.4 hp Vacuum Die Grinder

Parts Page Reorder No. PD09•50
Effective October, 2009

Trimmable Shroud/Straight Line/Rear Exhaust

Air Tool Manual – Safety, Operation and Maintenance

SAVE THIS DOCUMENT, EDUCATE ALL PERSONNEL

Models:

56751 – 5,000 RPM
– 1/4" & 6 mm Collet

56755 – 25,000 RPM, 1/4" Collet
– 1/4" & 6 mm Collet

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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 Safety 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 statues, 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: .4 hp Vacuum Die Grinder is ideal for deburring, deflashing, surface preparation, cleaning and finishing using the proper abrasive stones, abrasive mounted wheels and points, molded abrasives, and carbide burrs. An appropriate external vacuum source is required that is suitable for material being processed.

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 air tools will maximize their performance.

- Employer's Responsibility – Provide .4 hp Vacuum Die Grinder operators with safety instructions and training for safe use of tools and accessories.

(continued on next page)

SAFETY INSTRUCTIONS *(Continued)*

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.
- Use only accessories of the correct shaft size for the collet (example: 1/4" shaft = 1/4" collet).
- Use only recommended accessories. Reference Dynabrade catalog and this tool manual.
- Follow tool specifications before choosing size and type of accessory.
- Only use recommended fittings and air line sizes. Air supply hoses and air hose accessories must have a minimum working pressure of 150 PSIG (10 Bars) or 150 percent of the maximum pressure produced in the system, whichever is higher. (See tool Machine Specifications table.)

OPERATING INSTRUCTIONS

Warning: Always wear personal protective equipment. 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.

- Keep hand and clothing away from working end of the air tool.
- Working end of tool has a potential of cutting and severing.

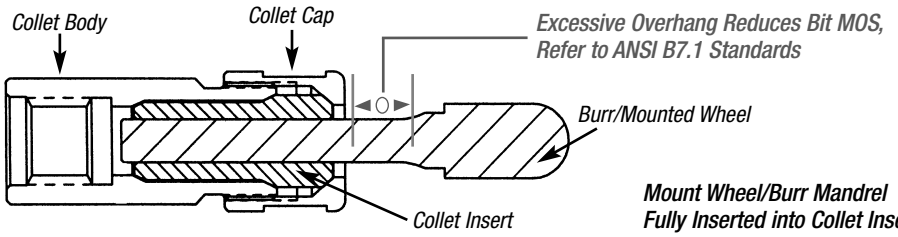
Operation: Be sure that any loose clothing, hair and all jewelry is properly restrained.

- Secure inlet bushing on air tool with a wrench before attempting to install the air fitting to avoid damaging housing assembly.
- BEFORE MOUNTING AN ACCESSORY, after all tool repairs and whenever a .4hp Vacuum Die Grinder is issued for use, check tool RPM (speed) with tachometer with air pressure set at 90 PSIG while the tool is running. 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.
- Before mounting an accessory regularly clean and inspect collet assembly parts for wear or damage. Do Not use worn or damaged components.

Caution: Tool RPM must never exceed abrasive/accessory RPM rating. Check accessory manufacturer for details on maximum operating speed or special mounting instructions. Improper mounting of an accessory may cause excessive vibration levels or damage the accessory. Make sure no one is in the unguarded plane of the accessory. Run tool for 1 minute of operating speed in a protected area.

PROPER MOUNTING PROCEDURE

Warning: *With Power Source Disconnected from the Tool, Remove Shroud Assembly by Loosening Clamp. Remove/Mount Correctly Rated Accessory. Replace Shroud Assembly and Tighten Clamp.*



- 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 assembling tool, the .4 hp Vacuum Die Grinder 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. Test tool at its free speed (RPM) in a protected area for at least one minute before applying the tool to the work.

