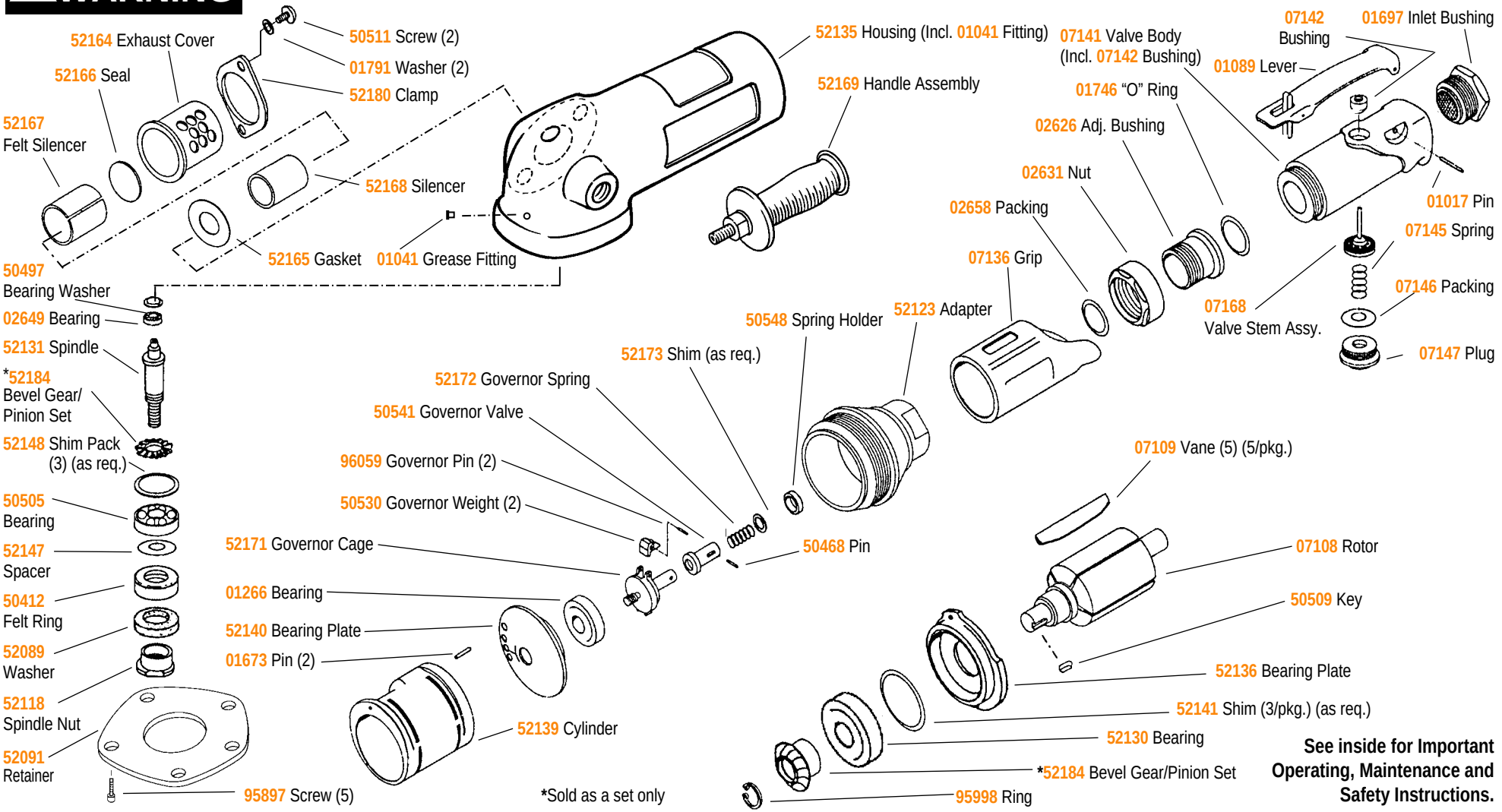
Parts Page Reorder No. PD96•21
Effective April, 1996
Supersedes PD 93•22

