

HOLLO-BLAST JR.
O.M. 6159

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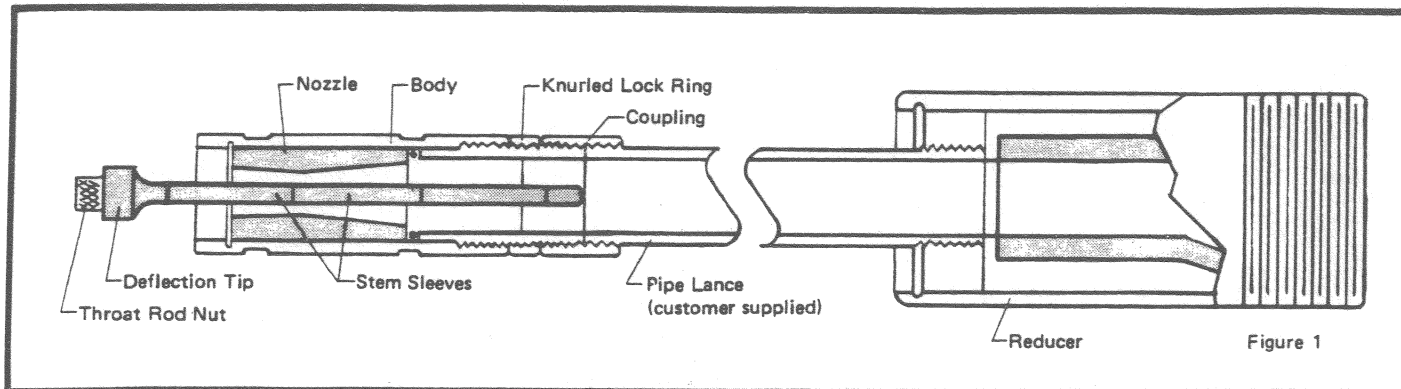
WARNING

Do not proceed with these instructions until you have READ the orange cover of this MANUAL and YOU UNDERSTAND its content.* These WARNINGS are included for the health and safety of the operator and those in the immediate vicinity.

***If you are using a Clemco Distributor Parts and Maintenance Guide refer to the orange warnings insert preceding the Index before continuing with the following instructions.**

© CLEMCO INDUSTRIES CORP.
One Cable Car Drive
Washington, MO 63090
Phone (636) 239-4300
Fax (636) 239-0788





1.0 INTRODUCTION

1.1 General Description. The Hollo-Blast Junior internal pipe cleaner (figure 1) is designed to blast clean pipe and tubing ranging in size from 3/4" to 2" I.D. The tool connects to an abrasive blast machine in place of a standard nozzle. In operation, the Hollo-Blast Junior nozzle directs the air/abrasive mixture at a deflection tip. This tip causes the blast pattern to fan out into a wide, circular pattern, which cleans the inside of the pipe as the tool is passed through. Centering collars, available in various sizes, hold the tool in position during passes.

The Hollo-Blast Junior tool is made from the finest materials available. However, some of its internal wear parts are of necessity somewhat brittle, due to their extreme hardness. The tool should therefore be handled carefully to avoid dropping it or giving it a sharp blow.

2.0 SET-UP

2.1 Basic Equipment Required. Use of the Hollo-Blast Junior tool requires the same equipment as any other abrasive blast cleaning operation, i.e. an air compressor and an abrasive blast machine. The compressor must be able to supply 80 c.f.m. at a pressure of 100 p.s.i. at the nozzle.

2.2 Abrasives. The abrasive must be well screened and dry. This is more important with the Hollo-Blast Junior than with most blasting operations, because of the small clearances involved. Use 40 mesh or finer. Any of the common blasting abrasives can be used, although soft sands give poor results because too much energy is lost in break-up on the deflection tip. Aluminum oxide and silicon carbide should be avoided unless required by specifications, since these abrasives cause extremely rapid wear on the tool.

2.3 Set-Up for Blasting. The Hollo-Blast Junior tool must be used with a 3/8" pipe lance. The lance is usually as long as the pipe to be cleaned. It should be square cut to allow it to butt neatly against the parts of the tool it touches. Screw one end of the pipe lance into the reducer, and connect the other end to the stem support assembly, using the coupling and knurled lock ring provided. Never connect the stem support assembly directly to the reducer. Make sure the lance butts against the

stem support assembly and bottoms against the tungsten carbide liner of the reducer. This will improve tool performance and increase the life of the parts. Select the pair of collars closest to the I.D. of the pipe being cleaned and attach them to the body. The set screws should be tightened into the grooves.

3.0 OPERATION

3.1 General Instructions. To blast clean the interior of a pipe, fit the Hollo-Blast Junior tool in the appropriate collars. Put the tool into the pipe, hold the tool firmly, and pressurize the blast machine. **BE CAREFUL NOT TO HIT THE DEFLECTION TIP AGAINST THE PIPE.** Push the tool through the pipe. Abrasive and blasted material will be blown out the other end.

3.2 Proper Abrasive Feed. Too much abrasive seriously hampers the efficiency of the Hollo-Blast Junior, and results in heavier wear on the parts, with lower production. When blasting at 100 p.s.i. the tool should use approximately 500 pounds of sand per hour of continuous blasting. Adjust abrasive feed if your rates differ significantly from these.

