

User Instruction

- Before use of this respirator, read carefully and understand this User Instruction of Model 1010A to obtain designed protection.
- Keep this User Instruction as useful reference if you have any questions during usage.

For Industrial Use ONLY

This product is designed for industrial use only. Make sure that this product be used by persons who:

- Have sufficient knowledge on occupational health and safety and respiratory protective equipment; or,
- Work under the close supervision of personnel with sufficient knowledge.

Model 1010A-06

Japan National Assay Registration No. TM560

*Before use, make sure that the approval label is attached on the respirator. Approval labels are attached on the head and rear sides of the filter case.

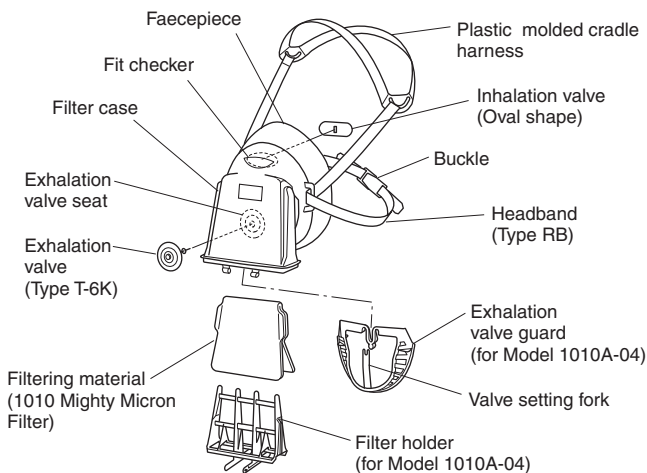
Replaceable Type Particulate Respirator (Direct connection type, half-facepiece, Category: RL1)

Model 1010A

Scope of applications

Model 1010A is a particulate respirator designed to protect the wearer from breathing particulates, etc., regardless of the presence of oil mist etc. Do NOT use Model 1010A in the environment described as "△ DANGER" and "△ WARNING" below.

Part names and structure



WARNING

- Do NOT use this respirator in workplaces where a) metal fume (including welding fume) diffuses, b) particulate substances with control concentration of 0.1mg/m³ or less diffuse, or any related works are performed.
- For these works, use proper respiratory protective devices such as particulate respirators categorized under RS2 or RL2.

For safe and proper usage

The following special messages may appear throughout this User Instruction to warn the wearer of potential hazard. Before reading the User Instruction, please make sure to read the definitions of the special messages and understand the contents.

DANGER

indicates an imminently hazardous situation. Unless following the instructions, there is a high possibility of resulting in **death or serious injury**.

WARNING

indicates a potentially hazardous situation. Unless following the instructions, there is a possibility of resulting in **death or serious injury**.

CAUTION

indicates a potentially hazardous situation. Unless following the instructions, there is a possibility of resulting in **light injury or damage accident**.

DANGER

- Do NOT use this respirator in oxygen-deficient environment (where the concentration of oxygen is less than 18%) or workplaces where the concentration of oxygen is unknown or toxic gas exists. Misuse will result in death or acute intoxication due to lack of oxygen and/or gas inhalation. Use supplied air respirator in such environment.
 - Do NOT use this respirator in workplaces categorized as "Working environment with a possibility of exposure to radioactive materials due to spillage or related emergency works," "Working environment involving asbestos removal where the use of particulate respirators categorized under categories other than Category 4 is required," "Working environment with a possibility of exposure to dioxins, etc.," or "Any works corresponding to these works."
- For these works, use proper respiratory protective devices such as particulate respirators categorized under RS3 or RL3.

How to use

Make sure to use only the Koken genuine parts.

Inspections prior to use

Make sure to perform the following inspections before donning the respirator. (Refer to "Inspection Procedure" (page 4) for more details).

