

Welder-Gas Metal Arc(MIG)-Portable

| Activity |   | Type Of Service |   |   |   |   |
|----------|---|-----------------|---|---|---|---|
|          |   | A               | B | C | D | E |
| 1        | <b>ELECTRICAL</b><br>- Inspect for damage to switch gear, wiring and/or conduit.<br>- If welder is operated on a circuit protected by a portable RCD check test status of RCD.  |                 |   |   | Y |   |
| 2        | <b>RESISTANCE TEST</b><br>- Resistance test insulation and earthing.  |                 |   | Y | Y |   |
| 3        | <b>REGULATOR</b><br>- Check that the regulator's rated maximum inlet pressure is suitable for the gas supply kPa.<br>- Check that the contents gauge functions correctly and returns to zero.<br>- Check the flowmeter / flowgauge is designed for MIG welding.<br>- Check that the flowgauge functions correctly when the control knob is adjusted and released, or the flowmeter functions correctly when the adjustment knob is adjusted.<br>- Leak test the contents gauge where it enters the regulator.<br>- Leak test the flow gauge where it enters the regulator.<br>- Leak test the spigot where it enters the cylinder valve and regulator.<br>- Leak test the outlet connection where it exits the regulator.<br>- Leak test hose connections at the regulator end.<br>- Inspect for visual damage and report it if it compromises its safe operation.<br>- Check the flowrate at the torch end with a hand held flowmeter and compare it with the flow that is shown on the flow gauge or flowmeter on the regulator. Replace regulator / flowmeter if discrepancy is excessive. |                 | Y | Y | Y |   |
| 4        | <b>GAS SUPPLY</b><br>- Check cylinder is securely restrained to machine or fixture.<br>- Check gas selection is correct for application.  |                 | Y | Y | Y |   |
| 5        | <b>HOSE</b><br>- Check hose for cracking at fittings and over its length. Replace if necessary.<br>- Leak test hose fittings.   |                 | Y | Y | Y |   |
| 6        | <b>TORCH</b><br>- Check operation of gas solenoid.<br>- Check torch cable for damage.<br>- Check hand piece for wear, cracks, damaged insulation or other damage.<br>- Inspect O rings.   |                 | Y | Y | Y |   |
| 7        | <b>DRIVE MECHANISM</b><br>- Check drive rolls correct size and type for wire selection.<br>- Check tension of wire feed mechanism.  |                 | Y | Y | Y |   |
| 8        | <b>WORK LEAD</b><br>- Inspect for damage to cable insulation,<br>- Check cable size compared to machine capacity.   |                 | Y | Y | Y |   |
| 9        | <b>WORK CLAMP</b><br>- Check spring tension and condition of jaws.  |                 | Y | Y | Y |   |

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Government of South Australia  
Department of Planning,  
Transport and Infrastructure

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| Last Issue Date: 30/09/2015 |   | Type Of Service |   |   |   |   |
|-----------------------------|---|-----------------|---|---|---|---|
|                             |   | A               | B | C | D | E |
| Activity                    |   |                 |   |   |   |   |
|                             | - Inspect cable to lug condition and condition of lug.<br>- Ccheck lug to clamp tightness.  |                 |   |   |   |   |
| 10                          | TERMINALS<br>- Inpect insulation terminals,<br>- Check terminals for tightness.<br>- Check lug condition.   |                 | Y | Y | Y |   |
| 11                          | WELDING SCREENS<br>- Inspect welding screens for damage and suitable for purpose.<br>- Check welding bays are of non reflective finish.   |                 | Y | Y | Y |   |
| 12                          | WELDING HELMET<br>- Check chipping lens is used and fitted in correct position.<br>- Check CR39 cover plate lens is used an dfitted in correct position.<br>- Check welding filter suitable for purpose (shade matches process and amperage). |                 | Y | Y | Y |   |
| 13                          | FUME EXTRACTION<br>Check fume extraction unit is operating. Refer to ME23 for maintenance on the welding exhaust system.  |                 |   |   | Y |   |
| 14                          | Record all results in log book.   |                 |   |   | Y |   |

**Special Comments and Technical Data**

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B SERVICE MONTHLY (FOR DECS SITES RESPONSIBILITY)  
 C SERVICE 3 MONTHLY AND APPLIES ONLY TO PORTABLE WELDERS.  
 D SERVICE ANNUAL  
 USE EQ022 FOR THE NON PORTABLE TYPE.

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