




User manual

INTEGRATED HYDRAULIC SAFETY POWER CABLES SPIKER AND CUTTER

<input type="checkbox"/>	PICOUP 50 Ref. : PICOUP50	
<input type="checkbox"/>	PICOUP 65 Ref. : PICOUP65	
<input type="checkbox"/>	PICOUP 80 Ref. : PICOUP80	

Created: 22/062023

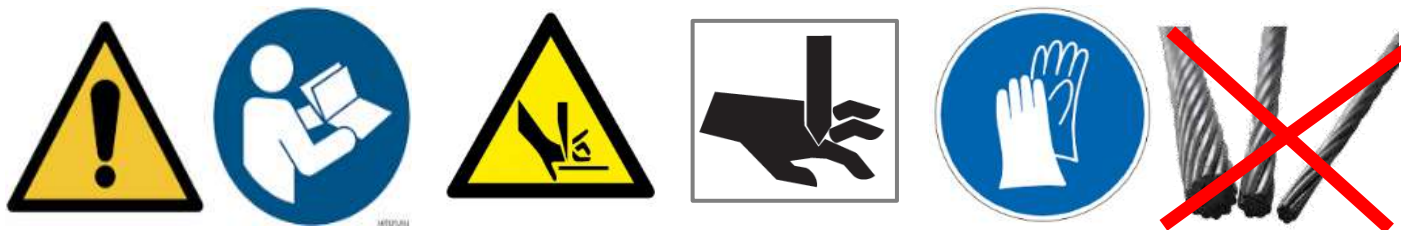
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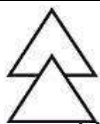
PREAMBLE

This product, marketed under the FAMECA brand, is manufactured by the company MOS INDUSTRIE (Centr'Alp business park - 355 rue Aristide Bergès - 38340 VOREPPE - France) which bears the legal responsibilities with regard to the regulatory provisions relating to this product.

A. WARNINGS



1	Please read the instructions carefully before using the tool.
2	Do not put your hands between the blades during operation, cleaning and testing. Stop the power supply before the intervention (remove the battery).
3	Please wear protective equipment in operation to ensure your safety.
4	Do not cut steel profiles or steel tubes.
5	This manual does not replace approved procedures and work practices. This manual is a guide to operate this product. No changes must be done to existing approved procedures.
6	Do not perform any modifications or repairs without asking your reseller and get written approval from MOS Industrie.
7	Only MOS Industrie or authorized technicians can repair the product using genuine spare parts, which must be used.



IEC 60417-5216 symbol suitable for live working.

The marking on the components is for your safety. It indicates information about the tool. Please do not erase or remove the marking.

B. PURPOSE OF THE TOOL

The PICOUP is a security tool developed, tested and produced by MOS INDUSTRIE.

The PICOUP is designed to securely dead proof distribution cables.

The electro-hydraulic pump is integrated into the tool, this eliminates the hydraulic hose potentially generating oil leaks at 700bar.

C. APPLICATION

- SPIKE a LV or HV cable to check and ensure the absence of voltage before cutting it.
- CUT the cable immediately after.

D. TOOL STRENGTHS

- *USER SAFETY*

Elimination of the risk of oil leakage by integrating the electro-hydraulic pump inside the tool.

Remoteness of the operator: activation only remotely by the remote control.

- *EASE OF USE FOR THE OPERATOR*

The PICOUP allows the operator to carry out his spiking and cutting operations without any other equipment than that provided in the carrying case.

- *A SINGLE OPERATION, REGARDLESS OF THE TYPE OF CABLE*

Indeed, even with the twisted cable with synthetic insulation, the 3 phases are cut in a single operation.

- *EASE OF IMPLEMENTATION*

Put the device in place on the cable to be cut. Make sure that the device is well kept in position by using the accessories provided.

Operate the device with the remote control unit from a minimum of 8 meters distance.

E. FUNCTIONS PROVIDED BY THE PICOUP

The operating mode of the PICOUP imposes the complete execution of the cutting operation to guarantee the absence of tension by destroying the cable “by cutting it”.

The cutting speed ensures a short-circuit between LV phases of short duration to quickly melt the fuses in the event of the presence of voltage.

The PICK reduces the risks during a possible cut under voltage of a MV cable, by favoring the creation of a single-phase short-circuit.

