

# **7000 N·m HORIZONTAL POWER TOOL TEST FIXTURE**



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# PART NUMBERS COVERED BY THIS MANUAL

Part Number	To Fit Transducers	Drive Square	Maximum Torque
50800 & 50803	50703.LOG	1 ½"	2500 N·m
	50704.LOG	1 ½"	2500 lbf·ft
	50599.LOG	1 ½"	5000 N·m
	50630.LOG	1 ½"	5000 lbf·ft
	50669.LOG	1 ½"	7000 N·m

## INTRODUCTION

This manual covers the setup and use of the Norbar horizontal power tool test fixture. This calibration fixture is designed to be used with the correct Norbar calibrated static transducer to test inline power tools using the standard Norbar adaptor plates.

## SAFETY

**IMPORTANT: DO NOT OPERATE THE SYSTEM BEFORE READING THESE INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY OR DAMAGE TO THE TOOL UNDER TEST.**

Isolate the tool from all energy sources before changing or adjusting the drive square or socket.



There is a risk of crushing between the reaction bar and work piece.

Keep hands away from reaction bar.

Keep hands away from tool output.

Keep loose clothing, hair, etc. from being caught in any rotating part of the tool.

Use only sockets and adaptors which are in good condition and are intended for use with power tools.

Read operating instructions for power tools.

Read operating instructions for transducer and measurement instrument.

# FITTING INSTRUCTIONS

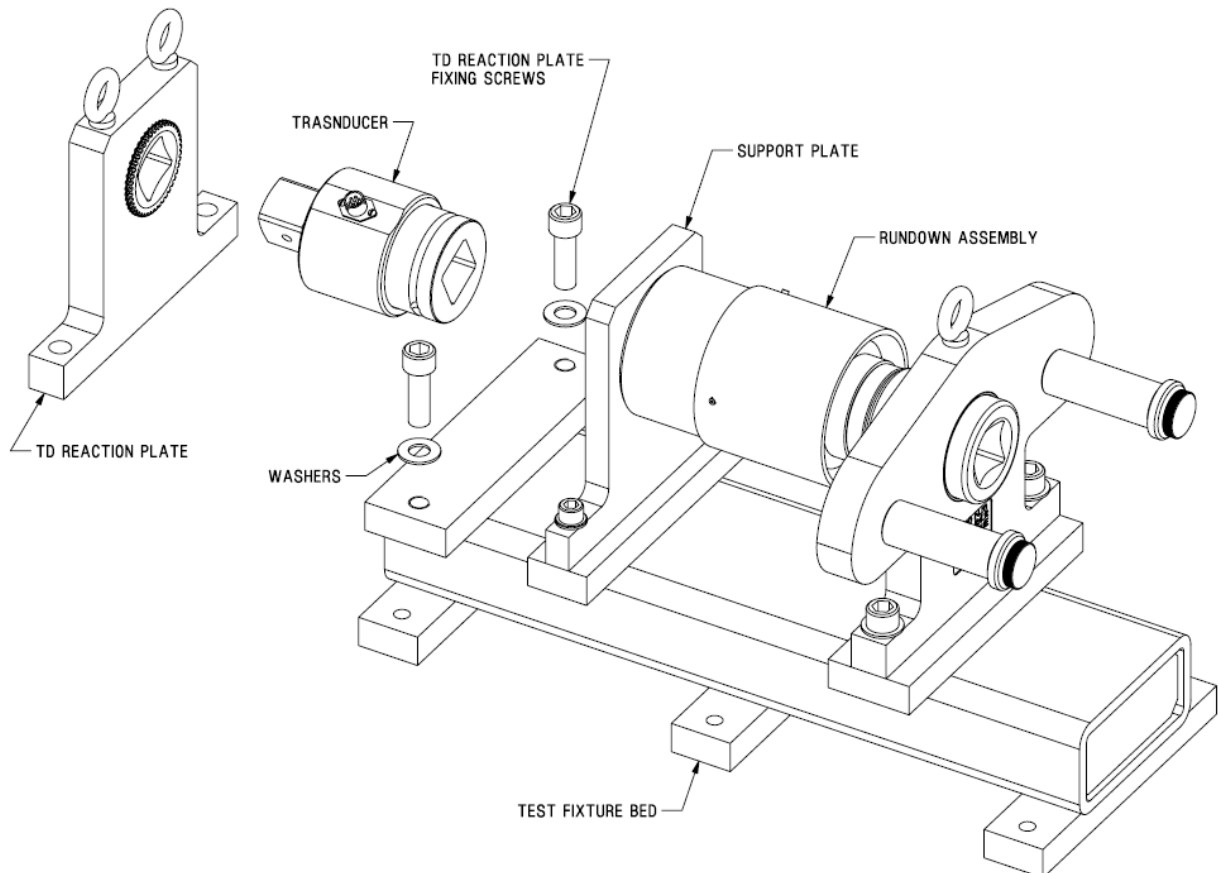
## Securing the Fixture to a Solid Surface

