For Serial No. II10000C and Higher

PD19-01
September, 2022
Supersedes PD11.21R

Dynabug® II

3/32" Diameter Orbit, 10,000 RPM

Safety, Operation and Maintenance – Save This Document and Educate All Personnel

Models:

58500 - Non-Vacuum, 3/32" Orbit
58501 - Self-Generated Vac, 3/32" Orbit
58502 - Central Vacuum, 3/32" Orbit
58503 - Non-Vacuum, 3/32" Orbit
58504 - Self-Generated Vac, 3/32" Orbit
58505 - Central Vacuum, 3/32" Orbit
58506 - Central Vacuum, 3/32" Orbit
58510 - Non-Vacuum, 3/32" Orbit
58512 - Central Vacuum, 3/32" Orbit
58516 - Non-Vacuum, 3/32" Orbit

Hook-Face Pad:

56315 - (74 mm x 109 mm)
56316 - (74 mm x 109 mm)
56316 - (74 mm x 109 mm)
56317 - (80 mm x 130 mm)
56319 - (80 mm x 130 mm)
56319 - (80 mm x 130 mm)
56323 - (99 mm x 143 mm, delta-style)
56351 - (76 mm x 102 mm)
56326 - (68 mm x 198 mm)
56326 - (68 mm x 198 mm)

Models:

58507 - Non-Vacuum, 3/32" Orbit
58509 - Non-Vacuum, 3/32" Orbit
58511 - Non-Vacuum, 3/32" Orbit

Vinyl-Face Pad:

56354 - (68 mm x 175 mm, with Clips)
56355 - (74 mm x 109 mm)
56354 - (68 mm x 175 mm)

58500

LIMITED LIFETIME WARRANTY

SANDER / POLISHER

Find The Most Current Offering of Support Documents and Accessories at 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 Requirements for the Use, Care and Protection of Abrasive Wheels – ANSI B7.1, and Safety Requirements for Abrading Materials with Coated Abrasive Systems – ANSI B7.7, Compressed Air and Gas Institute (CAGI) Safety Code for Portable Air Tools – B186.1, Code of Federal Regulation – CFR 29 Part 1910, International Organization for Standardization (ISO) Hand Held Non-Electric Power Tools – Safety Requirements ISO 11148 series and applicable State and Local Regulations.

Read and understand tool manual before work starts to reduce risk of injury to operator, visitors, and tool.

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 statues, ordinances and/or regulations.

Practice safety requirements. Work alert, have proper attire, and do not operate tools under the influence of alcohol or drugs.

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 and OPERATING INSTRUCTIONS

Carefully Read and Understand the General and Sander/Polisher sections found in Tool Safety and Operating Guidelines (PN00001676) 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: Dynabug® II Sanders are intended for use in industrial applications and used only by skilled, trained professionals in accordance with the instructions in this manual. This pneumatic tool is designed for sanding and finishing a variety of materials including wood, metal, plastic, fiberglass, solid surfaces, composites, rubber, glass and stone. Use in any other manner or with other accessories could lead to unsafe operating conditions.

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.

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 CAGI 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-Lubricator (FRL) as diagramed below.
- Each tool should have its own dedicated hose connected to an air supply FRL. Quick disconnects should be installed at the FRL in an effort to reduce contamination into the tool. Securely affix all fittings and hose assemblies.
- It is strongly recommended that all Dynabrade rotary vane air tools be used with a Filter-Regulator-Lubricator to minimize the possibility of misuse due to unclean air, wet air or insufficient lubrication. Dynabrade recommends the following: **10690** Air Line Filter-Regulator-Lubricator — Provides accurate air pressure regulation, two-stage filtration of water contaminants and micro-mist lubrication of pneumatic components.
- Dynabrade recommends 1 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). **95842** Dynabrade Air Lube is recommended.

MAINTENANCE SCHEDULE

Maintenance schedules depend on the type and style of tool. Refer to page 3 to reference symbols associated with specific maintenance items/areas. Match maintenance schedules accordingly. See page 4 for any additional maintenance information.

