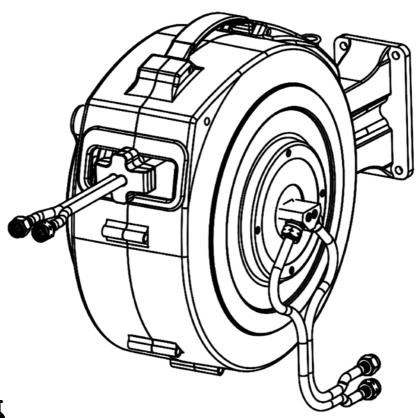


USER MANUAL AND PRODUCT SPECIFICATIONS





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WARNING

DO NOT USE THIS HOSE REEL WITHOUT FLASH BACK ARRESTORS FITTED TO THE INLET HOSES AND OUTLET HOSES OF THE HOSE REEL.

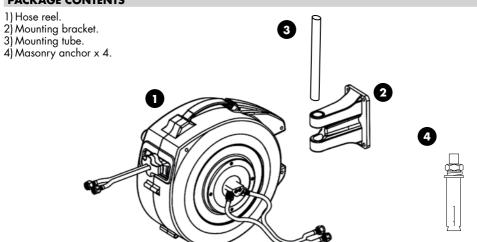
- READ THE ENTIRE INSTRUCTION MANUAL BEFORE USE.
- DO NOT USE ABOVE THE RATED MAXIMUM PRESSURE OF 1.2mPa.
- DO NOT DISASSEMBLE OR ATTEMPT TO REPAIR THIS HOSE REEL, IT CONTAINS AN INTERNAL SPRING THAT CAN BE EXTREMELY DANGEROUS IF TAMPERED WITH.
- WHEN NOT IN USE RELEASE THE PRESSURE IN THE GAS LINES.
- TO AVOID INJURY AND DAMAGE, ALWAYS HOLD THE HOSE WHILE IT IS RETRACTING.
- THE GASES USED IN THIS HOSE REEL ARE EXTREMELY DANGEROUS, SO EXTREME CARE SHOULD BE TAKEN WHEN USING THIS EQUIPMENT.

FEATURES

This Tradeflame OXY/ACETYLENE Hose Reel is made of high quality materials. It is driven and released by a coiled spring, which can rewind the hose automatically. Developed and designed for multi-purpose use, this reel has the following features:

- 10 m of twin gas hose conveniently stored on a self-retracting hose reel keeps the hose clutter off the floor.
- 2 m leader hose.
- Automatic locking the hose will lock every 1m (approx.) of extended hose.
- 180° swivel wall mount bracket.
- Brass fittings.
- Adjustable hose stopper.
- Carry handle enables easy moving between selected mountings.
- Includes swivel mounting bracket for versatility and 180° rotation.
- Industrial strength high impact plastic case provides secure storage.
- Ideal for industrial and automotive sites, mobile and home workshops, plumbing.
- Suitable for oxygen / acetylene gas welding applications only.

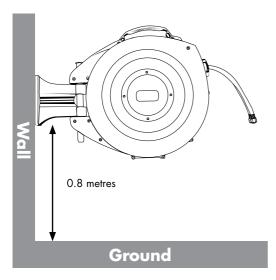
PACKAGE CONTENTS



INSTALLATION

This Tradeflame OXY/ACETYLENE Hose Reel can be mounted in a horizontal position only.

- Choose a location that is near to the oxygen and acetylene cylinders and near the required work area.
- The oxygen / acetylene cylinders must be secured separately and as per the suggested Australian standards "AS4839: The safe use of portable and mobile oxy-fuel gas systems for welding, cutting, heating and allied processes".
- Install the mounting bracket onto a flat surface.
- Note: It is recommended to install the mounting bracket 0.8 m (minimum) above the floor level. Further information or a replacement set of the instructions are available from our website: **tradeflame.com.au**

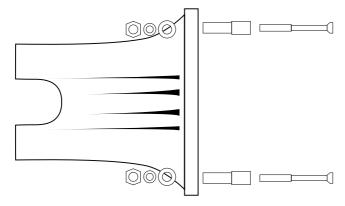


• Drill 4 x M8 holes to match the holes located in the mounting bracket.

