Basic troubleshooting

The following table provides an overview of the most common problems that may arise when using this system and explains how to solve them.

If you are unable to fix the problem by following this basic troubleshooting guide or if you need further assistance:

- 1. Call your distributor or authorized repair facility.
- 2. Call the nearest office listed in the front of this manual.

Problem	Solution
The ON/OFF power switch is set to ON (I), but the power ON LED does not illuminate.	 Verify that the power cord is plugged into the receptacle. Verify that the power is on at the main power panel or at the disconnect-power switch box. Verify that the line voltage is not too low (more than 15% below the rated voltage).
The power ON LED and the gas pressure LED illuminate.	 Verify that the gas supply line is connected to the power supply and the gas is turned on. Inspect the gas supply line for leaks, and verify the incoming gas pressure.
The power ON LED and the temperature LED illuminate.	 Leave the system on to allow the fan to cool the power supply. If the system's internal temperature approaches -30° C (-22° F), the temperature LED may illuminate. Move the system to a warmer location.
The power ON LED illuminates and the temperature LED blinks.	 Leave the system on to allow the fan to cool the power supply. The temperature LED blinks when the system continuously draws too much input current for too long. Try the following to prevent this condition: Turn down the cutting current. See <i>Adjust the gas pressure and output current</i> on page 44. Use only the FineCut consumables when operating the system on a 120 VAC input circuit. See <i>Choose the consumables</i> on page 30. Operate the system on a 240 VAC input circuit whenever possible. Avoid stretching the arc. Drag the torch on the workpiece. See <i>Edge start on a workpiece</i> on page 50. Operate the system without using an extension cord. If you must use an extension cord, use a heavy conductor cord of the shortest possible length. See <i>Extension cord recommendations</i> on page 26. Verify nothing else is drawing power on the same circuit.

Problem	Solution
The power ON LED blinks.	• Have an electrical technician check the incoming power. The input line voltage is either too high or too low (a variance greater than ±15% of the rated voltage). See <i>Hypertherm system ratings</i> on page 17 and <i>Prepare the electrical power</i> on page 23.
The power ON LED illuminates and the torch cap LED illuminates or blinks.	 Turn OFF the power supply. Verify that the consumables are properly installed and tightened. See <i>Install the consumables</i> on page 42. If the consumables became loose or were removed while the power supply was ON, turn OFF the power supply, correct the problem, and then turn ON the power supply to clear the fault. If the consumables appear to be installed correctly, the torch may be damaged. Contact your distributor or authorized repair facility.
The gas pressure and temperature LEDs blink when the machine is powered ON.	 Release the trigger and restart the power supply. The system automatically disables itself when the power supply is turned on while the torch trigger is pressed.
The temperature, gas pressure, and power ON LEDs blink, and the torch cap LED illuminates.	 Install new consumables in the torch (they may be corroded or approaching end of life). If you continue to see this error, contact your distributor or authorized repair facility.
All four LEDs blink when the system is powered ON.	A qualified service technician must service the system. Contact your distributor or use the information in the front of this manual to contact technical service.
The arc does not transfer to the workpiece.	 Clean the area where the ground clamp contacts the workpiece to ensure a good metal-to-metal contact. Inspect the ground clamp for damage and repair it if necessary. Move the torch closer to the workpiece and fire the torch again. See <i>Hand torch operation</i> on page 48.
The torch does not cut completely through the workpiece.	 Verify that the torch is being used correctly. See <i>Hand torch operation</i> on page 48. Inspect the consumables and replace as necessary. See <i>Inspect the consumables</i> on page 57.

Problem	Solution
The arc blows out but re-ignites when the torch trigger is pressed again.	 Inspect and replace the consumable parts if they are worn or damaged. See <i>Inspect the consumables</i> on page 57. Replace the air filter element if it is contaminated. See <i>Replace the air filter element and air filter bowl</i> on page 61. Make sure the air pressure is at the proper level.
The arc sputters and hisses.	 Replace the air filter element. See <i>Replace the air filter element and air filter bowl</i> on page 61. Inspect the gas line for moisture. If necessary, install or replace the gas filtration to the power supply. See <i>Prepare the gas supply</i> on page 27.
The cut quality is poor.	 Verify that the torch is being used correctly. See <i>Hand torch operation</i> on page 48. Verify the correct consumables are installed. See <i>Choose the consumables</i> on page 30. Inspect the consumables and replace as necessary. See <i>Inspect the consumables</i> on page 57. Loosen the consumables about 1/8th of a turn and try again. Check the air pressure and air quality. Verify the work lead connection is secure and there is no damage to the work lead. Operate the system without using an extension cord. If you must use an extension cord, use a heavy conductor cord of the shortest possible length. See <i>Extension cord recommendations</i> on page 26.
The circuit breaker trips while you are cutting.	 Turn down the cutting current. See <i>Adjust the gas pressure and output current</i> on page 44. Use only the FineCut consumables when operating the system on a 120 VAC input circuit. See <i>Choose the consumables</i> on page 30. Operate the system on a 240 VAC input circuit whenever possible. Avoid stretching the arc. Drag the torch on the workpiece. See <i>Edge start on a workpiece</i> on page 50. Operate the system without using an extension cord. If you must use an extension cord, use a heavy conductor cord of the shortest possible length. See <i>Extension cord recommendations</i> on page 26. Verify nothing else is drawing power on the same circuit.