Note: *Turbine style air motors do not require oil.*

Daily (every 8 hours):

- Inspect tool and accessories for damage or broken parts. Replace items as necessary to ensure proper operation and safety.

◆O Lubricate motor as recommended. Use **95842** Dynabrade Air Lube (10W/NR). Apply 1 drop/minute of air lube per 20 SCFM.

- Check air line pressure with a gage. (MAX. 90 PSIG or 6.2 Bar operating pressure at the air inlet of the tool.)

◆W Lubricate wick system and right angle gears through gear case fitting. Apply 3 plunges of **95848** Gear Oil. Use **95541** Lubricant Gun (Prime lubricant gun before use).

- Check tool for proper operation: If operating improperly or demonstrates unusual vibration, the tool must be serviced and problem corrected before further use.

Every 20 Hours/Once a Week (which ever comes first):

◆G For tools without "wick system", lubricate right angle gears through lubricant fitting. Apply 1 plunge of **95544** Grease. Use **95541** Lubricant Gun. (Prime lubricant gun before use).

- Measure RPM (speed) by setting air pressure to 90 PSIG (6.2 Bar) at tool inlet, without accessory mounted, while the tool is running. Using tachometer, check spindle speed of the tool. Unless otherwise stated the no-load speed may not exceed the rated speed. If tool speed exceeds maximum rated RPM, service as required and correct before use.
- If tool is running too fast: look for worn, damaged or missing governor, air control rings and silencer(s). Service as required.
- If tool is running too slow: look for malfunctioning governor, clogged inlet screen, silencer(s) or air stream. Service as required.

Note: *Special care must be taken when servicing governors. Refer to specific tool manual for governor instructions and/or speed control devices. Governor assemblies made from molded plastic components are non-serviceable and must be replaced.*

Every 50 Hours:

◆G Lubricate planetary gears through gear case fitting with 3 plunges of **95544** Grease. Use **95541** Lubricant Gun. (Prime lubricant gun before use).

REPAIR

- Use only genuine Dynabrade replacement parts to ensure quality. To order replacement parts, specify Model#, Serial# and RPM of your air tool.
- 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.
- 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.

◆O After maintenance is performed on tool, add a few drops of **95842** Dynabrade Air Lube 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 below).
- **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) and recycle or discard per local, state and/or federal regulations as to not harm the environment.

NOTICE

All Dynabrade air motors use the highest quality parts available and are manufactured to exacting tolerances. Air motor failures are often traced to lack of lubrication or unclean air supply. Compressed air can force dirt and other contaminants into motor bearings causing early failure. Contaminants can score cylinder wall and vanes resulting in reduced efficiency and power. Our warranty obligation is contingent upon proper use of our tools. Air motors which have been subjected to misuse, contaminated air or lack of lubrication will void warranty.

