

KEY

O	Oil	G	Grease
L	Loctite/Hernon: L ₂ = Loctite #271		
T	Torque: N•m x 8.85 = In. - lbs. T ₂ = 9 N•m, T ₃ = 39.5 N•m, T ₄ = 45 N•m, T ₅ = 50 N•m		

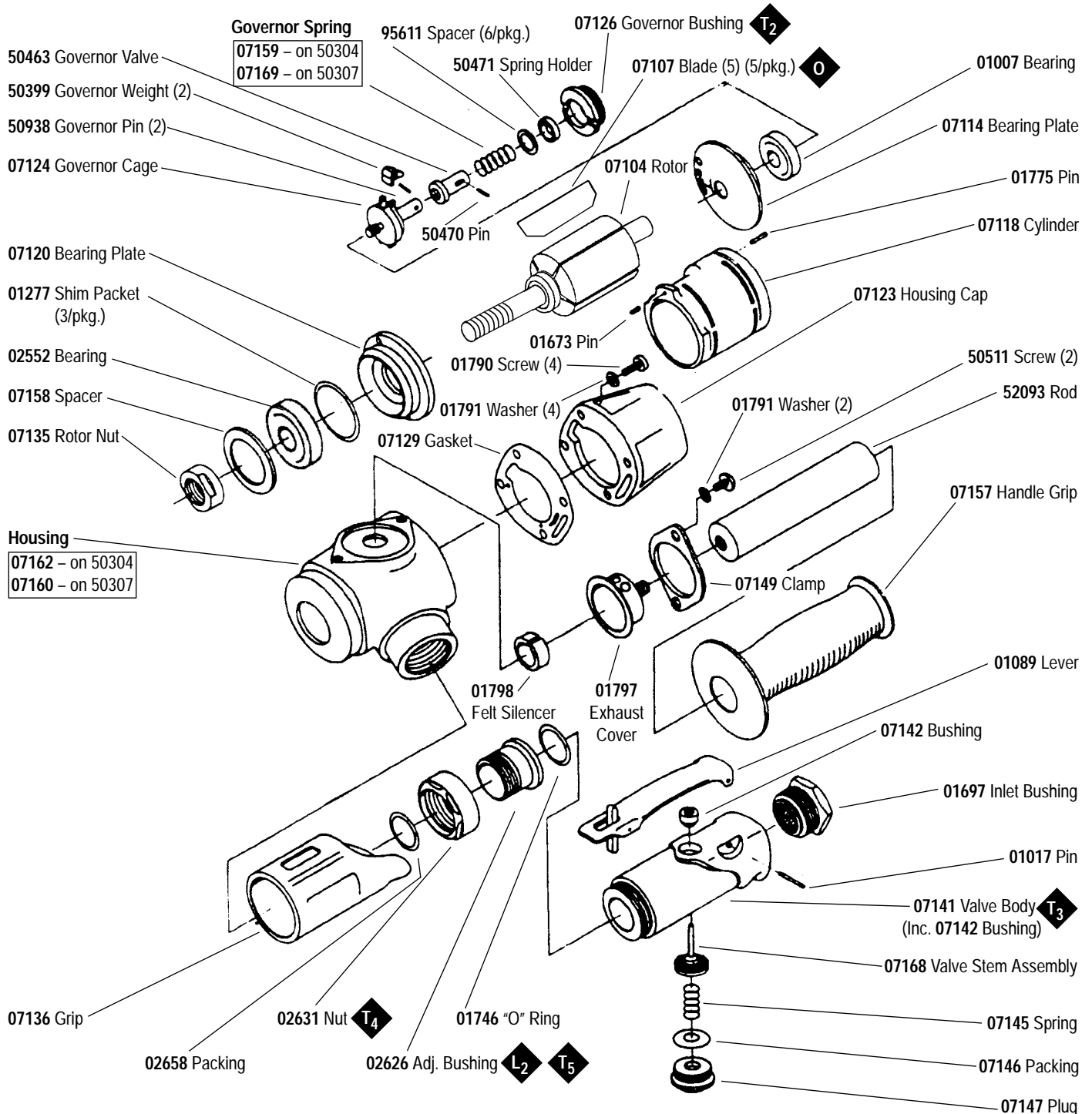
4-1/2"-5" Vertical Disc Sander

Model:
50304 - 8,500 RPM
50307 - 11,000 RPM

Air Motor and Machine Parts

WARNING

Always operate, inspect and maintain this tool in accordance with the Safety Code for portable air tools (ANSI B186.1) and any other applicable safety codes and regulations. Please refer to Dynabrade's Warning/Safety Operating Instructions for more complete safety information.



See reverse side for Accessories and Important Operating, Maintenance and Safety Instructions.

Important Operating, Maintenance and Safety Instructions

Carefully read all instructions before operating or servicing any Dynabrade® Abrasive Power Tool.

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

Important: All Dynabrade air tools must be used with a Filter-Regulator-Lubricator to maintain all warranties.

Operating Instructions:

Warning: Eye, face and body protection must be worn while operating power tools. Failure to do so may result in serious injury or death. Follow safety procedures posted in workplace.

1. With power source disconnected from tool, securely fasten abrasive/accessory on tool.
2. 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.
3. Connect power source to tool. Be careful not to depress throttle lever in the process.
4. Check tool speed with tachometer. If tool is operating at a higher speed than the RPM marked on the tool or operating improperly, the tool should be serviced to correct the cause before use.

Maintenance Instructions:

1. Check tool speed regularly with a tachometer. If tool is operating at a higher speed than the RPM marked on the tool, the tool should be serviced to correct the cause before use.
2. Some silencers on air tools may clog with use. Clean and replace as required.
3. All Dynabrade air motors should be lubricated. Dynabrade recommends one drop of air lube per minute for each 10 SCFM (example : if the tool specification state 40 SCFM, set the drip rate of your filter-lubricator at 4 drops per minute). Dynabrade Air Lube (P/N **95842**: 1pt. 473ml.) is recommended.
