

ULTRA HIGH PRESSURE PAINT GRATE CLEANER

FCT-JS

OPERATION AND MAINTENANCE MANUAL

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1.0 INTRODUCTION

This manual was prepared to provide the operator with the basic information needed to operate and service this equipment. The operating recommendations in the manual will ensure that you receive satisfactory performance. All operating personnel responsible for the care of this equipment should be familiar with the information in this manual.

If you have any questions or problems with this equipment, please contact the distributor you obtained the product from, or the manufacturer:

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2.0 SAFETY WARNING

Operations with this equipment can be potentially dangerous if caution is not exercised prior to and during tool use. Please read and follow all of these instructions, in addition to the guidelines in the WJTA Recommended Practices handbook.

- 1.1 Only competent and trained persons should operate this equipment.
- 1.2 Do not exceed the maximum operating pressure specified for any component in a system.
- 1.3 This equipment should always be used with an operator controlled dump mechanism to release the high pressure water.
- 1.4 The immediate work area should be marked off to keep out untrained persons.
- 1.5 All personnel in the area should wear eye and hearing protection, as well as other protective clothing in accordance with specific conditions.
- 1.6 Jet thrust should be less than the weight of the machine. Care must be used in selecting flow rate (Nozzle Size).
- 1.7 Inspect the equipment for visible signs of deterioration, damage, or improper assembly. Do not operate until repaired. Make sure all threaded connections are tight and leak free.
- 1.8 Check to see that all control functions work properly before going to high pressure.
- 1.9 The person operating the equipment should have direct control of the dump system.

3.0 DESCRIPTION

The ultra high pressure **FCT-UH Grate Cleaner** is a three wheeled cleaning machine with air powered rotation of the jets and an overhung dome with height adjustment. The water exits through the nozzles as high velocity jets which are capable of cutting most paint, residues, and chemical deposits. The tool is rated for 10 gpm at operating pressures up to 40,000 psi, but more flow may be used if additional weight is added to the dome area to keep it from becoming tipsy and unstable. **Note: During the first half-hour of use, the rotation speed should not be run at maximum, but should be limited to 300-500 rpm, allowing the swivel seal and shaft to "break-in."**

AIR SUPPLY

The air supply should be capable of producing 30 to 40 cfm at 80 psi. The air line from the compressor to the machine should be at least 1/2 inch. To operate the machine at full speeds (rotation and feed) the air supply will need to be 40 cfm. Lower volumes will result in slower maximum speeds.

WATER SUPPLY

A 10-micron water filter upstream from the pump is recommended. Flush all hoses before use. Keep the ends covered when not connected.

WATER SWIVEL

The UH high pressure water swivel is rated for 40,000 psi maximum operating pressure. When connecting to the 90 degree inlet, make sure that the threaded port is lined up with the cone port of the inlet. The UH has a high pressure seal which should be replaced when it begins to leak continuously at operating pressure. The swivel should be greased after 40 to 80 hours of use. Keep the end nut and all connections tight. Watch for leaks and shut down to repair. Please refer to the appendix for further detailed information on the swivel.

NOZZLE HEAD

The bent arm manifold used on this assembly has 6 arms. Depending on the application, it may be better to plug some ports and use fewer larger nozzles (thick, heavy deposits), or to use more, smaller nozzles in all ports (thin coatings, faster traverse rates.) The rotation speed of the head can be controlled by adjusting the needle valve on the exhaust port of the air motor. The standoff distance can be adjusted by using the dome height adjustment.

