

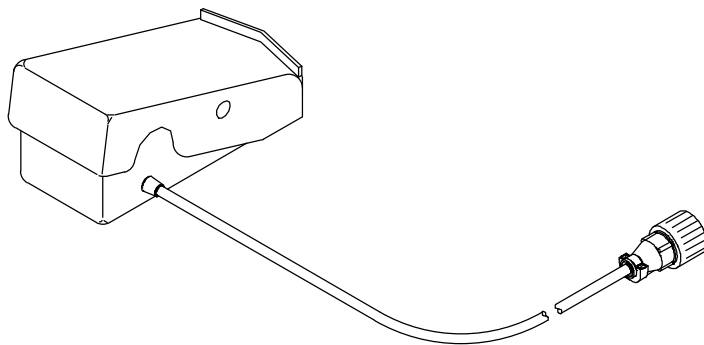


OM-844

183 973K

2015-01

Foot Controls RFCS-5, RFCS-5HD, RFCS-6M, RFCS-14, And RFCS-14HD



OWNER'S MANUAL



www.MillerWelds.com

From Miller to You

Thank you and congratulations on choosing Miller. Now you can get the job done and get it done right. We know you don't have time to do it any other way.

That's why when Niels Miller first started building arc welders in 1929, he made sure his products offered long-lasting value and superior quality. Like you, his customers couldn't afford anything less. Miller products had to be more than the best they could be. They had to be the best you could buy.

Today, the people that build and sell Miller products continue the tradition. They're just as committed to providing equipment and service that meets the high standards of quality and value established in 1929.

This Owner's Manual is designed to help you get the most out of your Miller products. Please take time to read the Safety precautions. They will help you protect yourself against potential hazards on the worksite.

We've made installation and operation quick and easy. With Miller you can count on years of reliable service with proper maintenance. And if for some reason the unit needs repair, there's a Troubleshooting section that will help you figure out what the problem is. The parts list will then help you to decide the exact part you may need to fix the problem. Warranty and service information for your particular model are also provided.



Miller is the first welding equipment manufacturer in the U.S.A. to be registered to the ISO 9001 Quality System Standard.



Miller Electric manufactures a full line of welders and welding related equipment. For information on other quality Miller products, contact your local Miller distributor to receive the latest full line catalog or individual specification sheets. **To locate your nearest distributor or service agency call 1-800-4-A-Miller, or visit us at www.MillerWelds.com on the web.**



Working as hard as you do – every power source from Miller is backed by the most hassle-free warranty in the business.











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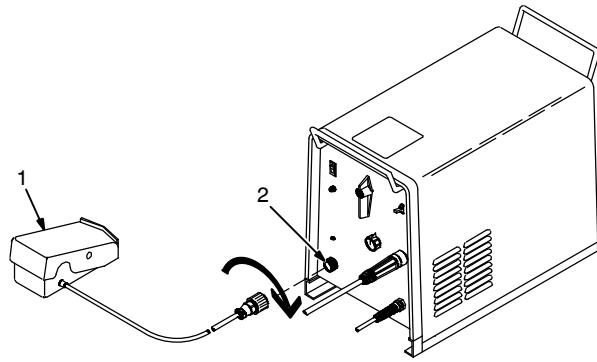
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SECTION 1 – INSTALLATION AND OPERATION

