

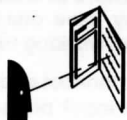
FIELD INSTRUCTIONS

2009-10

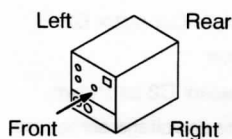
FORM: F237 589C

Use above FORM number when ordering extra manuals.

For Installing Kit 237 587, Circuit Card Assy Control (Low End Arc Starting)

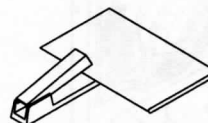


Have only trained and qualified persons install, operate, or service this unit. Call your distributor if you do not understand the directions. For WELDING SAFETY and EMF information, read Owner's Manual.



All directions are given as facing front panel.

Keep hardware for reuse.



Staple these instructions inside Owner's Manual.

1. Safety Symbol Definitions

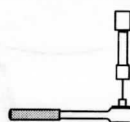
	DANGER! – Indicates a hazardous situation which, if not avoided, will result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.		Beware of electric shock from wiring. Disconnect input power before installing this kit. Reinstall all panels and covers.
	Indicates a hazardous situation which, if not avoided, could result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text.		Wear safety glasses with side shields.
NOTICE 	Indicates statements not related to personal injury. <i>Indicates special instructions.</i>		Welding sparks can cause fire or explosion. Move flammables away. Do not weld on closed tanks or barrels – they can explode. Clean tanks or barrels properly.

2. Tools Needed

3/8 in



Molex Pin Extractor

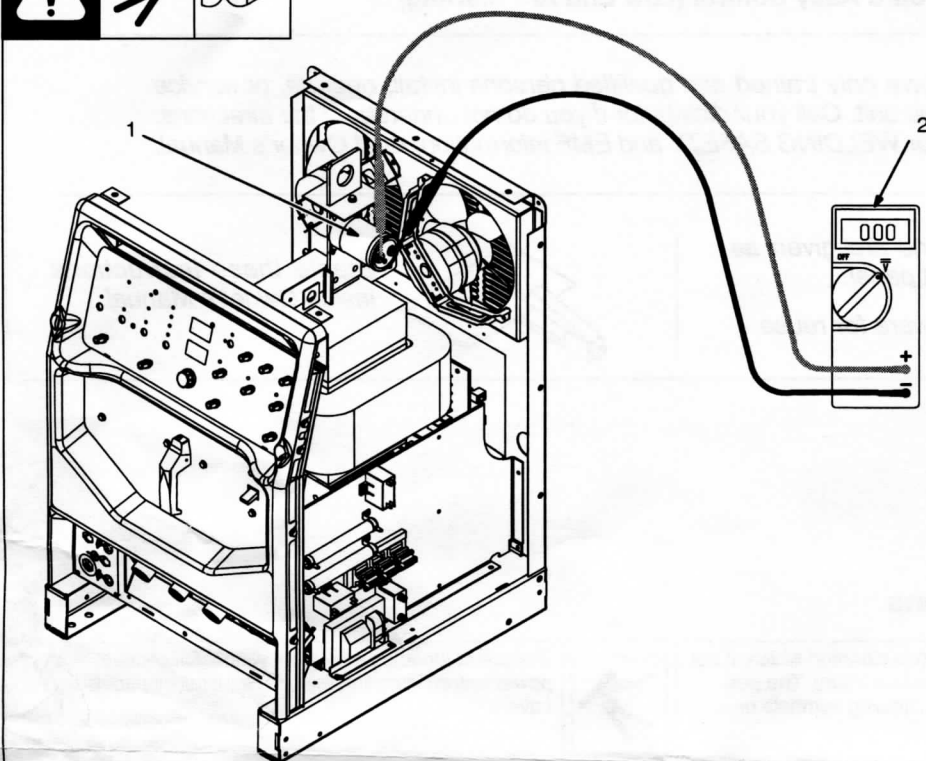


5/16, 3/8, 9/16 in.

Torx T20

Phillips

3. Measuring Capacitor Voltage



⚠ Significant DC voltage can remain on capacitors after unit is Off. Always check capacitors as shown to be sure they have discharged before working on unit.

