Wilson
Smarter Tools for Smarter Work

MODEL PG

AIR DRIVEN TUBE CLEANER

OPERATING INSTRUCTIONS
&
SERVICE MANUAL

Rev: A, 5/11/2007

TO REDUCE THE RISK OF INJURY AND EQUIPMENT DAMAGE
USER MUST READ AND UNDERSTAND OPERATOR'S MANUAL.

Thomas C. Wilson, Inc.
21-11 44th Avenue, Long Island City, New York 11101
Tel: (718)729-3360 Fax: (718)361-2872 http://www.tcwilson.com
E-mail: tcwilson@tcwilson.com

SAFETY INSTRUCTIONS

WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed below, may result in accident, fire and/or personal injury.
SAVE THESE INSTRUCTIONS

1. Do not allow corrosive gases or foreign material to enter the unit. Moisture, oil-based contaminants, or other liquids must be filtered out.

2. Eye protection is always required when running motor.

3. Hearing protection is recommended when in close proximity to all operating air motors.

4. Dust mask, non-skid safety shoes, hard hat, gloves and other personal safety equipment must be used.
5. Stay alert, watch what you are doing, and use common sense when operating a power tool.

6. Dress properly. Do not wear loose clothing or jewelry.

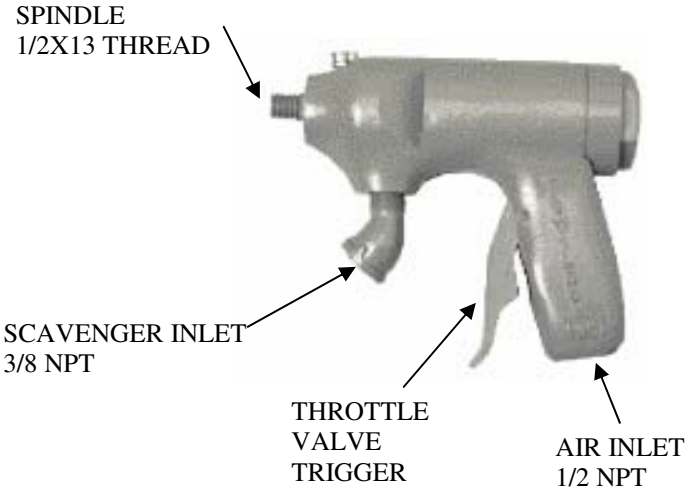
7. Keep your work area clean and well lit.

8. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.

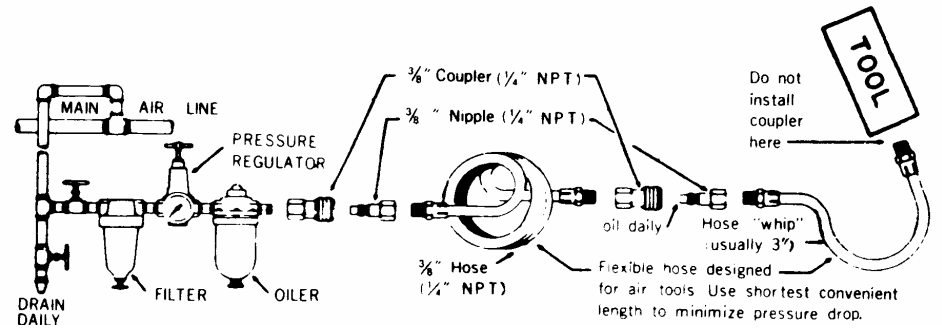
9. Disconnect the tool from the air supply before installing, making any adjustment, changing accessories, servicing or storing tool.

