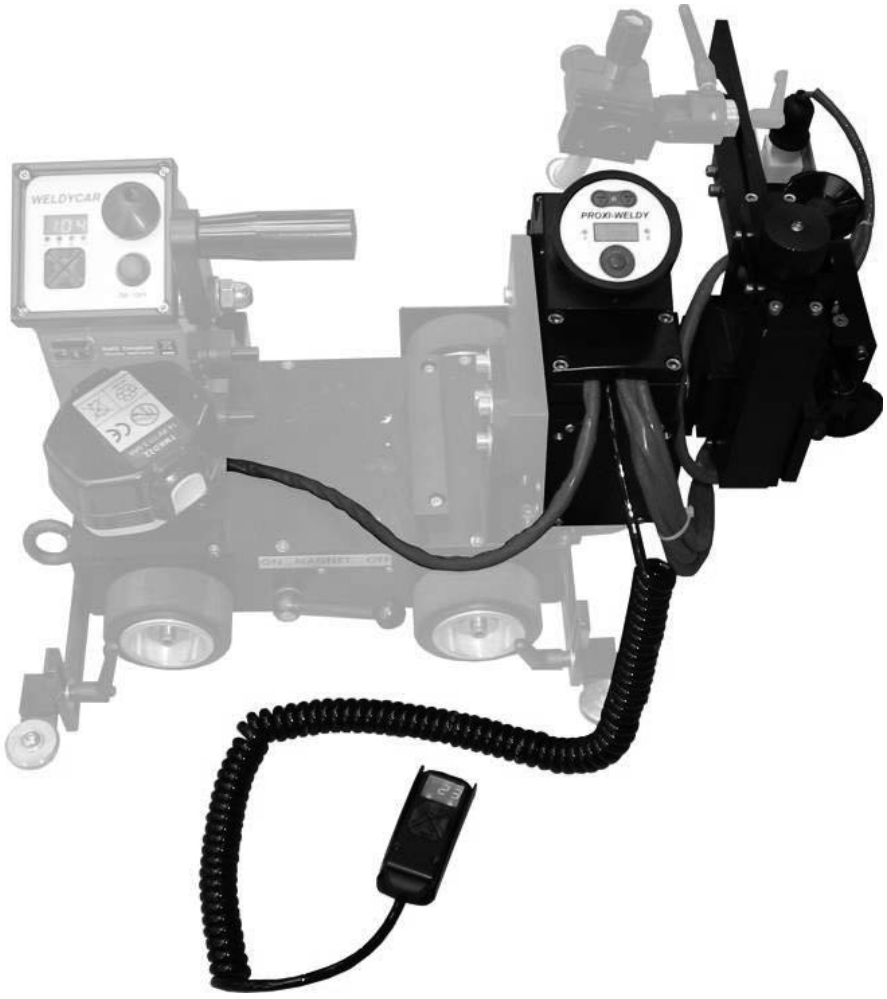
**MOTORIZED CROSSED SLIDES FOR WELYCAR**

# PROXI-WELDY

**SAFETY INSTRUCTIONS FOR USE AND MAINTENANCE**




EDITION: EN
REVISION: B
DATE: 03-2020

Instructions for use

REF: **8695 5879**

***Original instructions***

LINCOLN® ELECTRIC

**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.**

# CONTENTS

# INFORMATIONS

## DISPLAYS AND PRESSURE GAUGES

The measuring devices or displays for voltage, current, speed, pressure, etc., whether analog or digital, should be considered as indicators

# REVISIONS

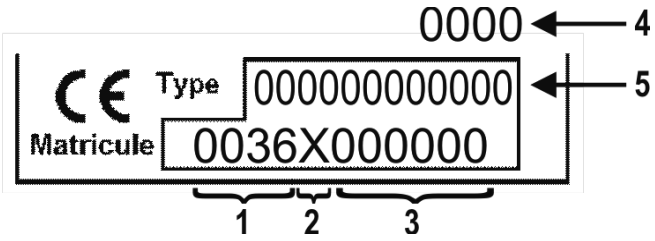
**REVISION B** **03/20**

| DESIGNATION | PAGE |
|---|---|
| To change logos | |

# A - IDENTIFICATION

Please enter the number of your machine 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. | | |

