

Section 10.1

Water Extraction System

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10. WATER EXTRACTION SYSTEM

10.1 Water Extraction System

10.1.1 Outline

When the woven fabric passes the surface of dehydrating cylinder "1", air is sucked through the slit in dehydrating cylinder "1" to lead the moisture contained in the fabric with the air into dehydration tank "2" to reduce moisture from the fabric. Dehydration tank "2" separates water from the air for drainage. Since the pressure inside suction hose "4" equals the atmospheric pressure while the blower is stopping, valve "5" is opened automatically to discharge remaining water in suction hose "4".

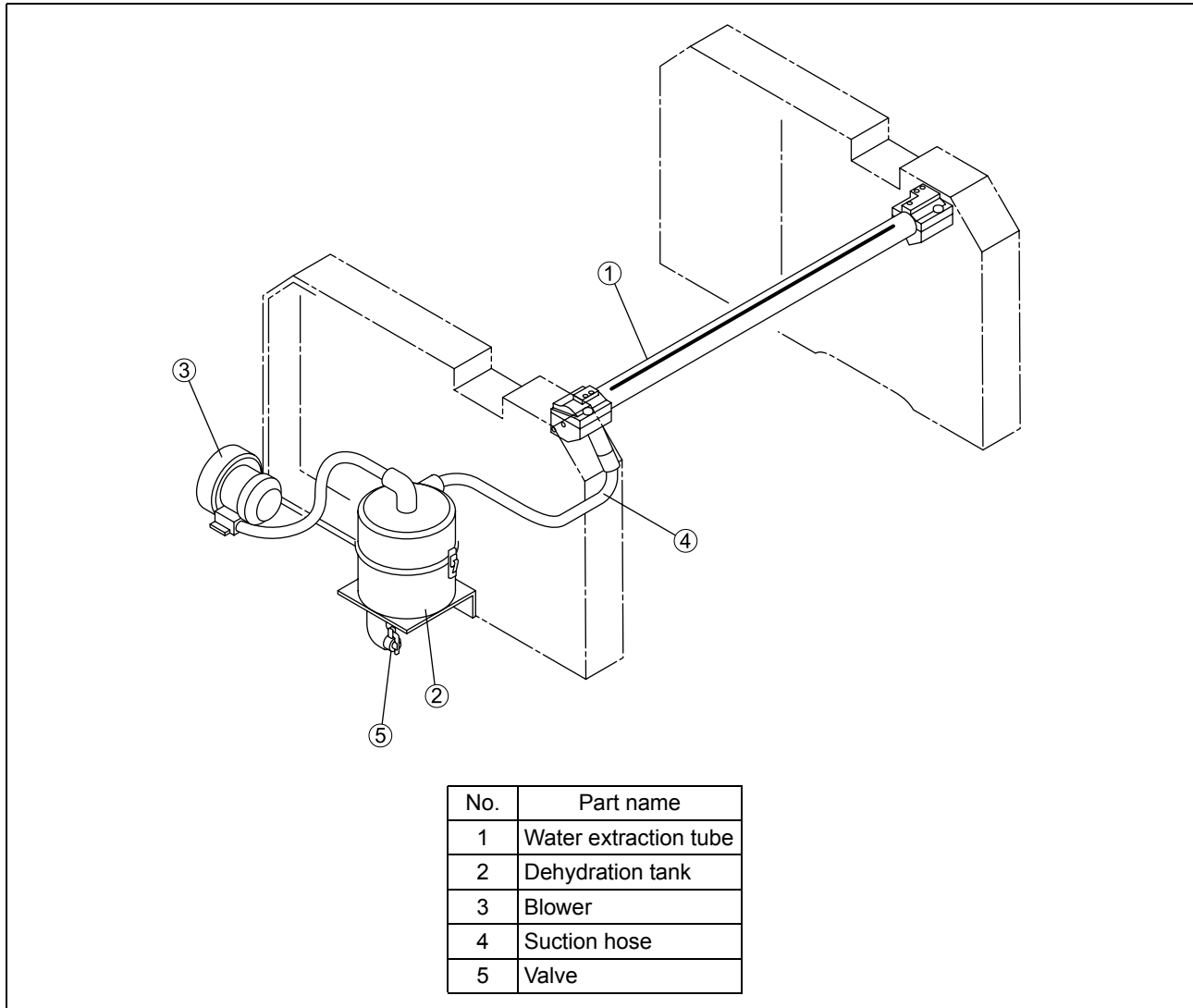


Fig. 10.1-1 Water extraction system

10.1.2 Water Extraction Tube

[1] Handling of Water Extraction Tube

The slit "2" length of the water extraction tube "1" is longer than the standard reed space, namely longer than the weaving cloth width. Therefore, tape the exposed slit "2" beyond the cloth width to prevent the suction force drop.