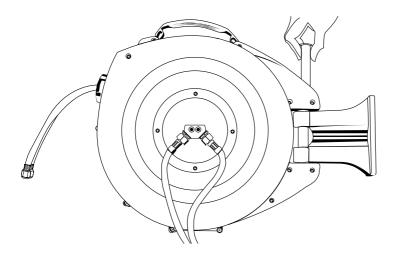




Push the 4 x M8 expansion bolts (supplied) into the holes and secure the mounting bracket using the
washers and nuts.



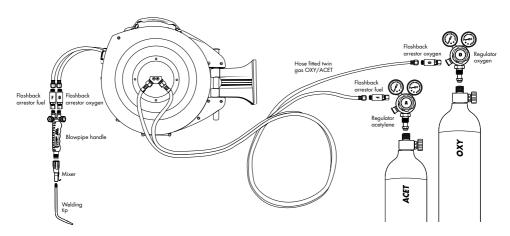
• Connect the hose reel to the mounting bracket with the metal tube.



WARNING:

Do not use this hose reel without flashback arrestors fitted to the inlet hoses and outlet hoses of the hose reel.

CONNECTION GUIDE



- CONNECTING FLASHBACK ARRESTORS AND HOSE REEL TO THE REGULATOR.
- Connect the blue regulator flashback arrestor to the outlet of the oxygen regulator (colour coded black). The flashback arrestor is clearly marked "FIT TO REGULATOR OUTLET". Tighten the nut using a spanner. The nut is right hand (RH) threaded and needs to be turned in a clockwise direction in order to tighten. Connect the blue oxygen hose to the outlet of the oxygen flashback arrestor (colour coded blue). Tighten the nut using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten. Connect the red regulator flashback arrestor to the outlet of the fuel regulator (ACETYLENE colour is RED). The flashback arrestor is clearly marked "FIT TO REGULATOR OUTLET". Tighten the nut using a spanner. The nut is left hand (LH) threaded and needs to be turned in an anti-clockwise direction in order to tighten. Connect the fuel hose to the outlet of the fuel flashback arrestor (ACETYLENE hose colour is RED). Tighten the nut using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten.
- CONNECTING FLASHBACK ARRESTORS AND HOSE REEL TO BLOWPIPE HANDLE. Connect the blue regulator flashback arrestor to the inlet of the oxygen side of the blowpipe handle (colour coded blue and marked 'O'). The flashback arrestor is clearly marked "FIT TO BLOWPIPE INLET". Tighten the nut using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten. Connect the blue oxygen hose to the outlet of the oxygen flashback arrestor (colour coded blue). Tighten the nut using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten. Connect the red regulator flashback arrestor to the outlet of the fuel regulator (ACETYLENE colour is RED and marked 'F'). The flashback arrestor is clearly marked "FIT TO REGULATOR OUTLET".

Tighten the nut using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten. Connect the fuel hose to the outlet of the fuel flashback arrestor (ACETYLENE hose colour is RED). Tighten the nut using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten.



TESTING FOR LEAKS - IMPORTANT

 After assembly and before igniting the torch and using this equipment, it is recommended that the following procedure be followed to check for leaks:

Oxygen system check

- Both regulator pressure adjusting knobs shall be turned anti-clockwise until fully open to the extent of their screwed spindle.
- Close the blowpipe handle valves.
- Each cylinder gas supply valves shall be opened slowly one at a time. The low pressure gauge on
 each regulator shall be observed. If pressure is registered on either or both low pressure gauges, this
 indicates a faulty regulator. Replace the faulty regulator and restart the pressurisation procedure.
- Open the oxygen cylinder valve slowly and set the regulator to show approximately 100 kPa on the delivery gauge.
- Close the oxygen cylinder valve and watch the cylinder pressure gauge and if the pressure decreases, there is a leak in the oxygen system. If there is no pressure drop, then there are no leaks up to the blowpipe handle valve.
- Open blowpipe handle oxygen valve to release oxygen gas pressure from the system.
- Make sure the oxygen regulator control knob is fully closed by turning counter clockwise.
- Close blowpipe handle oxygen valve.

