



TECHNICAL SERVICE BULLETIN

British Motor Holdings (U.S.A.) Inc.

734 GRAND AVENUE, RIDGEFIELD, NEW JERSEY 07657

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TO ALL DISTRIBUTORS AND DEALERS

Re: 18G 1002
Piston Wrist Pin Remover & Replacer Tool

Austin Healey Sprite
MG Midget
Austin America

This tool has been developed to remove and replace the piston wrist pins on all 1275 engines - 'A' Series. The piston pin is pressed into the connecting rod with a 7 ton pressure.

It is essential that all dealers have this tool to remove and replace any pistons requiring service.

OPERATING INSTRUCTIONS
18G 1002 GUDGEON PIN REMOVER & REPLACER

TO REMOVE GUDGEON PIN

Hold the hexagonal body in a vice with the cut out provided for Piston Ring Clearance uppermost. screw the large Nut (Det. 6) back until flush with the end of the centre screw and push both forward to make contact with the thrust race in the body, as shown in Fig. 1. (This is to prevent accidental damage to the piston when assembling on the centre screw). Slide the parallel sleeve (short length diameter portion first) on to the centre screw up to the shoulder. Place the piston assembly on the centre screw, followed by the Remover/Replacer bush (Det. 3) longest diameter portion first. Screw the stop nut (Det. 5) onto the end of the centre screw and adjust until there is approx. 1/32 end play in the entire assembly, making sure also that the parts are locating in the gudgeon pin bore on both sides at points marked X in Fig. 1. Lock the stop nut securely in position by means of the screw in its end. Ensure curved face of body is clean and free of foreign matter. Carefully push the piston assembly in this curved seating and ensure that the piston rings are over the cut out provided. Screw the large nut screw (not the stop nut itself) and using a 1 1/2 A/F Wrench on the nut, turn and withdraw the gudgeon pin.

TO REPLACE GUDGEON PIN

To avoid accidental damage to the piston when assembling, it is advisable to remove the large nut from the centre screw and pull the latter out a few inches as shown in Fig. 2. Slide the parallel sleeve (longest length diameter portion first) onto the centre screw up to the shoulder. Place the con-rod in the piston and pass both over the centre screw, ensure the short length diameter portion of the sleeve enters the con rod small end bore up to the undercut as shown in Fig. 2. Smear the gudgeon pin with thin oil and slide over the centre screw to locate in one side of the piston up to the face of the con-rod, followed by the Remover/Replacer bush, (short spigot first). As before, adjust stop nut to give approx. 1/32 end float and securely lock in position. Ensure curved face in body is clean, etc., before locating piston assembly into it, taking care as before that rings, if fitted are over the cut out. Screw large nut back on the centre screw up to the thrust race in the body.

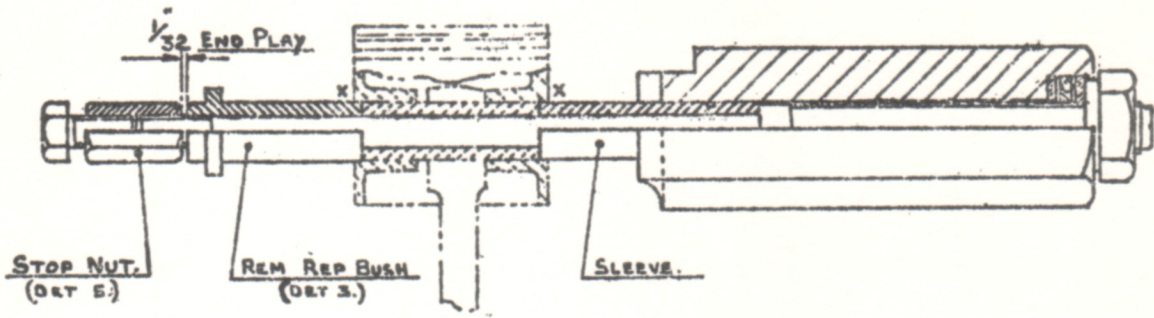
Set Torque Wrench to 16 lbs./ft. which represents the minimum load for an acceptable fit.

Using socket 18G 587 and holding the stop nut screw as before, commence to pull the gudgeon pin through until the flange of Det. 3 indicated by the letter A in Fig. 2 is 1/32 from the piston skirt, i.e., until clearance is just visible between flange and skirt.

Under no circumstances must the flange be allowed to contact the skirt.

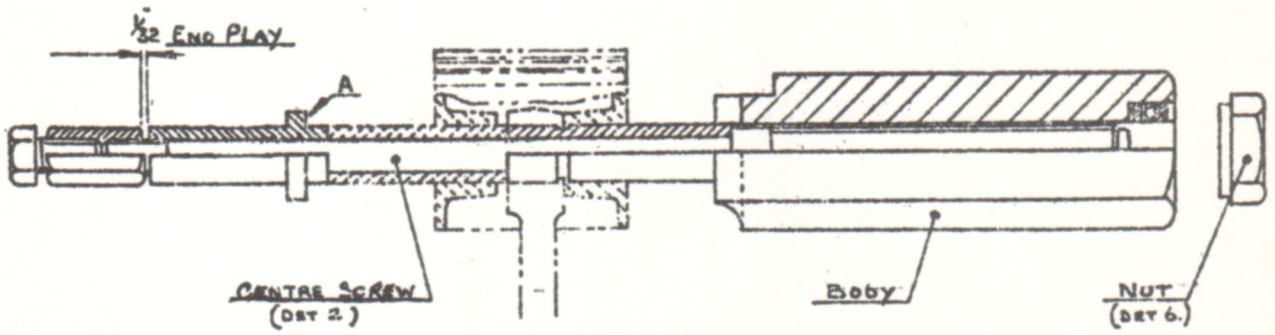
If the torque wrench has not broken throughout the pull, the fit is not acceptable.

NOTE The large nut and centre screw should be kept well lubricated at all times with thin M/C oil, otherwise wear and the accuracy of the torque reading will be affected.



REMOVING GUDGEON PIN.

FIG 1.



REPLACING GUDGEON PIN.

FIG. 2.