UM-226

# TROUBLE-SHOOTING

| Problem       |              |           |          |                                 |   |
|---------------|--------------|-----------|----------|---------------------------------|---|
| Low<br>Torque | Low<br>Speed | Won't Run | Runs Hot | Runs Well<br>Then Slows<br>Down | Reason & Remedy<br>For Problem.                         |
| 660           | 8            | 600       |          |                                 | Dirt or foreign material present.<br>Inspect and flush. |
| 990           | *            | 090       |          |                                 | Internal rust. Inspect and flush.                       |
|               | *            |           |          |                                 | Low air pressure. Increase pressure.                    |
|               |              |           |          |                                 | Air line too small. Install larger line(s).             |
|               | 20           |           |          | 7.83                            | Restricted exhaust. Inspect and repair.                 |
| •             |              |           |          | (*)                             | Motor is jammed. Have motor serviced.                   |
|               | 100          |           |          | P.                              | Air source inadequate. Inspect and repair               |
|               | *            |           |          | 550                             | Air source too far from motor.<br>Reconfigure setup.    |

# **SPECIFICATIONS**

| MODEL           | 9800-0000    |
|-----------------|--------------|
| AIR CONSUMPTION | 40CFM @90PSI |
| AIR HOSE        | 1/2"         |
| HORSEPOWER      | 4            |
| RPM             | 500-3000     |
|                 |              |

# TRUSTED TO PERFORM

**MODEL 9800** 

# WILS-AWAY PNEUMATIC TUBE CLEANER



# OPERATING INSTRUCTIONS & SERVICE MANUAL

Rev: A, 3/30/2016

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

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# Thomas C. Wilson,LLC

# 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. KNOW YOUR POWER TOOL. Read this service manual carefully.

2.



WEAR PROPEL APPAREL. No loose clothing or jewelry to get caught in mov-ing parts. Rubber gloves and footwear are recommended when working outdoors.

3.



WEAR EAR PROTECTION. Operator must wear ear protection and safety glasses. Also face or dust mask if cutting operation is dusty.

4.



WEAR STEEL TOE PROTECTIVE SHOES. Operator must wear steel toe shoes during operation and transpostation.

5.



Do not operate this machine on high ground or on a slope.

## **Product Use Criteria**

- Normal conditions: Operate at temperatures up to 250°F (121°C).
- Hazardous conditions: Operate at temperatures up to 104°F (40°C).
- · Protect unit from dirt and moisture.
- Use ONLY compressed air to drive motor.
- Air lines connected to motor should be the same size or the next size larger than the inlet port for efficient output and speed control.
- Protect all surrounding items from exhaust air.
- · Bearings are grease packed.
- Use Gast #AD220 or a detergent SAE#10 automotive engine oil for lubricating.
- Motors are to be used in commercial installations only.
- •This motors is not designed for use in hazardous atmospheres.
- Air supply, directional control valve and pressure regulator should be selected based upon the air consumption of the motor.

Your safety and the safety of others is extremely important.

We have provided many important safety messages in this manual and on your product. Always read and obey all safety messages.

This is the safety alert symbol. This symbol alerts you to hazards that can kill or hurt you and others. The safety alert symbol and the words "DANGER" and "WARNING" will precede all safety messages. These words mean:

# A DANGER

You will be killed or seriously injured if you don't follow instructions.

# **WARNING**

You can be killed or seriously injured if you don't follow instructions.

All safety messages will identify the hazard, tell you how to reduce the chance of injury, and tell you what can happen if the safety instructions are not followed.

Improper environment, installation and operation can result in severe personal injury and/or damage to property.

Qualified personnel must perform all work to assemble, install, operate, maintain and repair air motor.

#### Qualified personnel must follow:

- These instructions and the warning and information labels on the motor.
- All other drive configuration documents, startup instructions and circuit diagrams.
- The system specific legal regulations and requirements.
- The current applicable national and regional specifications regarding explosion protection, safety and accident prevention.

# **MAINTENANCE**

- ·Periodically, grease Ball Bearing inside Motor Connector Housing through Grease Fitting, through an access hole at bottom of the machine(see page 4), usually every 200 operating hours.
- · Storage: To store, disconnect water supply hose and foot pedal. Disconnect flexible shaft from machine. Dry out the shaft with an air blast through a hose fitting (optional #9614) attached to large aluminum coupling. Store the tube cleaner in a dry, heated place.

# **OPERATION GUIDELINES**

- 1. Only feed uncoiled Flexible Shaft into tubes.
- 2. Do not force cleaning brush within tube. If any resistance is felt, back off and refeed shaft until it moves easily through the tube. If this fails, adjust the output speed of the machine or use a smaller cleaning brush.
- 3. Keep bends in shaft minimal and avoid sharp 'S' bend.

