



# **3700-MIP1**

**HYDRO-PNEUMATIC TOOL  
WITH OIL PRESSURE ADJUSTMENT  
FOR INSTALLATION OF LOKSERT  
METRIC THREAD M4 TO M12  
INCH THREAD 8G TO 7/16**

**INSTRUCTION MANUAL**

**Part Number  
3700-MIP1**



**3700-MIP1**

**HYDRO-PNEUMATIC TOOL  
WITH OIL PRESSURE  
ADJUSTMENT FOR  
INSTALLATION OF LOKSERT**

STAMP OF THE  
AUTHORISED DEALER

**Loksert<sup>®</sup>**

**Crossroad Distributor Source  
sales@crossroad.bz**

**CE**

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## 1 - GENERAL INFORMATION

### 1.1 - MANUFACTURER

**Crossroad Distributor Source** manufactures and distributes a wide range of threaded inserts and related installation tools.

<b>PHONE</b> +32 52 412110
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<b>FAX</b> +32 52 410753
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### 1.2 - ASSISTANCE

If you need any assistance concerning the use and the maintenance of the tool, or if you need to order any spare parts, you shall contact your local authorised dealer (or Crossroad Distributor Source directly) specifying the identification/serial numbers of the tool, written on the outer case:



C 1

See section 3

### 1.3 - CERTIFICATION AND EC MARKING

The tool is manufactured in compliance with the European Directives, which are in force at the time the tool is sold. As the tool is not included in ENCLOSURE IV of DIRECTIVE 2006/42/EC, Crossroad Distributor Source issues a self-certification to apply the EC marking.

### 1.4 - WARRANTY

The warranty has a validity of 12 months from invoice date.

The warranty only covers replaced parts; labour 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 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 the case of unauthorised tampering/replacements of tool components and in case of use of accessories, tools or consumables different from those recommended by the manufacturer. Not adhering to the safety guidelines may result in bodily injury.

Crossroad Distributor Source assumes responsibilities only if the tool is originally defective but declines all forms of responsibility if the user fails to follow the instructions given.

### 1.5 - MANUAL STRUCTURE

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

#### 1.5.1 - PURPOSE AND CONTENTS

The manual herein has the purpose of providing the operator 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 Crossroad Distributor Source for further explanations.

#### 1.5.2 - RECEIVERS

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

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




Crossroad Distributor Source is not liable for any damage deriving from the failed observance of this rule.

#### 1.5.3 - 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.

**WARNING:** The 3700-MIP1 Loksert Pneumatic tool is only intended for use with non locking inserts in 303 Stainless steel or carbon steel.

**1.5.4 - 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 utmost attention.
 C ...	CONSULT	Consult the instruction manual before carrying out a specific procedure.

## 2 - TOOL DESCRIPTION

### 2.1 - OPERATING SYSTEM

The hydro-pneumatic 3700-MIP1 tool, with oil pressure adjustment, is designed to install the following product:

- LOKSERT THREADED INSERTS (from metric M4 to M12 and inch 8G to 7/16)

The hydro-pneumatic system and the mechanical components used for the 3700-MIP1, when compared with other competitive tools is more reliable. A tool feature is a reduction of the problems 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 3700-MIP1 more compact and light: the result is a useful tool.

### 2.2 - VIBRATION

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

### 2.3 - NOISE LEVEL

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

The information given can, in any event, allow the tool user to better evaluate the possible and eventual risks of danger.

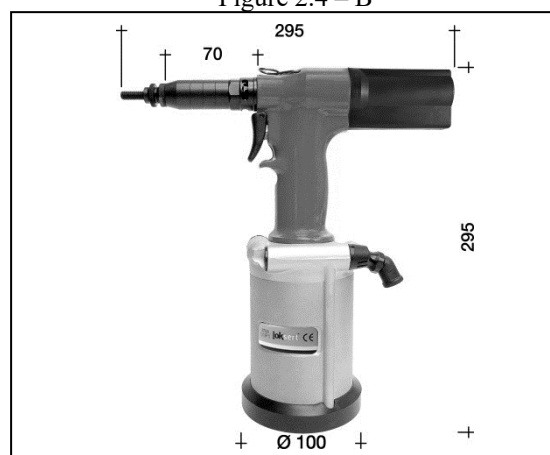
### 2.4 - TECHNICAL DATA

The following table provides the technical data and features of the tool, to which you must refer when contacting the Technical Assistance Department of Crossroad Distributor Source.

Table 2.4 – A - Technical data and features

AIR WORKING PRESSURE	6 bar
MIN – MAX AIR PRESSURE	5 – 7 bar
AIR CONSUMPTION PER CYCLE AT 6 BAR	5 liters
MAX STROKE	8,0 mm
MAX FORCE	19.000 N
MOTOR SPEED (SCREWING)	2250 rpm a 6,5 bar
MOTOR SPEED (UNSCREWING CYCL)	2250 rpm a 6,5 bar
DIRECT UNSCREWING SPEED	2250 rpm a 6,5 bar
WEIGHT (WITHOUT KIT)	2,200 Kg
VIBRATIONS	< 2,5 m/s <sup>2</sup>
NOISE LEVEL	76 dB (A)


