

**Models:**

- 12200 Stockade Filer**  
**12201 Stockade Filer**  
**12202 Stockade Filer Kit**  
**12203 Stockade Foundry Filer**  
**12204 Stockade Sander**  
**12205 Stockade Saw**  
**12206 Stockade Saw Kit**  
**12207 Stockade Filer/Saw Kit**

Parts Page Reorder No. PD01•52

Effective June, 2001

Supersedes PD97•11

# Stockade Filer/Saw

*Air Powered Reciprocating Filer/Saw*  
*2,400 strokes per minute*

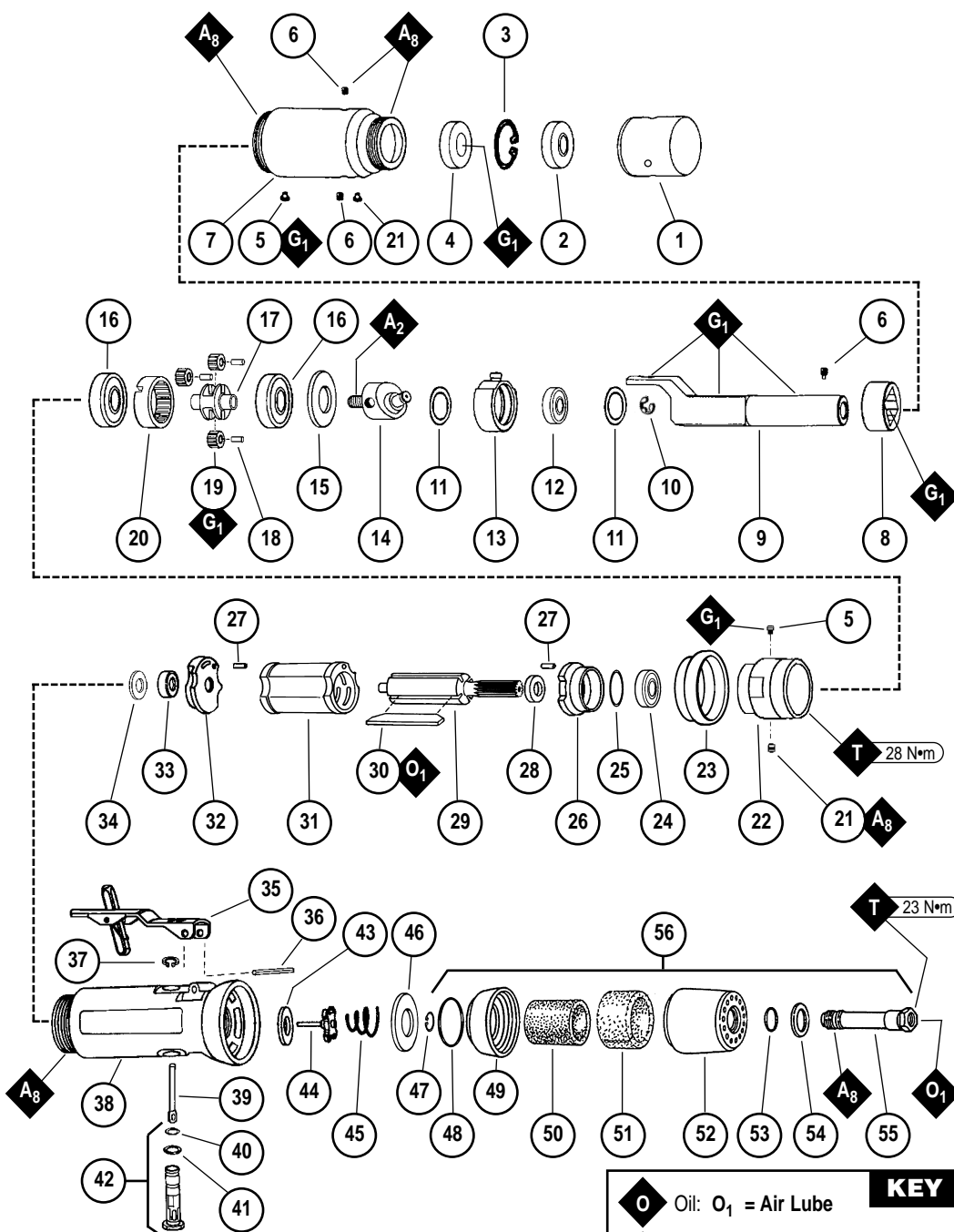
## ⚠ WARNING

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.

