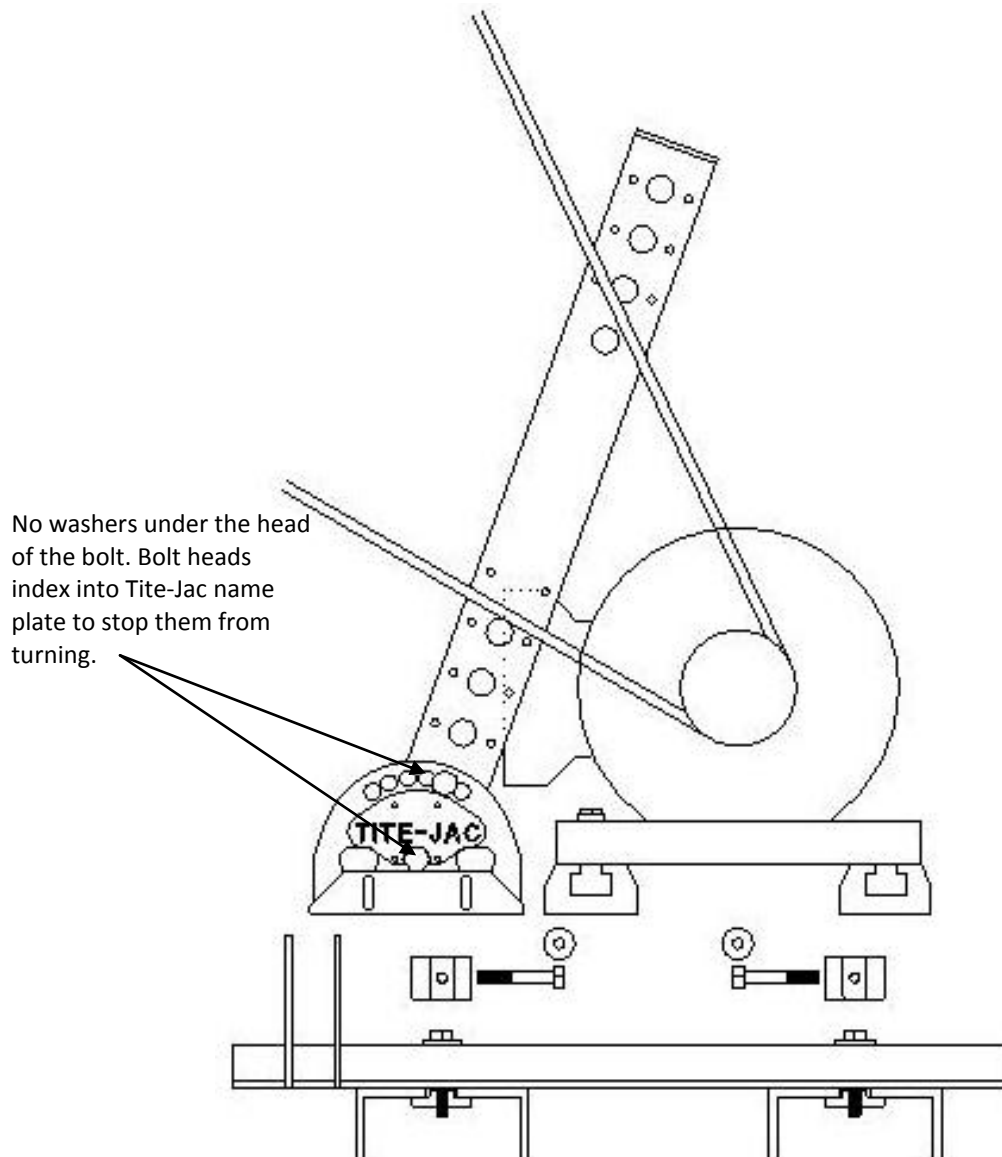
Mount the frame of Tite-Jac™ using the 4 – T nuts and 4 – $\frac{1}{2}$ " X 3 $\frac{1}{2}$ " NC bolts and washers provided in the hardware bag. Use a 2 foot square to make sure that the Tite-Jac™ frame is perpendicular to the main frame of the pump jack. Ensure that there is a minimum of $\frac{1}{2}$ " between the Tite-Jac™ frame and the motor mounts.

