# 1.2 hp Right Angle Disc Sander 5/8"-11 Male Spindle

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

Model	RPM	Wheel Size		
50346	12,000	5" Dia.		
50350	6,000	7" Dia.		

SANDER





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# **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, 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 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.

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 Grinder 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:** 5" and 7" Right Angle Grinders are intended to be used by professional operators and are ideal for material removal using reinforced Type 27, Type 42 Depressed Center Wheels and Flap Disc Wheel with 7/8" center hole.

#### **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 included inspection of the tool and all related accessories and consumables, including air lines, pressure regulators, filters, oilers, etc. refer to ANSI 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 as diagramed below.
- Each tool should have its own dedicated hose connected to an air supply manifold. Quick disconnects should be installed at the manifold in an effort to reduce contamination into the tool.
- 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 recommendsthe
  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 one 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) Dynabrade Air Lube (P/N 95842: 1pt/473ml) is recommended.

#### **MAINTENANCE SCHEDULE**

#### 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 Dynabrade Air Lube (P/N 95842: 1pt/473ml) 10W/NR. (1 Drop per 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.)
- Right angled gear and wick system through gear case grease fitting with 3 plunges of gear oil (P/N 95848) and grease gun (P/N 95541).
   (Prime grease gun prior to greasing.)
- 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 or Once a Week Which Ever Comes First:

- Check free speed of tool without the abrasive accessory mounted. Measure RPM (speed) with tachometer and with air pressure set at 90 PSIG while the tool is running. If a governed tool is operating at a higher speed than the RPM marked on the tool housing, the tool must be serviced and corrected before use. A non-governed tool may exceed the RPM marked on the tool by 10% when operated at free speed with no accessories.
- If tool is running fast look for worn, damaged or missing governors, air control rings and silencers. Special care must be taken when servicing governors and speed control devices. Injection molded governor assemblies are non-serviceable and must be replaced.

 If tool is running slow look for clogged inlet screen, air stream, silencer(s) or a malfunctioning governor(see concerns for servicing governors).
 Service as required.

#### Every 50 Hours:

 Lubricate planetary gears through gear case grease fitting with 3 plunges of grease (P/N 95542) and grease gun (P/N 95541). (Prime grease gun prior to greasing.)

#### 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.
- DO NOT clean or maintain tools with chemicals that have a low flash point (example: WD-40°).
- 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 Dynabrade Air Lube (P/N 95842) 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).

Air Tool

90 PSIG Max. (6.2 Bar)

Drain Valve ⊢d

- · 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 part) and recycle or discard per local, state and/or federal regulations as to not harm the environment.

#### **NOTICE**

All Dynabrade motors use the highest quality parts and metals available and are machined to exacting tolerances. The failure of quality pneumatic motors can most often be traced to an unclean air supply or the lack of lubrication. Air pressure easily forces dirt or water contained in the air supply into motor bearings causing early failure. It often scores the cylinder walls and the rotor blades resulting in limited efficiency and power. Our warranty obligation is contingent upon proper use of our tools and cannot apply to equipment which has been subjected to misuse such as unclean air, wet air or a lack of lubrication during the use of this tool.

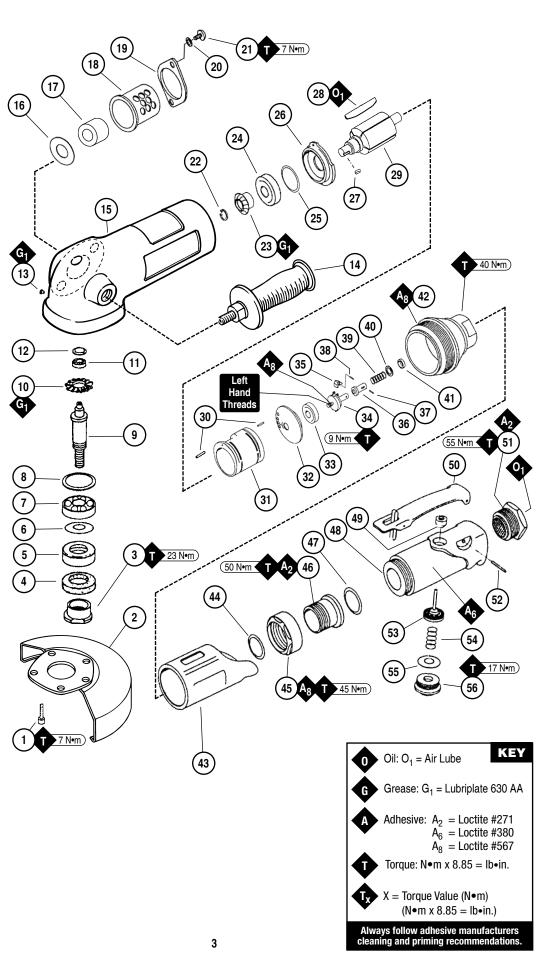
#### **CLOSED LOOP AIR SYSTEM** Sloped in Direction of Air Flow Air Flow · Dynabrade Air Power Tools are designed to operate at 90 0000 Air Flow to Tool Station PSIG (6.2 Bar) maximum air Regulator pressure at the tool inlet, when the tool is running. Use **Filter** Lubricator Refrigerated recommended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