4. An air line filter-regulator-lubricator must be used with this air tool to maintain all warranties. Dynabrade recommends the following: **11289** Air Line Filter-Regulator-Lubricator — Provides accurate air pressure regulation, two-stage filtration of water contaminants and micro-mist lubrication of pneumatic components. Operates 100 CFM @ 90 PSI has 1/2" NPT female ports.
5. Use only genuine Dynabrade replacement parts. To reorder replacement parts, specify the **Model #**, **Serial #**, and **RPM** of your machine.
6. A motor tune-up kit (P/N **96041**) is available which includes assorted parts to help maintain motor in peak operating condition.
7. 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.

Safety Instructions:

Products offered by Dynabrade should not be converted or otherwise altered from original design without expressed written consent from Dynabrade, Inc.

- **Important:** User of tool is responsible for following accepted safety codes such as those published by the American National Standards Institute (ANSI).
- Operate machine for one minute before application to workpiece to determine if machine is working properly and safely before work begins.
- Always disconnect power supply before changing abrasive/accessory or making machine adjustments.
- Inspect abrasives/accessories for damage or defects prior to installation on tools.
- Please refer to Dynabrade's Warning/Safety Operating Instructions Tag (Reorder No. 95903) for more complete safety information.
- **Warning:** Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibration.

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.

Note: To reorder replacement parts, specify the **Model #**, **Serial #**, and **RPM** of your machine.

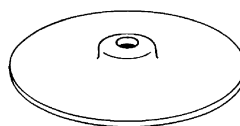
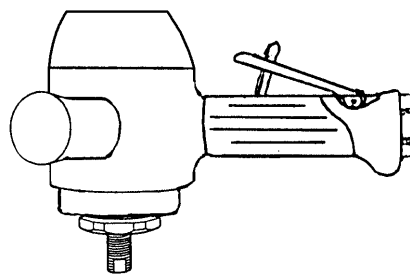
One Year Warranty

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 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, sanding pads, rotor blades, etc., are not covered under this warranty.