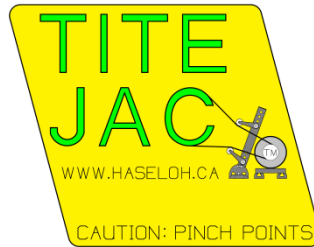




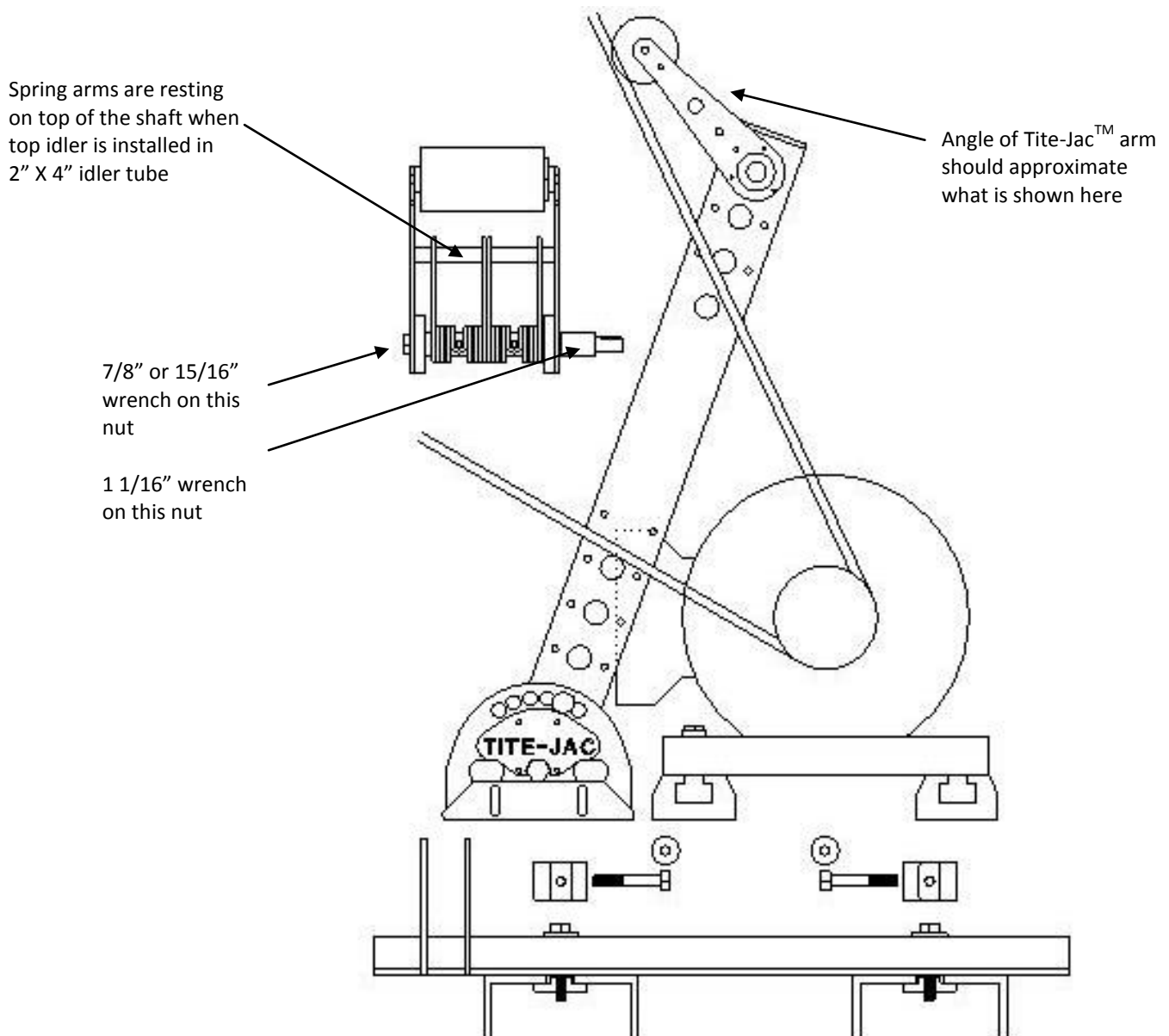
Next insert the main 2" X 4" tube into the plates at the front of the Tite-Jac™ frame. Insure that the 1 ¼" holes in the tube are facing the belts. Use the ¾" NF bolts, washers and Ni-loc nuts that are loosely installed in the plates. Do not use washers under the heads of the bolts, only under the nuts. This is done to ensure that the full unthreaded shank of the bolt is through all supporting members.

