

## Wet Sandblaster

### Models 30417-30422

#### FEATURES

- Ultra-lightweight, compact design for easy dust-free blasting.
- Stainless steel spray nozzle for long life.
- Durable tungsten carbide lined mixing nozzle and body for maximum service.
- Standard Sand Induction Hose Assembly permits visual inspection of sand draw.

#### COMMON SPECIFICATIONS

Maximum Pressure .....	3500 PSI	(245 BAR)
Maximum Temperature .....	160°F	(70°C)
Inlet Port.....	1/4" NPTF	(1/4" NPTF)
Sand Inlet Hose ID .....	1/2" NPT	(1/2" NPT)
Hose Tube & Probe Size.....	1/4" NPT	(1/4" NPT)
Weight — Housing .....	1.75 lbs.	(.79 kg)
— Housing, Probe, Hose .....	3.15 lbs.	(1.41 kg)
Length — Housing with Barb .....	5.12"	(130 mm)
— Probe .....	19.13"	(486 mm)

**SELECTION:** Select the sandblaster model by orifice size to match your system flow and pressure. The special Sand Induction Hose Assembly should be used to prevent collapsing during operation. For optimum performance the **sand inlet hose should not exceed the 25 feet included in the assembly.**

**INSTALLATION:** For best results the sand unit should be connected to a quality high pressure water source. A pressure gauge should be installed on the system to

#### SPECIFICATIONS

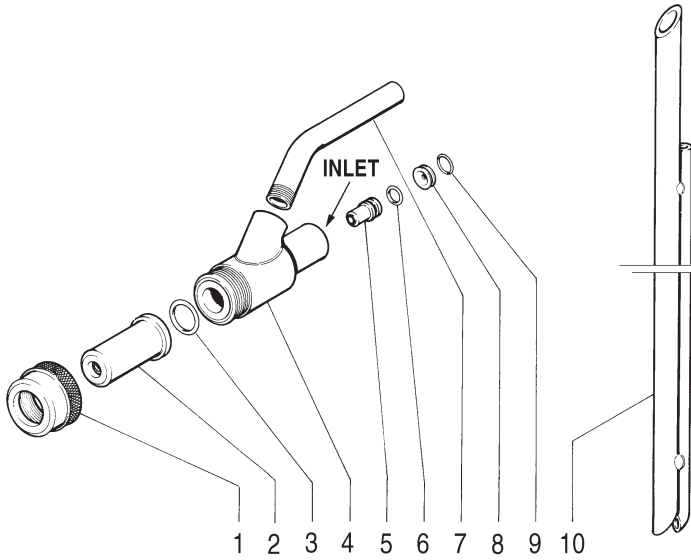
	U.S. Measure	Metric Measure
<b>MODEL 30417</b>		
Max. Flow .....	3.8 GPM	(14.5 L/M)
Nozzle Orifice .....	0.047"	(1.2 mm)
Sand Flow .....	6.0-9.0 lb/min.	(2.7-4.0 kg/min)
<b>MODEL 30418</b>		
Max. Flow .....	5.1 GPM	(19.5 L/M)
Nozzle Orifice .....	0.055"	(1.4 mm)
Sand Flow .....	6.5-10.0 lb/min.	(2.9-4.5 kg/min)
<b>MODEL 30419</b>		
Max. Flow .....	6.0 GPM	(23 L/M)
Nozzle Orifice .....	0.059"	(1.5 mm)
Sand Flow .....	7.0-11.0 lb/min.	(3.1-5.0 kg/min)
<b>MODEL 30420</b>		
Max. Flow .....	6.5 GPM	(25 L/M)
Nozzle Orifice .....	0.063"	(1.6 mm)
Sand Flow .....	7.5-13.0 lb/min.	(3.4-5.9 kg/min)
<b>MODEL 30421</b>		
Max. Flow .....	7.6 GPM	(29 L/M)
Nozzle Orifice .....	0.070"	(1.8 mm)
Sand Flow .....	8.5-13.0 lb/min.	(3.8-5.9 kg/min)
<b>MODEL 30422</b>		
Max. Flow .....	9.1 GPM	(34 L/M)
Nozzle Orifice .....	0.078"	(2.0 mm)
Sand Flow .....	8.5-13.0 lb/min.	(3.8-5.9 kg/min)

monitor system pressure as performance of the sandblaster is directly affected by the pressure of the system. A regulator or unloader must be installed in the pump discharge line of any system with a shut-off gun to handle by-pass fluid when the gun is shut off. Connect one end of the sand intake hose to sand siphon probe, place probe into sand supply and attach the other end to the hose connection tube at the body. Connect the sandblaster body to any 1/4" lance with 3500 PSI rating.

