

For Serial No. 8B1126 and Higher

AUTOMOTIVE

Parts Page Reorder No. APD00•12

Effective November, 2000

Supersedes APD97•10

8" Gear Driven Orbital Sander (900 RPM)

Air Motor and Machine Parts.

Models:

10700 – Non-Vacuum

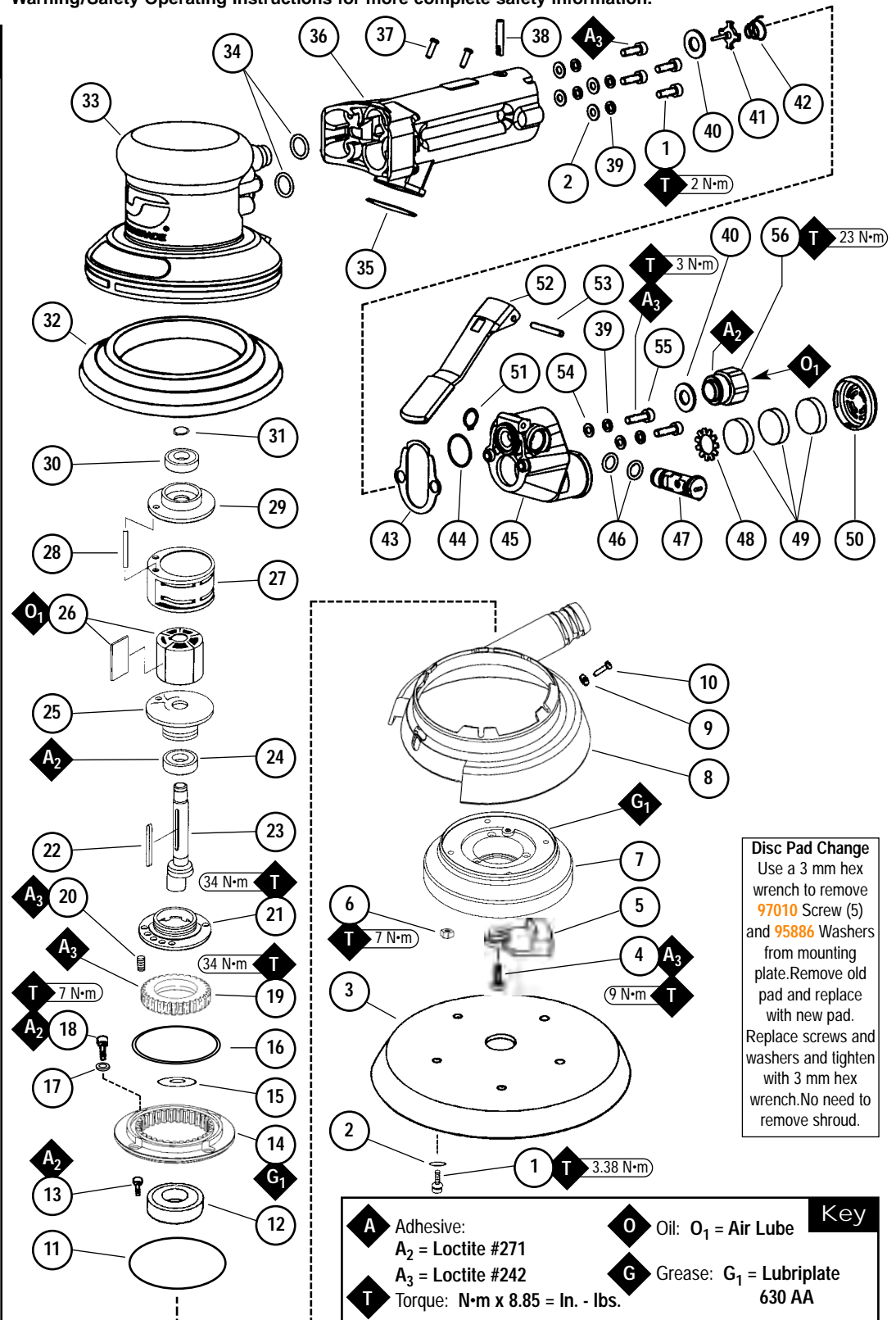
10705 – Central Vacuum

! 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.

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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 Rotary Vane air tools must be used with a filter-regulator-lubricator to maintain all warranties.

Operating Instructions:

Warning: Eye, face, respiratory, sound 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.
4. To avoid the danger of contaminating the workpiece from the lubricating oils permeating the air or sanding dust, it is recommended that this machine be hooked up to a central vacuum system or one of our unique vacuum systems that gather all such contaminants in a paper or cloth dust bag. This self contained vacuum system is highly efficient and convenient to use since it does not need to be attached to a separate vacuum system and is as mobile as the machine itself.

