NAL		In	ternal Coolant	t Airmotor
MAN	NSK		IS	-205
ЧЧ				
П Л	CE	Please read this Operation Manual carefully before use, and file for future reference.	MADE IN JAPAN OM-M0021E 002	Powerful Partners <sup>®</sup>
		ION		

**General Cautions** 

- Patient's safety is the first priority during treatment.
- Should the airmotor function abnormally, cease operation immediately and return the airmotor to the dealer for repair.
- Do not drop nor hit airmotor against hard object.
- Do not disassemble nor alter the airmotor.

Cautions on Operation

- Always check for vibration, heating, noise and sluggish operation before use in the patients mouth. If such abnormality is found, stop using and call the dealer.
- Do not mount nor remove the attachment while airmotor is rotating.
- Keep clean and dry supply air. Moisture and debris in supply air may cause the airmotor to malfunction.

Cautions on Lubrication.

• Lubricate the airmotor after each use. Always lubricate the airmotor prior to autoclaving. • Hold the airmotor firmly while activating spray. The airmotor, otherwise, may be ejected from the spray nozzle by the spray pressure.

# 1. Features

- The NON-RETRACTION VALVE, incorporated in the rear joint, prevents suction of oral fluids in a patient's mouth into the water line of the handpiece at the spray water outlet port. (PAT.)
- Various E-type internal coolant attachments are adaptable.
- The airmotor is autoclavable.
- Specially-coated cylinder provides outstanding durability.
- Selection of forward or reverse rotation, or stop is achived at the airmotor.

#### 2. Specifications



Weight	90g				
Drieve Air [MPa(kgf/cm <sup>2</sup> )]	Speed [min <sup>-1</sup> (rpm)]	Air Consumption [NL/min]			
0.25 (2.5)	22,000	42			
0.3 (3.0)	25,000	51			
0.4 (4.0)	27,000	72			
* Speed may vary slightly depending on the back-end					

configuration, the direction of rotation, type of hose used.

### 3. Mounting of attachment

(1) Mounting the Attachment

Insert the E-type attachment into the motor all the way until clicks to stop. (2) Removing the Attachment

Simply pull out the attachment from the motor.



Fig.2

# 4. Forward/Reverse Rotation

- (1) Forward Rotation : Turn the FWD/REV change ring to "F" as shown in Fig.3.
- (2) Reverse Rotation : Turn the FWD/REV change ring to "R" as shown in Fig.4.
- (3) When the FWD/REV change ring is positioned at the middle of "F" and "R", the drive air is interrupted and the motor does not rotate. (Fig.5)





## 5. Lubrication

Disconnect the motor from the handpiece hose, and supply a few drops of Air Turbine Oil (Cat.No.Z016-112) or PANA-SPRAY Plus for a few seconds into the drive air tube at the back end of the motor as shown in Fig.6 .

#### Air Turbine Oil:

Supply2-3drops of oil into the drive air tube. Run the airmotor for a while, approx. 10 seconds, to deliver the oil into the airmotor.

#### PANA-SPRAY Plus:

Mount the arrow-head spray nozzle tip into the spray port. Hold the nozzle tip firmly into the drive air tube of the airmotor. Supply spray lubricant for approx. 2 seconds. Hold the airmotor firmly against the spray nozzle tip, with the can upright. The airmotor, otherwise, may be ejected from the nozzle by the spray pressure. (Fig.7)





Fig.7

# 6. Sterilization

IS-205 airmotor is autoclavable.

Sterilization is required first time you use and after each patient as noted below.

- Autoclaving Procedure:
  - 1) Wipe off dirt with alcohol-soaked cloth.
  - 2) Lubricate the motor. Use PANA-SPRAY Plus or Air Turbine Oil. When Air Turbine Oil is used, be sure to operate the motor for a few seconds before autoclaving.
  - 3) Insert in a autoclave pouch and seal.
  - 4) Autoclavable up to max. 135°C.

ex.) Autoclave for 20 min. at 121°C, or 15 min. at 132°C.

- Do not exceed the sterilizer chamber temperature above 135°C.
- 5) Keep the handpiece in the autoclave pouch to keep it clean until you use it.

\*Sterilization at 121°C for more than 15 minutes is recommended by EN13060.

CC The EU directive 93/42/EEC was applied in the design and production of this medical device.

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