The fixture should be securely fastened to a solid bench of sufficient strength to withstand the weight of the fixture. Provision should be made to machine 6 holes into the bench to suit the 6 holes in the test fixture bed.

## Fitting the Transducer

Once the fixture has been secured the static transducer (TD) needs to be fitted as follows:

1. Release the TD reaction plate by removing the TD reaction plate fixing screws and washers.
2. Slide the male square of the transducer into the female square of the TD reaction plate.
3. Align the transducer and TD reaction plate with the rundown assembly.
4. Slot the transducer into the bore of the support plate, while sliding the female square of the transducer over the male square of the rundown assembly.
5. Align the screws holes of the TD reaction plate with the tapped holes of the test fixture bed and re-assemble the washers and fixing screws.
6. Torque tighten the TD reaction plate fixing screws to 325 N·m.



# OPERATING INSTRUCTIONS

The fixture should be securely fastened to a solid bench of sufficient strength to withstand the weight of the fixture. Never use with a larger capacity tool than the fixture is designed to operate at, as stated on the cassette reaction plate.

Remove the standard reaction from the power tool that is under testing. Locate the appropriate reaction plate and adaptor socket to suit the power tool. Attach the reaction plate to the front of the tool and position the correct adaptor socket on to the fixture. Remove the thumb screws and retention washers from the reaction posts. Slide the reaction plate with tool attached over the two reaction posts and reattach the retention washers and thumb screws. Free run the tool until it is possible to locate the square into the adaptor socket. Keep all body parts away from reaction plates when operating.

Once the power tool is set in the fixture, operate the tool to the required torque and take the reading from the display device.



**WARNING: KEEP HANDS CLEAR OF THE REACTION PLATE.**



## SPECIFICATIONS

Part Number	Dimensions	Weight (Excluding Transducer)	Maximum Torque
50800	H 401mm x L 600mm x W 350mm	150 Kg	7000 N·m
50803	H 401mm x L 600mm x W 350mm	79 Kg	7000 N·m

