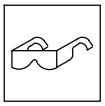
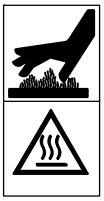
	**DANGER!** – Indicates a hazardous situation which, if not avoided, will result in death or serious injury. The possible hazards are shown in the adjoining symbols or explained in the text. **DANGER** ! - Indique une situation dangereuse qui, si elle n'est pas évitée, entraînera la mort ou des blessures graves. Les éventuels risques sont représentés par les symboles joints ou expliqués dans le texte. Fsafe1 2013-10		Wear safety glasses with side shields. Porter des lunettes de sécurité avec écrans latéraux. Fsafe8 2013-10
	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. 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. Fsafe2 2013-10		Arc rays can burn eyes and skin – wear a welding helmet with correct filter, and cover exposed skin with nonflammable clothing. 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. Fsafe11 2013-10
NOTICE ***NOTE*** ☞	*Indicates statements not related to personal injury.* *Signale des consignes non associées aux dommages corporels.* *Indicates special instructions.* *Fournit des instructions spéciales.* Fsafe3 2013-10		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. 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. Fsafe9 2013-10
	Beware of electric shock from welding electrode or wiring. Touching the electrode while in contact with the work or ground can cause electric shock. Always wear dry gloves. Keep all panels and covers closed. Attention au risque d'électrocution due au contact avec l'électrode de soudage ou les fils. Le fait de toucher l'électrode tout en étant en contact avec la pièce ou la terre peut provoquer une électrocution. Toujours porter des gants secs. Tous les panneaux et couvercles doivent rester fermés. Fsafe5 2013-10		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. 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. Fsafe10 2013-10
	Electric and magnetic fields (EMF) from high current can affect Implanted Medical Devices. Wearers of Pacemakers and other Implanted Medical Devices should consult their doctor and the device manufacturer before going near arc welding, spot welding, gouging, plasma arc cutting, or induction heating operations. Les CHAMPS ÉLECTROMAGNÉTIQUES (CEM) peuvent affecter les implants médicaux. Les porteurs de stimulateurs cardiaques ou d'autres appareils médicaux implantés doivent consulter leur médecin et le fabricant de l'appareil avant d'approcher d'un arc de soudage, d'un soudage par point, d'un gougeage, d'un découpage au plasma ou d'un chauffage par induction. Fsafe12 2013-10		Have only trained and qualified persons install, operate, or service this unit. Read the safety information at the beginning of these instructions and in each section. Call your distributor if you do not understand the directions. For WELDING SAFETY and EMF information, read owner's manual(s). Ne confiez l'installation, l'exploitation ou l'entretien de cet appareil qu'à des personnes compétentes et qualifiées. Lire les directives de sécurité au début de ces instructions et dans chaque section. Appeler votre distributeur si vous ne comprenez pas les directives. Lire le(s) manuel(s) d'utilisateur pour des renseignements sur la SÉCURITÉ DE SOUDAGE et les champs électromagnétiques. Fsafe15 2013-10



Hot parts can burn. Allow cooling period before working on equipment. Do not touch hot parts bare handed. To handle hot parts, use proper tools and/or wear heavy, insulated welding gloves and clothing to prevent burns.

Les pièces chaudes peuvent provoquer des brûlures. Prévoir une période de refroidissement avant de travailler à l'équipement. Ne pas toucher à mains nues les parties chaudes. Ne pas toucher aux pièces chaudes, utiliser les outils recommandés et porter des gants de soudage et des vêtements épais pour éviter les brûlures.

Fsafe13 2013-10

Drive rolls can injure – keep away from pinch points and moving parts on wire feeder.

Les galets d'entraînement peuvent blesser – s'éloigner des points de pincement et des parties mobiles du dévidoir.

Wiresafe2 2013-10

CALIFORNIA PROPOSITION 65 WARNINGS

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.)