When the cloth was changed to a wider one, peel off the overlapping tape and be sure to remove the attached bonding waste carefully.

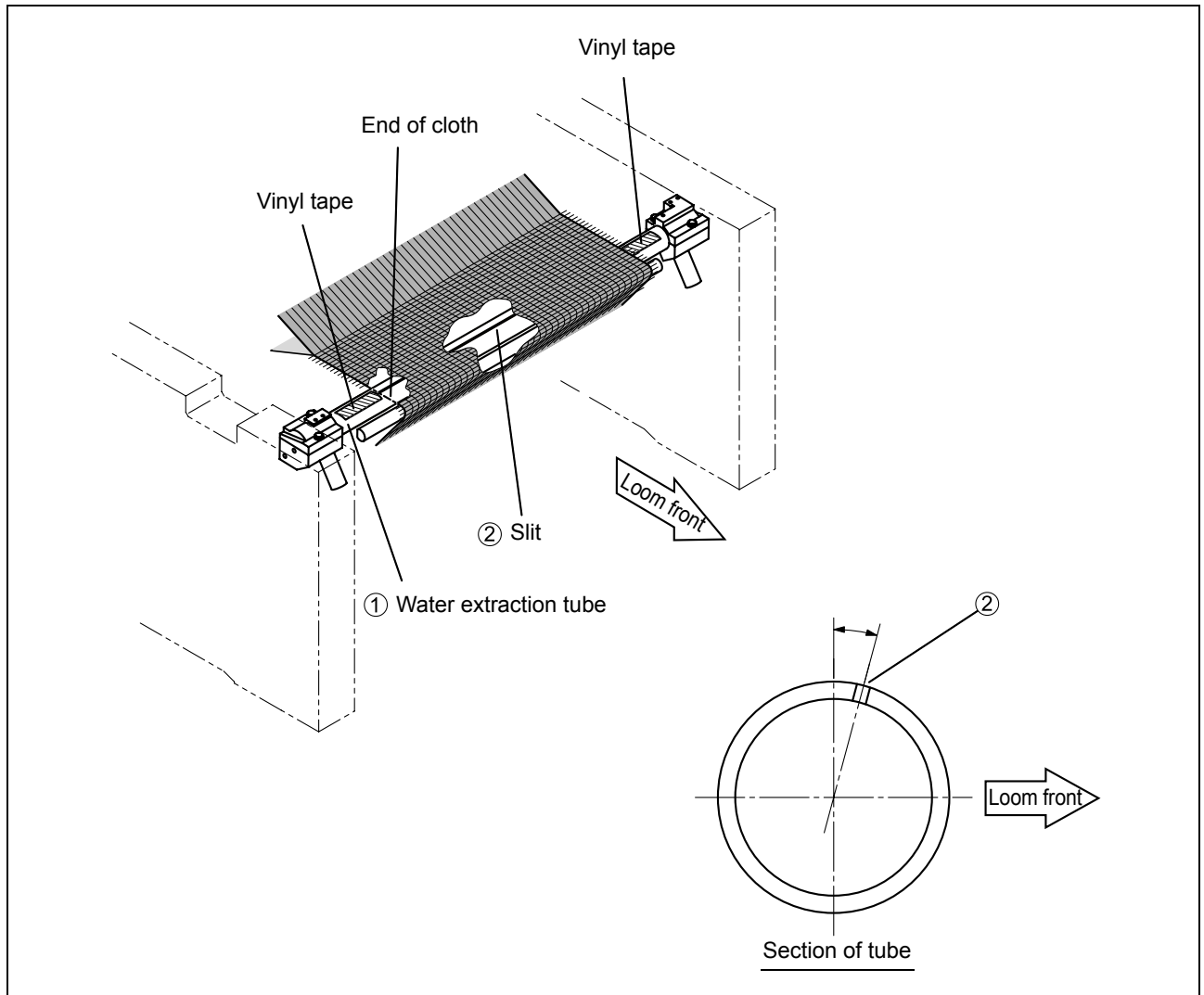


Fig. 10.1-2 Outline of water extraction tube

10. WATER EXTRACTION SYSTEM

[2] Cleaning of Water Extraction Tube

Clean the inside of the water extraction tube periodically to remove the sticking sizing material or dirt.