1-1. Safety Symbol Definitions

	<p>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.</p> <p>DANGER! - Indique une situation dangereuse qui, si elle n'est pas évitée, entraînera la mort ou des blessures graves. Les éventuels risques sont représentés par les symboles joints ou expliqués dans le texte.</p> <p style="text-align: right;">Fsafe1 2013-10</p>		<p>Arc rays can burn eyes and skin – wear a welding helmet with correct filter, and cover exposed skin with nonflammable clothing.</p> <p>Le rayonnement de l'arc peut provoquer des brûlures au niveau des yeux ou de la peau – porter un casque protecteur muni d'un écran de filtre approprié et porter des vêtements non inflammables pour protéger toutes parties exposées.</p> <p style="text-align: right;">Fsafe11 2013-10</p>
	<p>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.</p> <p>Indique une situation dangereuse qui, si elle n'est pas évitée, entraînera la mort ou des blessures graves. Les éventuels risques sont représentés par les symboles joints ou expliqués dans le texte.</p> <p style="text-align: right;">Fsafe2 2013-10</p>		<p>Wear safety glasses with side shields.</p> <p>Porter des lunettes de sécurité avec écrans latéraux.</p> <p style="text-align: right;">Fsafe8 2013-10</p>
<p>NOTICE</p> 	<p>Indicates statements not related to personal injury.</p> <p>Signale des consignes non associées aux dommages corporels.</p> <p>Indicates special instructions.</p> <p>Fournit des instructions spéciales.</p> <p style="text-align: right;">Fsafe3 2013-10</p>		<p>Welding sparks can cause fire or explosion. Move flammables away. Do not weld on closed tanks or barrels, or on containers that have held combustibles – they can explode. Clean tanks or barrels properly.</p> <p>Les étincelles de soudure peuvent provoquer un incendie ou une explosion. Ne pas souder de cuves ou de tonneaux, au risque qu'ils explosent. Nettoyer soigneusement les cuves ou tonneaux.</p> <p style="text-align: right;">Fsafe9 2013-10</p>
	<p>Beware of electric shock from wiring. Disconnect input power before installing this kit. Reinstall all panels and covers.</p> <p>Attention aux décharges électriques au contact des câbles. Couper l'alimentation électrique avant d'installer ce kit. Réinstaller tous les panneaux et couvercles.</p> <p style="text-align: right;">Fsafe7 2013-10</p>		<p>Breathing welding fumes and gases can harm your health. Welding requires good ventilation. If ventilation is impossible, such as when welding in a confined space, use an air-supplied respirator.</p> <p>L'inhalation des fumées et des gaz de soudure peut être dangereuse pour la santé. Une bonne ventilation est nécessaire pour procéder au soudage. S'il est impossible de ventiler, dans des lieux confinés par exemple, utiliser un respirateur à alimentation d'air.</p> <p style="text-align: right;">Fsafe10 2013-10</p>
<p>CALIFORNIA PROPOSITION 65 WARNINGS</p> <p>PROPOSITION CALIFORNIENNE 65 AVERTISSEMENTS</p> <p>Welding or cutting equipment produces fumes or gases which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer. (California Health & Safety Code Section 25249.5 et seq.)</p> <p>This product contains chemicals, including lead, known to the state of California to cause cancer, birth defects, or other reproductive harm. <i>Wash hands after use.</i></p> <p>Les équipements de soudage et de coupage produisent des fumées et des gaz qui contiennent des produits chimiques dont l'État de Californie reconnaît qu'ils provoquent des malformations congénitales et, dans certains cas, des cancers. (Code de santé et de sécurité de Californie, chapitre 25249.5 et suivants)</p> <p>Ce produit contient des produits chimiques, notamment du plomb, dont l'État de Californie reconnaît qu'ils provoquent des cancers, des malformations congénitales ou d'autres problèmes de procréation. Se laver les mains après utilisation.</p> <p style="text-align: right;">Fsafe4 2013-10</p>			

1-2. Typical Connection



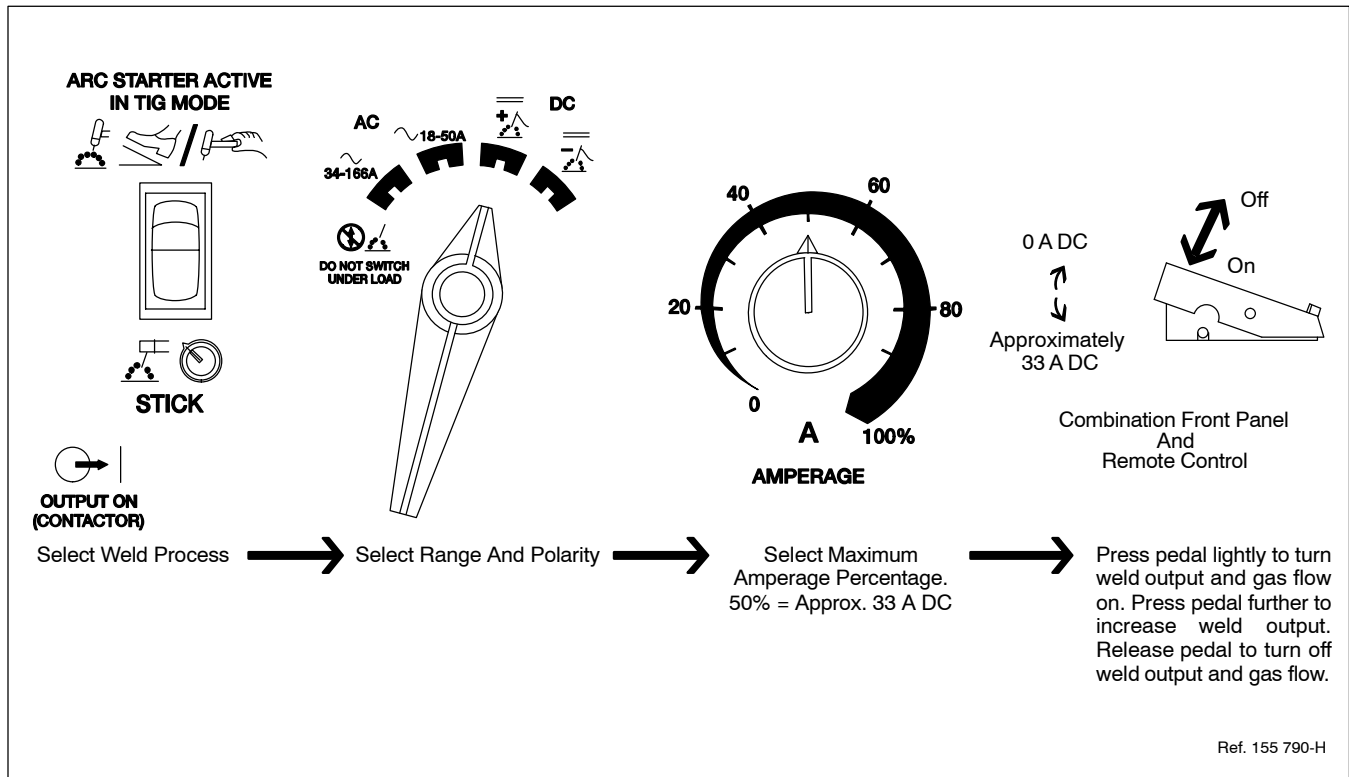
⚠ Turn Off welding power source before connecting foot control.

