

TR 575/750/1000 SPRAYMASTER W/ PRO-AIR SYSTEM

Service Manual August 2019

Contact Information

HEADQUARTERS:

2520 South Campbell Street Sandusky, Ohio 44870 Phone: 1-800-326-1994 Fax: 419-626-5477 E-mail: info@thorworks.com

Parts Ordering

CONTACT INFORMATION:

2520 South Campbell Street Sandusky, Ohio 44870 Phone: 800-326-1994/419-626-4375 Fax: 419-626-0842 E-mail: <u>mikeb@thorworks.com</u>

Parts Supervisor: Michael Bechtel

INFORMATION

Please provide as much of the following if available:

- Customer Name
- Complete Shipping Address
- Attention to:
- Phone Number
- Part Number & Description
- Equipment Model #
- Equipment Serial #
- Shipping Method/Date Required
- PO# (if necessary)
- Quantity & Price
- Kubota Model Number

Wear Items

- Wear items are not covered under ThorWorks limited warranty. A wear item is defined as, but not limited to: material, pump, crack fill-in tips, tires, etc.
- Note: All engine warranties are covered through the engine manufacturer. If you need information for the engine manufacturer please contact a Kubota representative.

Parts Warranty

ThorWorks warrants parts purchased through ThorWorks for one year from purchase **

**If the part is found to be within one year of purchase and has not been abused or modified, a credit will be issued to the customer's account or credit card.

Return Authorization

- If a part fails to function within the first year of purchase, a <u>RETURN</u> <u>AUTHORIZATION</u> number must be obtained.
- Please contact ThorWorks Parts Department to obtain the needed R.A. number.
- Note: If the part has a serial number associated with it, this must be furnished to the parts department and included with the shipped item.
- The customer will then be Emailed or faxed an RA form with all instructions to return the item to ThorWorks.

	Date
Customer Name	
Address	
	Fax Number
Contact Name	
Product Description	
Product / Model #	Quantity
VIN / Serial / Batch	N () ()
Purchase Date	
Date of Failure	
Describe Problem	
This form must be received	d by ThorWorks and evaluated before a returned goods authorization number will be
issued. Pictures may be red	guired for review and should be e-mailed to returns@thorworks.com along with a
	eturn is authorized, a returned goods authorization number will be e-mailed to you
along with the shipping in:	structions. Please email the completed form to returns@thorworks.com.
FO	OR THORWORKS USE ONLY
Authorization Number	
	Pictures Required (Y/N)
Method of Shipping	Pictures Required (Y/N) Field Destroy (Y/N)
	Pictures Required (Y/N) Field Destroy (Y/N)
Method of Shipping Contact Person	Pictures Required (Y/N) Field Destroy (Y/N)
Method of Shipping Contact Person Received by	Pictures Required (Y/N) Field Destroy (Y/N) Date Received
Method of Shipping Contact Person Received by Item Number	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch
Method of Shipping Contact Person Received by	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch Date Code
Method of Shipping Contact Person Received by Item Number	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch Date Code
Method of Shipping Contact Person Received by Item Number Quantity Sealer Department	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch Date Code Restock Fee (Y/N)
Contact Person Received by Item Number Quantity Sealer Department Color Department	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Date Code Date Code Restock Fee (Y/N) Approved By
Method of Shipping Contact Person Item Number Quantity Sealer Department Color Department Stock Room	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch Date Code Restock Fee (Y/N) Approved By Restock Charge
Method of Shipping Contact Person Item Number Quantity Guantity Sealer Department Color Department Stock Room Other	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch Date Code Restock Fee (Y/N) Approved By Restock Charge Customer Credit
Method of Shipping Contact Person Item Number Quantity Guantity Sealer Department Color Department Stock Room Other	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Date Received Batch Date Code Restock Fee (Y/N) Approved By Restock Charge Customer Credit Date Vendor Credit
Method of Shipping Contact Person Item Number Quantity Guantity Sealer Department Color Department Stock Room Other	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch Date Code Restock Fee (Y/N) Approved By Restock Charge Customer Credit Date Vendor Credit
Method of Shipping Contact Person Item Number Quantity Guantity Sealer Department Color Department Stock Room Other Return to Vendor	Pictures Required (Y/N) Field Destroy (Y/N) Date Received Batch Date Code Restock Fee (Y/N) Approved By Restock Charge Customer Credit

ThorWorks Returned Goods Authorization Form

Return Parts

- The same procedure should be followed if a customer has purchased a part but it is no longer needed.
- If the part is returned within 30 days of purchase, no restocking fee is applied.
- If a part is returned after 30 days of purchase, a 15% restocking fee will be charged.

