

Dynabrade 5" & 6" Pistol Grip Sander/Polisher

Safety, Operation and Maintenance – Save This Document and Educate All Personnel

Model	RPM	Spindle Thread	Exhaust
53320	3,400	5/8"-11 Male Thread	Rear

SANDER/POLISHER

LIMITED
LIFETIME
WARRANTY



53320

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⚠ WARNING

Read and understand this tool manual before operating your air tool. Follow all safety rules for the protection of operating personnel as well as adjacent areas. Always operate, inspect and maintain this tool in accordance with the American National Standards Institute (ANSI). Safety Requirements for the Use, Care and Protection of Abrasive Wheels – ANSI B7.1, and Safety Requirements for Abrading Materials with Coated Abrasive Systems – ANSI B7.7, Compressed Air and Gas Institute (CAGI) Safety Code for Portable Air Tools – B186.1, Code of Federal Regulation – CFR 29 Part 1910, International Organization for Standardization (ISO) Hand Held Non-Electric Power Tools – Safety Requirements ISO 11148 series and applicable State and Local Regulations.



Read and understand tool manual before work starts to reduce risk of injury to operator, visitors, and tool.



Eye protection must be worn at all times, eye protection to conform to ANSI Z87.1.



Ear protection to be worn when exposure to sound, exceeds the limits of applicable Federal, State or local statutes, ordinances and/or regulations.



Practice safety requirements. Work alert, have proper attire, and do not operate tools under the influence of alcohol or drugs.



Respiratory protection to be used when exposed to contaminants that exceed the applicable threshold limit values required by law.



Air line hazard, pressurized supply lines and flexible hoses can cause serious injury. Do not use damaged, frayed or deteriorated air hoses and fittings.

Some dust created by sanding, grinding, drilling, and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement and other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

SAFETY and OPERATING INSTRUCTIONS



Carefully Read and Understand the General and Sander/Polisher sections found in Tool Safety and Operating Guidelines (PN00001676) Before Handling or Using Tool.

Carefully Read all instructions before operating or servicing any Dynabrade® Abrasive Power Tool. Products offered by Dynabrade are not to be modified, converted or otherwise altered from the original design.

Tool Intent: Pistol Grip Sanders/Polishers are intended to be used by professional operators for sanding and finishing a variety of materials using 5" and 6" back-up pads with appropriate sized accessories. Ideal for use in metal working, woodworking, marine and aerospace industries.

DO NOT USE Tool for Anything Other Than Its Intended Applications.

Training: Proper care, maintenance, and storage of your air tool will maximize tools performance and reduce chance for accident.

Employer's Responsibility: Provide operators with safety instructions and training for safe use of tools and accessories.

Report to Your Supervisor any Condition of the Tool, Accessories or Operation you Consider Unsafe.

MAINTENANCE INSTRUCTIONS

Important: To keep tool safe, a Preventative Maintenance Program is recommended. The program should include inspection of the tool and all related accessories and consumables, including air lines, and pressure regulators, etc. (refer to CAGI B186.1 for additional maintenance information). If accessory or tool breakage occurs, investigate failure to determine the cause and correct before issuing tool for work. Use the following schedule as a starting point in developing a Preventative Maintenance Program. If tool does not operate properly (RPM, vibration, start/stop) after these scheduled checks or at any time, the tool must be repaired and corrected before returning tool to use.

INSTALLATION

- To ensure long life and dependable service, use a Closed Loop Air System and Filter-Regulator-Lubricator (FRL) as diagramed below.
- Each tool should have its own dedicated hose connected to an air supply FRL. Quick disconnects should be installed at the FRL in an effort to reduce contamination into the tool. Securely affix all fittings and hose assemblies.
- It is strongly recommended that all Dynabrade rotary vane air tools be used with a Filter-Regulator-Lubricator to minimize the possibility of misuse due to unclean air, wet air or insufficient lubrication. Dynabrade recommends the following: **10690** Air Line Filter-Regulator-Lubricator — Provides accurate air pressure regulation, two-stage filtration of water contaminants and micro-mist lubrication of pneumatic components.
- Dynabrade recommends 1 drop of air lube per minute for each 20 SCFM (example: if the tool specification states 40 SCFM, set the drip rate on the filter-lubricator to 2 drops per minute). **95842** Dynabrade Air Lube is recommended.

MAINTENANCE SCHEDULE

Maintenance schedules depend on the type and style of tool. Refer to page 3 to reference symbols associated with specific maintenance items/areas. Match maintenance schedules accordingly. See page 4 for any additional maintenance information.

