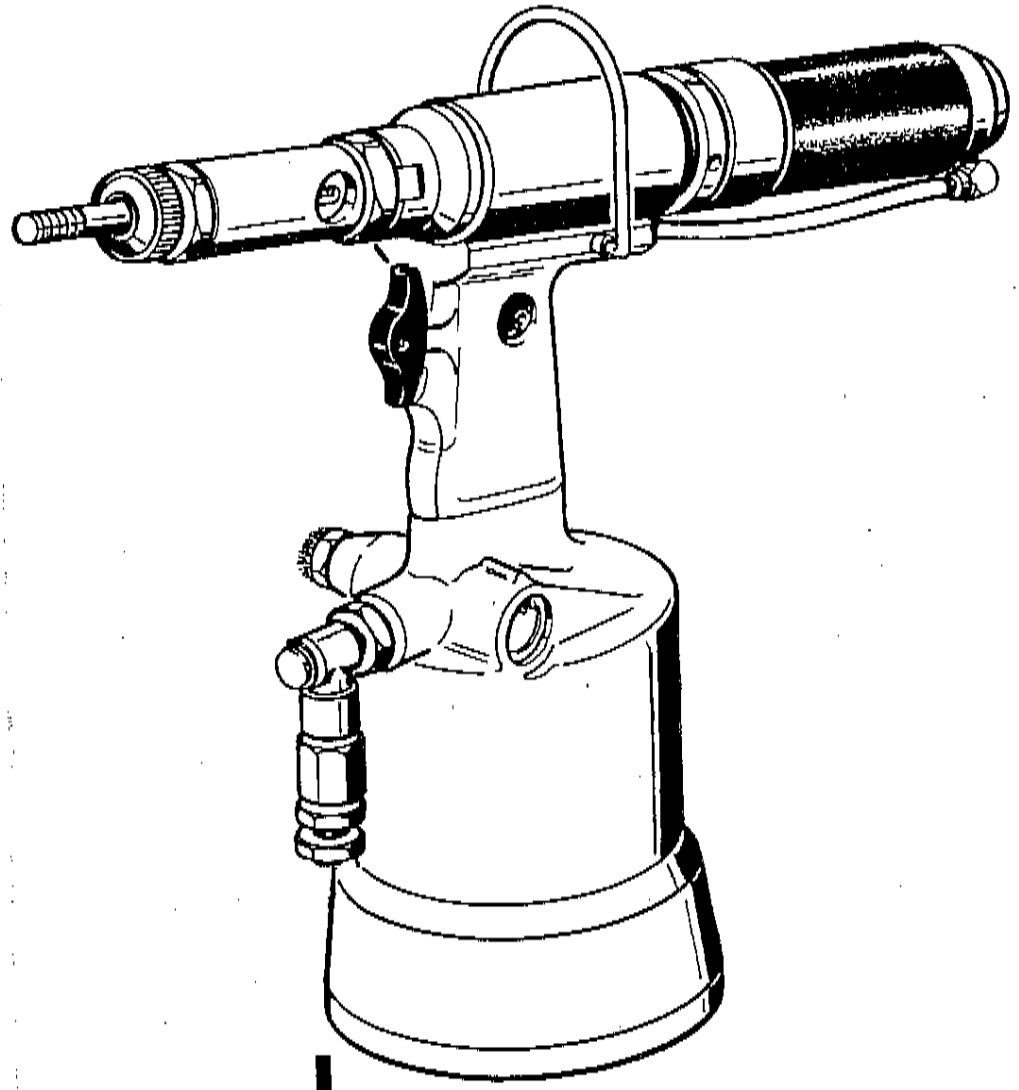
CAT. NO. 150-SPI 291

SUPER BRUTE SPIN PULL INSTRUCTIONS

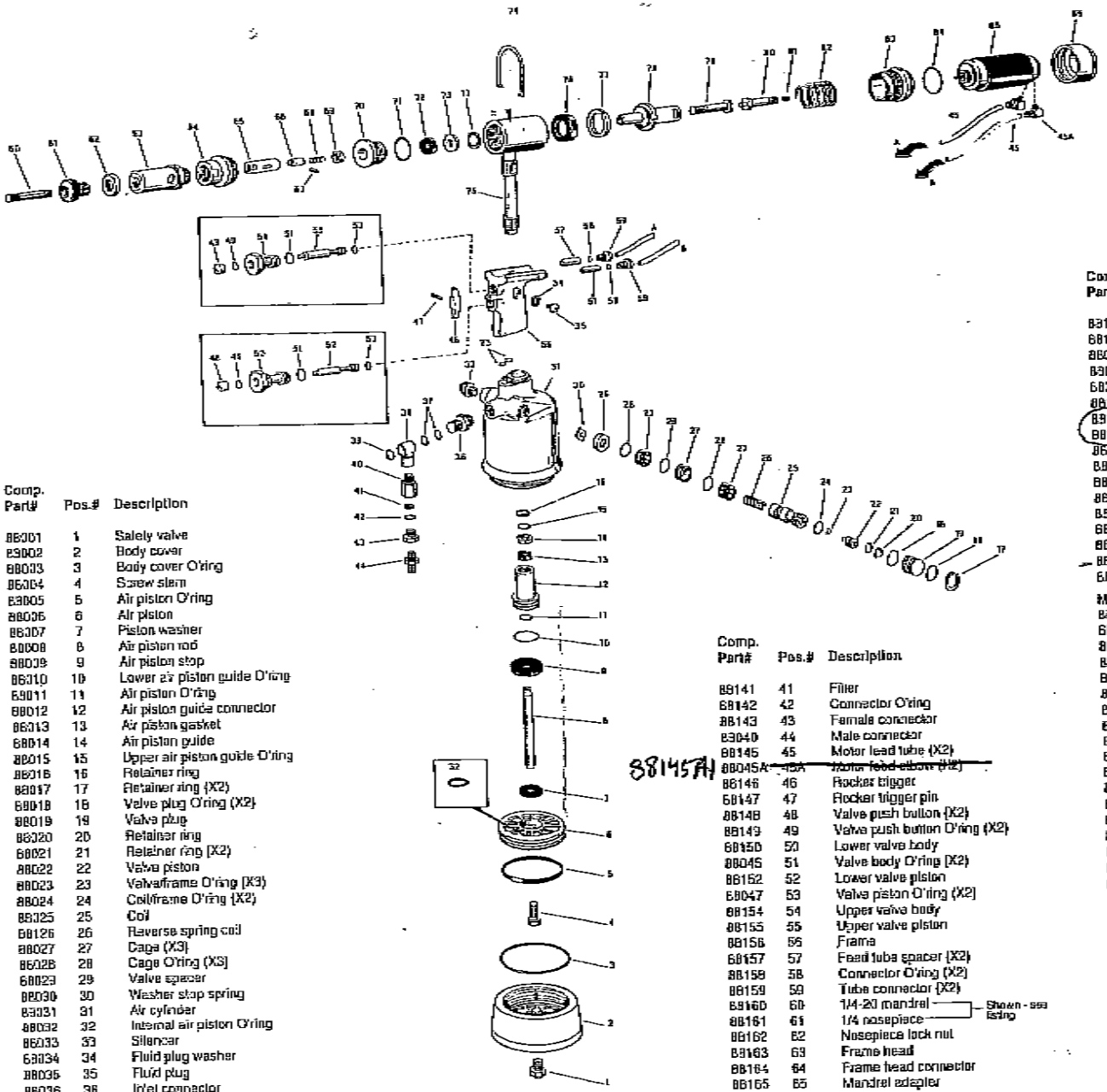
Model 150-SP Pneumatic Rivet Nut® Setting Tool



marson CORPORATION

44 Campanelli Parkway • Stoughton, MA 02072-3796

Parts



Comp. Part#	Pos.#	Description
88001	1	Safety valve
88002	2	Body cover
88003	3	Body cover O'ring
88004	4	Screw stem
88005	5	Air piston O'ring
88006	6	Air piston
88007	7	Piston washer
88008	8	Air piston rod
88009	9	Air piston stop
88010	10	Lower air piston guide O'ring
88011	11	Air piston O'ring
88012	12	Air piston guide connector
88013	13	Air piston gasket
88014	14	Air piston guide
88015	15	Upper air piston guide O'ring
88016	16	Retainer ring
88017	17	Retainer ring (X2)
88018	18	Valve plug O'ring (X2)
88019	19	Valve plug
88020	20	Retainer ring
88021	21	Retainer ring (X2)
88022	22	Valve piston
88023	23	Valve/frame O'ring (X3)
88024	24	Coil/frame O'ring (X2)
88025	25	Coil
88026	26	Reverse spring coil
88027	27	Cage (X3)
88028	28	Cage O'ring (X3)
88029	29	Valve spacer
88030	30	Washer stop spring
88031	31	Air cylinder
88032	32	Internal air piston O'ring
88033	33	Silencer
88034	34	Fluid plug washer
88035	35	Fluid plug
88036	36	Inlet connector
88037	37	Inlet connector O'ring (X2)
88038	38	Rotating connector
88039	39	Retainer ring
88140	40	Filler body