Fuel system check

Repeat the oxygen system check on the fuel gas system to check the fuel system for leaks.

IMPORTANT:

If either system is found to be leaking, then a suitable leak detection solution or soapy water can be used to find the leaks.

- Test for leaks at the following points (using a suitable leak detecting solution):
 - Between both the gas cylinder supply valves and the regulator connections.
 - Between the regulator outlet connections and the welding hose connection.
 - Between the welding hoses and the hose connections on both ends.
 - Between the blowpipe inlet connections and the welding hose connections.
 - Around the spindles of all blowpipe and cutting attachment valves.
 - At the connection joint between the blowpipe and the welding cutting or heating attachment.
 - At the tip or nozzle.
- If leaks are detected at any of these points then necessary adjustments, repairs or replacements shall be made before proceeding.
- This test should be done quickly, and it is important that there are no sources of ignition present during this process as a certain amount of oxygen and fuel gas will be released in the operation area. If no leaks are detected, the system is ready for use. Each time a component in the system is changed the test should be performed again.

NOTE:

Before using this equipment or when starting to re-use the equipment after an interval of ½ hour or more, each of the oxygen and fuel (gas) systems should be purged to remove any residual gas mixtures. When purging, ensure that the fuel valve is fully closed before opening the oxygen valve and the oxygen valve is closed before opening the fuel valve. Safe practices like this should be practiced minimising risks.

WARNINGS RELATING TO SAFE USE OF GAS

Read and understand instructions before using this equipment. The contained information not only contains information in relation to installation and use of the hose reel but also valuable safety information when using flammable gases.

Gas equipment that is incorrectly used, maintained or repaired can be dangerous. Use only Tradeflame parts and accessories with Tradeflame gas equipment. Use only approved service or repair agents of Tradeflame gas equipment. Do not attempt to repair this equipment. Do not attempt to modify any Tradeflame gas equipment from its intended use, doing so could result in damage or injury.

The information contained in these instructions represents the manufacturer's suggested use, the manufacturer assumes no liability for its use. Understanding the instructions and the equipment you are using along with the environment it is being used in is all part of using this equipment safely. The information contained in these instructions must be followed carefully to avoid injuring the user or anyone in the operating area. The safest of equipment, if wrongly used, can cease to be safe. For safe use of this equipment always consult the instructions if you are unsure. The gases used with this equipment are extremely flammable so proper use and proper safety precautions must always be followed.

Operator Safety

- Make sure the environment is neat, clean and free from any hazards or flammable materials before lighting up.
- Before commencing any work, make sure the equipment is in good condition and free from leaks.
- Wear suitable clothing and footwear. Synthetics, shorts, non-leather or open-toed footwear should not be worn.
- An approved face shield or a pair of approved welding goggles to protect the eyes should be worn.
 This not only protects your eyes but allows you to see your work clearly.
- Keep flame, sparks or metal away from cylinders and tubing. Watch out for sparks that may ignite things around you e.g. sleeves, cuffs and pockets.
- Leather gloves to protect the hands should be worn. If required, other leather apparel should be worn on other parts of the body if further protection is desired.
- Fumes produced by any of the processes may be harmful, in such cases, respiratory protection should be worn. Work should always be undertaken in well-ventilated areas, and where necessary, fume extraction should be used.
- Lighting up of the blowpipe should only be by a flint lighter or a pilot light, never with matches or cigarette lighters.
- The use of compressed oxy-fuel gases to dust off clothes or work should not be undertaken to avoid oxygen enrichment with possible subsequent self-ignition.
- All equipment items should be kept free from hydrocarbons, such as grease, oil, coal dust, silicon sealant, and the like.
- Hands and gloves should be free from hydrocarbons such as grease, oil, coal dust, etc. Also,
 the cleaning out of cylinder valves by running either a gloved or ungloved finger around the thread
 should not be practiced, as, when assembling the equipment, high pressure oxygen can react violently
 with hydrocarbons.
- An adequate gas supply is available to safely complete the work. Cylinders are safety secured.
- Equipment is matched to the fuel gas to be used.
- Flashback arrestors are used at all times.
- All parts of the system are in good working order. If in any doubt, replace or repair before proceeding.
- Minimize the length of the welding hoses and use a larger bore size if required. Keep the hose free from kinks and tangles.
- Ensure that the correct lighting-up and shutdown procedures are followed.
- Fire and accident prevention procedures are implemented.
- Use care when using a lit-up blowpipe to avoid burns to other personnel or a resulting fire.
 Ensure blowpipes that are lit are not left unattended.