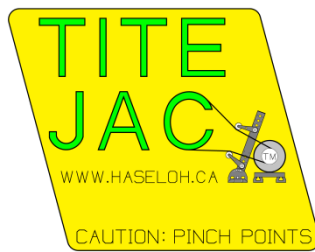
Please note: that the 1 ¼" holes of upright 2" X 4" tube of Tite-Jac™ are facing the belts of the pump jack. The angular position of the upright tube can be changed backwards or forwards to accommodate any angle of main drive belt angle.



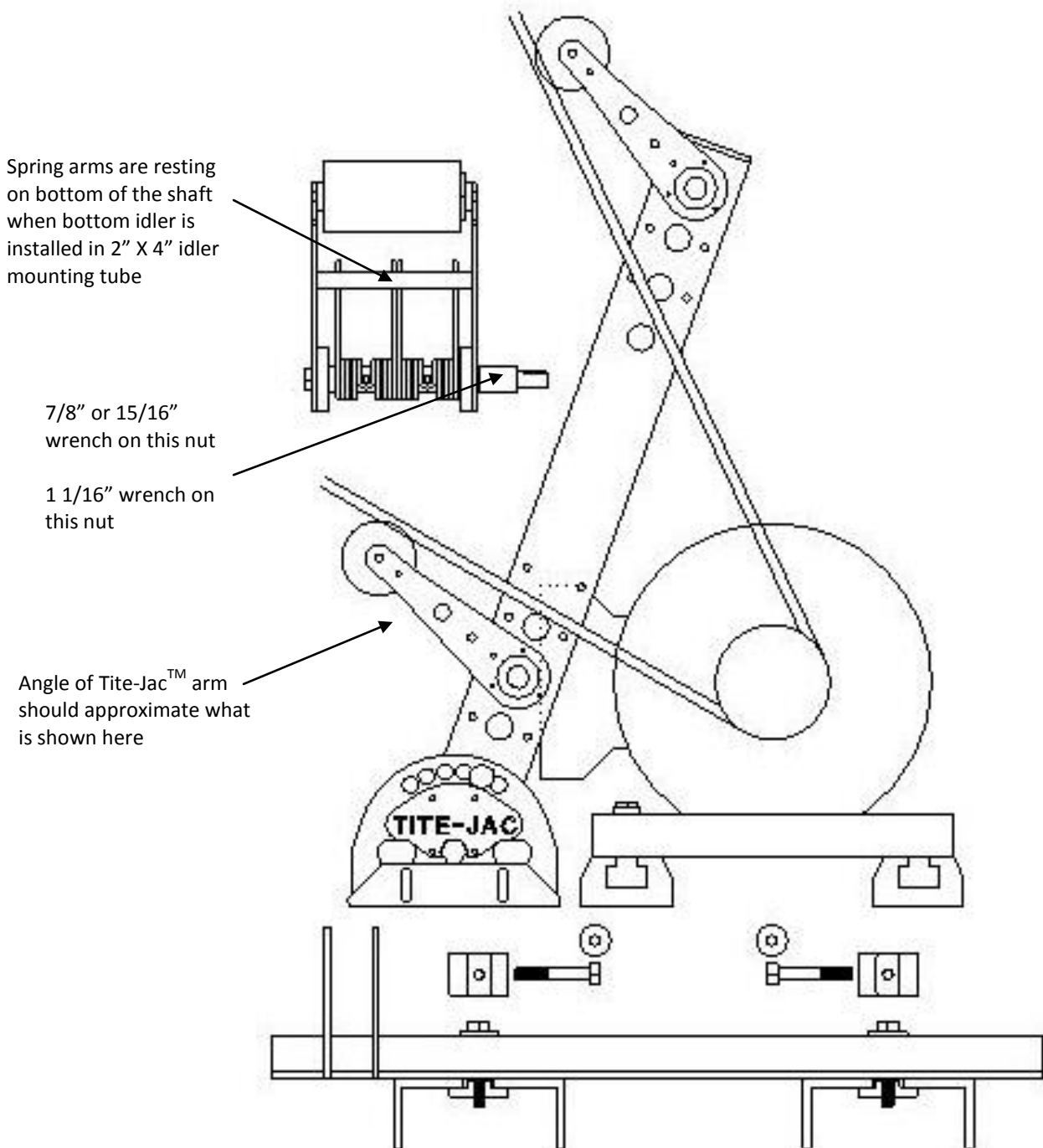


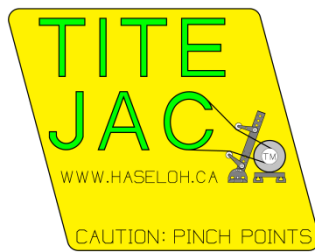
Select the Idler unit that is marked top roller, remove the nut and washer from