

# WARNING

The enclosed **DC Matic Model TL-900** 24V Impact is not a conventional impact and should not be used as such.

The **TL-900** generates very high striking force and does not require long run times to remove or install fasteners.

**READ THE INSTRUCTION  
MANUAL FOR BEST  
RESULTS**

# DC Matic Enterprises, Inc.

## **Model TL-900** **Safety and Use Manual**

### **24-30 VDC Powered 3/4" Square Drive Impact Wrench System**

#### **Work Area Safety**

- **Keep work area clean and well lighted.** Cluttered or dark areas invite accidents. Use the LED work light on the **Model TL-900** (shown in Fig. 1) whenever possible to reduce injuries.
- **Do not operate the Model TL-900 in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Although the **Model TL-900** incorporates safety measures that enclose sparks, its exterior metal parts may create sparks that can ignite flammable materials.
- **Keep bystanders, children and visitors away while operating the Model TL-900.** Distractions can cause you to lose control.
- **Make sure vehicles are braked, chocked and stable.**
- **Use extreme caution when working on or around a vehicle on a jack.**

#### **Electrical Safety**

- **The Anderson quick connector ( shown in Fig. 1) on your Model TL-900 must match another Anderson quick connector.** Mismatched connectors create the risk of electrical shorting.
- **Make sure the cables, switches and power connector are in good working order before making a secure connection.** Damaged cables, plug, switches or receptacles will reduce the amount of power available to the tool and potentially cause damage to it or the vehicle.
- **Do not immerse the Model TL-900 in standing water.**
- **Do not abuse the power cables. Never use the cord for carrying, pulling or unplugging the tool. Keep the cables away from sharp edges and moving parts.**
- **Make sure the power cables are free from snags and tangles before operating the tool system.**

#### **Personal Safety**

- **Always stay alert and use common sense when operating the Model TL-900. Never operate the tool while tired or under the influence of drugs, alcohol or medication.** The **Model TL-900** is a very powerful tool and personal injury and property damage could occur if not properly used.
- **Use safety equipment. Always wear eye and ear protection.** Safety equipment such as dust masks, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- **Avoid accidental start up of the Model TL-900 by applying power only when ready to use. Unplug immediately when work is completed.** Keep the trigger free from obstructions.
- **Make sure any attachments such as sockets, adapters and torque extensions are secured to the tool's square drive prior to operating the Model TL-900.**
- **Do not overreach. Keep proper footing and balance at all times. Make sure cables are free from snags and tangles when using the Model TL-900 off of the ground.**
- **Dress properly. Do not wear loose fitting clothing or jewelry. Make sure hair, clothing and gloves are kept away from moving parts.**
- **Keep your Model TL-900 handle clean from oil and grease. Holding a slippery handle will make it difficult to safely control this powerful tool.**

## Tool Use And Care

- **Operate the Model TL-900 in 2 to 3 second bursts. If the tool does not loosen the fastener (nut or bolt) after three (3) bursts, STOP and use other means to loosen the fastener.**
- **Use only impact “rated” sockets.** Non-impact sockets can break and cause personal injury or property damage.
- **Always hand start fasteners before securing with the Model TL-900 to avoid cross-threading.**
- **Make certain that impact sockets are securely seated over the fastener prior to tightening or loosening a bolt or nut.**
- **Always use the correct size impact socket.** Incorrect sockets can damage the fastener or slip off causing injury.
- **Always clean your Model TL-900 and all electrical connectors after use.**

## Operating Instructions

- **Hold the Model TL-900 firmly using both hands while operating the tool. Always wear safety goggles or other approved eye protection.** Heavy impacting can cause flying debris that can cause permanent eye damage.
- **Sockets and fasteners can get hot during operation.** Use protective gloves when handling them.
- **Do not operate the Model TL-900 for long periods of time.** Vibration caused by the tool's impacting action may be harmful to your hands and arms. Use thick gloves to provide extra cushion and limit exposure by taking frequent rest periods.