Check points	Troubleshooting
Are parts such as filtering material, filter holder, inhalation valve, exhalation valve, etc. properly installed?	Install all parts properly.
Are there any damages such as cracks, distortions and/or scars, or adherence of remarkable dirt or foreign objects on plastic parts, inhalation valve, exhalation valve and/or facepiece?	Replace the parts or respirator with new ones. Clean the parts when adherence of remarkable dirt and/or foreign objects is observed.
Are there any damages such as distortion or hole or adherence of remarkable dirt on filtering material?	Replace the filtering material with a new one.
Is headband well elastic without dirt, damages and/or deterioration?	Replace the headband with a new one.

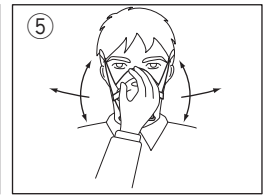
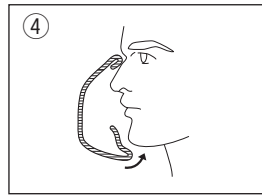
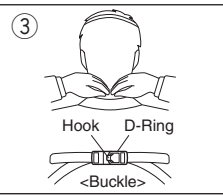
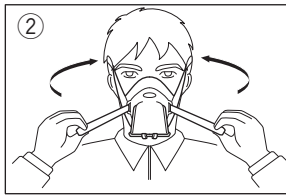
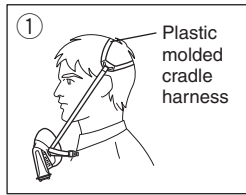
WARNING

- Do NOT use the respirator in the high-temperature environment where the respirator itself becomes remarkably hot or in the low-temperature environment where moisture from the exhaled breath becomes frozen. Deforming of parts or freezing may cause exhalation valve etc. to malfunction, resulting in leakage of toxic substances into the respirator.
- Make sure that facepiece is well fit on the face. Check the fit of the facepiece according to the "Performing fit test" (page 2).
- Airtight cannot be maintained under the following conditions, which may cause hazardous substances to leak into the facepiece. Do NOT use the respirator until improvements are made.
 - There is beard, sideburns, and/or hair that come inside the face-contacting area of the respirator.
 - There is mustache and/or chin beard that interfere the operation of the exhalation valve.
- Do NOT use the respirator if the wearer has a disorder in respiratory or circulatory system, or the doctor determines that the wearer does not have a fitness to wear a respirator.
- When working in a confined space, be careful not to bang the respirator against the wall. The respirator slipped out of place may cause hazardous substance to leak into the facepiece.

Fitting instructions

Don or doff the respirator in safe place without hazardous substance.

- Place the plastic molded cradle harness on your crown on head.
- Hold the buckle (hook and D-ring) and pull them evenly so that the respirator approaches to your face.
- Fasten the buckle on the back of your neck.
- Adjust the length of the headband according to the <Adjustment of headband length>. Place the facepiece over the bridge of your nose so that it stays completely over face, and then, place it over chin.
- Adjust the respirator position on face for stable position by aligning it left and right, up and down.
- Make sure to perform fit test after donning is completed.
- To doff the respirator, remove the buckle.



<Adjustment of headband length>

Adjust the length of the headband so that there is no slight opening between respirator and face. Also make sure not to over-tighten the headband to avoid oppression. Perform the adjustment of the headband length according to the following procedure.

*Make sure that the headband is evenly tightened.

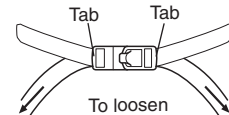
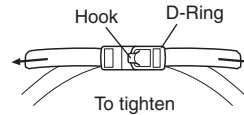
- To tighten, pull the headband on both the hook side and the D-ring side.
- To loosen, release the tension of the headband by lifting both tabs of the hook and D-ring.

CAUTION

- If the length of the headband is too short or too long, make adjustment following <Adjustment of headband length>.
- Make sure that the headband is well elastic and not over-extended.
- If the headband is over-tightened, feeling of good fit may be lost, and the wearer may experience a feeling of discomfort after working for a long time.
- After adjustment, make sure to perform fit test.

