

1 hp Vacuum Cut-Off Tool

6" Extension, for 3" Dia. Diamond Wheels

Air Tool Manual – Safety, Operation and Maintenance

SAVE THIS DOCUMENT, EDUCATE ALL PERSONNEL

Model:

52537 – 18,000 RPM

– 1" Vacuum Port

**– Accepts Diamond Wheels
with 3/8" Center Hole**



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⚠ 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.

SAFETY LEGEND

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

⚠ WARNING

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 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 without expressed written consent from Dynabrade, Inc.

Tool Intent: 1hp Extension Vacuum Cut-Off Tool is ideal for trimming fiberglass parts up to 9/16".

Do Not use tool for anything other than its intended applications.

This power tool is not intended for use in potentially explosive atmospheres and is not insulated against contact with electrical power.

Training: Proper care, maintenance, and storage of your air tools will maximize their performance.

- Employer's Responsibility – Provide 1hp Extension Vacuum Cut-Off Tool operators with safety instructions and training for safe use of tools and accessories.

Accessory Selection:

- USE ONLY Diamond Impregnated Steel Wheels with 3/8" center hole.
- Abrasive/accessory RPM (speed) rating MUST be approved for AT LEAST the tool RPM rating.
- Before mounting an accessory, visually inspect for defects. Do not use defective accessories.
- USE ONLY recommended accessories. Reference Dynabrade catalog and this tool manual.

SAFETY INSTRUCTIONS CONT.

- Follow tool specifications before choosing size and type of accessory.
- Only use recommended fittings and air line sizes. Air supply hoses and air hose accessories must have a minimum working pressure of 150 PSIG (10 Bars, g) or 150 percent of the maximum pressure produced in the system, whichever is higher. (See tool Machine Specifications table.)

OPERATING INSTRUCTIONS

Warning: Always wear personal protective equipment. Operator of tool is responsible for following: accepted eye, face, respiratory, hearing and body protection. Always use wheel shroud. Make sure it is positioned to best protect the operator and make sure it is securely fastened. Wheel shrouds that are worn, damaged or have been subject to a wheel breaking must be replaced.

Caution: Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibration.

- Keep hand and clothing away from working end of the air tool.
- Keep slot width constant or increased.
- DO NOT side grind with cut-off wheels.
- If wheels get jammed in cut slot, shut off the cut-off tool, ease wheel from slot. Check that the wheel is still correctly secured and not damaged before continuing the operation.

Operation: Be sure that any loose clothing, hair and all jewelry is properly restrained.

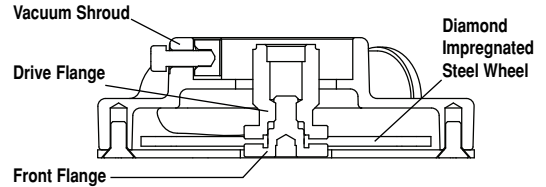
- Secure inlet bushing on air tool with a wrench before attempting to install the air fitting to avoid damaging housing assembly.
- BEFORE MOUNTING A WHEEL, after all tool repairs and whenever a cut-off tool is issued for use, check tool RPM (speed) with tachometer with air pressure set at 90 PSIG while the tool is running. If tool is operating at a higher speed than the RPM marked on the tool housing, or operating improperly, the tool must be serviced and corrected before use.

Caution: Tool RPM must never exceed abrasive/accessory RPM rating. Check accessory manufacturer for details on maximum operating speed or special mounting instructions.

Diamond Impregnated Steel Wheel Mounting

Side View

- With power source disconnected from the air tool.
- Clean flange mounting surfaces. Inspect flanges for nicks, cuts and sharp edges. (Replace damaged flanges)
- Use only Dynabrade flanges. DO NOT substitute.
- Inspect diamond wheel for any damage, warpage or excessive wear before mounting. (Do not use defective diamond wheels)
- Check for flange flatness and runout by rotating flange.
- Install diamond cut-off wheel through skid plate slot and center onto drive flange.
- Install front through hole in cover and wheel center hole, thread into drive flange. Secure front flange firmly against the wheel using hex key wrench.
- Check diamond cut-off wheel to make sure it is properly tightened down.
- **Caution:** Over tightening the flanges can cause damage to the wheel and/or flanges.
- Rotate wheel at least one full rotation to insure clearance to skid plate and cover.