Daily (every 8 hours):

- Inspect tool and accessories for damage or broken parts. Replace items as necessary to ensure proper operation and safety.
-  Lubricate motor as recommended. Use **95842** Dynabrade Air Lube (10W/NR). Apply 1 drop/minute of air lube per 20 SCFM.
- Check air line pressure with a gage. (MAX. 90 PSIG or 6.2 Bar operating pressure at the air inlet of the tool.)
- Check tool for proper operation: If operating improperly or demonstrates unusual vibration, the tool must be serviced and problem corrected before further use.

Every 20 Hours/Once a Week (which ever comes first):

- Measure RPM (speed) by setting air pressure to 90 PSIG (6.2 Bar) at tool inlet, without accessory mounted, while the tool is running. Using tachometer, check spindle speed of the tool. Unless otherwise stated the no-load speed may not exceed the rated speed. If tool speed exceeds maximum rated RPM, service as required and correct before use

- If tool is running too fast: air control rings and silencer(s). Service as required.
- If tool is running too slow: look for clogged inlet screen, silencer(s) or air stream. Service as required.

Every 50 Hours:



Lubricate planetary gears through gear case fitting with 3 plunges of **95544** Grease. Use **95541** Lubricant Gun. (Prime lubricant gun before use).

REPAIR

- Use only genuine Dynabrade replacement parts to ensure quality. To order replacement parts, specify Model#, Serial# and RPM of your air tool.
- Mineral spirits are recommended when cleaning the tool and parts. Do not clean tool or parts with any solvents or oils containing acids, esters, ketones, chlorinated hydrocarbons or nitro carbons.
- Air tool markings must be kept legible at all times, if not, reorder housing and replace. User is responsible for maintaining specification information.

HANDLING & STORAGE

- Use of tool rests, hangers and/or balancers is recommended.
- Protect tool inlet from debris (see Notice below).
- **Do Not** carry tool by air hose or near the tool throttle lever.
- Store accessories in protective racks or compartments to prevent damage.
- Follow the handling instructions outlined in the operating instructions when carrying the tool and when changing accessories.
- Protect accessories from exposure to water, solvents, high humidity, freezing temperature and extreme temperature changes.

END OF USE/DISPOSAL

When tool has reached its end of useful service, disassemble tool into its primary components (i.e. steel, aluminum and plastic) and recycle or discard per local, state and/or federal regulations as to not harm the environment.

NOTICE

All Dynabrade air motors use the highest quality parts available and are manufactured to exacting tolerances. Air motor failures are often traced to unclean air supply. Compressed air can force dirt and other contaminants into motor bearings causing early failure. Contaminants can score cylinder wall and vanes resulting in reduced efficiency and power. Our warranty obligation is contingent upon proper use of our tools. Air motors which have been subjected to misuse, contaminated air will void warranty.

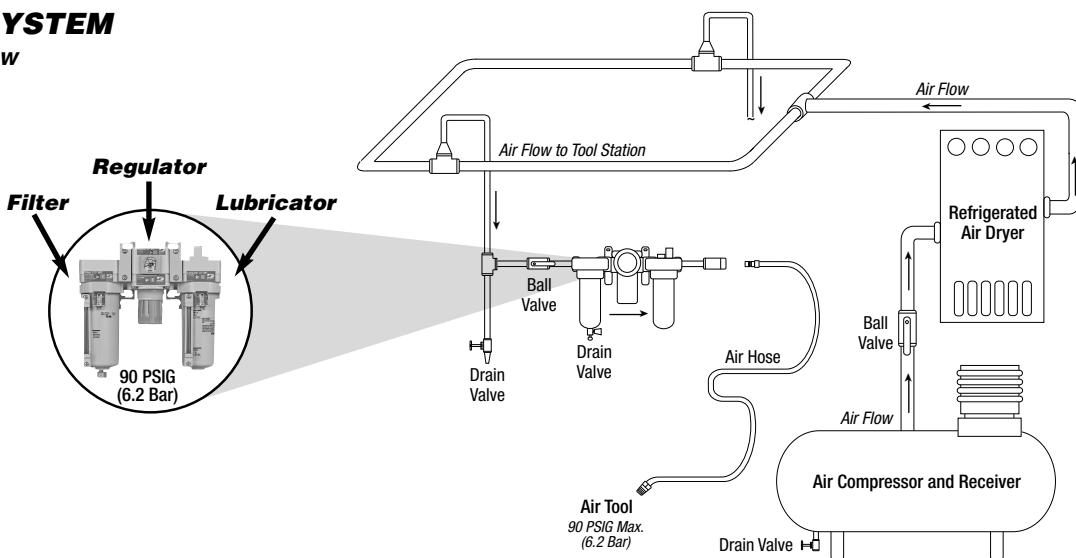
CLOSED LOOP AIR SYSTEM

Sloped in Direction of Air Flow

- Dynabrade Air Power Tools are designed to operate at 90 PSIG (6.2 Bar) maximum air pressure at the tool inlet, when the tool is running. Use recommended regulator to control air pressure.
- Ideally the air supply should be free from moisture. To facilitate removing moisture from air supply, the installation of a refrigerated air dryer after the compressor and the use of drain valves at each tool station is recommended.