Note: Kits are sold as a whole, you may not return unused parts out of a kit for credit.



Technical Assistance

Contact Information:

2520 South Campbell Street Sandusky, Ohio 44870 Phone: 1-800-326-1994 Fax: 419-626-5477 E-mail: info@thorworks.com

ThorWorks	Industries, Inc.
Purchased by	·
Company Name	Serial NO
Address	Acceptance Date
City	_ State Zip
All Correspondence regarding this equipment, a to: ThorWor PC Sandu In referring to the equipment, kindly state the M involved	ESPONDENCE s well as general correspondence should be addressed rks Industries, Inc. D Box 2277 isky, OH 44870 lodel Number, Serial Number and any part number

Warranty Information

- Limited Warranty
- Product Registration
- Authorized SealMaster Representative Only!

SealMaster® LIMITED WARRANTY

SealMaster warrants that its products are of quality material and workmanship. SealMaster agrees to replace, within a period of one (1) year from date of delivery, or at its option, repair, without charge, any part of their manufacture which proved defective. The repair or replacement will be free of charge F.O.B. Sandusky, Ohio, proving the damaged part or parts are returned, freight prepaid, to SealMaster and investigation show such repair or replacement is made necessary by an inherent defect of material or workmanship.

It is hereby understood that engines, motors, pumps, or other components purchased by SealMaster for use on its equipment are not warranted by SealMaster and are sold only with the standard warranty of the manufacturer of that component.

SealMaster will make no allowances for repairs or alterations completed by outside sources unless authorization is in writing and approved by an authorized SealMaster representative.

Any claims for defective material or workmanship must be made prior to the expiration of thirty (30) days from the date failure occurs, and in all cases prior to the expiration of the warranty period of one (1) year. It is the intent of this paragraph to limit SealMaster's liability solely to the cost of replacement parts, F.O.B. factory, or at the option of SealMaster to repair of the defective part or parts. No allowances for damages, lost time, or any other claim will be recognized.

This warranty is null and void if other than genuine SealMaster parts are used.

SealMaster is constantly striving to improve their products. Changes in design and improvement will be made whenever the manufacturer believes the efficiency of the product will be improved, without incurring any obligation to incorporate such improvements in any machines which have been shipped or are in service.

In an effort to continue to improve product quality, SealMaster reserves the right to change specifications without notice.

Any modification or alteration of this machine without prior approval of the manufacturer may void this warranty.

Where to find product information:

- Owner's Manual
- Website: https://sealmaster.net/





PO Box 2277 · Sandusky, Ohio 44870 · 419-626-4375

sealmaster.net

Questions?



- A manual is furnished
 with each new TR
 575/750/1000 SprayMaster
 w/Pro-Air System
 - The manual will help your machine operators learn to run the equipment properly and understand its mechanical functions for the trouble-free operation.

SprayMaster with Pro-Air System

575, 750 & 1000

OWNERS MANUAL





PO Box 2277 · Sandusky, Ohio 44870 · 419-626-4375

sealmaster.net

Your TR 575/750/1000 SprayMaster w/Pro-Air System is designed to give excellent service and save maintenance expenses. However, as with all specially engineered equipment, you can get the best results at a minimum cost if:

- You operate your machine as instructed in this manual.
- Maintain your machine regularly as stated in this manual.

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

Air Spray Tank Operating Instructions

Before Starting the Engine



1-BEFORE STARTING THE ENGINE

 Make sure the <u>agitator control valve</u> H2 is in the neutral position. Make sure <u>hydraulic oil valve</u> H1 is open.

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

2-STARTING THE ENGINE

- Set the fuel shutoff and choke levers to the on position.
- Set the throttle lever at ½ open.
- Turn the engine switch to the start position.