**Index Key**

No. Part # Description

- |    |       |                       |
|----|-------|-----------------------|
| 1  | 12166 | Guard                 |
| 2  | 12168 | Shaft Seal            |
| 3  | 96139 | Retaining Ring        |
| 4  | 12167 | Bearing               |
| 5  | 01041 | Grease Fitting (2)    |
| 6  | 95862 | Set Screw (3)         |
| 7  | 12117 | Slider Housing        |
| 8  | 12125 | Square Bearing        |
| 9  | 12122 | Slider                |
| 10 | 12174 | E-Ring                |
| 11 | 12119 | Retaining Ring (2)    |
| 12 | 02694 | Bearing               |
| 13 | 12121 | Crank Pivot Plate     |
| 14 | 12120 | Crank                 |
| 15 | 12170 | Retaining Ring        |
| 16 | 54520 | Bearing (2)           |
| 17 | 12222 | Planetary Carrier     |
| 18 | 54475 | Gear Shaft (3)        |
| 19 | 54519 | Planetary Gear (3)    |
| 20 | 54468 | Ring Gear             |
| 21 | 50784 | Lock Screw (2)        |
| 22 | 12220 | Gear Case             |
| 23 | 01547 | Rubber Collar         |
| 24 | 02649 | Bearing               |
| 25 | 54529 | Shim Pack (3/pkg.)    |
| 26 | 01478 | Front Bearing Plate   |
| 27 | 50767 | Pin (2)               |
| 28 | 01479 | Rotor Spacer          |
| 29 | 54554 | Rotor                 |
| 30 | 01480 | Blades (4/pkg.)       |
| 31 | 01476 | Cylinder              |
| 32 | 02676 | Rear Bearing Plate    |
| 33 | 02696 | Bearing               |
| 34 | 02679 | Shield                |
| 35 | 01462 | Safety Lock Lever     |
| 36 | 12132 | Pin                   |
| 37 | 95558 | Retaining Ring        |
| 38 | 01488 | Housing               |
| 39 | 01449 | Valve Stem            |
| 40 | 95730 | O-Ring                |
| 41 | 01024 | O-Ring                |
| 42 | 01469 | Speed Regulator Assy. |
| 43 | 01464 | Seal                  |
| 44 | 01472 | Tip Valve             |
| 45 | 01468 | Spring                |
| 46 | 01633 | Air Control Ring      |
| 47 | 95711 | Retaining Ring        |
| 48 | 95438 | O-Ring                |
| 49 | 94521 | Muffler Base          |
| 50 | 94524 | Sintered Muffler      |
| 51 | 94525 | Felt Muffler          |
| 52 | 94522 | Muffler Cap           |
| 53 | 95375 | O-Ring                |
| 54 | 94526 | Spacer                |
| 55 | 94523 | Inlet Adapter         |
| 56 | 94520 | Muffler Assembly      |



KEY	
<b>O</b>	Oil: O <sub>1</sub> = Air Lube
<b>G</b>	Grease: G <sub>1</sub> = Lubriplate 630 AA
<b>A</b>	Adhesive: A <sub>2</sub> = Loctite #271 A <sub>8</sub> = Loctite #567
<b>T</b>	Torque: N•m x 8.85 = In. - lbs.

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 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/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.
5. Air tools are not intended for use in explosive atmospheres and are not insulated for contact with electrical power sources. Sanding/Grinding certain materials can create explosive dust. It is the employers responsibility to notify the user of acceptable dust levels. Sanding/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.

### Maintenance Instructions:

1. Some silencers on air tools may clog with use. Clean and replace as required.
2. All Dynabrade Rotary Vane air motors should be lubricated. Dynabrade recommends one drop of air lube per minute for each 10 SCFM (example: if the tool specification states 40 SCFM, set the drip rate of your filter-lubricator at 4 drops per minute). Dynabrade Air Lube (P/N **95842**: 1 pt. 473 ml.) is recommended.
3. 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 micro-mist lubrication of pneumatic components. Operates 40 SCFM @ 100 PSIG, has 3/8" NPT female ports.
4. **Gear and Slider grease instructions:** Apply 2 plunges of dynabrade **95542** Grease with **95541** Grease Gun through all grease fittings for every 16 hours of use.
5. **Attention:** After grease is applied, Dynabrade recommends covering the front end of Slider Housing **12117** to catch a small discharge of grease that may soil or damage the workpiece.
6. Use only genuine Dynabrade replacement parts. To reorder replacement parts, specify the **Model #**, **Serial #**, and **RPM** of your machine.
7. A Motor Tune-Up Kit (P/N **96261**) is available which includes assorted parts to help maintain motor in peak operating condition.
8. 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.
9. DO NOT clean or maintain air tools with chemicals that have a low flash point (example: WD-40®).

