

Air Line Kit AL-0203

OPERATION MANUAL

OM-K0288E Rev.A

Thank you for purchasing Air Line Kit(AL-0203)

This device is designed for E800Z standard set. It provides Control Unit with clean air flow as well as SPINDLE(NR-3080)with oil mist. Read the operation manual carefully before initial use.

1 CAUTIONS IN HANDLING

- ① Read these cautions carefully to correctly follow the intended use.
- ② Safety instructions are intended to avoid potential hazards that could result in personal injuries or damages to the device.
Safety instructions are classified as follows in accordance with the seriousness of the risk.

Class	Degree of Risk
⚠ WARNING	Existence of a hazard that could result in bodily injury or damage of the device, if the safety instructions are not followed.
⚠ CAUTION	Possibility of a hazard that could result in light or middle degree of bodily injury or damage of device, if the safety instructions are not followed.

⚠ WARNING

- ① Air Pressure
Use the air pressure below 1.0MPa on primary side and 0.6MPa on secondary side.
- ② Use of Clean Air
Air shall be clean and free from chemicals, compound oil containing organic solvent, salinity, or corrosive gas to avoid damage to the device.
- ③ Connection of Hose
Connect hose securely to avoid accidental disconnection during use. Do not exceed 1.0MPa for air hose pressure. Make sure that the pressure from the air compressor does not exceed 1.0MPa. If the pressure exceeds 1.0MPa, hose might burst.

⚠ WARNING

An experienced and well-informed person shall assemble, operate and service the air compressor.

⚠ CAUTION

- ① Use of dry air
Use of air with excessive moisture could result in malfunction or failure of air tools. In case large moisture condensation is often found at the air filter of this air line kit, it is recommended to install a larger air filter or air dryer before the primary side of the air line kit.
- ② Draining
Be sure to drain moisture condensation from Filter regularly to avoid moisture carried by air to the air tool.
- ③ Installation Location
Place this device on a flat surface. When placing it on the wall, check if the wall is flat. Hang it horizontally.
- ④ Handling
Care should be exercised and avoid breaking Plastic Bowl of Filter when it is removed for cleaning.

⚠ CAUTION

- ② Do not use the device where corrosive gas, chemicals, seawater, water, or steam exists.
- ② Do not use in the direct sunlight.
- ③ Do not use where the device is subject to vibration or repetitive shocks.
- ④ Do not use where heat source or radiant heat exists.

2 FEATURES

- ① The device can provide Control Unit with clean air as well as Spindle(NR-3080) with oil mist.
- ② It eliminates dirt and debris, as the air passes Filter.
- ③ Air pressure can be adjusted easily.
- ④ Mist lubricator could extend air tool life.
- ⑤ The device can be mounted on the wall.

3 SPECIFICATIONS

Primary air pressure	1.0MPa Max.	Relief Pressure	Set Pressure plus 0.05MPa
Maximum Operating Pressure	0.6MPa	Lubricant Used	ISO VG15, Liquid Paraffin, or equivalent.
Withstanding Pressure	1.5MPa	Bowl Capacity	65 cc(approx. 4 cu-in)
Operating Temperature Range	5-65 (41-149 F)	Dimensions	W300 × D120 × H220 mm
Filtration Rating	0.3 μ m	Weight	3.7Kg
Set Pressure	0.04-0.6MPa		

ACCESSORIES

·2m Hose ·4 Rubber padding, 4 Screws, 4 Washers ·Lubricant(70 cc) ·Operation Manual

Lubricant

Liquid paraffin, ISO VG15 is recommended.

