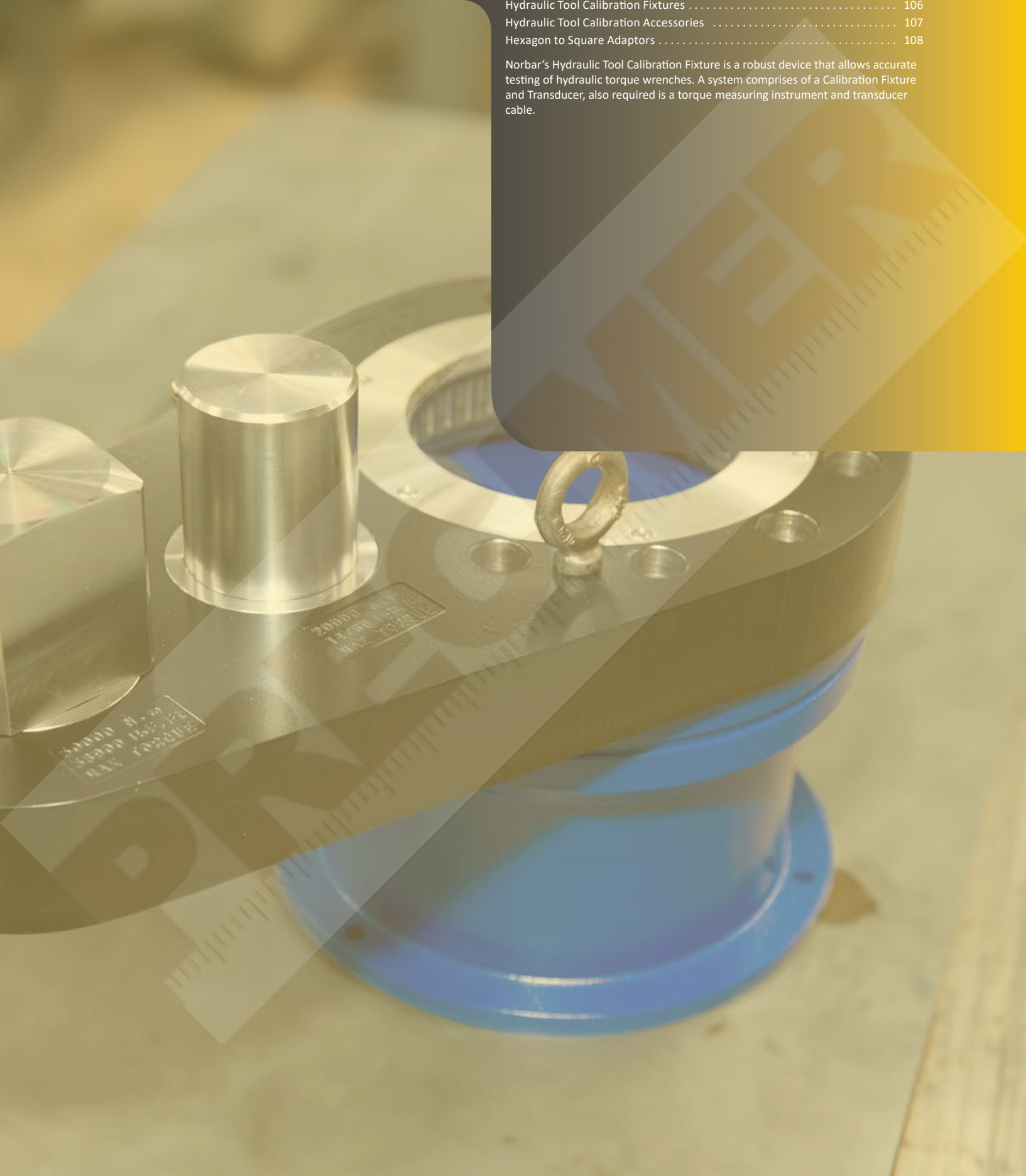


HYDRAULIC TOOL CALIBRATION FIXTURES

Hydraulic Tool Calibration Fixtures 106
Hydraulic Tool Calibration Accessories 107
Hexagon to Square Adaptors 108

Norbar's Hydraulic Tool Calibration Fixture is a robust device that allows accurate testing of hydraulic torque wrenches. A system comprises of a Calibration Fixture and Transducer, also required is a torque measuring instrument and transducer cable.