The profiles of the SPIKING and CUTTING blades, as well as their speed of penetration have been defined so that, in the event of an accidental spiking of a live cable, the network protections can react before the blades reach a second phase, regardless of the type of cable, preventing a much more powerful phase-phase short circuit (for tripolar cables).

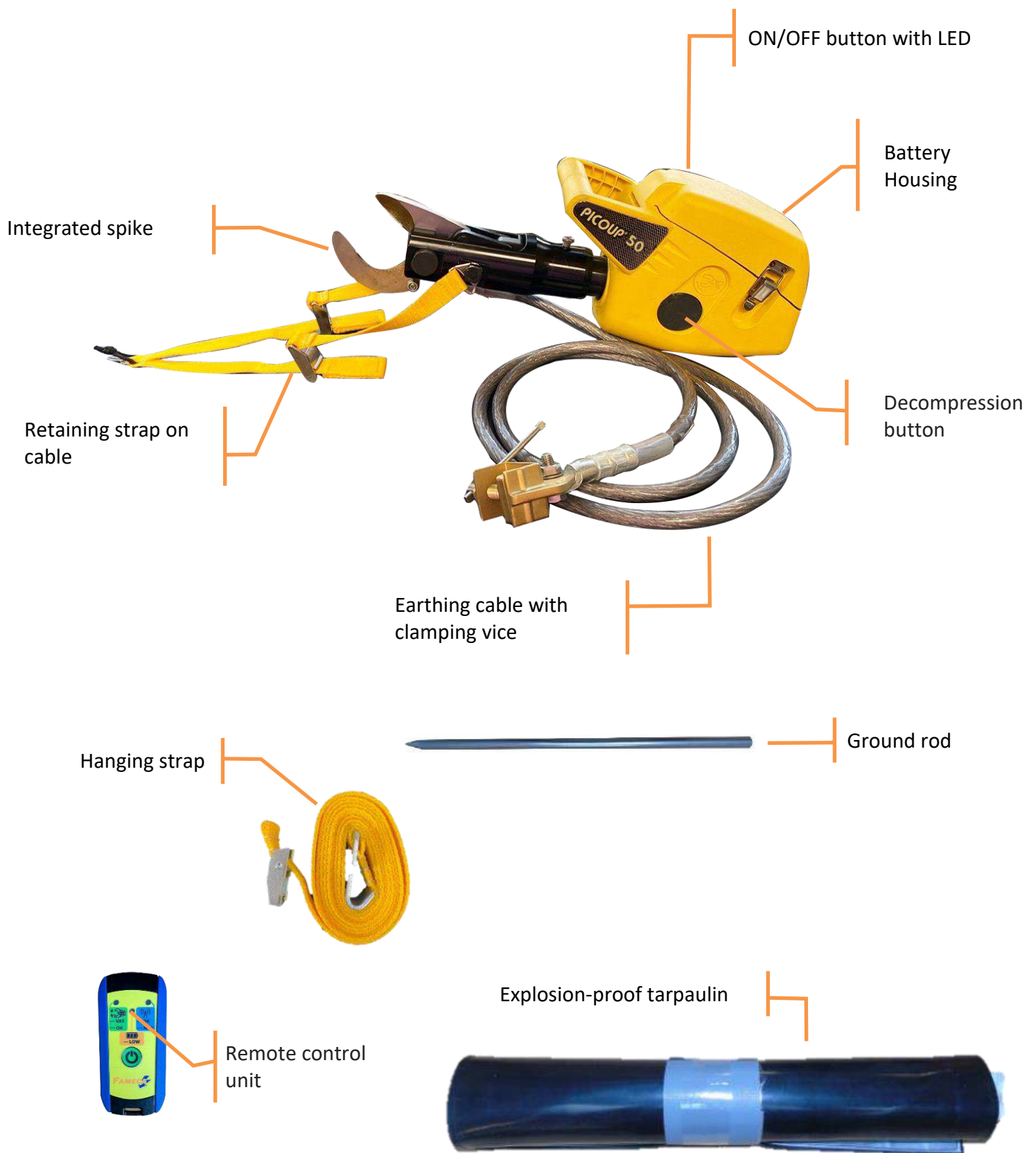
Cutting a single Low Voltage phase is prohibited. This operation will not melt the fuse nor will interrupt a possible distribution of energy. The PICOUP can remain energized even after the end of cutting a single Low Voltage phase.

