

301-EN (39065) Hydropneumatic Riveting Tool

This durable light-weight air/hydraulic riveter, with its newly designed *on/off* switch and vacuum control knob system, holds the rivet in the tool when switched to the on position allowing the operator to rivet at any angle with one hand free.

The vacuum system will automatically collect the spent mandrels into a collection bottle, creating a cleaner, safer work environment by preventing spent mandrels from falling to the floor.

A swivel air inlet along with a push button trigger and molded frame provides the operator with maximum comfort using minimal effort.

Note: The 301-EN has an option for a left or right side air input.

Specifications:

Tool Capacity: 3/32" - 3/16" diameter rivets in all alloys.

Stroke: .820"

Pulling Power: 2,360 lbs.

Air Connection Thread: 1/4"NPT

Tool Weight: 3.74 lbs.



CE



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**WARNING:
ALWAYS WEAR SAFETY GLASSES WHEN OPERATING
AND PERFORMING MAINTENANCE ON TOOL**

AIR FEED

WARNING: Do not use air supply greater than recommended or tool may be damaged or burst.

DO NOT USE OXYGEN, COMBUSTIBLE GASES OR BOTTLED GASES, AS A SOURCE FOR THIS TOOL IT MAY CAUSE IT TO EXPLODE.

Use only compressed air. Check air-line for damage from humidity & contaminants. In order to protect the tool from premature wear, we recommend the use of an in line condensation filter. Do Not use an in line oil lubricator.

NORMAL OPERATION

FAILURE TO USE COLLECTION BOTTLE, OR TUBE AS INSTRUCTED BELOW MAY RESULT IN INJURY.

The 301-EN features a 3 jaw construction and is fully self-adjusting. To change sizes of rivet simply change nosepiece. (See changing nosepiece section below) No other adjustments are necessary.

Install mandrel container (31) on back of tool. (Refer to drawing). Install air fitting in connection (45). Attach tool to air pressure between 85-95 PSI. You are now ready to work. Pointing tool away from people and objects, test by pulling trigger once or twice. When tool is new, or has been sitting idle overnight, or in the cold it may not function on first pull, occasionally this could occur.

When the air vacuum is switched on and the trigger is released the spent mandrel is automatically ejected into the Mandrel Container (31). The tool can also be operated without the Mandrel Container by removing the Mandrel Container (31) and the Cover (30M). After the removal, attach Reduction Part (57) and Mandrels Baffle (58). See tool schematic.

WARNING:
ALWAYS WEAR SAFETY GLASSES
WHEN OPERATING AND PERFORMING MAINTENANCE ON TOOL

MAINTENANCE

ADDING HYDRAULIC FLUID

Tool is shipped from factory with hydraulic fluid installed. If it becomes necessary to add fluid, follow this procedure. Place tool in a horizontal position. Remove screw plug (24) and washer (23). Pour hydraulic fluid into container (56).

Screw fluid container into tool fluid plug receptacle. Fluid level should reach edge of fill hole. With container still attached, reconnect to air supply. Actuate trigger button 5 or 6 six times, or until all air bubbles inside the container disappear. This will release any entrapped air.

IMPORTANT: Use only *Anti-Foam Hydraulic Fluid*

CHANGING NOSEPIECE

1. Select Proper nosepiece.
2. Disconnect tool from air supply.
3. Using a wrench unscrew nosepiece from sleeve carrying nozzle (25) and replace with appropriate size nosepiece. Store unused nosepiece in holder (33).
4. Reconnect air supply.
5. Pointing tool away from people and objects, pull trigger and hold. Use a wrench to tighten down nosepiece (Do Not over tighten), release trigger.
6. Insert rivet into application hole; pull trigger and hold until a quick snap is heard.
7. If rivet does not fully set, place tool back onto mandrel and make a second pull.

