The Model "S" Gasfluxer

Parts List

Body

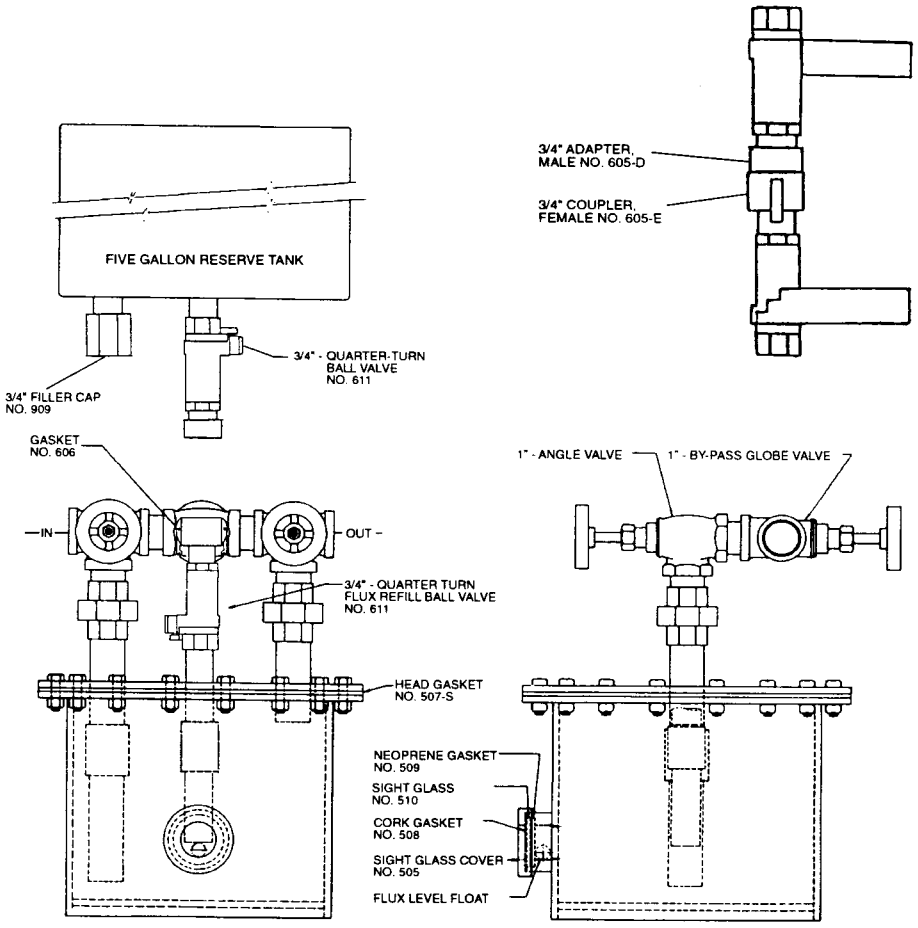
#505	Sight Glass Cover
#508	Sight Glass Gasket - Cork
#509	Sight Glass Gasket - Neoprene
#510	Sight Glass
#507-S	Head Gasket - Neoprene
#605-E	3/4" Coupler, Female w/ 606 Gasket
#606	Quick Disconnect Gasket - Neoprene
#611	3/4" Quarter Turn R/T Ball Valve

Reserve Tank

#605-D	3/4" Adapter Male
#611	3/4" Quarter Turn R/T Ball Valve
#909	3/4" Filler Cap

Included with the Model "S" Gasfluxer

Model "S" Gasfluxer Body
5 Gallon Reserve Tank
Operations Manual



SERIAL NUMBER 4150

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IMPORTANT INFORMATION

Read before installing, filling or operating Gasfluxer.

MISSING PIECES

If any piece of the Gasfluxer unit is missing or damaged during shipment, please contact your distributor or the Gasflux Company before use.