- 1 Foot Control
- 2 Remote 14, Remote 5, Or Remote 6 Receptacle

Insert plug into matching 14-socket, 5-socket, or 6-socket receptacle, as applicable, on welding power source. Tighten collar.

Ref. 801 736

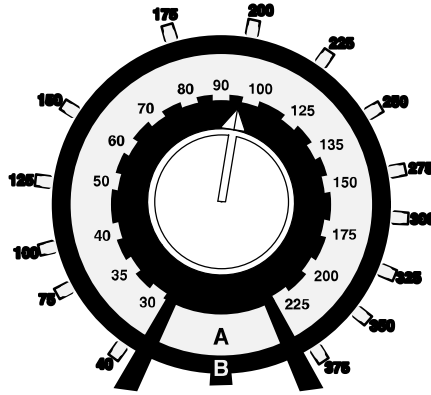
1-3. Remote Amperage Control For Welding Power Source Without Remote Control Switch



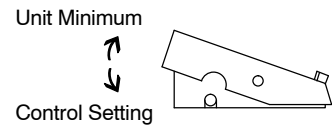
1-4. Remote Amperage Control For Welding Power Source With Remote Control Switch But Without Output (Contactor) Control

Example Of Combination Front Panel And Remote Amperage Control

☞ See welding power source Owner's Manual to determine if Remote Foot Control works as a combination or as full Amperage control.



In Example:
 Min = 30 A In Range A or 40 A In Range B (Unit Minimum)
 Max = 95 A In Range A or 200 A In Range B (Control Setting)



Set Switch



Set Desired Maximum Amperage For Application

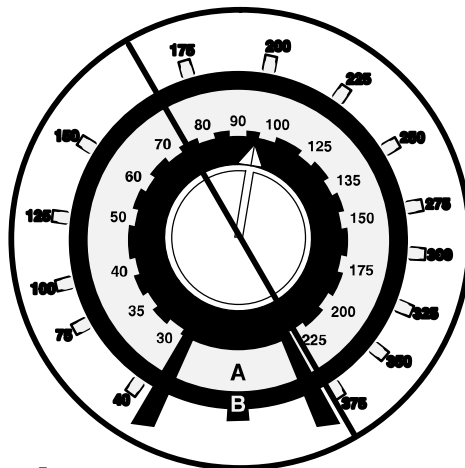


Press pedal to increase weld output. Release pedal to decrease weld output.

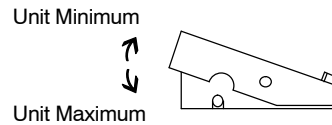
OR

EXAMPLE Of Full Remote Amperage Control

☞ See welding power source Owner's Manual to determine if Remote Foot Control works as a combination or as full Amperage control.