Environment safety considerations

When performing gas welding, cutting, heating and allied processes, the following should be considered before commencing any work.

- Burns from flames, hot objects, molten particles, etc.
- Explosion from mixed gas concentrations created from the fuel gas leakage from cylinders, hoses and equipment connections.
- Fire caused by ignition of flammable materials, leakage of fuel gases, contact with hot slag, etc.
- Ignition of materials not normally considered flammable due to oxygen enrichment.
- Asphyxiation due to displacement of atmospheric, breathable air by inert or toxic gases,
 e.g. leakages in confined spaces or lack of oxygen resulting from excessive rusting in confined spaces.
- Fumes originating from the particular materials being welded, cut or heated.
- Electric shock which could result from gas welding or cutting on cables or other conductors at high voltage.
- Influence on the workplace from the above hazards (containers, vessels, heights, etc.)

GASES

General

A summary of the properties and characteristics of the more common gases used in welding, cutting, heating and allied processes is given below. Some industrial gases may be flammable, oxidizing, toxic or corrosive, and users need to take special precautions in handling them. Material safety data sheets, normally available from the gas suppliers, for each of the gases stored and used shall be easily accessible at all gas installation sites and points of use.

Oxygen and oxygen cylinders

Cylinder colour is black. Oxygen has no smell and is generally considered non-toxic at atmospheric pressure. It will not burn, but is an oxidizer which means it supports and accelerates combustion. Materials not normally considered combustible may be ignited by sparks and will burn readily in oxygen-rich atmospheres. Oils, greases and solvents or any hydrocarbon containing substances or liquids may react violently in contact with oxygen (i.e. explode). Metals may also burn. Proper advice should be sought, e.g. from gas suppliers and equipment manufacturers, before using any materials, especially lubricants and thread sealing tapes, for oxygen service. Only equipment marked 'for oxygen only' should be used with oxygen.

Oxygen cylinders should only be used for the purpose for which they are intended. Routine inspections and testing are done on them to ensure their integrity. DO NOT try and modify, alter or use them for anything other than the purpose for which they are designed. For example, oxygen is NOT a substitute for compressed air.

Acetylene and acetylene cylinders

Cylinder colour is claret. Acetylene has a distinctive garlic smell. It is non-toxic, but asphyxiation is possible through depletion of oxygen. It is lighter than air and not likely to collect in ducts and drains, but could collect in roof spaces. It requires minimum energy to ignite in air or oxygen. A concentration of as little as 2.5% in the air can burn. Acetylene is a potential fire and explosion hazard. Mechanical shock to the cylinder due to mishandling or overheating when under high pressure may cause decomposition, giving rise to high temperatures and possible detonation even in the absence of oxygen.

All acetylene cylinders are fitted with fusible plugs. These are designed to vent the cylinder contents in the event of an unsafe condition arising in the cylinder due to over heating or decomposition arising from either incorrect operating technique, faulty equipment or in conjunction with excessive temperature. In the event that the acetylene cylinder is heated or has any signs of trouble notify the gas supplier immediately.

