

#### T-MECH Dent Puller Machine

214858

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#### **Unit Overview**

The T-Mech Dent Puller is a versatile and efficient solution for repairing dents of various sizes. Designed with advanced spot-welding technology, it offers multiple welding modes to tackle both small and large dents with precision and ease. Whether you're a professional auto body technician or a DIY enthusiast, this tool ensures reliable performance, making dent removal faster and more effective.

#### **Specifications**

• **Product Size:** 24.5cm (H) x 20.3cm (W) x 29.8cm (D)

• Product Weight: 21.2kg

Voltage: 220VPower: 3KW

• Welding Thickness: 0.6mm to 1.6mm

7 Welding Modes



#### **Safety Advice**

# Please read through the Safe Working Practice to ensure prevention of injury or damage to the device.

- Operators must receive proper training before using the machine to ensure safe and correct operation.
- Always ensure the machine is properly grounded before use; connect the grounding wire and ensure the grounding power wire is in good condition. Any screw on the machine shell can serve as a grounding point.
- Verify that the workbench is connected to the grounding device securely.
- Inspect all cables before use. Do not use cables that are frayed, cut, or have insulation defects, exposed copper wires, loose connections, or any signs of leakage.
- The machine should only be connected to a power supply that matches its rated voltage and power specifications. Use an air switch or leakage protector of at least 60A for safety.
- Never operate the machine in wet or humid environments, including standing on a wet floor, as it increases the risk of electric shock.
- Disconnect the power plug before opening or disassembling the machine casing, and prior to any inspections.
- Do not modify or bypass the machine's safety features under any circumstances.
- Only use original accessories and replacement parts specified by the manufacturer to maintain machine safety and performance.
- Ensure regular preventive maintenance inspections are conducted to confirm all components are in good working condition.
- Perform regular inspections to confirm all nuts, bolts, and connections, including those on the grounding device, are secure and free of wear or damage.
- Do not attempt repairs or modifications without professional qualifications. Always use trained personnel for maintenance.
- Keep all protective marking boards in good condition and securely attached to the machine.
- Operators must wear appropriate protective equipment, including leather gloves, a leather apron, safety shoes, and a face shield or protective glasses to protect against molten metal splashes.



- Avoid wearing conductive items such as rings, watches, or jewellery, as these can cause severe burns.
- Always use the machine in well-ventilated areas to prevent the build-up of fumes and gases generated during welding.
- Ensure the welding area and workpieces are free from contaminants, including paint, rust, or coatings, to improve the welding quality and safety.
- Do not use the machine near flammable or explosive materials.
- Ensure the welding gun and pulling hammer connections are tight and free from looseness to prevent malfunction or accidents.
- Do not touch the welding area, electrode, or welding arm during operation, as these parts can reach high temperatures and remain hot for some time after the machine stops operating.
- If the machine includes an overheating protection system and the buzzer sounds, cease operation immediately and allow the machine to cool before resuming use.
- Operators are responsible for ensuring the machine does not interfere with or damage a vehicle's electrical and electronic systems, such as airbags or computer displays.
- If the machine emits unusual sounds, smells, or malfunctions, stop using it immediately and contact the manufacturer for guidance.
- Store the machine in a dry, cool place away from direct sunlight and corrosive environments to prolong its life.
- This machine is designed for industrial and professional use only; do not use it for unauthorised applications or in environments not specified by the manufacturer.

#### **Parts**

Dent Puller Machine 1 Piece(s)	an	Welding Gun + Cable 1 Piece(s)	
Negative Wire 1 Piece(s)		Dual-usage Pulling Hammer 1 Piece(s)	
Multi-Claw Pulling Hook 1 Piece(s)	III)	Sucker 1 Piece(s)	Ø.



Triangle Connector 1 Piece(s)	44	T-rod 1 Piece(s)	
Circular Welding Pieces 100 Piece(s)	000	Corrugated Line 100 Piece(s)	
Dual-Usage Spot Welding Head 1 Piece(s)		Accessories Box 1 Piece(s)	

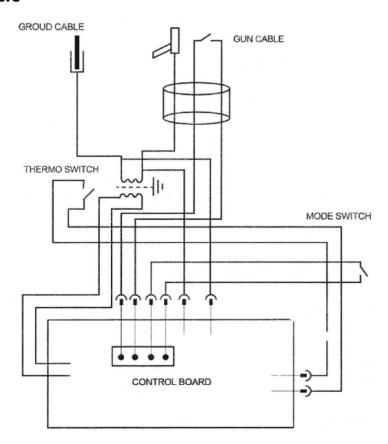
#### Steps (9)