the shaft and insert the idler shaft through the appropriate hole of the tube. Spring arms are on top of the $\frac{3}{4}$ " shaft when viewed as shown. Install nut and washer on threaded end of shaft. Wrenches needed to snug up shaft and nut are 1 – $\frac{7}{8}$ " or $\frac{15}{16}$ " wrench for the shaft and 1 – $1\frac{1}{16}$ " wrench for the nut.



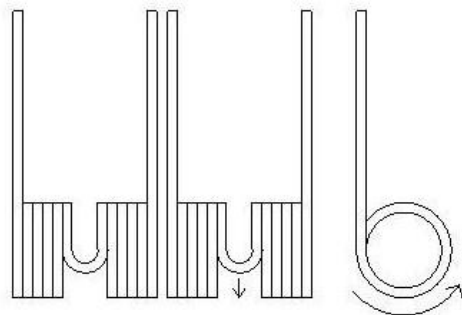
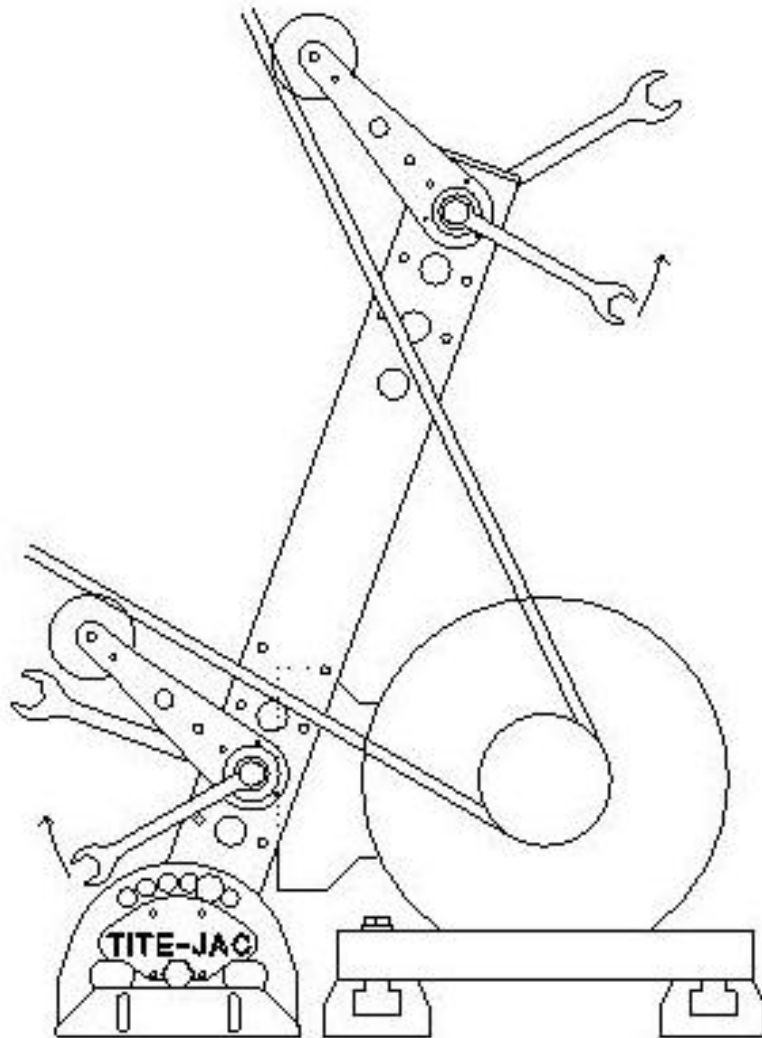