Prompt action should be taken:

- Shut the cylinder valve off.
- Clear all personal from the area.
- Cool the cylinder with lots of water and notify the fire brigade.
- The person directing the hose should be protected behind some suitable shelter in case of explosion.
 If the safety device functions and the issuing gas ignites, cool the cylinder as above, but avoid
 extinguishing the flames. If the escaping gas does not ignite, care must be taken to avoid an air
 acetylene explosion. No source of ignition must be permitted to enter the area. Existing sources of
 ignition should be rendered safe.
- Continue cooling the cylinder with large quantities of water until it is quite cool. This may be determined
 by removing the cooling water at intervals and watching whether the water on the cylinder fries off, or
 whether the cylinder remains wet.
- In cases where the supplier's representative is unavailable or cannot reach the scene of the incident
 within half an hour, the cylinder may after this period be removed carefully to an open space away from
 buildings and any source of ignition provided it remains cool and wet.
- The cylinder valve should then be opened until the cylinder is empty. During this period water should be poured on the cylinder.
- When the cylinder is empty check whether the cylinder is cool, if so, close the valve.

Blowpipes and regulators

Never work with damaged equipment. Regular inspection, cleaning and maintenance of your oxygen/ fuel equipment will ensure correct operation and user safety. Do not use oil or grease on any blowpipe or regulator and do not handle equipment with an oily rag, oily gloves or hands. Never use a blowpipe as a hammer to knock slag from work. That's what a slag hammer is used for. Never use regulators for purposes other than that for which they were intended. Inspect connections and all seating surfaces on regulators and blowpipes before use, damaged connections can cause flashbacks. Never hang a blowpipe or tubing on a regulator or cylinder valve. Crack cylinder valves before attaching regulators. Cracking means to open the valve a little, then immediately close, to blow out dust or foreign matter. Cracking should always be done gently. Never crack a fuel gas valve near other welding works, sparks or open flame. Never force connections, be sure connections are tight but never overtighten. Use leak detection spray or soapy water to test for leaks, never use a flame to test for leaks. Never try to connect a regulator to a cylinder containing gas other than that for which the regulator is intended. Should a leak develop around blowpipe valve spindle, tighten the packing nut.

Daily maintenance of tips and nozzles is important for good results. Tip and nozzle cleaners have been specially designed for this purpose. They will clean even the smaller bores without causing damage. Where you have distortion of the orifice itself, the drills are essential. If a regulator shows excessive creep (pressure build-up when blowpipe valve are closed), close cylinder valve and have regulator repaired at once. Apart from risks, creeping regulators lead to poor work. Pressure build-up in excess of 35kPa is to be regarded as excessive and calls for immediate attention. Periodically, have pressure gauges on regulators tested for accuracy. Ensure before using that regulators have both a cylinder pressure and a delivery pressure gauge in working order. Before opening cylinder valves always fully release regulator adjusting knob. A sudden pressure rise in a regulator whose adjusting knob is screwed in puts a heavy strain on the mechanism and may cause damage. Never release the regulator adjusting knob while there is pressure in the tubing. If the pressure gauge indicator fails to return to the stop when pressure is released, have the gauge checked. Always take care to keep the regulators free of oil and grease. Oil and grease should be removed chemically by a qualified repair technician. Never use oil or grease on the regulator, cylinder or manifold connections. Do not change the inlet connection on a regulator in an attempt to use the regulator for a different type of gas. Gas operating pressures are not alike and therefore cannot be interchanged.



Hose handling and care

Long lengths of hose are not desirable they tend to kink and are vulnerable to damage. When long lengths must be used, be sure all connections are tight and ensure hose is protected from being stepped on, run over, kinked or tangled. Use only suitable hose connections and couplings for connecting and repairing hose. Protect hose from sparks, hot slag, hot edges or open flames. Keep hose away from grease and oil. All new hoses should be blown out before connecting welding equipment to remove, talc, dust or water. Do not crimp hose to stop flow of gases temporarily when, for example, changing blowpipe. Red hose should always be used for acetylene, orange hose for LPG and blue hose for oxygen. Use only hose designed especially for oxygen and fuel gases. Purge each length of hose before lighting the blowpipe. In other words, when hose is to be reconnected, treat it as you would a new hose; before lighting up, pass through it some of the gas with which it is to be used. Examine all hose periodically for leaks, worn parts, and loose connections. Test for leaks by immersing the hose in water or using leak spray. Carry out this test at normal working pressures. Should leaks or worn parts be found, at once cut out the section containing them. Remake joints with suitable hose repair kit. Never use a steel or copper pipe to make a joint either temporary or permanent. Do not try to repair hose with tape. If hose is burned in a flashback, discard that length of hose. Flashbacks may burn inner walls, making hose unsafe or cause further instability to the blowpipe equipment by blockage.

