Chapter 16

RESISTOR UNIT, ROTAX, TYPE ZA8301

LIST OF CONTENTS

LIST OF ILLUSTRATIONS

LEADING PARTICULARS

Resistor unit, Type ZA 8301	*Ref. No.* 5CZ/5929
Resistance of element	0·013–0·017 *ohms*
Current loading	220 *amp.*
Overall dimensions—	
Height	3·421 *in.*
Length	5·270 *in.*
Width	2·800 *in.*
Weight	1 *lb.* 2·5 *oz.*

Introduction

1. The ZA 8301 resistor unit has been designed for use in conjunction with Rotax starter, Type C 10501, its purpose being to limit the armature current at the outset of the starting cycle.

DESCRIPTION

2. The unit (*fig.* 1) comprises a resistor element formed from folded "Brightray" strip which is mounted in four "Micalex" insulated clamp brackets. The resistance of the element is 0·015 ohm.

Operation

3. When the starter button is pressed, a time switch diverts the current from the main supply through the resistor unit to the starter. After a period of two seconds, the time switch operates and the starting current, limited by the resistor element, then flows for a further twenty-eight seconds after which the time switch operates again to short the resistor unit out of the circuit.

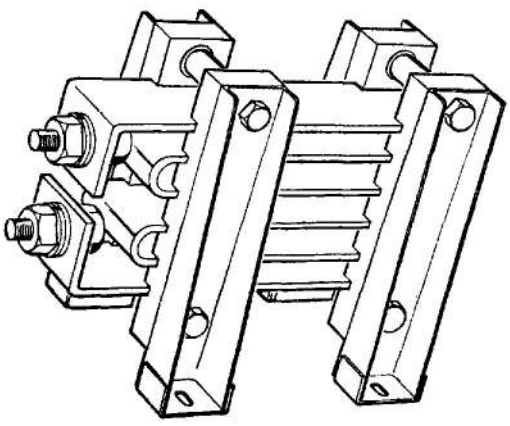

Fig. 1. Resistor unit, Type ZA 8301

Electrical connections

4. Electrical connections are made via two 0·250 in. B.S.F. studs.

INSTALLATION

5. For installation purposes, four clearance slots 0·156 in. x 0·250 in. for 0·142 in. fixing screws are drilled in the feet of the insulated clamp brackets, the centres of the holes forming a rectangle 2·750 in. x 2·250 in. nominal centres respectively.

SERVICING

6. Check that all connections are tight and mating surfaces clean.

Insulation resistance test

7. Check the insulation resistance between all live parts and the frame, using a 250-volt insulation resistance tester; the insulation resistance should not be less than 0·5 megohm (for R.N.) or 5 megohms (for R.A.F.).

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