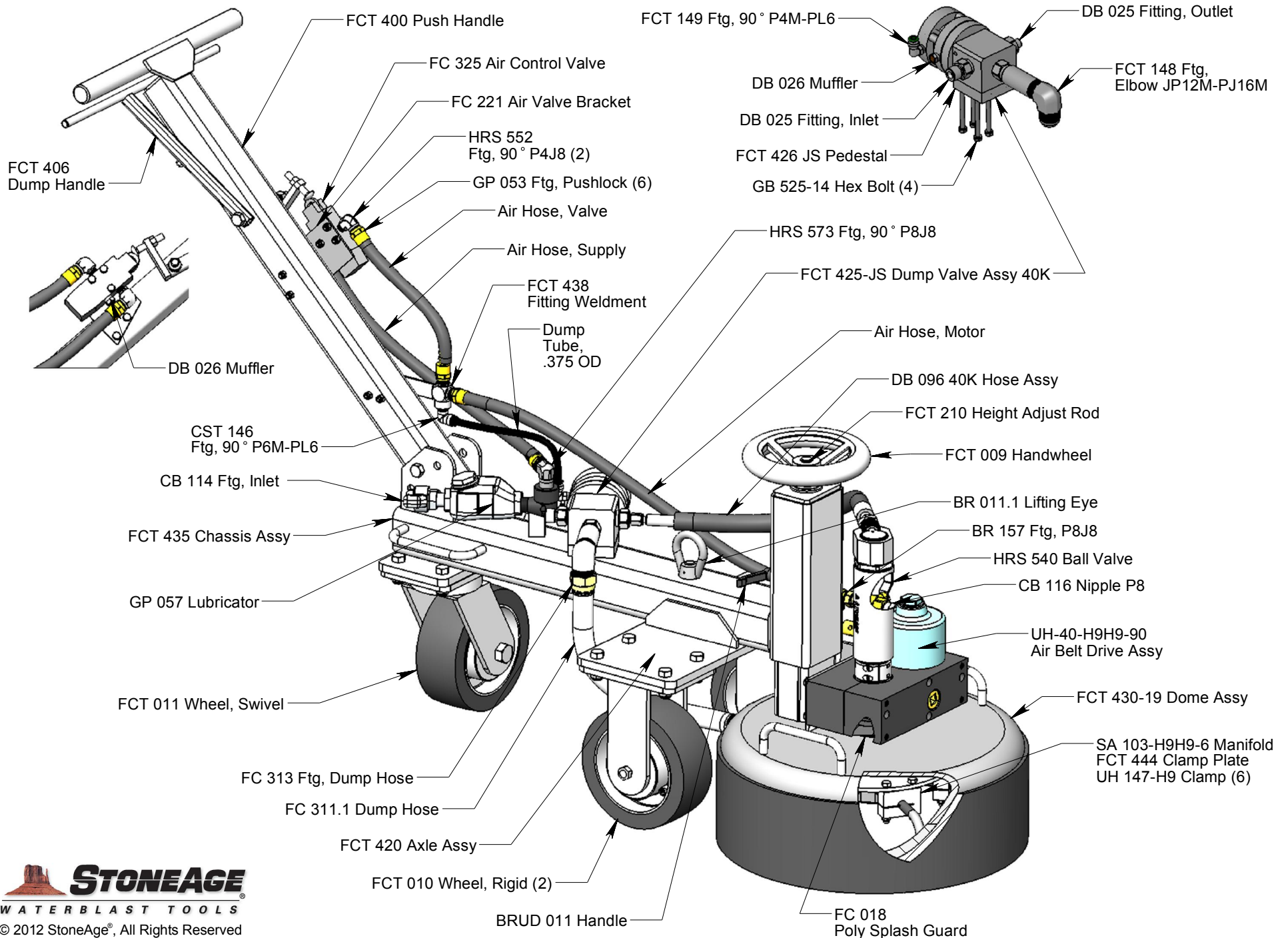
PRESSURE DUMP

The air actuated pressure dump valve is controlled by an air valve mounted on the push handle, and is closed by lifting up on the dump handle bar. The exhausted flow is routed into the dome. This valve is manufactured by Jetstream, of Houston, TX.

4.0 PARTS LIST

AF 071-H9	Collar	1
AF 072-H9	Gland, Anti-Vibe	1
BR 011.1	Lifting Eye	1
BR 157	Fitting, P8J8	1
BRUD 011	Handle	1
CB 114	Fitting, inlet	1
CB 116	Nipple	1
CST 146	Fitting, Elbow P6MPL6	1
CST 148	Dump Tube	1
DB 026	Muffler	1
DB 060	Bolt, Carriage .375-16 x 2.00	1
DB 096	Hose Assembly 40K	1
DB 310	Dump Handle Weldment	1
FC 018	Poly Splash Guard	1
FC 131-27	Skirt, Rubber	1
FC 221	Valve Bracket	1
FC 311.1	Dump Hose	1
FC 311.2	Hose Clamp	1
FC 313	Fitting, Dump Hose	1
FC 325	Air Valve	1
FCT 009	Hand wheel	1
FCT 010	Wheel, Rigid	2
FCT 011	Wheel, Swivel	1
FCT 210	Height Screw	1
FCT 260	Hose Clamp Kit	1
FCT 400	Push Handle	1
FCT 420	Axle Weldment	1
FCT 425-JS	Dump Valve Assy 40K	1
DB 025	Dump Valve (Jetstream 53620X)	1
DB 026	Muffler, P2	1
FCT 148	Fitting, Elbow P12MJ16M	1
FCT 149	Fitting, Elbow Swivel P4MPL6	1
FCT 426	Pedestal	1
GB 525-14	Bolt, Hex .250-20 x 3.50	4
FCT 430-19	Dome	1
FCT 435	Chassis	1
FCT 440	Manifold Assy 40K	1
AF 071-H9	Collar	6
AF 072-H9	Gland, Anti-Vibe	6
FCT 444	Plate, Support 6 Arm	1
FCT 569-H9S6-17.4-90	Arm	6
GB 531-10	Bolt, Hex .312-18 x 2.50	12
GB 531-11	Bolt, Hex .312-18 x 2.75	4
GH 113	Setscrew, Brass Tip	1
GN 531-L	Nylok Nut, .312-18	20
SA 103-H9H9-6	Head	1
UH 147-H9	Arm Clamp	6
FCT 438	Fitting Weldment	1
GP 053	Air Hose, Supply	1
GP 053	Air Hose, Valve	1
GP 053	Air Hose, Motor	1
GP 057	Lubricator	1
HRS 540	Ball Valve Assy	1
HRS 552	Fitting, Elbow P4J8	2
HRS 573	Fitting, Elbow P8J8	1
UH-40-H9H9-90	Air Belt Drive assembly	1 (see UH-40 manual for parts breakdown)

5.0 FCT-UH-JS TRI-WHEEL GRATE CLEANER, 40K



6.0 LIMITED WARRANTY

StoneAge, Inc. warrants to the extent herein provided the products of its own manufacture against defects in material and workmanship under normal use and service for which the products were designed for a period of six months after shipment from the factory. If such products should fail through defect in workmanship or material and specific written notice of failure is made within six months after date of shipment from factory, StoneAge, Inc. will either repair or replace any such items, F.O.B. its factory without charge. StoneAge, Inc. shall not be liable for expense incurred in repairs or alterations made outside the factory without the proper and prior authorization. StoneAge, Inc. shall have the option of requiring the return of the defective products to its factory, with transportation charges prepaid, to establish the claim. StoneAge, Inc. shall in no event be held liable for damages or delay resulting from or arising out of defective products nor for consequential damages or otherwise except for repair or replacement of items of defective material or workmanship aforesaid.

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