# Quantum





#### **Unit Information**

- Oil Reservoir 20 gal
- Oil Flow Stnd Pump 22 gpm
- Return Filter 10 Micron
- Pack Cycle Time 12-14 Second
- Compaction rating 900 lb/yd
- Approx Body Weight 5520 lbs 6020 lbs

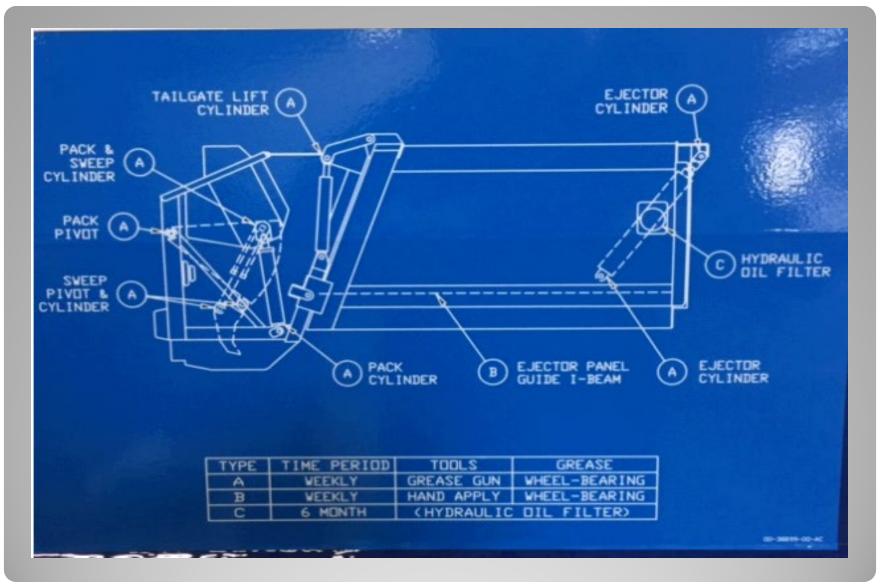


## SN, Model, Date Code



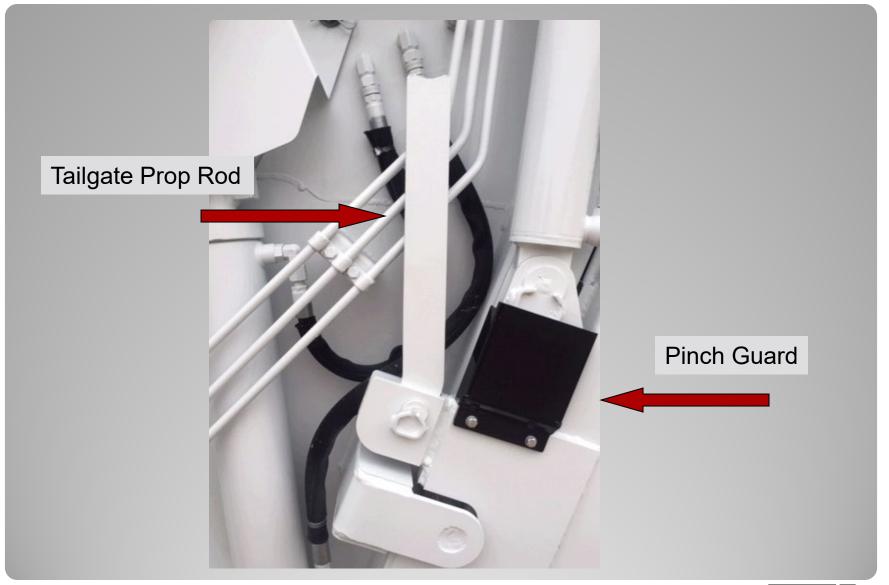


#### **Lube Chart**





#### **Tailgate Prop / Pinch Guard**





#### **Access Door**





### **Eject Panel Slide Blocks**







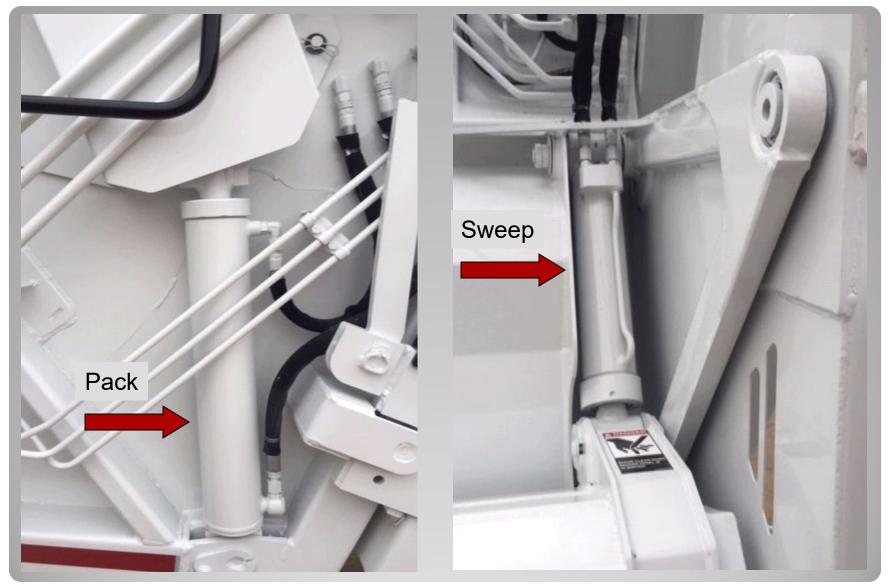
# **Eject Cylinder**







# Pack / Sweep Cylinders



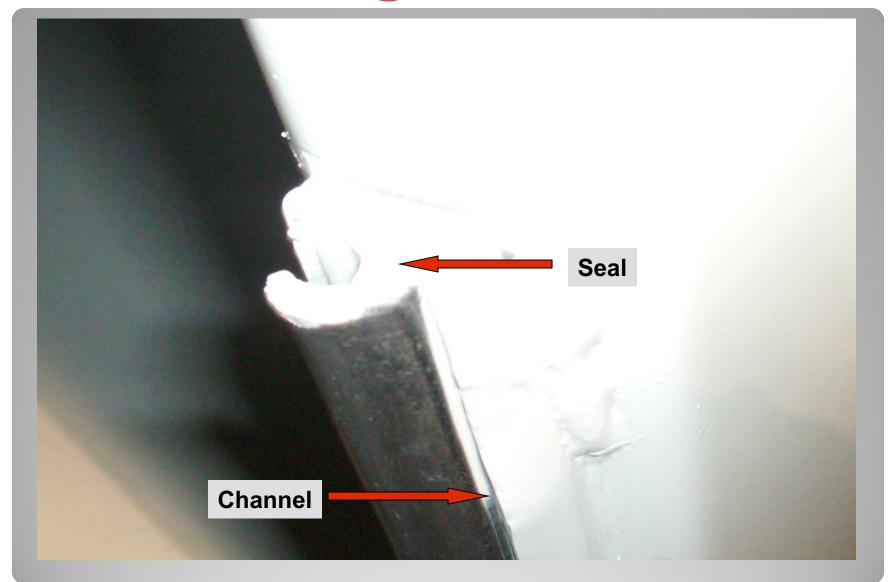


#### **Pack and Sweep Panel**





# **Tailgate Seal**





#### **Tailgate Seal Replacement**

#### TAILGATE SEAL REPLACEMENT

- Raise the tailgate to a sufficient height to extend the tailgate props. Slowly lower the tailgate until the tailgate props are supporting the tailgate. Remove the keys from the ignition, use proper lock-out/ tag-out procedures, and chock the tires.
- Using a small pry bar, bend the metal seal channel upward in those areas where the channel is depressed into the rubber seal.
- Grasp one end of the rubber seal and pull outward to remove the rubber seal from the metal seal channel.
- 4) Thoroughly clean dirt and debris from the inside grooves of the metal seal channel. Insert one end of the rubber seal into either end of the metal seal channel. Continue pushing/ pulling the rubber seal through the entire width of the metal seal channel.



