Dry Maxx 260RR Service Log:

Date	Hours	Service Performed or Problems Observed	Initials

In the event that the equipment is in need of service either due to the hours on the equipment or any problems or concerns that are observed, please call 1-306-591-2026 between the hours of 8:00 and 18:00 to notify us.

Dry Maxx 260RR Service Schedule

Hours	Service to be performed			
1150	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
1250	Engine oil change, air end oil change. Inspect filters and change as required.			
1350	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
1550	Engine oil change, air end oil change. Inspect filters and change as required.			
1550	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
1750	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
	Engine oil change, air end oil change. Inspect filters and change as required. Change water separator and oil			
1850	separator element and desiccant bed in cabinet. Grease wheel bearings on trailer.			
1950	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
2050	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
2150	Engine oil change, air end oil change. Inspect filters and change as required.			
2250	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
	Engine oil change, air end oil change. Inspect filters and change as required. Change water separator and oil			
2450	separator element and desiccant bed in cabinet. Grease wheel bearings on trailer.			
2450	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
2650	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
2750	Engine oil change, air end oil change. Inspect filters and change as required.			
2850	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
3050	Engine oil change, air end oil change. Inspect filters and change as required.			
	Engine oil change, air end oil change. Inspect filters and change as required. Change water separator and oil			
3050	separator element and desiccant bed in cabinet. Grease wheel bearings on trailer.			
3250	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
3350	Engine oil change, air end oil change. Inspect filters and change as required.			
3450	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
	Engine oil change, air end oil change. Inspect filters and change as required. Change water separator and oil			
3650	separator element and desiccant bed in cabinet. Grease wheel bearings on trailer.			
3650	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
3850	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
3950	Engine oil change, air end oil change. Inspect filters and change as required.			
4050	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
	Engine oil change, air end oil change. Inspect filters and change as required. Change water separator and oil			
4250	separator element and desiccant bed in cabinet. Grease wheel bearings on trailer.			
4250	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
4450	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
4550	Engine oil change, air end oil change. Inspect filters and change as required.			
4650	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
	Engine oil change, air end oil change. Inspect filters and change as required. Change water separator and oil			
4850	separator element and desiccant bed in cabinet. Grease wheel bearings on trailer.			
4850	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
5050	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
5150	Engine oil change, air end oil change. Inspect filters and change as required.			
5250	Check fan belt tension. Inspect radiator and cooler and clean if necessary. Check oil level for after cooler.			
	Engine oil change, air end oil change. Inspect filters and change as required. Change water separator and oil			
5450	separator element and desiccant bed in cabinet. Grease wheel bearings on trailer.			

Fluid levels for the engine oil, antifreeze, and compressor oil should be checked daily before start up.

Daily Walk Around

Conduct a walk around of the unit to check for any damage and ensure all doors are properly secured. Ensure that the pintle hitch, safety chains and the break-away system are properly connected to the tow vehicle. Inspect wheels and tires to insure they are properly inflated and that there are no cuts or damage to the tires.

Start Up Procedure

Before starting the compressor check the following fluid levels:

Passenger Side Compressor Door:

Oil level – should be to the full mark on the dipstick.

- Antifreeze The level should correspond with the temperature of the unit.
- Fuel level The tank should be full.
- Check for any leaks

Rear Compartment Door:

Check sight glass on sump. The oil level should just be at the bottom of the sight glass. When the unit is operating the level will appear higher and be visible in the sight glass. Over filling the sump will cause oil to carry over to the drying system. Check for any Leaks

Drivers Side Compartment Door: Check for any leaks



Cold Weather Start Up:

The unit should have been stored indoors or had the engine block heater and air drying system heat trace cables plugged in. Turn warm up control selector valve to **start** position. Turn ignition/start switch to the "**IGN**" position. Glow plugs

Push the "**Cold Start Relief Valve**" switch and push the ignition/start switch to the "**START**" position to engage starter and then release both switches when the engine starts. Allow the engine to warn up momentarily and turn the idle warm-up selector valve from the **start** to the **run** position within the first minute of operation.

Cold Weather Shut Down:

Slowly open the drain value on the after cooler to allow any moisture to escape. Turn the ignition/start switch to the "**OFF**" position. Slowly open the drain vale on the dryer to allow any moisture to escape. Slowly open the service value to allow the remaining air to escape. Ensure that the doors are all closed and secure. Remember to daily dispose of any moisture captured in the containment bucket in an appropriate location.

