

INSTRUCTION SHEET

LUBRICATION

(1) For Air Motor If an air line lubricator is not used, remove the Oil Chamber Screw, and fill the oil chamber in the handle with light oil when daily working over. Recommendable oils are No. 60 Spindle Oil, SAE 10, MOBIL Almo No.1, Shell Clavis J.37 or other having viscosity of 100 to 150°F.

(2) For Clutch (Hammer Mechanism)

Unscrew the four Hammer Case Cap Screw from Motor Case. Lift the hammer frame assembly and the Spacer from the tool. Grasp the end of Anvil exposed, and pull it outward rotating slowly to remove the Anvil from the Hammer Frame. Supply the inside of the Hammer Frame with about two teaspoonful new extreme pressure grease, and thinly coat the same grease to surface of the Anvil and the both sides of the Thrust Washer. Give a little quantity of the same grease to the Front Ball Bearing, and put back the Spacer, raised side first. Reassemble the hammer mechanism, and install it on the rotor shaft. The tools should be greased monthly, and the old grease in the assembly should be removed before applying new grease. Use a good sticky, semi-fluid gear grease. Don't apply excessive amount of grease as it causes retardation of the action of the hammer mechanism.

AIR SUPPLY

(1) Air Compressor Minimum 3HP compressor is required, but it is recommendable that the compressor has remaining capacity for installation of more air tools in future.

(2) Air Pressure Keep air pressure of 6-7 kg/cm² (85-100psi) at the tool. Over pressure will drastically shorten the life of the tools, and lower pressure will drop the output of the tools.

(3) Hose and Piping Piping should be installed with ½" i.d. or thicker pipe, and use a high pressure synthetic rubber hose with ½" i.d.

(4) Dust and Drain In order to provide effective lubrication and to give clean air to tools, the installation of filter and an automatic line oiler is recommended. Even if the filter and oiler are provided, the condensed moisture should be daily discharged from compressor thru its drain outlet. Before connecting the wrench to the hose, pass air thru hose in order to remove the remaining dust and drain in the hose.

MAINTENANCE and REPAIRING

(1) Air Motor Mechanism Being precisely machined and composed, it should not be disassembled unless particularly be necessary. In case of disassembly, vertically draw out Rear End Plate and Rotor, and be careful not to get dust into the mechanism which causes it to become inoperative. If it is necessary to remove Front End Plate or Cylinder, it should be professionally be done because it comes total repairing.

(2) Hammer Mechanism Troubles in hammer mechanism can be repaired by mere replacement of defective parts. Remove the four Hammer Case Cap Screws, and take out the hammer mechanism in good order as stated before. Wipe grease off, and carefully check wearing of parts, especially of the Hammer and Anvil because the wearing of them causes output-lowering. After replacement of parts, don't fail to supply the parts with fresh grease.

APPEARANCE OF TROUBLES AND REMEDY

APPEARANCE OF TROUBLES	CAUSES	REMEDIES
Air Leakage	Wearing of parts such as Reverse Valve, Vanes, Cylinder, End-Plates, Inlet Packing, Frame Handle Packing, Hammer Case Packing, 'O' Rings, Throttle Valves and etc.	Replacing the defective parts
Output Lowering	<ol style="list-style-type: none"> 1) Air Leakage 2) Wearing of Hammer, Anvil, Trigger, Throttle and etc. 3) Dropping air pressure, or lack of air flow. 4) Clog of air Inlet with dirt. 5) Increasing of friction in Air Motor Mechanism caused by getting dirt in or rusting etc. 	<ol style="list-style-type: none"> 1) See 'Air Leakage'. 2) Replacing the defective parts. 3) Inspect air pressure, inner diameter of piping, coupling, and air hose. 4) Disassembly and make it clean. 5) Supply spindle oil thru Air Inlet, and repeat free running in normal and reverse. If unsuccessful, disassemble and clean up.
Non-Revolution	<ol style="list-style-type: none"> 1) Damaged parts such as Hammer, Anvil, Hammer Frame, Driver, Bearing, Vanes, Spline of Rotor and etc. 2) Increasing of friction in Air Motor caused by dirt, rust. 	<ol style="list-style-type: none"> 1) Replacing the defective parts. 2) Supply spindle oil thru Air Inlet, and try to running in normal and reverse. If unsuccessful, make disassembly.