SPECIFICATIONS

MODEL	952-1800
TUBE CAPACITY (OD)	Up to 1/2 in (12.7mm)
FREE SPEED	1800 RPM
MIN. TORQUE	18 in-lbs (2 N-m)
MAX. TORQUE	45 in-lbs (5 N-m)
AIR CONSUMPTION	19 CFM
AIR PRESSURE	90 PSI
OPERATING HOSE	3/8 in (9.5 mm)
DRIVE	3/8" Square Spindle
CHUCK	1/4” Quick Connector

SM-155A

Wilson
Smarter Tools for Smarter Work

PNEUMATIC 1800 RPM TORQUE CONTROLLED TUBE ROLLER

☐ 952-1800

OPERATING INSTRUCTIONS & SERVICE MANUAL

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

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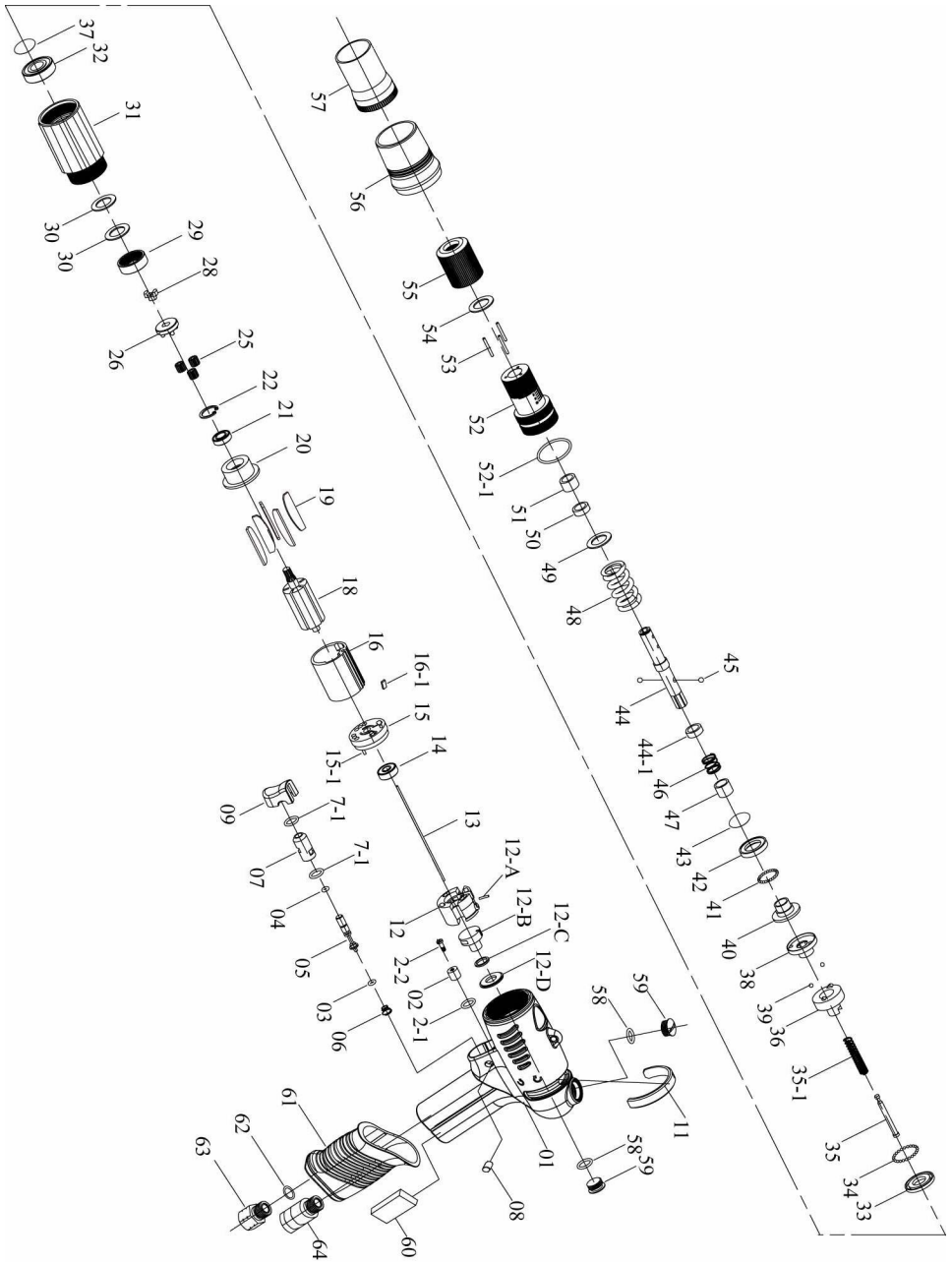
SAFETY INSTRUCTIONS