- Connect air tool to power source. Be careful NOT to depress throttle lever in the process. **Do not expose air tool to inlet pressure above 90 PSIG or (6.2 Bars).**

Caution: After installing the accessory, make sure that no one is in the unguarded plane of the wheel before starting the cut-off tool. IN A PROTECTED AREA, test run the wheel at a reduced speed to check for good balance. Gradually increase tool speed. DO NOT USE if tool vibration is excessive. Correct cause, and retest to insure safe operation. Test wheel at its free speed (RPM) in a protected area for at least one minute before applying the wheel to the work.

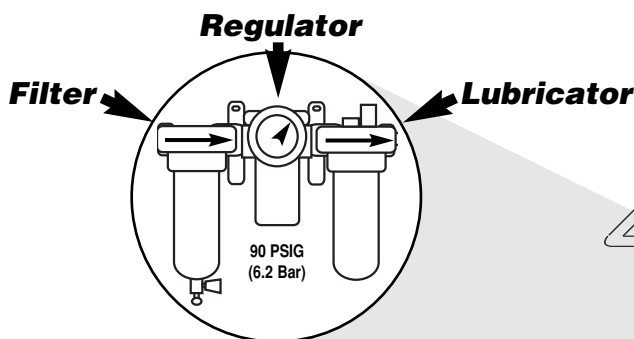
- Make sure that work area is uncluttered, and visitors are at a safe range from the tools and debris.
- Air tools are not intended for use in explosive atmospheres and are not insulated for contact with electric power sources.
- Use a vise or clamping device to hold work piece firmly in place.
- Do not apply excessive force on tool or apply "rough" treatment to it.
- Always work with a firm footing, posture and proper lighting.
- Ensure that sparks and debris resulting from work does not create a hazard.
- This tool has rear exhaust. Exhaust may contain lubricants, vane material, bearing grease, and other materials flushed thru the tool.

Warning: Cutting certain materials can create explosive dust. It is the employers responsibility to notify the user of acceptable dust levels.

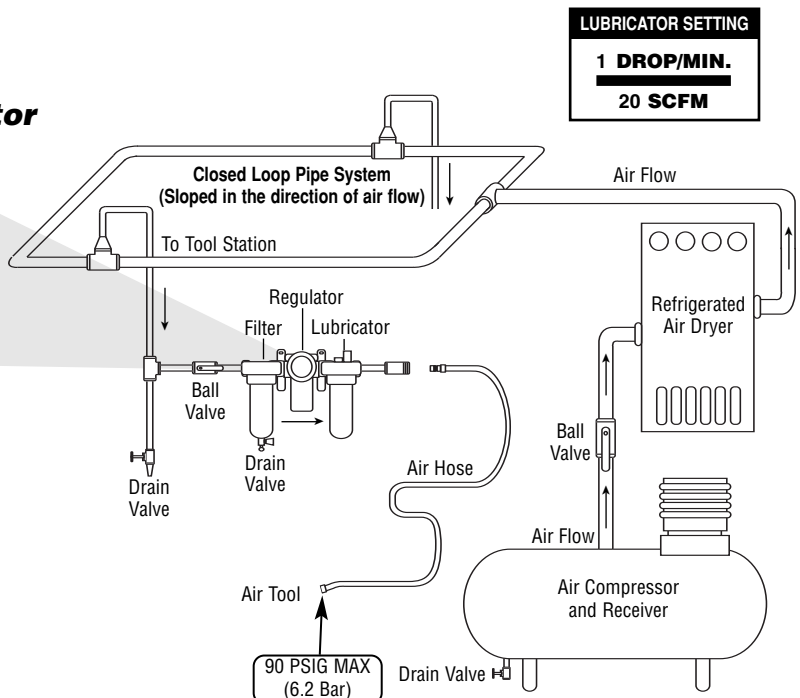
- Cutting can cause sparks which can cause fires or explosions. It is the users responsibility to make sure the work area is free of flammable materials.

Report to your supervisor any condition of the tool, accessories, or operation you consider unsafe.

Air System



- Dynabrade Air Power Tools are designed to operate at 90 PSIG (6.2 Bar/620 kPa) 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 of 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.