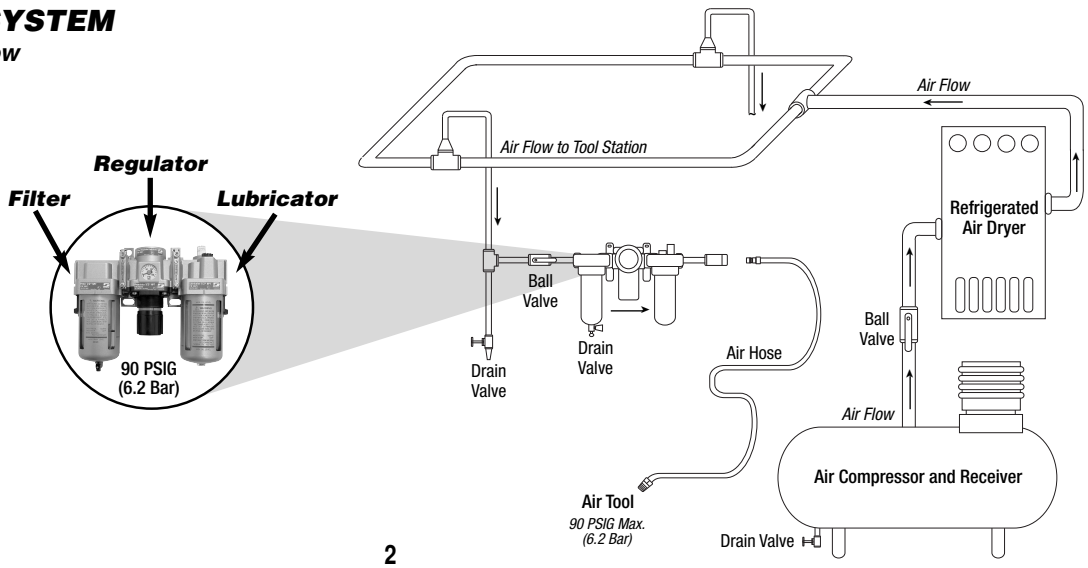
CLOSED LOOP AIR SYSTEM

Sloped in Direction of Air Flow

- 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.

Lubricator Setting

1 Drop/Minute per 20 SCFM



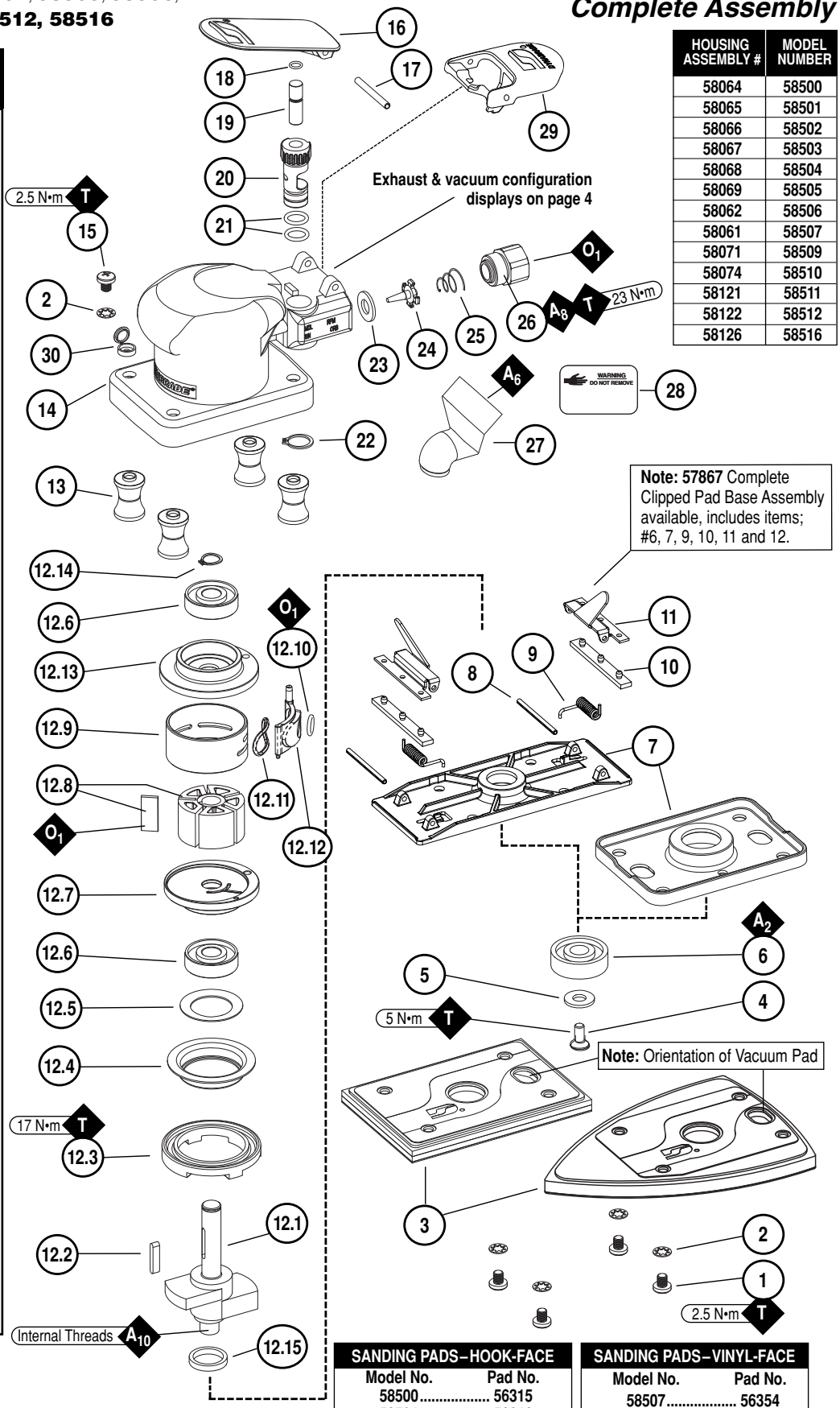
Models
58500, **58501**, **58502**, **58503**, **58504**, **58505**, **58506**, **58507**, **58509**, **58510, 58511, 58512, 58516**