Cutting a live HV PILC cable does not pose a risk to the operator or the tool provided that the operating requirements set out in this manual are met (Installation of the earthing lead and the anti-deflagration tarpaulin and remote operation from 8m).

F. TECHNICAL CHARACTERISTICS

	PICOU P50	PICOU P65	PICOU P80
Characteristics of the cables to be cut:			
- Copper conductors (overall diameter mm ²)	4 x 185 + 150 mm ² / 1 x 300 mm ²	3x150 + 95 / 1x300	3x150 + 95 / 1x300
- Aluminum conductors (overall diameter mm ²)	3 x 240 + 120 mm ² / 1 x 630 mm ²	3x240 + 120 mass / 1x630	3x240 + 120 mass / 1x1300
- Steel wire armature (diameter mm)	2,4	2	NO
- Flat wire armature (thickness mm)	2	2	1
- Steel sheath armature (thickness mm)	2	2	1
Fault according to network protection:			
- Fuses	Three-phase fault	Three-phase fault	Three-phase fault
- Circuit breaker	Single phase fault	Single phase fault	Single phase fault
Grounding cables:			
- ICC 10.5kA.1s or 14.5kA.0.5s (section mm ²)	70 Al 2m	70 Al 2m	70 Al 2m
Cutting head:			
- Maximum cutting diameter (mm)	50	65	80
- Weight with MALT + battery + remote (kg)	7,2	7,54	10
- Dimensions (mm)	555x115x180	550x115x180	550x115x180
- Cutter blade hardness (Hrc)	55	55	55
- Blade anti-corrosion treatment	Oil quench	Oil quench	Oil quench
- Main material	Steel	Steel	Steel
- Replaceable peak	NO	NO	NO
- Cutting force (tons)	7,5	7,5	7,5
- Hydraulic force (tons)	8,8	7,7	5,8
- Idle cycle time (s)	8	12	17
- Battery autonomy on 3x150mm ² alu. (cut)	100	90	75
Integrated electro-hydraulic pump:			
- Hydraulic pressure (bar)		700	
- Interchangeable battery (CAS MATEBO or MAKITA)		18v 4Ah	
- Blade reopening	Decompression button + spring return		
- Oil Volume (CC)		48	
- Seal grade		IP67	
Remote control unit:			
- Indicative transmission distance / battery	25m / CR2032		
- Radio frequency	Bluetooth 2.4 GHz (Smartphone possible - Android App)		
- Indicator lights (flashing / fixed)	Left green LED (cut indication) Right blue LED (connection status with the tool) Central orange LED (blinks when battery charge is low)		
Packaging / miscellaneous:			
- Total weight in soft bag (kg)	9	9,2	11,8
- Dimensions in soft bag (mm)	750x150x190	600x150x190	600x150x190
- Operating temperature (°C)	-20/50	-20/50	-20/50

G. TOOL COMPOSITION





Left green LED (cut indication)

Right blue LED (connection status with the tool)

Central orange LED (blinks when battery charge is low)

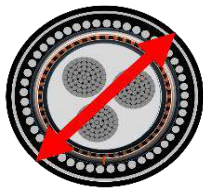
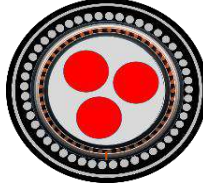
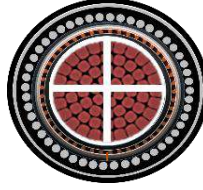
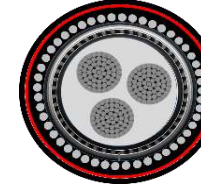
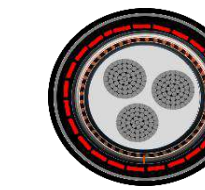
Remote control start button and remote tool activation button

NOTE: If the remote control unit and the tool are unpaired, to re-pair:

- Take the battery out of the tool
- Remove the battery from the remote control
- Reinsert the battery into the tool while pressing the ON button for 10 seconds.
- Reinsert the battery in the remote control while pressing its activation button.
- Wait up to 20 seconds.
- **2.4 GHz remote control (Bluetooth)**
 - 1 Cr 20 32 batteries
 - Coded radio with unique encoding
 - Usable up to 25m
 - Cutting status indication (LED)
 - One-time pairing with the remote control
- **Grounding**
 - Multi-strand aluminum earthing cable, length: 2 meters
 - Earth clamp
 - Ground rod
- **Li-Ion battery (x2)**
 - Voltage: 18V 4Ah
 - LED charging indicator
 - Autonomy: 55 cuts for a 3 x 150mm² cable
- **Carrying case**
 - Carrying strap by hand or on the back
 - Housing for remote control, batteries and charger
 - PICOUP Tool
 - Flexible braid and ground rod
- **1 fast charger**
- **1 explosion-proof tarpaulin: 0,7m x 1m**
- **1 User Manual**
- **1 Procedure**
- **1 hanging strap**