## Operating Voltage

Your **Model TL-900** requires a source of 24-30 VDC that is capable of providing 100 AMPS (intermittent) to generate optimum impacting strength.

If you have a solid source of 24-30 VDC applied to your **Model TL-900** and the impacting strength of the tool seems sluggish or weak, please contact **DC Matic Enterprises** to obtain a Return Material Authorization (RMA) so we can expedite the repair of your tool or arrange to have a new set of motor brushes sent to you for field replacement.

## Thermal Protection/Cut Off

Your **Model TL-900** is equipped with an internal, bi-metal thermostat that will shut down the tool (kill the trigger switch) when the tool becomes overheated. Testing has revealed that this tool's thermal protection circuit **will not activate** if the **Model TL-900** is used intermittently and allowed an adequate amount of cool down time between uses.

**Note:** When used consistently in an ambient temperatures above 90 degrees F, the average time needed for the thermal protection circuit to re-set time is thirty (30) minutes.

## Control Box

Your **Model TL-900** is equipped with a forward positioned, 12-cluster LED work light (shown in **Fig. 1**). The work light's **On/Off switch** is located on the control box (shown in **Fig. 3**). To achieve the highest degree of workplace safety always turn **ON** the work light when operating the **Model TL-900** in a low or no-light environment. **The control box is “Factory Sealed” and must remain that way. Unauthorized opening of the control box will void the tool’s warranty.**

### **Input Power Connector**

The Control Box that is part of your **Model TL-900** is equipped with an Anderson Connector that is rated for 175 amps of current. Before connecting your **Model TL-900** make certain that this connector is free of debris and in good condition.

### **Impacting Mechanism**

Your **Model TL-900** is equipped with an Industrial Grade, twin-hammer impacting mechanism (shown in Fig. 1) It is factory lubricated and sealed so it is not necessary to service the mechanism in the field.

### **Do-It-Yourself Motor Brush Set Replacement**

Your **Model TL-900** is equipped with **four (4) external brush ports** that will allow you to quickly and easily replace your initial set of Motor Brushes without having to remove the 24 VDC motor from the tool's housing. Each brush can be removed and replaced by using a standard flat blade screw driver in less than 30 minutes (shown in Fig. 2).

### **Repairs**

To achieve the highest degree of user safety and tool reliability, all repairs (**excluding brush set replacement**) to your **Model TL-900** must be performed by an authorized repair location. Please contact **DC Matic Enterprises** for immediate support of your **Model TL-900** and for proper product return (RMA) instructions or to purchase a replacement brush set.

### **Returns**

Each returned product must first be issued a **RMA** (returned material authorization) by **DC Matic Enterprises** **Do not ship your tool back without a company issued return authorization (RMA).** To request an RMA call toll-free 1-(866)-419-5602

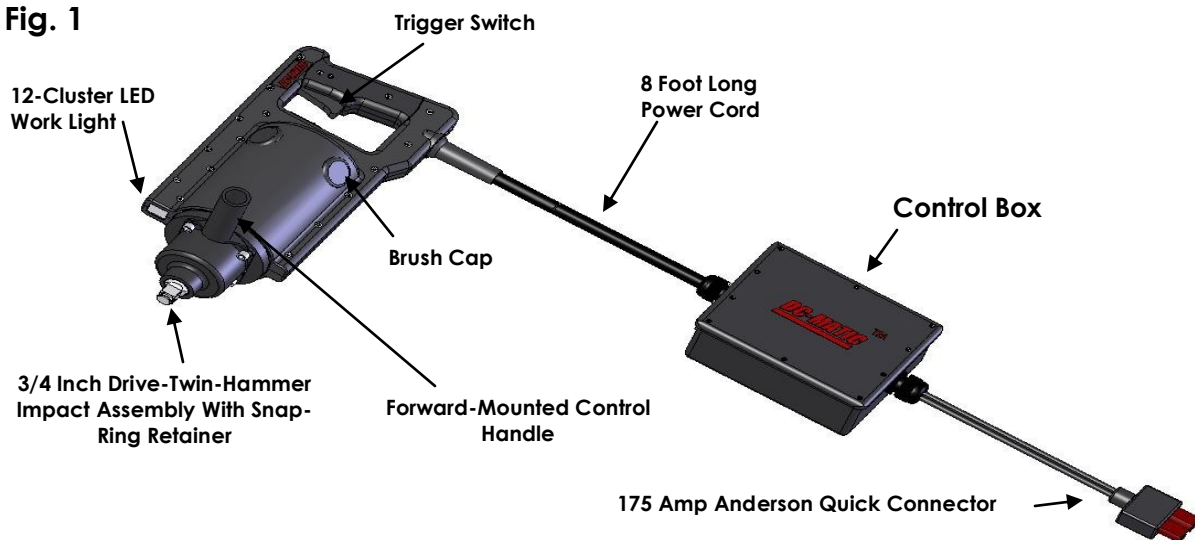
**Note:** Returned units must be shipped transportation prepaid to DC Matic's designated repair facility noted on the RMA.