Maintenance Instructions

Important: A Preventative Maintenance Program is recommended whenever portable power tools are used. The program should include inspection of air supply lines, air line pressure, proper lubrication and repair of tools. Refer to ANSI B186.1 for additional maintenance information.

- Use only genuine Dynabrade replacement parts to insure quality. To order replacement parts, specify **Model#**, **Serial#** and **RPM** of your air tool.
- All Dynabrade Rotary Vane air tools must be used with a Filter-Regulator-Lubricator to maintain all warranties. Dynabrade recommends the following: **11411** Air Filter-Regulator-Lubricator (FRL) – Provides accurate air pressure regulation and two stage filtration of water contaminants. Operates 55 SCFM/1,558 LPM @ 100 PSIG with 1/2" NPT female ports.
- Dynabrade recommends one drop of air lube per minute for each 20 SCFM (example: if the tool specification states 40 SCFM, set the drip rate on the filter-lubricator to 2 drops per minute). Dynabrade Air Lube (P/N **95842**: 1 pt 473 ml) is recommended.

Routine Preventative Maintenance:

- Check free speed of tool using a tachometer. This governor controlled tool should be speed checked every 20 hours of use or weekly, whichever occurs more frequently.
- **DO NOT** disassemble the governor for any reason. Reorder correct speed – governor assembly (See Assembly Breakdown) and recheck free speed of tool with a tachometer.
- Inspect flanges regularly for nicks, cuts, sharp edges, flatness and runout. Replace damaged or worn flanges with genuine Dynabrade flanges.
- Inspect vacuum shroud for wear or damage. Vacuum shrouds that are bent and severely worn or subject to a wheel breakage must be replaced.
- Inspect diamond impregnated steel wheel before mounting. Do not mount wheels that are damaged or warped.
- Check diamond impregnated steel wheel - speed rating. Rating on wheel must be greater than the tool speed marked on the housing.
- If diamond impregnated steel wheel damage occurs, investigate to determine the cause and correct before issuing tool for work.

- 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 (P/N **96532**) is available which includes high wear and medium wear motor parts.
- Air tool labels must be kept legible at all times, if not, reorder label(s) and replace. User is responsible for maintaining specification information i.e.: Model #, S/N, and RPM. (See Assembly Breakdown)
- Blow air supply hose out prior to initial use.
- Visually inspect air hoses and fittings for frays, visible damage and signs of deterioration. Replace damaged or worn components.
- Refer to Dynabrade's Warning/Safety Operating Instructions Tag (Reorder No. **95903**) for safety information.

After maintenance is performed on tool, add a few drops of Dynabrade Air Lube (P/N **95842**) to the air line and start the tool a few times to lubricate air motor. Check for tool vibration before mounting abrasive wheel accessory.

Handling and Storage:

- Use of tool rests, hangers and/or balancers is recommended.
- Protect tool inlet from debris (see Notice below).
- **DO NOT** carry tool by air hose or near the tool throttle lever.
- Protect diamond impregnated steel wheel from exposure to water, solvents, freezing temperature and extreme temperature changes.
 - See Manufacturer's Instructions –
- **DO NOT USE** cut-off wheels that have been dropped or show signs of warpage, cracks, nicks or other defects.
- Store accessories in protective racks or compartments to prevent damage.

Machine Specifications

Model Number	Motor HP (W)	Tool RPM	Sound Level	Air Flow Rate SCFM (LPM)	Air Pressure PSIG (Bars)	Wheel Diameter	Weight Pound (kg)	Length Inch (mm)	Height Inch (mm)
52537	1 (746)	18,000	82 dB(A)	41 (1161)	90 (6.2)	3"	3.75 (1.7)	14-5/8 (370)	4-1/2 (114)

Additional Specifications: Air Inlet Thread 3/8" NPT • Hose I.D. Size 3/8" (10mm) • Air Flow Rate Based At Max HP. • Air Pressure 90 PSIG Max
Sound Level is the pressure measurement according to the method outlined in ISO regulation ISO-15744