H. CUTTING CAPACITY

					
	Overall diameter	Maximum total cross-section of conductors		Steel strip armature	Flat or round wire armor
P50	Up to 50mm	3 x 240 + 120 mm ² / 1 x 630 mm ² Alu 4 x 185 + 150 mm ² / 1 x 300 mm ² Cuivre		Thickness up to 2 mm	Thickness up to 2,4 mm
P65	Up to 65mm	3x240 + 120 mass / 1x630mm ² Alu 3x150mm ² + 95mm ² / 1x300mm ² Cuivre		Thickness up to 2mm	Thickness up to 2mm
P80	Up to 80mm	3x240 + 120 mass / 1x1300mm ² Alu 3x150mm ² + 95mm ² / 1x300mm ² Cuivre		Thickness up to 1mm	Thickness up to 1mm (flat wire only)

I. IMPLEMENTATION

I. TOOL INSPECTION (before each implementation)

- **BATTERY:** Check the battery charge capacity using the charge indicators on the back of the battery. (**Do not make a cut** if there is only one charge LED showing). If the battery does not have cutting capacity (one LED on the charge indicator), charge the battery or take a sufficiently charged battery.
- **BLADE SPIKE:** If the slightest defect is observed (splinter, broken tip, serrated edges, etc.), the blade should be replaced.

Note: The batteries in the remote control should be replaced at each annual inspection.

II. EASE OF USE

- Ground the tool by connecting the braid to the ground rod.
- Ensure correct positioning of the tool. Tighten the retaining strap to secure the tool against the cable.
- Install the battery and press the red button (ON/OFF button).
- Press the ON button on the remote control unit to connect the remote control to the tool (Connection established if the connection LED flashes).
- Place the anti-deflagration tarpaulin protective mat over the tool.

III. PRECAUTIONS

- Mark out and take the necessary measures to prohibit access to anyone in the operation area.

IV. EXECUTION: SPIKING + CUTTING

- The connection LED flashes = tool connected and ready to cut
- Position yourself at least 8 meters from the job site area with the remote control.
- Start the cutting cycle by pressing the start button (Green button).
- The flashing of the cutting status LED indicates that the cut is progressing correctly. Maintain pressure on the button during the whole cut.
- The end of the cut is achieved when the cutting status LED stays on.
- Keep the button pressed to be sure that the cut is finished.



If the remote control is lost, the tool has a secure operating mode to automatically start the cut (delivered in some areas only). For this:

- *Remove the battery and insert it back into its compartment*
- *Press the ON button 11 times within 30 seconds*
- *The power indicator light flashes for 1 minute 30 seconds*
- *The power-on indicator light flashes quickly for another 30 seconds*
- *Cutting starts automatically until the blades are completely closed.*

CAUTION: In the event of a problem with the tool or cutting under voltage, perform a breakpoint and inform the operations manager.

This may involve the use of another PICOUP to perform another cut as far as possible from the first tool already in place.

V. BLADES OPENING:

- Press the decompression button to open the blades.
- Release the tool from the cable.
- Remove the battery, check and clean the blades.

VI. CHECKING - CLEANING:

- Clean the two blades, using the wire brush, as well as the spike to remove the residues of cable or sand.
- Check the perfect condition of the blades.
- If necessary, clean the tool with a brush and petroleum (exclusively).
- Charge the batteries if only one indicator LED is showing.
- Disconnect the ground rod from the earth clamp before storing the PICOUP it in its packaging.
- Remove the battery from the tool
- To avoid losing the remote control, it can be stored in the battery compartment.



