

SPRAYMASTER TANK TRAILER With Pro-Air System

Operating Instructions & Parts Manual



SealMaster[®]

Pavement Products & Equipment

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

SealMaster[®]

ThorWorks Industries, Inc.

Item Purchased: _____ Model No.: _____
Serial No.: _____ Acceptance/Ship Date: _____
Company: _____ Contact: _____
Address: _____ City: _____
Zip/Postal Code: _____ State: _____ Country: _____

CORRESPONDENCE

All correspondence regarding this equipment or general correspondence should be addressed to:

ThorWorks Industries, Inc.
PO Box 2277
Sandusky, OH 44870

In referring to the equipment, kindly state the Model Number, Serial Number and any Part Number involved.



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 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.

AIR SPRAY TANK OPERATING INSTRUCTIONS

APPLYS TO ALL PRO AIR AND MAXI AIR TRAILER AND SKID VERSIONS

READ ALL OWNERS MANUALS THAT COME WITH THIS MACHINE

DAILY CHECK THE ENGINE,AIR COMPRESSOR,AND HYDRAULIC OIL LEVELS

REFER TO OWNERS MANUALS FOR PROPER TYPES OF OILS

1. Before starting the engine, make sure the agitator control valve H2 is in the neutral position. Also make sure valve H1 is open.
2. To start the engine, slide the fuel shutoff and choke levers to the on position, turn the kill switch to the on position and turn the key. Set the throttle lever at ½ open. It is important that when you are done running the engine that the fuel shutoff lever be turned to the off position. This keeps gasoline from mixing with the oil as you are driving. Refer to the engine manual.
3. Add the appropriate amount of sealer and water to the tank. Slowly engage the agitator control valve H2 to the forward position. If the agitator will not turn or bogs the engine down, move the lever to the reverse position after stopping in neutral. Keep doing this until the agitator makes a complete revolution. For mixing purposes it does not matter what direction it rotates. When you are standing on the fender and looking into the tank, have it rotating away from you so that you do not get splashed. Before opening the lid stop the agitator or at least slow down the speed. Speed is controlled by how far you move the valve lever.
4. If adding sand, the agitator must be rotating at a medium speed when SLOWLY pouring in the sand. If it stops rotating you either need more speed or it is bound and needs to be rocked back and forth to get it going again. Once you have added everything you are going to, close the lid and let the agitator rotate at a medium to fast speed for a few minutes. Then slow it down to a crawl when ready to start spraying.
5. 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. The sand will fall to the bottom and pack in like concrete. It could then take a long time for you to finally get the agitator rotating fully. NEVER change direction without first coming to a complete stop or you will break the drive coupler H5.
6. RECIRCULATION: this involves the pump drawing material out of the bottom of the tank and pumping it back in at the top. Always do this after agitating a fresh mix and before the spraying process. To recirculate first open ball valves M1 and M5. On the air diaphragm pump M9 is the air pressure regulator/water trap A5 and a ball valve A6. This valve is opened whenever you want the material pump to come on.

7. SPRAY WAND: Once the recirculation process is done, close valve M5. The pump M9, will stop cycling and the pressure gauge on A5 will read the regulator setting. Start with 80 psi on the gauge. Remove the spray hose M11 from the side of the tank or hose reel and stretch it out. Open valves M6 and M12. Hold the wand at waist level and over lap by half as you swing the wand back and forth.

When the material is coming out of the spray tip, you will feel the wand want to raise on it's own. Thickness of material determines how much pressure is needed to properly atomize the material. You may have to increase the pressure setting on regulator A5 to get a proper spray pattern.

To do this, turn the knob on top of the regulator clockwise. It is possible that you will need to run the pressure at the maximum of 125 psi, it all depends on how thick your material is. Ball valve A6 determines how much air enters the diaphragm pump, and how fast it will cycle. Generally you will open this valve completely. The pump automatically slows down or speeds up depending on tip size or condition. When you close the wand valve, 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.

Try to always open valve M12 on the wand completely as this will make it last longer.

The wand valve and spray tips are wear items and need to be replaced periodically. Spray tips typically need replaced every 1500 to 2000 gallons if using a sand mix. The center of the spray starts to get heavy as the tip wears, keeping the tip too long causes you to use more sealer than necessary.

8. SPRAYBAR: open valves M7 on the spraybar, we will assume that you went thru the recirculation process and are ready to spray. The throttle on the compressor engine A1 needs to be slid to $\frac{3}{4}$ or the full position to ensure there is enough air available for the pump M9. Position the machine, open valve M3, motion for the driver to start forward and then push the lever located on the spraybar. This opens all of the valves M7 at the same time. There will be blast of material, the pump will cycle rapidly then slow to a regular cycle rate. To eliminate the initial blast, try moving the spraybar lever slowly to control the flow.

Control how fast the pump cycles by opening or closing valve A6. Try not to have a huge cloud of sealer following you. You can control pressure by using the regulator A5. Close the spraybar lever 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 spraybar. Position the tires right next to the previous pass, this will give you the proper overlap.

9. FILLING THE TANK FROM A DRUM: close the main tank valve M1 and connect a 2" hose to valve M2 located on the basket strainer M13. Put end of hose into your drum or connect to the other tank. Open recirculation valve M5, open valve A6 located on material pump M9. The material will go thru the basket strainer and be pumped up into the top of tank. Reverse the steps when done.

10. FILLING A BUCKET: you can fill a bucket for edging purposes by opening valves M1 and M2.

11. 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 spraybar valves, the basket strainer M13 needs to be cleaned. Usually it requires cleaning at least once a day and sometimes several times a day. Close valve M1 and remove the lid assembly, it may be necessary to pry off the lid as the rubber gasket really grips the housing. Reach in and pull the basket P14 out and put in in a bucket of water.