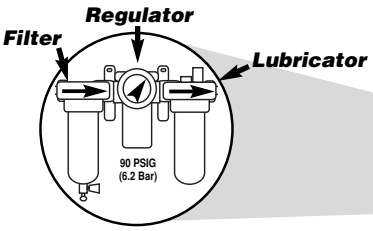
- Release throttle lever when air supply is interrupted.
- Make sure that work area is uncluttered, and visitors are at a safe range from the tools and debris.
- Air tools are not intended for use in explosive atmospheres and are not insulated for contact with electric power sources.
- Use a vise or clamping device to hold work piece firmly in place.
- 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 does not create a hazard.
- This tool is rear exhaust. Tool exhaust may contain lubricants, vane material, bearing grease, and other materials flushed thru the tool.

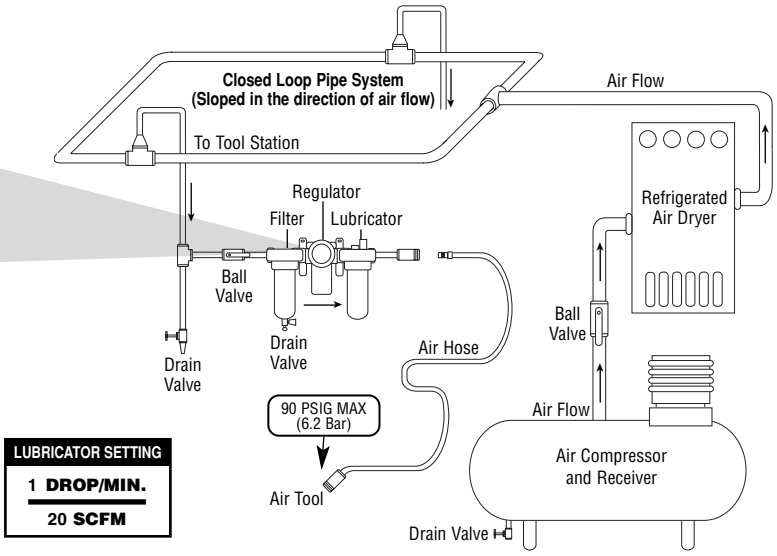
Warning: Grinding certain materials can create explosive dust. It is the employers responsibility to notify the user of acceptable dust levels.

- Grinding can cause sparks which can cause fires or explosions. It is the users responsibility to make sure the work area is free of flammable materials.
- DO NOT USE cut-off wheels or router bits on this tool.
- Always use dust extraction or suppression systems and personal protective equipment which are suitable for the materials being processed.
- Trimming shroud: vacuum shroud sleeve maybe cut/trimmed or removed to suit application.

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

Air System





- 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.

Maintenance Instructions

Important: To keep tool safe a Preventative Maintenance Program is recommended whenever portable power tools are used. The program should include inspection of air supply lines, air line pressure, proper lubrication and repair of tools. Refer to ANSI B186.1 for additional maintenance information.

- Use only genuine Dynabrade replacement parts to ensure 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 Line Filter-Regulator-Lubricator — Provides accurate air pressure regulation, two-stage filtration of water contaminants and micro-mist lubrication of pneumatic components. Delivers up to 55 SCFM/1,558 LPM @ 145 PSIG/9.7 Bar (Max. Air Temperature of 140˚F/60˚ C) **Note:** Two (2) 3/8" NPT Reducer Bushings are included.
- 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.
- Lubricate the planetary gears through the grease fitting located in the gear/planetary cover. Apply 2-3 plunges* for every 50 hours of use, to achieve maximum gear life. (*order **95542** Grease and **95541** Gun)

Routine Preventative Maintenance:

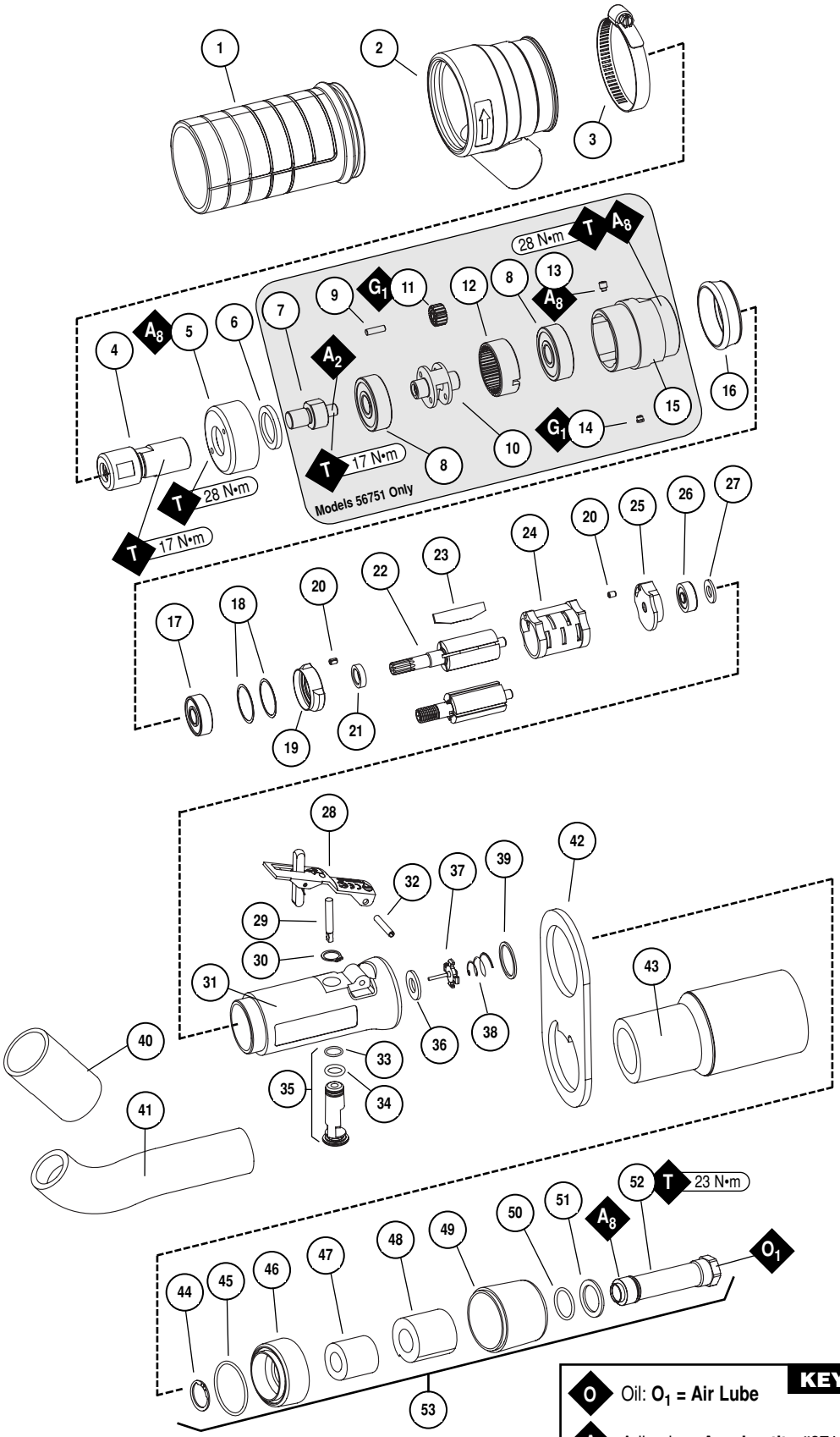
- Check free speed of tool regularly using a tachometer without the accessory mounted. After all tool repairs and whenever a .4 hp Vacuum Die Grinder is issued for use, check tool RPM (speed) with tachometer with air pressure set at 90 PSIG while the tool is running. If tool is operating at a higher speed than the RPM marked on the tool housing, operating improperly or demonstrates unusual vibration, the tool must be serviced and corrected before use.
- Inspect accessories before mounting. Do not mount accessories that are damaged or nicked.
- Check accessory - speed rating. Rating on accessory must be greater than the tool speed marked on the housing.
- If accessory breakage occurs, investigate to determine the cause and correct before issuing tool for work.
- 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©).
- Motor Tune-Up Kits (P/N **96173, 96049,** see back page) are available, they 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 i.e.: Model #, S/N, and RPM. (See Assembly Breakdown)
- 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 tool vibration before mounting accessory.

