OVERHAUL MANUAL

SHUNTS 161307 - 161310

SANGAMO WESTON LIMITED

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This Manual complies with British Civil Airworthiness Requirements, Chapter A6-2. The technical accuracy of this manual has been verified and is certified correct.

Signed. N.S. Logegrove.

Date. August 1962

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REVISION RECORD SHEET

Revision No.	Date of Issue	Incorporated by:	Date	Remarks
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The introduction of any amendment or revision not certified in accordance with British Civil Airworthiness Requirements Chapter A6-2 will invalidate the statement of certification on shunts 161307 - 161310.
Amendments or revisions embodied in this manual, which have been certified under an approval authorisation other than that applicable to the initial certification must be recorded on separate record sheets.

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ILLUSTRATIONS

SHUNTS 161307 - 161310

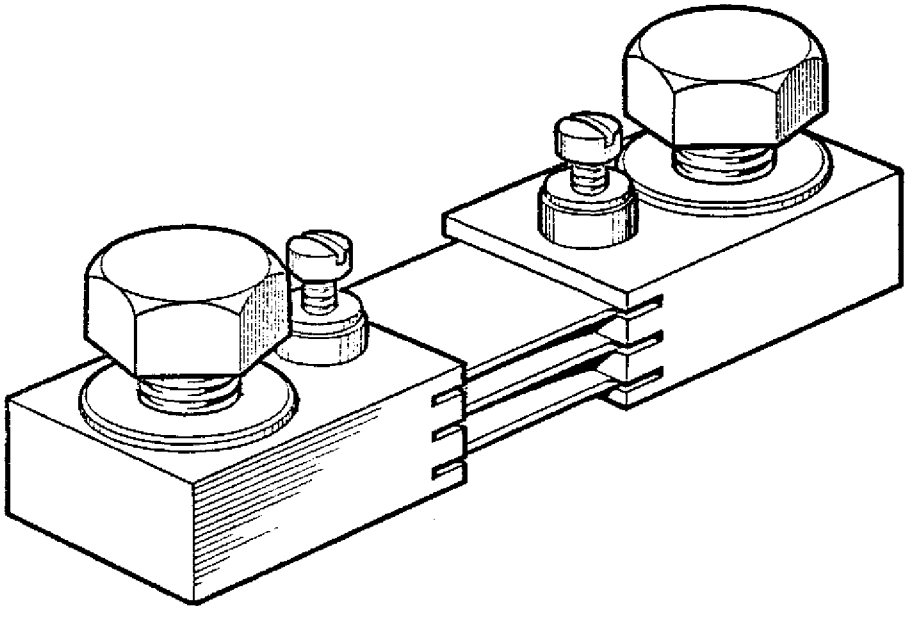

Fig. 1. Shunt 161307 - 161310

1. Description, Operation & Data

A. Description

Shunts 161307 - 161310 cover the range 150 to 300 amps. Blades of Minalpha strip mounted between two copper blocks form the resistive element. The number of blades used in a particular shunt is dependent upon its range and this information together with the identification of individual shunts will be found in paragraph C, Data. Two half inch Whitworth bolts afford the circuit connections to the shunt and two 2 B.A. screw terminals facilitate the means of connecting the shunt to the indicator.

B. Operation

The shunt is designed to operate in conjunction with an indicator whose full scale deflection is 75 mV., 10 mA.

C. Data

Shunt	Range	No. of Blades	Resistance
161307	150 amps	2	.0005 ohm
161308	200 amps	2	.000375 ohm
161309	250 amps	3	.0003 ohm
161310	300 amps	3	.00025 ohm

The approximate weights of these shunts are 1¼ lb. each.

2. Disassembly

These shunts are irreparable items, therefore no disassembly is possible. Defective shunts should be returned to the manufacturer.

3. Cleaning

A. Procedure

(1) Use a cloth to wipe away all dirt and grease from the shunt; work the cloth between the Minalpha blades to remove all foreign matter.

(2) Remove the terminals from the shunt and lightly clean the terminal threads by means of a wire brush.

(3) Ensure that the 2 B.A. washers and the area of the shunt covered by the washers are free from any form of dirt or corrosion. The associated lead terminals should satisfy the same requirement.

B. Cleaning Materials

(1) Soft cloth.

(2) Wire brush.

4. Inspection

The shunt should be inspected for:

(1) Cleanliness.

(2) Security of mounting.

(3) Tightness of electrical connections.

(4) Serviceability of terminal threads.

(5) Scratches on the blades.

5. Repair

Other than to repaint scratched blades no repair is necessary.

A. Procedure

(1) Apply paint No. 143 to the scratched sections of the blades.

(2) Allow the paint to air dry for 24 hours.

B. Schedule of Materials

Material	Supplier
Paint No. 143	SANGAMO WESTON LTD., Enfield, Middlesex, England.

6. Assembly

No assembly is possible.

8. Testing

A. Procedure

The shunt should satisfy the test below.

(1) Use a d.c. Potentiometer and compare the millivolt drop of the shunt with a shunt of known characteristics.

9. Trouble Shooting

A. Causes

The main causes of trouble after overhaul are:

(1) Dirty or loose connections to aircraft circuit.

(2) Dirty or loose connections to indicator.

B. Correction

(1) Clean or tighten aircraft terminals on shunt.

(2) Clean or tighten indicator terminals on shunt.

10. Storage Instructions

A. Preparation

If the original packing is not available, prepare suitable sizes of the following:

(1) Wax paper.

(2) Two corrugated cardboard strips.

(3) Water resistant paper.

(4) A label with the following information:

(a) Identification: e.g. Shunt 161310.

(b) Date of overhaul.

B. Procedure

Pack the shunt as follows:

(1) Wrap the wax paper around the shunt.

(2) Wrap one strip of corrugated cardboard lengthways around the shunt, to cover the base and top surfaces, and the other around the sides of the shunt to cover the remaining surfaces.

(3) Wrap the water resistant paper around the package to completely enclose it.

(4) Attach the identification label to the package.

C. Limiting Period

(1) The storage limiting period of the shunt is six years.

(2) At the expiry of this period the shunt should be checked as detailed in the manual.

11. Special Tools

The shunts do not necessitate the use of any special tools.

13. Overhaul Period

The shunts must be subjected to the instructions given in this manual at the completion of 10,000 hours flying time.