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. All Dynabrade Rotary Vane 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.
2. Gears on the 8" Gear Driven should be greased with Dynabrade **95541** Grease Gun and **95542** Grease (10 oz. 283.5g.). Apply grease to the grease fitting in the mounting plate, one full plunge every 300 hours of use.
3. **57360** Felt Wiper should be replaced every 600 hours.
4. An Air Line Filter-Regulator-Lubricator must be used with this air tool to maintain all warranties. Dynabrade recommends the following: **11405** Air Line Filter-Regulator-Lubricator — Provides accurate air pressure regulation, two-stage filtration of water contaminants and positive-drip lubrication of pneumatic components. Operates 40 SCFM @ 100 PSIG has 3/8" NPT female ports.
5. Frequent drainage of water traps in air lines is recommended.
6. Some silencers on air tools may clog with use. Clean and replace as required.
7. A Motor Tune-Up Kit (P/N **96195**) is available which includes assorted parts to help maintain and repair motor.

Safety Instructions:



- **Warning:** Eye, face, respiratory, sound 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
- Tool RPM must never exceed abrasive/sanding pad RPM rating, regardless of tool capacity.
- 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.

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 order replacement parts specify the model and serial number of your machine.

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, contact wheels, rotor blades, etc., are not covered under this warranty.

Machine Description	Pad Inch (mm)	Length Inch (mm)	Weight Pound (kg)	Height Inch (mm)	Air Flow Rate SCFM (LPM)	Sound Level	Motor HP (W)	Motor RPM	Air Pressure PSIG (Bars)
10700	8" (203)	12" (305)	4.3 (1.95)	5" (127)	28 (793)	85.6 dBA	.46 (343)	900	90 (6.2)
10705	8" (203)	12" (305)	4.3 (1.95)	5" (127)	28 (793)	93.0 dBA	.46 (343)	900	90 (6.2)

Additional Specifications: Air Inlet Thread 1/4" NPT • Hose I.D. Size 3/8" (10 mm)

(APD00-12)

Motor Disassembly/Assembly Instructions

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

A complete Tune-Up Kit, part number **96195**, is available which includes assorted parts to help maintain motor in tip-top shape. These instructions are for use in conjunction with Part Number **96283** Repair Kit, which includes special tools for proper disassembly/assembly of tool.

To Disassemble:

1. Disconnect tool from power source.
2. Invert machine and secure in soft jaw vise.
3. Remove sanding pad with 3 mm. hex wrench.
4. Remove counterbalance:
 - a.) Remove **95898** Screw with 5 mm. hex wrench. **Note:** To prevent counter balance rotation place a wrench on the counter balance.
 - b.) Remove counterbalance.
5. Pull out mounting plate sub-assembly.
6. Disassemble mounting plate sub-assembly:
 - a.) Remove **96276** Nuts (4) and **96274** Screws then lift out gear.
 - b.) Remove **96118** Screws (3).
 - c.) Press out **57335** Bearing by using **57091** Bearing Press Tool.
7. Remove **96166** Set Screw. **Note:** Remove **96150** Shims if so equipped.
8. Insert an adjustable spanner wrench or **96337** Lock Ring Wrench in the holes of the **57332** Lock Ring and turn counterclockwise to loosen. Motor may now be lifted out for service.
9. Remove **95626** Retaining Ring from the motor shaft.
10. Attach a 2 in. bearing separator around the rear portion of the **54631** Cylinder nearest the rear bearing plate.
11. Place the separator on the table of a #2 arbor press with the larger end of the motor shaft pointing down.
12. Press the retaining ring end of the motor shaft out of the rear motor bearing by using a 3/16 in. flat nose punch.
13. Remove cylinder, rotor, blades and key.
14. Press the **57331** Shaft and **56052** Bearing out through the front end plate using a (#2) arbor press.
15. Secure the **57749** Pinion in a soft jaw (bronze or aluminum) vise. With the **96182** Front Plate Removal Tool and a 3/8" ratchet, or breaker bar, turn the **57324** Front End Plate counterclockwise to loosen.
16. Remove **01206** Bearing from **54629** Rear Bearing Plate. Press **56052** Bearing from **57331** Motor Shaft.

To Reassemble:

Important: Be certain parts are clean and in good repair before reassembling.

