



RIV938P
PULL-TO-PRESSURE TOOL
FOR RIVET NUTS FROM #4-40 TO 3/8" AND M3 TO M10
AND RIVET STUDS #8-32 TO 5/16" AND M4 TO M8

OPERATING INSTRUCTIONS



PennEngineering®



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**NOTE: RIV938P COMES WITHOUT NOSE ASSEMBLY KITS.
NOSE ASSEMBLY KITS MUST BE ORDERED SEPARATELY ACCORDING TO USER NEEDS.**

FEATURES:

***RIV938P FEATURES A VALVE-CONTROLLED MOTOR THAT ALLOWS GREATER EFFICIENCY IN SCREWING AND UNSCREWING
(6 BARS = SPEED 2250 rpm).***

1. Air piston return (without spring).
2. Power piston air outwardly, not through the piston.
3. Kit assembly with toothed ring nut (wrench no longer necessary).
4. Tie rods are now replaced by commercial screws.
5. Additional unscrewing in case the user installs the wrong insert, or in case it gets stuck due to an improper regulation.
6. One position trigger mechanism.
7. No adjustments are needed when there is a thickness change in materials.
8. No damages occurs to mandrel (or tie rod) if operations are repeated.
9. Lightweight.
10. Small dimensions.

ITEMS AVAILABLE ON REQUEST

RIV938P, RIV938, RIV939, RIV939P,
RIV939PMAX, RIV941

COMES WITH A SMOOTH BOTTOM (REF. A)

YOU CAN SEPARATELY ORDER THE BOTTOM +
THE MALE EYEBOLT (KIT REF. (B), CODE 4540500)
+ THE BALANCER KG. 2/3 (CODE 0523200)

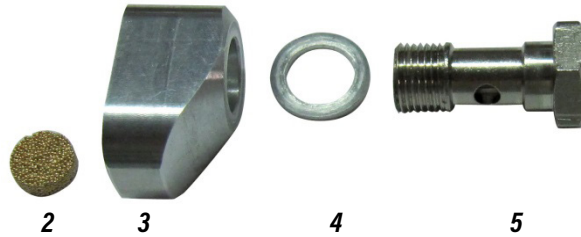
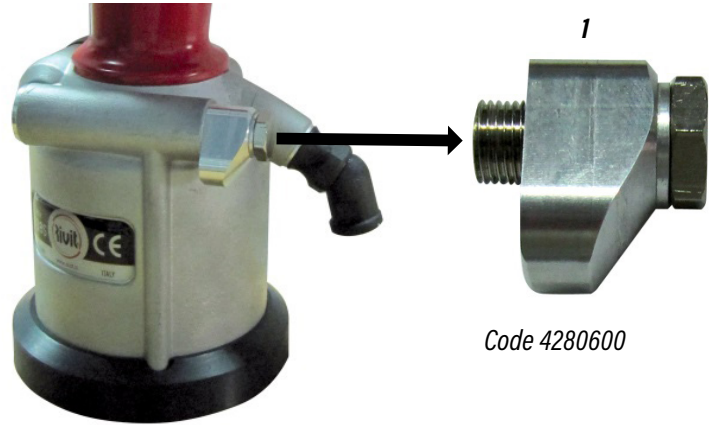



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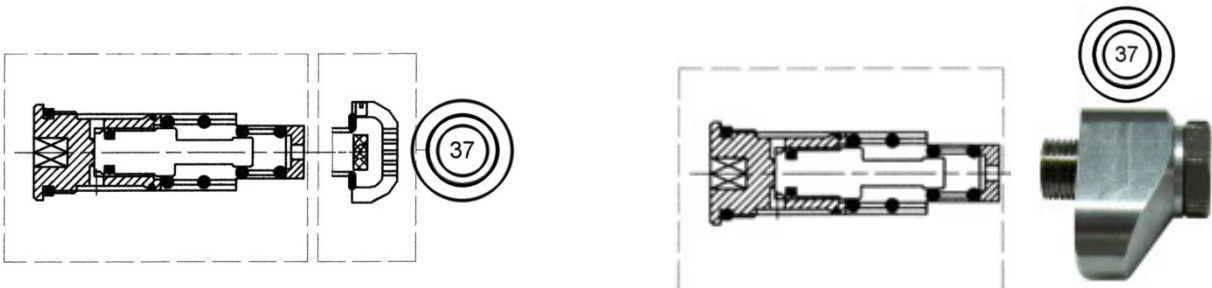
MOTOR RUBBER PROTECTION COVER (CODE 4796200)



RIV938P, RIV938, RIV939, RIV941 COMES WITHOUT THE ADJUSTABLE AIR SWITCH, WHICH IS AVAILABLE ON REQUEST (CODE 4280600)



REF.	CODE	QTY	DESCRIPTION
1	4280600	1	COMPLETE ADJUSTABLE AIR SWITCH KIT 
2	4280700	1	FILTER
3	4280900	1	BLOCK
4	3542800	1	SEAL WASHER
5	4281100	1	SPECIAL HEXAGONAL HEAD SCREW



KIT 37 DEFLECTOR IS FITTED AS STANDARD ON THE TOOL.
 IF NEEDED, AND AIR ADJUSTABLE SPECIAL SWITCH IS AVAILABLE ON REQUEST (CODE 4280600).

1 - GENERAL INFORMATION


MANUFACTURER

Established in 1973, Rivit S.r.l. produces and distributes Fasteners and Tools (tools for rivets and rivet nuts). With extensive technical experience, the company offers a wide range of products for fastening systems.

PHONE ++39 051 4171111	FAX ++39 051 4171129
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ASSISTANCE

For assistance with tool use or maintenance, or to order spare parts, please contact your local authorized dealer or Rivit S.r.l. directly. Please specify the identification/serial numbers of the tool, which are written on the outer casing.

 C 1	See section 3
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CERTIFICATION AND EC MARKING

The tool is manufactured in compliance with the European Directives, which are validated when the tool is put on the market. As the tool is not included in ENCLOSURE IV of DIRECTIVE 2006/42/EC, Rivit S.r.l. issues a self-certification to apply the EC marking.

WARRANTY

The warranty is valid for 12 months, as of the date indicated on the invoice.

Warranty covers replaced parts. Labor is not included.

The following are not covered by warranty: Standard accessories (see section 2.5) and tool damages caused by:

- Transport and/or handling.
- User error.
- Failed servicing/maintenance, as indicated in section 7 of this manual.
- Faults and/or breakages not attributable to tool anomalies.
- Normal consumption of consumables.

The warranty is deemed invalid in both the case of unauthorized tampering/replacements of tool components, and in the case of using accessories, tools or consumables different than those recommended by the manufacturer, which could cause potential injuries to the end user.

Rivit S.r.l. assumes responsibility if the tool is originally defective but is not responsible if the user fails to follow the provided instructions.

MANUAL STRUCTURE

This instruction manual must be read by the Customer to ensure the correct pre-arrangement, installation, and use of tool.

PURPOSE AND CONTENTS

This manual was developed to provide the Customer with the necessary information to not only use the tool correctly, but to also to manage it self-sufficiently and safely. It includes information concerning technical aspects, operation, maintenance, spare parts, and safety.

Users and Qualified Technicians must read the instructions thoroughly before using the tool.

If you have any questions, please contact Rivit S.r.l. for clarification.

RECEIVERS

This manual has been written for both the operators and the technicians who will service the tool.




Operators should not carry out procedures reserved to service and/or qualified technicians.

Rivit S.r.l. is not liable for any damage caused by failure to observe this rule.

PLACING OF THE MANUAL

This instruction manual must be kept near the tool, inside a dedicated container, and away from liquids or anything else that may damage its readability.

SYMBOLS USED

SYMBOL	MEANING	COMMENT
P ... 	HAZARD	This highlights a hazard with risk for the user.
A ... 	WARNING	This points out a warning/note on key functions or useful information. Read the texts indicated by this symbol with careful attention.
C ... 	CONSULT	Consult the instruction manual before carrying out a specific procedure.

2 - TOOL DESCRIPTION

OPERATING SYSTEM

The hydropneumatic RIV938P tool, with oil pressure adjustment, is designed to place the following fasteners:

- ▶ RIVSERT female rivet nuts (from M3 to M10)
- ▶ RIVBOLT male rivet nuts (from M4 to M10)

The hydropneumatic system and the mechanical components used inside the structure of the RIV938P, when compared with other riveting tools, results in greater reliability. Tool features reduce potential issues caused by the wear and tear of the components, and consequently the tool will last longer and perform better. The technical solutions adopted make the RIV938P more compact and lighter. The successful outcome is a very handy tool.

VIBRATION

When used correctly and in compliance with the instructions given, the tool does not produce dangerous vibration.

NOISE LEVEL

The tool is designed and manufactured to generate a very low noise level. The weighed equivalent of continuous acoustic pressure level A in the operator position is below 80 dB (A).

TECHNICAL DATA

The following table provides the technical data and features of the tool. Please refer to this table when contacting our Technical Assistance Department.

