



# USER'S GUIDE

## MC & MCS 18



Version 1.0

10/1/2016

## 1.0 Safety instructions and warnings

CAUTION: Read and follow all safety rules and operating instructions before first use of this product.

### 1.1 Use the equipment:

- In accordance with its purpose;
- If it is technically in working order;
- If the seals are in position and in good condition;
- In accordance with the terms, conditions and safety;

### 1.2 Intended Use

- This is mechanical winding equipment (spool and/or coil) for measuring wire, electric wire.
- The equipment is designed for use inside only.
- The equipment is designed to be powered by DC current 24 volts up to 175 amps.
- The equipment is adapted to be moved by an electric pallet truck with fork pockets
- The equipment enables winding of wire 1/4 to 2 or 4 inches (6,35 to 50,8 or 101.6 mm) in diameter\* inclusively.

\* *Limited by the counter model used for measuring.*

- For all lengths normally used for trade, either: .01 meter to 9999.99 meters limited by the rules and conditions of use of this equipment.

-the MC and MCS 18 are equipped with a digital meter Series 4000 or Series 2000 that holds a Measurement Canada certification "AM6014". To meet this requirement and use the equipment as intended, seals have been affixed on the meter and its components. Seals must be present, in good condition and performing the function they are intended. **IF IT DOES NOT, YOU MUST REPORT IT PROMPTLY TO THE MANUFACTURER.**

### 1.3 General safety instructions

- Before any maintenance or installation, make sure the power is off
- Follow the terms of compliance
- Follow the terms and rules of the workplace, the employer and safety health jurisdiction or country jurisdiction in which the equipment will be used.



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**WARNING:** THE EQUIPMENT IS DESIGNED TO WORK MANUALLY. MOVING PARTS (ex. SPOOL OR SHAFT) SHOULD NEVER BE INTRODUCED, DISPLACED AND / OR WITHDRAWN FROM EQUIPMENT USING A FORKLIFT OR OTHER LIFT EQUIPMENT, UNDER PENALTY IT WILL VOID THE WARRANTY AND SIGNIFICANTLY INCREASES THE RISK OF EQUIPMENT DAMAGE OR OTHER

**WARNING:** DO NOT USE RETRACTABLE PAW AND/OR DO NOT USE ADEQUACY SPOOL ADAPTER UNLESS PROPERLY INSTALLED AS RECOMMENDED BY THE MANUFACTURER IT WILL VOID ALL WARRANTIES AND SIGNIFICANTLY INCREASES THE RISK OF EQUIPMENT DAMAGE OR OTHER.

**WARNING:** MCS 18 IS DESIGNED TO ACCOMMODATE A MAXIMUM SPOOL OF:  
18 inches long, 24 inches in diameter, 150 Pounds (loaded)  
EXCEEDING THE RECOMMENDATIONS VOIDS ALL WARRANTIES AND SIGNIFICANTLY INCREASES THE RISK OF EQUIPMENT DAMAGE OR OTHER.

**WARNING:** ALWAYS USE THE REMOVABLE PAW FOR WINDING A REEL OF 12-18 INCHES LONG WITH THE MCS 18. NOT USING THE REMOVABLE PAW FOR THESE SPOOLS VOIDS ALL WARRANTIES AND SIGNIFICANTLY INCREASES THE RISK OF EQUIPMENT DAMAGE OR OTHER.

**WARNING:** TO AVOID DAMAGING EQUIPMENT OR OTHER, MAKE SURE THAT WIRE IS STRETCHED BETWEEN THE FEEDING SPOOL AND THE MEASURING HEAD BEFORE STARTING OR INCREASE SPEED WINDING.

**WARNING:** ALWAYS USE THE PIN TYPE PROVIDED BY THE MANUFACTURER AND ENGAGE THE SAFETY ONCE THE PIN IS COMPLETELY INSERTED IN ORDER TO SECURE THE RETRACTABLE PAW IN HIGH POSITION.

**WARNING:** ANY OTHER TYPE OF CONNECTION THEN THE STANDARD CONNECTOR PROVIDED COULD VOID THE WARRANTY AND CAUSE MATERIAL AND OTHER DAMAGES