### **Warranty**

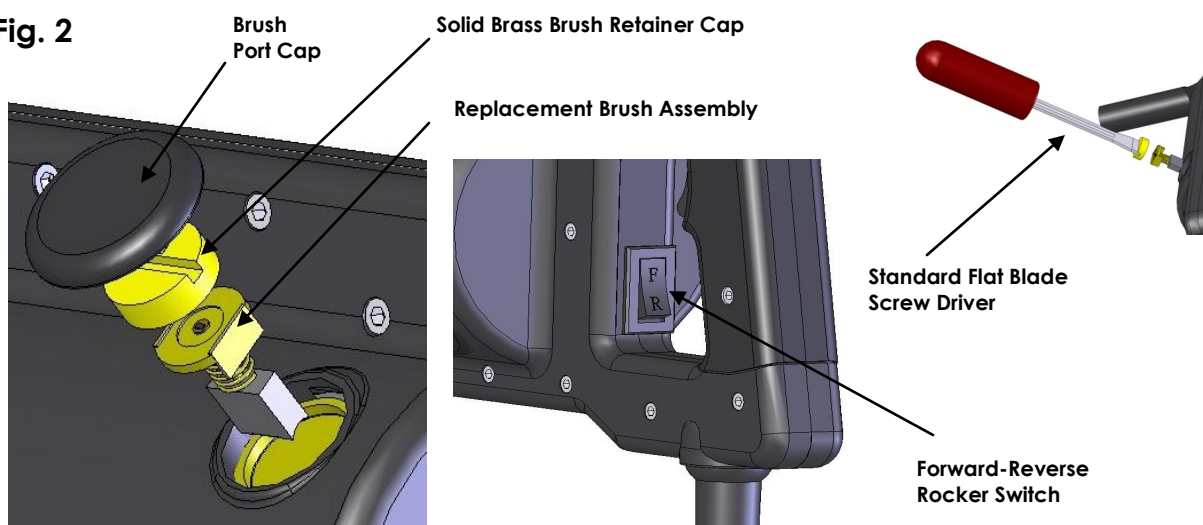
DC Matic Enterprises will repair or replace, without charge, any portion of your **Model TL-900** tool if a defect or failure was proved to be caused by faulty material or workmanship for a period of **ONE FULL YEAR** from the date of purchase. Proof of purchase date is required for all warranty claims. Warranty **DOES NOT** provide repair or replacement if it is determined that any portion of the tool system failed due to abuse or when repairs were made or attempted by any one other than "authorized" repair facility personnel.

**Note:** Each **Model TL-900** has a manufacturer's ID plate with serial number affixed to the bottom of the tool's Control Box ( shown in Fig. 4) for Warranty Verification purposes.