If you have waited too long to clean it, you will have to scrape with a screwdriver to get the hard packed material off of the walls. It is advisable to have another basket on hand so that you can drop in a fresh one and go back to work.

12. WATER FLUSH: it is not necessary to flush the system every day. If the machine is going to set for a week or more then water flush the system. If you purchased the water option close valve M1 and open the small valve that is on the basket strainer M13. Make sure the recirculation valve M5 is closed or you will pump water into your tank. Open valve A6 and either your spray wand or spray bar. Pump until you see the sealer has turned into water.

On the water tank P5 is a check valve 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, make sure you always close the valve.

If you do not have the water option, close valve M1. Remove the lid assembly from the basket strainer M13. Open valve A6 and pour water in as it is being pumped to the spray wand or spraybar.

80/50 spray tip

at 60 psi will pump 6.1 gpm

at 80 psi will pump 7.1 gpm

at 100 psi will pump 7.9 gpm

Note: skid tank configuration is differs from the trailer but operation is exactly the same

MAINTENANCE SCHEDULE

1. Check the engine, compressor, and hydraulic oils daily.

2. Follow maintenance procedures listed in the engine and compressor manuals.

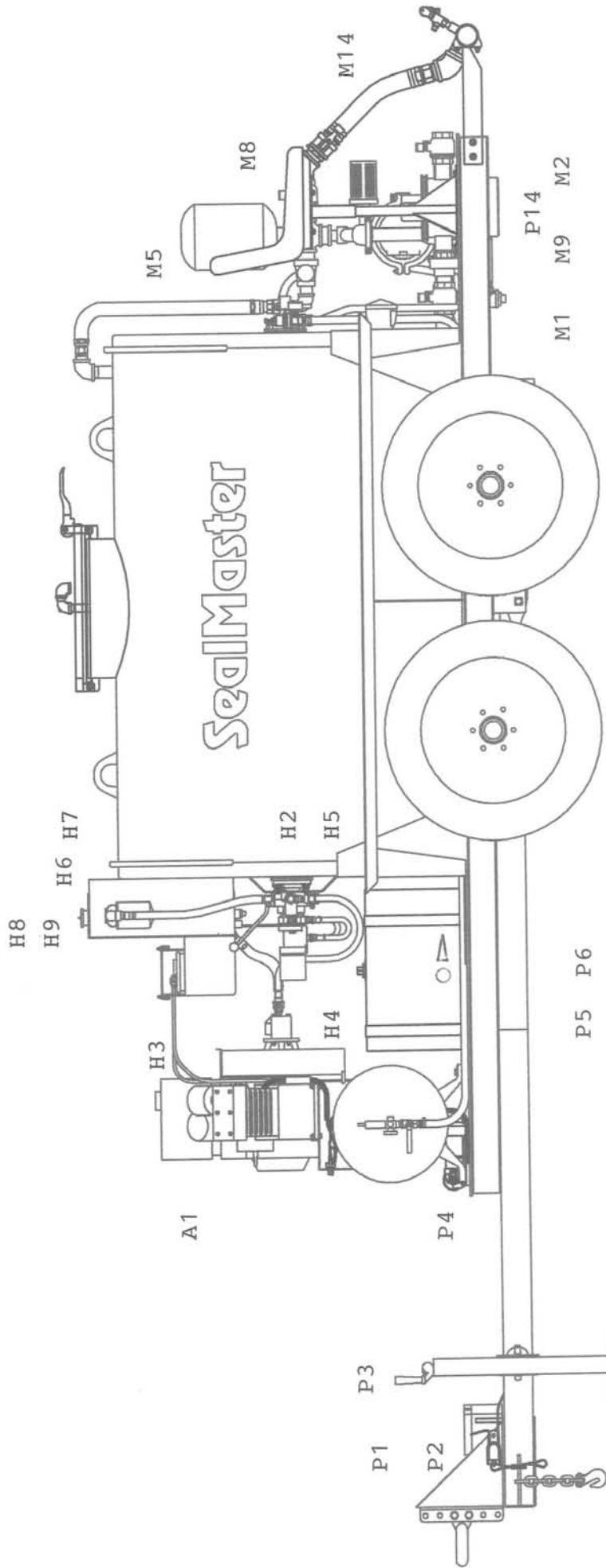
3. Change hydraulic oil filter yearly and the hydraulic oil every two years, sooner if it becomes contaminated. Use a good quality AW68 hydraulic oil with a rating of 352 SUS @ 100°F. Do not use a 150 rated hydraulic oil as it is too light.

