Part No. 8018

LASER[®]

Vacuum Tester & Brake Bleed Kit

with adaptors

Instructions



Introduction

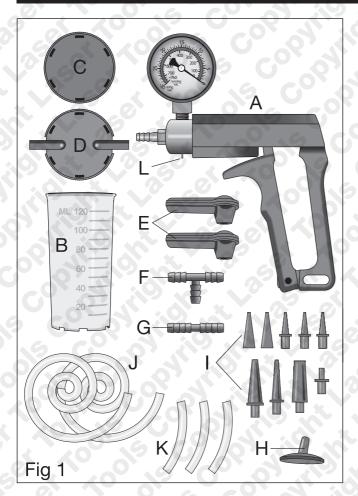
The Laser Tools 8018 is an automotive test, tune up and brake bleed vacuum pump with adaptor kit. Ideal for a wide variety of automotive applications, such as tune-ups, diagnostics and testing, one-man brake and clutch bleeding and liquid siphoning.

Fault diagnosis on internal combustion engines: the hand-operated vacuum pump in combination with the accurate vacuum gauge enables the monitoring of actual manifold vacuum, an invaluable aid to troubleshooting engine faults.

Static testing: easily diagnose vacuum and pressure-related systems such as ignition system vacuum advance, mechanical fuel pumps, carburettor vacuum control systems, fuel injection pressure regulators, EGR valves, one-way valves, electric vacuum solenoids, thermal vacuum switches, vacuum-operated control systems such as heating and air-conditioning valves, flaps and controls, vacuum-operated central locking systems, automatic transmission vacuum-operated modulator valves and brake servo diaphragms, etc.

Supplied with fluid reservoir and hoses, plus a selection of adaptors including brake and clutch bleed screw adaptors.

Components



Ref.	Description
Α	Vacuum pump / gauge unit
В	Fluid reservoir
С	Reservoir cap
D	Reservoir cap (with ports)
E	Bleed screw adaptors x 2
F	T-shaped hose connector
G	Straight hose connector
Н	Cup adaptor
I	Hose adaptors x 9
J	Fluid hose long (580mm) x 2
К	Fluid hose short (85mm) x 3
L	Vacuum release valve

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Operation:

Note: To quickly release the vacuum, press the vacuum release valve (L in Figure 1).

For tests requiring a vacuum:

- 1. Attach a suitable adaptor (and hose if required) from the selection in the kit. Ensure there is an air-tight line between the pump and the component being tested.
- 2. If testing engine, HVAC vacuum components or transmission components, refer to the manufacturer's specific instructions as to test procedure and vacuum readings.
- 3. Squeeze the vacuum pump (**A** in Figure 1) until the desired vacuum in indicated on the gauge.
- 4. When the test is complete, press the vacuum release valve (**L** in Figure 1) to release the vacuum.

To measure the vacuum in a system:

- 1. Attach a suitable adaptor (and hose if required) from the selection in the kit. Ensure there is an air-tight line between the pump and the component being tested.
- 2. Read the gauge for the vacuum in the system.

Note: DO NOT squeeze the pump - this will give an inaccurate reading.

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Transferring and siphoning fluids:

Note: Fluid MUST NOT pass through the vacuum pump. A container or reservoir must be placed in line between the fluid and the pump to ensure that the fluid is prevented from reaching the pump.

- 1. Connect a short fluid hose (K in Figure 1) to the vacuum pump.
- 2. Connect the short fluid hose to the straight port on the reservoir cap (**D** in Figure 1) Note that on reservoir cap **D**, one port is straight, the other has an internal stub. The straight port must always be connected to the vacuum pump side. Failure to do so will result in brake fluid being drawn into the vacuum pump. (Refer to Figure 2.)

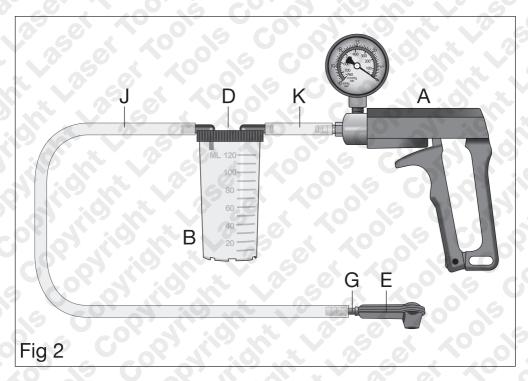
Note: Ensure the reservoir cap is completely installed and the rubber O-ring is in place correctly. If the O-ring is kinked and/or not sealing correctly no vacuum will be created.

- 3. Connect a long fluid hose (J) to the other port on the reservoir cap.
- 4. Place the other end of the long fluid hose into the liquid to be siphoned.
- 5. Squeeze the vacuum pump handle to initiate the vacuum.
- 6. When the desired amount of liquid has been removed remove the hose from the liquid's container.

Note: STOP SIPHONING before the fluid reservoir is completely full to avoid drawing fluid into the pump.

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Example Brake Bleed Configuration:



Refer to Figure 2: Ensure that the vacuum pump (\mathbf{A}) is connected to the fluid reservoir (\mathbf{B}) and cap (\mathbf{D}) in accordance with the diagram. Note, the port with stub on the inside of the cap (\mathbf{D}) must be connected to the brake bleed tube (\mathbf{J}) and NOT to the vacuum pump side. Failure to do so will result in brake fluid being drawn into the vacuum pump.

Precautions



- Ensure that all operators have read and understood these instruction before using the tool.
- Wear approved PPE: eye protection, gloves and protective clothing.
- Ensure no loose clothing, ties, watches, jewellery, etc. Contain long hair.
- Keep work area clean, tidy and free for any obstructions. Ensure adequate lighting.
- Always refer to the manufacturer's specific instructions as to test procedure and vacuum readings.
- DO NOT use petroleum-based lubricants such as air-tool oil, maintenance lubricant, etc, to lubricate the vacuum pump as this will render the pump unserviceable.
- STOP SIPHONING before the fluid reservoir is completely full to avoid drawing fluid into the pump.
- Keep away from flammable materials. DO NOT use the tool with flammable liquids or materials, other than brake fluid.
- DO NOT hold the pump inlet against the skin when using the pump.
- Dropping the tool may cause damage that will result in an inaccurate gauge.
- WARNING: brake fluid damages paintwork; any spillage should be flushed with clean water immediately.
- WARNING: brake fluid is flammable keep away from sources of ignition, for example hot engine parts such as the exhaust manifold.
- Dispose of any waste fluids in accordance to local authority guidelines.
- Always store the vacuum pump and kit components in a dry, secure area.
- Do not use the tool for tasks it is not designed for. Use the product correctly and with care. Failure to do so may cause damage and/or personal injury and will invalidate the warranty.

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.





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Guarantee

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