

# DynaPen

## Reciprocating Tool

**SAFETY, OPERATION AND MAINTENANCE - SAVE THIS DOCUMENT, EDUCATE ALL PERSONNEL**

Model	Collet	Description
10832	3 mm	DynaPen
10843	1/8"	DynaPen
10844	1/8"	Filer Kit
10846	1/8"	Scribe Kit
10847	3 mm	Scribe Kit
10848	1/8"	Chisel Kit
10849	3 mm	Chisel Kit
10850	1/8"	DynaPen Kit
10851	3 mm	DynaPen Kit



Model 10843  
Shown

FIND THE MOST CURRENT OFFERING OF SUPPORT DOCUMENTS AND ACCESSORIES AT [WWW.DYNABRADE.COM](http://WWW.DYNABRADE.COM)

### ! WARNING

Read and understand this tool manual before operating your air tool. Follow all safety rules for the protection of operating personnel as well as adjacent areas. Always operate, inspect and maintain this tool in accordance with the American National Standards Institute (ANSI) Safety Code for Portable Air Tools – B186.1. For additional safety information, refer to Safety Requirements for the Use, Care and Protection of Abrasive Wheels – ANSI B7.1, Code of Federal Regulation – CFR 29 Part 1910, European Committee for Standards (EN) Hand Held Non-Electric Power Tools – Safety Requirements and applicable State and Local Regulations.

	Read and understand tool manual before work starts to reduce risk of injury to operator, visitors, and tool.	Practice safety requirements. Work alert, have proper attire, and do not operate tools under the influence of alcohol or drugs.	
	Eye protection must be worn at all times, eye protection to conform to ANSI Z87.1.	Ear protection to be worn when exposure to sound, exceeds the limits of applicable Federal, State or local statutes, ordinances and/or regulations.	
	Respiratory protection to be used when exposed to contaminants that exceed the applicable threshold limit values required by law.	Air line hazard, pressurized supply lines and flexible hoses can cause serious injury. Do not use damaged, frayed or deteriorated air hoses and fittings.	

Some dust created by sanding, grinding, drilling, and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement and other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

### SAFETY INSTRUCTIONS



**CAREFULLY READ AND UNDERSTAND PNEUMATIC TOOL SAFETY GUIDELINES (P/N 00001676) BEFORE HANDLING OR USING TOOL.**

Carefully Read all instructions before operating or servicing any Dynabrade® Abrasive Power Tool. Products offered by Dynabrade are not to be modified, converted or otherwise altered from the original design.

**Tool Intent:** DynaPen are ideal for engraving, light deburring, deflashing, cleaning and finishing.

**DO NOT USE tool for anything other than its intended applications.**

**Training:** Proper care, maintenance, and storage of your air tool will maximize tools performance and reduce chance for accident.

**Employer's Responsibility:** Provide operators with safety instructions and training for safe use of tools and accessories.

**REPORT TO YOUR SUPERVISOR ANY CONDITION OF THE TOOL, ACCESSORIES, OR OPERATION YOU CONSIDER UNSAFE.**

# OPERATING & MAINTENANCE INSTRUCTIONS

**Important:** To keep tool safe, a Preventative Maintenance Program is recommended. The program should include inspection of the tool and all related accessories and consumables, including air lines, pressure regulators, filters, oilers, etc. refer to ANSI B186.1 for additional maintenance information. If accessory or tool breakage occurs, investigate failure to determine the cause and correct before issuing tool for work. Use the following schedule as a starting point in developing a Preventative Maintenance Program. If tool does not operate properly (RPM, Vibration, Start/Stop) after these scheduled checks or at any time, the tool must be repaired and corrected before returning tool to use.

## INSTALLATION:

- To ensure long life and dependable service, use a Closed Loop Air System and Filter-Regulator as diagramed below.
- Each tool should have its own dedicated hose connected to an air supply manifold. Quick disconnects should be installed at the manifold in an effort to reduce contamination into the tool.
- It is strongly recommended that all Dynabrade Reciprocating air tools be used with a Filter-Regulator to minimize the possibility of misuse due to unclean or wet air. Dynabrade recommends the following: **10677 Air Line Filter-Regulator** — Provides accurate air pressure regulation, two-stage filtration of water contaminants.
- Dynabrade recommends one drop of air lube at the end of each eight hour shift, manually at the inlet of the tool. Dynabrade Air Lube (P/N **95842**: 1pt/473ml) is recommended.