Warm Weather Start Up:

Turn warm up control selector valve to **start** position. Turn ignition/start switch to the "**IGN**" position. Turn the ignition/start switch to the "**START**" position to engage starter and then release when the engine starts. Allow the engine to warm up momentarily and turn the idle warm-up selector valve from the **start** to the **run** position within the first minute of operation.

Warm Weather Shut Down:

Slowly open the drain value on the after cooler to allow any moisture to escape. Turn the ignition/start switch to the "**OFF**" position. Slowly open the drain value on the dryer to allow any moisture to escape. Slowly open the service value to allow the remaining air to escape. Ensure that the doors are all closed

and secure. Remember to daily dispose of any moisture captured in the containment bucket in an appropriate location.

Air Compressor Maintenance

5.1 GENERAL

A good maintenance program is the key to long compressor life. Below is a program that, when adhered to, should keep the compressor in top operating condition. For maintenance requirements on engine, refer to the Engine Operator's Manual for a detailed description of service instructions. See Section 5.12, Parts Replacement and Adjustment Procedures for a detailed description of specific compressor system components. Prior to performing maintenance, read the CIMA Safety Manual, if applicable in your area.

A WARNING

DO NOT remove caps, plugs and/or other components when compressor is running or pressurized.

Stop compressor and relieve all internal pressure before doing so.

5.2 DAILY OPERATION

Prior to starting the compressor, it is necessary to check the fluid level in the sump. Should the level be low, simply add the necessary amount. If the addition of fluid becomes too frequent, a simple problem has developed which is causing this excessive loss. See the Troubleshooting Section (5.13) under Excessive Fluid Consumption for a probable cause and remedy. Also check the engine oil level and the radiator coolant level and drain water from the engine fuel/water separator prior to starting.



The radiator and engine cooling system must be drained and flushed every two (2) years. Replace the coolant with a solution of 50% ethylene glycol and 50% water or as required for your geographic location. DO NOT use a leak sealing type of antifreeze. All engines must have Supplemental Coolant Additive (SCA) added to the engine coolant system. Refer to your Engine Operator's Manual for details and specific engine requirements.

After a routine start has been made, observe the instrument panel gauge and be sure it monitors the correct reading for that particular phase of operation. After the compressor has warmed up, it is recommended that a general check on the overall compressor and instrument panel be made to assure that the compressor is running properly. Also check the air filter maintenance indicators if supplied.

5.3 MAINTENANCE AFTER INITIAL 50 HOURS OF OPERATION

After the initial 50 hours of operation, a few maintenance requirements are needed to rid the system of any foreign materials. Perform the following maintenance operations to prevent unnecessary problems.

- 1. Clean the return line orifice and strainer.
- Change compressor fluid filter.
- Check Engine Operator's Manual for required service.

4. Check fuel filter for water.

5.3A MAINTENANCE EVERY 50 HOURS

- Inspect and replace air filter elements (if required).
- Check fuel filter for water.
- 5.4 MAINTENANCE AFTER INITIAL 100 HOURS OF OPERATION
 - 1. Change engine oil and filter (John Deere engines)

5.4A MAINTENANCE EVERY 100 HOURS

After 100 hours of operation, it will be necessary to perform the following:

- 1. Clean the radiator and cooler exteriors.
- 2. Check Engine Operator's Manual for required service.

5.5 MAINTENANCE EVERY 200 HOURS

Perform the following after every 200 hours of operation:

- Check fan belt tension.
- Clean the radiator and cooler exterior. Depending on how contaminated the atmosphere may be, more frequent cooler and radiator cleaning may be necessary.
- Check Engine Operator's Manual for required service.

5.6 MAINTENANCE EVERY 250 HOURS

 Change engine oil and filter (John Deere and Caterpillar engines).

5.7 MAINTENANCE EVERY 300 HOURS

NOTE

Fluid change period will vary according to fluid brand. Refer to Lubrication Guide in Section 3.

