

# ACETYLENE REGULATOR

MODEL NO: SGA40.V2

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.







clothing

Wear safety footwear

Refer to instructions

#### SAFETY 1.

~ Always have a fire extinguisher nearby.

goggles

- × Never use acetylene gas to blow soot or dirt from your clothes.
- **DO NOT** wear ragged clothes, as sparks can ignite the ragged or loose ends.
- ~ Secure cylinders to a trolley, wall or post to prevent them from falling.
- 1 All cylinders should be used and stored in an upright position.
- Never drop or strike a cylinder. DO NOT use cylinders that have been dented. x
- ~ Cylinder caps should be used when storing or moving cylinders.
- ~ Empty cylinders should be kept in specified areas and clearly marked 'EMPTY'.
- Inspect fittings for damage. If any damage is found, replace immediately.
- Always use reverse flow check valves on torch and flashback arrestors on the regulator. This greatly reduces the possibility of mixing gases in the regulator or hoses. Reverse flow check valves are an important safety precaution.
- Keep all threads and unions clean and free from oil, dirt or grease.
- Never apply oil or grease to any thread, inlet or outlet connection or cylinder valves. ×
- For safety advice regarding gas bottles (oxygen and acetylene) refer to the supplier of the bottles. 1 Make sure bottle keys are in place at all times so that in the event of an emergency the valves can be turned off quickly.
- LEAKING HOSES CAN KILL. Leak test all connections and valves prior to each use of the equipment.
  - Remember at all times BLUE = OXYGEN 'O'

## **RED = ACETYLENE 'A'**

- At no time may you interchange parts contained in this kit with those of other manufacturers. Only Sealey replacement items should be used.
- The regulator in this kit has no user-serviceable parts. All repairs/calibrations must only be undertaken by a BCGA approved service agent.

#### 2. INTRODUCTION

Twin gauge regulator complies to BS EN ISO 2503 with bull nose adaptor and 3/8" BSP hose union. Displays bottle pressure and working pressure for acetylene.

#### 3. **SPECIFICATION**

MODEL NO:	SGA40.V2
Gravity/Mass	0.9
Maximum Inlet Pressure:	28 Bar
Maximum Outlet Pressure:	1.5 Bar

#### 4. ASSEMBLY

WARNING! Danger of explosion. All parts which come into contact with acetylene, including hands and tools, must be free from oil or grease. If grease or oil is found on a cylinder, discontinue its use immediately and contact your gas supplier.

#### 4.1. PREPARING THE CYLINDER

- Make sure that the cylinder to be used is safe and properly secured as noted in the safety precautions. 4.1.1.
- 4.1.2. Whilst standing to one side or to the rear of the cylinder 'crack' the cylinder valve. 'Cracking' is to quickly open and close the valve allowing gas to escape and thus clear the valve of any dust, dirt or foreign bodies.
- CONNECTING THE GAS REGULATOR TO THE CYLINDER 4.2.

NOTE: Pressure regulators should be treated as precision instruments and should not be jarred or knocked. 4.2.1. Function of the regulator.

Fitted to the outlets of the gas cylinder valves, the pressure regulator reduces the pressure of the gas from cylinder pressure to the constant lower pressure required for the operation of the equipment. The right hand gauge indicates the pressure in the cylinder. The left hand gauge indicates the pressure of the gas being delivered to the torch. Pressure reduction within the regulator occurs in two stages.



- 4.2.2. Use only acetylene regulators to control the acetylene supply. Switching regulators from other uses use can introduce contaminants to the system. Ensure that the valve is always clean and completely free of grease or oil. Use a dry lint free cloth to thoroughly clean the regulator before use.
- 4.2.3. Attach acetylene regulator to the appropriate cylinder. On each gauge ensure the inlet filter is in place and is not blocked or contaminated. **DO NOT** use any form of jointing paste or tape between regulators and cylinder valves.
- 4.2.4. Before attaching the regulator wipe the fittings with a clean dry lint free cloth. Screw the union at the base of the regulator to the appropriate cylinder by hand. Ensure that the regulator is correctly orientated so as to be seen properly by the operator in use.
- 4.2.5. To tighten, turn COUNTER CLOCKWISE for ACETYLENE. A wrench should be used to ensure tight connections.
- 4.2.6. Before opening the cylinder valve, ensure that the regulator's pressure adjusting screw is released. To do this, rotate the adjusting screw fully counter clockwise. If this is not done, pressure from the cylinder can damage the diaphragm and render the regulator inoperative.
- 4.2.7. Cylinder valve-to-regulator connections should be checked for leaks using an approved leak detection spray or soap and water solution.
- 4.2.8. Stand to one side while opening the acetylene cylinder valve. Open the valve as slowly as possible until the high pressure gauge reaches cylinder pressure. Ensure you open the cylinder valve slowly as surges of high pressure can cause a blow out.
- 4.3. CONNECTING THE FLASH ARRESTORS AND HOSES TO THE GAS REGULATOR
- 4.3.1. Connect the **RED**, **ACETYLENE** flash arrestor to the outlet on the **ACETYLENE** regulator.
- 4.3.2. Tighten all nuts securely with a wrench. If any sign of oil or grease is found on the flash arrestor or regulator discontinue use immediately. NOTE: New hoses contain a preservative powder which must be blown out before use.
- 4.3.3. Prior to attaching the torch, blow out both hoses to eliminate any particles or debris. Perform this on one hose at a time and in a well ventilated area, otherwise you may create conditions for fire or explosion.
  - a. Turn the acetylene regulator adjusting screw clockwise to allow 5psi to pass through hose.
    - b. Allow acetylene to flow for approximately 10 seconds to purge the hose.

# 5. MAINTENANCE

### 5.1. DAILY

- 5.1.1. Check the condition of all equipment checking for damage, especially hose sets
- 5.2. WEEKLY
- 5.2.1. Pressure test the system and check the system for leaks using 0.5% Teepol detergent solution in water (or other oil free leak detection fluid).
- 5.3. EVERY FIVE YEARS
- 5.3.1. Ensure the product is removed from service and replaced or refurbished by a qualified person (refer to the date stamp on the equipment)



## ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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