



MSA AUTHORIZED/CERTIFIED SERVICE CENTER'S REQUIREMENTS

GM (PG14) FIRST

Covers all GM (PG14) Fixed Gas & Flame Detection Products

MSA FIRST (PG14) Authorized/Certified Service Centers must have:

- Facilities, equipment and competent personnel to meet MSA service standards. Refer to Annex 1, 2.
- Assure that maintenance personnel successfully complete the MSA FIRST training class under the instruction of an MSA-authorized and qualified instructor.
- Tools and equipment must be purchased prior to class attendance. To be used during the training.
- Sub-agent or subcontractor will not be appointed to be utilized for the purpose of providing service on MSA products or attend this training.
- A Program Administrator assigned to coordinate with MSA to ensure that:
 - ✓ The Maintenance Center complies with MSA's procedures and recommendations.
 - ✓ MSA Manuals and support materials are kept current.
 - ✓ Yearly Audits and 3 Year refresher courses completed on time.
 - ✓ Upon six years, MSA Certified Repair Persons must attend a Re-Certification class to maintain their listing on their company's certificate (Complete Course).
 - ✓ Maintenance and repair questions are communicated to MSA for resolution.
 - ✓ Reports as required from MSA are provided in the right format.
 - ✓ The quality of the Service Center meets or exceeds MSA's minimum service standards (ASC KPIs).
 - ✓ MSA is notified immediately of any changes regarding the ability of the Service Center to meet the Authorized MSA Service Center requirements or its ability to maintain status as an MSA Authorized Service Center.
 - ✓ Tools and equipment are kept available and in good condition.

Annex. 1: Tools & Equipment list for GM (PG14) FIRST ASC:

P/N	Item Description	Qty
1400152-1	SMALL CALIBRATION CUP	1
1400154-1	LARGE CALIBRATION CUP (USE W/DUST GUARD)	1
722-000	FLEXIBLE TUBING	1
10001-1	SENSOR ALUMINUM STANDARD INDUSTRIAL HC CSA/FM	1
32461-4	CONTROL BOARD, HART, SCREW TERMINAL	1
32441-1	DISPLAY BOARD	1
1400150-M	PORTABLE PURGE CALIBRATOR METHANE	1
30060-1	CALIBRATION MAGNET	1
32554-1	CALIBRATION CUP IR400	1
32491-3	CONTROL BOARD, MODBUS	1
31414-1	ZERO SWITCH ASSEMBLY STAINLESS STEEL METRIC	1
32451-2	RELAY BOARD, 2 COMM, SCREW TERMINAL	1
IR400-4-01-1-2-0-1-0	IR400 SENSOR	1
50000	SINGLE BREAKER BOTTLE	1
271-001	MAGNET	1
922-023	REGULATOR 0-1000 psi 500 mL/MIN	1
50448-1	SENSOR STAINLESS STEEL 0-100 ppm H2S	1
32471-4A	CONTROL BOARD HART SCREW TERMINAL S4000TH	1
922-022	REGULATOR 0-1000 psi 1000 mL/MIN	1
922-023	REGULATOR 0-1000 psi 500 mL/MIN (for Highly Reactive Gases)	1
45172-1	CALIBRATION PLUG ASSEMBLY	1
70631-2	TOXIC SPLASH GUARD	1
931-085	TUBING, 3/16 ID X 5/16 OD X 1/16W TYGON SE200 PRICE/FT	1
45167-1	TOXIC SPLASH GUARD - FOR CL2, CL02 & O3 ONLY	1
46131-2	TS4000H MODBUS HART CONTROL BOARD SCREW	1
46100-1	INTERFACE MODULE, TOXIC GAS	1
45123-3	CARBON MONOXIDE SENSOR	1
45213-1	OXYGEN DEFICIENCY -20°C SENSOR	1
329082-1	LONG RANGE ALIGNMENT KIT IR5500	1
329113-1	ATTENUATOR IR5500	1
31037-1	DOUBLE CALIBRATION MAGNET	1
329314-1	SOURCE STACK KIT, SCREW TERMINALS	1
329084-1	PROPANE FILTER KIT IR5500	1
329083-1	METHANE FILTER KIT IR5500	1
TL105-0-2	TL 105 TEST LAMP	1
71471-1	UV/IR DETECTOR BOARD FL3100H	1
71471-2	UV DETECTOR BOARD FL3100H	1
71481-2	CONTROL BOARD 4-20 HART UV/IR FL3100H	1
70567-2	ASSEMBLY UV SOURCE TUBE W/O COVER FL3100/FL3101	1

71127-1	SENSOR UV FLAME FL3100/FL3101	1
70596-2	IR SOURCE TUBE	1
70552-2	IR PYROELECTRIC DETECTOR	1
70567-3	UV Source	1
71521-1	UV Detector	1
71391-1	IR Detector	1
70596-2	Lamp, IR Source	1
71336-1	Program Card	1
71064-1	IR Detector, CO2	1
71064-2	IR Detector, Sun	1
Gassonic 1701	PORTABLE TEST & CALIBRATION UNIT GASSONIC 1701	1
805773-1A	Microphone	1
805554-3A	Sound Source Tower Assembly	1

Annex. 2: Facility Requirements for GM (PG14) FIRST ASC:

- 1. Workshop requirements:** (Depends on the size of the market)
 - ✓ Minimum floor space required is 50m².
 - ✓ Floor – of a static free material and to control dust. If concrete the floor must be sealed or painted.
 - ✓ Walls – sufficient to maintain adequate heating, air conditioning and humidity control. Sound proofing is not necessary, however, may be required if Service center is adjacent to office space.
 - ✓ Floor – static proof mats are to be used where electronics are to be handled and repaired.
- 2. Work benches:**
 - ✓ Wood top work benches 1m x 2.5m are required for repair with heavy duty vise.
 - ✓ Anti-static mats are to be used on work benches and floor where electronic parts are to be disassembled or repaired.
- 3. Lighting:**
 - ✓ Fluorescent lighting to be located over each work area to provide adequate light to perform repair service.
- 4. Shipping area:**
 - ✓ Space available for shipping, storage of incoming goods, storage of shipping material, and outgoing products. An oversize shipping and receiving door is recommended for pallet shipments.
- 5. Parts Area:**
 - ✓ Floor racks and bins for parts storage. These can be either permanent or portable type.
- 6. Office space:**
 - ✓ An adequate space is to be separated for administration functions.
- 7. Power Supply**
 - ✓ Both AC and DC Power Supplies to be provided with adequate outlets
 - 230/115V AC
 - 24V DC Fixed supply
 - 0-30V DC Variable Power Supply
- 8. Facility HVAC System:**
 - ✓ Adequate Ventilation and Air conditioning is required to maintain the Service Center environment at a constant temperature and relative humidity. Recommend temperature range is 20 -26 degrees C at approximately 30 to 70% relative humidity.
- 9. First Aid:**
 - ✓ A First aid kit and emergency procedures are to be available as required by local regulations. All emergency phone numbers are to be posted at all phones.