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 AIR TOOL. Read this service manual carefully.
2. KEEP GUARDS IN PLACE and in working order.
3. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
4. AVOID DANGEROUS ENVIRONMENT. Keep work areas well lit.
5. STORE IDLE TOOLS. When not in use, tools should be stored in dry, high or locked-up place – out of reach of children.
6. DON'T FORCE TOOLS. It will do the job better and safer at the rate for which it was designed.
7. USE RIGHT TOOLS. Don't force small tool or attachment to do the job of a heavy-duty tool.
8. WEAR PROPEL APPAREL. No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
9. USE SAFETY GLASSES with most tools. Also face or dust mask if cutting operation is dusty.
10. DON'T ABUSE AIR-HOSE. Never carry tool by air-hose or yank it to disconnect from receptacle. Keep hose from heat and sharp edges.
11. SECURE WORK. Use clamps or a vise to hold work. It's safer than using your hands to operate tool.
12. DON'T OVERREACH. Keep proper footing and balance at all times.
13. MAINTAIN TOOL WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
14. DISCONNECT TOOLS: When not in use; before servicing; when changing accessories such as blades, bits, cutters, etc.
15. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking that keys and adjusting wrenches are removed from tool before turning it on.
16. AVOID ACCIDENTAL STARTING. Don't carry plugged-in tool with finger or switch.
17. Remove the air-hose from the tool before carrying out any adjustment, servicing or maintenance.
18. Do not use unit with combustible fluids or where combustible fluids or fumes may be present.

No.	Part No.	Part Name	Q't y	No.	Part No.	Part Name	Q't y
1	9520002	Pistol Hous'g (Green)	1	34	9520037	Ball	32
2	9520003	Blank Cap	1	35	9521835	Pilot Pin	1
2-1	9520004	O Ring	1	35-1	9521837	Spring	1
2-2	9520005	Screw	1	36	9521836	Rear Clutch	1
3	9520006	O Ring	1	37	9520041	C Ring	1
4	9520007	Valve O-Ring	1	38	9521838	Center Clutch	1
5	9520008	Valve Pin	1	39	34270	Ball	2
6	9520009	Cone Spring	1	40	9521840	End Clutch	1
7	9520010	Valve Bushing	1	41	9520045	Ball	25
7-1	9520011	O-Ring	2	42	9520046	Ball Race	1
8	9520012	Cap (Blue)	2	43	9520047	C Ring	1
9	9520013	Button (Blue)	1	44	9521844	Anvil	1
11	9520014	Cover	1	44-1	9520049	Washer	1
12	9521881	Valve Bushing	1	45	34271	Ball	2
12-A	9521885	Valve Pin	1	46	9521846	Spring	1
12-B	9521882	Valve Spool	1	47	9521847	Slide Base	1
12-C	9521884	O Ring	1	48	9521848	Torque Spring	1
12-D	9521883	Valve Washer	1	49	9521849	Washer	1
13	9521900	Operating Rod	1	50	9521850	Bushing	1
14	9521814	Ball Bearing	1	51	9520056	Anvil Bushing	1
15	9521815	End Plate	1	52	9521852	Clutch Housing	1
15-1	9521813	Pin	1	52-1	9520058	O Ring	1
16	9521816	Cylinder	1	53	9521853	Needle Pin	1
16-1	9521823	Key	1	54	9521854	Regulation Washer	1
18	9521818	7T Rotor	1	55	9521855	Torque Ring	1
19	9521819	Blade	6	56	9521860	Housing Cap	1
20	9521820	Front Plate	1	57	9521861	Torque Cover (Black)	1
21	9521821	Ball Bearing	1	58	9520064	O Ring	2
22	9521822	C Ring	1	59	9520065	Screw Cap	2
25	9521825	15T Plate Gear	3	60	9520066	Silencer	1
26	9521826	Gear Cage	1	61	9520067	Pistol Cover	1
28	9521827	Connector	1	62	9520068	O Ring	1
29	9521830	First Internal Gear	1	63	9520069	Air Inlet Bushing [PT]	1
30	9521828	Washer	2	63	9520070	Air Inlet Bushing [PS]	1
31	9521831	Front Housing	1	63	9520071	Air Inlet Bushing [NPT]	1
32	9521832	Ball Bearing	1	64	9520072	Silencer For Pistol	1
33	9520036	Retainer	1				