WARNING

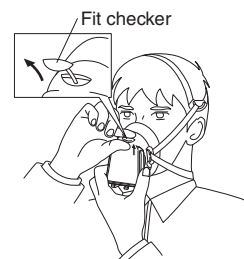
- Do NOT wear the respirator on towel applied over face. Particulates may leak into the facepiece.
- Make sure that the left and right sides of the headband are even in length. There is a possibility that over-extended headband and/or longer side of the headband than the other side may be caught up in a machine, etc.
- The wearer with allergic tendency and/or fragile skin may suffer from rough skin surface, eczema, etc. by using the respirator. And the similar symptom may occur due to sweat, particulates and/or dirt attached on the surface of the facepiece. In such case, stop using the respirator and consult with a doctor.
- In case proper donning cannot be maintained, such as dislocation of the respirator while working, move to a clean area without hazardous substance and don the respirator properly again.
- Do NOT apply vibration or excessive force onto the filtering material. It may result in decrease in performance and/or damage to the filtering material.



Performing fit test

Perform fit test in safe place without hazardous substance.

- Don the respirator, completely lift the fit checker up and inhale. Good fit is obtained if the facepiece is pressed against the wearer's face.
- If air leakage is perceived, check the donning and installation condition of parts, and perform ① again.
- If good fit is obtained, make sure to press down the fit checker before entering into the workplace.



DANGER

- Make sure to perform fit test prior to each use. If not donned properly, hazardous substance may leak through the opening created between face and facepiece, and be inhaled.
- If air leakage into the facepiece is perceived when performing fit test, do NOT use the respirator. Hazardous substance may leak and be inhaled.
- Do NOT handle the fit checker violently. Fit test may not be performed properly due to damage.

Replacement of filtering material (filter)

- Replace filtering material in safe place without hazardous substance.
- Make sure to use only the Koken genuine filtering material.

Replacement schedule

Replace the filtering material with a new one when:

- Breathing becomes difficult; and/or,
- Filtering material is damaged, distorted and/or got hole.

Replacement procedure

1pc of 1010 Mighty Micron Filter for replacement is packaged in each bag.

Replace 1010 Mighty Micron Filter according to the following procedure.

- Pinch the spring locks of filter holder with fingers, and pull the filter holder out from filter case. (Fig. 1).
- Remove used filtering material from the filter holder. *
- Insert the filter holder into a new filtering material all the way to the end. (Fig. 2).
- With the filtering material installed on the filter holder (Fig. 3), hold the spring locks with fingers and insert the filter holder into the filter case. (Fig. 4). Make sure that the protruding portions on the spring locks securely stay in the four holes on the filter case (Fig. 5).

*Dispose of the used filtering material in a sealed bag, etc. so that hazardous substances do not diffuse. Clearly indicate that the bag contains "waste plastic." Inform the industrial waste disposal operator that hazardous substances are attached on the used filtering material and ask for proper disposal.

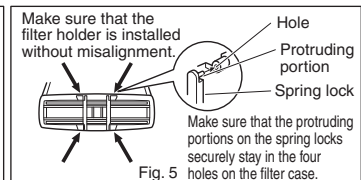
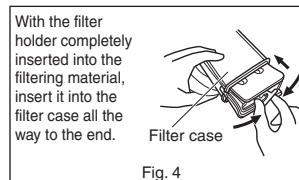
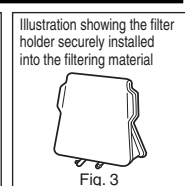
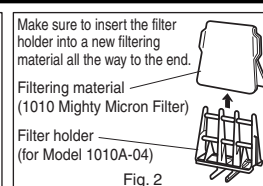
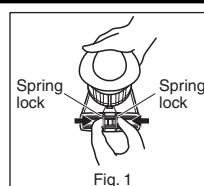
CAUTION

- Pay particular attention to the protruding portions located at the end of the filter holder, as fingers could get injured.

WARNING

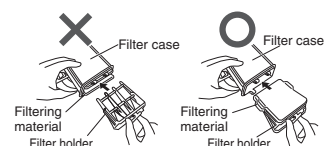
- Make sure to use filter holder for Model 1010A-04.
- Make sure to completely install the filtering material and filter holder.

