



# *360 Screener*



## **OWNERS/OPERATOR'S MANUAL**

BWS P/N 25000293  
2014, REV. 2

## **Structural & Component Warranties**

### **PITPRO 360 Screener:**

- **1 year “bumper to bumper “ - 100% Parts and Labor**

For more information, contact the nearest BWS Manufacturing Ltd authorized dealer, or visit [www.bwstrailers.com](http://www.bwstrailers.com)

BWS contact info:

Phone: 506 276 4567

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# 1. SAFETY PRECAUTIONS

The following precautions are suggested to help prevent accidents.

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. Read and take the following precautions before operating this machine to help prevent accidents. Equipment should be operated only by those who are responsible and instructed to do so.

## 1.1 GENERAL INSTRUCTIONS

1. Read this manual carefully before using the machine. Working with unfamiliar equipment can lead to accidents.
2. Do not allow anyone to ride on the machine when being towed.
3. Make sure all safety and instruction decals are in place and legible. (See section 1.2)

### OPERATING THE MACHINE

1. Always tow the machine at speeds compatible with safety, especially when operating over rough ground, crossing ditches or turning.
2. Use care when operating on steep grades to maintain proper stability.
3. Be careful when towing through door openings or under overhead objects. Always make sure there is sufficient clearance.
4. When travelling on public roads, know the local rules and regulations and make sure your machine is equipped with the proper safety equipment.
5. Watch out for overhead and underground high-voltage electrical lines when operating the machine.
6. Always park the machine on firm level ground. If necessary, prepare a level area to operate the machine from.
7. Be watchful of bystanders when starting the machine and during operation.
8. Wear protective clothing such as safety eye wear, hearing protection, steel toe foot wear, gloves and hard hats.
9. Never attempt to load the machine in excess of capacity.
10. Assure all hydraulic controls are functioning properly, as well as safety devices are installed and functioning at all times.
11. Never run the engine in a closed building without adequate ventilation, as the fumes can cause death.
12. Never go under the machine while it is running.
13. Remove debris from the shaker screen before transporting.



# 1. SAFETY PRECAUTIONS

## MAINTENANCE

1. Stop the engine before performing any service on the machine.
2. Never refuel the machine while smoking or with the engine hot or running.
3. Replace all missing, illegible or damaged safety and warning decals. See section 1.2.
4. Do not modify or alter, or permit anyone to modify or alter this machine or any of its components or machine functions.
5. Do not bypass the safety systems. Consult your BWS Equipment Dealer if your safety system is malfunctioning.
6. Do not make mechanical adjustments while the machine is in motion or when the engine is running.
7. Do not attempt to repair or tighten hydraulic lines when the system is under pressure. Escaping fluid under pressure can penetrate the skin and cause serious injury or death.
8. Whenever replacing pivot pins, always use a brass drift and hammer. Failure to do so could result in injury from flying metal fragments.
9. The cooling system operates under pressure which is controlled by the radiator cap. It is dangerous to remove the cap while the system is hot. Allow the engine to cool before removing the radiator cap.
10. Wear protective clothing such as safety eye wear, hearing protection, steel toe foot wear, gloves and hard hats.
11. The engine RPM (speed) is preset from the factory. Changing the preset speed may cause severe damage to the shaker components, and will void your warranty.
12. Battery gas can explode. Keep sparks and flames away from batteries. Never short the battery terminals to check charge. Use a voltage meter or hydrometer.
13. Sulfuric acid in battery electrolyte is poisonous. Fill batteries in a well ventilated area. Wear eye protection and rubber gloves. Avoid breathing fumes when charging or electrolyte is added.
14. For secure towing instructions, refer to section 3.6.
15. Dispose of waste responsibly. Improper disposal of waste can harm the environment and ecology. Contact your local environmental agency for proper waste disposal procedures.

### IMPORTANT

**Read this manual completely before attempting to operate this machine.**

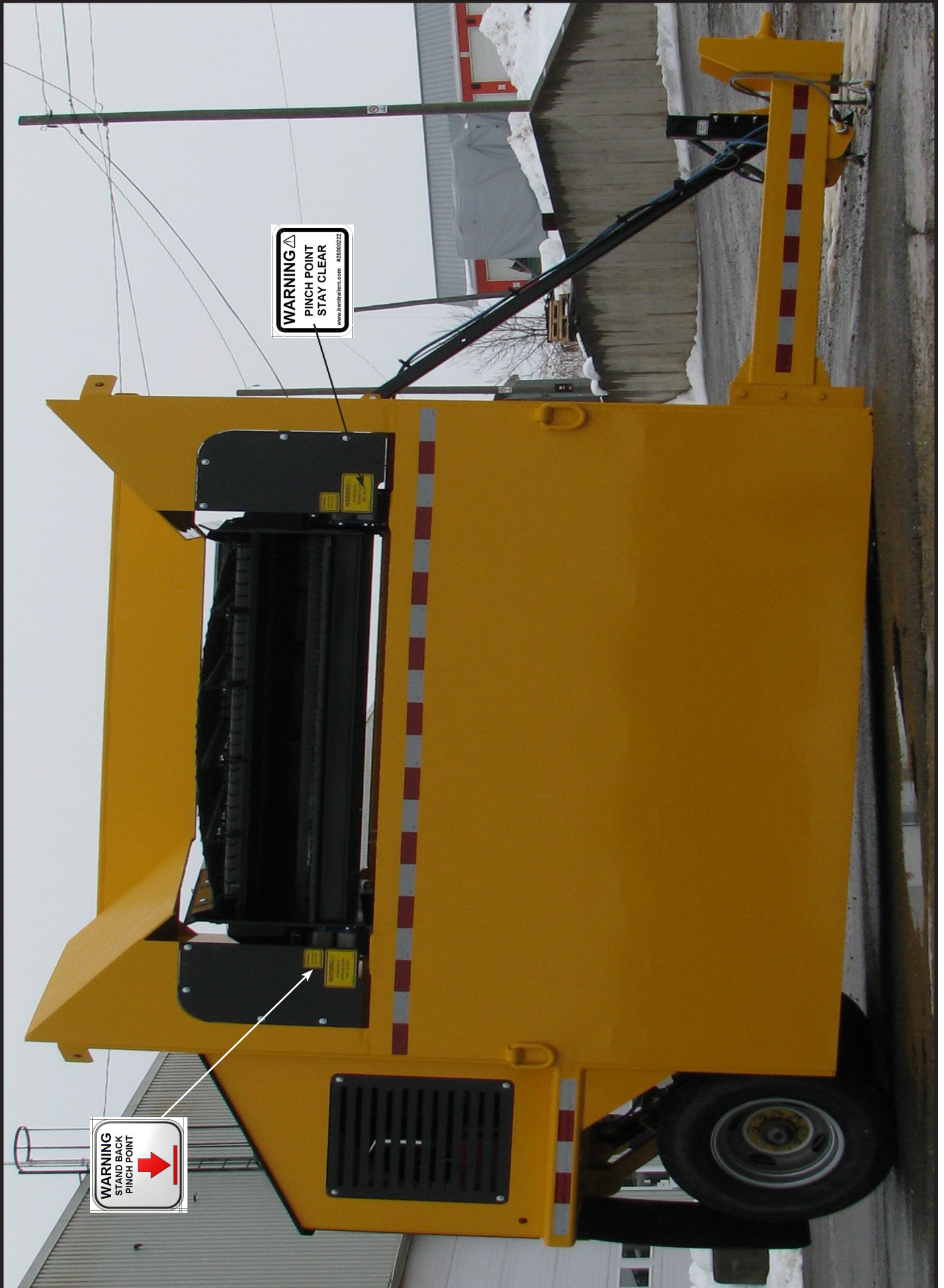


### WARNING

**Do not operate this machine if any protective guards are missing or have been removed.**

# 1. SAFETY PRECAUTIONS

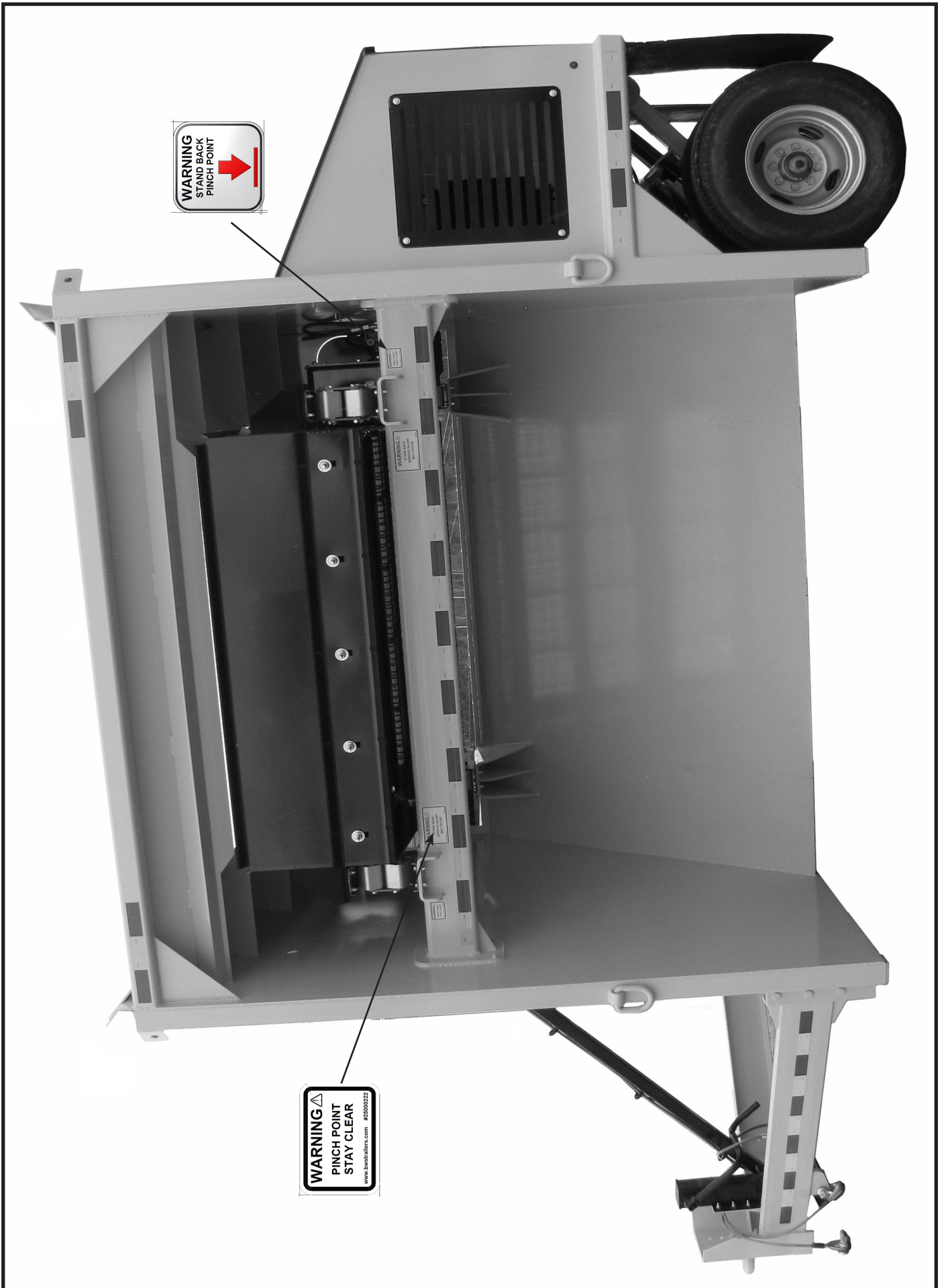
## 1.2 DECALS





# 1. SAFETY PRECAUTIONS

## 1.2 DECALS





# 1. SAFETY PRECAUTIONS

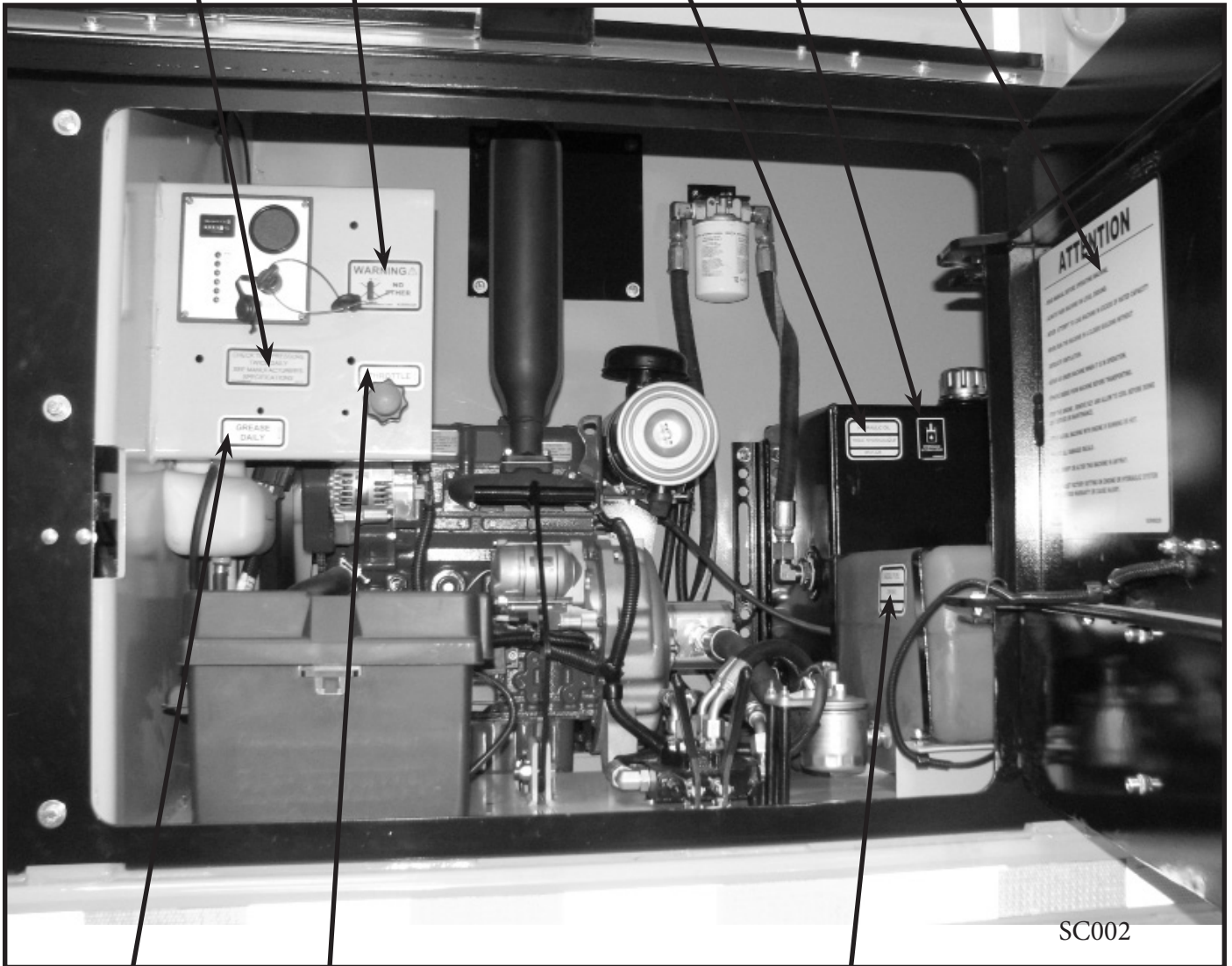
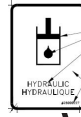
## 1.2 DECALS





