RIV939P

HYDROPNEUMATIC TOOL FOR RIVET NUTS FROM #4-40 TO 1/2" AND M3 TO M12

OPERATING INSTRUCTIONS

PennEngineering®

ATLAS®

North America: Danboro, PA USA • E-mail: atlas@pemnet.com • Tel: +1-215-766-5987 • Fax: +1-215-766-5988 • 877-682-2505 (USA Only)
Europe: Galway, Ireland • E-mail: europe@pemnet.com • Tel: +353-91-751714 • Fax: +353-91-753541
Asia/Pacific: Singapore • E-mail: singapore@pemnet.com • Tel: +65-6-745-0660 • Fax: +65-6-745-2400
Shanghai, China • E-mail: china@pemnet.com • Tel: +86-21-5868-3688 • Fax: +86-21-5868-3988

WARNING!
RIV939P COMES WITHOUT KITS.
KITS MUST BE ORDERED SEPARATELY ACCORDING TO USER NEEDS.

FEATURES
RIV939P FEATURES A VALVE-CONTROLLED MOTOR THAT ALLOWS GREATER EFFICIENCY IN SCREWING AND UNSCREWING (6 BARS = SPEED 2250 rpm).

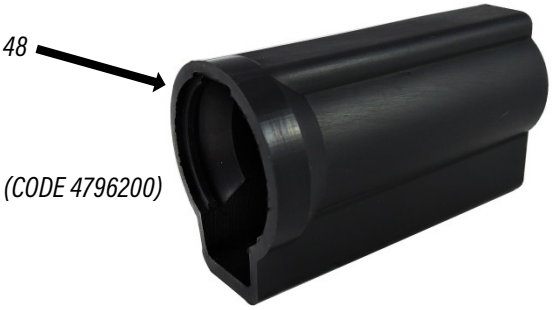
1. Air piston return (without spring).
2. Power piston air outwardly, not through the piston.
3. Kit assembly with toothed ring nut (wrench is not necessary).
4. Tie rods are now replaced by commercial screws.
5. Additional unscrewing in case the user unintentionally uses an unsuitable insert, or in 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 occur to mandrel (or tie rod) if operations are repeated.
9. Lightweight.
10. Small dimensions.
11. Handiness.

ITEMS AVAILABLE ON REQUEST

RIV938P, RIV938, RIV939, RIV939P,
RIV939PMAX, RIV941

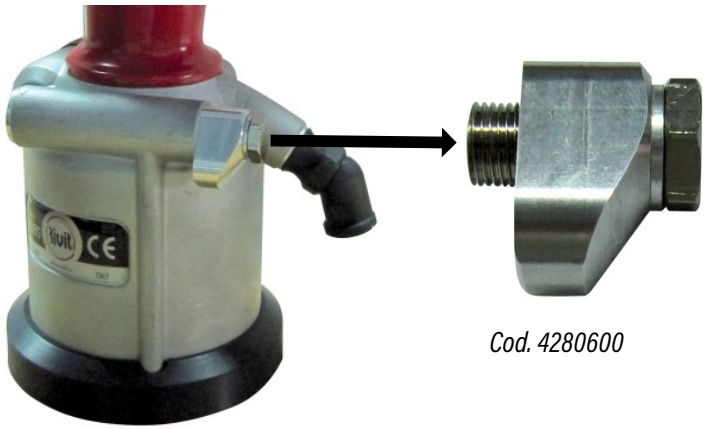
COMES WITH A SMOOTH BOTTOM (REF. A)

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

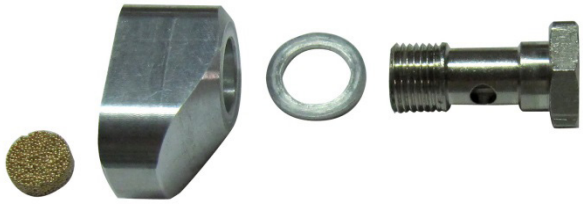


MOTOR RUBBER PROTECTION COVER (CODE 4796200)

RIV938, RIV938P, RIV939, RIV939P, RIV939PMAX, RIV941 COMES WITHOUT THE ADJUSTABLE AIR SWITCH, WHICH IS AVAILABLE ON REQUEST (CODE 4280600)

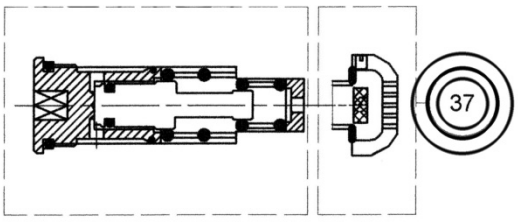


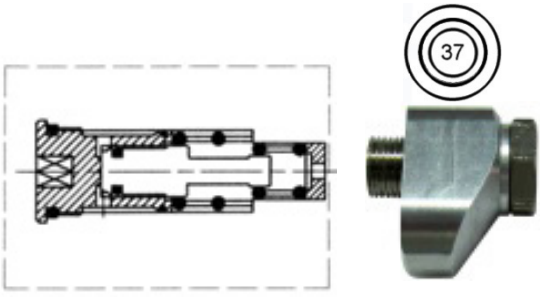
Cod. 4280600



1 *2* *3* *4*

REF.	CODE	QTY	DESCRIPTION
Fig. 2.5 - A	4280600	1	COMPLETE ADJUSTABLE AIR SWITCH KIT
1.	4280700	1	FILTER
2.	4280900	1	BLOCK
3.	3542800	1	SEAL WASHER
4.	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).

GENERAL INFORMATION

MANUFACTURER
Rivit S.r.l. was born in 1973, it produces and distributes in Fasteners and Tools for Fixings (tools for rivets and rivet nuts). The Company boasts much technical experience and offers a wide range of products related to fastening systems.

ASSISTANCE
In case you need any assistance concerning the use and the maintenance of the tool, or in case you need to order any spare parts, you shall contact your local authorised dealer (or Rivit S.r.l. directly) specifying the identification/serial numbers of the tool, written on its outer casing.