NOTICE

VENTILATION

WARNING

USE ADEQUATE VENTILATION: Brazing fumes and gases cannot be classified simply. The composition and quantity of the fumes and gases are dependent upon the base metal, the flux and the filler metal being used. Coatings on the base metal such as paint, galvanizing or plating will produce fumes as well. Other conditions which influence the composition and quality of the fumes and gases to which workers may be exposed are: the number of operators relative to the volume of the work area, the quality and amount of ventilation, the position of the brazer's head in respect to the fume plume, and the presence of contaminants in the atmosphere such as halogenated hydrocarbon vapors from cleaning and degreasing activities

AVOID MOISTURE

WARNING

A Gasfluxer should not be installed with generated acetylene or any wet fuel gas without means for water removal. Moisture in any form or quantity will precipitate the solids in the liquid Gasflux and will clog lines and equipment.

When flashback arrestors are used, the water must be completely replaced with another suitable liquid such as 100% ethylene glycol (one phase type anti-freeze). Anti-freeze solutions containing special additives such as rust inhibitors and oil should not be used.

If water is known to be present in fuel gas, it must be removed by some chemical or mechanical means.

AVOID OXYGEN

WARNING

Under no circumstances should oxygen or any gas mixture that contains oxygen be introduced into or permitted to flow through a Gasfluxer.

Similarly, a Gasfluxer is for use only for dispensing liquid Gasflux in bronze and silver brazing applications and never in conjunction with torch cutting and gas welding.

NON-RETURN CHECK VALVE

WARNING

The Gasflux Company recommends that an approved non-return check valve be installed in the fuel gas line between the outlet valve of the Gasfluxer and the torch or burner tip.

A check valve is not the same as a flashback arrestor. Check valves are designed to help prevent reverse flow of gases, but **will not necessarily prevent** a flashback if all contributing conditions are present—fuel gas, oxygen, and a source of ignition.

Also, more than one check valve used on a single fuel gas line can cause a restriction of fuel gas flow and result in possible backfire or flashback.

MODIFICATIONS

WARNING

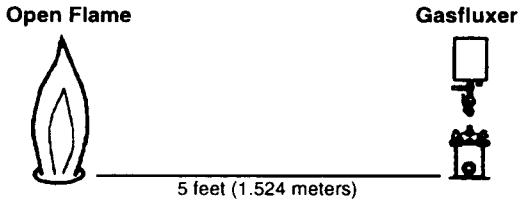
A Gasfluxer is manufactured according to specific industry standards, and is considered "approved." Any modifications, redesigning, or use of replacement parts other than those specified will void the approval.

INSTRUCTIONS FOR INSTALLING AND FILLING THE GASFLUXER

INITIAL INSTALLATION

WARNING

1. Installation should be no closer than 5 feet (1.542 meters) horizontal distance from any open flame or any other source of ignition.



2. Attach fuel gas supply to the gas inlet on the Gasfluxer marked "IN".

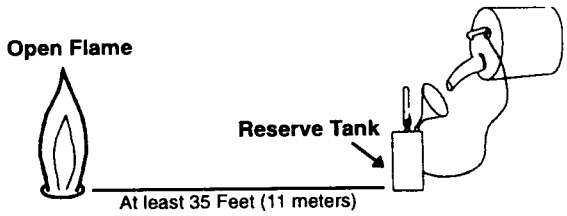
OSHA NFPA

3. OSHA and NFPA **require** that a non-return check valve be installed between the fuel gas regulator and the torch. We recommend that you install the non-return check valve between the Gasfluxer and the tip of the torch.

INSTRUCTIONS FOR INSTALLING AND FILLING THE GASFLUXER

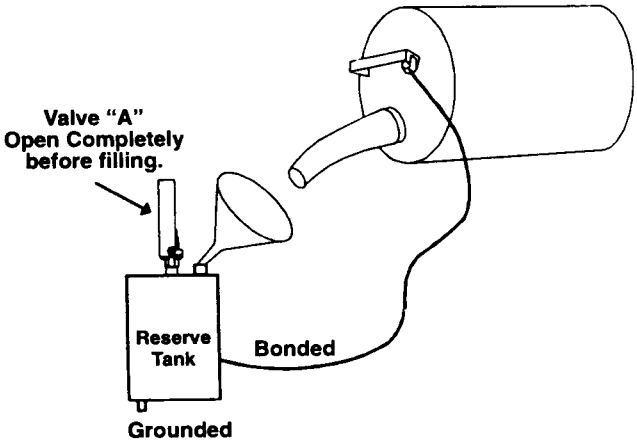
FILLING THE RESERVE TANK

DANGER: Liquid Gasflux is a volatile, flammable liquid and it must <u>not</u> be poured within 35 feet (11 meters) of an open flame or other sources of ignition such as standard electrical switches and apparatus. Use adequate ventilation; read and understand all labels and Material Safety Data Sheets (MSDS) associated with this product. Consult with your supervisor or safety officer for required personal safety and protective equipment. In the event of a spill, use proper cleanup procedures for a flammable material (See MSDS.)