Select the Idler unit that is marked bottom roller, remove the nut and washer from the shaft and insert the idler shaft through the appropriate hole of the tube. Spring arms are on bottom of the $\frac{3}{4}$ " shaft when viewed as shown. Intall nut and washer on threaded end of shaft. Wrenchs needed to snug up shaft and nut are 1 – $\frac{7}{8}$ " or $\frac{15}{16}$ " wrench for the shaft and 1 – $1 \frac{1}{16}$ " wrench for the nut.

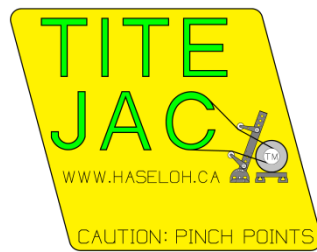




The spring tension is easily adjustable as shown in following drawing. Loosen rear nut on idler shaft with 1 1/6" wrench. Turn 7/8" or 15/16" wrench in direction indicated. After desired tension is achieved, tighten rear nut back up while holding 15/16" wrench in position.

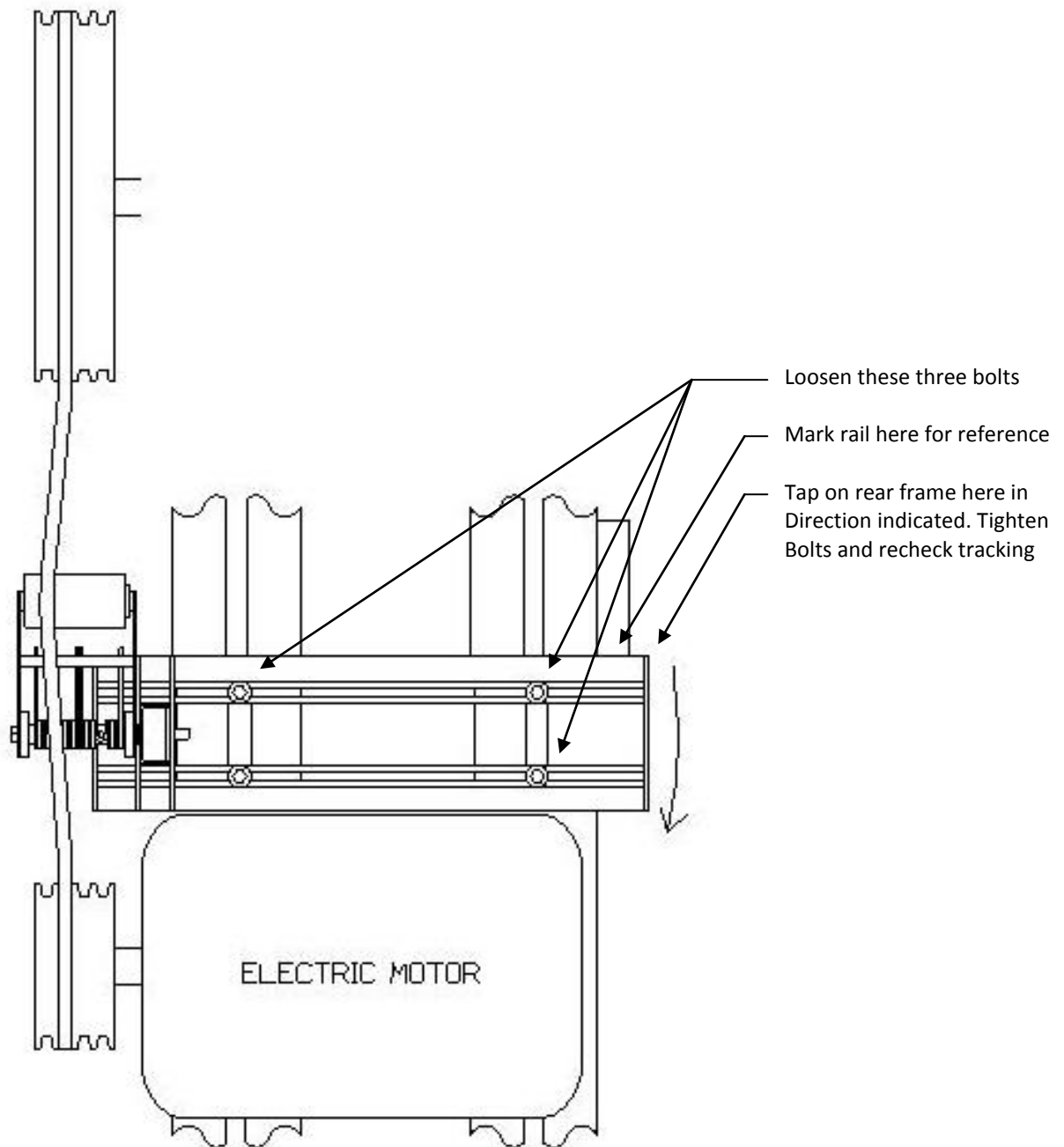


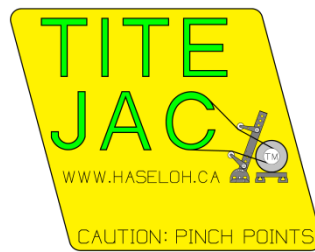
The spring tension must be adjusted in the direction indicated above. The spring must always wind tighter. If you tension the spring in the other direction, the spring will start to unwind and fail prematurely. These springs are the pickup tines from a New Holland combine and can be purchased at any agricultural implement dealer.