OPERATION

Before Beginning

1. Air tools are adversely affected by moisture. Since air from a compressor contains a lot of moisture and dust, it is desirable to provide a filter and lubricator in the pipeline to remove such elements.
2. When using a new air hose or air pipe, blow and clean the inside of air hose or pipe before installation.
3. Keep the inside of the air hose or air pipe clean to prevent pressure drop problems caused by dust accumulation that can restrict air flow.
4. When disconnecting the air hose from the air tool after operation, do not drop the air hose end to the floor as dust or other elements may get inside the air hose.
5. Use an air regulator to keep stable air pressure at the tool end. It is IMPORTANT to get proper air pressure to the tool.

Torque Setting Adjustment

1. Use the torque ring to adjust the torque setting on the tool. Units are set to the lowest torque setting out of the box.
2. Each of the lines that can be seen on the clutch housing corresponds to (2) revolutions. One revolution translates to an adjustment of about 4 to 5 in-lbs of torque.

3. To increase the torque setting, turn the torque ring clockwise. When the torque ring is twisted, a click will be heard and felt. (6) clicks indicate a full revolution, and there are about (10) revolutions between the maximum and minimum torque settings. When determining the setting to use for rolling, start at a lower setting and increase in increments until the proper expansion is achieved.

NOTE: When lowering the torque setting, there is nothing to prevent the torque ring from being completely unthreaded (it will only be held on by the quick connector). When this happens the ring will no longer click when twisted, and if operated the tool will reverse immediately, even with no load. To rethread the ring, simply turn it clockwise until the click is felt again.

OPERATION CONT'D

Tube Rolling

The 952-1800 is a trigger operated, torque controlled rolling tool. It is designed for use with regulated, filtered, and lubricated 90 psig air (measured at the tool inlet), but can be used at lower pressures to lower the minimum torque setting if required (with some loss of free speed).

The operator inserts the expander and pulls the trigger to start the tool. (To avoid "staking" in soft tubes, do not engage the expander mandrel before it starts to rotate.) Applying light thrust to feed in the mandrel, the tool reaches desired torque setting, indicating that the desired amount of expansion has been achieved. The tool will then stop and automatically reverse direction so that the operator can gently pull back and release the mandrel. Once the mandrel is free, release the trigger and remove the expander . Proceed to the next tube. The tool will automatically return to forward operation when the trigger is released.

Below is approximate torque value:

Setting	Torque in-lb
2	18-20
3	21-23
4	27-29
5	31-34
6	35-38
7	38-40
8	43-45

Lubrication

1. Lubrication is indispensable to air tools. The best way to provide it is to install a lubricator into the air line for automatic oil feed, but if one is not available, manual lubrication once after every half day of use (4 hours) is recommended for longer life and proper function of all features.
2. For manual lubrication, disconnect air hose from air inlet and pour oil (#40-#60) into the air intake.
3. After lubrication, oil will discharge from the exhaust upon operation. Flush motor for a few seconds if necessary.