2.0 HP 7" Right Angle Disc Sander

Air Motor and Machine Parts; with 5/8" male spindle

Models:
50347 — 6,000 RPM

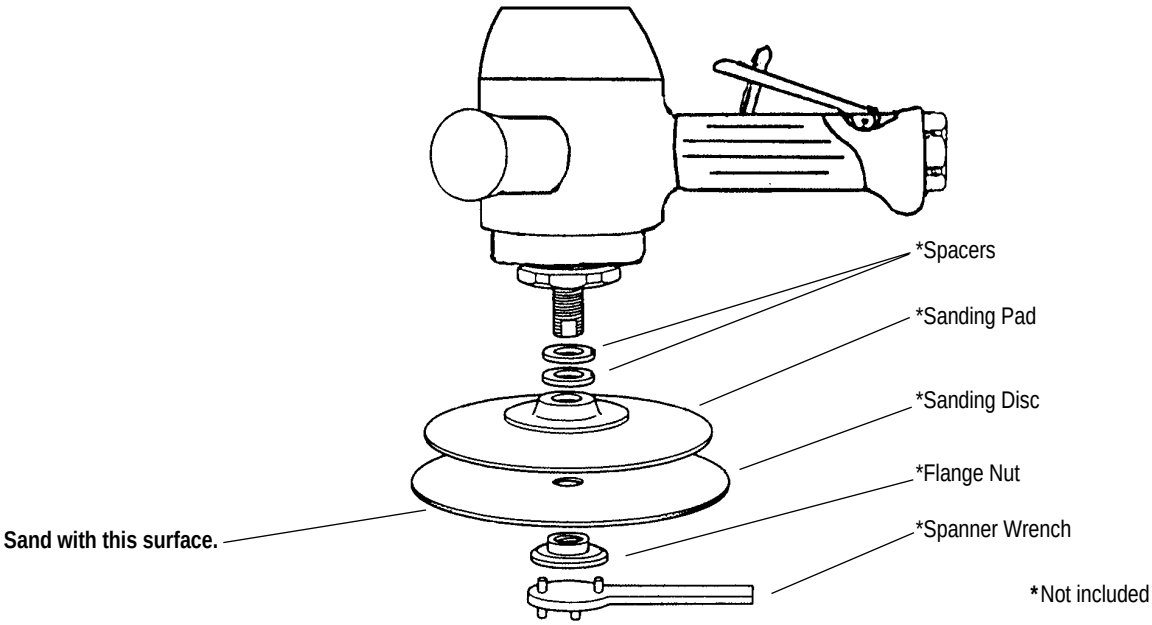
⚠WARNING **Always operate, inspect and maintain this tool in accordance with the Safety Code for portable air tools (ANSI B186.1 and B7.1) and any other applicable safety codes and regulations. Please refer to Dynabrade's Warning/Safety Operating Instructions for more complete safety information.**



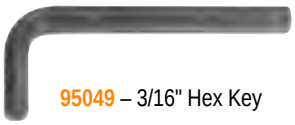
*Sold as a set only

See inside for Important Operating, Maintenance and Safety Instructions.

Mounting Arrangement



Standard Wrenches



95049 – 3/16" Hex Key

95304 – 24mm Open-End

Optional Accessories

96043 Motor Tune-Up Kit:
Includes assorted parts to help maintain motor peek operating condition.

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

Optional Disc Pad Assemblies

50277 – 7" Back-up Pad Assembly
- 7,000 RPM max.
- Hard density.
- Includes 50273 Flange Nut.

50283 – 7" Spiralcool® Disc Pad Assembly, 8,500 RPM max.
50284 – 9" Spiralcool® Disc Pad Assembly, 6,500 RPM max.
- Spiral ribs provide contact points and form channels extending disc life.
- Slotted hub draws cool air between the disc.
- Medium density.
- Includes 50286 Flange Nut.
- Optional 96038 Spanner Wrench available.

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/sanding pad on tool.
2. Connect power source to tool. Be careful **not** to depress throttle lever in the process.
3. 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:

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

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 with two drops of Dynabrade Air Lube (P/N 95842: 1pt. 473ml.) placed directly into the air inlet with throttle lever depressed every four hours of use.
4. An air line filter-regulator-lubricator must be used with this air tool to maintain all warranties. Dynabrade recommends the following: 11299 Air Line Filter-Regulator-Lubricator — Provides accurate air pressure regulation, two-stage filtration of water contaminants and positive-drip lubrication of pneumatic components. Operates 100 CFM @ 90 PSI has 1/2" NPT female ports.
5. Gear case of this Dynabrade air tool should be lubricated every 16 hours of use by using 95541 Grease Gun and 95542 Grease.

Safety 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.
- **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 30 seconds before application to workpiece to determine if machine is working properly and safely before work begins.
- Always disconnect power supply before changing abrasive or making machine adjustments.
- Inspect abrasives and sanding pads for damage or defects prior to and during operation of tool.
- 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.

Full 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.

Disassembly/Assembly Instructions

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

Tool Disassembly:

1. Disconnect tool from power source.
2. Insert 01697 Inlet Bushing securely into vise.
3. Roll 07136 Grip Back away from 52123 Adapter to expose wrench flats.
4. Remove 52123 Adapter from housing (right hand thread).
5. Grip onto governor cage assembly and pull motor assembly from housing.
6. Remove 02631 Nut (use a 32mm wrench – P/N 96079**).**
7. Separate valve from adapter.

