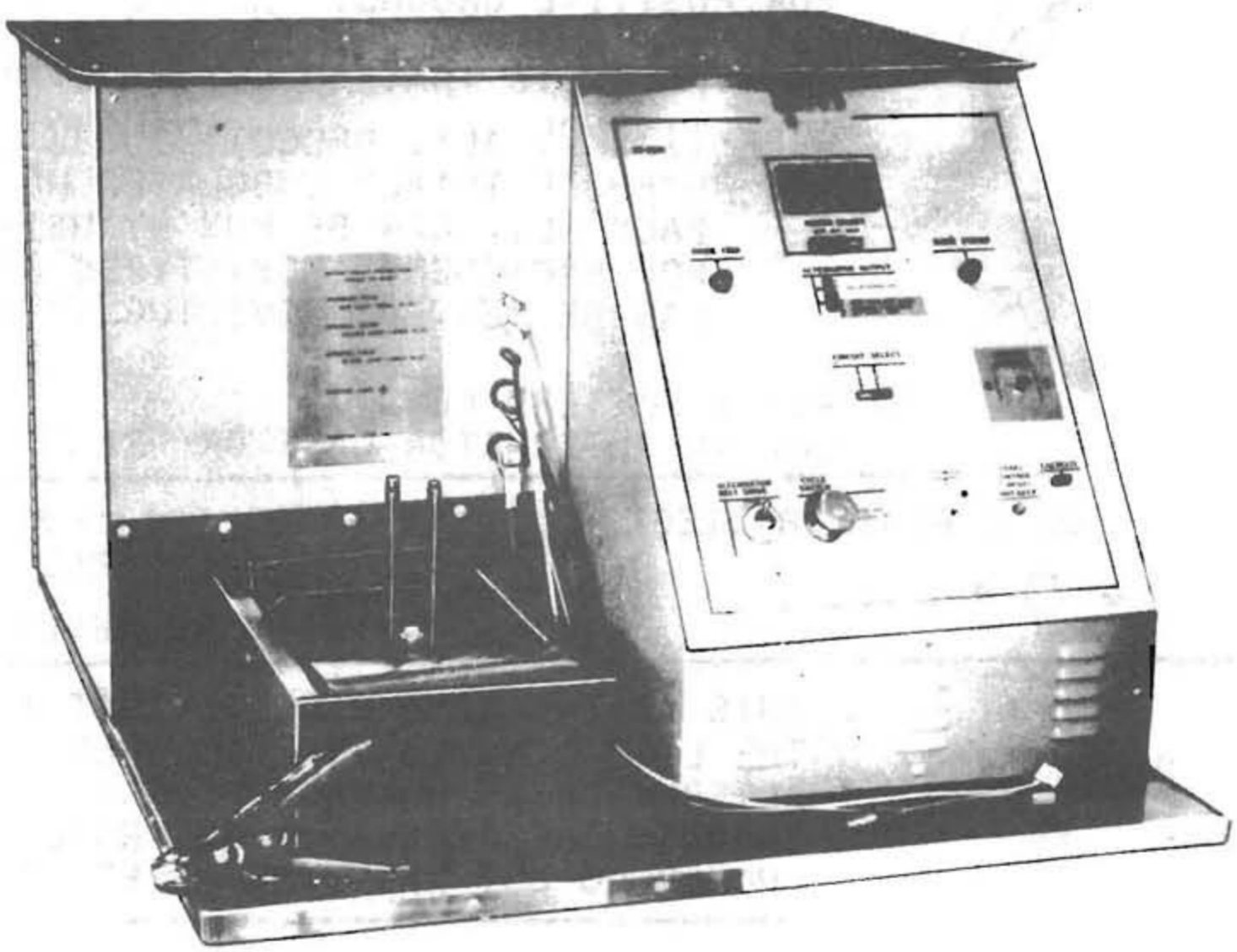
OT-0507
HOOK-UP
&
TECHNICLE
ASSISTANCE



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141 West J-5
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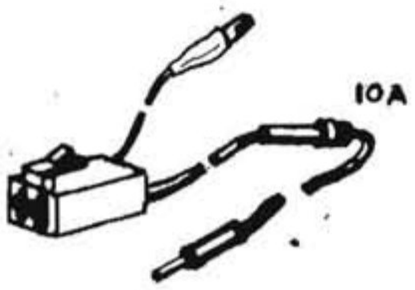


