

Vacuum Pump Brake Bleeder

User Manual

Read Carefully Before Use
Keep for Future Reference



OMT
Orion Motor Tech

UM-BBT-0001-V2

Disclaimer

Read this disclaimer completely and carefully before proceeding with the rest of the manual content.

1. Product Modifications

Any modifications or alterations to Orion Motor Tech (OMT) products void any warranties and may result in damage or injury. OMT shall not be liable for any damages resulting from such modifications or alterations.

2. Compliance with Laws

Customers shall be liable for ensuring that the use of OMT products complies with all applicable laws and regulations in their respective jurisdictions. OMT shall not be responsible for any violations of laws or regulations resulting from the use of OMT products.

3. Correct Use

Always use OMT products only as directed in the accompanying manuals. Failure to follow instructions may result in injury or damage.

Always ensure the assembly, installation, operation, maintenance, or repair of OMT products is carried out by a competent person.

Regular maintenance should be performed throughout the lifecycle of OMT products. You are responsible for ensuring the products operate as intended.

Always wear appropriate protective gear.

4. Third-Party Products

OMT shall not be liable for any damages or losses resulting from the use of third-party products in conjunction with OMT products. Customers shall refer to the third-party's guidelines and/or warranties (if any) for any third-party products used.

5. Limitation of Liability

OMT shall not be liable for any direct, indirect, punitive, incidental, special, or consequential damages to property or life, whatsoever arising out of or connected with the use or misuse of OMT products. In no event shall OMT's liability exceed the value of the products sold.

6. Warranty

Refer to the sales page for warranty information.

This disclaimer states the entire obligation of OMT with respect to OMT products. If any part of this disclaimer is determined to be void, invalid, unenforceable, or illegal, including but not limited to the warranty disclaimers, liability disclaimers, and liability limitations set forth above, the invalid or unenforceable provision will be deemed superseded by a valid and enforceable provision that most closely matches the intent of the original provision and the remainder of the agreement shall remain in full force and effect.

Contact Us

Thank you for choosing our products! If you have any questions or comments, contact us and we'll address your issues ASAP!



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Safety Information

Danger

- The following instructions are for general guidance only. **ALWAYS** perform repairs in full compliance with your vehicle's service manual. After completing any repair, test your vehicle at a low speed in your workshop before resuming regular use. Failure to do so may result in serious personal injury or property damage.
- **DO NOT** allow use by children, individuals with physical or mental conditions that could impair safe operation, or anyone unfamiliar with this product and its compatible air conditioning, fuel, and transmission systems.
- **ALWAYS** use personal protective equipment (PPE) suitable for your task. While using this product, always wear ANSI-approved eye and hand protection. Nonslip footwear is highly recommended. Other equipment, such as ear, head, and body protection, may also be necessary depending on your work.
- **ALWAYS** read and understand your vehicle's specific safety warnings and instructions before using this kit. Use only the correct fluids, pressures, adapters, and other necessary components for your vehicle. Ensure the parking brake is engaged before beginning any work. Use a jack and jack stands rated to support the full weight of your vehicle. Never touch any heated surface with exposed skin.
- **DO NOT** overreach. Keep proper footing and balance at all times.
- Keep this product in good working condition. Check for misalignment, binding, wear, or other damage before each use. If any damage is found, repair or replace the affected components before further use. If this product is used in a commercial or workshop setting, clearly label any damaged parts with "**DO NOT USE**" and ensure they are repaired or replaced before being used again. **ONLY** use identical parts for any replacement.

