

MULTI-FLUID EXTRACTOR

Thank you for selecting this quality Griot's product. The Multi-Fluid Extractor allows you to suck out heavy transmission fluid, differential fluid, gear oil, antifreeze, power steering fluid and brake fluid. Enjoy the best!

MULTI-FLUID EXTRACTOR INCLUDES

- Multi-Fluid Extractor
- Three Dipstick Tubes
- · Brake Bleeding Tube with a Bleeder Valve

REMOVING ENGINE OIL

When using this unit to remove engine oil, make sure the vehicle is level. Run a cold engine for approximately 5 minutes to warm the oil and allow any sludge or contaminants to mix with the oil. If the engine is hot, allow enough time for the engine to cool to a cooler temperature, as this can harm the unit. Extracting hot oil or liquids can melt or destroy this product and may be hazardous and/or cause burns.

- 1. Remove the oil dipstick from the engine.
- 2. Select and insert the appropriate diameter extracting tube into the dipstick hole until it reaches the bottom of the oil pan.
- 3. Connect the main suction tube into the extractor. The main suction tube will connect to the extracting tube at the rubber fitting. Raise the extractor's handle to its highest position and fully pump the handle up and down several times to start the flow of liquid. Once fluid begins to fill the tank there is no need to keep pumping. The unit will automatically extract the fluid. Note that when the liquid flows into the unit, it will raise the internal float. When the float reaches the top of the tank the shut-off valve will automatically stop the flow, even if the unit is still under vacuum. Press the relief valve button on top of the unit for approximately five seconds to release the vacuum, then remove the main suction tube from the unit and pour the liquid out. Please dispose of fluids in an appropriate manner.

BLEEDING BRAKES

The Multi-Fluid Extractor comes with a suction tube with fittings and a red in-line valve to control the flow of used brake fluid. Start by connecting the main suction tube fitting to the hole in the top of the Multi-Fluid Extractor. Before removing the cap from your vehicle's brake fluid reservoir (master cylinder), clean all dirt off the top of the reservoir. This prevents foreign matter from entering the brake system. Remove the cap from the brake fluid reservoir. Using the pump handle, pump 3 to 5 times to create a vacuum in the container. Use the black rubber fitting on the clear tube to suck out all the old fluid from the reservoir. For larger bleeder fittings remove the black rubber fitting and place the clear plastic hose directly onto the fitting. If you're not getting any suction, adjust the red in-line valve so air and fluid can flow through the tube. Avoid mixing the old and new brake fluid.

For electronic ABS brake systems, turn the key to the "ACC" position, press the brake pedal and put the gear selector to the "D" position. Do not start the engine. The valve will open and allow brake fluid to flow out at the calipers when the bleeder screw is loosened.

When changing or repairing the master cylinder, calipers or wheel cylinders, it is necessary to press the brake pedal twice to push out the air that is inside. **Quick Tip:** Always start with the furthest wheel and work your way in towards the closest wheel in relation to the brake fluid reservoir/master cylinder location.

This usually means the right rear, left rear, right front and finishing up with the left front. Put the appropriate size wrench onto the bleeder screw. Place the black rubber fitting, on the end of the clear, plastic tube, onto the bleeder screw. (We recommend that you put some grease around the bleeder screw beforehand to prevent air from leaking through the screw threads.) Pump the handle of the Multi-Fluid Extractor 3 to 5 times to create a vacuum. Once under vacuum, loosen the bleeder screw allowing brake fluid to be sucked out. The red, in-line valve on the tube can be opened or closed to control the amount of fluid being extracted. Adjust valve allowing a slow and steady removal of brake fluid. It is normal to see air gaps or bubbles in the brake fluid as fluid is removed from the system. This is caused by air seeping in from the loosened bleeder valve threads as mentioned earlier.

As the old brake fluid flows out, check the fluid level and add as needed. If the fluid does not flow out smoothly from the bleeder screw because of blockage, press the brake pedal in order to clear out any dirt. When the color of the liquid is clear and the fluid is free from most air bubbles, tighten the bleeder screw to stop the extraction. To prevent air from entering the brake system at the bleeder screw, the red rubber fitting should be removed only after the bleeder screw has been tightened. It is normal to see air bubbles with the brake fluid inside the clear tube during extraction as air will get into the tube through the gap on the threads of the wheel cylinder's nozzle. The tube can now be removed from the bleeder screw.

Repeat the above procedure at every wheel. Some cars are equipped with a brake balancer at the rear wheels. The brake fluid in the wheel cylinders will appear to decrease when there is no load at the rear wheels or when the car is lifted up. The balance rod or the spring valve need to be pressed off in order to have smooth fluid release. Do not depress the brake pedal of the car while bleeding the brakes unless trying to remove a blockage. Before driving, check the operation of the brakes. The pedal should feel solid when depressed with no sponginess. If in doubt, repeat the whole procedure.

WARNINGS AND CAUTIONS

Do not use the unit to extract or store dangerous chemicals, poisons, acids, alkalies or solvents. Flammable products (e.g. petrol, gasoline, diesel, kerosene) may be extracted or siphoned with this unit, but they must not be stored in it. Always use in a well ventilated area. Do not store either the unit or suction tubes near or in areas of high temperatures, open flames, direct sunlight, rain or snow. Do not drop, throw or mishandle the Multi-Fluid Extractor and do not dismantle, tamper with or adapt the unit for any other purpose than for what it was originally intended. Dispose of fluid in accordance with your local rules and regulations. Keep all oils and solvents out of the reach of children.

DISCLAIMER

Griot's Garage is not responsible for the misuse of the Multi-Fluid Extractor or for any injury or damage incurred to any person or object related to the Multi-Fluid Extractor.

ANSWERS TO YOUR QUESTIONS

Should you have any questions about the assembly or use of the Multi-Fluid Extractor, our Customer Service Department can be reached by phone at 800-345-5789 or email to info@griotsgarage.com.



Have fun in your garage!*