CERTIFICATION AND EC MARKING
The tool is manufactured in compliance with the European Directives, which are in force when the tool itself 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 has a validity of 12 months, as of the date indicated on the invoice.
The warranty only 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's mistakes,
- failed servicing/maintenance, as indicated in section 7 of this manual,
- faults and/or breakages that are not attributable to tool anomalies,
- normal consumption of consumables.

The warranty is invalidated both in case of unauthorized tampering/replacements of tool components and in case of use of accessories, tools or consumables different to those recommended by the manufacturer, which could even cause injuries to the tool's user.
Rivit S.r.l. assumes responsibilities only if the tool is originally defective, but declines all forms of responsibility if the user fails to follow the instructions given.

OPERATING SYSTEM
The hydro-pneumatic RIV939 tool, with oil pressure regulation, is designed to place female threaded inserts (from #4-40 to 1/2" and M3 to M12) and male threaded inserts (from #8-32 to 5/16" and M4 to M10). The hydro-pneumatic system and the mechanical components used inside the RIV939, when compared with other riveting tools, are more reliable. There is less wear and tear of the components, consequently the tool will last much longer and work better. The technical solutions adopted make the RIV939 more compact and lighter.

MANUAL STRUCTURE
This instruction manual must be read with particular attention by the Customer, as the correct pre-arrangement, installation and use of the tool, are the correct basis for a good relationship between Manufacturer and Customer.

PURPOSE AND CONTENTS
The manual herein has the purpose of providing the Customer with all the information needed not only to use the tool correctly, but 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 given herein thoroughly before starting to use the tool. If you have any doubts on the meaning of the instructions given, please do not hesitate to contact Rivit S.r.l. for further explanations.

RECEIVERS
The manual herein has been written for both the operators and the technicians enabled to service the tool.

Operators must not carry out jobs reserved to service and/or qualified technicians.
Rivit S.r.l. is not liable for any damage deriving from the failed observance of this rule.

PLACING OF THE MANUAL
This instruction manual must be kept near the tool, inside a dedicated container and, above all, away from liquids or anything else that may compromise its legibility.

VIBRATION
When used correctly, the tool does not produce any dangerous vibration.

NOISE LEVEL
The tool is designed and manufactured in such a way that the noise level is very low. The weighed equivalent continuous acoustic pressure level A in the operator position is indeed below 80 dB (A).
This information can allow the tool user to better evaluate the possible risks of danger.

TECHNICAL DATA
The following table provides the technical data and features of the tool, to which you must refer when contacting the ATLAS® Technical Assistance Department at PennEngineering.

TECHNICAL DATA AND FEATURES

TABLE 2.4-A TECHNICAL DATA AND FEATURES

AIR WORKING PRESSURE	90 PSI / 6 bar
MIN – MAX AIR PRESSURE	70 to 100 PSI / 5 – 7 bar
AIR CONSUMPTION PER CYCLE AT 6 BAR	5 liter
MAX STROKE	.256" / 6.5 mm
MAX FORCE	6 lbs. / 26.6 N
MOTOR SPEED (SCREWING) MOTOR SPEED (UNSCREWING CYCL) DIRECT UNSCREWING SPEED	2250 rpm a 6.5 bar 2250 rpm a 6.5 bar 2250 rpm a 6.5 bar
WEIGHT (WITHOUT KIT)	4.85 lbs. / 2.2 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	KIT939P-SPECIAL EXTENDED HEAD
A/1.	3446600	1	90 MM EXTENDED SLEEVE
A/2.	3446900	1	90 MM INTERNAL EXTENDED SLEEVE

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

2.5 - 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	*RIV939P*- HYDROPNEUMATIC TOOL FOR RIVET NUTS WITH OIL PRESSURE ADJUSTMENT (FORCE)
Fig.2.5-A	4843900	1	RIV939P-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	

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Hook for Balancer (Code 4229800).

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)
1/2-13	4361600	-
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)
M12	3441700	-

Insert Nose Assembly

A1	*Head RING NUT can be ordered separately (Rivit code 0327700).* 
A2	  *COMPLETE SPECIAL HEAD Ø 20,0, M8 (Rivit Code 4281000).* *Upon request, we can supply the head in different diameters and holes according to your needs.*

KIT FOR BLIND THREADED INSERT #6-32

1

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

KIT COMPOSITION

2 *3* *4* *5*

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

1

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

1

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

2 *3* *4* *5*

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

2

3

4

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 1/2-13

1

REF.	PART NUMBER	QTY	DESCRIPTION
1	4361600	1	KIT FOR BLIND THREADED INSERT 1/2-13

KIT COMPOSITION

2 *3* *4* *5* *6* *7*

REF.	PART NUMBER	QTY	DESCRIPTION
2	4378400	1	M8X6 SOCKET CAP SCREW NUT
3	4378500	1	M8 - 1/2-13 UNC DOUBLE THREAD BUSH
4	4378600	1	HEAD (HOLE Ø 8.1)
5	3472600	1	ADAPTER (HOLE Ø 8.1)
6	4187000	1	M8X70 SOCKET HEAD CAP SCREW 8.8, UNI 5931
7	3472900	1	HEXAGONAL JOINT FOR M8 SCREW

KIT FOR BLIND THREADED INSERT M3

1

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

KIT COMPOSITION

2 *3* *4* *5*

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

1

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

KIT COMPOSITION

2 *3* *4* *5*

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

1

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

1

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

KIT COMPOSITION

2 *3* *4* *5*

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

2 *3* *4*

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.