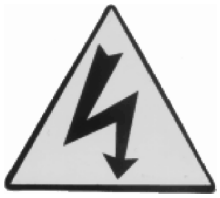
# B - SAFETY INSTRUCTIONS

**ELECTROMECHANICAL EQUIPMENT USED AS THE SUBASSEMBLY OF AN INSTALLATION.**

- This equipment can be associated with a welding installation, in which case it is covered by safety instructions described in the instructions for the welding installation

- If this equipment is used in other cases, a minimum of instructions must be respected, in particular :

## 1 - SERVICING



- Check often that the insulation and connections of the electrical equipment and accessories are in good condition: plugs, cables, flexible cables, sheaths, connectors, extension cables, workpiece clamps, electrode holders or torches…
- Maintenance and repair work on insulating sheaths and covers should never be carried out in a makeshift manner.
- Have defective accessories repaired by a specialist or, better still, replace them.
- Periodically check that electrical connections are properly tightened and do not overheat.

## 2 - PERSONAL PROTECTION

**RISK OF EXTERNAL INJURY.**

- The operator must be properly dressed and protected for the work he is carrying out.
- Ensure that no part of the operator's body or of his assistant's body can come in contact with metal parts and workpieces which are energized or which could accidentally become energized and/or which are moving.
- Do not wrap electrical cables around your body.

**Make sure that no spray or water enters into the electrical box of the oscillator.**
**➔ IP235 PROTECTION**

# C - DESCRIPTION

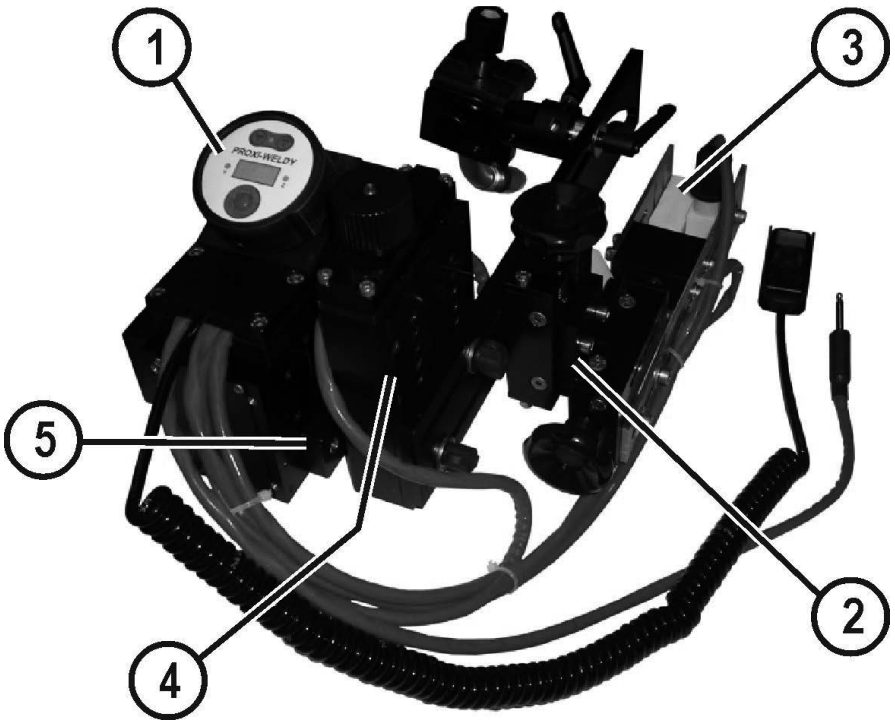
## 1 - DEFINITION

This autonomous crossed slides **PROXI-WELDY**, equipped with proximity sensors, can be mounted on **WELDYCAR** which is able to support one MIG/MAG torch. This option is used for the automatic joint tracking through the 2 electrical slides.

The **WELDYCAR**, equipped with the crossed slides, keeps the same technical characteristics. The electrical supply of the **PROXI-WELDY** is done by the 14V plug on the **WELDYCAR**.

On a basic **WELDYCAR**, the joint tracking is made by manual slides. Now, with this option, it's possible to track the joint in automatic on steel or aluminium piece, thanks to proximity sensors.

The **PROXI-WELDY** can be used as a simple crossed electrical slide when the proximity sensors are not easy to be adjusted.




| | |
|---|---|
| **1** | Control Panel |
| **2** | 2 manual slides to adjust the position between the proximity sensors and the torch |
| **3** | 2 proximity sensors :<br>- 1 for vertical slide,<br>- 1 for lateral slide |
| **4** | Vertical slide stroke 56 mm controlled by proximity sensor or joystick control |
| **5** | Lateral slide stroke 56 mm controlled by proximity sensor or joystick control |

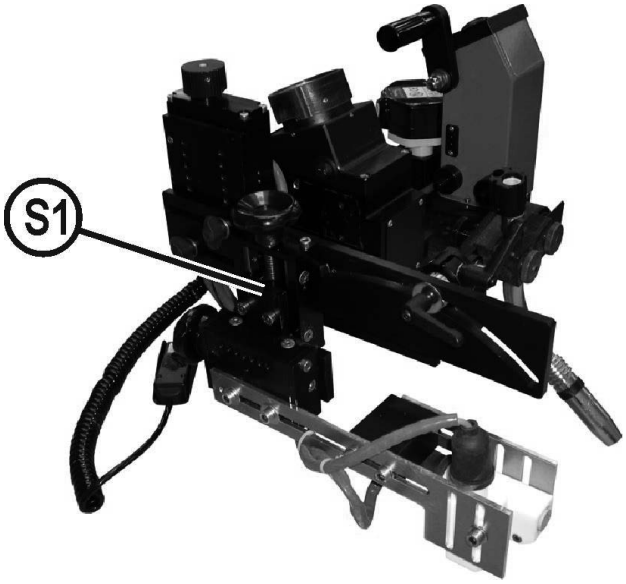
## 2 - POWER SUPPLY

The **PROXI-WELDY** is powered by connecting a jack plug onto the **WELDYCAR**, itself powered by a 14.4 VDC battery.

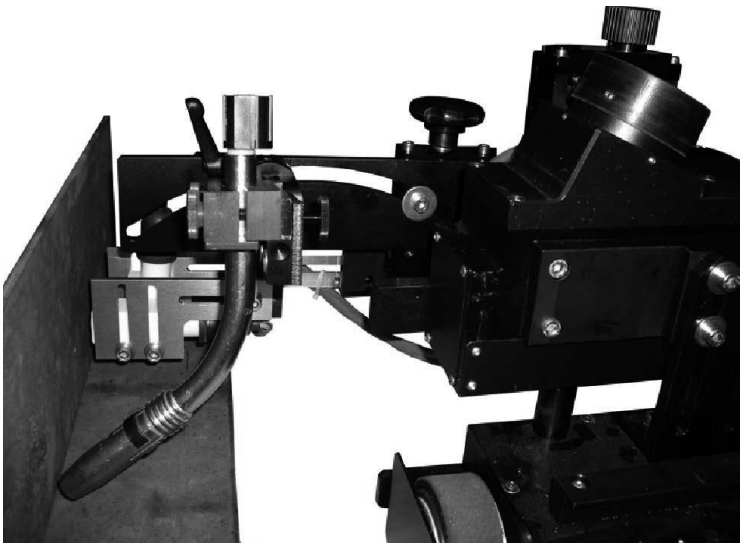
The **WELDYCAR** carriage and its associated **PROXI-WELDY** are completely autonomous. The **WELDYCAR** battery provides continuous operation of 2 hours.

## 3 - POSITION OF THE TORCH

The adjustment between the torch and the proximity sensors is made by manual crossed slides S=40 mm.




For filet joint, activate the sensors and then, adjust the torch in the joint.

