Safety glasses should be worn at all times while operating tool.

General Information

The Marson ValueRivet™ V-3 pneumatic/ hydraulic riveting tool is designed to set rivets in all materials in sizes from 1/8" to 3/16" diameter. Model V-3 is supplied with 3/16" NOSEPIECE (17C) installed in the operating position. Standard nosepieces for 1/8" (17A) and 5/32" (17B) diameter rivets is included among the accessories supplied with the tool.

The Maximum Air Pressure is 95 PSI At Tool.

Specifications

Rivet Setting Capacity

Traction power

Operating air pressure

Air consumption

Air Inlet

Overall height

Net weight

3/16" diameter
1983 lbs
85-95 PSI
4 CFM
4 CFM
1/4" N.P.T.
11"
Net weight

3.3 lbs.

Accessories

The V-3 is packaged in a compartment storage container. Wrenches needed to service the tool are included. Special SPANNER (40) has a cut-out gauge used in adjusting the tool as described below.

Also included: Safety Cap (49) to catch ejected mandrels when attached to the back of the tool.

Maintenance

In order to achieve maximum efficiency and economy, the Marson V-3 pneumatic/hydraulic riveting tool should be serviced and maintained on a regular basis. No special skills or tools other than the ones provided are needed to properly service and maintain the device.

The operative parts of the tools requiring regular inspection and maintenance are as follows:

- The JAWS (2) should be periodically inspected, cleaned, and when necessary, replaced with new jaws (see Cleaning and Changing Jaws under Procedures below).
- The FRAME (14) of the tool should be checked periodically to ensure that the oil level is maintained and that there are no leaks or breakdowns in the seals. (See Repair sections under Malfunction for procedures).

Maintenance Procedures

1. Cleaning and Changing Jaws

IMPORTANT – Disconnect the V-3 from the air pressure line before proceeding with inspection or repairs. Use SPANNER (48) to remove HEAD (16) and JAW HOUSING (1). At the same time, hold the JAW CASE COUPLER (4) with 14MM WRENCH (13). Clean jaws with solvent or a steel brush. Replace with new jaws if excess wear is apparent. Always coat outer or smooth surface of jaws with an oil film before assembling.

Reassemble by reversing order of above procedure. It is important that JAW PUSHER (3) engages the conical parts of the JAWS. **DO NOT CHANGE THE POSITION OF PARTS (4) and (6).** If these parts are inadvertently changed, see readjustment instructions under "Malfunction."

2. Changing Nosepiece

Connect V-3 to air pressure and press TRIGGER ARM (39) until nosepiece has been removed and new nosepiece fully tightened. When TRIGGER ARM (39) has been released and tool is at rest there should be a circular opening visible in the nosepiece.

Malfunction

1. Mandrel gripped by JAWS (2) but rivet does not set and mandrel does not break:

CAUSE: Low air pressure or loss of oil.

REPAIR: Increase air pressure but do not exceed 95 PSI at tool. Make sure all fittings including FRAME CAP (10) and HEAD (16) are tight. If malfunction persists, add oil as follows:

Disassemble AIR CYLINDER (28), FRAME (14) and HEAD (16). Before adding oil, check to be sure OIL PISTON (7) is at the bottom of its stroke, by hand pulling JAW HOUSING (1) away from FRAME (14). OIL PISTON (18) should bottom its stroke automatically when removing FRAME HEAD (16). If JAW HOUSING (1) moves downward by hand power, then RETURN SPRING (11) must be replaced. Care must be exercised to avoid damage to O-RING (46). Pour MARSON OIL No. 39105 or equivalent into FRAME (14) while tool is upside down. Before assembling also check for oil appearing in AIR CYLINDER (28) or HEAD (16). If oil is found in any of these areas, replace O-RING (12, 46) as needed. Reassemble tool.

2. Mandrel does not enter nosepiece OR fails to eject. **CAUSE:** JAW HOUSING COUPLER (4) and NUT (6) have changed position.

REPAIR: Adjust so that the distance between the plane underside of the FRAME (14) and the front edge of the securely-assembled JAW HOUSING (1) is approximately 2-3/8". This can be measured with the cut-out gauge on SPANNER (48) before assembling HEAD (16).

3. Tool takes more than one stroke under ideal conditions to set rivet and break mandrel.

CAUSE: Insufficient oil.

