

TECHNICAL SERVICE BULLETIN

76-B-4

NO



Triumph

PLEASE DESTROY BULLETIN
NO. 76-A-8

July, 1976

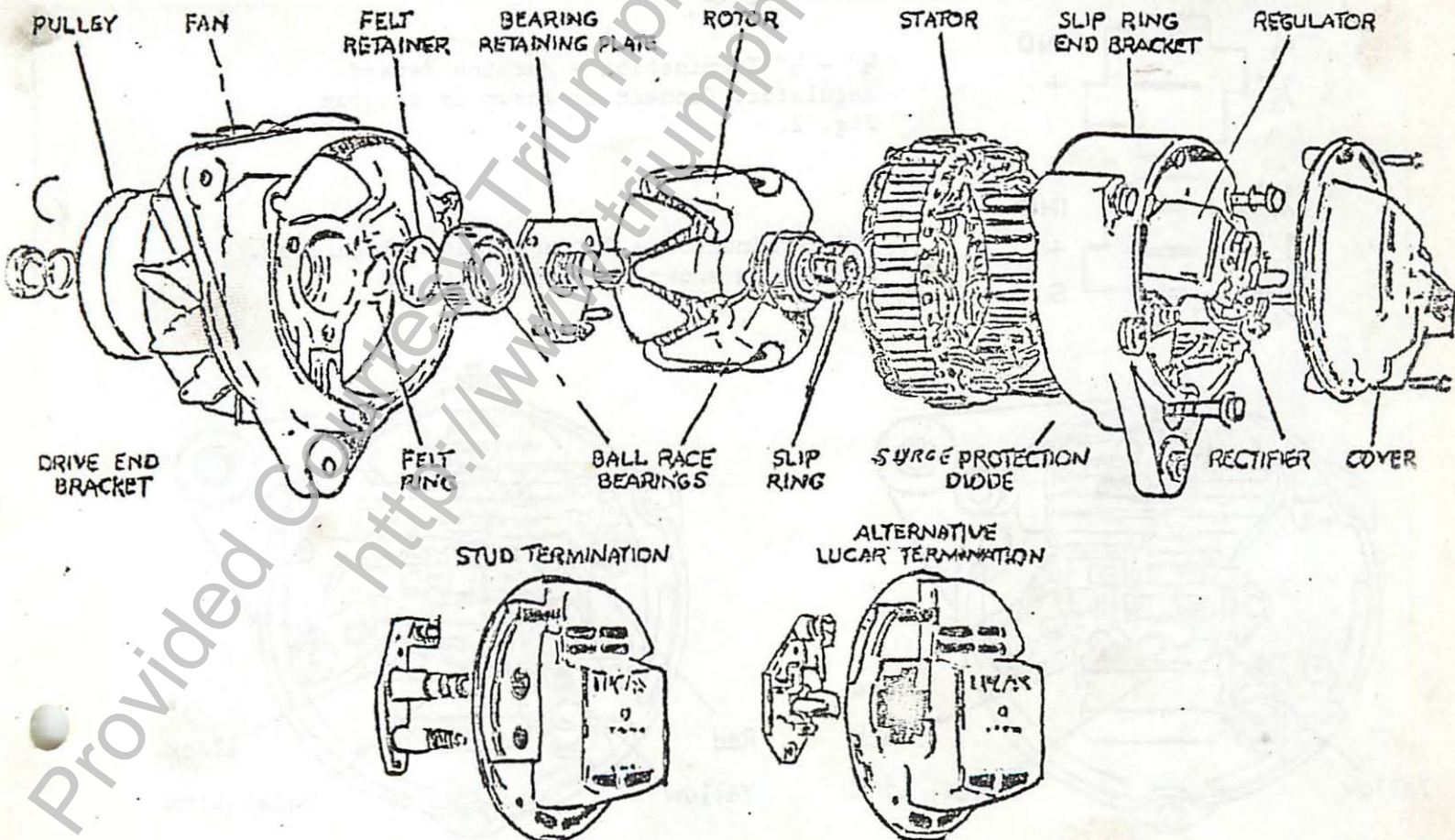
SUBJECT:

INTRODUCTION OF 23ACR AND 25ACR
ALTERNATORS

MODELS:

TR7

These two alternators are recent additions to the Lucas ACR range and are similar to the earlier ACR models except that the frame size has been increased. The 25ACR model (Lucas Part #23859) will be used initially to replace those applications previously using the 20ACR, TR7, the 20ACR no longer being supplied as original equipment. The test procedures are exactly the same as that for the 15 through 18ACR models, with which most people are familiar. The shaft is 15mm in diameter with a sleeve to bring it up to 17mm for maximum interchangeability. The rectifier pack instead of having a separate plate for auxiliary, positive and negative diodes has one of each kind on each plate. Stator windings connect to the plate instead of the diodes.



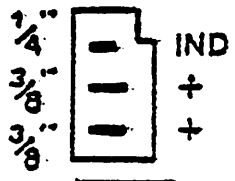
Exploded View - 23/25ACR

Specification

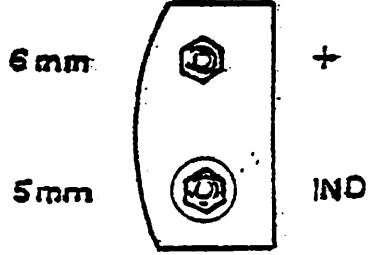
Nominal System Voltage
 Earth Polarity
 Nominal Rated Output (hot) at 6000 rev/min
 Alternator Voltage at 20% rated output
 Number of Poles
 Stator Phases
 Stator Winding Connected
 Maximum Continuous Rotor Speed (rev/min)
 Fan Size (dia)
 Weight (inc) Fan approx.
 Stator Winding Resistance (at 20°C)
 Rotor Winding Resistance (at 20°C)
 Slip Ring End Brushes (length new)
 Regulating Voltage (measured across battery)

