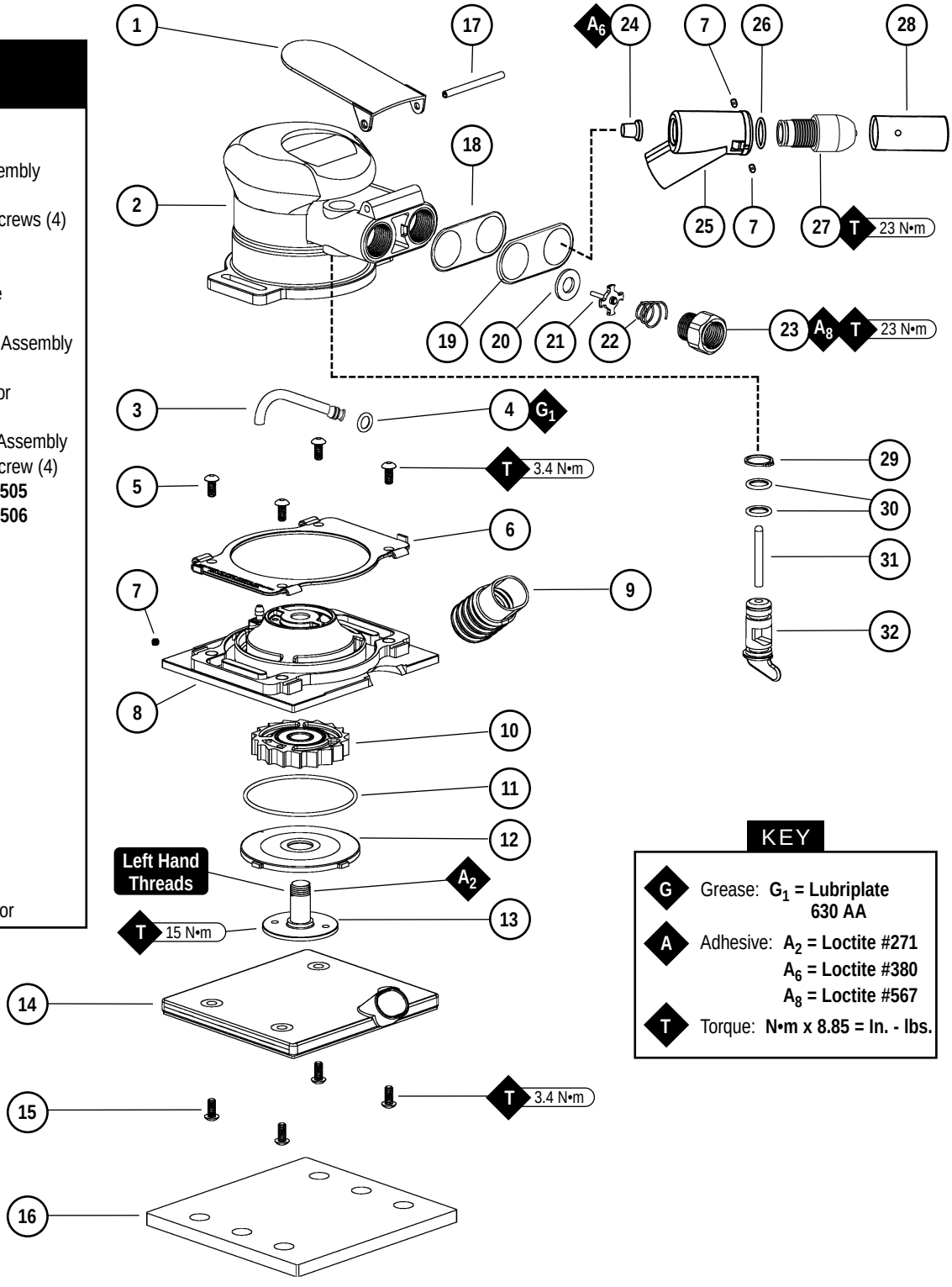
Dynabug "Model T"

