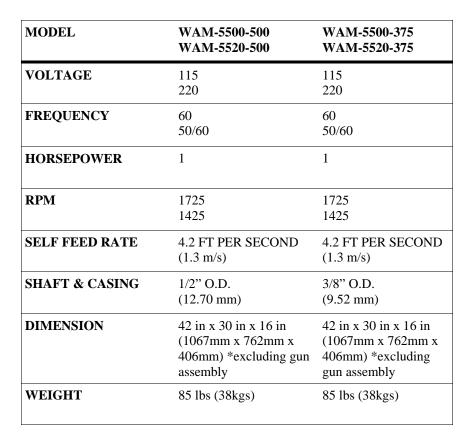
SM-165A SM-165A

#### **SPECIFICATIONS**



## LIST OF ACCESSORIES

	Item	Part No.	Description
•	Flexible Shaft Lubricator	9675-0000	
•	Safety Shaft Coupling	9600-0102	includes removal tool
•	Flexible Shaft & Casing	9722-0045	Shaft & Casing, 3/8in OD, 45ft
•		9724-0045	Shaft & Casing, 1/2in OD, 45ft
•	Spiral Brushes	61746-x0xx	(Max. Speed = $1725$ /min.)
•		62501-x0xx	(Max. Speed = $1725$ /min.)

## 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



WAM-5500-375/500 WAM-5520-375/500

## WILS-MATIC AUTO TUBE PUNCHER



# OPERATING INSTRUCTIONS & SERVICE MANUAL

Rev: A, 10/26/2011

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. KNOW YOUR POWER TOOL. Read this service manual carefully.
- 2. GROUNDING INSTRUCTIONS. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- 3. KEEP GUARDS IN PLACE and in working order.
- 4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- 5. AVOID DANGEROUS ENVIRONMENT. Keep work areas well lit.
- 6. STORE IDLE TOOLS. When not in use, tool should be stored in dry place.
- 7. DON'T FORCE TOOLS. It will do the job better and safer at the rate for which it was designed.
- 8. USE RIGHT TOOLS. Don't force small tool or attachment to do the job of a heavy-duty tool.
- 9. WEAR PROPER APPAREL. No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
- 10. USE SAFETY GLASSES with this tool.
- 11. DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
- 12. DON'T OVERREACH. Keep proper footing and balance at all times.
- 13. MAINTAIN TOOL WITH CARE. Keep tool clean for best and safest performance. Follow instructions for changing accessories.
- DISCONNECT TOOLS: When not in use; before servicing; when changing accessories.
- 15. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking that keys and adjusting wrenches are removed from tool before turning it on.
- 16. Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.
- 17. Do not use unit with combustible fluids or where combustible fluids or fumes may be present.

#### TROUBLE-SHOOTING

1.	ROUBLE-SHOOTING	
	PROBLEM	CAUSE & SOLUTION
•	No power Green Light not lit up when unit is first plugged into power outlet	<ul> <li>GFCI Plug not reset</li> <li>press reset button on GFCI</li> <li>GFCI Plug defective</li> <li>Power cord defective</li> <li>Green Light (Power On) defective</li> </ul>
•	Power up but motor not turning when activated	<ul> <li>Blown Fuse         —replace fuse #1         </li> <li>Defective motor</li> <li>Defective wiring in unit</li> <li>Overload protection engaged on the motor</li> <li>—reset the motor by pressing OLP reset button from the back of the unit. (use the hole next to the fan)</li> </ul>
•	Power up but motor not turning forward when activated	• Stop switch plate damaged and is constantly hitting the forward stop switch.
•	Motor running but Flexible Shaft not turning	<ul><li>Broken Safety Coupling</li><li>Broken Shaft Cable</li></ul>
•	Motor running but no water output at end of Flexible Shaft	<ul><li>Water supply not turn on</li><li>Defective Solenoid Valve</li></ul>
•	Flexible Shaft turning but not feeding out	<ul> <li>Feed wheel not grabbing the shaft</li> <li>Broken belt</li> <li>Brush head is getting resistance from inside the tube</li> <li>Reverse couple of inches and feed forward</li> </ul>
fron lect bly uni	Motor running and water drips inside unit the: Some water coming back the rotating brush that is coled inside the Feeder Gun Assemwill come out from under the	<ul> <li>Worn Teflon seal inside Motor Connector</li> <li>Leakage in tube or tube fittings</li> </ul>
•	Unit running rough and/or noisy	• Lack of lubrication in Motor Connector —grease ball bearings inside Motor Connector  —replace worn or corroded ball bearings in Motor Connector

