TECHNICAL SERVICE BULLETIN

BRITISH LEYLAND **AUSTIN MG**

NO. 72-B-5

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SUBJECT:	MODELS:
SURGE PROTECTION DEVICE FOR 15, 16, 17, & 18 ACR ALTERNATORS	ALL MODELS

A surge protection diode has now been incorporated in the range of ACR alternators. The diode is connected between the "IND Terminal" and ground and protects the regulator and/or alternator diodes from high voltage surges due to poor external wiring connections or battery lead removal when the engine is running.

FUNCTION OF SURGE DIODE

Under normal charging voltage levels, the diode is in open circuit; but, if for any reason (battery leads removed), a high voltage surge results. The diode will provide an alternative path to ground for the damaging voltage instead of passing through the regulator components and alternator diodes.

Two versions of the diode are fitted - one is fitted as original equipment, part number 54486144 (Figure 1) - the other, which can be used to modify existing alternators has part number 54386877. Diode 5436877 is directly suitable for all the latest machine-sensed (one plug) alternators and is connected to the extra Lucar blade on the top plate of the rectifier pack as illustrated in Figure 2.

TESTING

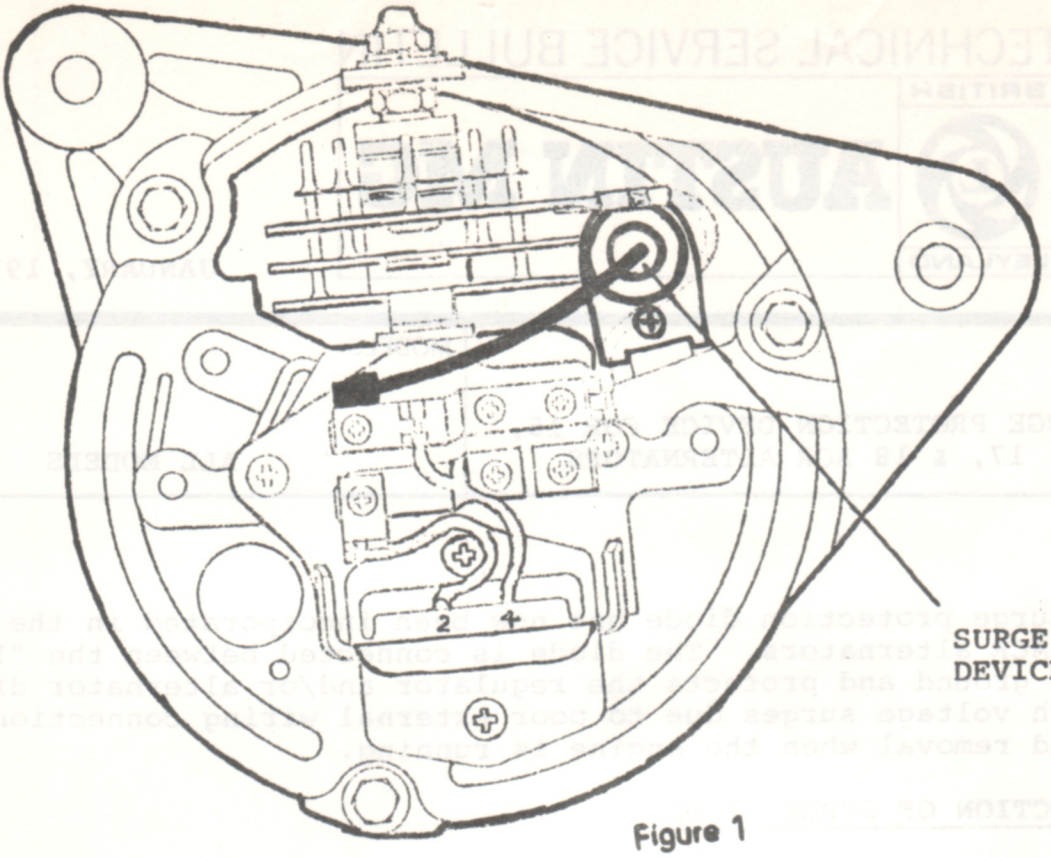
1. If the alternator output falls to zero, the fault may be caused by a shorted surge protection device. To check this, proceed as follows:

   A. Check that all circuit connections are clean and tight.

   B. Disconnect surge protection device lead.

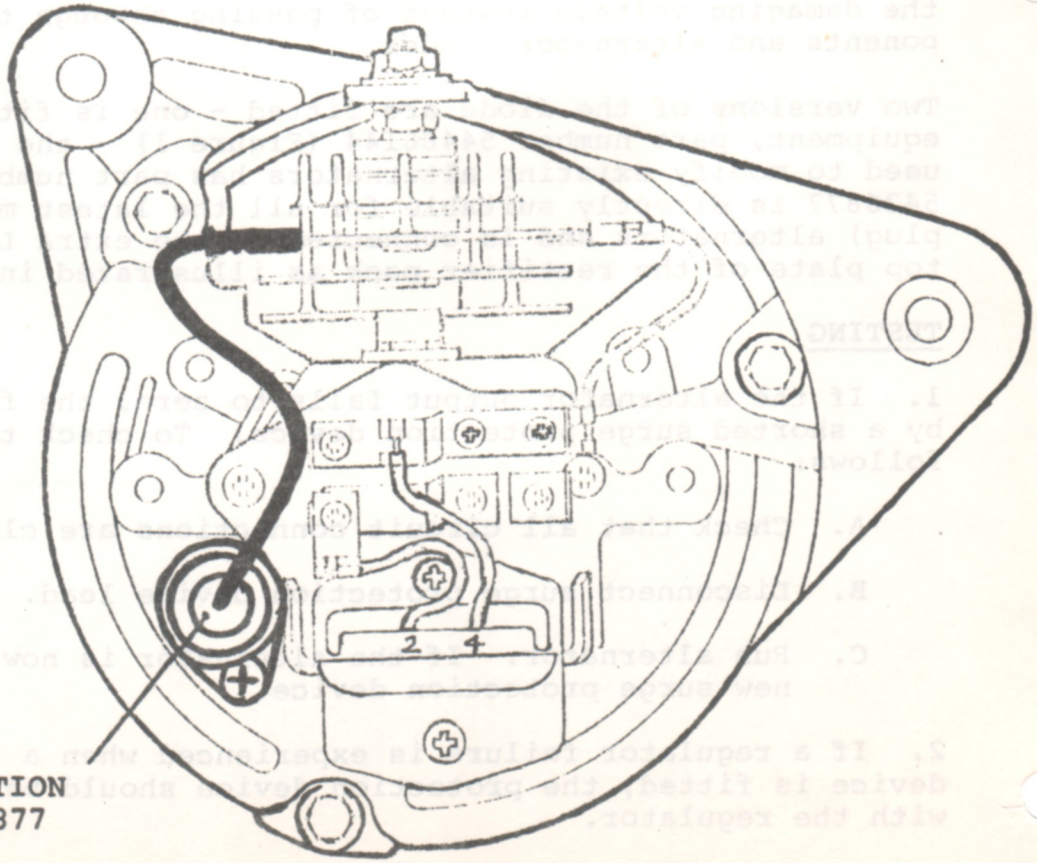
   C. Run alternator. If the alternator is now normal, fit a new surge protection device.

2. If a regulator failure is experienced when a surge protection device is fitted, the protection device should be replaced together with the regulator.



SURGE PROTECTION
DEVICE 54486144

Figure 1



SURGE PROTECTION
DEVICE 54386877

Figure 2