Self Generated Vacuum Sander

Air Motor and Machine Parts

Models:
10505 — 4-1/4" x 4-1/2" Thick, Vac, Vinyl Pad
10506 — 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	**53861**	Housing
3	**57988**	Inlet Hose Assembly
4	**12156**	O-Ring
5	**96492**	Button Head Screws (4)
6	**57982**	Clip Retainer
7	**96493**	Set Screw (3)
8	**57971**	Vac Base Plate
9	**57942**	Vacuum Tube
10	**57981**	Turbine Wheel Assembly
11	**97121**	O-Ring
12	**57983**	Base Plate Door
13	**57979**	Motor Shaft
14	**53858**	Vacuum Plate Assembly
15	**95405**	Button Head Screw (4)
16	**56286**	Vinyl Pad – **10505**
	56285	Hook Pad – **10506**
17	**95979**	Pin
18	**53863**	Gasket
19	**53852**	Plate Seal
20	**01464**	Seal
21	**01472**	Tip Valve
22	**01468**	Spring
23	**01494**	Inlet Bushing
24	**53864**	Cap Plug
25	**53851**	Vac Adapter
26	**95288**	O-Ring
27	**53854**	Vac Nozzle
28	**53853**	Vac Tube
29	**95697**	Snap Ring
30	**01025**	O-Ring
31	**53857**	Valve Stem
32	**57064**	Speed Regulator

KEY

- **G** Grease: **G_1 = Lubriplate 630 AA**
- **A** Adhesive: **A_2 = Loctite #271**, **A_6 = Loctite #380**, **A_8 = Loctite #567**
- **T** Torque: **N•m x 8.85 = In. - 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.

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. Use only genuine Dynabrade replacement parts. To reorder replacement parts, specify the **Model #**, **Serial #**, and **RPM** of your machine.
4. 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.
5. 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.

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	20,000	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

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 **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. Replace **57981** Turbine Wheel Assembly on motor shaft using the same orientation as when it was disassembled.
2. Slide **57983** Base Plate Door onto **57979** Motor Shaft.
3. Apply a slight amount of #271 Loctite® (or equivalent) to **57979** Motor Shaft threads, torque 15 N•m/133 in. - lbs.
4. Install subassembly into base plate assembly.
5. 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).
6. Install housing assembly onto base plate assembly.
7. 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.
8. Re-attach **53858** Vacuum Plate Assembly to **57971** Vacuum Base Plate. Secure with (4) **96492** Button Head Screws.
9. 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.

Loctite® is a registered trademark of the Loctite Corp.

Optional Accessories

Coated Abrasive Sheets & Discs For Dynabug "Model T" Finishing Sanders

5" (127mm) Diameter PSA & Hook-Face Discs

Aluminum Oxide Discs / Reattachable

Abrasive Grit			
36	**40**	**60**	125 Discs = Unit.
93311	93312	93313	

Premium Aluminum Oxide Discs / PSA Mounted

Abrasive Grit					
80	**100**	**120**	**150**	**180**	**220**
93101	93102	93103	93104	93105	93106

120 Grit & Coarser – 125/Roll; 10 Rolls = Unit. 150 Grit & Finer – 175/Roll; 6 Rolls = Unit. Complete rolls only. **Note:** Other grits available upon request.

Silicon Carbide Discs / PSA Mounted

Abrasive Grit					
80	**100**	**120**	**150**	**180**	**220**
93051	93052	93053	93054	93055	93056

120 Grit & Coarser – 125/Roll; 8 Rolls = Unit. 150 Grit & Finer – 250/Roll; 4 Rolls = Unit. Complete rolls only. **Note:** Other grits available upon request.

Reattachable & Non-Adhesive Abrasive Sheets

Coated Aluminum Oxide Sheet Abrasives

		Abrasive Grit			
Sheet Size	**Description**	**80**	**120**	**180**	**320**
4-1/2" (114mm) x 4-1/4" (108mm)	PSA w/Liner	93860	93861	93862	93863
4-1/2" (114mm) x 4-1/4" (108mm)	Hook-Face	93870	93871	93872	93873
Unit = 100 Sheets					



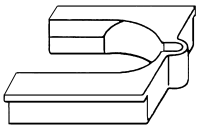
96169 Motor Tune-Up Kit

- Includes assorted parts to help maintain and repair motor.



98846 Hook-Face Backing

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



57092 Repair Collar

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



50971 Lock Ring Tool

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

DYNABRADE®

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.l., 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