E-TAP

ELECTRIC TAPPING ARMS

User Manual

ARM TA-EL-3-12

Introduction

Thank you for purchasing the E-TAP electric driven tapping machine is capable of tapping M3 (1/8") to M12 (1/2") threads in mild steel and aluminum.

Before attempting to operate the machine, please read this instruction manual thoroughly, and follow all directions carefully. In doing so you will ensure the safe operation for both yourself and others around you, and at the same time, giving you long and trouble free service.

General Safety Precautions

- **USE SAFETY GLASSES:** Suitable eye protection must be worn.
- **WEAR PROPER APPAREL:** . No Loose clothing, neckties, jewellery to get caught in moving parts. Long hair should be contained.
- **KEEP WORK AREA CLEAR:** Cluttered areas and benches invite accidents.
- **SECURE WORK PIECES:** Use a vice or clamps to hold to the work piece. This free's both hands during operation.
- **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use in damp or wet locations, or expose to rain.
- **MAINTAIN TAPS AND CUTTING TOOLS:** Follow tap and cutting tool lubrication as per manufacturer instructions, inspect and replace as necessary.
- **ALWAYS DISCONNECT THE MACHINE:** When not in use, servicing or changing accessories.
- **REMOVE ADJUSTING SPANNERS AND KEY:** Check chuck keys or spanners are removed before operation.
- **DO NOT OVERREACH:** Keep proper footing and balance at all times.
- **DO NOT EXCEED TAPPING CAPACITY:** Using the tapping machine outside of its specified tapping specification, material or abuse will result in the cancellation of warranty.

