ENGINEER TO ORDER SPECIAL PROJECT INFORMATION SHEET



Project Description	Special Reaction for HT-52/4.5 – Cylinder Head Bolts		
Date created	6 May 2010	Project Number	Q1898 Application # 2

INTRODUCTION & APPLICATION

Automotive industry requirement to tighten eight engine cylinder head bolts, in sequence, to torque and then to further angles in stages.

Old method used a 1 metre long bar for leverage and was a health and safety risk.



SOLUTION

Handtorque multiplier HT-52/4.5 # 18087 fitted with torque bar adaptor # 18558, special torque reaction arm and angle gauge assembly.

To ensure a safe torque reaction, a special plate is bolted to the cylinder head via cam cover fixing holes, and has receiver sockets to locate the reaction arm.

Angle gauge assembly includes protractor for angle measurement.







TECHNICAL SPECIFICATION / DATA HIGHLIGHTS

(8) E18, M12-1.75 bolts, tightened in sequence to stage 1 - snug torque / stage 2-60 N.m / stage $3-90^{\circ}$ angle / stage $4-90^{\circ}$ / stage $5-90^{\circ}$.

All for use with Norbar wrench TT100, 20 - 100 N.m, with $\frac{1}{2}$ " square drive # 13255.