

## Replacing the spool of wire

- 1) Your No-Gas Mig Welder comes complete with a 0.5 Kg. mini-spool of 0.9 mm. flux cored mild steel wire. Once it is depleted it can be replaced with either a 0.5 Kg. or 5.0 Kg. spool of flux cored wire.

If you convert your welder (Not MIG 85 EN NO GAS) to gas operation then you can use spools of 0.8 Kg or 5.0 Kg wire in either 0.6 mm diameter mild steel or 0.8 mm diameter mild steel, stainless steel or aluminium.

0.6 mm. is normally used for thin mild steel to 3 mm.

0.8 mm. is normally used for thicker metal to 6 mm.

The wire is pulled by a roller (see diagram 2, item M) which is moved by a set of gears. The roller has two grooves, one 0.7 mm. deep and one 0.9 mm. deep. You must use the correct groove as outlined on Page 10 - Preparation for Welding - otherwise the wire will not be carried through efficiently, or will flatten; also make sure that the contact tip at the end of the torch is the correct size. Your No-Gas Welder is fitted as standard with a 1.0 mm. tip which is fine for 0.9 mm. flux cored wire, and also for 0.8 mm. Aluminium. for all other wires use a tip which corresponds with the diameter of the wire being used.

To replace the spool refer to diagram 2 and repeat the procedure outlined on Page 7 - Connecting the Wire Feed.

## Replacement welding wire and gas bottles

Replacement welding wire and gas bottles are easily available through our Clarke national dealer network, motor accessory shops, engineering outlets, chain stores and D.I.Y. shops. Should you have any difficulty obtaining replacements telephone Clarke on 081/9868231 for your nearest outlet. North America - Please call Clarke Power Products - Inc. at (419) 352-2299.

## Welding hints and maintenance

- 1) Hold the gun at 45° angle to the work-piece with the nozzle about 6 mm from the surface.
  - 2) Move the gun smoothly and steadily as you weld.
  - 3) Avoid welding in very draughty areas. A weak pitted and porous weld will result due to air blowing away the protecting welding gas.
  - 4) Keep wire and wire liner clean. Do not use rusted wire. Check all cables periodically. They must be in good condition and not cracked.
  - 5) Sharp bends or kinks on the welding hose should be avoided.
  - 6) Always try to avoid getting particles of metal inside the machine since they could cause short circuit.
  - 7) If available, use compressed air to periodically clean the hose liner when changing wire spools and the inside of the welder.
  - IMPORTANT: Disconnect from power.
  - 8) Using low pressure air (20-30 PSI), occasionally blow the dust from the inside of the welder. This keeps the machine running cooler. Note: do not blow air over the printed circuit board and electronic components.
  - 9) The wire feed roller will eventually wear during normal use. With the correct tension the pressure roller must feed the wire without slipping. If the pressure roller and the wire feed roller make contact (with wire between them), the wire feed roller (grooved) must be replaced.
  - 10) Should you have a problem with your machine contact your local service agent of Clarke International (telephone 071/254 6421).
- North America - Please call Clarke Power Products - Inc. at (419) 3522299.

## Spot welding

It is possible to spot weld two sheets of up to 0.8 mm. thickness mild steel by replacing the torch gas nozzle with a spot welding nozzle (not supplied), which is available from most welding equipment suppliers as an optional extra. It is sufficient to place the torch nozzle on the upper sheet and then push the torch, pressing the trigger to spot the first sheet with the second one. For spot welding the machine must be regulated at the highest welding current and at a high feeding speed. It is advisable to use 0.8 mm. Ø wire.

## Connecting the wire feed

(See diagram 2)

Your No-Gas Mig welder is supplied with a 0.5 Kg. spool of 0.9 mm. flux cored mild steel welding wire. To connect this wire through the feed system ready for operation, follow the instructions below and refer to diagram 2.

- 1) Unscrew the spool holder (Drum brake) wingnut (I) and remove the washer and spring.
- 2) Pull off the external ring (J) from the spool holder and remove the spool (K).
- 3) Take the wire spool out of its plastic wrapping and replace on the spool holder. Replace the external ring, spring, washer and drum brake wingnut.  
Note: Do not overtighten the wingnut. 2-3 turns is normally sufficient for smooth wire feed without allowing the spool to overrun.
- 4) Loosen the plastic knob (L) (turn anti-clockwise) that holds pressure on the wire via the roller (M), then raise the pressure roller (N) and pull out any wire that has been left in the hose.
- 5) Cleanly clip the end of the wire from the spool and straighten if necessary, then feed the wire through the guide tube (O) over the channel on the roller (M) and into the torch sheath (P) about 10 to 15 cm.
- 6) Reposition the pressure roller (N) and the plastic knob (L) and tighten slightly (TOO TIGHT WILL CRUSH THE WIRE AND DAMAGE THE WIRE FEED MOTOR; TOO LOOSE WILL NOT ALLOW THE WIRE TO BE PULLED BY THE ROLLER). Note: The roller (M) has two grooves of different widths. Your machine is set at the factory with the correct groove in position for the No-Gas welding wire supplied. If you convert your machine to normal gas operation the roller can be reversed for use with different wire sizes (See page 10).  
Pull off the torch shroud (item 8, page 17) and unscrew the contact tip (item 9, page 17).  
Replace the side panel of the machine, plug into a correct\* outlet, switch on the machine and press the trigger. The wire will feed through the hose and when it appears at the torch end, release the trigger, switch off the machine and replace the contact tip and the torch shroud/nozzle.

\* For United Kingdom

MIG 85 EN - 240 V., 50 Hz

MIG 90 EN - 240 V., 50 Hz

MIG 100 EN - 240 V., 50 Hz

MIG 150 EN - 240 V., 50 Hz

\* For North America

MIG 90 EN - 110 V., 60 Hz

MIG 100 EN - 110 V., 60 Hz

MIG 150 EN - 220 V., 60 Hz