This product contains chemicals, including lead, known to the state of California to cause cancer, birth defects, or other reproductive harm. *Wash hands after use.*

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)

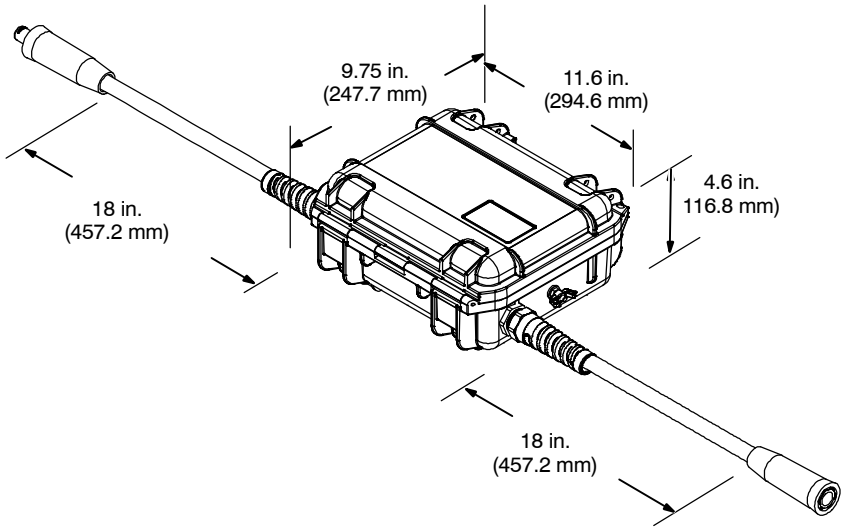
Ce produit contient des produits chimiques, notamment du plomb, dont l'État de Californie reconnaît qu'ils provoquent des cancers, des malformations congénitales ou d'autres problèmes de procréation. Se laver les mains après utilisation.

Fsafe4 2013-10

1. Dimensions And Weight

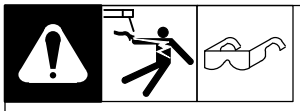
Remote

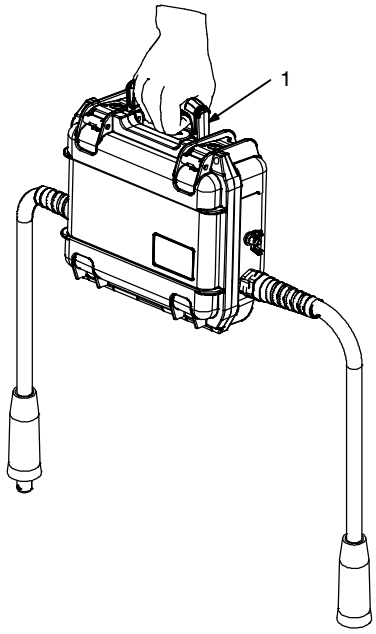
9.08 lb (4.12 kg)



Ref. 255 429-B

2. Proper Method To Carry Remote





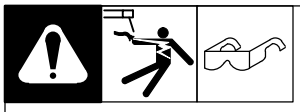
Turn off welding power source and disconnect input power before making any input or output weld cable connections.

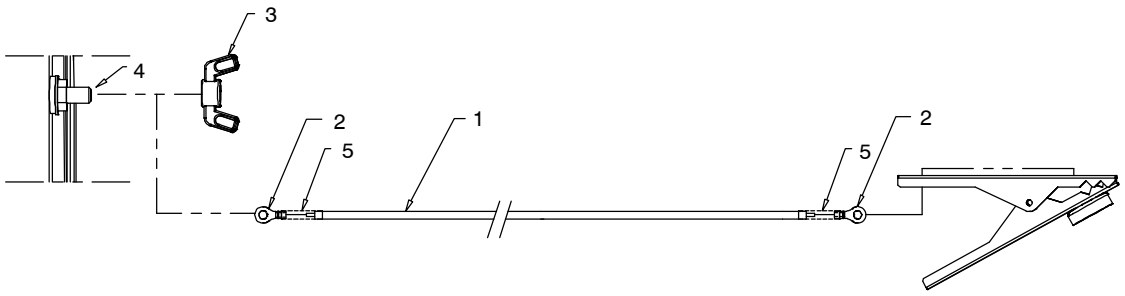
1 Handle

Carry Remote only by using the handle.

255 409-B

3. Connecting Work Sense Lead To Remote





255 450-A

☞ *The work sense lead is required for operation of the FieldPro Remote.*

1 Lead

2 Ring Terminal 1/2 in.

If using a ring terminal, slide terminal onto post on the remote.

3 Wing Nut

Once terminal or wire is on post, tighten wing nut.

