

## 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 - Maintenance Practices.

(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 - Maintenance Practices.

## 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 - Maintenance Practices.
- (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 - Maintenance Practices.

## 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**