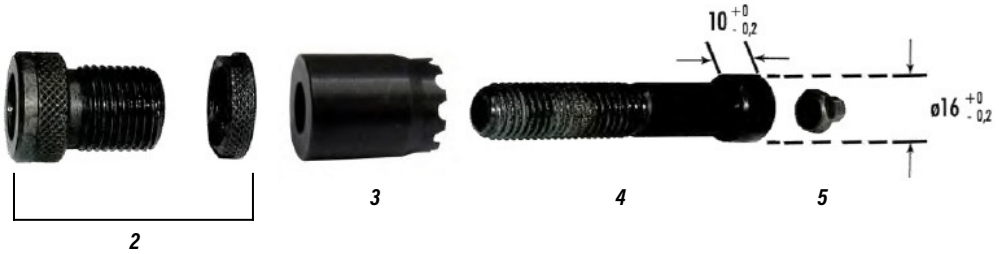
REF.	PART NUMBER	QTY	DESCRIPTION
3a	2428500	1	SOCKET CAP SCREW M10X70 12.9 UNI5931/DIN912
3b	4180100	1	SOCKET CAP SCREW M10X1.25X60 12.9 UNI5931/DIN912

KIT FOR BLIND THREADED INSERT M12

1

REF.	PART NUMBER	QTY	DESCRIPTION
1	3441600	1	KIT FOR BLIND THREADED INSERT M12 SOCKET HEAD CAP SCREW

KIT COMPOSITION



REF.	PART NUMBER	QTY	DESCRIPTION
2	0329000	1	HEAD WITH RING NUT FOR M12 SCREW
3	4316200	1	TOOTHED BLOCKING RING NUT
4	3473100	1	SOCKET CAP SCREW M12X60 12.9 UNI5931/DIN912
5	3441800	1	HEXAGONAL JOINT FOR M12 SCREW

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
M10	4601900

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

1

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

KIT COMPOSITION

2 *3* *4*

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

1

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

KIT COMPOSITION

2 *3* *4*

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

2 *3* *4*

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

1

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

KIT COMPOSITION

2 *3* *4*

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

1

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

KIT COMPOSITION

2 *3* *4*

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

1

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

KIT COMPOSITION

2 *3* *4*

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

KIT FOR BLIND THREADED STUD M10

1

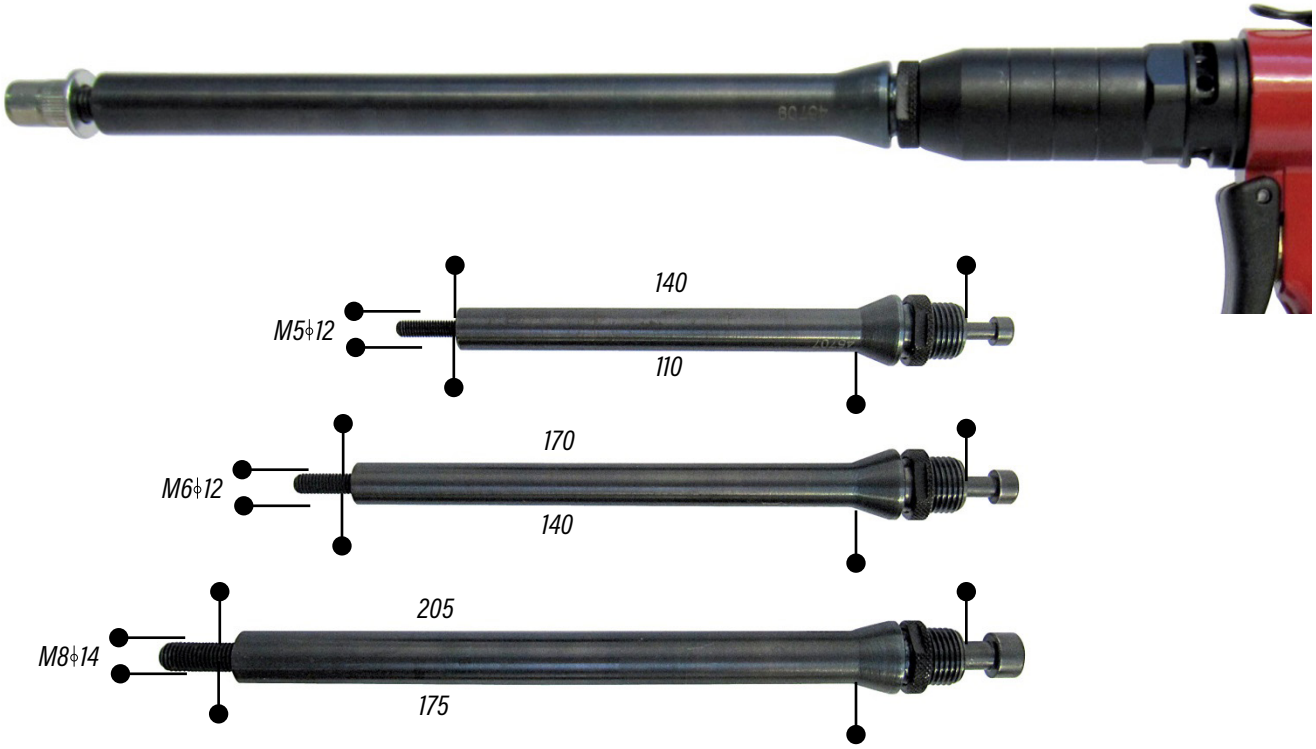
REF.	PART NUMBER	QTY	DESCRIPTION
1	4601900	1	KIT FOR BLIND THREADED STUD M10

KIT COMPOSITION

2 *3* *4* *5*

REF.	PART NUMBER	QTY	DESCRIPTION
2	4601700	1	HEAD WITH RING NUT FOR M10 STUD
3	4601600	1	EXTERNAL SLEEVE
4	4601800	1	FEMALE TIE ROD FOR M10 STUD
5	3540100	1	TIE ROD CONNECTOR WITH O-RING

