

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 2.0!	"FRQLEr"	Main_Frequency_Lo_Error	Power Supply frequency is too low	Freq Min

Meaning: Processor cannot function due to the electrical frequency being supplied from the power supply is outside of the acceptable range on the low side.

Trouble Shooting Recommendation: Check the frequency of the current coming from the power supply to the processor is within the processors operating range while under a load. Output frequency should be 60Hz +/- 10Hz. <u>This can be done on IntegriFuse processors</u>.

Solution: Change Power Supply. Make sure generators are calibrated annually.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 2.1!	"FRQHEr"	Main_Frequency_Hi_Error	Power supply frequency is too high	Freq Max

Meaning: Processor cannot function due to the electrical frequency being supplied from the power supply is outside of the acceptable range on the high side.

Trouble Shooting Recommendation: Check the frequency of the current coming from the power supply to the processor is within the processors operating range while under a load. Output frequency should be 60Hz +/- 10Hz. *This can be done on IntegriFuse processors.* Solution: Change Power Supply. <u>Make sure generators are calibrated annually.</u>

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 3.0!	"FREQEr"	N0_Frequency	Power supply frequency is irregular or has failed.	Freq Min & Freq Max

Meaning: Processor cannot function due to irregularities or a failure in the power supply's electrical frequency.

Trouble Shooting Recommendation: Check the frequency of the current coming from the power supply to the processor is within the processors operating range while under a load. Output frequency should be 60Hz +/- 10Hz. *This can be done on IntegriFuse processors*.

Solution: Change Power Supply. Make sure generators are calibrated annually.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 4	"LinLErr"	N0_Voltage_IN	Power supply input voltage does not exist.	VLine Min

Meaning: Processor cannot function because the voltage being supplied to the processor does not exist.

Trouble Shooting Recommendation: Check the Voltage output on the power supply with a multi-meter or the Processor's meter function to make sure the power being supplied meets the Processors voltage input requirements. Check the breakers or relays and make sure they are all on and in in the correct position. Make sure that an adapter or pigtail is not being used to connect the processor to the power supply. Check the Processors power cord and make sure that plug has not been modified in any way. If an extension cord is being used, make sure it is not damaged in any way and that it is the recommended length and has the recommended wire gauge. Solution: Change Power Supply

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 4.0!	"LinLEr"	Main_Voltage_Lo_Error	Power supply input voltage is too low.	VLine Min

Meaning: Processor cannot function because the voltage being supplied to the processor is outside of the required range on the low side.

Trouble Shooting Recommendation: Check the Voltage output on the power supply with a multi-meter or the Processor's meter function to make sure the power being supplied meets the Processors voltage input requirements. Some generators have outlets that supply both 120v and 240v through the same outlet. Check the breakers or relays for those outlets and make sure they are all in the correct position. Make sure that an adapter or pigtail is not being used to connect to the processor. Check the Processors power cord and make sure that plug has not been modified in any way. If an extension cord is being used, make sure it is the recommended length and has the recommended wire gauge.

Solution: Change Power Supply

Code	Fusion Report Message	Code Indication	Cause	Download Report Column	
ERROR 4.1!	"LinHEr"	Main_Voltage_Hi_Error	Power supply input voltage is too high.	VLine Max	
Manning: Processor compating herein because the veltage being cumplied to the processor is outside of the required range on the high side					

Meaning: Processor cannot function because the voltage being supplied to the processor is outside of the required range on the high side.

Trouble Shooting Recommendation: Check the Voltage output on the power supply with a multi-meter or the Processor's meter function. Some generators have outlets that allow you to supply both 120v and 240v through the same outlet. Check the breakers or relays for those outlets and make sure they are all in the correct position. Make sure the power supply is NOT a dual purpose generator.

Solution: Change Power Source

Code	Fusion Report Message	Code Indication	Cause	Download Report Column	
ERROR 20!	"HTAErr"	High_Temp_Error	Ambient temperature is too high	Temperature	
Meaning: Ambient temperature is out of range and Processor cannot function because the outside (ambient) temperature is too high					

Meaning: Ambient temperature is out of range and Processor cannot function because the outside (ambient) temperature is too high

Trouble Shooting Recommendation: If the outside temperature is over 115 degrees F the processor will not be able to function without taking steps to reduce the temperature in the fusion area.

Solution: Protect the work site where the fusion is taking place with a tent in order to get to a suitable ambient temperature.

Rev. 072022-A



Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 21!	"LTAErr"	Low_Temp_Error	Ambient temperature is too low	Temperature

Meaning: Ambient temperature is out of range and Processor cannot function because the outside (ambient) temperature is too low.

