



**INSTRUCTIONS FOR USE AND MAINTENANCE OF
THE SGE 400 FULL FACE MASK**

PREFACE

These instructions for the SGE 400 full face mask have been prepared by MESTEL Safety.

The SGE 400 must be used and maintained in accordance with the following instructions. Incorrect use, unsuitable spare parts or bad maintenance are not only dangerous for health and safety but also automatically invalidate the guarantee and exempt MESTEL Safety from all liability.

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1 - INTRODUCTION

The SGE 400 full face mask conforms to European standard EN-136. Only screw filters are used, conforming to European standard EN-148 part 1.

2 - APPROVAL

The full face mask, model SGE 150 is a Personal Protective Equipment that fall under category III in terms of European 89/686/CEE (Italian Leg. Dec. 4.12.92, N° 475). The masks carry a CE certification in conformity with the harmonised EN 136: 1998 standard and satisfy the requirements laid down for class 3. (Firefighting & special use).

-Marking

An example of the marking used is given below:

CE 0426

SGE 150 EN 136: 1998 CL3

Where SGE 150 indicated the model, EN 136: 1998 indicates the European reference standard and CL 3 indicates the class the device belongs to, in terms of the reference standard.

The CE conformity mark indicates that the essential health and safety requirements indicated in Attachment 2 to the European Directive 89/686/CEE (Leg. Dec. 4.12.92 N° 475) are fulfilled. The number alongside the conformity mark denotes the Certified Body, ITALCERT, responsible for checking production in terms of article 11. B, European Directive 89/686/CEE.

3 - APPLICATIONS

The mask can be used in conditions requiring protection for both eyes and respiratory system. It is particularly recommended for industrial and agricultural sectors where the air is contaminated by toxic and/or hazardous substances.

4 - RESTRICTIONS

This ppe doesn't provide oxygen, be carefull to use it exclusively where $O_2 > 13\%$

5 - DESCRIPTION

The SGE 400 full-face mask is fitted by means of a headpiece with six straps. These can be adjusted to ensure a perfect fit over the face. The internal nose and mouth piece allow the air inhaled to pass through the visor without causing condensation or misting. It also reduces the unused space inside the mask to prevent the build-up of carbon dioxide from the air exhaled.

6 - MARKINGS ON PARTS

6.1 Visor

The visor is engraved to one side with the characters M-1.

6.2 Clamping band

One end of the clamping band where it meets the other bears the manufacturing lot number.

6.3 Face seal

The face seal is marked internally with the characters N-6 AS or N-6 A.

6.4 Breathing assembly

The top of the assembly is clearly marked SGE 400 to identify the type of mask.

6.5 Other parts

All other parts of the SGE 400 full-face mask are marked for easy identification to aid replacement during maintenance checks and to trace manufacturing data.

7 - INSTRUCTIONS FOR USE

7.1 General information

7.1.1 Packing

When removing the mask from its box, check that the instructions are included and that the mask shows no signs of damage. If it does, contact your supplier immediately.

7.1.2 Storage

Store the mask in a dry place away from direct sunlight and other sources of heat. Do not store below -20° C or above +50° C.

7.2 Preparation for use

7.2.1 Initial check

First read instructions carefully

- 1 - Inspect mask thoroughly
- 2 - Check visor is clean
- 3 - Check breathing valve is clean and moves freely
- 4 - Ensure that straps are fully extended

7.2.2 Fitting the mask

- 1 - Put the neck strap over the head so that the mask hangs around the neck with the inside towards the face.
- 2 - Put the chin into the face seal, keeping the two lower straps stretched open with the hands.
- 3 - Now pull the mask over the head and adjust it on the face. Be sure that hair does not remain trapped between seal and forehead.
- 4 - Adjust the side straps, then the lower straps and finally the upper ones. Do not tighten straps excessively.
- 5 - Use the palm of the hand to cover the threaded hole into which the filter is screwed and inhale. The mask should collapse in towards the face and remain so for as long as you hold your breath. This check is necessary to ensure that the face seal is fitted correctly. If it is not, tighten the straps or adjust the mask over the face. Then repeat the check until the fit is perfect.

IMPORTANT

Beards, long sideburns or spectacle stems may interfere with the fitting of the mask to the face and cause air to leakage. Do not use in such circumstances.

7.3 Use

Choose the filter according to the type of contaminant, check the expiration date and ensure that the seal at the bottom of the threaded hole makes good contact.

You can now enter the contaminated area.

7.4 Removing the mask

Remove the mask either by pulling the two ends of the neck strap or by loosening the two lower headpiece straps. Then pull the mask off from the chin upwards.

7.4.1 Cleaning

IMPORTANT

Take particular care of any contaminants deposited on the mask. All cleaning should take place in safe areas. Do not use abrasive substances to clean the visor.