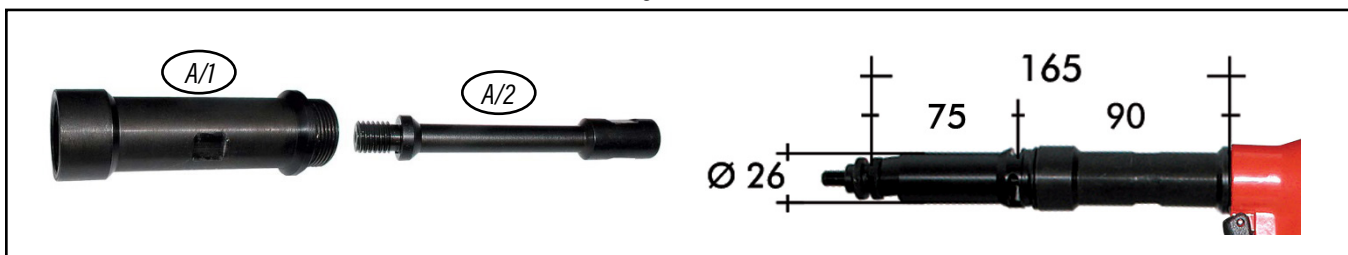
TECHNICAL DATA AND FEATURES

AIR WORKING PRESSURE	6 bar
MIN - MAX AIR PRESSURE	5 - 7 bar
AIR CONSUMPTION PER CYCLE AT 6 BAR	5 litri
MAX STROKE	6,5 mm
MAX FORCE	19.000 N
MOTOR SPEED (SCREWING)	2250 rpm a 6,0 bar
MOTOR SPEED (UNSCREWING CYCL)	2250 rpm a 6,0 bar
DIRECT UNSCREWING SPEED	2250 rpm a 6,0 bar
WEIGHT	2,100 Kg
VIBRATIONS	< 2,5 m/s ²
NOISE LEVEL	76 dB (A)

Figure 2.4-B



Figure 2.4-C




REF.	CODE	QTY	DESCRIPTION
Fig. 2.4-C	3531800	1	KIT938P-SPECIAL EXTENDED HEAD
A/1.	3446600	1	90 MM EXTENDED CONE
A/2.	3446900	1	90 MM INTERNAL EXTENDED CONE

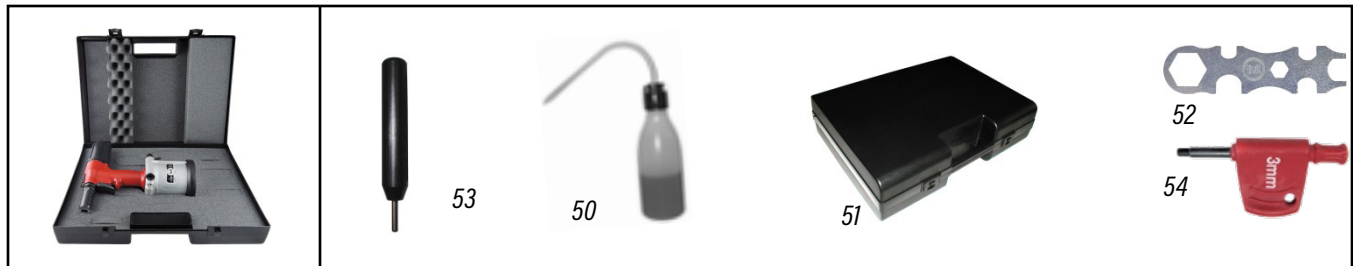
When ordering these two items, you can reach a total head extension of 165 mm (see figure 2.4-C)

NOSE ASSEMBLIES AND STANDARD ACCESSORIES

The nose assemblies stated below refer to standard tools.
 A special tool may require special parts, different to those listed.

Figure 2.5-A

REF.	CODE	QTY	DESCRIPTION	RIV938P- HYDROPNEUMATIC TOOL FOR RIVET NUTS WITH OIL PRESSURE ADJUSTMENT (FORCE)
Fig.2.5-A	4439600	1	RIV938P-HYDROPNEUMATIC TOOL FOR RIVET NUTS (IN CASE)	
50.	3064400	1	HYDRAULIC OIL TYPE ISO VG 32 100CC	
51.	0369800	1	PLASTIC CASE	
52.	0207300	1	UNIVERSAL KEY	
53.	2533800	1	EMERGENCY AND STROKE REGULATION PIN	
54.	4154200	1	REGULATION WRENCH MM. 3,0	
-	-	1	INSTRUCTION MANUAL	



2.5.1 - ACCESSORIES ON REQUEST

The tool can be supplied with different accessories according to the kind of fastener to be placed.

2.5.1.1 - FOR RIVSERT PLACING:

The user must purchase the following kits separately according to the fastener to be used.

NOSE ASSEMBLY PART NUMBERS

Thread Size	Part No. For Complete Insert Nose Assembly	Part No. For Replacement SHCS / Mandrel ⁽¹⁾
#4-40	4326700	MC-91251A078 (50/box)
#6-32	3755100	IN-14328 (100/box)
#8-32	3755500	IN-03190 (100/box)
#10-24	—	IN-08823 (100/box)
#10-32	3755900	IN-07085 (100/box)
1/4-20	3756100	IN-05336 (100/box)
1/4-28	—	IN-08057 (100/box)
5/16-18	3756300	IN-04153 (100/box)
5/16-24	—	IN-10834 (100/box)
3/8-16	3756700	IN-15776 (100/box)
3/8-24	—	IN-16488 (50/box)
M3	3441100	IN-06219 (200/box)
M4	3441200	IN-03023 (200/box)
M5	3441300	IN-03038 (200/box)
M6	3441400	IN-13128 (200/box)
M8	3441500	IN-21070 (100/box)
M10	3441600	IN-03088 (100/box)



(1) Replacement mandrels sold in box quantities shown above.

 A1	<p>Head RING NUT can be ordered separately (Part Number 0327700).</p>
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 A2	<p>COMPLETE SPECIAL HEAD (Part Number 4281000). Upon request, we can supply the head in different diameters and holes according to your needs.</p>
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KIT FOR BLIND THREADED INSERT #6-32



REF.	PART NUMBER	QTY	DESCRIPTION
1	3755100	1	KIT FOR BLIND THREADED INSERT #6-32 SOCKET HEAD CAP SCREW

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	3755200	1	HEAD WITH RING NUT FOR #6-32 SCREW
3	3753300	1	ADAPTER FOR #6-32 SCREW (HOLE Ø 3.6)
4	IN-14328 (100/box)	1	SOCKET CAP SCREW #6-32 X 1.5"
5	3753400	1	HEXAGONAL JOINT WITH SPRING FOR #6-32 SCREW

KIT FOR BLIND THREADED INSERT #8-32


REF.	PART NUMBER	QTY	DESCRIPTION
1	3755500	1	KIT FOR BLIND THREADED INSERT #8-32 SOCKET HEAD CAP SCREW

KIT COMPOSITION


REF.	PART NUMBER	QTY	DESCRIPTION
2	3755600	1	HEAD WITH RING NUT FOR #8-32 SCREW
3	3753800	1	ADAPTER FOR #8-32 SCREW (HOLE Ø 4.2)
4	IN-03190 (100/box)	1	SOCKET CAP SCREW #8-32 X 1.5"
5	3753900	1	HEXAGONAL JOINT WITH SPRING FOR #8-32 SCREW

KIT FOR BLIND THREADED INSERT #10-32



REF.	PART NUMBER	QTY	DESCRIPTION
1	37555900	1	KIT FOR BLIND THREADED INSERT #10-32 SOCKET HEAD CAP SCREW

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	3755600	1	HEAD WITH RING NUT FOR #10-32 SCREW
3	3471700	1	ADAPTER FOR #10-32 SCREW (HOLE Ø 5.0)
4	IN-07085 (100/box)	1	SOCKET CAP SCREW #10-32 X 2.25"
4	IN-08823 (100/box)	1	SOCKET CAP SCREW #10-24 X 2.25"
5	3472000	1	HEXAGONAL JOINT FOR #10-32 SCREW

KIT FOR BLIND THREADED INSERT 1/4-20


REF.	PART NUMBER	QTY	DESCRIPTION
1	3756100	1	KIT FOR BLIND THREADED INSERT 1/4-20 SOCKET HEAD CAP SCREW

KIT COMPOSITION


REF.	PART NUMBER	QTY	DESCRIPTION
2	3756200	1	HEAD WITH RING NUT FOR 1/4-20 SCREW
3	3754600	1	ADAPTER FOR 1/4-20 SCREW (HOLE Ø 6.5)
4	IN-05336 (100/box)	1	SOCKET CAP SCREW 1/4-20 X 2.25"
4	IN-08057 (100/box)	1	SOCKET CAP SCREW 1/4-28 X 2.25"
5	3754700	1	HEXAGONAL JOINT FOR 1/4-20 SCREW

KIT FOR BLIND THREADED INSERT 5/16-18

1



REF.	PART NUMBER	QTY	DESCRIPTION
1	3756300	1	KIT FOR BLIND THREADED INSERT 5/16-18 SOCKET HEAD CAP SCREW

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	3756400	1	HEAD WITH RING NUT FOR 5/16-18 SCREW
3	3755300	1	ADAPTER FOR 5/16-18 SCREW (HOLE Ø 8.1)
4	IN-04153 (100/box)	1	SOCKET CAP SCREW 5/16-18 X 2.25"
4	IN-10834 (100/box)	1	SOCKET CAP SCREW 5/16-24 X 2.25"
5	3755000	1	HEXAGONAL JOINT FOR 5/16-18 SCREW

KIT FOR BLIND THREADED INSERT 3/8-16

1



REF.	PART NUMBER	QTY	DESCRIPTION
1	3756700	1	KIT FOR BLIND THREADED INSERT 3/8-16 SOCKET HEAD CAP SCREW

KIT COMPOSITION



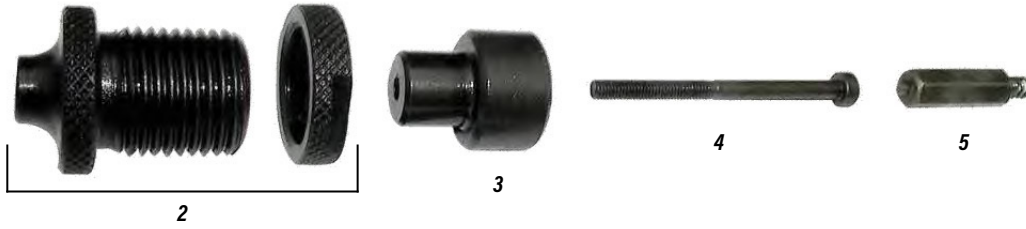
REF.	PART NUMBER	QTY	DESCRIPTION
2	3756800	1	HEAD WITH RING NUT FOR 3/8-16 SCREW
3	IN-15776 (100/box)	1	SOCKET CAP SCREW 3/8-16 X 2.5"
3	IN-16488 (50/box)	1	SOCKET CAP SCREW 3/8-24 X 2.5"
4	3755700	1	HEXAGONAL JOINT FOR 3/8-16 SCREW

KIT FOR BLIND THREADED INSERT M3



REF.	PART NUMBER	QTY	DESCRIPTION
1	3441100	1	KIT FOR BLIND THREADED INSERT M3 SOCKET HEAD CAP SCREW

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	3457500	1	HEAD WITH RING NUT FOR M3 SCREW
3	3457400	1	ADAPTER FOR M3 SCREW
4	IN-06219 (200/box)	1	SOCKET CAP SCREW M3X40 12.9 UNI5931/DIN912
5	3466200	1	HEXAGONAL JOINT WITH SPRING FOR M3 SCREW

On request, we can provide a longer screw than the standard one.