#### **1.4 General equipment dimensions (overall)**

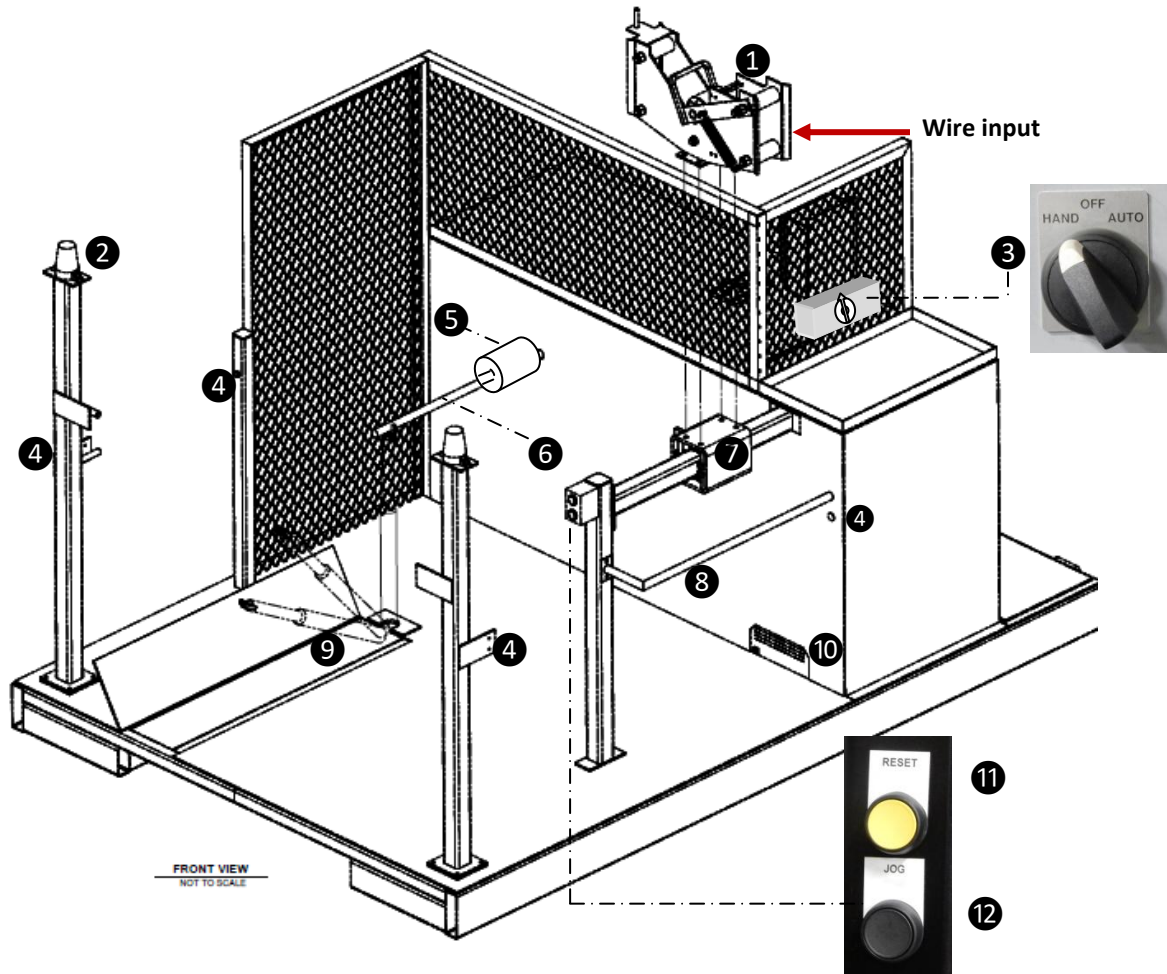
Height : 70.5 inches  
Length : 115.0 inches  
Width : 75.0 inches  
Weight : About 2000 pounds



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## 2.0 Equipment description (tool side)