In Example:
 Min = 30 A In Range A or 40 A In Range B (Unit Minimum)
 Max = 225 A In Range A or 375 A In Range B (Unit Maximum)



Set Switch



Control Setting Does Not Matter

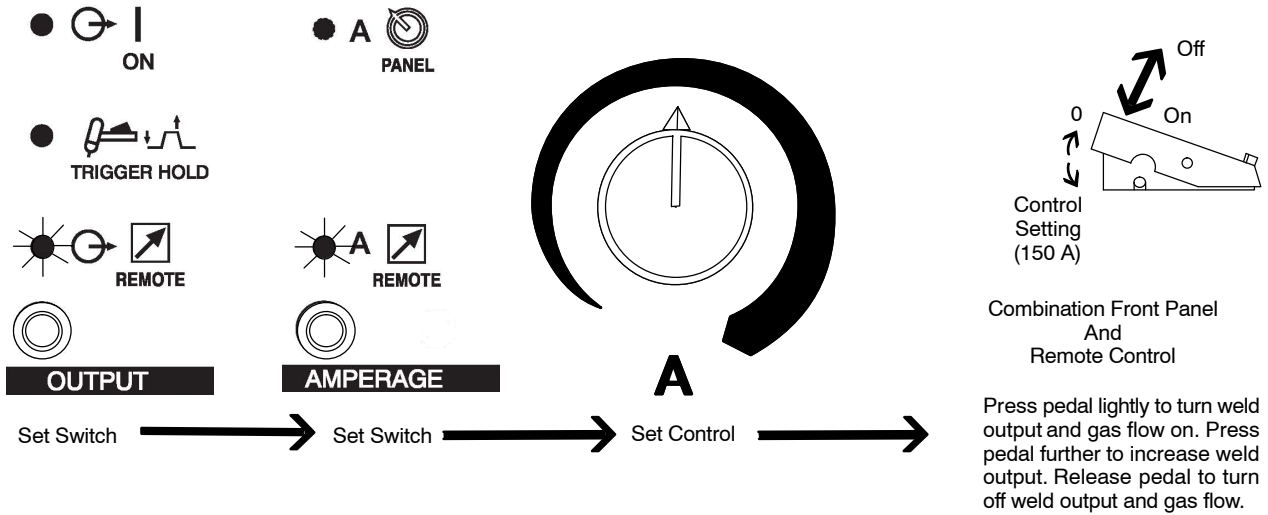


Press pedal to increase weld output. Release pedal to decrease weld output.

1-5. Remote Amperage Control For Welding Power Source With Remote Control Switch And Output (Contactor) Control

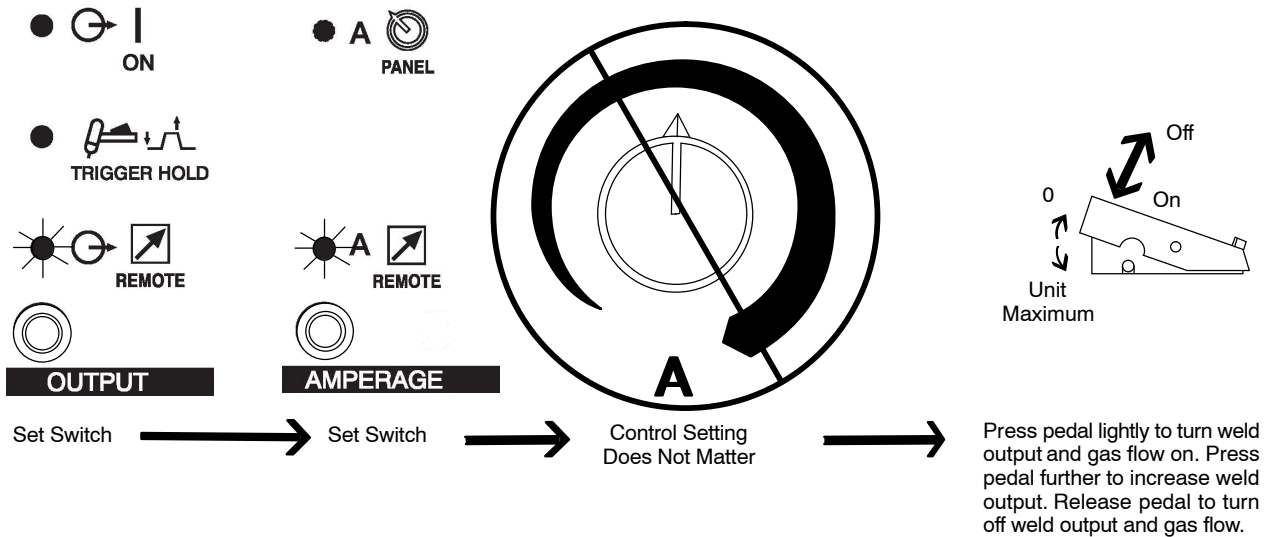
Example Of Combination Front Panel And Remote Amperage Control

☞ See welding power source Owner's Manual to determine if Remote Foot Control works as a combination or as full Amperage control.