STANDERD FIELD LEAD — RED FIELD LEAD WITH 10AMP FUSE IN LINE FOR PROTECTION AGAINST GROUNDED ROTORS OR IMPROPER HOOK-UP

INTEGRAL SENSE — YELLOW LEAD (SENSING TURN ON VOLTAGE) 10v MIN 12.5v MAX NOT CONNECTED TO ALT.

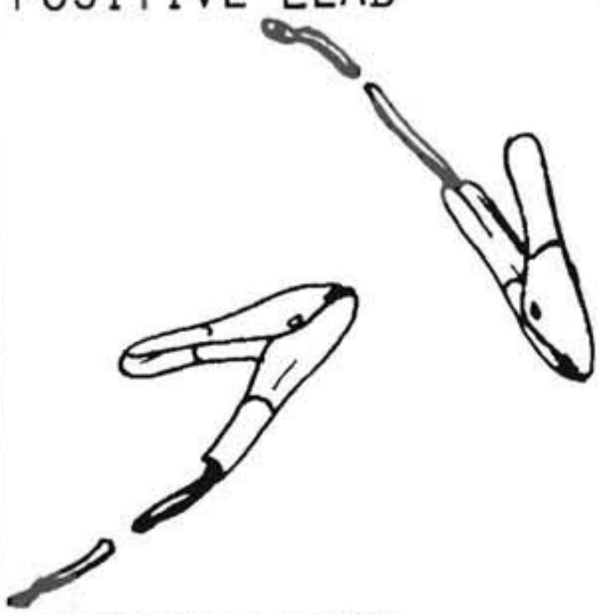


INTEGRAL FIELD — BLACK LEAD (TURN ON FIELD CURRENT) 10v MIN 12.5v MAX NOT CONNECTED TO ALT.

POSITIVE LEAD — POSITIVE BATTERY LEAD
HOOK TO ALTERNATOR OUTPUT TERMINAL

(THIS LEAD DOES NOT HAVE TO BE CHANGED FOR POSITIVE GROUND. THE MACHINE COMPINSATES FOR THIS AUTOMATICLY EXCEPT FOR THE SELF EXCITED UNITS THAT DO NOT HAVE FIELD CONNECTIONS

EXAMPLE-1117225 ALT. DELCO, 2500JB LEECE NEVILLE NIEHOFF TOTALY INSULATED MOTOROLA PIGGY BACK ALT. CAN BE RUN BY USING FIELD WIRE FOR EXCITMENT. MOST TYPES OF GENERATORS CAN BE TESTED PROVIDING ROTATION IS PROPER



NEGITIVE LEAD — NEGATIVE BATTERY LEAD
HOOK TO ALTERNATOR CASE OR FRAME

ROTOR CIRCUIT PROTECTOR



RESETABLE CIRCUIT BREAKER FOR ADDITIONAL FIELD PROTECTION

(PRESS TO RESET)

DIODE TRIO



THIS IS THE SAME CIRCUIT THAT IS IN THE CAR THE LIGHT SHOULD COME ON WHEN AN INTEGRAL ALTERNATOR IS HOOKED-UP INDICATING A CIRCUIT THROUGH THE REGULATOR AND ROTOR. THE LIGHT SHOULD GO OUT WHEN THE ALTERNATOR IS RAN

DIODE STATOR



IF LIGHT COMES ON AND STAYS ON DURING THE TEST THERE IS A DEFECTIVE DIODE, STATOR OR A LOOSE CONNECTION. WILL COME ON IF VOLTAGE IS ADJUSTED TO HIGH