**Fig. A**



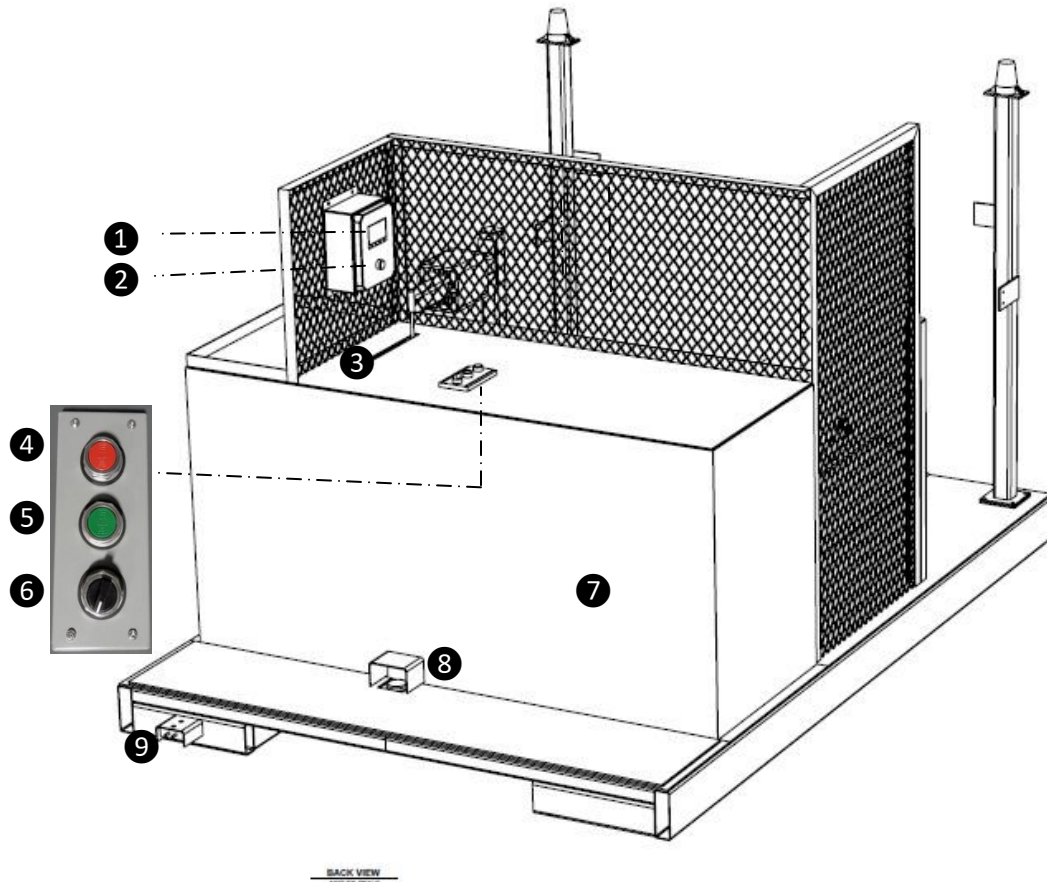
Description Fig A	
① Measuring head	② Beacon
③ HAND / AUTO Selector	④ Security
⑤ Motor coupler	⑥ Shaft
⑦ Counter carrier	⑧ Usefull
⑨ Retractable paw	⑩ 110 V. 15 A. Power outlet
⑪ RESET Button	⑫ Jog Button -



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## 2.0 Equipment description (control panel side)

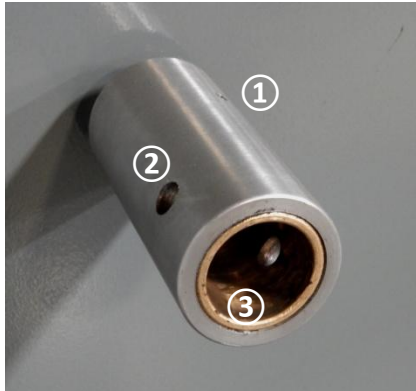
**Fig. B**



Description Fig. B	
① Screen	② RESET button
③ Measuring head carrier lever	④ STOP button
⑤ START button	⑥ Speed controller (Left = close)
⑦ Component access panel	⑧ Security pedal switch
⑨ Connector 24 Volt 175Amp. Max.	

## 2.0 Equipment description (Miscellaneous)

**Fid. C : Drive rod coupling**



**Description Fig. C : Coupler**

- |   |                                |
|---|--------------------------------|
| ① | vent                           |
| ② | Security pin hole              |
| ③ | Brass bushing (receives tools) |

**Fig. D : Zerk**



**Access:** Disassemble the access panel of the components « Fig. B # 7 ». It is not necessary to disassemble the pedal safety guard bolts (2) to disengage the panel.