REF.	PART NUMBER	QTY	DESCRIPTION
4a	2193500	1	SOCKET CAP SCREW M3X50 12.9 UNI5931/DIN912

KIT FOR BLIND THREADED INSERT M4


REF.	PART NUMBER	QTY	DESCRIPTION
1	3441200	1	KIT FOR BLIND THREADED INSERT M4 SOCKET HEAD CAP SCREW

KIT COMPOSITION


REF.	PART NUMBER	QTY	DESCRIPTION
2	3470200	1	HEAD WITH RING NUT FOR M4 SCREW
3	3466300	1	ADAPTER FOR M4 SCREW
4	IN-03023 (200/box)	1	SOCKET CAP SCREW M4X55 12.9 UNI5931/DIN912
5	3470600	1	HEXAGONAL JOINT WITH SPRING FOR M4 SCREW

On request, we can provide a longer screw than the standard one.

REF.	PART NUMBER	QTY	DESCRIPTION
4a	4186400	1	SOCKET CAP SCREW M4X65 12.9 UNI5931/DIN912

KIT FOR BLIND THREADED INSERT M5



REF.	PART NUMBER	QTY	DESCRIPTION
1	3441300	1	KIT FOR BLIND THREADED INSERT M5 SOCKET HEAD CAP SCREW

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	3471800	1	HEAD WITH RING NUT FOR M5 SCREW
3	3471700	1	ADAPTER FOR M5 SCREW
4	IN-03038 (200/box)	1	SOCKET CAP SCREW M5X55 12.9 UNI5931/DIN912
5	3472000	1	HEXAGONAL JOINT FOR M5 SCREW

On request, we can provide a longer screw than the standard one.

REF.	PART NUMBER	QTY	DESCRIPTION
4a	4285500	1	SOCKET CAP SCREW M5X65 12.9 UNI5931/DIN912

KIT FOR BLIND THREADED INSERT M6


REF.	PART NUMBER	QTY	DESCRIPTION
1	3441400	1	KIT FOR BLIND THREADED INSERT M6 SOCKET HEAD CAP SCREW

KIT COMPOSITION


REF.	PART NUMBER	QTY	DESCRIPTION
2	3472200	1	HEAD WITH RING NUT FOR M6 SCREW
3	3472100	1	ADAPTER FOR M6 SCREW
4	IN-13128 (200/box)	1	SOCKET CAP SCREW M6X55 12.9 UNI5931/DIN912
5	3472500	1	HEXAGONAL JOINT FOR M6 SCREW

On request, we can provide a longer screw than the standard one.

REF.	PART NUMBER	QTY	DESCRIPTION
4a	4285300	1	SOCKET CAP SCREW M6X65 12.9 UNI5931/DIN912

KIT FOR BLIND THREADED INSERT M8



REF.	PART NUMBER	QTY	DESCRIPTION
1	3441500	1	KIT FOR BLIND THREADED INSERT M8 SOCKET HEAD CAP SCREW

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	3472700	1	HEAD WITH RING NUT FOR M8 SCREW
3	3472600	1	ADAPTER FOR M8 SCREW
4	IN-21070 (100/box)	1	SOCKET CAP SCREW M8X60 12.9 UNI5931/DIN912
5	3472900	1	HEXAGONAL JOINT FOR M8 SCREW

On request, we can provide a longer screw than the standard one.

REF.	PART NUMBER	QTY	DESCRIPTION
4a	2192800	1	SOCKET CAP SCREW M8X65 12.9 UNI5931/DIN912

KIT FOR BLIND THREADED INSERT M10

1



REF.	PART NUMBER	QTY	DESCRIPTION
1	3441600	1	KIT FOR BLIND THREADED INSERT M10 SOCKET HEAD CAP SCREW

KIT COMPOSITION


REF.	PART NUMBER	QTY	DESCRIPTION
2	0329000	1	HEAD WITH RING NUT FOR M10 SCREW
3	IN-03088 (100/box)	1	SOCKET CAP SCREW M10X60 12.9 UNI5931/DIN912
4	3441800	1	HEXAGONAL JOINT FOR M10 SCREW

On request, we can provide a longer screw than the standard one.

REF.	PART NUMBER	QTY	DESCRIPTION
3a	2428500	1	SOCKET CAP SCREW M10X70 12.9 UNI5931/DIN912
3b	4180100	1	SOCKET CAP SCREW M10X1.25X60 12.9 UNI5931/DIN912

OPTIONAL TOOLING

For Blind Threaded Stud Installation.

NOSE ASSEMBLY PART NUMBERS

Thread Size	Part No. For Complete Stud Nose Assembly
#8-32	4361900
#10-24	4362000
1/4-20	4362100
5/16-18	4362200
M4	3442300
M5	3442400
M6	3442500
M8	3442600



Stud Nose Assembly

Kits are sold separately. A different kit is required for each thread size.

The tool is available with different kinds of head assemblies.



HEAD RING NUT

Can be ordered separately. Part number 0327700.



KIT FOR BLIND THREADED STUD #8-32



REF.	PART NUMBER	QTY	DESCRIPTION
1	4361900	1	KIT FOR BLIND THREADED STUD #8-32

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	2561200	1	HEAD WITH RING NUT FOR #8-32 STUD (HOLE Ø 4.25)
3	4377000	1	TIE ROD FOR #8-32 STUD
4	3441800	1	HEXAGONAL JOINT

KIT FOR BLIND THREADED STUD #10-32



REF.	PART NUMBER	QTY	DESCRIPTION
1	4362000	1	KIT FOR BLIND THREADED STUD #10-32

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	2561300	1	HEAD WITH RING NUT FOR #10-32 STUD (HOLE Ø 5.1)
3	4376700	1	TIE ROD FOR #10-32 STUD
4	3441800	1	HEXAGONAL JOINT

KIT FOR BLIND THREADED STUD 1/4-20

1



REF.	PART NUMBER	QTY	DESCRIPTION
1	4362100	1	KIT FOR BLIND THREADED STUD 1/4-20

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	4376800	1	HEAD WITH RING NUT FOR 1/4-20 STUD (HOLE Ø 6.5)
3	4376900	1	TIE ROD FOR 1/4-20 STUD
4	3441800	1	HEXAGONAL JOINT

KIT FOR BLIND THREADED STUD 5/16-18

1



REF.	PART NUMBER	QTY	DESCRIPTION
1	4362200	1	KIT FOR BLIND THREADED STUD 5/16-18

KIT COMPOSITION



2



3



4



5

REF.	PART NUMBER	QTY	DESCRIPTION
2	2700500	1	HEAD WITH RING NUT FOR 5/16-18 STUD (HOLE Ø 8.1)
3	4316200	1	TOOTHED BLOCKING RING NUT
4	4376200	1	TIE ROD FOR 5/16-18 STUD
5	3441800	1	HEXAGONAL JOINT

KIT FOR BLIND THREADED STUD M4


REF.	PART NUMBER	QTY	DESCRIPTION
1	3442300	1	KIT FOR BLIND THREADED STUD M4

KIT COMPOSITION


REF.	PART NUMBER	QTY	DESCRIPTION
2	2561200	1	HEAD WITH RING NUT FOR M4 STUD
3	3441900	1	TIE ROD FOR M4 STUD
4	3441800	1	HEXAGONAL JOINT FOR M4 SOCKET CAP SCREW STUD

KIT FOR BLIND THREADED STUD M5



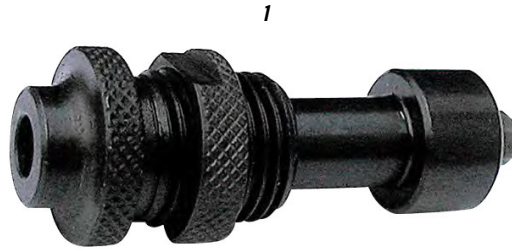
REF.	PART NUMBER	QTY	DESCRIPTION
1	3442400	1	KIT FOR BLIND THREADED STUD M5

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	2561300	1	HEAD WITH RING NUT FOR M5 STUD
3	3442000	1	TIE ROD FOR M5 STUD
4	3441800	1	HEXAGONAL JOINT FOR M5 SOCKET CAP SCREW STUD

KIT FOR BLIND THREADED STUD M6



REF.	PART NUMBER	QTY	DESCRIPTION
1	3442500	1	KIT FOR BLIND THREADED STUD M6

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	2561400	1	HEAD WITH RING NUT FOR M6 STUD
3	3442100	1	TIE ROD FOR M6 STUD
4	3441800	1	HEXAGONAL JOINT FOR M6 SOCKET CAP SCREW STUD

KIT FOR BLIND THREADED STUD M8

1



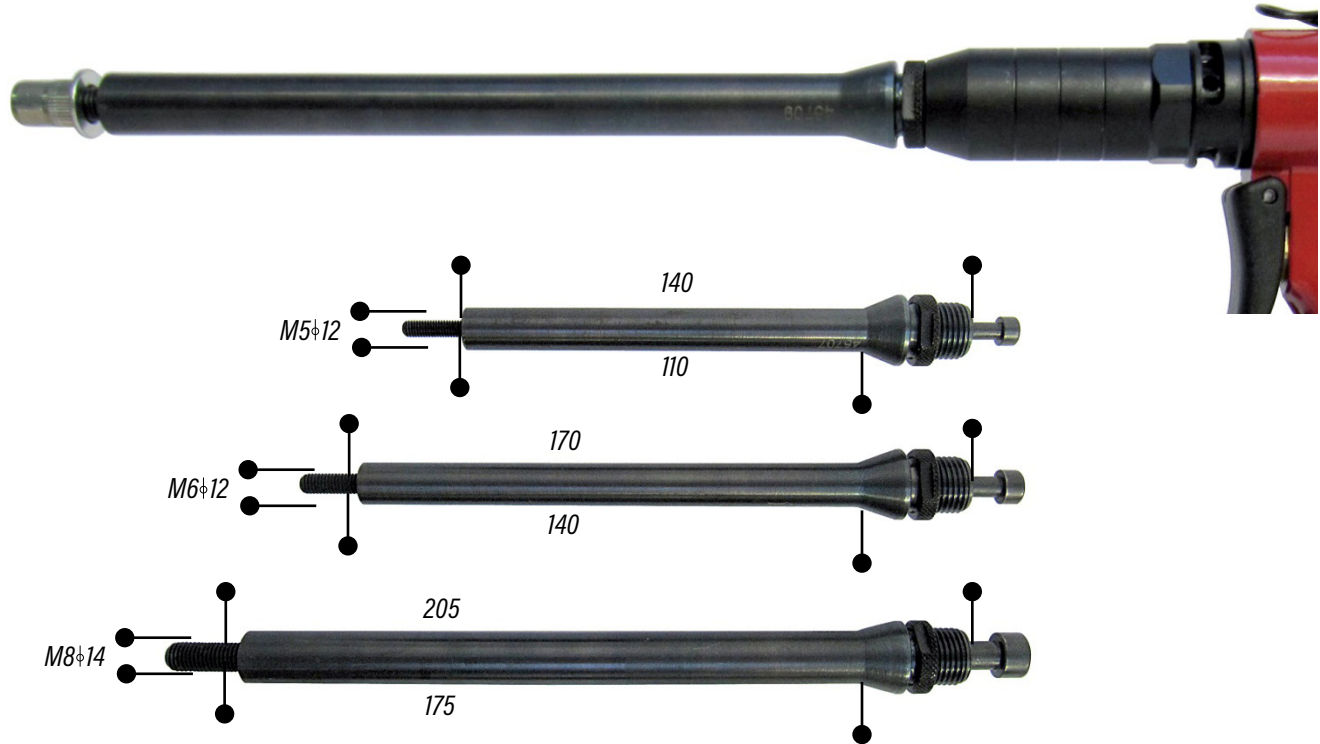
REF.	PART NUMBER	QTY	DESCRIPTION
1	3442600	1	KIT FOR BLIND THREADED STUD M8

