EXP450 (EXP88)

SEMI-AUTOMATIC POWDER ACTUATED TOOL WITH POWER REGULATION AND SILENCER

OPERATORS MANUAL

WARNING!

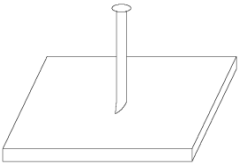
SEVERE INJURY CAN RESULT FROM FAILURE TO OBEY ALL INSTRUCTIONS IN THIS MANUAL

I、EXP88 DESCRIPTION

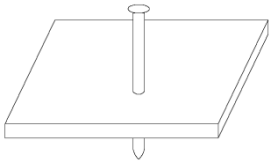
EXP88 is a powder actuated tool that uses 6.8X11M(.27 caliber), 10-shot strip loads. There are three key features in the tool. One is infinite regulation of the driving power between limits. Another is the cartridges advanced to the chamber automatically. The other is the silencer built in the EXP88. The tool is designed for installation into concrete or steel.

II、ACCEPTABLE BASE MATERIAL

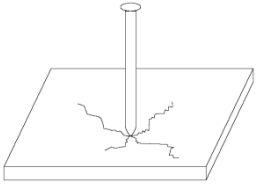
1. Always check material being fastened into for hardness before attempting any fastening operation.
2. Using a fastener as a center punch, strike the fastener against the work surface using an average hammer blow and check the results as shown below. (Wear safety goggles when performing this procedure.)



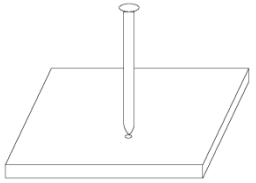
If the fastener point is flattened, the material is too hard for powder actuated fastening



If the fastener penetrates the material easily, the material is too soft.



If the fastener cracks or shatters, the material is too brittle.



If the fastener makes a small indentation into the material, the material is suitable for fastening.

Ⅲ、LOAD SELECTION

6.8/11M loads in 10 load magazines

Description / Color	Power Level (Power regulation possible on the tool)
#3 / GREEN	LIGHT
#4 / YELLOW	MEDIUM
#5 / RED	HEAVY
#6 / BLACK	MAGNUM

IV、SAFETY INSTRUCTIONS

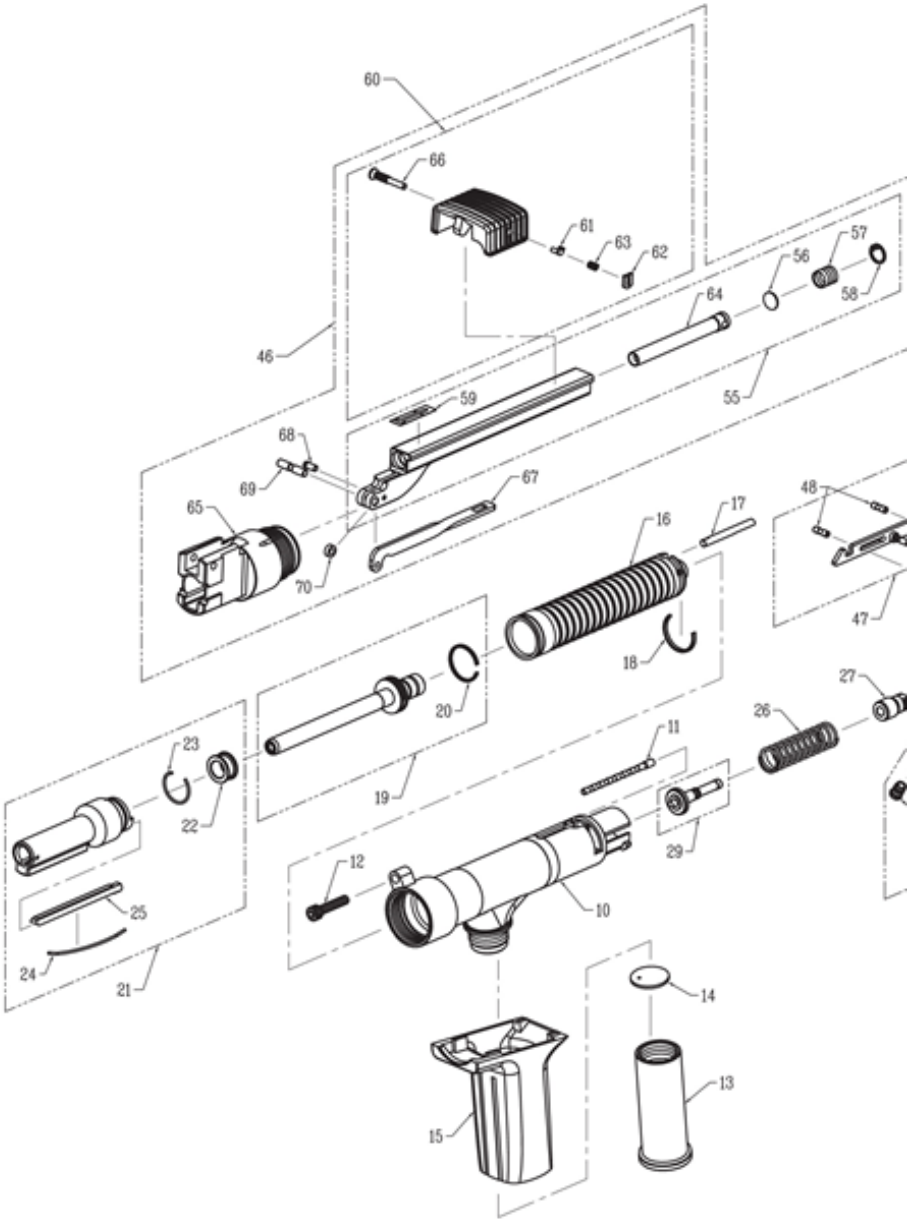
1. Never use the tool in a flammable or explosive area.
2. Have adequate ventilation at all times when discharging the tool.
3. Never load a tool unless it is to be used immediately.
4. Never place your any body part over fastener loading end of tool.
5. Always hold the tool perpendicular to and firmly against the work surface when making a fastening.
6. Always perform **the misfire procedure** if the tool fails to fire.