4. Grease the agitator bearings monthly.

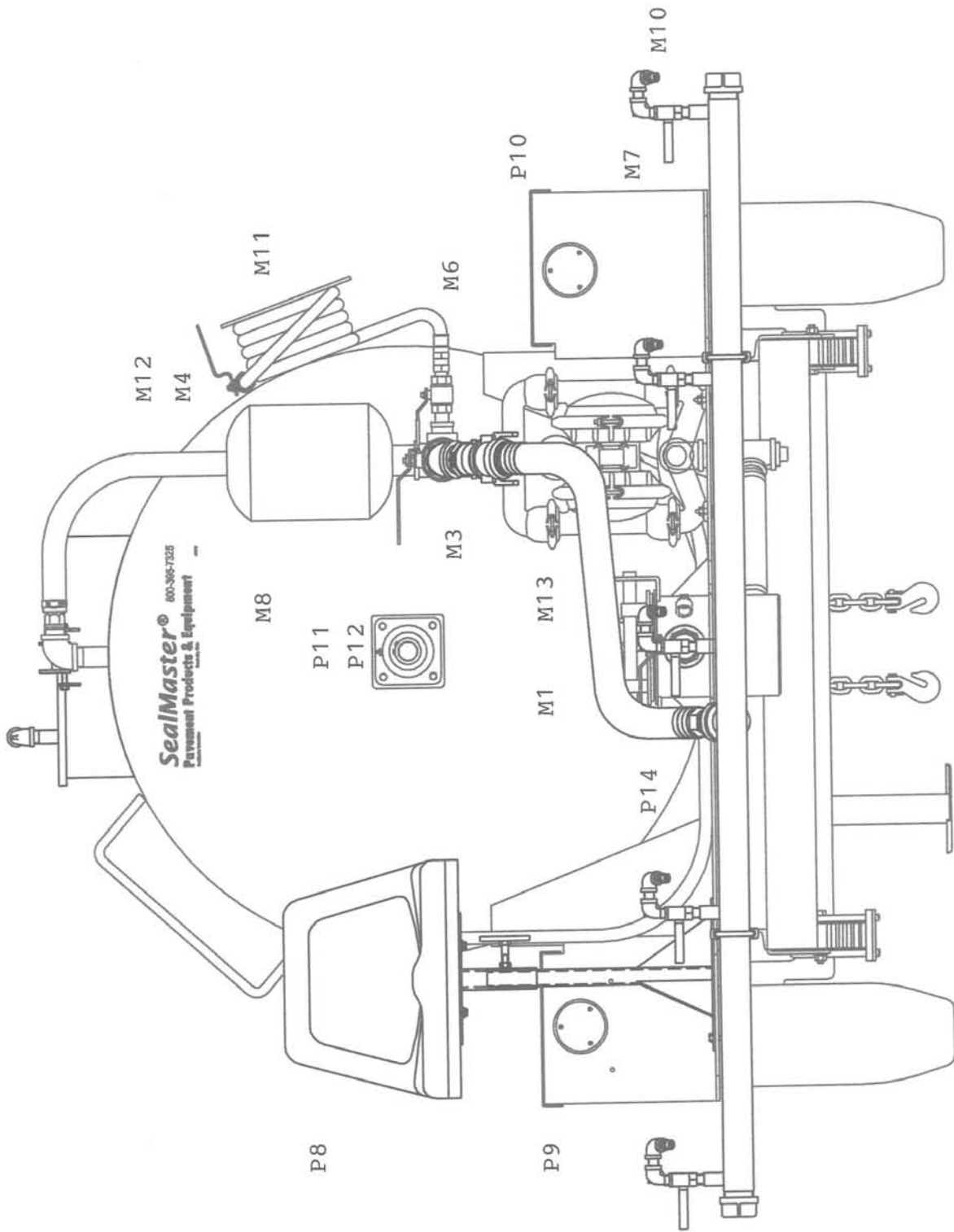
5. Drain excess water from the air receiver tank weekly and the water trap on the air diaphragm pump on an as needed basis.
6. Check tire pressure monthly.
7. Grease the pivot bracket between the two axles yearly along with the wheel bearings.
8. Inspect all hoses for cracks and leaks and change as needed.

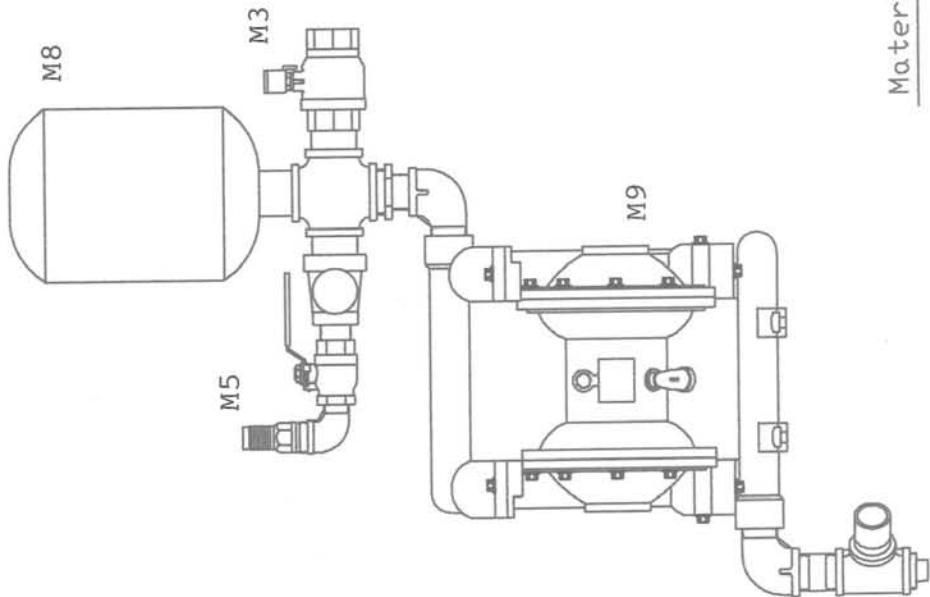
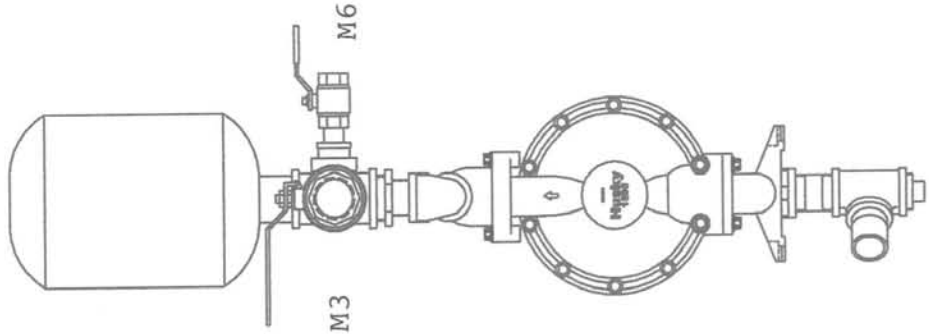
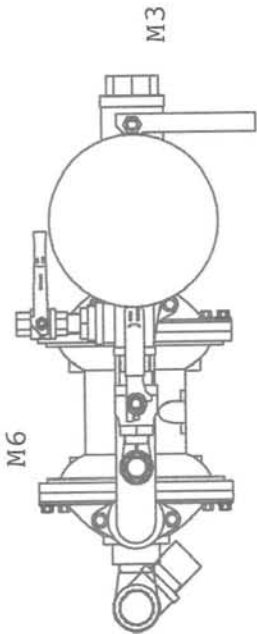
HOW TO WINTERIZE YOUR EQUIPMENT

