

DEVILBISS

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CE 0194

OPERATION MANUAL
MPV-627 AIR FED HALF MASK



Operation Manual MPV-627 AIR FED HALF MASK Important

Read and follow all instructions and Safety Precautions before using this equipment

SAFETY WARNINGS

IMPROPER USE IS DANGEROUS. READ INSTRUCTIONS BEFORE USING

This supplied air respirator is designed to provide a high level of protection in contaminated atmospheres when worn and used correctly. It is not for use in atmospheres immediately dangerous to life or health and if accidentally disconnected or removed the wearer must be able to safely reach clean breathable air supply. The compressed air

supply to the respirator must be of breathable quality and conform to BSEN 12021:1998 and the relevant National or local Standards.

THE ACTIVATED CARBON FILTER DOES NOT REMOVE CARBON MONOXIDE OR CARBON DIOXIDE.

THIS DEVICE IS NOT RECOMMENDED WHEN SPRAYING PAINTS CONTAINING ISOCYANATES.

APPROVAL FOR USE

The MPV supplied Air Half - Mask Respirator is CE approved under PPE Directive 89/686/EEC. The goggles conform to European Eye-Protection standard EN166, category F for Low Energy Impact and Liquid Splash Protection.

An MPV supplied Air Half-mask system, correctly fitted and applied by trained personnel in accordance with these instructions, may be used subject to the user determining its suitability, in atmospheric contaminant concentrations up to 20 times

the relevant exposure limit for protection from particles, fumes, gases and vapours.

The respirator should only be used with Devilbiss original components to maintain approval for the system, this includes the compressor air supply hose item 15. (Fig 1)

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SUITABILITY FOR USE

COSHH requires that respiratory protective equipment be "suitable for the purpose" [Regulation 7 (6) (a)]. It is the duty of the user to determine such suitability and in so doing the following factors should be considered bearing in mind that the circumstances of use determine the level of protection provided.

1) The respirator must not be used in atmospheres immediately dangerous to life or health; i.e those atmospheres from which it

would not be possible to escape without risk to life or health. Such atmospheres include those deficient in oxygen.

2) The respirator must not be used in atmospheres where the concentration of contaminant may exceed 20 times the relevant exposure limit and it should be noted that at exceptionally high levels of physical work the peak inhalation may exceed the constant flow of supplied air.

SUITABILITY FOR USE

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| <p>3) The wearer must be able to adjust and fit the respirator correctly.</p> <p>4) The wearer must be trained in the correct wearing and operation of the respirator and understand the limitations of use.</p> <p>5) The user should examine the working area and the task to be performed to ensure that the respirator, which is intended for light duty service, is suitable and that the appropriate</p> | <p>model is selected and that the trailing supply hose will not present a hazard to the wearer or others in the vicinity.</p> <p>6) The user must provide a suitable management system, to ensure that the respirator is maintained in accordance with the manufacturers instructions.</p> |
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Facepiece fit testing

- Fit testing is required under COSHH, CLAW and CAR regulations and should be carried out by a competent person by using a recommended method. (see HSE guide HSG 53 & BSEN 529 : 2005)
- Fit testing is required for the MPV-627 facepiece to ensure it seals and protects the wearer adequately.
- A fit test should be carried out at the initial selection of RPE , where an untested facepiece is already in use or when there is a physical change to the user that may affect the fit of the facepiece.
- Users of the MPV-627 should be clean shaved , it is not suitable for users with facial hair which can affect the seal and protection..
- The cotton rimlets should not be used unless an adequate fit can be achieved when fit testing.

DESCRIPTION

<p>The MPV supplied Air Half Mask has a disposable cotton rimlet, adjustable head harness and two exhalation valves.</p> <p>The Half-Mask air feed tube is connected to a filter/regulator attached to the waistbelt. The pre set compressed air pressure regulator maintains a constant flow of air of the mask. The manufacturers flow rate is recommended at a minimum of 120 litres/min (4.2 SCFM).</p> <p>The disposable activated carbon filter removes odour, particulates and oil vapour. The filter should be changed when odours are no longer effectively removed. Appropriate (for example</p>	<p>DVFR 2). filtration should be fitted at the supply hose inlet to remove bulk oil, water and particulate matter,</p> <p>A short hose with connections is supplied for the attachment of a spray gun or air tool to the belt outlet connection. Protective goggles and disposable hood provide additional eye and skin protection for use with materials containing chemicals that have harmful effects.</p> <p>A stowage bag is supplied to keep the outfit safe and clean when not in use.</p>
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SPECIFICATION