- 1 - After removing mask, clean under running water with mild soap to remove most of the contaminants. Then clean more fully by placing in boiling water. If disinfection is required, use a solution of diluted chlorhexidine digluconate (5%).
- 2 - Dry the mask with a soft, clean cloth or with a cool air blower.
- 3 - When dry, clean the visor with clean cotton wool.

TABLE: MAINTENANCE AND CLEANING

| Type of action | A | B | C | D |
|---------------------------------|---|---|---|---|
| Clean | | * | | |
| Disinfect | | * | | |
| General parts check | * | | * | |
| Replace inhaler membrane | | | | * |
| Replace exhaler membrane | | | | * |
| Replace nose and mouth membrane | | | | * |
| Fitting check | * | | | |

A = Before use

C = Monthly

B = After use

D = Every two years

8-MAINTENANCE

8.1 Monthly check

Examine the mask and check that:

- 1 - none of the plastic parts are broken
- 2 - there are no general signs of wear or damage
- 3 - the seals and/or headpiece are not split
- 4 - the filters and/or O-rings are not excessively worn

If the mask has any of these defects, it must not be used before the faulty parts are replaced.

ME.ST.EL. Srl recommends using the mask for no more than 10 years before replacement.

8.2 Replacing nose and mouth membrane

To replace the nose and mouth membrane and perform a complete overhaul, first remove the nose and mouth piece from the mask using the spanners provided in maintenance kit K11 (code 033450). If a complete overhaul is not necessary, remove the membrane gently without dismantling the entire nose and mouth assembly and insert the new one. To make the operation easier, apply a little liquid soap to the stem of the new membrane.

8.3 Replacing inhaler and exhaler membranes

This maintenance operation requires you to dismantle the entire breathing assembly. This can only be done by using the special spanners provided.

Step 1: insert the metal pin of the circular spanner in the hole on the outside of bushing MI-3 (1) see illustration on page 7 (exploded diagram) and unscrew by turning clockwise. This allows you to replace O-ring MI-8 (2) if it is damaged.

Step 2: remove the bushing and pull the breathing assembly out of the mask. This facilitates replacement of the nose and mouth membranes and separation of the assembly into two parts by extracting the central part of filter connector MI-2 (7) from breathing assembly MI-1 (14). During this operation, remove the two O-rings (MI-7 - 6-8 in figure) and replace them if they show signs of wear or breakage.

Step 3: replace exhaler filter NG-11 (13) in assembly MI-1.

Step 4: use a small pair of long-nosed pliers to remove filter holder MI-4 (4) from assembly MI-2. This operation also involves removing filter seal NG-13 (3) and replacing it if necessary. Replace inhaler membrane MI-5, which is similar to the ones fitted to the nose and mouth piece (5-17).

Step 5: reassemble the parts in the reverse order, taking care when fitting the O-rings. Use a thin layer of silicone grease to lubricate the O-rings.

8.4 Replacing the visor

To replace the visor, first detach the mask from the headpiece by unscrewing bolt NG-23 (20) from nut NG-24 (21) with a Philips screwdriver. Remove plastic clamping band MI-9 (23) attached to the headpiece and face seal N-6 AS (18) from the visor.

You can now dismantle the entire breathing assembly using the circular spanner supplied with maintenance kit K-11.

Follow the reverse procedure to reassemble the parts, taking care to position the face seal and plastic clamping band correctly.

8.5 Replacing headpiece

The headpiece has 6 adjuster straps (M-8 - 19 in figure). Replace if there is any sign of splitting.

To do this, pull the straps out through buckles MI-6 (26). Once you have freed all of the straps, fit the new headpiece by passing the straps through the buckles and making sure they are fitted securely.

8.6 Replacing clamping band

If clamping band MI-9 (23) is accidentally broken, remove it from the straps and buckles (see above). Then use a Philips screwdriver to unscrew the bolt from the nut and open the clip.