Handling and Storage:

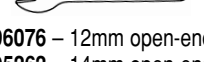
- Use of tool rests, hangers and/or balancers is recommended.
- Protect tool inlet from debris (see Notice on Page 6).
- DO NOT carry tool by air hose or near the tool throttle lever.
- Protect tool from exposure to water, solvents, high humidity, freezing temperature and extreme temperature changes.
- DO NOT USE accessories that have been dropped or show signs of cracks, nicks or other defects.
- Store accessories in protective racks or compartments to prevent damage.

.4hp Vacuum Die Grinder
Complete Assembly Diagram



Index Key

No.	Part #	Description
1		**Vacuum Shroud Sleeve**
	02288	Model - 56751
	02286	Model - 56755
2		**Vacuum Shroud Base**
	02289	Model - 56751
	02285	Model - 56755
3		**Hose Clamp**
	97029	Model - 56751
	97326	Model - 56755
4		**Collet Assembly**
	50010	Model - 56751
	50080	Model - 56755
5		**Rear Exhaust Cover**
	50781	Model - 56751
	02242	Model - 56755
6	**01580**	Felt Seal (Model - 56755 Only)
7	**50782**	Adapter
8	**54520**	Bearing (2)
9	**54472**	Pin (2)
10	**50787**	Planetary Carrier
11	**06213**	Gear (2)
12	**54468**	Ring Gear
13	**50784**	Set Screw
14	**01041**	Grease Fitting
15	**53152**	Gear Case
16	**01547**	Collar
17	**02649**	Bearing
18	**54529**	Shim Pack (3/pkg.)
19	**01478**	Front End Plate
20	**50767**	Pin (2)
21	**01479**	Rotor Spacer
22		**Rotor**
	54553	Model - 56751
	01475	Model - 56755
23	**01480**	Vane (4/pkg.)
24	**01476**	Cylinder
25	**02676**	Rear Bearing Plate
26	**02696**	Bearing
27	**02679**	Shield
28	**01462**	Safety Throttle Lever
29	**01449**	Valve Stem
30	**95558**	Retaining Ring
31		**Housing**
	06052	Model - 56751
	06054	Model - 56755
32	**12132**	Pin
33	**95730**	O-Ring
34	**01024**	O-Ring
35	**01469**	Speed Reg. Assembly
36	**01464**	Seal
37	**01472**	Tip Valve
38	**01468**	Spring
39		**Air Control Ring**
	01564	Model - 56751
	01642	Model - 56755
40	**97180**	Hose Cuff
41		**Hose**
	31941	Model - 56751
	31940	Model - 56755
42	**97161**	Vacuum Hose Retainer
43	**31907**	Swivel Cuff - 1-1/4" I.D.
44	**95711**	Retaining Ring
45	**95438**	O-Ring
46	**94521**	Muffler Base
47	**94524**	Sintered Muffler (Model - 56755 Only)
48		**Felt Muffler**
	94528	Model - 56751
	94525	Model - 56755
49	**94522**	Muffler Cap
50	**95375**	O-Ring
51	**94526**	Spacer
52	**94523**	Inlet Adapter
53		**Muffler Assembly**
	94519	Model - 56751
	94520	Model - 56755



96076 – 12mm open-end
95262 – 14mm open-end
95281 – 19mm open-end

KEY

- **O** Oil: **O_1 = Air Lube**
- **A** Adhesive: **A_2 = Loctite #271**, **A_8 = Loctite #567**
- **T** Torque: **N•m x 8.85 = In. - lbs.**
- **G** Grease: **G_1 = Lubriplate 630AA**

Disassembly/Assembly Instructions - .4hp Vacuum Die Grinder

Important: The Dynabrade Pneumatic Power Tool Lifetime Warranty Policy does NOT cover normally wearable parts and products. Before servicing this tool please contact Dynabrade Inc. or a Dynabrade Subsidiary for information regarding the Dynabrade Pneumatic Power Tool Lifetime Warranty Policy. Notice: Special repair tooling referred to in these instructions can be ordered from Dynabrade. (See Page 8)

Disconnect the die grinder from the air supply.