Step	Procedure
1	Remove the bolt "1" that fixes the left cap "3". Then, loosen the setscrew "2" of the right support "5" to remove the cap "3" from the loom.
2	Move the water extraction tube "4" in parallel with the loom and remove it from the support "5". NOTE: Place the tube not on the floor but on wooden blocks, etc. so as not to deform the O-rings "6".
3	Remove sizing or oiling materials adhered to the slit using a thin metal plate. NOTE: Do not damage or burr the edges of slit opening then. If damaged or burred, repair with sandpaper.
4	Pour water from one end of the water extraction tube "4" to remove sludge inside the tube.
5	After cleaning, engage the U notch "8" of the water extraction tube "4" with the U projection "7" in the RH support "5" to assemble the tube. At this time, apply grease to the O-rings "6".
6	Fix the cap "3" by tightening bolts "1".
7	Tighten the setscrew "2".

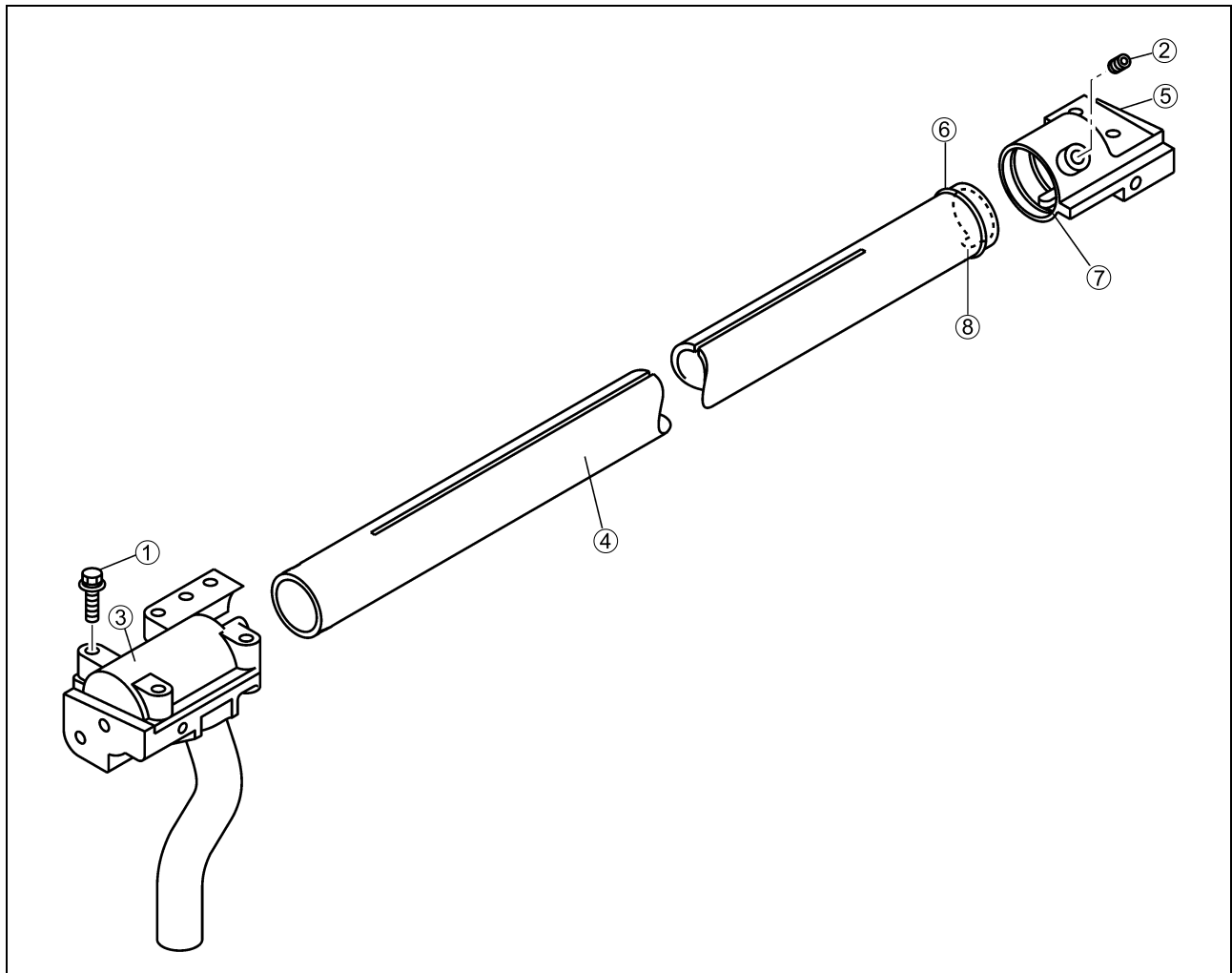
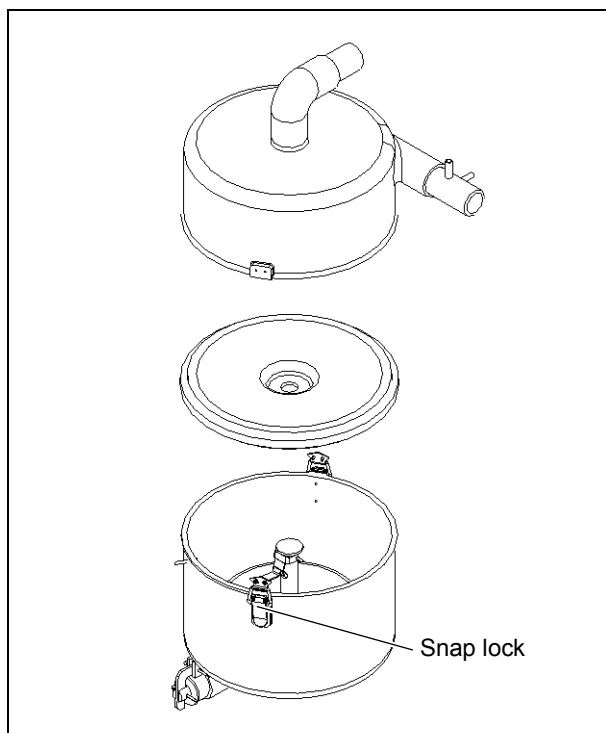
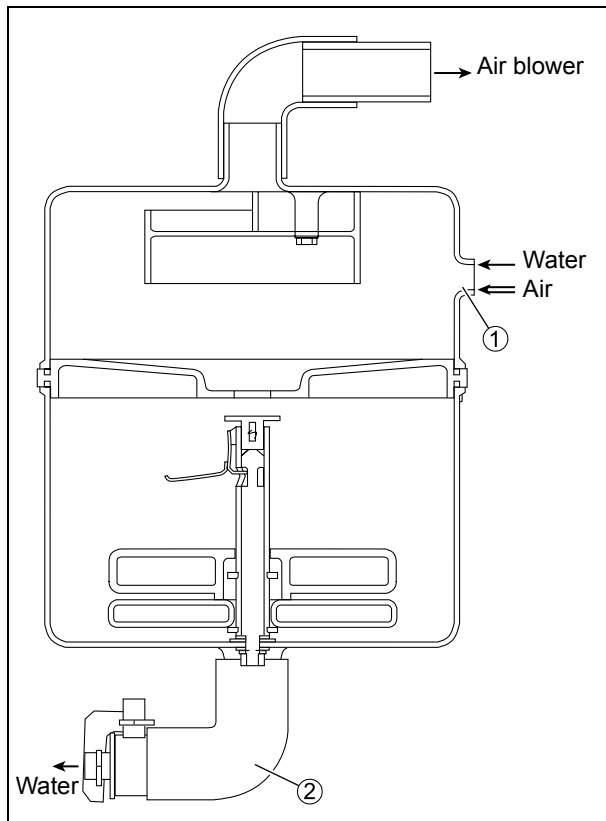


Fig. 10.1-3

[3] Dehydration Tank

Separates water from the air sucked from the dehydrating cylinder and discharges it. The air is sucked by the blower through cylinder "1" in the center. The water is discharged through hole "2" at the bottom.



