

# ENGINEER TO ORDER

## SPECIAL PROJECT INFORMATION SHEET



Project Description	PTM-72-2000-F-EC based torque & angle kit		
Date created	16 July 2013	Project Number	Q2468

### INTRODUCTION & APPLICATION

Railway industry application where vibration can result in the loosening of torque tightened gear housing to axle bolts on diesel electric locomotives.

### SOLUTION

Bolts tightened to torque and then through a specified angle to put the bolts into yield.  
2,000 N.m kits supplied comprised the following: -

- New PTM-72-2000-F-EC tool having integral transducer, angle encoder & forward only gearbox
- Special tool controller with TTT instrument, angle display, pass / fail lamps & override reset
- Special torque & angle 10 metre lead (with splitter to suit existing tool controllers)
- Special torque reaction, external solenoid valve, solenoid cable, hose & lubro control unit.



### TECHNICAL SPECIFICATION / DATA HIGHLIGHTS

No exposed cables above / forward of the tool handle, suits heavy duty railway use.  
Kit is customer specific but could be supplied in different configurations e.g. -

- Other tool sizes / torque ratings
- Forward & reverse gearbox version (*angle encoder does not identify direction*)
- T-Box based tool controller in wall box or Peli-case housing
- Tool internal shut-off valve in lieu of external valve