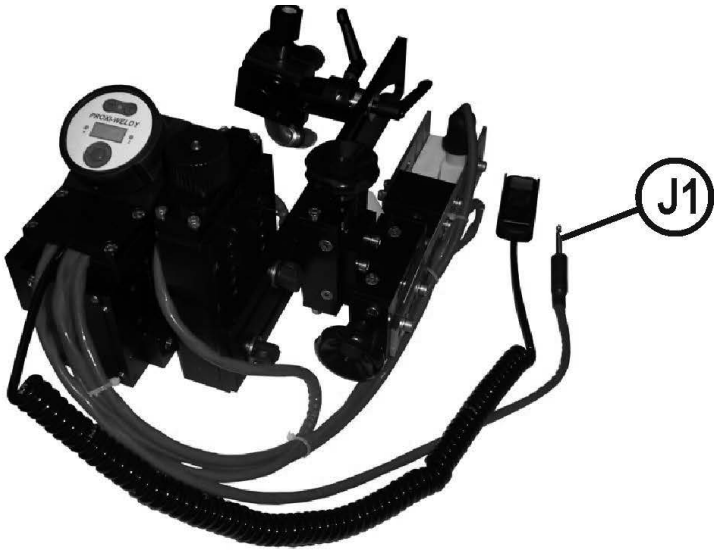


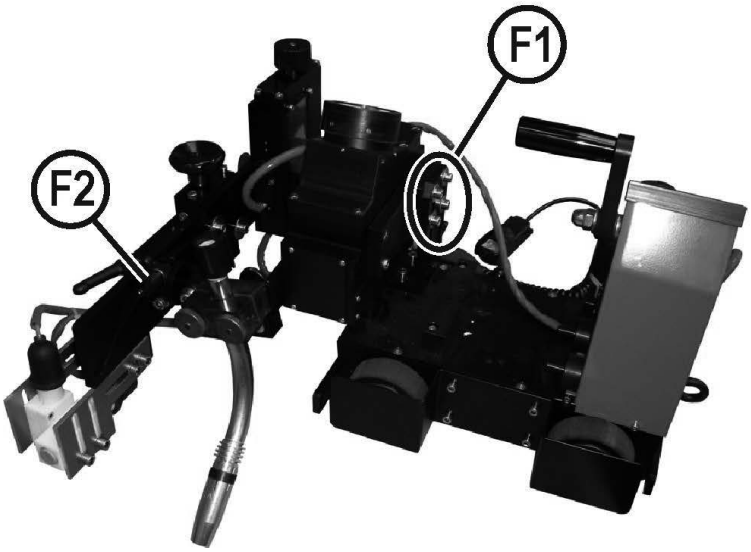
# 4 - CHARACTERISTIC

| | | PROXI-WELDY |
|---|---|---|
| Stroke left/right slide | mm | 56 mm |
| Stroke up/down slide | mm | 56 mm |
| Autonomy of work with **WELDYCAR** | - | 2 h in continuous work |
| Protection indice | - | IP 23 |
| Weight | Kg | 4 |
| Supply | - | 14V by connection to the **WELDYCAR** |
| Functionning temperature | - | -5°C to +45°C |
| Storage temperature | - | -10°C to +60°C |
| Relative humidity | - | < 90% |

# D - ASSEMBLY - INSTALLATION

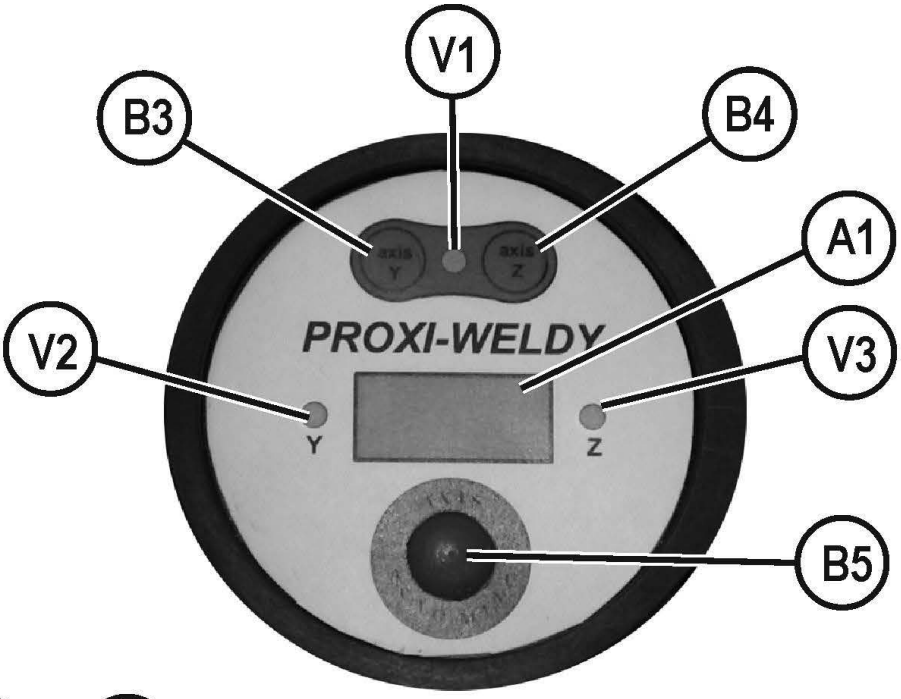
1. Remove the torch holder from the **WELDYCAR**
2. Remove the manual crossed slides from the **WELDYCAR**
3. Fix the **PROXI-WELDY** on the **WELDYCAR** with the screws F1
4. Fix the torch holder on the **PROXI-WELDY** with the handle F2
5. Connect the jack plug J1 on the power supply