Perform the following after every 300 hours of operation:

- Change the compressor fluid and fluid filter, if not using Sullair AWF. Run the compressor for 5 to 10 minutes to warm the fluid. Shut the compressor off and relieve all internal pressure before proceeding. Drain the fluid sump by removing the plug at the bottom of the sump tank. For fluid filter element replacement, see Filter Element Replacement under the Maintenance Section 5.12 Parts Replacement and Adjustment Procedures. Fill the sump with fluid according to specifications in Section 3. Remove any accumulated dirt from the fluid filler cap prior to filling the sump.
- 2. Clean return line strainer.
- 3. Check Engine Operator's Manual for required service.

5.8 MAINTENANCE EVERY 500 HOURS

Perform the following after every 500 hours of operation:

 Check the engine RPM. Idle speeds should never be allowed to fall below the minimums (see Section 3 Specifications).

- Change the fuel filter (John Deere engines). Should persistant clogging be evident, change the fuel filter more frequently.
- Change engine fuel-water separator (Caterpillar engines).



Operation at speeds below the minimum idle speeds shown in the Table in Section 3, Specifications will damage the compressor. Extended operation below those speeds will induce coupling and/or compressor failures.

- Lubricate the control linkage.
- Check Engine Manual for required service.

5.9 MAINTENANCE EVERY 600 HOURS

- Change the fuel filter (Caterpillar engines). Should persistant clogging be evident, change the fuel filter more frequently.
- 2. Change the compressor fluid filter.
- Change engine fuel-water separator (John Deere engines).

5.10 MAINTENANCE EVERY 1000 HOURS

Perform the following after every 1000 hours of operation:

1. Clean the return line orifice.

5.11 MAINTENANCE EVERY 1200 HOURS

When using Sullair AWF, change the compressor fluid and replace the fluid filter element (See maintenance procedures in Section 5.12).

5.11A MAINTENANCE EVERY YEAR OR 12,000 MILES

 Lubricate axle bearings on wheel-mounted units.

5.12 PARTS REPLACEMENT AND ADJUSTMENT PROCEDURES

COMPRESSOR FLUID CHANGE PROCEDURE

Warm-up compressor for 5 to 10 minutes to warm the fluid. Shut the compressor off and relieve all internal pressure before proceeding. Drain the fluid sump by removing the plug at the bottom of the sump tank. Change the compressor fluid and replace the fluid filter element. For element replacement see procedure for servicing the fluid filter in this section. Fill the sump with fluid according to specifications in Section 3.

COMPRESSOR FLUID FILTER ELEMENT RE-PLACEMENT

- Using a strap wrench, remove the old element.
- Clean the gasket seating surface.
- Apply a light film of fluid to the new gasket.
- Hand tighten the new element (from kit P/N 250028-032) until the new gasket is seated on the gasket seat.

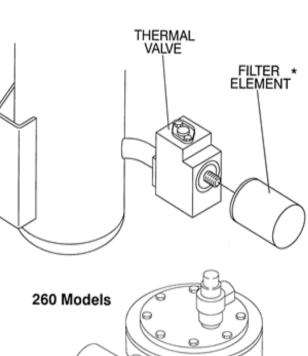
- Continue tightening the element by hand an additional 1/2 to 3/4 turn.
- Restart the compressor and check for leaks.

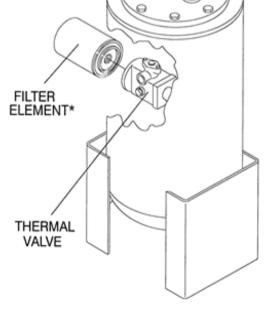
AIR FILTER MAINTENANCE

Refer to Figure 5–2. Air filter maintenance should be performed as often as conditions require. If the filters are equipped with an optional maintenance indicator, maintenance should be done when the in-