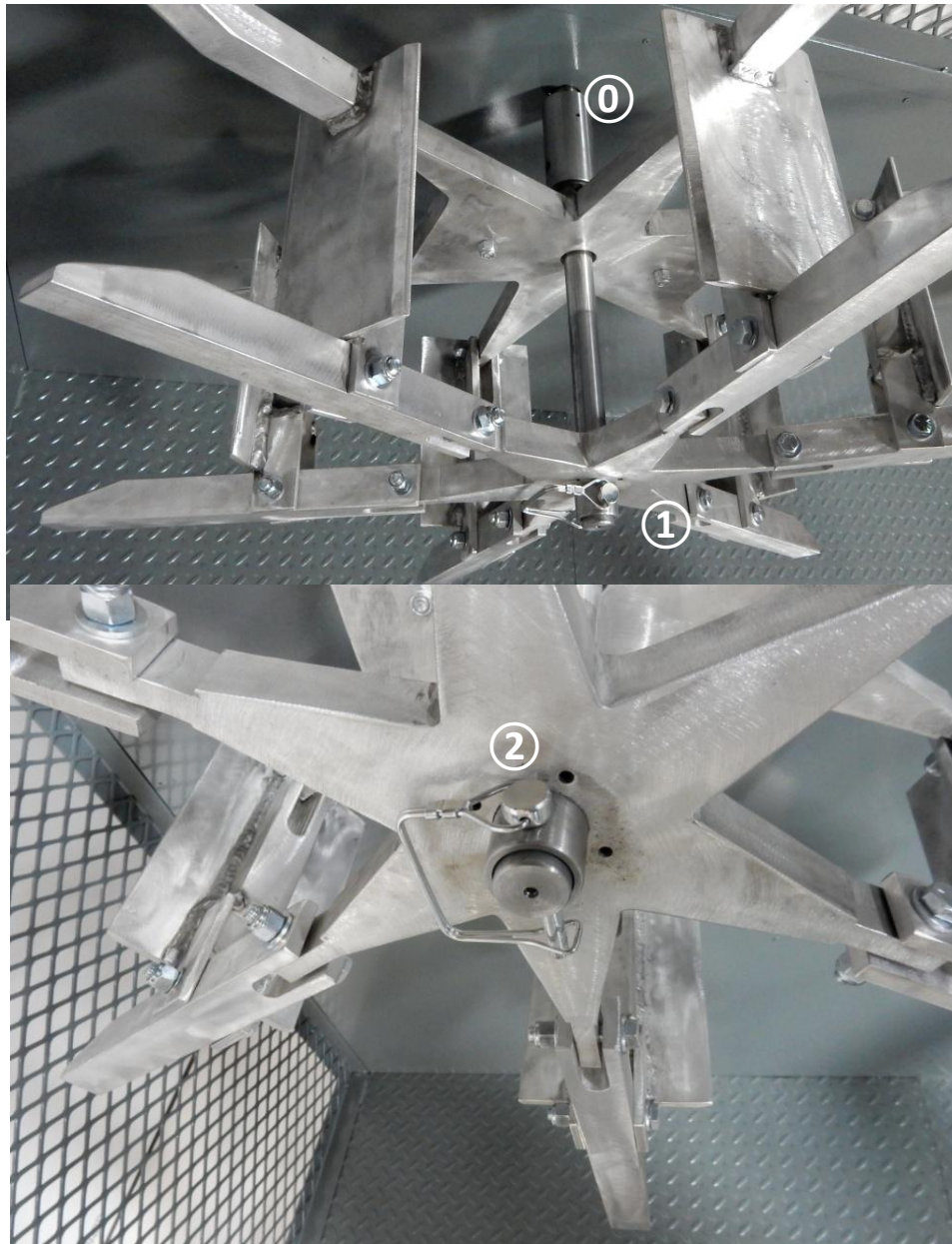
**Access :** Located at the bottom of retractable paw in vertical position

Note. The second zerk is located behind the chain gear.