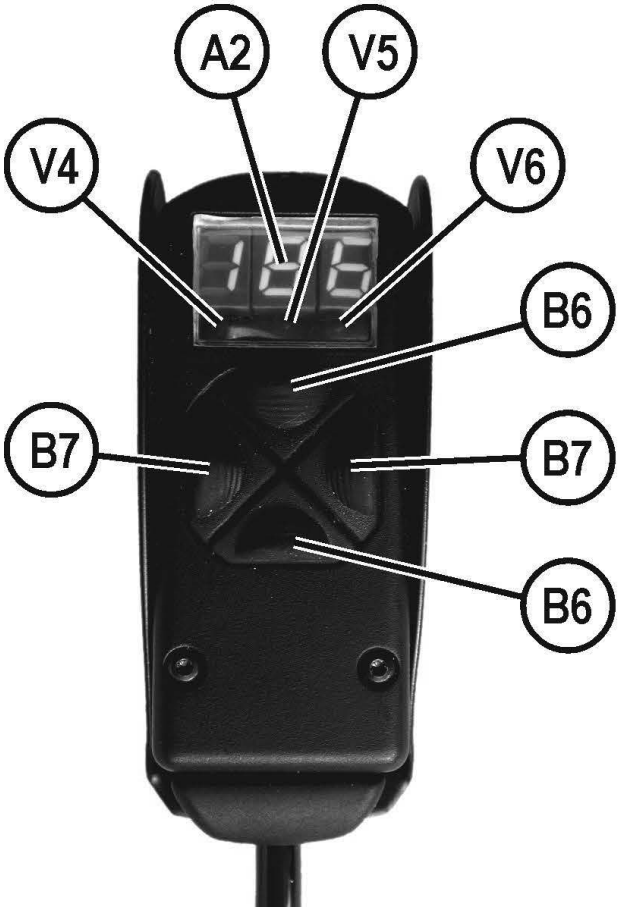


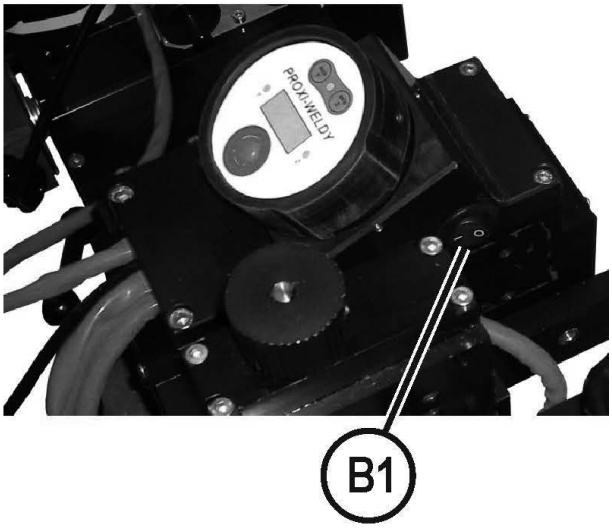



# E - OPERATOR MANUAL

## 1 - COMMANDE



| | |
|---|---|
| **A1** | Display on the **PROXI-WELDY** |
| **A2** | Display on remote control |
| **B1** | Switch on / off button |
| **B3** | Button to select the mode Manu / Auto on Y axis |
| **B4** | Button to select the mode Manu / Auto on Z axis |
| **B5** | Start / stop tracking with proximity sensors |
| **B6** | Button to adjust the Y axis position |
| **B7** | Button to adjust the Z axis position |
| **V1** | Automatic mode light |
| **V2** | Setting light for Y axis |
| **V3** | Setting light for Z axis |
| **V4** | Setting light for Y axis |
| **V5** | Setting light for automatic mode |
| **V6** | Setting light for Z axis |

# 2 - SETTING PROCEDURE

## 2.1 Manual mode

- Push the button B1 to switch on the **PROXI-WELDY**
- At the start, the machine is in manual mode
- The light V2, V3, V4 and V5 are on continuous lighting
- The V1 and V5 are off

In the manual mode, it's possible to move the slides manually with the remote control :
- Push buttons B6 : to move the Y axis up/down
- Push buttons B7 : to move the Z axis left/right

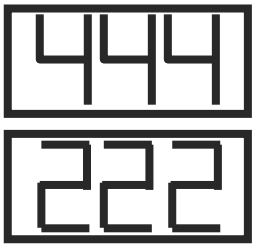
## 2.2 Automatic mode

- After adjustment in manual mode of the slides (preferably in medium position), it's possible to put the machine in automatic mode
- When pushing button B3 (for Y axis) or B4 (for Z axis), the automatic mode is pre-selected in according the selected axis.
- The light V2 (for Y axis) or V3 (for Z axis) are flashing when the automatic mode is selected.
- Push start button B5 to track the joint with the proximity sensors.