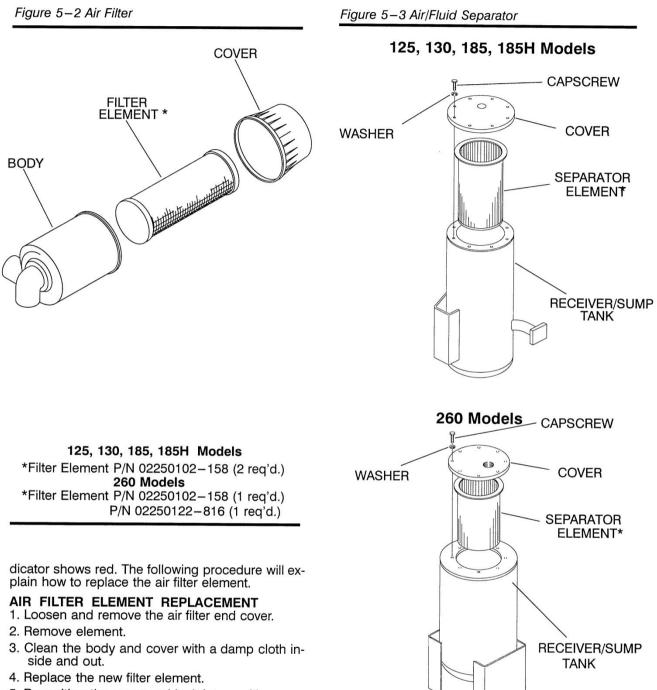
Figure 5–1 Compressor Fluid Filter

125, 130, 185 185H Models





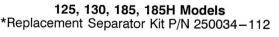
* Replacement Element Kit P/N 250028-032



- 5. Reposition the cover and lock into position.
- Reset the air filter restriction indicator if so equipped, and the unit will be ready for operation.

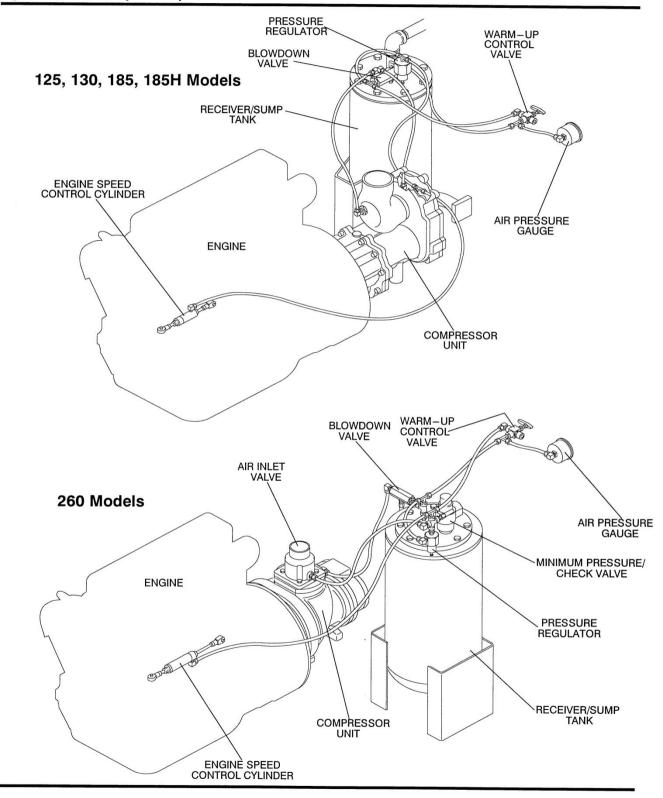
ELEMENT INSPECTION

 Place a bright light inside the element to inspect for damage or leak holes. Concentrated light will shine through the element and disclose any holes.



260 Models *Replacement Separator Kit P/N 02250078-031

Figure 5-4 Control System Adjustment



Air Compressor and Trailer Maintenance

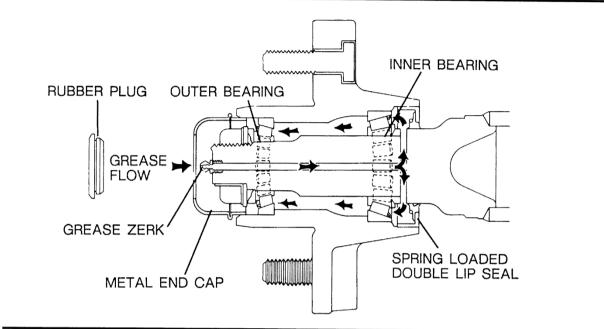


Figure 5–5 Typical E–Z Lube Axle

removing the hubs from the axle. This feature con- 5.13 TROUBLESHOOTING sists of axle spindles that have been specially drilled and fitted with a grease zerk in their ends. When grease is pumped into the zerk, it is channeled to the inner bearing and then flows back to the outer bearing and eventually back out of the grease cap hold (see Figure 5-5). The procedure is as follows:

- 1. Remove the rubber plug from the end of the grease cap.
- 2. With a standard grease gun filled with a quality wheel bearing grease, place the gun onto the grease zerk located in the end of the spindle. Make sure the grease gun nozzle is fully engaged on the fitting.
- 3. Pump grease into the zerk. The old, displaced grease will begin to flow back out the cap around the grease gun nozzle.
- 4. When the new, clean grease is observed, remove the grease gun, wipe off any excess, and replace the rubber plug in the cap.