REPAIR: See repair instructions under Malfunction, 1.

CAUSE: Not enough air pressure.

REPAIR: Increase air pressure but do not exceed 95 PSI at tool.

CAUSE: Loose nosepiece.

REPAIR: Tighten nosepiece with SPANNER (48).

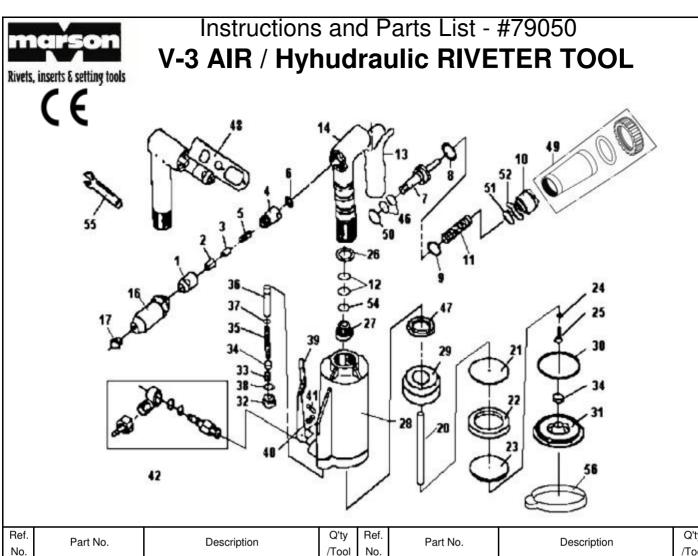
CAUSE: JAW HOUSING COUPLER (4) too far forward.

REPAIR: See procedure under Section 2 above.



Rivets, inserts & setting tools

44 Campanelli Pkwy. Stoughton, MA. 02072 Tel. (800) 344-9664 Fax (800) 644-2177



Ref.	Part No.	Description	Q'ty	Ref.	Part No.	Description	Q'ty
No.			/Tool	No.			/Tool
1	95700	Jaw Housing	1	31	95729	Air Cylinder Cap	1
2	95701	Jaw	1set	32	95730	Screw Plug	1
3	95702	Jaw Pusher	1	33	95731	Valve Pressure Spring	1
4	95703	Jaw Housing Coupler	1	34	95732	Valve Plate	2
5	95704	Spring	1	35	95733	Valve Spring	1
6	95705	Nut	1	36	95734	Valve Tube	1
7	95706	Hydraulic Plunger	1	37	95735	O-Ring 4.8x1.9	1
8	95707	O-Ring 2.6x18.8x24	1	38	95736	O-Ring 9.25x1.78	1
9	95708	O-Ring Washer	1	39	95737	Trigger Arm	1
10	95709	Frame Cap	1	40	95738	Spring	1
11	95710	Return Spring	1	41	95739	Roll Pin	1
12	95711	O-Ring 8.8x1.9	2	42	95740	I/4" Air Inlet Fitting	1set
13	95750	14mm Wrench	1	46	95741	O-Ring 9.8x1.9	2
14	95713	Hydraulic Section	1	47	95742	Hydraulic Section Nut	1
16	95714	Head	1	48	95743	Spanner	1
17A	95715	I/8" Nosepiece(Accessories)	1	49	95755	Safety Cup	1
17B	95716	5/32" Nosepiece(Accessories)	1	50	95745	Black Up O-Ring	1
17C	95717	3/16" Nosepiece(Accessories)	1	51	95746	O-Ring	1
20	95718	Air Piston Rod	1	52	95747	Hanging Cilp	1
21	95719	Front Piston Head Disc	1	54	95749	Black Up O-Ring	1
22	95720	Piston Head Packing Ring	1				
23	95721	Rear Piston Head Disc	1				
24	95722	Piston Head Spring Washer	1				
25	95723	Piston Head Lock Screw	1				
26	95724	O-Ring 25.4x19.5x2.7	1	RK	95752	Repair Kit Ref. No	
27	95725	Air Piston Rod Guide	1		33132	3, 5, 11	
28	95726	Air Cylinder body	1			Service Kit Ref. No	
29	95727	Air Piston Stop	1	SK	95753	8, 9, 12(x2), 22, 26, 30, 33, 34(x2),	
30	95728	O-Ring 4.8x2.4	1			35, 37, 38,46(x2),50,51,54	

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