

# Dynabug® II

10,000 RPM, 3/32" Orbit

## Tool Manual – Safety, Operation and Maintenance

SAVE THIS DOCUMENT, EDUCATE ALL PERSONNEL

**Models:**

- 58500 - Non-Vacuum
- 58501 - Self-Generated Vacuum
- 58502 - Vacuum-Ready
- 58503 - Non-Vacuum
- 58504 - Self-Generated Vacuum
- 58505 - Vacuum-Ready
- 58506 - Vacuum-Ready

**Pads: Hook & Loop**

- (74mm x 109mm)
- (74mm x 109mm)
- (74mm x 109mm)
- (80mm x 130mm)
- (80mm x 130mm)
- (80mm x 130mm)
- (99mm x 143mm, delta-style)



(Model 58500)

**Models:**

- 58507 - Non-Vacuum
- 58509 - Non-Vacuum

**Pad: Vinyl**

- (68mm x 175mm, w/Clips)
- (74mm x 109mm)

FIND THE MOST CURRENT OFFERING OF SUPPORT DOCUMENTS AND ACCESSORIES @ [WWW.DYNABRADE.COM](http://WWW.DYNABRADE.COM)

## ⚠ 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 Code for Portable Air Tools – B186.1. For additional safety information, refer to Safety Requirements for the Use, Care and Protection of Abrasive Wheels – ANSI B7.1, Code of Federal Regulation – CFR 29 Part 1910, European Committee for Standards (EN) Hand Held Non-Electric Power Tools – Safety Requirements and applicable State and Local Regulations.

## SAFETY LEGEND

	<b>⚠ WARNING</b> Read and understand tool manual before work starts to reduce risk of injury to operator, visitors, and tool.	<b>⚠ WARNING</b> Practice safety requirements. Work alert, have proper attire, and do not operate tools under the influence of alcohol or drugs.	
	<b>⚠ WARNING</b> Eye protection must be worn at all times, eye protection to conform to ANSI Z87.1.	<b>⚠ WARNING</b> Ear protection to be worn when exposure to sound, exceeds the limits of applicable Federal, State or local statutes, ordinances and/or regulations.	
	<b>⚠ WARNING</b> Respiratory protection to be used when exposed to contaminants that exceed the applicable threshold limit values required by law.	<b>⚠ WARNING</b> Air line hazard, pressurized supply lines and flexible hoses can cause serious injury. Do not use damaged, frayed or deteriorated air hoses and fittings.	

### ⚠ WARNING

Some dust created by 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 INSTRUCTIONS

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 without expressed written consent from Dynabrade, Inc.

**Tool Intent:** Dynabug® II Sander is used for sanding and finishing a variety of materials including wood, metal, plastic, fiberglass, solid surfaces, composites, rubber, glass and stone.

**Do not use tool for anything other than its intended applications.**

**This power tool is not intended for use in potentially explosive atmospheres and is not insulated against contact with electrical power.**

**Training:** Proper care, maintenance, and storage of your tool will maximize its performance.

- Employer's Responsibility – Provide Dynabug® II operators with safety instructions and training for safe use of tools and accessories.

**Accessory Selection:**

- Abrasive/accessory RPM (speed) rating MUST be approved for AT LEAST the tool RPM rating.

(continued on next page)

## SAFETY INSTRUCTIONS (Cont.)

- Use only recommended accessories. See back page of manual and Dynabrade Literature.
- Before mounting an accessory, visually inspect for defects. Do not use defective accessories.
- Follow tool specifications before choosing size and type of accessory.
- Only use recommended fittings and air line sizes. Air supply hoses and air hose assemblies must have a minimum working pressure rating of 150 PSIG (10 bars, g) or 150 percent of the maximum pressure produced in the system, whichever is higher. (See Tool Machine Specifications Table.)

## OPERATING INSTRUCTIONS

**Warning:** Always wear eye protection. Operator of tool is responsible for following: accepted eye, face, respiratory, hearing and body protection.

**Caution:** Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibration.

**Caution:** Be sure that any loose clothing, hair and all jewelry is properly restrained.

- Install air fitting into inlet bushing of tool. Important: Secure inlet bushing of tool with a wrench before attempting to install the air fitting to avoid damaging valve body housing.
- BEFORE MOUNTING AN ACCESSORY, after all tool repairs and whenever a tool is issued for use, check tool OPM (speed) with tachometer with air pressure set at 90 PSIG while the tool is running. This tool is an orbital tool, checking the OPM requires either a strobe or magnetic tachometer. If tool is operating at a higher speed than the RPM marked on the tool housing, or operating improperly, the tool must be serviced and corrected before use.

**Caution:** Tool RPM / OPM must never exceed abrasive/accessory RPM / OPM rating. Check accessory manufacturer for details on maximum operating speed or special mounting instructions.