Figure 2.4 – B

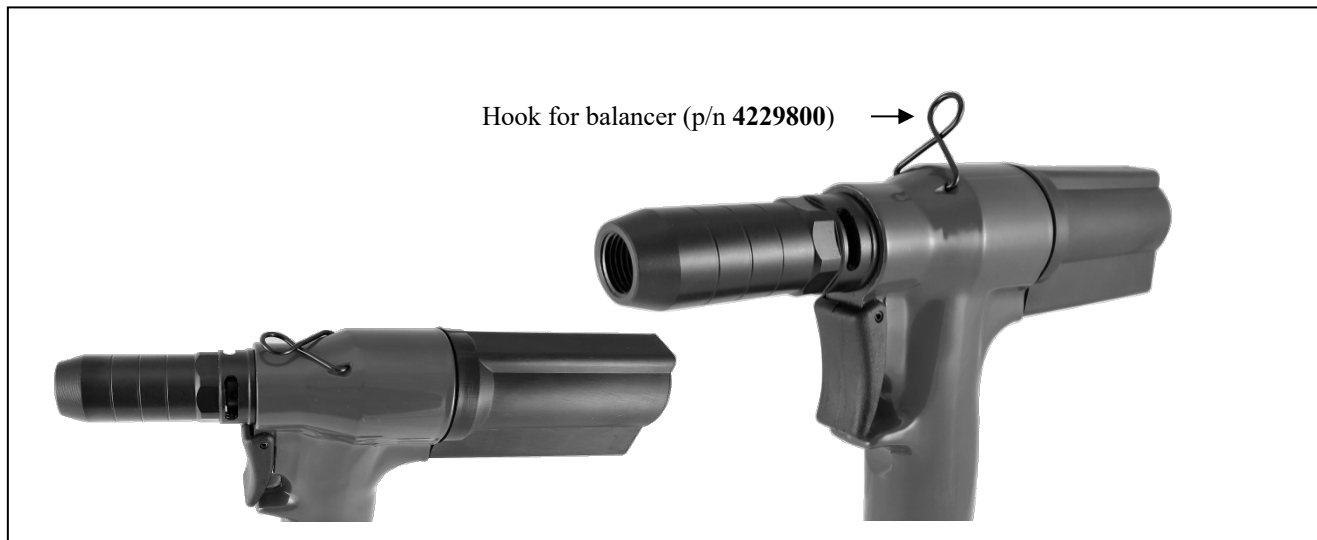
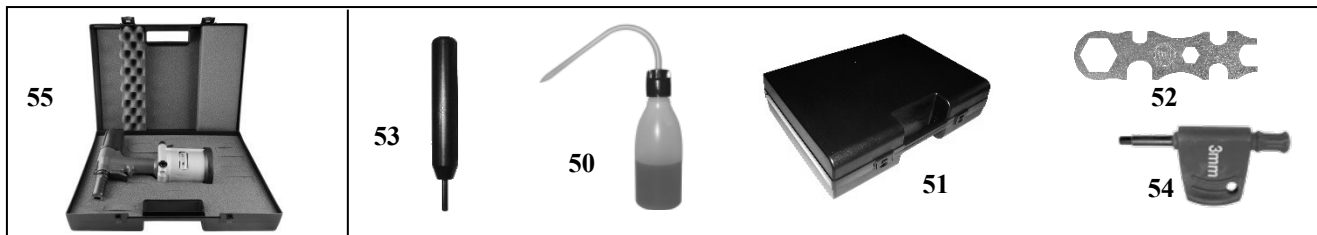


**2.5 - NOSE ASSEMBLIES AND STANDARD ACCESSORIES**

The nose assemblies stated hereafter refers to standard tools.

Figure 2.5 – A

REF.	P/N	Q.TY	DESCRIPTION	3700-MIP1 HYDRO-PNEUMATIC WITH OIL PRESSURE ADJUSTMENT (FORCE)
55.	3700-MIP1	1	HYDRO-PNEUMATIC TOOL FOR LOKSERT (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; not included with tool FEAs must be ordered separately accordingly to the following.

### 2.5.1.1 - FRONT END ASSEMBLIES (FEA) FOR LOKSERT - METRIC AND INCH

#### METRIC THIN WALL

P/N	LOKSERT INTERNAL THREAD	LOKSERT EXTERNAL THREAD
3720-5.00TWMIP	M5x0,8	M8x1,25
3720-6.00TWMIP	M6x1	M10x1,25
3720-8.00TWMIP	M8x1,25	M12x1,25
3721-8.00TWMIP	M8x1	
3720-10.00TWMIP	M10x1,5	M14x1,5
3721-10.00TWMIP	M10x1,25	
3720-12.00TWMIP	M12x1,75	M16x1,5
3721-12.00TWMIP	M12x1,25	

#### METRIC HEAVY DUTY

P/N	LOKSERT INTERNAL THREAD	LOKSERT EXTERNAL THREAD
3720-4.00HDMIP	M4x0,7	M8x1,25
3720-5.00HDMIP	M5x0,8	M10x1,25
3720-6.00HDMIP	M6x1	M12x1,25
3720-8.00HDMIP	M8x1,25	M14x1,5
3721-8.00HDMIP	M8x1	
3720-10.00HDMIP	M10x1,5	M16x1,5
3721-10.00HDMIP	M10x1,25	
3720-12.00HDMIP	M12x1,75	M18x1,5
3721-12.00HDMIP	M12x1,25	



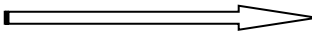


**INCH THIN WALL**

P/N	LOKSERT INTERNAL THREAD	LOKSERT EXTERNAL THREAD
3732-10GTWMIP	10-24	5/16-18
3734-10GTWMIP	10-32	
3732-1/4TWMIP	1/4-20	3/8-16
3734-1/4TWMIP	1/4-28	
3732-5/16TWMIP	5/16-18	7/16-14
3734-5/16TWMIP	5/16-24	
3732-3/8TWMIP	3/8-16	1/2-13
3734-3/8TWMIP	3/8-24	
3732-7/16TWMIP	7/16-14	9/16-18
3734-7/16TWMIP	7/16-20	

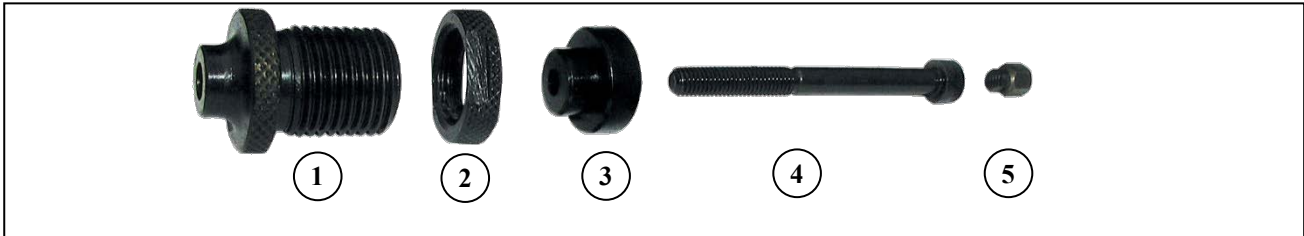
**INCH HEAVY DUTY**

P/N	LOKSERT INTERNAL THREAD	LOKSERT EXTERNAL THREAD
3732-8GHDMIP	8-32	5/16-18
3732-10GHDMIP	10-24	3/8-16
3734-10GHDMIP	10-32	
3732-1/4HDMIP	1/4-20	7/16-14
3734-1/4HDMIP	1/4-28	
3732-5/16HDMIP	5/16-18	1/2-13
3734-5/16HDMIP	5/16-24	
3732-3/8HDMIP	3/8-16	9/16-18
3734-3/8HDMIP	3/8-24	
3732-7/16HDMIP	7/16-14	5/8-11
3734-7/16HDMIP	7/16-20	