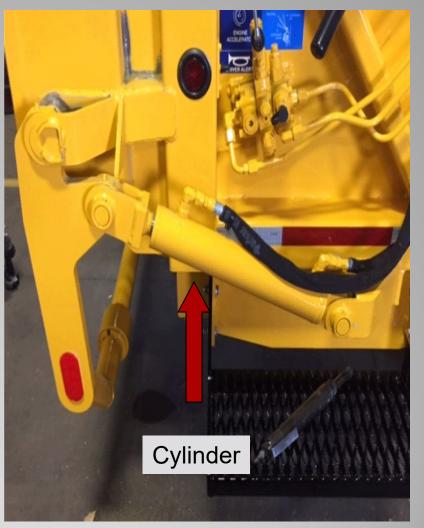
## **Lip And Latch**





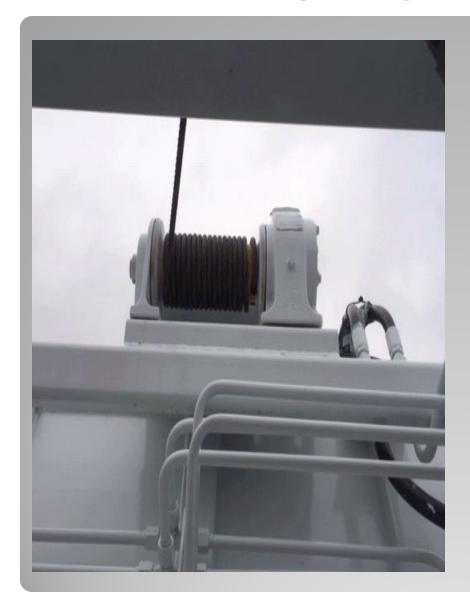
#### **Roll Bar**







#### **Winch Fairlead Hook**







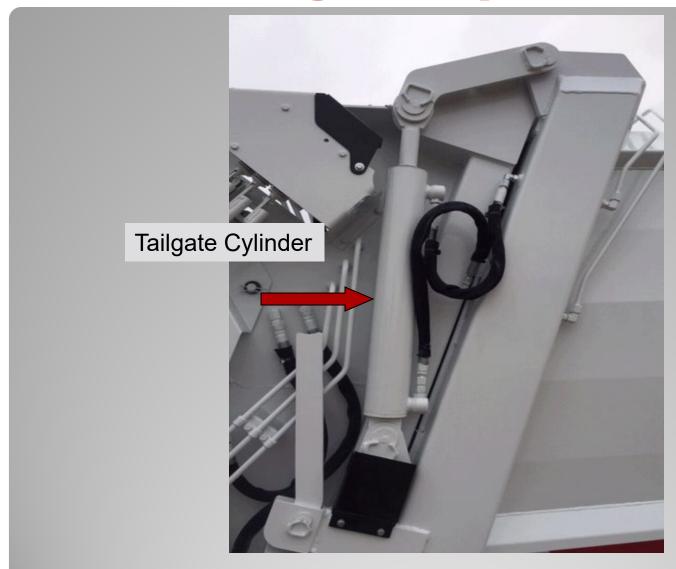


# **Cart Tipper Valve**



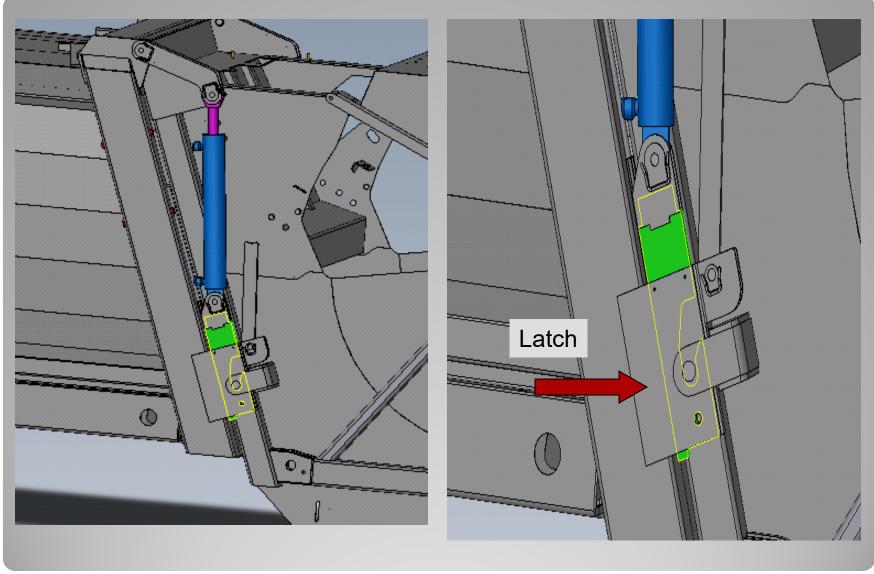


# **Tailgate Cylinders**



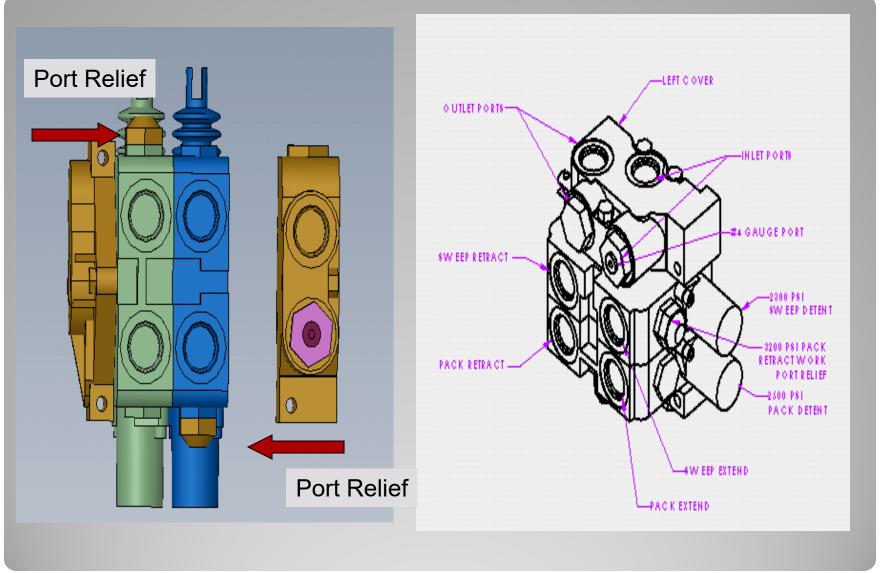


## **Tailgate Latch**





### Pack / Sweep Valve





#### **Tailgate Valve Relief Setting**

#### TAILGATE ("MAIN" VALVE) RELIEF PRESSURE CHECK

(The main valve relief cartridge is in series with the body valve relief cartridge. Therefore, the body valve relief cartridge will need to be set to a pressure setting above 2,700 PSI before the main valve relief can be set properly)

- Install a 0-4,000 PSI test gauge on the body valve assembly test port.