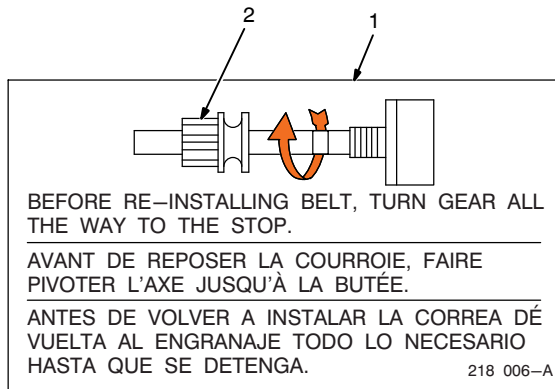


EXAMPLE Of Full Remote Amperage Control

☞ See welding power source Owner's Manual to determine if Remote Foot Control works as a combination or as full Amperage control.



1-6. Adjusting Potentiometer Timing



⚠ Disconnect foot control from welding power source/generator before adjusting potentiometer.

Turn unit upside down, and remove bottom plate.

- 1 Label
- 2 Gear

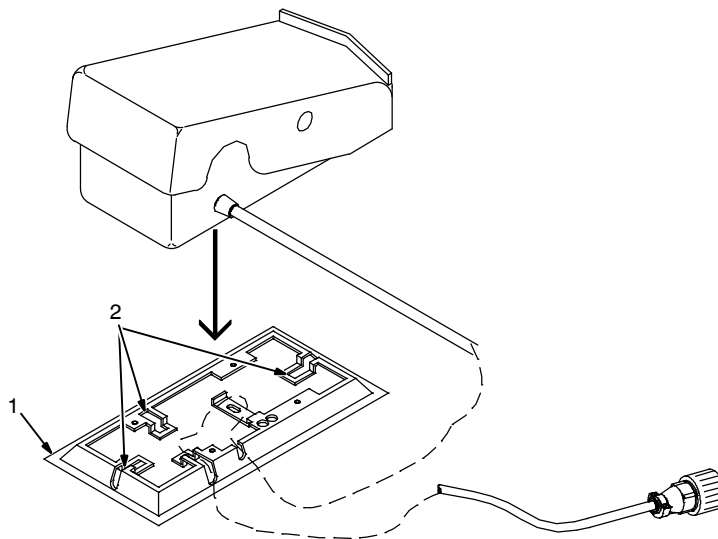
Turn gear on potentiometer shaft counterclockwise as far as possible.

Pull drive belt tight and mesh belt teeth with gear teeth.

Connect free end of small spring into end of drive belt.

Reinstall bottom plate

1-7. Changing Cord Location On RFCS-5HD, And RFCS-14HD Models



⚠ Disconnect foot control from welding power source/generator before changing location of cord.

- 1 Bottom Plate

Turn unit upside down, and remove bottom plate.

Remove screw that holds cord in its factory installed location.


- 2 Cord Slots

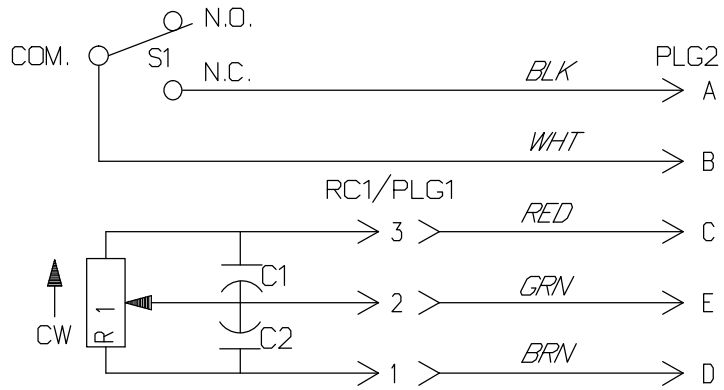
Position cord in desired slot.

Slide strain relief down cord and into slot to protect cord. Secure cord with screw in the same manner in which it came from the factory.