# 1. SAFETY PRECAUTIONS

## 1.2 DECALS

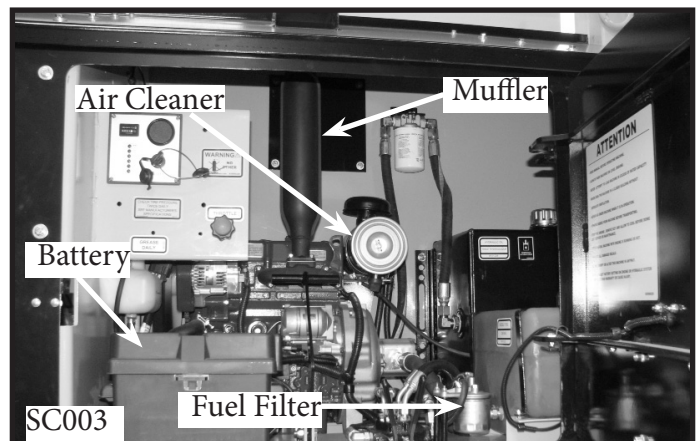
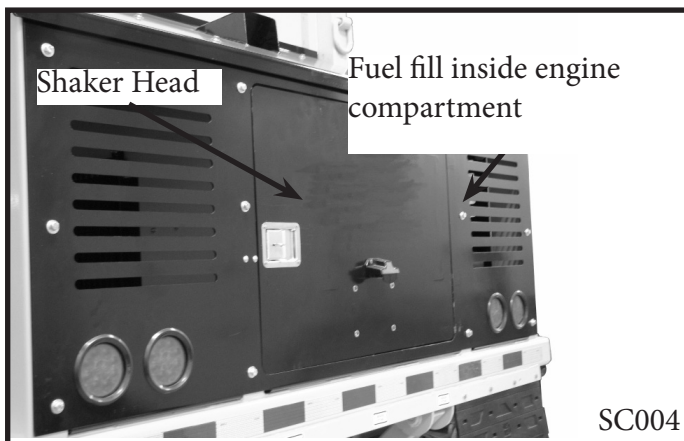
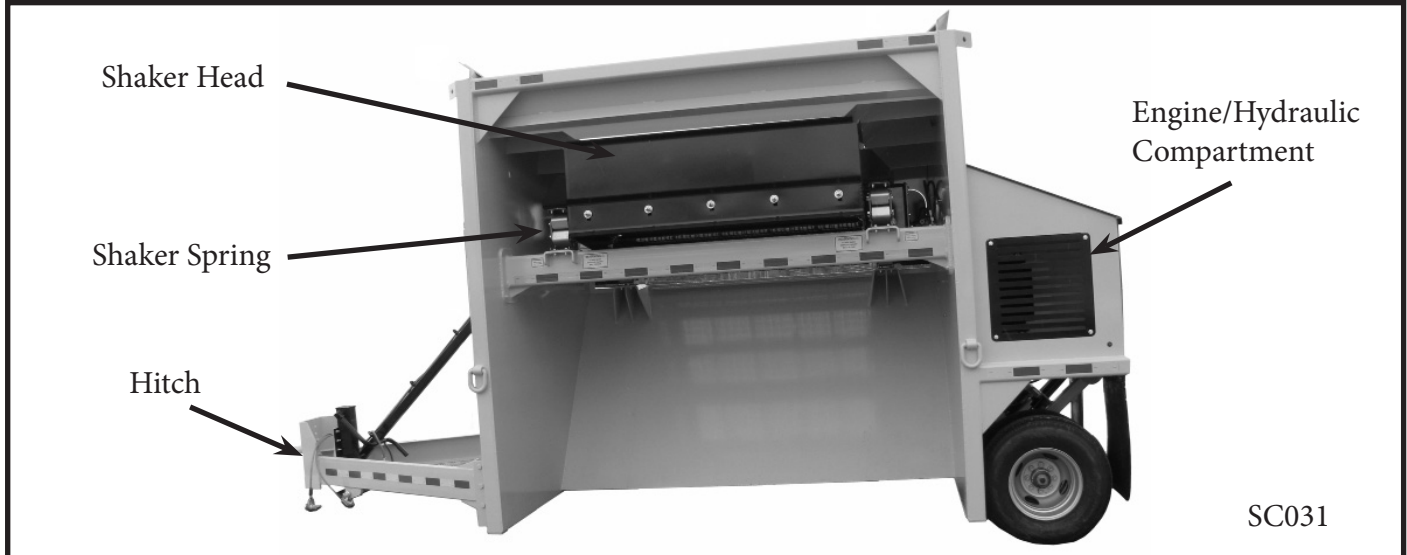
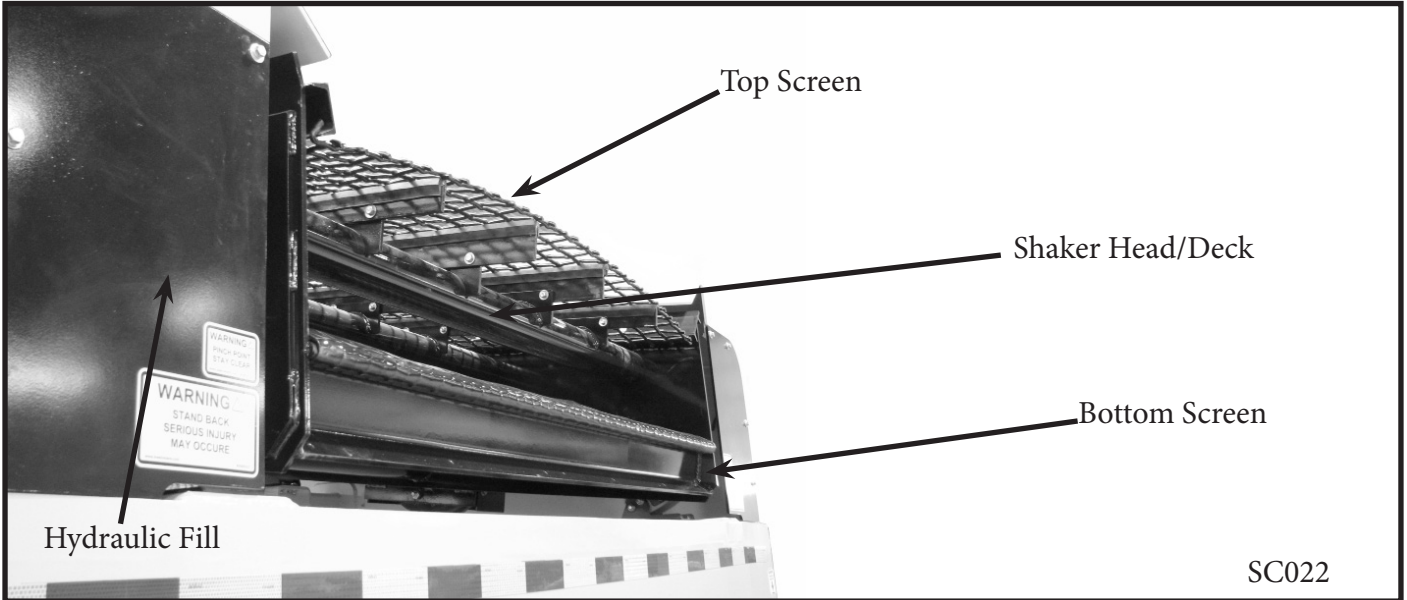


# 1. SAFETY PRECAUTIONS

## 1.3 ORIENTATION/ACCESS

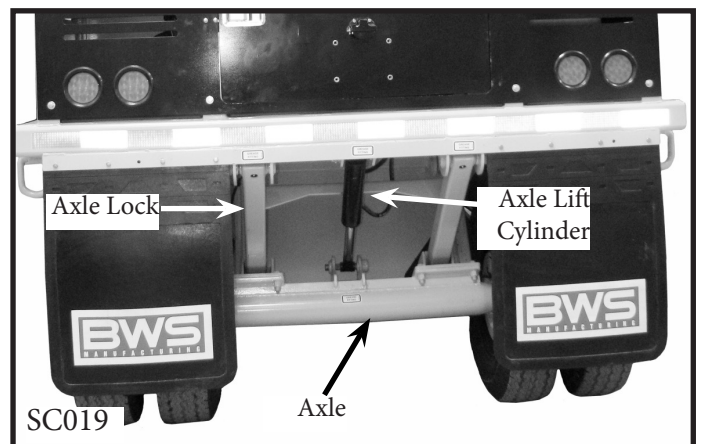
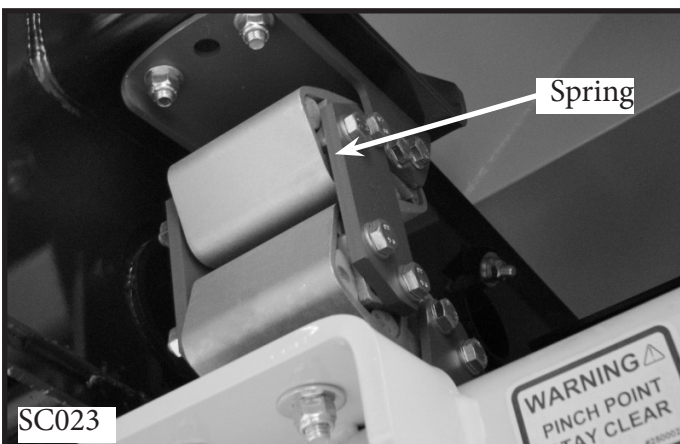
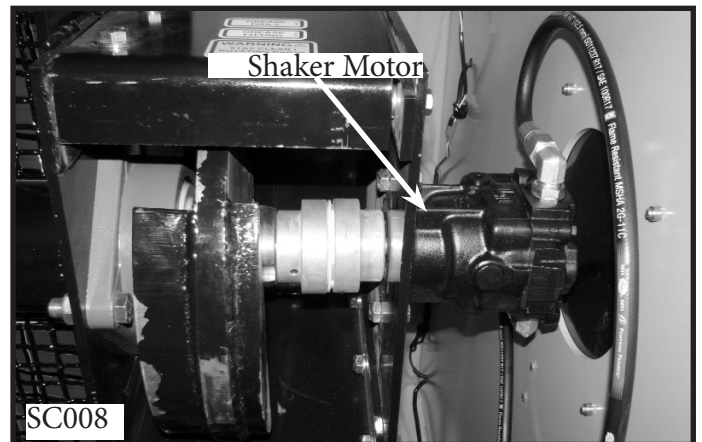
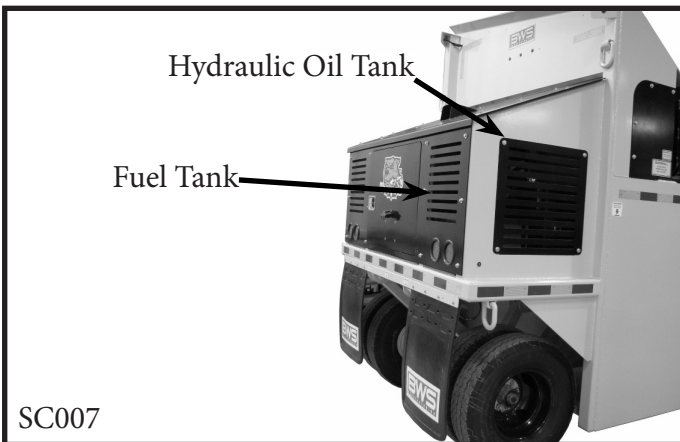
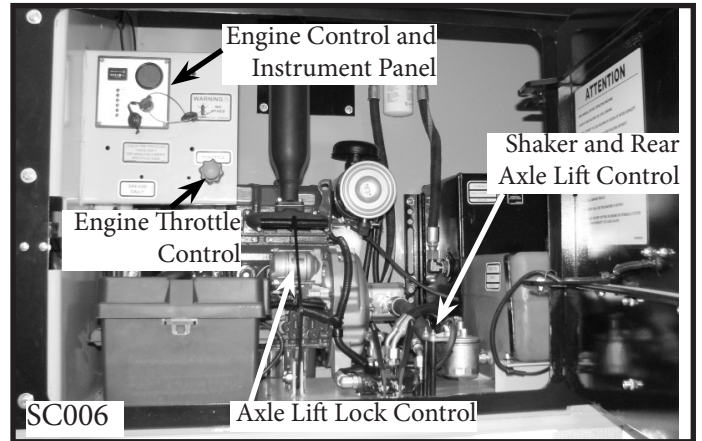
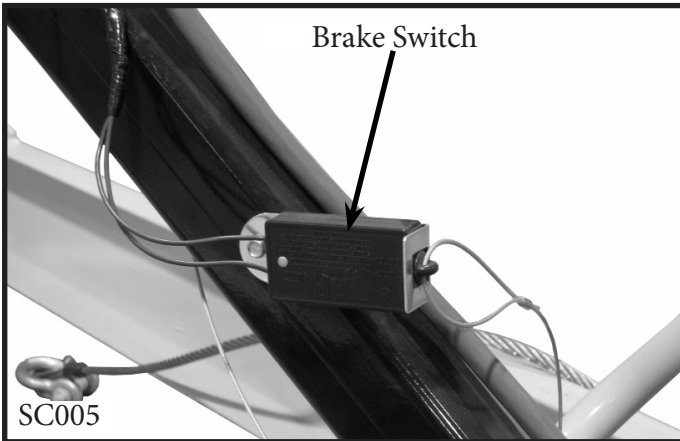
The following will familiarize you with the technical terms and locations of important components. Major components, control locations and indicator or instruments can be located using the pictures provided.

Details of control operations and functions are explained in the Operations Section 3.



# 1. SAFETY PRECAUTIONS

## 1.3 ORIENTATION/ACCESS (continued)



## **2. CONTROLS**

**Engine Controls**

**2.1**

**Hydraulic And Axle Controls**

**2.2**



## 2. CONTROLS

### 2.1 ENGINE CONTROLS

#### Instrument Panel

**A. Ignition Switch.** The ignition switch controls engine preheat, start, run and stop functions.

**B. Battery Charge.** This indicator illuminates whenever the charging system is under or over charging.

**C. Low Oil.** This indicator will illuminate whenever the engine oil pressure drops below the minimum recommended level.

**D. High Temp.** This indicator will illuminate whenever the engine coolant temperature exceeds maximum recommended level.

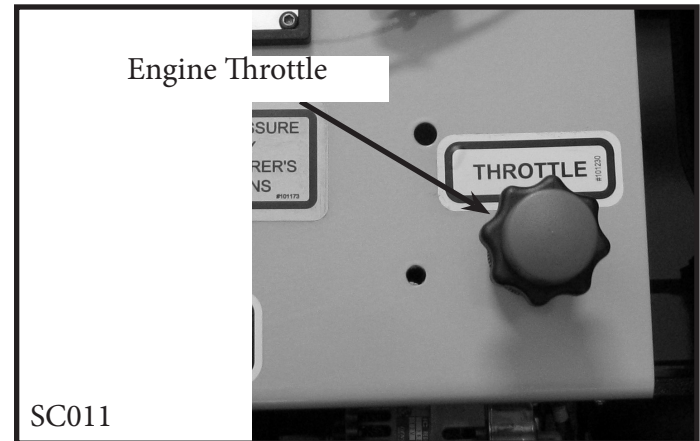
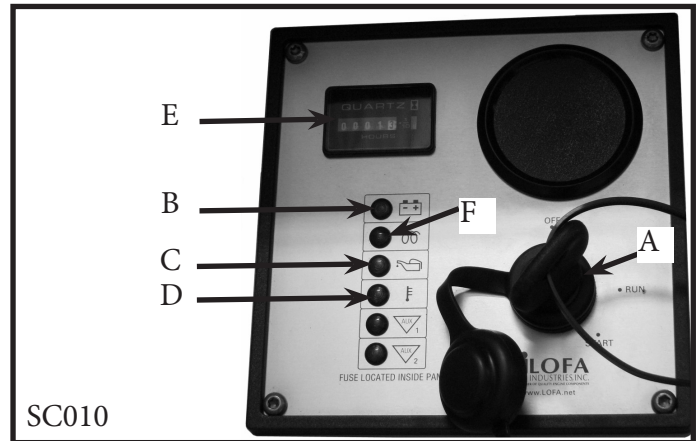
**E. Hour Meter.** The hour meter measures actual engine operating hours.

**F. Glow.** This indicator will illuminate whenever the engine glow plug preheaters are engaged.

#### Throttle:

Push throttle back for start and stop functions. Pull toward you to engage operating speed.

Spring

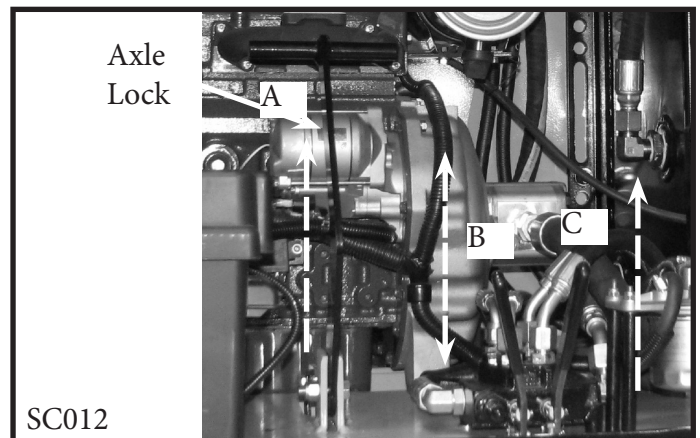


### 2.2 HYDRAULIC AND AXLE LOCK CONTROLS

**A. Axle Lock Lift.** Pulling the lever back raises the axle lock device. The engine needs to be operating and the hydraulic axle lift needs to be engaged to release the axle lock from its support brackets as you pull the lever.

**B. Hydraulic Axle Lift Control.** Push to lower the machine. Pull to raise to transport position.

**C. Hydraulic Shaker Control.** Push to engage shaker. Pull to stop shaker.



### **3. OPERATION**

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<b>Securing And Transporting</b>	<b>3.6</b>
<b>A. Securing To Flatbed Trailer</b>	
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## 3. OPERATION

### 3.1 PRE-START INSPECTION

Daily inspection should be performed to assure safe operation and minimal down time.

The daily maintenance should be performed before start-up. See Section 4 for complete details.

Check the fuel level. Add fuel if necessary.  
Make sure the filler cap is secure.

Inspect fuel lines for leaks.

Check air cleaner, air intake hoses and clamps.  
Assure everything is tight and no hoses are chaffed or have holes in them.

Check engine oil level.

Check engine coolant level.