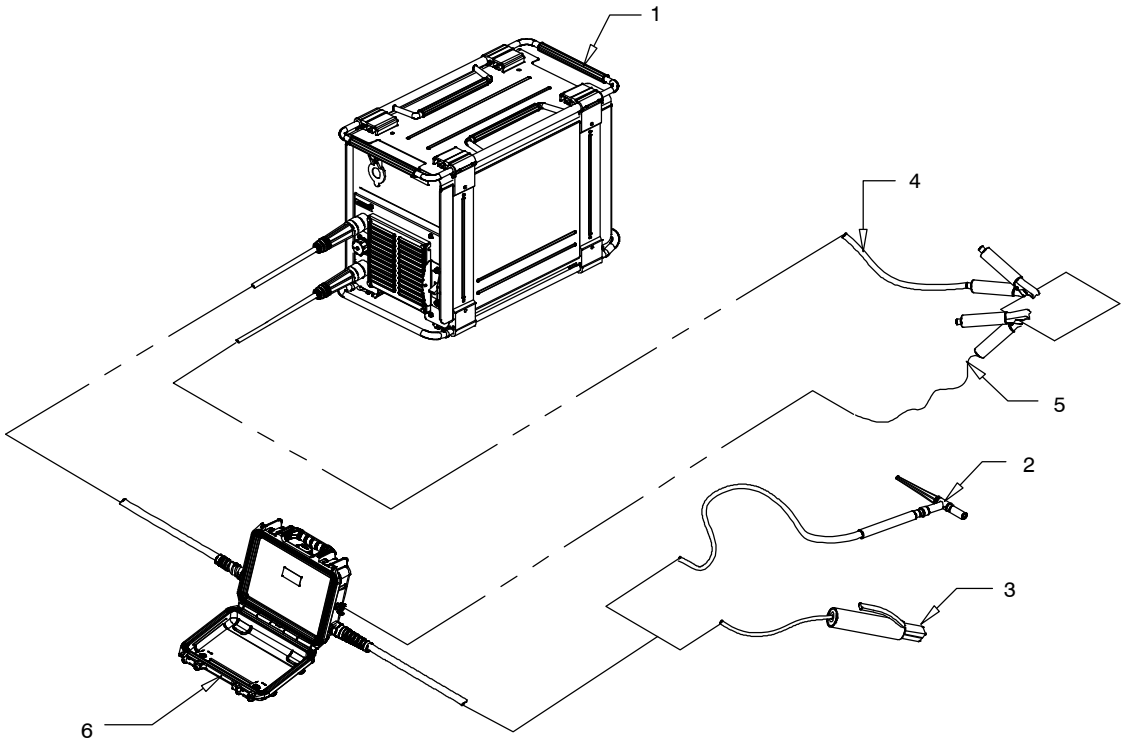
4 Binding Post

5 Electrical Tape Or Heat Shrink Tubing

If ring terminal is cut or broken, the bare wire can be looped around the post and tightened under the wing nut.

4. Connecting To Power Source

FieldPro Remote Connection



255 420-B

☞ *The FieldPro Remote can only be used with FieldPro power sources. See welding power source Owner's Manual for additional information on safety, installation, operation, and troubleshooting.*

1 Power Source

2 TIG Torch (Shielding Gas Not Shown)

3 Electrode Holder

4 Work Cable

Connect work cable to WORK (bottom) output receptacle on the front of the welding power source. Attach work cable clamp as close to the arc as possible.