- 2) Push and hold the sweep lever. Once the panel is "dead-headed", keep the sweep lever actuated, and read the pressure gauge. The pressure gauge should read 2,700 PSI.

#### IF NOT

- Adjust the tailgate valve main relief pressure.
  - Loosen the locknut on the main relief cartridge, located to the right of the tailgate lever.
  - B) Insert an large flat head screw driver and turn the adjustment clockwise to increase pressure, or counter-clockwise to decrease the pressure.
- Repeat step 2 to check the main relief pressure setting.



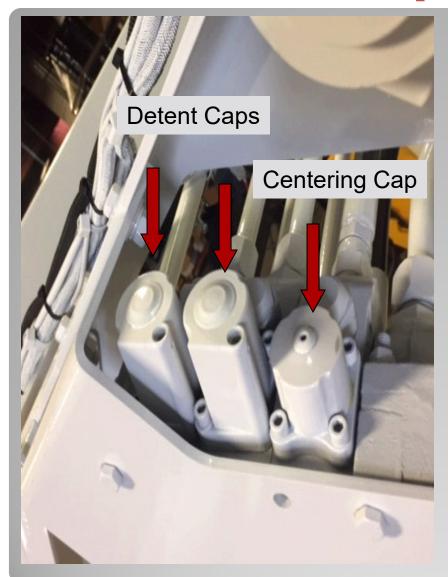
# **Detent Cap Shield**







### Pack/Sweep Detent Caps







#### **Detent Adjustment**

#### AUTOMATIC PACK VALVE DETENTS

Refer to the drawing below. A 5/32 Allen wrench is required to perform this adjustment procedure.