Since the inside of the dehydration tank gets dirty as time elapses, clean it as required.

The dehydration tank can be disassembled by unlocking the snap lock.

In case the specification is for air pullback, if the tank is used in a condition that the inside of the dehydration tank is dirty, water is discharged from the dehydration blower, and the water may be left on the floor or discharged to the body of air pullback equipment.

⚠ CAUTION

After cleaning the dehydration tank, always wipe dirt and water on the floor around the machine clean.

If the floor is dirty or wetted, injury by slipping may occur.

Fig. 10.1-4 Dehydration tank

10. WATER EXTRACTION SYSTEM

10.1.3 Inspection and Maintenance of Blower

[1] Cleaning of Blower Inside

Step	Procedure
1	Soak and rinse the silencer in tepid water, squeeze it, and dry it off.
2	Clean the fan cover, fan, fan case, etc. with a brush in neutral detergent or tepid water. NOTE: Do not splash tepid water onto ball bearings and shafts.
3	Assemble the blower in the reverse order of disassembly.

[2] Replacement of Blower Motor Bearings

Step	Procedure	Remarks
1	Remove the cover "1" and the fan "2".	Use the exclusive puller to pull out the fan "2".
2	Pull out the key "3".	
3	Remove the fan cover "4".	
4	Unfasten the bolts "5" to separate the fan case "6" and the motor "7".	Handle the motor "7" together with the shaft "8".
5	Remove the counter-sunk screws "9" and the cap "10".	Replacement of the fan side bearing "2".
6	Replace the bearing "11" with new one.	
7	Remove the snap ring "12", cooling fan "13" and key "14".	
8	Remove the case "15".	
9	Replace the bearing "16" with new one.	
10	After replacing the bearing, assemble the motor in the reverse order of disassembly.	

