Chapter 4.— ENGINE INTAKE ANTI-ICING SYSTEM

(Completely revised)

Note.—*This chapter applies to Avon Mk. 10701, 10901, 11301, 11501, 12101 and 12201. Engine Change Units and Associated Jet Pipes*

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HOT AIR VALVE AND ACTUATOR

Removal

1. The actuator can be changed without removing the hot air valve from the compressor casing. Unscrew the electrical connection from the front of the actuator and remove the four nuts retaining the unit to the hot air valve housing. Withdraw the actuator and its drive shaft. The drive coupling is retained in the actuator by a circlip and should not be disturbed. Replacement units have a drive coupling fitted.

2. When removing the hot air valve, great care must be taken to prevent any article from dropping through the exposed orifice into the compressor; the orifice must be blanked off immediately.

3. To remove the hot air valve and actuator complete, proceed as follows:—

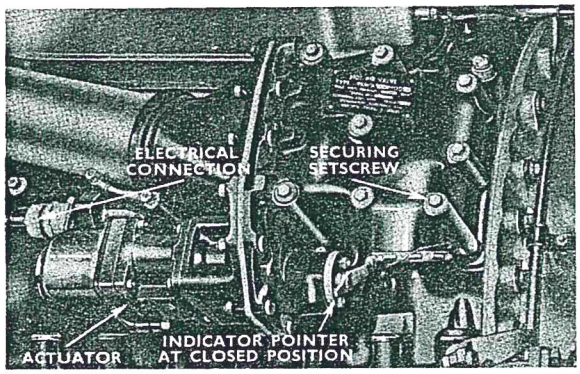

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Fig. 1 Hot air valve and actuator

(1) Disconnect the electrical connection from the actuator.

(2) Remove the six setscrews securing the inlet elbow to the anti-icing manifold at the front of the engine and the eight setscrews securing the hot air valve and actuator to the compressor casing.

(3) Lift the assembly clear of the engine and withdraw the hot air pipe, together with the inlet elbow, from the hot air valve.

Replacement

4. Replacement is the reverse of removal. When assembling the actuator to the hot air valve, ensure that the master spline of the actuator drive coupling is in line with the master spline of the hot air valve quillshaft. To do this, connect the electrical supply to the actuator, then, using the anti-icing selector switch, motor it over to the closed position. Turn the hot air valve quillshaft manually until the indicator pointer is in the CLOSED position; then disconnect the electrical supply and carefully fit the two units together. Before fitting the hot air valve and inlet elbow, smear the joint faces with jointing compound *(Ref. No. 34B/9429676).*

Serviceability check

5. Operate the cockpit control and ensure that the full movement of the valve is obtained by observing the indicator pointer on the hot air valve and on the cockpit indicator.