Assembly

1. Servo motor.
2. Motor direction buttons.
3. Quick change chuck and collet.
4. IEC power connection.
5. Mounting base.
6. Power switch.
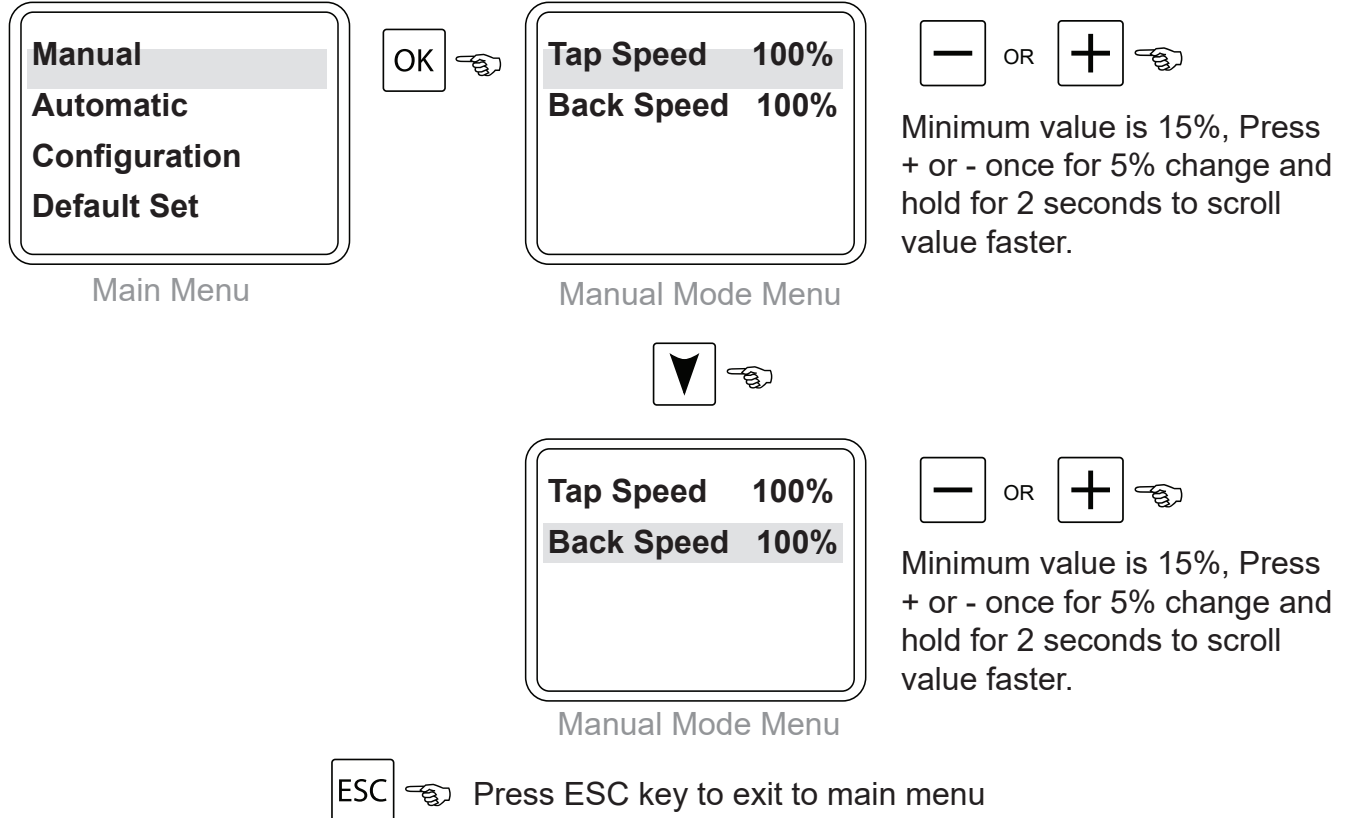7. LCD display and control panel.
8. Gas strut.
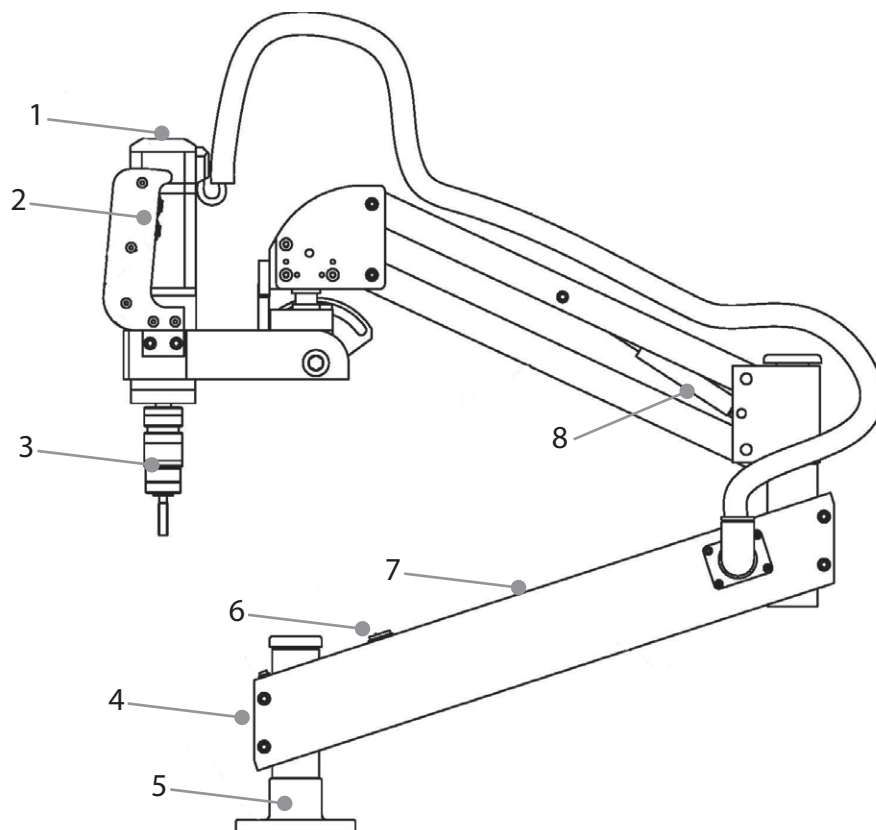
Arm Mounting Base

The mounting base has four mounting holes, to secure the arm to a bench or a machine table. Mount the base to a suitable flat working table, attach with the M8 bolts.