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

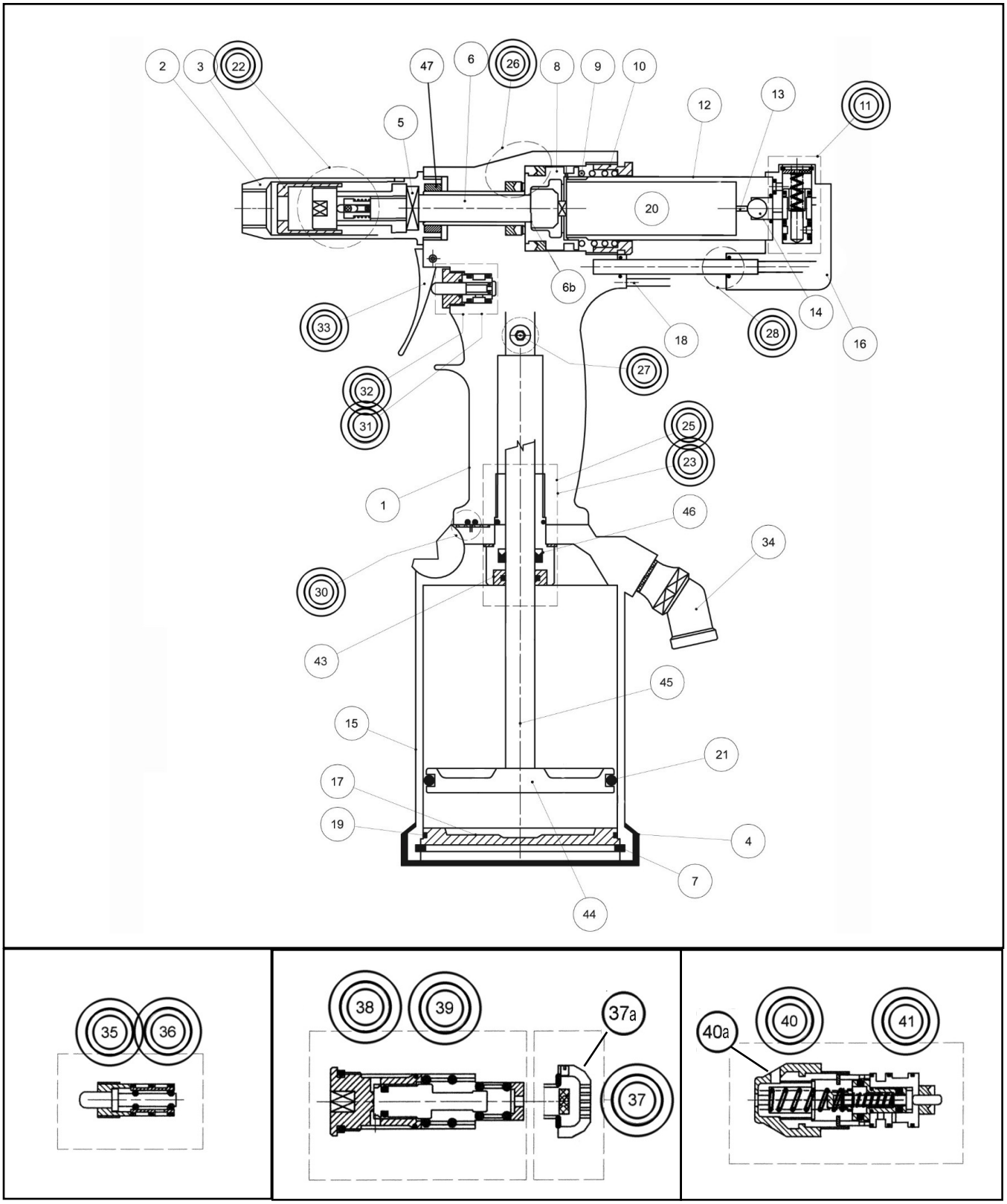
REF.	CODE	QTY	DESCRIPTION
Kit 140/170	4572600	1	KIT-HEAD EXTENSION D.12X140/170MM FOR RIVSERT M6
	4570800	1	HEAD EXTENSION D.12X140/170 FOR M6 RIVSERT
	45702GR	1	SOCKET CAP SCREW UNI5931/DIN912 PLAIN M6X200

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	25.	4647600	1	COMPLETE STEM GUIDE KIT 6 PIECES
2.	3539900	1	OUTER CONE 	26.	4151000	1	PISTON GASKET KIT 2 PIECES
3.	4172400	1	TOOTHED BLOCKING RING NUT M3-M10	27.	4175700	1	OIL CAP KIT WITH O-RING
4.	4165100	1	RUBBER BASE	28.	4802600	1	AIR HOSES KIT WITH O-RING 6 PIECES
5.	4277200	1	RING NUT	30.	4152300	1	FLAT GASKET KIT + O-RING
6.	4151500	1	ROTATING PIN + SKIMMER	31.	4151200	1	O-RING KIT 4 PIECES
6b.	3097900	1	SKIMMER WASHER	32.	4156900	1	KIT COMPLETE WITH O-RING 7 PIECES
7.	3093200	1	BOTTOM BLOCKING SNAP RING	33.	4153400	1	LEVER – PIN KIT
8.	4151300	1	OIL PISTON	34.	3235500	1	SUPPLE AIR CONNECTION THREAD 1/4"+1/4" GAS + ALUMINIUM WASHER
9.	4151700	1	SPRING	35.	4157000	1	KIT COMPLETE WITH O-RING 8 PIECES
10.	5167800	1	RING NUT	36.	4156600	1	O-RING KIT 5 PIECES
11.	4803100	1	9 PCS KIT DISTRIBUTOR	37.	4291600	1	BAFFLE KIT 3 PIECES
12.	4803000	1	MOTOR CASING	38.	4155800	1	O-RING KIT 7 PIECES
13.	4426700	1	ROD	39.	4157100	1	KIT COMPLETE WITH O-RING 13 PIECES
14.	3096900	1	BALL	40.	4154400	1	GASKET KIT 7 PIECES
15.	4645300	1	AIR BODY	41.	4647900	1	KIT COMPLETE 18 PIECES
16.	4802800	1	DISPENSER	43.	4645600	1	GASKET HOLDER RING NUT
17.	3762300	1	BOTTOM	44.	4645400	1	PISTON
18.	4152100	1	PIN	45.	4645500	1	STEM
19.	3762200	1	O-RING	46.	4645700	1	GASKET
20.	3761000	1	MOTOR UNIT	47.	5114200	1	STOP RING
21.	3235600	1	O-RING	48.	4796200	1	MOTOR RUBBER PROTECTION COVER 
22.	4174200	1	QUICK KIT WITH SPRING				
23.	4647700	1	GASKET KIT 3 PIECES				