Motor Disassembly:

1. Position the **52296** Repair Collar around the valve housing and secure the tool in a vise with the collet pointing up.
2. Loosen the clamp and remove the shroud.
3. Loosen the collet cap and remove the insert tool, cap and insert.
4. Use the **50971** Lock Ring Tool to remove the rear exhaust cover. Turn it counterclockwise.
5. **Model 56751:** Use a 5/64" hex key to remove the **50784** Set Screw. Remove the planetary gear assembly. Use an adjustable wrench to remove **53152** Gear Case and air motor. Turn it counterclockwise.
6. **Model 56755:** Remove the air motor.
7. Fasten the **96346** Bearing Separator (2") around the portion of the **01476** Cylinder that is closest to the **02676** Rear Bearing Plate. Place the bearing separator and the motor in the **96232** Arbor Press (#2) with the rotor shaft pointing down.
8. Use a 5/32" dia. flat end drive punch as a press tool to push the rotor out of the **02696** Bearing.
9. Remove the cylinder and vanes.
10. Use the **96210** Bearing Removal Tool and the arbor press to remove the **02696** Bearing from the **02676** Rear Bearing Plate.
11. **Model 56755**: Secure the body of the rotor in a vise with aluminum or bronze jaws and remove the collet body. Turn it counterclockwise.
12. Remove the **01478** Front Bearing Plate, **02649** Bearing, shims, **01479** Spacer.
13. **Model 56751:** Position the **54553** Rotor in the arbor press with the pinion gear pointing up. Push the rotor out of the **02649** Bearing.
14. Remove the **01478** Front Bearing Plate, **02649** Bearing, shims, **01479** Spacer.

Motor Disassembly Complete.

Model 56751: Planetary Gear Disassembly

1. **IMPORTANT:** Position the **96346** Bearing Separator (2") with the FLAT SIDE facing the RING GEAR and the BEVELED SIDE toward the REAR **54520** Bearing. Place the bearing separator and the planetary gear assembly in the **96232** Arbor Press (#2) with the **50782** Adapter pointing down.
2. Use a 5/16" flat end drive punch as a press tool to push the planetary carrier out of the REAR **54520** Bearing.
3. Remove the ring gear, shafts, and planet gears.
4. Carefully secure the planetary carrier in a vise with aluminum or bronze jaws with the **50782** Adapter pointing up.
5. Use an adjustable wrench to remove the adapter from the planetary carrier. Turn it counterclockwise.
6. Use the arbor press and a 5/16" flat end drive punch as a press tool to push the planetary carrier out of the **54520** Bearing.

Planetary Gear Disassembly Complete.

Valve and Muffler Disassembly:

1. Position the **52296** Repair Collar around the valve housing and secure the tool in a vise with the **94523** Inlet Adapter pointing up.
2. Use a wrench to hold the inlet adapter stationary when removing the air fitting.
3. Remove the **94523** Inlet Adapter. Turn it counterclockwise.
4. Use the exploded view of the **94519**/**94520** Muffler in this tool manual for the order of disassembly and part number identification. Be careful; do not lose the air control ring.
5. Use needle nose pliers to remove the **01468** Spring and the **01472** Tip Valve. Use a small screwdriver to remove the **01464** Seal.
6. Position the valve housing so that the **12132** Pin, **01462** Safety Throttle Lever, and **01449** Valve Stem can be removed.
7. Use retaining ring pliers to remove the **95558** Retaining Ring and then push the **01469** Speed Regulator Assembly out of the valve housing.

Valve Disassembly Complete.

Clean and inspect all parts before assembling.