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	2700500	1	HEAD WITH RING NUT FOR M8 STUD
3	4316200	1	TOOTHED BLOCKING RING NUT
4	3442200	1	TIE ROD FOR M8 STUD
5	3441800	1	HEXAGONAL JOINT FOR M8 SOCKET CAP SCREW STUD

2.5.1.3 - HEAD EXTENSIONS



Total length of the extension is obtained using the HEAD EXTENSION and the EXTERNAL CONE on the Tool.

REF.	CODE	QTY	DESCRIPTION
Kit 110/140	4572500	1	KIT-HEAD EXTENSION D.12X110/140MM FOR RIVSERT M5
	4570700	1	HEAD EXTENSION D.12X110/140 FOR M5 RIVSERT
	45513GR	1	SOCKET CAP SCREW UNI5931/DIN912 PLAIN M5X170

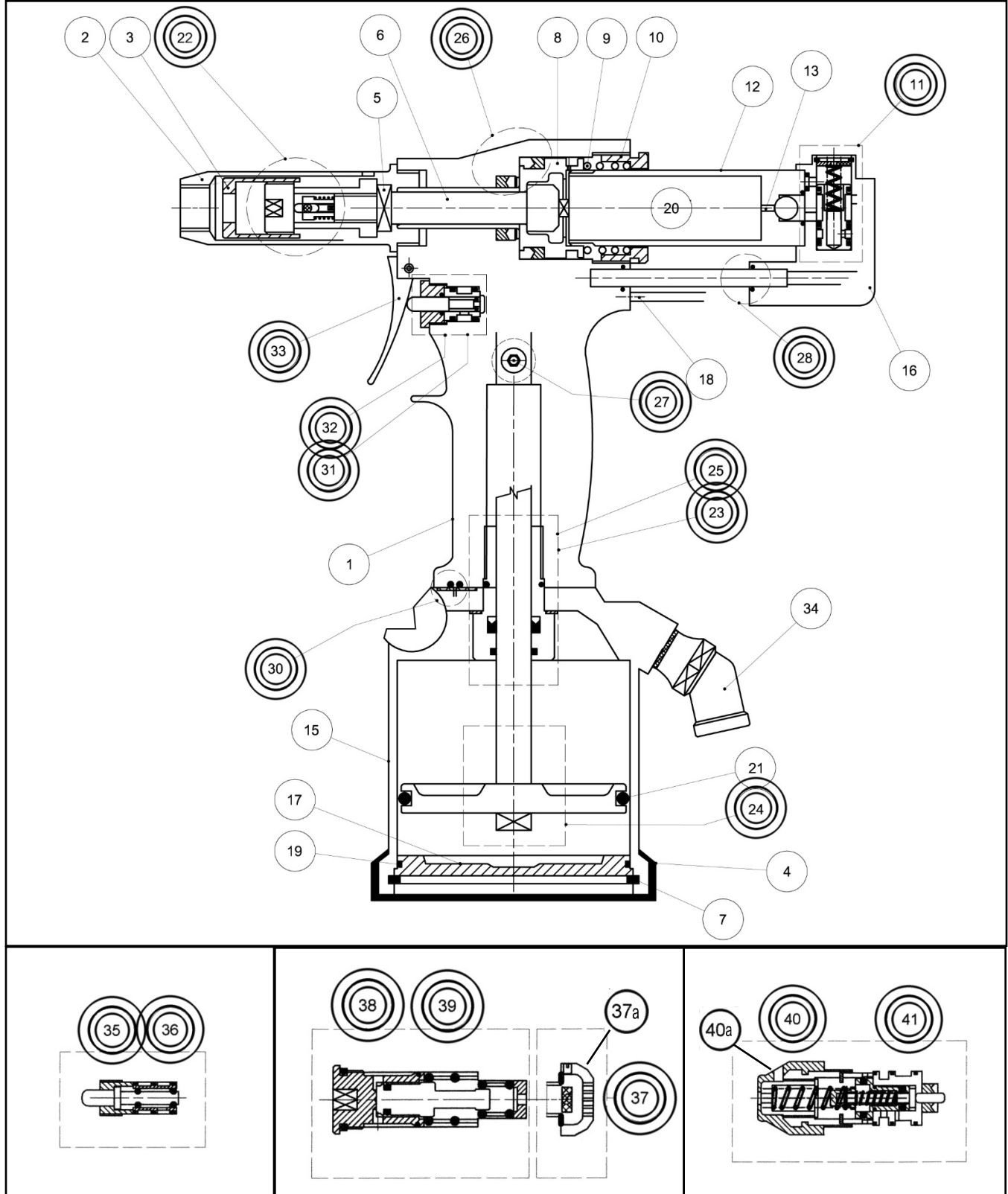
REF.	CODE	QTY	DESCRIPTION
Kit 140/170	4572600	1	KIT-HEAD EXTENSION D.12X140/170MM FOR RIVSERT M6
	4570800	1	HEAD EXTENSION D.12X140/170 FOR M6 RIVSERT
	45702GR	1	SOCKET CAP SCREW UNI5931/DIN912 PLAIN M6X200

REF.	CODE	QTY	DESCRIPTION
Kit 175/205	4572700	1	KIT-HEAD EXTENSION D.14X175/205MM FOR RIVSERT M8
	4570900	1	HEAD EXTENSION D.14X175/205 FOR M8 RIVSERT
	45514GR	1	SOCKET CAP SCREW UNI5931/DIN912 PLAIN M8X240

3 - SPARE PARTS

3.1 - SPARE PARTS

Figure 3.1-A Spare parts



See Figures 3.1-A

TABLE 3.1-A

REF.	CODE	QTY	DESCRIPTION	REF.	CODE	QTY	DESCRIPTION
1.	4833800	1	HANDLE CASING	22.	4174200	1	QUICK KIT WITH SPRING 
2.	3539900	1	OUTER CONE	23.	4177400	1	GASKET KIT 3 PIECES 
3.	4172400	1	TOOTHED BLOCKING RING NUT M3-M10	24.	4152500	1	PISTON - STEM - O-RING KIT 4 PIECES 
4.	4165100	1	RUBBER BASE	25.	4157300	1	COMPLETE STEM GUIDE KIT 5 PIECES 
5.	3098600	1	RING NUT	26.	4151000	1	PISTON GASKET KIT 2 PIECES 
6.	4151500	1	ROTATING PIN + SKIMMER	27.	4175700	1	OIL CAP KIT WITH O-RING 
6b.	3097900	1	SKIMMER WASHER	28.	4802600	1	AIR HOSES KIT WITH O-RING 6 PIECES 
7.	3093200	1	BOTTOM BLOCKING SNAP RING	30.	4152300	1	FLAT GASKET KIT + O-RING 
8.	4151300	1	OIL PISTON	31.	4151200	1	O-RING KIT 4 PIECES 
9.	4151700	1	SPRING	32.	4156900	1	KIT COMPLETE WITH O-RING 7 PIECES 
10.	4151800	1	RING NUT	33.	4153400	1	LEVER - PIN KIT 
11.	4803100	1	9 PCS KIT DISTRIBUTOR 	34.	3235500	1	SUPPLE AIR CONNECTION THREAD 1/4"+1/4" GAS + ALUMINIUM WASHER
12.	4803000	1	MOTOR CASING	35.	4157000	1	KIT COMPLETE WITH O-RING 8 PIECES 
13.	4426700	1	ROD				
14.	3096900	1	BALL	36.	4156600	1	O-RING KIT 5 PIECES 
15.	4152800	1	AIR BODY	37.	4291600	1	BAFFLE KIT 3 PIECES 
16.	4802800	1	DISPENSER WITH M3-M5 GRUB SCREWS	38.	4155800	1	O-RING KIT 7 PIECES 
17.	3762300	1	BOTTOM	39.	4157100	1	KIT COMPLETE WITH O-RING 13 PIECES 
18.	4802700	1	PIN	40.	4154400	1	GASKET KIT 7 PIECES 
19.	3762200	1	O-RING	41.	4157200	1	KIT COMPLETE 18 PIECES 
20.	3761000	1	MOTOR UNIT	-	4527100		SEE KIT PAGE 25
21.	3235600	1	O-RING	-	4796200	1	MOTOR RUBBER PROTECTION COVER 

These items may be ordered separately:

- Deflector ref. 37a (Code 4412900) belonging to KIT ref. 37 (Code 4291600)
- Manostat protection ref. 40a (Code 4412100) belonging to KIT ref. 40 (Code 4154400)

