

TOOL HOLDER

PO150D

No 07085025NG - 07085505NG

EDITION : EN
REVISION : E
DATE : 03-2024

Instructions for use

REF. : **8695 4566**

Original instructions

Thank for the trust you have expressed by purchasing this equipment, which will give you full satisfaction if you follow its instructions for use and maintenance.

Its design, component specifications and workmanship comply with applicable European directives.

Please refer to the enclosed CE declaration to identify the directives applicable to it.

The manufacturer will not be held responsible where items not recommended by themselves are associated with this product.

For your safety, there follows a non-restrictive list of recommendations or requirements, many of which appear in the employment code.

Finally we would ask you kindly to inform your supplier of any error which you may find in this instruction manual.

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REVISIONS

REVISION B**10/16**

DESIGNATION	PAGE
Creation in several languages	

REVISION C**02/19**

DESIGNATION	PAGE
To change logos	

REVISION D**02/19**

DESIGNATION	PAGE
Update « 07085064 => W000400419 »	21

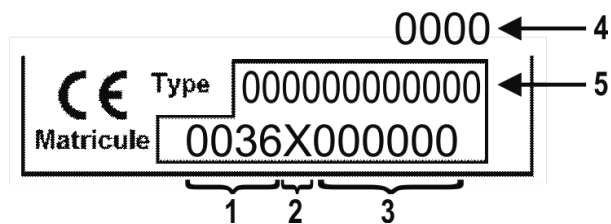
REVISION E**03/24**

DESIGNATION	PAGE
Imperial measurements added	

A - IDENTIFICATION

Please enter the number of your equipment in the following box.

Quote this information in all correspondence.

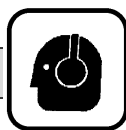


1	Manufacturing factory code	4	Year manufactured
2	Manufacturing year code	5	Product type
3	Product serial no.		



B - SAFETY INSTRUCTIONS

For general safety instructions, please refer to the specific manual supplied with the equipment.



AIRBORNE NOISE

Please refer to the specific manual supplied with the equipment.

C - DESCRIPTION

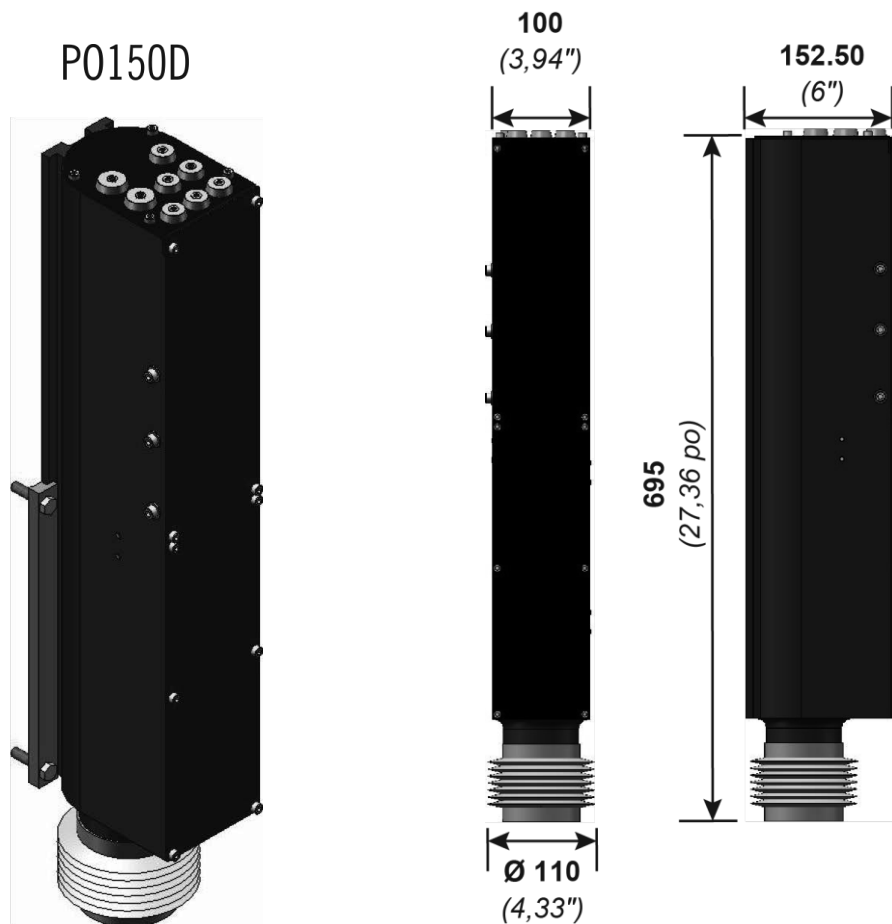
1 - DESCRIPTION

This assembly is made up of a dust-proof housing and contains the mechanical and electrical components that raise and lower the tool.