ENERGIZER



APPLIES POWER TO THE RED AND BLACK BATTERY LEADS FOR SELF EXCITED UNITS- DURING RUN, PUSH FOR APROX 1SEC TO ENERGIZE UNIT. DO NOT HOLD DOWN FOR MORE THAN 1SEC

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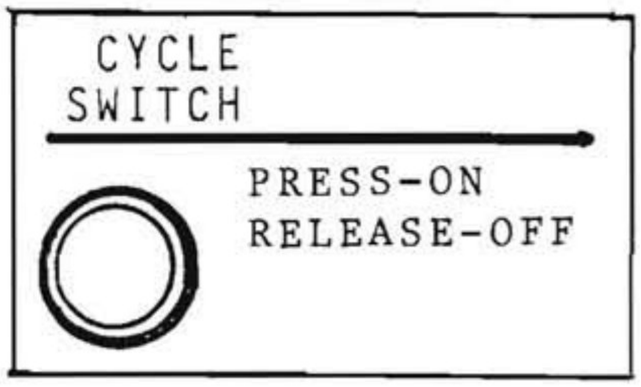
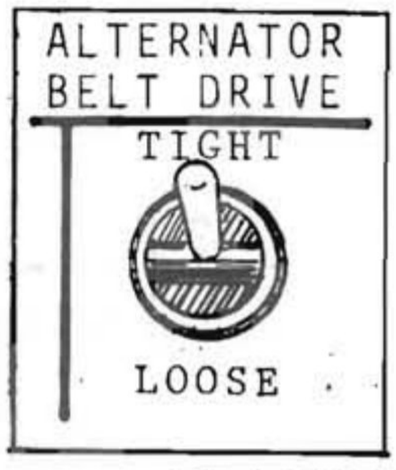


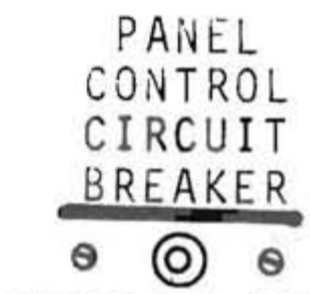
CYCLE SWITCH ACTUIATES THE MOTOR AND PUTS POWER ON FIELD LEAD