# LIST OF ACCESSORIES

Foot Switch #9600-0118 Dolly #9600-0134

Shaft Lubricator #9675-0000

Flexible Shaft & Casing #9720-00xx, #9722-00xx, #9724-00xx, #9726-00xx Expanding Brushes #9900-x00x, #7000-x00x, #2456-x00x, #2463-x00x ( Max. Speed = 1725/min.)

Spiral Brushes #61746-x0xx, #62501-x0xx (Max. Speed = 1725/min.)

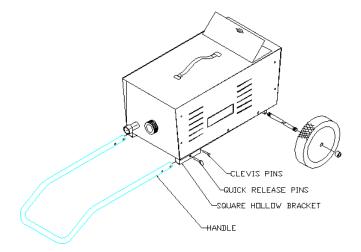
# **SAFETY INSTRUCTIONS**

- 5. USE RIGHT TOOLS. Don't force small tool or attachement to do the job of a heavy-duty tool.
- 6. DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
- 7. DON'T OVERREACH. Keep proper footing and balance at all times.
- 8. BE AWARE OF REPETITIVE MOVEMENT. operator must rest periodically.
- MAINTAIN TOOL WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- DISCONNECT TOOLS: When not in use; before servicing; when changing accessories such as blades, bits cutters, etc.
- 11. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking that keys and adjusting wrenches are removed from tool before turning it on.
- 12. AVOID ACCIDENTAL STARTING. Don't carry plugged-in tool with finger or switch.
- 13. Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.
- 14. Do not use unit with combustible fluids or where combustible fluids or fumes may be present.

## **ASSEMBLY**

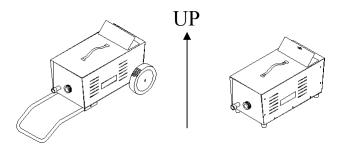
The WILS-AWAY Tube Cleaner may be set up with its built-in dolly for operator convenience. Follow the assembly instructions below:

- 1. Set the WILS-AWAY on its end with aluminum Motor Connector facing up. Insert the Dolly Handle through square hollow brackets.
- 2. Insert Clevis Pins through lower hole on both sides.
- 3. Pull Handle up until it stops and insert the Quick-Release Pin through the bracket and the upper hole of Handle on both sides.
- 4. Insert Axle through bracket at bottom. Mount wheel onto Axle on both sides.
- 5. Tighten Stop Nuts with a wrench to secure the wheels. Tighten just enough so that the wheel will spin freely.



# **OPERATING POSITION**

The WILS-AWAY tube cleaner may be operated with or without the dolly in place. However, it should be only with the top side (side with carrying handle) up, as illustrated below:



## **OPERATION**

- 1. Remove Foot Pedal from storage compartment and insert tube ends into matching Tube Fitting marked 'A', 'B' on the end panel.
- 2. The machine is supplied with a Quick-Connect Coupling. Screw the Coupling onto end of air supply hose(with 1/2NPT male fitting). Connect air supply hose to the machine by pulling back the outer-sleeve on the Coupling and inserting the Coupling onto the Air Inlet Fitting on the machine.
- 3. A supply of minimum 30 scfm at 40 psig to a maximum of 72 scfm at 95 psig is required to operate the machine. A moisture trap and filter, a pressure regulator and an oil lubricator in the air line ahead of the machine is required for trouble free operation.
- 4. A rate of 5 drops of oil per minute is recommended for lubrication. Use only SAE#10 lubricating oil such as Wilson's Wilsolub #9047(1 gallon).
- 5. Turn Adjustment Knob on Speed Control Valve(see page 4) in the Storage Com-partment clockwise for lower speed & counter-clockwise for higher speed.
- 6. Select flexible Shaft as required for tube size to be cleaned. Uncoil and stretch out to straighten it as much as possible. Pull male Square extending from large aluminum coupling out about an inch. Insert this square into coupling within motor connection on box end. Box may be set on opposite end to facilitate this. Securely hand-tighten large aluminum coupling with seal quad-ring captive within onto motor connector assembly.
- 7. Connect water hose to water inlet with strainer within. Turn water supply on. Water valve only opens to allow water through when the motor is running.
- 8. Position hose clamp or place a mark on outside of flexible shaft to retain brush or cleaning head just within tube on opposite end.
- 9. Place the foot pedal at a point close to the tube sheet. Hold the end of the flexible shaft with one hand about three inches from the cleaning head; making sure it is held away from your body and then depress the foot pedal.
- 10. The air motor will operate and drive the flexible shaft, which in turn rotate the cleaning head. At the same time, water will pass through the machine and out at the end of the casing near the cleaning head.
- 11. Feed the shaft with cleaning head through tube to clean and loosen deposits inside tube.
- 12. Observe the following operation guidelines:
  - · Only feed uncoiled flexible shaft into tube.
  - Do not force cleaning head within tube. If any resistance is felt, back off two inches or so and re-feed shaft until it moves easily through the tube. If this fails, use a smaller cleaning head or one intended for plugged tube application.
  - · Keep bends in shaft minimal and avoid sharp 'S' bend.
  - Do not allow tools to come out of other end of tube.