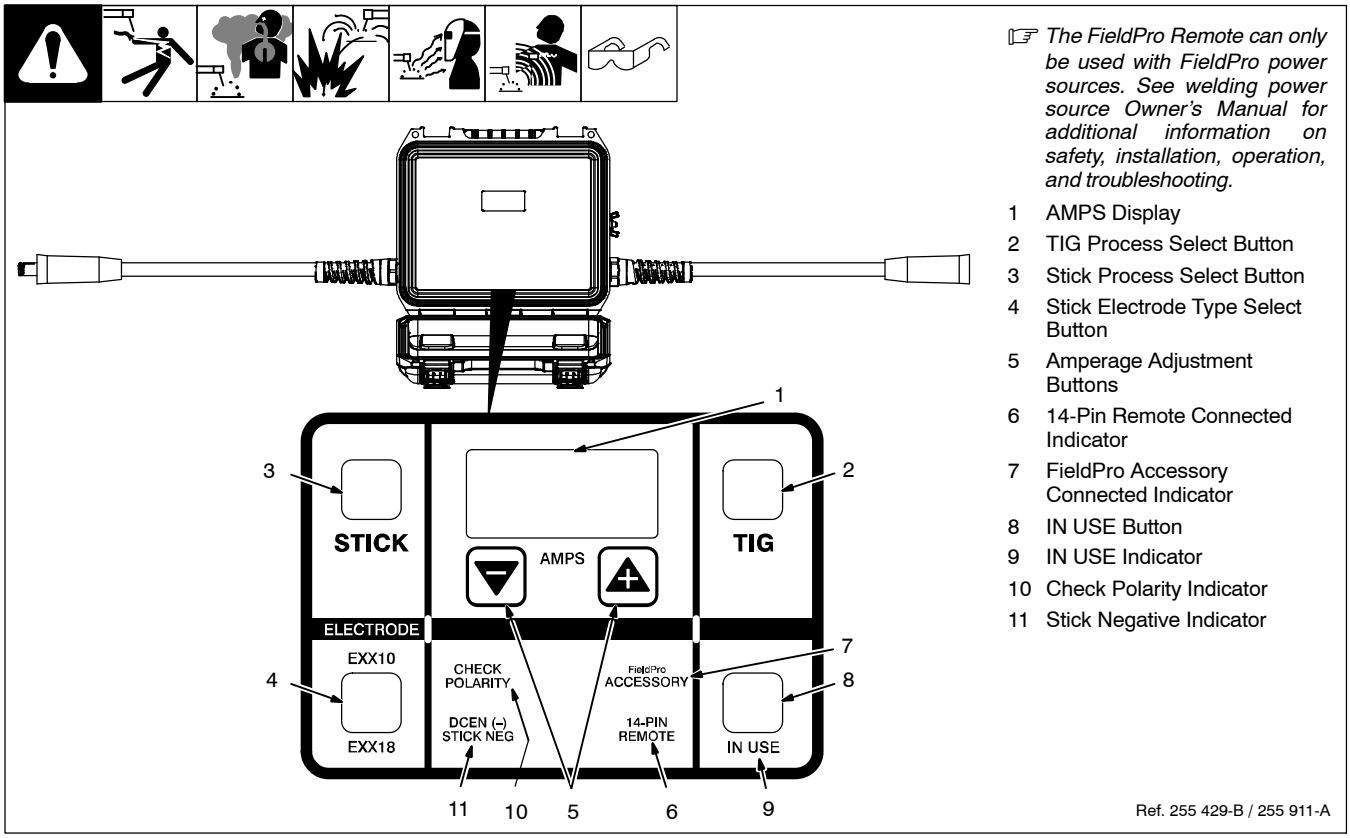
5 Work Sense Lead

Attach work sense lead clamp next to the work cable clamp. Connect the other end of the work sense lead to the binding post on the side of the FieldPro Remote.

6 FieldPro Remote

Connect one end of the weld cable to ELECTRODE (top) output receptacle on the front of the power source and the other end to the FieldPro Remote. Connect the TIG torch or electrode holder to the other side of the FieldPro Remote.

5. Remote Interface Controls



☞ *The FieldPro Remote can only be used with FieldPro power sources. See welding power source Owner's Manual for additional information on safety, installation, operation, and troubleshooting.*

1 AMPS Display
2 TIG Process Select Button
3 Stick Process Select Button
4 Stick Electrode Type Select Button
5 Amperage Adjustment Buttons
6 14-Pin Remote Connected Indicator
7 FieldPro Accessory Connected Indicator
8 IN USE Button
9 IN USE Indicator
10 Check Polarity Indicator
11 Stick Negative Indicator

Ref. 255 429-B / 255 911-A

6. Remote Interface Operation Description

AMPS Display — This display illuminates and shows amperage for either TIG or stick welding process. Measured amperage just prior to the end of a welding operation will appear on the display for ten seconds after welding operation.

TIG Process Select Button — Press and release this button to activate the TIG welding process controls. The TIG text below the button illuminates. Adjust the amperage to the appropriate setting within a range from 10 to 350 amps. If the TIG process has been selected and a remote current/contactor control is connected, holding the TIG process select button for more than two seconds will display the effective amperage command (based on the amperage setting and the remote current/contactor control setting).