4.0 MAINTENANCE

4.1 General Instructions. Always take care not to drop the Hollo-Blast Junior tool or any of its internal wear parts. They are quite brittle due to their hardness, and break easily. When inspecting or replacing parts, keep the tool clean and brush abrasive out of cracks, threads, etc.

4.2 Deflection tip and Sleeve Replacement. The deflection tip should be replaced when the head is 75% worn away. The stem sleeves should be replaced before they wear through. These parts can be easily reached by removing the knurled throat rod nut, unscrewing the body, and lifting off the nozzle and O-ring. When replacing the sleeves, make sure that no abrasive or dirt particles get between them. Do not use great force when tightening the throat rod nut. Hand tightening is preferable.

4.3 Nozzle Replacement. The nozzle should be replaced when the I.D. reaches 0.330".

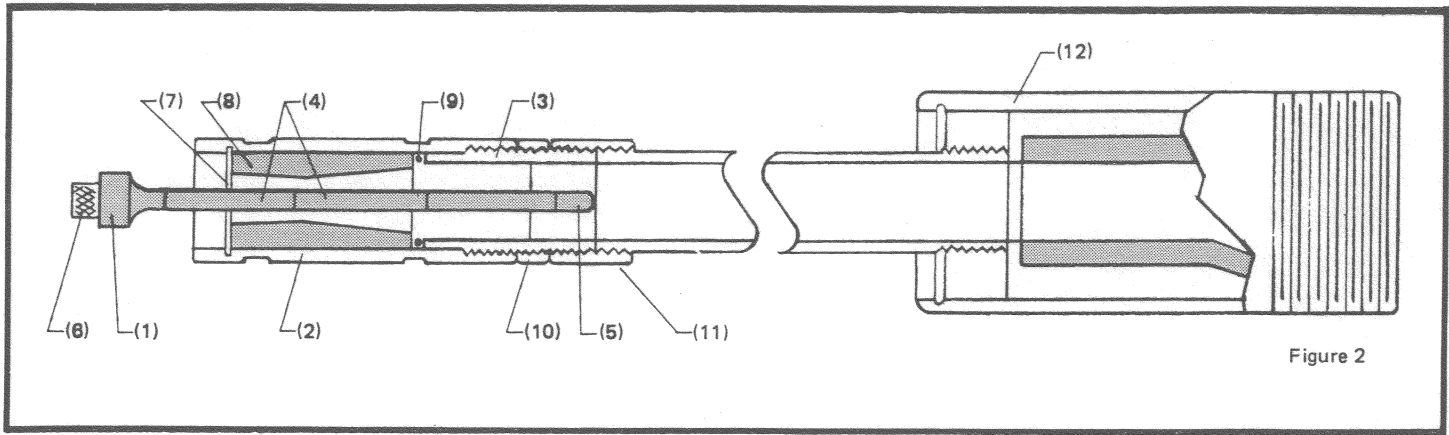


Figure 2

5.0 REPLACEMENT PARTS

5.1 Hollo-Blast Junior (Figure 2).

Item	Description	Stock No.
(-)	Hollo-Blast Jr. with reducer (item 12)	32 HBJ 1098
(-)	Hollo-Blast Jr. without reducer	32 HBJ 1099
(1)	*Deflection tip	33 HBJ 1100
(2)	Body	33 HBJ 1101
(3)	*Stem support assembly (includes item 5)	33 HBJ 1102
(4)	*Stem sleeve	33 HBJ 1105
(5)	*Throat rod and tip assembly	33 HBJ 1162
(6)	*Throat rod nut	33 HBJ 1108
(7)	Retaining ring	33 HBJ 1109
(8)	Nozzle, 9/32", tungsten carbide	24 HBJ 1113
(9)	Nozzle gasket	33 HBJ 1110
(10)	Knurled lock nut	33 HBJ 1111
(11)	Coupling, 3/8" dia.	33 HBJ 1112
(12)	Reducer	33 HBJ 1115

5.2 Centering Collars

(-)	Centering collar set (includes all four sets listed below)	33 HBJ 1114
(-)	Collar set for 1" I.D. pipe	33 HBJ 1117
(-)	Collar set for 1¼" I.D. pipe	33 HBJ 1118
(-)	Collar set for 1½" I.D. pipe	33 HBJ 1119
(-)	Collar set for 2" I.D. pipe	33 HBJ 1120

* Recommended spares.

IMPORTANT WARNING FOR SAFE, PRODUCTIVE BLAST CLEANING

1. Use protective equipment: Abrasive-resistant clothing, safety shoes, leather gloves, ear protection, NIOSH-approved air-fed helmet. Air for helmet must be supplied by a breathing air compressor, monitored for carbon monoxide (CO), and filtered.
2. Check for possible silicosis hazards. Avoid dust.
3. Do not blast with damaged or worn equipment.
4. Unless otherwise specified, maximum working pressure of blast machine and related components must not exceed 125 p.s.i.
5. Point nozzle only at area being cleaned.
6. Use only abrasives specifically intended for blasting.
7. Keep unprotected workers out of the blast area.
8. Before operating machine:
 - Check fittings and hose for wear. Safety-wire couplings together.
 - Check helmet filters and air supply.
 - Test remote controls.
 - Make sure blast machine is adequately grounded.
 - Check pop-up valve for alignment.
 - Check all fittings for tightness.
9. Do not weld on blast machine— this voids National Board approval.
10. Do not substitute for Clemco parts or modify equipment in any way.