  
FEA to be installed in this
   
position



**2.5.1.2 - FRONT END ASSEMBLIES (FEA) FOR LOKSERT - COMPOSITION AND SPARE PARTS**



**METRIC THIN WALL**

P/N	1	2	3	4	5
3720-5.00TWMIP	FLC4416.M5TW	0327700	3471700	12.233.MM1.1.BR	3472000
3720-6.00TWMIP	FLC4416.M6TW		3472100	12.234.MM1.1.BR	3472500
3720-8.00TWMIP	FLC4416.M8TW		3472600	12.235.MM1.1.BR	3472900
3721-8.00TWMIP				12.235.MM2.1.BR	
3720-10.00TWMIP	FLC4416.M10TW		-	12.236.MM1.1.BR	3441800
3721-10.00TWMIP				12.236.MM2.1.BR	
3720-12.00TWMIP	FLC4416.M12TW		-	12.237.MM1.1.BR	3473400
3721-12.00TWMIP				12.237.MM2.1.BR	

**METRIC HEAVY DUTY**

P/N	1	2	3	P/N	P/N
3720-4.00HDMIP	FLC4416.M4HD	0327700	3466300	12.238MM1.1.BR	3470600
3720-5.00HDMIP	FLC4416.M5HD		3471700	12.233.MM1.1.BR	3472000
3720-6.00HDMIP	FLC4416.M6HD		3472100	12.234.MM1.1.BR	3472500
3720-8.00HDMIP	FLC4416.M8HD		3472600	12.235.MM1.1.BR	3472900
3721-8.00HDMIP				12.235.MM2.1.BR	
3720-10.00HDMIP	FLC4416.M10HD		-	12.236.MM1.1.BR	3441800
3721-10.00HDMIP				12.236.MM2.1.BR	
3720-12.00HDMIP	FLC4416.M12HD		-	12.237.MM1.1.BR	3473400
3721-12.00HDMIP				12.237.MM2.1.BR	

**INCH THIN WALL**

P/N	1	2	3	4	5
3732-10GTWMIP	FLC4416.M5TW	0327700	3471700	12.233.MP1.1.BR	3472000
3734-10GTWMIP				12.233.MP2.1.BR	
3732-1/4TWMIP	FLC4416.1/4TW		3472600	12.235.MP1.1.BR	3472900
3734-1/4TWMIP				12.235.MP2.1.BR	
3732-5/16TWMIP	FLC4416.5/16TW			12.235.MP3.1.BR	
3734-5/16TWMIP				12.235.MP4.1.BR	
3732-3/8TWMIP	FLC4416.3/8TW		-	12.236.MP1.1.BR	3441800
3734-3/8TWMIP				12.236.MP2.1.BR	
3732-7/16TWMIP	FLC4416.7/16TW		-	12.237MP1.1.BR	3473400
3734-7/16TWMIP				12.237MP2.1.BR	

**INCH HEAVY DUTY**

P/N	1	2	3	4	5
3732-8GHDMIP	FLC4416.M5TW	0327700	3471700	12.233.MP3.1.BR	3472000
3732-10GHDMIP	FLC4416.10GHD			12.233.MP1.1.BR	
3734-10GHDMIP				12.233.MP2.1.BR	
3732-1/4HDMIP	FLC4416.1/4HD		3472600	12.235.MP1.1.BR	3472900
3734-1/4HDMIP				12.235.MP2.1.BR	
3732-5/16HDMIP	FLC4416.5/16HD			12.235.MP3.1.BR	
3734-5/16HDMIP				12.235.MP4.1.BR	
3732-3/8HDMIP	FLC4416.3/8HD		-	12.236.MP1.1.BR	3441800
3734-3/8HDMIP				12.236.MP2.1.BR	
3732-7/16HDMIP	FLC4416.7/16HD		-	12.237MP1.1.BR	3473400
3734-7/16HDMIP				12.237MP2.1.BR	

**Note:**

The followings FEAs include additional component p/n 4316200. The standard "blocking ring nut" p/n 4172400 is common for all other FEAs and it is delivered included along with the power tool 3700-MIP1

3720-12.00TWMIP, 3721-12.00HDMIP, 3720-12.00HDMIP, 3721-12.00HDMIP  
 3732-7/16TWMIP, 3734-7/16TWMIP, 3732-7/16HDMIP, 3734-7/16HDMIP