Stick Process Select Button — Press and release this button to activate the stick welding process controls. The STICK text below the button illuminates as well as the active stick electrode type text. Select the desired stick electrode type and adjust the amperage to the appropriate setting within a range from 40 to 350 amps.

Stick Electrode Type Select Button — Press and release button to select the desired stick electrode type (EXX10 or EXX18). The text above or below the button will illuminate for the active electrode type. This button is only active with the stick welding process and only then will text for the electrode type illuminate.

☞ *There may be a "clunk" sound from the power source when switching between Stick and TIG processes. This is part of normal power source operation.*

Adjustable DIG and Hotstart — Press and hold the STICK button for a few seconds to enter adjustable DIG. The right decimal point will illuminate on the display to indicate DIG. Once in adjustable DIG, press and release the STICK button again to enter adjustable Hotstart. The middle decimal point will illuminate on the display to indicate Hotstart. Pressing and releasing the STICK button a third time will exit the menu. The menu will automatically exit after 10 seconds of inactivity. Pressing and releasing any button other than the STICK button while in the menu will also exit the menu.

Amperage Adjustment Buttons — Use these buttons to set the desired amperage setting for either TIG or stick welding process.

14-Pin Remote Connected Indicator — The 14-PIN REMOTE text will illuminate when there is a 14-pin accessory connected to the Remote 14 receptacle on the power source.

FieldPro ACCESSORY Connected Indicator — The FieldPro ACCESSORY text will illuminate when there is a FieldPro accessory connected to and properly communicating with the power source.

IN USE Button — Press and release this button on the power source or FieldPro Remote to illuminate the IN USE text. Press and release again to turn IN USE text off. This lets others know that the machine is being used.

IN USE Indicator — Light automatically turns on when arc is struck. Toggle light using the IN USE button during use. Light will automatically turn off after four hours of inactivity.

CHECK POLARITY Indicator — The CHECK POLARITY text will illuminate along with an error message (Err) if the work and electrode leads are reversed. This will light only if a FieldPro accessory is connected. Power down and correct the connections (see Section 4 for proper connections).

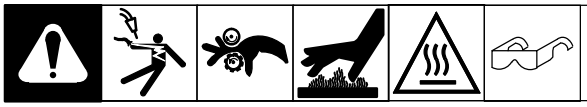
STICK NEGATIVE Indicator — The DCEN (–) STICK NEG text will illuminate if the polarity is negative while in STICK mode. To activate DCEN mode, press the STICK button and down arrow at the same time. Press the STICK button to exit this mode. The DCEN mode can be used for EXX10 and/or EXX18 process setting. The mode has to be set for each electrode process individually.

NOTICE *– Controls on the FieldPro Remote are NOT adjustable during welding. To make adjustments during welding, use the power source controls. Adjustments can be made if using the RHC-14 remote or wireless remote.*

Table 6-1. Recommended Process Selections vs Electrode Type

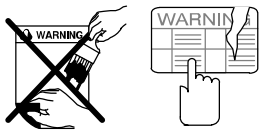
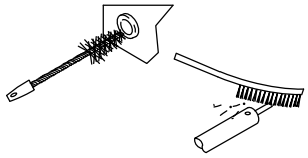
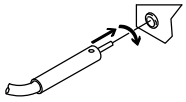
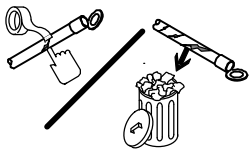
Electrode Type	Suggested Process Setting
EXXX1	EXX10
EXXX2	EXX10
EXXX3	EXX18
EXXX4	EXX18
EXXX5	EXX18
EXXX6	EXX18
EXXX7	EXX18
EXXX8	EXX18
Stainless	EXX18

7. Routine Maintenance



Disconnect power before maintaining.

