Sand Pup /Crack Pro 2000, 3000 & 3500 and Porta-Pump

OWNERS MANUAL



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

sealmaster.net

SANDPUP CRACK PRO Owner's Manual

Version 2.3

Issue Date: July 2022

Effective Date: April 2019

Version	Date	Changes	Approval
1.0		Original Issue	
2.0	4/19	New Format and Updates	DS
2.1	1/22	Change Engine Oil - Note	JG
2.2	4/22	Added Paint Page	JG
2.3	7/22	Cover Art – Porta Pump	JG

Table of Contents

CORRESPONDENCE	2
SealMaster® LIMITED WARRANTY	3
SAFETY PRECAUTIONS AND CAUTIONS	4
PRECAUTIONS	4
CAUTIONS	4
STARTUP	5
1-BEFORE STARTING THE ENGINE	5
2-STARTING THE ENGINE	6
OPERATING INSTRUCTIONS SANDPUP	7
3-START TO PUMP MATERIAL	7
4-START THE SPRAY WAND	8
5-WATER FLUSH	9
OPERATING INSTRUCTIONS CRACK PRO	10
3-START TO PUMP MATERIAL	11
4-START THE CRACK FILLER WAND	12
5-WATER FLUSH	14
PARTS LIST	15
PARTS LIST - CRACK PRO 2000 AND PORTA-PUMP	15
PARTS LIST - CRACK PRO 3000 AND SANDPUP	16
PARTS LIST - CRACK PRO 3500 AND SANDPUP II	17
PARTS LIST - ARO 1" PUMP	18
PARTS LIST - ARO 1-1/2" PUMP	21
MACHINE MAINTENANCE	24
MAINTENANCE SCHEDULE	24
TROUBLE SHOOTING GUIDE	25
MAINTENANCE AND STORAGE	27
MAINTENANCE	27
STORAGE	27

Thor Works Industries, Inc.

Model NO.	Serial NO.	Acceptance Date	
			Zip
l by	Name		State
Purchased by	Company Name	Address	City

CORRESPONDENCE

All Correspondence regarding this equipment, as well as general correspondence should be addressed to:

ThorWorks Industries, Inc.

PO Box 2277

Sandusky, 0H 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, providing the damaged part or parts are returned, freight prepaid, to SealMaster and investigation shows 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.

SAFETY PRECAUTIONS AND CAUTIONS

PRECAUTIONS

• Always wear eye and ear protection, and gloves.





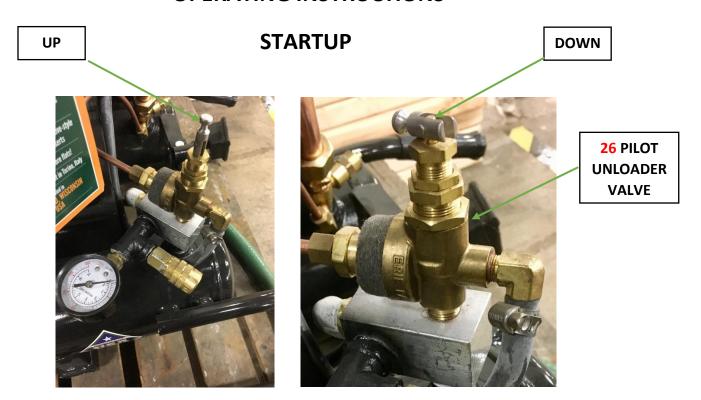
- Be aware of all CAUTION, WARNING, DANGER signs on the unit.
- Read all Owners Manuals that come with this unit.
- Daily check the Engine, Air Compressor oil levels.
- Refer to Owners Manuals for proper types of oils.
- Make sure the operator is familiar with the units' operation.
- Shut down compressor engine prior to refilling the gas tank.
- Replace any hoses that show signs of wear, fraying or splitting.
- Be sure all fittings and joints are tight and leak proof.
- Do not do maintenance work on the unit while in operation.
- The unit should not be left unattended when running.

CAUTIONS

- Keep hands, feet, and clothing away from moving parts.
- Do not operate the machine without all guards in place.
- Do not point the spray applicators at another person.
- Do not operate the machine in an enclosed building or confined area.