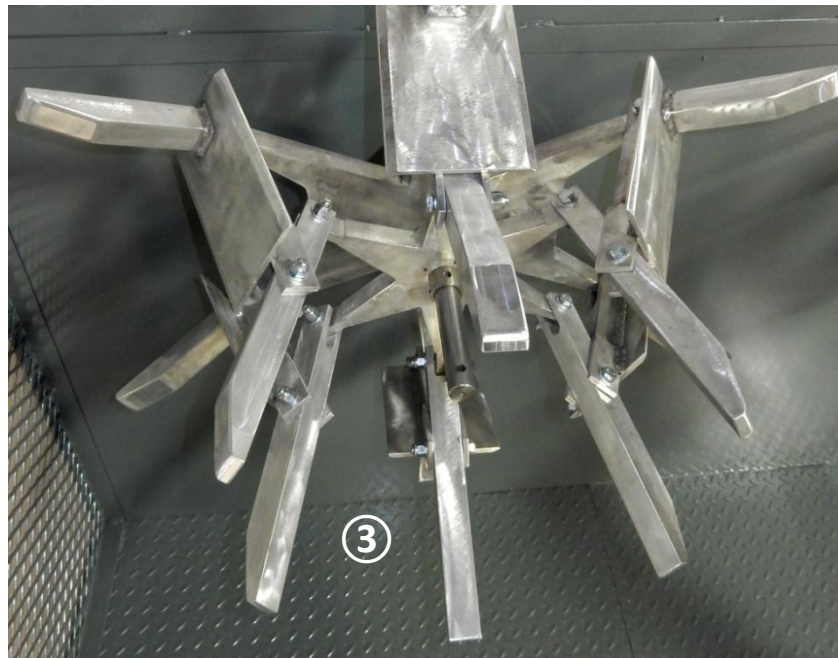


## 2.0 Equipment description (Removable tools)

**Fig. E : Coiling tool**

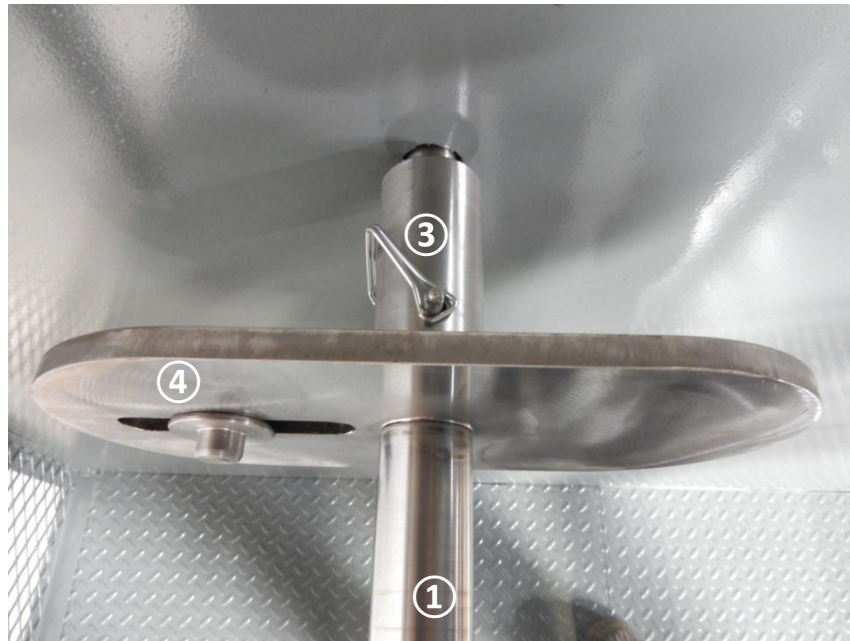
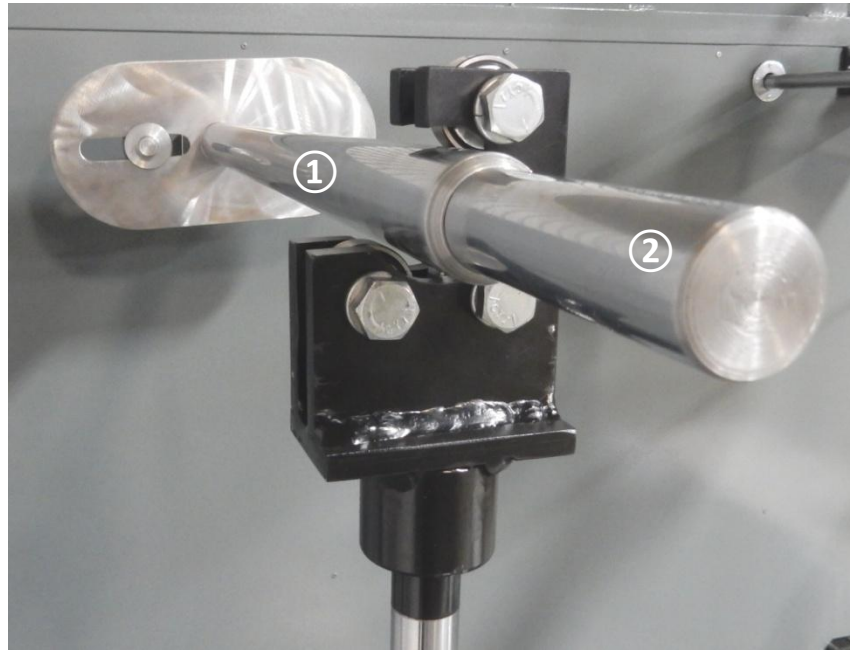