Check engine fan belt.

Check radiator cooling fins for obstructions.  
Flush if necessary.

Check the hour meter reading. Have scheduled maintenance performed when required. Refer to Section 4.

Verify compartment covers and doors are closed and secured.

#### HYDRAULICS:

Check the fluid level. Add #32 hydraulic oil as required to bring fluid level in the middle of the sight gauge. Make sure the filler cap is secure.

## 3. OPERATION

### 3.1 PRE-START INSPECTION

Check all hydraulic hoses for chaffing, bulges and leaks. Replace immediately if any defects are found.

Verify hydraulic controls are in the neutral position before starting the engine.



Shakerhead:

Grease shakerhead bearings. Assure bearing hardware is tight.

Check shaker spring mounting hardware for tightness. Follow the procedure in Section 4.

Check shaker springs for cracks.

Verify there is no debris on the shaker screens and check for bystanders before start-up.

Check the shaker screens and hold down mounting hardware for proper tension. See Section 4.



## 3. OPERATION

### 3.2 STARTING INSTRUCTIONS

Perform the pre-starting inspection found at the beginning of this section.

Ensure the hydraulic controls are in the neutral position.

Place the engine throttle control in the low idle position.

Make sure bystanders are clear of area.

Preheat the engine glow plugs, turn the ignition key clockwise to the run position. Light will go out when the glow plugs are hot.

Engage the engine starter by turning the ignition key fully to the clockwise position. Release when the engine has started.

### IMPORTANT

**Do not engage the starter for more than 15 second intervals. Repeat the pre-heat procedure if the engine fails to start. Allow the starter to cool to ambient temperature after 3 consecutive starting attempts. Failure to do so may cause premature starter and/or engine stop solenoid failure.**



### CAUTION

**This engine is equipped with glow plug type preheaters. Do not use ether or high energy fuels at assist starting. Severe engine damage may result.**

## 3. OPERATION


### 3.2 STARTING INSTRUCTIONS (continued)

Allow the engine to warm up 15 minutes at the idle position before operating at the normal operating speed.

Check the instrument panel indicators for normal operation. Shut the engine off immediately if warning indicators are illuminated.

Turn the ignition key counter clockwise to the stop position.

Clear any debris that may still be stuck to the shaker screens.

 **WARNING**

**The engine idle position is used for start up, cool down, wheel lift and jack operations. DO NOT operate at high idle settings while performing these operations. Damage or injury may occur to the machine and/or the operator.**

**IMPORTANT**

**This machine is equipped with an engine monitoring system that will shut down the engine whenever oil pressure is too low or if the coolant temperature is too high. The warning lights illuminated notify whenever a problem occurs. Have the problem diagnosed and repaired before further operation.**

**IMPORTANT**

**Follow the operation procedures in Section 3.4 before engaging the shakerhead.**

**IMPORTANT**

**Allow the engine to warm approximately 15 minutes before engaging the shaker control. If the engine labors when trying to engage the shakerhead, allow the engine to warm an additional 5 minutes, then try again.**

### 3.3 SHUT DOWN PROCEDURE

Make sure the shakerhead control lever is in the neutral position and the shakerhead has stopped.

Move the throttle control to the idle position and allow the engine to cool for approximately 2 minutes.

## 3. OPERATION

### 3.4 SET UP


Follow the pre-start inspection and start-up instructions previous to this section.

The machine must be operated on a level surface. If necessary, grade an area to accommodate.

Make sure you leave adequate room for maneuvering equipment around the machine to remove tailings.

For efficient cycle times, keep the stock piles as close as possible to prevent excessive travel times.

Start the engine and operate at idle position.

 **WARNING**

**Make sure the area around you is clear when lowering the machine to the ground. Make sure bystanders and your feet are clear when the machine is lowered.**

Release the axle lock mechanism by raising the rear of the machine up, and pulling the axle lock lever. Lower the machine to the ground as you release the axle locks from their support brackets. Raise the wheels to their fully raised position.

Engage full engine speed.

Engage the hydraulic shaker control.

### IMPORTANT

**When engaging the shaker control, assure the engine is at full operating speed.**

### IMPORTANT

**Allow the engine to warm approximately 15 minutes before engaging the shaker control. If the engine labors when trying to engage the shakerhead, allow the engine to warm an additional 5 minutes, then try again.**

## 3. OPERATION

### 3.5 OPERATING PROCEDURES

Follow the set up procedures outlined previously in this section.

This section contains important information for getting the best performance and efficiency from your machine.

#### 3.5A GENERAL

The shakerhead assembly contains two sorting surfaces called screens. Certain applications will require you to change screen sizes for best results. Thousands of screen sizes and multiple combinations are available to sort a variety of material. Proper screen sizing makes this a truly multi-purpose and efficient machine, able to handle fine sands, rocks, wood product refuse, etc.

The basic rule of thumb for screen sizing is 3 to 1 ratio, top to bottom respectively. Example: 3" (76 mm) top screen, 1" (25 mm) bottom screen. However, in some cases, it may be more efficient to run the material through a larger screen combination first, then changing the screens to obtain the final product size. This would be desirable when the material being sized clogs the screens of feed rate becomes excessively slow.

The most common type of screen material is called "wire cloth". Various diameters of wire are overlaid together to make varied openings. The actual diameter of the wire used dictates the surface area of the hole.

Example: A screen 2" square, using a 0.25 wire diameter would have a larger hole opening than a 2" square using 0.50 wire diameter. The smaller diameter screen will be more efficient, due to the larger open area, but the screen life will also be shorter. A larger diameter material will wear longer.

Wire cloth screens may be ordered in square or rectangular (slotted) patterns. A slotted pattern will process material faster, though larger material will slip through.

See Section 6 for more screen size information.



## 3. OPERATION

### 3.5 OPERATING PROCEDURES

#### 3.5B LOADING PROCEDURE

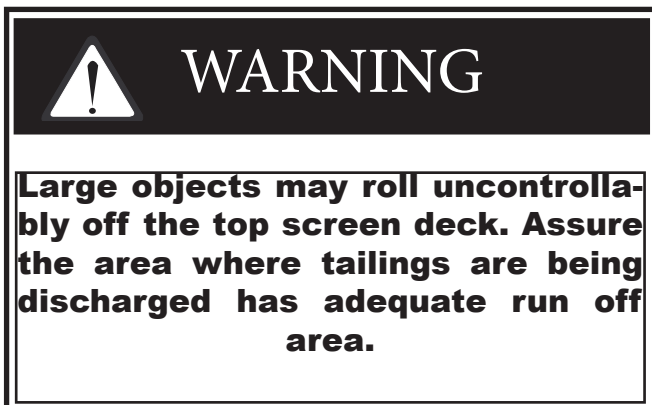
When loading material into the hopper, keep the bucket as low as possible. Allow the material to slide down the high side of the hopper plate onto the top screen deck.

Check tailings for size. If you find good material mixed in with the tailings, try slowing the feed rate (dump) into the hopper.

Dumping the material further down the deck wastes processing area. This will allow good material to flow off with the tailings.

Use extra care when placing large heavy objects on the top screen deck. Make sure smaller material is in front of the load before lowering onto the top screen deck. This will provide some cushion effect. Never drop large heavy objects directly onto the top screen deck. Immediate damage to the wire screen cloth or shaker assembly may occur.

Keep an eye on tailings and finished product. Do not allow to build up around the shaker deck area. Retrieve product before excessive build up around the shaker area.



## 3. OPERATION

### 3.5 OPERATING PROCEDURES

#### 3.5C REMOVING FINISHED MATERIAL

After each load is placed into the hopper, check the finished and tailing piles. Allow adequate area to retrieve finished material from under the hopper and shaker deck area.

For best efficiency, allow at least a full bucket of material to accumulate before retrieving.

Do not allow the product to pile up around the shaker deck area. This will impede the shaker action and could result in serious damage to the shaker deck assembly.



Retrieve finished material from under the high hopper side area. Drive into the material with the bucket low. Use the screener as a back stop, curling the bucket before you contact the deflector plate.

Do not raise the bucket excessively as to contact the shaker deck assembly. Serious damage may occur.

## 3. OPERATION

### 3.5 OPERATING PROCEDURES

#### 3.5D REMOVING TAILINGS

Do not allow the tailings to pile up higher than the shaker deck area.

Remove tailings by pushing the material from the side of the machine.

Do not use the machine as a back stop.



## 3. OPERATION

### 3.5 OPERATING PROCEDURES

#### 3.5E SCREENING SELECTION/COMBINATION

The top plate or screen is used to absorb the impact of heavier material and discharge or separate the larger material to a separate pile

The bottom screen further separates materials and dictates the actual final size of product.

The correct combination of screen sizes will produce the desired size of material quickly and efficiently. Results; high yield.

A top screen with too small an opening will process material inefficiently and usable material will be lost to waste. Results; low yield.

A top screen with too large an opening, or if the bottom size screen is small, will clog the bottom screen. Results; low yield.

Proper loading technique is also important for efficient operation. Slowing the feed rate into the hopper will allow more time for materials to separate.

Situations when the lower screen deck continues to clog, a larger bottom screen may need to be used and the material run through a second time with a smaller screen. This may prove to be more effective than slowing the feed (dumping) rate excessively.

### 3. OPERATION

#### 3.5 OPERATING PROCEDURES

#### 3.6 TRANSPORTING

Before transporting the machine, perform the following checks.

Tire Pressure 80 PSI (551 kPa).

Wheel nuts torqued 190-210 lbs./ft. (258 ~ 286 Nm.). Check the wheel nut torque after 50 miles (80 km), and again at 100 miles (62 km). Check before each site move thereafter.

Check axle grease. The grease should be level with the glass check line.

Check the pintle hitch mounting bolts and safety chains.

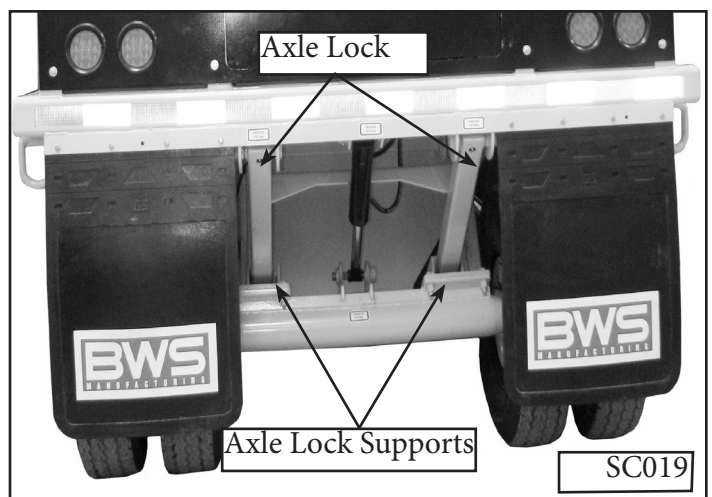
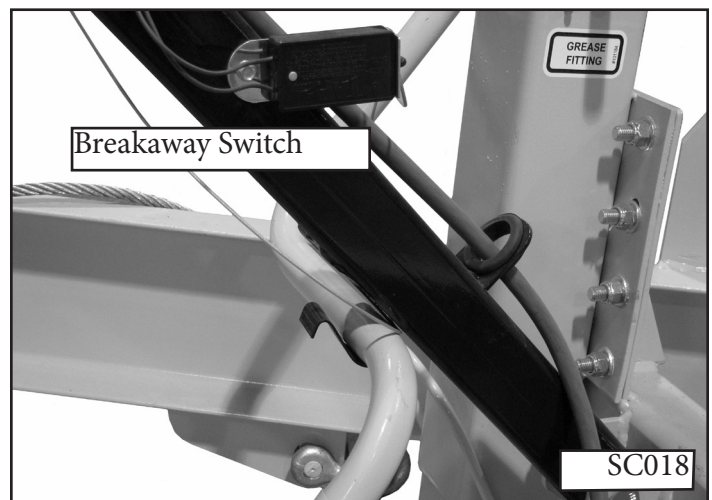
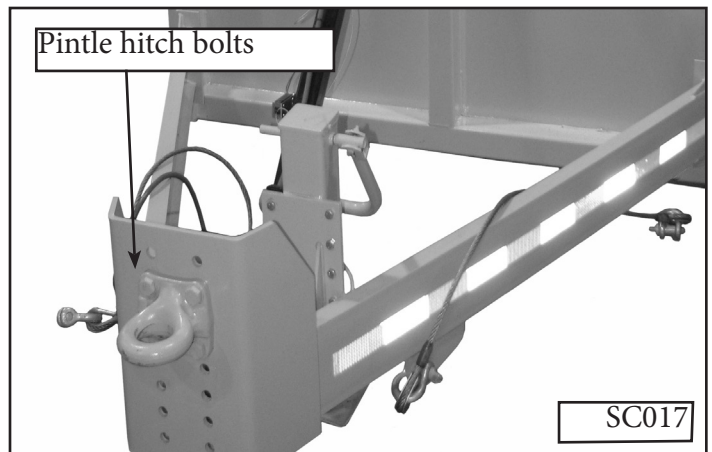
This machine is equipped with self adjusting 12 volt electrically activated brakes. For safety, the system has its own 12 volt battery source to activate the wheel brakes whenever the tethered break away switch has been activated. This means, if has unhitched from the tow vehicle, the brakes will activate automatically, if the tethered break away switch has been secured to the tow vehicle and the 12 volt battery source is operative.

Check the electrically activated brakes using the breakaway switch. Refer to section 4.3G.

Check the axle lock device. Make sure it is securely located in the axle lock support brackets.

Verify the clearance marker and indicator lights are all functioning. Repair immediately if defective.

Always clean all debris from the screener before transporting. This will prevent debris from interfering with other traffic.



**WARNING**

**Clean debris from the shaker decks before transporting.**

## 4. MAINTENANCE INDEX

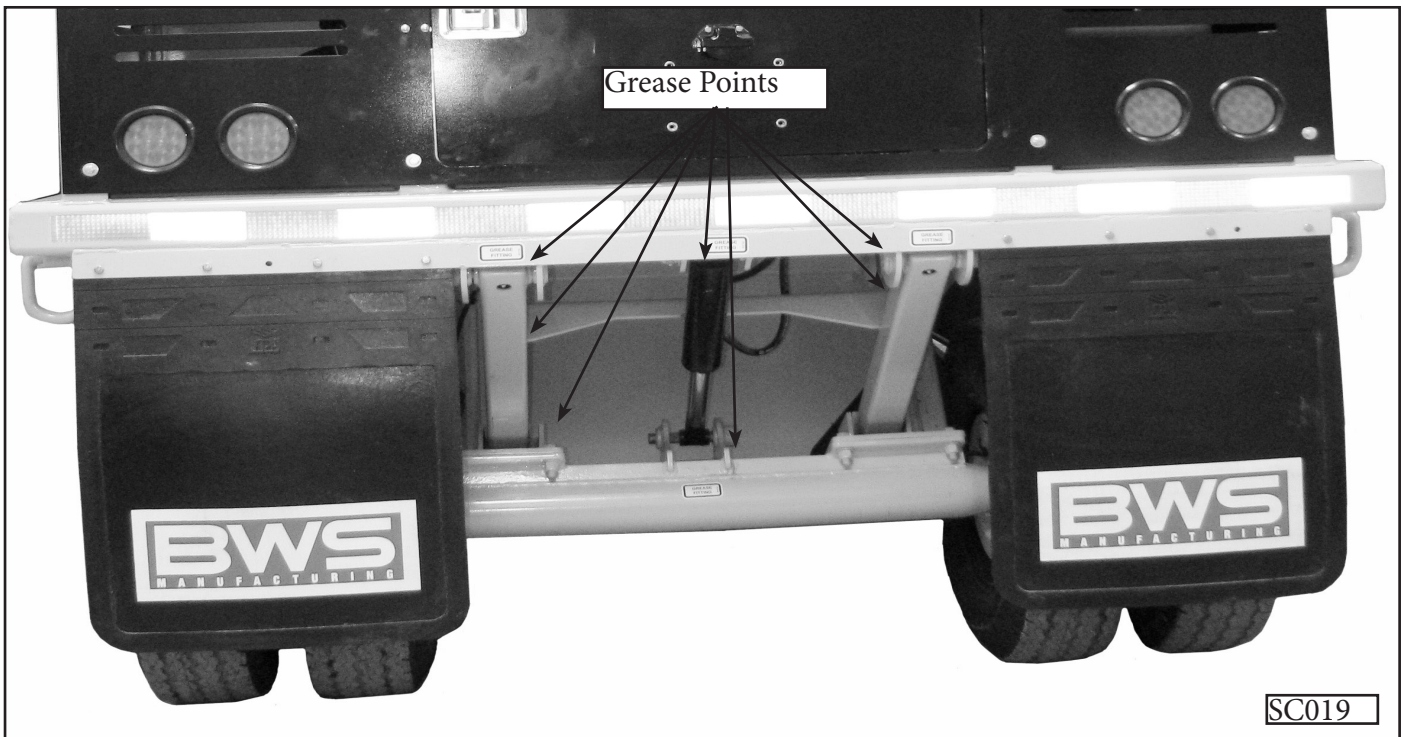
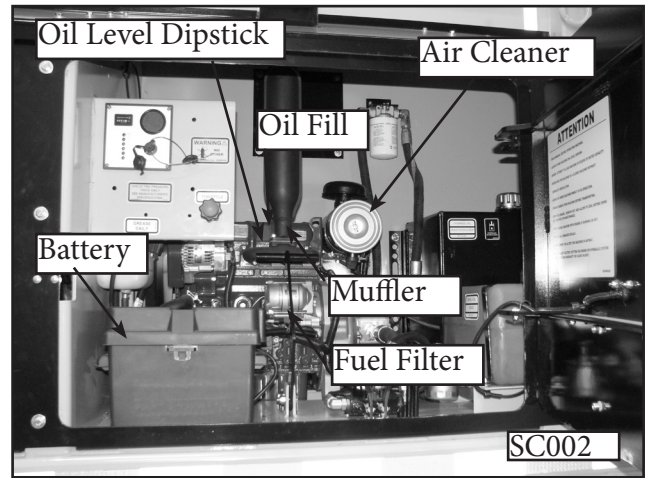
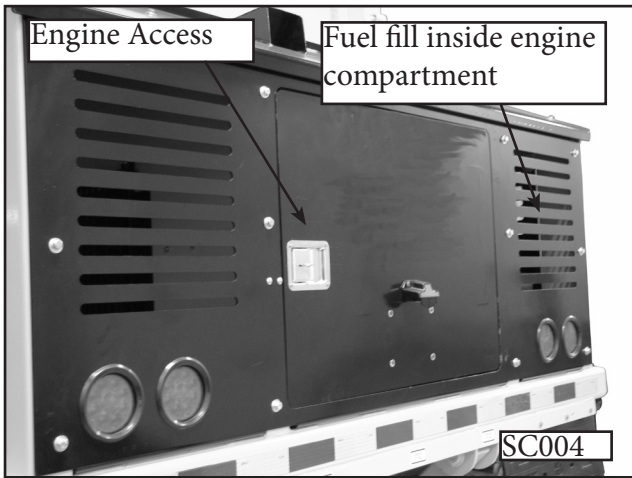
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## 4. MAINTENANCE

### 4.1 SERVICE ACCESS

The following pages will depict how to access specific areas for service.