4 COMPONENT NAMES

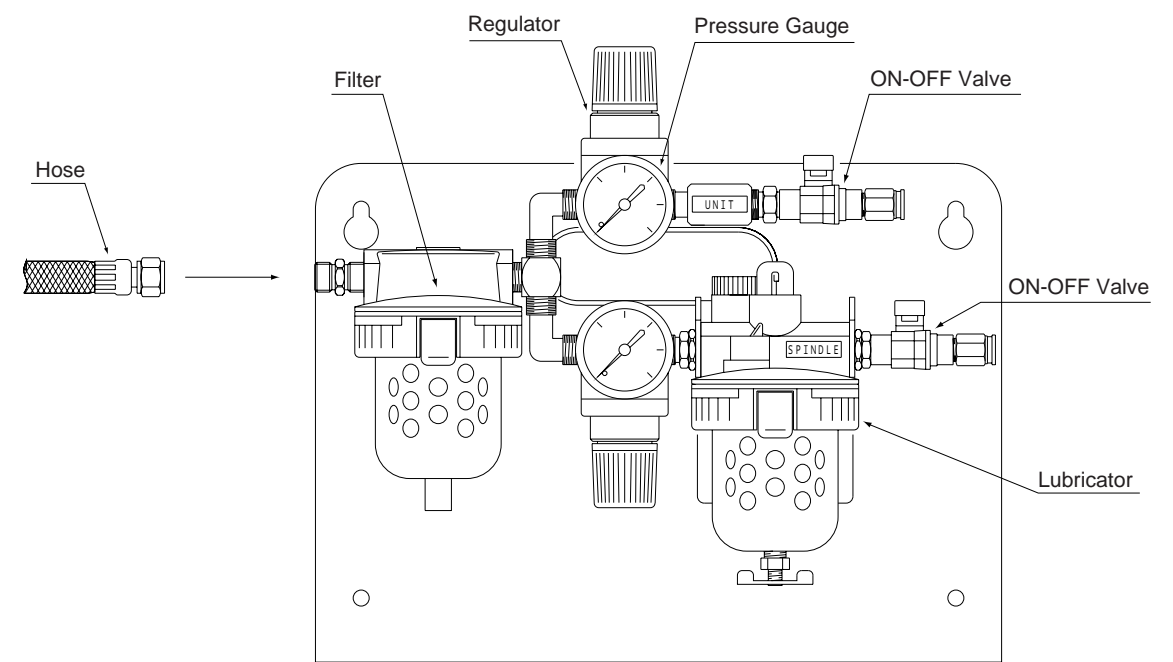


Fig.1

5 COMPONENT PARTS

① Air Filter

Moisture, dirt and debris are separated from the compressed air and collected in Plastic Bowl. Drain by pushing Drain Valve sideways. (See Fig. 2)

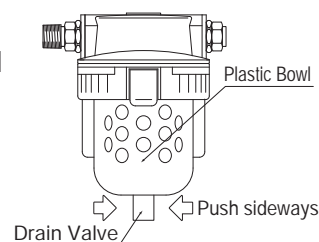


Fig. 2

② Air Pressure Regulator

Air Line Kit (AL-0203) incorporates two pressure regulators on its secondary: one for air supply and the other to lubricator. Each should be adjusted to the proper pressure reading. To increase the air pressure, pull Regulator Knob outward and turn it in either direction. Set at the recommended air pressure. (See Fig. 3)

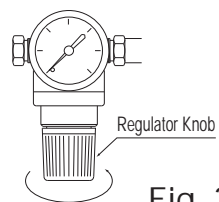


Fig. 3

③ Pressure Gauge

Check the air pressure with this gauge. (See Fig. 4)



Fig. 4

④ Lubricator

•Supply of Oil

Check the amount of oil in the bowl. Fill oil to the upper limit of oil level. (See Fig. 5)

⚠ WARNING

When the lubricant is filled above the maximum oil level, remove the excess amount. Excess oil might result in poor or failure of oil supply. When supplying or removing oil, stop the air supply to Air Line Kit.

•Removing oil and moisture

Remove oil in Reservoir once a month. Open Valve at the bottom of Reservoir by turning counterclockwise. Moisture might be collected and mixed with oil in Reservoir and could cause damage. (See Fig. 5)

•Adjustment of oil drip rate

While running the air tool at the proper pressure, adjust the oil drip rate to the recommended rate by turning Oil Drip Rate Adjusting Screw. The oil drip rate could be checked through Sight Dome. Turn Oil Drip Rate Adjusting Screw clockwise to increase the rate and counterclockwise to decrease. Adjust to 25-35 drips/min. for NAKANISHI Air Line Kit Lubricator. (See Fig. 6)

⚠ CAUTION

In NAKANISHI lubricator, oil content in air exiting lubricator is approximately 3% of dripping oil. Adjust the oil drip rate so that oil, full in the bowl, depletes in 40-50 hours.