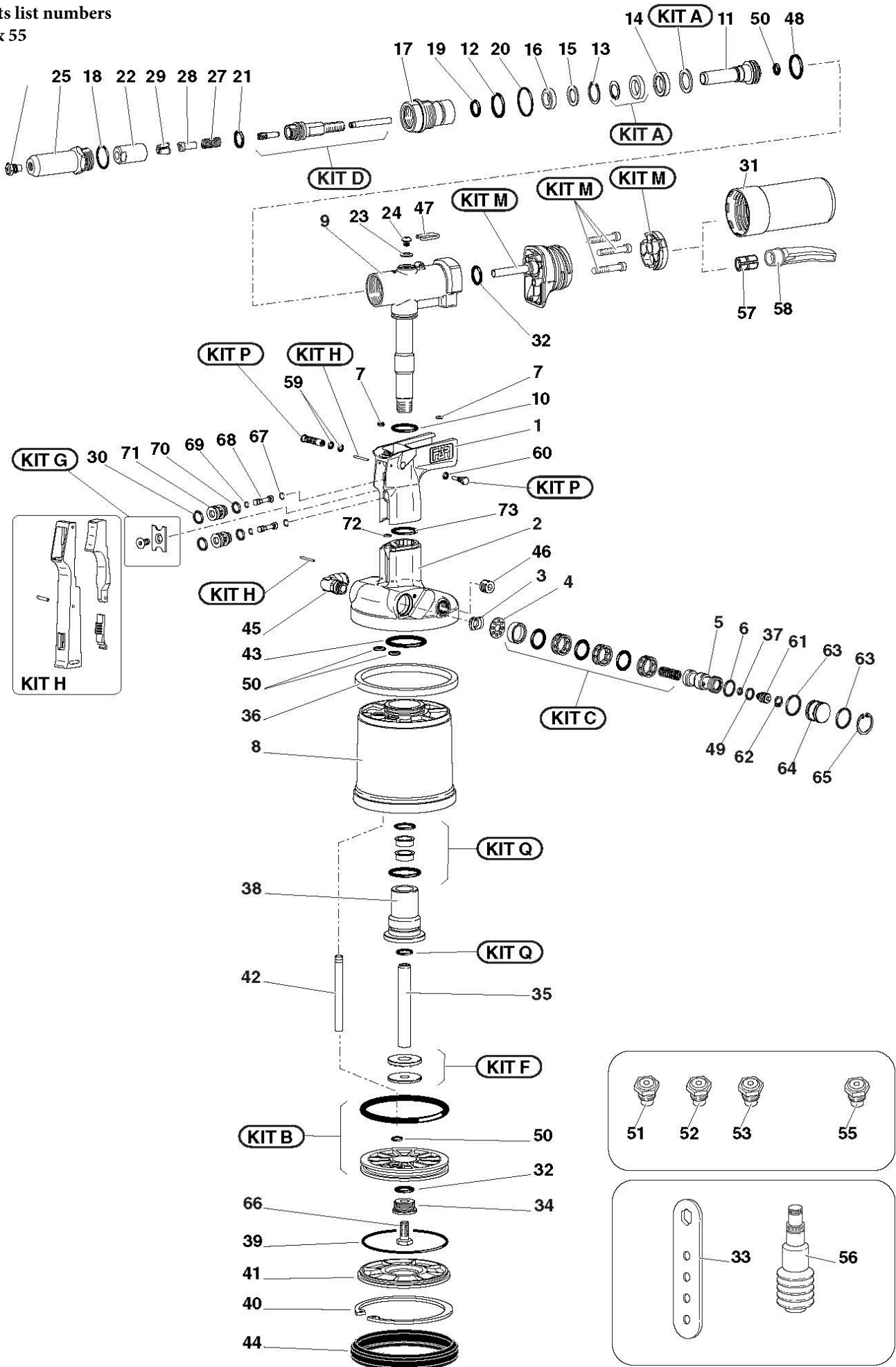
CLEANING & CHANGING OF JAWS

With use, the jaws of the tool may become dirty or worn. This will cause slipping of the rivet mandrel & and improper setting of the rivet. To clean or replace the jaws follow this procedure:

1. Disconnect air supply.
2. Using a (27mm) wrench loosen and remove carrying nozzle (25).
3. Using (16mm & 11mm) wrenches, disassemble front jaw case (22) from front connector (17).
4. To clean jaws, use a stiff dry wire brush.
5. If excessive wear is apparent, replace with new jaws.
6. Reassemble in reverse order. **Do Not** add oil / grease to jaws at any time.