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)

QUICK KIT COMPLETE WITH SPRING

QUICK KIT COMPLETE WITH SPRING WITH-OUT TOOTHED RING NUT

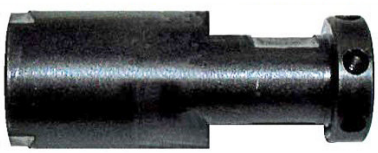
TOOTHED RING NUT ASSEMBLED ON THE TOOL

SPECIAL TOOTHED RING NUT FOR M8 SOCKET CAP SCREW NO NEED FOR REDUCTION (PART NUMBER 3472600) (OPTIONAL)

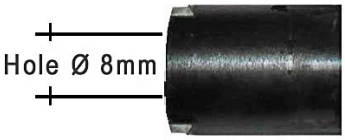
REF.	PART NUMBER	QTY	DESCRIPTION
1	4174200	1	QUICK KIT COMPLETE WITH SPRING
2	4176900	1	QUICK KIT WITH SPRING AND WITHOUT TOOTHED RING NUT
3	4172400	1	TOOTHED RING NUT M3 - M10
4	4280300	1	SPECIAL TOOTHED RING NUT, HOLE Ø 8

HIGH RESISTANCE SPECIAL KIT FOR M8 WITH FIXED RING NUT

For use with M8 rivet nuts only. The locking ring (Part #4508700) is made from high resistance material for a consistent tolerance and increased durability.



Kit Part #4508800

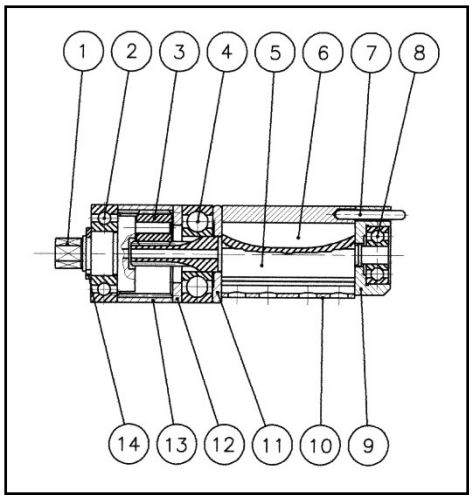


Part #4508700

Part #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 M4 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

MODEL AND SERIAL NUMBER ETCHED IN THE OUTER CASING

ADHESIVE LABEL INDICATING THE TOOL MODEL, THE NAME OF THE MANUFACTURER AND THE EC MARKING

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.

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.

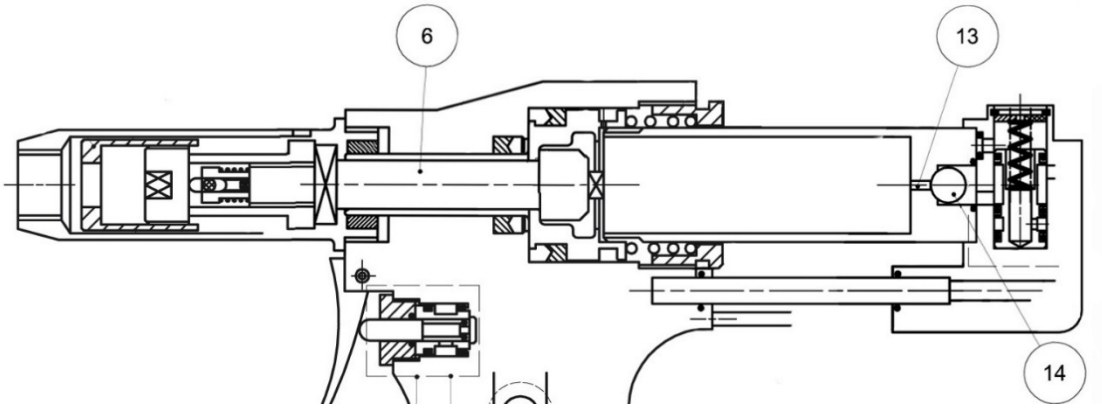
In addition to the above-mentioned requirements, the service technicians must also have appropriate technical training.

