

***Check Valve Installation for
HT2000/HT2000LHF/HT4001
Gas Consoles***

Kit: 128339

**Field Service Bulletin
IM-336
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WARNING



INSTALLATION MUST BE PERFORMED ONLY BY HYPERTHERM DISTRIBUTORS OR QUALIFIED TECHNICIANS!!

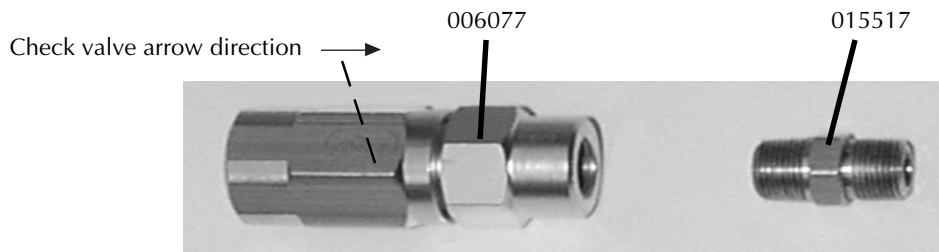
INTRODUCTION

This field service bulletin will enable a qualified technician to install check valves on the O₂ and N₂ input ports of the HT2000, HT2000LHF and HT4001 gas consoles. The installation of the check valves will prevent gas back-flow problems that may occur under certain conditions. Systems that have gas back-flow problems may also experience cut quality and starting problems.

KIT 128339 CONTENTS

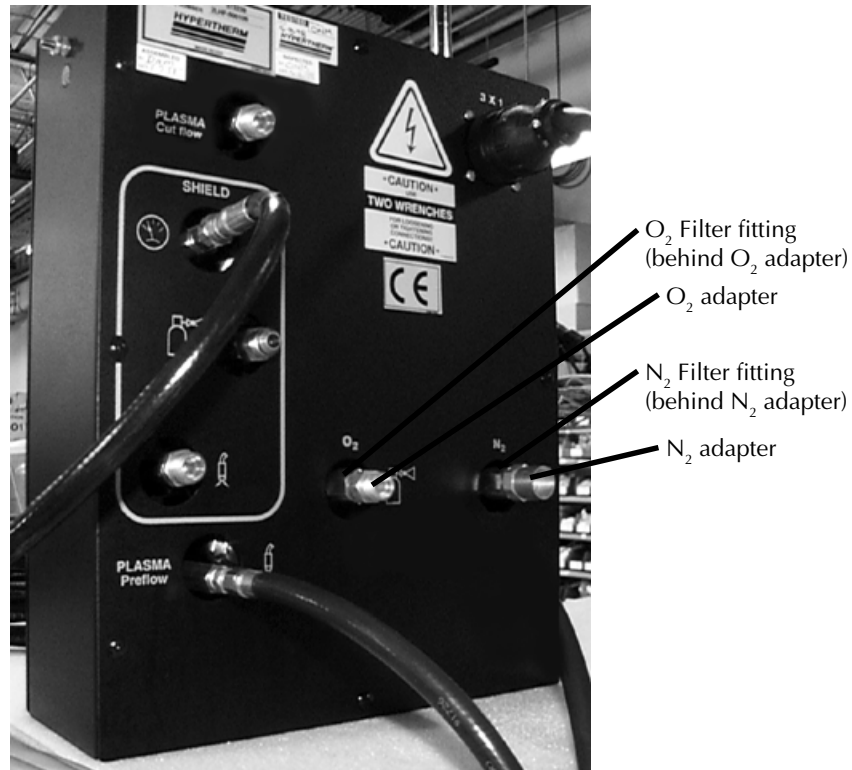
Part Number	Description	Qty
006077	Check Valve:1/8FPT	2
015517	Nipple:1/8 X CL Hex Brass	2
803360	Check Valve Installation FSB	1

CHECK VALVE ASSEMBLY



1. Assemble 006077 and 015517 as shown above using red Loctite pipe sealant on the threads. Note the direction of the check valve arrow.
2. Tighten with wrenches.

