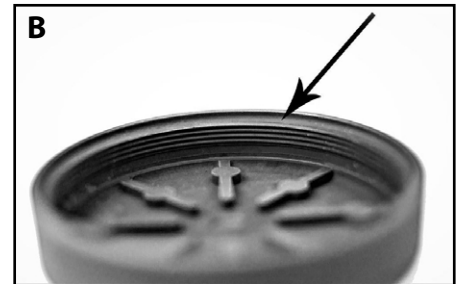




## Installing your New System 1 Billet Spin-On Filter

1. The package will include a System 1 Oil Filters billet aluminum housing (most have dual O-ring capability at the mounting surface), a removable inspection cap on the bottom that is grooved on the inside, which meets the O-Ring positioned above the threads of the housing to seal the cap to the body, a stainless filter element, and a by-pass plate to make a complete sub-assembly, adapters and O-rings. (Note 3" Diameter filters and Billet Pro Series Filters only have a single O-ring groove)
2. The installation starts by removing the disposable spin on oil filter from your engine. Make sure you use safety (jack) stands if you raise your vehicle to remove the filter. Use a drain pan below the filter and be careful to avoid spilling oil. After the engine stops draining, wipe off the filter mounting pad with a lint-free towel. Always dispose of used oil and filters properly.
3. Select the correct threaded adapter for your vehicle by trial-fitting them onto the nipple of the block. Only 1 will fit. Once you have the correct threaded adapter, screw it into the center of the oil filter housing until it bottoms out. **(Note: a few drops of Blue Loc-Tite on the outside of the thread will help secure it).** The insert has a "dead thread" at the top to prevent it from screwing all the way into the housing. When using a System 1 Billet Remote Mount or Billet Block Adapter, no threaded inserts are required.
4. Verify which diameter O-ring will fit the block mounting surface. Chevrolets typically use the outer O-ring and Ford and Chrysler engines employ the Inner O-ring. (When using a System 1 Billet Remote Style Mount, use both O-rings)

5. Once you have completed the initial steps you are ready to install the filter housing on your engine. It is recommended that you fill the filter with oil to avoid a dry start up. If the angle of your filter will cause you to spill some oil out of it, only fill it ½ full. Be sure to coat the O-ring with oil for ease of installation. Tighten the filter with both hands, or use a strap wrench —then give it a 1/8th to ¼”turn more with a wrench on the cap to finish tightening it down snug. Start your engine and with it idling, check for leaks after you see the engine has oil pressure.
6. Always clean your **System 1 Filter** when you change your oil. Also follow all safety precautions and drain your oil into a proper drain pan. You can remove the Filter inspection cap to let the oil drain or by removing the entire assembly from the block. **If you remove the complete filter from the block, loosen the inspection cap first for ease of service.**
7. Once the filter has drained (it takes a couple of minutes if the oil is hot) you can start disassembling the filter. Remove the bypass plate (part with chrome check ball in the middle of the bottom plate) and set aside for cleaning. Wiggle the element from side to side while pulling it down out of the housing. The filter element can now be inspected and cleaned along with the bypass plate. Use solvent, brake/carburetor aerosol cleaner, biodegradable parts wash, or dish soap and hot water to. Use a soft bristle brush on the outside of the element (such as an old tooth brush). Always keep O-rings away from any type of solvents or cleaners. Hand wipe O-rings with a lint free cloth (see fig. B). **Use compressed air to blow dry the element from the inside out to keep from embedding dirt into the filter element.** You can let it air dry if compressed air is not available. The inspection cap should also be cleaned, dried and re-oiled on the internal threads of the cap before re-installing it.
8. Re-install filter element, bypass plate and inspection cap and fill Filter with oil if possible. Tighten cap up with a wrench to prevent leaks. Make sure you fill the engine with oil prior to starting. After starting engine, check for leaks.
9. When changing the O-Rings on your filter, don't forget the upper O-Ring **inside** the housing that holds (and seals) the element in place. To remove this O-Ring, use a pick through the inlet holes on **top** of filter housing (see fig. A). To replace the new O-Ring go through the **inside** of the filter body with a pic and walk the O-Ring onto the groove (**inside**) of the housing.
10. Additionally, there is an O-ring on the bypass plate that should also be replaced (see fig. C).



**For Race applications** use this filter as a tool to see what's going on inside of your motor. Inspecting your element will tell you the condition of the internal working parts of your engine, and allow you nip any problems in the bud. Don't be afraid to look at it between rounds or heat races. If you feel something is not right with the internal workings of your motor, look at the filter element. It's a window to look inside the motor without taking the motor apart.

**For Street or Fleet applications** check the filter after a few hundred miles to see what kind of lint or debris has been floating around inside your engine. Once you are sure it is operating normally you can extend your service interval to 3,000-3,500 miles or, as you deem necessary.

If you need further technical assistance please call 559-687-1955  
Monday through Friday from 8:00 AM to 5:00 PM Pacific time.