Flashback arrestors (FBA)

It is recommended to use flashback arrestors at both the regulator and blowpipe ends complying with recognised standards for any gas welding, cutting or heating processes. This will guard against the potential dangers of backfires and flashbacks. Regulator inspection and testing of FBA's is recommended. Replacement of flashbacks every 5 years or before is suggested to ensure safety.

LEAK TESTING

Leaks may develop in any part of a gas system. All equipment shall be regularly checked and any corrective action taken before use. Hose assemblies shall be tested after repair. Worn ends shall be cut back and refitted with the appropriate hose connections. Any hose that shows signs of deterioration shall be discarded. Leakage of gas around the spindle of the cylinder valve may be revealed by hissing and in the case of fuel gases by smell. If a leak on a cylinder cannot be shut off, the cylinder shall be marked and removed to a well ventilated safe area at a safe distance from the employees and the general public and the gas supplier informed. Repairs shall not be attempted on a leaking cylinder. Any leak detecting fluids used shall be compatible with the gases in use. The tested area shall be wiped dry with a clean lintfree cloth after the leak checks have been completed. If leaks occur whilst the system is pressurized, the system, shall be depressurized and removed from service for repair.

CONNECTING REGULATORS TO CYLINDERS

Place the gas cylinders in intended position ready for use and secure firmly in position. Open and then close (called 'cracking') the cylinder valve momentarily before attaching the regulator to blow out any material that maybe in the gas valve.

WARNING:

Fuel valves should be cracked in a well ventilated area clear of source of ignition.

Oxygen regulator

Place the inlet of the oxygen regulator (colour coded black) onto the cylinder valve of the oxygen cylinder (OXYGEN cylinder colour is BLACK) tighten the nut on the oxygen regulator inlet using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten.

Fuel regulator: (Acetylene regulator is RED)

Place the inlet of the fuel regulator making sure the correct fuel regulator is used with the correct cylinder (ACETYLENE cylinder colour is CLARET, LPG cylinder colour SILVER, GREY or GALVANISED) onto the cylinder valve, tighten the nut on the fuel regulator inlet using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten.

CONNECTING FLASHBACK ARRESTORS AND HOSE TO THE REGULATOR

Connect the blue regulator flashback arrestor to the outlet of the oxygen regulator (colour coded black). The flashback arrestor is clearly marked "FIT TO REGULATOR OUTLET". Tighten the nut using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten. Connect the blue oxygen hose to the outlet of the oxygen flashback arrestor (colour coded blue). Tighten the nut using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten. Connect the red regulator flashback arrestor to the outlet of the fuel regulator (ACETYLENE colour is RED). The flashback arrestor is clearly marked "FIT TO REGULATOR OUTLET". Tighten the nut using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten. Connect the fuel hose to the outlet of the fuel flashback arrestor (ACETYLENE hose colour is RED). Tighten the nut using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten.

NOTE: Colour coding of system components.

TYPE OF GAS	COLOUR OF FLASHBACK ARRESTORS (REGULATOR AND BLOWPIPE ENDS)	COLOUR OF HOSE	COLOUR OF REGULATOR	COLOUR OF GAS CYLINDER	
OXYGEN	BLUE	BLUE	BLACK	BLACK	
ACETYLENE RED		RED	RED	CLARET	

CONNECTING FLASHBACK ARRESTORS AND HOSE TO BLOWPIPE HANDLE

Connect the blue regulator flashback arrestor to the inlet of the oxygen side of the blowpipe handle (colour coded blue and marked 'O'). The flashback arrestor is clearly marked "FIT TO BLOWPIPE INLET". Tighten the nut using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten. Connect the blue oxygen hose to the outlet of the oxygen flashback arrestor (colour coded blue). Tighten the nut using a spanner. The nut is RH threaded and needs to be turned in a clockwise direction in order to tighten. Connect the red regulator flashback arrestor to the outlet of the fuel regulator (ACETYLENE colour is RED and marked 'F'). The flashback arrestor is clearly marked "FIT TO REGULATOR OUTLET".