Dynabug® II
Complete Assembly

HOUSING ASSEMBLY #	MODEL NUMBER
58064	58500
58065	58501
58066	58502
58067	58503
58068	58504
58069	58505
58062	58506
58061	58507
58071	58509
58074	58510
58121	58511
58122	58512
58126	58516

Index Key

No.	Part #	Description
1	96080	**Screw** (4)
2	96538	Lock Washer (8)
3		**Pad:** See Charts (lower rt.)
4	95344	Screw
5	95935	Washer
6	54552	Bearing
7	57895	Pad Base (Standard)
	57875	Pad Base (w/Clips)
8	94590	Pin (2)
9	57899	Spring (2)
10	57834	Rubber Grip (2)
11	57898	Clip (2)
12		**Motor Assembly**
	57844	Models: **58500-06, 09-12,16**
	57845	Model: **58507**
12.1		**Shaft Balancer**
	57892	Models: **58500-06, 09-12,16**
	57894	Model: **58507**
12.2	56047	Key
12.3	59058	Lock Ring
12.4	59057	Front Bearing Seal
12.5	59083	Felt Washer
12.6	58368	Bearing (2)
12.7	57858	Front Bearing Plate
12.8	57113	Blade (5)/Rotor Set
12.9	59134	Cylinder Sleeve
12.10	01024	O-Ring
12.11	95529	O-Ring
12.12	59133	Cylinder Sleeve Adaptor
12.13	59332	Rear Bearing Plate
12.14	98463	Retaining Ring
12.15	57896	Felt Seal
13	57890	Isolator Post (4)
14		**Housing:** See Chart (upper rt.)
15	96624	Screw (4)
16	69357	Throttle Lever
17	94590	Pin
18	98459	O-Ring
19	58363	Valve Stem
20	59075	Speed Regulator
21	01025	O-Ring (2)
22	95697	Retaining Ring
23	01464	Seal
24	58365	Tip Valve
25	01468	Spring
26	01494	Inlet Bushing
27	57897	Vacuum Tube
28	96540	Vacuum Port Cover
29	57041	Comfort Platform
30	96627	Screw Cap (4)



KEY

- O: Oil: O_1 = Air Lube
- A: Adhesive: A_2 = Loctite #271, A_6 = Loctite #380, A_8 = Loctite #567, A_{10} = Loctite #243
- T: Torque: N•m x 8.85 = In. - lbs.

SANDING PADS–HOOK-FACE

Model No.	Pad No.
58500	56315
58501	56316
58502	56316
58503	56317
58504	56319
58505	56319
58506	56323
58510	56351
58512	56326
58516	56326

SANDING PADS–VINYL-FACE

Model No.	Pad No.
58507	56354
58509	56355
58511	56354

LIMITED LIFETIME WARRANTY

Dynabrade portable pneumatic power tools are rigorously inspected and performance tested in our factory before shipping to our customers. If a Dynabrade tool develops a performance problem and an inherent defect is found during normal use and service, Dynabrade will warrant this tool against defects in workmanship and materials for the limited lifetime of the tool.