3.1.1 - QUICK KIT COMPLETE WITH SPRING

Figure 3.1-B



REF.	CODE	QTY	DESCRIPTION
Fig. 3.1-B	4174200	1	QUICK KIT WITH SPRING

3.1.1.1 - QUICK KIT COMPLETE WITH SPRING COMPOSITION

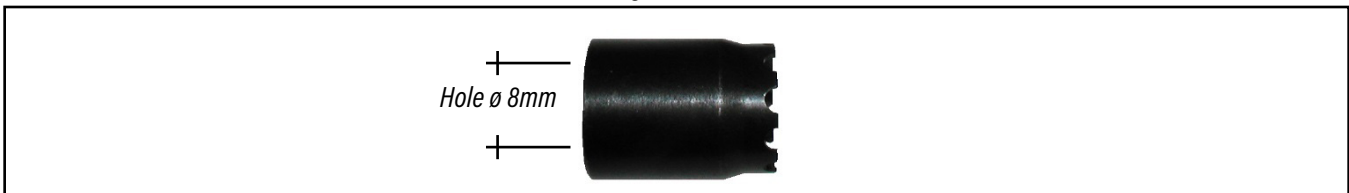
Figure 3.1-C



REF.	CODE	QTY	DESCRIPTION
A1	4172400	1	TOOTHED BLOCKING RING NUT M3-M10
A2	4176900	1	SCREW CONNECTION WITH SPRING

3.1.1.1.1 SPECIAL TOOTHED RING NUT FOR SOCKET CAP SCREWM8
NO NEED FOR REDUCTION (CODE 3472600) (OPTIONAL)

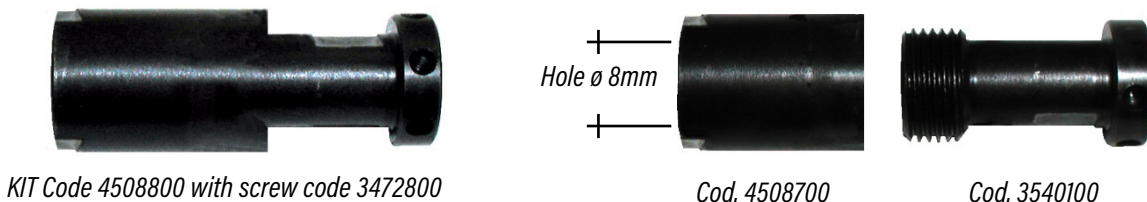
Figure 3.1 - D



REF.	CODE	QTY	DESCRIPTION
Fig. 3.1 - E	4280300	1	SPECIAL TOOTHED RING NUT, HOLE Ø 8

3.1.2 - HIGH RESISTANCE SPECIAL KIT FOR M8 WITH FIXED RING NUT

This kit was made for those who need to only use M8 rivet nuts.
The locking ring (Code 4508700) is made with high resistance material, so the head of the allen key does not press it down, and it also keeps a constant tolerance and increased durability.



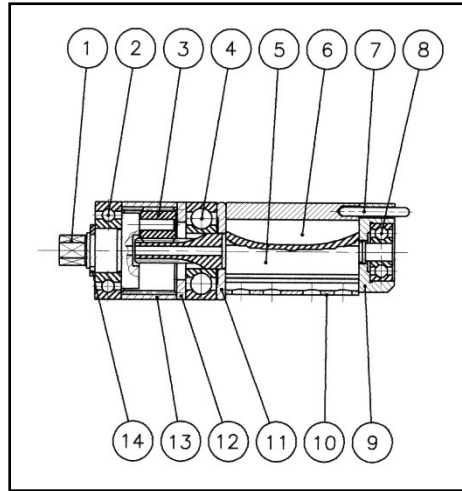
KIT Code 4508800 with screw code 3472800

Cod. 4508700

Cod. 3540100

3.2 - SPARE PARTS OF THE MOTOR UNIT (KIT 20)

Figure 3.2-A Motor spare parts



REF.	CODE	QTY	DESCRIPTION
Fig. 3.2-A	3761000	1	MOTOR UNIT (20)

REF.	CODE	QTY	DESCRIPTION	REF.	CODE	QTY	DESCRIPTION
1.	3763400	1	PLANET WHEEL HOLDER	8.	3327300	1	BEARING
2.	3763300	1	BEARING	9.	3327400	1	REAR PLATE
3.	3763200	3	PLANET WHEEL	10.	3327000	1	STATOR
4.	3327500	1	BEARING	11.	3326900	1	FRONT PLATE
5.	3523400	1	ROTOR	12.	3763700	1	SPACER
6.	3327100	5	FIN	13.	3763600	1	CROWN WHEEL
7.	3327200	1	ROLLER	14.	3763500	1	SNAP RING

NOTE: When placing an order, please indicate the REF. number and DESCRIPTION.

3.3 - ORDERING SPARE PARTS

Only local authorized dealers should repair the tool. For assistance, contact the Technical Assistance Service of Rivit S.r.l., where a qualified engineer will assist you. To order spare parts listed above, follow the instructions in section 1.2.

4 - SAFETY

4.1 - GENERAL WARNINGS

The operator should carefully review the information presented in this manual, especially with regards to the safety precautions outlined in this section:

- The tool should be used only by trained personnel.
- The tool and the work area should be kept clean and tidy.
- The tool should be rested upright on the rubber base on a flat surface to prevent it from dropping.
- The tool should only be used in normal psychophysical conditions.
- The user must wear suitable clothing, taking care to avoid entanglement of loose parts, ties, long hair, cleaning rags etc. in the tool itself.
- When using the tool, safety glasses are required both by the operator and others in the vicinity to protect against fastener ejection. We also recommend wearing gloves when using the tool.
- The user should use the accessories supplied and indicated in the Servicing section (see section 7) when servicing and/or adjusting the tool.
- The plates applied on the tool by Rivit S.r.l. should not be removed or altered.
- Unauthorized personnel should not touch the tool.
- Make sure the air supply hoses are correctly sized for use.
- Do not drag the tool by the hose when it is connected to the power supply. Keep the hose away from heat sources and sharp objects.
- Remember to remove service or adjustment keys after completing repair and/or adjustment jobs.
- Before disconnecting the compressed air hose from the tool, make sure it is not pressurized.
- Tool repairs and cleaning jobs must be carried out with the tool disconnected from the power supply.
- When filling with oil, only use fluids with the characteristics indicated herein.
- If you accidentally spill oil on your skin, rinse and wash thoroughly with water and alkaline soap.
- It is recommended to use a safety balance to support the tool.
- Pay attention to potential risk of whiplash with the air supply hoses.
- Do not operate the tool when it is directed towards any person(s) or the operator.

4.2 - INTENDED USE

The tool is designed exclusively to be used with rivet nuts as described in section 2.1: female type (i.e. Rivit RIVSERT) with thread between M3 and M10, and male rivet nuts (i.e. Rivit RIVBOLT) with thread between M3 and M10.

4.3 - OPERATING CONDITIONS

The tool shall not be used:

- For purposes different to those listed in previous section 4.2.
- In explosive or aggressive atmosphere, or when there is an excessive amount of dust or oil in the air.
- In an atmosphere subject to the risk of fire.
- When it is exposed to weather conditions.

4.4 - RESIDUE RISKS

During the normal working cycle and when servicing the tool, operators are exposed to some residue risks which, due to the nature of the operations to be carried out, cannot be completely eliminated.

- There is risk of breakage of the supply hose because it contains compressed air. It is crucial to not exceed the maximum pressure indicated in the technical data (see section 2.5).

4.5 - IDENTIFICATION/SERIAL NUMBER



5 - INSTALLATION

5.1 - TRANSPORT AND HANDLING

The tool can be hand carried. It is recommended that you store the tool in its case after use.

 A 5	Damages to the tool caused during transport and/or handling are not covered by WARRANTY. Repairs or replacements of damaged parts are at the Customer's expense.
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5.2 - STORAGE

If you are not going to use the tool for a long time, put it away according to these recommendations:

- Store the tool indoors.
- Protect the tool from impacts and stresses by keeping it in its case.
- Protect the tool from damp and excessive thermal excursions.
- Keep the tool away from corrosive substances.

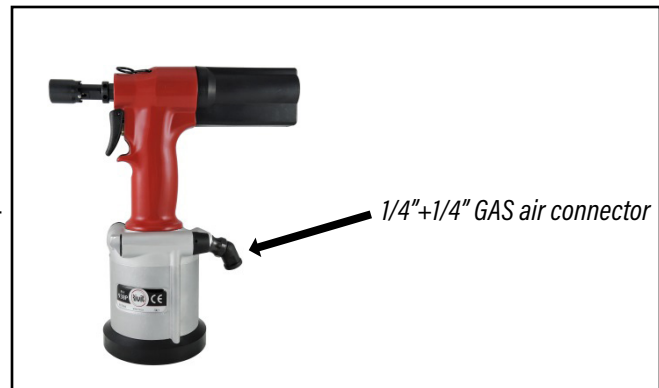
5.3 - CONNECTIONS

To avoid problems when starting the tool, we recommended you observe the following:

5.3.1 - PNEUMATIC

The pneumatic line is connected by mean of a quick-release coupling hose to be attached to the supple air connection, thread 1/4" +1/4" gas, supplied with the tool.

The air supply hose must be flexible and must meet the safety requirements of the pressurized products.



5.4 - AIR SUPPLY

To prevent the early wear of the tool's moving components, the air supply line must be free from dirt and dampness. We recommended using dry air: i.e. not greased.

5.5 - PRELIMINARY CHECKS

Before putting the tool into service, please make the following inspections and checks to prevent errors or accidents while starting it:

- Make sure the tool has not been damaged during transport.
- Check that the compressed air hose is correctly connected to the air supply line.
- Check that the tool turns freely and that the motor runs freely

6 - OPERATION

6.1 - OPERATORS


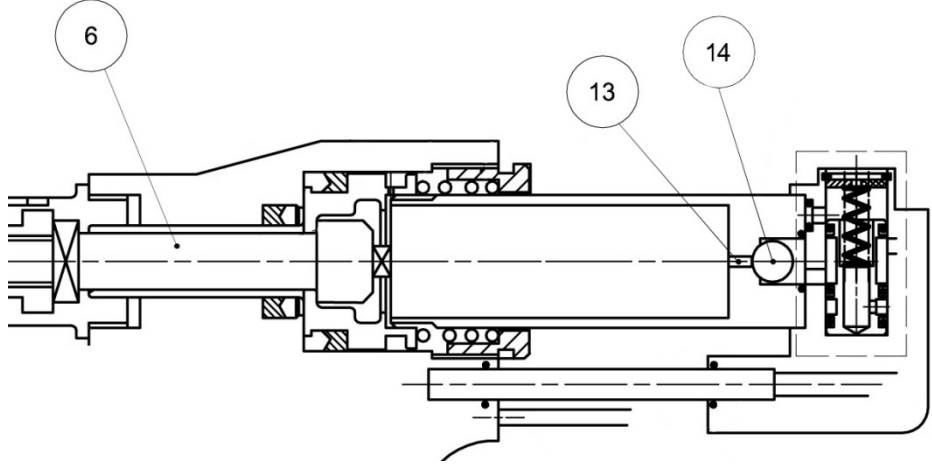
The tool is designed to be used by one operator only.