Dia 90mm

Dia 9mm
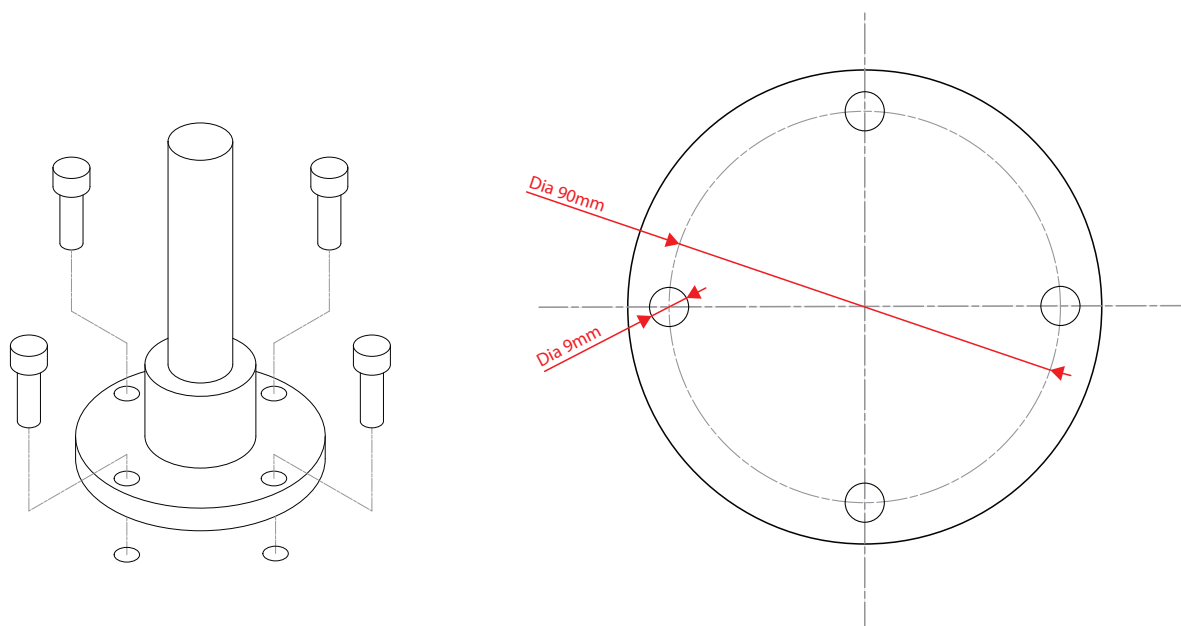
LCD Menu

Manual mode for standard tapping operation. Press OK key to select this parameter, forward and reverse speeds can be adjusted as required. Press motor forward button to start motor rotation, release to stop.

Manual
Automatic
Configuration
Default Set

Main Menu

OK ☞

Tap Speed	**100%**
Back Speed	**100%**

Manual Mode Menu

— OR + ☞

Minimum value is 15%, Press + or - once for 5% change and hold for 2 seconds to scroll value faster.

▼ ☞

Tap Speed	**100%**
Back Speed	**100%**

Manual Mode Menu

— OR + ☞

Minimum value is 15%, Press + or - once for 5% change and hold for 2 seconds to scroll value faster.