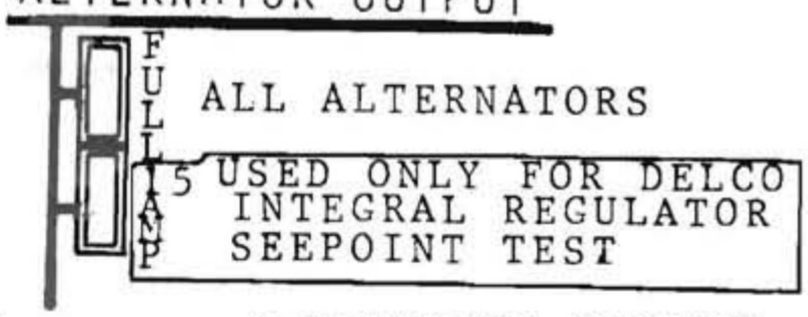
ALTERNATOR BELT DRIVE APPLIES AIR POWER TO SLIDER ASSEMBLY TO TIGHTEN BELT



POWER SWITCH SUPPLIES 110 AC POWER TO THE MACHINE



CIRCUIT BREAKER PROTECTS AC POWER TO THE MACHINE



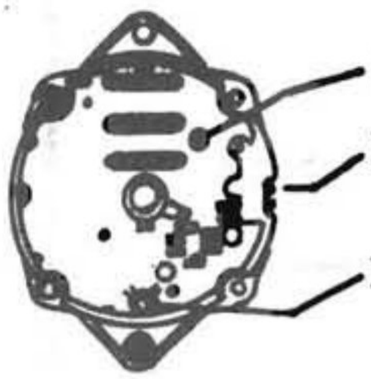
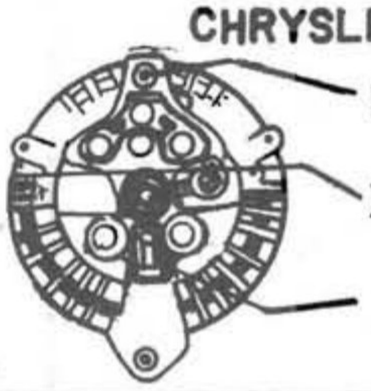
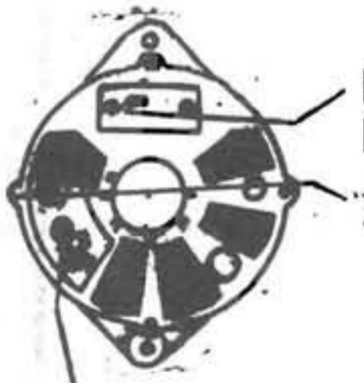
ALTERNATOR OUTPUT PUSH ONE AT A TIME FOR DESIRED FUNCTION. REFER TO FOLLOWING CHARTS



METER SELECT SWITCH PUSH ONE AT A TIME FOR DESIRED FUNCTION. REFER TO FOLLOWING CHARTS

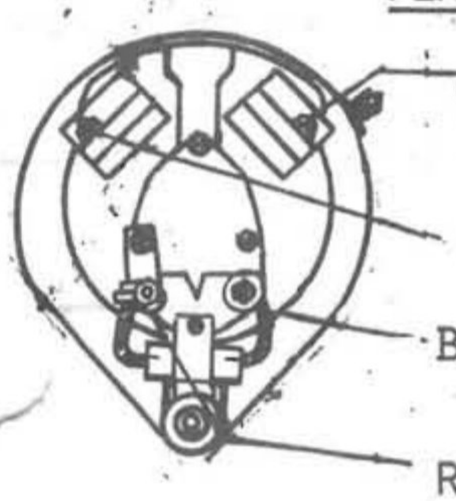
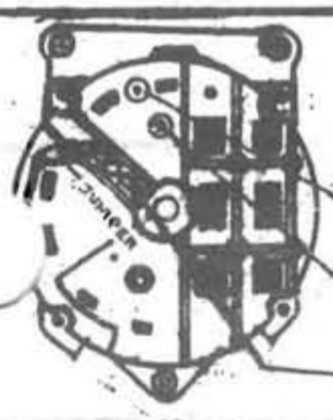
Electrical Rebuilder's ERA FOUNDED 2001 ASSOCIATION

HOOK-UP AND SAMPLE READINGS FOR OT-0507

	METER SELECT SWITCH	ALTERNATOR OUTPUT SWITCH	CIRCUT SELECT SWITCH	VOLTAGE CONTROL	METER READING
DELCO INT. 					
LOW OUTPUT	VOLTS	FULL	1	12.8 TO 13	13
	AMPS	FULL	1	DO NOT USE	41
	ROTOR	FULL	1	DO NOT USE	NO READINGS
	VOLTS	15 AMP	1	14.6	13
HIGH OUTPUT	VOLTS	FULL	1	12.8 TO 13	13.1
	AMPS	FULL	1	DO NOT USE	63
	ROTOR	FULL	1	DO NOT USE	NO READIN
	VOLTS	15 AMPS	1	14.6	13
CHRYSLER A CKT 					
	VOLTS	FULL	2	12.8	12.8
	AMPS	FULL	2	DO NOT USE	75
	ROTOR	FULL	2	DO NOT USE	3.2
CHRYSLER LATE STYLE 					
LOW OUTPUT	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	46
	ROTOR	FULL	1	DO NOT USE	2.3
HIGH OUTPUT	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	79
	ROTOR	FULL	1	DO NOT USE	3.6
MOTOROLA ALTERNATOR 					
LOW OUTPUT	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	36
	ROTOR	FULL	1	DO NOT USE	2.0
HIGH OUTPUT	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	57
		FULL	1	DO NOT USE	2.7