✓ = Check ◔ = Clean ☆ = Replace

Every 3 Months	 ☆ Unreadable Labels	 ◔ Weld Connections	 ✓ Tighten Weld Connections	 ✓☆ Weld Cables And Cords

8. Remote Diagnostics Help Codes

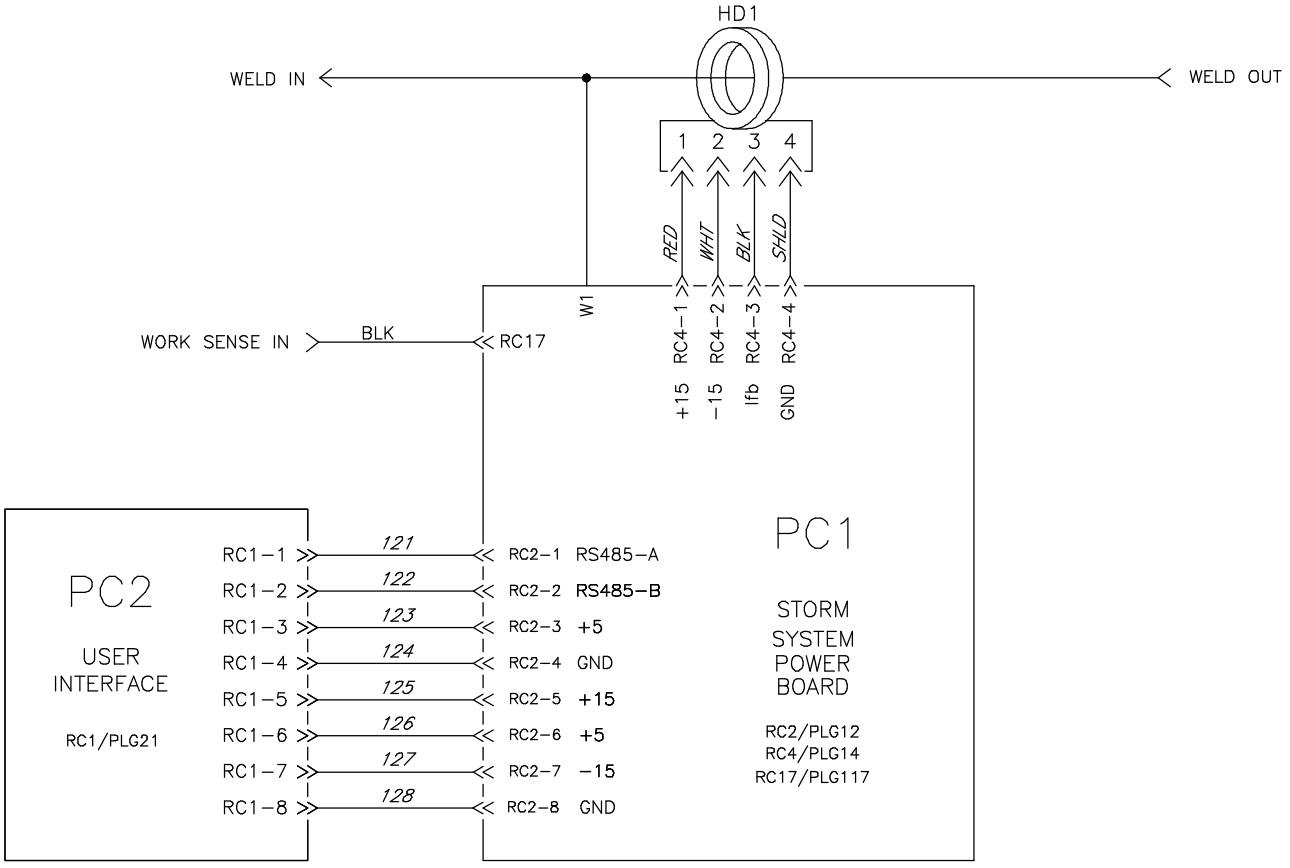
Display Example

Display Code	Fault	Description
H01	Primary Transformer Over Current	Indicates a malfunction in the primary power circuit. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H02	Secondary Thermistor Malfunction	Indicates the left side thermal protection circuitry is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H03	Secondary Circuit Over Temperature	Indicates left side of unit has overheated. Unit has shutdown to allow fans to lower left side temperature. Operation will continue after unit is within normal temperature range.
H04	Primary Temperature Sensor Malfunction	Indicates the right side thermal protection circuitry is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H05	Primary Circuit Over Temperature	Indicates right side of unit has overheated. Unit has shutdown to allow fans to lower right side temperature. Operation will continue after unit is within normal temperature range.