The stepper motor unit transmits the vertical movement to a column by means of a screw and nut system. Upper and lower limit switches keep the movement safe.

The movement of that column, which is treated and ground, is guided, and it is blocked by an anti-rotation system. The protruding part is protected by heat-resistant bellows.

The assembly made up of the column and the geared motor moves vertically but cannot rotate. The movement thus provides for safety if there is a vertical impact between the tool and the plate to cut. A limit switch safety device stops the downward movement.

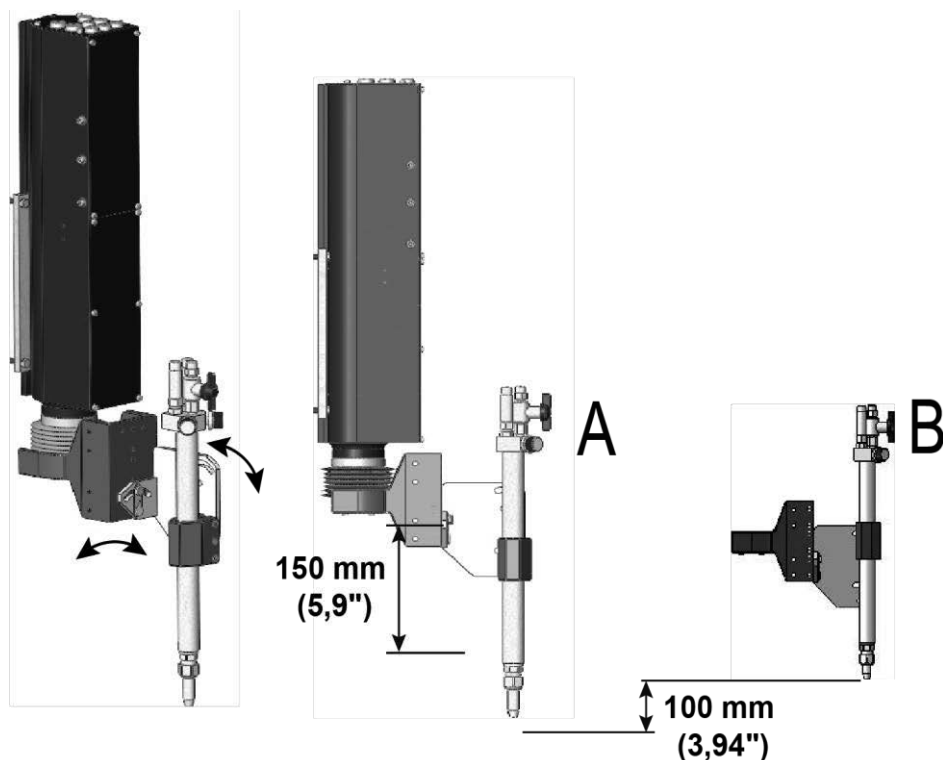


SPECIFICATIONS:	
Speed	200 cm/min (78 in/min)
Electrical travel	150 mm (5,9")
Max. load	35 daN (7,8 lb)
Weight:	22,5 daN (5,06 lb)

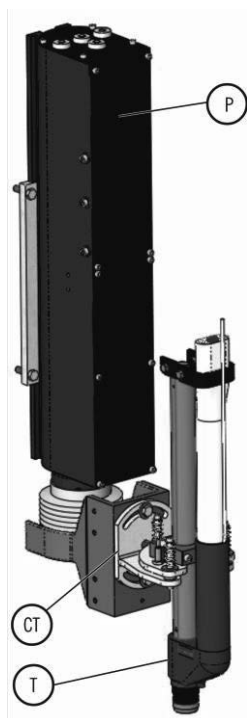
2 - PO150D OXY

A support placed at the end of the column fastens the tool in two different positions. (version A or B).