# 4. MAINTENANCE

## 4.1 SERVICE ACCESS (continued)







## 4. MAINTENANCE

### 4.3 DAILY SERVICE

#### 4.3A SCREEN TENSION

To prevent premature screen or crown bar rubber wear:

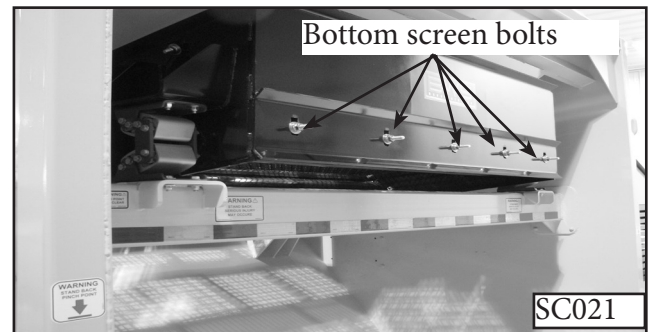
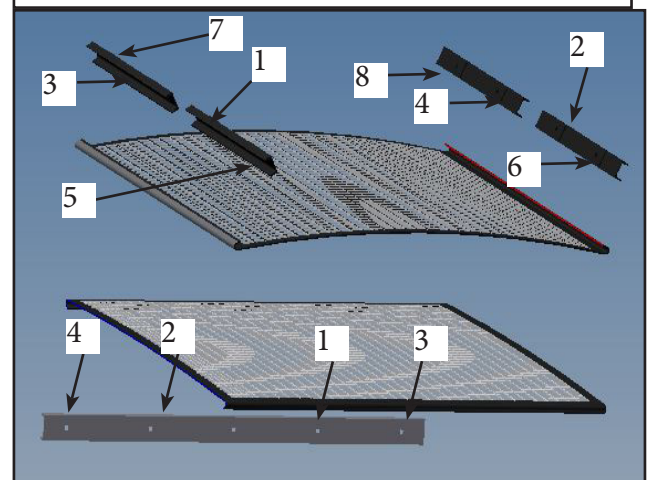
Every 4 hours of operation, check the crown bar rubber on the top and bottom screens. Make sure it is intact and not damaged. If necessary, replace.


Every 4 hours, torque the bolts retaining screens to the screen deck. Start from the middle, tighten bolts in a criss cross pattern to 45 lbs/ft (61.2 Nm)

Assure the screens are tight against the crown bar rubbers. If necessary, tighten the bolts further in 5 lbs/ft (6.8 Nm) increments, until the screen is tight against the crown bar rubbers.

Start the engine and engage the shaker to verify. (Refer to section 3 for operating instructions). The screens must not bounce freely on the crown bar rubbers. This will decrease the life of the screens. You will notice if the screens are loose by the rapping noise they will make. If necessary, tighten the bolts further in 5 lbs/ft (6.8 Nm) increments, until the screen is tight against the crown bar rubbers and they do not bounce when the shaker is engaged.

Screen bolt tightening sequence



WARNING

**When performing maintenance, assure the engine is off and the ignition key is removed to prevent accidental start up.**

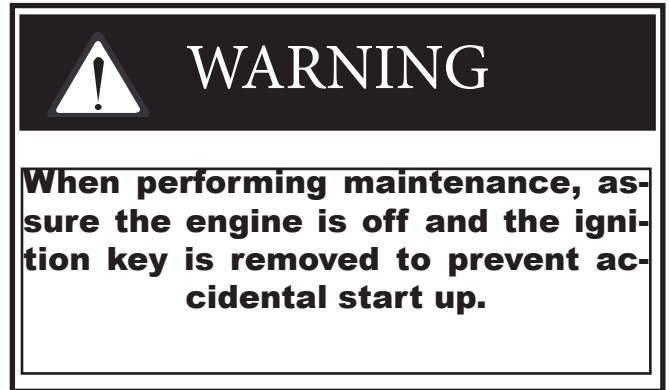
## 4. MAINTENANCE

### 4.3 DAILY SERVICE

#### 4.3B SHAKER SPRING BOLTS

Check the 32 shaker spring mounting bolts every 8 hours.

Check to make sure the spring rubbers blocks are in place.



## 4. MAINTENANCE

### 4.3 DAILY SERVICE

#### 4.3C ENGINE


Check engine compartment area for signs of fluid leaks.

Check the engine oil level. Add Diesel oil if required.

Check coolant level. Add 50/50 mixture of ethylene glycol and water if required.

Check and clean radiator cooling fins for obstruction. Flush with compressed air and/or water.

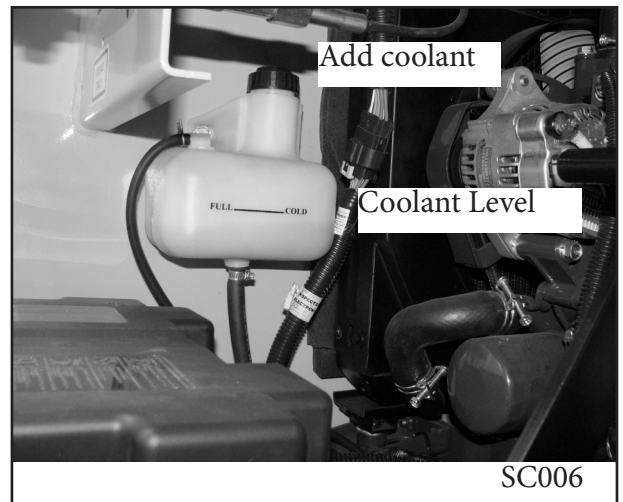




## WARNING

**Do not exceed 40 psi (276 kPa) when servicing the radiator. Wear safety glasses when using compressed air. Wear rubber gloves when working with coolant.**

Check the air intake hoses and clamps. Make sure clamps are tight and no hoses are chaffed.



Check battery terminal connections. Make sure the battery is fastened securely to its' compartment.

**If Screener is to be stored for a long period of time, ensure to remove the battery cables from the battery.**

## IMPORTANT

**Never attempt to clean and reuse the air filter elements. Damage can occur to the paper pleats causing dirt to enter the engine.**

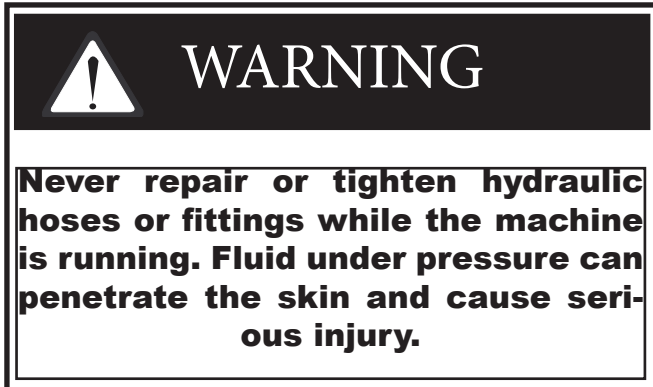
Check battery terminal connections. Make sure the battery is fastened securely to its' compartment.

## 4. MAINTENANCE

### 4.3 DAILY SERVICE

#### 4.3D HYDRAULIC SYSTEM

Check hydraulic hoses, pumps and motors for leaks. Check each hydraulic hose for chaffing or bulging. Replace immediately as required.



Check the hydraulic fluid level. Fill to the middle level on the site gauge with #32 hydraulic oil.

Check the hydraulic oil cooling fins for obstructions. Clean with compressed air and/or flush with water.

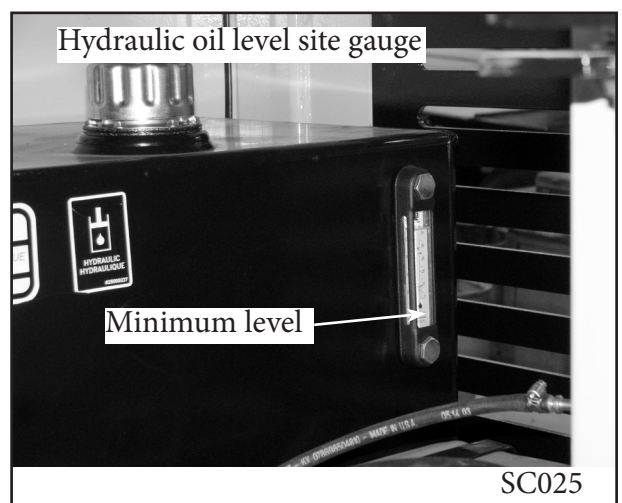
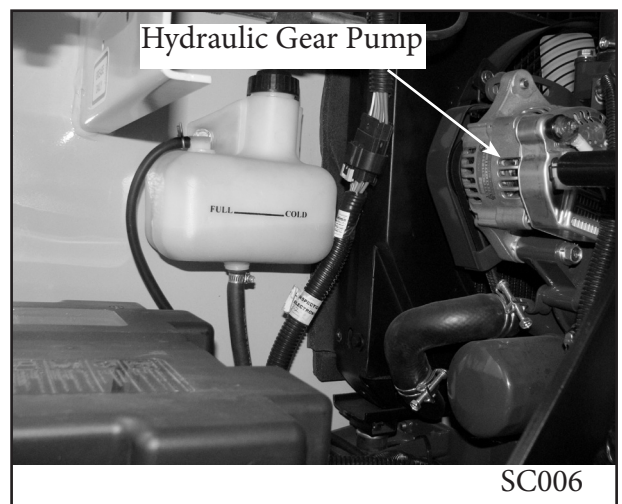
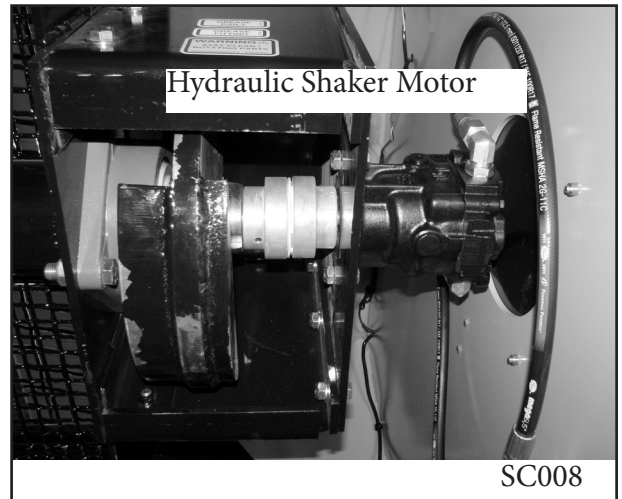


#### 4.3E SAFETY EQUIPMENT

Assure all safety, warning and instruction decals are in place and legible. See section 1.2 for decal placements.

Make sure all compartment doors are closed and secured before operating.

Also check all shields, lights, brakes, and safety chain.





## 4. MAINTENANCE

### 4.3 DAILY SERVICE

#### 4.3F LUBRICATION

There are nine (9) lubrication points on this machine that require regular service. Use a high quality lithium based grease. Apply two (2) shots per grease fitting.

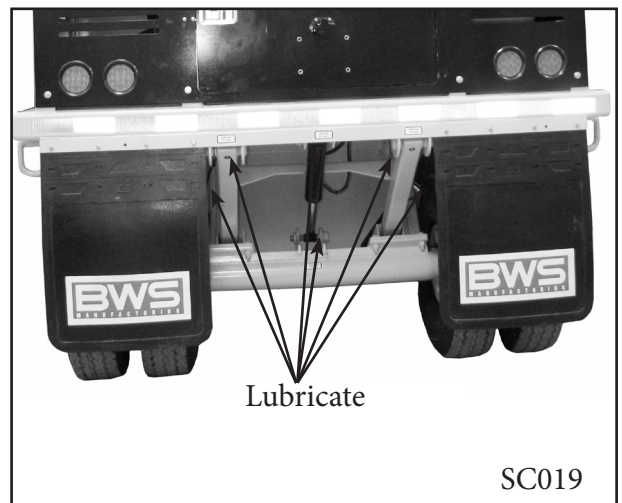
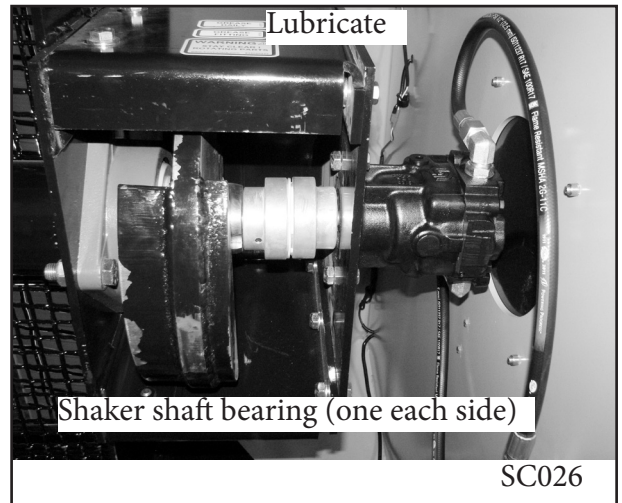
The two (2) shaker drive shaft bearings require daily lubrication, or every four (4) hours of operation, whichever ever comes first.


Grease the hydraulic lift cylinder before transporting to a new site.

The axle lock mechanism has two (2) grease fittings that require lubrication before transporting.

The axle pivot mechanism has two (2) grease fittings that require lubrication before transporting.

The landing gear has one (1) grease fitting.



WARNING

**When performing maintenance, assure the engine is off and the ignition key is removed to prevent accidental start up.**

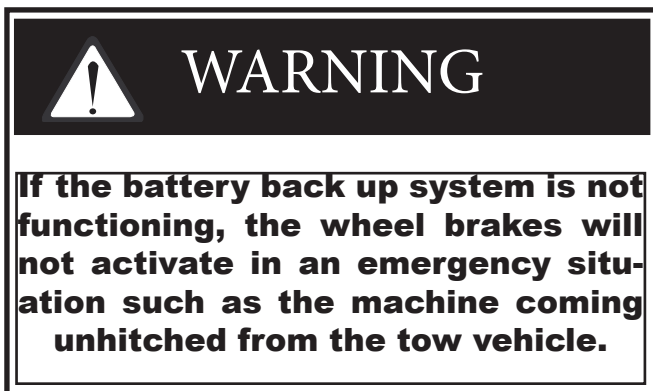
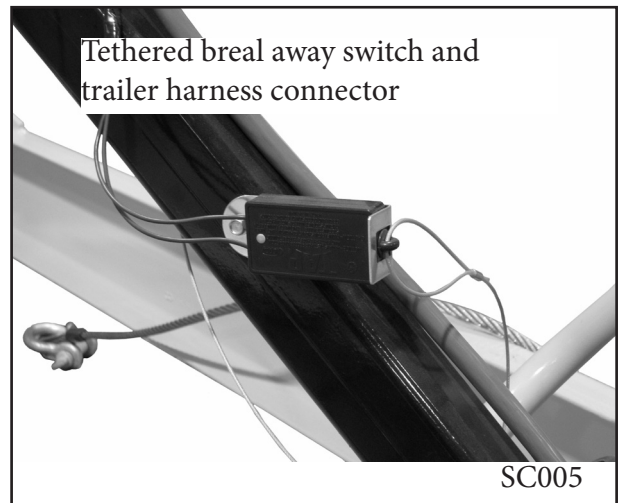
## 4. MAINTENANCE

### 4.3 DAILY SERVICE

#### 4.3G BRAKE SYSTEM, TRAILING AXLE

This machine is equipped with self adjusting 12 volt electrically activated brakes.