### 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.

### 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.

Model Number	Motor HP (W)	Motor RPM	Air Inlet Thread	Sound Level	Air Flow Rate SCFM (LPM)	Stroke Inch (mm)	Strokes Per Minute	Weight Pound (kg)	Length Inch (mm)	Height Inch (mm)
All Models	.26 (194)	2,400	1/4" NPT	79 dB(A)	19 (538)	13/32 (10)	2,400	2.4 (1.08)	10 (254)	1-1/2 (38)

Additional Specifications: Hose I.D. Size 1/4" (8 mm) • Air Pressure 90 PSIG (6.2 Bars)

(PD01•52)

## **Disassembly/Assembly Instructions – Stockade Filer/Saw**

**Important:** Manufacturer's warranty is void if tool is disassembled before warranty expires.

**Notice:** Dynabrade strongly recommends the use of their **52296** Repair Collar (sold separately) during assembly/disassembly activities. Failure to use this collar will highly increase the risk of damage to the valve body of this tool. Please refer to parts breakdown for part identification.

### **Slider Housing and Gear Case Disassembly:**

1. Disconnect tool from power source.
2. Secure air tool in a vise by using **52296** Repair Collar placed around the **01488** Housing.
3. Remove the **12166** Guard, by turning it counterclockwise.
4. Remove the **12117** Slider Housing turning it counterclockwise while holding onto the **12220** Gear Case with a 34 mm crowfoot wrench.
5. Use a 3 mm hex key to remove the **95862** Set Screws (3) from the **12122** Slider and **12117** Slider Housing.
6. Remove the **12122** Slider and **12125** Square Bearing from the **12117** Slider Housing.
7. Remove the **12168** Shaft Seal, **96139** Retaining Ring, and **12167** Round Bearing, (use **96232** #2 Arbor Press to remove round bearing).
8. Remove the **12220** Gear Case with a 34 mm crowfoot wrench turning it counterclockwise.
9. Remove the **50784** Set Screw from the **12220** Gear Case with a 2 mm hex key and pull the planetary gear assembly from the **12220** Gear Case.
10. Place a 2 in. **96346** Bearing Separator between the ring gear and the **54520** Rear Bearing. Place the planetary assembly along with the separator on the table of the arbor press and remove the bearing.
11. Remove the ring gear and the planetary gears from the **12222** Planetary Carrier.
12. Secure the planetary carrier in a soft (bronze or aluminum) jaw vise, and unscrew the **12120** Crank with a drift pin turning it counterclockwise. Remove the **12170** Spacer Ring.
13. Remove **12174** E-Ring from the crank and with a bearing separator and arbor press remove the **12121** Crank Pivot Plate.
14. Remove the **12119** Retaining Rings (2) from the **12121** Crank Pivot Plate and remove the **02694** Bearing.
15. Press the **12222** Planetary Carrier from the front **54520** Bearing.

**Slider Housing and Gear Case Disassembly Complete.**

### **Motor Disassembly:**

1. Pull on the pinion gear of the **54554** Rotor and remove the air motor assembly from the **01488** Housing.
2. Fasten the **96346** Bearing Separator around the rear portion of the cylinder and place the separator on the table of the **96232** Arbor Press with pinion gear pointing toward the floor. Press on the rear shaft of the rotor with flat nose 3/16 in. diameter punch, as a press tool, and remove it from the **02696** Bearing. The vanes can now be removed.
3. Place the flat side of the **01478** Front Bearing Plate on the **96231** Tool Plate of the arbor press and push the pinion end of the **54554** Rotor from the **02694** Bearing. The **02649** Bearing can be pushed out of the front bearing plate allowing the removal of the **54529** Shims. The **01479** Spacer can be slipped off the rotor.
4. Remove the **02696** Bearing from the **02676** Rear Bearing Plate with the **96210** Bearing Removal Tool.