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:
52537

1hp Extension Vacuum Cut-Off Tool

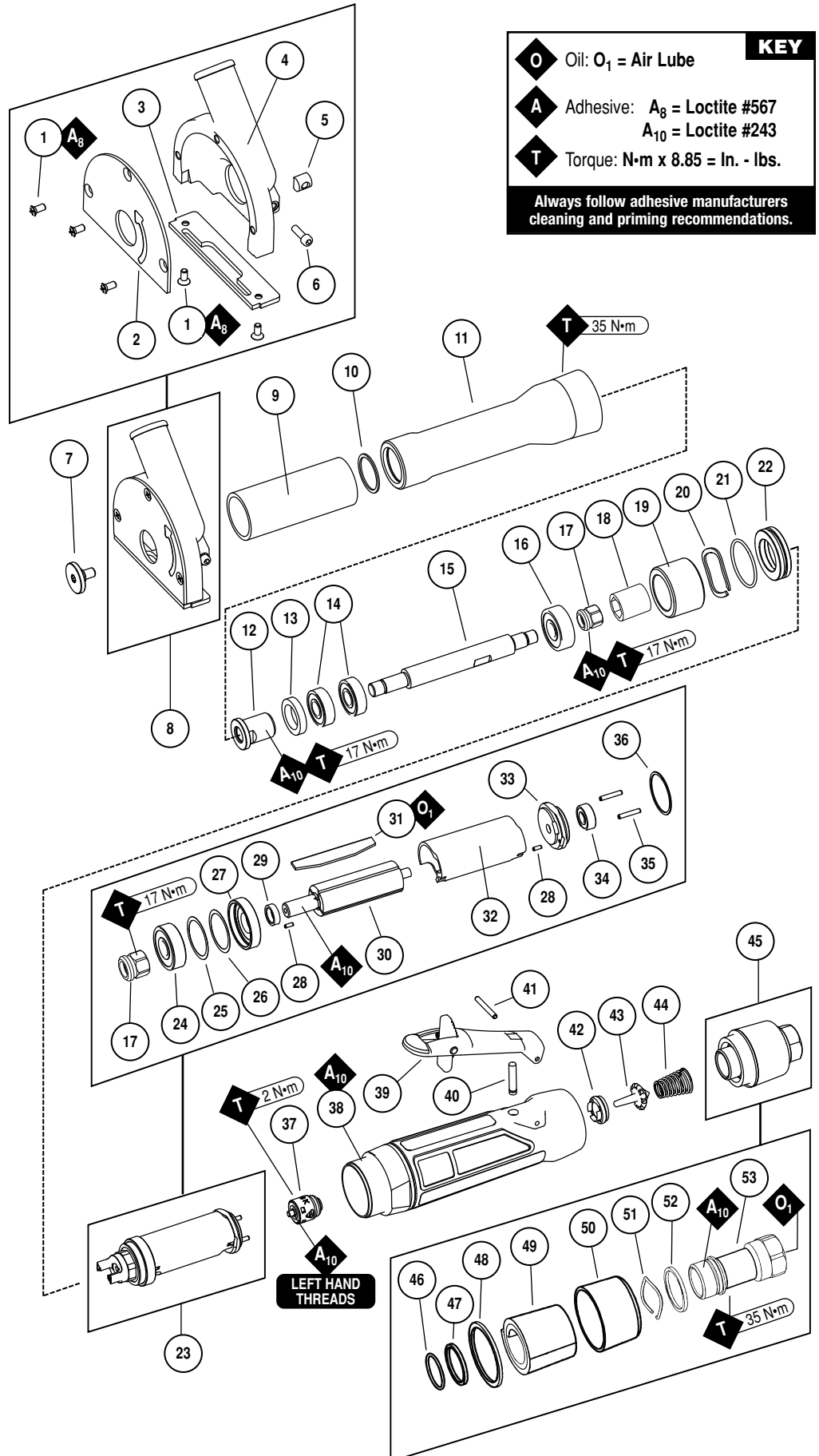
Complete Assembly

Index Key

No.	Part #	Description
1	96272	Screw (5)
2	52647	Vacuum Shroud Cover
3	52648	Skid Plate - 1/8" Thick
	52649	Skid Plate - 1/4" Thick (Optional)
4	53598	Vacuum Shroud
5	40029	Cam Lock
6	95168	Screw
7	50054	Front Flange
8	53597	Vacuum Shroud Assembly
9	53690	Grip
10	96524	Retainer Ring
11	51952	Extension Handle
12	50048	Drive Flange
13	51956	Felt Seal
14	01007	Bearing (2)
15	51955	Spindle
16	54520	Bearing
17	51969	Coupler Nut (2)
18	50902	Coupler
19	51982	Spacer
20	96498	Wave Spring
21	95438	O-Ring
22	53620	Adapter
23	01902	Motor Assembly
24	54520	Bearing
25	97119	Shim
26	97120	Shim
27	51922	Front Bearing Plate
28	96441	Pin (2)
29	51927	Spacer
30	51921	Rotor
31	51926	Blade (4/Pkg.)
32	51925	Cylinder
33	51923	Rear Bearing Plate
34	02057	Bearing
35	96445	Pin (2)
36	51924	Gasket
37	51932	Governor Assembly
38	All Housings Include:	
	Warning & Specification Labels	
	53791 Housing - Model 52537	
39	51949	Safety Lever Assembly
40	51946	Valve Stem Assembly (Incl. 96443 O-Ring)
41	96444	Pin
42	51945	Valve Seat
43	51944	Tip Valve
44	51943	Spring
45	53655	Muffler Assembly
46	96442	O-Ring
47	51940	Spacer
48	53682	Gasket
49	94528	Felt Silencer
50	53686	Muffler Cap
51	94924	Wave Spring
52	53683	Spacer
53	53681	Inlet Bushing (Incl. 2 - 51938 Screens)

Label Key

Part #	Description
00001535	Warning Label
00001181	Specification Label



Disassembly Instructions - 1hp Extension Vacuum Cut-Off Tool

Important: Manufacturing Warranty is void if tool is disassembled before warranty expires. Please refer to complete part list for part identification.
Disconnect tool from power source before tool repair.

Extension Disassembly:

1. Remove **50054** Front Flange and diamond impregnated steel wheel.
2. Remove **53597** Vacuum Shroud Assembly by loosening **95168** Screw.
3. Secure housing using **51989** Repair Collar (*see back cover for Optional Accessories*).