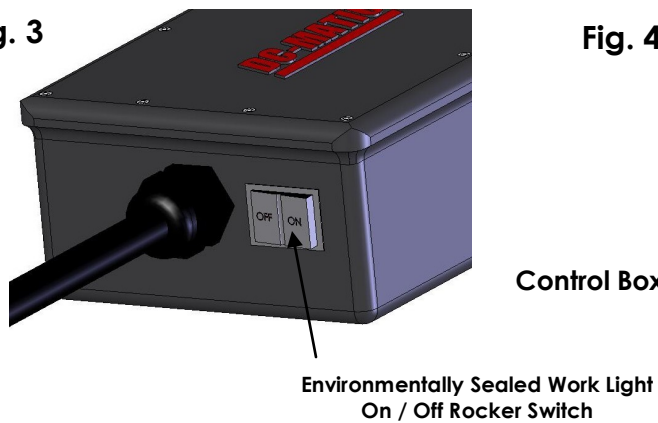
**Fig. 1**



**Fig. 2**



**Fig. 3**



**Fig. 4**

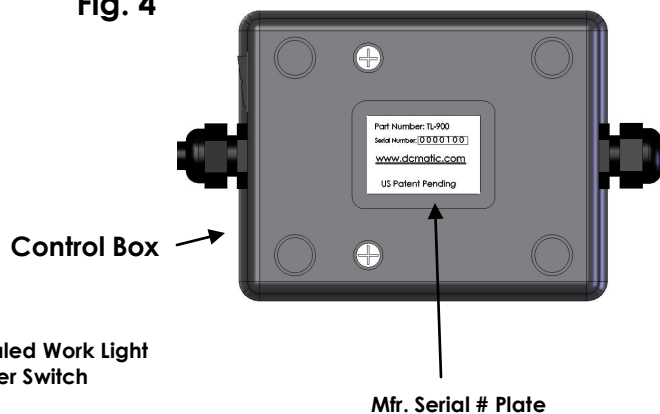


Fig. 5



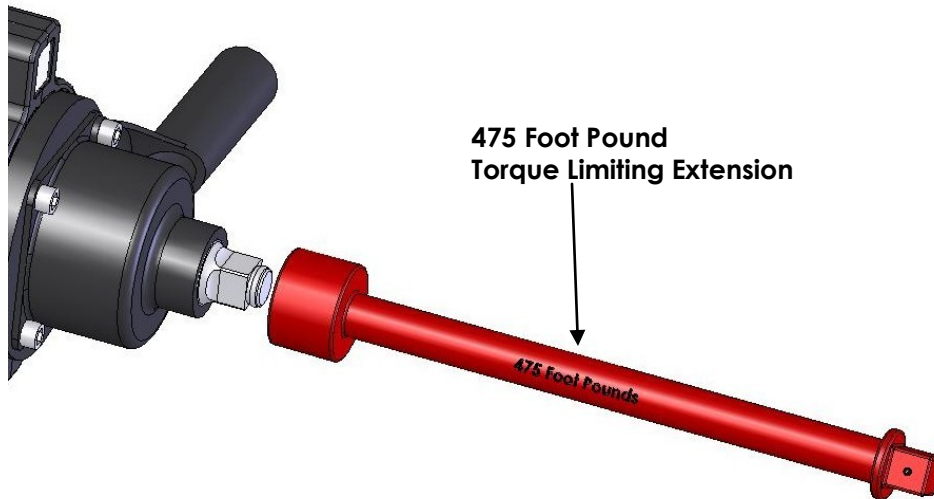
### Stabilizing Handle Placement

By removing the (4) Allen-head cap screws that secure the hammer assembly to the tool, the stabilizing handle can be moved to the other side as shown.

### Properly Controlling Output Impacting Torque

DC Matic Enterprises markets (4) individual 3/4" drive "torque limiting extensions" calibrated at 175, 250, 350 and 475 FtLbs as well as (1) 1" drive 650 FtLb extension. When attached to the Model TL-900 a burst of two (2) seconds of tool run time will yield an output torque limited within the range (+/- 10 %) that is marked on the extension. It must be noted that a longer than a two second burst could yield a greater amount of impacting torque. Residual torque will vary based upon joint rate and condition.

Fig. 6



## **WARNING**

Excluding the do-it-yourself replacement of motor

brushes, please **DO NOT** attempt to repair your **Model TL-900**.

Doing so will void the tool's WARRANTY.

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