We will be a set of the set of

Air Spray Tank Operating Instructions

Starting the Engine

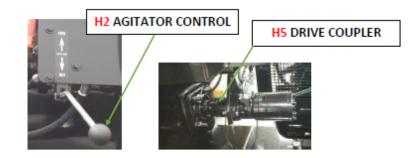
APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

Air Spray Tank Operating Instructions

Agitate the Material

AIR SPRAY TANK OPERATING INSTRUCTIONS

MACHINE OPERATIONS



3-TO AGITATE THE MATERIAL

- Add the appropriate amount of sealer and water to the tank.
- Slowly engage the <u>agitator control valve</u> H2 to the forward position.
- If the agitator will not turn or bogs the engine down, move the lever to the neutral then the reverse position.
- Repeat until the agitator makes a complete revolution.
- For mixing purposes, rotation direction does not matter.
- When you are standing on the fender and looking into the tank, set rotation toward you, to prevent splashing.
- Before opening the lid, stop the agitator or at least slow down the speed. Speed is controlled by the valve lever.
 NEVER change direction without first coming to a stop or you could break the <u>drive coupler</u> H5.

Air Spray Tank Operating Instructions

Adding Sand/Transporting

SPRAY MASTER TANK TRAILER WITH PRO-AIR SYSTEM

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

MACHINE OPERATIONS

4-ADDING SAND

- When adding sand, the agitator must be rotating at a medium speed SLOWLY pour in the sand.
- If it stops rotating increase speed if that is not effective it needs to be cycled back and forth to get it going again.
- Once the sand is added, close the lid and let the agitator rotate at a medium to fast speed for a few minutes.
- Set to a slow speed when ready to start spraying.
- WARNING Never reach into the manhole with the agitator on.

5-WHEN YOU ARE TRANSPORTING

- When you are traveling from job to job and have a sand mix in the tank, it is important that you leave the agitator ON. If not, slowly the sand will settle to the bottom and pack. It is very difficult to get pack settled sand back into suspension.
- NEVER add sand without agitator running.

Air Spray Tank Operating Instructions

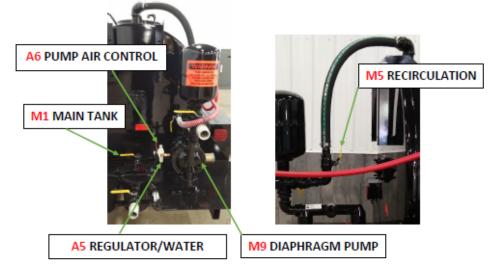
Recirculation

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

6-RECIRCULATION

- This involves the pump drawing material out of the bottom of the tank and pumping it back in at the top.
- Be sure the product is mixed thoroughly before recirculating and before spraying the material.
- To recirculate, first open the <u>main tank valve</u> M1 and the <u>recirculation valve</u> M5.
- On the air <u>diaphragm pump</u> M9 is the air pressure regulator/water trap A5 and the <u>pump air control valve</u> A6.
- These valves turn the pump on and off, it's also used to adjust pump speed and volume.



APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

Air Spray Tank Operating Instructions

Spray Wand

AIR SPRAY TANK OPERATING INSTRUCTIONS

MACHINE OPERATIONS

7-SPRAY WAND

- Once the recirculation process is done, close <u>recirculation valve</u> M5.
- The material <u>diaphragm pump</u> M9 will stop cycling and the pressure gauge <u>regulator/water trap</u> A5 will read the regulator setting.
- Start with 80 psi on the gauge.
- Remove the <u>spray hose</u> M11 from the side of the tank or hose reel and stretch it out, making sure there are no twists or kinks.
- Open <u>spray hose feed valve</u> M6 to pressurize the hose, then the <u>spray wand valve</u> M4. To start spraying. Hold the wand at waist level and overlap 50%. Walk side to side across the area to be sealed.
- When the material is coming out of the spray tip, you will feel the wand push up.
- The thickness of the material determines how much pressure is needed to properly atomize the material.
- Adjust the pressure setting on <u>regulator/water trap</u> A5 to get a proper spray pattern. To do this, turn the knob on top of regulator clockwise to increase pressure or counterclockwise to decrease.
- You may need to run the pressure at the maximum of 125 psi, depending on your material.

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

Air Spray Tank Operating Instructions

Spray Wand

AIR SPRAY TANK OPERATING INSTRUCTIONS

MACHINE OPERATIONS

7-SPRAY WAND cont.