Pour liquid Gasflux into the Reserve Tank. Do not pour liquid Gasflux directly into the Gasfluxer.

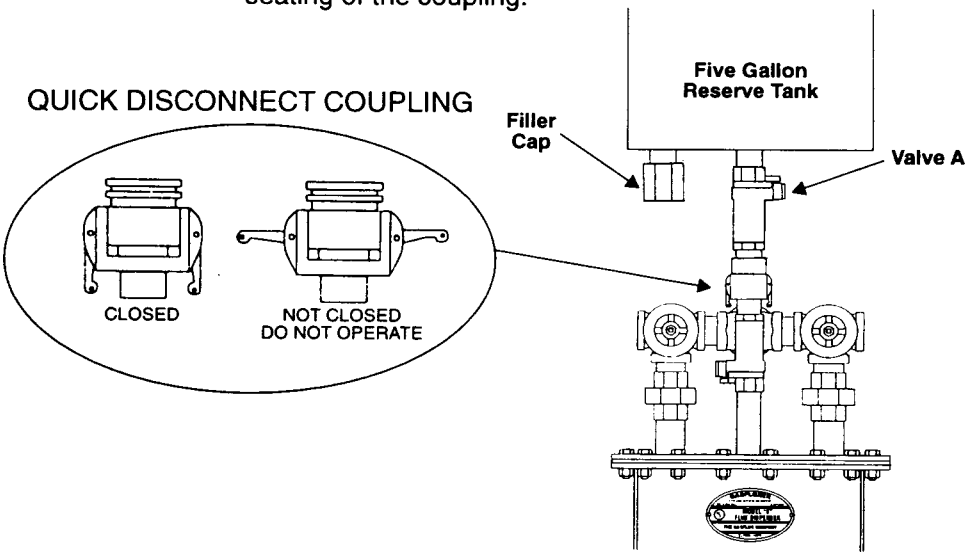
Position the reserve tank so that the valve points up. Slowly open valve "A," remove the filler cap, insert the funnel and pour in liquid Gasflux. Make sure both containers are bonded and grounded to prevent discharge from sparks of static electricity. **Do not overfill.** The reserve tank is designed to provide an air space for possible expansion of liquid Gasflux due to the temperature and should never contain more than five gallons.



INSTRUCTIONS FOR INSTALLING AND FILLING THE GASFLUXER

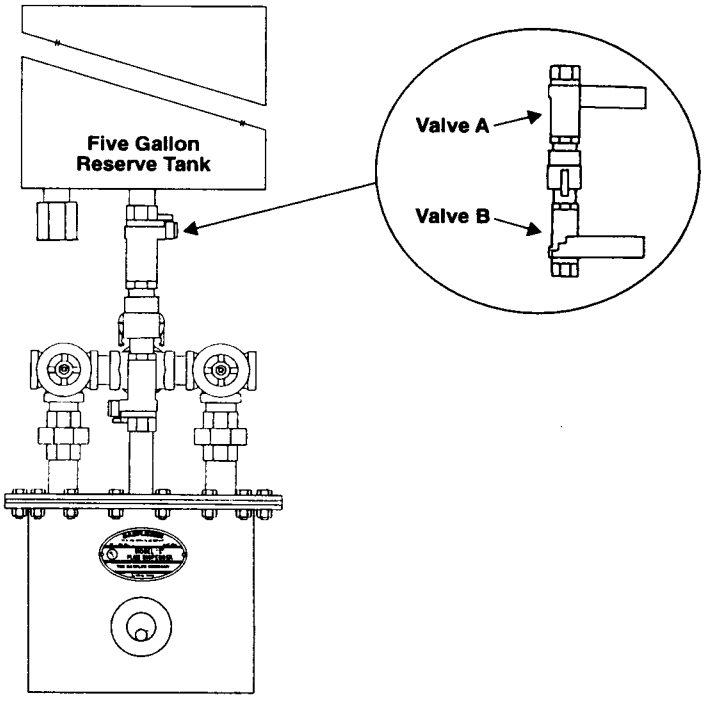
ATTACHING THE FILLED RESERVE TANK TO THE GASFLUXER