- Adjust the torch position according the proximity sensors.

In automatic mode, it's always possible to come back to manual mode by pushing the B5 button. Push only 1 button B3 or B4 to come back to manual mode on the correspondent axis.

## 2.3 Error mode

- When one axis is out of the stroke of the slides, there is a BUZZER and on the display A2 and A5 we can see :




→ Out of stroke on Y axis

→ Out of stroke on Z axis

→ Go on manual mode and recenter the slide in the good position with the remote control

# F - MAINTENANCE

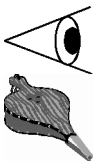
## 1 - SERVICING

- 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)

| Daily | | |
|---|---|---|
|  | | Remove regularly welding projection on protection lenses of the photo cell, protection casing and support roller.<br>Regularly clean the outside of the carriage and the welding torch support adjusting elements. |

| Every 100 hours | | |
|---|---|---|
| Date of maintenance: / / | | |
|  | | - Grease manœuvre screw |
|  | | - Dismount and clean the support rollers |

| Annually or after every 500 hours | | |
|---|---|---|
| Date of maintenance: / / | | |
|  | | - check up the transmission system<br>- adjust the clearance of guiding shims on the slides<br>- adjust the clearance of the geared motor on the large sprocket wheel. |
|  | | - wash and grease the wheels<br>- blow very carefully the electronic card, speed regulator, electric rack. |

# 2 - 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.)

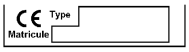
For items noted on the photos or sketches but not in the tables, send a copy of the page concerned, highlighting the particular mark.