4. Apply wrench at wrench flats on **51952** Extension Handle and remove **51952** Extension Handle from housing.
5. Slide **51982** Bearing Spacer and Spindle Assembly through rear of **51952** Extension Handle.
6. Secure **51955** Spindle at wrench flats, and remove **50048** Drive Flange and **51935** Coupler.
7. Secure **01007** Bearing and press **51955** Spindle through both **01007** Bearings.
8. Secure **54520** Bearing and press **51955** Spindle through **54520** Bearing.

Extension Disassembly Complete.

Motor Disassembly:

1. Pull motor assembly from housing, and remove **53620** Motor Adapter with **95438** O-Ring.
2. Remove governor assembly by using a slotted screwdriver. (**Left Hand Threads**)
3. Using **96209** Repair Clamp (*ordered separately*) secure **51925** Cylinder and place a 1/16" (1.5mm) drift pin to the base of the terminal thread and press the **51921** Rotor from the **02057** Rear Bearing.
4. Slide **02057** Rear Bearing from **51923** Rear Bearing Plate.
5. Remove **51925** Cylinder and **51926** Blades.
6. Secure **51921** Rotor in padded vise and remove **51935** Extension Coupler (twist counterclockwise).
7. Slide **51922** Front Bearing Plate and **51927** Rotor Spacer from **51921** Rotor.
8. Slide **54520** Bearing and shims from **51922** Front Bearing Plate.

Motor Disassembly Complete.

Housing Disassembly:

1. Secure housing using **51989** Repair Collar (*see back cover for Optional Accessories*).
2. Remove inlet bushing with muffler assembly (twist counterclockwise).
3. Remove **53682** Gasket, **51943** Spring, **96442** O-Ring, **51940** Spacer, **94528** Felt Silencer, **53686** Muffler Cap, **94924** Wave Spring and **53683** Spacer from **53681** Inlet Bushing.
4. Remove **51944** Tip Valve and **51945** Valve Seat.
5. Remove housing and **51989** Repair Collar and lay collar on bench with flange facing down so it is supporting throttle lever. Place a 3/32" (2.4mm) drift pin on **96444** Pin and tap pin thru housing.
6. Remove **51946** Valve Stem Assembly.
7. Remove **96443** O-Ring from **51946** Valve Stem Assembly.