Reinstall bottom plate

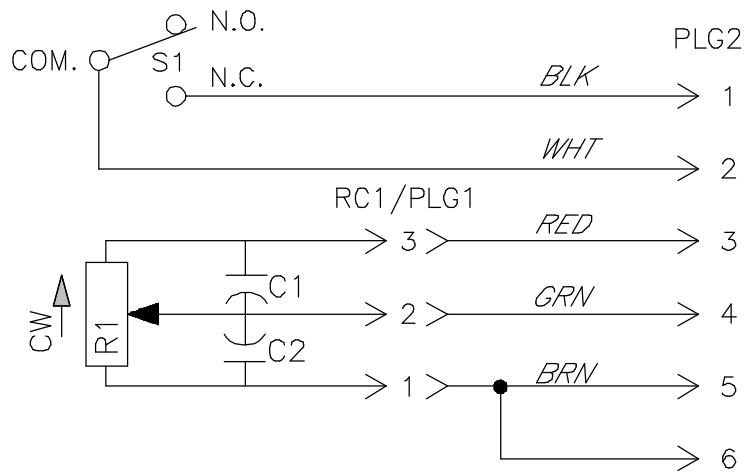
SECTION 2 – ELECTRICAL DIAGRAMS

	WARNING <ul style="list-style-type: none"> Do not touch live electrical parts. Disconnect input power or stop engine before servicing. Do not operate with covers removed. Have only qualified persons install, use, or service this unit.
	ELECTRIC SHOCK HAZARD



183 957-B

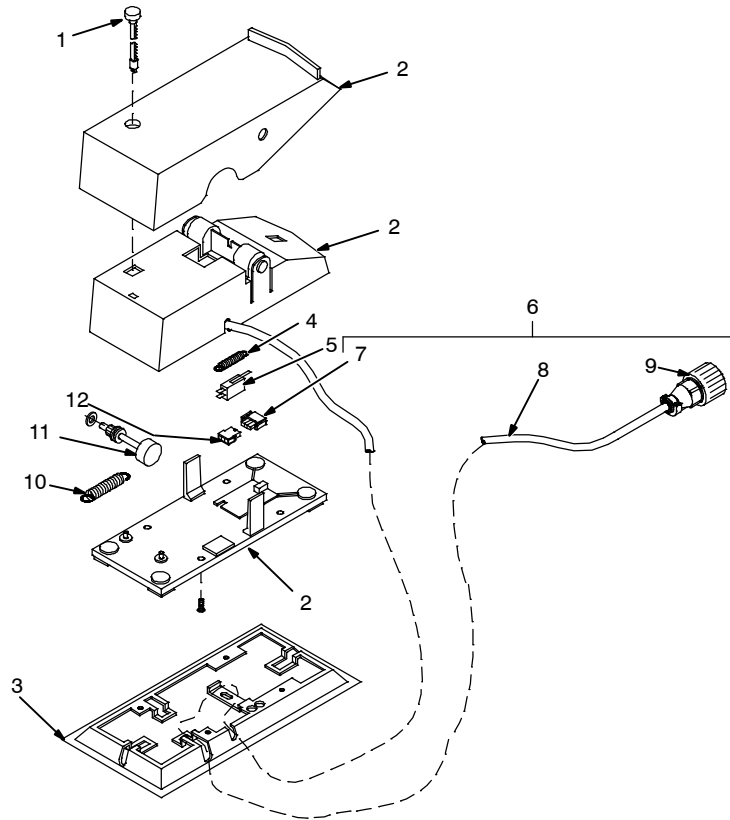
Circuit Diagram For RFCS-5, RFCS-5HD, RFCS-14, And RFCS-14HD Models



Circuit Diagram For RFCS-6M Models

208 615-B

SECTION 3 – PARTS LIST



801 735-B

Item No.	Dia. Mkgs.	Part No.	Description	Quantity				
				5	5HD	6M	14	14HD
1		182 030	Belt	1	1	1	1	1
2		185 929	Pedal / housing / bottom	1	1	1	1	1
3		198 036	Bottom Plate		1			1
4		182 627	Spring	1	1	1	1	1
5	S1	183 629	Switch, limit 10A 125/250V	1	1	1	1	1
6		271019	Cable, Control (Includes)	1				
6		271022	Cable, Control (Includes)		1			
6		271021	Cable, Control (Includes)			1		
6		271023	Cable Control (Includes)			1		
6		271018	Cable Control (Includes)				1	
6		271020	Cable Control (Includes)					1
7	PGL1	131 204	Connector & Sockets	1	1	1	1	1
8		175 284	Cable	21Ft				21Ft
8		199 410	Cable		21Ft			21Ft
		199 409	Strain Relief		1			1
8		208620	Cable 13'-3"			1		
8		219944	Cable 20'			1		
9	PLG2	039 273	Connector & Sockets	1	1			
		039 685	Connector, clamp str	1	1			
9	PLG2	144 310	Connector & Sockets				1	1
		143 922	Connector, clamp str				1	1
10		182 626	Spring	1	1	1	1	1
11	R1	264050	Potentiometer, w/Leads	1	1	1	1	1
12	RC1	131 203	Connector & Sockets	1	1	1	1	1

To maintain the factory original performance of your equipment, use only Manufacturer's Suggested Replacement Parts. Model and serial number required when ordering parts from your local distributor.

