## **Dual-Grip Gear Driven Sander** 8" Diameter, Central Vacuum Electrostatic Discharge (ESD) Gear Driven Sander

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

Model	Shroud	RPM	
58661	Overskirt	900	







SANDER / POLISHER \*Vac

\*Vacuum hose sold separate (See optional accessories)

Find The Most Current Offering of Support Documents and Accessories at www.Dynabrade.com

## **A 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, 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 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 statues, 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.



Ground wire of tool/hose assembly must be properly connected to earth ground of portable/central vacuum system to allow ESD capabilities to function correctly.

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 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:** Dual-Grip ESD Gear Driven Sanders are intended for use in industrial applications and used only by skilled, trained professionals in accordance with the instructions in this manual. This pneumatic tool is designed to be used for sanding and finishing a variety of materials including wood, metal, plastic, fiberglass, solid surfaces, composites, rubber, glass and stone while routing electrostatic discharge away from the operator. Only hook-faced abrasives are recommended by Dynabrade to be used with this tool. Use in any other manner or with other accessories could lead to unsafe operating conditions.

#### **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, pressure regulators, filters, oilers, 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.

Note: Turbine style air motors do not require oil.

#### 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.)



Lubricate wick system and right angle gears through gear case fitting. Apply 3 plunges of **95848** Gear Oil. Use **95541** Lubricant Gun (Prime lubricant gun before use).

 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):



**Lubricator Setting** 

1 Drop/Minute per 20 SCFM

For tools without "wick system", lubricate right angle gears through lubricant fitting. Apply 1 plunge of **95544** Grease. Use **95541** Lubricant Gun. (Prime lubricant gun before use).

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

**Note:** Special care must be taken when servicing governors. Refer to specific tool manual for governor instructions and/or speed control devices. Governor assemblies made from molded plastic components are non-serviceable and must be replaced.

#### **Every 300 Hours:**



Lubricate gears through fitting located in the 56470 mount plate assembly with 2 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.
- A Motor Tune-Up Kit is available which includes high wear and medium wear motor parts.
- Air tool markings must be kept legible at all times, if not, reorder housing and replace. User is responsible for maintaining specification information.



After maintenance is performed on tool, add a few drops of **95842** Dynabrade Air Lube to the tool inlet and start the tool a few times to lubricate air motor. Verify RPM (per 20 hr maintenance schedule), vibration and operation.

#### **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**

Air Tool

90 PSIG Max (6.2 Bar)

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**

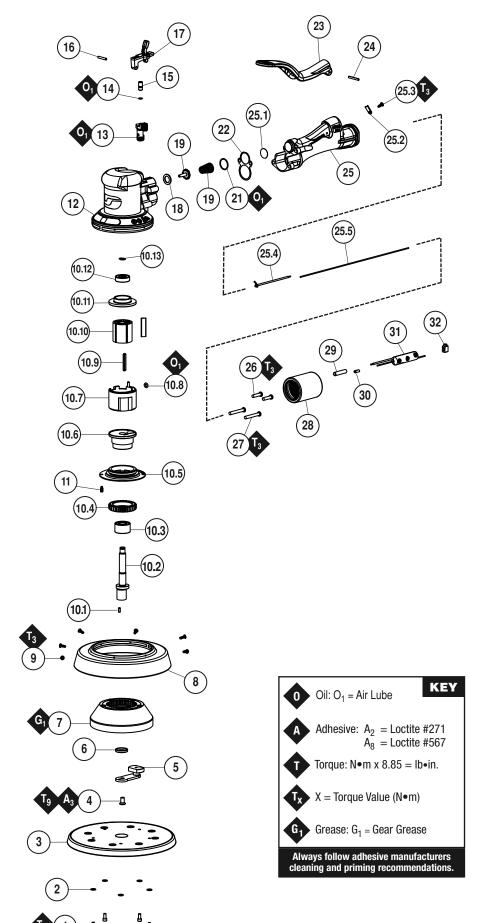
All Dynabrade air motors use the highest quality parts available and are manufactured to exacting tolerances. Air motor failures are often traced to lack of lubrication or unclean air supply. Compressed air can force dirt and other contaminants into motor bearings causing early failure. Contaminants 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 or lack of lubrication will void warranty.