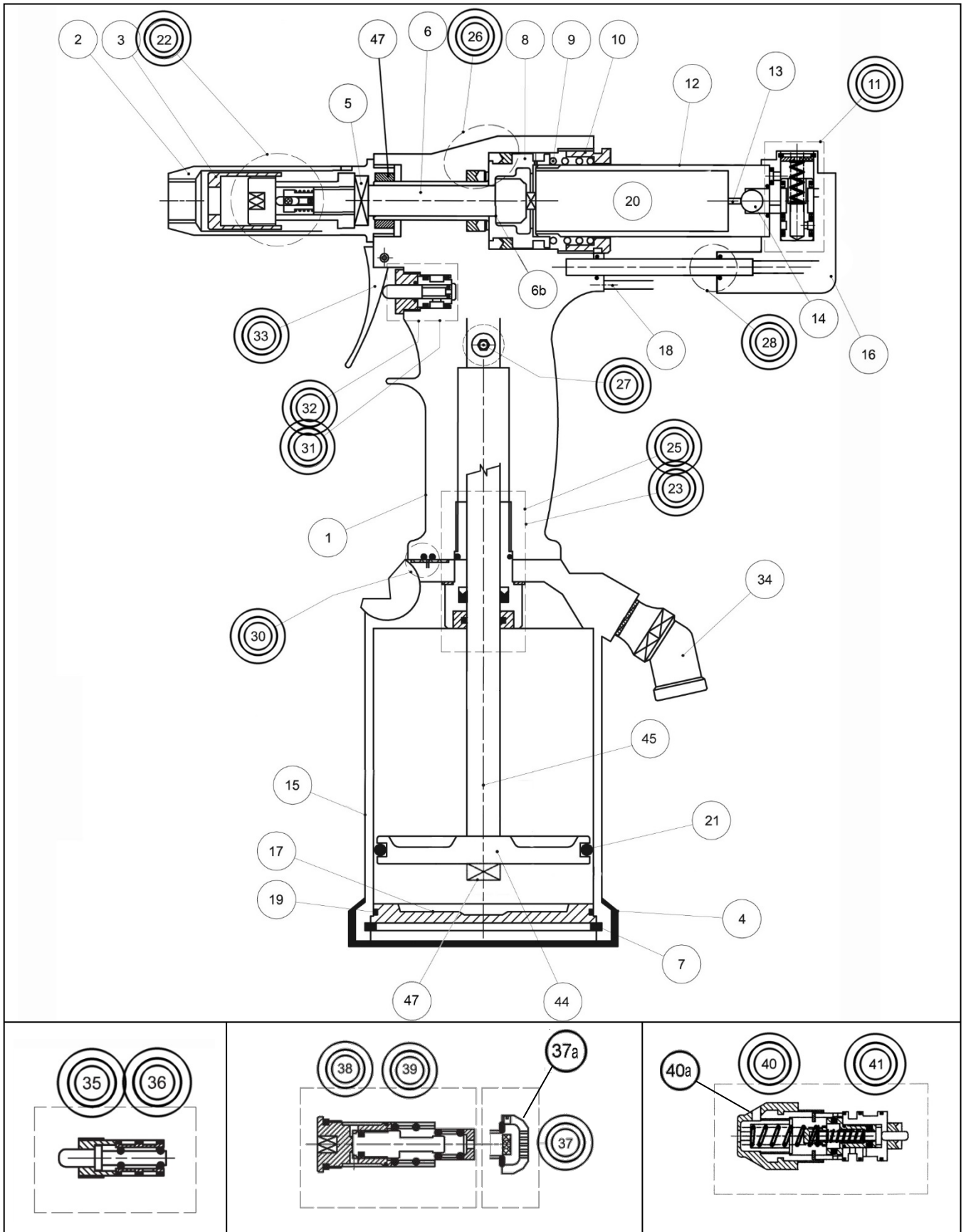


P/N 4316200  
 to replace the p/n 4172400 when using the  
 M12 or 7/16 FEAs

### 3 - SPARE PARTS





















#### 3.1 - SPARE PARTS

Figure 3.1 - A - Spare parts



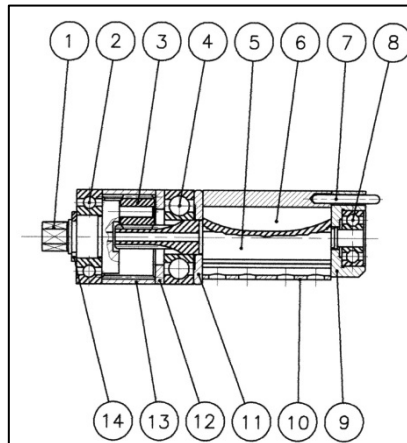
See Figures 3.1 – A

TABLE 3.1 - A

REF.	P/N	Q.TY	DESCRIPTION	REF.	P/N	Q.TY	DESCRIPTION
1.	4833800	1	HANDLE CASING	25.	4157300	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.	3098600	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.	4157200	1	KIT COMPLETE 18 PIECES 
16.	4802800	1	DISPENSER	44.	5331700	1	PISTON
17.	3762300	1	BOTTOM	45.	5331800	1	STEM
18.	4152100	1	PIN				
19.	3762200	1	O-RING		4796200	1	MOTOR RUBBER PROTECTION COVER 
20.	3761000	1	MOTOR UNIT	47.	5331900	1	STEM LOCK NUT
21.	3235600	1	O-RING				
22.	4174200	1	QUICK KIT WITH SPRING 				
23.	4177400	1	GASKET KIT 3 PIECES 				

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

Figure 3.2 - A - Motor spare parts



REF.	P/N	Q.TY	DESCRIPTION				
Fig. 3.2 - A	3761000	1	MOTOR UNIT (20)				
REF.	P/N	Q.TY	DESCRIPTION	REF.	P/N	Q.TY	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 always the REF. number, PART NUMBER and DESCRIPTION.

**3.3 - ORDERING SPARE PARTS**

Remember that only local authorised dealers are permitted to repair the tool. Failing this, contact the Technical Assistance Service of Crossroad Distributor Source, where qualified engineers avail of the correct tools and original spare parts to solve any problems.

Follow the instructions given in section 1.2. to order the spare parts previously listed.

## 4 - SAFETY

### 4.1 - GENERAL WARNINGS

The operator must read carefully the information given in the present manual, especially with regard to the safety precautions listed in this chapter.

The operator must also observe the warnings listed below:

- The tool shall be used exclusively by trained personnel.
- The tool and the work area shall be kept clean and tidy.
- The tool shall be rested upright on the rubber base on a flat surface to prevent it from dropping.
- The tool shall only be used in normal psychophysical conditions.
- The user shall 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, the wearing of safety glasses is required both by the operator and others in the vicinity to protect against fastener ejection. Besides we recommend wearing gloves when using the tool.
- The user shall use the accessories supplied and indicated in the 'servicing' chapter (see chapter 7) when servicing and/or adjusting the tool.
- The plates applied on the tool by Crossroad Distributor Source shall not be removed or altered.
- Unauthorized personnel shall not be allowed to touch the tool.
- Make sure that the air supply hoses are correctly sized for the use envisaged.
- Do not drag the tool holding it by the hose when it is connected to the power supply. Keep the hose away from sources of heat and from sharp objects.
- Remember to remove service or adjustment keys after having carried out repair and/or adjustment jobs.
- Before disconnecting the compressed air hose from the tool, ensure 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 should accidentally spill oil on your skin, rinse and wash thoroughly with water and alkaline soap.
- Where possible use a safety balance to support the tool.
- Pay attention to possible 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 LOKSERT as described in section 2.1

### 4.3 - OPERATING CONTRAINDICATIONS

The tool shall not be used:

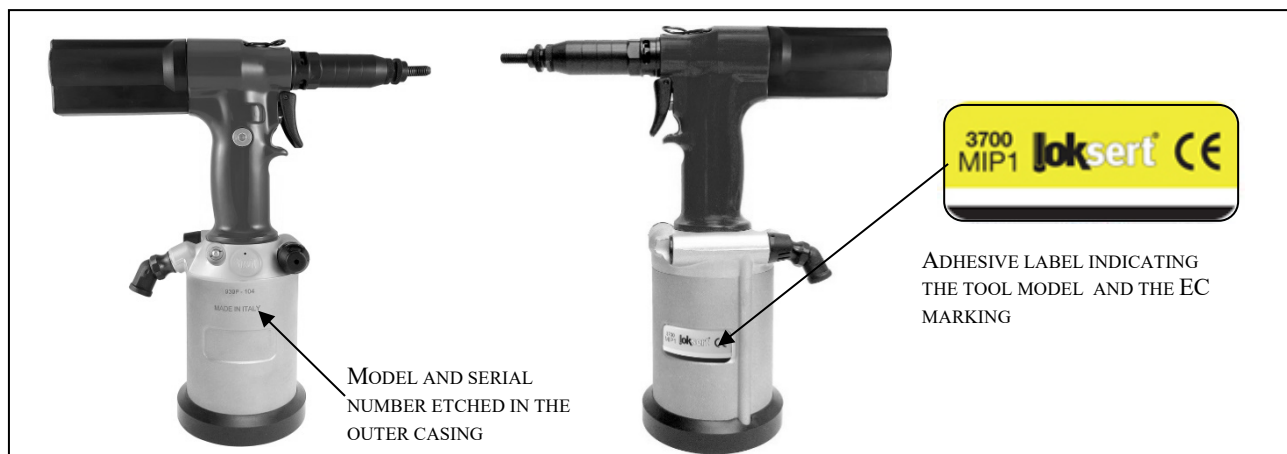
- For purposes different to those listed in previous para 4.2.
- In explosive or aggressive atmosphere or when there is an excessive amount of dust or oil in the air.
- In atmosphere subject to the risk of fire.
- When it is exposed to weather conditions.