## MAINTENANCE:

Daily (every 8 Hours):

- Inspect tool and accessories for damage or broken parts. Replace items as necessary to ensure proper operation and safety.
- Lubricate motor as recommended. Use Dynabrade Air Lube (P/N **95842**: 1pt/473ml) 10W/NR.
- Check air line pressure with a gage. (MAX. 90 PSIG or 6.2 Bar operating pressure at the air inlet of the tool.)
- Check tool for proper operation: If operating improperly or demonstrates unusual vibration, the tool must be serviced and problem corrected before further use.

## REPAIR:

- Use only genuine Dynabrade replacement parts to ensure quality. To order replacement parts, specify Model#, Serial#.
- 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.
- DO NOT clean or maintain tools with chemicals that have a low flash point (example: WD-40®).
- A Motor Tune-Up Kit is available which includes high wear and medium wear motor parts.
- Air tool markings must be kept legible at all times, if not, reorder housing and replace. User is responsible for maintaining specification information.
- After maintenance is performed on tool, add a few drops of Dynabrade Air Lube (P/N **95842**) to the tool inlet and start the tool a few times to lubricate air motor. Verify RPM (per 20 hr maintenance schedule), vibration and operation.

## HANDLING & STORAGE:

- Use of tool rests, hangers and/or balancers is recommended.
- Protect tool inlet from debris (see Notice).
- DO NOT carry tool by air hose or near the tool throttle lever.
- Store accessories in protective racks or compartments to prevent damage.
- Follow the handling instructions outlined in the operating instructions when carrying the tool and when changing accessories.
- Protect accessories from exposure to water, solvents, high humidity, freezing temperature and extreme temperature changes.

## END OF USE/DISPOSAL:

When tool has reached its end of useful service, disassemble tool into its primary components (i.e. steel, aluminum and plastic part) and recycle or discard per local, state and/or federal regulations as to not harm the environment.

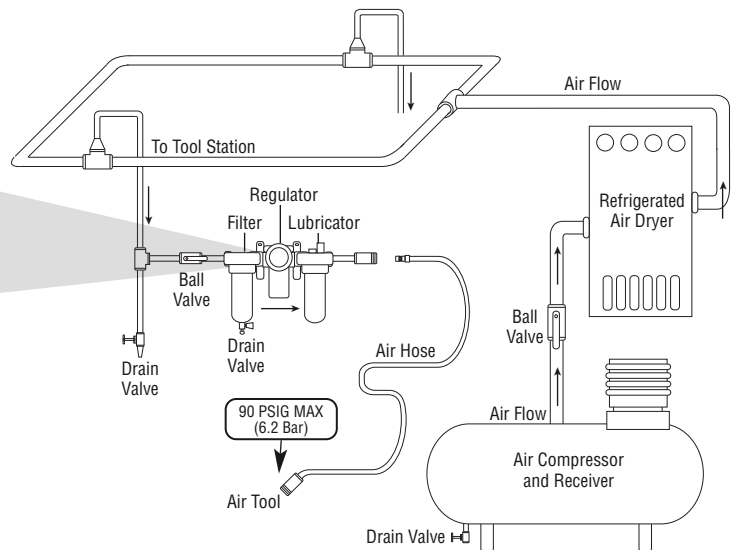
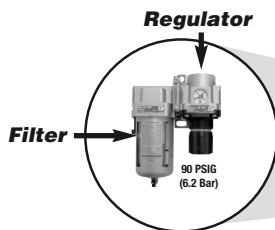
## NOTICE:

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.

## AIR SYSTEM

*Closed loop pipe system, Sloped in direction of air flow*

**LUBRICATOR SETTING**  
**1 DROP/MIN.**  
**20 SCFM**



- Dynabrade Air Power Tools are designed to operate at 90 PSIG (6.2 Bar) maximum air pressure at the tool inlet, when the tool is running. Use recommended regulator to control air pressure.
- Ideally the air supply should be free from moisture. To facilitate removing moisture from air supply, the installation of a refrigerated air dryer after the compressor and the use of drain valves at each tool station is recommended.