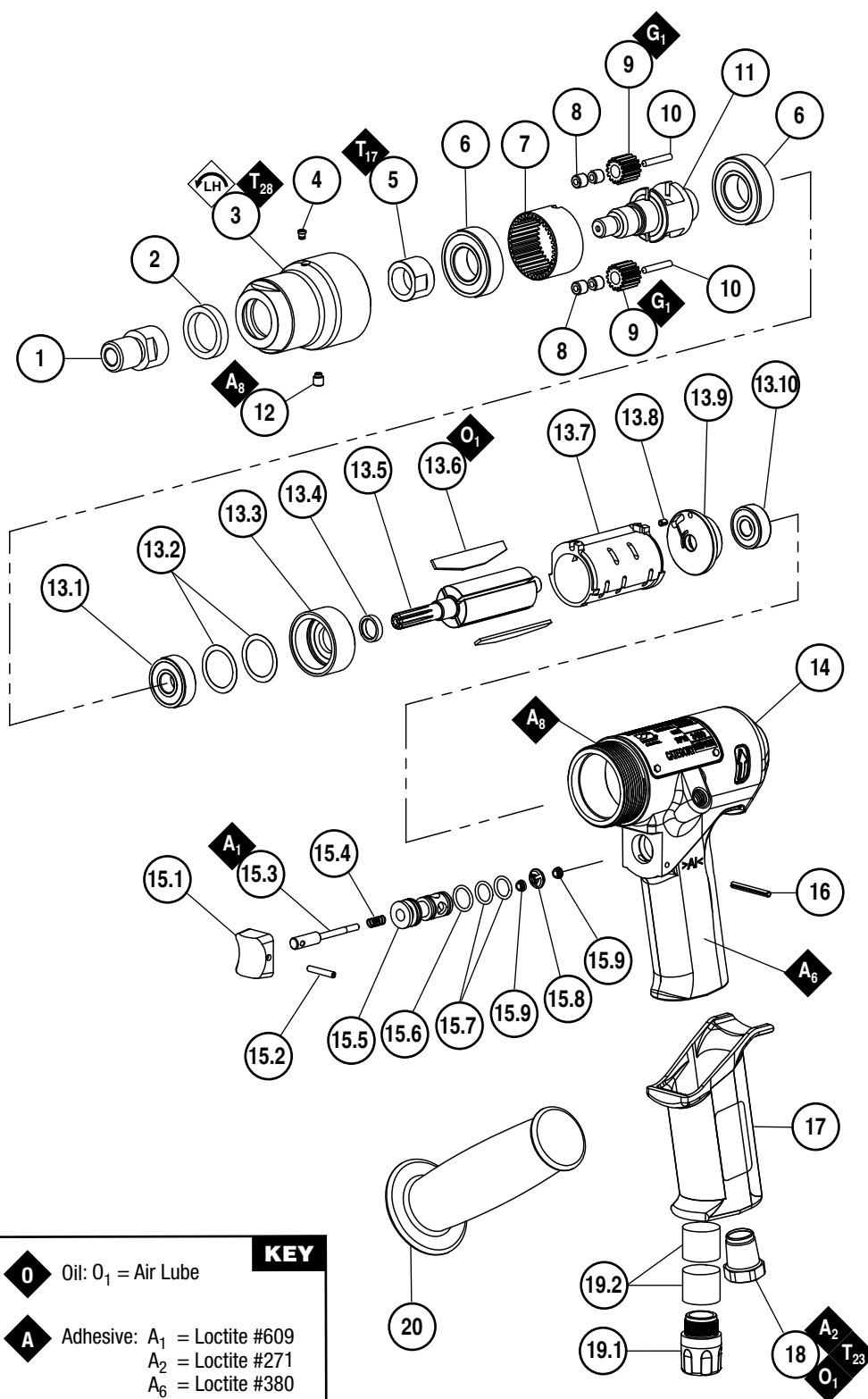
Lubricator Setting

1 Drop/Minute per 20 SCFM



Dynabrade 5" & 6" Pistol Grip Sander/Polisher

Complete Assembly



ITEM	P/N	DESCRIPTION	QTY.
1	55064	3/8-24 - 5/8-11 MALE THREAD ADAPTER	1
2	55031	SHAFT SEAL	1
3	55030	PLANETARY COVER	1
4	01041	GREASE FITTING	1
5	04114	SPINDLE NUT	1
6	02552	BEARING	2
7	53191	RING GEAR	1
8	04026	NEEDLE BEARING	4
9	53193	GEAR	2
10	53182	SHAFT	2
11	02270	PLANETARY CARRIER	1
12	04014	SCREW	1
13	55057	SHORT BLOCK ASSY	1
13.1	01007	BEARING	1
13.2	01121	SHIM PACK	A/R
13.3	53183	END PLATE, FRONT	1
13.4	01010	SPACER-MOTOR	1
13.5	04017	ROTOR	1
13.6	01185	MOTOR VANE (4/PKG.)	1
13.7	01028	CYLINDER	1
13.8	50767	PIN	1
13.9	55027	REAR END PLATE	1
13.10	02649	BEARING	1
14	55073	HOUSING ASSEMBLY	1
15	55058	TRIGGER ASSEMBLY	1
15.1	55035	TRIGGER	1
15.2	50936	PIN	1
15.3	55068	PISTOL GRIP VALVE STEM	1
15.4	96069	SPRING	1
15.5	55039	BUSHING	1
15.6	50939	O-RING	1
15.7	02027	O-RING	2
15.8	55041	VALVE - TRIGGER ASSY	1
15.9	55051	VALVE STOP	2
16	96025	PIN	1
17	55024	GRIP-HANDLE HOUSING	1
18	56023	INLET BUSHING ASSY	1
19	69272	MUFFLER ASSEMBLY	1
19.1	69359	MUFFLER BODY	1
19.2	56027	MUFFLER INSERT	2
20	53163	HANDLE ASSEMBLY	1
-	95263	17 mm OPEN END WRENCH	1

AR – "As Required"

KEY
O Oil: O ₁ = Air Lube
A Adhesive: A ₁ = Loctite #609 A ₂ = Loctite #271 A ₆ = Loctite #380 A ₈ = Loctite #567
T_x X = Torque Value (N•m) (N•m x 8.85 = lb•in.)
G Grease: Lubriplate 630 AA

Always follow adhesive manufacturers
cleaning and priming recommendations.

LIMITED LIFETIME WARRANTY