1. 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 spraybar. When the tank is empty, make a 50/50 mixture of antifreeze and water, pour this into the tank. Turn on the material pump and open the spray wand and spraybar till the mixture starts to come out. Open the recirculation valve for an instance, 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.
3. Disconnect the battery and take it inside. A battery charging maintainer will assure that it makes it thru the off season.
4. Cover the engine and compressor with a plastic trash bag.
5. Cover the cap on top of the hydraulic tank.
6. In the spring totally flush all antifreeze from the system. Get inside of the tank and chip off all remaining sealer from the walls and paddles. If you do not do this, the dried material will come off all during the season causing much plugging in the basket strainer and spray tips.

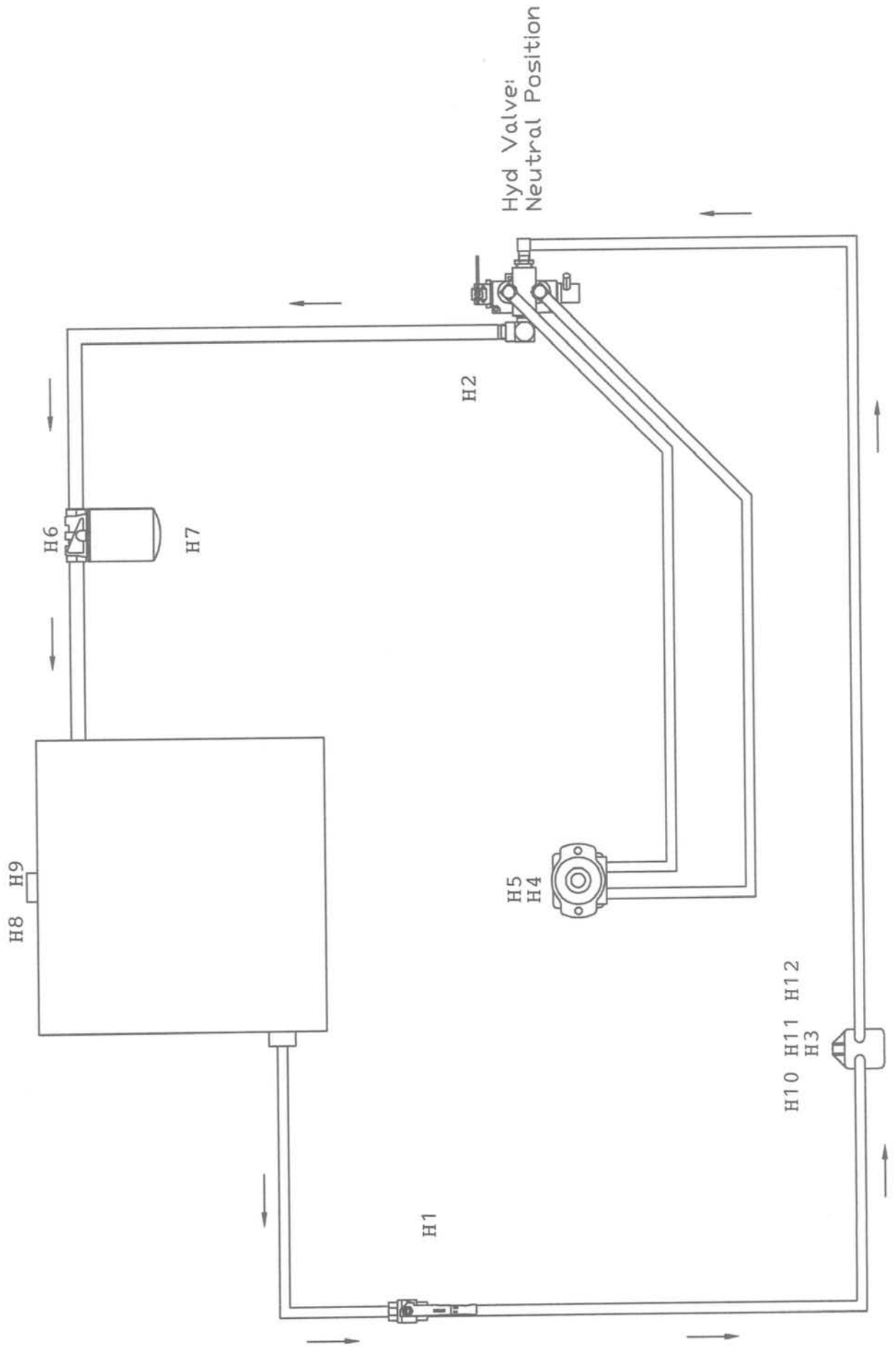


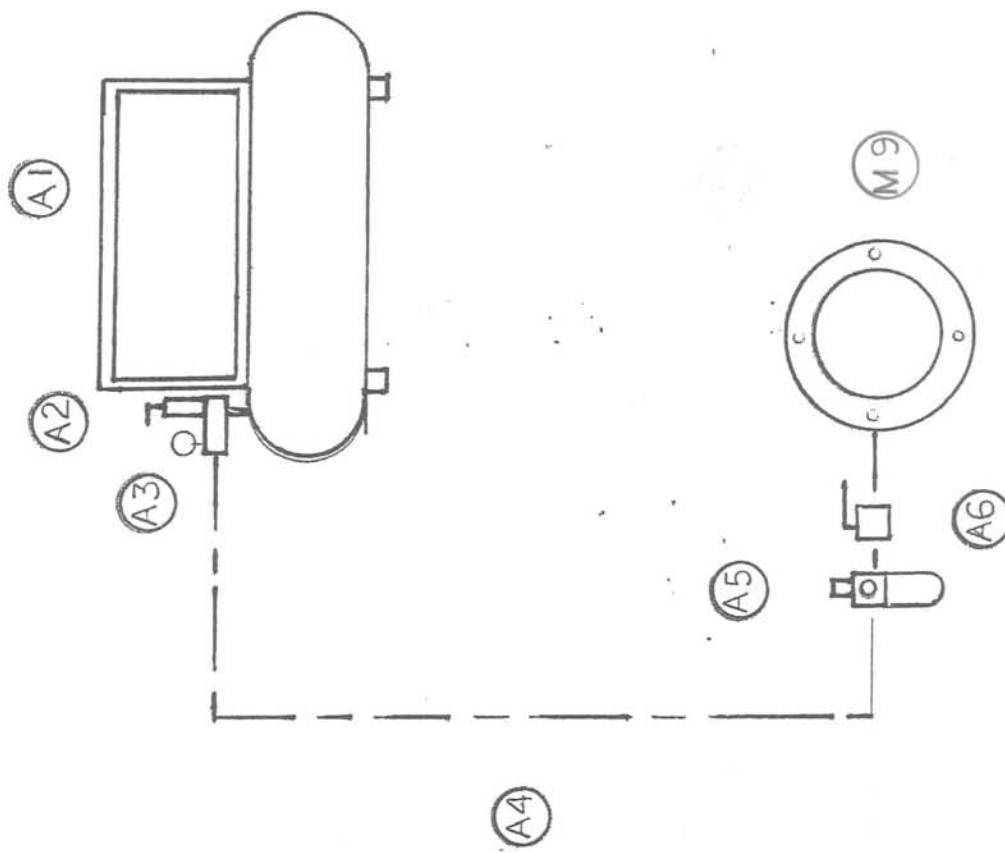
P7





HYDRAULIC SCHEMATIC



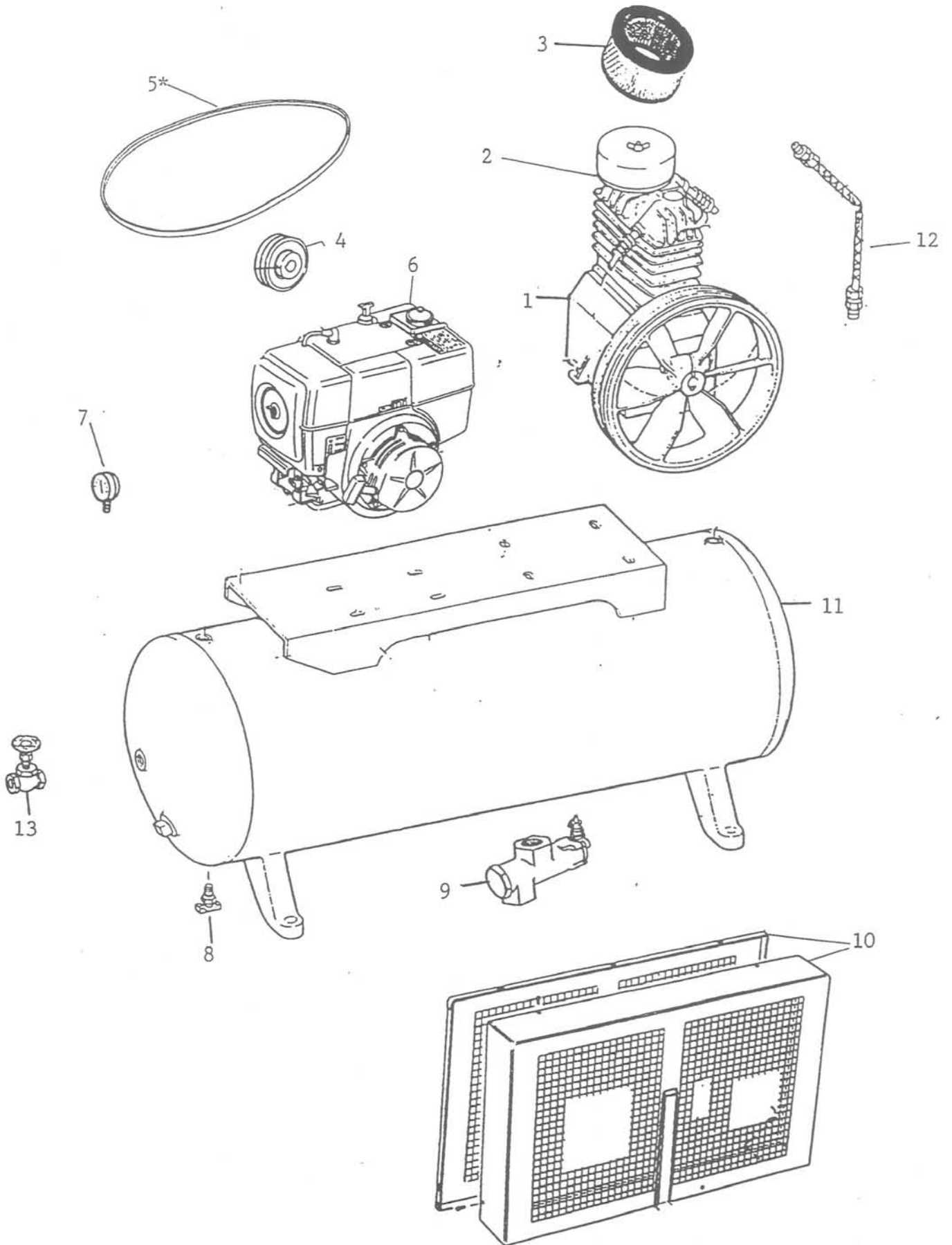


AIR SCHEMATIC

ITEM #	PART #	QTY	DESCRIPTION
A1	P458A044	1	13 HP AIR COMPRESSOR
A2	P458C086	1	PILOT UNLOADER VALVE
A3	P458C063	1	PRESSURE GAUGE
A4	P709C000		POLY AIR TUBING
A5	P735A046	1	REGULATOR/FILTER ASSEMBLY
A6	P397A005	1	3/8" BALL VALVE
M1	P397A002	1	2" BALL VALVE
M2	P397A002	1	2" BALL VALVE
M3	P397A002	1	2" BALL VALVE
M4	P397A010	1	3/4" BALL VALVE
M5	P397A012	1	1 1/4" BALL VALVE
M6	P397A001	1	3/4" BALL VALVE
M7	P397A009	5	1/2" BALL VALVE
M8	P30003C	1	SURGE TANK
M9	P640A048	1	AIR DIAPHRAGM PUMP
M10	P449A008	6	80/50 SPRAY TIP
M11	P754B026	1	75' SPRAY HOSE ASSEMBLY
M12	P50273B	1	SPRAY WAND ASSEMBLY
M13	P50147B003	1	BASKET STRAINER ASSEMBLY
M14	P482A000	1	2" HOSE ASSEMBLY
P1	P553A008	*	2 5/16" BALL COUPLER
P1	P646A003	*	PINTLE EYE COUPLER