OPERATION

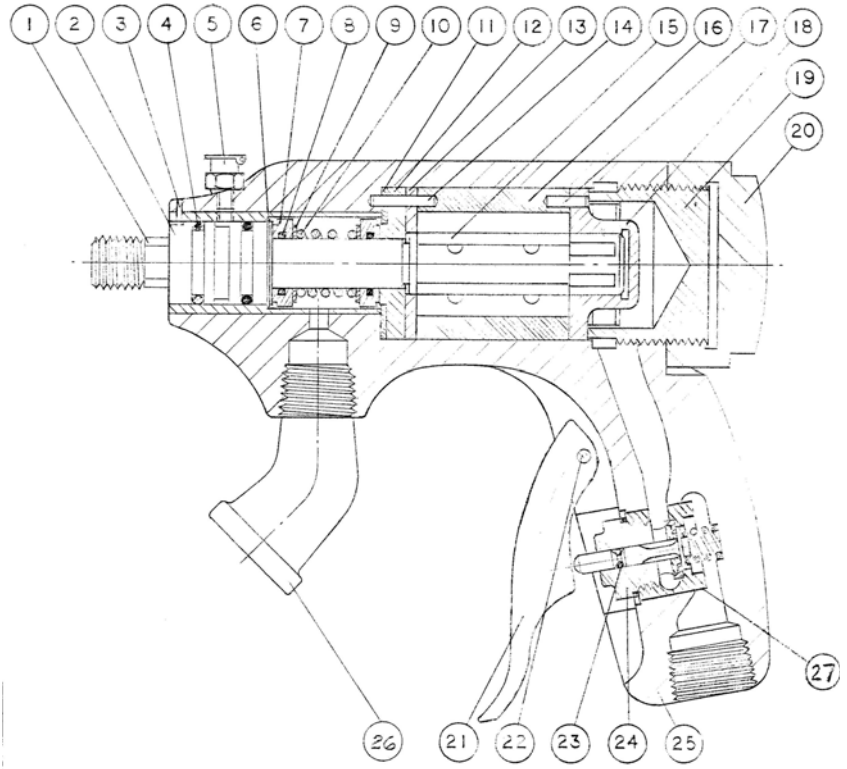
RECOMMENDED OPERATING AIR PRESSURE 90 PSI



PROPER PIPING FOR AIR TOOLS



PARTS LIST



Key	Part No.	Qty.	Description
1	7009	1	ROTOR
2	9466	1	FRONT BEARING
3	24908	1	ROLL PIN (PT. OF 7006)
4	7587	2	'O' RING
5	7578	1	OIL PLUG
6	45918	1	SPIROLOX (PT. OF 9466)
7	8524	2	SEAL RING
8	8525	2	'O' RING
9	6999	2	SEAL SPRING WASHER
10	7014	1	SEAL SPRING
11	7011	1	SEAL WASHER GASKET
12	7010	1	BODY SEAL GASKET
13	4093	1	WEAR PLATE
14	7117	1	SPIROL PIN (PT. OF 4092-0001)
15	4095	6	BLADE
16	4092-0001	1	CYLINDER ASSEMBLY
17	6620	1	SPIROL PIN (PT. OF 4092-0001)
18	4094	1	REAR JOURNAL
19	7008	1	RETAINER NUT
20	7007	1	CAP
21	7016	1	VALVE TRIGGER
22	7017	1	TRIGGER PIVOT SCREW
23	8493	1	'O' RING (PT. OF 7018)
24	7018	1	VALVE ASSEMBLY
25	7006	1	BODY ASSEMBLY
26	41467	1	STREET ELBOW
27	42835	1	VALVE INSERT

Caution: Disassembly or reassembly of the unit must be performed by qualified personnel. It is advisable to return units to the factory or consult the factory for necessary repair.

MAINTENANCE AND LUBRICATION

AIR SUPPLY

Optimum air tool performance is based upon a clean, dry air supply that delivers 90 psi of air pressure at the tool, while the tool is running. (Lower air pressure will reduce the efficiency of the tool.) Airline filters will effectively eliminate moisture and particles from the air supply. To get the ultimate in performance from your air tools ample air compressor capacity, proper air hose and fittings are essential.

LUBRICATION

Proper lubrication is the most important requirement in preventive maintenance. The majority of tool failure can be linked to inadequate lubrication. Tools should be oiled daily through the air inlet, or better through lubricators. Airline lubricators automatically provide oil to tools, allowing them to produce at peak efficiency. Use a light oil similar to a #10 spindle oil, or Marvel Oil for best result.

PERIODIC INSPECTION

For maximum performance and protection of your air operated equipment, inspect all tools regularly to prevent unnecessary damage and prevent down time. All airline accessories should be checked on a regular basis.