Valve Assembly:

1. Install the **01469** Speed Regulator Assembly (with o-rings) into the valve housing and secure it in place with the **95558** Retaining Ring.
2. Position the **52296** Repair Collar around the valve housing and secure the tool in a vise so that the **12132** Pin, **01462** Safety Throttle Lever, and **01449** Valve Stem can be installed. Install these parts.
3. Position the **52296** Repair Collar around the valve housing and secure the tool in a vise with the air inlet opening pointing up.
4. Install the **01464** Seal into the valve housing so that it is laying flat.
5. Use needle nose pliers to install the **01472** Tip Valve so that the metal pin passes through the hole in the **01449** Valve Stem.
6. Install the **01468** Spring so that the smaller end of the spring fits against the back of the tip valve.
7. Install the air control ring against the back of the valve housing.
8. Apply a small amount of the Loctite #567 (or equivalent) to the external threads of the **94523** Inlet Adapter and install it into the valve housing. (Torque to 23 N•m/200 in. lbs.)
9. Hold the inlet adapter stationary with a wrench when installing the air fitting.

Valve Assembly Complete.

Model 56751: Planetary Gear Assembly

1. Use the RAISED CENTER of the **96239** Bearing Press Tool and the arbor press to install the **54520** Bearing onto the front of the **50787** Planetary Carrier.
2. Apply a small amount of Loctite #271 (or equivalent) to the threads of the **50782** Adapter that connect to the planetary carrier. Install the adapter into the planetary carrier. (Torque to 17 N•m/150 in. lbs.)
3. Apply the **95542** Grease to the bearings in the **06213** Planetary Gears (2). Install the planetary gears into the carrier and install the **54472** Pins (2). Install the **54468** Ring Gear so that the notches will align with the lubricant and set screw access holes in the **53152** Gear Case.

(continued on next page)

Disassembly/Assembly Instructions (continued)

4. Use the RAISED CENTER of the **96239** Bearing Press Tool and the arbor press to install the REAR **54520** Bearing onto the **50787** Planetary Carrier. **IMPORTANT:** Carefully press the bearing down until it just touches the ring gear. This will establish a snug fit between the bearings and the ring gear.

Planetary Gear Assembly Complete.

Motor Assembly:

1. Secure the body of the rotor in a vise with aluminum or bronze jaws and install the **01479** Spacer onto the rotor.
2. Select .003" (.08 mm) shim thickness from the **54529** Shim Pack and install these into the **01478** Front Bearing Plate.
3. **Model 56755:** Install the **02649** Bearing into the front bearing plate and install these onto the rotor.
4. Install the **01435** Collet Body onto the **01475** Rotor. (Torque to 17 N•m/150 in. lbs.)
5. **Model 56751:** Position the **54553** Rotor with the **01479** Spacer in the arbor press with the pinion gear pointing up.
6. Use the raised center of the **96240** Bearing Press Tool and arbor press to install the **02649** Bearing, shims and **01478** Front Bearing Plate.
7. Use a .001" (0.3 mm) thick feeler gauge to check the clearance between the bearing plate and the face of the rotor.
8. Clearance should be .001"-.0015" (0.3-0.4 mm). **Note:** If the clearance needs adjustment, repeat steps 2-6. Add or remove shims as required.
9. Lubricate the **01480** Vanes with the **95842** Dynabrade Air Lube 10W/NR (or equivalent). Install vanes into the rotor.
10. Install the **01476** Cylinder so that the air inlet opening will align with the air inlet opening in the **02676** Rear Bearing Plate.
11. Use the RAISED OUTSIDE DIAMETER of the **96242** Bearing Press Tool and the arbor press to install the **02696** Bearing into the **02676** Rear Bearing Plate.
12. Use the RAISED CENTER of the **96242** Bearing Press Tool and the arbor press to install the bearing/plate onto the rotor.
13. Carefully press the bearing/plate down until it just touches the cylinder. This will establish a snug fit between the bearing plates and the cylinder.
14. Apply a small amount of white grease to the seal of the **02696** Bearing, and stick the **02679** Shield against the bearing. Carefully slide the motor assembly into the housing.
15. **Model 56755:** Install the **01580** Felt Silencer onto the front of the air motor.
16. **Model 56751:** Install the planetary gear assembly into the **53152** Gear Case, aligning the lubricant and set screw access holes with the notched openings in the ring gear. Apply a small amount of Loctite #567 (or equivalent) to the threads of the **50784** Set Screw and install with a 5/64" hex key.
17. Apply a small amount of Loctite #567 (or equivalent) to the threads of the rear exhaust cover and install it onto the housing. (Torque to 28 N•m/250 in. lbs.)
18. **Model 56751:** Install the **50011** Collet Body.
19. Install the shroud and secure it with the clamp.