V、FASTENER & PISTON SELECTION

Material	Fastener	Piston Assembly Used
steel	(E)NK drive pins, EM8 threaded studs	452200 (standard)
	EM6 threaded studs (thread length 11mm)	452204
	EM6 threaded studs (thread length 20mm)	452201
concrete	NK drive pins, M8 threaded studs	452200 (standard)
	M6 threaded studs (thread length 11mm)	452204
	M6 threaded studs (thread length 20mm)	452201
	Internally threaded studs	452202

VI、FASTENING APPLICATIONS

- The correct fastener length required can be easily and quickly determined by choosing the embedment desired in the base material to achieve the best holding value, then trying the fastener length that is 3mm longer than the embedment depth.
- When fastening into **concrete,** always maintain a minimum spacing of 70mm from any free edges and 70mm between fastenings. The concrete thickness should be at least three times the intended penetration depth.
- When fastening into **steel,** always maintain a minimum spacing of 12mm from any edges and 40mm between fastenings.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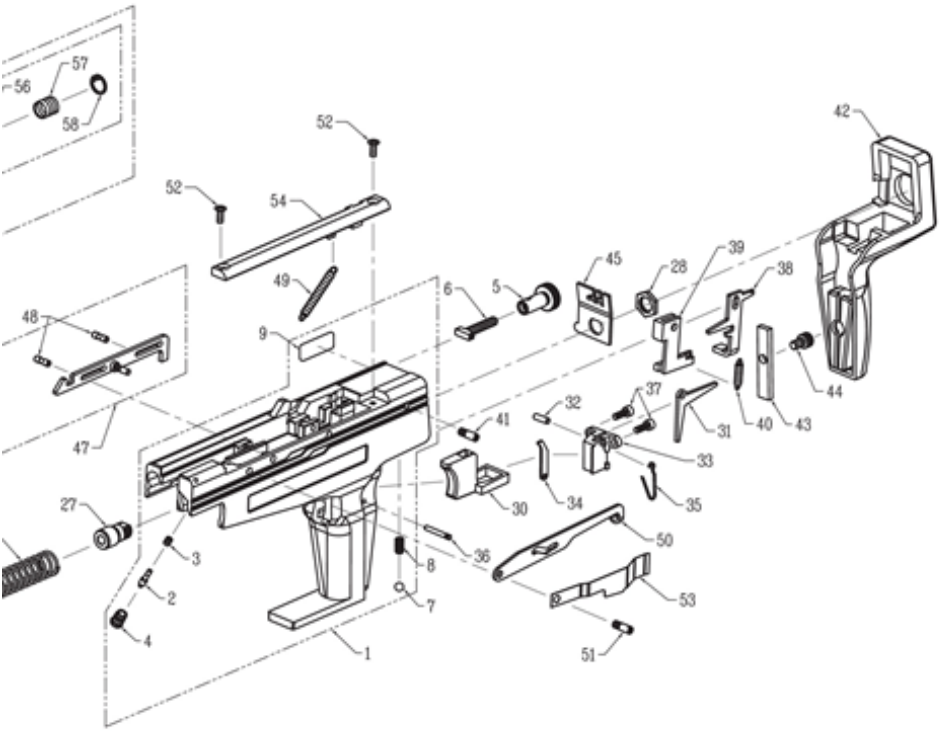
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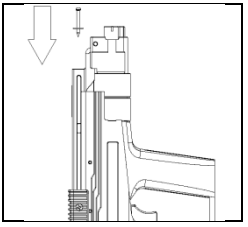
Ⅶ、EXP88 PARTS SCHEMATIC & LISTING