Trouble Shooting Recommendation: If the outside temperature is below -10 degrees F the processor will not be able to function without taking steps to increase the temperature in the fusion area.

#### Solution: Use of a tent, heaters and/or heating blankets may be required to get to a suitable ambient temperature.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 23!	"THTErr"	Transfo_Temp_Error	Transformer temperature is too high	

Meaning: The internal temperature of the processor is too high.

Trouble Shooting Recommendation: Temperature of the processor's transformer is too high and internal protection disables the device. Solution: Shade the processor and leave the processor on and allow the fan to dissipate the heat.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 24!	"ChsHTE"	CHSS_Temp_High	Frame temperature is too high	

Meaning: The temperature of the processor chassis is too high.

Trouble Shooting Recommendation: Typically due to heavy use of the control unit. Poorly ventilated work environment. Solution: Turn processor off and wait until the frame chassis has cooled down. Placing it in a cooler environment may speed up the process.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 30!	"NLoadE"	Load_Open_Error	Open Circuit in fitting	

Meaning: Indicates an open circuit in the fitting due to compromised contact or a break in the fusion coil. This error can be displayed anytime within the fusion cycle.

Trouble Shooting Recommendation: Make sure the terminal pin connections are tight and secure. Make sure you are using the correct size pin adapters. Check for oxidation, wear, or bad contact. Check for continuity across the fusion coil.

Solution: Check leads to make sure tips are not dirty, are correct size, and there is not oxidation on the tips or terminal pins. Replace the damaged or failed fitting.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 32!	"NLoadE1"	Load_Measure_Error1	Resistance on the fitting is too low	Nominal Resistance & Measured Resistance

Meaning: Indicates the resistance measured across the fusion coil is too low or not within range. Possible sort circuit in fusion coil,

Trouble Shooting Recommendation: Check for continuity across the fusion coil. Make sure the terminal pin connections are tight and secure. Make sure you are using the correct size pin adapters. Check for oxidation, wear, or bad contact.

Solution: If no continuity across the fusion coil, replace the damaged or failed fitting

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 33!	"NLoadE2"	Load_Measure_Error2	Resistance on the fitting is too high	Nominal Resistance & Measured Resistance

Meaning: Indicates the resistance measured across the fusion coil is too high or not within range.

**Trouble Shooting Recommendation:** Can be caused by dirty or compromised contact between the fittings' terminal pins and the processor leads. Can also be caused by increased resistance in the fusion coil in a fusion attempt and the re-fusing is attempted before the coil reaches ambient temperature again. Can also be due to incorrect data in the fittings barcode.

Solution: Check the terminal pin contacts. Allow fitting to cool to ambient temperature if attempting to re-fuse the fitting in either barcode or Manual mode. Replace the fitting if defective.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 34.0!	"loutEr"	Out_Current_Error	Current output is not correct	IMin

Meaning: Indicates the current flow (amperage draw) from the processor to the fitting is not correct.

Trouble Shooting Recommendation: If the lead tips or terminal pin connections are too loose, an arc can be produced which will result in a sudden surge in amperage draw. This can cause create an open circuit in the terminal pin area or in the fusion coil. Check for continuity across the fusion coil. Solution: Check for continuity across the fusion coil. Replace the fitting if defective.



Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 34.1!	"I2SCHE"	Current_SCH_Error	Before the fusion: Current output request is higher than possible	IMax

Meaning: This error will manifest before the fusion attempt due to the fitting calling more current than is possible due to the electronic limitation settings.

Trouble Shooting Recommendation: Visually check the fitting for damage in the terminal pin and/or the fusion coil area that may have caused a short circuit. Damage could have been caused by rough handling, mishandling, improper storage and transportation related issues. Solution: Check for continuity across the fusion coil. Replace the fitting if defective.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 34.2!	"I1SCHE"	Out_SCH_Curr_Error	During the fusion: Current output request is higher than possible	IMax
Maaning, This orr	ar will manifact during the fusion at	ament due to the fitting calling more our	ant than is nassible due to the electronic limits	tion cottings

Meaning: This error will manifest during the fusion attempt due to the fitting calling more current than is possible due to the electronic limitation settings.

Trouble Shooting Recommendation: Visually check the fitting for damage in the terminal pin and/or the fusion coil area that may have caused a short circuit. Damage could have been caused by rough handling, mishandling, improper storage and transportation related issues. Solution: Check for continuity across the fusion coil. Replace the fitting if defective.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 35!	"VoutEr"	V_Out_Error	Possible processor issue	

Meaning: An anomaly found in the processors output voltage due to a possible short circuit, a internal system overload or the power supply fuse being damaged.