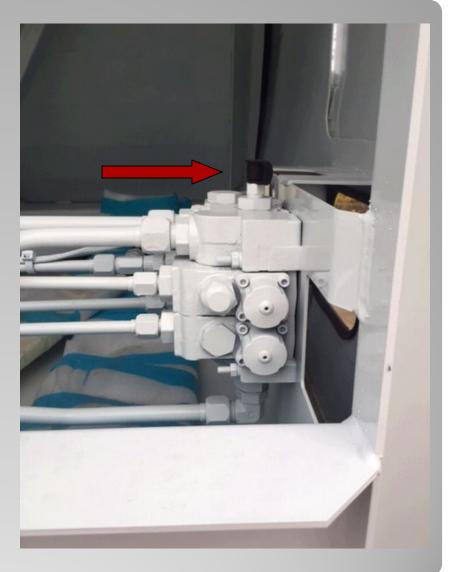
For automatic cycle, if the valve actuating handles fail to "pop-out" of detent at the end of the cylinder stroke, a detent adjustment may be required. Proceed as follows:

- Since low system pressure can also cause detent malfunction, always check the main relief pressure first. The main relief pressure adjustment is listed earlier in this section.
- Misalignment of detent caps at upper end of the valve can cause the detents to hang-up and fail to release. Loosen the screws, re-align the caps, re-tighten the screws and check operation.
- 3) If these two steps fail to correct the detent problem, the detents can be adjusted by the following procedures:
  - A) Remove the plastic plug in the end cap opposite the spool attachment end and insert the Allen wrench into the screw and locknut.
  - B) Loosen the locknut and turn the screw in (clockwise) to increase the detent force, or screw out (counter-clockwise) to reduce the detent force.
  - C) Screw the adjuster inward until the detent fails to release at the end of the cylinder stroke, and then back it off until it releases.
  - D) Tighten the locknut and re-check operation through several packing cycle. Reset if necessary. Install the plastic plugs.



## **Tailgate Valve**







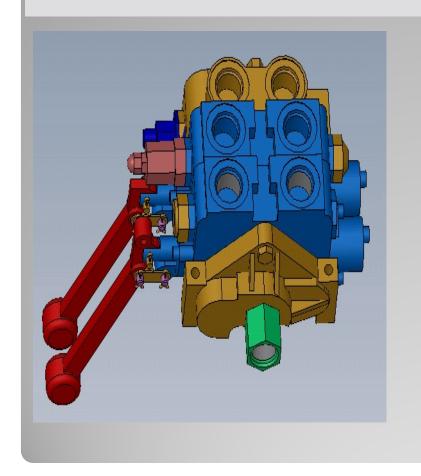
### **Body Valve**

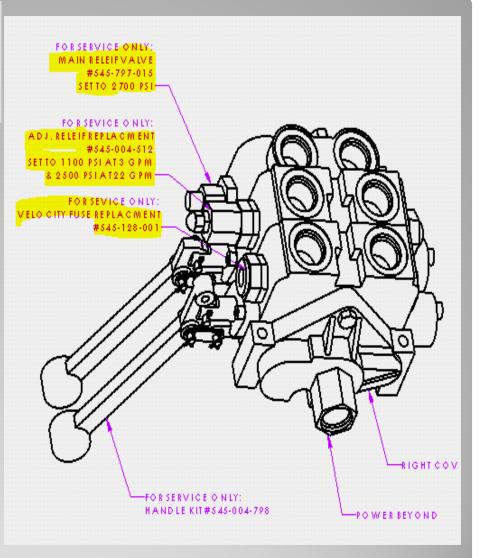
Velocity Fuse: Prevents tailgate from lowering

Main relief: 2700 psi

Backpack Resistance Cartridge

Port Relief







#### **Body Valve Relief Setting**

#### BODY VALVE MAIN RELIEF PRESSURE CHECK

- Install a 0-4,000 PSI test gauge on the 2 spool valve assembly test port.
- 2. Press the engine speed-up button located directly above the 2 spool valve assembly. At the same time pull the ejector panel lever to fully retract the ejector panel. Once the panel is "dead-headed," keep the ejector lever actuated. The pressure gauge should read 2,700 PSI.