⚠ Disconnect and lockout/tag-out input power before beginning.

Remove cover and side panels.

1 Electrolytic Capacitor C2

2 Voltmeter

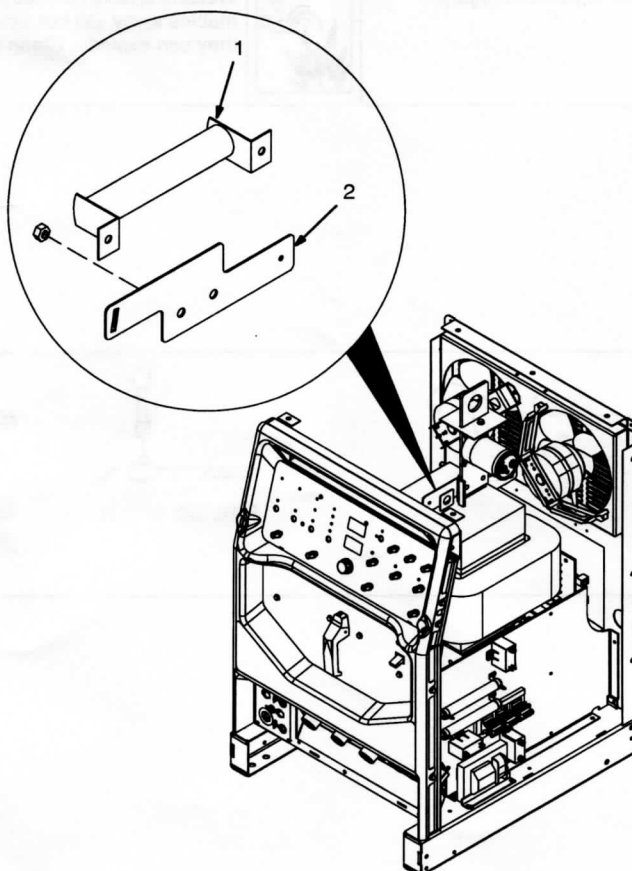
Check capacitor C2 as shown.

Measure the dc voltage across the positive (+) and negative (-) terminals until voltage drops to near 0 (zero) volts.

Proceed with job inside unit. Reinstall cover and side panels when finished.

803 787-B

4. Removing Existing Resistor Mounting Bracket



1 Resistor R3

Remove and discard R3.

2 Resistor Mounting Bracket

Remove and discard bracket.

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5. Installing Supplied Resistor Mounting Bracket



1 Supplied Resistor Mounting Bracket

Install supplied bracket.

