

Instructions for ESAB Reverse Flow Check Valves

For use on torches with standard 'B' size (9/16-in.—18) hose connections.

Oxygen Part No. 639110 Fuel Gas Part No. 629109

For use on regulators with 'B' size outlet connections.

Oxygen Part No. 639209 Fuel Gas Part No. 639210

To replace standard 'B' size regulator outlet connections.

Oxygen Part No. 639112 Fuel Gas Part No. 639111

These check valves are designed to prevent reverse flow of gases into your hoses or regulators. They are not designed for stopping a flashback. Such reverse flow, which can create hazardous conditions, may be caused by (1) a damaged or plugged tip or nozzle; (2) a cylinder emptying in use; (3) loss of pressure in one line; (4) failure of operator to follow correct procedures for lighting torch.

Torch models 639109 and 639110 are designed for use on torch inlet connections. Regulator models 639209 and 639210 are for use on regular outlet connections. Screw them on, tighten securely with a wrench. Then attach hoses.

Regulator models 639111 and 639112 replace the outlet connection fittings (1/4-in. NPT -to- 'B' size) factory-installed on most regulators. First, remove the original outlet fitting with a wrench. Then apply a single turn of Teflon tape to the tapered threads of the check valve. Screw it into the regulator by hand as far as possible. Tighten with a wrench, at least three full turns.

Reverse flow check valves should be tested every six months or whenever they have been subject to severe torch back-firing or to torch flashback. They should be replaced every five years, or whenever test indicates need for replacement.

To test valves used on a torch:

1. Remove check valve from torch.
2. Attach check valve to outlet connection of a regulator which is attached to a cylinder of the same gas. Tighten securely.
3. Open cylinder valve and turn in regulator pressure-adjusting screw until delivery gauge registers 10 psi.
4. Place a light film of Oxy-Tec leak test solution (P/N 998771) or any other solution suitable for oxygen service across open end of check valve. If bubbles appear, check valve is leaking and should be replaced. If no leakage is evident, release regulator screw, remove check valve, reinstall on torch.
5. Follow same procedure with each check valve.

To test valves installed on regulators:

1. Attach regulator with check valve to a cylinder of the appropriate gas (oxygen or acetylene). Tighten connection nut. DO NOT open cylinder valve. Release regulator pressure-adjusting screw.
2. Attach hose from regulator check valve outlet to outlet of another regulator attached to a cylinder of the same gas, which is to supply the back-pressure for testing. Open the valve of that cylinder.
3. Turn in the pressure-adjusting screw on the second regulator until its delivery-pressure gauge registers 10 lb. per sq. in.
4. Watch the delivery-pressure gauge on the regulator which has the check valve at its outlet. If it starts to move within one minute, the check valve should be replaced.



ESAB Welding & Cutting Products
PO Box 100545, Florence SC 29501-0545

(over)

F-12-334-B

12/97

30M

Printed in U.S.A.