APPLIES TO SANDPUP, SANDPUP II AND CRACK PRO 3000 / 3500

OPERATING INSTRUCTIONS

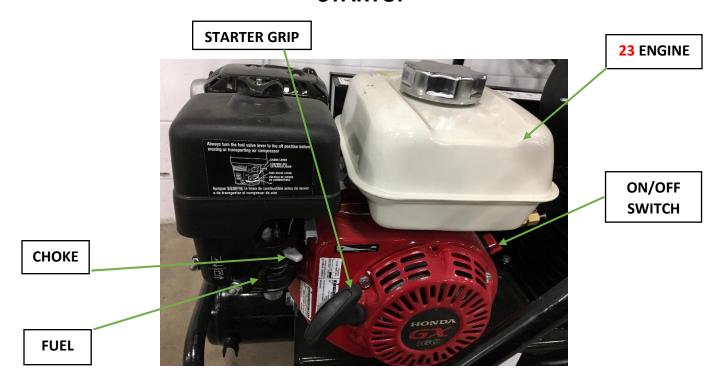


1-BEFORE STARTING THE ENGINE

- Move the <u>pilot unloader valve</u> **#26** knob to the **Up** position before starting the engine.
- After the engine has warmed up, swing the lever back down.

APPLIES TO SANDPUP, SANDPUP II AND CRACK PRO 3000 / 3500

OPERATING INSTRUCTIONS STARTUP



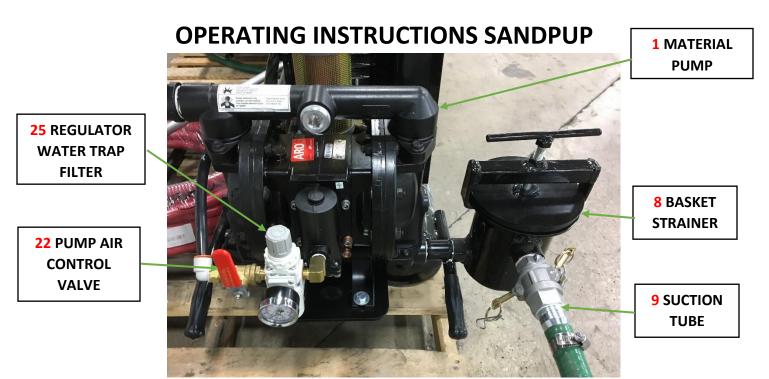
2-STARTING THE ENGINE

- Set the **fuel** shutoff and **choke** levers to the **on** position.
- Set the engine **on/off** switch to **on** position.
- Pull the Engine starter grip to start.
- The engine will run full throttle until the two air tanks are charged. The compressor gauge will show tank pressure of 125psi.
- Once the engine drops back to idle, the unit is ready to start pumping material.

SANDPUP PORTABLE SPRAY SYSTEM

APPLIES TO SANDPUP, SANDPUP II AND PORTA-PUMP

NOTE: PORTA-PUMP REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR



3-START TO PUMP MATERIAL

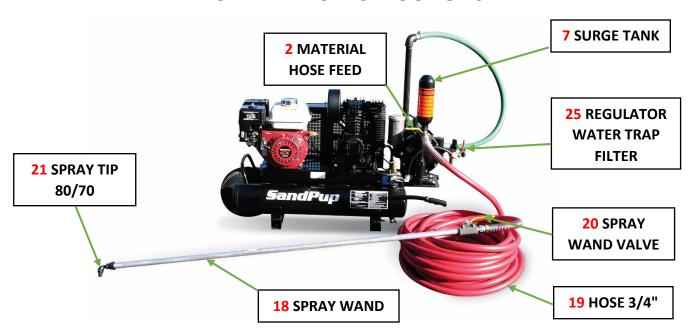
- NOTE: For Porta Pump unit connect your own air compressor, running at 125psi
- Connect the <u>suction tube</u> **#9** to the <u>basket strainer</u> **#8** and put the pipe in your container of material.
- Attached to the <u>regulator/water trap filter</u> #25 is the <u>pump air control valve</u> #22, it regulates the volume of air that goes to the <u>material pump</u> #1.
 The regulator's factory setting is 80 psi. It controls the cycle rate of the <u>material pump</u> #1 and the gallons per minute of material output.
- It is only necessary to open the <u>pump air control valve</u> **#22** part way.
- NOTE: Opening all the way, will cause the <u>material pump</u> #1 to consume more air than the compressor can produce, which will cause the air pressure to fall.