Tighten the nut using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten. Connect the fuel hose to the outlet of the fuel flashback arrestor (ACETYLENE hose colour is RED). Tighten the nut using a spanner. The nut is LH threaded and needs to be turned in an anti-clockwise direction in order to tighten.



TESTING FOR LEAKS - IMPORTANT

After assembly and before igniting the torch and using this equipment, it is recommended that the following procedure be followed to check for leaks:

Oxygen system check

- Both regulator pressures adjusting knobs shall be turned anti-clockwise until fully open to the extent of their screwed spindle.
- Close the blowpipe handle valves.
- Each cylinder gas supply valves shall be opened slowly one at a time. The low pressure gauge on each regulator shall be observed. If pressure is registered on either or both low pressure gauges, this indicates a faulty regulator. Replace the faulty regulator and restart the pressurization procedure.
- Open the oxygen cylinder valve slowly and set the regulator to show approximately 100kPa on the delivery gauge.
- Close the oxygen cylinder valve and watch the cylinder pressure gauge and if the pressure decreases
 there is a leak in the oxygen system. If there is no pressure drop, then there are no leaks up to the
 blowpipe handle valve.
- Open blowpipe handle oxygen valve to release oxygen gas pressure from the system.
- Make sure the oxygen regulator control knob is fully closed by turning counter clockwise.
- Close blowpipe handle oxygen valve.

Fuel system check

Repeat the oxygen system check on the fuel gas system to check the fuel system for leaks.

IMPORTANT:

If either system is found to be leaking then a suitable leak detection solution or soapy water can be used to find the leaks.

Test for leaks at the following points (using a suitable leak detecting solution):

- (a) Between both the gas cylinder supply valves and the regulator connections.
- (b) Between the regulator outlet connections and the welding hose connection.
- (c) Between the welding hoses and the hose connections on both ends.
- (d) Between the blowpipe inlet connections and the welding hose connections.
- (e) Around the spindles of all blowpipe and cutting attachment valves.
- (f) At the connection joint between the blowpipe and the welding cutting or heating attachment.
- (a) At the tip or nozzle.

If leaks are detected at any of these points then necessary adjustments, repairs or replacements shall be made before proceeding.

This test should be done quickly and it is important that there are no sources of ignition present during this process as a certain amount of oxygen and fuel gas will be released in the operation area. If no leaks are detected, the system is ready for use. Each time a component in the system is changed the test should be performed again.

NOTE:

Before using this equipment or when starting to re-use the equipment after an interval of ½ hour or more, each of the oxygen and fuel(gas) systems should be purged to remove any residual gas mixtures. When purging, ensure that the fuel valve is fully closed before opening the oxygen valve and the oxygen valve is closed before opening the fuel valve. Safe practices like this should be practiced to minimize risks.

MAINTENANCE

Maintenance shall be carried out by a technically qualified person. That person shall possess the following:

- (a) Sound knowledge of, and sufficient practical experience of, oxy-fuel gas equipment to carry out the duties required.
- (b) Sound theoretical knowledge of oxy-fuel gases used and their potential hazards when used in the workplace.
- (c) An understanding of the importance of integrity and safety in the use of oxy-fuel equipment. Examine the blowpipe nozzle regularly and if it is becoming clogged, clean it in a manner described by the manufacturer. All oxy-fuel equipment shall be kept clean and free of oil and grease at all times inclusive of the cylinders.
- Always keep the hose clean. If the hose becomes dirty, clean it with a damp cloth while retracting.
- Mount the hose reel in a sheltered area to assist and protect the performance of the hose and reel.
- DO NOT allow the hose to contact any corrosive chemicals or fluids.
- ALWAYS perform the leak test procedure mentioned above before using this hose reel.
- Always retract the hose when not in use.
- This hose reel contains a pre-tensioned spring inside the drum assembly. DO NOT attempt to open the drum assembly.
- If the hose jams, pull the hose fully out and retry. Repeat procedure if required.
- Always guide hose back into the reel and ensure the hose is clean and not twisted.