**Fig. E : CONTINUED ON NEXT PAGE ...**

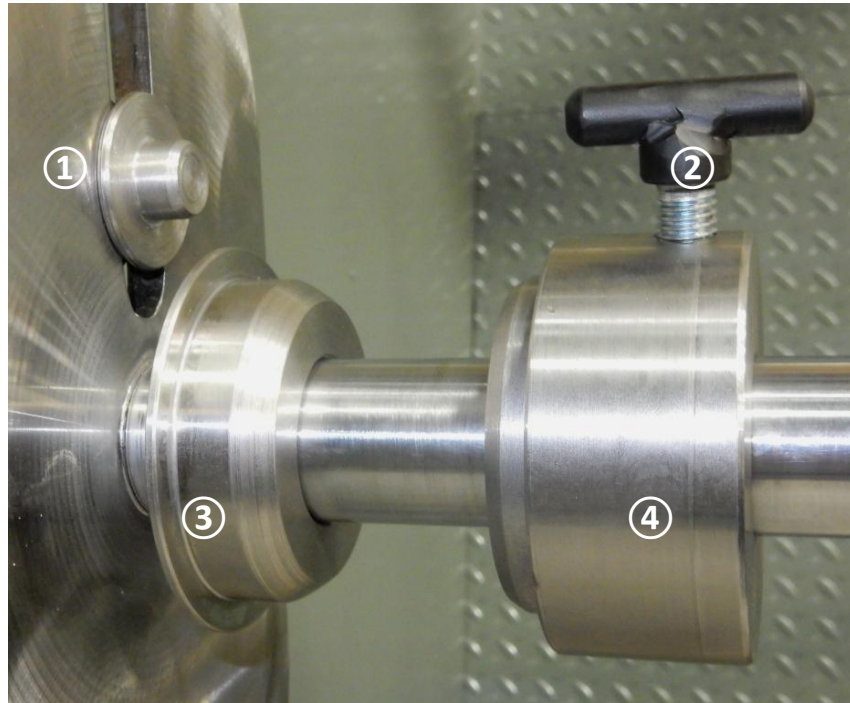
**Fig. E (3/3) : Coiling tool**

Description Fig. E : Coiling tool			
①	Tool Coupler	①	Close position
②	Security pin	③	Open position

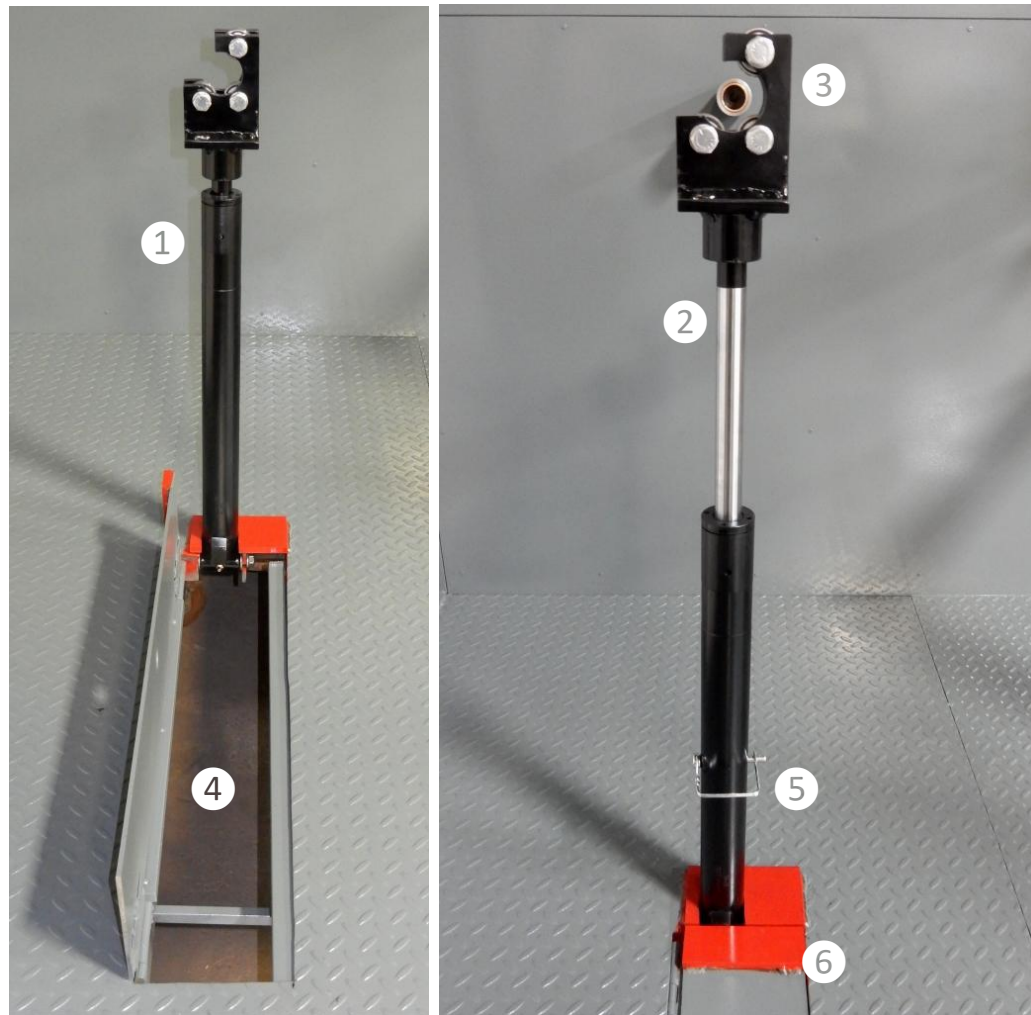


**Fig. F : Spool drive rod****Description Fig. F : Spool drive rod**

① Drive rod	② Handle
③ Security pin: rod and coupler	④ Mobile steel gouge (secondary spool hole)

**Fig. G** : Example, spool adapter**Description Fig. G : Example, spool adapter**

① Mobile steel gouge (secondary spool hole)	② Spool adapter lock
③ Spool adapter <b>WITHOUT</b> lock	④ Spool adapter <b>WITH</b> lock

**Fig. H : Retractable paw**

Description Fig. H : Retractable paw	
① Close position (To fit the room)	② Open position
③ Head (Bearing seat)	④ Storage compartment
⑤ Security pin	⑥ Security lock (Closed door)

## 3.0 General rules of use

### 3.1 GENERAL INSTRUCTION

**Power supply connection:** 24 volt DC, maximum 175 amps.



Standard connector of 175 Amps for electric pallet truck allow a simple connection to the MC or MCS 18 « Fig. B # 8 ».