J. OPERATING MODE

	<h1>PICOU 50</h1>		NUPICOU50ENEO_EN_V01_20230621
			
<p>1. CHECK the state of charge of the battery. CONNECT braid & ground rod.</p>	<p>2. POSITION the tool on the cable.</p>	<p>3. ATTACH the tool to the cable with the strap</p>	<p>4. INSTALL la batterie, the battery, then PRESS the "ON" button.</p>
			
<p>8. CHECK et NETTOYER les lames. STORE the tool in its cover.</p>	<p>7. DECOMPRESS the tool by pressing the decompression button to open the blades.</p>	<p>6. PRESS the power button on the remote control. ACTIVATE the tool by holding down the power button.</p>	<p>5. POSITION explosion-proof cover. STAY AWAY at least 8 meters.</p>
<p>At the end of the cut, remove the battery and place the remote control in the battery compartment.</p>			
<p>RECOMMENDATIONS</p> <p>LIVE WORKING PRICKING: In case of Live Working Cutting, you must contact MOS Industrie for a complete check-up and rehabilitation of your Picoup.</p> <p>FAILURE WHILE CAT: In case of failure during CAT, check battery. If it works, take a second Picoup and do the a second CAT as far as possible from the defective Picoup. IMPORTANT: Do not move the defective tool before the end of the second CAT.</p> <p>ARMORED CABLE: Cut armored cables with maxi 6mm round wire.</p> <p>MAINTENANCE:</p> <ul style="list-style-type: none"> - Clean blades - Change the batteries regularly - Check the condition of the explosion-proof cover - Do the annual check. - Please refer to the User Manual <p>CONTACT : +33 (0)4 38 02 17 10 @ : ventes.outillage@moss-industrie.com</p>			

K. MAINTENANCE

The PICOUP, SAFETY equipment must be regularly inspected, in order to guarantee operators the constant maintenance of its level of reliability.

Only MOS Industrie is authorized to provide MAINTENANCE for your PICOUP. There are companies approved for foreign countries. During this intervention, the tool is completely disassembled. All seals and other wearing parts are systematically replaced.

Mechanical parts such as: blades, spikes, etc. are checked and replaced on request.

Maintenance plan:

- Annual check of the hydraulic pressure, the correct operation, the condition of the blades, the spike and the various sensors present on the tool. This operation allows the tool to be operationally maintained.
- Maintenance of the entire tool every 4 years or in the event of cutting under power, change of seals, verification of the various hydraulic elements, verification of the earthing cable.

Spare parts:

The user can change the following parts himself:

- Earthing Alu braid with ground clamp (Ref.: MALT-AL-70-030)
- Blades Kit (Spike blade + counter blade) (Ref. : PCCH80-LAMES-K)
- Blades Kit (Spike blade + counter blade) (Ref. : PCCH65-LAMES-K)
- Retaining strap (Ref. : SANGL-MAINT-P80)
- Battery charger METABO (Ref. : CHARG-18V-MET)
- Battery CAS METABO 18v 4Ah (Ref. : BATT-18V-4AH-MET)
- Battery charger MAKITA (Ref. CHARG-18V-MAK)
- Battery Makita 18V 4Ah (Ref. : BATT-18V-4AH-MAK)
- Retaining strap (Ref. : SANG-SUSP-P80)

L. WARRANTY: ELECTRO-HYDRAULIC MATERIAL

Purpose: This document describes all the terms of the applicable warranty for the tools of the PICOUP range. It supplements our current GCS.

1. Application domain:

Picoup 50/65/80 / Picoup EXP 240 / Picoup FR 240 / Picoup EXP 300 / Picoup EXP 350 / Picoup 2/ Picoup 250/ Picoup 400 / HYDROPIC INT.

In general, any integrated electro-hydraulic product with a closed circuit (without hydraulic hose).

2. Standard warranty: 2 years.

Our equipment is guaranteed against any design, manufacturing or material defect for a period of 2 years from the date of delivery "ex works". **See our terms and conditions of sale.**

3. Warranty validity:

This guarantee applies to all the equipment mentioned in §1.

It concerns the replacement of spare parts, labor included, subject to use in accordance with the manufacturer's instructions, excluding wearing parts.

Warranty validity according to these two mandatory points:

- Compliance with routine maintenance according to the equipment manual
- Compliance with operating procedure and types of cables

4. Out of Warranty:

If you have cut a hot cable:

- Replacement of affected spare parts.
- Warranty retained on hydraulic unit and control box subject to:
 - Use in accordance with the procedure
 - Use on networks protected by a circuit breaker
 - The grounding of the tools in accordance with the operating mode and/or with improved grounding (saline water) for land with an insufficient ohmic value
 - The use of a tool with blades and blade spike conforming to the origin of the material delivered.
 - Rated voltages on the product sheets.