P2	P518A000	1	SAFETY BREAKAWAY KIT

ITEM #	PART #	QTY	DESCRIPTION
P3	P551A001	1	JACK ASSEMBLY
P4	P593A013	1	12VDC WATER PUMP
P5	P596A002	1	WATER TANK
P6	P398A003	1	CHECK VALVE
P7	P514A016	4	TIRE ASSEMBLY
P8	P602A001	1	SEAT
P9	P516A016	1	LEFT SIDE TAIL LIGHT
P10	P516A017	1	RIGHT SIDE TAIL LIGHT
P11	P50137B002	2	SHAFT SEAL
P12	P434A003	2	SHAFT BEARING
P13	P50119A	1	BASKET STRAINER SEAL
P14	P50313A	1	STRAINER BASKET
H1	P397A001	1	3/4" BALL VALVE
H2	P472A004	1	FORWARD-REVERSE CONTROL VALVE
H3	P601A034	1	HYDRAULIC PUMP
H4	P474A004	1	HYDRAULIC DRIVE MOTOR
H5	P498A008	1	DRIVE COUPLER
H6	P909A002	1	OIL FILTER HEAD
H7	P908A003	1	OIL FILTER
H8	P938A009	7 GAL.	HYDRAULIC OIL
H9	P464A002	1	TANK CAP
H10	P630A045	1	SHAFT COUPLER
H11	P631A005	1	COUPLER INSERT

13GR30HK30



* 2 REQUIRED

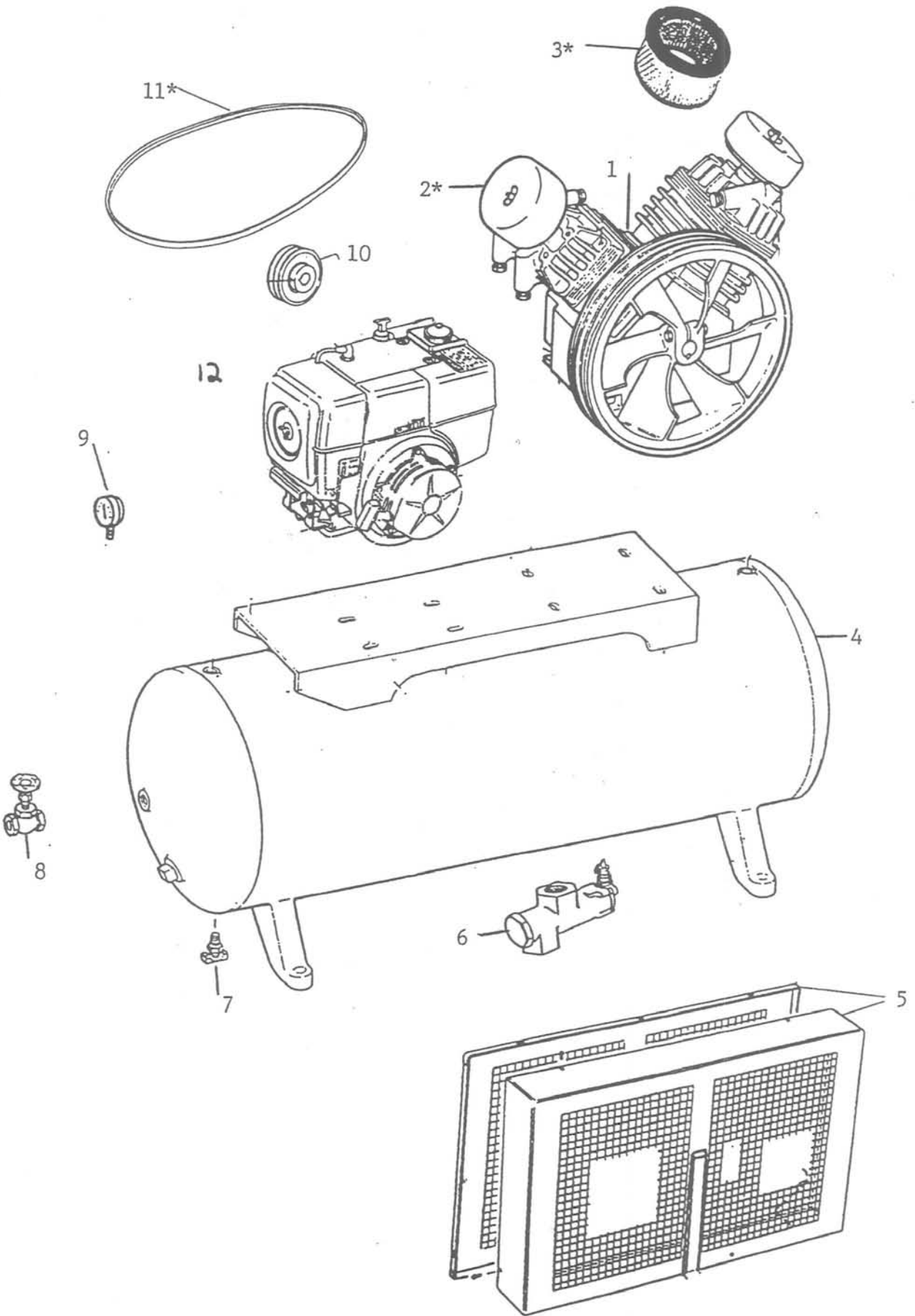
**MAXI AIR TRAILER AND SKID TANKS
APPLYS TO 750,1000,1500,AND 2000 GALLON TANKS**