- <u>Pump air control valve</u> A6 determines how much air enters the diaphragm pump, and how fast it will cycle. Typically, this valve is open completely.
- The pump automatically slows down or speeds up depending on tip size or condition.
- When you close the <u>spray wand valve</u> M4, the pump will make a few cycles then stop.
- When the wand is opened, the pump will start pumping again. If it does not, bleed all of the air from the system and start over.
- If the pump still does not cycle, refer to the troubleshooting guide in the pump manual.
- Open <u>spray wand valve</u> M4 on the wand completely to make it last longer.
- The <u>spray wand valve</u> M4 and 80-70 <u>spray tips</u> M10 are wearing items and need to be replaced periodically.
- 80-70 or 80-100 spray tips M10 typically need to be replaced every 500 to 1000 gallons if using a sand mix.
- The center of the spray starts to get heavy as the tip wears. Using worn tips causes an inconstant spray pattern making it difficult to maintain a uniform coating.

Air Spray Tank Operating Instructions

Spray Wand

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS AIR SPRAY TANK OPERATING INSTRUCTIONS

M12 SPRAY 7-SPRAY WAND M10 SPRAY TIP 80/70 WAND M5 RECIRCULATION ASSEMBLY M4 SPRAY WAND VALVE M11 SPRAY HOSE M6 SPRAY HOSE FEED M5 RECIRCULATION A6 PUMP AIR CONTROL A5 REGULATOR/WATER TRAP M9 DIAPHRAGM PUMP

Air Spray Tank Operating Instructions

Spray Bar

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

8-SPRAY BAR

- The throttle on the <u>compressor engine</u> A1 needs to be set between 3/4 and full position to ensure there is enough air available for the <u>diaphragm pump</u> M9.
- Open <u>spray tip valves</u> M7 on the spray bar, after completing the recirculation process.
- Position the machine, motion for the driver to start forward at approx. 4mph, open <u>spray bar feed valve</u> M3, and also the (optional) spray bar lever, this opens all of the <u>spray tip valves</u> M7 at the same time, to start spraying.
- There will be a surge of material, the pump will cycle rapidly then slow to a regular cycle rate.
- To reduce the initial surge, move the spray bar lever slowly to control the flow.
- Control how fast the pump cycles by opening or closing the <u>pump</u> air control valve A6.
- Run the pump pressure at the lowest acceptable application pressure to reduce overspray.
- Control pressure by using the <u>regulator/water trap</u> A5.

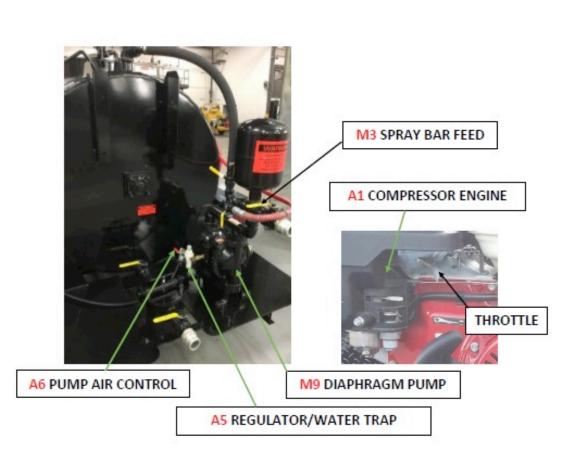
Close <u>spray bar feed valve</u> M3 or the spray bar lever (optional) when you reach the end of your pass, leave all of the pump controls set. The pump will come back on when you open the spray bar valves. Position the tires right next to the previous pass, this will give you the proper overlap.



8-SPRAY BAR

Air Spray Tank Operating Instructions

Spray Bar

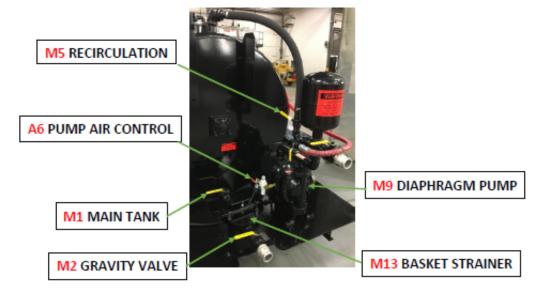


Air Spray Tank Operating Instructions

Filling Tank from Drum/Another Tank

9-FILLING THE TANK FROM A DRUM OR ANOTHER TANK

- Close the <u>main tank valve</u> M1 and connect a 2" hose to <u>gravity</u> valve M2 located on the <u>basket strainer</u> M13.
- Put the end of the hose into your drum or connect to the other tank.
- Open <u>recirculation valve</u> M5 open <u>pump air control valve</u> A6 located on material <u>diaphragm pump</u> M9.
- The material will go thru the basket strainer and be pumped up into the top of the tank.
- Reverse the steps when done.