Couple the connectors so that the electric pallet truck battery recharges properly and in good working order, feeds the equipment.

Note: In the event that the equipment is connected to an electric pallet truck battery, we suggest that you use a "Y" plug to avoid unplugging the unit for every move.

This plug is available from **Calibre Industrie Inc.**

**WARNING : ANY OTHER TYPE OF CONNECTION THEN THE STANDARD CONNECTOR PROVIDED COULD VOID THE WARRANTY AND CAUSE MATERIAL AND OTHER DAMAGES**

**Outlet** 110 volt AC / 15 amps maximum

For use by the user, they make it possible to connect a cutting tool, for example

Two connections are provided for this purpose « Fig. A #10 »

The connections are energized as long as the equipment is connected to a compliant source in good condition.



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**COIL** with the **MC** or the **MCS 18**: Coil winding work

- A. Insert, align the holes and secure the drive rod that support the coil winding tool « Fig. **E # 0** » in the intended coupling « Fig. **C # 3** »
- B. Find the close position on the tool « Fig. **E # 1** »
- C. Insert the security pin « Fig. **E # 2** »
- D. *Go to : 3.1.1 instruction for use*

*Note. To remove the wound wire:*

- a. Remove the security pin « Fig. **E # 2** »
- b. Position both hands on each side of the drive rod so that the center of the coil winding tool is pushed forward ( Open position « Fig. **E # 3** »)
- c. Remove the wire

**RETRACTABLE PAW (MCS 18 only)** : For 12 to 18 inches long spool

*Note. Less than 12 inches spool : The paw is not mandatory but an adaptor is necessary.*

**WARNING: DO NOT USE RETRACTABLE PAW AND/OR DO NOT USE ADEQUACY SPOOL ADAPTER UNLESS PROPERLY INSTALLED AS RECOMMENDED BY THE MANUFACTURER. IT WILL VOID ALL WARRANTIES AND SIGNIFICANTLY INCREASES THE RISK OF EQUIPMENT DAMAGE OR OTHER.**

- A. Completely open the floor panel « Fig. **H # 4** »
- B. Pull the paw out of the compartment by lifting it up. Position the paw vertically, in the « U » space provided for this purpose
- C. Completely close the floor panel to lock the paw in a vertical position« Fig. **H # 6** ».
- D. Completely lift the head (bearing seat) of the retractable paw until the safety pin « Fig. **H # 5** » can be inserted into hole provided for locking the head in the position to receive the drive rod « Fig. **F # 1** »

*Note : The height of the retractable paw is preset at the factory*

*Note : The pin aligns only one direction(the correct one) in the hole provided to position the head so that it retains the drive rod in place during winding.*

**WARNING : ALWAYS USE THE PIN TYPE PROVIDED BY THE MANUFACTURER AND ENGAGE THE SAFETY ONCE THE PIN IS COMPLETELY INSERTED IN ORDER TO SECURE THE RETRACTABLE PAW IN HIGH POSITION.**

*Go to : 3.2 Instruction for use*



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**SPOOL (MCS 18 seulement) : Spool winding work**

The drive rod for the MSC 18 « Fig. **F # 1** » is designed for spool from 12 to 18 inches long.

Other drive rods are available as required for spool size.

Spool adaptors « Fig. **G** » are sometimes required depending on the main drill hole diameter..

- A. Insert the drive rod « Fig. **F # 1** » in the coupler « Fig. **C # 3** »  
Note. Drive rod of the MSC 18 should lay on the bearing seat as shown « Fig. **F** »
- B. Secure the drive rod with the security pin « Fig. **F # 3** »
- C. *As the case may be* ; insert the NON-LOCK part of the adaptor « Fig. **G # 3** » suitable for the spool
- D. Fully insert the empty spool on the drive rod AND/OR the adapter
- E. Position the spool so that the mobile steel gouge « Fig. **F # 4** et **G # 1** » can align with the secondary spool hole
- F. *As the case may be* ; insert the LOCK part of the adaptor « Fig. **G # 4** » suitable for the spool