SANDPUP PORTABLE SPRAY SYSTEM

APPLIES TO SANDPUP, SANDPUP II AND PORTA-PUMP

NOTE: **PORTA-PUMP** REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR

OPERATING INSTRUCTIONS



4-START THE SPRAY WAND

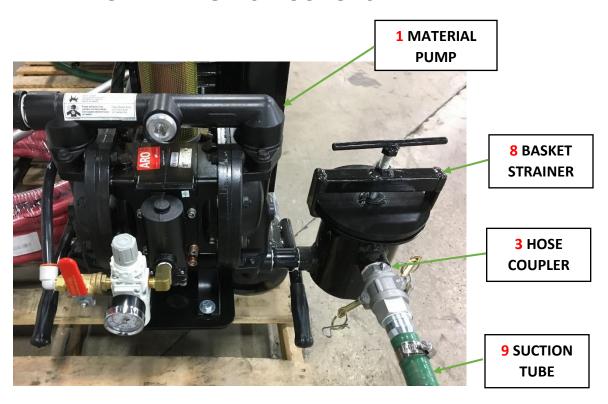
- Open <u>material hose feed valve</u> #2 to pressurize the hose, then the <u>spray wand valve</u> #20. To start spraying. Hold the wand at waist level.
- The thickness of the material determines how much pressure is needed to properly atomize the material.
- Adjust the pressure setting on <u>regulator/water trap</u> #25 to get a proper spray pattern. To do this, turn the knob on top of the regulator in for more or out for less pressure. When the material is coming out of the <u>spray tip 80/70</u> #21, you will feel the wand push up.
- Walk side to side and overlap 50% for proper coverage.

SANDPUP PORTABLE SPRAY SYSTEM

APPLIES TO SANDPUP, SANDPUP II AND PORTA-PUMP

NOTE: **PORTA-PUMP** REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR

OPERATING INSTRUCTIONS



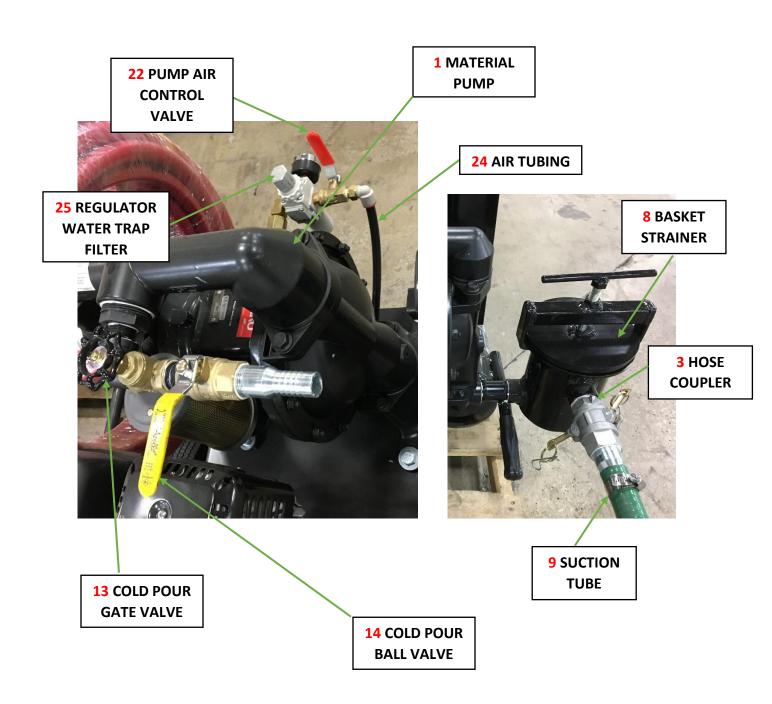
5-WATER FLUSH

- It is not necessary to flush the system every day.
 If the machine is going to be out of service for a week or more, then water flush the system using one of the methods listed below.
- First method: Put the <u>suction tube</u> **#9** in a bucket of water and turn on the material pump **#1**.
- Second method: Remove the lid of the <u>basket strainer</u> **#8** and pour water into it with the pump running.