Air Spray Tank Operating Instructions

Filling a Bucket Cleaning the Basket Strainer

10-FILLING A BUCKET

 You can fill a bucket for edging purposes by opening <u>main tank</u> valves M1 and gravity valve M2.

11-CLEANING THE BASKET STRAINER

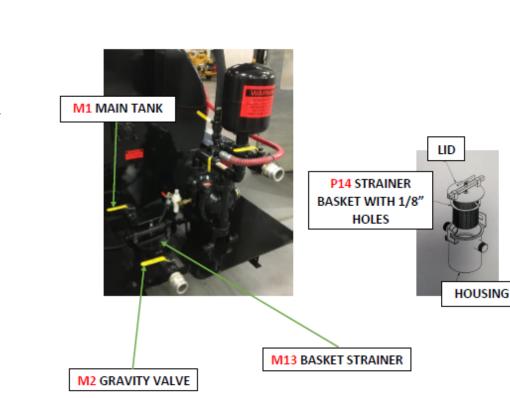
- When you notice the spray pattern has started to decrease, or it is taking longer for the pump to stop when you close the spray wand or spray bar valves, the <u>basket strainer</u> M13 needs to be cleaned.
- It requires cleaning at least once a day and sometimes several times a day.
- Close <u>main tank valve</u> M1 and remove the lid assembly, it may be necessary to open <u>gravity valve</u> M2 to release vacuum or pry off the lid as the rubber gasket adheres to the housing.
- Reach in and pull the <u>strainer basket</u> P14 out and put it in a bucket of water.
- If the material is hard packed or dry, you will have to scrape with a screwdriver.
- It is advised to have a 2nd basket on hand. It can be replaced and returned to spraying while the first is being cleaned.

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

MACHINE OPERATIONS

11-CLEANING THE BASKET STRAINER



Air Spray Tank Operating Instructions

Cleaning the Basket Strainer

Air Spray Tank Operating Instructions

Water Flush

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

12-WATER FLUSH

- It is not necessary to flush the system every day. We suggest removing the spray tip and plugging the wand.
- If the machine is going to be out of service for a week or more, then water flush the system.
- If outfitted with the water option, close <u>main tank valve</u> M1 and open the small <u>water flush valve</u> P15 that is on the <u>basket strainer</u> M13.
- Make sure the <u>recirculation valve</u> M5 is closed or you will pump water into your tank.
- Open <u>pump air control valve</u> A6 and either your <u>spray wand valve</u> M4 or <u>spray bar feed valve</u> M3. Pump until water runs clear.
- On <u>basket strainer</u> M13 is a <u>water check valve</u> P6, this keeps sealer from flowing into the water tank if you leave the valve open. Do not rely on this check valve to always operate properly, always close the <u>water flush valve</u> P15.
- If you do not have the water option, close <u>main tank valve</u> M1. Remove the lid assembly from the <u>basket strainer</u> M13.
- Open <u>pump air control valve</u> A6 and pour water in as it is being pumped to the spray wand or spray bar.

Note: Skid tank configuration is different from the trailer, but the operation is the same.

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

MACHINE OPERATIONS

Air Spray Tank Operating Instructions

Water Flush



Air Spray Tank Operating Instructions

Air Operation Instructions Filling the Tank Using the Diaphragm Pump APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK OPERATING INSTRUCTIONS

AIR OPERATION INSTRUCTIONS

- Completely read the air compressor owner's manual before attempting to start the engine.
- Add gasoline to the engine. Check the oil levels in the engine and air compressor. Use only oil recommended for the air compressor.
- Be sure the <u>agitator control valve</u> H2, is in NEUTRAL when starting the compressor.
- 4. Follow the start-up procedure listed in the air compressor manual.

