# Dynabug "Model T"

# Self Generated Vacuum Sander

Air Motor and Machine Parts

#### *Models:* 58070 — 4-1/4" x 4-1/2" Thick, Vac, Vinyl Pad 58075 — 4-1/4" x 4-1/2" Thick, Vac, Hook Pad

# 

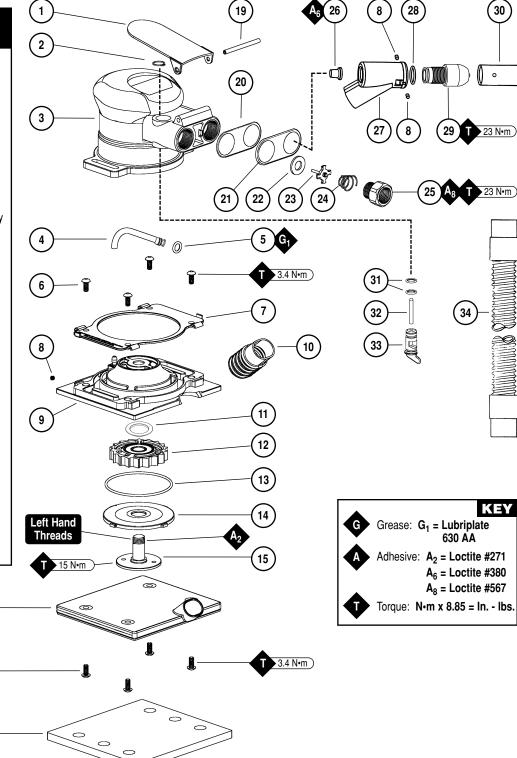
Always operate, inspect and maintain this tool in accordance with the Safety Code for portable air tools (ANSI B186.1) and any other applicable safety codes and regulations. Please refer to Dynabrade's Warning/Safety Operating Instructions for more complete safety information.

#### Index Key No. Part # Description 53856 Throttle Lever 1 95697 2 Snap Ring 3 53859 Housing 4 57988 Inlet Hose Assembly 12156 O-Ring 5 6 96492 Button Head Screws (4) **Clip Retainer** 7 57982 Set Screw (3) 8 96493 Vac Base Plate 9 57971 10 57942 Vacuum Tube 58092 Spacer 11 12 57981 Turbine Wheel Assembly 13 97121 O-Ring 57983 Base Plate Door 14 57979 Motor Shaft 15 53858 Vacuum Plate Assembly 16 17 95405 Button Head Screw (4) Vinyl Pad - 58070 18 56286 Hook Pad - 58075 56285 95979 Pin 19 Gasket 20 53863 21 53852 Plate Seal 22 01464 Seal 23 01472 Tip Valve 24 01468 Spring 25 01494 Inlet Bushing 26 53864 Cap Plug 27 53851 Vac Adapter 28 95288 O-Ring 29 53854 Vac Nozzle 30 53853 Vac Tube O-Ring 31 01025 32 53857 Valve Stem 33 57064 Speed Regulator 34 50682 Vacuum Hose

16

17

18



## 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.

## **Operating Instructions:**

Warning: Eye, face, sound, respiratory, 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. 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. 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.
- An Air Line Filter-Regulator must be used with this air tool to maintain all warranties. Dynabrade recommends the following: 11402 Air Line Filter-Regulator – Provides accurate air pressure regulation, two-stage filtration of water contaminats. Operates 40 SCFM @ 100 PSIG and has 3/8" NPT female ports.
- 4. Use only genuine Dynabrade replacement parts. To reorder replacement parts, specify the Model #, Serial #, and RPM of your machine.
- A Motor Tune-Up Kit (P/N 96169) is available which includes assorted parts to help maintain motor in peek operating condition. Please refer to Dynabrade's Preventative Maintenance Schedule for a guide to expectant life of component parts.
- 6. Mineral spirits are recommended when cleaning the tool and parts. Do not clean tool or parts with any solvents or oils containing acids, esters, keytones, chlorinated hydrocarbons or nitro carbons.
- 7. 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).
- 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.

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

| Model      | Pad     | Motor  | Sound    | Air Flow Rate  | Air Pressure | Orbit Diameter | Weight     | Length    | Height    |
|------------|---------|--------|----------|----------------|--------------|----------------|------------|-----------|-----------|
| Number     | Size    | RPM    | Level    | CFM/SCFM (LPM) | PSIG (Bars)  | Inch (mm)      | Pound (kg) | Inch (mm) | Inch (mm) |
| All Models | Various | 16,000 | 88 dB(A) | 2/17 (481)     | 90 (6.2)     | 3/32 (2.4)     | 1.5 (.68)  | 8 (203)   | 4 (102)   |

Additional Specifications: Air Inlet Thread 1/4" NPT (8 mm)

## Motor Assembly/Disassembly Instructions – Vacuum "Model T" Dynabug

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

A complete repair kit, part number 96169, is available which includes special tools for correct disassembly/assembly of tool.

## **To Disassemble**

- 1. Disconnect tool from power source.
- 2. Remove sanding pad (if necessary).
- 3. Unscrew 96492 Button Head Screws (8).
- 4. Remove 57942 Vacuum Tube.
- 5. Separate and remove 53858 Vacuum Plate Assembly from 57971 Vacuum Base Plate.
- 6. Lift 57982 Clip Retainer up about 1/2", to expose 57971 Vacuum Base Plate.
- 7. Remove 57988 Hose from 57971 Vacuum Base Plate.
- 8. Disassemble housing assembly from base plate assembly, by pulling apart.
- 9. Invert assembly and insert spanner wrench to 57979 Motor Shaft, and remove (left-hand threads).
- 10. Remove 58092 Spacer. Note: Orientation of spacer on motor shaft.
- 11. Remove 57981 Turbine Wheel Assembly. Note: Turbine orientation of wheel assembly on motor shaft.