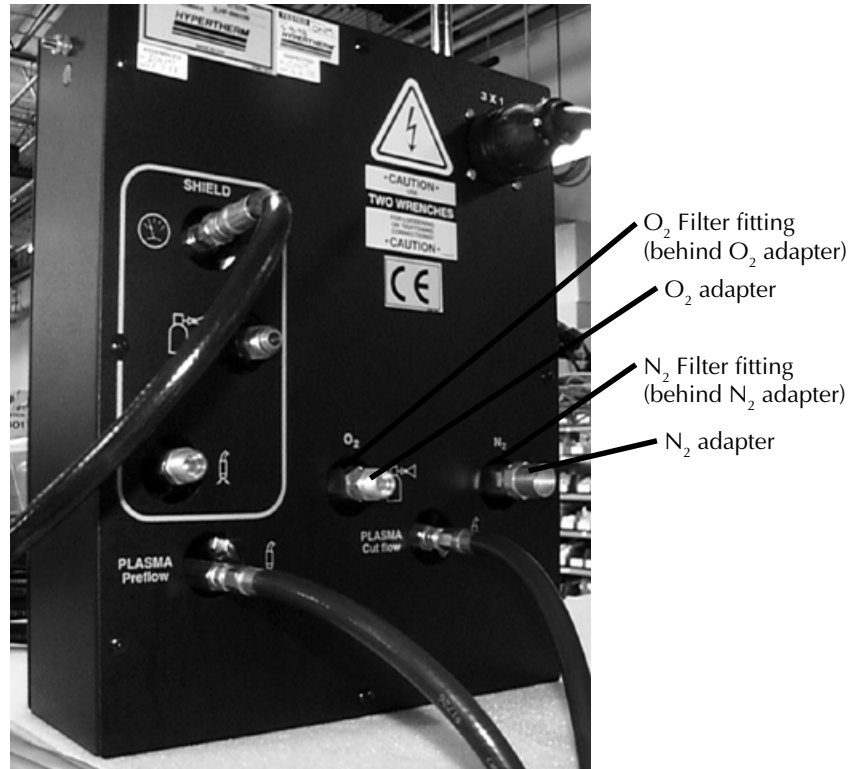
HT2000 Check Valve Installation



HT2000 CHECK VALVE INSTALLATION

1. **Set the power supply power switch to O (off), unplug the power cable and turn off the supply gases.**
2. Disconnect the O₂ and N₂ gas supply hoses from the O₂ and N₂ input adapters at the gas panel. Note: Position a backup wrench on the adapters when unscrewing the hoses.
3. Remove the adapters at the N₂ and O₂ input ports. Note: Position a backup wrench on the filter fittings behind the adapters when unscrewing. If you are unable to position a backup wrench properly, remove the rear panel.
4. Apply red Loctite pipe sealant to the threads of the 015517 nipple and connect the check valve assemblies to the O₂ and N₂ input ports. Note: The arrow on the check valves point in toward the gas panel. Tighten each check valve assembly to the input ports with 2 wrenches.
5. Apply red Loctite pipe sealant to the O₂ and N₂ adapters and screw them into the check valve assemblies. Tighten the adapters to the check valve assemblies with 2 wrenches.
6. Connect the O₂ and N₂ supply hoses to the O₂ and N₂ input adapters. Apply red Loctite pipe sealant to the threads and tighten the hoses to the adapters with 2 wrenches.
7. Turn the supply gases on.
8. Leak test the fittings before energizing the plasma system.