- With power source connected at the air tool relieve hose of air pressure and disconnect tool from air supply when changing recommended accessories.
- Connect air tool to power source. Be careful NOT to depress throttle lever in the process.

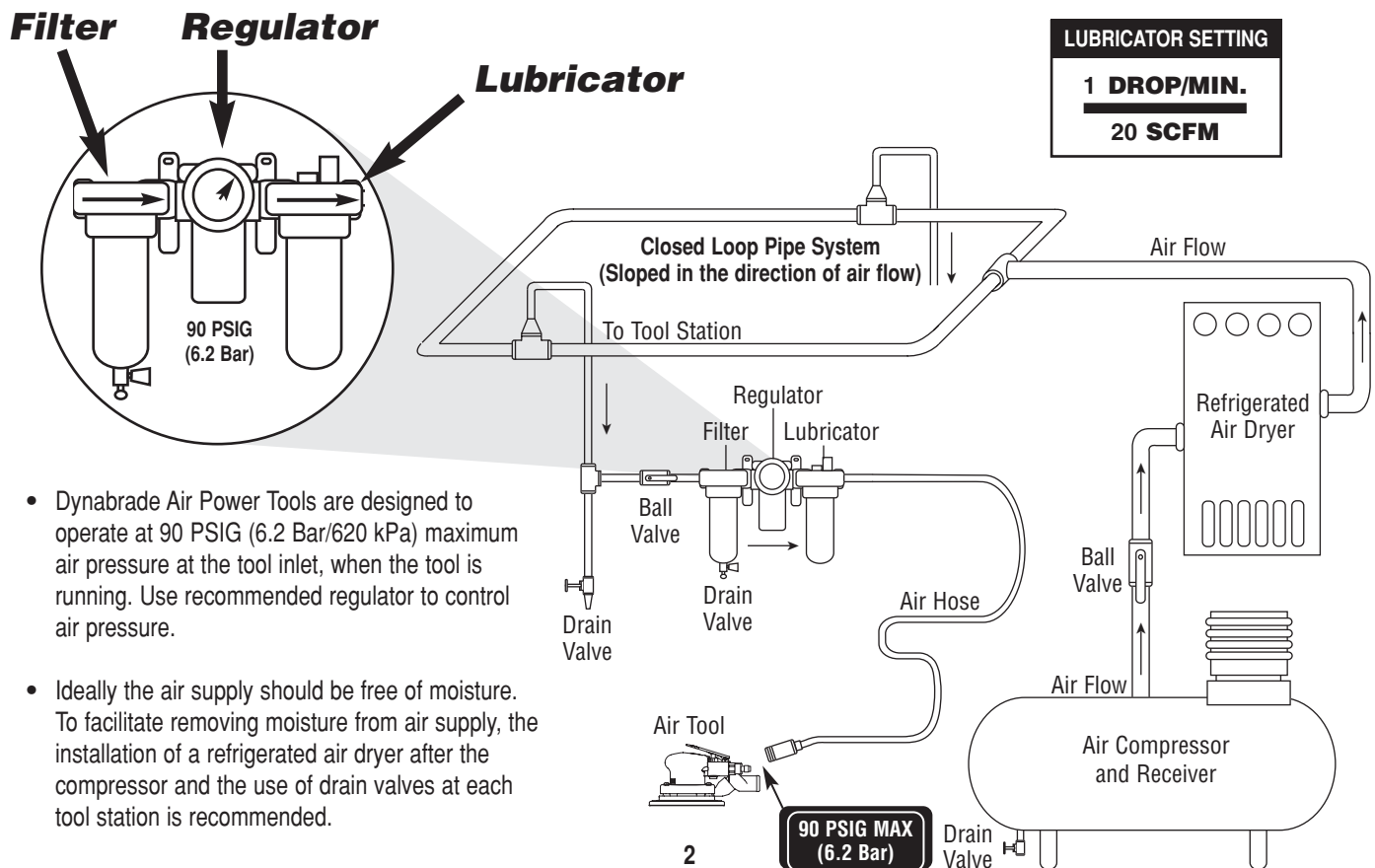
**Do not expose air tool to inlet pressure above 90 PSIG or (6.2 Bars).**

**Caution:** After installing the accessory, before testing or use and/or after reassembling tool, the tool must be started at a reduced speed to check for good balance. Gradually increase tool speed. DO NOT USE if tool vibration is excessive. Correct cause, and retest to insure safe operation.

