Modification of the Starter Gear installed on Lycoming Engine for Electrically Controlled Variable Pitch Propeller Systems

Accomplishment:
Procedure during conversion to a electrically controlled variable pitch MT Propeller.

Affected Propeller:
MTV-7- ( ), MTV-10- ( ), MTV-18- ( ), MTV-23- ( )

Required Tools:
1x Drill Ø5,2mm(0.204")
1x Centering Bushing Ø6,4/Ø5,3x25 (Ø0,251"/Ø0,208"x0,984", self made)
1x Drill Ø6,0mm(0.236")
1x Clamp tool (according picture, self made)
1x Deburring Tool
1x Standard Drill Machine
1x Tap ¼”-28 UNF
1x Vertical Drill Press

Work procedure:

1) Mark the drill position according the drawing A-542- ( ), the positions are at 30° and 39° away from the Index bushing

2) The distance from flange surface is 15mm (0,590")

This technical information has been approved according the procedures established for the EASA-certified Design Organization No.: EASA.21J.020
### Service Letter SL 62

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#### 3) Bore two holes with a Ø6,0mm (0,236") drill

#### 4) Deburr the holes on both ends

#### 5) Position the slip ring that the starter gear alignes with the holes

#### 6) Fix the slip ring into the starter gear with the self made clamp tool

#### 7) Bore all 6 holes with the Ø5,2mm (0,204") drill

**Note:** Use for drill cooling ethyl alcohol

#### 8) For the thread use the ¼"-28 UNF tap
9) Remove the slip ring from the starter gear for cleaning. Install the slip ring back again in convenient position and install the electrical connection according the drawing A-542-( ).

10) Mark the polarity on the starter gear with + / -. 
    **Note:** The outer slip ring is +

11) Install the 6x screws C-315-1,5 with 6x washer C-338-4 and 6x teeth washer C-352-40 with PERMATEX No.2 according the drawing A-542-( )
    Torque value screws 9-10 Nm (6,6-7,4 ftlbs)

12) Make sure that the screw head(6x C-316-1,5) is flush with the slip ring surface

**Note:** All mechanic are allowed to do this modification

**Contact:** e-mail: techsupport@mt-propeller.com
13) Drawing A-542-( )