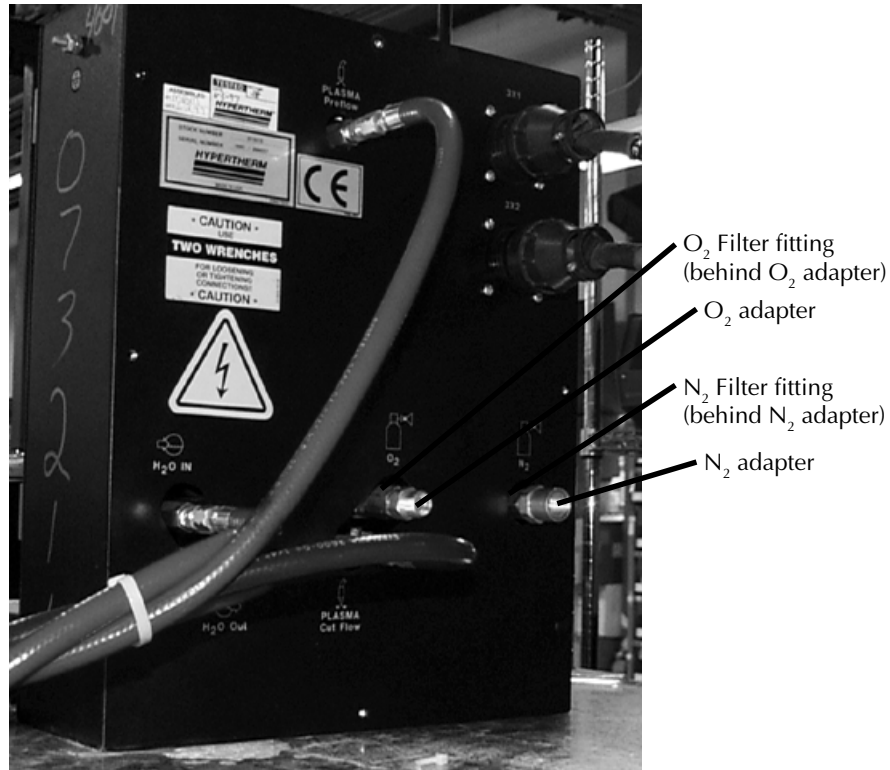
HT2000LHF Check Valve Installation



HT2000LHF CHECK VALVE INSTALLATION

1. **Set the power supply power switch to O (off), unplug the power cable and turn off the supply gases.**
2. Disconnect the O₂ and N₂ gas supply hoses from the O₂ and N₂ input adapters at the gas panel. Note: Position a backup wrench on the adapters when unscrewing the hoses.
3. Remove the adapters at the N₂ and O₂ input ports. Note: Position a backup wrench on the filter fittings behind the adapters when unscrewing. If you are unable to position a backup wrench properly, remove the rear panel.
4. Apply red Loctite pipe sealant to the threads of the 015517 nipple and connect the check valve assemblies to the O₂ and N₂ input ports. Note: The arrow on the check valves point in toward the gas panel. Tighten each check valve assembly to the input ports with 2 wrenches.
5. Apply red Loctite pipe sealant to the O₂ and N₂ adapters and screw them into the check valve assemblies. Tighten the adapters to the check valve assemblies with 2 wrenches.
6. Connect the O₂ and N₂ supply hoses to the O₂ and N₂ input adapters. Apply red Loctite pipe sealant to the threads and tighten the hoses to the adapters with 2 wrenches.
7. Turn the supply gases on.
8. Leak test the fittings before energizing the plasma system.

HT4001 Check Valve Installation



HT4001 CHECK VALVE INSTALLATION

1. **Set the power supply power switch to O (off), unplug the power cable and turn off the supply gases.**
2. Disconnect the O₂ and N₂ gas supply hoses from the O₂ and N₂ input adapters at the gas panel. Note: Position a backup wrench on the adapters when unscrewing the hoses.
3. Remove the adapters at the N₂ and O₂ input ports. Note: Position a backup wrench on the filter fittings behind the adapters when unscrewing. If you are unable to position a backup wrench properly, remove the rear panel.
4. Apply red Loctite pipe sealant to the threads of the 015517 nipple and connect the check valve assemblies to the O₂ and N₂ input ports. Note: The arrow on the check valves point in toward the gas panel. Tighten each check valve assembly to the input ports with 2 wrenches.
5. Apply red Loctite pipe sealant to the O₂ and N₂ adapters and screw them into the check valve assemblies. Tighten the adapters to the check valve assemblies with 2 wrenches.
6. Connect the O₂ and N₂ supply hoses to the O₂ and N₂ input adapters. Apply red Loctite pipe sealant to the threads and tighten the hoses to the adapters with 2 wrenches.
7. Turn the supply gases on.
8. Leak test the fittings before energizing the plasma system.