ITEM #	PART #	QTY	DESCRIPTION
A1	P458A047	1	20 HP AIR COMPRESSOR
A2	P458C086	1	PILOT UNLOADER VALVE
A3	P458C0693	1	PRESSURE GAUGE
A4	P709C000		POLY AIR TUBING
A5	P735A020	1	REGULATOR
	P909A007	1	FILTER/TRAP
A6	P397A009	1	1/2" BALL VALVE
H1	P397A012	1	1 1/4" BALL VALVE
H3	P601A014	1	HYDRAULIC PUMP
H4	P474A017	1	HYDRAULIC DRIVE MOTOR
N/S	P428A001	1	SPROCKET
N/S	P428A003	1	SPROCKET
H10	P630A013	1	CHAIN COUPLING
H11	P631A002	1	COUPLING CHAIN
H12	P630A022	1	CHAIN COUPLING
M5	P397A002	1	2" BALL VALVE
M8	P30003D	1	SURGE TANK
M9	P640A049	1	AIR DIAPHRAGM PUMP
P11	P50137B007	2	SHAFT SEAL
P12	P434A004	2	SHAFT BEARING

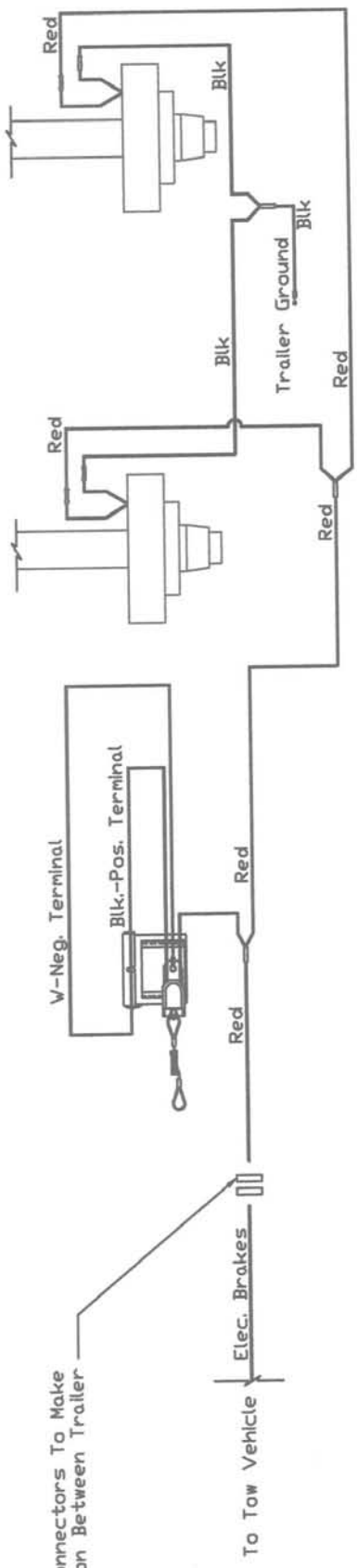
MAXI AIR COMPRESSOR ASSEMBLY

ITEM #	PART #	QTY	DESCRIPTION
C1	P458C091	1	4 CYCLE 2 STAGE COMPRESSOR PUMP
C2	P458C092	2	AIR FILTER ASSEMBLY
C3	P458C093	2	AIR FILTER ELEMENT
C4	P458C094	1	60 GALLON TANK
C5	P458C095	1	BELT GUARD
C6	P458C086	1	PILOT UNLOADER VALVE
C7	P458C085	1	DRAIN COCK
C8	P458C096	1	SHUT OFF VALVE
C9	P458C063	1	PRESSURE GAUGE
C10	P661A024	1	PULLEY
	P740A042	1	BUSHING
C11	P660A027	3	V-BELT
C12	P458A013	1	20 HP KOHLER ENGINE