# **Lubricator Setting**

1 Drop/Minute per 20 SCFM

# 1.2 hp Right Angle Disc Sander

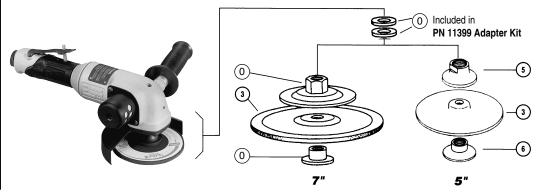
Complete Assembly



ITEM	P/N	DESCRIPTION		
1	95897	SCREW		
2	52049	GUARD	1	
3	52118	SPINDLE NUT	1	
4	52089	WASHER		
5	50412	FELT RING	1	
6	52088	SPACER		
7	50431	BEARING		
8	52120	SHIM PACK (3/PKG.)		
9	52117	SPINDLE	1	
40	50450	BEVEL GEAR	١.	
10	52159 52125	6,000 RPM 12,000 RPM	1	
11	12152	BEARING	1	
12	50424	SPINDLE CAP	1	
13	01041	GREASE FITTING	1	
14	52169	HANDLE	1	
17	32103	HOUSING (INCL. 01041 FITTING)	'	
15	52114	MODEL 50350	1	
	52115	MODEL 50346		
16	52165	GASKET	1	
17	55245	SILENCER	1	
18	52164	EXHAUST COVER	1	
19	52180	CLAMP	1	
20	01791	WASHER	2	
21	50511	SCREW	2	
22	95939	RETAINING RING	1	
		BEVEL PINION		
23	52158	6,000 RPM	1	
	52124	12,000 RPM		
24	01036	BEARING	1	
25	01277	SHIM PACK (3/PKG.)	1	
26	07119	FRONT BEARING PLATE	1	
27	50435	KEY	1	
28	07107	VANE (5/PKG.)	1	
29	07106	ROTOR		
30	01673	PIN		
31	07118	CYLINDER	1	
32	07114	REAR BEARING PLATE	1	
33	01007	BEARING	1	
		GOVERNOR CAGE	1	
34	07113 07124	6,000 RPM		
	0/124	12,000 RPM		
35	50399	GOVERNOR WEIGHT 6.000 RPM	2	
00	52086	12.000 RPM	-	
36	50463	GOVERNOR VALVE	1	
37	50470	PIN	1	
38	50938	GOVERNOR PIN	2	
	23000	GOVERNOR SPRING	-	
39	52182	6,000 RPM	1	
	52126	12,000 RPM		
40	95611	SHIM (AS REQ.) 6/PKG.	1	
41	50471	SPRING HOLDER		
42	52090	ADAPTER	1	
43	07136	GRIP	1	
44	02658	PACKING	1	
45	02631	NUT	1	
46	02626	ADJUSTMENT BUSHING	1	
47	01746	O-RING	1	
40	071.44	VALVE BODY	1	
48	07141	(INCLUDING 07142 BUSHING)		
49	07142	BUSHING	1	
50	01089	SAFETY LEVER		
51	01697	INLET BUSHING		
52	01017	PIN		
	07168	VALVE STEM ASSY.		
53	07445	SPRING		
	07145	PACKING		
53	07145	PACKING	1	
53 54		PACKING PLUG	1	
53 54 55	07146			

# **MOUNTING ARRANGEMENT**

Inde No.	ex Key Description	Part No.		
1	Spacers (2) As Req.	97311		
2	Wheel Adapter Black	52176		
3	Type 27, 7/8" I.D. Dej	oressed		
	Center Wheel			
4	Adapter Nut	07139		
5	Back Flange	07138		
6	Front Flange	07139		
All Of The Above Are Not Included With Tool.				



## LIMITED LIFETIME WARRANTY

Dynabrade portable pneumatic power tools are rigorously inspected and performance tested in our factory before shipping to our customers. If a Dynabrade tool develops a performance problem and an inherent defect is found during normal use and service, Dynabrade will warrant this tool against defects in workmanship and materials for the limited lifetime of the tool.

# **MACHINE SPECIFICATIONS**

Model	Speed	Power	Sound Level	Air Consumption	Wheel Size	Weight	Length	Height
50346	12,000 RPM	1.2 hp (893 W)	83 dB(A)	51 SCFM	5" Dia.	4.8 lb. (2.2 kg)	11.8" (298 mm)	3.6" (98 mm)
50350	6,000 RPM		78 dB(A)	(1,444 LPM)	7" Dia.	6.8 lb. (3.1 kg)	11.0 (298 11111)	4.6" (79 mm)

Additional Specifications: Air Inlet Thread 1/2" NPT • Hose I.D. 1/2" (15 mm)

# **OPTIONAL ACCESSORIES**



#### **Motor Tune-Up Kit**

 Includes assorted parts to help maintain and repair motor.

96042



# Dynaswivel®

 Swivels 360° at two locations which allows an air hose to drop straight to the floor, no matter how the tool is held.

95462: 1/2" NPT



## Dynabrade Air Lube

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

**95842:** 1pt. (473 ml) **95843:** 1 gal. (3.8 L)



#### Grease and Grease Gun

- Multi-purpose grease for all types of bearing, cams, gears.
- High film strength; excellent resistance to water, steam, etc.
- Workable range 0°F to 300°F.

95541: Push-type grease gun.

**95544:** 2.5oz. (74ml) tube.

# 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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