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SERVICE BULLETIN

ATL-SB-7

Date of Issue: 15-01-2001

Applicability: Propeller Models: AP308 with AC100 Automatic Controllers
Serial Numbers: Controller serials up to 154

Compliance: Initial: At Owners Discretion
Subsequent: Nil

SUBJECT: ADDITION OF LIGHT SHIELD TO SENSOR

Reason

1. In some circumstances sunlight can interfere with the optical speed sensor (P145) causing uncommanded speed changes. Typically the controller will intermittently command a fine pitch change resulting in an increase in engine RPM. The addition of the light shield reduces the risk of light interference and therefore uncommanded pitch change.

Materials and Parts Required

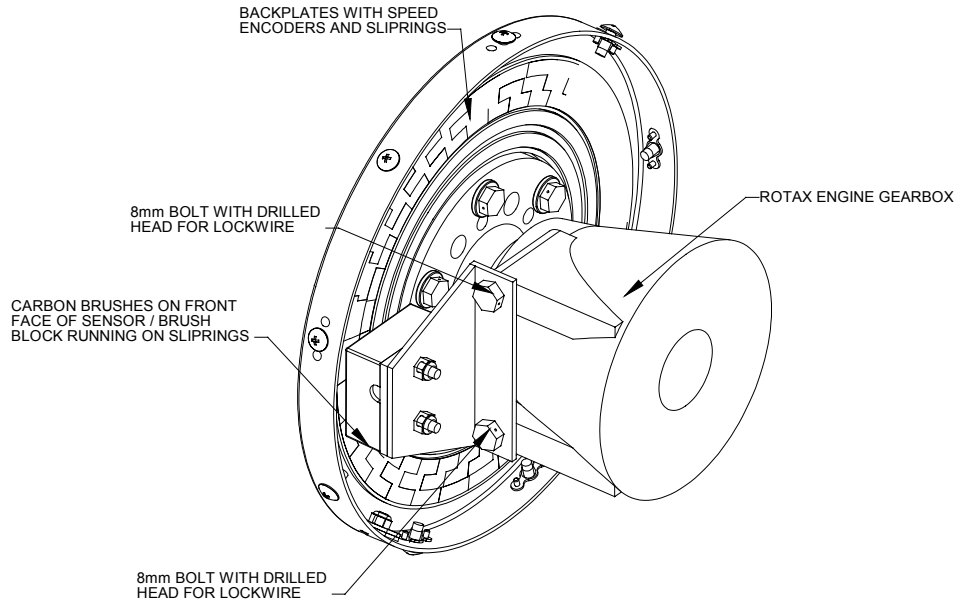
2. Light shield p/n P181, cleaning alcohol, contact adhesive (ADOS F2), lock wire 0.032in, 1/2in (13mm) spanner.

Action

Disassembly

3. Remove engine cowling as required to gain access to the optical speed sensor/brush block assembly. If access to the brush/sensor box is difficult you may have to remove the entire brush/sensor/bracket assembly from the engine (or gearbox) by removing the two lock wired mounting bolts.

Installation



4. Clean the outer three surfaces of the sensor/brush block with cleaning alcohol
5. Apply a thin even coating of contact adhesive (ADOS F2) to the outer three surfaces of the sensor/brush block. Wait 3-4 minutes until the adhesive is tacky.
6. Remove the plastic protective backing on the light shield P181.

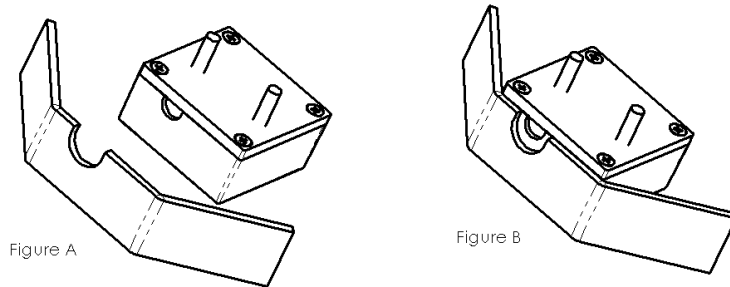


Figure A

Figure B

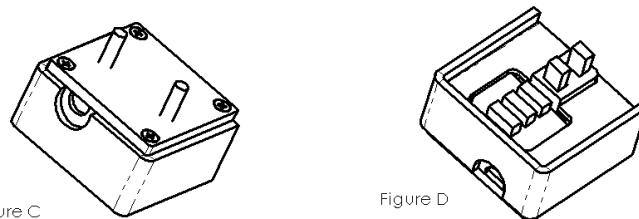


Figure C

Figure D

7. Carefully apply the light shield to the outer three surfaces of the sensor/brush block (figure A – C). Ensure the edge of the light shield is aligned to the join line between the sensor/brush block and its lid. This will ensure there is a clearance of 1/16” 1.6mm between the light shield and the encoder surface once the sensor/brush block is re installed. The finished unit should look like Figure D from the front.
8. Reassemble sensor/brush block and bracket remembering to re lock wire the mounting bolts if required.

Recording

9. Record completion of service bulletin ATL-SB-7 in propeller logbook.