



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

General Information

The Marson ValueRivet™ V-4 pneumatic/ hydraulic riveting tool is designed to set rivets in all materials in sizes from 3/32" to 1/4" diameter. Model V-4 is supplied with 1/4" NOSEPIECE (1A) installed in the operating position. Standard nosepieces for 3/32" (1B), 1/8" (1C), 5/32" (1D), and 3/16" (1E) diameter rivets are included among the accessories supplied with the tool. The **Maximum Air Pressure is 95 PSI At Tool.**

Specifications

Rivet Setting Capacity	1/4" diameter
Traction power	3055 lbs
Operating air pressure	85-95 PSI
Air consumption	5CFM
Air Inlet	1/4"N.P.T.
Overall height	12"
Net weight	4.2 lbs.

Accessories

The V-4 is packaged in a compartment storage container. Wrenches needed to service the tool are included. Special SPANNER (41) and SPANNER GAUGE (40) has a cut-out gauge used in adjusting the tool as described below.

Also included Safety Cap (26) to catch ejected mandrels when attached to the back of the tool.

Maintenance

In order to achieve maximum efficiency and economy, the Marson V-4 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:

1. The JAWS (5) should be periodically inspected, cleaned, and when necessary, replaced with new jaws (see Cleaning and Changing Jaws under Procedures below).
2. The FRAME (17) 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-4 from the air pressure line before proceeding with inspection or repairs. Use SPANNER (41) to remove FRAME HEAD (13) and JAW CASE FRONT (3, 31). At the same time, hold the JAW CASE REAR (4) with the SPANNER GAUGE (40). 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 (7, 8) engages the conical parts of the JAWS. **DO NOT CHANGE THE POSITION OF PARTS (4) and (14).** If these parts are inadvertently changed, see readjustment instructions under "Malfunctions".

2. Changing Nosepiece

Connect V-4 to air pressure and press TRIGGER (45) until nosepiece has been removed and new nosepiece fully tightened. When TRIGGER (45) has been released and tool is at rest there should be a circular opening visible in the nosepiece.

Malfunction

1. Mandrel gripped by JAWS 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 (24) and FRAME HEAD (13) are tight. If malfunction persists, add oil as follows:

Remove FRAME HEAD (13). Before adding oil secure tool upside down in vise. Remove CYLINDER CAP (39), pull out AIR PISTON ASSEMBLY (30, 34, 37, 35, 36). Check to be sure OIL PISTON (18) is at the bottom of its stroke by hand pulling JAW CASE FRONT (3, 31) away from FRAME (17). OIL PISTON (18) should bottom its stroke automatically when removing FRAME HEAD (13). If JAW CASE FRONT (3, 31) moves downward by hand power, then RETURN SPRINGS (21, 22) may need replacing. Care must be exercised to avoid damage to O-RINGS (15, 16). Use Mobil DTE 24 or equivalent into FRAME (17) while tool is upside down to level of the top O-RING (16). Before reassembling check for oil appearing in AIR CYLINDER (33) or FRAME HEAD (13). If oil is found in any of these areas, replace O-RING (15, 16, 29) as needed Reassemble tool.

2. Mandrel does not enter nosepiece OR fails to eject.

CAUSE: JAW CASE REAR (4) and NUT (14) have changed position.

REPAIR: Adjust so that the distance between the plane underside of the FRAME (17) and the front edge of the securely-assembled JAW CASE FRONT (3, 31) is approximately". This can be measured with the cut-out gauge on SPANNER GAUGE (40) before assembling FRAME HEAD (13).

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 (41).

CAUSE: JAW CASE REAR (4) too far forward.

REPAIR: See procedure under Section 2 above.



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