

**Field winding—to replace**

File away the head of the rivet that secures the field winding to the yoke. Tap out the rivet.

**DO NOT DISTURB THE HOT-PRESSED JOINT OF THE COPPER LINK**

Use a pole-shoe screwdriver to slacken the four pole-shoe retaining screws. Remove the screws from one pair of diametrically opposed pole-shoes and remove the shoes from the yoke.

Slacken the other pole-shoes just enough to release the field winding, which can then be slid out from beneath the pole-shoes and out through the end of the yoke.

Thoroughly clean the inside of the yoke, the pole-shoes and the insulating piece between the yoke and the field brush winding joint.

Remove the rivet securing the field winding to the yoke by filing the head of the rivet away, and tapping it out of the yoke. Lift the end of the winding away from the yoke.

Ensure that the field winding brushes and flexible leads are not touching the yoke.

Test the insulation with an armature tester or 110 volt A.C. 15 watt test lamp. If the test lamp lights the insulation is faulty.

If the insulation test is satisfactory re-connect the end of the winding to the yoke with a new rivet.

Loosely fit the new field winding assembly and the pole-shoes into the yoke. Place the insulating piece correctly between the field winding brush joint and the yoke.

Tighten the pole-shoes and retaining screws evenly with a pole-shoe screwdriver.

Connect the field winding to the yoke with a new rivet.

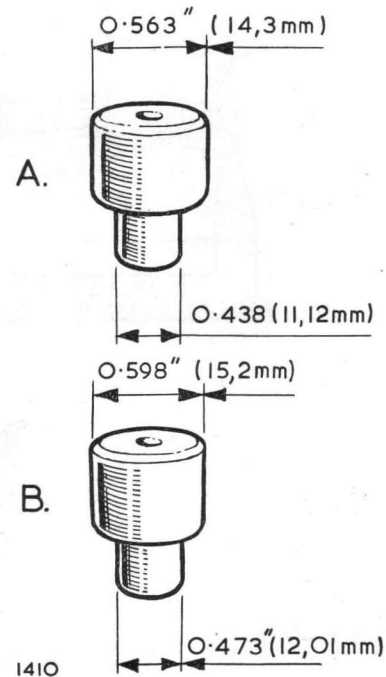


Fig. 56. Mandrel dimensions

**Bushes**

Each end bracket is fitted with a self-lubricating porous bronze bush. New bushes must be soaked in clean engine oil (SAE 30/40) for at least 24 hours before fitting.

New bushes must not be reamed after fitting because the self-lubricating quality will be impaired.

**Bushes—to remove and refit**

Remove the bush cover and felt washer from the commutator end bracket. Soak the felt washer in engine oil.

Remove the old bushes from the end brackets with an extractor or mandrel and press.

Press the new, oil impregnated bushes into the end brackets, using mandrel A for commutator end and B for drive end (Fig. 56).

Refit the oiled felt washer and bush cover to the commutator end bracket.