The following Troubleshooting Chart is based upon the data obtained both from testing at the factory and from applied situations in the field. It contains symptoms and usual causes for the described problems, however **DO NOT** assume that these are the only problems that may occur. All available data concerning the trouble should be systematically analyzed before undertaking any repairs or component replacement procedures.

A detailed visual inspection is worth performing for almost all problems. Doing so may prevent unnecessary additional damage to the compressor. Always remember to:

- 1. Check for loose wiring.
- 2. Check for damaged piping.
- 3. Check for parts damaged by heat or an electrical short circuit, usually apparent by discoloration or a burnt odor.

Should the problem(s) persist after making the recommended check, consult your nearest Sullair representative or the Sullair Corporation.

SYMPTOM	PROBABLE CAUSE	REMEDY
COMPRESSOR WILL NOT START	No Fuel	Check fuel level and add fuel if necessary. Check fuel shut-off valve.
	Plugged Fuel Filter	Replace the element.
	Low Battery Voltage	Recharge or replace if necessary.

TROUBLESHOOTING

TROUBLESHOOTING (CONTINUED)

SYMPTOM	PROBABLE CAUSE	REMEDY
COMPRESSOR WILL NOT START (continued)		Loose battery cables; tighten cables. Dirty battery cables; clean thoroughly.
	Plugged Air Filter	Clean or replace the element.
	Engine Problems May Have Developed.	Refer to Engine Operator's Manual.
	Defective Engine Oil Pressure Switch	Check continuity flow and replace the switch if necessary.
	Blown Fuse In Wiring Harness	Check continuity and replace if necessary.
COMPRESSOR SHUTS DOWN WITH AIR DEMAND PRESENT	No Fuel	Check fuel level and add fuel if necessary.
	Compressor Discharge Temperature Switch Is Open	Cooling air flow is insufficient; clean cooler and check for proper ventilation.
		Low fluid sump level; add fluid.
		Clogged compressor fluid filter; change element.
		The temperature regulating section of the fluid control center is not functioning properly; change the thermostat element.
		Defective discharge temperature switch; check for a short or open circuit to the engine fuel rack solenoid. Should this check out normally, it could be possible that the temperature switch itself is defective.
	Defective Engine Oil Pressure Switch	Check continuity and replace if necessary.
	Blown Fuse In Wiring Harness	Check continuity and replace if necessary.
COMPRESSOR WILL NOT BUILD UP FULL DISCHARGE PRESSURE		For compressors with idle warm-up controls, switch toggle to "run" for full operation.
	Air Demand Is Too Great.	Check service lines for leaks or open valves.
	Dirty Air Filter	Check the filter indicator and change element if required.
COMPRESSOR WILL NOT BUILD UP FULL DISCHARGE PRESSURE (continued)	Defective Pressure Regulator	Check diaphragm and replace if necessary (kit available).
	Defective Idle Warm-up Control	Replace control.
MPROPER UNLOADING WITH AN EXCESSIVE PRESSURE BUILD-UP CAUSING PRESSURE RELIEF VALVE TO OPEN	Pressure Regulating Valve Is Set Too High	Readjust.
	Leak In Control System Causing Loss Of Pressure Signal	Check control lines.
		Defective pressure regulating valve; repair valve (kit available).
	Inlet Valve Jammed	Free or replace valve.