### 4.4 - RESIDUE RISKS

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

- **Risk of breakage of the supply hose due to the fact that it contains compressed air. It is therefore absolutely crucial not to 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. You are recommended to store the tool in its case after using it. The tool can be transported safely if it has been correctly put away in its case.



A 1

Damages to the tool caused during transport and/or handling are **not covered by WARRANTY**. Repairs or replacements of damaged parts are at Customer's charge.

### 5.2 - STORAGE

If you are not going to use the tool for a long time, you must put it away according to the following suggestions:

- 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.

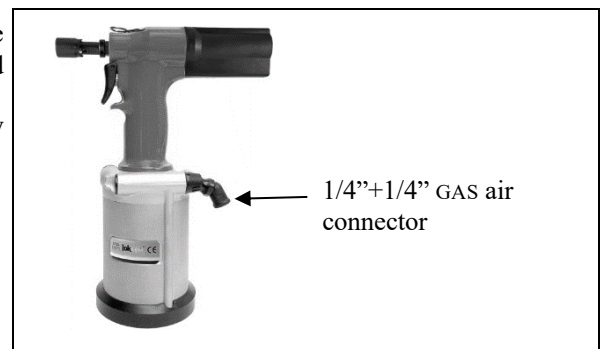
### 5.3 - CONNECTIONS

To avoid all sorts of problems when starting the tool you are recommended to 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 pressurised products.



### 5.4 - AIR SUPPLY

The air supply line must be free from dirt and damp to prevent the early wear of the moving components of the tool. You are therefore recommended to use dry air: i.e. not greased.

### 5.5 - PRELIMINARY CHECKS

Before using the tool you must make a few inspections and checks in order to prevent errors or accidents.

- Check if the tool has been damaged during transport.
- Check if the compressed air hose is perfectly connected to the air supply line.
- Check if the tool turns freely and if 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 with the ability to understand the manual and to interpret the drawings and the diagrams correctly.
- They must be acquainted with the main hygienic rules, and with the industrial-safety and technological instructions.
- They must have an overall knowledge of the line and of the factory in which the tool is installed.
- They must know what to do in case of emergency, where to find the individual protection means and how to use them correctly.

Together with the above-mentioned requirements, the service technicians must also have an appropriate technical training.

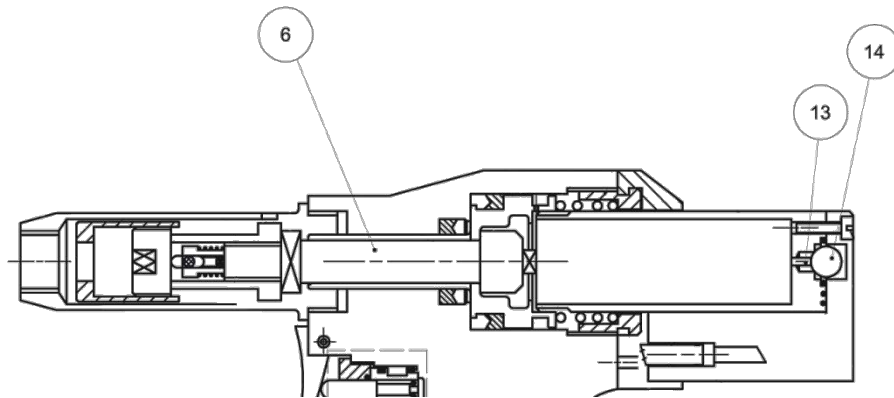


P 1

### 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). When the air is on, the shaft shall have no end float.

Unlike the situation above, the shaft is too short and it has to 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 - TOOL PREPARATION AND SCREW REPLACEMENT


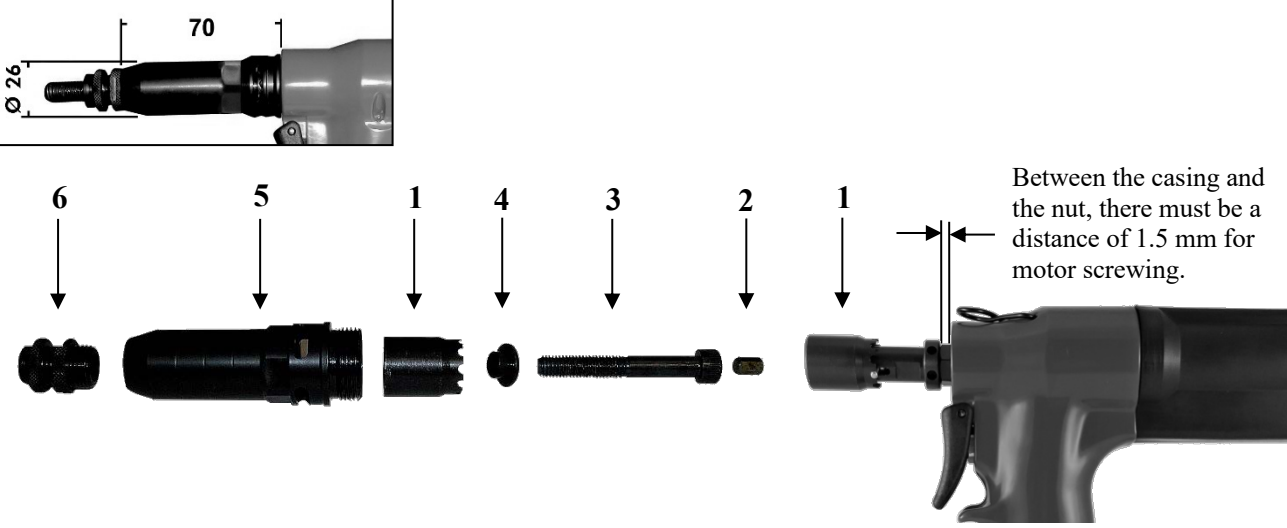
 P 2	<p><b>Warning:</b>                  Tool setting and screw replacement must be carried out with the tool disconnected from the air supply line.</p>
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Figure 6.2 - A



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

**To replace screws you have to carry out the following operations:**  
 Unscrew the 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.

**TO UNSCREW THE KIT HOLDER QUICK RING**

Use the supplied wrench to hold the front drive in place and unscrew the attached ring to place the front end assembly.