## MAINTENANCE

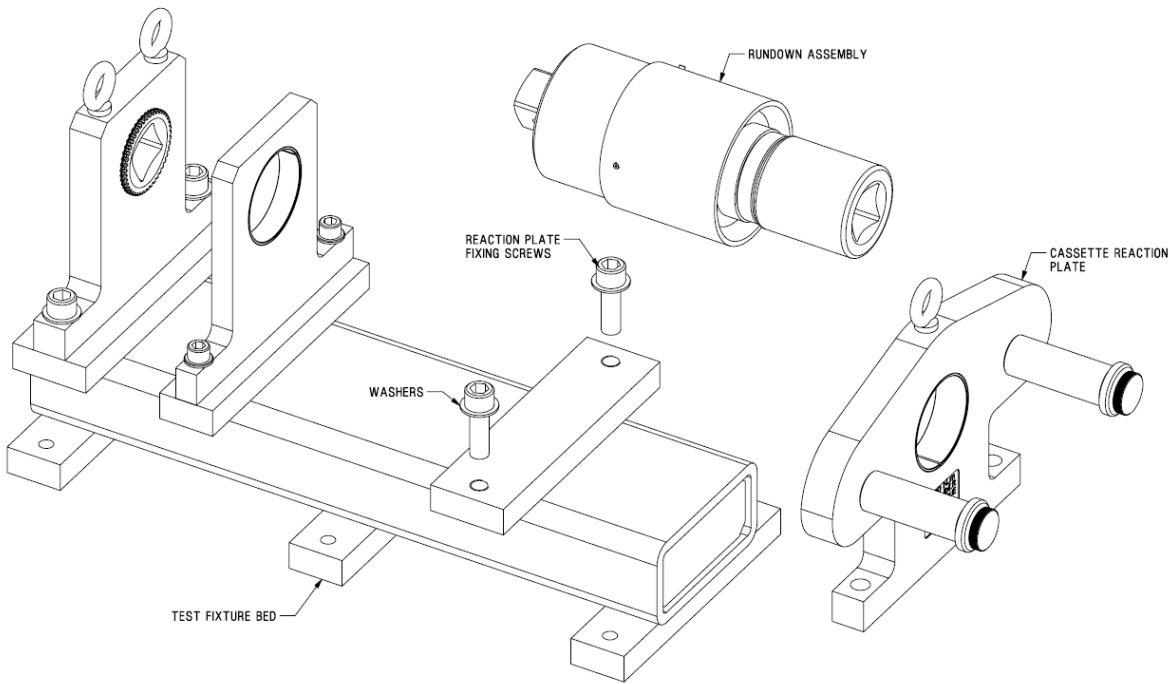
Keep the fixture in a clean condition to aid safety. Do not use abrasives or solvent based cleaners.

### Service / Repair

To access the rundown assembly for servicing or repair, follow the instructions below:

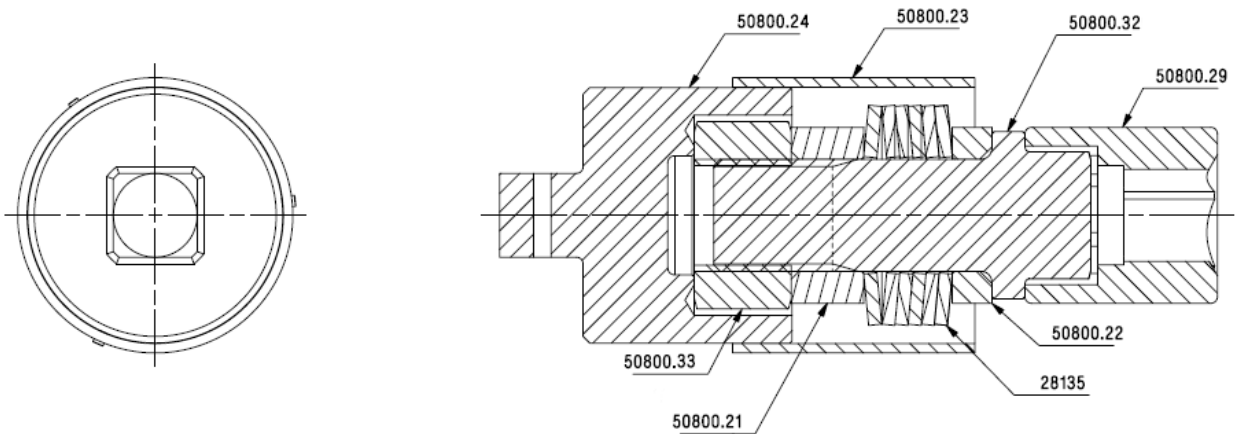
1. Remove the reaction plate fixing screws with the supplied 14mm hex Allen key.
2. Slide the cassette reaction plate off the rundown assembly and place to one side.
3. The rundown assembly can then be removed from the test fixture.

*(Diagram for the above dis-assembly instructions can be found on the following page)*



To service or repair the rundown assembly, complete the following steps:

1. Remove square drive, 50800.29, from the special UNC bolt, 50800.32.
2. Remove bolt with washers, spacers and nut attached from the sleeve.
3. 50800.32 can then be disengaged from 50800.33, releasing the spacers and washers.
4. Service of required parts can then take place.
5. 50800.32 and 50800.33 are the items most prone to wear. It is recommended that these items be greased regularly with Rocol M204 G Graphite grease or Rocol Tufgear Universal. Replace components when worn as a set of nut and bolt together.



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