For safety, the system has its own 12 volt battery source to activate the wheel brakes whenever the tethered break away switch has been activated. This means if the machine has unhitched from the tow vehicle, the brakes will activate automatically, if the tethered break away switch has been secured to the tow vehicle and the 12 volt battery source is operative. Fasten cable to tow vehicle securely. Be certain that the cable has no restrictions, and will not be restricted in case of trailer break away.



**Before transporting this machine, perform the following checks:**

Assure the battery box is secure before transporting.

Pull out the plunger on the break away switch by pulling on the tether cable. Try to move the machine with a tow vehicle. The wheels should not roll freely.

**Fasten cable to tow vehicle securely. Be certain that the cable has no restrictions, and will not be restricted in case of a trailer breakaway.**

## 4. MAINTENANCE

### 4.3 DAILY SERVICE

#### 4.3G BRAKE SYSTEM, TRAILING AXLE (continued)

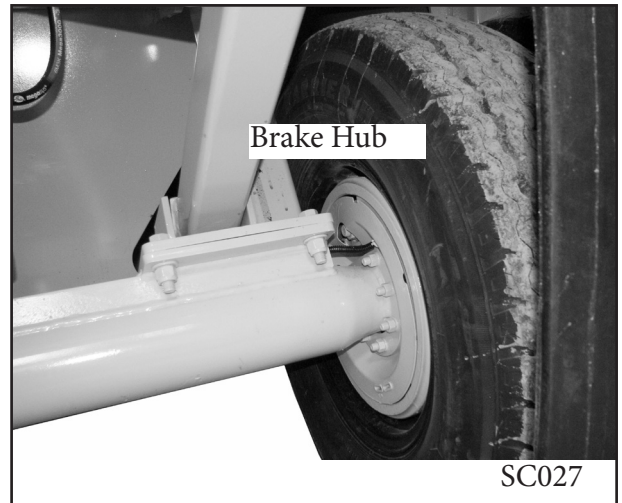
If the machine rolls freely, the self contained 12 volt battery may need to be charged, the electrical system may be damaged or other brake service is needed.

Check the battery charge first. The battery is located in front of and to the left of the engine and hydraulic controls.

Verify electrical wiring integrity and continuity. See Section 4.3H for electrical schematic.

Have the electrically activated brake system inspected by an authorized service technician.

If the brakes work properly, push the plunger back into position.



### WARNING

**Do not transport this machine without the braking system functioning properly.**

### IMPORTANT

**The units self contained battery normally charges through the tow vehicle wiring harness. The battery must be charged, if left idle, every 6 months.**



### WARNING

**Do not expose batteries to open flame or spark. Do not expose battery box to solvents or adhesives.**



## 4. MAINTENANCE

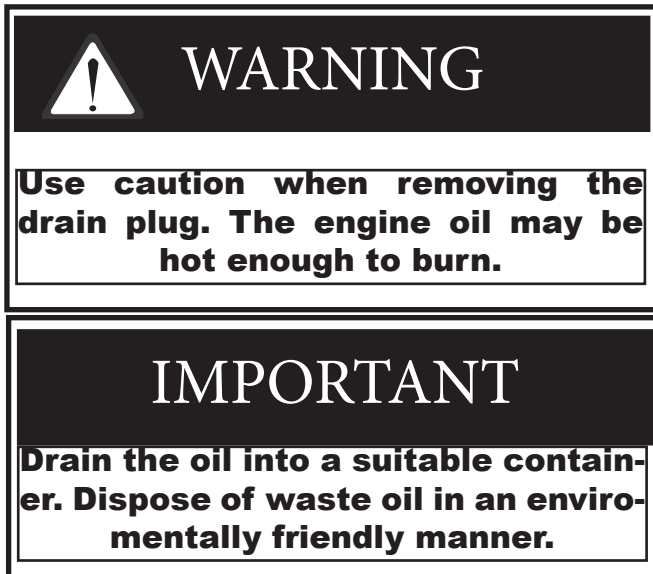
### 4.4 150 HOUR SERVICE

The 150 hour service is to be performed initially at 50 hours, and repeated every 150 hours thereafter (starting at 200 hour reading).

#### 4.4A ENGINE OIL AND FILTER

Change the engine oil and filter. Use original equipment replacement parts only. Use 10W30 motor oil with minimum API classification SE/CD.

1. Start the engine and allow to operate for five (5) minutes. See Section 3 for operating procedures.
2. Shut off the engine.
3. Remove the oil drain plug. Have a container ready to hold approximately 5 quarts (4.7 liters) of fluid.



4. Remove the engine oil filter with a filter wrench.
5. Apply clean motor oil to the new oil filter gasket. Use only approved filters.
6. Install the filter until the gasket contacts the engine block. Hand tighten an additional 3/4 ~ 1 1/4 turns.

## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

7. Replace the oil drain plug after the oil has completely drained.
8. Remove the oil filler cap.
9. Add 5 quarts (4.7 liters) of 10W30 diesel motor oil. Only use minimum API classification SE/CD.
10. Replace the oil filler cap.
11. Start the engine and check for leaks around the oil filter and drain plug. Operate for two to three minutes and shut it off.
12. Allow the engine to sit for five minutes and then check the engine oil level. Add oil to bring to full level mark as required. Do not over fill.

### **IMPORTANT**

**In severe dust applications, change the engine oil every 75 hours, and the oil filter every 150 hours.**

## 4. MAINTENANCE

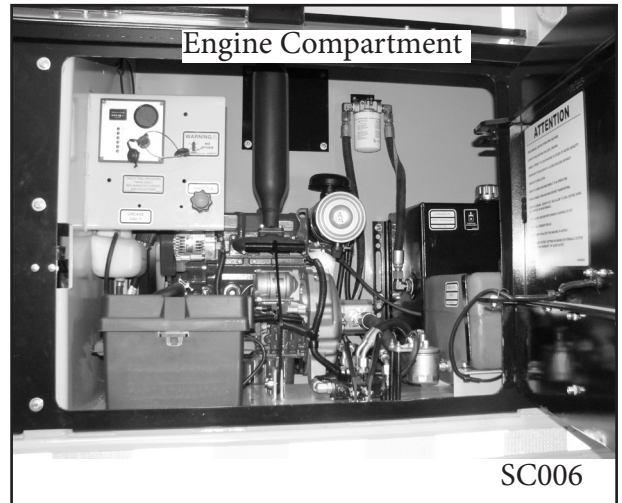
### 4.4 150 HOUR SERVICE (continued)

#### 4.4B ENGINE FUEL SYSTEM

Check all the fuel lines, supply, return and injection, for leaks and chaffing.

Change the engine fuel filter after the first 50 hours and every 300 hours thereafter. The fuel filter is a replaceable spin on cartridge. See Section 4.5 for 300 Hour service information.

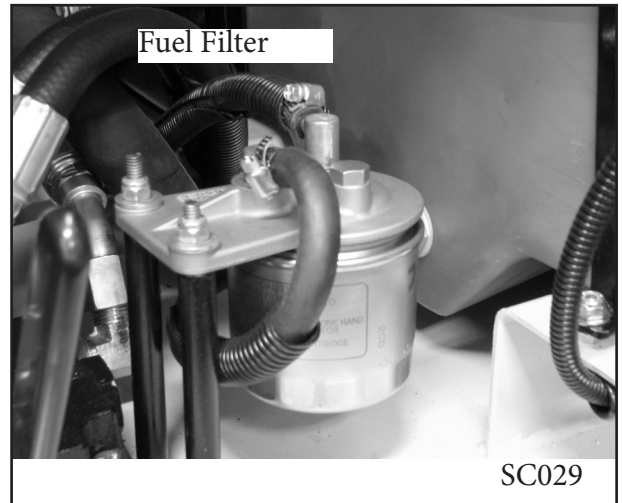
1. Pinch fuel line.
2. Use a filter wrench and remove the fuel filter.
3. Lubricate the new fuel filters' gasket with clean light oil. Do not use grease.
4. Turn on until gasket contacts the adapter base. Hand tighten an additional 1/2 to 3/4 turn.



## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

5. Open the air bleed screw on the fuel filter housing.
6. Close the bleed screw when fuel begins to trickle out.
7. Open the air bleed screw on the engine. The air bleed screw is located at the back side of the engine.
8. Start the engine and operate for two to three minutes before closing the air bleed screw.
9. If the engine fails to continue to operate, repeat the air bleed procedures steps 5 ~ 9.



### IMPORTANT

**Make sure there is adequate fuel in the fuel tank. Gravity will help bleed the air from the fuel system.**

## 4. MAINTENANCE

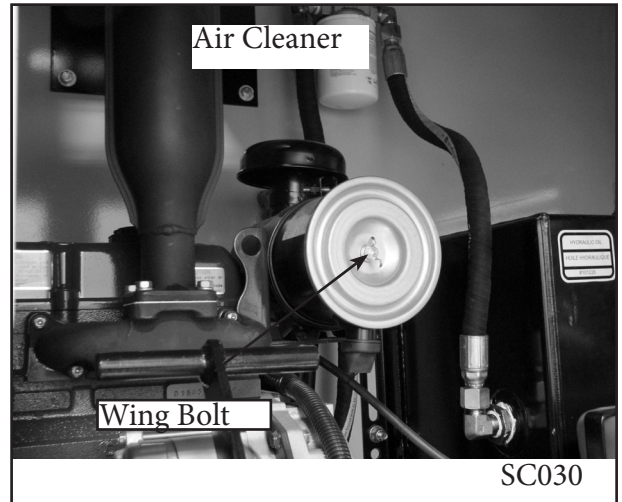
### 4.4 150 HOUR SERVICE (continued)

#### 4.4C ENGINE AIR FILTER

Replace Filter.  
Remove wing bolt and pull out element.

#### To check or replace the air filter element:

Wipe out dirt from inside the air cleaner canister and replace with new filter element. Support the rear of the canister when inserting the element.



## IMPORTANT

**The air filter elements is not serviceable by blowing with compressed air or washing. Replacement only.**

## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

#### 4.4D ENGINE FAN BELT

Check the fan belt condition. Replace if cracked or chipped. Replace every 2 years or at 600 hours, whichever comes first.

Check belt tension halfway between the crankshaft and alternator pulley. Correct tension is 10 - 12 mm deflection @ 98 newtons force (3/8 ~ 1/2 in. @ 22 lbs.)

#### **To adjust the fan belt:**

1. Loosen the bolts retaining the alternator to the engine.
2. Use a pry bar to tension the fan belt and tighten the top alternator bolt.
3. Check the tension. Repeat steps 1 ~ 2 if necessary.
4. Tighten bottom alternator bolt.

#### **To replace the fan belt:**

1. Loosen the alternator bolts.
2. Remove the fan guard.
3. Replace the fan belt, set tension as outlined above.
4. Replace the fan guard.

## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

#### 4.4E ENGINE COOLING SYSTEM


Check the coolant level daily. Add only 50/50 mixture ethylene glycol. Do not use or mix in other types of coolant. Add coolant to the overflow reservoir as required to be above the minimum cold level.

Correct coolant mixture must measure  $-32^{\circ}\text{F}$  ( $-32^{\circ}\text{C}$ ) using an accurate measuring device.

The engine coolant needs to be flushed and changed every year or after 900 hours of operation, whichever ever comes first. See Section 4.7 for 900 Hour service information.

Check the radiator fins for obstruction of damage. Clean the radiator using compressed air and or flush with water. Straighten bent fins carefully.



WARNING

**Do not exceed 40 psi (276 kPa) when servicing the radiator. Wear safety glass when using compressed air. Wear rubber gloves when working with coolant.**

IMPORTANT

**Wear rubber gloves and use eye protection when handling coolant.**



## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

#### 4.4F SHAKER SHAFT

The shaker shaft coupling needs to be checked for wear and alignment after the first 50 hour of operation and every 150 hours thereafter.

1. Check the center spider for wear. Replace if worn excessively.
2. Loosen the clamp screw and set screws and slide the couplers apart.
3. Check the coupler for wear. Replace if spider surface face is scared excessively or broken.
4. Remove the spider and replace.
5. Slide the couplers together. Arrange the couplers to have the shafts fully engaged to the shaft and or splines.
6. Tighten the clamp screw on the drive motor coupling to 210 ~ 220 in.lbs. (24 ~ 25 Nm). Tighten the set screws to 190 ~ 200 in.lbs. (21.5 ~ 22.6 Nm).

#### INSTALLATION INSTRUCTIONS:

Shaft spacing should be within range given.

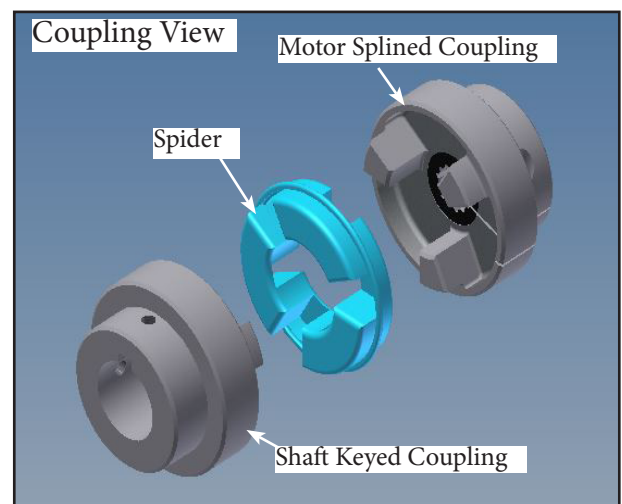
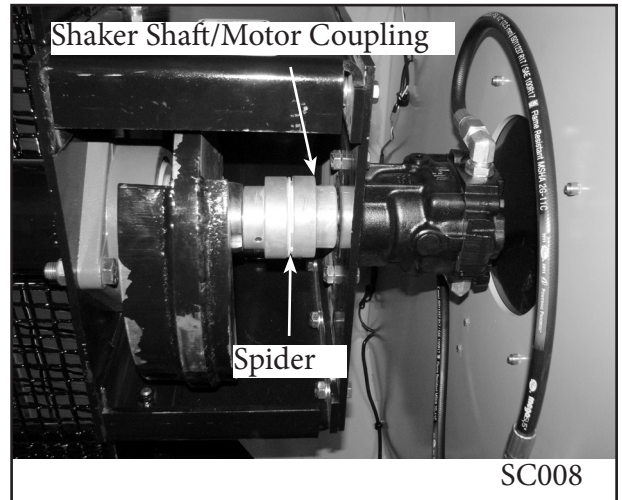
Position each hub on proper size shaft. Magnaloy couplings are bored to standard “push fit” tolerances, if a tight fit exists, check shaft for burrs.

Maximum benefits are obtained with hubs positioned to allow complete shaft engagement within bore. However, some equipment designs do not permit this condition - maximum shaft engagement should be utilized in any case.

Alignment - Place a straight edge (scale) at top and side of coupling. Use a .005 inch feeler gauge under scale for final inspection. This will indicate accurate parallel and angular alignment.

Magnaloy’s precision machined outside surfaces permit this simple, but accurate alignment method.

In this application the coupler should not be run without alignment done and all set screws and bolts torqued. Everything is aligned and torqued then run for 5 minutes. Then recheck the torque and alignment.