#### IF NOT

- Adjust the 2 spool valve main relief pressure.
  - Loosen the locknut on the main relief cartridge, located to the right of the tailgate lever.
  - B) Insert an Allen wrench and turn the adjustment clockwise to increase pressure, or counter-clockwise to decrease the pressure.
- Repeat step 2 to check the main relief pressure setting.



#### **Resistance Cartridge**

#### RESISTANCE CARTRIDGE PRESSURE CHECK

(CHECKING THE RESISTANCE CARTRIDGE REQUIRES THE USE OF AN EXTERNAL HYDRAULIC POWER SOURCE)

- Install a 0-4,000 PSI test gauge on the body valve assembly test port.
- 2) Install the external hydraulic power source to the pack extend pressure hose returning to the 2 spool valve. Ensure that the open cylinder port is plugged. Next, begin applying hydraulic pressure to the extend line. Build pressure until 1,100 PSI is reached. If the resistance cartridge is working properly the pressure should not go beyond 1,100 PSI

#### IF NOT

- Adjust the resistance cartridge pressure.
  - Loosen the locknut on the resistance cartridge, located on the eject section of the main body valve.



#### Resistance Cartridge

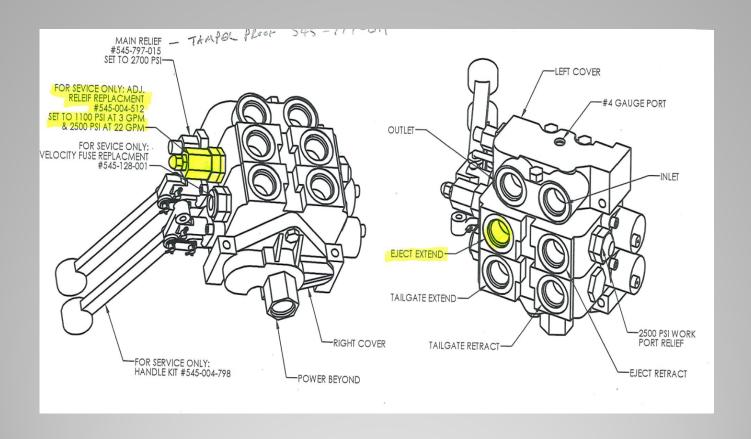
Remove the eject extend hose from the valve. (see below)

Cap the hose going to the cylinder to prevent contamination.

Install an external power source into the valve port (Power Unit)

Start putting pressure to the eject extend and watch the pressure.

The pressure shouldn't go above 1100 psi. If it is higher adjust the cartridge below counter clockwise and if it is low then turn clockwise Until 1100 psi is met.





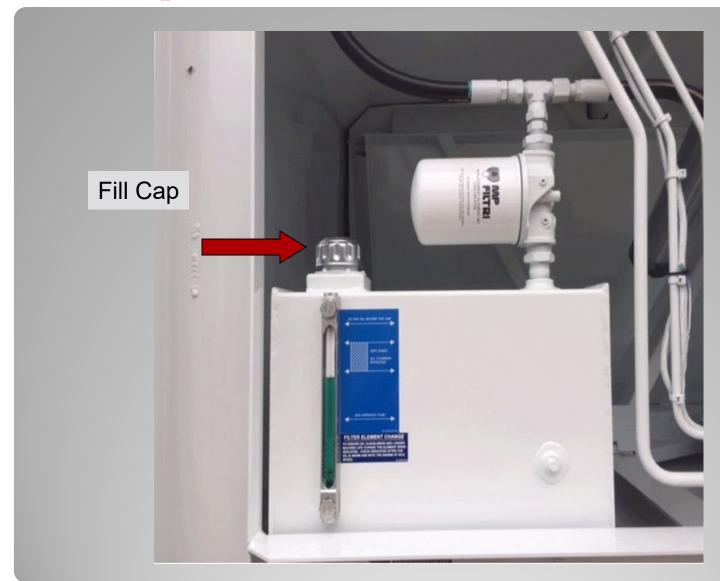
#### **Flow Control**







### **Hydraulic Tank and Filter**





## Filter / Sight Glass







## **Hydraulic Shut Off**





#### Filter Service Schedule

#### CHECK/REPLACE RETURN FILTER

The return filter is a vital component of the hydraulic system. Without proper filtration, problems with hydraulic system components will occur. Stick to a strict maintenance schedule for this item. (See page 33 for procedure).