TRUE BLUE[®]

WARRANTY

Effective January 1, 2015

(Equipment with a serial number preface of MF or newer)

This limited warranty supersedes all previous Miller warranties and is exclusive with no other guarantees or warranties expressed or implied.

Warranty Questions?

Call
1-800-4-A-MILLER
for your local
Miller distributor.

Your distributor also gives
you ...

Service

You always get the fast,
reliable response you
need. Most replacement
parts can be in your
hands in 24 hours.

Support

Need fast answers to the
tough welding questions?
Contact your distributor.
The expertise of the
distributor and Miller is
there to help you, every
step of the way.

LIMITED WARRANTY – Subject to the terms and conditions below, Miller Electric Mfg. Co., Appleton, Wisconsin, warrants to its original retail purchaser that new Miller equipment sold after the effective date of this limited warranty is free of defects in material and workmanship at the time it is shipped by Miller. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

Within the warranty periods listed below, Miller will repair or replace any warranted parts or components that fail due to such defects in material or workmanship. Miller must be notified in writing within thirty (30) days of such defect or failure, at which time Miller will provide instructions on the warranty claim procedures to be followed. If notification is submitted as an online warranty claim, the claim must include a detailed description of the fault and the troubleshooting steps taken to identify failed components and the cause of their failure.

Miller shall honor warranty claims on warranted equipment listed below in the event of such a failure within the warranty time periods. All warranty time periods start on the delivery date of the equipment to the original end-user purchaser, and not to exceed twelve months after the equipment is shipped to a North American distributor or eighteen months after the equipment is shipped to an International distributor.

1. 5 Years Parts — 3 Years Labor
 - * Original Main Power Rectifiers Only to Include SCRs, Diodes, and Discrete Rectifier Modules
2. 3 Years — Parts and Labor
 - * Auto-Darkening Helmet Lenses (Except Classic Series) (No Labor)
 - * Engine Driven Welder/Generators
(NOTE: Engines are Warranted Separately by the Engine Manufacturer.)
 - * Inverter Power Sources (Unless Otherwise Stated)
 - * Plasma Arc Cutting Power Sources
 - * Process Controllers
 - * Semi-Automatic and Automatic Wire Feeders
 - * Transformer/Rectifier Power Sources
3. 2 Years — Parts and Labor
 - * Auto-Darkening Helmet Lenses – Classic Series Only (No Labor)
 - * Fume Extractors – Capture 5, Filtair 400 and Industrial Collector Series
4. 1 Year — Parts and Labor Unless Specified
 - * Automatic Motion Devices
 - * CoolBelt and CoolBand Blower Unit (No Labor)
 - * Desiccant Air Dryer System
 - * External Monitoring Equipment and Sensors
 - * Field Options
(NOTE: Field options are covered for the remaining warranty period of the product they are installed in, or for a minimum of one year — whichever is greater.)
 - * RFCS Foot Controls (Except RFCS-RJ45)
 - * Fume Extractors – Filtair 130, MWX and SWX Series HF Units
 - * ICE/XT Plasma Cutting Torches (No Labor)
 - * Induction Heating Power Sources, Coolers
(NOTE: Digital Recorders are Warranted Separately by the Manufacturer.)
 - * LiveArc Welding Performance Management System
 - * Load Banks
 - * Motor-Driven Guns (except Spoolmate Spoolguns)
 - * PAPR Blower Unit (No Labor)
 - * Positioners and Controllers
 - * Racks
 - * Running Gear/Trailers
 - * Spot Welders
 - * Subarc Wire Drive Assemblies
 - * Water Coolant Systems
 - * TIG Torches (No Labor)
 - * Wireless Remote Foot/Hand Controls and Receivers
 - * Work Stations/Weld Tables (No Labor)