Comp. Part#	Pos.#	Description
88141	41	Filler
88142	42	Connector O'ring
88143	43	Female connector
88040	44	Male connector
88145	45	Motor lead tube (X2)
88045A	45A	Motor feed elbow (X2)
88146	46	Rocker trigger
88147	47	Rocker trigger pin
88148	48	Valve push button (X2)
88149	49	Valve push button O'ring (X2)
88150	50	Lower valve body
88045	51	Valve body O'ring (X2)
88152	52	Lower valve piston
88047	53	Valve piston O'ring (X2)
88154	54	Upper valve body
88155	55	Upper valve piston
88156	56	Frame
88157	57	Feed tube spacer (X2)
88158	58	Connector O'ring (X2)
88159	59	Tube connector (X2)
88160	60	1/4-20 mandrel — Shown - see listing
88161	61	1/4 nosepiece — Shown - see listing
88162	62	Nosepiece lock nut
88163	63	Frame head
88164	64	Frame head connector
88165	65	Mandrel adapter
88166	66	Adapter clutch
88167	67	Clutch pin
88168	68	Disengagement spring
88169	69	Adapter nut

Comp. Part#	Pos.#	Description
88170	70	Gasket sleeve
88171	71	Gasket sleeve O'ring
88068	72	Sleeve gasket
88069	73	Washer
88220-16	74	Balancer connection
88175	75	Internal frame cylinder
88176	76	Oil piston gasket
88177	77	Oil piston gasket ring
88178	78	Oil piston
88179	79	Female clutch
88180	80	Male clutch
88181	81	Dowel
88182	82	Reverse spring
88183	83	Stroke adjustment connector
88184	84	Stroke adjustment connector O'ring
88185	85	Pneumatic motor
88186	86	Air distributor

Mandrel Selection

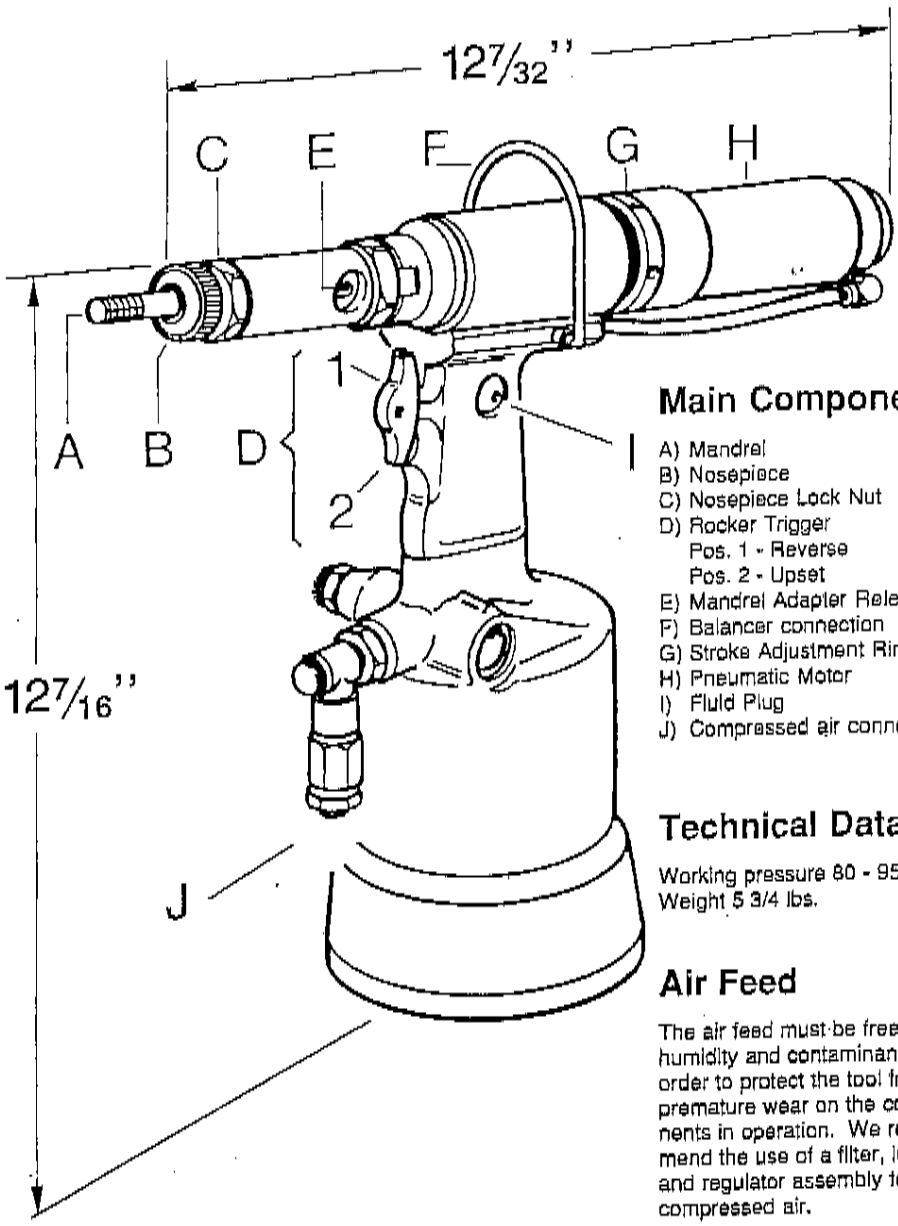
88187	4-40 mandrel
88188	6-32 mandrel
88189	8-32 mandrel
88190	10-32 mandrel
88191	10-24 mandrel
88192	1/4-28 mandrel
88193	5/16-18 mandrel
88194	5/16-24 mandrel
88195	3/8-16 mandrel
88196	3/8-24 mandrel
88197	1/2-13 mandrel
88198	1/2-20 mandrel
88206	M3.5-0.6 mandrel
88207	M4-0.7 mandrel
88208	M5-0.8 mandrel
88209	M6-1.0 mandrel
88210	M8-1.25 mandrel
88211	M10-1.5 mandrel