Make sure the reserve tank valve "A" is closed, and the filler cap is secured tightly. Lift the arms of the quick disconnect coupler on the Gasfluxer to an upward position. Turn the reserve tank so that the adapter points down. Insert the male adapter of the reserve tank into the female coupler of the Gasfluxer. Lock the arms of the quick disconnect coupler in a downward position, checking for proper seating of the coupling.



FILLING THE GASFLUXER FROM THE RESERVE TANK

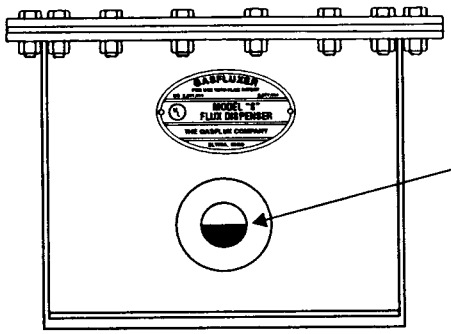
1. First open valve "B" on the Gasfluxer, and then open valve "A" on the reserve tank. Liquid Gasflux will flow from the reserve tank to the Gasfluxer.



INSTRUCTIONS FOR INSTALLING AND FILLING THE GASFLUXER

FILLING THE GASFLUXER FROM THE RESERVE TANK (Continued)

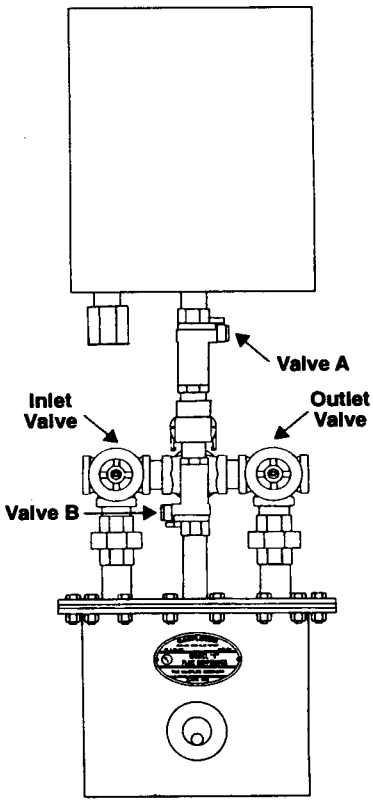
2. As the liquid Gasflux flows into the Gasfluxer, watch the level of liquid Gasflux in the sight glass. Fill the Gasfluxer until the liquid Gasflux reaches a level about 1/2 of the way to the top of the sight glass. Do not overfill. When the liquid Gasflux reaches 1/2 way to the top level, close reserve tank valve "A." A small amount of additional liquid Gasflux will flow into the Gasfluxer, but an empty space should remain at the top of the sight glass. Never overfill the Gasfluxer.
3. Close Gasfluxer Valve "B."



CORRECTING AN OVERFILL

If the sight glass is full of liquid Gasflux, the Gasfluxer is overfilled. If the Gasfluxer is accidentally overfilled:

- Shut off oxygen and fuel gas at source.
- Make sure the reserve tank valve "A", Gasfluxer inlet and outlet valves and Gasfluxer valve "B" are closed.
- Remove the reserve tank from the Gasfluxer.
- Remove the Gasfluxer from the fuel gas line to an area at least 35 feet (11m) from an open flame or other sources of ignition.
- Let off pressure which may be in the Gasfluxer by slowly opening Gasfluxer outlet valve.
- Loosen the bolts and remove the headplate.
- Pour the excess liquid Gasflux into an environmentally safe container.
- Reinstall the headplate and head gasket, and secure the bolts.
- Make sure Gasfluxer inlet and outlet valves as well as valve "B" are closed and reinstall the Gasfluxer into the fuel gas line following procedure outlined on page 4, "Initial Installation."
- Inspect for leaks.