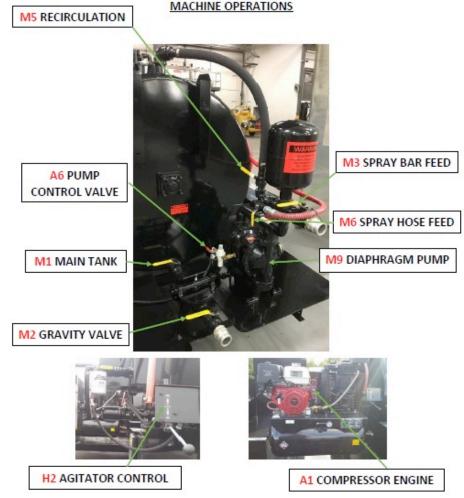
FILLING THE TANK USING THE DIAPHRAGM PUMP

- Connect your hose to <u>gravity valve</u> M2 and your source of material. Close <u>main tank valve</u> M1, <u>spray bar feed valve</u> M3 and <u>spray hose feed valve</u> M6.
- 2. Open gravity valve M2 and recirculation valve M5.
- Start the <u>compressor engine</u> A1, and open <u>pump control valve</u> A6. The <u>diaphragm pump</u> M9 will now draw material into the basket filter. It will then enter the pump and be pushed up the return line attached to the top of the tank. When the tank is full, close <u>gravity</u> <u>valve</u> M2. Then close <u>recirculation valve</u> M5.

Add water and engage <u>agitator control valve</u> H2. It is a metering valve. (The farther the lever is moved, the faster the agitator will rotate). After the water has been blended in add sand and additives. Keep agitator rotating slowly.

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

Air Spray Tank Machine Maintenance



APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

Air Spray Tank Machine Maintenance

Maintenance Schedule

AIR SPRAY TANK MACHINE MAINTENANCE MAINTENANCE SCHEDULE

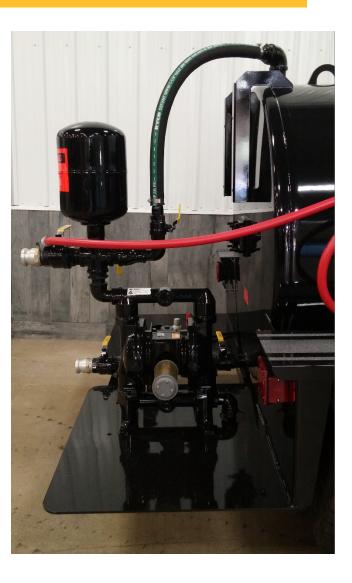
Follow maintenance procedures listed in the engine and compressor manuals.

MAINTAIN	8 HRS	1 WEEK	1 Month	6 MONTHS	1 Year	2 YEARS
CHECK ENGINE OIL LEVELS	~					
CHECK COMPRESSOR OIL LEVELS	~					
CHECK HYDRAULIC OIL LEVELS	 Image: A second s					
TIGHTEN V-BELT	 Image: A second s	 Image: A second s	~			
REPLACE V-BELT					~	
CHANGE HYDRAULIC.					~	
CHANGE HYDRAULIC.						 ✓
GREASE AGITATOR BEARINGS				1		
DRAIN WATER FROM COMPRESSOR		 Image: A second s				
DRAIN WATER FROM REGULATOR	~					
CHECK TIRE PRESSURE			✓			
GREASE PIVOT BRACKET					~	
GREASE WHEEL BEARINGS		_			~	
INSPECT ALL HOSES	 Image: A second s					



Air Spray Tank Machine Maintenance

Diaphragm Pump



Air Spray Tank Machine Maintenance

How to Winterize Your Equipment APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK MACHINE MAINTENANCE

HOW TO WINTERIZE YOUR EQUIPMENT

- Add water to the tank and let it agitate at a high speed for 30 minutes. Pump this water thru the spray wand and or spray bar. When the tank is empty, make a 50/50 mixture of antifreeze and water approx. 4-gals, pour this into the tank. Turn on the material pump and open the spray wand and spray bar until the mixture starts to come out. Open the recirculation valve for a brief moment, then close it. The entire pumping system is now protected from freezing.
- 2. If you have a water tank and pump, run antifreeze thru this also.
- Disconnect the battery and take it inside. A battery charging maintainer will assure that it lasts thru the offseason.
- 4. Cover the engine and compressor with a plastic bag.
- 5. Cover the cap on top of the hydraulic tank.
- 6. In the spring totally flush all antifreeze from the system. In the winter, when the temperature is below freezing, get inside of the tank with proper hearing protection and an air chipping gun with a 1" spade bit and chip off all remaining sealer from the walls and paddles.

NOTE: If you do not do this, the dried material will come off all during the season causing the basket strainer and spray tips to plug.