Display Code	Fault	Description
H06	Current Foldback	Indicates operation at maximum input current. The unit has maximum allowable input current limit. As the line voltage decreases, the required input current increases. If the line voltage is too low, the output power is limited by the input current. When this limit is reached, the unit automatically reduces output power to continue operation. If this display is shown, have a qualified electrician check the input voltage.
H08	Output Over Voltage Malfunction	Indicates secondary power circuit is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H12	Precharge Incomplete	Indicates the power on precharge cycle did not complete. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H13	Internal Voltage Malfunction	System cannot measure output voltage. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H16	PC2 Temperature Sensor Malfunction	Indicates thermal protection circuitry on the Process Control board is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H17	PC2 Over Temperature	Indicates PC2 has overheated. Unit has shutdown to allow fans to lower temperature. Operation will continue after unit is within normal temperature range.
H18	PC3 Temperature Sensor Malfunction	Indicates thermal protection circuitry on the System Power board is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H19	PC3 Over Temperature	Indicates PC3 has overheated. Unit has shutdown to allow fans to lower temperature. Operation will continue after unit is within normal temperature range.
H20	PC2 Power Supply Low	Indicates the control supply on PC2 is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H21	Primary Input Line Voltage Malfunction	Indicates input primary line voltage is too low or power source is incorrectly linked. Increase primary line voltage to at least 90% of specified nominal voltage.
H22	Boost Fault	Indicates the boost circuitry on the right side of unit is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H26	Button Stuck On Power Source	Indicates button is stuck on the power source upon start up. Fault will clear when button is released.
H27	Polarity Switch Fault	Indicates the relay circuitry (W1, W2) is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H30	Stuck Contactor TIG/Stick	Indicates a stuck remote contactor in either Stick or TIG process. Fault will clear when foot pedal or control device contactor is released.
H32	Accessory Temperature Sensor Malfunction	Indicates the thermistor in the attached FieldPro accessory is malfunctioning. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H33	Accessory Over Temperature	Indicates the attached FieldPro accessory has overheated. After arc goes out, the power source will not allow a new arc to be struck until the accessory has cooled down. Operation will continue after the accessory is within normal temperature range.
H96	PC7 Communication Malfunction	Indicates internal communication malfunction to PC7. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H97	PC1 Communication Malfunction	Indicates internal communication from primary power circuitry to secondary power circuitry on PC1. If this code appears on the display, contact the nearest Factory Authorized Service Agent.
H98	Serial Communication Loss	Indicates serial communication was initially made and is now malfunctioning. Check wire feeder/power source control cable connection and tighten if necessary. May appear normally during firmware updates. If this code continues to appear on the display, contact the nearest Factory Authorized Service Agent.
H99	Serial Communication Malfunction	Indicates serial communication is malfunctioning. Check wire feeder/power source control cable connection and tighten if necessary. May appear normally during firmware updates. If this code continues to appear on the display, contact the nearest Factory Authorized Service Agent.