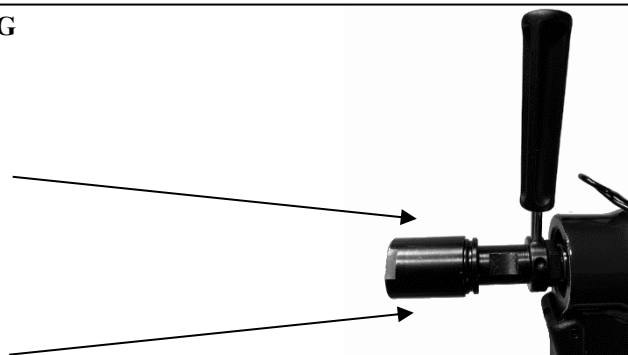
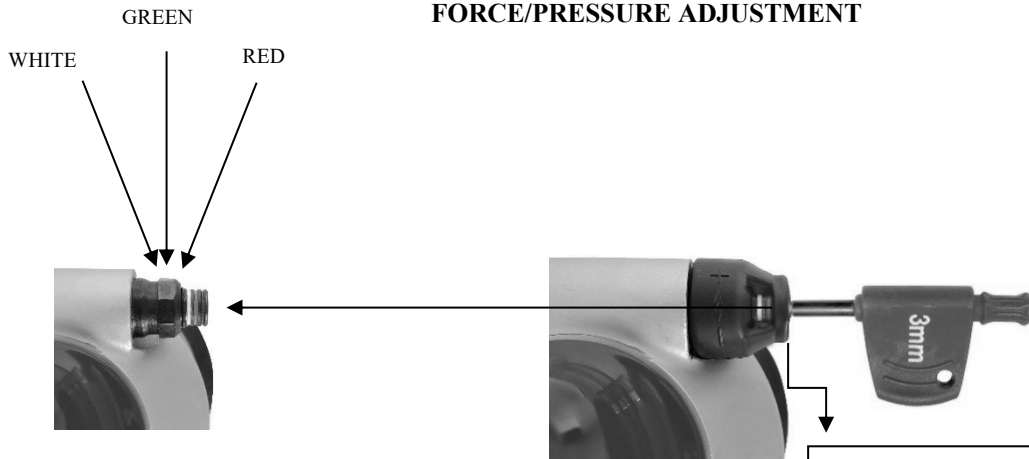


Figure 6.2 - B

Figure 6.2 – C

**FORCE/PRESSURE ADJUSTMENT**



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

**OIL (FORCE) PRESSURE SUGGESTED BASED ON LOKSERT DIMENSION TO BE INSTALLED**

**M4, M5  
8G, 10G** } GREEN

**M6, M8, M10, M12  
1/4, 5/16, 3/8, 7/16** } RED

Note: These settings are general guidelines to the operator. Parent materials where Loksert are installed are not uniform as hardness and therefore some modifications may be necessary (+ or -).

**IMPORTANT**

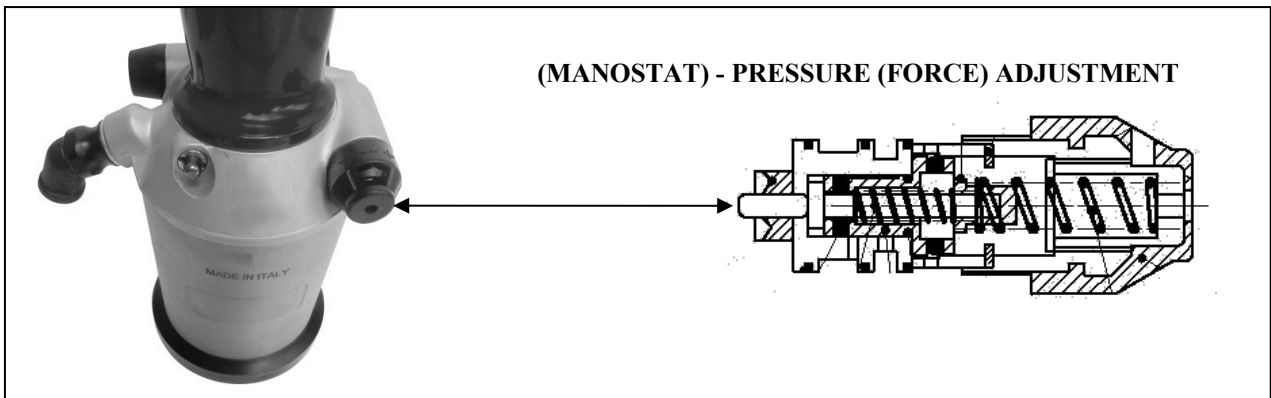
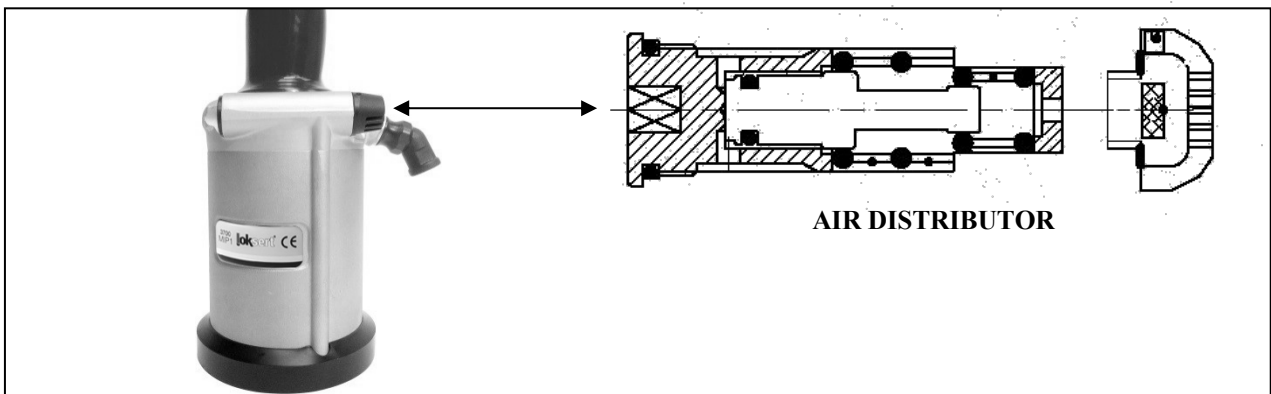
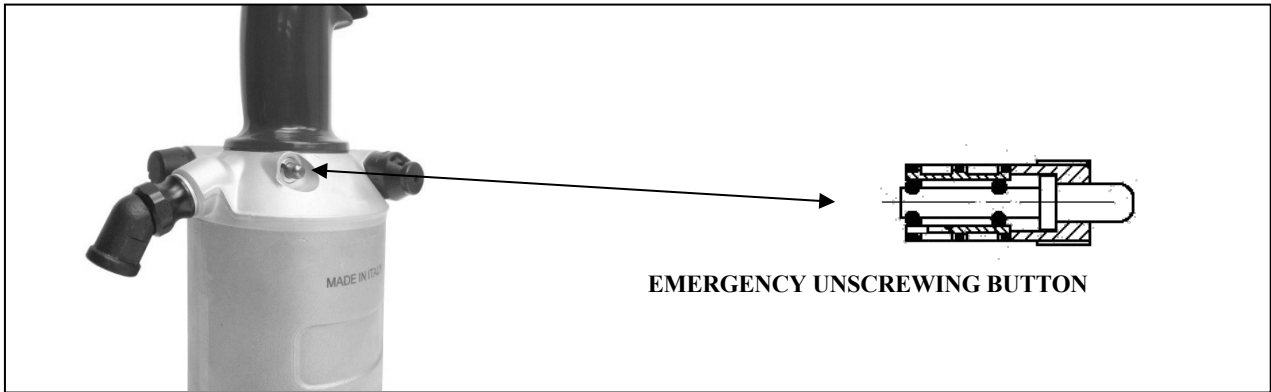
OIL (FORCE) PRESSURE ADJUSTMENT  
Turning rightward, the force increases.  
Turning leftward, the force decreases.