Nosepiece Selection

88199	#4 nosepiece
88200	#6 nosepiece
88201	#8 nosepiece
88202	#10 nosepiece
88203	5/16 nosepiece
88204	3/8 nosepiece
88205	1/2 nosepiece
88212	M3.5 nosepiece
88213	M4 nosepiece
88214	M5 nosepiece
88215	M6 nosepiece
88216	M8 nosepiece
88217	M10 nosepiece
88218	Spanner wrench
88219	Mandrel adapter pin

88145A

1/4-20 88160 88161



Main Components

A) Mandrel
B) Nosepiece
C) Nosepiece Lock Nut
D) Rocker Trigger
Pos. 1 - Reverse
Pos. 2 - Upset
E) Mandrel Adapter Release
F) Balancer connection
G) Stroke Adjustment Ring
H) Pneumatic Motor
I) Fluid Plug
J) Compressed air connection

Technical Data

Working pressure 80 - 95 P.S.I.
Weight 5 3/4 lbs.

Air Feed

The air feed must be free from humidity and contaminants in order to protect the tool from premature wear on the components in operation. We recommend the use of a filter, lubricator and regulator assembly for compressed air.

DISCONNECT FROM AIR SOURCE WHEN PERFORMING MAINTENANCE ON TOOL AND WHEN NOT IN USE.

General Notes

Model #150-SP pneumatic rivet nut setting tool handles Thread-Serts® in all sizes and metals. Rivet nuts in sizes 4/40 through 5/16 - 18/24 in all metals; 3/8 - 16/24 in aluminum and steel; 1/2 - 13/20 in aluminum only. Metric conversion kits also available.

Maintenance

ADDING HYDRAULIC FLUID

Put tool in a horizontal position. Using the 5 1/2mm hex key, (provided), remove fluid plug. Add fluid (using special container provided) until its level reaches the edge of the fill hole. (see fig. 1) Rock tool in horizontal position to remove any air pockets. Add more fluid if needed. IMPORTANT: Use only Walker Anti-Foam hydraulic fluid #93294 or equivalent. To insure proper installation of fastener, mandrels should be oiled frequently.

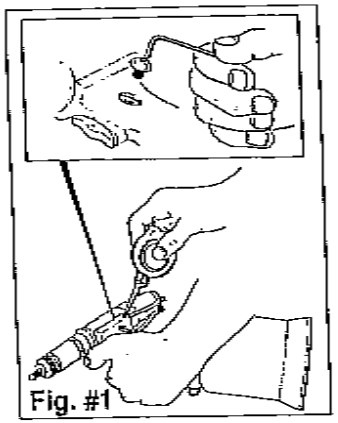


Fig. #1

Size Change

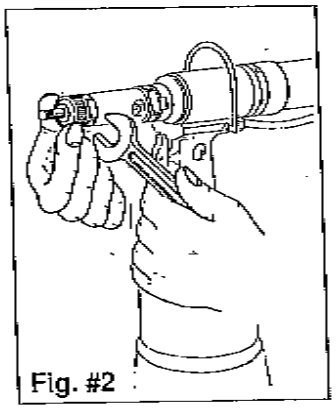


Fig. #2

REMOVING MANDREL AND NOSEPIECE

Working from the rear of the tool, use a 22mm wrench to turn nosepiece lock nut counter-clockwise until loose. (see fig. 2)