MACHINE SPECIFICATIONS

Model	Speed	Power	Air Consumption	Weight	Length	Height
58500	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.7 lb. (.78 kg)	6.8" (171 mm)	3.6" (92 mm)
58501	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.8 lb. (.82 kg)	8.3" (221 mm)	3.6" (92 mm)
58502	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.8 lb. (.82 kg)	7" (179 mm)	3.6" (92 mm)
58503	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.7 lb. (.78 kg)	7.2" (182 mm)	3.6" (92 mm)
58504	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.8 lb. (.82 kg)	8.7" (221 mm)	3.6" (92 mm)
58505	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.8 lb. (.82 kg)	7.5" (190 mm)	3.6" (92 mm)
58506	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.8 lb. (.82 kg)	8.6" (218 mm)	3.6" (92 mm)
58507	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	2.2 lb. (.98 kg)	8" (203 mm)	3.7" (94 mm)
58509	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.7 lb. (.78 kg)	6.8" (171 mm)	3.6" (92 mm)
58510	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.7 lb. (.78 kg)	6.5" (166 mm)	3.7" (94 mm)
58511	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.8 lb. (.82 kg)	8" (203 mm)	3.7" (94 mm)
58512	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.9 lb. (.86 kg)	8.75" (222 mm)	3.7" (94 mm)
58516	10,000 RPM	.11 hp (82 W)	12 SCFM (340 LPM)	1.8 lb. (.82 kg)	8.5" (215 mm)	3.7" (94 mm)

Additional Specifications: Air Inlet Thread 1/4" NPT • Hose I.D. 1/4" (6 mm)
Visit dynabrade.com for your model's vibration and sound data.

OPTIONAL ACCESSORIES

98222 Motor Tune-Up Kit

- Includes assorted parts to help maintain and repair motor.

59469 Drop-In Motor
Note: Not for use with model 58507

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

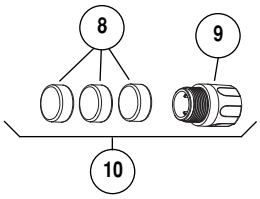
Dynabrade Air Lube

- 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.

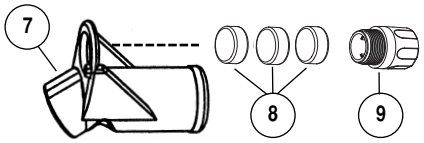
95842: 1 pt. (473 ml)
95843: 1 gal. (3.8 L)

MACHINE EXHAUST ASSEMBLIES

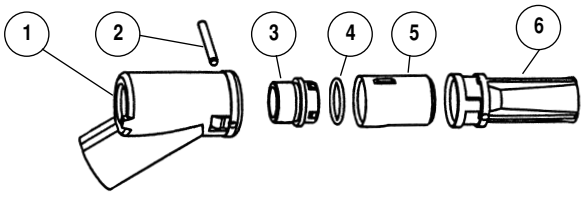
Non-Vacuum



Vacuum-Ready



Self-Generated Vacuum



Index Key

No.	Part #	Description
1	**57083**	Vacuum Adapter
2	**96197**	Dowel Pin
3	**57066**	Muffler Body
4	**95526**	O-Ring
5	**69353**	Vac Nozzle
6	**57067**	Vac Tube
7	**57093**	Vacuum Adapter
8	**56027**	Muffler Insert (3)
9	**69359**	Muffler Cap
10	**69273**	Muffler Assembly

REFERENCE CONTACT INFORMATION

American National Standards Institute (ANSI)
www.ansi.org

Compressed Air & Gas Institute (CAGI)
www.cagi.org

European Committee for Standardization (PNEUROP)
www.pneurop.org

International Organization of Standards (ISO)
www.iso.org

U.S. Government Publishing Office (GPO)
www.gpo.gov

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