**For example:**

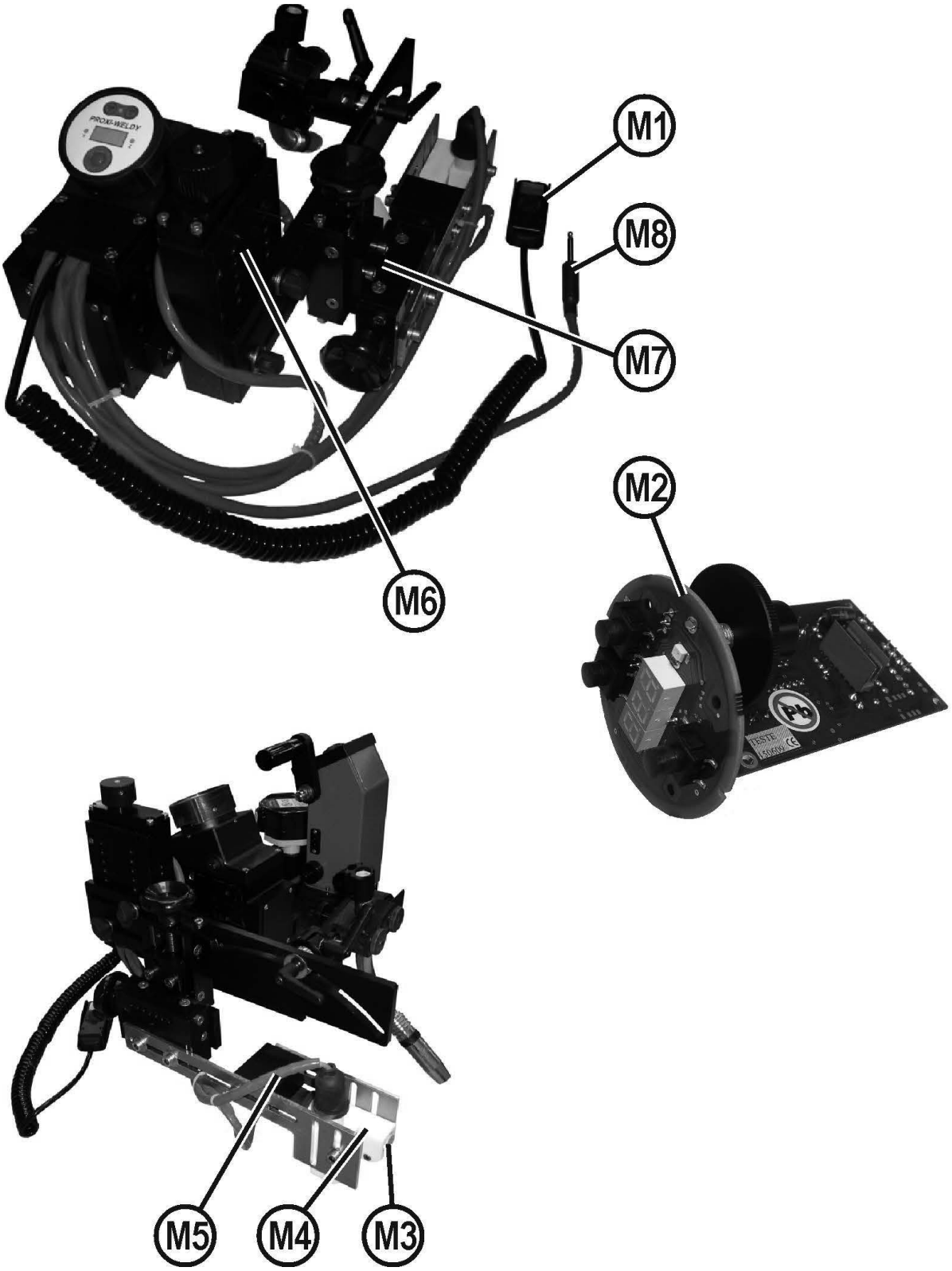
| | |
|---|---|
| ✔ | normally in stock |
| ✘ | not in stock |
| | on request |

| 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.