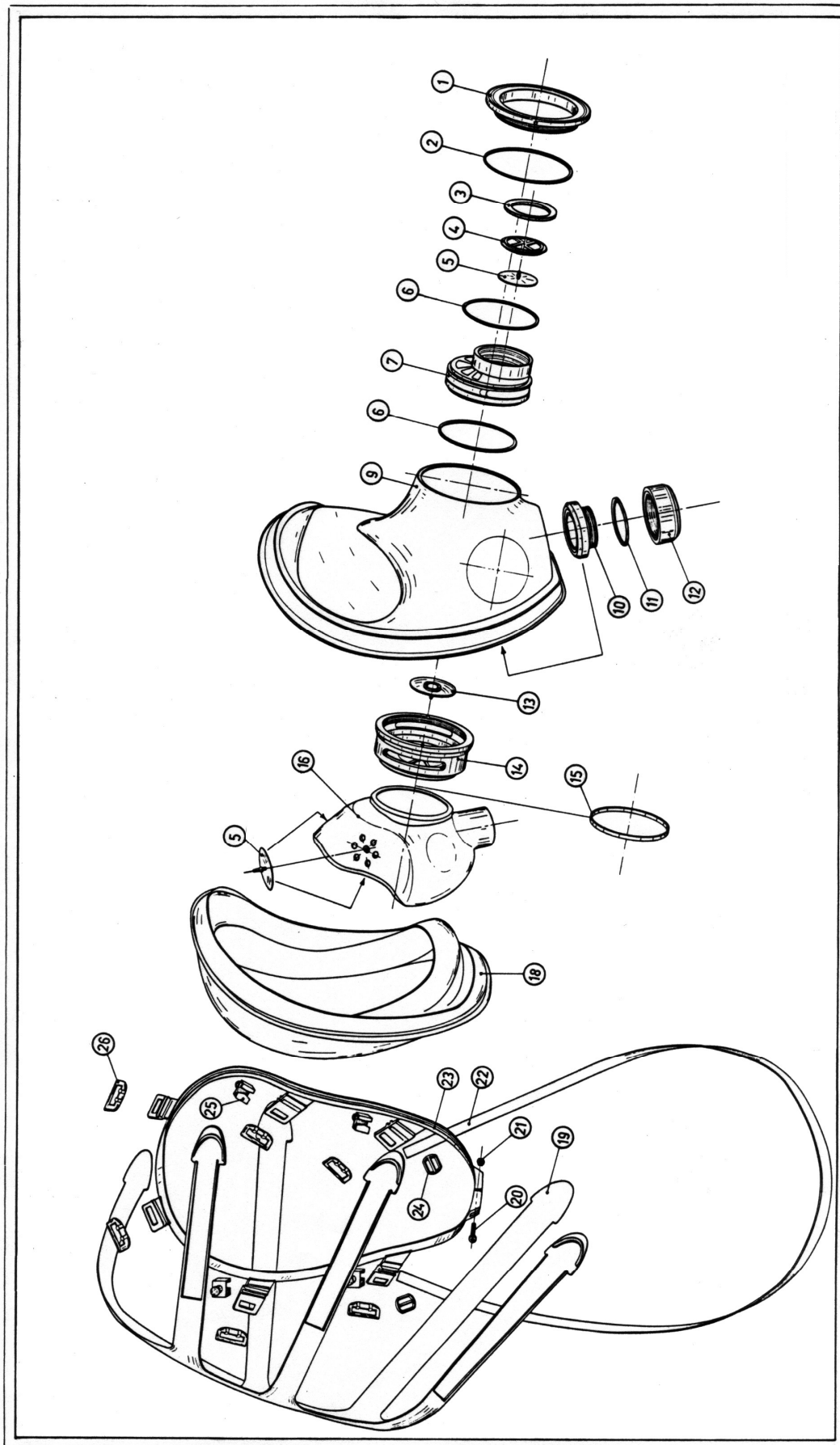
When reassembling, be particularly careful that the face seal and clamping band are centered on the visor and that the clip is positioned correctly on the face seal. Do this by lining up one end with the center mark on the face seal before tightening the bolt.

9.SPARE PARTS AND ACCESSORIES

9.1 List of spare parts

| Description | Component parts | Key | Code |
|-----------------------------|-----------------------------|-----|--------|
| SK-6 Clamping band kit | Buckle | 26 | |
| | NG-23 Bolt | 20 | |
| | NG-24 Nut | 21 | |
| | MI-9 Clamping band | 23 | |
| | MI-15 Visor support stem | 25 | |
| | | | |
| SK-1 Strap kit | MI-13 Neck strap | 22 | |
| | MI-12 Buckles | 24 | |
| SK-2 Breathing assembly kit | N-7 Nose and mouth piece | 16 | |
| | MI-7 O-Ring | 16 | |
| | MI-8 O-Ring | 2 | |
| | MI-3 Bushing | 1 | |
| | MI-2 Filter connector | 7 | |
| | NG-13 Filter seal | 3 | |
| | MI-4 Filter membrane holder | 4 | |
| | MI-5 Inhaler membrane | 5 | |
| | NG-11 Exhaler membrane | 13 | |
| | MI-14 Nose and mouth band | 15 | |
| SK-3 Condensation plug kit | NG-15 Bushing | 10 | |
| | MI-10 O-Ring | 11 | |
| | MI-11 Condensation plug | 12 | |
| SK-4 Membrane kit | MI-5 Inhaler membrane | 5 | 032504 |
| | NG-11 Exhaler membrane | 13 | |
| SK-5 O-Ring kit | MI-7 O-Ring | 6 | |
| | MI-8 O-Ring | 2 | |
| | NG-13 Filter seal | 3 | |
| | MI-10 O-Ring | 11 | |
| Separate parts | M-1 Visor | 9 | |
| | N-7 Nose and mouth piece | 16 | |
| | N-6AS Face seal | 18 | |
| | M-8 Straps | 19 | |
| | MI/1 | 14 | |

10-EXPLODED DIAGRAM





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