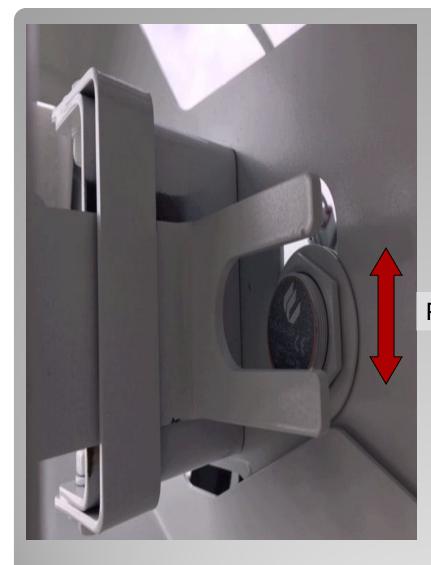
#### Time Lapse Recommendations for Filter Replacement:

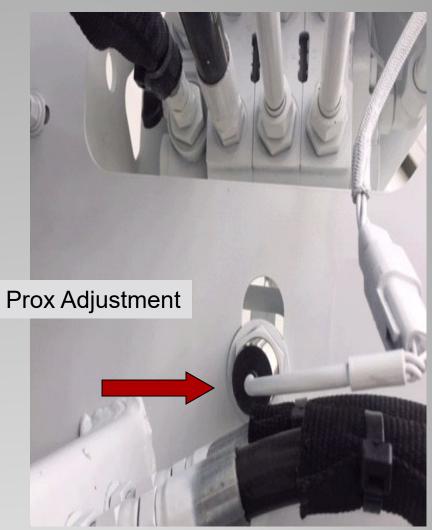
- After the first 20-hours of hydraulic pump operation.
- After the next 50-hours of hydraulic pump operation.
- C) Thereafter, every 250-hours of hydraulic pump operation or sooner, if so indicated by adverse operating conditions.

The condition of the filter must be checked weekly!



# **Throttle Up Prox**







#### **Accel Prox Adjustment**

#### ADJUSTING ACCELERATOR PROXIMITY SWITCH

 With the engine running and the unit operating, operate the tailgate packing mechanism. If the engine accelerates while the packing panels are in motion, the proximity switch is operating correctly.

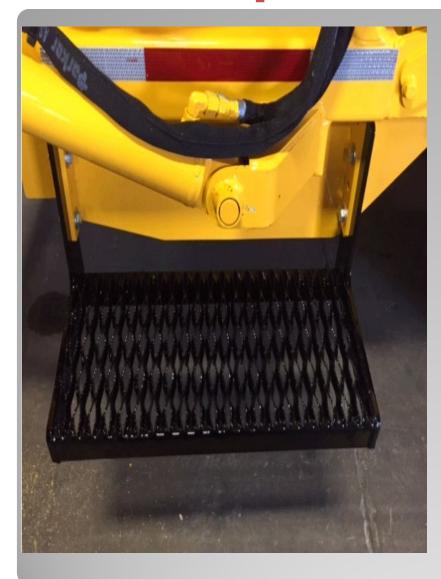
#### IF NOT

- 2) Loosen the nuts retaining the accelerator proximity switch, and adjust the switch to give approximately a 1/8th inch gap between the switch and the linkage flag. Then tighten the switch retaining nuts securely.
- Repeat step 1.
- Once the switch is adjusted properly, apply silicone to the retaining nuts to lock them in place.



# Step

#### **Grab Handle**







#### **Engine Excel / Driver Alert**





#### **Cab Control Box**



Switch with light 345-011-010 Lights Red 332-036-003 Lights Green 332-036-004 Relay 342-013-017