If not properly installed, or a non-genuine filtering material and/or filter holder is used, filtering material/filter holder may drop off or particulates may leak into the facepiece.



WARNING

- Do NOT install the filter holder after filtering material is inserted into the filter case. Filtering material may get distorted and slight gap may be created, resulting in leakage of particulates into the facepiece.



Replacement of inhalation valve / exhalation valve

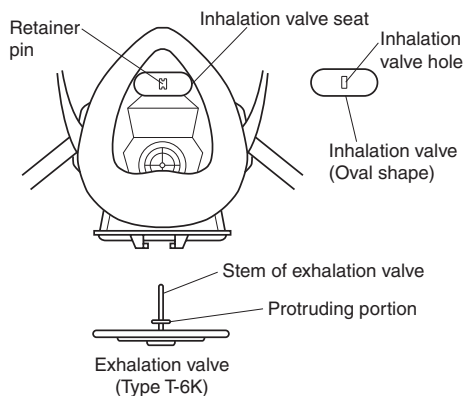
- Replace inhalation valve / exhalation valve in safe place without hazardous substance.
- Make sure to use only the Koken genuine parts.

Replacement schedule

- Replace when damages such as cracks, distortion, scar, hole, etc., remarkable dirt and/or sticky surface due to rubber deterioration is observed.

Replacement procedure of inhalation valve

- ① Remove the used inhalation valve from the retainer pin of the valve seat located inside of the respirator.
- ② To place a new inhalation valve in its position, widen the hole located at the center of the new inhalation valve with fingers so that the retainer pin easily goes through the hole. Make sure not to strongly press down the retainer pin

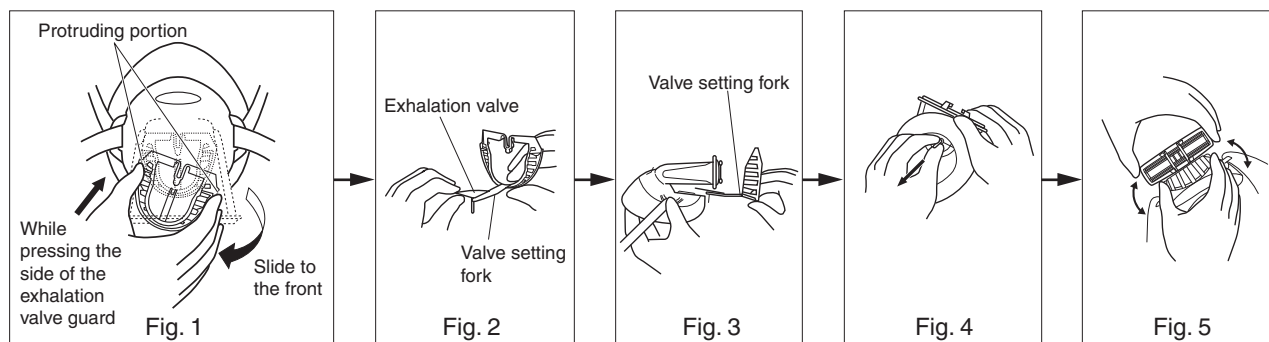


Replacement procedure of exhalation valve

- ① While pressing the side of the exhalation valve guard with thumb, slide the protruding portion of the exhalation valve guard to the front with forefinger and remove it from the respirator. (Fig. 1)
- ② Pinch the used exhalation valve with fingers and remove it from the respirator.
- ③ Bend the valve setting fork of the exhalation valve guard, place the stem of a new exhalation valve on the slot located at the end of the valve setting fork. (Fig. 2)
- ④ Insert the stem of the new exhalation valve into the hole located at the center of the exhalation valve seat. (Fig. 3). With fingers, pinch the stem of the exhalation valve which comes out inside of the respirator, and pull it until the protruding portion on the stem comes out. (Fig. 4)
- ⑤ Move the valve setting fork back to the original position. Make sure to push the valve setting fork all the way to the end so that it stays to the side of the filter case. (Fig. 5)
- ⑥ Check if the exhalation valve guard is securely installed.