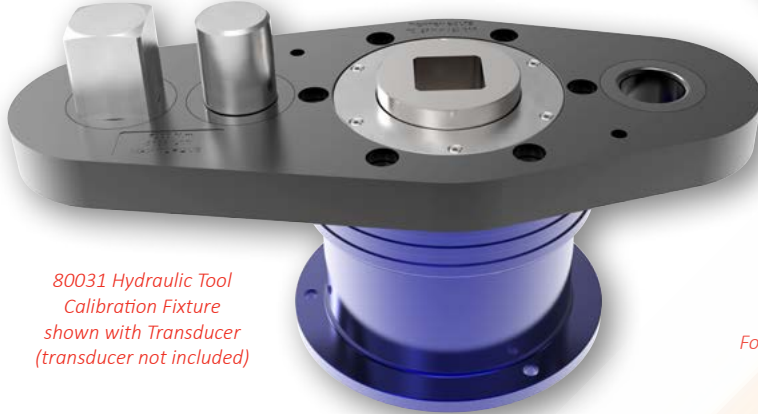




HYDRAULIC TOOL CALIBRATION FIXTURES



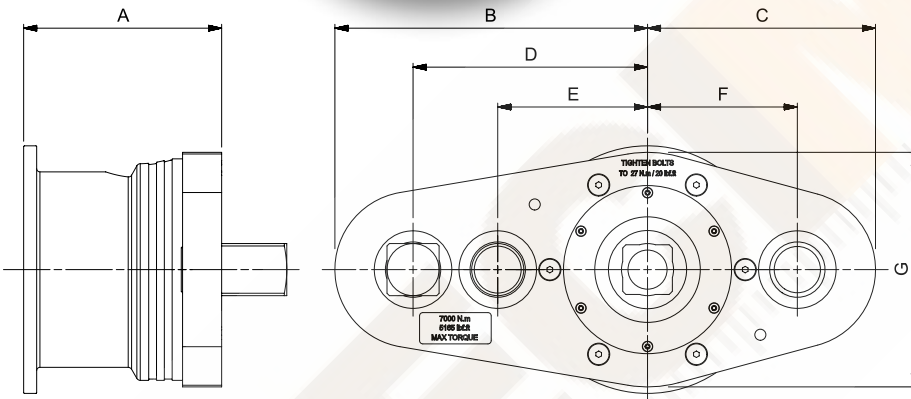
4	CALIBRATION FIXTURES
80031	Hydraulic Calibration Fixture up to 7,000 N-m
80029	Hydraulic Calibration Fixture up to 50,000 N-m
80032	Hydraulic Calibration Fixture up to 80,000 N-m
81022	Reaction Bar for 80031
81023	Reaction Bar for 80029



80031 Hydraulic Tool Calibration Fixture shown with Transducer (transducer not included)



For more information regards Hydraulic Torque Wrenches please contact Norbar



Model	Hydraulic Calibration Fixture up to 7,000 N-m	Hydraulic Calibration Fixture up to 50,000 N-m	Hydraulic Calibration Fixture up to 80,000 N-m
Part Number	80031	80029	80032
Dimensions (mm)	A	202	292
	B	240	450
	C	175	170
	D	180	350
	E	115	260
	F	115	N/A
	G	180	340
Weight (kg)	TBC	TBC	TBC