	<u>23ACR</u>	<u>25ACR</u>
Nominal System Voltage	12	12
Earth Polarity	Negative	Negative
Nominal Rated Output (hot) at 6000 rev/min	55A	65A
Alternator Voltage at 20% rated output	14.2V	14.2V
Number of Poles	12	12
Stator Phases	3	3
Stator Winding Connected	Delta	Delta
Maximum Continuous Rotor Speed (rev/min)	15000	15000
Fan Size (dia)	5.5" (139.7 mm)	6" (152.4 mm)
Weight (inc) Fan approx.	4.80 kg (10½ lb)	5.10 kg (11 lb)
Stator Winding Resistance (at 20°C)	0.202 ohms	0.152 ohms
Rotor Winding Resistance (at 20°C)	3.201 ohms	3.201 ohms
Slip Ring End Brushes (length new)	0.5"	0.5"
Regulating Voltage (measured across battery)	13.6 - 14.4	13.6 - 14.4

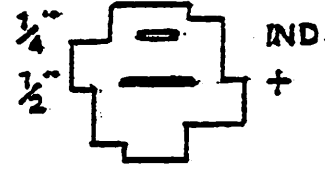
23/25ACR Terminal Arrangements



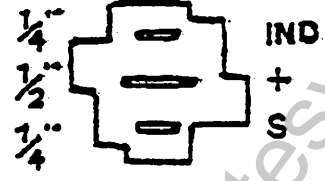
European Termination - Machine Sensed Regulator. Connect as shown in diagram Fig. 1.



Stud Termination - Machine Sensed Regulator. Connect as shown in diagram Fig. 2.



1/2" - 1/4" Termination - Machine Sensed Regulator. Connect as shown in diagram Fig. 2.



BSH Termination - Battery Sensed Regulator. Connect as shown in diagram Fig. 3.

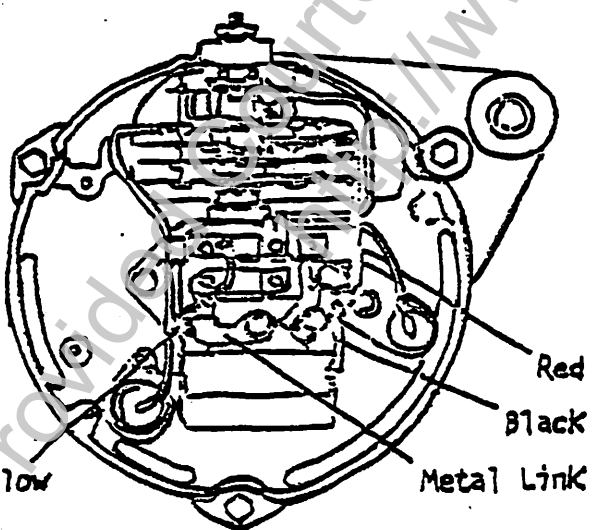


Fig. 1.

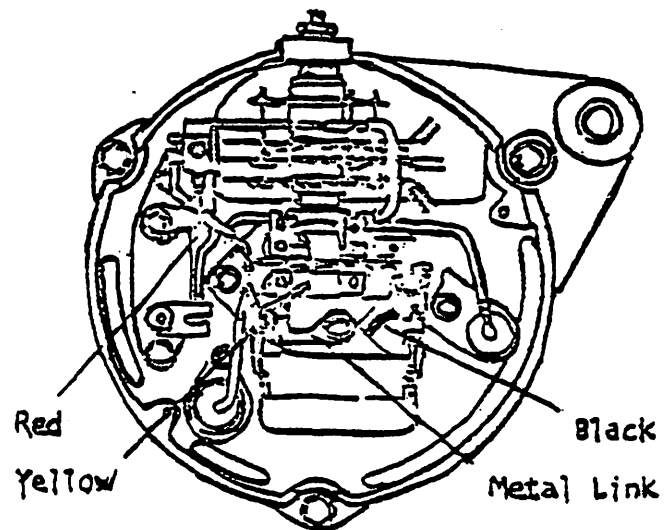
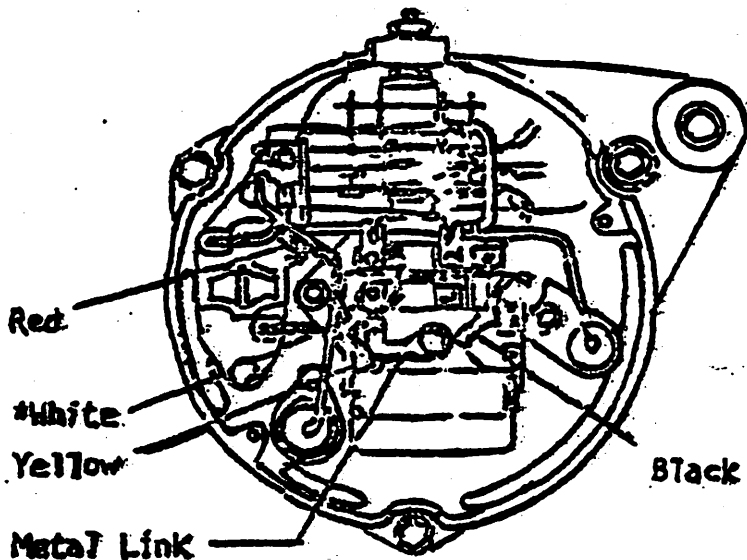


Fig. 2.



* BSH termination
alternators only

Fig. 3.

Output Curves

23/25 Output Curves:

