

Dynorbital® Silver Supreme

12,000 RPM Air Powered Random Orbital Sander

Air Tool Manual – Safety, Operation and Maintenance

SAVE THIS DOCUMENT, EDUCATE ALL PERSONNEL

Models:

3/8" Orbit		3/16" Orbit		3/32" Orbit	
69000	69010	69015	69025	69030	69040
69003	69013	69018	69028	69033	69043
69004	69014	69019	69029	69034	69044
69005	69100	69020	69105	69035	69110
69008	69103	69023	69108	69038	69113
69009	69104	69024	69109	69039	69114

FOR COMPLETE MODEL DESCRIPTION REFERENCE PAGE 8.



FIND THE MOST CURRENT OFFERING OF SUPPORT DOCUMENTS AND ACCESSORIES @ 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

	! WARNING Read and understand tool manual before work starts to reduce risk of injury to operator, visitors, and tool.	! WARNING Practice safety requirements. Work alert, have proper attire, and do not operate tools under the influence of alcohol or drugs.	
	! WARNING Eye protection must be worn at all times, eye protection to conform to ANSI Z87.1.	! WARNING Ear protection to be worn when exposure to sound, exceeds the limits of applicable Federal, State or local statutes, ordinances and/or regulations.	
	! WARNING Respiratory protection to be used when exposed to contaminants that exceed the applicable threshold limit values required by law.	! WARNING 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 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 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: Dynorbital® Silver Supreme Random Orbital 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.

Warning: 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 Dynorbital® Silver Supreme 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.
- 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.

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

- Keep hand and clothing away from moving end of the air tool which has a potential hazard of cutting and severing.
- 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.

Warning: Regularly check free speed (RPM) of random orbital sander. The speed (RPM) is checked with the back-up pad securely fastened without any type of sanding accessory attached to the back-up pad. The air pressure must be set to 90 PSIG with the tool running. Checking the RPM requires either a strobe or magnetic tachometer. This procedure is required after all tool repairs and whenever a tool is issued for use. 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.

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

Warning: Do not free spin the tool away from the work surface with an abrasive sanding disc attached. The sanding disc may detach from the back-up pad causing injury.

Warning: Always start the tool with the sanding abrasive against the work. Stop the air flow to the tool as it is removed from the work.

- 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.

Warning: Use only appropriately sized abrasive sanding discs properly secured and centered 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.

Warning: 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.

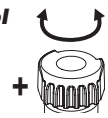
- Proceed with caution in unfamiliar surroundings. Hidden hazards may exist, such as electricity or other utility lines.
- Use only Dynabrade weight-mated pads to maintain low vibration levels.
- Use a vise or clamping device to hold work piece firmly in place.
- Work may generate hazardous dust.
- Always be aware of bystanders in work areas.
- Do not apply excessive force on tool or apply "rough" treatment to it.
- Always work with a firm footing, posture and proper lighting.
- Release the throttle lever in case of an interruption of the energy supply.
- 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.