P 1

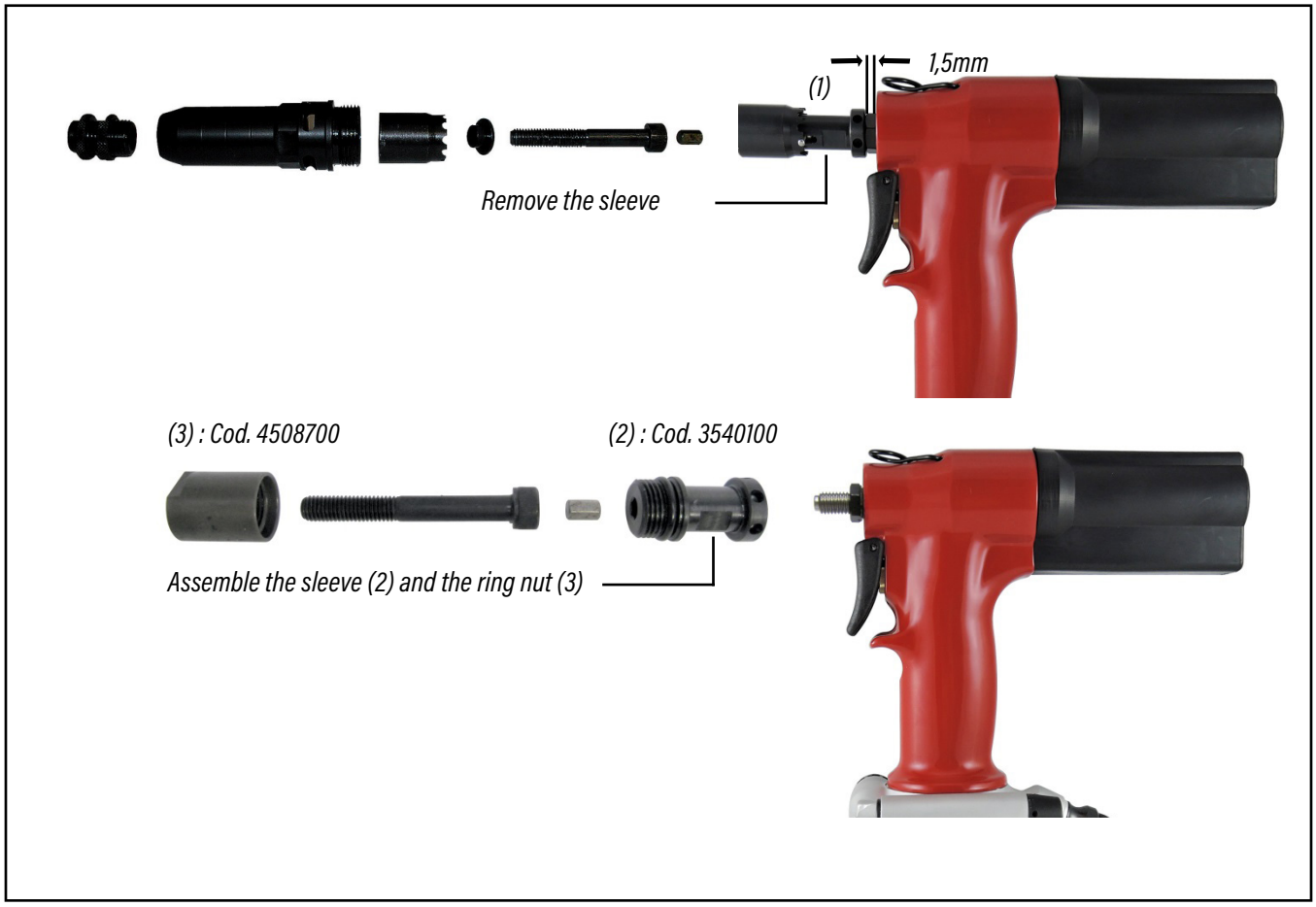
MOTOR SCREWING

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 3761300) 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.

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).



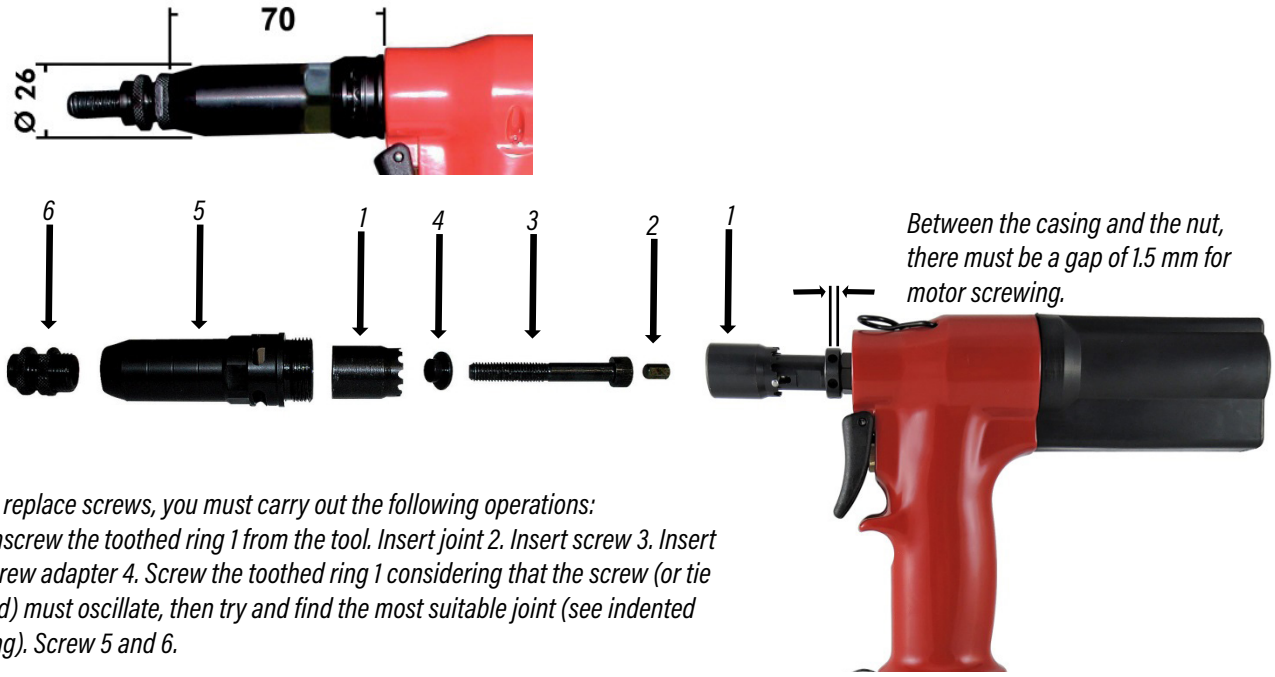
6.2 REPLACEMENT OF STANDARD KIT WITH HIGH RESISTANCE SPECIAL ONE, FOR M8 ONLY (CODE 4508800) WITH FIXED RING NUT:
REPLACE TOOTHED RING NUT (1) WITH THE FIXED ONE (2) + (3) (see section 3.1.2)



6.3 - TOOL PREPARATION AND SCREW REPLACEMENT

P 2	**Warning:** **Tool setting and screw replacement must be carried out with the tool disconnected from the air supply line.**

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.