Adjustment for bow out of Belt Tracking

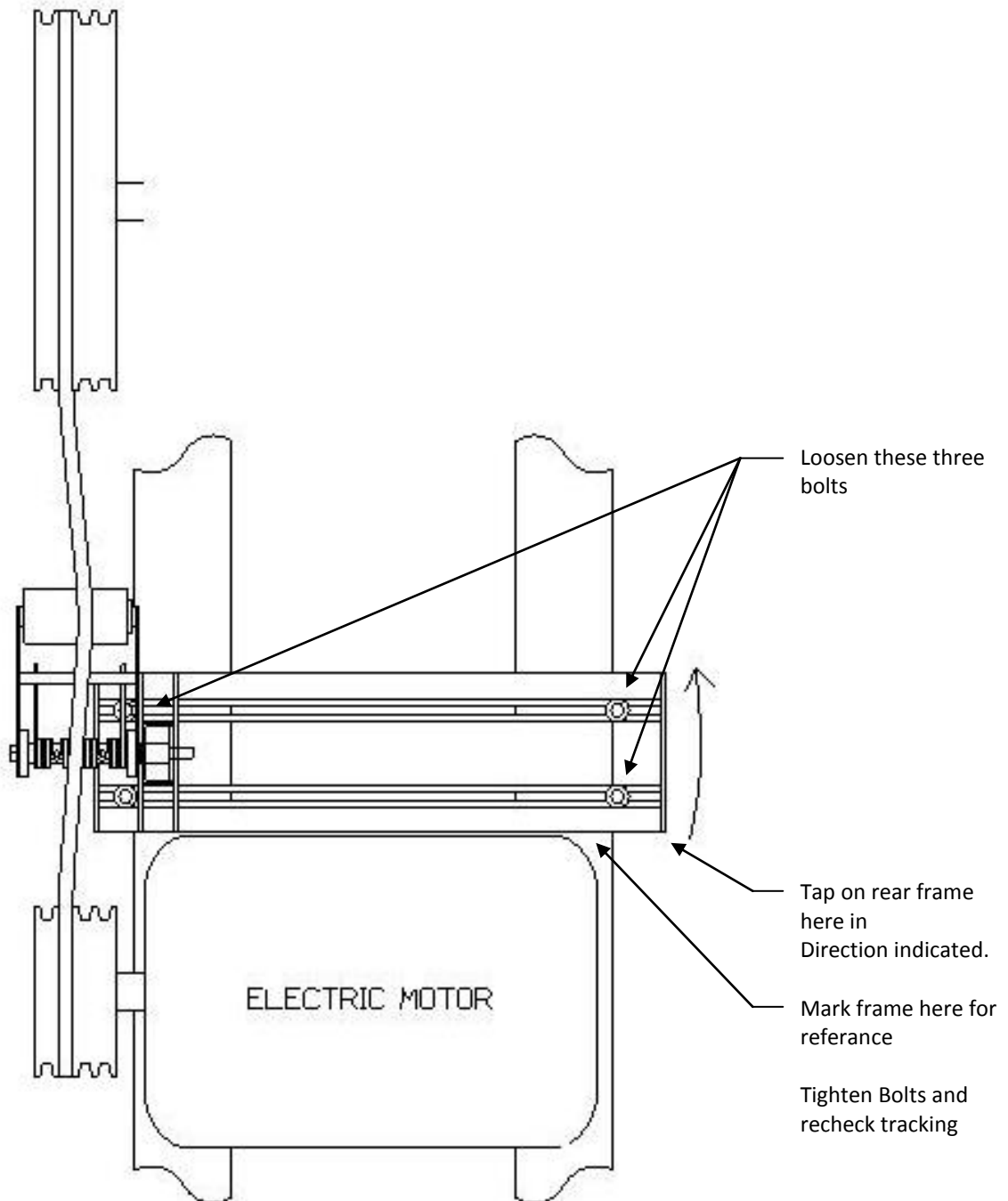
On initial start up of the system, stand behind the pump jack and watch the belts. If the belt bows outwards from the motor to the belt tension roller and then goes back towards the main driven pulley you must adjust the rear of the main mounting frame of Tite-Jac™. Below is a drawing with only one belt depicted for clarity.