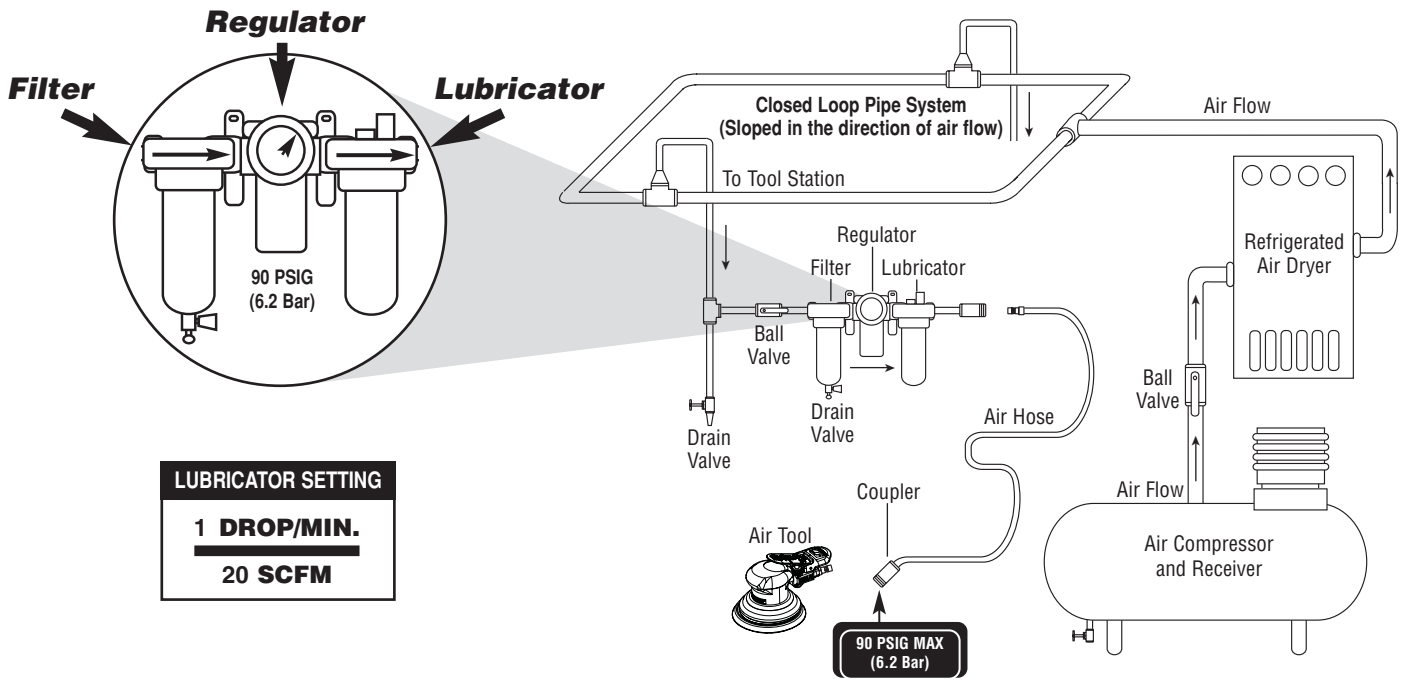
Speed Regulator Flow Control

Maximum Flow: Turn Clockwise.

Minimum Flow: Turn Counter-clockwise.



Air System



- Dynabrade Air Power Tools are designed to operate at 90 PSIG (6.2 Bar/620 kPa) 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 of 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.

Maintenance Instructions

Important: To keep tool safe 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: **10681** Air Filter-Regulator-Lubricator (FRL) – Provides accurate air pressure regulation and two stage filtration of water contaminants.
- 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 Dynorbital® Silver Supreme using a strobe or magnetic tachometer without abrasive accessory attached with 90 PSIG at inlet while tool is running. Always check tool speed after any maintenance or repair. If tool is operating at a higher RPM (speed) than marked on the housing, or operating improperly, the tool must be corrected before use.

- 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 Drop-In Motor and Tune-Up Kit are available, see specific kit number on page 7.
- 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.

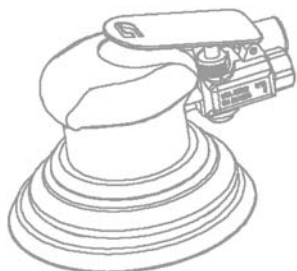
After maintenance is performed on tool, add a few drops of Dynabrade Air Lube (P/N **95842**) to the air line and start the tool a few times to lubricate air motor. Check for excessive tool vibration.

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.



Lifetime Warranty

All 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 lifetime of the tool. Upon examination and review at our factory, Dynabrade shall confirm that the tool qualifies for warranty status, and will repair or replace the tool at no charge to the customer. Normally wearable parts and products are NOT covered under this warranty. Uncovered items include bearings, contact wheels, rotor blades, regulators, valve stems, levers, shrouds, guards, O-rings, seals, gaskets and other wearable parts. Dynabrade's warranty policy is contingent upon proper use of our tools in accordance with factory recommendations, instructions and safety practices. It shall not apply to equipment that has been subjected to misuse, negligence, accident or tampering in any way so as to affect its normal performance. To activate lifetime warranty, customer must register each tool at www.dynabrade.com. Dynabrade will not honor lifetime warranty on unregistered tools. A one-year warranty will be honored on all unregistered portable pneumatic power tools. Lifetime warranty applies only to portable pneumatic tools manufactured by Dynabrade, Inc. in the USA. Lifetime warranty applies only to the original tool owner; warranty is non-transferable.

Reference Contact Information

- 1. American National Standards Institute – ANSI**
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Tel: 1 (212) 642-4900
Fax: 1 (212) 398-0023
- 2. Government Printing Office – GPO**
Superintendent of Documents
Attn. New Orders
P.O. Box 371954
Pittsburgh, PA 15250-7954
Tel: 1 (202) 512-1803
- 3. European Committee for Standardization**
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