**MODELS:**

**10832, 10843, 10844**  
**10846, 10847, 10848**  
**10849, 10850, 10851**

# DynaPen - Reciprocating Tool

## Complete Assembly

**KEY**

**O** Oil: O<sub>1</sub> = Air Lube

**A** Adhesive: A<sub>1</sub> = Loctite #242  
 A<sub>8</sub> = Loctite #567

**T** Torque: N•m x 8.85 = In. - lbs.

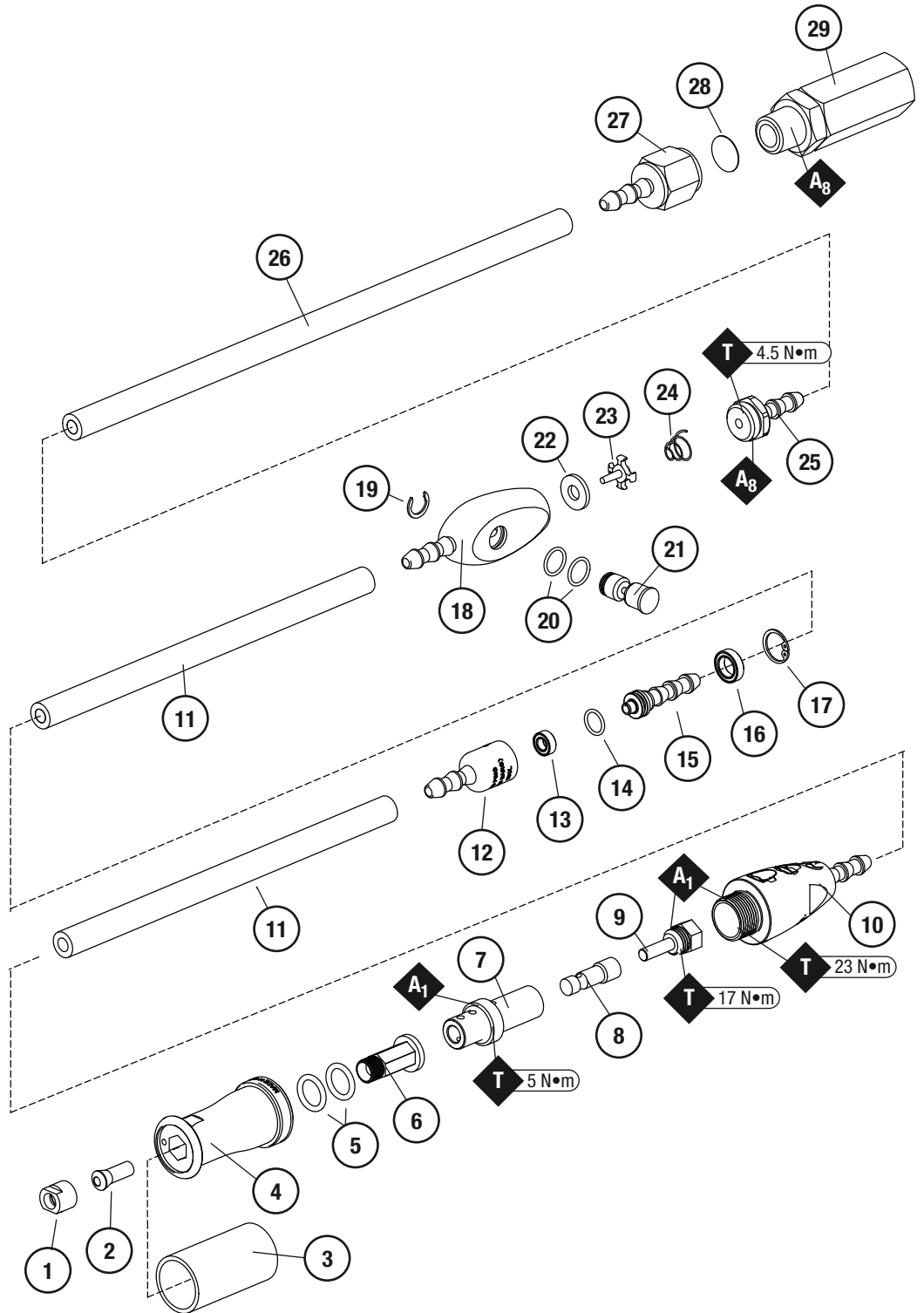
Always follow adhesive manufacturers cleaning and priming recommendations.

**INDEX KEY**

No.	Part #	Description
1	51657	Collet Cap
2	51673	3mm Collet Insert
	51659	1/8" Collet Insert
3	10841	Tactile Grip
4	10839	Front Housing
5	01025	O-Ring (2)
6	10836	Arbor
7	10833	Cylinder
8	10834	Piston
9	10835	Cylinder Plug
10	10840	Rear Housing (1/8")
	10845	Rear Housing (3 mm)
11	10971	Air Line (2)
12	10969	Housing
13	10967	Bearing
14	10972	O-Ring
15	10966	Swivel
16	10968	Bearing
17	95998	Int. Retaining Ring
18	51282	Valve
19	51669	Retaining Ring
20	95730	O-Ring (2)
21	51665	Valve
22	51664	Seal
23	51663	Valve
24	51676	Spring
25	51271	Fitting
26	10973	Air Line
27	51269	Fitting
28	56022	Screen
29	10842	Air Filter