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*“Customer confidence is our greatest asset”*

## EXPLODED VIEW



## PARTS LIST

ITEM	P/N	MATL	DESCRIPTION	QTY
1	32064	BB	Retainer, Nozzle	1
2	33013	BB	Nozzle, Mixing, Tungsten Carbide Lined	1
3	33014	NBR	O-Ring, Mixing Nozzle	1
4	—	—	Body, Tungsten Carbide Lined (1/4")	1
5	31048	S	Nozzle (1.2 mm) SS w/O-Ring	1
	31049	S	Nozzle (1.4 mm) SS w/O-Ring	1
	31050	S	Nozzle (1.5 mm) SS w/O-Ring	1
	31056	S	Nozzle (1.6 mm) SS w/O-Ring	1
	31058	S	Nozzle (1.8 mm) SS w/O-Ring	1
	31068	S	Nozzle (2.0 mm) SS w/O-Ring	1
6	33015	NBR	O-Ring, Spray Nozzle	1
7	34006	STZP	Elbow, Bent	1
8	33217	BB	Insert	1
9	33216	NBR	O-Ring, Insert	1
10	33016	STL	Probe, Sand Siphon	1
—	34101	—	• Hose (1/2"x25')	1
—	34102	—	• Clamps, Hose (1/2")	2
—	30430	—	Sand Induction Hose Assembly (1/2"x25') (•Included in Assy)	1

MATERIAL CODES (Not Part of Part Number): BB=Brass  
NBR=Medium Nitrile (Buna-N) S=304SS STL=Steel STZP=Steel/Zinc Plated

## WARNING

**Severe injury can occur with high pressure spray.  
Do not allow spray to contact any part of body.**

## WARRANTY

### 90 Day Warranty

Refer to complete Cat Pump Warranty for further information.

**OPERATION:** Start the high pressure system. Open trigger on gun to assure system is operating properly. When the sand unit is operating efficiently, there will be a smooth and continuous flow of sand through the nozzle. The pressure and flow rate through the spray nozzle are the factors that determine the rate of sand flow. See **Performance Chart**. If the spray nozzle is chosen to give the maximum pressure and flow rate possible for the pump, the rate of sand flow will also be at maximum. Keep sand supply dry for best performance.

## CAUTION

**Adequate safety equipment and clothing must be worn during operation of the wet sandblaster.**

## PERFORMANCE CHART

Model	Spray Nozzle Orifice	Approximate flows at selected pressures					
		1000	1500	2000	2500	3000	3500
30417	1.2 mm	2.0	2.5	2.8	3.2	3.5	3.8
30418	1.4 mm	2.8	3.2	3.9	4.4	4.8	5.1
30419	1.5 mm	3.2	3.9	4.5	5.0	5.5	6.0
30420	1.6 mm	3.5	4.2	4.9	5.5	6.0	6.5
30421	1.8 mm	4.1	4.9	5.7	6.4	7.0	7.6
30422	2.0 mm	4.6	5.6	6.5	7.4	8.3	9.1

## SAND SUPPLY

SURFACE	SUGGESTED SAND TYPE
Rust	Angular 16-50
Metal Scale	Round 20-40
Painted Metal	Round Silica 20-40
Painted Masonry	Round River 20-40
Painted Wood	Round 20-40

## TROUBLESHOOTING

### No Sand:

- Plugged sand probe
- Wet sand
- Low vacuum
- Clear obstruction in sand probe.
- Remove mixing nozzle and inspect mixing chamber.
- Dry or replace sand.
- Check for air leak in system.

### Not enough sand:

- Low water pressure
- Collapsed hose
- Hot water reduces efficiency
- Partially plugged sand probe
- Restricted sand flow
- Check water supply to pump, nozzle size and RPM of pump.
- Use reinforced hose. Remove any obstruction.
- Optimum performance obtained with cold water.
- Remove any restriction from sand probe inlet. Use dry sand.
- Increase diameter of hose. Recommend 1/2" ID, Maximum 25 ft.

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

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