TROUBLESHOOTING (CONTINUED)

SYMPTOM	PROBABLE CAUSE	REMEDY
IMPROPER UNLOADING WITH AN EXCESSIVE PRESSURE BUILDIMPROPER UNLOADING RELIEF VALVE TO OPEN (continued)	Restriction In The Control System Restriction In The Control System	Check all control lines and components. lce and/or other contaminants could cause Check all control lines and components. lce and/or other contaminants could cause restrictionsUP CAUSING PRESSURE
	Defective Pressure Relief Valve Opening At Too Low Of Pressure	Replace pressure relief valve.
	Defective Pressure Regulator	Check diaphragm and replace if necessary (kit available).
INSUFFICIENT AIR DELIVERY	Engage Idle Warm-up Control In "Run" Position For Full Compressor Operation.	
	Plugged Air Filter	Replace.
	Plugged Air/Fluid Separator	Replace separator element and also change compressor fluid and fluid filter at this time.
	Defective Pressure Regulator	Adjust or repair.
	Engine Speed Too Low	Readjust engine speed.
	Defective Idle Warm-up Control	Replace control.
EXCESSIVE COMPRESSOR FLUID CONSUMPTION	Clogged Return Line	Clear orifice and return line strainer.
	Leak In The Lubrication System	Check all pipes, connections and components.
	Separator Element Damaged Or Not Functioning Properly	Change separator element.
COMPRESSOR OVERHEATING	Low Sump Fluid Level	Fill.
	Loose Or Broken Fan Belt	Tighten or change belt.
	Dirty Fluid Cooler Core	Clean core thoroughly.
	Plugged Compressor Fluid Filter	Change element.
	Faulty Thermostat	Change thermostat element.
	Plugged Fluid Cooler Tube (Internal)	Replace cooler.
ENGINE OVERHEATING	Loose Or Broken Fan Belt	Tighten or change belt.
	Dirty Radiator Core	Clean thoroughly.
	Low Fluid Level	Refill.
	Faulty Water Pump	Change pump.
	Plugged Radiator	Clean and flush thoroughly.
	Defective Engine Thermostat	Replace engine thermostat.

Air Drying Component

DANGER !

Do not attempt at any time to remove, repair, or replace any item in the system while it is under pressure. Depressurize the components completely before starting installation and/or maintenance procedures. Serious personal injury or death may result if these safety rules are not followed.

Do not remove cover and/or retaining clamp on the dryer until ALL air pressure is removed.

WARNING !

Do not try to tighten the clamps if you hear or feel a leak. Immediately shut off the air or gas supply to the vessels and reduce the pressure to zero. Do not use power tools or cheater bars to tighten the nut on the dryer clamp. Too much force can distort the threads. If damaged by over tightening, the cover can blow out and cause serious injury or death. Always install a new o-ring each time the cover is removed, or at least once a year. Use authorized parts only.

Safety Components

Pressure Relief Valve: pressure relief valves aid in preventing system failures by relieving system pressure when compressed air reaches a predetermined pressure level. This type of valve is preset by the manufacturer and must not be modified in any way.

WARNING !

Pressure relief valves must not be modified, welded on, or repaired. Such actions may cause property damage, severe injury, or even death.

The dryer has a manual drain which should be drained at the end of each shift to check for moisture. The desiccant in this unit should be changed annually or if the green filter has been saturated and allowed oil to pass by.

Condensate

Each of the filters and dryer diverts their water to the condensate containment container which should be emptied daily. The exhaust from the fan also flows to this container to catch the oil from the exhaust from the fan.

Freeze Protection

The drying system has heat trace cables on each of the units to help to protect them in the cold from freezing. These cables are energized automatically when the temperatures drops and nears the freezing mark. They get their power from the inverter which is mounted on the compartment wall and only operates when the air compressor is running. If the inverter does not operate when the compressor is running, the operator needs to ensure that the unit is turned on. The compartment also has a heater to provide some heat for the space. The heater is a 12 volt unit which also only operates when the compressor is running. If the trailer and all of its' components are to be stored outside in cold weather, it should have the block heater on the engine plugged in and a small heater to heat the compartment or as a minimum have the heat trace cables plugged in to help to prevent freezing of the components. A small thermostatically controlled 300 to 600 watt car warmer can be installed in the front compartment to keep the space heated if the unit is to be stored outside for long periods below -20 C. A circulating block heater should also be installed in this application.

Parts and Service

In the event that the equipment is in need of service either due to the hours on the equipment or any problems or concerns that are observed, please call 1-306-591-2026 between the hours of 8:00 and 18:00 and we will be happy to assist you.