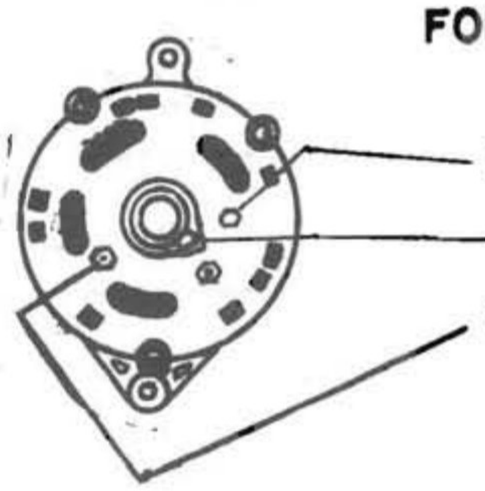
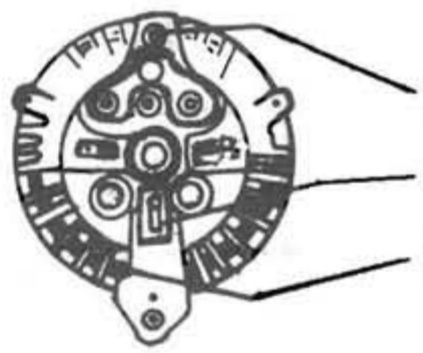
Electrical Rebuilder's ERA FOUNDED 2001 ASSOCIATION

HOOK-UP AND SAMPLE READINGS FOR OT-0507

	METER SELECT SWITCH	ALTERNATOR OUTPUT SWITCH	CIRCUT SELECT SWITCH	VOLTAGE CONTROL	METER READING
MOTOROLA INDUSTRIAL	VOLTS	FULL	1	12.8	12.8
 LOW OUTPUT	AMPS	FULL	1	DO NOT USE	36
	ROTOR	FULL	1	DO NOT USE	2.2
	VOLTS	FULL	1	12.8	12.8
HIGH OUTPUT	AMPS	FULL	1	DO NOT USE	57
	ROTOR	FULL	1	DO NOT USE	2.7
HEAVY DUTY DELCO	VOLTS	FULL	1	12.8	12.8
PERFERATED LOW OUTPUT 	AMPS	FULL	1	DO NOT USE	57
	ROTOR	FULL	1	DO NOT USE	4.1
	VOLTS	FULL	1	12.8	12.8
PERFERATED HIGH OUTPUT	AMPS	FULL	1	DO NOT USE	68
	ROTOR	FULL	1	DO NOT USE	4.1
 **CHRYSLER 100 AMP ALTERNATOR**	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	110
	ROTOR	FULL	1	DO NOT USE	5.0
 **LEECE NEVILLE** LATE INTERGRATED	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	85
	ROTOR	FULL	1	DO NOT USE	NO READING
	VOLTS	15 AMP	1	DO NOT USE	13.6

Electrical Rebuilder's ERA FOUNDED 2001 ASSOCIATION

HOOK-UP AND SAMPLE READINGS FOR OT-0507

	METER SELECT SWITCH	ALTERNATOR OUTPUT SWITCH	CIRCUT SELECT SWITCH	VOLTAGE CONTROL	METER READING
DELCO STD.  LOW OUTPUT	VOLTS	FULL	1	12.8 TO 13	12.8
	AMPS	FULL	1	DO NOT USE	43
	ROTOR	FULL	1	DO NOT USE	2.4
HIGH OUTPUT	VOLTS	FULL	1	12.8 TO 13	12.8
	AMPS	FULL	1	DO NOT USE	65
	ROTOR	FULL	1	DO NOT USE	2.3
FORD ALTERNATOR  LOW OUTPUT	VOLTS	FULL	1	12.8 TO 13	12.8
	AMPS	FULL	1	DO NOT USE	37
	ROTOR	FULL	1	DO NOT USE	2.4
	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	62
HIGH OUTPUT	ROTOR	FULL	1	DO NOT USE	3.1
CHRYSLER B CKT  LOW OUTPUT	VOLTS	FULL	1	12.8	12.8
	AMPS	FULL	1	DO NOT USE	42
	ROTOR	FULL	1	DO NOT USE	2.7
	VOLTS	FULL	1	12.8	12.8
HIGH OUTPUT	AMPS	FULL	1	DO NOT USE	78
	ROTOR	FULL	1	DO NOT USE	3.4