Tool operators must satisfy the requirements stated hereafter (or they must be informed and trained accordingly).

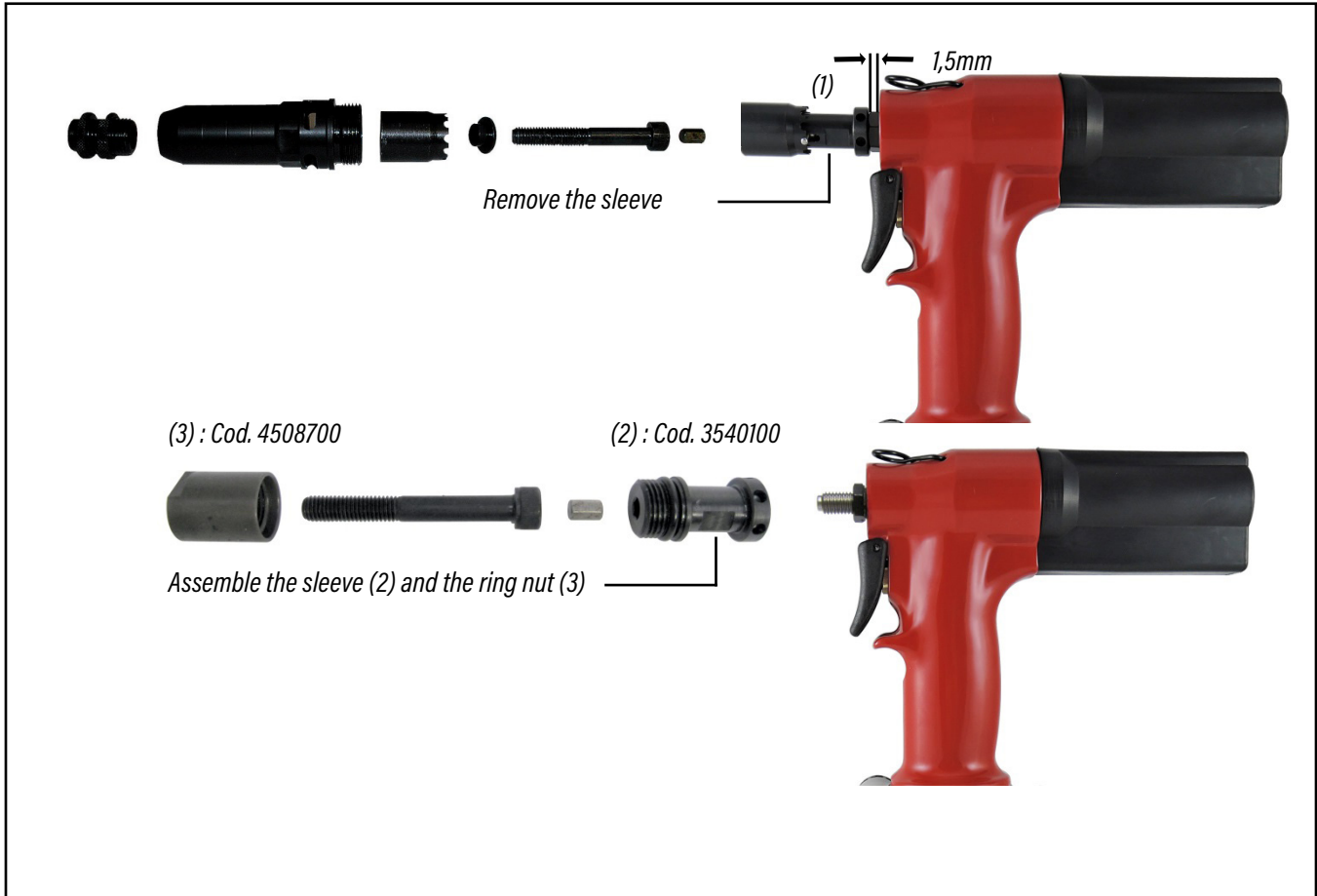
They must be aware of the manual herein and of all information relevant to safety:

- They must have some general and technical education, to a degree that they can understand the manual and interpret the drawings and diagrams correctly.
- They must be familiar with hygienic rules, and with the industrial-safety and technological instructions.
- They must have overall knowledge of the line and the factory in which the tool is installed.
- They must know what to do in case of emergency and know where to find the individual protection means and how to use them correctly.

In addition to the above-mentioned requirements, the service technicians must also have appropriate technical training.

<p>P1</p> 	<p>MOTOR SCREWING</p> <p>When the rotating pin (6 Code 4151500) is broken and you replace it, the motor may rotate continuously. This means that the shaft (13 Code 4426700) is too long; in this case, it will have to be shortened by a few tenths to obtain the closure of the ball (14 Code 3096900). When the air is on, the shaft shall have no end float.</p> <p>Unlike the situation above, if the shaft is too short it must be replaced with a new one - fitting it without end float, with the air on, in order to obtain the closure of the ball (14 Code 3096900).</p> 
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**6.2 REPLACEMENT OF STANDARD KIT WITH HIGH RESISTANCE SPECIAL ONE, FOR M8 ONLY (CODE 4508800) WITH FIXED RING NUT:
REPLACE TOOTHED RING NUT (1) WITH THE FIXED ONE (2) + (3) (see section 3.1.2)**



6.3 - TOOL PREPARATION AND SCREW REPLACEMENT


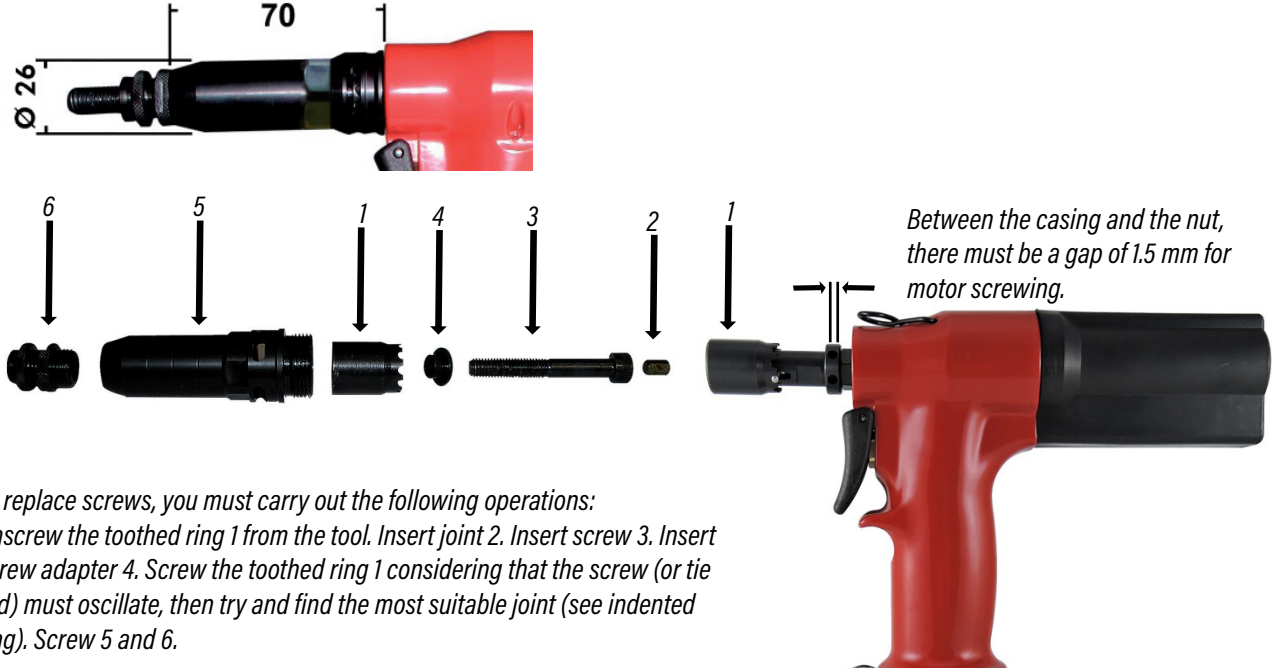
 P 2	<p>Warning: Tool setting and screw replacement must be carried out with the tool disconnected from the air supply line.</p>
---	---

Figure 6.2 - A



Between the casing and the nut, there must be a gap of 1.5 mm for motor screwing.

*To replace screws, you must carry out the following operations:
 Unscrew the toothed ring 1 from the tool. Insert joint 2. Insert screw 3. Insert screw adapter 4. Screw the toothed ring 1 considering that the screw (or tie rod) must oscillate, then try and find the most suitable joint (see indented ring). Screw 5 and 6.*

Figure 6.2 - B

TO UNSCREW THE KIT HOLDER QUICK RING:

Press the little pin with two fingers, sliding it inside the hole, and unscrew the ring simultaneously.

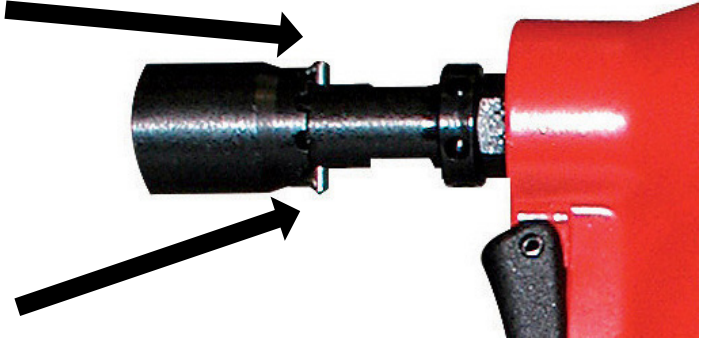
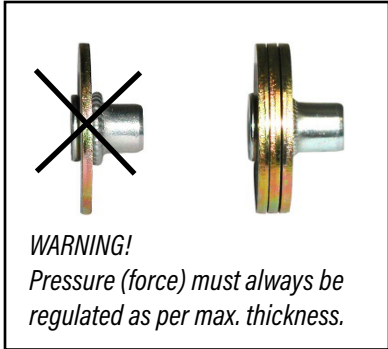


Figure 6.2-C



OIL (FORCE) PRESSURE ADJUSTMENT - SCREW THE INSERT

M3 *WHITE*

M4]
M5] *GREEN*

M6]
M8] *RED*
M10]

*Note: These settings are general guidelines to the operator.
Rivet nuts are not uniform as hardness and therefore some modifications may be necessary (+ or -).*