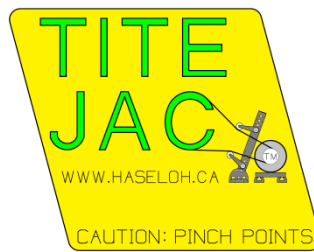




Adjustment for bow in of Belt Tracking

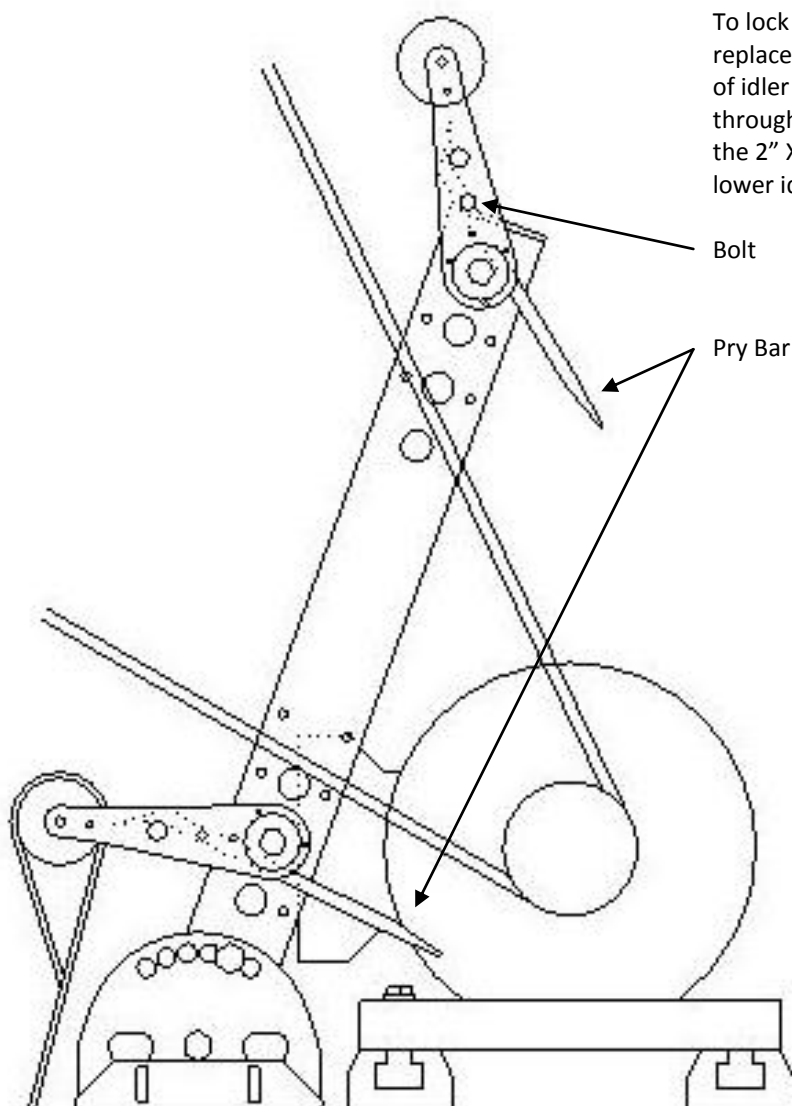
On initial start up of the system, stand behind the pump jack and watch the belts. If the belt bows inwards from the motor to the belt tension roller and then goes back towards the main driven pulley you must adjust the rear of the main mounting frame of Tite-Jac™. Below is a drawing with only one belt depicted for clarity.





Replacing the belts with Tite-Jac™ in place

When replacing the belts on the pump jack, the rollers may be locked out of the way by inserting a bolt through the roller arm into the appropriate 3/8" hole in the tube or tying down the lower roller to the frame of the jack. The upper roller can be held up by inserting a bolt through the side plate into the appropriate 3/8" hole in the tube or resting on the top of the tube.



To lock idlers out of the way for belt replacement, insert a pry bar over top of idler shaft to spring pad. Insert a bolt through inner side plate out onto the top of the 2" X 4" tube. Use same procedure for lower idler and or tie it down to frame

If you are unable to insert a bolt into tube to hold rear idler away from belt, use a rope or chain to tie it down to frame rail

Replacement Parts

Main Roller Locking Collar Ball Bearings –
Arm Sealed Bearings
Springs

Timken PT# RA104RR
R20 2RS
New Holland Pick Up Tine