ESC ☞ Press ESC key to exit to main menu

Automatic mode for auto tap reversal at a preset thread depth. Press DOWN key and then OK key to select this parameter, set depth unit, thread unit and run mode before selecting threads menu.
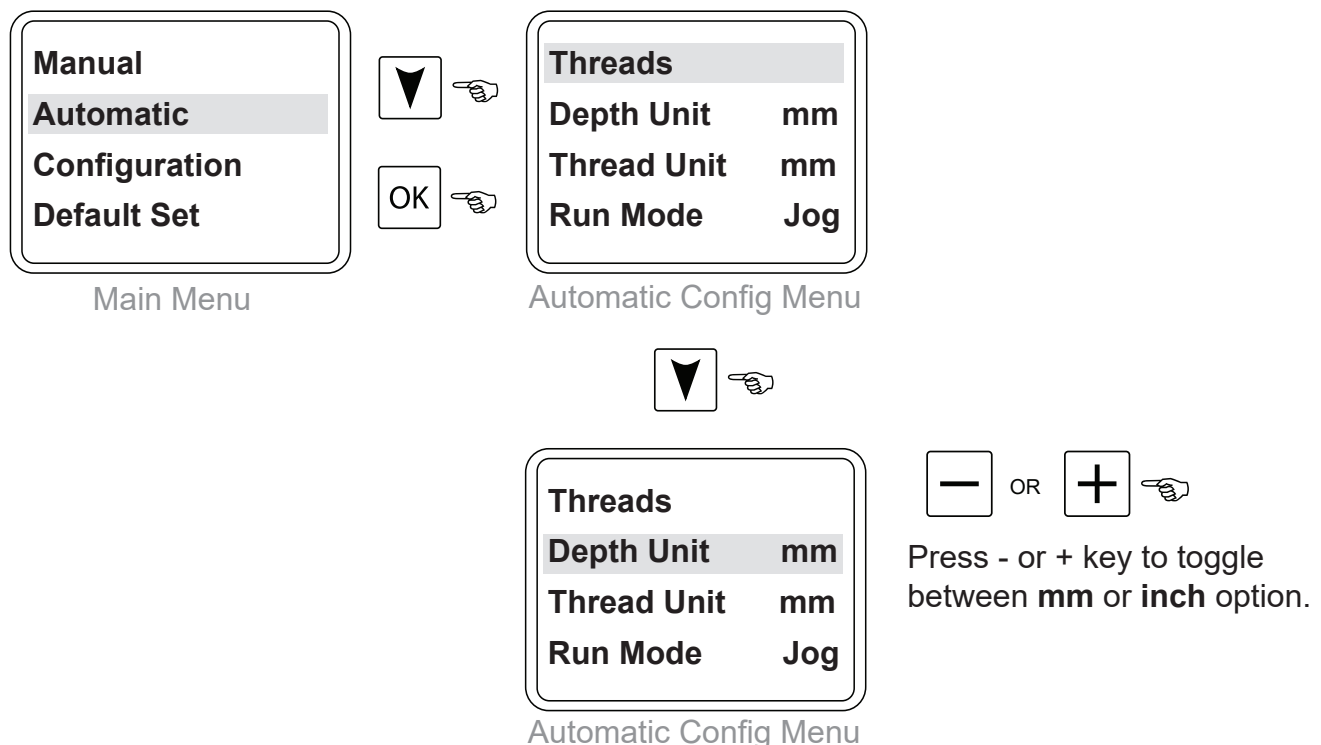
Manual
Automatic
Configuration
Default Set

Main Menu

▼ ☞

OK ☞

Threads	
Depth Unit	**mm**
Thread Unit	**mm**
Run Mode	**Jog**

Automatic Config Menu

▼ ☞

Threads	
Depth Unit	**mm**
Thread Unit	**mm**
Run Mode	**Jog**

Automatic Config Menu

— OR + ☞

Press - or + key to toggle between **mm** or **inch** option.

▼ 👉

Threads
Depth Unit   **mm**
Thread Unit   **mm**
Run Mode   **Jog**

Automatic Config Menu

— OR ✛ 👉

Press - or + key to toggle between **mm** or **inch** option.

▼ 👉

Threads
Depth Unit   **mm**
Thread Unit   **mm**
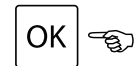**Run Mode**   **Jog**

Automatic Config Menu

— OR ✛ 👉
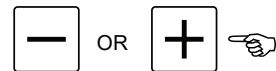
Press - or + key to toggle between **jog** or **lock** option. Jog requires the motor button to be held during tapping cycle. Lock requires a single button press to start tapping cycle.

▼ 👉

Threads
Depth Unit   **mm**
Thread Unit   **mm**
Run Mode   **Jog**

Automatic Config Menu

OK 👉

Press ok key to enter Auto **threads** menu.

Depth   **010mm**
Pitch   **1.25mm**
Tap Speed   **100%**
Back Speed   **100%**

Automatic Thread Menu

— OR ✛ 👉

Press - or + key to select tapping depth increase or decrease depth by 1mm increments.

▼ 👉

Depth	010mm
Pitch	**1.25mm**
Tap Speed	100%
Back Speed	100%

Automatic Thread Menu

OR
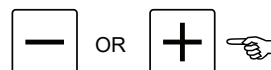
Press - or + key to toggle through thread pitch options.