A clamp makes it possible to vertically adjust the torch within a range of ± 100 mm (3,94") (± 50 mm (1,97") with optional detection or sensing) and adjust the angle along the two axes X and Y.



3 - PO150D PLASMA



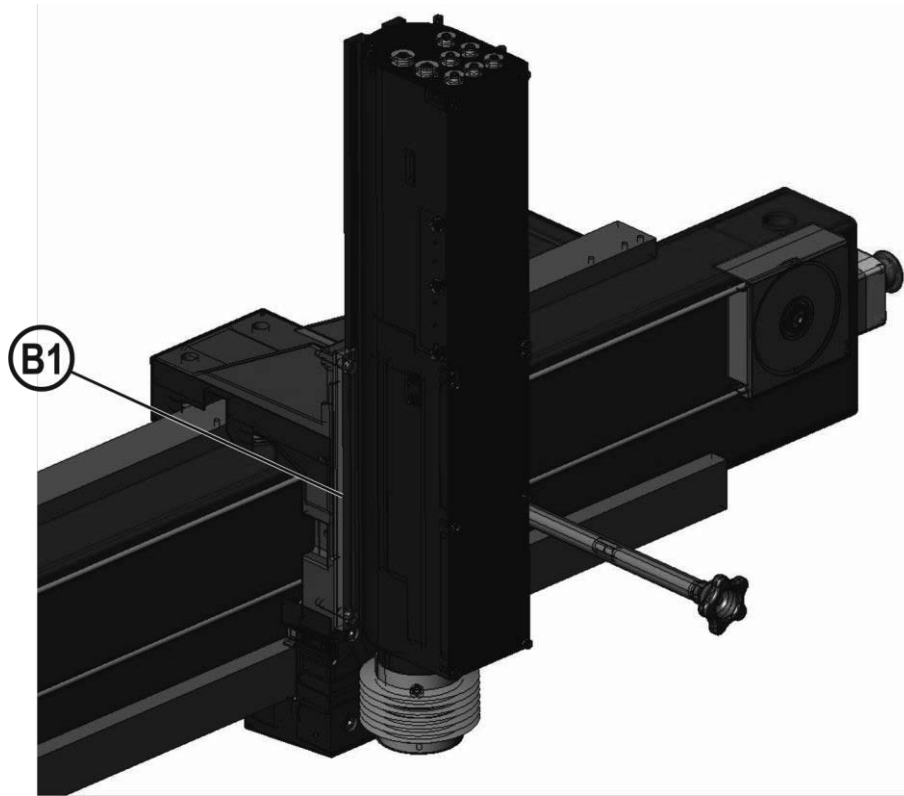
The torch impact safety system **CT** is a machine protection device that is mounted between the tool holder **P** and a cutting torch **T**.

It acts as a safety device in the event of a lateral or vertical impact on the torch by stopping the movements of the machine.