95731 8mm Wrench



## OPERATING & MAINTENANCE INSTRUCTIONS - CONTINUED

- **DO NOT** use quick disconnect coupling at tool, tool is supplied with a whip hose. Connect into air supply after whip hose.
- Always use/replace collet after accessory changes. To avoid risk of injury due to reciprocating collet always operate tool with collet in place.
- Before turning tool on, make sure accessory is against the work surface.
- If tool fails to start after air valve is turned on lightly tap tool's reciprocating end on a solid surface.
- Tools and accessories may damage if they are used to pry at the work surface.
- **DO NOT** use any accessory (chisel, etc.) as a hand strike tool.

## LIFETIME WARRANTY

To validate Dynabrade Lifetime Warranty, you must register each tool at: [www.dynabrade.com](http://www.dynabrade.com). Registration of each tool at website is required. Dynabrade will not honor Lifetime Warranty on unregistered tools. Please view the entire Lifetime Warranty Policy at : [www.dynabrade.com](http://www.dynabrade.com).

## MACHINE SPECIFICATIONS

Air Inlet Thread 1/4" NPT • Hose Size 1/4" (6 mm) • Air Pressure 90 PSIG (6.2 Bar)  
Sound Level is measured according to ISO regulation ISO-15744

Model Number	SPM	Sound Level	Stroke Length	Air Consumption	Collet Insert	Weight	Length	Height
10832	14,000	82	.007"	1 SCFM (28 LPM)	3 mm	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10843	14,000	82	.007"	1 SCFM (28 LPM)	1/8"	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10844	14,000	82	.007"	1 SCFM (28 LPM)	1/8"	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10846	14,000	82	.007"	1 SCFM (28 LPM)	1/8"	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10847	14,000	82	.007"	1 SCFM (28 LPM)	3 mm	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10848	14,000	82	.007"	1 SCFM (28 LPM)	1/8"	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10849	14,000	82	.007"	1 SCFM (28 LPM)	3 mm	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10850	14,000	82	.007"	1 SCFM (28 LPM)	1/8"	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)
10851	14,000	82	.007"	1 SCFM (28 LPM)	3 mm	.6 lb (.26 kg)	3-1/8" (80 mm)	15/16" (23)

## OPTIONAL ACCESSORIES



### Collet Inserts

- Add versatility to your DynaPen, choose the right insert for your accessory.

P/N 51659 - 1/8"

P/N 51674 - 3/32"

P/N 51780 - 1/16"

P/N 51673 - 3 mm

### Scribe Points

- Ideal for mark making on various materials.

P/N 90990 - 1/8"

P/N 90991 - 3 mm

### Chisels

- Used for scrapping and chipping excess materials.

#### Narrow

P/N 90992 - 1/8"

P/N 90993 - 3 mm

#### Wide

P/N 90994 - 1/8"

P/N 90995 - 3 mm

### Files (1/8" Shaft Diameter)

- For precision finishing on delicate parts and substrates. Used for deburring and detail work.



P/N 90900 - Equaling (Med.) Straight

P/N 90901 - Equaling (Fine) Curved



P/N 90910 - Square (Med.) Straight

P/N 90911 - Square (Fine) Curved



P/N 90920 - Three Square (Med.) Straight

P/N 90921 - Three Square (Fine) Curved



P/N 90930 - Half Round (Med.) Straight

P/N 90931 - Half Round (Fine) Curved



P/N 90940 - Crochet (Med.) Straight

P/N 90941 - Crochet (Fine) Curved



P/N 90950 - Round (Med.) Straight

P/N 90951 - Round (Fine) Curved

## REFERENCE CONTACT INFORMATION

1. **American National Standards Institute – ANSI**  
1899 L Street, NW  
11th Floor  
Washington, DC 20036  
Tel: 1 (212) 642-4900

2. **Government Printing Office – GPO**  
Superintendent of Documents  
Attn. New Orders  
P.O. Box 371954  
Pittsburgh, PA 15250-7954  
Tel: 1 (202) 512-1803

3. **Power Tool Institute, Inc.**  
P.O. Box 818  
Yachata, Oregon 97498-0818  
Tel: 1 (503) 547-3185

4. **European Committee for Standardization**  
Rue de Stassart 36  
B - 1050 Brussels, Belgium

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