Electrical Remanufacturer's ERA FOUNDED 2001 ASSOCIATION

To insure proper operation and desired output from Alternators at the test bench, the following should be followed:

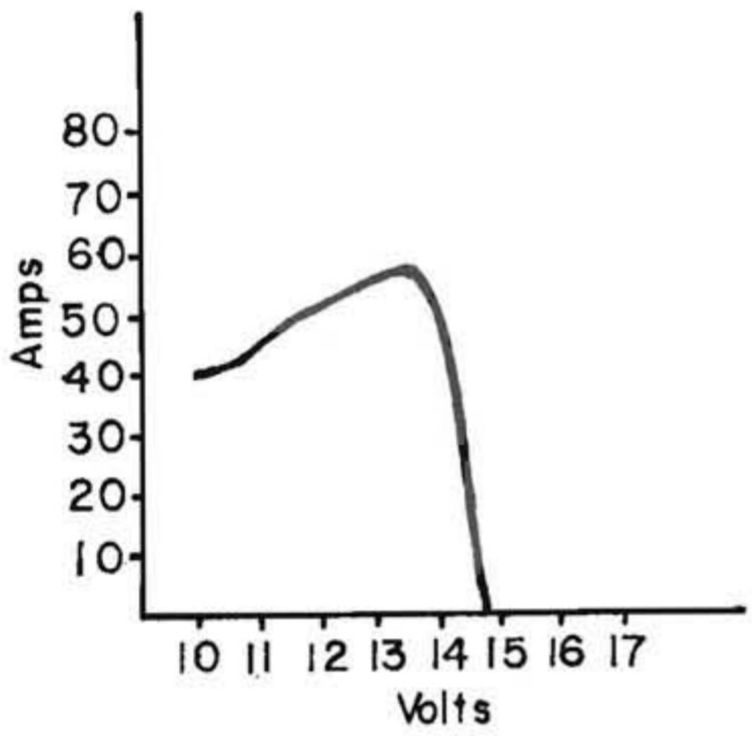
1. Rotors checked and graded prior to installation.
2. Stators checked and graded prior to installation.
3. Low Amp rotor matched with low Amp stator and high with high, etc.
4. Diodes checked before and after installation to be sure they aren't damaged during installation.
5. Connectionschecked and resoldered when necessary (prevents intermitants)
6. Rotor circuit checked on finished unit to prevent shorts being put on tester field circuit.
7. For best results pre-testing prior to final testing may almost completely eliminate final test rejects.
8. Test in proper voltage range.
9. The specs shown on previous sheets are all with alternator at room temperature.
10. If trying compare the OT-0507 with existing benches in the field, the voltage must be in normal vehicle range, not above 15 Volts.
    The OT-0507 tests the alternator at approximately 6000 RPM to simulate correct automobile rating any comparisons must be made at simular RPM and Voltage.

