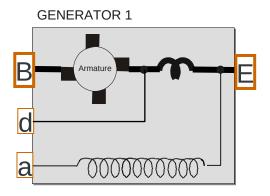


Auxilec Starter/Generator Reference Information

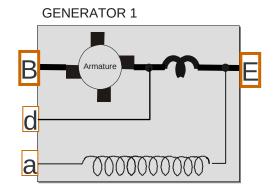
- 1500 Amps Momentary during start
- 600 Amps momentary output
- 300 Amp continuous output





Auxilec Starter/Generator Reference Information

- Field Resistance (\underline{a} to \underline{E})
 - 2 Ohms to 3 Ohms, Decrease over time due to Overheating, insulation shorting.
- Internal Resistance (<u>B</u>to <u>E</u>)
 - <1 Ohm in service, increases over time.</p>
- Insulation Resistance (Any wire to the case)
 - > 1 meg (use LOW VOLTAGE megger)
- Resistance Check (d to <u>E</u>)
 - ➤ Should be ½ of <u>B</u> to <u>E</u>
- Brush Spring Tension
 - Approx 4.25 Lbs, all springs must be similar

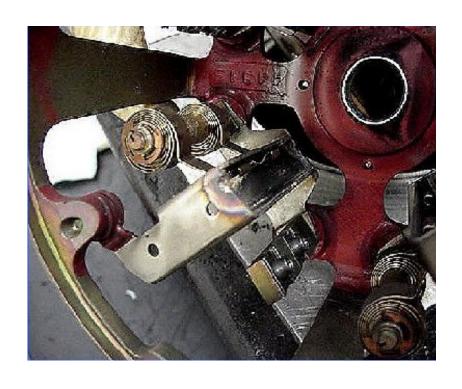




- .8 vdc to 1.5 vdc
- Reference Voltage (<u>d</u> Voltage)
 - \triangleright (B output in amps/ 300 = d voltage)
- Ripple Voltage
 - > < 1 volt
- Field Voltage (<u>a</u> Voltage),
 - ► 14v at initial start dropping to 8v at N2 20%



- ABOVE ALL ELSE..... Double check <u>a</u> and <u>d</u> wiring
- DO NOT use a megger for insulation check
- Do not rotate starter backwards



Common damage results to Auxilec generator

- \geq <u>a</u> lead termination
- Brush housing arcing
- Heat damage
- Desoldering
- Shock damage
- ➤ Fod
- Frangible drive / Alignment pin





Falcon 900 / 900EX Starter-Generator P/N 8060-150





- Operators requested Higher TBO.
- -141
 - 150FH brush check,
 - 450FH brush replace,
 - 900FH O/H
- -150
 - 450 FH brush check
 - 900FH Overhaul
- -160
 - 600 Brush check
 - 1200FH O/H

New 8060-160 improvements

New Starter-Generator P/N 8060-160

New end bell housing with spring axes insulated





New Brush box housing

New Starter-Generator P/N 8060-160

New bearings designed in collaboration with bearing manufacturer for improved performance margins as related to S/G specifications => Temperature, Load, Speed and Vibration



- √ High precision grade (ISO class C5)
- √ High thermal stabilization grade (200°C)
- √ High performance grease (288°C)
- √ New viton (fluorine) seal (240°C)
- ✓ Better traceability ⇒ each bearing is serialized, inspected and delivered with an inspection form

logie	B320050L		BALL BEARING INSP. RESULT			A. Nakamura		
INSP.	Out Side	Hore	Owter Ring		Inner Ring		Side Renout	Unit-Pa Radial
ITEM	Diameter	Disneter	Radial Report	Axial Sunser	Radial Runous	Axial Runous	Bore Bore	Clearance
INSP.	-2	-4	1	1	1	1	1	10



Maintenance Improvements on S/G 8060-150/-160

Information:

- **Maintenance improvements:**
 - Performance follow up / operational survey has allowed to refine the criteria for brush change / repair

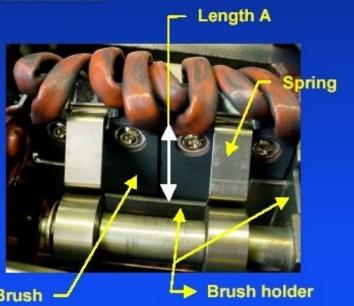
Required action:	Previous	New
Brush replacement	17 mm	16 mm
S/G repair	9 mm	7 mm