<p>Protection - Assigned Protection Factor APF =20</p> <p>Carbon Filter Life = 1000 HRS.</p> <p>Supply pressure - 3.8 bar (55 lbf/in²) At hose supply connection (See Fig 1) Max 7 bar (100 lbf/in²)</p> <p>Supply hose - Only to be used with Devilbiss original hose. The manufacturers flow rate is recommended at a minimum of 120 litres/min (4.2 SCFM) to the mask. See parts list for recommended supply hose.</p> <p>The MPV-627 Air Fed Half Mask Outfit, comprises of:</p> <p>MPV-506-2 Half Mask: manufactured from soft natural rubber and has two exhalation valves, cotton rimlet, lightweight flexible hose with quick detachable stem, disposable hood and</p>	<p>stowage bag.</p> <p>MPV-518 Waistbelt Assembly: An adjustable nylon belt with quick fit buckle. The disposable carbon odour removal filter and pre set regulator are contained in a moulded housing which is moveable on the belt.</p> <p>MPV-456 Rubber air hose (1.2M) with quick detachable fittings to connect spray gun or air tool.</p> <p>MPV-4006 Single lens goggle provides eye protection to EN 166 Category F.</p> <p>MPV-59-K10 Pack of 10 overspray strips for MPV-4006.</p>
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REPLACEMENT OF PARTS

DISPOSABLE CARBON FILTER (11)

- 1) Unscrew the three cross head screws holding the regulator (10) to the filter housing (12).
- 2) Remove the spent filter from the filter housing (12) and replace with a complete new moulded filter cartridge (11).
- 3) Replace the regulator housing and retighten the securing screws.
- 4) Connect to the air supply and ensure correct airflow to the mask before use.

EXHALATION VALVE (3) AND BREATHING HOSE / MASK DIFFUSER ASSEMBLY (7)

- 5) Hold firmly the valve body (3) or hose/

diffuser and peel mask away from the retaining groove holding it onto the mask.

- 6) Replace valve or diffuser by inserting the sealing groove into the mask at a slight angle and gradually feeding the mask into the groove until it is sealed.

HARNES

- 7) To remove, push keyslot in the clips forward to release harness from the mask studs. To fit new harness, reverse the procedure.

DONNING PRODEDURE

WARNING: DO NOT ENTER THE CONTAMINATED AREA UNTIL ITEM (10) IS COMPLETED

- 1) Connect the air supply hose to the outlet of a coalescing air filter (DVFR 2). Do not turn on the air supply.

NOTE: Ensure that the supply hose is of sufficient length to allow the operator to enter and leave the contaminated area without disconnecting or removing the face mask.

- 2) Check the waistbelt and respirator assemblies ensuring that all parts are in good condition. Replace if damaged.
- 3) Attach and adjust the waistbelt assembly ensuring that the supply air inlet and spray gun outlet connectors are pointing down.
- 4) Connect the air supply hose to the waistbelt inlet.
- 5) Connect the respirator feed tube to the outlet socket on top of the filter assembly.
- 6) Connect the spray gun air supply hose to QD outlet on the bottom of the filter assembly (if required)

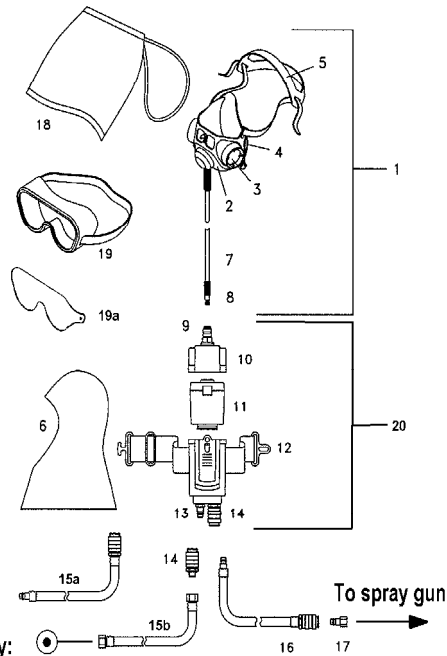
- 7) Turn on the air supply and check that the air is flowing freely to the inside of the face mask.

8) Place the single loop elasticated strap over the head. Place the face mask over the nose and mouth and fit the moulded head frame on the crown of the head. Pull the two ends of the elasticated strap to tension until the mask is a snug fit to the face. Adjust the position and fit as necessary to ensure a seal to the face. To release the tension push the plastic tabs to release the elasticated straps.

- 9) Adjust the air pressure with the gun triggered (if fitted) to ensure that the minimum supply pressure at the inlet of supply hose is in accordance with the minimum requirements 3.8 bar (55 psi).

(10) Fit goggles ensuring that there is no interference with the respirator. Adjustment to the goggles elasticated strap may be required to ensure a comfortable and effective fit.

NOTE: Do not remove the face mask inside the contaminated area. Retreat from the area immediately if any malfunction is suspected or if the warning whistle sounds (if fitted).



Air supply:
3.8 Min - 7 Max Bar (55 - 100 psi)
Breathable quality to BSEN12021:1999
(Such as from a DVFR2 Filter/Coalescer
unit, see accessories)

* NOT PART OF KIT ORDER SEPARATELY
 Use of this Devilbiss supply hose is essential to ensure correct and safe operation of this equipment.