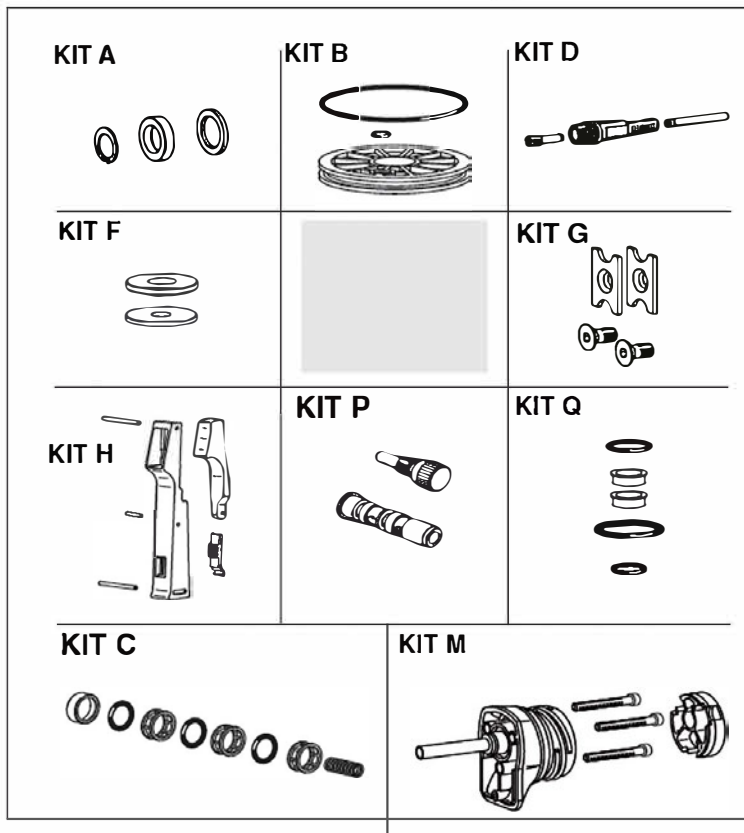
If further maintenance is required beyond the scope of this direction sheet, and the tool fails to function properly, return to an authorized repair station or the factory for service.

for nosepiece sizes
see parts list numbers
51-53 & 55



Parts and Kits List

Pos.	Part #	Description	Qty.	Pos.	Part #	Description	Qty.
1	M72000322	HANDGRIP	1	38	M71346452	ROD GUIDE	1
2	M72000364	RIVETING TOOL BODY	1	39	M71C01297	GASKET OR 2-043	1
3	M71346451	SERVICE PLUG	1	40	M71C01296	SEEGER RING 100 UNI 7437	1
4	M712117	WASHER STOPPING SPRING	1	41	M71346085	PROTECTION BOTTOM	1
5	M710841	VALVE	1	42	M71346469	TUBE 8X7	1
6	M710916	GASKET OR 2-015	1	43	M88220-66	GASKET OR 2-129	1
7	M713390	GASKET OR 2-007	2	44	M71346084	RUBBER PROTECTION	1
8	M72000457	PNEUMATIC CYLINDER	1	45	M716377	CONNECTOR 6522 - 10-1/4"	1
9	M72000323	HYDRAULIC CYLINDER	1	46	M71C01022	CAP 1/4"	1
10	M88676	GASKET OR 2-119	1	47	M71346107	BALANCER HOOK	1
11	M71346103	HYDRAULIC PISTON	1	48	M711732	GASKET OR 2-118	1
12	M88066	GASKET OR 2-118	1	49	M88021	GASKET OR 5-612	1
13	M88095	SEGER RING JV 22	1	50	M88032	GASKET OR 2-109	4
14	M88072	GASKET B-102070	1	51	M717001	1/8" NOSEPIECE	1
15	M88069	WASHER	1	52	M717002	5/32" NOSEPIECE	1
16	M88068	GASKET B-086055	1	53	M717003	3/16" NOSEPIECE	1
17	M71346101	FRONT CONNECTOR	1				
18	M88003	GASKET OR 020	1	55	M717006	3/32" NOSEPIECE	1
19	M88327	GASKET OR 2-113	1	56	M72A00053	OIL CONTAINER ASSEMBLY	1
20	M711729	GASKET OR 2-024	1	57	M712329	REDUCTION	1
21	M88062	GASKET OR 113	1	58	M71345212	MANDREL BAFFLE	1
22	M88057	JAW HOLDER	1	59	M71C01495	GASKET OR 4 X 1.5	2
23	M710555	WASHER 400-004-4490	1	60	M71C0496	GASKET OR 3 X 2	1
24	M71C01278	SCREW TBCE M6 X 6 ISO 7380	1	61	M88022	VALVE PISTON	1
25	M71346060	SLEEVE CARRYING NOZZLE	1	62	M88020	SEEGER RING 11 UNI 7437	1
			1	63	M88018	GASKET OR 018	2
27	M88026	SPRING	1	64	M88019	SPRING GUIDE PLUG	1
28	M88059	JAW PUSHER	1	65	M88017	SEEGER RING 22 UNI 7437	1
29	M71345507	HIGH-PERFORMANCE JAWS	3	66	M88004	SCREW TE M9 X 20	1
30	M88681	GASKET OR 5-052	2	67	M88047	GASKET OR 2-005	2
31	M711706	MANDREL CONTAINER	1	68	M711704	VALVE PISTON	2
32	M88220-9	GASKET OR 2-114	2	69	M88149	GASKET OR 2-004	2
33	M88220-78	WRENCH KIT	1	70	M88158	GASKET OR 2-009	2
34	M71346455	BUSH	1	71	M711703	VALVE BODY	2
35	M71346453	ROD	1	72	M88023	GASKET OR 2-006	1
36	M71346470	SILENCER	1	73	M88355	GASKET OR 2-120	1
37	M88045	GASKET OR 008	1				