**WARNING**

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

**6.3 - INFORMATION**

To be used in case the LOKSERT gets stuck in the hole.



## 7 - SERVICING THE TOOL

### 7.1 - MAINTENANCE STATUS


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

#### Warnings:

- The tool maintenance instructions must be followed carefully.
- To ensure safety and perfect tool efficiency use only ORIGINAL spare parts.

### 7.2 - CLEANING

Tool must be completely cleaned and greased periodically, depending on the usage of the tool, but at least once per year.

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

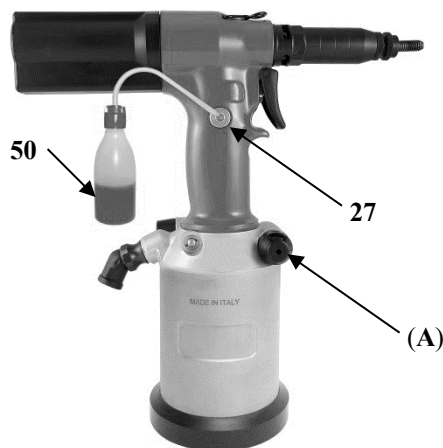
### 7.3 - ORDINARY MAINTENANCE

In order to prevent stoppages and faults of the tool, an ordinary 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 a continuous use, and when you notice a reduction in the tool stroke.

Proceed as follows (see Picture 7.3-A):

- Disconnect the air line 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 up a couple of idle cycles (do not pull trigger anymore), unscrew cap 27, and make sure that the circuit is full with oil and that no air bubbles are left inside.

Wear gloves when managing the oil.

**Do not** throw the old oil outdoors but hand it over to an authorised waste disposal centre.

**Warning!:** if you should accidentally spill oil on your skin, wash and rinse thoroughly with water and alkaline soap.

#### 7.3.2 - PARTS SUBJECT TO WEAR

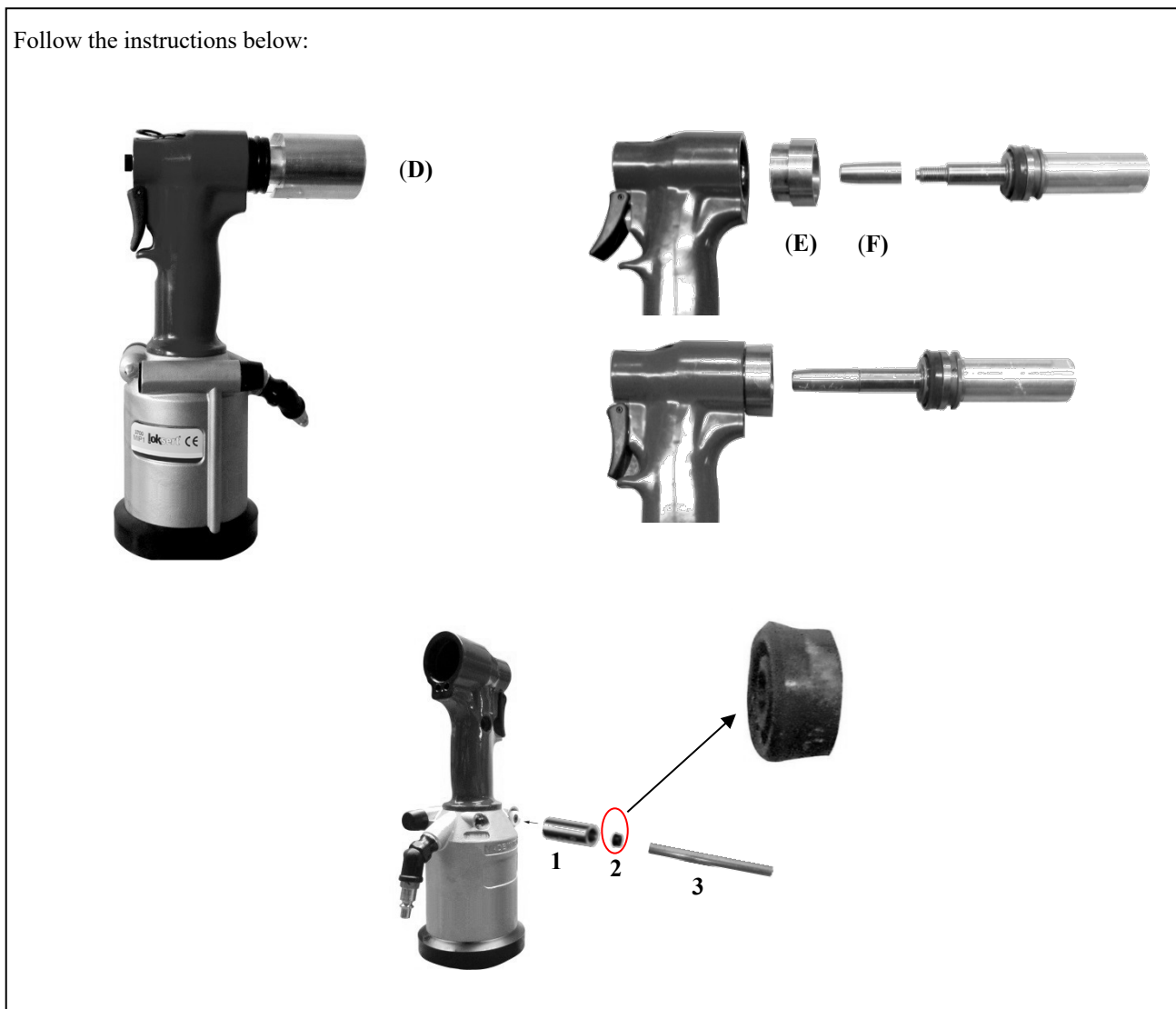
On a periodic basis check the state of wear of the rubber base, as this is what ensures the stability of the tool. If it should need replacing, order the spare base from Crossroad Distributor Source indicating the year/serial number of the tool (see section 4.5).