APPLIES TO CRACK PRO 2000 -3000 AND 3500

NOTE: CRACK PRO 2000 REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR

OPERATING INSTRUCTIONS CRACK PRO



APPLIES TO CRACK PRO 2000 -3000 AND 3500

NOTE: CRACK PRO 2000 REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR

OPERATING INSTRUCTIONS

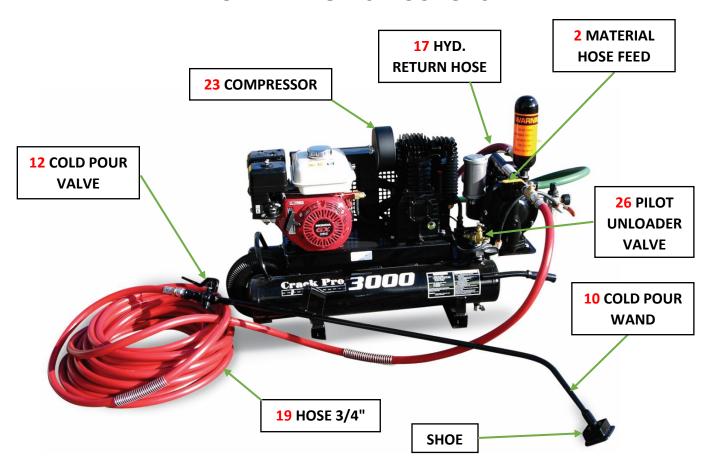
3-START TO PUMP MATERIAL

- NOTE: For Crack Pro 2000 unit connect your own air compressor running at 125psi
- Connect the <u>suction tube</u> **#9** to the <u>basket strainer</u> **#8** and put the pipe in your container of material. There is an additional <u>hose</u> **#17** and a <u>cold pour ball valve</u> **#14** and a <u>cold pour gate valve</u> **#13** on the discharge manifold of the <u>material pump</u> **#1**, this <u>hose</u> **#17** also needs to be put in the container.
- Open the <u>cold pour ball valve</u> #14 completely and the <u>cold pour gate valve</u> #13 1-1/2 2 turns. This allows some material to always return to the container and prevents the <u>material pump</u> #1 from stopping when you release the <u>cold pour wand</u> #10. More turns on the <u>cold pour gate valve</u> #13, allows more material to return to the container. You can use this <u>cold pour gate valve</u> #13 to adjust how much product comes out of the <u>cold pour wand</u> #10.
- Attached to the <u>regulator/water trap filter</u> **#25** is the <u>pump air control valve</u> **#22**, it regulates the volume of air that goes to the <u>material pump</u> **#1**. Regulator factory setting is 80psi. It controls the cycle rate of the material pump, and the gallons per minute of material output.
- It is only necessary to open the <u>pump air control valve</u> **#22** part way. **NOTE:** Opening all the way, will cause the pump to consume more air than the compressor can produce, which will cause the air pressure to fall.
- The <u>material pump</u> **#1** will now be drawing material in and sending it back into your container. Once this happens, close the <u>cold pour ball valve</u> **#14** on the return hose. The gauge on the pump pressure regulator will now rise and stop. Set the pressure to 40 psi by turning the knob on top of the <u>regulator/water trap filter</u> **#25** in for more pressure or out for less pressure. Open the <u>cold pour ball valve</u> **#14**. Thicker material will require more pressure than thinner material.

APPLIES TO CRACK PRO 2000 -3000 AND 3500

NOTE: CRACK PRO 2000 REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR

OPERATING INSTRUCTIONS



4-START THE CRACK FILLER WAND

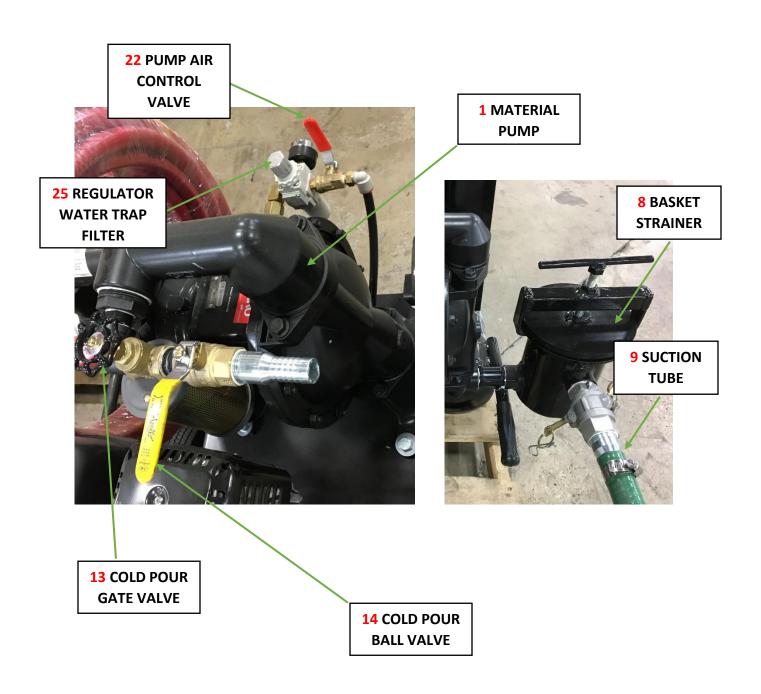
Open <u>material hose feed valve</u> #2 and squeeze the <u>cold pour valve</u> #12, the sealant will push all of the air out as it rushes down the hose. Begin to walk with the <u>cold pour wand</u> #10 as you apply the sealant. The objective is to keep the cold pour shoe full of the product without overflowing, alternately squeezing and releasing the <u>cold pour valve</u> #12.

Helpful Hint: With a little experience, you will be able to tell when to fill the cold pour **shoe** and how close to the end of the crack to let the shoe empty.