Housing Disassembly Complete.

Assembly Instructions - 1hp Extension Vacuum Cut-Off Tool

Motor Assembly:

Important: Be sure parts are clean and in good repair before assembling. Follow oil, lubrication, adhesive and torque specifications.

1. Place **51921** Rotor into a padded vise with male thread facing upwards.
2. Slip **51927** Rotor Spacer over rotor shaft and down against rotor body face.
3. Press **96441** Coiled Pin into **51922** Front Bearing Plate. Make certain, coiled pin does not protrude beyond internal bearing surface.
4. Place a .002" (.05mm) shim into the base of **51922** Front Bearing Plate as an initial spacing and slide **54520** Bearing to the front plate base.
Note: **51951** Shim Pack contains .001" (.03mm) and .002" (.05mm) shims.
5. Slip bearing/bearing plate assembly onto rotor. Add one drop of Loctite® #243 (or equiv.) to **51921** Rotor 3/8"-24 male thread and screw **51935** Coupler into place. Torque to 17 N•m (150 lb.-in.).
6. Check clearance between rotor and front bearing plate by using a .001" feeler gauge. Clearance should be between .001" (.03mm) – .0015" (.04mm). Adjust clearance by repeating steps 4 and 5 with different shims if necessary.
7. Once proper rotor gap clearance is achieved, install well lubricated **51926** Blades (4) into rotor slots. Dynabrade recommends lubricating blades with **95842** Air Lube.
8. Install **51925** Cylinder over rotor and front plate raised boss. Align coiled pin on front plate to cylinder slot.
9. Press **96441** Coiled Pin into blind hole on **51923** Rear Bearing Plate. Press (2) **96445** Coiled Pins into the back side of rear bearing plate.
10. Peel backing off **51924** Gasket and apply it firmly in place onto **51923** Rear Bearing Plate.

(continued on next page)

Assembly Instructions - (Continued)

11. Place **51923** Rear Bearing Plate over rotor mandrel and insert raised boss on rear bearing plate into cylinder diameter, while inserting short coiled pin into cylinder slot. Be sure inlet slot on rear bearing plate line up with inlet slot on cylinder. To correct alignment flip cylinder end to end and repeat steps 8 & 9 for correct assembly.
12. Using **96243** Bearing Press Tool (*ordered separately*) press **02057** Bearing onto rotor and into **51923** Rear Bearing Plate hole until it is seated. **Important:** Cylinder must fit snug between bearing plates. If too tight, rotor will not turn freely. Rotor must be lightly tapped at press fit end until rotor spins freely while still maintaining a snug fit. A loose fit will not achieve the proper preload on motor. While pressing **02057** Bearing, make certain to contact inner race of bearing only.
13. Add one drop of Loctite® #243 (or equiv.) to governor assembly male thread and screw governor assembly into place (**Left Hand Threads**) with a slotted screwdriver. Torque to 2 N•m (18 lb.-in.).
14. Install motor assembly into housing, making sure motor drops all the way into housing. **Note:** Align both **96445** Coiled Pins to slots in insert and against **51924** Gasket.
15. Install **95438** O-Ring onto **53620** Adapter and slide adapter into housing and over **54520** Bearing.
16. Place **96498** Wave Washer onto **53620** Adapter.
17. Place **51936** Coupling Insert into **51935** Coupling. Make certain radii aligns with radii in coupling base, to correct alignment remove insert and rotate 90°.

Motor Assembly Complete.

Extension Assembly:

1. Press one **01007** Bearing on end of **51955** Extension Spindle that is further from the wrench flats, then repeat with second **01007** Bearing on same end of spindle. **Important:** While pressing **01007** Bearings, make certain to contact inner race of bearing only. (*Using 96244 Press Tool ordered separately*)
2. Press **54520** Bearing onto end of spindle that is closer to wrench flats. **Important:** While pressing **54520** Bearing, make certain to contact inner race of bearing only. (*Using 96244 Press Tool ordered separately*)
3. Secure spindle and apply Loctite® #243 (or equiv.) to external threads then torque **51935** Coupling on single bearing end to 17 N•m (150 lb.-in.).
4. Install **51956** Felt Seal over **50048** Drive Flange.
5. On double bearing end, apply Loctite® #243 (or equiv.) to external threads and torque **50048** Drive Flange to 17 N•m (150 lb.-in.).
6. Insert spindle assembly, with drive flange first, into larger diameter end of **51952** Extension Handle.
7. Insert **51982** Bearing Spacer into larger diameter end of extension handle.
8. Pull **51936** Coupling Insert half way off of **51935** Coupling.
9. Apply Loctite® 567 (or equiv.) to external threads just above machined flats on housing.
10. Align **51936** Coupling Insert onto **51935** Coupling in extension handle.
11. Thread housing assembly onto extension handle.
12. Secure front end of housing using **51989** Repair Collar (*ordered separately*), align with machined flat on the silver ring.
13. Apply wrench at wrench flats on **51952** Extension Handle and torque handle onto housing to 35 N•m (310 lb.-in.).

Housing Assembly:

1. Secure housing using **51989** Repair Collar (*see back cover for Optional Accessories*) with inlet facing upward.
2. Slide **96443** O-Ring onto **51946** Valve Stem and slide sub-assembly until o-ring passes through housing hole. Make certain valve stem assembly slides freely after the o-ring passes through the hole.
3. Install **51945** Valve Seat by aligning 3 male prongs with three deep slots on insert. Make certain valve seat is pressed flat against base of pocket. **Note:** Add a few drops of Dynabrade Air Lube (P/N **95842**) to pocket walls before inserting **51945** Valve Seat.
4. Install **51944** Tip Valve as shown.
5. Pre-assemble muffler, slide **53683** Spacer over **53681** Inlet Bushing and up against the hex head base. Slide **94924** Wave Spring over **53681** Inlet Bushing and up against spacer. Pre roll **94528** Felt and install it in **53686** Muffler Cap. Support felt in felt/muffler cap assembly and slide **53681** Inlet Bushing thru the inside until the muffler cap assembly seats against the **94924** Wave Spring. Flare the felt and place **51940** Spacer over male thread and set **96442** O-Ring into groove at the base of thread. Return felt to unflared form. Slide **51943** Spring into bushing and up to the two **51938** screens.
6. Place **53682** Gasket over felt silencer and against **53686** Muffler Cap.
7. Apply one drop of Loctite® #243 (or equiv.) to **53681** Inlet Bushing Thread.
8. Align small inside diameter of **51943** Spring to cone point on **51944** Tip Valve and thread inlet bushing and sub-assembly into place. Torque bushing to 35 N•m (310 lb.-in.).
9. Remove housing from **51989** Repair Collar and place repair collar onto the bench top with the part number identifier against the bench. Align the throttle lever holes to housing pinhole and rest the housing and throttle lever onto the legs of the repair collar. Press **96444** Coiled Pin into lever hole and center into housing.

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

Important: Before operating, place 2-3 drops of Dynabrade Air Lube (P/N **95842**) directly into inlet with throttle lever depressed. Operate tool for 30 seconds to allow air lube to properly lubricate internal motor components. Motor should now be tested for proper operation at 90 PSIG max. If tool operates at a higher RPM than marked on the tool or if vibration and sound levels seem abnormal, the tool should be serviced to correct the cause before use.

Preventative Maintenance Schedule

For All 1 hp Extension Vacuum Cut-Off Tool

This service chart is published as a guide to expectant life of component parts. The replacement levels are based on average tool usage over one year. Dynabrade Inc. considers one year usage to be 1,000 hours.

Parts Common to all Models:

LEGEND	
T	Included in Tune-up Kit
X	Type of wear, no other comments apply.
L	Easily lost. Care during assembly/disassembly.
R	Replace each time tool is disassembled.