KEY NO.	PART NO.	DESCRIPTION
1	460010	HOUSING
2	460102	SPECIAL PIN
3	460103	SPECIAL PIN SPRING
4	460104	SPECIAL PIN SLEEVE
5	460205	THUMB WHEEL
6	460206	REGULATING SCREW
7	301013	STEEL BALL
8	460207	COMPRESSION SPRING
9	460208	DATA PLATE
10	461000	STEEL LINER
11	461005	REGULATING PIN
12	461006	ALLEN CAP SCREW
13	461100	SILENCER ASSEMBLY
14	461110	O-RING
15	461111	JACKET
16	462000	PISTON SLEEVE ASSEMBLY
17	462001	PRESSURE PIN
18	462002	RETAINING RING
19	*	PISTON ASSEMBLY
20	452220	PISTON RING
21	453000	GUIDE ASSEMBLY
22	453021	STOP RING
23	453022	RETAINING RING
24	453123	PRESSURE PIECE
25	453124	SPACHIP PIECE
26	464001	FINING PIN SPRING
27	464002	SPRING GUIDE
28	464003	NUT
29	464100	FIRING PIN ASSEMBLY
30	450005	TRIGGER
31	465101	RELEASE LEVER
32	465102	DOWEL PIN
33	465103	HOLDER
34	465104	MAGAZINE DETENT
35	465105	DETENT SPRING

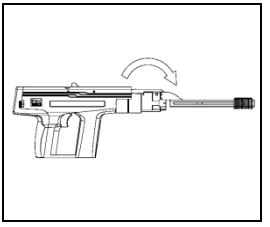
KEY NO.	PART NO.	DESCRIPTION
36	465106	DOWEL PIN
37	465107	SELF-TAPPING SPRING
38	465208	SEAR
39	465209	SEAR HOLDER
40	465210	TENSION SPRING
41	465211	SPECIAL SCREW
42	467001	RUBBER GRIP
43	467002	SUPPORT STRIP
44	467003	ALLEN CAP SCREW
45	467004	RETENTION PLATE
46	468001	COCKING LEVER ASSEMBLY
47	468100	CONNECTOR ASSEMBLY
48	468102	SWIVEL PIN
49	458154	TENSION SPRING
50	468201	TRANSPORT LEVER
51	468202	SPECIAL SCREW
52	458257	SCREW
53	458259	LEAF SPRING
54	468203	COVERPLATE
55	458300	COCKING LEVER
56	458363	DISC
57	458364	COMPRESSION SPRING
58	458365	CIRCLIP
59	458389	FASTENER SYMBOL
60	458400	COCKING GRIP ASSEMBLY
61	458466	FRICTION PIN
62	458467	BLOCKING PLATE
63	458468	COMPRESSION SPRING
64	458500	RAM ASSEMBLY
65	468301	BASEPLATE
66	458074	THREADED PIN
67	458075	LINK
68	458076	SPECIAL SCREW
69	458077	SWIVEL PIN
70	450081	CIRCLIP

*** see Sec. V for piston selection**

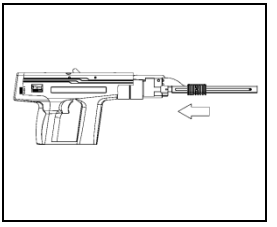
Ⅷ、TOOL OPERATION



1. Hold tool with muzzle upwards. Insert fastener point first in cocking lever and let it slide down.

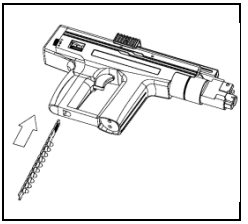


2. Pull firmly to release and swing over cocking lever till aligned with muzzle.

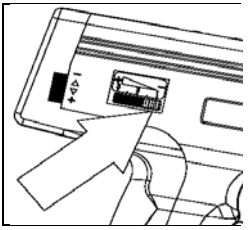


3. Pull back cocking grip on cocking lever as far as it goes. This positions fastener correctly in guide. Return grip and pivot cocking lever back to its original position.