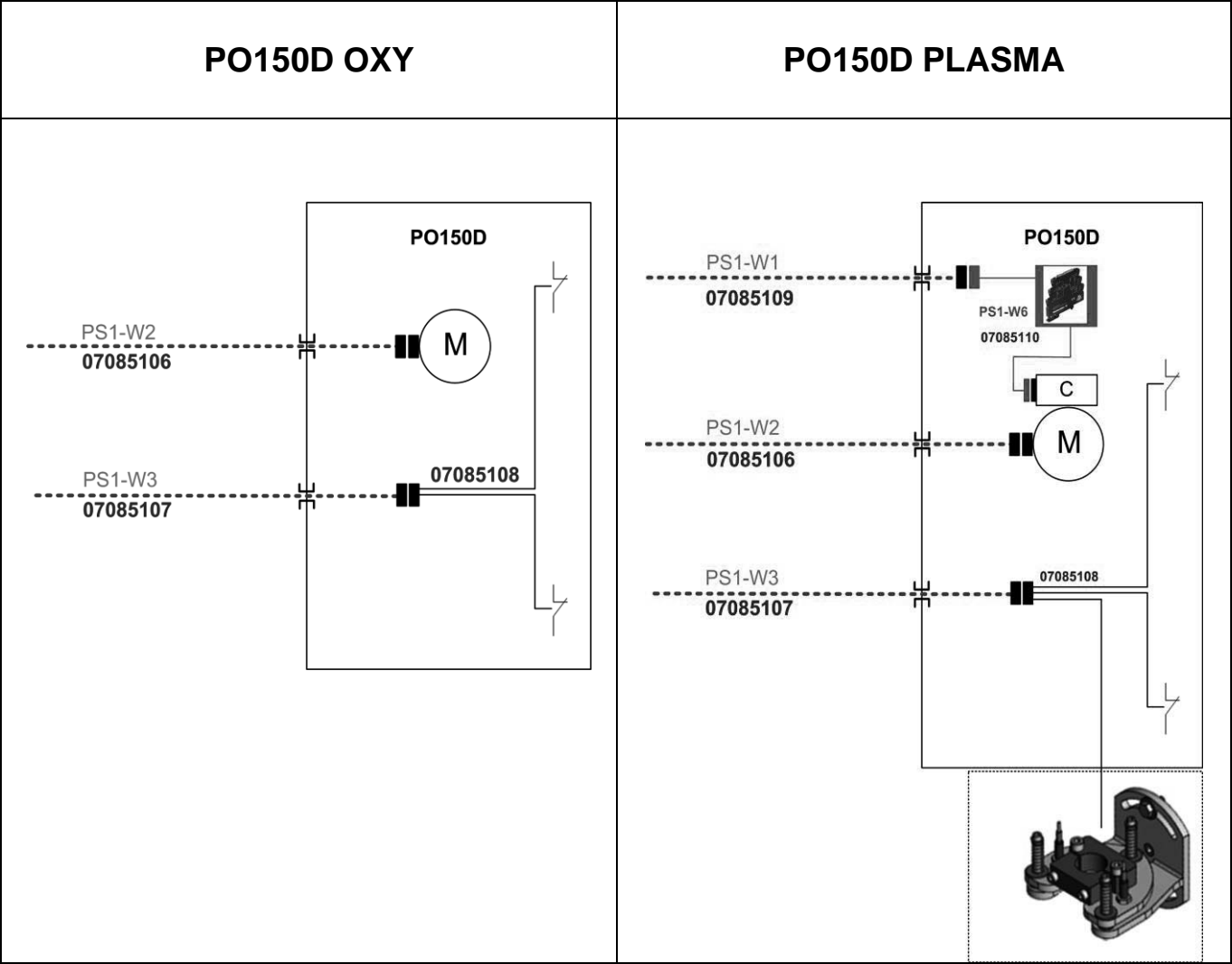
D - MONTAGE INSTALLATION

1 - MONTAGE

Fix the tool holder PO150D to the machine shield by means of the two clamps **B1**. Fastening is by means of four M8 screws.



2 - CONNECTION



The connectors have foolproofing to avoid reversed connections.

For oxycutting, one bundle groups tool-holder information and the other one is the motor power bundle.

The plasma process additionally has an encoder interface bundle.

E - MAINTENANCE

1 - SERVICING

- So that the machine continues to provide good service for as long as possible, a certain minimum of care and maintenance is necessary.
- • The frequency of this maintenance work is given on the basis of the production of one work station per day. Maintenance should be more frequent if production is greater.

Your maintenance department may photocopy these pages so that it can follow up maintenance dates and operations (tick as appropriate)



Before working on the machine, it is **MANDATORY** to lock out all the supplies of utilities to the machine (electricity, air, gas etc.).
Locking an emergency stop button is not sufficient.

Every day

Date of maintenance : / /



- Brush off any oxide splatter on the most exposed parts.

Weekly

Date of maintenance : / /



- Check if the tool holder is properly fastened to the machine.