5. 6 Months — Parts
 - * Batteries
 - * Bernard Guns (No Labor)
 - * Tregaskiss Guns (No Labor)
6. 90 Days — Parts
 - * Accessory (Kits)
 - * Canvas Covers
 - * Induction Heating Coils and Blankets, Cables, and Non-Electronic Controls
 - * M-Guns
 - * MIG Guns and Subarc (SAW) Torches
 - * Remote Controls and RFCS-RJ45
 - * Replacement Parts (No labor)
 - * Roughneck Guns
 - * Spoolmate Spoolguns

Miller's True Blue[®] Limited Warranty shall not apply to:

1. **Consumable components; such as contact tips, cutting nozzles, contactors, brushes, relays, work station table tops and welding curtains, or parts that fail due to normal wear. (Exception: brushes and relays are covered on all engine-driven products.)**
2. Items furnished by Miller, but manufactured by others, such as engines or trade accessories. These items are covered by the manufacturer's warranty, if any.
3. Equipment that has been modified by any party other than Miller, or equipment that has been improperly installed, improperly operated or misused based upon industry standards, or equipment which has not had reasonable and necessary maintenance, or equipment which has been used for operation outside of the specifications for the equipment.

MILLER PRODUCTS ARE INTENDED FOR PURCHASE AND USE BY COMMERCIAL/INDUSTRIAL USERS AND PERSONS TRAINED AND EXPERIENCED IN THE USE AND MAINTENANCE OF WELDING EQUIPMENT.

In the event of a warranty claim covered by this warranty, the exclusive remedies shall be, at Miller's option: (1) repair; or (2) replacement; or, where authorized in writing by Miller in appropriate cases, (3) the reasonable cost of repair or replacement at an authorized Miller service station; or (4) payment of or credit for the purchase price (less reasonable depreciation based upon actual use) upon return of the goods at customer's risk and expense. Miller's option of repair or replacement will be F.O.B., Factory at Appleton, Wisconsin, or F.O.B. at a Miller authorized service facility as determined by Miller. Therefore no compensation or reimbursement for transportation costs of any kind will be allowed. TO THE EXTENT PERMITTED BY LAW, THE REMEDIES PROVIDED HEREIN ARE THE SOLE AND EXCLUSIVE REMEDIES. IN NO EVENT SHALL MILLER BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOSS OF PROFIT), WHETHER BASED ON CONTRACT, TORT OR ANY OTHER LEGAL THEORY.

ANY EXPRESS WARRANTY NOT PROVIDED HEREIN AND ANY IMPLIED WARRANTY, GUARANTY OR REPRESENTATION AS TO PERFORMANCE, AND ANY REMEDY FOR BREACH OF CONTRACT TORT OR ANY OTHER LEGAL THEORY WHICH, BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION, OPERATION OF LAW, CUSTOM OF TRADE OR COURSE OF DEALING, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE, WITH RESPECT TO ANY AND ALL EQUIPMENT FURNISHED BY MILLER IS EXCLUDED AND DISCLAIMED BY MILLER.

Some states in the U.S.A. do not allow limitations of how long an implied warranty lasts, or the exclusion of incidental, indirect, special or consequential damages, so the above limitation or exclusion may not apply to you. This warranty provides specific legal rights, and other rights may be available, but may vary from state to state.

In Canada, legislation in some provinces provides for certain additional warranties or remedies other than as stated herein, and to the extent that they may not be waived, the limitations and exclusions set out above may not apply. This Limited Warranty provides specific legal rights, and other rights may be available, but may vary from province to province.





Owner's Record

Please complete and retain with your personal records.

Model Name

Serial/Style Number

Purchase Date

(Date which equipment was delivered to original customer.)

Distributor

Address

City

State

Zip



For Service

Contact a DISTRIBUTOR or SERVICE AGENCY near you.

Always provide Model Name and Serial/Style Number.

Contact your Distributor for:

Welding Supplies and Consumables

Options and Accessories

Personal Safety Equipment

Service and Repair

Replacement Parts

Training (Schools, Videos, Books)

Technical Manuals (Servicing Information and Parts)

Circuit Diagrams

Welding Process Handbooks

To locate a Distributor or Service Agency visit www.millerwelds.com or call 1-800-4-A-Miller

Contact the Delivering Carrier to:

File a claim for loss or damage during shipment.

For assistance in filing or settling claims, contact your distributor and/or equipment manufacturer's Transportation Department.

Miller Electric Mfg. Co.

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1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters—USA

USA Phone: 920-735-4505 Auto-Attended
USA & Canada FAX: 920-735-4134
International FAX: 920-735-4125

For International Locations Visit
www.MillerWelds.com