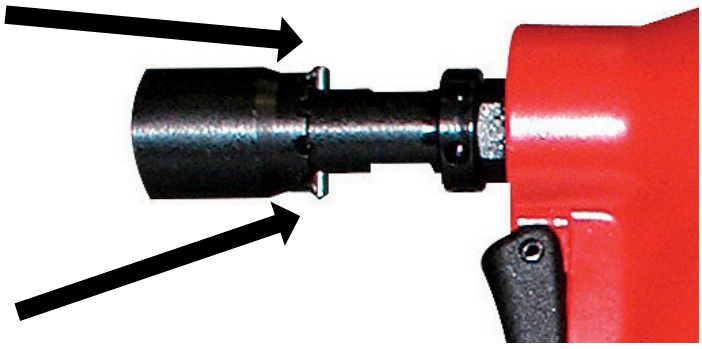
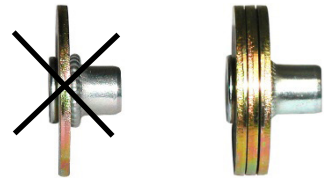
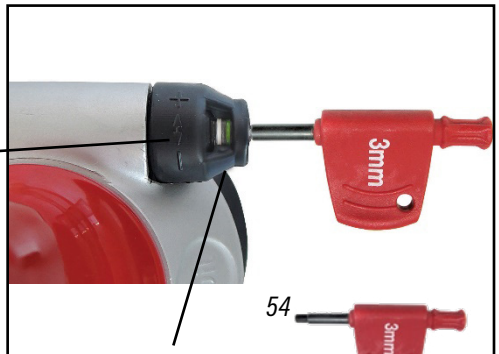


Figure 6.2-C



WARNING!
Pressure (force) must always be regulated as per max. thickness.



Screwing and unscrewing you see three rings (WHITE, GREEN, RED).

OIL (FORCE) PRESSURE ADJUSTMENT – SCREW THE INSERT

M3 *WHITE*

M4, M5 *GREEN*

M6, M8, M10 *RED*

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

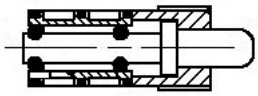
OIL (FORCE) PRESSURE ADJUSTMENT
Turning rightward, screwing the force increases.
Turning leftward, decreases.

WARNING

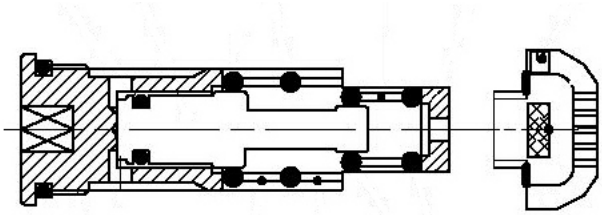
When the pressure (force) adjustment screw is entirely screwed, unscrewing can be done at a pressure not less than 6.5 bar (atm).

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.

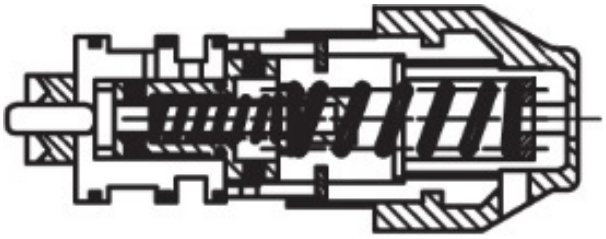


EMERGENCY UNSCREWING BUTTON
To be used in case the user inserts a wrong rivet nuts.



AIR DISTRIBUTOR

(MANOSTAT) - PRESSURE (FORCE) ADJUSTMENT



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


(1) Rivet nut is stuck.
(2) Keep the trigger pressed and rotate to help unblocking.
939 - 104
MADE IN ITALY
(3) It does not get unblocked.
(4) Disconnect the air hose.
(5) Insert the Emergency Regulation Pin 53 in the proper holes, unscrewing the tool manually.

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 3 	**Shut off all sources of power to the tool.** **The operator must wear and use suitable personal protections before starting to clean the tool.**

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 airline from the tool inlet.
- Unscrew the manostat (A) with relevant wrench 54.
- Remove cap together with relevant washer 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 back on, together with relevant washer 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 should be present.
- 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).

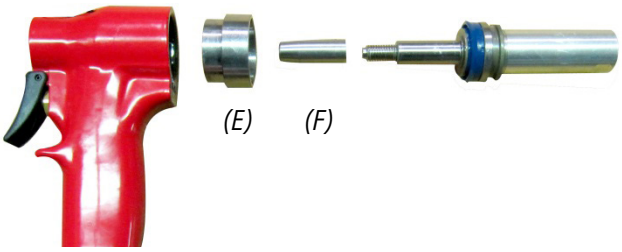
Periodically check the state of wear of the screws and of the heads. If necessary, replace them as indicated in section 6.2.

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

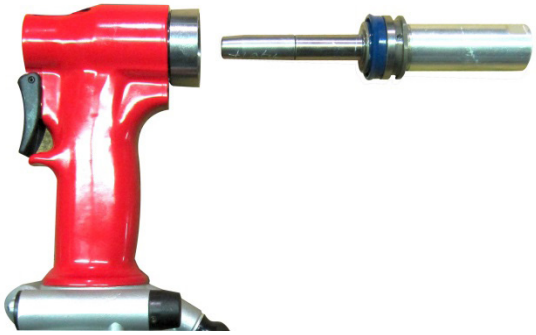
7.4 - MAINTENANCE KIT ON REQUEST

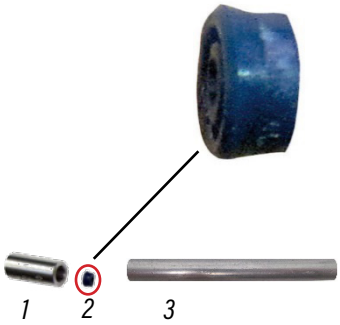
Follow the instructions below:

(D)



