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PERFORMANCE TOOL warrants the product to be free from defects in materials and workmanship under normal use and service. A defective product may be returned for a free replacement within 90 days from the date of purchase, provided that product is returned to place of purchase immediately after discovery of defect. After 90 days and up to 1 year from date of purchase, PERFORMANCE TOOL will replace at no charge any parts which our examination shall disclose to be defective and under warranty.

These warranties exclude blades, bits, punches, dies, bulbs, fuses, and other consumables which must be replaced under normal use and service. These warranties shall not apply to any product or part which is used for a purpose for which it is not designed, or which has been repaired or altered in any way so as to affect adversely its performance or reliability, nor shall these warranties apply to any product or part which has been subject to misuse, neglect, accident or wear and tear incident to normal use and service.

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Vacuum Pump/ Brake Bleeder Kit

Stock Number W89727

OWNER'S MANUAL



FOR YOUR SAFETY,
please read these instructions carefully and retain them for future use.

**Performance
Tool®**

PRODUCT SPECIFICATIONS

Item	Description
Gauge Size	2" Diameter
Gauge Scale	0, -.30 in/Hg (0<->76 cm/Hg) Vacuum
Accessories	1/4" I.D. X 23" Long Vacuum Hoses (Qty. 2)
	1/4" I.D. X 3" Long Vacuum Hoses (Qty. 4)
	Tapered Hose Adapters (Qty. 4)
	"T" Hose Connector
	Straight Hose Connector
	Brake Bleeder Valve Adapters (Qty. 2)
	Universal Cup Adapter
	4 oz. Reservoir Jar
	Jar Lids (Qty. 2)
Net Weight	1.8 Lbs

UNPACKING

When unpacking, check to make sure all the parts shown on the parts list on pg. are included.

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES

Keep bystanders, children, and visitors away while operating the Brake Bleeder/Vacuum Pump. Distractions can cause you to lose control. Protect others in the work area from injury. Provide barriers or shields as needed.

PERSONAL SAFETY

1. Stay alert. Watch what you are doing, and use common sense when operating the Brake Bleeder/Vacuum Pump. Do not use the tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
2. Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and jewelry away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
3. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enables better control of the power tool in unexpected situations.
4. Use safety equipment. Always wear ANSI approved safety glasses underneath a full face safety shield. Nonskid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

TOOL USE AND CARE

1. Do not force the tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
2. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
3. Maintain tools with care. Keep tools dry and clean. Properly maintained tools are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools "Do not use" until repaired.
4. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
5. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.

SPECIFIC SAFETY RULES

1. Maintain a safe working environment. Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use the Brake Bleeder/Vacuum Pump in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
2. Maintain labels and nameplates on this product. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
3. Keep the Handles of the Brake Bleeder dry, clean, and free from brake fluid, oil, and grease.
4. Prior to using the Brake Bleeder/Vacuum Pump make sure to read and understand all warnings, safety precautions, and instructions as outlined in the vehicle manufacturer's instruction manual. Every vehicle has specific measurement values for vacuum related readings. It is beyond the scope of this manual to properly describe the correct procedure and test data for each vehicle.
5. **WARNING!** Carbon monoxide is produced while a vehicle's engine is operating and is deadly in a closed environment. Early signs of carbon monoxide poisoning resemble the flu, with headaches, dizziness, or nausea. If you have these signs, the work area may not be vented properly. Get fresh air immediately.
6. Prior to using the Brake Bleeder/Vacuum Pump, make sure to place the vehicle's transmission in "PARK" (if automatic) or "NEUTRAL" (if manual). Then, block the tires with chocks.

SPECIFIC SAFETY RULES CONT.

7. Be alert for hot engine parts to avoid accidental burns.
8. Avoid accidental fire and/or explosion. Do not smoke near engine fuel and battery components.
9. Use the Brake Bleeder only with brake fluid. Do not attempt to use the tool to siphon any other liquids. Damage to the internal chamber and seal, or future brake fluid contamination may result.
10. Follow guidelines for proper brake fluid disposal. Used brake fluid should be removed from the vehicle and properly recycled. Many states require recycling. Contact your local solid/liquid waste authority for information on recycling. Do not reuse old brake fluid.
11. Brake fluid is corrosive. Avoid spilling it on the vehicle's exterior, it can harm automobile paint.
12. **WARNING!** People with pacemakers should consult their physician(s) before using this product on a running engine. Electromagnetic fields in close proximity to a heart pacemaker could cause interference or failure of the pacemaker. In addition, people with pacemakers should adhere to the following: Caution is necessary when near the coil, spark plug cables, or distributor of a running engine. The engine should always be off if adjustments are to be made to the distributor.
13. **WARNING!** The brass components of this product contain lead, a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code § 25249, et seq.)
14. **WARNING!** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that common sense and caution are factors which can not be built into this product, but must be supplied by the operator.

ASSEMBLY AND OPERATING INSTRUCTIONS

To Bleed Brakes:

1. Attach a 3" Vacuum Hose (5) to the bottom of the Jar Lid (2a). (See Figure A.)
2. Attach a 23" Vacuum Hose (4) to the top of the Jar Lid (2a) marked "TO PUMP". Then, attach the other end of the 23" Vacuum Hose to the Brake Bleeder/Vacuum Pump (1). (See Figure A.)
3. Firmly attach the Jar Lid (2a) to the Reservoir Jar (3). (See Figure A.)
4. Remove the cap from the vehicle's master cylinder, and check to make sure the master cylinder is full of brake fluid. If not full, fill the master cylinder to capacity with clean, new brake fluid. (Use only the kind of brake fluid recommended by the vehicle manufacturer.)
5. **NOTE:** Determine the proper brake bleeding sequence from your vehicle service manual (i.e., right rear wheel, left rear wheel, right front wheel, left front wheel).
6. Connect the 23" Vacuum Hose (4) to the remaining port on the Jar Lid (2a) and then connect the other end to the Brake Bleeder Screw Adapter (9).
7. Squeeze the Handle of the Brake Bleeder/Vacuum Pump (1) 10 to 15 times to create a

ASSEMBLY AND OPERATING INSTRUCTIONS CONT.