**Motor Disassembly Complete.**

### **Valve and Silencer Disassembly:**

1. Position the **01488** Housing in the vise with the **52296** Repair Collar so that the air inlet is pointing up.
2. Hold the **94523** Inlet Adapter stationary with a wrench and remove the air fitting.
3. Remove the **94523** Inlet Adapter.
4. Remove the **95711** Retaining Ring from the inlet adapter and separate the **94521** Muffler Base from the **94522** Muffler Cap. Remove the bronze and felt mufflers.
5. Remove the air control ring from the **01488** Housing.
6. Use needle nose pliers to remove **01468** Spring, **01472** Tip Valve and **01464** Seal.
7. Use a 2.5 mm drive punch and remove **12132** Pin along with throttle lever.
8. Remove **95558** Retaining Ring and push **01469** Speed Regulator Assembly from housing. The o-rings can be removed.

**Valve and Silencer Disassembly Complete.**

### **Valve and Silencer Assembly:**

**Note:** Make sure that all parts are clean and in good order before assembling. Follow all adhesive, lubrication, and torque instructions.

1. Install **01469** Speed Regulator Assembly (with o-rings) into the **01488** Housing securing it with the **95558** Retaining Ring.
2. Position the **01488** Housing in the vise with the **52296** Repair Collar so that the air inlet is pointing up.
3. Install **01464** Seal into housing.
4. Insert the **01449** Valve Stem into **01469** Speed Regulator Assembly so that the hole in the valve stem is visible through the air inlet opening.
5. Holding the valve stem in position and use a needle nose pliers to install the **01472** Tip Valve so that it intersects with the valve stem. Install the **01468** Spring (small end against the tip valve).
6. Install the bronze and felt mufflers into **94522** Muffler Cap. Install the **94521** Muffler Base onto muffler cap.
7. Install **95438** O-Ring into the groove on the muffler base. Place **95375** O-Ring and **94526** Spacer into the recessed area of the muffler cap.
8. Slip **94523** Inlet Adapter through muffler assembly and install **95711** Retaining Ring into the groove on the inlet adapter.
9. Install **01633** Air Control Ring over the male thread of the inlet adapter and apply a small amount of Loctite® #567 (or equivalent) to the male threads of the inlet adapter and install the entire muffler assembly onto the **01488** Housing (torque to 23 N•m/200 in. - lbs.).
10. Hold the **94523** Inlet Adapter with a wrench when installing the air fitting.
11. Install the throttle lever and **12132** Pin.

**Valve and Silencer Assembly Complete.**

### **Motor Assembly:**

1. Slip **01479** Spacer onto the pinion end of the **54554** Rotor.
  2. Place a .002 in. shim into the **01478** Front Bearing Plate and install **02649** Bearing into the front bearing plate. Press this assembly onto the **54554** Rotor by using the **96240** Bearing Press Tool.
  3. Check the clearance between the rotor and the bearing plate by using a .001 in. feeler gauge. The proper clearance should be .001 in. to .0015 in. If it is necessary, adjust clearance by repeating steps 1-3, adding or removing shims as required.
  4. Once proper rotor gap clearance is achieved, install lubricated (oiled) vanes into the rotor slots, (use **95842** Dynabrade Air Motor Oil or equivalent).
  5. Install the **01476** Cylinder so that it rests against the **01478** Front Bearing Plate while making sure that the air inlet holes of the **02676** Rear Bearing Plate align properly with the air holes in the **01476** Cylinder.
  6. Use the **96216** Bearing Press Tool to install the **02696** Bearing into the **02676** Rear Bearing Plate and to press the bearing plate with bearing onto the **54554** Rotor.
- Note:** The pinion end of the **54554** Rotor should be supported on the tool plate of the arbor press while pressing the rear bearing and bearing plate assembly onto the rotor.