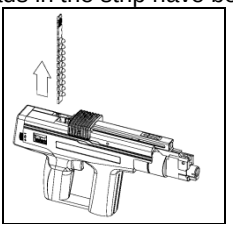
4. Insert a load strip into the tool from the bottom of the feed track housing until the bottom edge is flush with the bottom of the housing.



5. Check power regulation. Indicator in rear position(3) means the max. power



6. Hold tool perpendicular to work surface. Depress tool completely and squeeze trigger.
7. Repeat step 1 to 6 until all ten loads in the strip have been fired.
8. Pull the fired load strip from the top of the tool, and repeat the entire sequence until all desired fastenings are made.



9. After all desired fastenings have been made, remove the last load strip from the top of the tool and check the tool to make sure no fastener or other debris is left in the nosepiece, and that the load strip track is open and clear. Brush or blow out any debris.

IX- TROUBLESHOOTING

A、MISFIRE PROCEDURE

If the tool does not fire after squeezing trigger, continue to hold the depressed tool firmly against the work surface for at least 30 seconds. This will protect the operator and bystanders from injury in the event of a delayed firing. Then, carefully open the tool, remove the load strip, and put it into a container of water or other nonflammable liquid. Never carelessly discard or throw any unfired strip load into a trash container.

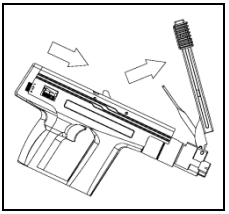
B、THE STOP RING IS DAMAGED BY OVERDRIVING A FASTENER

If the damaged stop ring jams on the piston, you may strike protruding piston sharply against a hard surface. This will separate piston and stop ring. Remove piston completely from fastener guide. Pull stop ring off fastener guide to one side and press in a new one.

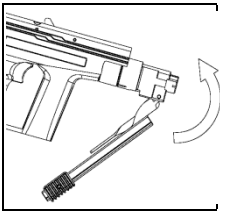
X、CLEANING & MAINTENANCE

A、TOOL DISASSEMBLY

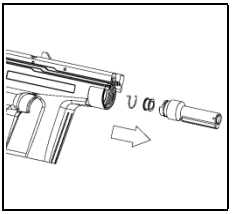
Make sure the tool is unloaded before starting the disassembly process.



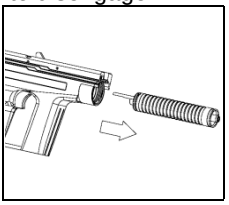
1. Pivot cocking lever forward. Press forward connector in housing while lifting catch (link) to disengage.



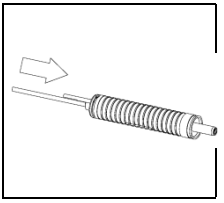
2. Screw off baseplate.



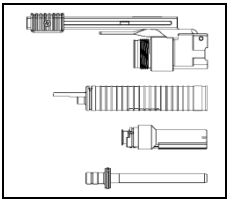
3. Pull fastener guide off piston sleeve.



4. Let piston sleeve slide out of housing.



5. Push piston out of piston sleeve using a 4 mm rod.



6. Parts disassembled are baseplate, piston sleeve, fastener guide & piston.

B、CLEANING & MAINTENANCE

Clean the parts shown below each day, and the housing each week. Please use a brush & cleaning oil to remove heavy build-up. If oil is used, be sure to wipe parts dry to minimize new residue build-up.

(1) inside of base plate and around thread (2) piston
(3) inside and outside of fastener guide (4) inside of housing
(5) inside and outside of piston sleeve

C、REASSEMBLY

1. Insert piston in piston sleeve.
2. Insert piston sleeve in housing. (Slot in piston sleeve must align with silencer)
3. Insert fastener guide in piston sleeve.
4. Slide over baseplate. (Recess in baseplate must align with raised part of fastener guide.)
5. Screw on baseplate as far as it goes, and then screw back until it snaps in place. Swing over cocking lever to resting position. Connector and link will automatically latch again.