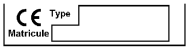

| |
|---|
| TYPE: |
| Number: |


M1
M8
M7
M6
M2
M5
M4
M3

| | |
|---|---|
| ✔ | normally in stock |
| ✘ | not in stock |
| | on request |

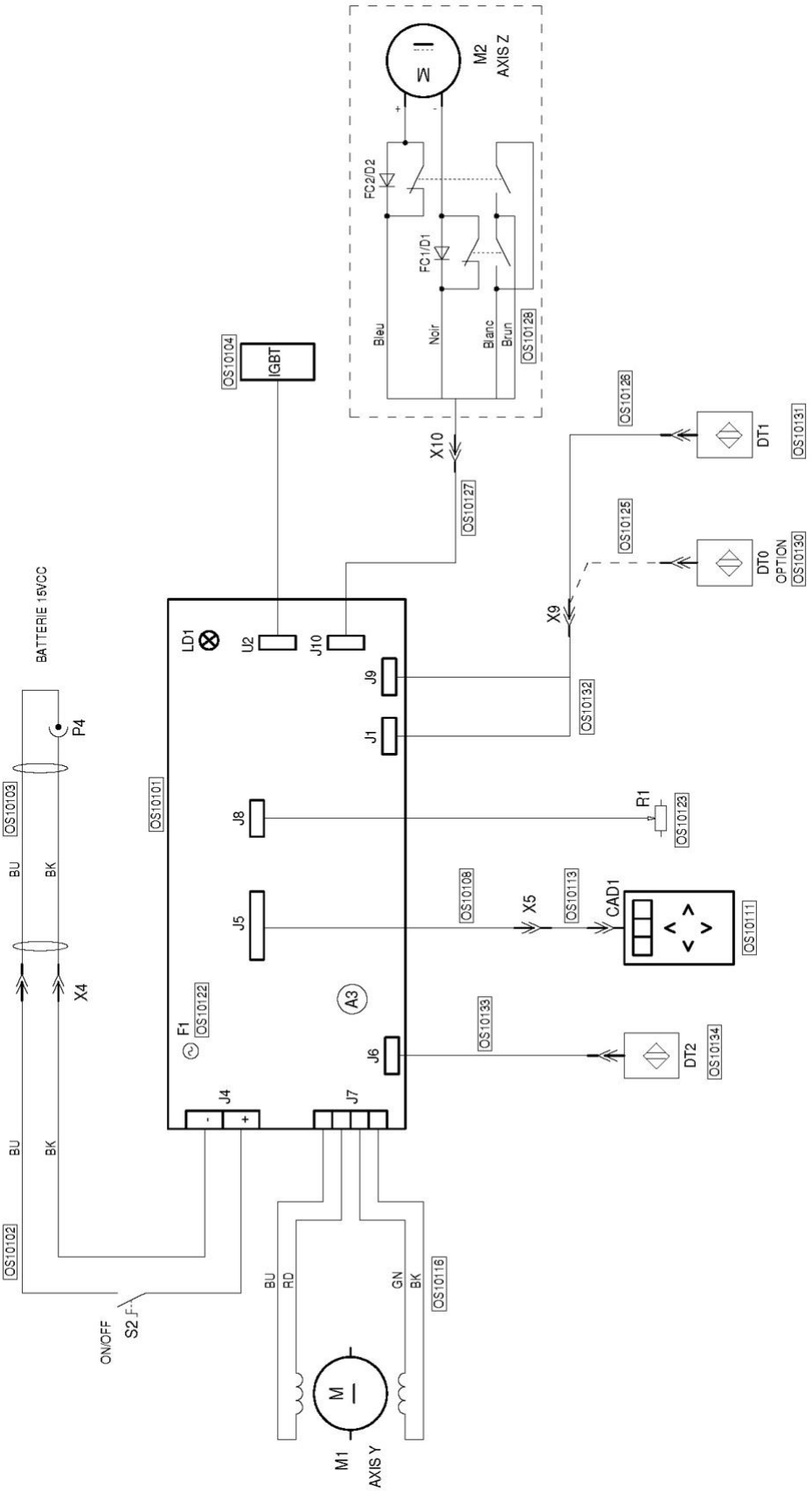
| Item | Ref. | Stock | Order | Designation |
|---|---|---|---|---|
| **M1** | | | | Remote control with cable |
| **M2** | | | | Control circuit |
| **M3** | | | | Proximity sensor |
| **M4** | | | | Support of proximity sensor |
| **M5** | | | | Harness of proximity sensor |
| **M6** | | | | Z – electrical slide with harness |
| **M7** | | | | Manual slides C = 40 mm |
| **M8** | W000276824 | | | Battery power harness |

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




| |
|---|
| TYPE: |
| Number: |

# 3 - WIRING DIAGRAM



# PERSONAL NOTES

**Lincoln Electric France S.A.S.**
**Avenue Franklin Roosevelt 76120 Le Grand Quevilly**
**76121 Le Grand Quevilly cedex**
**www.lincolnelectriceurope.com**