Options for metric pitch
0.35, 0.5, 0.6, 0.7, 0.75, 0.8, 1, 1.25, 1.5, 1.75, 2, 2.5, 3, 3.5, 4 or 4.5
Options for inch pitch
44, 40, 36, 32, 28, 24, 20, 19, 18, 16, 14, 13, 12, 11, 11-1/2 (11.5), 10, 9, 8, 7, 6 or 5

Depth	010mm
Pitch	1.25mm
Tap Speed	**100%**
Back Speed	100%

Automatic Thread Menu

OR

Minimum value is 15%, Press + or - once for 5% change and hold for 2 seconds to scroll value faster.

Depth	010mm
Pitch	1.25mm
Tap Speed	100%
Back Speed	**100%**

Automatic Thread Menu

OR

Minimum value is 15%, Press + or - once for 5% change and hold for 2 seconds to scroll value faster.
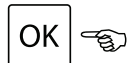
Press motor forward button to start auto tapping cycle. Press and hold in **Jog** or single press in **lock** mode.

ESC Press ESC key to exit to main menu
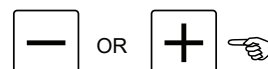
Configuration menu to select motor button direction.

| Manual |
| Automatic |
| **Configuration** |
| Default Set |

Main Menu

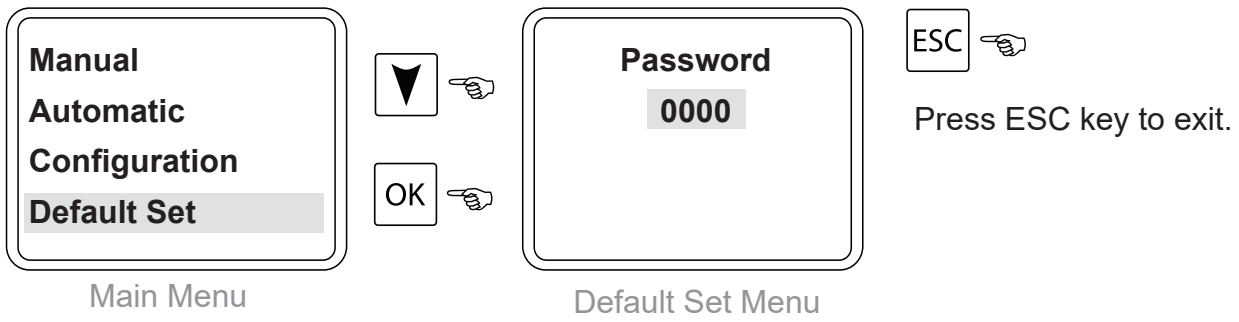| **Direction** | **Right** |

Configuration Menu

OR

Press - or + key to switch motor button direction.

Default set is configured during manufacture and does not require any operator changes.

Main Menu		Default Set Menu
Manual	▼ ☞	**Password**
Automatic		**0000**
Configuration	OK ☞	
Default Set		

ESC ☞

Press ESC key to exit.

Inserting a Machine Tap into Collet

Step 1;

Step 2;

Press the locking button on the front of the collet

Step 3;

Insert machine tap and locate the square of the tap with the square at the rear of the collet

Step 4;

Release the locking button

Inserting a Collet into the Chuck

Step 1;

Lift the black knurled locking ring on the chuck.

Step 2;

Locate the collet with the chuck.

Step 3;

Align the two drive pegs.

Step 4;

Release the black knurled locking ring on the chuck

Removing a Collet from the Chuck

Step 1;

Grip the collet and knurled locking ring.

Step 2;

Lift black knurled locking ring on the chuck

Step 3;

The collet can be removed.

Step 4;

Control Menu

Error Code	Description
EER1	Hardware protection
EER2	Overload protection
EER3	Coder hall signal fault
EER4	Overvoltage or brake circuit fault
EER5	Under-voltage
EER6	Brake function null
EER7	Current/speed sensor fault
EER8	Coder fault
EER9	Motor stalling

Contact Details

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