IMPORTANT

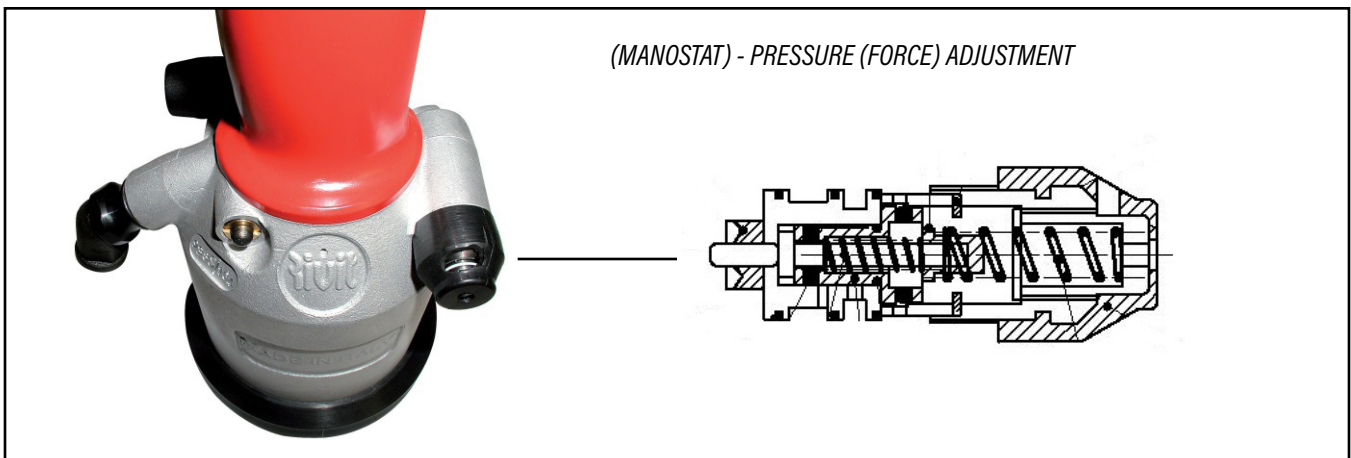
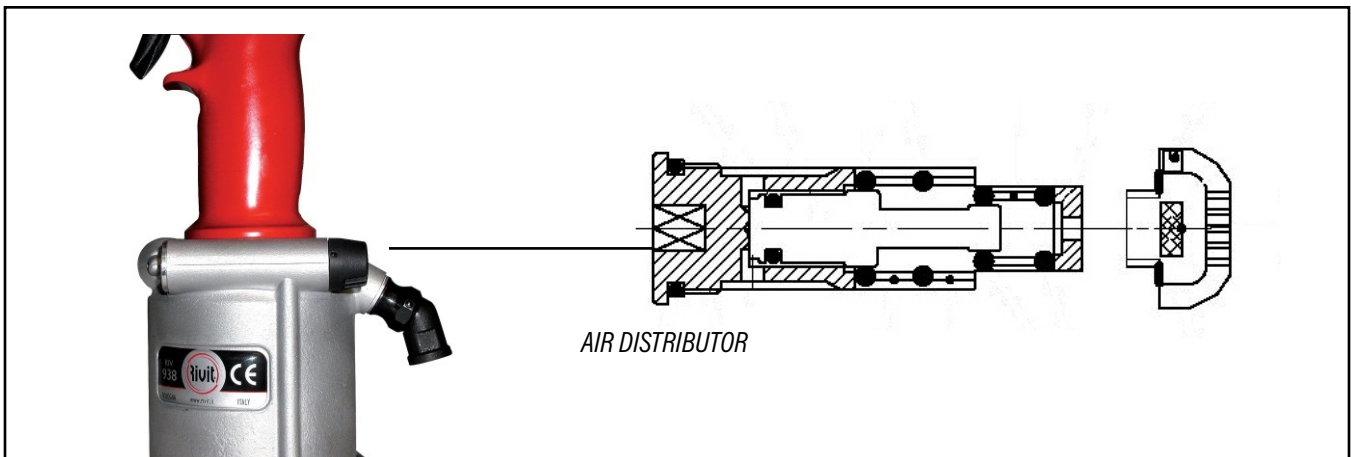
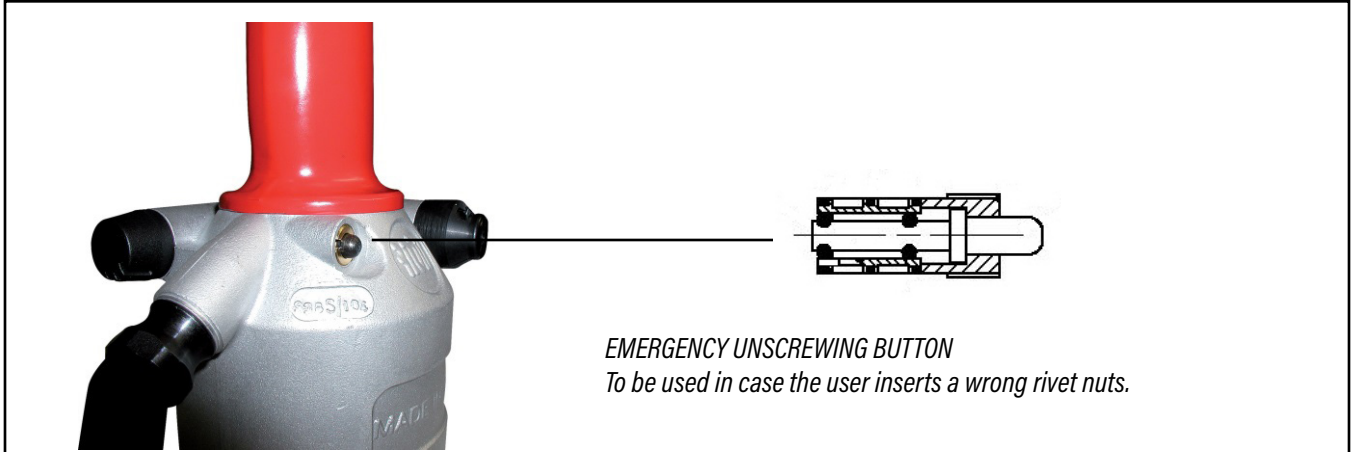
OIL (FORCE) PRESSURE ADJUSTMENT
Turning rightward, screwing the force increases.
Turning leftward, decreases.

WARNING

When the pressure (force) adjustment screw is entirely screwed, unscrewing can be done at a pressure not less than 6.5 bar (atm).

6.4 - INFORMATION

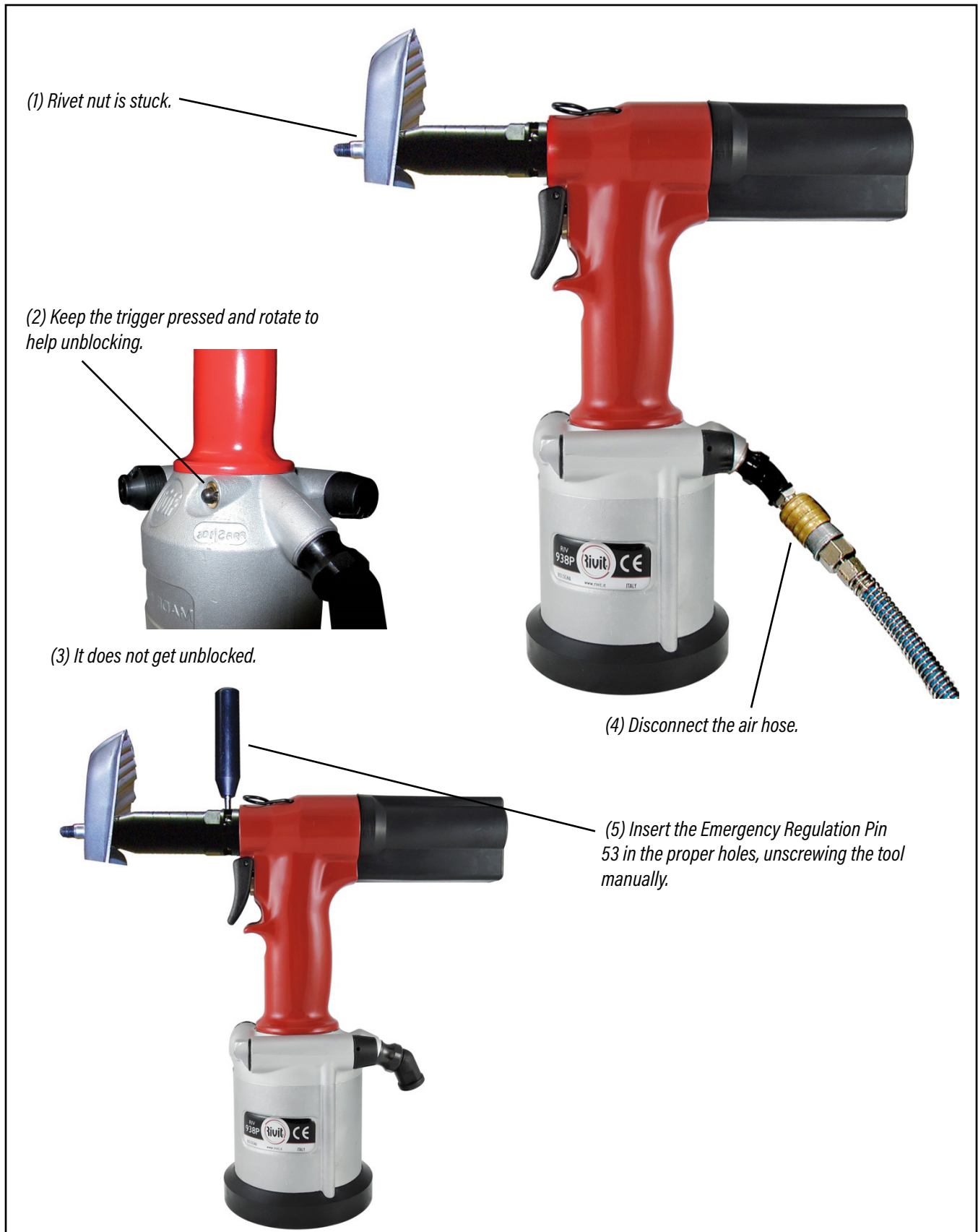
The Emergency Unscrewing Button is to be used when the rivet nut gets stuck, or when the inserted rivet nut is not the correct one and it must be changed.



WARNING!

- 1- The cycle of unscrewing may not occur when the rivet nut is not mounted on the screw (tie trod); the manostat isn't under pressure.
- 2- The not under pressure oil does not allow the manostat to do the unscrewing.