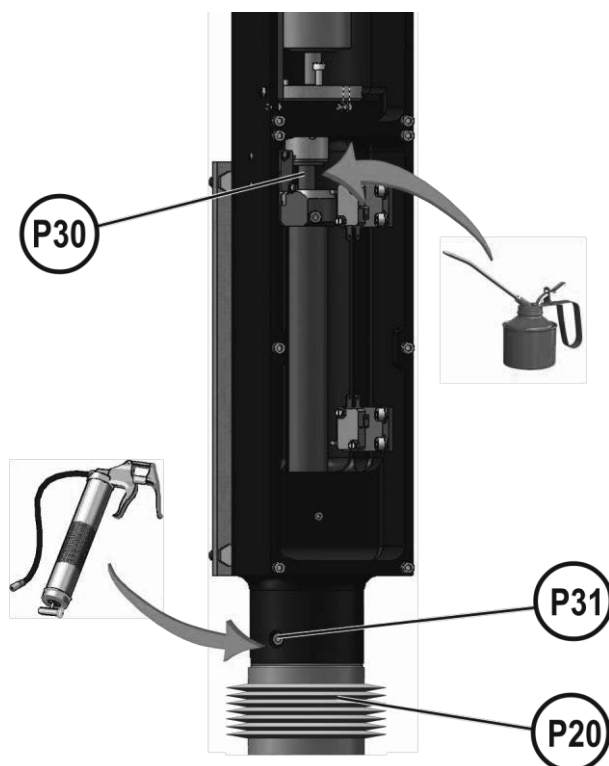
Monthly

Date of maintenance : / /



LUBRICATING THE TOOL HOLDER

- Move the tool holder down
- Take off the front of the tool holder
- Release the clamp **P20** and move down the protective bellows
- Oil the tool holder screw **P30** with 140 oil
- Lubricate the tool holder through the hole **P31** with ALVANIA G2 SHELL grease
- Put back the bellows and the front
- Move the tool holder up and down