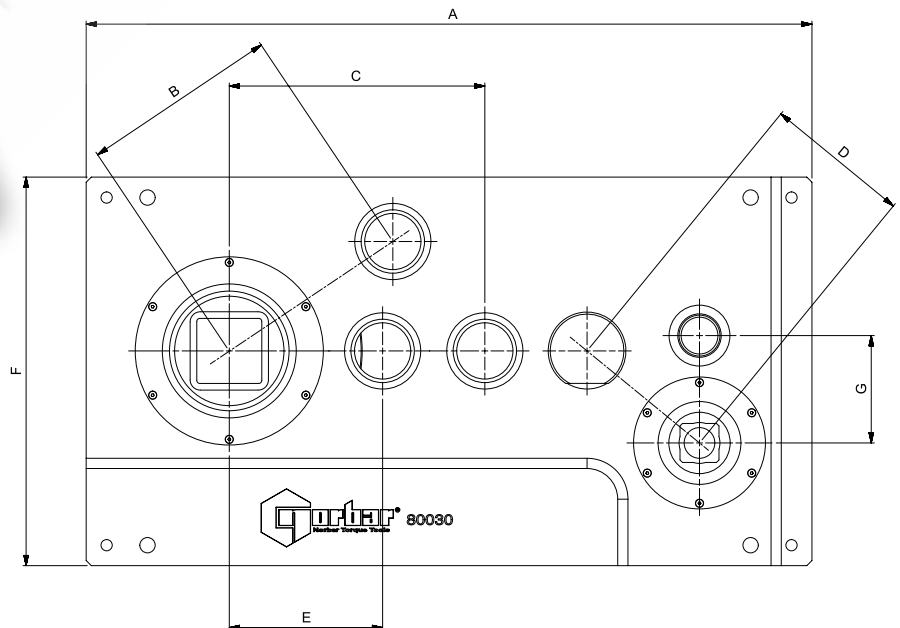
4	DUAL CALIBRATION FIXTURE
80030	Dual Calibration Fixture

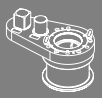
Note: Houses 1 transducer up to 7,000 N-m and 1 transducer up to 50,000 N-m in a bench top plate.



Dual Calibration Fixture (Part No. 80030)

Model	Dual Calibration Fixture	
Part Number	80030	
Dimensions (mm)	A	710
	B	193
	C	250
	D	142
	E	150
	F	380
	G	105
Weight (kg)	140.0	



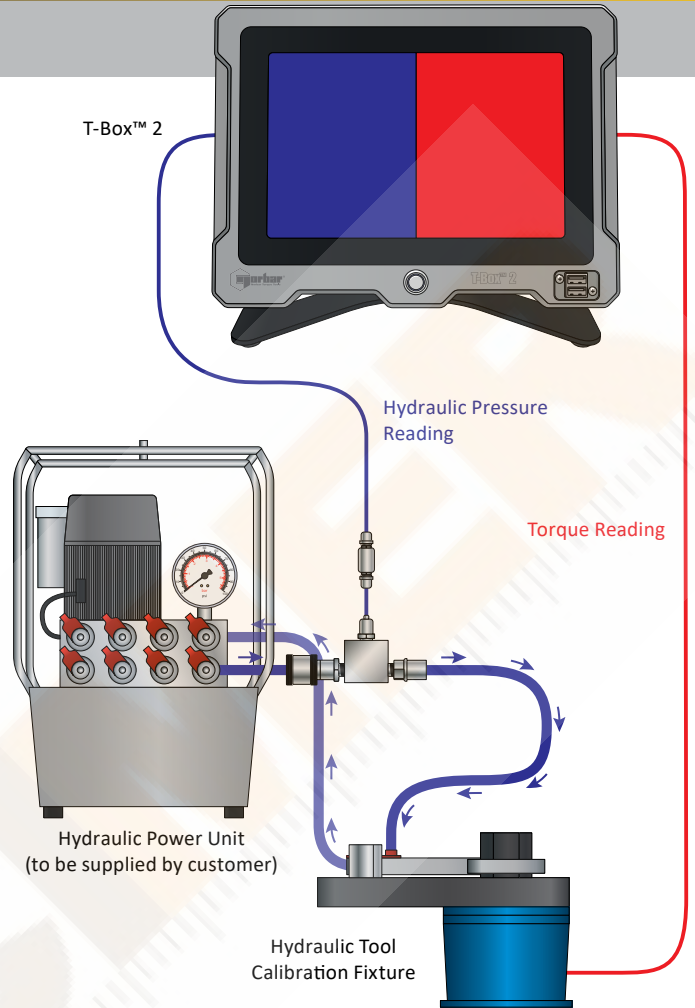
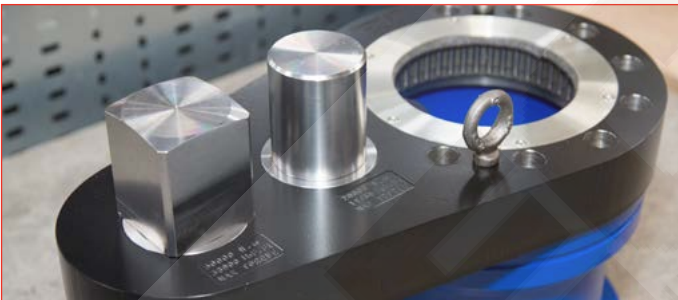