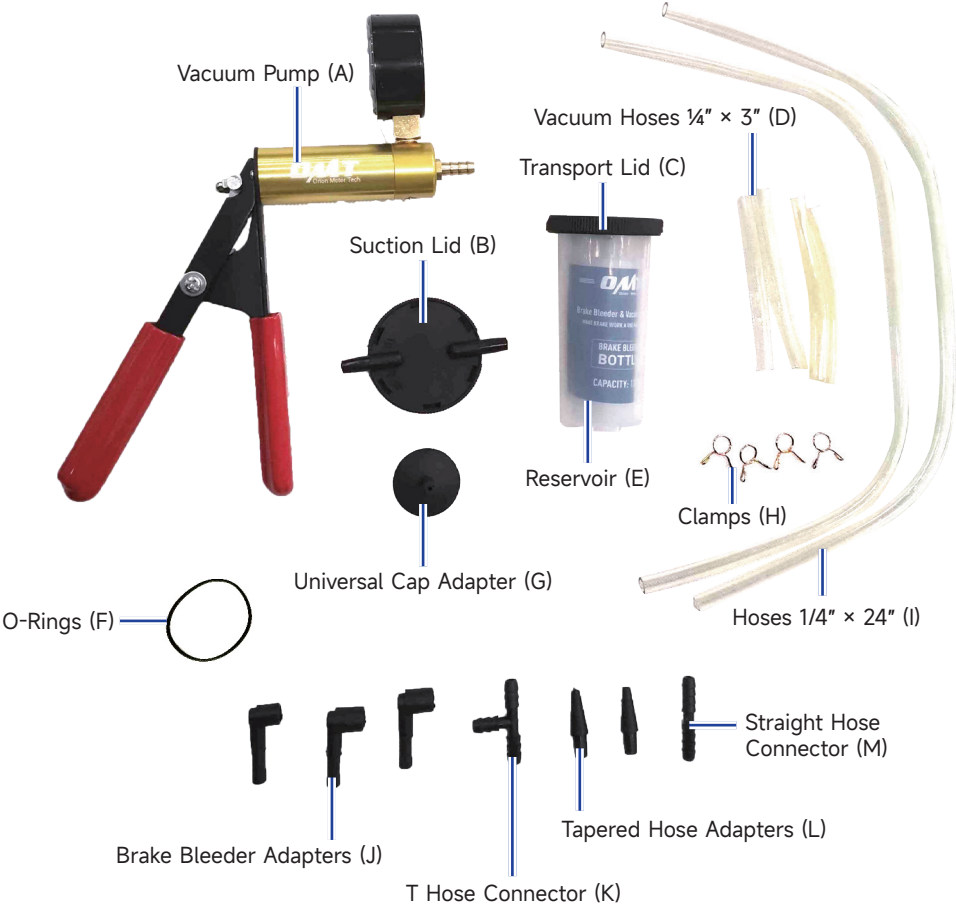
Warning

- **DO NOT** use this product if you are tired or under the influence of drugs, alcohol, or strong medication.
- Keep the work area clean and well-lit. Cluttered or dark areas can increase the risk of accidents.
- For best results, keep the kit clean and dry. Remove any fluid, oil, or grease before and after use, particularly from the handle and fittings.
- Dress appropriately for automotive servicing. Do not wear loose clothing or jewelry. Keep hair, clothing, gloves, hoses, and tools away from moving parts during use.
- In case of an accident or injury, keep a first aid kit and a communication device (e.g., a phone) readily available. Be familiar with the location of nearby emergency medical facilities.
- Automotive servicing involves inherent risks. This manual and your vehicle's service manual cannot cover every possible scenario. **ALWAYS** use sound judgment and caution. Seek proper training if you are unsure how to proceed.

Specifications

Dimensions	26.5 × 22 × 9 cm	10.43 × 8.66 × 3.54 in
Weight	0.95 kg	2.05 lb

Package List



No.	Name	Qty.
A	Vacuum Pump	1
B	Suction Lid	1
C	Transport Lid	1
D	Vacuum Hose 1/4" x 3"	2
E	Reservoir	1
F	O-rings	2
G	Universal Cap Adapter	1

No.	Name	Qty.
H	Clamps	4
I	Hoses 1/4" x 24"	2
J	Brake Bleeder Adapters	3
K	T Hose Connector	1
L	Tapered Hose Adapters	2
M	Straight Hose Connector	1

Operation



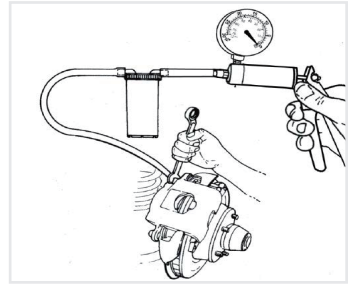
Warning

- Shut off the engine before servicing. Ensure the vehicle is stationary and the engine has cooled to room temperature before performing any maintenance or adjustments.
- **DO NOT** force the tool. Excessive force may result in serious personal injury or property damage.
- Be extremely careful with possible pinching points, moving parts, or components that may suddenly spring out during use.
- **ENSURE** your work area is stable, clean, and free of clutter or hazards that may cause accidents.
- For your safety, proper training is strongly recommended before using the tool. Lack of training can lead to serious injury.
- **ALWAYS** use the correct tools and personal protective equipment (PPE) before operation.