After every 1200 hours

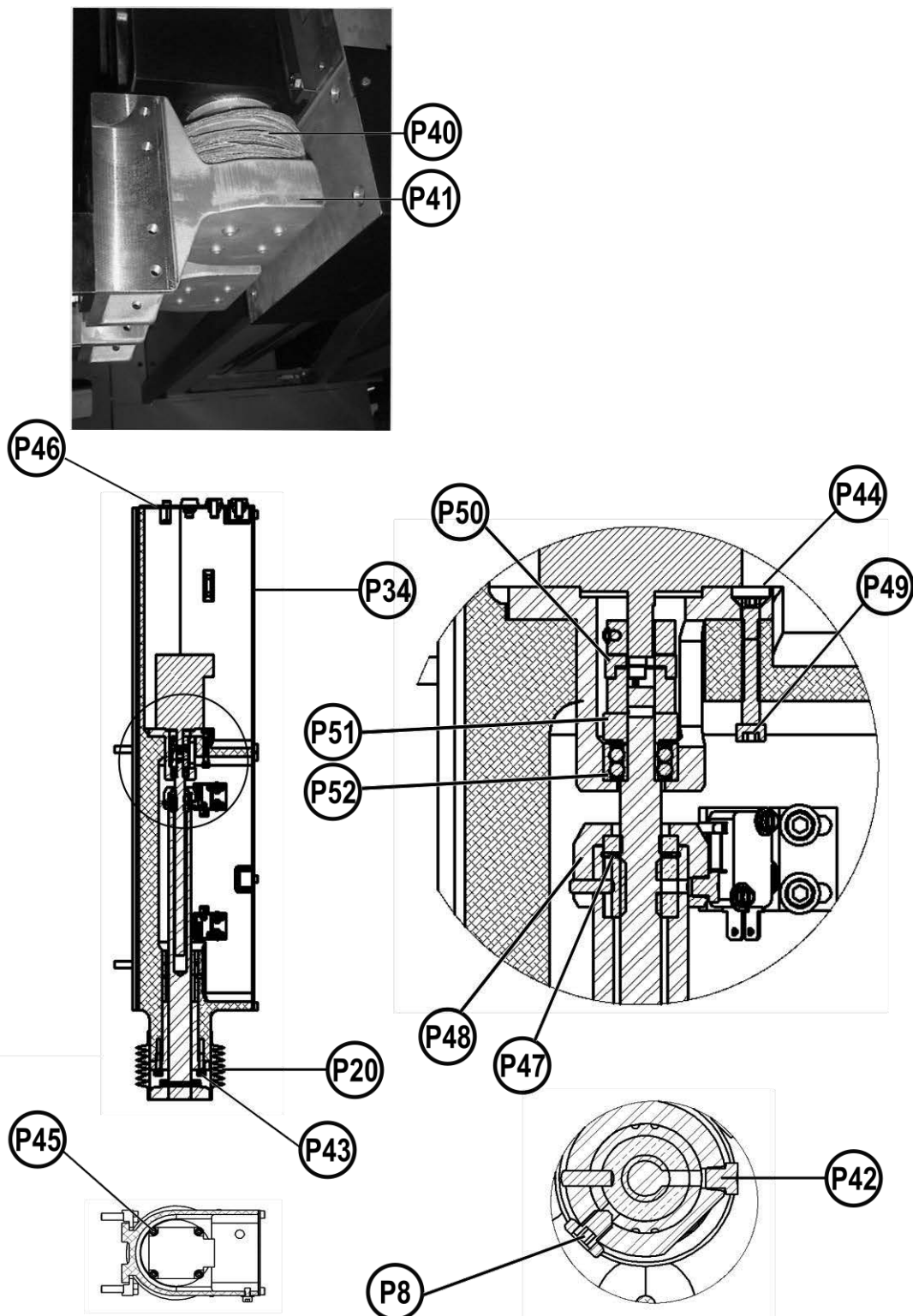
Date of maintenance : / /



- Check the wear and tear of moving elements, screws, nuts, bearings etc.

2 - TROUBLESHOOTING

CHANGING A COLUMN KIT



CHANGING A COLUMN KIT

- ◆ Move the tool holder down if possible
- ◆ Take off the front P34 of the tool holder
- ◆ Take off the torch support P40 by taking off the four screws P41
- ◆ Release the clamp P20 and move down the protective bellows
- ◆ Take off the lubricator P42
- ◆ Unscrew the screw P47
- ◆ Take off the four screws P43
- ◆ Turn the column assembly by hand over 180°
- ◆ Take off the nut and the screw P8
- ◆ Take down the column by unscrewing it
- ◆ Put the new assembly in place by reversing the procedure

CHANGING THE FELT PIECE AND NUT (EQUIPPED SCREW KIT)

- ◆ Move the tool holder down if possible
- ◆ Take off the front P34 of the tool holder
- ◆ Take off the torch support P40 by taking off the four screws P41
- ◆ Release the clamp P20 and move down the protective bellows
- ◆ Take off the lubricator P42
- ◆ Take off the four screws P43
- ◆ Turn the column assembly by hand over 180°
- ◆ Take off the nut and the screw P8
- ◆ Remove the ring P48
- ◆ Remove the felt piece
- ◆ Remove the circlip P47
- ◆ Remove the nut
- ◆ Put the new assembly in place by reversing the procedure

CHANGING AN EQUIPPED SCREW KIT

- ◆ Move the tool holder down if possible
- ◆ Take off the front of the tool holder P34
- ◆ Take off the upper plate P46 of the tool holder
- ◆ Take off the screw P44
- ◆ Take off the nut and screw and motor assembly from above
- ◆ Unscrew the four screws P45 and take off the motor
- ◆ Loosen the coupling P50
- ◆ Loosen the thrust ring P51
- ◆ Remove the screw and nut assembly
- ◆ Remove the bearing P52
- ◆ Put the new assembly in place by reversing the procedure



IMPORTANT! Never take the column out of the ball bushing

NB:

- Tightening torque for thrust ring: 1.61 Nm (14,19 lb-in).
- Tightening torque for coupling: 3 Nm (26,55 lb-in).
- Leave play for assembling the screw P44, and loosen the companion screw P49.
- Mind you do not apply axial force on the motor.
- While assembling the bearing, take care to apply the force on the outer ring.

3 - SPARE PARTS

How to order

The photos or sketches identify nearly every part in a machine or an installation

The descriptive tables include 3 kinds of items:

- those normally held in stock: ✓
- articles not held in stock: ✕
- those available on request: no marks

(For these, we recommend that you send us a copy of the page with the list of parts duly completed. Please specify in the Order column the number of parts desired and indicate the type and the serial number of your equipment.)

For items noted on the photos or sketches but not in the tables, send a copy of the page concerned, highlighting the particular mark.

For example:

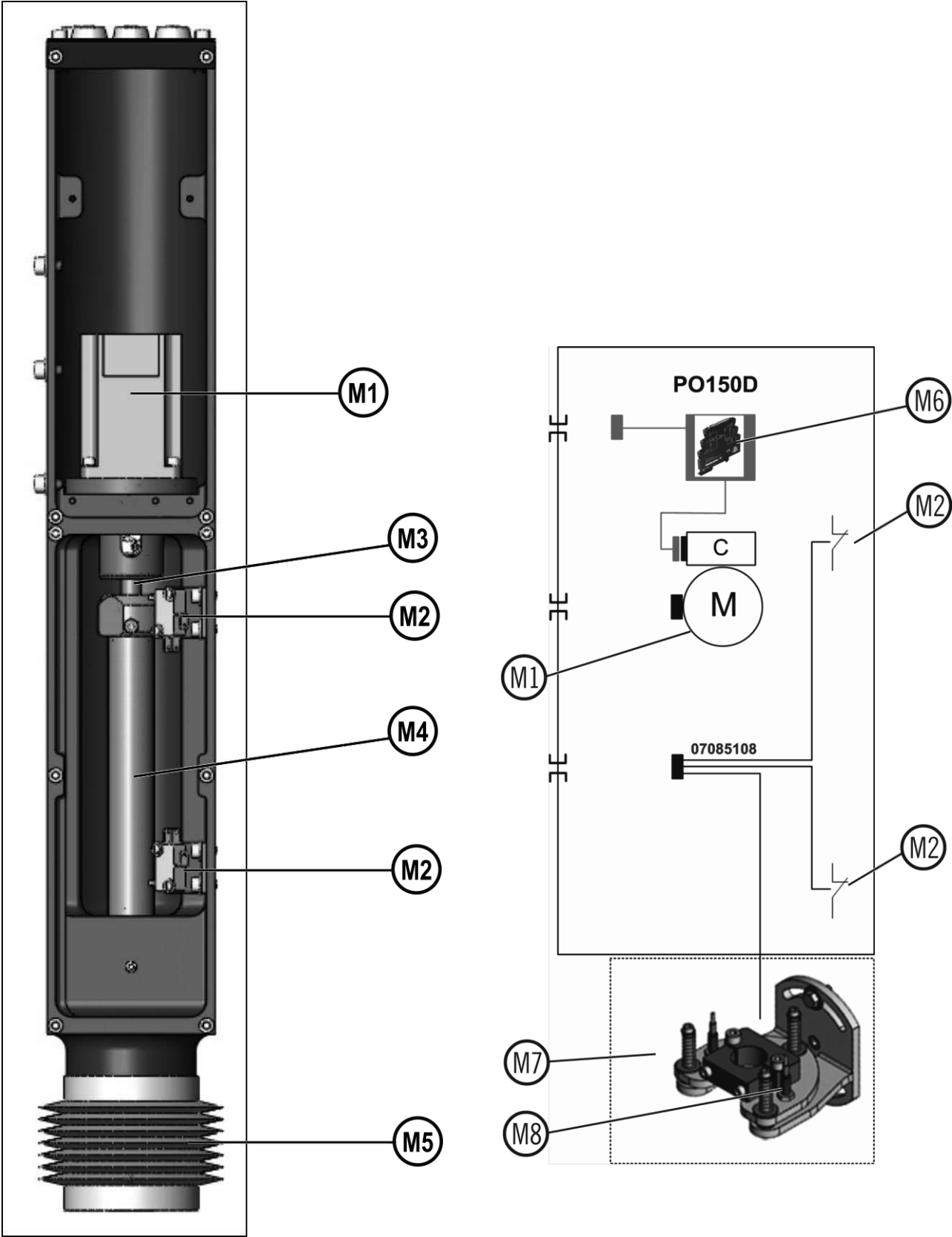
		✓	normally in stock
		✕	not in stock
			on request

Item	Ref.	Stock	Order	Designation
1	W000XXXXXX	✓		Machine interface board
2	W000XXXXXX	✕		Flowmeter
3	9357 XXXX			Silk-screen printed front panel

- For parts order, give the quantity required and put the number of your machine in the box below.

CE Type <input type="text"/> Matricule <input type="text"/>	TYPE:
	Number:

TOOL HOLDER



✓	normally in stock
✗	not in stock
	on request

Item	Ref.	Stock	Order	Designation
M1	W000400416	✗		Step motor for oxycutting process
	W000400417	✗		Step motor + encoder for plasma process
M2	W000352100	✓		XGG288WT20 Position detector
M3	W000400419	✓		Equipped screw kit
M4	W000139102	✓		Equipped column kit
M5	W000139104	✓		Bellows
	W000265274	✓		Torch support assembly
M6	W000400418	✗		5-24V optocoupler for plasma process
M7	W000400420			Simplified plasma torch impact safety system assembly
M8	W000400421			Electrification of plasma torch impact safety system

➤ For parts order, give the quantity required and put the number of your machine in the box below.

CE Type <input type="text"/> Matricule <input type="text"/>	TYPE:
	Number:

[illegible]