Loose Covers on the unit

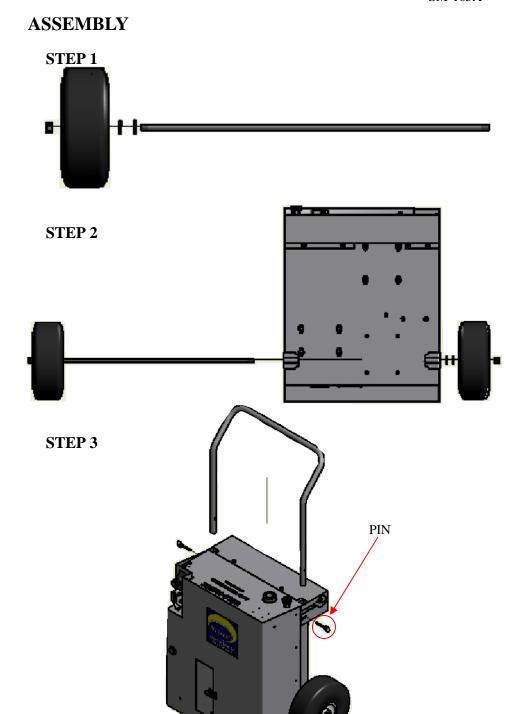
#### **SHAFT & CASING REPLACEMENT**

In order to replace the shaft and casing follow these steps:

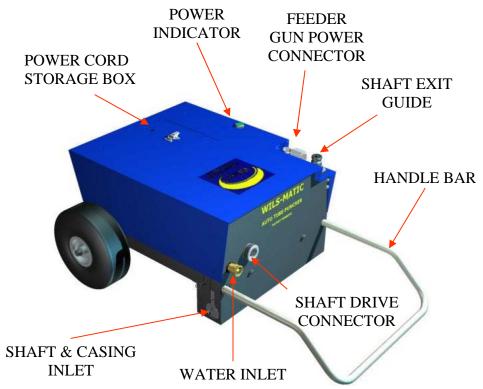
- 1. Remove the brush from the Shaft & Casing.
- 2. Un-screw the shaft from the "Shaft Drive Connector"
- 3. Reverse the Shaft & Casing until it comes back out from the feed wheel.
- 4. Remove the "Stop Collar", "Stop Spring" and the "Spring Cone" from the worn Shaft & Casing then replace it onto the new Shaft & Casing.
- 5. Feed the new Shaft & Casing in to the machine and then screw the back end of the shaft & casing on to the "Shaft Drive Connector"
- 6. Attach the new brush and continue on with your cleaning cycle.

#### **MAINTENANCE**

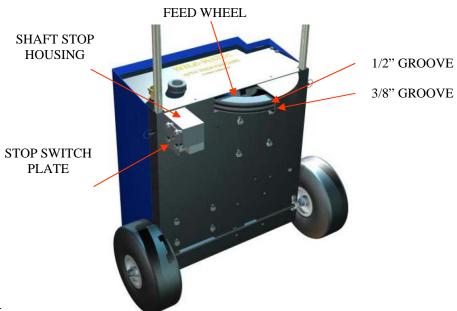
- NOTE: Remove the plug from the power outlet before carrying out any adjustment, service, or maintenance.
- Safety coupling replacement: A 80 in-lb safety coupling (9600-0102) is supplied within the motor connection assembly. It will break if the shaft is overloaded by forcing the shaft into a clogged tube. A hook-type removal tool (9600-0055) is supplied for removing the broken coupling. Engage the end of of the coupling with this tool and pull it out.
- Storage: To store, disconnect water supply hose and gun assembly.
   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.
- Lubrication: Grease ball bearing inside motor connector housing through grease fitting (located inside drive unit) every 200 hours of use.
- Replacement of cords or electrical components: If supply cord is damaged, it
  must be replaced by an assembly available from the factory.