#### 1. Precautions for Power-On

- Ensure the product is properly connected to the grounding wire, and verify that the grounding wire is in good condition. Any screw on the machine casing can serve as a grounding point.
- Ensure the workbench is properly connected to the grounding device. Any screw on the machine casing can serve as a grounding point.
- Prevent the operator from coming into contact with metal parts to be welded if no protective measures are in place or when wearing wet clothing.
- Avoid direct contact with the welding area.
- Do not perform spot welding in excessively humid environments or on wet floors.
- Do not use cables that are frayed, cut, or damaged. Inspect cables for insulation defects, exposed copper wires, loose connections, leaks, or any other unsafe conditions before use.
- Turn off the machine before replacing the electrode wire.
- Always turn off the machine and unplug it from the power supply before performing any inspections or maintenance.
- Ensure the power supply meets the machine's standard requirements.
- Use a copper-core power cord with a national standard of at least 4 square millimetres in cross-sectional area and a maximum length of 20 metres.
- Use an air switch or leakage protector rated at 60A or above.



# 2. Circuit Schematic

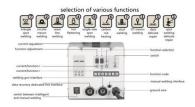




#### 3. Function of Each Part



# 4. Panel Operation



- 1. Connect the product to a suitable power source, and then press the switch to display: function (left) power (right)
- 2. To adjust the power intensity (current size), press the + or button
- 3. To change the function, press the function selection key. At this time, you can use the + and buttons to select the function number.
- 4. Manual welding and intelligent welding:
  - When using manual control, connect the torch switch connector and switch the switch to manual mode.
  - When using smart mode, there is no need to



disconnect the torch switch connector and switch the switch to smart mode.

# 5. Grounding Operation

- 1. Put the grounding wire in the position that needs to be repaired.
- 2. Put the welding torch near the ground wire for welding.
- 3. Tighten the nut of the grounding head.

It is strictly forbidden to replace other styles of grounding devices - The original grounding device is the most suitable one among all the current grounding devices. The tip of the grounding device is only used for fixing, and the copper nut plays the role of conduction. Be sure to screw the nut tightly and firmly.

# 6. Welding Operation

The machine can be welded manually/automatically, and the host automatically detects the short-circuit condition of the welding gun, and a welding spot is generated within 1 second. Disconnect the welding gun and the welding part for 0.5 seconds, then the next point can be welded, and others can be welded in sequence. When switches to manual mode, use the gun switch to control welding.

**Welding technique -** The welding can be very firm with a light touch. Excessive force is not necessary.

# 7. Host Overheating Protection System

The product is equipped with an automatic overheating protection system, which can automatically stop the machine for a few minutes in the case of excessive use. In this case, the buzzer will continue to sound.



### 8. Automatic Pulse System

The product is equipped with an automatic pulse system (function 4 and 6). Contact the welding gun fully with the steel plate, and the host automatically detects the short circuit of the welding gun, and starts to work in 1 second, reducing the degree of carbonisation of the body and improving work efficiency.

#### 9. Maintenance

#### **Safety Precautions**

- Always disconnect the machine from the power source before performing any maintenance.
- Wear appropriate personal protective equipment (PPE) such as gloves and eye protection during maintenance.
- Ensure the machine is cool to the touch before beginning any work to avoid burns.

# Routine Inspection Schedule Daily:

- Check the accessories for wear and tear. Replace if necessary.
- Inspect all visible cables and connectors for damage or loose connections.

# Weekly:

- Verify the integrity of all moving parts and mechanisms. Lubricate as required.
- Check the seals and gaskets on the machine's vacuum system and replace if they show signs of deterioration.

#### Monthly:

- Conduct a comprehensive test of the machine's safety features, such as emergency stops.
- Review the entire machine for any signs of unusual wear or potential failures.



#### **Cleaning Procedures**

#### 1. Exterior Cleaning:

- Wipe down the machine with a damp cloth.
- Avoid using abrasive cleaners that can damage the paint or finishes.

### 1. Component Cleaning:

- Clean the accessories and any exposed or moving parts using a mild detergent solution.
- Dry all parts thoroughly before reassembling and restarting the machine.

#### **Lubrication Guidelines**

- Lubricate all moving parts monthly with a silicone-based lubricant to ensure smooth operation.
- Do not over-lubricate, as excess lubricant can attract dirt and debris, which may impair function.

FOR ALL OTHER ISSUES, PLEASE CONTACT OUR CUSTOMER SUPPORT TEAM.