STORAGE OF EQUIPMENT:

1 - Upon securing the equipment for the night, blow air through the scavenging hole to dry out any remaining moisture. Then squirt some oil into the scavenging hole, and revolve the rotor by hand permitting the oil to reach the seal and shaft.
2 - Before storing the PG Cleaner, clean and oil it thoroughly with machine oil to prevent rusting.

DISASSEMBLY INSTRUCTIONS

To disassemble this unit, clamp the body by the handle and unscrew the cap. This permits easy access to the retainer nut which is removed next.

After removing the retainer nut, the rear journal, cylinder, rotor, wear plate, body seal washer, gasket, seal rings, shaft seals, spring washers and spring may be removed as a unit. If the rotor sticks, tap lightly with a brass rod or rawhide hammer to loosen.

In removing the seal from the rotor, be careful not to mar the lapped faces or crack the seal rings. To remove the seal ring, shaft seal and seal spring washer, slide the spring off the rotor thread end of the rotor. In removing the second shaft seal, slide the body seal washer from the rotor. Now remove the wear plate, cylinder and the other remaining parts - rear journal and blades.

REPLACE WORN PARTS

If the front bearing, which is assembled with a press fit, has to be replaced; press the old bearing back into the body. Before inserting new bearing, the face which comes into contact with the seal ring must be lapped. This face has been lapped at the factory, but after handling should be relapped to insure a flat surface free from scratches. Then press the new bearing into place.

After all the parts have been cleaned, the following procedure will be helpful in re-assembling the motor:

1. start with the rear journal, then
2. slide the rotor into the rear journal, this leaves the blade slots and rotor thread end exposed, next
3. place the cylinder over the rotor so that the dowel pin in the rear journal lines up with the dowel pin hole in the cylinder.
4. insert the blades and then
5. line up the wear plate so that the exhaust slots are in line with the cylinder and also dowel pin and hole matches up,
6. put the body seal washer next to the wear plate and then
7. place the seal washer gasket in place.
8. finally, the sealing arrangement in following manner:
   (a) slide the seal ring over the rotor so the lapped face matches with the lapped face of the body seal washer.
   (b) the shaft seal is pushed over the rotor against the seal ring so the former fits into the latter.
   (c) the seal spring washer goes on next
   (d) then the seal spring
   (e) now the other seal spring washer is placed over the rotor and pushed up against the spring
   (f) the second shaft seal is pushed into place
   (g) last; the seal ring is put on with the lapped face exposed.

CARE SHOULD BE EXERCISED IN HANDLING THE SEAL RINGS BECAUSE OF THE LAPPED FACES

The above parts assembled in this manner are now ready to be put into the body. Clamp the body by the handle. Slide the sub-assembled into the body, exercising some care when pushing to compress the spring. While holding unit in place, give the rotor a few spins by hand to see that it turns freely. Now screw the retainer nut in place, if rotor turns freely tighten the retainer nut. Put the cap back on and be sure the rotor is free to turn.

The valve assembly is removed as a unit by loosening the knurled valve body. This permits easy access to the valve seat, valve plunger and spring.

The packing around the valve plunger may be replaced by removing the packing nut. In replacing the packing, do not use more than is necessary as too much packing tends to bind the valve plunger, thus restricting the movement.

The Pistol Grip Tube Cleaner is now ready for operation.

SPECIFICATIONS

Model no.	PG
Tube ID Range	1/4” to 1/2”
RPM	9000
Spindle	1/2 X 13 THREAD
Dimensions	2”DIA. X 5-1/2” X 7”
Weight (LBS)	3
Air Pressure (PSI)	90
Air Inlet	1/2” NPT
Operating Hose	1/2”
Air Flow	35 CFM
Scavenger Inlet	3/8” NPT

TROUBLE-SHOOTING

PROBLEM	CAUSE & SOLUTION
Tool becomes sluggish	Dirt or oil gum accumulation on internal parts —Flush with kerosene, operate for 30 seconds and re-lubricate.
Loss of Power	1. Worn Blades —Replace the Blades. 2. Worn Rotor, Cylinder, or accessory —Replace worn parts.

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