



Subject: Sabre-arc 25i
Number: 175
Date: 25th September 2000
From: Technical & Marketing Manager - Arc Equipment

We have received reports of a couple of units failing on or very shortly after initial installation. The cause of the failure has been diagnosed as being the result of HF pick-up on the torch switch leads causing a resistor (100Ω metox) on the front panel control/logic PCB to go high resistance. This resistor is electrically in series with one end of the torch switch leads. Depending on the "lay" of the switch leads inside the torch cable sheath the level of HF cross coupling can vary.

The solution to this problem (a higher power resistor and a varistor assembly) has already been fitted to all our stock, see pages 2 and 3 attached for details.

The fault symptoms are as follows. When the machine is switched on (with air connected) the air purge should automatically cycle for about 20 seconds. If when this has ended, pressing the torch switch does not turn on the air, the unit will have failed as above.

Resistor and varistor kits are available from Waltham Cross if needed. When reinstalling the modified control/logic PCB please ensure that the white torch switch pair and the red air-flow switch pair are kept separate from each other (lest HF cross-couples from the torch switch to the air-flow switch circuitry) and also that they do not come into contact with the torch connection bracket (which is live to OCV and HF).

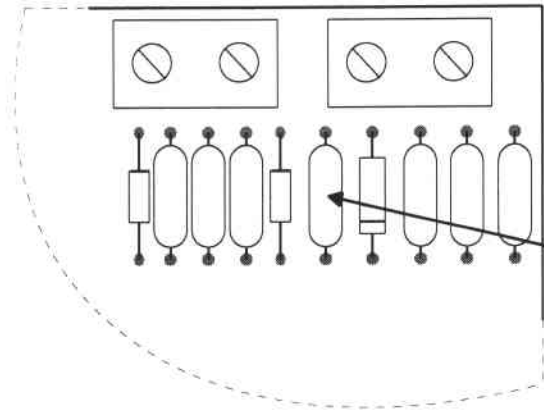
Thank you.

PHIL WATKINS

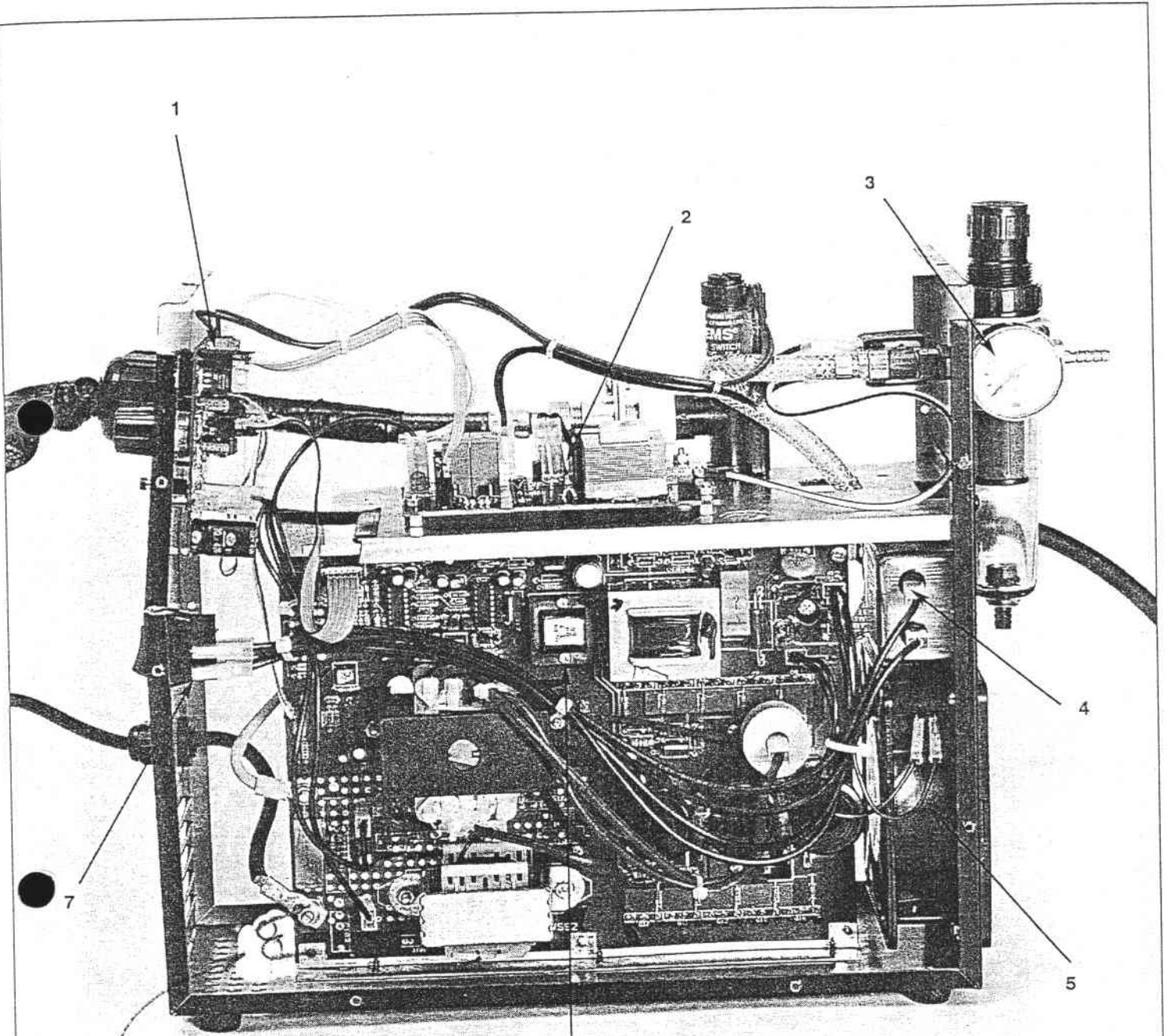
SERVICE BULLETIN

Sabre-arc 25i Front Panel Control PCB

Pt. No.1415704



Replace this resistor
with 100 ohm
1/2W Carbon



ADD VARISTOR ASS'Y
 (2 VARISTOR IN SERIES!)
 BETWEEN WORK RETURN LEAD
 CONNECTION & CHASSIS AS SHOWN

Item	Pt. No.	Description
1	1415704	Control & Logic PCB
2	1415572	HF & Air Valve PCB
	1415708	Air Filter/Regulator
4	1415481	Mains Filter
5	1415480	Fan
6	1415703	Main Inverter PCB
7	1415485	Power On/Off Switch