APPLIES TO CRACK PRO 2000 -3000 AND 3500

NOTE: CRACK PRO 2000 REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR

OPERATING INSTRUCTIONS CRACK PRO



APPLIES TO CRACK PRO 2000 -3000 AND 3500

NOTE: CRACK PRO 2000 REQUIRES SEPARATE AIR COMPRESSOR AND REGULATOR

OPERATING INSTRUCTIONS

5-WATER FLUSH

- Flush the <u>material pump</u> **#1** and <u>suction tube</u> **#9** periodically.
- It is not necessary to flush the system every day.
 If the machine is going to be out of service for a week or more, then water flush the system using one of the methods listed below.
- **First method:** Put the <u>suction tube</u> **#9** in a bucket of water and turn on the material pump **#1**.
- **Second method:** Remove the lid of the <u>basket strainer</u> **#8** and pour water into it with the pump running.
- Flushing is important as it keeps the check balls from sticking to the ball seats.
- NOTE: Do not touch the <u>cold pour gate valve</u> **#13** setting, but you can close the <u>cold pour ball valve</u> **#14** on the return hose.
- **NOTE:** Never leave the <u>material pump</u> **#1** empty. Always store with water or material in the system. This prevents skinning of the product within the system. It is also a good idea to put a slight amount of water on top of the material in your container to prevent skinning as you are filling cracks.
- The above settings are a guideline to get started. The viscosity of your product determines how much pressure and flow is needed to adequately supply the product to the applicator wand. You may have to fine tune the settings listed above.

APPLIES TO: PORTA-PUMP AND CRACK PRO 2000

PARTS LIST

PARTS LIST - CRACK PRO 2000 AND PORTA-PUMP

ITEM #	PART#	QTY.	DESCRIPTION
1	P640A060	1	DIAPHRAGM PUMP-MATERIAL 1" ARO
2	P397A001	1	MATERIAL HOSE FEED VALVE 3/4" BALL
3	P477A018	1	1" HOSE COUPLER
4	P1000A051	1	1/4" NIPPLE-CLOSE
5	P397A011	1	1/4" BALL VALVE BRASS
6	P571A002	1	1/4" AIR ADAPTER
7	P30003E	1	SURGE TANK
8	P50147B004	1	BASKET STRAINER ASSEMBLY
9	P71001B001	1	SUCTION TUBE ASSEMBLY

PARTS LIST - CRACK PRO 2000 ONLY

ITEM #	PART#	QTY.	DESCRIPTION
10	P50273D	1	COLD POUR WAND
11	P754B025	1	3/4" HOSE X 50' LONG
12	P397A020	1	COLD POUR 1/2" GLOBE VALVE
13	P399A001	1	COLD POUR 1/2" GATE VALVE
14	P397A009	1	COLD POUR 1/2" BALL VALVE BRASS
15	P50343	1	CRACK FILLER ASSEMBLY OPTIONAL
16	P50342	1	CRACK CLEANING ASSEMBLY OPTIONAL
17	P712A048	1	HYD. HOSE 200 PSI 5/8" X 48"

PARTS LIST - PORTA-PUMP ONLY

ITEM#	PART#	QTY.	DESCRIPTION
18	P50273B	1	SPRAY WAND
19	P754B026	1	3/4" HOSE X 75' LONG
20	P397A010	1	SPRAY WAND VALVE 3/4" BALL STEEL
21	P449A004	1	SPRAY TIP 80/70 – 3/8 NPT STEEL

APPLIES TO: SANDPUP AND CRACK PRO 3000

PARTS LIST - CRACK PRO 3000 AND SANDPUP

ITEM #	PART#	QTY.	DESCRIPTION
1	P640A060	1	DIAPHRAGM PUMP-MATERIAL 1" ARO
2	P397A001	1	MATERIAL HOSE FEED VALVE 3/4" BALL
3	P477A018	1	1" HOSE COUPLER
7	P30003E	1	SURGE TANK
8	P50147B004	1	BASKET STRAINER ASSEMBLY
9	P71001B001	1	SUCTION TUBE ASSEMBLY
22	P397A033	1	PUMP AIR CONTROL VALVE 1/4" BALL
23	P458A045	1	4.8 HP COMPRESSOR
24	P709C000	1	1/2" X 18" AIR TUBING
25	P735A046	1	REGULATOR/WATER TRAP FILTER
26	P458C017	1	PILOT UNLOADER VALVE

PARTS LIST - CRACK PRO 3000 ONLY

ITEM #	PART#	QTY.	DESCRIPTION
10	P50273D	1	COLD POUR WAND
11	P754B025	1	3/4" HOSE X 50' LONG
12	P397A020	1	COLD POUR 1/2" GLOBE VALVE
13	P399A001	1	COLD POUR 1/2" GATE VALVE
14	P397A009	1	COLD POUR 1/2" BALL VALVE BRASS
15	P50343	1	CRACK FILLER ASSEMBLY OPTIONAL
16	P50342	1	CRACK CLEANING ASSEMBLY OPTIONAL
17	P712A048	1	HYD. HOSE 200 PSI 5/8" X 48"