Motor Disassembly:

1. Secure bevel pinion into a soft jaw vise.
2. Remove governor cage assembly from 07108 Rotor (left hand thread).
3. Remove rear bearing plate by securing cylinder and pressing the 07108 Rotor through the 01266 Rear Bearing.
4. Remove blades from rotor.
5. Secure bevel pinion into a soft jaw vise and press rotor shaft through the bevel pinion.
6. Remove 52136 Front Bearing Plate and 52130 Front Bearing from 07108 Rotor.

(continued on next page)

Disassembly/Assembly Instructions (continued)

Spindle Disassembly:

1. Remove the (5) 95897 Cap Screws from the retainer.
2. Remove the 52091 Retainer.
3. Grip onto the spindle and pull evenly away from housing.
4. Remove 52089 Washer, 52147 Spacer and 50412 Felt Ring.
5. Secure 52131 Spindle into vise using wrench flats and remove 52118 Spindle Nut (right hand thread).
6. Remove 50505 Bearing.
7. Secure bevel gear into a soft jaw vise and press spindle through the gear.
8. Remove 02649 Bearing by pressing the 50497 Bearing Washer through the housing.
   Note: Replace by pressing on outside diameter of the bearing.

Motor Reassembly:

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

1. Slide 52136 Front Bearing Plate with 52130 Front Bearing in place onto 07108 Rotor (see step 4).
2. Place 50509 Key onto rotor shaft.
3. Press bevel pinion into place. Secure 95998 Ring in place.
4. Place the correct number of shims from the 52141 Shim Pack between the front bearing and front bearing plate to achieve a .0015 inch spacing between the front bearing plate and 07108 Rotor when forward pressure is applied to both the bearing plate and the rotor toward the bevel pinion.
5. Place the blades into rotor slots.
   Note: Blades should be lightly lubricated with Dynabrade Air Lube P/N 95842 (or equivalent) before installation in rotor slots.
6. Place cylinder over rotor and blade assembly.
7. Place the 52140 Rear Bearing Plate (with 01266 Bearing pressed into place) over the rotor shaft and line-up short pin on cylinder with the small hole in the rear plate and press into place.
8. Place the bevel pinion into a soft jaw vise and tighten the governor assembly **(**52171 Governor Cage) to 9.0 N•m (80 lb. in.) (left hand thread).
9. Place complete motor assembly into housing.
10. Tighten 02626 Adjustment Bushing into 52090 Adapter to 50 N•m (450 lb. in.). Add 2 drops of #271 loctite or equivalent to threads of bushing before tightening.
11. Tighten 52123 Adapter into housing with 39.5 N•m (350 lb. in.).
12. Secure inlet bushing into vise. Replace 02631 Nut and 01746 O-Ring. Swivel 07141 Valve Body to desired throttle lever position. Tighten 02631 Nut to 45 N•m (400 lb. in).
13. Unroll 07136 Grip back into place.

Spindle Reassembly:

1. Press bevel gear into place on 52131 Spindle.
2. Press 50505 Bearing up against shoulder.
3. Tighten 52118 Spindle Nut to 34 N•m (300 lb. in.).
4. Place 52147 Spacer up against the bearing.
5. Mount 50412 Felt Ring over spindle nut and down inside 52147 Spacer.
6. Place 52089 Washer with the deeper counter bore toward the felt ring.
7. Slide the spindle assembly down into the housing lining up the small end of the spindle into the 02649 Bearing.
8. Place the correct number of shims from the 52148 Shim Pack checking for backlash (back and forth clearance in the gear teeth while pressing down into the housing).
   Note: Minimal backlash of the gear set is recommended.
9. Replace retainer. Line up 5 hole pattern and secure with (5) 95897 Screws.

Note: Always check tool RPM before mounting any wheel, disc or accessory with a tachometer while maintaining 90 PSI at the tool inlet under a no load condition. 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.

Tool assembly is complete.

Important:

The regular maintenance of any air tool will contribute to greater efficiency of tool and will prolong tool life. The failure of quality pneumatic air 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. Frequent drainage of water traps in air lines is recommended. Each tool on each drop should also be equipped with a secondary air processing unit.This consists of an in-line Filter-Regulator-Lubricator. All Dynabrade air tools must be used with a Filter-Regulator-Lubricator to maintain all warranties. Our warranty obligation is contingent upon proper use of our tools and cannot apply to equipment which has been subject to misuse such as unclean air, wet air or a lack of lubrication during the use of the tool.

Loctite® is a registered trademark of the Loctite Corp.

DYNABRADE®

DYNABRADE, INC., 8989 Sheridan Drive • Clarence, NY 14031-1490 • Phone: (716) 631-0100 • Fax: 716-631-2073 • International Fax: 716-631-2524
DYNABRADE EUROPE S.àr.l., Zone Artisanale • L-5485 Wormeldange—Haut, Luxembourg • Telephone: 352 76 84 94 • Fax: 352 76 84 95

PRINTED IN USA