1. Use **57091** Press Tool and press **56052** Bearing onto **57331** Motor Shaft down to shoulder, seal side toward shoulder.
2. Apply 3 drops of #271 Loctite® (or equivalent) to outside of bearing. Assemble front bearing plate onto shaft and press plate on outer race of bearing.
3. Place rotor key, rotor, and blades onto shaft. **Note:** Be certain rotor "floats" easily on the shaft. Because the design of this motor uses a "floating rotor", there is no need to set or adjust gap between the rotor and end plates.
4. Place **54631** Cylinder over rotor. The "short" line-up pin goes toward the front plate.
5. Place rear bearing plate (with **01206** Rear Bearing pressed into place) over shaft and "long" end of line-up pin and press fit in place using **57091** Press Tool.
6. Install **95626** Retaining Ring, **concave side toward motor**. **Note:** Be certain retaining ring is completely pressed down into its groove on the shaft.
7. Grease the rubber seals inside the housing using a small amount of multi-purpose grease or petroleum jelly.
Note: Be certain that rubber seals in housing have not pulled out of their seat during disassembly. If this has happened re-seat seals by pushing them back in place until they are flush with inside diameter.
8. Slide motor assembly into housing. **Note:** With handle pointing down be certain line-up pin enters slot to the right of center.
9. Secure motor housing in a vice, using **57092** Collar or soft jaws (be careful not to over tighten tool in vise).
10. Tighten **57332** Lock Ring with **96337** Lock Ring Tool to 34.0 N•m/300 in. - lbs. Align holes in **57332** Lock Ring with hole in housing.
11. Apply a small amount of #242 Loctite (or equivalent) to the threads of **96166** Set Screw. Use a 2 mm hex key and install set screw into the housing through one of the holes in the lock ring until set screw is flush with the top of the lock ring.
12. Apply a bead of #242 Loctite® (or equivalent) to threads of **57324** Front Plate. Screw **57749** Pinion onto **57324** Front Plate and torque to 34 N•m/300 in. - lbs. using **96181** Pinion Wrench.
13. Mounting Plate Sub-Assembly:
 - a.) Press **57335** Bearing into **57333** Mounting Plate.
 - b.) Insert **96118** Screws (3) and apply 1 drop of #271 Loctite® (or equivalent). **Note:** All screws should be hand tight before torque is applied.
 - c.) Press **57748** Gear into **57333** Mounting Plate, making sure to align mounting holes and that the **96273** O-Ring on back of gear is in place before assembly to mounting plate.
 - d.) Insert **96275** Washers into c-bore in gear.
 - e.) Apply 1 drop of #271 Loctite® (or equivalent) to **96274** Screws (4), insert through gear and thread into mounting plate torque 7.0 N•m/60 in. - lbs. Insert **96276** Nuts (4) and torque 7.0 N•m/60 in. - lbs.
14. Assemble mounting plate sub-assembly onto motor shaft machine assembly.
Note: If tool is equipped with **96150** Shim be sure to replace it on the shaft prior to reassembling the mounting plate onto shaft.
15. Assemble counterbalance to motor shaft.
16. Install **95898** Screw to secure counterbalance. Apply 1 drop of #242 Loctite® (or equivalent) to threads and torque screws with 5 mm. hex wrench to 9.0 N•m/80 in. - lbs.). **Note:** To prevent counterbalance rotation with motor, use a wrench on the **57334** Counterbalance.
17. Attach sanding pad. Torque the **97010** Screws (5) to 3.38 N•m/30 in. - lbs.

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Motor Disassembly/Assembly Instructions (continued)

To Disassemble Valve And Speed Regulator Assemblies:

1. Invert tool and place in soft jaw vise or use **57092** Repair Collar.
2. Loosen and remove **01788** Screws (2) from **57373** Adapter.
3. Carefully remove **56672** Adapter making sure no parts fall to the ground. Pry off **54194** Muffler Cap and remove **54195** Muffler (3).
4. Remove **57343** Speed Regulator by detaching **98597** Retaining Ring with a pair of snap ring pliers. Remove **01024** O-Rings with a small screwdriver.
5. Remove tip valve and seal from handle.

To Reassemble Valve And Speed Regulator Assemblies:

1. Lightly lubricate **01024** O-Rings and slide them on **57343** Speed Regulator. Install through regulator hole on **56672** Adapter. Place **98597** Retaining Ring on groove of speed regulator using a pair of retaining ring pliers.
2. Insert valve stem in handle and line up the hole in valve stem with hole in handle. Place **01464** Seal into handle. Insert tip valve so that the metal pin passes through the hole in the valve stem. Install **01468** Spring (small end first).
3. Install **98597** O-Ring onto **56672** Adapter and place **56673** Gasket onto handle.
4. Gently line-up **56672** Adapter onto handle so no parts shift when tightening. Apply #242 loctite to **01788** Screws (2), install along with **01211** Lock Washers (2) and **96421** Flat Washers (2).

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

Note: Motor should operate at between 850-900 RPM at 6.2 bar (90 PSIG). RPM should be checked with a tachometer. Before operating, we recommend that 3-4 drops of pneumatic tool oil be placed directly into the air inlet with throttle lever depressed.

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Accessories



95542 Grease 10 oz.

- Multi-purpose grease for all types of bearings, cams, gears.
- High film strength; excellent resistance to water, steam, etc.
- Workable range 0° F to 300° F.

95541 Push-type Grease Gun

- One-hand operation.



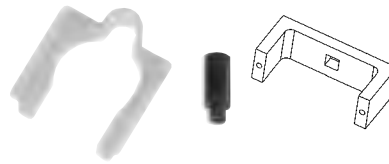
01189 Safety Lock Lever

- A **57375** Valve Stem must be used in conjunction with this lever to function properly.



96195 Motor Tune-Up Kit

- Includes assorted parts to help maintain and repair motor.



96283 Motor Repair Kit

- Contains special tools for use of Disassembly/Assembly of machine.

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