PARTS LIST - SANDPUP ONLY

ITEM #	PART#	QTY.	DESCRIPTION
18	P50273B	1	SPRAY WAND
19	P754B026	1	3/4" HOSE X 75' LONG
20	P397A010	1	SPRAY WAND VALVE 3/4" BALL STEEL
21	P449A004	1	SPRAY TIP 80/70 – 3/8 NPT STEEL

APPLIES TO: SANDPUP II AND CRACK PRO 3500

PARTS LIST - CRACK PRO 3500 AND SANDPUP II

ITEM #	PART#	QTY.	DESCRIPTION
1	P640A061	1	DIAPHRAGM PUMP-MATERIAL 1-1/2" ARO
2	P397A001	1	MATERIAL HOSE FEED VALVE 3/4" BALL
3	P477A018	1	1" HOSE COUPLER
7	P30003F	1	SURGE TANK
8	P50147B011	1	BASKET STRAINER ASSEMBLY
9	P71001B001	1	SUCTION TUBE ASSEMBLY
22	P397A033	1	PUMP AIR CONTROL VALVE 1/4" BALL
23	P458A046	1	9 HP COMPRESSOR
24	P709C000	1	1/2" X 60" AIR TUBING
25	P735A047	1	REGULATOR/WATER TRAP FILTER
26	P458C017	1	PILOT UNLOADER VALVE

PARTS LIST - CRACK PRO 3500 ONLY

ITEM #	PART#	QTY.	DESCRIPTION
10	P50273D	1	COLD POUR WAND
11	P754B025	1	3/4" HOSE X 50' LONG
12	P397A020	1	COLD POUR 1/2" GLOBE VALVE
13	P399A002	1	COLD POUR 3/4" GATE VALVE
14	P397A001	1	COLD POUR 3/4" BALL VALVE BRASS
15	P50343	1	CRACK FILLER ASSEMBLY OPTIONAL
16	P50342	1	CRACK CLEANING ASSEMBLY OPTIONAL
17	P713A095	1	HYD. HOSE 300 PSI 3/4" X 95"

PARTS LIST - SANDPUP II ONLY

ITEM #	PART#	QTY.	DESCRIPTION
18	P50273B	1	SPRAY WAND
19	P754B026	1	3/4" HOSE X 75' LONG
20	P397A010	1	SPRAY WAND VALVE 3/4" BALL STEEL
21	P449A004	1	SPRAY TIP 80/70 – 3/8 NPT STEEL

APPLIES TO SANDPUP, PORTA-PUMP AND CRACK PRO 2000 / 3000

PARTS LIST - ARO 1" PUMP

DESCRIPTION	S/M PART#	QTY.
ROD	P975A001	1
BACKUP WASHER	P975A002	2
DIAPHRAGM WASHER	P975A003	2
DIAPHRAGM HYTREL	P975A004	2
WASHER	P975A005	2
SCREW M12 X 1.75-6G X 25MM	P975A006	2
FLUID COVER	P975A007	2
SEAT- HYTREL	P975A008	4
BALL- HYTREL	P975A009	4
SCREW M8 X 1.25-6G X 30MM	P975A010	8
BOLT M8 X 1.25-6G X 40MM	P975A011	20
HEX FLANGE NUT M8 X 1.25-6H	P975A012	20
INLET MANIFOLD	P975A013	1
OUTLET MANIFOLD	P975A014	1
PIPE PLUG 1" N.P.T.	P975A015	1
GROUND LUG	P975A016	1
AIR CAP INNER CHAMBER	P975A017	1
AIR CAP INNER CHAMBER	P975A018	1
GASKET	P975A019	2
SCREW M8 X 1.25-6G X 95MM	P975A020	4
U CUP 3/16" X 1-1/8" O.D.	P975A021	2
O-RING 3/32" X 13/16" O.D.	P975A022	2
WASHER .406 I.D. X .031" THICK	P975A023	4

APPLIES TO SANDPUP, PORTA-PUMP AND CRACK PRO 2000 / 3000

PARTS LIST FOR ARO 1" PUMP

DESCRIPTION	S/M PART #	QTY.
NUT M8 X 1.25-6H	P975A024	4
CENTER BODY	P975A025	1
BUSHING	P975A026	1
SCREW M6 X 1- 6G X 16MM	P975A027	4
SPOOL	P975A028	1
ACTUATOR PIN	P975A029	2
SLEEVE	P975A030	2
PIPE PLUG 1/8-27 N.P.T. X .27"	P975A031	1
GASKET	P975A032	1
WASHER	P975A033	3
SCREW M6 X 1- 6G X 20MM	P975A034	6
VALVE BLOCK	P975A035	1
END CAP	P975A036	1
GASKET	P975A037	1
U CUP 3/16" X 1-5/8" O.D.	P975A038	1
U CUP 3/16" X 1-1/8" O.D.	P975A039	1
VALVE INSERT	P975A040	1
VALVE PLATE	P975A041	1
GASKET	P975A042	1
PILOT PISTON - WITH O-RING & U CUP	P975A043	1
O-RING 3/32" X 5/8" O.D.	P975A044	2
U CUP 1/8" X 7/8" O.D.	P975A045	1