**WARNING:** THE EQUIPMENT IS DESIGNED TO WORK MANUALLY. MOVING PARTS (ex. SPOOL OR SHAFT) SHOULD NEVER BE INTRODUCED, DISPLACED AND / OR WITHDRAWN FROM EQUIPMENT USING A FORKLIFT OR OTHER LIFT EQUIPMENT, UNDER PENALTY IT WILL VOID THE WARRANTY AND SIGNIFICANTLY INCREASES THE RISK OF EQUIPMENT DAMAGE OR OTHER

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**G. Go to : 3.2 Instruction for use**



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### 3.2 INSTRUCTION FOR USE

- A. Direct the equipment using an electric pallet truck with fork pockets « Fig. **A # Wire input** » in order to position the measuring head access in front of the feeding spool.  
Note. Feed the measuring head so that the wire being inserted is parallel to the floor.
- B. Switch the selector (Hand/Auto) on Hand « Fig. **A # 3** »  
Note. This maneuver also disengages the safety « Fig. **A # 4** »
- C. Insert the wire into the measuring head so that the wire ends at the laser pointer.  
« Laser location: Counter USER'S GUIDE corresponding »

***For measurement, wire and counter instructions, see the corresponding USER'S GUIDE***

- D. Press RESET on the tool side (HOLD 3 SEC.) « Fig. **A # 11** »
- E. Insert and secure the wire in the spool or the coil winding tool  
The wire must be tight between the feeding spool and the measuring head BEFORE increasing the speed. Use the (JOG button) « Fig. **A # 12** » to help you get the wire into position
- F. Switch the selector (Hand/Auto) on AUTO « Fig. **A # 3** »  
Note. This maneuver also engages safety « Fig. **A # 4** »
- G. Back to control panel
- H. Press the Start button « Fig. **B # 5** »
- I. Press the security pedal switch « Fig. **B # 7** » and maintain it throughout the work.
- J. Set the speed control selector to zero by turning it all the way to the left « Fig. **B # 6** »
- K. Use the speed control selector « Fig. **B # 6** » to start, increase or decrease the speed from 0 to 60 revolutions per minute

**WARNING : MAKE SURE THAT WIRE IS STRETCHED BETWEEN THE FEEDING SPOOL AND THE MEASURING HEAD . TO AVOID DAMAGE, WIND ALL UNTENSIONED LENGTHS AT LOW SPEED, MINIMUM SPEED.**

- L. Before reaching the total length of the wire to be measured: Monitor the measurement on the screen « Fig. **B # 1** » and gradually reduce the speed BEFORE reaching the desired length.

If the length to be measured is exceeded, remove the excess length by manually removing it from the measuring head. Note: The calculation will be automatically adjusted.



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### 3.3 REQUIRED OR SECURITY STOP

THESE MEASURES AUTOMATICALLY CUT THE WINDING.

1. **If the pedal switch « Fig. B # 8 » is released during winding**, the motor stops.

*Note. The calculation on the digital counter will remain accurate*

To restart and continue winding you must :

- a. Reset the speed selector « Fig. B # 6 » to zero (left)
- b. Press and hold the pedal switch « Fig. B # 8 »
- c. Increase the winding speed with the speed selector « Fig. B # 6 »

2. **Pressing the STOP button « Fig. B # 4 »**, the motor stops.

*Note. The calculation on the digital counter will remain accurate*

To restart and continue winding you must :

- a. Press the START button « Fig. B # 5 »
- b. Reset the speed selector « Fig. B # 6 » to zero (left)
- c. Press and hold the pedal switch « Fig. B # 8 »
- d. Increase the winding speed with the speed selector « Fig. B # 6 »

3. **If a person or object is inserted into the winding area while the equipment is in operation**, the motor stops.

*Note. The calculation on the digital counter will remain accurate*

To restart and continue winding you must:

- a. Reset the speed selector « Fig. B # 6 » to zero (left)
- b. Press de START button « Fig. B # 5 »
- c. Press and hold the pedal switch « Fig. B # 8»
- d. Increase the winding speed with the speed selector « Fig. B # 6 »



### **3.4 SETTING OPERATING PARAMETERS**

The equipment is pre-set at the factory to meet current measurement requirements.

In the event of a power failure during the execution of the work, we suggest that you completely withdraw the inserted wire and resume the work from start.

### **3.5 CLEANING AND MAINTENANCE INSTRUCTIONS**

Clean with a dry cloth as often as desired

Ensure that bolts, nuts, springs and other parts are in place and functioning properly.

Lubrication and oiling required monthly:

- a) Two (2) zerk on drive rod's bearing seats « Fig. D »  
Note. Oil chain between motor and drive rod
- b) One (1) zerk on the bottom of the retractable paw « Fig. D »

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Contact the manufacturer for any anomaly detected.

For **more details** «like an **exploded view** or an **electric diagram**», send a request to the manufacturer by mail or by e-mail, it will be our pleasure to return the exact information!

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