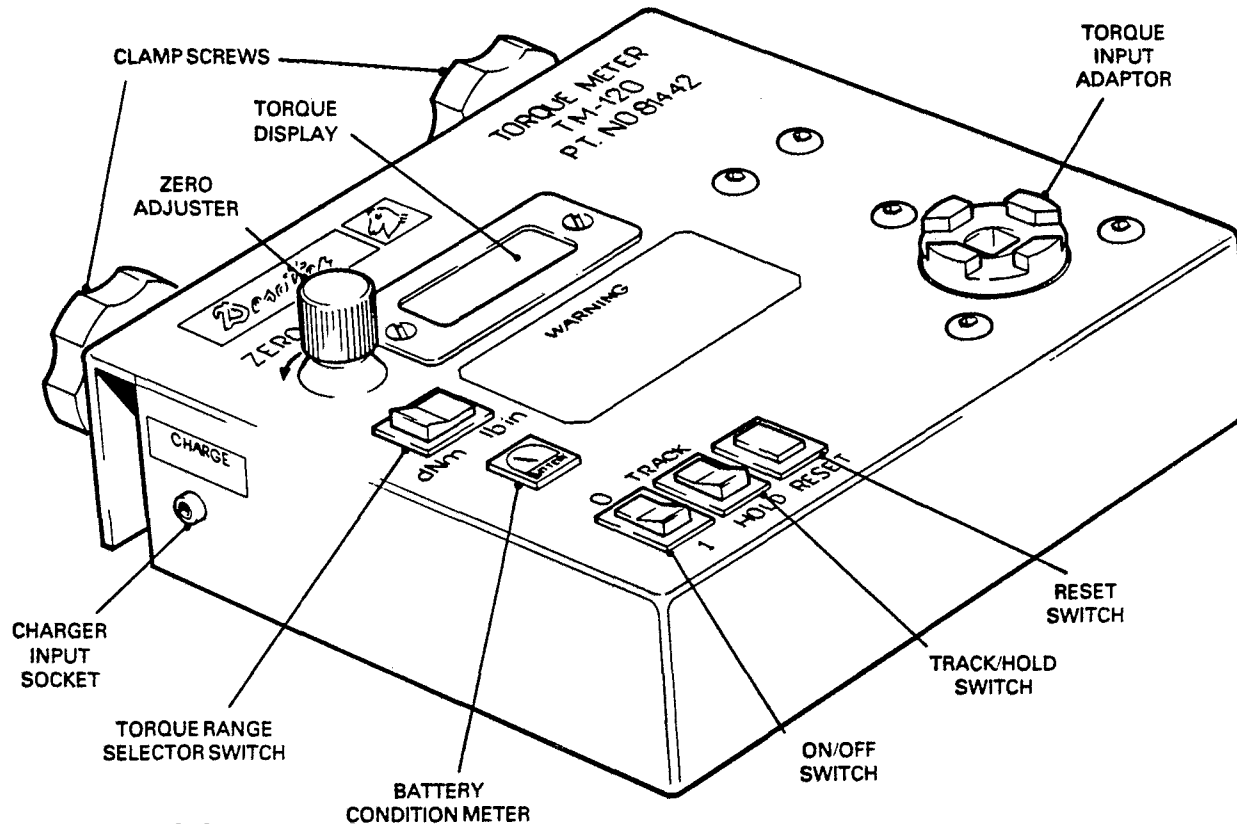


Desoutter

Electronic Torque Tester

INSTRUCTION MANUAL



Lou Zampini & Associates

2 Douglas Pike, Rt. 7
Smithfield, RI 02917
1 800 353 4676
FAX 1 401 679 0165

Type

TM-120 for 240 volt AC
TM-120 for 120 volt AC

Code

82022
82032

INTRODUCTION

The Electronic Torque Tester consists of the following:

Part No.	Description	Qty.
81442	Torque Meter	1
82142	Joint Simulator with Red Spring	1
68448	Spring — Green	1
73318	Spring — Blue	1
72222	5mm. Hex. Insert Bit	1
11522	Insert Bit Adaptor	1
82152	Accessory Box	1
82042	Battery Charger — 240v.	1
	OR	
82052	Battery Charger — 120v	1

The Electronic Torque Tester has been designed to accurately measure torque values from 9dNm to 113dNm (8 to 100 lb.in). Torque input into the tester can be either clockwise or anti-clockwise.

DO NOT EXCEED THE MAXIMUM TORQUE.

Controls and Fittings

Zero Adjuster:

Rotate to zero the Torque Display. With the torque meter switched on and the Track/Hold selector set to TRACK, adjust the zero control to obtain 0.0.0 on the display.

dNm/lb.in. Switch:

Engineering unit Selector, set to dNm/lb.in. As required.

Battery Condition Meter:

Activated when torque meter is switched on. OK to use if the reading is in the GREEN. RECHARGE if in the RED.

ON/OFF Switch:

Bias switch to 0:- the torque meter is OFF.
Bias switch to 1:- the torque meter is ON.

Track/Hold Switch:

Bias switch to TRACK with torque meter ON, the applied torque will be monitored when the torque is released the display reading will return to zero.
Bias switch to HOLD and switch ON the meter, the peak torque applied will be displayed and held until: the Reset Switch is pressed or the meter switched OFF.