On a periodic basis check the state of wear of the screws and of the heads and, if necessary, replace them as indicated in section 6.2.

Spare parts are to be ordered exclusively from Crossroad Distributor Source, specifying the codes listed in section 3.1.

**7.4 - MAINTENANCE KIT ON REQUEST**



Follow the instructions below:

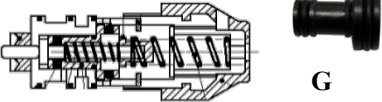
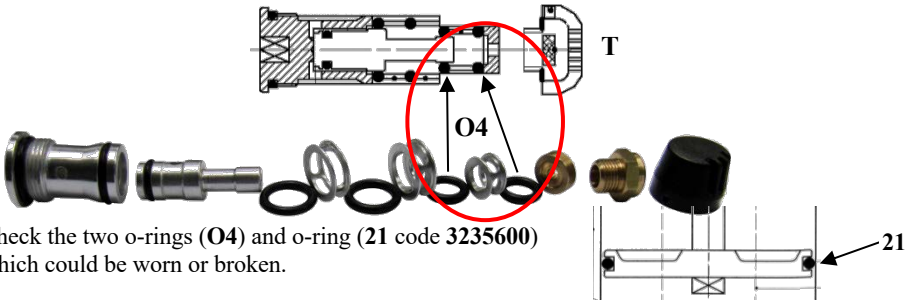
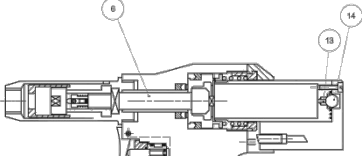
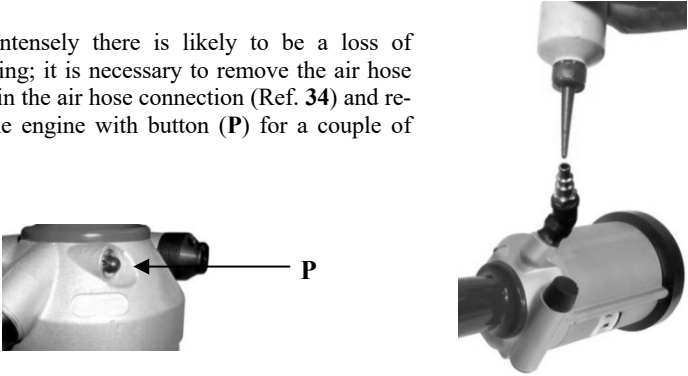



REF.	P/N	Q.TY	DESCRIPTION
D.	4461800	1	MILLED SLEEVE TO SCREW AND UNSCREW THE RING NUT (10)
E.	4461900	1	BUSH FOR INTRODUCTION OF ROTATING PIN (6) FITTED WITH GASKET
F.	4461700	1	THREAD PROTECTOR METAL FERRULE FOR INSERTION OF ROTATING PIN (6) to avoid damages to the gasket in the KIT (26)
1.+ 3.	4380800	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

CAUSE	REMEDY
Traction is not correctly performer.	Lack of oil [see para. 7.3.1].
Unscrew without traction.	Or (B) broken: replace it.  O-ring Code 4371800
Slows the unscrewing after traction.	Working intensively it loses greasing and tends to harden. Remove the piston (G), and grease.  G
Replacing parts of the manostat.	 <p>When you have to work on the manostat:</p> <ol style="list-style-type: none"> <li>1. Remove air</li> <li>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 (O1, O2, O3) have not been correctly assembled:                      O-ring (O2), when broken unscrews without making traction                      O-ring (O3) makes traction but no unscrew                      O-ring (O1) can leak air                      Consequently it is advisable to replace all 3 o-rings(ORM 15x1) of the kit(ref.41) code 4157200.</li> </ol>

CAUSE	REMEDY
<p>The transition time from stroke to unscrewing slows.</p>	<p>Open the manostat and pull the piston out (G), grease it and reassemble it.</p> 
<p>Air leaks from muffler (T).</p>	 <p>Check the two o-rings (O4) and o-ring (21 code 3235600) which could be worn or broken.</p>
<p>MOTOR screwing</p>	<p>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).</p>  <p>Unlike the situation above, the shaft is too short and it has to 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>
<p>Loss of rev. during unscrewing.</p>	<p>When you are working intensely there is likely to be a loss of revolutions in the 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.</p> 
<p>Air leaks from air distributor.</p>	<p>In case of loss of air from the air distributor, the plate of the piston is broken.</p> 



## **9 - FAULT DIAGNOSIS AND REPAIRS**

### **9.1 - REPAIRS**

To ensure the operational efficiency and safety of the tool, all repair jobs shall be carried out exclusively by the local authorised dealer or by the Technical Assistance Service of Crossroad Distributor Source (see section 1.2).

### **9.2 - REQUESTING ASSISTANCE**

For any information concerning Use, Maintenance, Installation, Repair and so on, Crossroad Distributor Source is at the Customer's full disposal for all enquiries.

When making enquiries the customer is requested to be absolutely clear and to make always reference to this Manual and, in particular, to the instructions given in section 1.2.

## **10 -DISMANTLING INSTRUCTIONS**

### **10.1 - DISMANTLING INSTRUCTIONS**

When demolishing the tool you need to separate the plastic parts, which are to be disposed of in compliance with current Regulations.

As for the bulk metal part of the tool, simply split-up the steel parts from those in other metals or alloys and send to be melted down and recycled.

The oil drained from the tool must not be thrown outdoors but handed over to an authorised spent oil disposal centre.

## **11 -ENCLOSED DOCUMENTS**

### **11.1 - DECLARATION**

The following declaration is enclosed:

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



## NOTES

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# DECLARATION OF CONFORMITY

**Bordo Europe  
Dendermonde, Belgium**

**DECLARE**

**in the person of:**

**Iain Brown**

**(Director)**

**under our sole responsibility that the tool**

**3700-MIP1**

**Serial No. : 3700-114**

**to which this declaration relates is:**

**IN CONFORMITY**

**with the provisions of the Machine Directive 2006/42/EC**

**Technical documentation at:**

Bordo Europe BVBA  
Industrieweg 2 (BAA)  
B-9200 DENDERMONDE

***Dendermonde, 18/05/2018***



**Crossroad Distributor Source**  
**15340 Herriman Blvd**  
**Noblesville, IN 46060**  
**317.723.5050**  
**sales@crossroad.bz**