APPLIES TO SANDPUP, PORTA-PUMP AND CRACK PRO 2000 / 3000

PARTS LIST FOR ARO 1" PUMP

DESCRIPTION	S/M PART #	QTY.
PISTON SLEEVE	P975A046	1
O-RING 3/32" X 1-1/8" O.D.	P975A047	1
O-RING 1/16" X 1-1/8" O.D.	P975A048	1
O-RING 3/32" X 1-3/8" O.D.	P975A049	2
O-RING 1/8" X 1/2" O.D.	P975A050	2
DIAPHRAGM CHECK VALVE	P975A051	2
ROLL PIN 5/32" O.D. X 1/2" LONG	P975A052	4
GASKET	P975A053	1
MUFFLER	P975A054	1
ADAPTER PLATE	P975A055	1
LUBRIPLATE FML-2 GREASE	P975A056	1
LUBRIPLATE GREASE PACKETS	P975A057	1
MAJOR VALVE ASSEMBLY	P975A058	1
MATERIAL PUMP REBUILT KIT	P975A059	1
AIR VALVE REPAIR KIT	P975A060	1

APPLIES TO: SANDPUP II AND CRACK PRO 3500

PARTS LIST - ARO 1-1/2" PUMP

DESCRIPTION	S/M PART #	QTY.
ROD	P976A001	1
BACKUP WASHER	P976A002	2
DIAPHRAGM WASHER	P976A003	2
WASHER	P976A004	2
SCREW M14 X 2-6G X 45MM	P976A005	2
FLUID CAP OUTER CHAMBER	P976A006	2
SEAT	P976A007	4
BALL	P976A008	4
SCREW M10 X 1.5-6G X 30MM	P976A009	8
BOLT M8 X 1.25-6G X 40MM	P976A010	20
HEX FLANGE NUT M8 X 1.25-6H	P976A011	20
GROUND LUG	P976A012	1
INLET MANIFOLD	P976A013	1
OUTLET MANIFOLD	P976A014	1
PIPE PLUG 1-1/2" N.P.T.	P976A015	2
AIR CAP INNER CHAMBER	P976A016	1
AIR CAP INNER CHAMBER	P976A017	1
GASKET	P976A018	2
SCREW M10 X 1.5-6G X 100MM	P976A019	4
U CUP 3/16" X 1-1/4" O.D.	P976A020	2
O-RING 3/32" X 13/16" O.D.	P976A021	2
WASHER .406 I.D. X .031" THICK	P976A022	4

APPLIES TO: SANDPUP II AND CRACK PRO 3500

PARTS LIST FOR ARO 1-1/2" PUMP

DESCRIPTION	S/M PART #	QTY.
NUT M10 X 1.5-6H	P976A023	4
CENTER BODY	P976A024	1
BUSHING	P976A025	1
SCREW M6 X 1- 6G X 16MM LONG	P976A026	4
SPOOL	P976A027	1
ACTUATOR PIN	P976A028	2
SLEEVE	P976A029	2
PIPE PLUG 1/8-27 N.P.T. X .27"	P976A030	1
GASKET	P976A031	1
WASHER	P976A032	3
SCREW M6 X 1- 6G X 20MM	P976A033	4
VALVE BLOCK	P976A034	1
END CAP	P976A035	1
GASKET	P976A036	1
U CUP 3/16" X 1-5/8" O.D.	P976A037	1
U CUP 3/16" X 1-1/8" O.D.	P976A038	1
VALVE INSERT	P976A039	1
VALVE PLATE	P976A040	1
GASKET	P976A041	1
PILOT PISTON - WITH O-RING & U CUP	P976A042	1
O-RING 3/32" X 5/8" O.D.	P976A043	2
U CUP 1/8" X 7/8" O.D.	P976A044	1

APPLIES TO: SANDPUP II AND CRACK PRO 3500

PARTS LIST FOR ARO 1-1/2" PUMP

DESCRIPTION	S/M PART #	QTY.
PISTON SLEEVE	P976A045	1
O-RING 3/32" X 1-1/8" O.D.	P976A046	1
O-RING 1/16" X 1-1/8" O.D.	P976A047	1
O-RING 3/32" X 1-3/8" O.D.	P976A048	2
O-RING 1/8" X 1/2" O.D.	P976A049	2
DIAPHRAGM CHECK VALVE	P976A050	2
ROLL PIN 5/32" O.D. X 1/2" LONG	P976A051	4
GASKET	P976A052	1
MUFFLER	P976A053	1
ADAPTER PLATE	P976A054	1
LUBRIPLATE FML-2 GREASE	P976A055	1
LUBRIPLATE GREASE PACKETS	P976A056	1
MAJOR VALVE ASSEMBLY	P976A057	1
AIR VALVE SERVICE KIT	P976A058	1
MATERIAL PUMP REBUILT KIT	P976A059	1
DIAPHRAGM	P976A060	2