Brake Bleeding

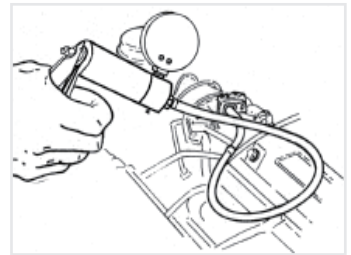
1. Open your hood and locate your brake fluid reservoir. Remove as much brake fluid as possible from the vehicle's reservoir. Be careful as brake fluid will erode paint. Fill the brake fluid reservoir with new brake fluid. Ensure that the brake fluid reservoir cap is in place.
2. Attach one end of the 1/4" × 3" vacuum hose (D) to the vacuum pump (A) and the other end to the suction lid (B) of the reservoir (E). Attach an O-ring (F) to the reservoir and seal it shut. Attach one end of the 1/4" × 24" hose (I) to the other end of the suction lid. To get more reach, join your hoses with the straight connector (M). To use 2 hoses at once, join them to 2 nozzles on the T connector (K) and join the third nozzle to the vacuum pump directly or via a third hose.
3. Attach the other end of the 1/4" × 24" hose to the brake caliper bleeder using the braker bleeder adapter (J). Pump the vacuum pump's handle 10–15 times to get about 20 inHg of pressure. Unfasten the bleeder and begin bleeding the system. If the vacuum pump's pressure is not stable, use clamps (H) and tapered hose adapters (L) to maximize the seal between hoses and inlets.
4. Assist the bleeding process by pumping your vehicle's brakes periodically.
5. Stop draining fluid once the fluid going through the bleeding hose becomes clear.
Re-fasten the bleeder and disconnect the bleeding hose.
6. Repeat this process for the braker calipers on all other wheels. Between each caliper bleed, fill up the brake fluid reservoir and empty the reservoir connected to the vacuum pump hose. Clean any grime off the caliper before connection.

7. Re-install the wheels after bleeding each caliper or once all the calipers have been bled.
8. Verify the integrity of the braking system by depressing the brake pedal and, if it does not feel firm, correct any problems before using the vehicle. Next, take a slow drive while periodically testing the brakes. Again, correct any problems before continuing to use the vehicle.



Vacuum System Testing

1. Attach one end of the 1/4" × 3" vacuum hose (D) to the vacuum pump (A) and the other end to the suction lid (B) of the reservoir (E). Attach an O-ring (F) to the reservoir and seal it shut. Attach one end of the 1/4" × 24" hose (I) to the other end of the suction lid.
2. Attach the other end of the 1/4" × 24" hose to the end of a vacuum system you wish to test using one of the supplied adapters (J).
3. Ignite the engine and wait for a stable reading from the pressure gauge on the vacuum pump. After obtaining a measurement, shut off the engine.
4. A low or unstable vacuum reading may mean a vacuum line blockage, cylinder sealing problems, incorrect valve/igniting timing, or other issues.



Glass Repair

This kit also contains a universal cap adapter (G) which can be used in glass repair. This cap can be used in combination with the hand pump to repair windshield cracks.

1. Clean out the hole as much as possible.
2. Place the universal cap adapter over the hole on the windshield.
3. Place your glass-repair glue into the universal cap adapter's hole.
4. Connect the universal cap adapter to a 1/4" × 24" hose and connect the hose to the hand pump.
5. Pull a vacuum of 20–30 inHg with the hand pump and wait 10 minutes. This step allows the glass-repair glue to seep into the cracks in the glass.
6. Disconnect the hand pump from the hose and then disconnect the universal cap adapter from the hole. Clean up any excess glue that is not settled.
7. Cure your glue with a UV light for 10 minutes.

Maintenance

- Clean the tools with a soft, damp cloth using a mild detergent or solution after use. **DO NOT** rinse them or use abrasive cleaners or caustic chemicals.
- For best results, lubricate the tools with high-quality anti-corrosive oil between uses.
- Check the tools periodically for any wear or damage. Repair or replace any faulty parts before further use.
- If the tools are not going to be used for an extended period, clean and lubricate them before storage. Keep them in a cool, dry place out of reach of children.



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