Mounting Arrangement

50275 – 5" Back-up Pad Assembly, 12,500 RPM max.

- Hard density.
- Includes 50273 Flange Nut.
- Accepts abrasive discs with 7/8" center hole.



50272 – 5" Pad



50273 Flange Nut

Disassembly/Assembly Instructions

Important: Manufactures warranty is void if tool is disassembled before warranty expires.

Tool Disassembly:

1. Disconnect tool from power source.
2. Remove 50275 Pad with a 21mm wrench.
3. Insert 01697 Inlet Bushing securely into vise.
4. Roll 07136 Grip Back away from housing.
5. Remove 02631 Nut by using a 32mm wrench (P/N 96079).
6. Separate valve body from housing.
7. Remove 07190 Screws (4) and 01791 Washers (4) from 07123 Housing Cap. Remove housing cap and 07129 Gasket.

Motor Disassembly:

1. Grip onto governor cage assembly and pull motor assembly from housing.
Note: If motor assembly does not come out freely, gently tap tool rotor side down to "pop" motor from housing.
2. Remove governor cage assembly from 07106 Rotor (left hand thread).
3. Insert a tap pin into rear bearing plate and press the 07106 Rotor from the rear bearing plate.
4. Place motor assembly in softjaw vise.
5. Remove 07135 Rotor Nut with an adjustable wrench.
6. Remove 07120 Front Bearing Plate and 02552 Front Bearing from 07104 Rotor.
7. Remove cylinder and blades from rotor.

Motor disassembly complete.

Motor Reassembly:

Important: Be certain all parts are cleaned, properly greased and in good repair before reassembly.

1. Slide 07120 Front Bearing Plate with 02552 Front Bearing in place on to 07104 Rotor.
2. Place the correct number of shims from the 01277 Shim Pack between the front bearing and front bearing plate to achieve a .0020 inch spacing between the front bearing plate and 07104 Rotor when forward pressure is applied to both the bearing plate and the rotor.
3. Tighten 07135 Rotor Nut onto rotor, torque
4. Place the blades into rotor slots. Blades should be lightly lubricated with Dynabrade Air Lube P/N 95842 (or equivalent) before installation in rotor slots.
5. Place cylinder over rotor and blade assembly. The scalloped end goes towards the front plate.
6. Place the 07114 Rear Bearing Plate (with 01007 Bearing pressed into place) over the rotor and line-up short pin on cylinder with the small hole in the rear plate and press into place.
7. Place the tool into a soft jaw vise and tighten the governor assembly (07124 Governor Cage) torque 9.0 N•m/80 in. - lbs. (left hand thread).
8. Place complete motor assembly into housing.
9. Tighten 02626 Adjustment Bushing into housing torque 50 N•m/450 in. - lbs.
10. Apply 2 drops of #271 Loctite® (or equivalent) to threads of adjustment bushing before tightening.
11. Tighten valve body into housing torque 39.5 N•m/350 in. - lbs.
12. Secure inlet bushing into vise. Replace 02631 Nut and 01746 O-Ring. Swivel 07141 Valve Body to desired throttle lever position.
13. Tighten 02631 Nut to 45 N•m/400 in. - lbs.
14. Roll 07136 Grip back into place.

Tool assembly is complete. Please allow 30 minutes for adhesives to cure before operating tool.

Optional Accessories



Dynaswivel®

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

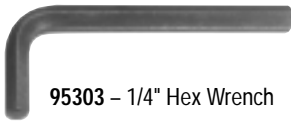
- 95460 1/4" NPT
- 95461 3/8" NPT
- 95462 1/2" NPT



96041 Motor Tune-Up Kit:

- Includes assorted parts to help maintain motor in tip-top shape.

Wrenches



95303 – 1/4" Hex Wrench



95823 – 21mm Open-End