Air Spray Tank Machine Maintenance

Troubleshooting Guides
10 Troubleshooting Guides-TR

APPLIES TO ALL PRO-AIR AND MAXX-AIR TRAILER AND SKID VERSIONS

AIR SPRAY TANK MACHINE MAINTENANCE

TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES/SOLUTIONS
AIR REGULATOR DROPS PRESSURE	MATERIAL TOO THICK/ THIN WITH WATER CHECK VALVE IS DAMAGED / INSPECT BALLS AND BALL SEATS
SURGE TANK - NOTE EXCESSIVE PULSATION	TANK PLUGGED / CLEAN OUT TANK CHECK VALVE WORN / INSPECT FOR STUCK CHECK BALL
BASKET STRAINER	MATERIAL CHUNKS/ EMPTY TANK-FLUSH WITH WATER EXCESSIVE SAND / LACK OF SEALER VISCOSITY MODIFIER
EXCESSIVE PLUGGING	MATERIAL / TOO MUCH WATER HAS BEEN ADDED

SURGE TANK – NOTE

WEARING OF A FACE SHIELD IS RECOMMENDED

PRESSURE CAN BE RELIEVED FROM SYSTEM BY OPENING THE <u>SPRAY WAND</u> AND <u>RECIRCULATION VALVES</u>, ALSO IF THERE IS A (OPTIONAL) SPRAY BAR, OPEN THE <u>SPRAY BAR FEED VALVE</u>.

KEEP IN MIND THE PLUMBING CONNECTING THE PUMP TO THE SURGE TANK COULD ALSO BE PLUGGED, AND THERE MAY BE RESIDUAL PRESSURE STILL IN THE SYSTEM.

Troubleshooting Guide – TR

1. Agitator Tries to Rotate

 The sand has settled to the bottom. You can carefully rock it back and forth. If that doesn't work, take a length of pipe or your spray wand with the tip removed, connect an airline to it and probe into the sand until it gets worked loose enough for the agitator to rotate.



Troubleshooting Guide – TR

2. Shaft Coupler Turns but the Agitator Shaft Does Not

 The shaft key has sheared, remove the motor and coupler and replace the key. Replace the coupler if the keyway is damaged.



Troubleshooting Guide – TR

- 3. Agitator Makes no Effort to Rotate
- The key on the motor shaft has sheared. Remove the motor and replace the key. Inspect the coupler to make certain the keyway isn't damaged. Replace the coupler if they keyway is damaged.





Troubleshooting Guide – TR

- 4. When I Removed the Engine Dipstick for the Oil it Overflowed and Smells Like Gasoline
- You are not sliding the fuel shutoff lever to the off position after each use. When driving the bouncing of the machine causes the carburetor float to move and gas flows down into the crank case. Drain and put in fresh oil and get into the habit of closing the shutoff after each use.
- Picture shows off position.



Troubleshooting Guide – TR

5. Air Compressor no Longer Supplies Enough Air When I am Spraying

 The belts need tightened and/or replaced. Proper tension is determined by midway between the pulleys, you should be able to move the belt up or down 1/2". Any more than that is excessive. Also, the air receiver tank needs to be drained weekly of water. Under the tank is a valve for this purpose.





Troubleshooting Guide – TR

- 6. Spray Pressure is Weak and the Gauge on the Pump Regulator Drops to 40 PSI when the Pump Cycles, I Have Checked the Strainer Basket
- With the lid off of the strainer housing, open the main valve to determine that there is good flow coming into the housing. Assuming the material is not overly thick, take a look at the check balls and the ball seats. If they are 2 or more years old, they need to be replaced.



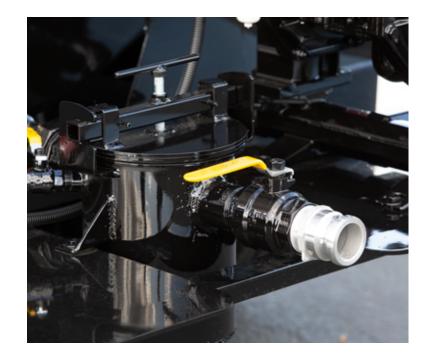


Troubleshooting Guide – TR

- 6. Spray Pressure is Weak and the Gauge on the Pump Regulator Drops to 40 PSI when the Pump Cycles, I Have Checked the Strainer Basket
- The top balls are inside the top pump manifold and they should fall out when the seats are removed. If they have to be pried out, then change them. The seats will wear right where the ball sits on it. Excessive wear caused the ball to set lower into the seat. On some pumps, the seat can be turned over to gain longer life, but the ball may still need to be changed. The bottom balls and seats need changed at the same time as the top ones. Unbolt the center section of the pump from the lower manifold to access them.
- Another reason can be the check valves which are located behind the air valve on the pump. The air valve is what the air line from the compressor attaches to. The edges of the check valves are very thin and pieces can break away from the edges.