Drain Valve ⊨

#### **CLOSED LOOP AIR SYSTEM** Sloped in Direction of Air Flow Air Flow · Dynabrade Air Power Tools are designed to operate at 90 0000 Air Flow to Tool Station PSIG (6.2 Bar) maximum air Regulator pressure at the tool inlet, **Filter** Lubricator when the tool is running. Use Refrigerated recommended regulator to Air Dryer control air pressure. Rall · Ideally the air supply should Valve be free from moisture. To Rall facilitate removing moisture Valve Drain Air Hose from air supply, the installation 90 PSIG Drain of a refrigerated air dryer after the compressor and the use of Air Flow drain valves at each tool station is recommended. Air Compressor and Receiver

# **Dual-Grip ESD Gear Driven Sander**

Complete Assembly



ITEM	P/N	DESCRIPTION	QTY.
1	95178	SCREW	5
2	95886	WASHER	5
3	56237	HOOK-FACE PAD – 8"	
4	96477	SCREW	1
5	56478	8" BALANCE ARM ASSEMBLY	1
6	56474	BALANCE WASHER	1
7	56470	MOUNTING PLATE ASSEMBLY	1
8	56489	8" RANDOM SHROUD	1
9	96489	SCREW	6
-			-
10	56484	SHORT BLOCK ASSEMBLY	1
10.1	01673	METRIC SPRING PIN	1
10.2	56589	SHAFT	1
10.3	56133	BEARING	1
10.4	56473	GEAR – PINION	1
10.5	57332	RING – LOCK	1
10.6	56594	FRONT PLATE-GEARED TOOL	1
10.7	56495	GEAR DRIVEN CYLINDER ASSEMBLY	1
10.8	95911	O-RING	1
10.9	54673	SHAFT KEY	1
10.10	54671	ROTOR/VANE KIT	1
10.11	54629	REAR BEARING PLATE	1
10.12	01206	BEARING	
10.13	95626	RETAINER RING	
11	96166	M4 x 10 SOCKET SCREW	
12	58671	HOUSING LABEL ASSEMBLY	
13	58620	SPEED REGULATOR ASSEMBLY	
14	98459	O-RING	
15	56579	VALVE STEM	
16	12132	PIN – SPRING	
17	58649	SAFETY LOCK ASSEMBLY	
18	56598	SEAL-WASHER	
19	51944	TIP VALVE	
20	51943	SPRING	
21	96459	O-RING	1
22	56469	EXHAUST GASKET	1
23	58648	LEVER	1
24	01017		
25	58642	PIN – SPRING HANDLE ASSEMBLY	
		INCLUDES 25.1 – 25.5	1
25.1	51938	INLET SCREEN	
25.2	58653	CLAMP	1
25.3	96489	SCREW	
25.4	59440	WIRE	1
25.5	58621	WIRE	
26	96469	SCREW	
27	96454	SCREW	
28	58628	VACUUM CUFF	
29	59444	CONNECTOR	
30	58640	COMPRESSION SLEEVE	
	59395	RESISTOR ASSEMBLY	
31	00000	COUPLER	
	59384	COUPLER	1

#### LIFETIME WARRANTY

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



### **MACHINE SPECIFICATIONS**

Speed	Power	Air Consumption	Pad	Weight - Tool Only	Length	Height
900 RPM	.4 hp (298 W)	23 SCFM (566 LPM)	8" (203 mm)	4.2 lb (1.9 kg)	15.2" (386 mm)	5.6" (142 mm)

Additional Specifications: Air Inlet Thread 1/4" NPT • Hose I.D. 1/4" (6 mm)

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

#### **OPTIONAL ACCESSORIES**



#### Motor Tune-Up Kit

 Includes assorted parts to help maintain and repair motor.

Part No. 98221



Gear Grease Part No. 95544 Part No. 95541



#### 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)



#### Vacuum Hose Assembly

- 10' (3 m) conductive vacuum hose assembly.
- For connection to 2" central vacuum system.
   Part No. 31927

#### RAPTOR VAC® VACUUM SYSTEMS



Dual-Grip Gear Driven Sander Electrostatic Discharge (ESD), is compatible with Dynabrade Raptor Vac® standard Dynabrade Raptor Vac® hose assemblies.\*

\*Part No. 94942: Ground wire kit, required to properly ground system.

#### 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