- Use only appropriately sized abrasive sanding sheets properly secured and aligned to the backing pad provided with the air sander.
- When applying the sander to a work surface **start-on** and **stop-off** when completed.
- Make sure that work area is uncluttered, and visitors are at a safe range from the tools and debris.
- Potentially explosive atmospheres can be caused by dust and fumes resulting from sanding or grinding. Always use dust extraction or suppression systems which are suitable for the material being processed.
- Proceed with caution in unfamiliar surroundings. Hidden hazards may exist, such as electricity or other utility lines.
- Use only Dynabrade weight-mated pads to maintain low vibration levels.
- Use a vise or clamping device to hold work piece firmly in place.
- Work may generate hazardous dust.
- Do not apply excessive force on tool or apply "rough" treatment to it.
- Always work with a firm footing, posture and proper lighting.
- Ensure that sparks and debris resulting from work do not create a hazard.
- This tool is rear exhaust. Exhaust may contain lubricants, vane material, bearing grease, and other materials flushed through the tool.

**Report to your supervisor any condition of the tool, accessories, or operation you consider unsafe.**

## Air System



# Maintenance Instructions

**Important:** A Preventative Maintenance Program is recommended whenever portable power tools are used.

- Use only genuine Dynabrade replacement parts to insure quality. To order replacement parts, specify **Model#**, **Serial#** and **RPM** of your air 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 recommends the following: **11405** Air Filter-Regulator-Lubricator (FRL) – Provides accurate air pressure regulation and two stage filtration of water contaminants. Operates 40 SCFM/1,133 LPM @ 100 PSIG with 3/8" NPT female ports.
- 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**: 1 pt 473 ml) is recommended.

**Routine Preventative Maintenance:** Check free speed of Dynabug® II using a tachometer.

- 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®).
- Air tool stampings must be kept legible at all times, if not, reorder and replace. User is responsible for maintaining specification information i.e.: Model #, S/N, and RPM.
- Blow air supply hose out prior to initial use.
- Visually inspect air hoses and fittings for frays, visible damage and signs of deterioration. Replace damaged or worn components.
- Refer to Dynabrade's Warning/Safety Operating Instructions Tag (Reorder No. **95903**) for safety information.

After maintenance is performed on tool, add a few drops of Dynabrade Air Lube (P/N **95842**) to the air line and start the tool a few times to lubricate air motor. Check for excessive tool vibration.

**Handling and Storage:**

- Protect tool inlet from debris (See Notice Below).
- **DO NOT** carry tool by air hose.
- Protect abrasive accessories from exposure to water, solvents, high humidity, freezing temperature and extreme temperature changes.
- Store accessories in protective racks or compartments to prevent damage.

## Notice

All Dynabrade motors use the highest quality parts and materials 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.

## One Year Warranty

Following the reasonable assumption that any inherent defect which might prevail in a product will become apparent to the user within one year from the date of purchase, all equipment of our manufacture is warranted against defects in workmanship and materials under normal use and service. We shall repair or replace at our factory, any equipment or part thereof which shall, within one year after delivery to the original purchaser, indicate upon our examination to have been defective. Our obligation is contingent upon proper use of Dynabrade tools in accordance with factory recommendations, instructions and safety practices. It shall not apply to be equipment which has been subject to misuse, negligence, accident or tampering in any way so as to affect its normal performance. Normally wearable parts such as bearings, contact wheels, rotor blades, etc., are not covered under this warranty.

## Machine Specifications

Model Number	Motor hp (W)	Motor RPM	Air Inlet Thread	Sound Level	Air Flow Rate SCFM (LPM)	Air Pressure PSIG (Bars)	Hose I.D. Inch (mm)	Weight Pound (kg)	Length Inch (mm)	Height Inch (mm)
58500/58509	.15 (112)	10,000	1/4" NPT	81 dB(A)	13 (368)	90 (6.2)	1/4" (6)	1.8 (.8)	5-3/4 (147)	3.5 (91)
58501	.15 (112)	10,000	1/4" NPT	78 dB(A)	13 (368)	90 (6.2)	1/4" (6)	1.9 (.85)	8-1/4 (212)	3.5 (91)
58502	.15 (112)	10,000	1/4" NPT	83 dB(A)	13 (368)	90 (6.2)	1/4" (6)	1.8 (.8)	7 (180)	3.5 (91)
58503	.15 (112)	10,000	1/4" NPT	81 dB(A)	13 (368)	90 (6.2)	1/4" (6)	1.8 (.8)	6-1/4 (157)	3.5 (91)
58504	.15 (112)	10,000	1/4" NPT	78 dB(A)	13 (368)	90 (6.2)	1/4" (6)	1.9 (.85)	8-3/4 (222)	3.5 (91)
58505	.15 (112)	10,000	1/4" NPT	83 dB(A)	13 (368)	90 (6.2)	1/4" (6)	1.8 (.8)	7-1/2 (190)	3.5 (91)
58506	.15 (112)	10,000	1/4" NPT	83 dB(A)	13 (368)	90 (6.2)	1/4" (6)	1.8 (.8)	8-3/4 (222)	3.5 (91)
58507	.15 (112)	10,000	1/4" NPT	82 dB(A)	13 (368)	90 (6.2)	1/4" (6)	2.1 (.95)	7-1/16 (179)	3.75 (91)

## Diagrams