9. Circuit Diagram

⚠ WARNING	• 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	



255 132-B

10. Parts List

☞ *Hardware is common and not available unless listed.*

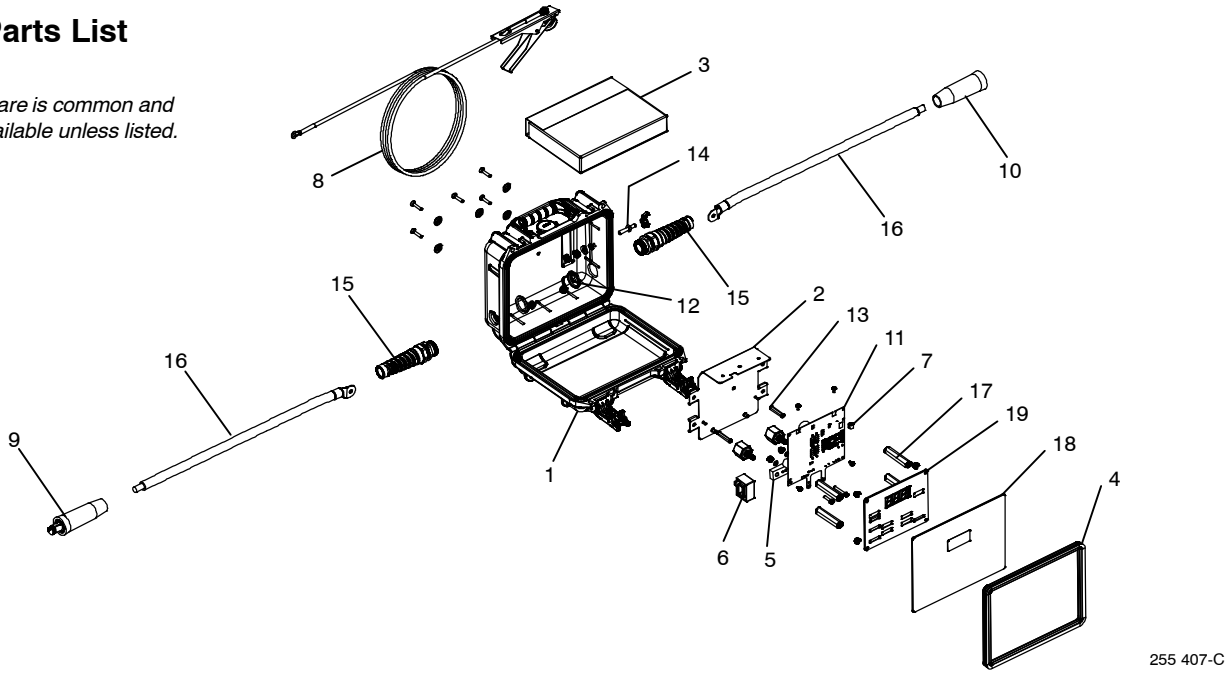


Figure 10-1. Remote Parts Assembly

Item No.	Dia. Mkgs.	Part No.	Description	Quantity Model 300934	Quantity Model 300934001
Figure 10-1. Remote Parts Assembly					
1		+253680	Case, Molded (Including)	1	1
2		253723	Base, Remote	1	1
3		253372	Pouch, Nylon 1000 Denier W/Velcro	1	1
4		253671	Gasket, Remote	1	1
5		253666	Bus Bar, LEM	1	1
6	HD1	191941	Transducer, Current 200A Module Supply V+/– 15V	1	1
7		255046	Insert, Nyl	2	2
8		255045	Cable, Volt Sense 15 ft w/Clamp & Term	1	1
9		242239	Conn, Tw Lk Insul Male(Dinse Type)1/0-2/0 Blk		1
8		191981	Conn, Tw Lk Insul Male (Tweco/Lenco Type) 1/0–2/0 Blk	1	
10		242240	Conn, Tw Lk Insul Fem (Dinse Type) 1/0-2/0 Blk		1
9		218677	Conn, Tw Lk Insul Fem (Tweco/Lenco Thpe) 1/0–2/0 Blk	1	
11	PC1	255721	Circuit Card Assy	1	1
12		214860	Nut, Ln Pg21 1.26hex .14h Nickel Plated Brass	2	2
13		254969	Stand–Off, No 6–32 x 1.375 Lg .250 Hex Al Fem	2	2
14		254883	Stud, Brass	1	1
		255326	Label, PipeWorx 350 Field Remote	1	1
		214521	Label, Warning Turn Off Power Before Opening	1	1
		255253	Label, Warning Disconnect Input Power Before Servicing	1	1
	PLG12, PLG21,PLG14	255063	Housing Plug + Skts, (Service Kit)	3	3
15		121276	Bushing, Strain Relief .450/.709 ID x 1.115 Mtg Hol	2	2
16		254257	Lead List, Large	2	2
17		258463	Spacer, Nylon 010-32 x 2.500 x .500 Hex	4	4
18		256973	Nameplate/Switch Membrane, Front Pnl Pwxfld Rmt	1	1
19		252115	Circuit Card Assy, Front Panel Pwxfld Ps/Rmt W/Pgm	1	1
		255133	Plugs, w/Leads (User Interface)	1	1
		255145	Cable, LEM Pipeworx 350 Field Remote	1	1
		255326	Label, Nameplate Pipeworx 350 Field Remote	1	1
		255259	Label, Notice Only Fieldpro Compatible	1	1
		258410	Card, Quick Reference Guide	1	1

+When ordering a component originally displaying a precautionary label, the label should also be ordered.
BE SURE TO PROVIDE MODEL AND SERIAL NUMBER WHEN ORDERING REPLACEMENT PARTS.