#### **Trouble Shooting Recommendation:**

### Solution: Contact Technical Support at 1 -770-632-7530

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 36!	ERROR 36! "LoadE3"	Land Manager Free 2	A difference between measured	
ERROR 30!	LOADES	Load_Measure_Error3	resistance and parameters	

Meaning: Indicates an unacceptable difference between the resistance parameters recorded in the barcode and those measured in the fitting.

**Trouble Shooting Recommendation:** Can be caused by increased resistance in the fusion coil if re-fusing of a fitting is attempted before it reaches ambient temperature. Can also be due to incorrect data in the fittings barcode and/or a manufacturing defect.

Solution: After the fitting cools back down to ambient temperature, you may try to re-fuse the fitting in manual mode, or you can replace the fitting.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 38!	"LoadSE"	Load_SCH_Error	Short circuit during fusion process	

Meaning: Bad fusion joint

Trouble Shooting Recommendation: Typically caused by the rapid and excessive movement of molten material during the fusion process that is often associated with excessive gaps found in the fusion zone. (short-stab, mis-stab, misalignment, binding situations)

Solution: Replace the fitting

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 39.0!	"VCtrEr"	Control_Voltage_Error	Output voltage not stable	

Meaning: The voltage being supplied to the processor is not consistent or stable.

Trouble Shooting Recommendation: Check the generator and make sure that the throttle control is on "full". Ensure that any throttle control switches (econ mode, throttle control) are in the off position.

Solution: May need to replace the power supply

Code F	usion Report Message	Code Indication	Cause	Download Report Column
ERROR 39.1!	"VoutEr"	Out_Voltage_Error	Output voltage out of limit	

Meaning: The voltage being supplied to the processor is not within limits. It is either too high or too low.

Trouble Shooting Recommendation: Check the generator and make sure that the throttle control is on "full". Ensure that any throttle control switches (econ mode, throttle control) are in the off position. A generator with a dirty voltage output can damage the Servo Card.

Solution: Connect to a stable power source or May need to replace the power supply. May need to check the Servo Card.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 41!	"GenErr"	General_Error	General error due to unexpected conditions.	

Meaning: Fusion process experienced unexpected conditions

Trouble Shooting Recommendation: If this happens 3 times in succession contact technical support. 1-770-632-7530 Solution:



Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 42!	"SrvErr"	Servo_Error	Generic error	

Meaning: The Processors Servo Controller assisting the welding is defective.

## Trouble Shooting Recommendation: Shut off the device and restart.

### Solution: If the problem continues, contact technical support. 1-770-632-7530

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 43!	"SynkEr"	Sync_Error	Generic error	

Meaning: Error associated with either calibration problems or electromechanical problems in the processor.

Trouble Shooting Recommendation: A defect in the Processors hardware has been detected. Solution: Contact technical support. 1-770-632-7530

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 44!	"HFCEr"	HW_Servo_Error_FCTRL	Power Controller defective	

Meaning: A defect in the Processors hardware has been detected

### **Trouble Shooting Recommendation:**

Solution: Contact technical support. 1-770-632-7530

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 45!	"SwErr"	SW_Error	Code error reception.	

Meaning: Possible defective internal communication or software error.

Trouble Shooting Recommendation: No solution. Shut off the device and restart. If message displays again, Solution: Contact technical support. 1-770-632-7530

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 50	"UsrStp"	User_Stop_Error	Welding error	

Meaning: The user pressed the stop button during the fusion cycle.

### Trouble Shooting Recommendation:

Solution: Wait for the fitting to cool to ambient temperature and re-fuse the fitting.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 50!	"UsrStp"	User_Stop_Error	Welding Stop	

Meaning: The user pressed the stop button during the fusion cycle.

### **Trouble Shooting Recommendation:**

Solution: Review installation instructions before restarting fusion.

Code	Fusion Report Message	Code Indication	Cause	Download Report Column
ERROR 70!	"MemErr"	Memory_Writing	Full Memory or DMS Failure	

## Meaning:

Trouble Shooting Recommendation:

Solution: Contact technical support. 1-770-632-7530

[	Code	Fusion Report Message	Code Indication	Cause	Download Report Column
	ERROR 80!		Weld Authorization		

Meaning: Welder must be authorized

**Trouble Shooting Recommendation:** 

Solution: Authorize welder or change settings in the processor