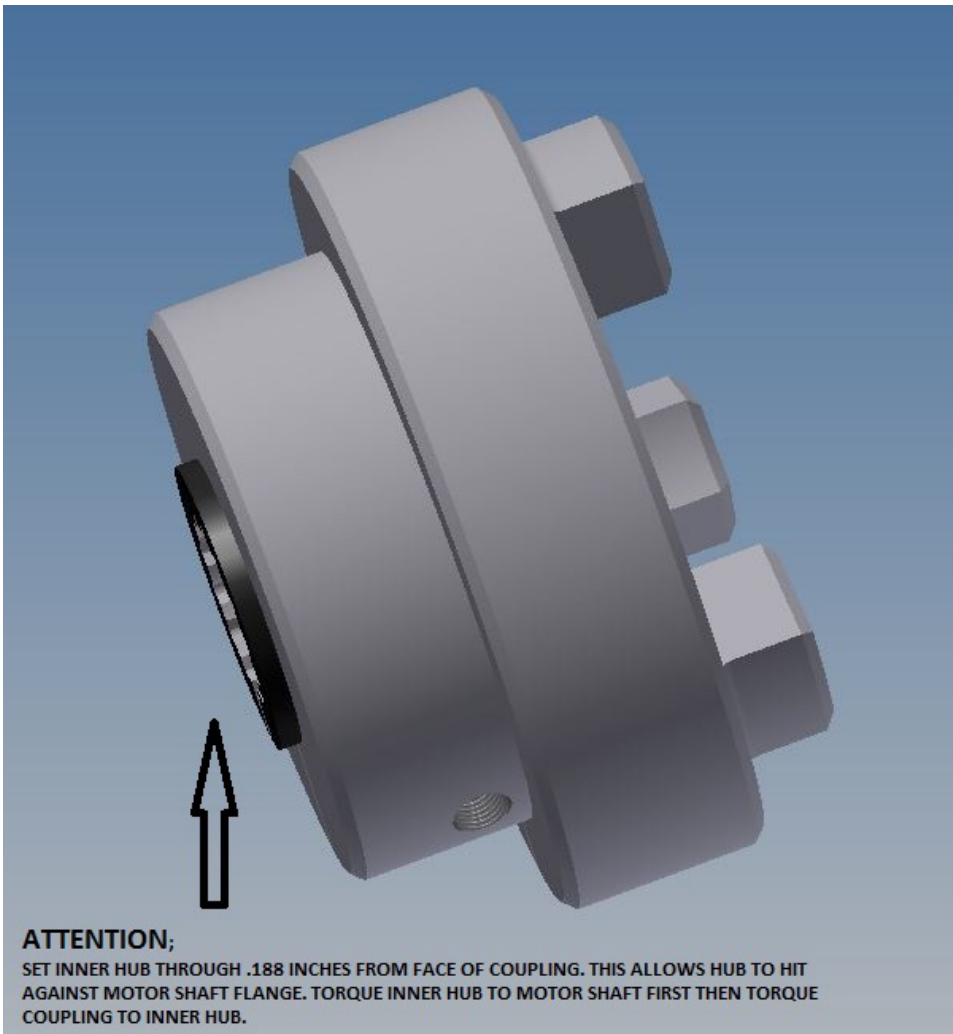


## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

#### 4.4F SHAKER SHAFT

7. Check coupling alignment using a small straight edge and a .005 inch (0.13 mm) feeler gauge.
8. If the feeler gauge can be inserted under the straight edge, the coupling alignment needs corrected.
9. Loosen the hydraulic motor mounting box bolts slightly. Adjust by moving the motor box as required to align the couplers.
10. Tighten the motor mount box bolts to 75 lbs/ft. (102 Nm.)
11. Check and tighten the shaker counter weight bolt to 78 lbs/ft. (106 Nm.)



## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

#### 4.4G HYDRAULIC SYSTEM

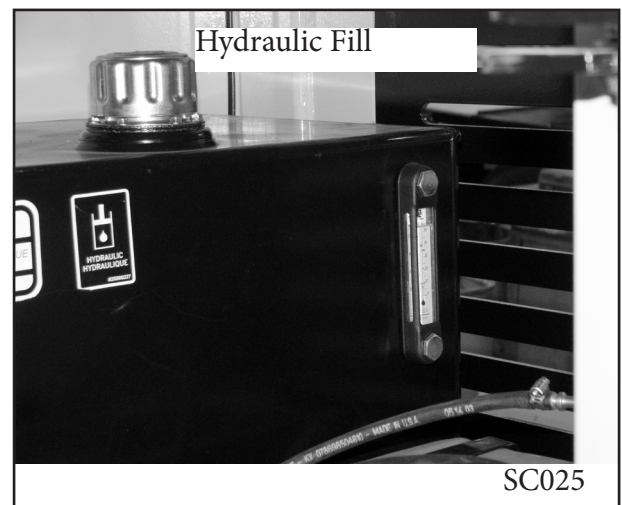
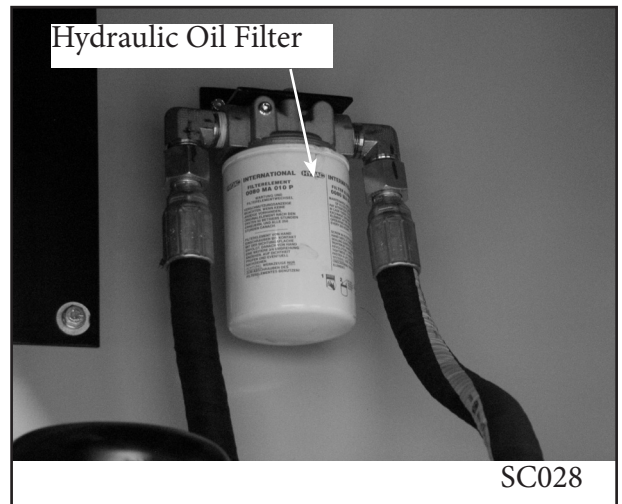
Change the hydraulic oil filter after the first 50 hours of operation and every 150 hours thereafter. Check the oil level daily.

Replace the hydraulic oil every 900 hours. See section 4.7 for 900 hour service information.

Replace the hydraulic oil after major repairs are made, such as gear pump or motor failure, or if the oil has been contaminated by water or other contaminate.

#### To change the filter:

1. Shut off the engine.
2. Remove the filter using a filter wrench.
3. Lubricate the new filter seal with system oil. Install the filter head. Hand tighten  $3/4$  to  $1\ 1/4$  turns after the seal has contacted the filter head. Use only approved filters.
4. Start the engine and check for leaks around the filter seal.
5. Stop the engine and check the oil level. Replenish with #32 hydraulic oil.

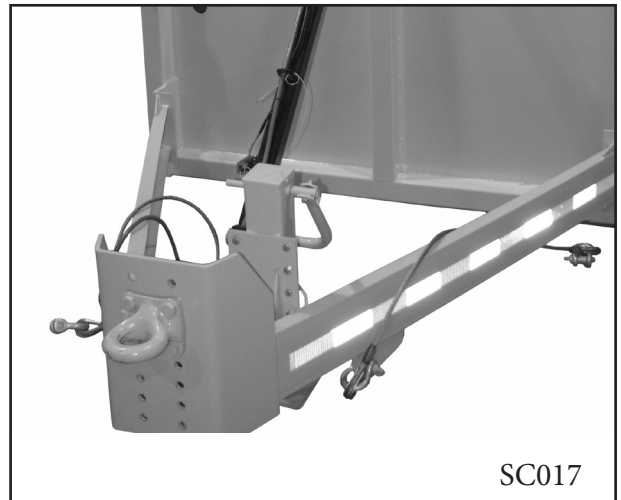
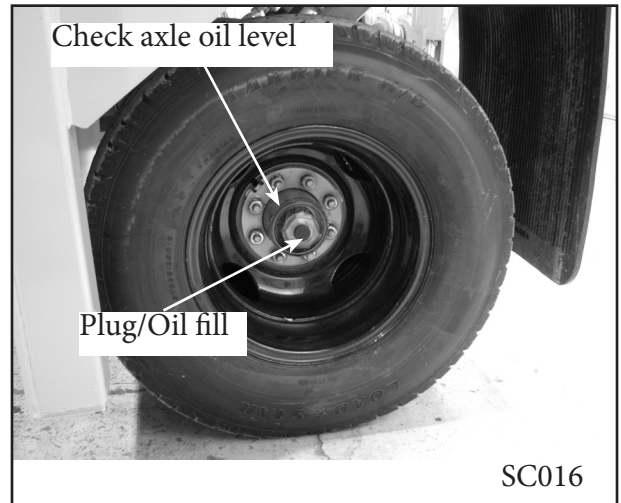


## 4. MAINTENANCE

### 4.4 150 HOUR SERVICE (continued)

#### 4.4H CHASSIS MAINTENANCE

1. Check the wheel nut torque. Use the correct tightening sequence and tighten in 3 increasing torque settings to 190 ~ 210 lbs/ft. (258 ~ 286 Nm.)
2. Check the oil level for the axle bearings. Add SAE 90W, or 80W - 90, or 75W90, hypoid gear oil as required by removing the plug.
3. Check and adjust tire air pressure to 80 psi (551 kPa).
4. Lubricate all grease fittings using a good quality lithium based grease.
5. Check pintle hitch mounting bolts. Torque to 188 lbs/ft. (256 Nm.)
6. Check the safety chains for damage. Chains must have no modifications such as welded on hooks, etc.
7. Check the axle mounting bolts. Torque to 188 lbs/ft. (256 Nm.)



## IMPORTANT

**Check the axle seals closely if axle lubricant is low.**



## 4. MAINTENANCE

### 4.5 300 HOUR SERVICE

Perform a complete 150 hour service plus the following:

#### 4.5A FUEL FILTER

Change the engine fuel filter after the first 50 hours and every 300 hours thereafter. Use only approved filters.

1. Pinch fuel line.
2. Use a filter wrench and remove the fuel filter.
3. Lubricate the new fuel filters' gasket with clean light oil. Do not use grease.
4. Turn on until gasket contacts the adapter base. Hand tighten as additional 1/2 to 3/4 turn.
5. Open the air bleed screw on the fuel filter housing.
6. Close the bleed screw when fuel begins to trickle out.
7. Open the air bleed screw on the engine.
8. Start the engine and operate for two to three minutes before closing the air bleed screw.
9. If the engine fails to continue to operate, repeat the air bleed procedures steps 5 ~ 9.



## 4. MAINTENANCE

### 4.6 500 HOUR SERVICE

Every 500 operating hours, the engine valve clearance needs to be verified and adjusted if necessary.

**IMPORTANT**

**TO PREVENT VOIDING THE ENGINE WARRANTY, the engine valve clearance is to be performed by an authorized dealer.**

## 4. MAINTENANCE

### 4.7 900 HOUR SERVICE

Perform a complete 150 and 300 hour service plus the following:

#### 4.7A ENGINE COOLING SYSTEM:

**The engine cooling system needs to be flushed, and the coolant replaced after 900 hours of service.**

1. Warm the engine to circulate the engine coolant.
2. Shut off the engine.
3. Drain the coolant from the engine. Connect a hose to the engine block drain and place the other end of the hose in a container.



### IMPORTANT

**Wear rubber gloves and use eye protection when handling coolant.**



### CAUTION

**Use care when draining the engine coolant. It may be hot enough to burn the skin.**

4. Remove the drain plug from the radiator assembly. Be sure to contain all waste coolant.
5. Replace the radiator plug and shut off the engine block drain.
6. Fill the engine with plain water and warm the engine to operating temperature.
7. Drain the cooling system again. Use a container to catch the waste water.
8. Replace the coolant drain plugs and replenish with 50/50 mixture of ethylene glycol and clean water.

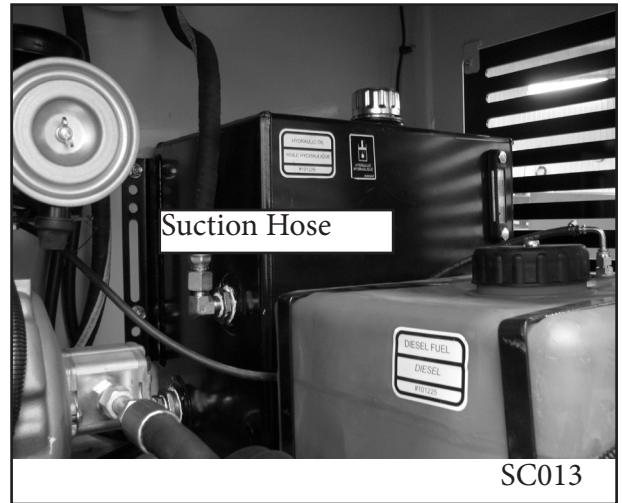
## 4. MAINTENANCE

### 4.7 900 HOUR SERVICE

#### 4.7B HYDRAULIC SYSTEM

**After 900 hours of operation, the hydraulic oil needs to be changed.**

1. The reservoir drain plug is accessed at the bottom of the engine compartment. Drain the hydraulic oil from the reservoir. Have a container ready to hold approximately 21 gallons (81 liters) of oil.
2. Add #32 hydraulic oil to the operating level on the site gauge.



## 4. MAINTENANCE

### 4.8 AS REQUIRED SERVICE

#### 4.8 SCREEN REPLACEMENT

**The shaker screen will need replaced whenever they have worn out, broken or soil conditions required different sizing.**

The top screen or plate is held in place by tension bars on both sides of the screen or plate. This is called a side tension type.

The bottom screen is held in place from tension applied from one end. This is called an end tension type.

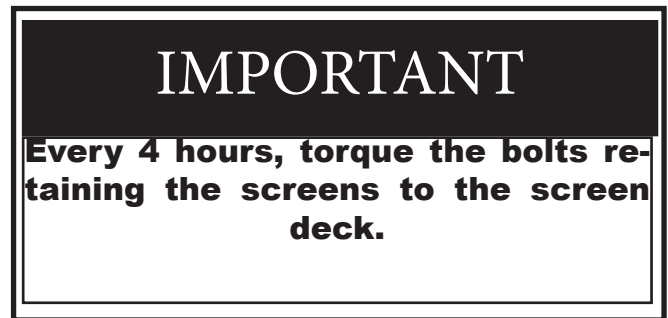
**To replace the shaker screens and/or top plate:**

1. Shut off the engine and remove the key to prevent accidental start up.
2. Depending on which screen is to be replaced, remove the 8 side bolts for the top screen or plate (4 each side), or the 5 end tension bolts located at the left side of the machine.
3. Remove the tension bar(s). It may be necessary to apply weight to the screen, and use a pry bar, to release the tension bars from the screen or plate.
4. Before replacing the screen or plate, check the crown bars and crown bar rubbers for damage. Repair as required.



## 4. MAINTENANCE

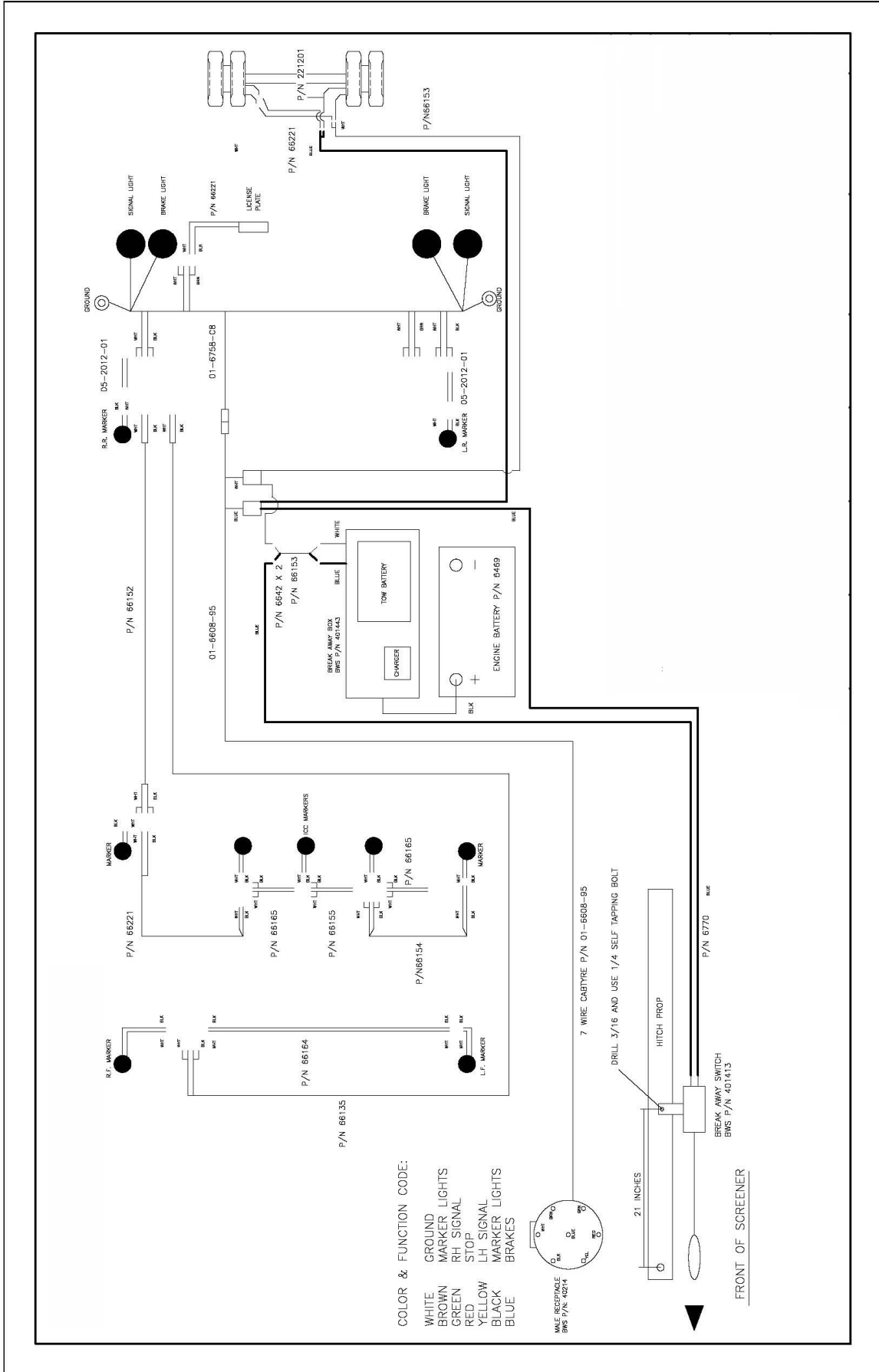
5. When replacing the screen or plate, follow the torque tightening sequence. Start from the middle, tighten the bolts in a criss-cross pattern to 45 lbs/ft. (61.2 Nm).
6. Assure the screens are tight against the crown bar rubbers. If necessary, tighten the bolts further, in 5 lbs/ft (6.8 Nm) increments, until the screen is tight against the crown bar rubbers.
7. Start the engine and engage the shaker to verify. The screens must not bounce freely on the crown bar rubbers. You will notice if the screens are loose by the rapping noise they will make. If necessary, tighten the bolts further, in 5 lbs/ft (6.8 Nm) increments, until the screen is tight against the crown bar rubbers.