KIT	PART #	DESCRIPTION
KIT A	M740821	ANTI-EXTRUSION RING KIT
KIT B	M74000030	PNEUMATIC PISTON KIT
KIT C	M740840	COIL KIT
KIT D	M74000089	CONE HOLDER KIT
KIT F	M74000113	DAMPENER KIT
KIT G	M741702	PLATE KIT
KIT H	M74000114	LEVER KIT
KIT M	M74000116	KIT BACK CONNECTOR
KIT P	M74000117	VACCUUM ADJUSTMENT KIT
KIT Q	M74000119	GASKETS KIT

"For letters (D) (G) and (M)" refer to tool pictured below"

Adjusting vacuum suction to factory settings

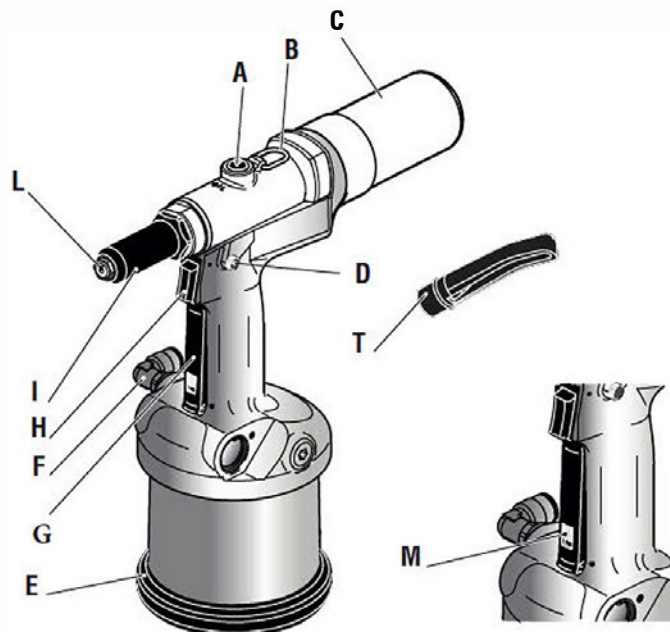
Make sure that the knob (D) is completely turned clockwise until it stops.
Hold down the lever (G) and turn the knob (D) anticlockwise to open and adjust the air flow necessary to suck the spent mandrel into collection bottle.

Air vacuum always ON

With air vacuum on keep the lever (G) pressed and push down the locking device (M). To return to controlled vacuum, keep the lever (G) pressed and push up the locking device (M).

Tool Air Supply on/off

Press and hold (G) and switch (M) to on or off.



MAIN COMPONENTS

- (A) Oil tank plug
- (B) Balancer connection
- (C) Mandrel container
- (D) Vacuum regulation knob
- (E) Rubber protective base
- (F) Compressed air connection
- (G) Vacuum control
- (H) Tensile strength button
- (I) Sleeve carrying nozzle
- (L) Nosepiece
- (M) Vacuum Switch on / off
- (T) Mandrel Baffle

LIMITED TOOL WARRANTY

HOWMET Fastening System, Marson Division, warrants that this tool will be free from defects in material and workmanship under normal service for ninety (90) days from the date of purchase. This warranty applies to the purchaser of the tool for original use only. All other warranties, whether expressed or implied, including any warranties of merchantability or fitness for purpose are hereby excluded.

Should this tool fail during this ninety (90) day period, and no unauthorized repairs have been made, return the tool freight prepaid to the factory for free of charge replacement of any part or parts found by HOWMET Fastening System, Marson Division, to be defective due to faulty material or workmanship. This represents the sole obligation of HOWMET Fastening System, Marson Division, under this warranty. In no event shall Howmet Fastening System, Marson Division, be liable for any consequential or special damages arising from the purchase or use of this tool. You may have other rights, which vary from state to state.