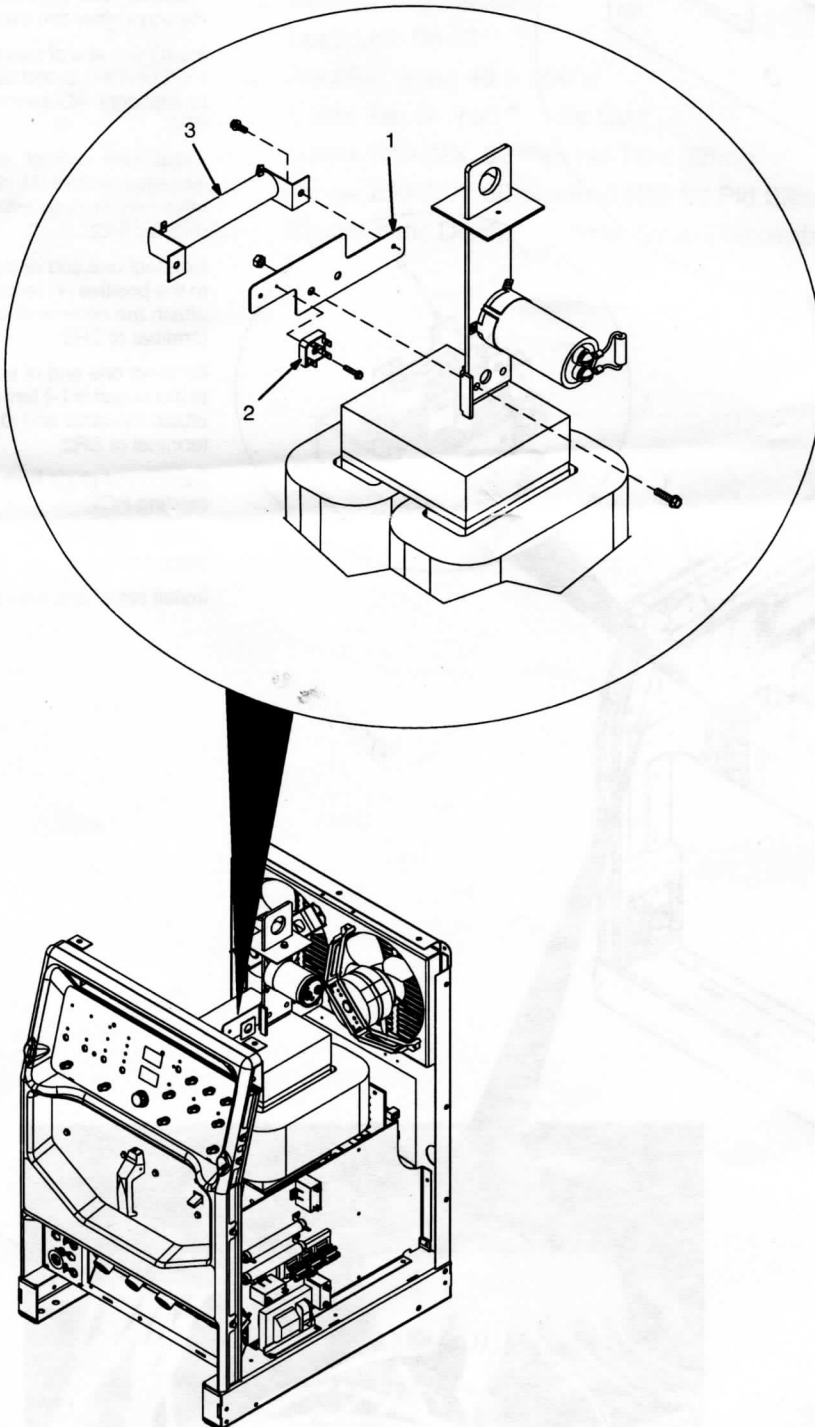
2 Bridge Rectifier SR2

Install rectifier using supplied 8-32 hardware. The notched corner of the rectifier should be in the upper left position.