To validate Dynabrade Limited Lifetime Warranty, you must register each tool at: www.dynabrade.com. Registration of each tool at website is required. Dynabrade will not honor Limited Lifetime Warranty on unregistered tools. Please view the entire Limited Lifetime Warranty Policy at : www.dynabrade.com.

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MACHINE SPECIFICATIONS

Model	Speed	Power	Air Consumption	Weight	Length	Height
53320	3,400 RPM	.7 hp (522 W)	44 SCFM (29 LPM)	2.9 lbs. (1.3 kg)	7.6" (194 mm)	6.4" (163 mm)

Additional Specifications: Air Inlet Thread 1/4" NPT • Air Pressure 90 PSI (6.2 Bar)

Visit dynabrade.com for your model's current vibration and sound data.

OPTIONAL ACCESSORIES



Dynabrade Air Lube

- Formulated for pneumatic equipment
- Absorbs up to 10% of its weight in water
- Prevents rust and formation of sludge
- Keeps pneumatic tools operating longer with greater power and less down time

Part No. 95842: 1 pt. (473 ml)

Part No. 95843: 1 gal. (3.8 L)

Part No. 95841: 4 oz. (118.3 ml)



Motor Tune-Up Kit

- Includes assorted parts to help maintain and repair motor.

Part No. 96047



Dynabrade Gear Grease

- High film strength; excellent resistance to water, steam, etc.
- Easy to apply using Dynabrade Push-Type Oil or Grease Applicator **PN: 95541**

Part No. 95544 2.5 fl. oz. (74 ml) Tube



Push-Type Oil or Grease Applicator

- Can be used with Gear oil, Gear Grease and Ultra Gear Grease

Part No. 95541

REFERENCE CONTACT INFORMATION

American National Standards Institute (ANSI)
www.ansi.org

Compressed Air & Gas Institute (CAGI)
www.cagi.org

European Committee for Standardization (PNEUROP)
www.pneurop.org

International Organization of Standards (ISO)
www.iso.org

U.S. Government Publishing Office (GPO)
www.gpo.gov

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