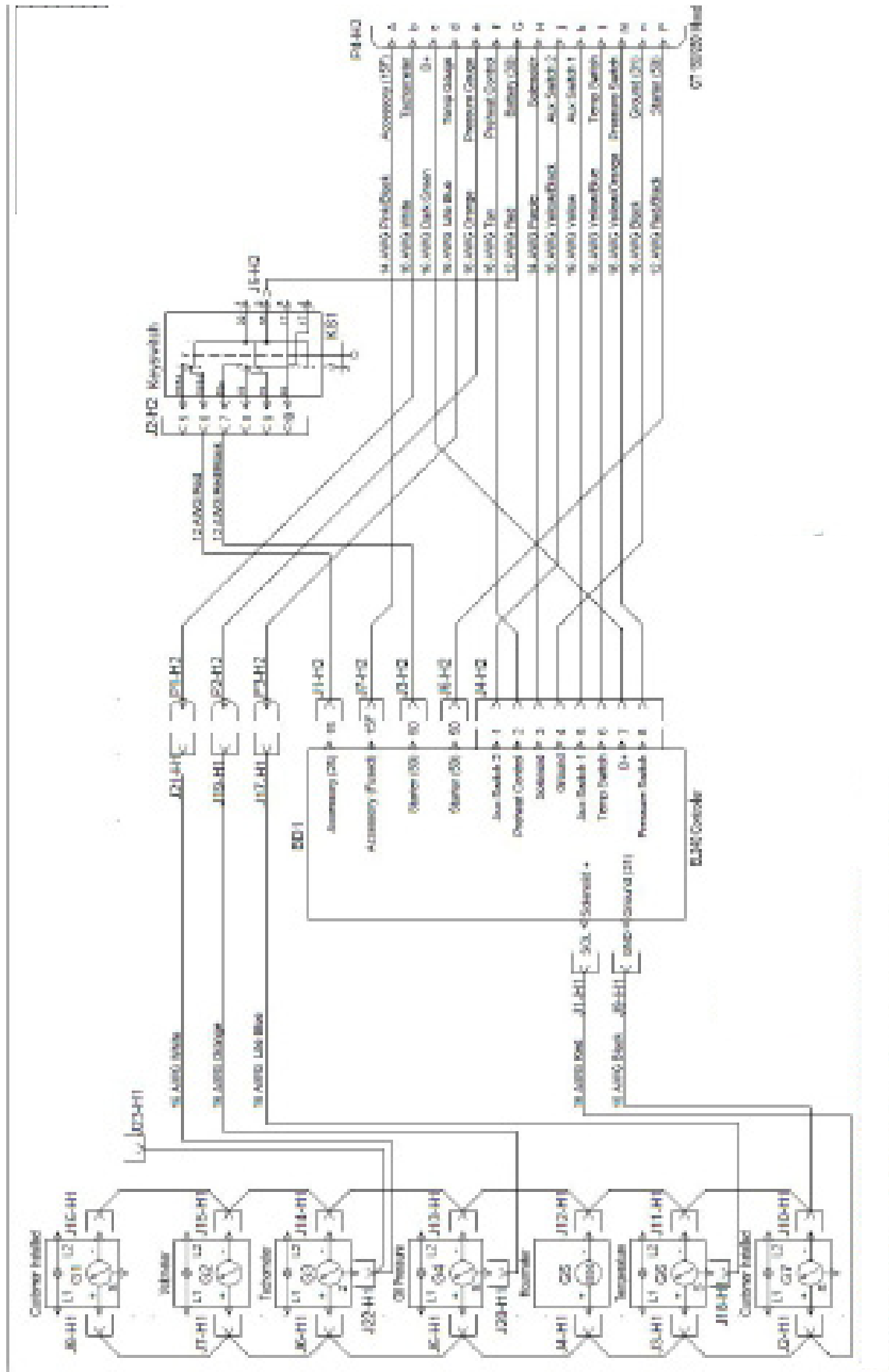
# 4. MAINTENANCE

## 4.9 ELECTRICAL SCHEMATIC, CHASSIS



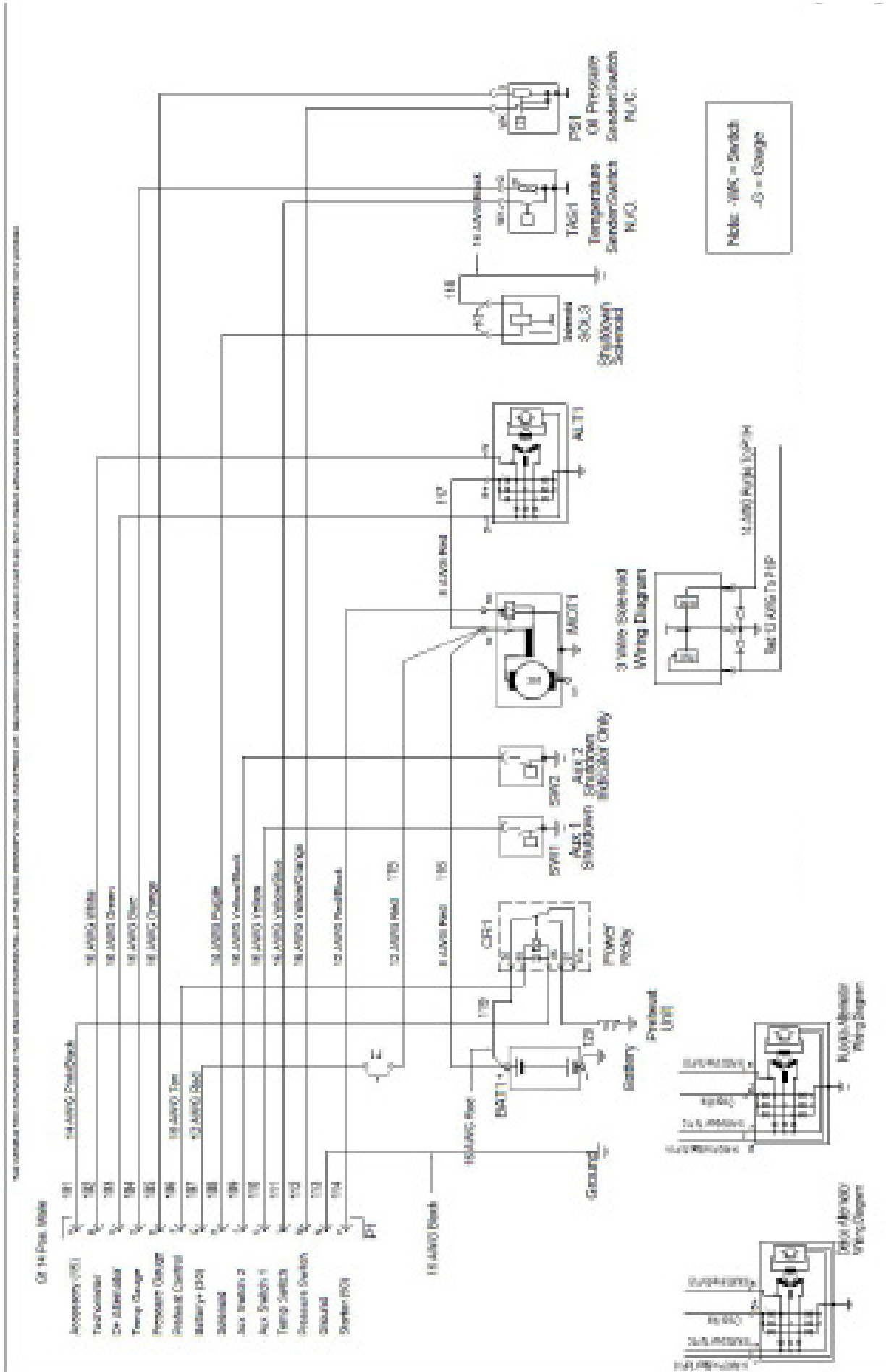
# 4. MAINTENANCE

## 4.10 ELECTRICAL SCHEMATIC, ENGINE



# 4. MAINTENANCE

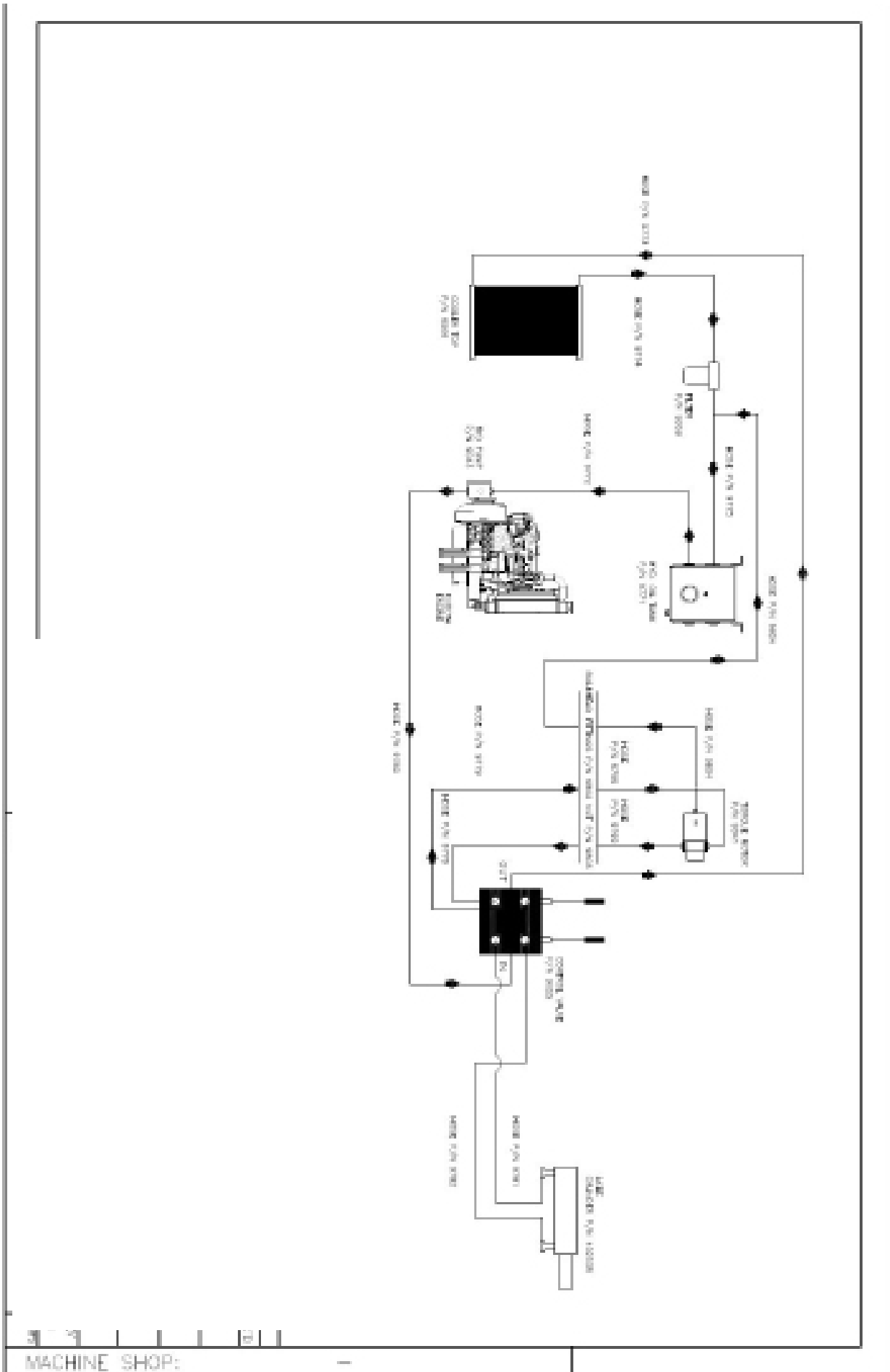
## 4.10 ELECTRICAL SCHEMATIC, ENGINE



Note: -OR = Switch  
-O = Change

# 4. MAINTENANCE

## 4.11 HYDRAULIC SCHEMATIC



## 4. MAINTENANCE

### 4.12 TROUBLE SHOOTING

#### 4.12A SCREENER

Symptom	Probable Cause	Solution
Cylinder will not operate	Engine RPM too low	Check and adjust
	Hydraulic fluid low	Replenish
	Fluid leak	Check and repair
Shaker head will not move	Hydraulic fluid low	Replenish
	Broken key	Check and replace
	Hydraulic pump or motor failure	Check pressure/flow
	Bearing seizure	Check and replace
Shaker head operates slow	Hydraulic fluid low	Replenish
	Engine RPM low	Check and adjust
	Hydraulic pump or motor leakage/wear	Check pressure/flow
	Broken key	Check and replace
	Bearing damage	Check and replace
Loud howling noise when shaker is engaged	Shaker head bearing is failing	Check and replace
Rapping noise from shaker deck area	Loose screen tension bolts	Tighten to specifications
	Worn crown bar rubber	Replace
	Engine RPM too high	Check and adjust
Screen cloth broken	Loose screen tension bolts	
	Worn crown bar rubber	



## 4. MAINTENANCE

### 4.12 TROUBLE SHOOTING

#### 4.12B ENGINE

Symptom	Probable Cause	Solution
Will not start for blockage	Low crank speed	Check battery charge
	No fuel in fuel system. Check	Replenish. Check for air.
	Faulty stop solenoid	Check and replace
	Faulty fuel pump	Check and replace
	Faulty injection system	Check and repair
	Improper preheat of engine	Read the starting instructions in the Operator's Manual
	Faulty glow plugs	Check and replace
	Incorrect valve timing	Check and repair
	Clogged air filter	Check and replace
	Worn engine components. ie: rings, valves, cylinder.	Check, repair, replace
Difficulty starting	Low cranking speed	Check battery charge
	Faulty stop solenoid	Check and replace
	Blocked fuel system	Check and repair
	Faulty fuel pump	Check and repair
	Clogged air filter	Check and adjust
	Air in fuel system	Bleed fuel lines
	Contaminant in fuel	Check for water, etc.
	Faulty injection system	Check and repair
	Faulty glow plug	Check and replace
	Incorrect valve timing	Check and repair
	Worn engine components. ie: rings, valves, cylinder.	Check, repair, replace
Low cranking speed capacity	Battery charge low	Charge battery, check alternator
	Faulty starter motor	Check and repair

## 4. MAINTENANCE

### 4.12 TROUBLE SHOOTING

#### 4.12B ENGINE

Symptom	Probable Cause	Solution
Lack of power	Faulty fuel pump	Check and replace
	Faulty injection system	Check and repair
	Incorrect valve timing	Check and repair
	Clogged air filter	Check and replace
	Air in fuel system	Bleed fuel lines
	Blocked fuel system	Check and repair
	Overheating	Check cooling system
	Engine temperature too low	Check and replace thermostat
	Worn engine components. ie: rings, valves, cylinder.	Check, repair, replace
Black exhaust	Clogged air filter	Check and replace
	Faulty injection system	Check and repair
	Incorrect valve timing	Check and repair
	Worn engine components. ie: rings, valves, cylinder.	Check, repair, replace
Blue/white exhaust	Incorrect valve timing	Check and repair
	Worn engine components. ie: rings, valves, cylinder.	Check, repair, replace
	Overheating	Check cooling system
	Incorrect grade of oil	Drain and replace with proper specification
	Water in fuel	Drain tank. Replace filter.
Engine starts then stops	Faulty stop solenoid	Check and replace
	Clogged air filter	Check and replace
	Blocked fuel system	Check and repair
	Air in fuel system	Bleed fuel lines

## 5. PARTS

<b>Mainframe</b>	<b>5.1</b>
<b>Shaker Head</b>	<b>5.2</b>
<b>Screen</b>	<b>5.3</b>
<b>Hydraulics</b>	<b>5.4</b>
<b>Engine</b>	<b>5.5</b>
<b>Decals</b>	<b>5.6</b>
<b>Electrical</b>	<b>5.7</b>