(E) *(F)*



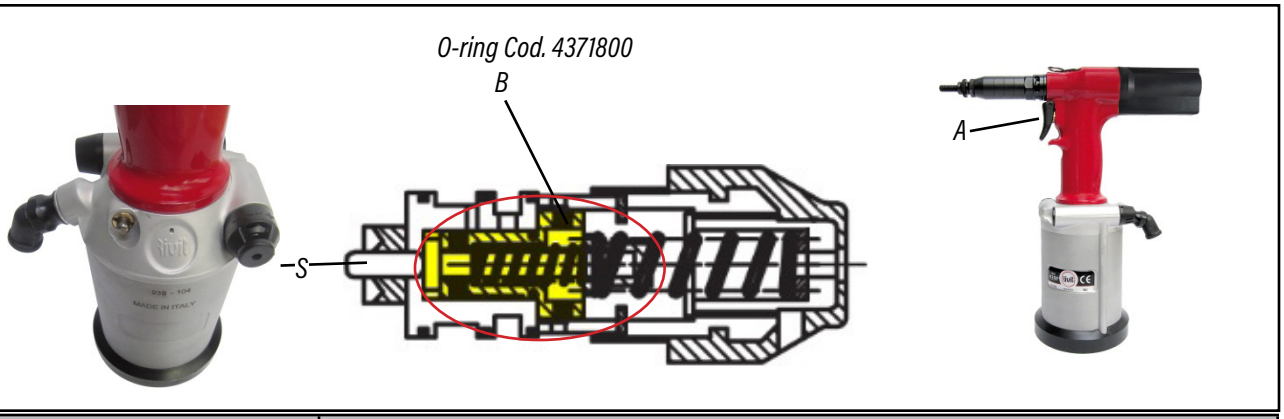


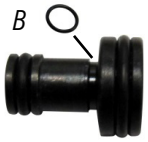
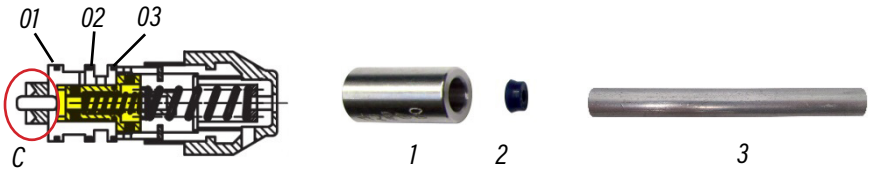
1 *2* *3*

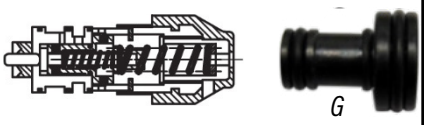
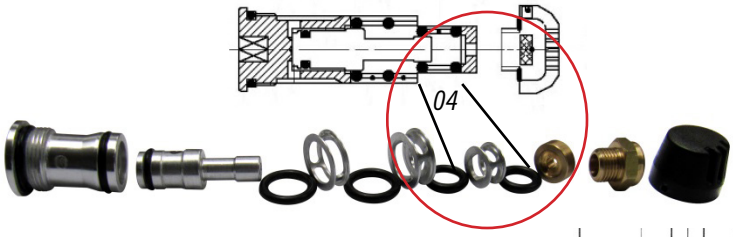
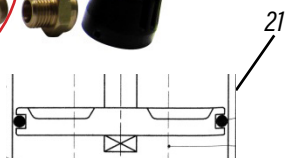
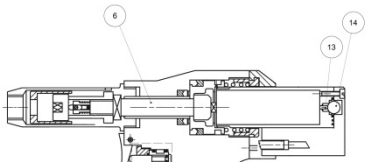
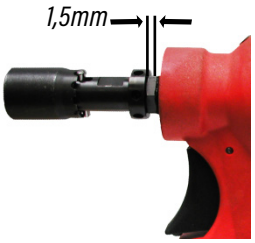
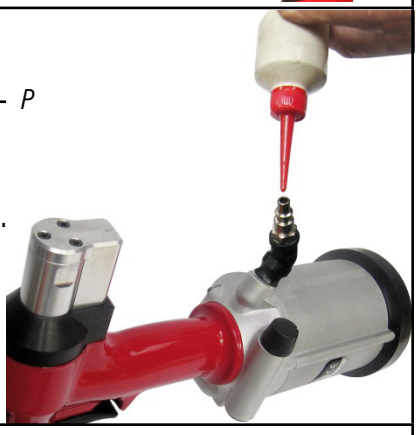
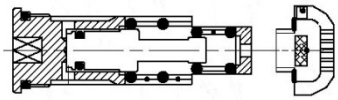
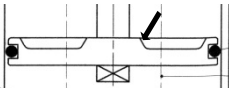
REF.	CODE	QTY	DESCRIPTION
D.	4461800	1	MILLED CONE TO SCREW AND UNSCREW THE RING NUT (10)
E.	4461900	1	BUSH FOR INTRODUCTION OF ROTATING PIN (6) FITTED WITH GASKET
F.	4461700	1	THREAD PROTECTOR METAL FERRULE FOR INSERTION OF ROTATING PIN (6) to avoid damages to the gasket in the KIT (26)
1.+ 3.	4380800	1	GUIDE BUSH + ALUMINIUM CYLINDRICAL PIN Ø 8X78 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
Traction is not correctly performed.	It lacks oil (see section 7.3.1)
Unscrewing is not correctly performed.	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.
Unscrew without traction.	Or (B) broken: replace it. O-ring Code 4371800 
Slows the unscrewing after traction.	Working intensely, it loses greasing and tends to harden. Remove the piston (G) and grease. 
Replacing parts of the manostat.	 When you must work on the manostat: 1. Remove air 2. Loosen the oil cap (27) to avoid the coming out of gasket (C). In case of replacement, use guide. (1) Insert the gasket (2) and push it with the pin (3). 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: O-ring (02), when broken unscrews without making traction O-ring (03) makes traction but no unscrew O-ring (01) can leak air Consequently, we recommend replacing all 3 o-rings (ORM 15x1) of the kit (ref.41) code 4157200

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 3761300) 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).  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).
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.

PennEngineering®

North America: Danboro, PA USA • E-mail: atlas@pemnet.com • Tel: +1-215-766-5987 • Fax: +1-215-766-5988 • 877-682-2505 (USA Only)
Europe: Galway, Ireland • E-mail: europe@pemnet.com • Tel: +353-91-751714 • Fax: +353-91-753541
Asia/Pacific: Singapore • E-mail: singapore@pemnet.com • Tel: +65-6-745-0660 • Fax: +65-6-745-2400
Shanghai, China • E-mail: china@pemnet.com • Tel: +86-21-5868-3688 • Fax: +86-21-5868-3988

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