18GR60KK60

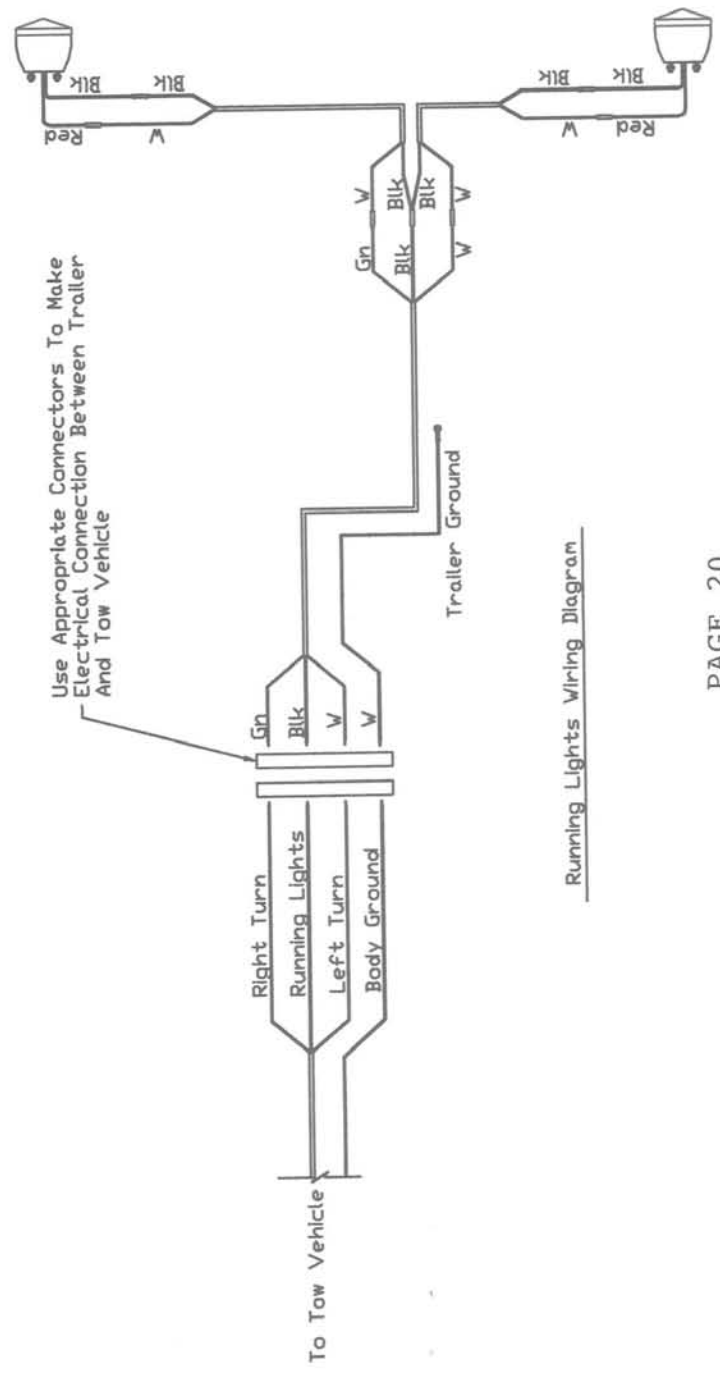


* 2 REQUIRED



Use Appropriate Connectors To Make Electrical Connection Between Trailer And Tow Vehicle

Elec. Brakes Wiring Diagram



Use Appropriate Connectors To Make Electrical Connection Between Trailer And Tow Vehicle

Running Lights Wiring Diagram

TANK CAPACITY CHART

MATERIAL DEPTH IN INCHES	300 GAL 41" X 54" GALLONS	550 GAL 48" X 74" GALLONS	750 GAL 56" X 74" GALLONS	1000 GAL 48" X 132" GALLONS	1000 GAL 64" X 74" GALLONS	1500 GAL 64" X 114" GALLONS	2000 GAL 64" X 144" GALLONS
1	3	4	4	7	5	7	9
2	7	10	11	18	11	18	22
3	11	17	18	30	20	30	38
4	17	25	27	45	29	45	57
5	23	34	37	61	40	62	78
6	30	44	48	79	52	80	101
7	37	55	60	98	64	99	125
8	44	66	72	118	78	120	151
9	52	78	85	140	92	141	179
10	60	91	99	162	107	164	207
11	69	103	113	185	122	188	237
12	77	117	128	208	138	212	268
13	86	130	143	232	154	237	300
14	95	144	158	257	171	263	333
15	105	158	174	282	188	290	366
16	114	173	190	308	206	317	401
17	123	187	206	334	224	345	436
18	133	202	223	361	242	373	471
19	142	217	240	388	261	402	508
20	152	232	257	415	280	431	545
21	161	248	275	442	299	461	582
22	171	263	292	469	318	491	620
23	181	278	310	496	338	521	658
24	190	294	327	524	358	551	697
25	199	309	345	551	378	582	735
26	209	324	363	579	398	613	774
27	218	340	381	606	418	644	814
28	227	355	399	633	439	676	853
29	236	370	417	660	459	707	893
30	244	385	435	686	479	739	933
31	252	400	453	713	500	770	973
32	260	414	470	739	520	802	1013
33	268	428	488	764	541	833	1052
34	275	442	506	789	561	865	1092
35	282	456	523	814	582	896	1132
36	289	470	540	838	602	928	1172

MATERIAL DEPTH IN INCHES	300 GAL 41" X 54" GALLONS	550 GAL 48" X 74" GALLONS	750 GAL 56" X 74" GALLONS	1000 GAL 48" X 132" GALLONS	1000 GAL 64" X 74" GALLONS	1500 GAL 64" X 114" GALLONS	2000 GAL 64" X 144" GALLONS
37	295	483	557	861	622	959	1211
38	300	495	574	883	643	990	1250
39	304	507	591	905	663	1021	1289
40	307	519	607	926	682	1051	1328
41	308	530	623	945	702	1082	1366
42		540	639	964	722	1112	1404
43		550	654	981	741	1142	1442
44		559	669	997	760	1171	1479
45		566	683	1010	779	1200	1516
46		573	697	1022	797	1228	1552
47		578	710	1031	816	1256	1587
48		579	723	1033	833	1284	1622
49			735		851	1311	1656
50			746		868	1337	1689
51			757		885	1363	1721
52			766		901	1388	1753
53			775		916	1412	1783
54			782		931	1435	1812
55			787		946	1457	1840
56					960	1478	1867
57					972	1498	1892
58					985	1517	1916
59					996	1534	1938
60					1006	1550	1958
61					1015	1564	1975
62					1023	1575	1990
63					1028	1584	2001
64					1030	1586	2004