SANDPUP PORTABLE SPRAY SYSTEM CRACK PRO COLD-POUR CRACK FILLER UNITS 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
CHECK ENGINE	1				
OIL LEVEL					
CHANGE ENGINE OIL *					
CHECK COMPRESSOR					
OIL LEVELS					
CHANGE COMPRESSOR					
OIL			_		
INSPECT COMPRESSOR					
AIR FILTER					
CHANGE COMPRESSOR					
AIR FILTER			_		
DRAIN WATER FROM		_			
COMPRESSOR		_			
DRAIN WATER FROM	1				
REGULATOR		_			
TIGHTEN V-BELT		•			
REPLACE V-BELT					✓
INSPECT ALL HOSES	1				

*CHANGE ENGINE OIL - OIL SPECIFICATIONS / REFER TO ENGINE MANUAL

Honda Recommends 20hrs Initial Start / every 100hrs or 6 mons. After

SANDPUP PORTABLE SPRAY SYSTEM CRACK PRO COLD-POUR CRACK FILLER UNITS MACHINE MAINTENANCE

TROUBLE SHOOTING GUIDE

PROBLEM	POSSIBLE CAUSES/SOLUTIONS		
AIR COMPRESSOR	BELTS LOOSE / TIGHTEN THE BELTS		
NOT PRODUCING	PILOT UNLOADER VALVE / REFER TO OWNER'S MANUAL		
ENOUGH AIR OR PRESSURE	AIR COMPRESSOR FLUID IN TRAP / DRAIN OUT WATER WEEKLY		
	OIL SPECIFICATIONS / REFER TO OWNER'S MANUAL		
ENGINE	OPERATING INSTRUCTIONS / REFER TO OWNER'S MANUAL		
ISSUES	FUEL IN OIL CRANKCASE / FUEL SHUT-OFF VALVE IN		
	OFF POSITION WHEN FINISHED		
	BASKET STRAINER IS PLUGGED / UNPLUG		
MATERIAL PUMP MATERIAL FLOW	PLUMBING LEADING TO PUMP IS PLUGGED / UNPLUG		
IS REDUCED	PUMP WORN / NEEDS NEW BALLS AND BALL SEATS REPLACED		
	MATERIAL TOO THICK/ THIN WITH WATER		
MATERIAL PUMP WILL NOT CYCLE	AIR VALVE IS PLUGGED / CLEAN AND LUBRICATE		
MATERIAL PUMP	DIAPHRAGM HAS A TEAR / REPLACE ONE OR BOTH		
AIR COMING OUT OF SPRAY TIP	LOOSE FITTINGS ON SUCTION LINE / TIGHTEN		
SPRAY TIP	BASKET STRAINER LID GASKET LOOSE / SEAT PROPERLY OR REPLACE		
MATERIAL PUMP SEALER COMING OUT	DIAPHRAGM IS LOOSE / REPLACE ONE OR BOTH		
MATERIAL PUMP AIR COMING OUT OF PUMP	AIR VALVE FAULTY/ REPLACE VALVE		
MATERIAL PUMP	BASKET STRAINER IS PLUGGED / UNPLUG		
DOES NOT STALL WHEN SPRAY WAND IS CLOSED	PLUMBING LEADING TO PUMP IS PLUGGED / UNPLUG		

SANDPUP PORTABLE SPRAY SYSTEM CRACK PRO COLD-POUR CRACK FILLER UNITS MACHINE MAINTENANCE

TROUBLESHOOTING GUIDE

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

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>MATERIAL HOSE FEED VALVES</u> AND IF NECESSARY, REMOVING THE <u>SPRAY TIP</u>.

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

MAINTENANCE AND STORAGE

MAINTENANCE

During the lubrication stop, inspect all operating parts. Should any damage or excessive wear be evident, replace parts immediately. Straighten any parts as soon as possible. Clean and re-paint all exposed parts using touch-up kit P3020B034 yellow paint or touch-up kit P3020B033 black paint.

STORAGE

Perform all required maintenance and lubrication procedures.

Coat all shafts with grease. Clean and re-paint all exposed parts using touch-up kit P3020B034 yellow paint or touch-up kit P3020B033 black paint.

Each touch-up kit includes:

1-pint paint can --- 1 pair of gloves --- 1 touch-up paintbrush