



(This Service Letter Is FAA Approved)

This Service Letter reidentified as
Service Bulletin M 20-96A
per Service Instruction M20-15.

SUBJECT: Installation of Hartzell HC-C2YK-1/7666-2
Propeller Assembly

MODELS AFFECTED: M20A, M20B (Mark 21), Serial Numbers 1201-1939

TIME OF COMPLIANCE: At Owner's Discretion

INTRODUCTION:

Due to the many requests from M20A and M20B owners for approval of the Hartzell HC-C2YK-1/7666-2 propeller assembly on their aircraft, we have obtained approval for this propeller to be used on these aircraft with Lycoming O-360-A1A (M20A) and O-360-A1D (M20B) engines. This propeller is standard equipment on the 1962 Model M20C (Mark 21).

The installation of this propeller requires no modification to the engine or aircraft and may be used with the Woodward P/N 210105, A210315, or B210345 governors presently installed on these aircraft.

INSTRUCTIONS:

1. Remove the spinner, propeller, and spinner bulkhead from the engine.
2. The Hartzell spinner bulkhead and the spinner dome both have index marks with arrows on them. When the parts are assembled, the index marks should be aligned.
3. There are four long bushings and two short ones on the propeller mounting flange on the engine. These four long bushings will be inserted into the counterbored holes in the propeller mounting flange when installed.
4. Lubricate the "O" ring in the propeller mounting flange with light oil, install the spinner bulkhead and install the propeller, using caution to slide the propeller straight onto the crankshaft so as not to damage the "O" ring. Torque the bolts to 65 to 75 ft. lbs., install safety wire in the bolts, and install the spinner (See Figure 1).
5. Adjust weight and balance covering the Hartzell installation. Hartzell propeller and spinner installed weight is 54 pounds at -20.1 inches.
6. Conduct inspection per CAM 18, and enter this installation in aircraft records.
7. Revise the Flight Manual by replacing the revision sheet, Page 1 and Page 2, with the attached sheets.

S.L. KIT 20-96A:

The following kit (20-96A) is available from Mooney Aircraft, Inc. Spare Parts Department, Kerrville, Texas, at a total list price of \$717.30.

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| Item 1 - Propeller, Hartzell - HC-C2YK-1/7666-2 with
Studs, Hartzell - P/N 2247 (6)
Washers, AN960-816 (6)
Nuts, AN355-8 (6) | List Price \$625.00 |
| Item 2 - Spinner Assembly, Hartzell - 835-20 consists of
Adapter Ring, C-885
Screws, AN526 C1032R8
Spinner Dome, C-2426
Nut, AN365-428 (12)
Washer, AN960-416 (12)
Bolt, AN4-11A (12) | List Price \$ 78.00 |
| Item 3 - Tachometer A/C 1548433 with
Dial Markings per Mooney Drawing No. 6485 | List Price \$ 14.30 |
| Item 4 - FAA Approved Flight Manual Revision Sheet, Page 1 and Page 2 for M20A and M20B. | |

COMPLIANCE:

After this propeller is installed, please fill out the enclosed card and return it to Mooney Aircraft for our records.

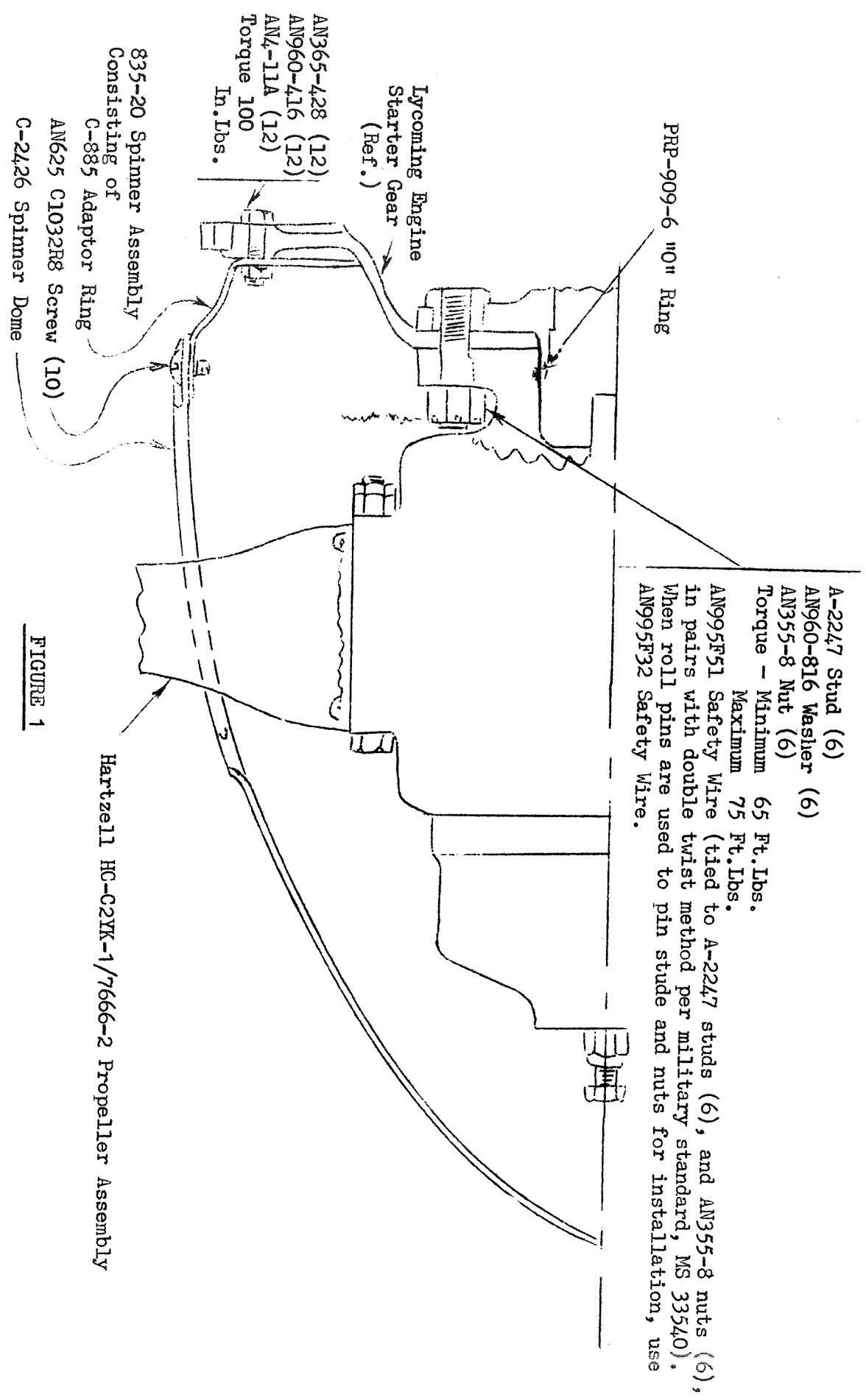


FIGURE 1