Motor Assembly Complete.

Important: Motor should now be tested for proper operation at 90 PSIG. If motor does not operate properly or operates at a higher RPM than marked on the tool, the tool should be serviced to correct the cause before use. Before operating, place 2-3 drops of Dynabrade Air Lube (P/N **95842**) directly into air inlet with throttle lever depressed. Operate tool for 30 seconds to determine if tool is operating properly and to allow lubricating oils to properly penetrate motor.

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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.

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.

Machine Specifications

Model Number	Motor hp (W)	Motor RPM	Sound Level	Maximum Air Flow SCFM (LPM)	Collet Insert Size	Air Pressure PSIG (Bars)	Weight Pound (kg)	Length Inch (mm)	Height Inch (mm)
56751	.4 (298)	5,000	81 dB(A)	25 (708)	1/4" or 6 mm	90 (6.2)	2.1 (.9)	13.3 (338)	4.6 (118)
56755	.4 (298)	25,000	80 dB(A)	21 (595)	1/4" or 6 mm	90 (6.2)	1.4 (.6)	10.6 (268)	4.6 (117)

Additional Specifications: Air Inlet Thread 1/4" NPT • Hose Size 1/4" or 6 mm
Sound Level is the pressure measurement according to the method outlined in ISO regulation ISO-15744.

Preventative Maintenance Schedule

For All .4hp Vacuum Die Grinders

This service chart is published as a guide to expectant life of component parts. The replacement levels are based on average tool usage over one year. Dynabrade Inc. considers one year usage to be 1,000 hours.

LEGEND	
T	Part included in Tune-Up Kit
X	Type of wear, no other comments apply.
L	Easily lost. Care during assembly/disassembly.
D	Easily damaged during assembly/disassembly.
R1	Replace each time tool is disassembled.

(A) 96173 – Model 56751
(B) 96049 – Model 56755

Parts Common to all Models:

Index #	Part Number	Description	Number Required	High Wear 100%	Medium Wear 70%	Low Wear 30%	Non-Wear 10%
1	See Note	Vacuum Shroud Sleeve	1				**X**
2	See Note	Vacuum Shroud Base	1				**X**
3	See Note	Hose Clamp	1				**X**
4	See Note	Collet Assembly	1				**X**
5	See Note	Rear Exhaust Cover	1				**X**
6	See Note	Felt Seal	1		(B) **T**		
7	**50782**	Adapter	1				**X**
8	**54520**	Bearing	2			**X**	
9	**54472**	Pin	2				**X**
10	**50787**	Planetary Carrier	1				**X**
11	**06213**	Gear	2			**X**	
12	**54468**	Ring Gear	1			**X**	
13	**50784**	Set Screw	1		(A) **T**		
14	**01041**	Grease Fitting	1		(A) **T**		
15	**53152**	Gear Case	1				**X**
16	**01547**	Collar	1			**X**	
17	**02649**	Bearing	1		(A, B) **T**		
18	**54529**	Shim Pack	1		(A, B) **T**		
19	**01478**	Front End Plate	1			**X**	
20	**50767**	Pin	2			**X**	
21	**01479**	Rotor Spacer	1			(B) **T**	
22	See Note	Rotor	1				**X**
23	**01480**	Vane (4/pkg.)	1	(A, B) **T**			
24	**01476**	Cylinder	1			**X**	
25	**02676**	Rear Bearing Plate	1				**X**
26	**02696**	Bearing	1		(A, B) **T**		
27	**02679**	Shield	1			(A, B) **T**	
28	**01462**	Safety Throttle Lever	1				**X**
29	**01449**	Valve Stem	1			(A, B) **T**	
30	**95558**	Retaining Ring	1		(A, B) **T**		
31	See Note	Housing	1				**X**
32	**12132**	Pin	1			(A, B) **T**	
33	**95730**	O-Ring	1			(A, B) **T**	
34	**01024**	O-Ring	1			(A, B) **T**	
35	**01469**	Speed Reg. Assembly	1			(A, B) **T**	
36	**01464**	Seal	1			(A, B) **T**	
37	**01472**	Tip Valve	1			(A, B) **T**	
38	**01468**	Spring	1			(A, B) **T**	
39	See Note	Air Control Ring	1				**X**
40	**97180**	Hose Cuff	1				**X**
41	See Note	Hose	1				**X**
42	**97161**	Vacuum Hose Retainer	1				**X**
43	**31907**	Swivel Cuff - 1-1/4" I.D.	1				**X**
44	**95711**	Retaining Ring	1			(A, B) **T**	
45	**95438**	O-Ring	1			(A, B) **T**	
46	**94521**	Muffler Base	1				**X**
47	See Note	Sintered Muffler	1			(A, B) **T**	
48	See Note	Felt Muffler	1			(A, B) **T**	
49	**94522**	Muffler Cap	1				**X**
50	**95375**	O-Ring	1			(A, B) **T**	
51	**94526**	Spacer	1				**X**
51	**94523**	Inlet Adapter	1				**X**

Note: Please refer to page 4 of tool manual for specific part number.

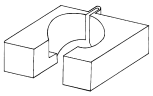
Optional Accessories

FIND THE MOST CURRENT OFFERING OF SUPPORT DOCUMENTS AND ACCESSORIES AT WWW.DYNABRADE.COM

Composite Dynaswivel®

- Swivels 360° AT TWO PIVOT POINTS allowing the air hose to drop directly to the floor while providing superb tool handling.

94300 – 1/4" NPT.



52296 Repair Collar

- Specially designed collar for use in vise to prevent damage to valve body of tool during disassembly/assembly.

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.

95821: 4 oz. (108 ml)
95842: 1 pt. (473 ml)
95843: 1 gal. (3.8 L)

95675 Male Plug

- Provides up to twice the air flow compared to standard plug design.
- Plug has "ported" design to prevent "starving" of the air tool.

95542 Grease 10 oz.

- Workable range 0˚F to 300˚F.
- High film strength; excellent resistance to water, steam, etc.

95541 Push-type Grease Gun

- One-hand operation.

96173 Tune-Up Kit - Model 56751
96049 Tune-Up Kit - Model 56755

- Includes assorted parts to help maintain and repair motor.

53407 Drop-In Motor - Model 56751
01391 Drop-In Motor - Model 56755

- Allows quick and easy replacement. No motor adjustments needed.

Carbide Burr Kits

- Includes 12 burrs for grinding, deburring and finishing metal.

93351 – 1/8" Kit
93350 – 1/4" Kit
93380 – 6mm Kit

Collet Inserts - Model 56751

- **50065** – 1/8"
- **50013** – 1/4"
- **50014** – 3/8"
- **50016** – 6mm
- **50039** – 8mm

Collet Inserts - Model 56755

- **01495** – 1/8"
- **01485** – 1/4"
- **01497** – 6mm
- **01496** – 3mm

Portable Vacuum Systems

- Dynabrade offers a wide assortment of vacuuming options to choose from. To help make your selection please request the most current portable vacuum systems literature form your local representative or by searching our web site.

Reference Contact Information

1. **American National Standards Institute – ANSI**
   25 West 43rd Street
   Forth Floor
   New York, NY 10036
   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**
   Rue de Stassart 36
   B - 1050 Brussels, Belgium

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PRINTED IN USA
PD09.50_Rev.1_10/09