## To Assemble:

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

- 1. If removed slide **57983** Base Plate Door onto **57979** Motor Shaft.
- 2. Replace 57981 Turbine Wheel Assembly on motor shaft using the same orientation as when it was disassembled.
- 3. Replace 58092 Spacer on motor shaft using the same orientation as when it was disabled.
- 4. Apply a slight amount of #271 Loctite® (or equivalent) to 57979 Motor Shaft threads, torque 15 N•m/133 in. lbs.
- 5. Install subassembly into base plate assembly.
- 6. Apply a slight amount of grease to the flared end of **57988** Inlet Hose and assemble onto housing. Install **12156** O-Ring. Slide other end of tube over barb fitting in base plate (use adhesive if necessary).
- 7. Install housing assembly onto base plate assembly.
- Slide 57982 Clip Retainer down onto 57971 Vacuum Base Plate and install (4) 96492 Button Head Screws, torque 3.4 N•m/30 in. Ibs.
- 9. Re-attach 53858 Vacuum Plate Assembly to 57971 Vacuum Base Plate. Secure with (4) 96492 Button Head Screws.
- 10. Re-attach 57942 Vacuum Tube to outlet hole of 53858 Vacuum Plate Assembly.

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

## Valve and Speed Regulator Assemblies:

- 1. Secure housing in vice using 57092 Collar or padded jaws.
- 2. Remove 01494 Inlet Bushing, 01468 Spring, 01472 tip valve and 01464 Seal from housing.
- 3. Remove 95697 Snap Ring. Pull the speed regulator and valve stem out of the housing. Remove the 01025 O-Rings (2).
- 4. Place new 01025 O-Rings (2) on the speed regulator and place in housing with valve stem. Install new 95697 Snap Ring.
- 5. Place new 01464 Seal in housing. Using tweezers or needle nose pliers, place the tip valve into housing so that the pin goes through the valve stem hole. Place new 01468 Spring into housing so small end is towards tip valve.
- Place 1 drop of #567 Loctite<sup>®</sup> (or equivalent) on the threads of the inlet bushing and tighten into housing to 23 №m/200 in. - lbs.

**Note:** This tool is an oil-free Dynabrade Tool. Therefore no air lube should be placed into the tool. Operate the machine for approximately 30 seconds before application to workpiece to determine if machine is working properly and safely.

Loctite® is a registered trademark of the Loctite Corp.

## **Optional Accessories**



## 96169 Motor Tune-Up Kit

 Includes assorted parts to help maintain and repair motor.



### 56284 Vacuum Hook-Face Backing

A Replacement Hook-Face Backing for **53858** Vacuum Square Base Plate.



### 50971 Lock Ring Tool

• Lock Ring Tool has a 3/8" square socket for use with 3/8" drive; breaker bar, ratchet head, or torque wrenches.



### 57092 Repair Collar

 Specially designed collar for use in vise to prevent damage to motor housing during disassembly/assembly.

# Vacuum Options

#### Self-Contained Dust Collection Systems

Easily attach to air powered Dynabug self-generated vac-ready models. Vacuum hoses, air lines and dust collection receptacles may be ordered separately.



#### 50694 Mini Reusable Felt Bag\*

• 11" (280 mm) long x 3" (76 mm) wide. End opens up - no need to remove bag from tool when emptying.



#### 50683 Reusable Felt Bag\* (Hook'n Loop End) • 14-1/2" (368 mm) long x 7-1/2" (191 mm) wide.



## 56304 Reusable Felt Bag\* (Zipper-Lock End)

 14-1/2" (368 mm) long x 7-1/2" (191 mm) wide.

\*Note: New bag design features a one micron filter rating. Bag traps over 99% of vacuum particles one micron or larger.



#### 50617 and 56303 Long Felx-Hose Systems

- Both systems include 6' (1829 mm) long 50682 Flex-Hose.
- Shown with optional 95831 Air line (1/4" [8 mm] dia.).
- 50617: Has 50683 Bag.
- 56303: Has 56304 Bag.



### "Bag-in-Box" System

- 95361 Air Line 5' (1524 mm) long.
- 50682 Flex-Hose 1" diameter x 6" (183 cm) long.
- 95572 Durable Box Receptacle (to house bag and store tool). Sample paper bag included.
- Paper bag reorder: 50962 (400/case) or 50693 (24 per package.)

## Abrasives

#### **Non-Adhesive Abrasive Sheets**

| Coated Aluminum Oxide Sheet Abrasives |             |       |               |       |  |  |  |  |  |
|---------------------------------------|-------------|-------|---------------|-------|--|--|--|--|--|
|                                       |             | Α     | Abrasive Grit |       |  |  |  |  |  |
| Sheet Size                            | Description | 80    | 120           | 180   |  |  |  |  |  |
| 4-1/2" (114mm) x 4-1/4" (108mm)       | PSA w/Liner | 93840 | 93841         | 93842 |  |  |  |  |  |

Unit = 200 Sheets



Visit Our Web Site: www.dynabrade.com

Email: Customer.Service@Dynabrade.com

 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.I.,
 Zone Artisanale
 L-5485 Wormeldange—Haut, Luxembourg
 Telephone: 352 76 84 94 1
 Fax: 352 76 84 95 1

 © DYNABRADE, INC., 2001
 PRINTED IN USA