INSTRUCTIONS FOR OPERATING THE GASFLUXER

OPERATING THE GASFLUXER

WARNING

WARNING: Do not operate the Gasfluxer when the liquid Gasflux has filled the sight glass. If overfilled, pressure of the gas may force the liquid Gasflux out through the hose and into the torch or burner tip.

NOTICE

Also, never operate the Gasfluxer unless the sight glass shows some liquid Gasflux. While this constitutes no danger, the fluxing action will be inadequate due to insufficient liquid Gasflux in the unit.

WARNING

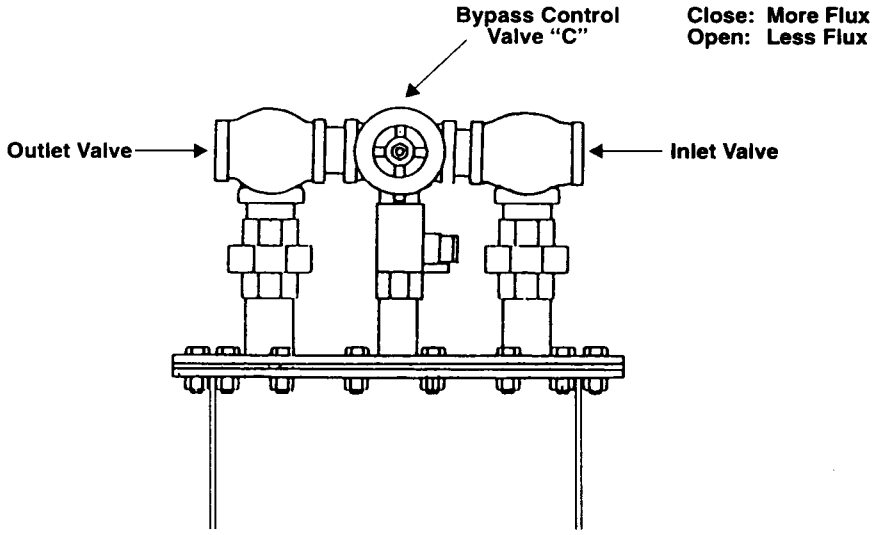
Protective eyewear is required. (Ref: ANSI Standard Z.87-1)

WARNING

1. With the torch valves closed, set the fuel gas and oxygen pressure at the level recommended for the torch and tip by the gas apparatus or machine manufacturer.

   The fuel gas pressure ***must not exceed 15 P.S.I.G. (103.5 kPa)*** *and the oxygen pressure* ***must not exceed 20 P.S.I.G. (138 kPa).***

2. Fully close Gasflux bypass control valve "C" by turning it **clockwise** until it will no longer turn. This may require several revolutions. Open the outlet valve and **then** open the inlet valve.

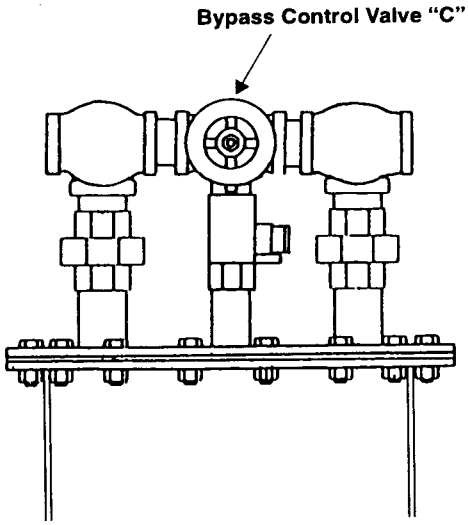


3. *Before lighting the torch or burner tip,* purge the oxygen and fuel gas passages independently for at least 5 seconds before lighting.

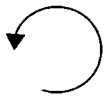
4. With a friction lighter, ignite the fuel gas at the torch or burner tip then slowly open the oxygen valve for the desired flame. A neutral flame (equal amounts of oxygen and fuel gas) is preferred for brazing with liquid Gasflux.

OPERATING THE GASFLUXER (Continued)

5. Test the work to determine the proper amount of liquid Gasflux needed. The amount of liquid Gasflux in the flame is determined by the amount of fuel gas passing through the Gasfluxer. For more liquid Gasflux, the center bypass control valve (Valve "C") must be turned clockwise. For less liquid Gasflux, the valve must be turned counterclockwise.




