

TWO-SPEED PROPELLER REDUCTION GEAR CONTROL

Issued 2-1-45
Revised

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This standard is supplementary to AS 41 "Propeller Shaft Ends, Single Rotation", and AS 91 "Propeller Shaft Ends, Dual Rotation (Propeller Supplied Bearing)". It is applicable to all engines that incorporate two-speed propeller reduction gears. Such engines shall incorporate the provisions listed under both sections A and B, below.

A. Governor Mounting Pad Provisions

1. The governor drive shaft shall be driven at a fixed ratio of propeller shaft speed.
2. A pressure outlet shall be provided in the governor mounting pad as specified in AS 43 "Governor, Propeller, Mounting Pad and Drive".
3. A pressure of 25 to 90 psi shall be maintained in the pressure outlet while the reduction gears are meshed in high gear (high propeller rpm) and the engine running. While the gears are in neutral or in low gear (low propeller rpm), or the engine is not running, the pressure outlet shall be open to drain.

B. Engine Thrust Cover Plate Provisions

1. A plunger shall be provided in the engine thrust cover plate. Its location and size and the dimensions of the surrounding surfaces shall be as specified in Figures 1, 2, 3, or 4. There shall be no leakage past the plunger to the outside of the engine.
2. The plunger shall protrude above the surface of the cover plate $.625 \pm .015$ " while the reduction gears are meshed in high gear (high propeller rpm) and the engine running. The force available from the plunger shall be 15 to 60 pounds when stopped at any point throughout its travel. While the gears are in neutral or in low gear (low propeller rpm) or the engine is not running, the plunger shall be retracted below the surface of the cover plate.

CANCELLED

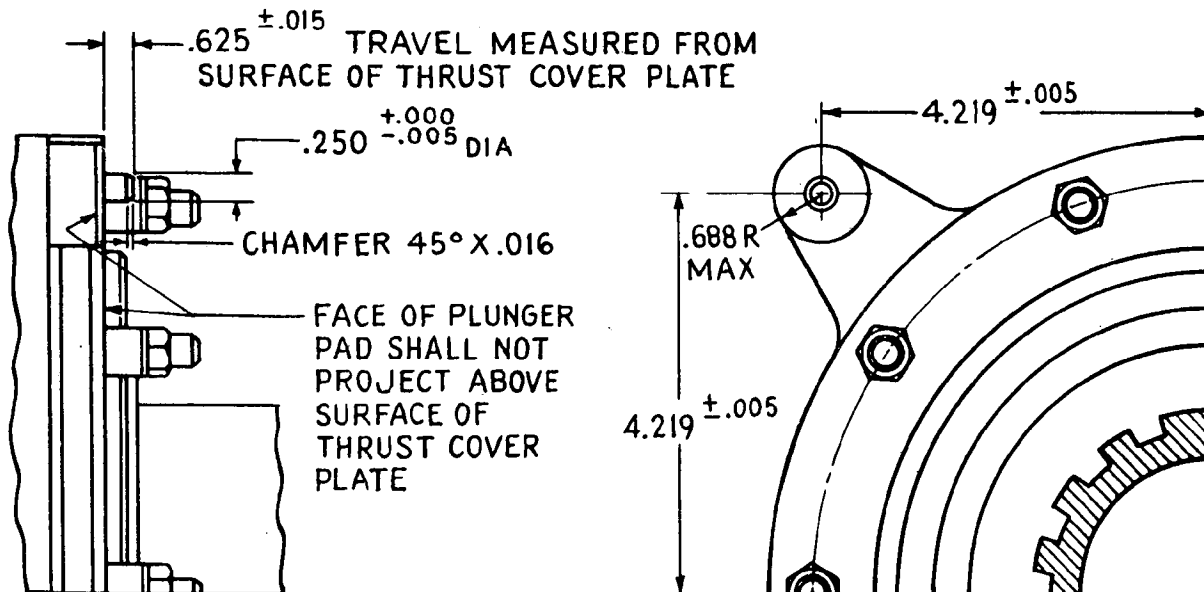
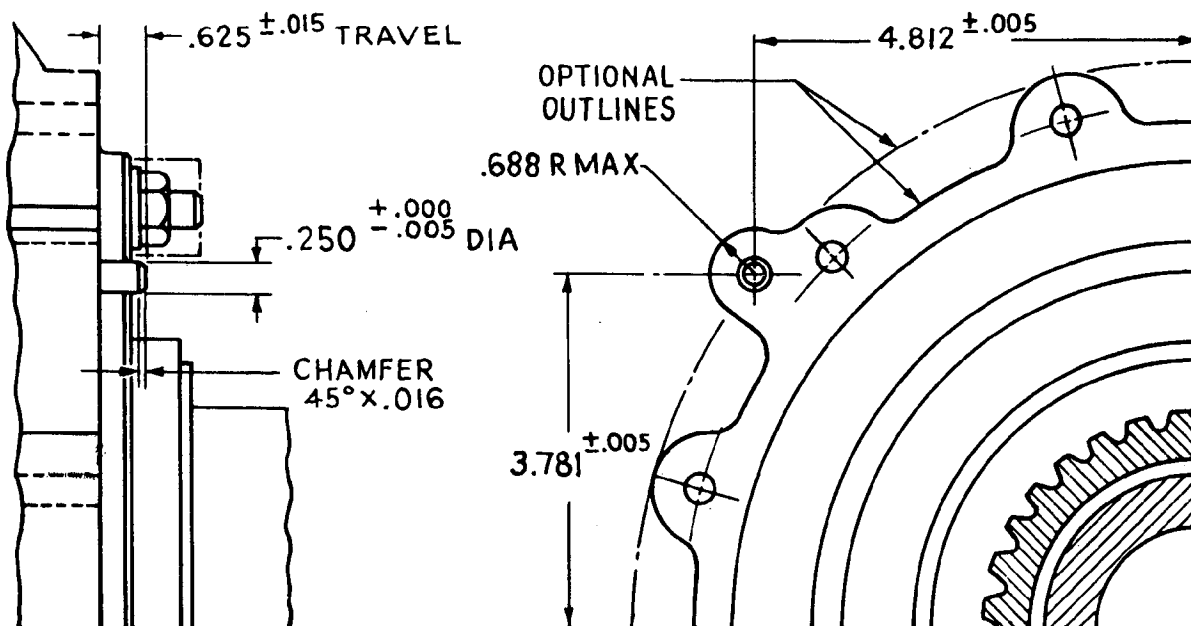
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REAFFIRMED

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Documents

NO. 50 (AS 41)
FIG 1NO. 60A (AS 41)
NO. 40-60 (AS 91)
FIG 2

UNLESS OTHERWISE SPECIFIED
 ALLOWABLE TOLERANCE ON:
 FINISHED DIMENSIONS IS $\pm .010$
 ANGULAR DIMENSIONS IS $\pm 2^\circ$