Figure 6.3-A



7 - SERVICING THE TOOL

7.1 - MAINTENANCE STATUS


Maintenance operations must be carried out with the tool stopped and disconnected from the pneumatic supply line.

Warnings:

- The tool maintenance instructions must be carefully followed.
- To ensure safety and perfect tool efficiency, we recommend using ORIGINAL spare parts.

7.2 - CLEANING

Completely clean and grease the tool on a periodic basis (depending on the type and frequency of use). At minimum, carry out cleaning operations at least once a year.

 <p>P 3</p>	<p>Shut off all sources of power to the tool.</p> <p>The operator must wear and use suitable personal protections before starting to clean the tool.</p>
--	--

7.3 - ORDINARY MAINTENANCE

See *Figure 6.2-A*.

To prevent stoppages and faults of the tool, regular maintenance (including inspections, checks and operations) must be scheduled to keep the following under systematic control:

- State of lubrication of the tool.
- State of wear of consumables.

7.3.1 REFILLING THE HYDRAULIC CIRCUIT WITH OIL

Figure 7.3-A

The hydraulic circuit needs to be refilled with oil after continuous use, and when you notice a reduction in the tool stroke.



Proceed as follows (see Picture 7.3-A):

- Disconnect the compressed airline.
- Completely unscrew the manostat (A) with relevant wrench 54.
- Unscrew cap 27.
- Put the tool in horizontal position and slowly pour in the hydraulic oil (ISO VG 32 type) 50 until the circuit is full.
- Screw cap 27.
- Connect the tool to compressed airline and start a couple of idle cycles (do not pull trigger), unscrew cap 27, and make sure the circuit is full of oil and no air bubbles are left inside.
- Wear gloves when managing the oil.

Do not throw the old oil outdoors. Dispose of it at your local waste disposal center.

Warning! If you accidentally spill oil on your skin, wash and rinse thoroughly with water and alkaline soap.

7.3.2 PARTS SUBJECT TO WEAR

Periodically check the state of wear of the rubber base, as this ensures tool stability. To order a new base from Rivit S.r.l., please indicate the year/serial number of the tool (see section 4.5).

Periodically check the state of wear of the screws and of the heads. If necessary, replace them as indicated in section 6.2.

Spare parts should be ordered exclusively from Rivit S.r.l., specifying the codes listed in section 3.1.

7.4 - MAINTENANCE KIT ON REQUEST

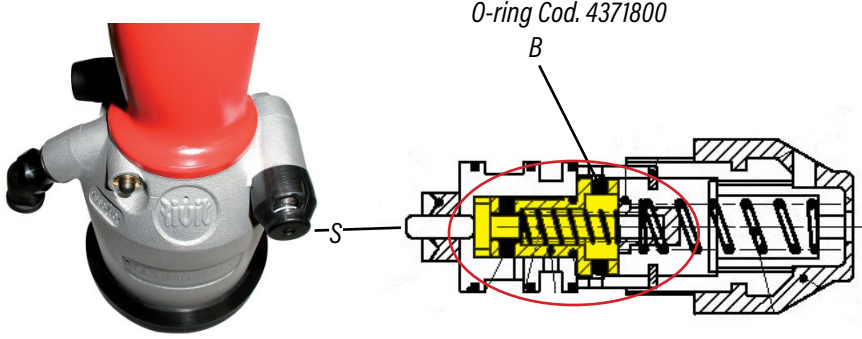

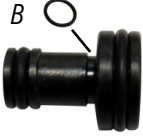


Follow the instructions below:

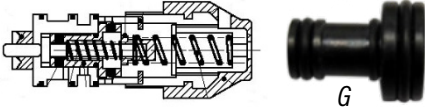
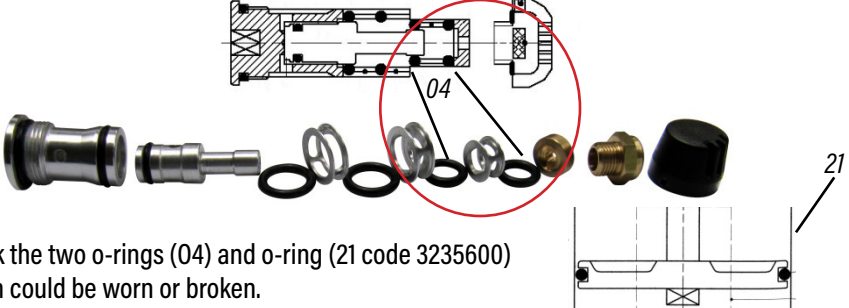
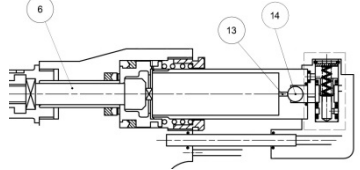
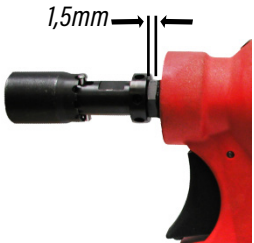
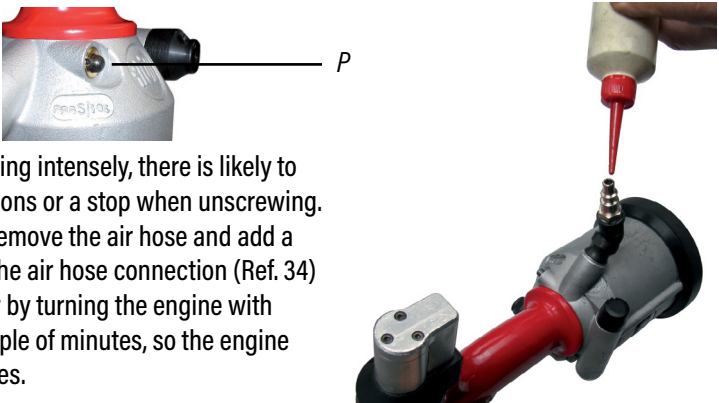



REF.	CODE	QTY	DESCRIPTION	
D.	4461800	1	MILLED CONE TO SCREW AND UNSCREW THE RING NUT (10)	
E.	4461900	1	BUSH FOR INTRODUCTION OF ROTATING PIN (6) FITTED WITH GASKET	
F.	4461700	1	THREAD PROTECTOR METAL FERRULE FOR INSERTION OF ROTATING PIN (6) to avoid damages to the gasket in the KIT (26)	
1.+ 3.	4380800	1	GUIDE BUSH + ALUMINIUM CYLINDRICAL PIN Ø 8X80 to insert Ø 9 lip seal, located at the bottom of the manostat (ref. C)	
2.	-	1	Ø 9 LIP SEAL GASKET (REF. C) belonging to KIT (41)	

8 - FAULT DIAGNOSIS

8.1 - POSSIBLE FAULTS

ISSUE	REMEDY
	
<p>Traction is not correctly performed.</p>	<p>It lacks oil (see section 7.3.1)</p>
<p>Unscrewing is not correctly performed.</p>	<p>If unscrewing is not correctly performed when inserting the rivet nut in the tie rod, and after pressing the trigger (A), there may not be enough oil. In this situation, add oil.</p>
<p>Unscrew without traction.</p>	<p>Or (B) broken: replace it.</p>  <p><i>O-ring Code 4371800</i></p>
<p>Slows the unscrewing after traction.</p>	<p>Working intensely, it loses greasing and tends to harden. Remove the piston (G) and grease.</p> 
<p>Replacing parts of the manostat.</p>	 <p>When you must work on the manostat:</p> <ol style="list-style-type: none"> 1. Remove air 2. Loosen the oil cap (27) to avoid the coming out of gasket (C). In case of replacement, use guide. (1). If after reassembling of all parts of the pressure switch, it does not work properly, o-rings (01, 02, 03) have not been correctly assembled: <ul style="list-style-type: none"> O-ring (02), when broken unscrews without making traction O-ring (03) makes traction but no unscrew O-ring (01) can leak air <p>Consequently, we recommend replacing all 3 o-rings (ORM 15x1) of the kit (ref. 41) code 4157200.</p>

ISSUE	REMEDY
The transition time from stroke to unscrewing slows.	Open the manostat and pull the piston out (G). Grease it and reassemble it. 
Air leaks from muffler (T).	Check the two o-rings (04) and o-ring (21 code 3235600) which could be worn or broken. 
MOTOR screwing.	When the rotating pin (6 Code 4151500) is broken and you replace it, it may happen that the motor rotates continuously, which means that the shaft (13 Code 4426700) is too long. In this case it will have to be shortened by a few tenths to obtain the closure of the ball (14 Code 3096900).  <p>Unlike the situation above, if the shaft is too short, it must be replaced with a new one. Fit it without end float, with the air on, in order to obtain the closure of the ball (14 Code 3096900).</p>
Quick kit assembly.	When assembling the quick kit (code 4176900), with air, make sure to create an axial space of 1.5mm between the lock nut and the end of the piston. 
Loss of revolution or stopping during unscrewing.	When you are working intensely, there is likely to be a loss of revolutions or a stop when unscrewing. It is necessary to remove the air hose and add a few drops of oil in the air hose connection (Ref. 34) and re-enter the air by turning the engine with button (P) for a couple of minutes, so the engine cleans and lubricates. 
Air leaks from air distributor.	If there is loss of air from the air distributor, the plate of the piston is broken. 

9 - FAULT DIAGNOSIS AND REPAIRS

9.1 - REPAIRS

To ensure the operational efficiency and safety of the tool, all repair jobs shall be completed by your local authorized dealer or by the Technical Assistance Service of Rivit S.r.l. (see section 1.2).

9.2 - REQUESTING ASSISTANCE

For any information concerning Use, Maintenance, Installation, or Repair, Rivit S.r.l. is at the Customer's full disposal for all inquiries. When making inquiries, we ask that the customer reference this manual (in particular, the instructions in section 1.2)

10 - DISMANTLING INSTRUCTIONS

10.1 - DISMANTLING INSTRUCTIONS

When demolishing the tool, please separate the plastic parts, which should be disposed of in compliance with current Regulations. As for the bulk metal part of the tool, separate the steel parts from the other metals or alloys and send them to be melted down and recycled.

Oil drained from the tool should not be disposed of outdoors. Please take used oil to your local authorized disposal center.

11 - ENCLOSED DOCUMENTS

11.1 - DECLARATION

The following declaration is enclosed:

- Declaration of Conformity to DIRECTIVE 2006/42/EC.

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