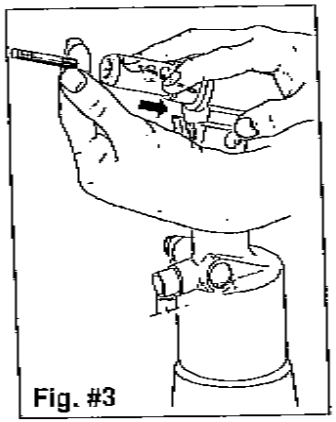


Fig. #3

Insert mandrel adapter pin through the mandrel release on frame head. Pull back on pin (towards rear of tool) to remove mandrel and nosepiece from tool. (see fig. 3)

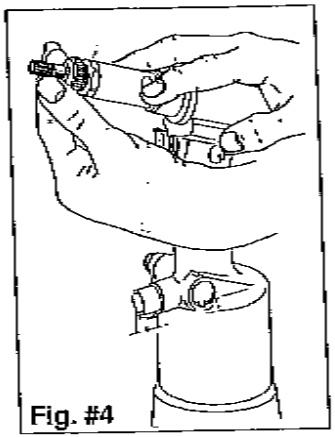


Fig. #4

REPLACING MANDREL AND NOSEPIECE

Using the same procedure as in fig. 3, insert the desired mandrel adapter. (Mandrel will stop at appropriate level when properly installed.) Thread nosepiece and lock nut back against frame head. Thread fastener onto mandrel, leaving .050 mandrel protruding. Unscrew nosepiece from frame head until it seats against flange of fastener. Tighten lock nut to frame head (while maintaining position of nosepiece). (see fig. 4)

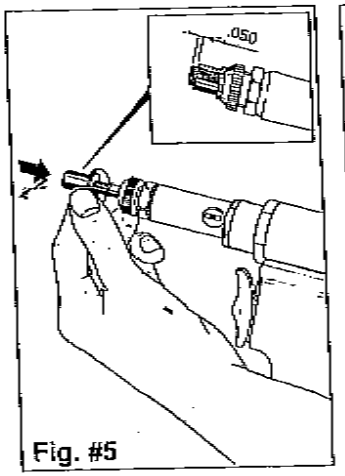


Fig. #5

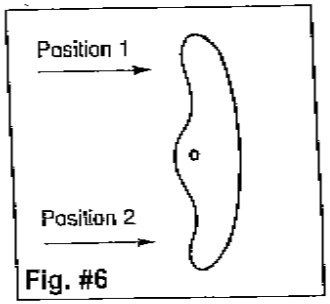


Fig. #6

Instructions

Install correct size mandrel and nosepiece in tool. (see fig. 2-4) Thread fastener (flange toward tool) on tool to the depth of 1 turn. Apply a light pressure and the fastener will automatically thread onto the mandrel. Make certain the flange of the fastener is touching the nosepiece and you have approximately .050 protrusion of the mandrel (see fig. 5). FOR PROPER STROKE LENGTH, turn the stroke adjustment ring (using the spanner wrench issued) clockwise until it stops. Insert into a sample application with desired thickness over fastener and actuate position 2 on rocker trigger (see fig. 6). Begin turning stroke adjustment ring counterclockwise until proper upset has been reached (see fig. 7). Actuate position 1 on rocker trigger to unthread mandrel from fastener. Your tool is now ready for production.

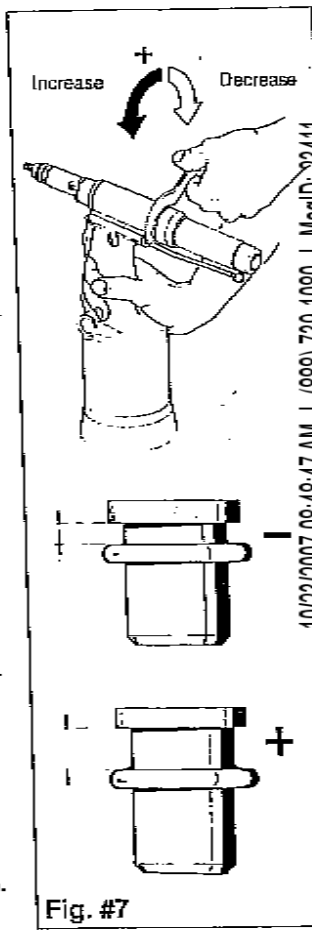


Fig. #7