Turn Bypass Control Valve "C" clockwise for more flux


Turn Bypass Control Valve "C" counter-clockwise for less flux

TO DISCONTINUE OPERATING THE GASFLUXER

1. Extinguish the flame by closing torch valves, and then close the cylinder valves.

NOTICE

2. Drain the pressure from the system as instructed by the gas apparatus or machine manufacturer.

NOTICE

3. Close the inlet and outlet valves of the Gasfluxer after use to prevent liquid Gasflux from evaporating into the fuel gas line.

WHEN CHANGING FUEL GAS CYLINDERS, THE INLET AND OUTLET VALVES ON THE GASFLUXER MUST BE CLOSED.

NOTICE

INSTRUCTIONS FOR OPERATING THE GASFLUXER

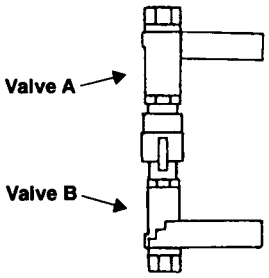
REFILLING THE RESERVE TANK

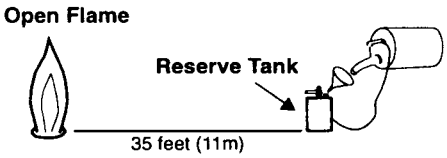
WARNING

Before disconnecting the reserve tank for refilling, extinguish the torch, close all valves on the Gasfluxer and reserve tank and shut off the fuel gas and oxygen supply at the cylinders.

DANGER

DANGER: Liquid Gasflux is a volatile, flammable liquid and it must not be poured within 35 feet (11 meters) of an open flame or other sources of ignition such as standard electrical switches and apparatus. Use adequate ventilation; read and understand all labels and Material Safety Data Sheets (MSDS) associated with this product.





- Close the reserve tank valve "A", the inlet and outlet valves and valve "B" on the Gasfluxer.
- Remove the reserve tank from the Gasfluxer to an area at least 35 feet (11m) from an open flame.
- Bleed off pressure by slowly opening valve "A". Beware of sudden release of pressure.
- Remove the filler cap and insert a funnel into the filler neck.
- Bond and ground each container to prevent discharge from sparks of static electricity.
- Slowly pour liquid Gasflux into reserve tank.
- Replace filler cap, tighten with a wrench and close the ball valve.

WARNING

The reserve tank is designed to provide an air space for possible expansion of liquid Gasflux due to temperature variations and should never contain more than five gallons. **Do not overfill.**

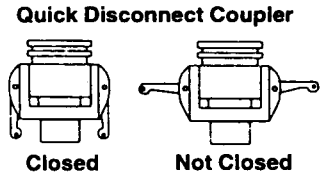
REFILLING THE GASFLUXER FROM THE RESERVE TANK

WARNING

BEFORE CONNECTING THE RESERVE TANK TO THE GASFLUXER, MAKE SURE ALL VALVES ARE CLOSED AND ALL FLAMES ARE EXTINGUISHED.

ALWAYS KEEP REFILL VALVES CLOSED EXCEPT DURING FLUX TRANSFER TO PREVENT OVERFILLING OF THE GASFLUXER.