SM-165A SM-165A



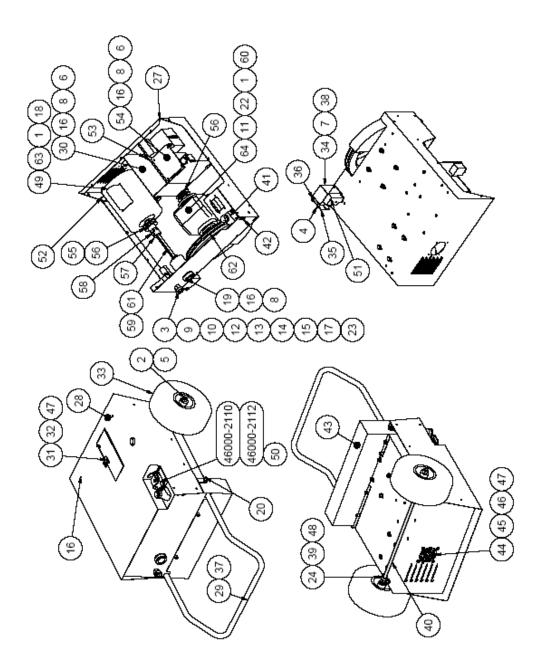
## **Unit Without Back Cover**



	QTY PART NUMBER DESCRIPTION	1 9992-1117 STORAGE BOX	1 9992-6910 MOTOR, ELECTRICAL	4 9992-2131 NUT-CLIP ON	1 9992-5111 V BELT	1 9992-5121 4L PULLEY-2.5" OD	1 9992-5132 L TYPE COUPLING HUB	4 9992-5150 BOLT-FLANGED HEX HEAD	1 9992-5132 L TYPE COUPLING HUB	1 9992-5170 3/16 x 3/16 KEYWAY	1 9992-5140 5/8" OD SHAFT W/KEYWAY	1 9992-5133 L TYPE COUPLING SPIDER	1 9992-0020 SWITCH SUB ASSEMBLY	4 38070-0000 SHOULDER BOLT	1 9992-1121 SHAFT STOP HOUSING	1 9992-1122 SHAFT STOP PLATE	4 9992-1123 STOP PLATE SPRING	1 9992-1125 GUIDE BUSHING	1 9992-2111 BUSHING-FLANGED LIP	4   9992-2140   SCREW-THRUSS HEAD	1 9992-2156 SWITCH, STOP	2 9992-2158 METAL CONDUIT	1 9992-2160 FEED WHEEL GUIDE LIP					
L	ITEM	24	22						26	27	28	59	30										31					
PARTS LIST	DESCRIPTION	WATER VALVE ASSY	HANDLE	QUICK-RELEASE PIN	SHAFT EXIT GUIDE	5/16-18 HEX SCREW	HARTING CONNECTOR	THPMS, #4-40 x 1/2" SS	CONTROL BOX	FRONT COVER	ГАТСН	SCREW-PAN HEAD	LOCKNUT-SS	BACK COVER	SQUARE COOLING FAN	SQUARE FAN GUARD	WHEEL AXLE	WHEEL PNEUMATIC	WASHER-1/2"	2 WAY SOLENOID VALVE	FRAME BASE	MOTOR CONNECTOR	FEED WHEEL	GEAR REDUCER (21.54:1)	WASHER-5/16"	STOP NUT-1/2"	4L PULLEY-2.5" OD	BOLT-FLANGED HEX HEAD
	PART NUMBER	9600-0400	9992-1114	9600-0124	9992-1180	9992-1182	46000-2110	9992-2140	9992-2190	9992-1113	9992-1118	9992-1219	9992-1221	9992-1200	9992-1217	9992-1218	9992-1149	9992-1126	30575-0000	9600-0010	9992-1112	9600-0106	9992-6950	9992-6920	30573-0000	9618-0000	9992-5121	9992-5150
	QTY	1	1	2	1	2	1	4	1	1	1	11	22	1	1	1	1	2	4	1	1	1	1	1	4	4	1	4
	ITEM	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23				

SM-165A SM-165A

## **PARTS LIST**



## **SETUP**

### STEP 1



STEP 2



STEP 3



STEP 4





STEP 6

SNAP BLUE TUBING INTO GROOVE



SM-165A SM-165A

## **SETUP CON'T**

UNIT

**STEP 7** CONNECT FEDER GUN CABLE TO

STEP 8



**SETUP CON'T** 

**STEP 15** 





**STEP 10** 









SHAFT IS SLIGHTLY EXPOSED FROM GUN



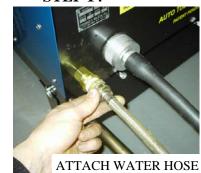
**STEP 13** 

ATTACH BRUSH

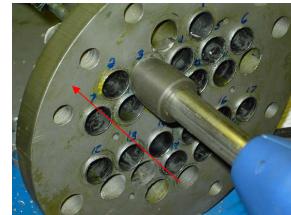
TO SHAFT



**STEP 14** 



STEP 1



STEP 2