## 5. PARTS

### 5.1 MAINFRAME



ITEM	PART NUMBER	QTY.
LANDING GEAR ASSEMBLY	25000230	1
HITCH WELDED ASSEMBLY	25000234	1
DRAWBAR EYE	02511	1
CABLE SLING 1/2" x 5"	04262	2
SHACKLE 3/4"	04099	2
MUD FLAP	19075	2
BRACKET MUDFLAP MOUNT PLATE	40900490	2



## 5. PARTS

### 5.2 SHAKER HEAD

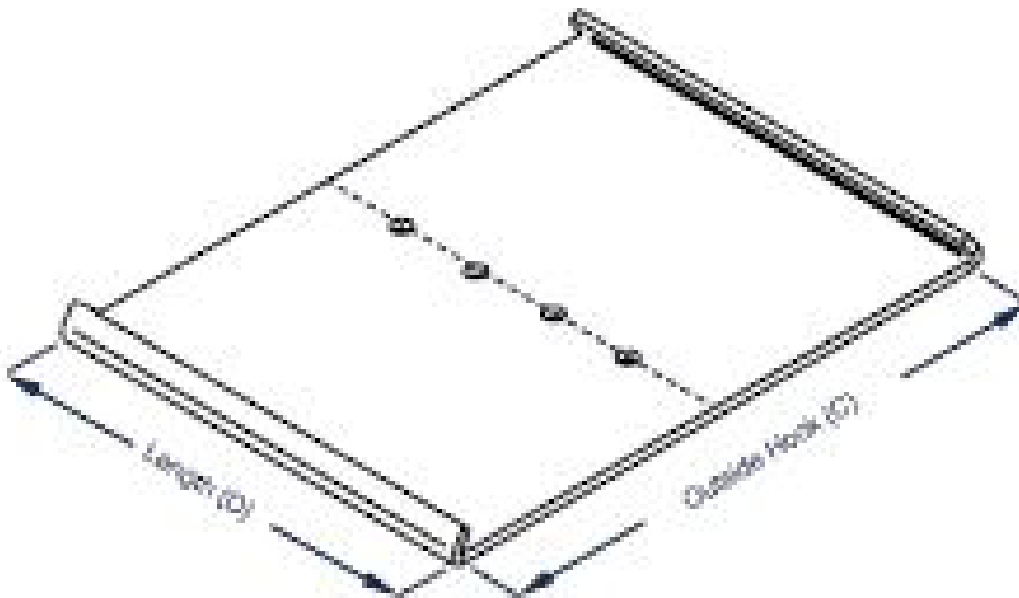


ITEM	PART NUMBER	QTY.
TOP SCREEN 71" x 82" x 2" SQUARE	02506	1
TOP SCREEN CLAMP	25000266	4
TOP SCREEN CROWN BAR	25000287	4
TOP SCREEN SUPPORT TALL	25000136	2
TOP SCREEN SUPPORT SHORT	25000135	2
BOTTOM SCREEN 82" x 71" x 1" SQUARE	02507	1
BOTTOM SCREEN CROWN RUBBER	25000286	3
BOTTOM SCREEN CLAMP	25000252	1
SHAKER SHAFT BEARING	08024	2
SUSPENSION SPRINGS	02501	4
SHAKER HEAD SHAFT	25000045	1
COUNTER WEIGHT ASSEMBLY	25000068	2
HYDRAULIC MOTOR	09041	1
DRIVE COUPLER KEYED	09112	1
DRIVE COUPLER SPLINED	09046	1
COUPLER BLUE INSERT	09047	1
CARRAGE BOLT 5/8" x 5" UNC	03929	13
FLANGE NUT 5/8" UNC	03927	13

## 5. PARTS

### 5.3 SCREEN

**FOR THE PERFECT FIT**



**Please Provide:**

- A** – Side Tensioned or End Tensioned
- B** – Hook Direction (2 Hooks Up / 2 Hooks Down or 1 Hook Up and 1 Hook Down)
- C** – Width - Measurement from the outside of one hook to the outside of the other hook
- D** – Length - Measurement of the length of the hook
- E** - Location of bar rails if blanking out required.



## 5. PARTS

### 5.3 SCREEN

ITEM	PART NUMBER
Screen, 71" OB x 82" - 2", SQ OPG Top .375 Dia Typro Wire C/W Bent	2506
Screen 82" OB x 71" - 1", SQ OPG BOT .250 Dia. Typro Wire C/W End	2507
Screen 71" OB x 82" - 1/4" SQ OPG .092 Dia. Typro Wire C/W Bent	2536
Screen 82" OB x 71" - 1/4" SQ OPG .092 Dia. Typro Wire C/W End	2537
Screen 71" OB x 82" - 5/16" SQ OPG .135 Dia. Typro Wire C/W Bent	2538
Screen 82" OB x 71" - 5/16" SQ OPG .135 Dia. Typro Wire C/W End	2539
Screen 71" OB x 82" - 3/8" SQ OPG .148 Dia. Typro Wire C/W Bent	2540
Screen 82" OB x 71" - 3/8" SQ OPG .148 Dia. Typro Wire C/W End	2541
Screen 71" OB x 82" - 7/8" SQ OPG .225 Dia. Typro Wire C/W Bent	2542
Screen 82" OB x 71" - 7/8" SQ OPG .225 Dia Typro Wire C/W End	2543
Screen 71" OB x 82" - 1/2" SQ OPG .177 Dia. Typro Wire C/W Bent	2544
Screen 82" OB x 71" - 1/2" SQ OPG .177 Dia. Typro Wire C/W End	2545
Screen 71" OB x 82" - 9/16" SQ OPG .177 Dia. Typro Wire C/W Bent	2546
Screen 82" OB x 71" - 9/16" SQ OPG .177 Dia. Typro Wire C/W End	2547
Screen 71" OB x 82" - 5/8" SQ OPG .192 Dia. Typro Wire C/W Bent	2548
Screen 82" OB x 71" - 5/8" SQ OPG .192 Dia. Typro Wire C/W End	2549
Screen 71" OB x 82" - 11/16" SQ OPG .192 Dia. Typro Wire C/W Bent	2550
Screen 82" OB x 71" - 11/16" SQ OPG .192 Dia. Typro Wire C/W End	2551
Screen 71" OB x 82" - 3/4" SQ OPG .207 Dia. Typro Wire C/W Bent	2552
Screen 82" OB x 71" - 3/4" SQ OPG .207 Dia. Typro Wire C/W End	2553
Screen 71" OB x 82" - 1" SQ OPG .250 Dia. Typro Wire C/W Bent	2554
Screen 82" OB x 71" - 2" SQ OPG .375 Dia. Typro Wire C/W End	2555
Screen 71" OB x 82" - 2 1/2" SQ OPG .375 Dia. Typro Wire C/W Bent	2556
Screen 82" OB x 71" - 2 1/2" SQ OPG .375 Dia. Typro Wire C/W End	2557
Screen 71" OB x 82" - 3" SQ OPG .500 Dia. Typro Wire C/W Bent	2558
Screen 82" OB x 71" - 3" SQ OPG .500 Dia. Typro Wire C/W End	2559
Screen 71" OB x 82" - 4" SQ OPG .500 Dia. Typro Wire C/W Bent	2560
Screen 82" OB x 71" - 4" SQ OPG .500 Dia. Typro Wire C/W End	2561
Screen 71" OB x 82" - 5 mm OPG .1875 Dia. TY-HARP C/W Bent	2562
Screen 82"OB 71" - 5 mm OPG .1875 Dia. TY-HARP C/W End	2563
Screen 71" OB x 82" - 6 mm OPG .250 Dia. TY-HARP C/W Bent	2564
Screen 82" OB x 71" - 6 mm OPG .250 Dia. TY-HARP C/W End	2565

# 5. PARTS

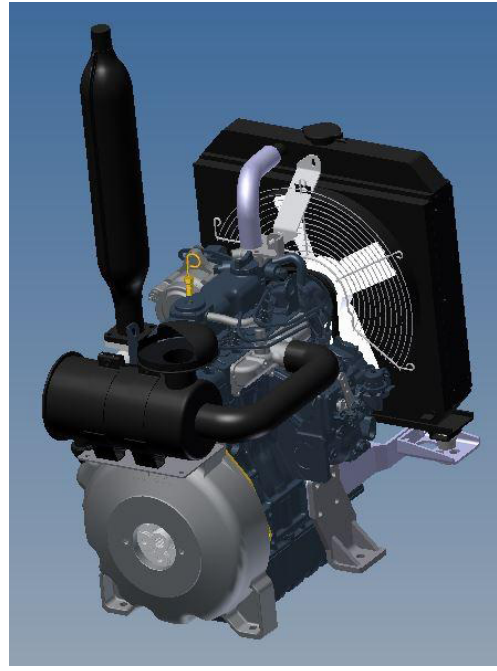
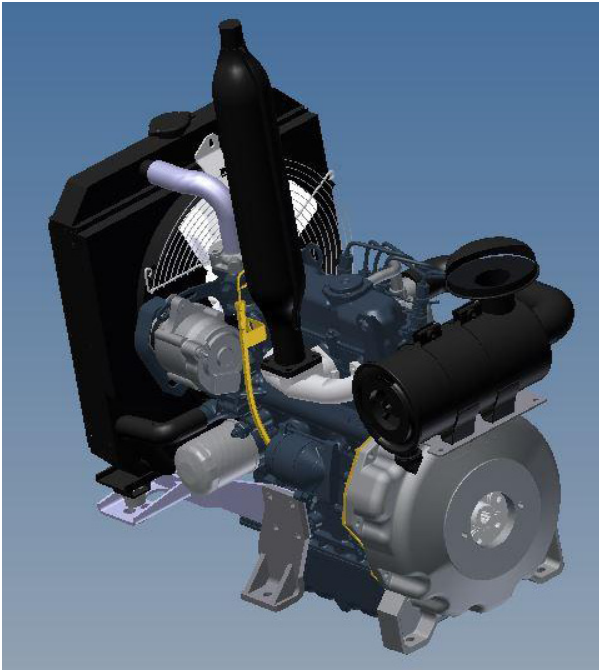
## 5.4 HYDRAULICS



ITEM	PART NUMBER	QTY.
HYDRAULIC TANK	09771	1
HYDRAULIC OIL COOLER	09069	1
HYDRAULIC PUMP	09043	1
HYDRAULIC OIL FILTER	02532	1
2 SPOOL VALVE	09055	1
HYDRAULIC CYLINDER	402338	1

## 5. PARTS

### 5.5 ENGINE



ITEM	PART NUMBER	QTY.
AIR FILTER ELEMENT	02525	1
RADIATOR	02514	1
RADIATOR TOP HOSE	02515	1
RADIATOR BOTTOM HOSE	02516	1
RADIATOR THERMOSTAT	02517	1
ENGINE FAN	02518	1
ENGINE FAN BELT	02519	1
ALTERNATOR	02520	1
STARTER	02521	1
MUFFLER	02522	1
MANIFOLD	02523	1
AIR CLEANER ASSEMBLY	02524	1
AIR CLEANER ELEMENT	02525	1
AIR CLEANER HOSE	02526	1
ENGINE STOP SOLENOID	02527	1
HAYES ADAPTOR ASSEMBLY	02528	1
HAYES SPINE COUPLER	02529	1
ENGINE ELECTRIC CONTROL BOX	02530	1
ELECTRIC CONTROL HARNESS	02531	1
FUEL FILTER	02533	1
GLOW PLUG RELAY	02534	1
GLOW PLUG RELAY	02535	1

# 5. PARTS

## 5.6 DECALS

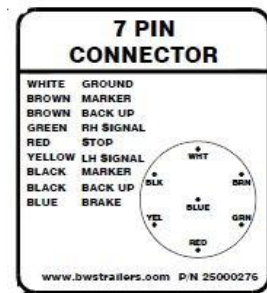
#	PART NUMBER	QTY.
1	25000220	1
2	25000221	4
3	25000222	6
4	25000223	3
5	25000224	1
6	25000227	1
7	25000271	4
8	25000276	1
9	25000228	1
10	25000231	2
11	25000298	1
12	25000299	1



1



6



8



2



9



3



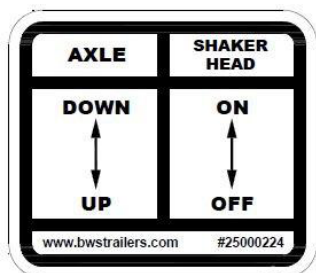
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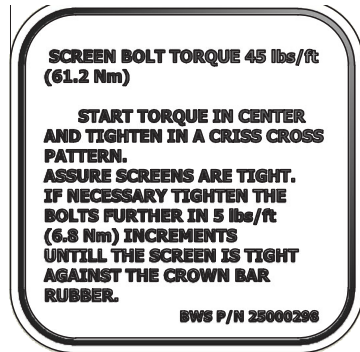
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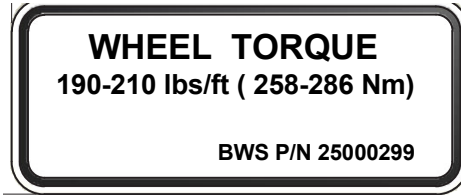
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## 5. PARTS

### 5.6 DECALS



11



12



## 5. PARTS

### 5.7 ELECTRICAL

P/N 40214 - 7 PIN MALE PLUG



P/N 06818 - MAIN HARNESS



P/N 06769 - REAR LICENSE PLATE LIGHT



P/N 06746 - AMBER MARKER LIGHT



P/N 06751 - RED MARKER LIGHT



P/N 06655 - REAR RED LIGHT



P/N 06187 - 4" GROMMET



P/N 401313 - BREAKAWAY KIT



P/N 06819 - REAR SILL HARNESS





## Screener Hitch mounting instructions.

### Items required

1. P/N 25000234 Front hitch assembly. Qty 1
2. P/N 25000246 Hitch prop assembly. Qty 1
3. P/N 03151  $\frac{3}{4}$  X 4  $\frac{1}{2}$  UNC bolt Qty 2
4. P/N 03146  $\frac{3}{4}$  X 2 UNC bolt Qty 6
5. P/N 03244  $\frac{3}{4}$  UNC lock nut Qty 8
6. Rigging will be required to secure hitch to lift truck tine.
7. Two 1 1/8 wrenches.
8. Two 5/8 line up punches
9. Torque wrench capable of 200 ft lbs and 1 1/8 socket.
10. A fork lift will be required to retrieve and mount hitch to screener.

### Delivery arrangement:

When screener is received by dealer P/N 25000246 hitch prop will be bolted to front of screener with bolts P/N 03151 qty 2, nuts P/N 03244 qty 2 and wiring attached. Screener hitch P/N 25000234 assembly will be separated from screener and will include jack, drawbar and mounting bolts P/N 03146 qty 6 and nuts P/N 03244 qty 6. A fork lift will be required to retrieve and mount hitch to screener.



Step 1: (figure 1)

Place screener on a level surface area with rear axle raised and screener base flat on surface area. Secure hitch to forklift tines. Navigate hitch to where the hitch mount plates on the hitch are located between the inside of the hitch mounts on the front of screener. Use a 5/8 tapered line up punch to position holes to receive qty 6 of  $\frac{3}{4}$  x 2 UNC bolts. Apply nuts but do not tighten.



(Figure 1)

Step 2: (Figure 2)

Remove qty 1 of  $\frac{3}{4}$  x 4  $\frac{1}{2}$  UNC bolt holding hitch prop to front of screener. Using  $\frac{3}{4}$  x 4  $\frac{1}{2}$  UNC bolts and nuts connect one end of hitch prop between hitch assembly mounts at jack location and the other end of hitch prop to between prop mounts at front of screener do not tighten nuts.



(Figure 2)

Step 3:

Raise hitch assembly with fork lift tines to remove slack in hitch prop. Now torque the qty 6 of  $\frac{3}{4}$  x 2 UNC bolts to 200 ft lbs. Tighten the qty 2 of  $\frac{3}{4}$  x 4  $\frac{1}{2}$  UNC bolts to 50 ft lbs. Remove fork lift from hitch. Crank jack to raise front of screener off surface area. Start engine and lower rear axle and set axle support in



(Figure 3)

PIT-PRO SCREENER PDI CHECK LIST

This document is to be completed and a copy returned to: BWS Manufacturing, 29 Hawkins Road, Centerville N.B, E7K 1A4.

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Delivery date \_\_\_\_\_ Dealer \_\_\_\_\_  
Equipment model # \_\_\_\_\_ S/N \_\_\_\_\_  
New Used

Item	Passed	Rejected
1. Paint condition		Comment _____
2. VIN tag applied		Comment _____
3. S/N stamped in engine compartment		Comment _____
4. All decals and tape applied		Comment _____
5. Operators manual attached		Comment _____
6. Electrical functions correct		Comment _____
7. Oil and Coolant levels correct		Comment _____
8. Engine operation		Comment _____
9. Hydraulic functions correct		Comment _____
10. Check for fluid leaks		Comment _____
11. Axle and braking functions		Comment _____
12. Tire air pressure 80 psi		Comment _____
13. Wheel nut torque 190-210 ft lbs		Comment _____
14. Shaker Screen tension correct		Comment _____

Dealer Comments:

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Customer Comments:

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