STARTER/GENERATOR - INSPECTION/CHECK

1. General

A. This section has the inspections and checks necessary to keep the starter/generator in a serviceable condition. **TASK 80-10-00-220**

2. Starter/Generator Inspection and Checks

NOTE: This inspections and checks procedure applies only to Lucas Model 23081-023 Starter/Generator. The Aircraft Parts Corporation 300-amp Starter/Generator is a remove-and-replace-only part.

- A. Inspections and Checks.
 - (1) Remove starter/generator.
 - (2) Visually check commutator for worn, pitted or burned commutator bars.
 - NOTE: If the commutator bars are damaged, starter/generator must be returned for overhaul.
 - (3) Check damper assembly for looseness and excessive wear. Check for loose rivets.

NOTE: If the damper assembly is excessively worn, reveals looseness or has loose rivets, the starter/generator must be returned for overhaul.

- (4) Check drive shaft for worn, chipped, cracked, and/or twisted splines.
 - NOTE: Any visible damage to drive shaft or splines requires that starter/generator be returned for overhaul.
- (5) Check starter/generator housing for cracks and loose stator poles. Tighten stator poles as necessary and stake screws.

NOTE: If housing is cracked or damaged, return starter/generator for overhaul.

(6) With brushes removed, rotate armature slowly to feel bearings for roughness.

NOTE: This step does not apply to the 23081-023A, which is not field serviceable.

NOTE: If armature movement is rough, starter/generator must be returned for overhaul.

(7) Inspect fan for bent or distorted blades, cracks, or looseness.

3. Starter-Generator (Part Number 23081 Series only) Detailed Inspection

- A. General
 - (1) This task gives the procedures to do a detailed inspection of the starter-generator (Part Number 23081 Series only). WARNING: Parts and brushes are not interchangeable between the 23081-023 and 23081-023A.

NOTE: The model 23081-023 starter/generator brushes have a diagonal wear mark that shows when the brush replacement is necessary.

- B. Special Tools
 - (1) None
- C. Access
 - (1) Remove the left and right upper cowling doors. Refer to Chapter 71, Engine Cowling and Nose Cap Maintenance Practices.
- D. Do a Detailed Inspection of the Starter-Generator (Part Number 23081 Series Only).
 - (1) Examine the starter-generator for condition, security of installation, and signs of overheating.
 - (2) Examine the terminal block and the boot for condition, cracks, and security.
 - (3) Examine the electrical connections at terminal block for cleanliness, signs of heat or arcing, and signs of damage.
 - (4) Examine the quick attach/detach mount for condition, cracks, corrosion, and security of installation.
 - (5) Examine the mount clamp for condition, cracks, and security.
 - (6) Remove the starter/generator from the airplane. Refer to Starter/Generator Removal/Installation.
 - (7) Examine the starter-generator brushes and brush holders. Refer to Goodrich Component Manual With Illustrated Parts List, DC Starter-Generator 23081 Series I.
 - (8) Clean the starter-generator splines. Refer to Starter-Generator Splines Cleaning.
 - (9) Install the starter/generator. Refer to Starter/Generator Removal/Installation.

- E. Restore Access
 - (1) Install the left and right upper cowling doors. Refer to Chapter 71, Engine Cowling and Nose Cap Maintenance Practices.

END OF TASK TASK 80-10-00-960

4. Starter/Generator Restoration

- A. General
 - (1) This task gives the procedures to do the starter/generator restoration.
- B. Special Tools
 - (1) None
- C. Access
 - (1) Remove the left and right upper cowling doors. Refer to Chapter 71, Engine Cowling and Nose Cap Maintenance Practices.
- D. Do the Starter/Generator Restoration.
 - (1) Remove the starter/generator from the airplane. Refer to Starter/Generator Removal/Installation.
 - (2) Replace the starter/generator or send the starter/generator to an authorized repair facility for restoration (overhaul).
 - (3) Install the starter/generator. Refer to Starter/Generator Removal/Installation.
- E. Restore Access
 - (1) Install the left and right upper cowling doors. Refer to Chapter 71, Engine Cowling and Nose Cap Maintenance Practices.
- END OF TASK