Reset Switch:

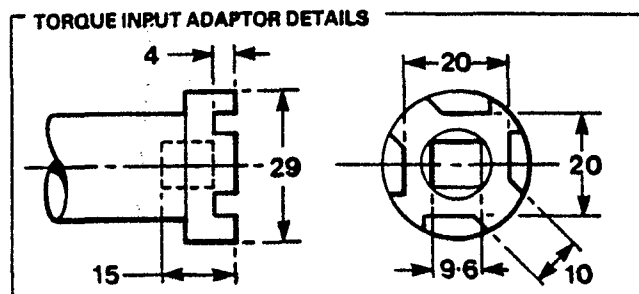
Pressing this switch, when the meter is on HOLD, will zero any reading displayed. Allowing the next reading to be taken.

TM-120

TM-120

Torque Input Adaptor:

Designed to receive the joint simulator or customers own sample fixing through an inner $\frac{3}{16}$ in. square or outer 20mm square female sockets, see illustration.



Torque Display:

Digital reading, make sure the reading is zero before a torque measurement is taken.

Charger Input Socket:

Plug in the charger 'jack' and with the charger plugged into the mains and switched on the torque meter batteries will receive a charge. Whilst connected to the charger the Meter can not be used for torque measurement.

Clamp Screws.

For recording higher torques it is advisable to restrain the meter, using the clamp screws and a rigid fixed plate.

NOTE: The dimensions of the fixed plate should be: 10mm thick, 40mm wide and 200mm long.

COMMISSIONING

When received check that the unit is complete, undamaged and that the battery charger is suitable for the voltage it is to be used on.

Obtain a suitable mains plug for the battery charger and wire it up with the Blue wire to Neutral and the Brown wire to Live. The charger should be protected by a 3 amp. fuse.

Remove the torque meter from the case and switch ON. Check that the Battery Condition Meter is recording in the GREEN segment:- torque meter OK to use. If the reading is in the RED segment the torque meter must be placed on charge.

Charging

NOTE: Charging should be carried out with the torque meter ON/OFF switch in the 'OFF' position.

Plug the charger into the torque meter then connect to and switch on the mains supply. The charging time will be 3 to 10 hours depending on the residual charge. Never charge for more than 20 hours.

NOTE: When in use monitor the battery condition regularly and to prevent overcharging an occasional overnight recharging is advisable.

OPERATING

Remove the torque meter from the case and switch ON. Check that the battery condition meter is reading in the GREEN.

Select the torque range required, and set the Track/Hold switch to TRACK.

Zero the meter reading and then if the peak torque value is to be recorded set the Track/Hold switch to HOLD.

Torque applied to the Torque Input Adaptor, clockwise or anti-clockwise, will appear on the Torque Display as a figure in the range selected.

If the torque meter is set into HOLD press the Reset switch to zero the torque display ready for the next reading.

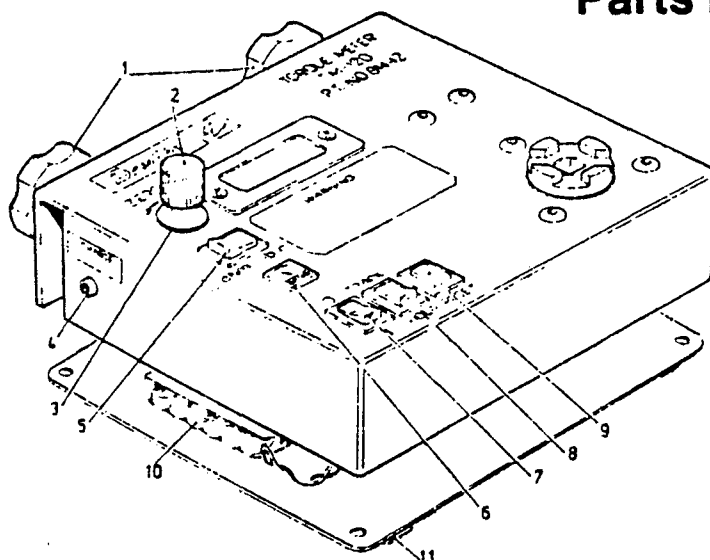
To prolong battery life switch OFF the torque meter as soon as the reading has been taken.

A Joint Simulator is supplied in the case and can be used in the following combinations:-

No Spring	— Hard Stop
Blue Spring	— Medium Stop
Green Spring	— Medium/Soft Stop
Red Spring	— Soft Stop

For consistent results operate a tool with a sample fixing or joint simulator not directly into the torque input adaptor.

Parts List



Item No.	Part No.	Description	Qty.
1	202533	Clamp Screw	2
2	310123	Zero Adjustment Knob	1
3	43463	'O' Ring	1
4	310193	Recharge Socket	1
5	310153	Torque Range Selector	1
6	310143	Battery Condition Indicator	1
7	310163	On/Off Switch	1
8	310173	Track/Hold Switch	1
9	310183	Reset Switch	1
10	302523	Battery Pack	1
11	310133	Foot	4

The replacement of components will require the soldering of connections, if this is beyond the capabilities of the repairer the unit should be returned to Desoutter or their Agent.



Desoutter Limited,
319 Edgware Road, Colindale, London NW9 6ND.
Telephone: 01-205 7050 Telex: 21392