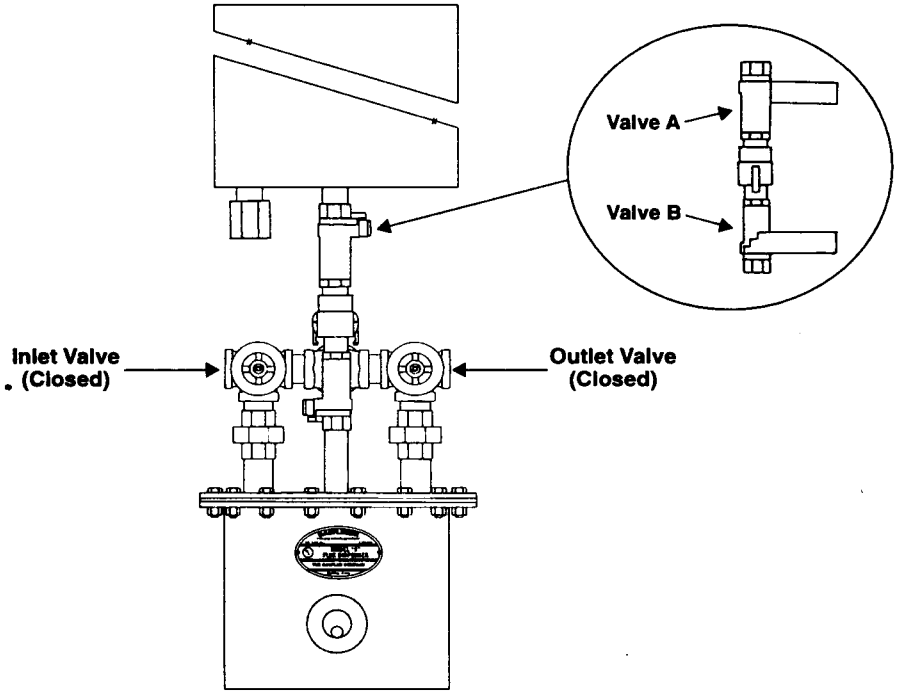
1. Replace the reserve tank on top of the Gasfluxer. Make sure the quick disconnect coupler is properly seated and closed.



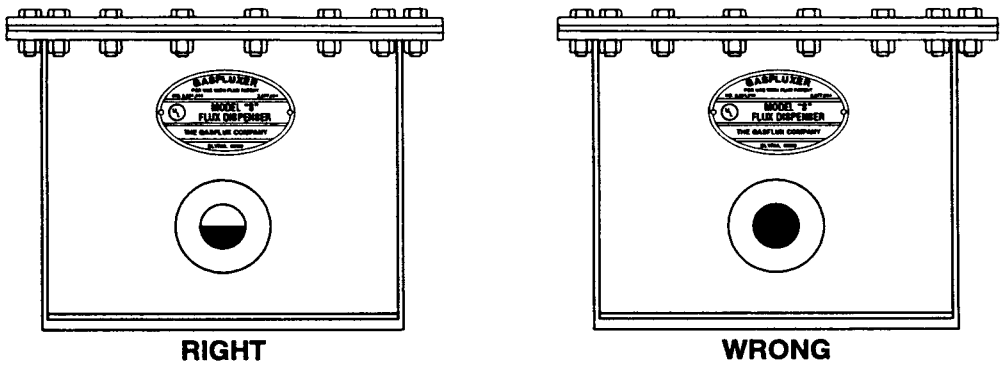
REFILLING THE GASFLUXER FROM THE RESERVE TANK (Continued)

2. Open valve "B" on the Gasfluxer first, followed by valve "A" on the reserve tank. Liquid Gasflux will flow from the reserve tank to the Gasfluxer.

3. As the liquid Gasflux flows into the Gasfluxer, watch the level of liquid Gasflux in the sight glass. Fill the Gasfluxer until the liquid Gasflux reaches a level about 1/2 of the way to the top of the sight glass. DO NOT OVERFILL. When the liquid Gasflux reaches a level 1/2 of the way to the top, close reserve tank valve "A." A small amount of additional liquid Gasflux will flow into the Gasfluxer. Close valve "B" on the Gasfluxer.



An empty space should remain at the top of the sight glass. If the sight glass is full of liquid Gasflux, the Gasfluxer has been overfilled. Refer to page 7, "Correcting Overfill."



GENERAL MAINTENANCE INSTRUCTIONS

DAILY OBSERVATION

NOTICE

Visually inspect the Gasfluxer, its connections, and the fuel gas hose daily for possible leaks. Leaks appear in the form of a white deposit. If a leak is found in any of the following locations on the Gasfluxer, take the action indicated.

Location of leak	Action to stop leak
Valve packing nuts and pipe connections	Tighten nuts and connections.
Sight glass cover	Tighten with spanner wrench. Check for worn cork and neoprene sight glass gaskets.
Head gasket	Tighten bolts. Replace head gasket.
Welding hose	Replace Grade T hoses.
Quick disconnect coupling	Replace gasket.

WEEKLY

NOTICE

1. Remove and inspect non-return check valves and other protective equipment for possible liquid Gasflux deposits or fuel gas impurities.
2. If cleaning is required, immerse in hot water and dry with a blast of clean air in direction of gas flow.
3. Test the check valve by blowing air in the opposite direction of flow.