WARNING

- Make sure that the exhalation valve seat is not get scarred.
There is a possibility that hazardous substance may leak inside the facepiece.



Replacement of headband

- Replace the headband in safe place without hazardous substance.
- Make sure to use only the Koken genuine headband.

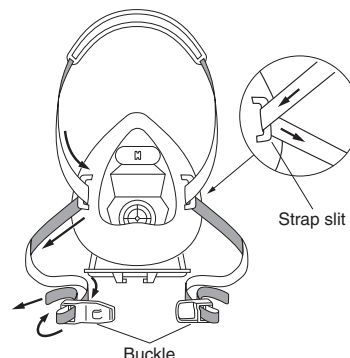
Replacement schedule

Replace the headband with a new one when:

- Remarkable dirt and/or sticky surface due to rubber deterioration is observed on the headband;
- The headband is not fully elastic or it does not have enough strength to hold the respirator;
- Crack, distortion, damage, missing parts, etc. are found on the buckles and/or plastic molded cradle harness; and/or,
- The buckles cannot be securely fastened or cannot be disconnected easily.

Replacement procedure

- ① Disconnect buckles from headband.
- ② Remove the headband through the strap slits located on the left/right sides.
- ③ To install a new headband, insert a new headband through the strap slits from the facepiece side.
- ④ Install buckles on a new headband while paying attention to the side of the headband, as shown on the illustration on the right.



Caution: Be sure with headband direction. Do NOT twist the headband.

Optional accessories and usage

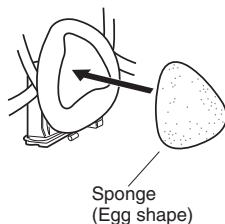
- Install or replace the optional accessories in safe place without hazardous substance.
- Make sure to use only the Koken genuine parts.

● Sponge (Egg shape)

Use when the wearer feels discomfort on moisture or sweat accumulated inside of the respirator.

How to use

Insert the sponge with its narrow end up into the inside of the facepiece. Make sure that it does not interfere the movement of the inhalation valve.

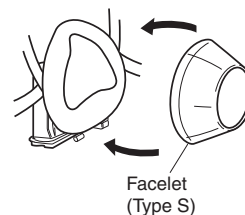


● Facelet (Type S)

Use facelet to avoid skin irritation due to sweat.

How to use

Expand the rim of the facelet and completely cover it over the facepiece evenly so that it stays without crimp.
*Make sure that the facepiece does not become deformed.



WARNING

- Use the facelet only when there is a possibility that the use of the particulate respirator causes eczema on facial skin and sufficient airtight is obtained on facepiece.
The use of the facelet may become a cause of leakage of particulates into the facepiece.

Inspection procedure

Perform in safe place without hazardous substance.

Check points		Criteria	Troubleshooting
Facepiece		No damages such as crack, distortion, and hole, no sticky surface due to rubber deterioration and/or no remarkable dirt are found.	Replace the respirator with a new one. Clean the respirator if remarkable dirt and/or foreign object attached are found.
Filter case		No damages such as crack, distortion, and hole, and no remarkable dirt are found. Filtering material can be firmly installed.	
Exhalation valve seat		No damages such as crack, distortion, and scar are found. There is no adherence of remarkable dirt and/or foreign objects.	
Fit checker		Fit checker moves smoothly and fit test can be performed at ease. No damages such as crack, distortion, and scar, and no remarkable dirt are found.	
Filter holder Exhalation valve guard		No damages such as crack, scar, and distortion are found. There is no adherence of remarkable dirt.	Replace the filter holder or exhalation valve guard with a new one. Clean the filter holder or exhalation valve guard if remarkable dirt and/or foreign object attached are found.
Inhalation valve Exhalation valve		No damages such as crack, distortion, scar and hole, and no sticky surface due to rubber deterioration are found. There is no adherence of remarkable dirt and/or foreign objects.	Replace the inhalation valve or exhalation valve with a new one. Clean the inhalation valve / exhalation valve if remarkable dirt and/or foreign object attached are found.
Headband	Straps	Fully elastic. It keeps necessary strength to hold the respirator.	Replace the headband with a new one. Clean the headband if remarkable dirt is found.
	Plastic molded cradle harness, Buckles	No cracks and/or no distortions are found. Buckles can be disconnected at ease and can be securely fastened.	
Filtering material	External appearance	No damages such as distortion and hole, no remarkable dirt and/or no excessive moisture are found.	Replace the filtering material with a new one.
	Inhalation resistance	Breathing is not difficult when donning the respirator.	
Overall conditions after all parts are assembled.		There are no missing parts. There are no gaps created at connecting parts. Filtering material is correctly installed in the filter case.	Install missing parts.

