

# 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

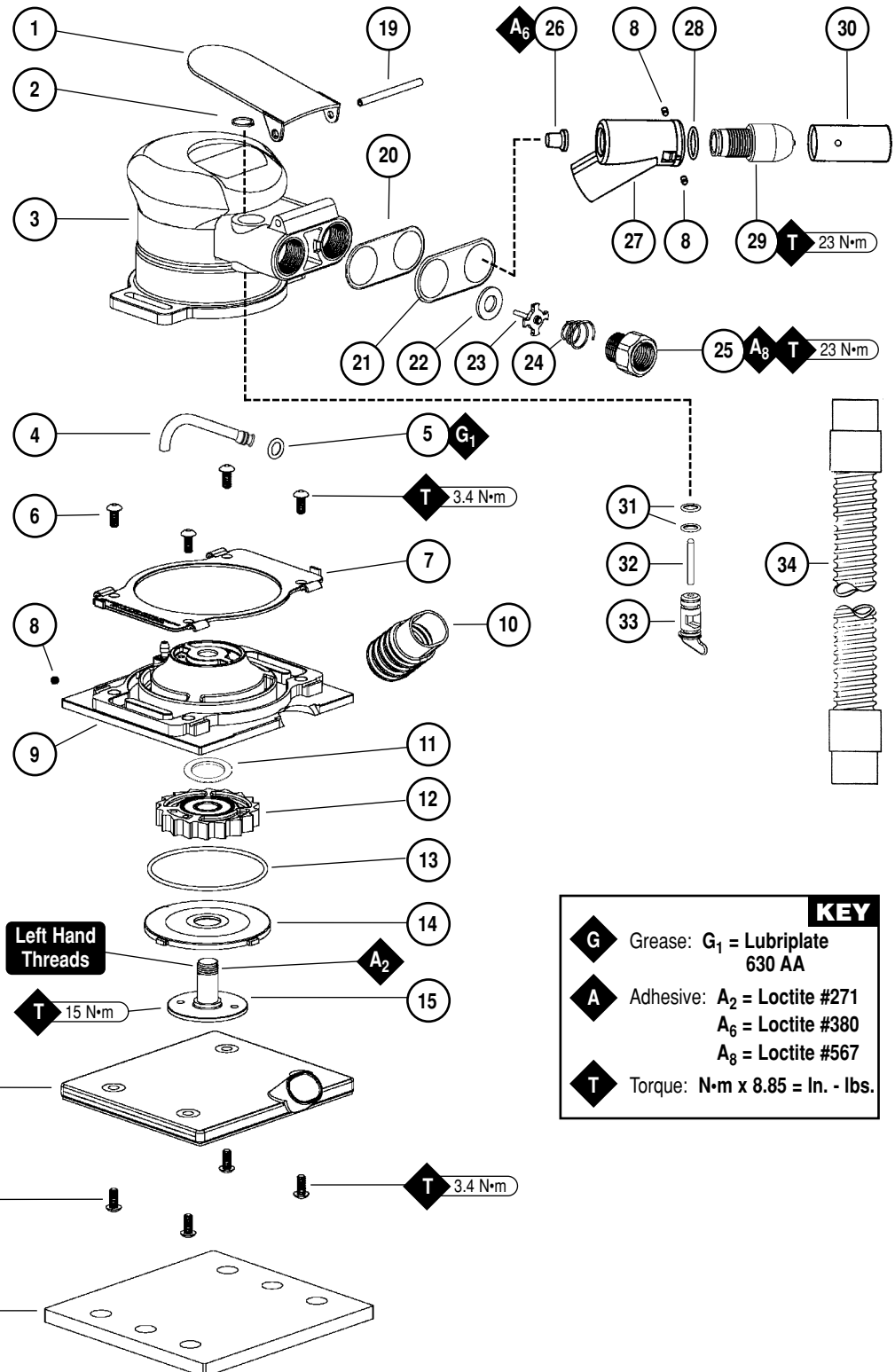
**58075** — 4-1/4" x 4-1/2" Thick, Vac, Hook Pad

### ! 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	53856	Throttle Lever
2	95697	Snap Ring
3	53859	Housing
4	57988	Inlet Hose Assembly
5	12156	O-Ring
6	96492	Button Head Screws (4)
7	57982	Clip Retainer
8	96493	Set Screw (3)
9	57971	Vac Base Plate
10	57942	Vacuum Tube
11	58092	Spacer
12	57981	Turbine Wheel Assembly
13	97121	O-Ring
14	57983	Base Plate Door
15	57979	Motor Shaft
16	53858	Vacuum Plate Assembly
17	95405	Button Head Screw (4)
18	56286	Vinyl Pad — <b>58070</b>
	56285	Hook Pad — <b>58075</b>
19	95979	Pin
20	53863	Gasket
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
31	01025	O-Ring
32	53857	Valve Stem
33	57064	Speed Regulator
34	50682	Vacuum Hose



KEY	
<b>G</b>	Grease: $G_1$ = Lubriplate 630 AA
<b>A</b>	Adhesive: $A_2$ = Loctite #271 $A_6$ = Loctite #380 $A_8$ = Loctite #567
<b>T</b>	Torque: $N\cdot m \times 8.85 = In. \cdot lbs.$

## 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.
3. 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 contaminants. 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.
5. A Motor Tune-Up Kit (P/N **96169**) is available which includes assorted parts to help maintain motor in peak 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, ketones, 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 Number	Pad Size	Motor RPM	Sound Level	Air Flow Rate CFM/SCFM (LPM)	Air Pressure PSIG (Bars)	Orbit Diameter Inch (mm)	Weight Pound (kg)	Length Inch (mm)	Height 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)

(PD02-33)

## **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.
8. Slide **57982** Clip Retainer down onto **57971** Vacuum Base Plate and install (4) **96492** Button Head Screws, torque 3.4 N•m/30 in. - lbs.
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.
6. Place 1 drop of #567 Loctite® (or equivalent) on the threads of the inlet bushing and tighten into housing to 23 N•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.

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## Optional Accessories



### 96169 Motor Tune-Up Kit

- Includes assorted parts to help maintain and repair motor.



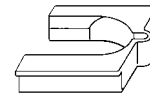
### 56284 Vacuum Hook-Face Backing

- 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.



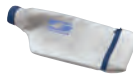
### 50694 Mini Reusable Felt Bag\*

- 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 Flex-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

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

Unit = 200 Sheets

Visit Our Web Site: [www.dynabrade.com](http://www.dynabrade.com)

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