Bad use:

- Malfunctions related to improper use: non-compliant electrical connections, striking mechanical parts with a hammer (blade, counter-blade, blade guide), non-compliance with the operating mode, use of a battery or charger other than those provided by MOS Industrie,
 - Use not in accordance with the description of the operating mode
 - Repair or replacement of parts due to a proven lack of maintenance of the equipment.
 - A malfunction of the tool due to complete or partial disassembly
 - Of a material left to the weather which would result in a proven oxidation
- Consumables:
- Batteries, blades, seals and sealing rings, grounding strap, blade guide.

5. Loss of warranty:

- Equipment over 2 years old
- Tool having been dismantled by a third party other than MOS Industrie or an organization approved by MOS Industrie.
- Tool having carried out a tapping under voltage and not returned for repair to MOS Industrie or organization approved by MOS Industrie
- Tool having undergone a modification not approved by MOS Industrie
- Tool that has been misused §4
- Tool not maintained
- User negligence.

6. Warranty Terms:

MOS Industrie reserves the right, in the event of equipment under warranty, to choose between replacement or repair. The replacement will be made with identical or similar equipment, on the sole decision of MOS Industrie. A repair or replacement does not give the right to extend the warranty period. This will be considered as expired on the anniversary date.

In general, the warranty does not entail any acceptance of direct or indirect liability for any damage caused to property or persons due to defective products.

As a result, it does not in any way lead to the possibility of a claim for damages or compensation of any kind whatsoever. In any event, the manufacturer's liability is limited to the value of the equipment sold.

7. Settlement of disputes, applicable law.

The applicable law is French law. In the event of a dispute which could not be settled amicably, the Commercial Court of Paris has sole jurisdiction, even in the event of multiple defendants, relatedness or intervention.

M. MATERIAL LIST

- | | |
|--|--|
| <input type="checkbox"/> 1 PICOUP cable spike and cutter | <input type="checkbox"/> 1 User Manual (This document) |
| <input type="checkbox"/> 1 remote control | <input type="checkbox"/> 1 carrying case |
| <input type="checkbox"/> 2 Battery 18V 4Ah | <input type="checkbox"/> 1 braid of MALT |
| <input type="checkbox"/> METABO | <input type="checkbox"/> 1 ground stake |
| <input type="checkbox"/> MAKITA | <input type="checkbox"/> 1 Grounding vice |
| <input type="checkbox"/> 1 220/18 volt charger | <input type="checkbox"/> 1 explosion-proof tarpaulin |
| <input type="checkbox"/> 1 Operating Mode | <input type="checkbox"/> 1 Retaining strap |

N. SAFETY DATA

Identification of hydraulic oil: **TOTAL EQUIVIVS XV 32**

Specific risk(s):

Under normal conditions of use, mineral oils and other components of this product do not present an acute poisoning hazard.

If the skin is affected by a high-pressure jet, there is a risk of introduction into the body.

The injured person must be transported to a hospital even in the apparent absence of injury.

IMPORTANT

IN THE EVENT OF PITTING A LIVE CABLE, it is imperative to contact us to carry out a COMPLETE CHECK OF THE TOOL AND ITS REPAIR.



HIGH PRESSURE EQUIPMENT

Recommended periodic CHECKING frequency: ANNUALLY

PRESSURE SHETT

CUSTOMERS:

Tools Type:	<input type="checkbox"/> PICOUP 50	<input type="checkbox"/> PICOUP 65	<input type="checkbox"/> PICOUP 80
Number:		Numb. orders:	

			EXPORT	PICTURE
❶ Test Tool (no in charge) <input checked="" type="checkbox"/> SETTING PRESSURE (Check leak and tool operation)	720 bars mini (during 15 seconds)	- Pressure sensor (Keep the curve with the control plug in the tool folder) If control is done with manometer, enter the value in the box "DONE"		
❷ Clean Tool No visual trace		Visual		
Result: Conform: <input type="radio"/> No conform: <input type="radio"/> Visa: Date:				

Remarks:

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- CLASSIFICATION OF THE SHEET IN THE TOOL FOLDER.
 - ANY DIFFERENCE DURING THE INSPECTION MUST BE CORRECTED BEFORE THE TOOL IS SENT.

* : 1 night in charge
 ** : Picture before sending

INITIAL INSPECTION CERTIFICATE

Tool No.: _____ Name: _____ Date: _____ Visa: _____