AMM TCs scheduled June 2004

Maintenance Improvements on S/G 8060-150/-160

New Brush Measurement Tool P/N P611527





- ✓ New brush ⇒ length "A" = 26 mm
- ✓If: "A" ≥ 16 mm ⇒ no action until overhaul
- √If: 7 mm ≤ "A" < 16 mm ⇒ all brushes must be replaced.
 </p>
- ✓If: "A" < 7 mm ⇒ S/G must be sent to THALES approved repair network for evaluation and overhaul

Maintenance Improvements on S/G 8060-150/-160 Information (Cont'd):

Brush replacement by using standard set of tools, a spring holder and a brass nozzle blower



√ Brush P/N P610355 (quantity = 8)



✓ Spring holder P/N P609579

✓ Wrench / screwdriver and/or torque wrench / screwdriver for screw P/N V300412D and washer P/N V0590405

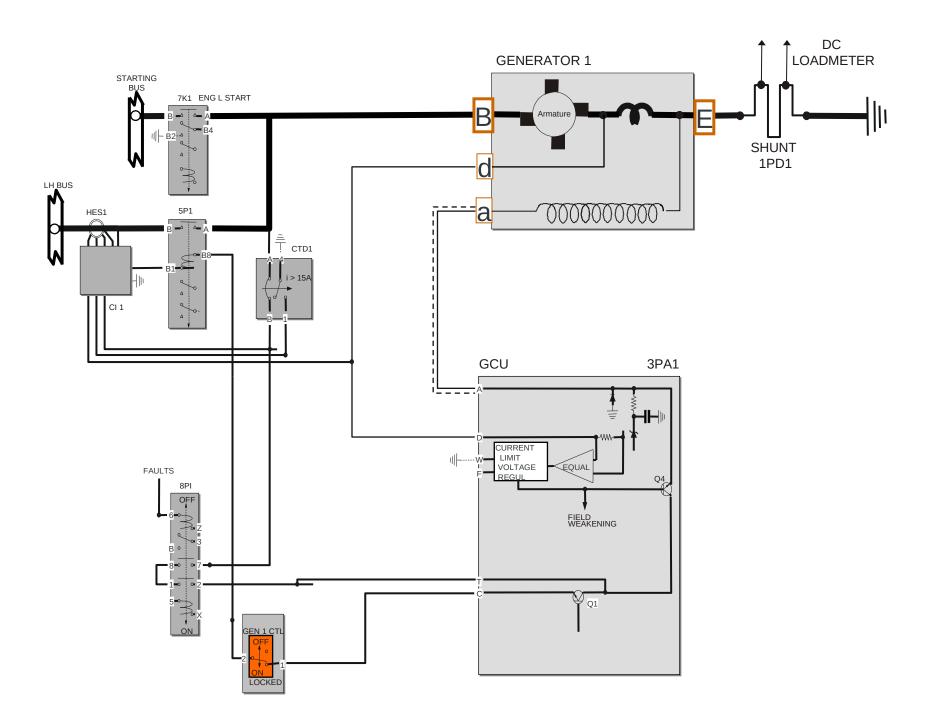


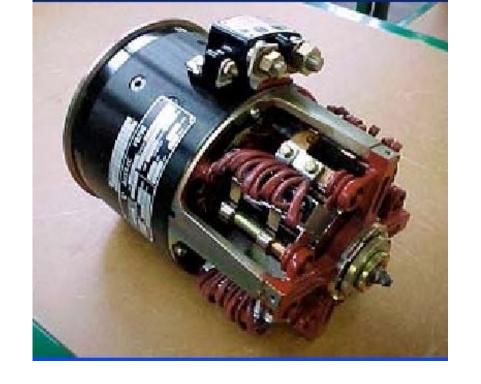
✓ Brass nozzle blower P/N506277-1 or equivalent

Maintenance on Starter-Generators

Information (Cont'd):

- 150 FH (+33%) longer intervals for brush checks and +300 FH between scheduled overhauls
 - Easier brush check Free tool & video CD provided
 - Do it yourself 'field brush change' with confidence
- Full interchangeability of S/G P/Ns on aircraft
 - Operators can have upgrades performed on attrition
 - No need to have all Starter-Generators updated at once
- Take advantage of this life extending and cost reducing S/G modification
- Upgrade yours to the 'latest and greatest' through Dassault or Thales!





Auxilec Starter/Generator Reference Information

- ABOVE ALL ELSE..... Double check <u>a</u> and <u>d</u> wiring
- DO NOT use a megger for insulation check
- Do not rotate starter backwards