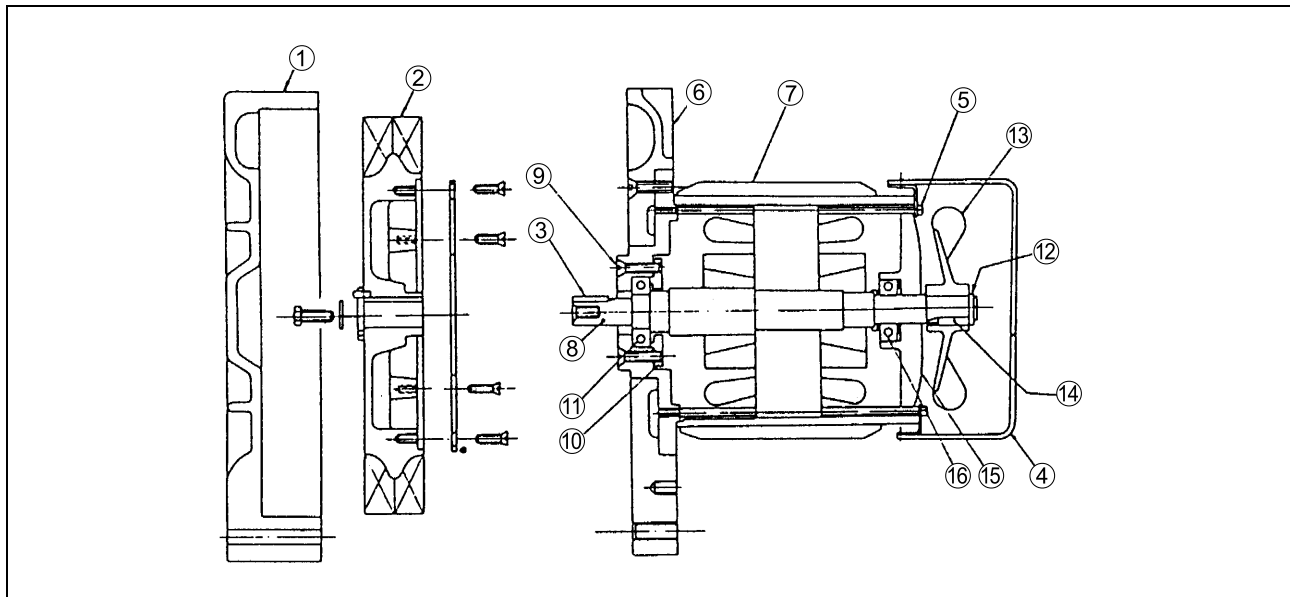


Fig. 10.1-5

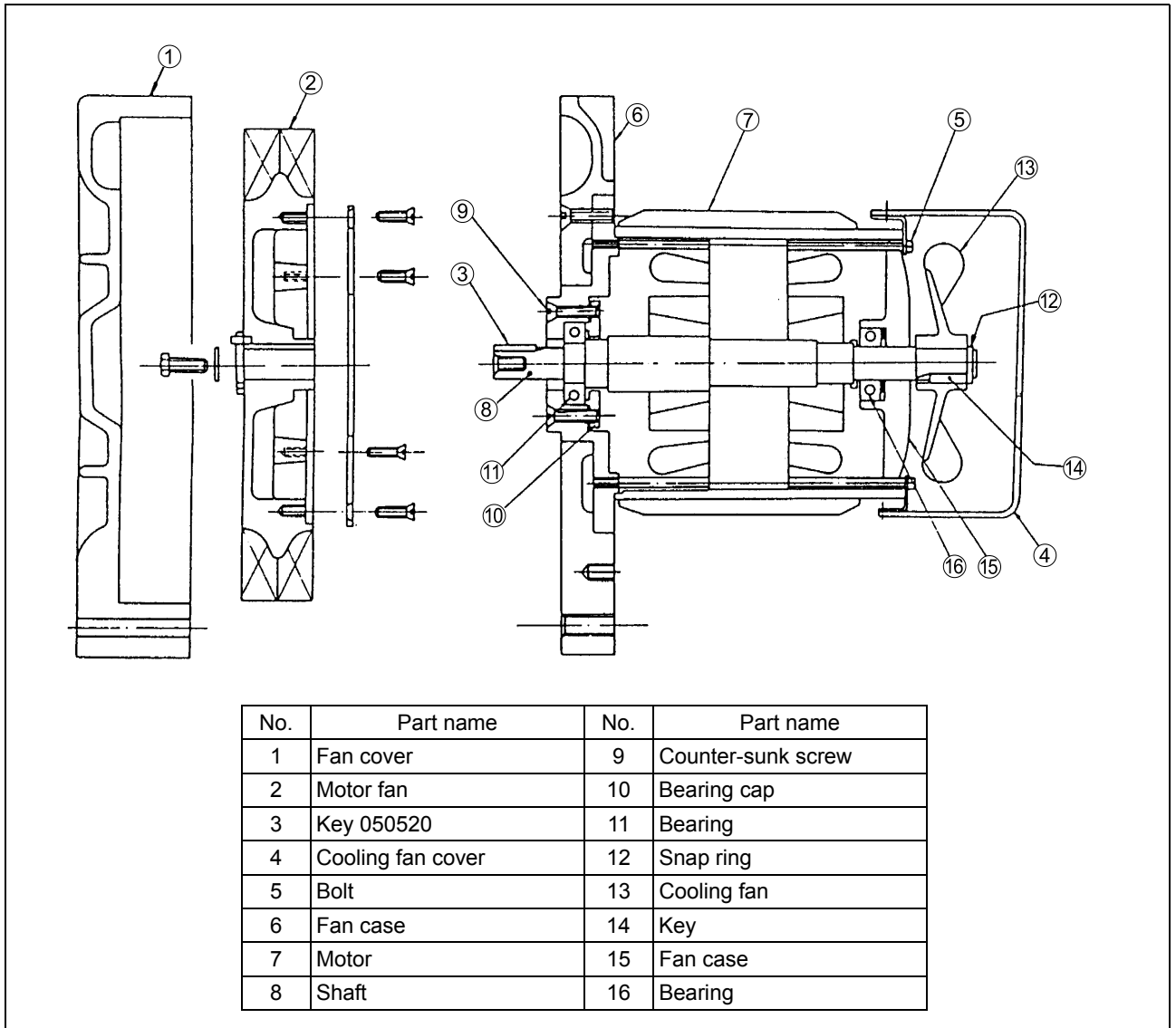


Fig. 10.1-6 Replacement of blower bearings