IF THE CHECK VALVE FAILS TO PERFORM, REPLACE IT BEFORE YOU REINSTALL YOUR GASFLUXER. THE CHECK VALVE MUST BE COMPLETELY DRY BEFORE REINSTALLING.

PERIODIC INSPECTION

NOTICE

WARNING

Regular periodic inspection should be made at least every three months or more frequently if conditions warrant. If cleaning is necessary, follow these instructions:

- Remove the Gasfluxer to an area at least 35 feet (11m) from an open flame or other sources of ignition.
- Remove the head of the Gasfluxer by unfastening the bolts, and inspect it.
- Remove the sight glass with a spanner wrench and inspect.
- Replace all worn valves, parts, and gaskets.
- Clean the inside of the body of the Gasfluxer, the sight glass chamber, and openings in the head of the Gasfluxer thoroughly with hot water or steam. **Dry the body and head with dry air. All parts must be completely dry before reassembly.**
- Reassemble Gasfluxer and test for leaks by using 40 lbs. air pressure under water.
- Reinstall the Gasfluxer. (See "Initial Installation," page 4.)
- Refill the Gasfluxer from the reserve tank. (See instructions under "Refilling The Gasfluxer From The Reserve Tank," page 10.)

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Bypass control valve is completely open, so that the fuel gas is diverted past the liquid Gasflux, but the flame is still green.	Vapor remains in the hose or is still rising from the Gasfluxer.	No adjustment needed; this is normal.
Even though the flame is green, there is not adequate fluxing action.	Bypass control valve may be fully open, diverting the flow of liquid Gasflux from the flame; vapors in the hose or rising from the Gasfluxer make the flame green.	Close the bypass control valve by turning it clockwise as far as it will turn. This may require more than one revolution. Then adjust the amount of liquid Gasflux to the flame by turning the valve counterclockwise. (Turning the bypass control valve counterclockwise reduces the amount of liquid Gasflux to the flame. Turning the bypass control valve clockwise increases the amount of liquid Gasflux to the flame.)
	No liquid Gasflux in the Gasfluxer.	Add liquid Gasflux. (See page 6).
Bypass control valve is closed, but there is not adequate fluxing action.	Moisture has caused the Gasfluxer to clog.	Follow the instructions for "Periodic Inspection," page 12. Be sure to dry the body and head thoroughly with dry air before reassembly.
	No liquid Gasflux in the Gasfluxer.	Add liquid Gasflux. (See page 6).
Gasflux in liquid form is flowing from the torch tip.	Gasfluxer is overfilled.	See page 7, "Correcting Overfill." Follow instructions on page 6, "Filling The Gasfluxer From The Reserve Tank."
Smell fuel gas.	Loose connection.	Extinguish all flames. Tighten all hoses and fittings on the gas apparatus.
White powder at fittings.	Loose connections.	Tighten fittings.
White powder at braze.	Overfluxing.	Open the bypass control valve by turning counterclockwise for less flux.
	Poor ventilation/exhaust.	Inspect ventilation/exhaust.
Black or red residue in regulator, check valve or Gasfluxer.	If using acetylene, exceeding withdrawal rate for cylinder.	Check if the cylinder is empty.
	Drawing cylinder too low, pulling acetone.	Contact fuel gas supplier.
Liquid Gasflux in the regulator.	Inlet and outlet valves were not closed after use, allowing liquid Gasflux to enter the regulator.	Close inlet and outlet valves on Gasfluxer and keep closed when not in use. Clean regulator with water and dry before reinstallation.
White powder on the seams of the reserve tank.	Pinhole leaks.	Inspect welds for leaks. Replace the tank.
Liquid Gasflux flowing from quick disconnect coupler.	Quick disconnect coupler system not properly seated and secured.	Close valves "A" & "B". (Refer to page 6 for proper seating.)
	Worn gasket.	Replace gasket.
Inadequate fuel gas.	Plugged Gasfluxer.	Clean. (Refer to page 12.)
	Water in fuel gas.	Inspect hydraulic liquid fill flashback arrestor - remove water and replace with ethylene glycol.
	Plugged check valve.	Clean and purge. (See page 12.)
	Plugged tip.	Clean. (Refer to tip manufacturer.)