HYDRAULIC TOOL CALIBRATION ACCESSORIES

Rapid hydraulic wrench calibrations (for instance, from many minutes to around one minute) are possible using appropriate hydraulic calibration fixtures and accessories along with the T-Box™ 2. The T-Box™ 2 can take simultaneous hydraulic pressure readings and torque readings at pre-configured trigger points. By ramping up the hydraulic pressure from the minimum to the maximum for the torque wrench under test, pressure and torque readings will be taken and recorded at the required points. This data can be saved to Excel and exported to appropriate third-party calibration certification software.

This feature is not limited to hydraulic torque wrench calibration. By substituting the hydraulic pressure transducer for a pneumatic pressure transducer along with the appropriate calibration hardware, similar benefits of ease and speed can be applied to air tool calibration.

Contact TechSales@norbar.com or your distributor for further details.



4 CALIBRATION FIXTURE ACCESSORIES

56026.IND	730 bar Pressure Transducer ADDCALPOINTS.NEW does not apply to pressure transducers
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56026.IND 730 bar Pressure Transducer

4 TRANSDUCERS FOR USE WITH 80031 / 80030

50703.xxx*	250 - 2,500 N·m, 1½" sq. dr. M/F
50704.xxx*	250 - 2,500 lbf·ft, 1½" sq. dr. M/F
50599.xxx*	500 - 5,000 N·m, 1½" sq. dr. M/F
50630.xxx*	500 - 5,000 lbf·ft, 1½" sq. dr. M/F
50669.xxx	700 - 7,000 N·m, 1½" sq. dr. M/F

* UKAS accredited calibration up to 6,000 N·m. A non-accredited value at 7,000 N·m is extrapolated and provided for reference only.

4 TRANSDUCERS FOR USE WITH 80029 / 80030

50776.xxx@	1,000 - 10,000 N·m, 2½" sq. dr. M/F
50777.xxx@	1,000 - 10,000 lbf·ft, 2½" sq. dr. M/F
50797.xxx@	2,500 - 25,000 N·m, 2½" sq. dr. M/F
50781.xxx@	5,000 - 50,000 N·m, 2½" sq. dr. M/F
50798.xxx@	25,000 lbf·ft, 2½" sq. dr. M/F

4 TRANSDUCERS FOR USE WITH 80032

50782.xxx	6,000 - 60,000 lbf·ft, 3½" sq. dr. M/F
50783.xxx	8,000 - 80,000 N·m, 3½" sq. dr. M/F

Harsh Environment Transducers available on request.

12 ADDITIONAL CALIBRATION

The transducers shown include clockwise only calibration from 10% to 100% of rated capacity. For other calibration options, see below:

*ADDCALPOINTS.NEW

Additional calibration steps below 10% of rated capacity to 2% for transducers up to 7,000 N·m (5,000 lbf·ft) when ordered with new unit

@SECCAL.CW

Secondary calibration in one direction on static transducers with 2½" square drives to extend the range below 10% of the rated capacity, when ordered with new unit

SECCAL.CW+CCW

Secondary calibration in two directions on static transducers with 2½" square drives to extend the range below 10% of the rated capacity, when ordered with new unit