NOTE:

A high standard of cleanliness to be applied when the equipment is not in use.

The information contained in instructions represents the manufacturer's suggested use, the manufacturer assumes no liability for its use. Understanding the instructions and the equipment you are using along with the environment it is being used in is all part of using this equipment safely. The information contained in these instructions must be followed carefully to avoid injuring the user or anyone in the operating area. The safest of equipment, if wrongly used, can cease to be safe. For safe use of this equipment always consult the instructions if you are unsure. The gases used with this equipment are extremely flammable so proper use and proper safety precautions must always be followed. Further information or a replacement set of the

Personal protection MUST be used/worn when using this gas equipment.

instructions are available from our website, tradeflame.com.au

FLASHBACK ARRESTOR DESCRIPTION & FUNCTION

The Tradeflame Flashback Arrestor (FBA) is manufactured to EN730-1, AS4603 and is used to prevent flashbacks in oxy/fuel systems.

The safety devices contained within the flashback arrestor are dependent upon the type of flashback arrestor:

- 1) A sintered flame arresting element (FA) cools the flame to below the ignition temperature of the gas or gas mixture and prevents flashback.
- 2) A non-return valve is to prevent reverse flow of gases (NV) and ensures the gas only flows in one direction.
- 3) A thermal cut off device (TV) closes automatically at certain temperatures and cuts off the gas flow long before the ignition temperature of the gas mixture is reached.



PART NO	DESCRIPTION	GAS TYPE	MAX. W.P.: kPa	MAX AIR FLOW L/MIN	CONNECTIONS	STANDARD	LABEL COLOUR	SINTERED FLAME ARRESTING ELEMENT (FA)	NON RETURN VALVE (NV)	THERMAL CUT OFF DEVICE (TV)
228256	FLASHBACK ARRESTOR REGULATOR END	OXYGEN	OXYGEN: 1500kPa	1283	5/8" — 18UNF RH Thread	EN730-1, AS4603	BLUE	YES	YES	YES
			LPG: 500kPa	- 483 5/8" - 18UN		EN730-1, AS4603	RED	YES	YES	YES
228245 FLASHBACK ARRESTOR REGULATOR END	FLASHBACK ARRESTOR	FUEL	NAT GAS: 500kPa		5/8" — 18UNF LH					
	FUEL	HYDROGEN: 350kPa	216	THREAD	EN730-1, A34003	KED	153	163	163	
			ACET: 150kPa	210						
228167	FLASHBACK ARRESTOR BLOWPIPE END	OXYGEN	OXYGEN: 1000kPa	583	5/8" — 18UNF RH Thread	EN730-1, AS4603	BLUE	YES	YES	NO
228178	FLASHBACK ARRESTOR BLOWPIPE END		LPG: 500kPa	166	5/8" - 18UNF LH THREAD	EN730-1, AS4603	RED	YES	YES	NO
		FUEL	NAT GAS: 500kPa	100						
		FUEL	HYDROGEN: 350kPa	85						
			ACET: 150kPa	85						

Specifications	
Part No.	228523
Hose length	10 m
Hose I.D.	5 mm
Hose O.D.	10.5 mm
Working pressure	1.2mPa (max.)
Leader hose inlet length	2 m
Hose type	Reinforced rubber twin gas hose
Dimensions	42L x 24W x 40H cm
Brass thread fittings size	5/8" 18UN to 5/8" left & right threads
Hose conforms to	AS1335
Weight	7.5 kg



CAUTION: For maximum protection, always wear safety goggles, gloves or other appropriate equipment

KEEP OUT OF REACH OF CHILDREN