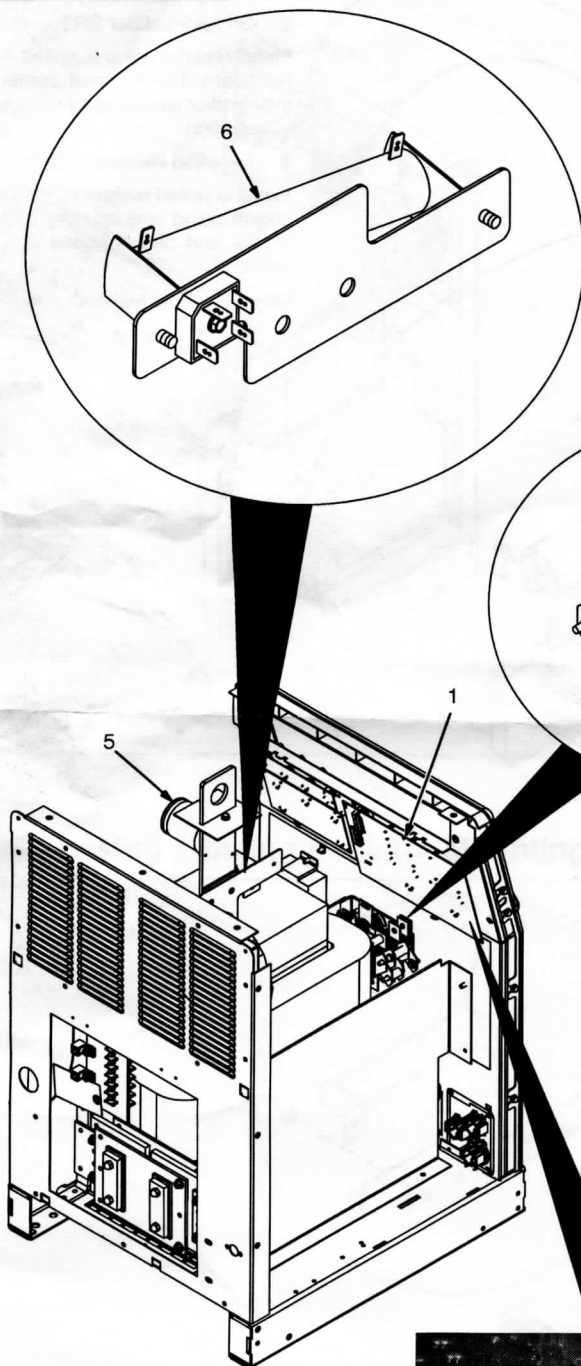
3 Supplied Resistor R3

Install supplied resistor in the holes shown using one existing 250-20 screw, and one supplied 250-20 screw.

Attach leads to resistor.



6. Electrical Connections



- 1 Control Board PC1
- 2 Plug PLG4
- 3 Polarity Switch S5
- 4 Plug PLG 17
- 5 Capacitor C2
- 6 Rectifier SR2

Remove one end of black/white lead from PLG4 pin 6. Remove other end from switch S5.

Remove lead 34 from PLG17 pin1. Remove other end from capacitor C2.

Install one end of supplied lead 91 into PLG17 pin 1, and attach other end to top right AC terminal of rectifier SR2.

Install one end of supplied black/white lead into PLG4 pin 6, and attach other end to lower left AC terminal of rectifier SR2.

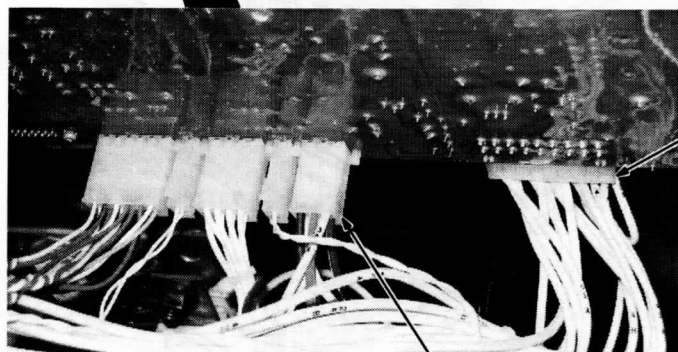
Connect one end of supplied lead 34 to the positive (+) terminal of C2, and attach the other end to the upper left terminal of SR2.

Connect one end of supplied lead 55 to the negative (-) terminal of C2, and attach the other end to the lower right terminal of SR2.

Disconnect plugs from PC1. Remove existing PC1.

Install supplied PC1, and connect plugs to PC1.

Install cover and side panels.



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803 787-B / 805 315-A

7. Parts

Item No.	Dia. Mkgs.	Part No.	Description	Quantity
		237587	Kit, Circuit Card Assy Control	
1	 PC1	 239647	 Circuit Card Assy,Control & Interface W/Program	 1
2	 R3	 186949	 Resistor,Ww Fxd 175 W 20 Ohm W/Clips	 1
3		 237590	 Bracket,Mtg Resistor	 1
4		 237588	 Lead List, Small	 1
5	 SR2	 035704	 Rectifier, Integ 40 A 800 V	 1
6		 605510	 Cable Tie, 0- .750 Bundle Sst1	 3
7		 223286	 Screw,008-32X .62 Pan Hd-Torx Slffmg	 1
8		 602154	 Screw,250-20X .50 Hexwhd.50D Stl Pld Slffmg Tap-Rw	 1
9		 148300	 Electrostatic Discharge,Wrist Strap Disposable	 1