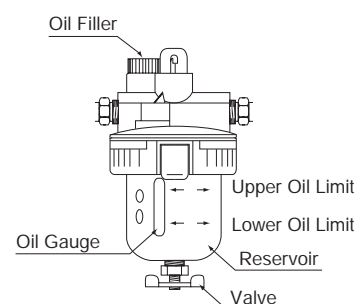


Fig. 5

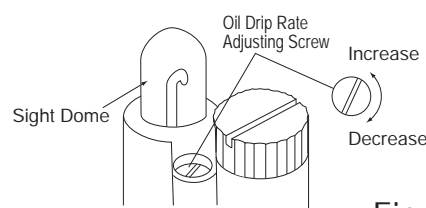


Fig. 6

⑤ On-Off Valve

Air flow can be stopped by making a quarter turn of the lever. (See Fig. 7)

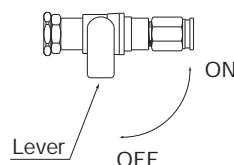


Fig. 7

6 CONNECTION AND INSTALLATION

- Connect the provided hose to Primary Connector. (See Fig. 8)
- Connect Air Supply Connector and Air Inlet Joint on the control unit with a $\phi 6.0$ mm air hose. (See Fig. 8)
- Connect Oil-misted Air Supply Connector to Spindle Connector with a $\phi 4.0$ mm air hose. (See Fig. 8)
- To carry Air Line Kit, mount four rubber paddings and place it on a flat surface. When mounting on the wall with screws in Holes for Wall Attachment at the back of Air Line Kit, put washers between the back and the wall. (See Fig. 9)

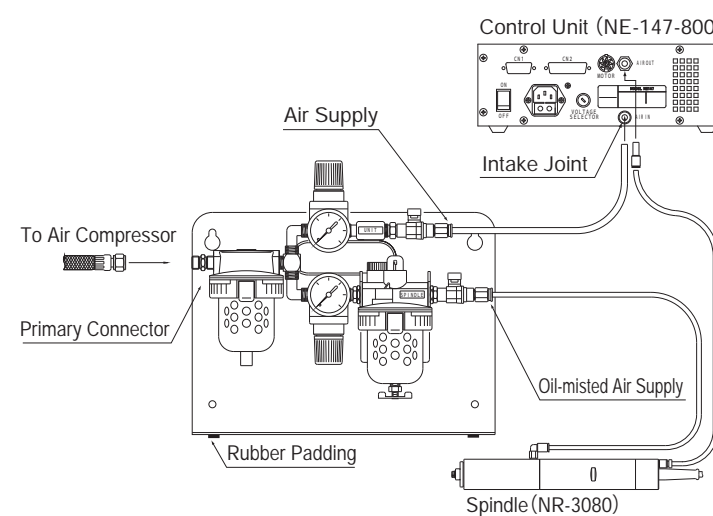


Fig. 8

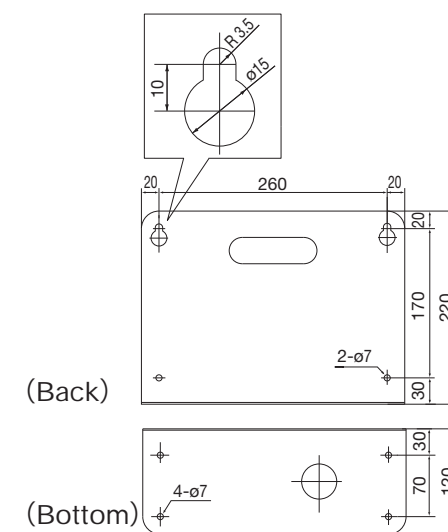


Fig. 9

7 TROUBLESHOOTING

Problem	Action Taken
Air leakage.	Check the joint and re-tighten screws.
Broken hose.	Replace hose.
No or poor oil supply.	Check oil volume in Lubricator and increase the oil drip rate. When using NAKANISHI lubricator, adjust to 25-35 drips/min. and supply lubricant into Supply Air Hose directly.
Excess lubrication.	Air tool could not rotate regularly when inclining or giving shakes to the lubricator.
	Air tool could not rotate normally. Drain oil to proper level by loosening Drain Valve.
Moisture in Lubricator.	Excess oil could slow bearings rotation. Decrease oil drip rate.
Moisture in Air Filter.	Drain moisture from Lubricator and replace oil.
No air flow.	Drain moisture.
	Check Regulator and set at the correct air pressure. Check every hose connection.
	Check the power supply and the air outlet of the air compressor.
	Check if hose is broken, bent or disconnected.

※Specifications may be changed without notice.

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