ATTACHMENT 1

Starter-Generator Acceptance Test Data Sheets

Left Engine, Serial Number 425AB

MG94A-1 ACCEPTANCE TEST DATA SHEET
PER ATPMG94A-1 REV. J

WORK ORDER # Eng

DATE TESTED: 9-9-13 INSPECTED BY: _____

SERIAL NUMBER: 425AB MOD: _____

NON-0PERATING (10.0)		
TEST (SECTION)	**REQUIREMENTS**	**INITIAL OR RECORD**
Brush Seating (10.1)	100% seating all brushes	Inspected by:
End Play (10.2)	End Play .039 ± .005 in.	Measured Dim. Inches: _____ Inspected By: _____
Dielectric Strength (10.3)	600 vrm , 2mA Max current leakage	Inspected by:
Insulation Resistance (10.4)	200 VDC applied to "E" terminal, 100 Mega Ohm min. Resistance	_____ MΩ Inspected by:
Visual Inspection (10.5)	Workmanship and visual defects, Drive shaft output dim. (1.58±.06)	Inspected by: KT Output Dim.= 1.601 inches
Retainer Screw Torque (10.5)	Verify torque to be 10 ± 2 in-lbs	Inspected by:
STARTER PERFORMANCE (11.0)		
TEST SECTION (11.0)	**REQUIREMENTS**	**INITIAL OR RECORD**
Starter Performance (11.0)	24VDC ±0.25 VDC, Accelerate to 4700 rpm within 30 seconds	Start time= 11.7 (30 sec.max) Inspected by: BB
GENERATOR PERFORMANCE (12.0)		
TEST (SECTION)	**REQUIREMENTS**	**INITIAL OR RECORD**
Generator Compounding (12.1)	12,000 RPM ±100 RPM, 30 VDC ±0.1 VDC at terminals, Record shunt field current at 100, 200, 300, 350 Amp loads (Shunt field current should increase with load)	100 Amp load: 2.1 Amps 200 Amp load: 2.3 Amps 300 Amp load: 2.8 Amps 350 Amp load: 3.2 Amps Inspected by: KT
Temperature Stabilization and Equalizing Voltage (12.2)	12,000 RPM ±100 RPM, 300 Amps ±5 Amps, 30 VDC ±0.1 VDC at terminals (B to E). D to E volts shall be within Fig. 4 limits.	Inlet Air Temp.= 102.6 °F D to E Voltage= 1.47 VDC Within figure 4 limits? Yes Inspected by: KT
Commutation (12.3)	Pin point sparking: .125 max. length from trailing edge	Inspected by: KT
High Continuous Test (12.4)	8,000 RPM +100/-0 RPM, 30.0 VDC, ±0.1 VDC at terminals, 300 Amps ±5 Amps load	Shunt field current= 1.8 Amps. (10 Amps max. allowed) Inspected by: KT
Minimum Speed for Regulation (12.5)	6575 RPM ±100 RPM, 30.0 VDC ±0.1 VDC at terminals, 300 Amps ±5 Amps load	Shunt field current= 8.1 Amps. (10 Amps max. allowed) Inspected by: KT
Overspeed (12.6)	14,000 RPM ±100 RPM, No load, No excessive noise, vibration or loosening of parts.	Inspected by: KT
Overload (12.7)	8000 RPM, 487±5 Amps for two minutes.	Inspected By: KT
Magnetic Speed Pickoff (12.8)	7,000 RPM ±100 RPM, (2.0 volts minimum peak to peak voltage)	Peak to Peak Volts= 3.60 Volts Inspected by: KT
Commutator Run Out (12.9)	Run out must be less then 0.0003 inch between adjacent commutator bars. Total run out of commutator must be less then 0.0007 inch.	0.0003 inch. Commutator bars: .0002 0.0007 inch Commutator run out: .0008 Inspected By: BB

Right Engine, Serial Number 461AB

MG94A-1 ACCEPTANCE TEST DATA SHEET
PER ATPMG94A-1 REV. J

WORK ORDER # Eng

DATE TESTED: 9-9-13 INSPECTED BY: TOR0002

SERIAL NUMBER: 461 AB MOD:

NON-OPERATING (10.0)		
TEST (SECTION)	REQUIREMENTS	INITIAL OR RECORD
Brush Seating (10.1)	100% seating all brushes	Inspected by:
End Play (10.2)	End Play .039 ± .005 in.	Measured Dim. Inches: _____ Inspected By: _____
Dielectric Strength (10.3)	600 vrm , 2mA Max current leakage	Inspected by:
Insulation Resistance (10.4)	200 VDC applied to "E" terminal, 100 Mega Ohm min. Resistance	_____ MΩ Inspected by:
Visual Inspection (10.5)	Workmanship and visual defects, Drive shaft output dim. (1.58±.06)	Inspected by: BB Output Dim.= 1.58 inches
Retainer Screw Torque (10.5)	Verify torque to be 10 ± 2 in-lbs	Inspected by: BB
STARTER PERFORMANCE (11.0)		
TEST SECTION (11.0)	REQUIREMENTS	INITIAL OR RECORD
Starter Performance (11.0)	24VDC ±0.25 VDC, Accelerate to 4700 rpm within 30 seconds	Start time= 11.65 (30 sec.max) Inspected by: KT
GENERATOR PERFORMANCE (12.0)		
TEST (SECTION)	REQUIREMENTS	INITIAL OR RECORD
Generator Compounding (12.1)	12,000 RPM ±100 RPM, 30 VDC ±0.1 VDC at terminals, Record shunt field current at 100, 200, 300, 350 Amp loads (Shunt field current should increase with load)	100 Amp load: 1.9 Amps 200 Amp load: 2.2 Amps 300 Amp load: 2.7 Amps 350 Amp load: 3.0 Amps Inspected by: KT
Temperature Stabilization and Equalizing Voltage (12.2)	12,000 RPM ±100 RPM, 300 Amps ±5 Amps, 30 VDC ±0.1 VDC at terminals (B to E). D to E volts shall be within Fig. 4 limits.	Inlet Air Temp.= 105.1 °F D to E Voltage= 1.46 VDC Within figure 4 limits? Yes Inspected by: KT
Commutation (12.3)	Pin point sparking: .125 max. length from trailing edge	Inspected by: KT
High Continuous Test (12.4)	8,000 RPM +100/-0 RPM, 30.0 VDC, ±0.1 VDC at terminals, 300 Amps ±5 Amps load	Shunt field current= 4.4 Amps. (10 Amps max. allowed) Inspected by: KT
Minimum Speed for Regulation (12.5)	6575 RPM ±100 RPM, 30.0 VDC ±0.1 VDC at terminals, 300 Amps ±5 Amps load	Shunt field current= 7.4 Amps. (10 Amps max. allowed) Inspected by: KT
Overspeed (12.6)	14,000 RPM ±100 RPM, No load, No excessive noise, vibration or loosening of parts.	Inspected by: KT
Overload (12.7)	8000 RPM, 487±5 Amps for two minutes.	Inspected By: KT
Magnetic Speed Pickoff (12.8)	7,000 RPM ±100 RPM, (2.0 volts minimum peak to peak voltage)	Peak to Peak Volts= 5.20 Volts Inspected by: KT
Commutator Run Out (12.9)	Run out must be less then 0.0003 inch between adjacent commutator bars. Total run out of commutator must be less then 0.0007 inch.	0.0003 inch. Commutator bars: .0001 0.0007 inch Commutator run out: .0002 Inspected By: BB