- vacuum in its Reservoir Jar (3). **NOTE:** The Gauge on the Brake Bleeder/Vacuum Pump should read at approximately 10 in/Hg. Do not exceed 20 in/Hg. A greater vacuum could damage the vehicle's brake system.
8. Once the Brake Bleeder/Vacuum Pump (1) is ready, check for leaks at the Reservoir Jar (3) and at all Vacuum Hose (4, 5) connections. If there is a leak, release the vacuum in the Brake Bleeder/Vacuum Pump with the Vacuum Release Control.
CAUTION! NEVER remove the Jar Lid (2a) before releasing the vacuum in the Brake Bleeder/Vacuum Pump.
Correct the leak, and once again create a vacuum in the Brake Bleeder/Vacuum Pump to approximately 10 in/Hg.
 9. Open the vehicle's wheel caliper bleeder screw, and allow brake fluid to flow into the Reservoir Jar (3). Then, retighten the wheel caliper bleeder screw after bleeding.
 10. Release the vacuum in the Brake Bleeder/Vacuum Pump (1) with the Vacuum Release Control. Then, disconnect the Brake Bleeder Screw Adapter (9) from the vehicle's wheel caliper bleeder screw.
 11. **NOTE:** When necessary, release the vacuum in the tool and empty its Reservoir Jar (3) of old brake fluid. To assist in transport, this set includes a leak-resistant Lid (2b) without hose connections. After the brake fluid is disposed of properly, resume bleeding the brakes.
 12. Remove the cap from the vehicle's master cylinder, and refill the master cylinder back to its normal capacity with clean, new brake fluid. Then, replace the cap on the master cylinder.
 13. Proceed to the vehicle's next wheel, and perform the same steps as above.
 14. When finished using the Brake Bleeder/Vacuum Pump, clean the tool and store it in a clean, dry location out of reach of children.
 15. **WARNING!** Before driving the vehicle, carefully check for leaks and test for proper brake operation.

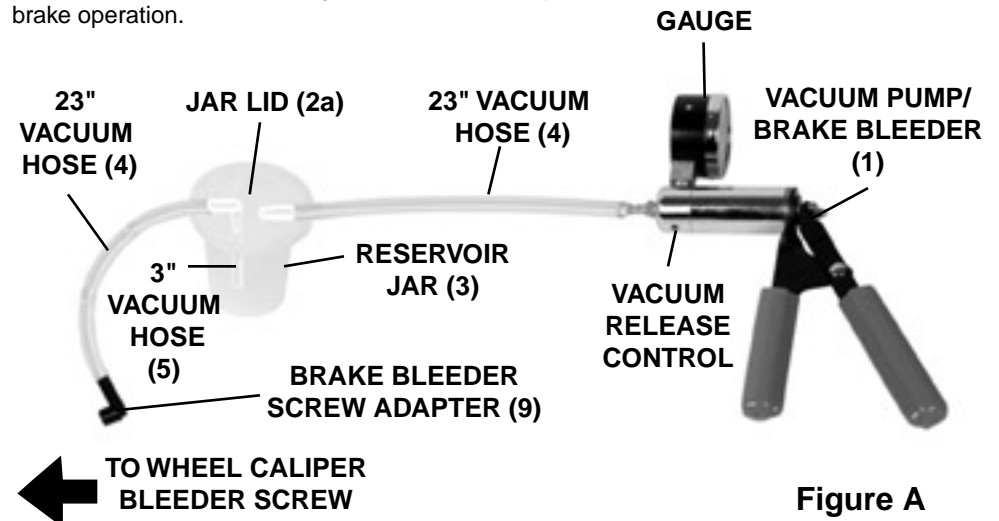


Figure A

INSPECTION, MAINTENANCE AND CLEANING

1. **WARNING!** Always release the vacuum in the Brake Bleeder/Vacuum Pump before performing any inspection, maintenance, or cleaning.

2. Before each use: Inspect the general condition of the Brake Bleeder/Vacuum Pump. Check for misalignment or binding of moving parts, cracked or broken parts, damaged Hoses, loose connections, and any other condition that may affect its safe operation. If a problem occurs, have the problem corrected before further use. Do not use damaged equipment.

3. When cleaning: Do not clean the Brake Bleeder/Vacuum Pump with cleaners or other solvents not intended for use with plastic components. Use a clean cloth and, if necessary, a mild detergent. Do not immerse the Brake Bleeder/Vacuum Pump (1) component in any liquid.

4. When storing: Never store fluid in the Reservoir Jar (3) of the Brake Bleeder/Vacuum Pump. Always dispose of excess fluid properly, according to federal, Pump (1) component in any liquid.

5. **WARNING!** All maintenance, service, or repairs not listed in this manual are only to be attempted by a qualified service technician.

PARTS LIST

Part	Description	Qty.
1	Brake Bleeder/Vacuum Pump	1
2a	Jar Lid (for operation)	1
2b	Jar Lid (for transport)	1
3	Reservoir Jar	1
4	23" Vacuum Hose	2
5	3" Vacuum Hose	2
6	Tapered Hose Adapter	2
7	"T" Hose Connector	1
8	Straight Hose Connector	1
9	Brake Bleeder Screw Adapter	3
10	Universal Cup Adapter	1

NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