NO	DESCRIPTION	PART NO	MPV-627 KIT-QTY	NO	DESCRIPTION	PART NO	MPV-627 KIT-QTY
1	MASK ASSEMBLY(REF NOS 2-8)	MPV-506-2	1	13	QUICK DETACHABLE STEM	MPV-10	1
2	FACEPIECE	MPV-486	1	14	QUICK DETACHABLE CONNECTOR	MPV-424	1
3	EXHALATION VALVE (KIT OF 2)	MPV-489-K2	1	15	SUPPLY AIR HOSE 5/16" BORE *		
4	KIT OF 10 COTTON RIMLETS	MPV-17-K10	1	15a	-10M LG M-F OD FITTINGS	H-6085-QD	
5	HARNES	MPV-487	1	15b	-10M LG 1/4" RE-USABLE FITTINGS	H-6065-B-R	
6	HOODS (KIT OF 5)	MPV-2-K5	1	16	GUN HOSE ASSEMBLY	MPV-456	1
7	TUBE AND MASK DIFFUSER ASSY	MPV-488	1	17	QUICK DETACHABLE STEM	MPV-5	1
8	QUICK DETACHABLE STEM	MPV-20	1	18	STOWAGE BAG	MPV-458	1
9	QUICK DETACHABLE CONNECTOR	MPV-442	1	19	GOGGLE	MPV-4006	1
10	REGULATOR AND HOUSING	MPV-455	1	19a	GOGGLE PROTECTION STRIP (KIT OF 10)	MPV-59-K10	1
11	DISPOSABLE FILTER	MPV-22	1	20	WAISTBELT ASSEMBLY	MPV-518	1
12	WAISTBELT & FILTER HOUSING	MPV-519	1				

INSTALLATION / OPERATION

WARNING: NEVER USE THIS RESPIRATOR IN AN AREA WHERE THE ATMOSPHERE IS IMMEDIATELY HAZARDOUS TO LIFE OR HEALTH. IN AN EMERGENCY THE WEARER MUST BE ABLE TO ESCAPE FROM THE WORK AREA WITHOUT THE NEED OF A RESPIRATOR.

THE AIR SUPPLIED MUST BE OF BREATHABLE QUALITY AND CONFORM TO BSEN 132 AND THE RELEVANT NATIONAL STANDARDS.

ONLY USE RECOMMENDED SUPPLY AIR HOSE.

CAUTION: It is essential to site the air intake of the compressor so that the air intake is free from contaminants. The compressed air must

be regularly checked for breathable quality. As a precaution against a supply failure or pressure loss an audible low pressure warning device can be fitted as described under accessories.

NOTE: It is recommended that a new air supply hose item (15) fig 1 is used and specially identified for breathing air. In the interest of hygiene each user should have their own face mask and hood.

HOSE LENGTH: Note 10m is the maximum hose length that can be used due to the minimum pressure requirements. If longer length is required a portable coalescing air filter device must be located at the supply end of the 10m of hose connected to the waistbelt inlet.

MAINTENANCE

INSPECTION:

- 1) Check the air flow to the face mask, the carbon filter should be changed after 1000 hours of use.
- 2) Check security of the hose connections and that hoses and tubes are in good condition. Replace if damaged.
- 3) Visually check the condition and function of all components of the half-mask particularly he

- exhalation valves, face moulding cotton rimlet and head harness. Replace if damaged.
- 4) Check the quality of the compressed air supply to the respirator, in accordance with a suitable management system.

CLEANING

- 1) Regularly clean and/or disinfect the face mask and headband assemblies. **DO NOT USE PAINT SOLVENTS.**

Recommended solutions:-

- a) Cleaning: 3ml of liquid detergent to 1 litre of warm water, mix thoroughly.
- b) Disinfectant: 2 ml of Dettol to 1 litre of warm water, mix thoroughly.

Method for cleaning and/or disinfecting

Use a lint free cloth dampened with the solution and wipe outside and inside of the face mask and headband assemblies. Repeat with a clean lint free cloth dampened with clean luke warm water. Allow to dry naturally, maximum ambient temperature 40°C.

ACCESSORIES

MPV-525: Breathsafe air quality test kit - tests air flow and quality after the waistbelt filter/regulator for carbon monoxide, carbon dioxide, oil mist and water carry-over.

DVFR-2 Filter, regulator and coalescer. Suitable for 2 operators, this unit provides air filtered to 99.99% at 0.01 micron.

DVCF-1 Filter and coalescer. Suitable for 2 operators, this unit provides air filtered to 99.99% at 0.01 micron.

MPV-405: Low pressure warning device provides an audible whistle to warn the operator when the air pressure is insufficient to supply the minimum recommended air flow.

Permanently fit to the filter/regulator assembly, remove (17), screw whistle device in place then re-fit connection (17) to whistle inlet.

ITW Finishing Systems and Products reserve the right to modify equipment specification without prior notice.

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