(Continued on next page)

## Disassembly/Assembly Instructions-Stockade Filer/Saw(continued)

7. **Important:** The fit must be snug between the bearing plates and the cylinder. If it is too tight, the rotor will not turn freely. Press fit must be loosened so that it will turn freely while still maintaining a snug fit.
  8. Apply a small amount of grease to the exposed seal of the **02696** Bearing and install the **02679** Shield so that it will stick against the bearing.
  9. Position the **01488** Housing in the vise so that the motor opening in the housing is pointing up.
  10. Install the motor assembly into the **01488** Housing so that the motor drops all the way into the housing. **Note:** Align the rear bearing bearing plate node inside the housing.
- Motor Assembly Complete.**

### Slider Housing and Gear Case Assembly:

1. Install one of the **12119** Retaining Rings into the **12121** Crank Pivot Plate and use the **96216** Bearing Press Tool to press the **02694** Bearing into the pivot plate. Install the second **12119** Retaining Ring into the crank pivot plate.
2. Use the **96216** Bearing Press Tool to press the **12121** Crank Pivot Plate with bearing onto the **12120** Crank and install the **12174** E-Ring onto the crank.
3. Use **96239** Bearing Press Tool to press the front **54520** Bearing onto the threaded side of the **12222** Planetary Carrier. Hold the planetary carrier in the soft (bronze or aluminum) jaw vise so that the threaded side of the carrier with the bearing is pointing up. Place the **12170** Spacer Ring on top of the **54520** Bearing. Apply a small amount of Loctite® #271 (or equivalent) to the threads of the **12120** Crank and install it into the planetary carrier.
4. Remove the planetary carrier from the vise and install the **54519** Planetary Gears with bearings (3) along with **54475** Gear Shafts (3). **Note:** Apply a small amount of **95542** Grease to the needle bearings and planetary gears.
5. Place the **54468** Ring Gear over the planetary carrier so that the notches face away from the crank pivot plate.
6. Press the second **54520** Bearing onto the rear of the planetary carrier.
7. Slide the planetary gear assembly into the **12220** Gear Case so that the notches line up with the lock screw hole and **01041** Grease Fitting. Apply a small amount of Loctite® #567 Pipe Sealant (or equivalent) to the threads of the **50784** Lock Screw and install.
8. Slip **01547** Rubber Collar onto **12220** Gear Case, apply a small amount of Loctite® #567 Pipe Sealant (or equivalent) to the threads of the **01488** Housing and install the gear case assembly onto the **01488** Housing. (Torque to 28 N•m/250 in. - lbs.)
9. Press **12167** Round Bearing into the **12117** Slider Housing. Install the **96139** Retaining Ring and press the **12168** Seal into the slider housing.
10. Place the **12125** Square Bearing into the slider housing and secure it in place with (2) **95862** Set Screws. **Note:** Apply a small amount of Loctite® #567 Pipe Sealant (or equivalent) to the threads of the set screws, before installation.
11. Apply a film of **95542** Grease to the round and square surfaces of the **12122** Slider. Install slider into the slider housing assembly.
12. Apply a small amount of Loctite® #567 Pipe Sealant (or equivalent) to the threads of the **12117** Slider Housing and a dab of grease to the pivot hole in the **12122** Slider. Engage the hole in the slider with the pivot plate and thread the **12117** Slider Housing into the **12220** Gear Case, securing it in place.
13. Install **95862** Set Screw into the **12122** Slider.
14. Install **12166** Guard onto **12117** Slider Housing.

### Slider Housing and Gear Case Assembly Complete.

**Note:** The file mounting set screw can be aligned with the access holes in the **12166** Guard by pointing the slider toward the floor, loosening the (2) **95862** Set Screws in the slider housing and then rotating the **12122** Slider to the desired position and securing the (2) **95862** Set Screws back in place.

**Important:** The slider must remain pointing toward the floor during this process.

**Gear and slider grease instructions:** Apply 2 plunges of Dynabrade **95542** Grease with **95541** Grease Gun through all grease fittings for every 16 hours of use.

**Tool Assembly Complete.** Please allow 30 minutes for adhesives to cure before operating tool.

**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. Loctite® is a registered trademark of Loctite Corp.

## Optional Accessories



**12211** Foundry Filer Adapter  
• For use with **90905** Foundry File.



**12212** Saw Holder Adapter and  
**12183** Saw Guide  
• For use with small saws.



**12197** Filer Adapter  
• For use with small files.



### Dynabrade Angle Gear Oil

- Specifically formulated to saturate wick system in right angle gear head.
- Easy to apply using Dynabrade P/N **95541** Oil Gun. Apply 3 plunges every 8 hours of operation into tools lubrication fitting.

**95848:** 2 oz. tube  
**95849:** 10 oz. tube



### 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.

**95842:** 1pt. (473 ml)  
**95843:** 1gal. (3.8 L)