*For cleaning, refer to "Cleaning after use."

●Specifications

	Internal standard	Average
Filtering efficiency (Test particulate: DOP)	80.0% or more	94.4%
Inhalation resistance	70Pa or less	59Pa
Exhalation resistance	63Pa or less	38Pa
Increased value of inhalation resistance	-	109Pa
Increased value of carbon dioxide concentration / Dead space	0.6% (240cm ³) or less	0.46% / 184cm ³
Weight	83g or less	76g

Replacement parts

Call Koken or local distributor to purchase the following replacement parts.

- Filtering material -----1010 Mighty Micron Filter (1pc per bag)
- Filter holder -----Filter Holder for Model 1010A-04
- Inhalation valve -----Inhalation Valve Oval Shape (5pcs per bag)
- Exhalation valve -----Exhalation Valve Type T-6K (5pcs per bag)
- Headband -----Headband Type RB (5pcs per bag)
- Sponge -----Sponge Egg Shape (50pcs per package)
- Facelet to avoid skin irritation due to sweat -----Facelet Type S (5pcs per bag)

Maintenance and storage

Make sure to perform maintenance after each use and keep the respirator clean.

1. Cleaning after use

Perform cleaning in safe place without hazardous substance.

WARNING

- Do NOT remodel or disassemble the parts that are not replaceable.
- Do NOT use parts that are not Koken genuine when replacing parts.

● Filtering material

DANGER

- Do NOT perform maintenance on the used filtering material. Put the used filtering material in a sealed bag so that captured particulates would not diffuse and dispose of it in a proper way.

WARNING

- NEVER attempt the followings, or the filtering material could be distorted or damaged, or the filtering performance be decreased.
- Do NOT apply unnecessary impact on the filtering material to get rid of captured particulates, for example.
 - Do NOT use compressed air to blow away captured particulates attached on the filtering material. Do NOT use a vacuum cleaner to suck captured particulates attached on the filtering material.
 - Do NOT wash the filtering material in water.

● Parts other than filtering material

CAUTION

- Make sure to remove the filtering material before cleaning respirator.

- Gently wipe out attached particulates and dirt such as sweat with dry and slightly wet cloth. Be sure not to damage the respirator.
- Wash out remarkable dirt with mild neutral detergent diluted with warm water. Be careful when handling especially on the exhalation valve seat and the exhalation valve. Then rinse off neutral detergent by rinsing completely.
- Wipe out residual water after cleaning and dry it in the shade.
- Disinfect the face-contacting area and inside of the facepiece by wiping it with alcohol-soaked cloth. Then wipe the alcohol out completely.

CAUTION

- Always keep the face-contacting area clean.
Dirt attached on the face-contacting area could cause rough skin and skin irritation.
- If alcohol for disinfection is used, dry the respirator completely or wipe water completely after rinsing it with water.
- Do NOT use organic solvents, such as thinner, for maintenance.

2. Storage

● Place for storage

After cleaning, store the respirator in a dry place without heavy temperature fluctuations and/or high humidity. Do NOT pile up the cleaned respirators, as the facepiece, headband, etc. could be cracked and/or distorted. Avoid a direct sunlight for storage. Prepare an exclusive storage place so that the storage condition can be checked at ease.



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