INSURE QUALITY THROUGH PROPER TESTING

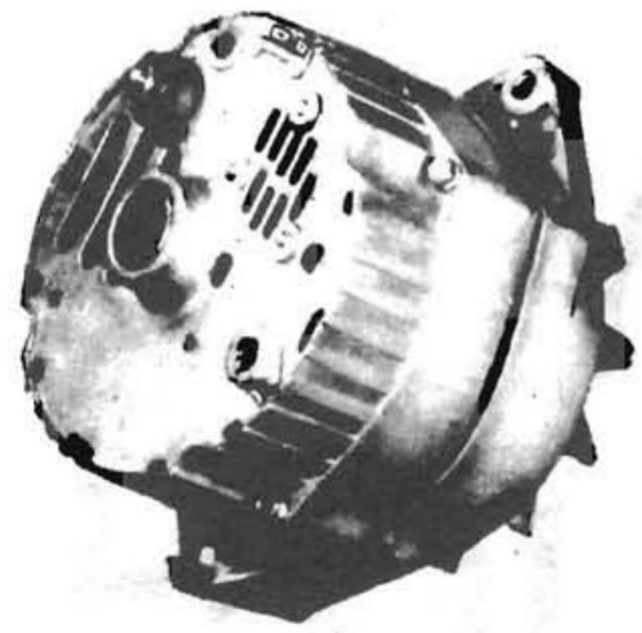
Electrical Rebuilder's ERA FOUNDED 2001 ASSOCIATION

TECHNICAL BULLETIN HD 10-19-77
ALTERNATOR TESTING

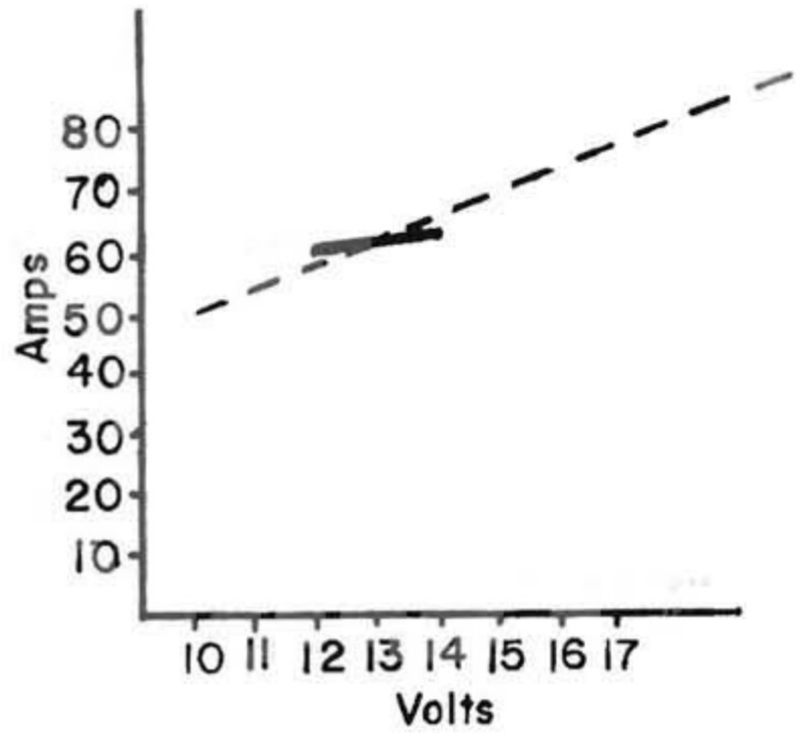
INTEGRAL UNIT POWER CURVE



The integral unti will have low power out at low voltage due to lower field current and low power out at higher voltage due to regulator control.



STANDARD UNIT POWER CURVE



Solid line shows unit run under controlled conditions-constant field supply and output voltage in the range normally found on a vehicle. This simulates on vehicle maximum output.

Dotted line indicates unit run under non controlled conditions. Full field non regulated with field voltage varying as output voltage varies - not a condition as is normally found on a vehicle except in a short voltage range like 13 to 14 Volts, testing in this manor is only valid in the voltage range normally found on vehicle.

Full rated output of an Alternator should be taken only in voltage range found on vehicle. Amperage ratings at a higher voltage than vehicle voltage are not valid (example - test at 18 Volts will show more output than will be available on vehicle).

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