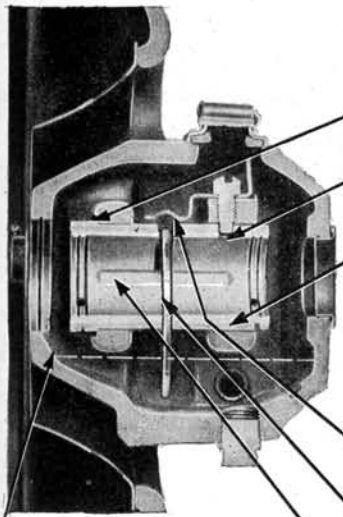
GENERAL-PURPOSE MOTORS

Sleeve Bearings

The continued successful operation of a motor depends in no small part upon:

The use of bearings that withstand the strains and shocks to which they are subjected;
The continuous supply of a clean, suitable lubricant to the bearings;
Provision for easy maintenance and easy replacement of renewal parts.

The illustrations below tell how these requirements are met in G-E motors.



Cross-section of Typical Housing Used in "900 Series" Polyphase "800 Series" Single-phase and D-c. Motors

I. Ability to Withstand Strains:

(a) End thrust taken by housing through shoulder on bearing lining.

(b) Hard tin babbitt in steel shell does not easily peen.

(c) Rigid support insured by accurately machined steel shell lining having a light pressed fit into housing.

(d) Proper shaft diameter, alignment, and clearance avoid uneven strains

II. Ample Lubrication Obtained by:

(a) Ring, retained in place by a suitable guard.

(b) Large-diameter oil ring with wide beveled edge, cut from the best material for the purpose. drawn tubing.

(c) Wide distribution grooves in lining.

(d) Extra-large capacity oil wells which insure continuous supply of oil.

III. Easy Maintenance Because:

(a) Flooding of bearing impossible when filled through oil filler gauge with motor at rest. Extra space over oil level prevents frothing.

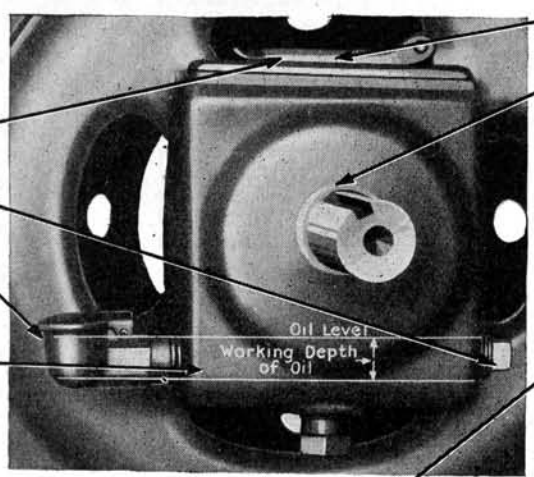
(b) Easy to inspect oil ring through sight-hole in cover.

(c) Filler gauge can be conveniently located on either side.

(d) Oil well is conveniently filled to correct level through large filler gauge.

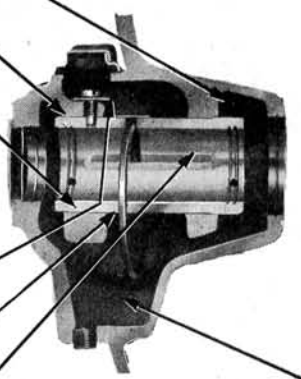
(e) Frequent oiling unnecessary as the working capacity of oil well is sufficient for many months' operation.

(f) Complete drainage readily accomplished by brass drain plug in lowest part of housing.



IV. Clean Oil Supply Maintained by:

(a) Long, close, grease-packed clearance between shaft and housing which excludes dust



Cross-section of Typical Housing Used in "500 Series" Motors

(b) Settling chamber catches and holds all sediment from the oil in the larger-size motors.

(c) Dust-tight oil-well cover.

(d) No dust can enter through 8- to 12-mil clearance between shaft and housing closed by grease seal.

V. Bearings Easily Renewed Because of:

(a) Simplicity of design.

(b) Accuracy of manufacture which makes all bearings of like size interchangeable.

(c) Lining easily pressed from housing because of ground surface.

(d) Only seven sizes used in complete line of a-c. and d-c. motors ½ to 20 hp. (except Type SCR, frames 114 to 126).