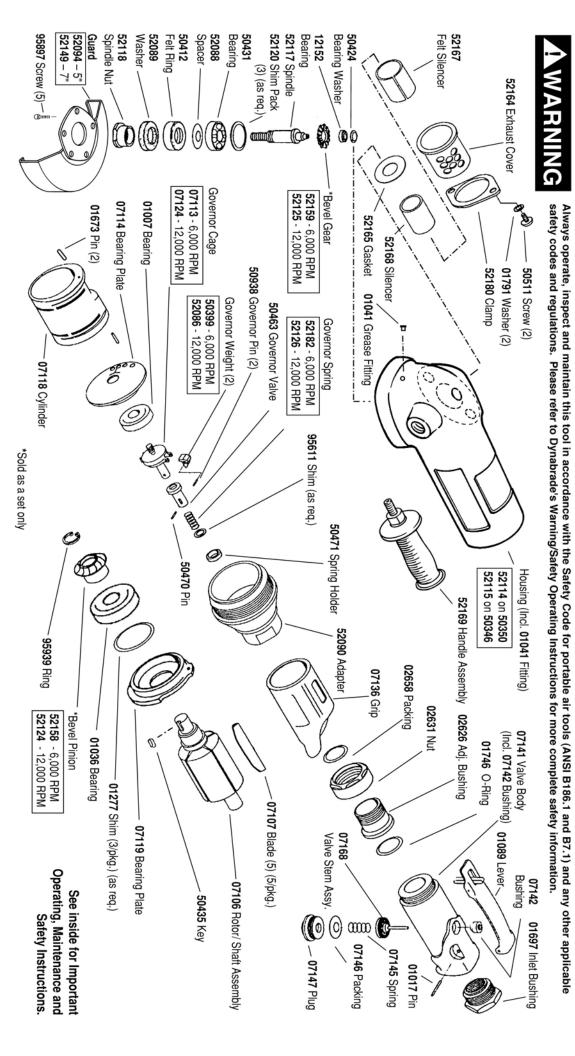
Effective April, 1996 Supersedes 93•21

50350 — 7", 6,000 RPM 50346 — 5", 12,000 RPN Models:

1.2 HP Right Angle Disc Grinder

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



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.

Standard Wrenches



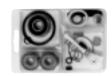
Optional Accessories



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

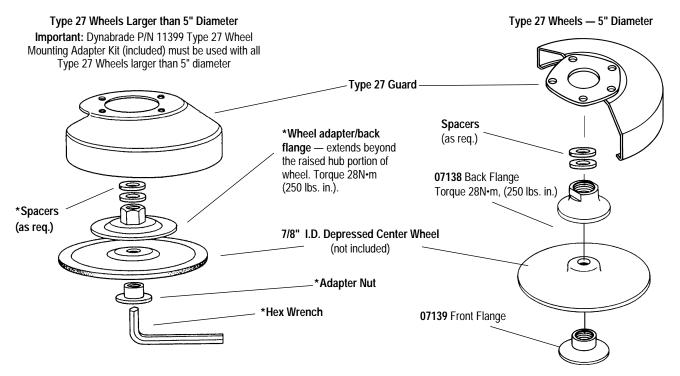
Dynaswivel®



96042 Motor Tune-Up Kit:

Includes assorted parts to help maintain motor peek operating condition

Mounting Arrangements for 5" and 7" Type 27 Depressed Center Wheels



Important

Type 27 Wheels larger than 5" diameter require specially designed adapters because of their shape and usage. The adapter (back flange) should extend beyond the central hub or raised portion and contact the wheel to counteract the side pressure on the wheel in use. The adapter nut, which is less than the minimum one-third diameter of the wheel, fits in the depressed side of the wheel to prevent interference in side grinding. These specially designed adapters should be used to mount only Types 27 reinforced organic bonded wheels.

Mounts which are affixed to the wheel by the manufacturer may not require an inside nut and should not be reused.

Type 27 Wheels 5" diameter and smaller with 7/8" diameter arbor holes may be mounted between matched flanges, provided the matched flanges are at least 1-5/8" diameter or one third diameter of wheel.

Important Safety Information

- 1. Always use eye, face and body protection.
- 2. Always use wheel guard.
- For safe use of this tool, always comply with OSHA, ANSI Standards B7.1 and B186.1.
- Some wheels are supplied with throwaway adapters (mounting flanges) attached by the manufacturer. These adapters should not be used again.

WARNING: Do not remove wheel quard.

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 **52090** Adapter to expose wrench flats.
- 4. Remove 52090 Adapter from housing (right hand thread).
- 5. Grip onto governor 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 **52087** Rotor Shaft (left hand thread).
- 3. Remove rear bearing plate by securing cylinder and pressing the 07106 Rotor through the 01007 Rear Bearing.
- Remove blades from rotor.
- 5. Secure bevel pinion into a soft jaw vise and press rotor shaft through the bevel pinion.
- 6. Remove **07119** Front Bearing Plate and **01036** Front Bearing from **07106** Rotor.

(continued on next page)

^{*}Indicates parts included in P/N-11399 Type 27 Wheel Adapter Kit.

Disassembly/Assembly Instructions (continued)

Spindle Disassembly:

- 1. Remove the (5) 95897 Cap Screws from the guard.
- 2. Remove the guard assembly.
- 3. Grip onto the spindle and pull evenly away from housing.
- 4. Remove 52089 Washer, 52088 Spacer and 50412 Felt Ring.
- 5. Secure 52117 Spindle into vise using wrench flats and remove 52118 Spindle Nut (right hand thread).
- 6. Remove 50431 Bearing.
- 7. Secure bevel gear into a soft jaw vise and press spindle through the gear.
- Remove 12152 Bearing by pressing the 50424 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 07119 Front Bearing Plate with 01036 Front Bearing in place on to 07106 Rotor (see step 4).
- 2. Place 50435 Key onto rotor shaft.
- 3. Press bevel pinion into place. Secure 95939 Ring in place.
- 4. Place the correct number of shims from the **01277** Shim Pack between the front bearing and front bearing plate to achieve a .0015 inch spacing between the front bearing plate and **07106** 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. The scalloped end goes towards the front plate.
- 7. 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.
- 8. Place the bevel pinion into a soft jaw vise and tighten the governor cage assembly 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 52090 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 **52117** Spindle.
- 2. Mount 50431 Bearing with the open side toward the gear.
- 3. Tighten 52118 Spindle Nut to 34 N·m (300 lb. in.).
- 4. Place 52088 Spacer up against the bearing.
- 5. Mount 50412 Felt Ring over spindle nut and down inside 52088 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 12152 Bearing.
- 8. Place the correct number of shims from the **52120** 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 guard assembly. 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 PSIG 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.