96532 – 1 Hp. Motor Tune-Up Kit

Index #	Part Number	Description	Number Required	High Wear 100%	Medium Wear 70%	Low Wear 30%	Non-Wear 10%
1	96272	Screw	5			X	
2	52647	Vacuum Shroud Cover	1				X
3	52648	Skid Plate - 1/8" Thick	1				X
	52649	Skid Plate - 1/4" Thick	1				X
4	53598	Vacuum Shroud	1				X
5	40029	Cam Lock	1				X
6	95168	Screw	1			X	
7	50054	Front Flange	1				X
9	53690	Grip	1				X
10	96524	Retainer Ring	1				X
11	51952	Extension Handle	1				X
12	50048	Drive Flange	1				X
13	51956	Felt Seal	1	R			
14	01007	Bearing	2		X		
15	51955	Spindle	1				X
16	54520	Bearing	1		X		
17	51969	Coupler Nut	2				X
18	50902	Coupler	1			X	
19	51982	Spacer	1				X
20	96498	Wave Spring	1		T		
21	95438	O-Ring	1				T
22	53620	Adapter	1				X
24	54520	Bearing	1		T		
25	97119	Shim	1		L		
26	97120	Shim	1		L		
27	51922	Front Bearing Plate	1			X	
28	96441	Pin	2			X	
29	51927	Spacer	1		T		
30	51921	Rotor	1			X	
31	51926	Blade (4/Pkg.)	1	T			
32	51925	Cylinder	1			X	
33	51923	Rear Bearing Plate	1			X	
34	02057	Bearing	1		T		
35	96445	Pin	2			X	
36	51924	Gasket	1		T		
37	51932	Governor Assembly	1				X
38	52537	Housing	1				X
39	51949	Safety Lever Assembly	1			X	
40	51946	Valve Stem Assembly	1		T		
41	96444	Pin	1		T		
42	51945	Valve Seat	1				X
43	51944	Tip Valve	1		T		
44	51943	Spring	1				X
46	96442	O-Ring	1		T		
47	51940	Spacer	1				X
48	53682	Gasket	1				X
49	94528	Felt Silencer	1	T			
50	53686	Muffler Cap	1				X
51	94924	Wave Spring	1				X
52	53683	Spacer	1				X
53	53681	Inlet Bushing	1				X

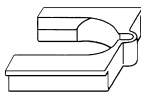
Optional Accessories



Dynamswivel®

- Swivels 360° AT TWO PIVOT POINTS allowing the air hose to drop directly to the floor while providing superb tool handling.

95461 – 3/8" NPT.



51989 Repair Collar

- Specially designed collar for use in vise to prevent damage to valve body of tool during disassembly/assembly.



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: 1 gal. (3.8 L)



96005 Male Plug

- Provides up to twice the air flow compared to standard plug design.
- Plug has "ported" design to prevent "starving" of the air tool.



96209 Motor Repair Clamp

- Specially designed clamp to secure motor cylinder before disassembly.



Bearing Press Tool

- Used to install bearings.

96243: For installing 02057 Bearing.

96244: For installing 01007 & 54520 Bearings.



96532 Motor Tune-Up Kit

- Includes assorted parts to help maintain and repair motor.

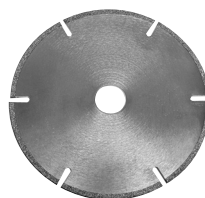
01902 Drop-In Motor

- Allows quick and easy replacement. No motor adjustments needed.



53621 Overhose Assembly

- Overhose Assembly directs exhaust away from operator.



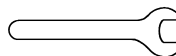
3" Diamond Cut-Off Wheels

- Diamond impregnated steel.
- 3/8" Center Hole

93917: Continuous Rim

93646: Side Spoked

93658: Gulleted/Slotted



Wrenches

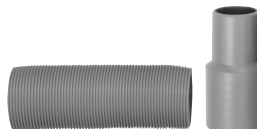
95262: 14 mm Open-End

95134: 9/64 in. Hex Key

95049: 3/16 in. Hex Key

30335 Air Supply Hose

- 3/8" I.D. x 60 in. Wide air supply hose, includes: 3/8 in. NPT male and female threaded fittings.



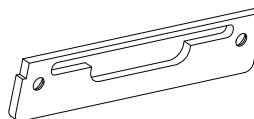
Vacuum Hoses and Cuffs

- Used to make proper connection between tool and vacuum system.

95894: 1-1/4" Reduction Cuff to 1"

54205: 1-1/4" Vacuum Hose, sold by the foot.

Note: Please specify length.



Skid Plate

- Sets cutting depth to exact dimension, no over cutting.

52648: 1/8" Thick (7/16" Cutting Depth)

52649: 1/4" Thick (5/16" Cutting Depth)

Reference Contact Information

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