Troubleshooting Guide – TR

- 7. Air Coming out of the Spray Tip
- There is a suction air leak at the basket strainer lid gasket. Inspect the rubber gasket where it meets the housing. If cut through, replace it. Or there could be a build up of sealer on the ring around the housing top. Scrape off the built up sealer. Another possibility is a ruptured diaphragm. Replace both if one turns out to be the reason.



Troubleshooting Guide – TR

8. Excessive Pulsation

- The wand will have some movement up and down as the pump cycles. Extreme movement can be caused by:
- Plugged surge tank
- Check ball is not seating properly on the diaphragm pump.
- Basket Strainer is plugged.
- If you have the water tank option, water check valve open.



Troubleshooting Guide – TR

9. Drain – Air Tank



Troubleshooting Guide – TR

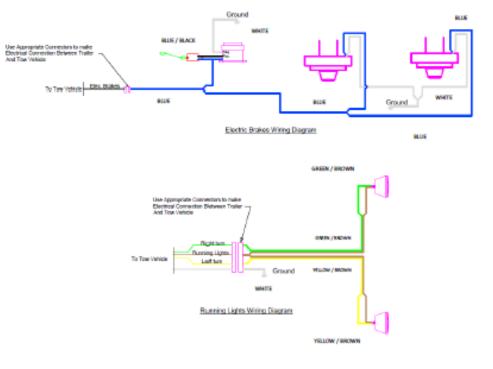
10. Air – Valve – Pop Off



Wiring Diagrams

ELECTRIC BRAKES AND RUNNING LIGHTS

Electric Brakes & Running Lights



Tank Capacity Chart

						MATERIAL	300	575	750	1000	1000
TANK CAPACITY CHART						DEPTH	GALLONS	GALLONS	GALLONS	GALLONS	GALLONS
GALLONS ARE APPROXIMATE AND MAY VARY SLIGHTLY TANK TO TANK						41"x54"	48"x74"	56"x74"	48"x132"	64"x74"	
MATERIAL	300	575	750	1000	1000	INCHES	GALLONS	GALLONS	GALLONS	GALLONS	GALLONS
DEPTH	GALLONS	GALLONS	GALLONS	GALLONS	GALLONS	34	274	439	501	783	556
	41"x54"	48"x74"	56"x74"	48"x132"	64"x74"	35	281	453	519	808	577
INCHES	GALLONS	GALLONS	GALLONS	GALLONS	GALLONS	36	287	466	536	832	597
1	2	3	3	5	3	37	293	479	553	855	617
2	6	8	9	15	10	38	298	492	570	878	638
3	10	15	16	27	18	39	303	504	587	900	658
4	15	23	25	41	27	40	307	516	603	921	678
5	21	32	35	57	37	40	309	527	619	941	697
6	28	42	45	75	49		203				
7	35	52	57	93	61	42		538	635	959	717
8	42	64	69	113	74	43		548	650	977	736
9	50	75	82	134	88	44		557	665	993	755
10	58	87	95	156	103	45		565	680	1007	774
11	67	100	109	179	118	46		571	694	1019	793
12	75	113	124	202	134	47		577	707	1029	811
13	84	127	139	226	150	48		580	720	1034	829
14	93	141	154	251	167	49			732		847
15	102	155	170	276	184	50			744		864
16	112	169	186	302	201	51			754		881
17	121	184	202	328	219	52			764		897
18	130	199	219	354	238	53			773		913
19	140	214	236	381	256	54			780		928
20	150	229	253	408	275	55			786		942
21	159	244	270	435	294	56			789		956
22	169	259	288	462	314	57					969
23	178	274	305	490	333	58					982
24	188	290	323	517	353	59					993
25	197	305	341	544	373	60					1004
26	206	321	359	572	393	61					1013
27	216	336	377	599	413	62					1013
28	225	351	395	626	433	63					1021
29	233	366	412	653	454	64					1027
30	242	381	430	680	474	04					1051
31	250	396	448	706	495						
32	258	411	466	732	515						
33	266	425	484	758	536						

Questions?