

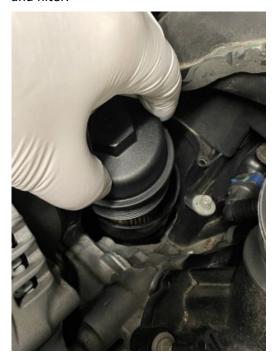
## MS-101-BK Cartridge to Spin-On Adapter

For 2011-2013 3.2L & 3.6L Pentastar Engines

## Installation instructions:

## Important: Read instructions thoroughly prior to starting installation.

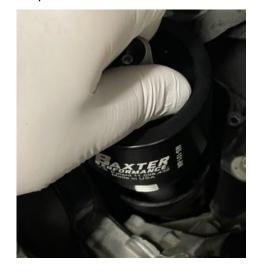
**Step 1:** Remove existing Cartridge filter cap and filter.



**Step 2:** Ensure that the threads on locking cleat are aligned with threads on adapter body prior to install. (as shown)



**Step 3:** Install the Adapter until it bottoms out, then back it out less than 180 degrees to expose an NPT port to be utilized for the Schrader valve. Note the orientation (the opposite one will be plugged with the included hex plug) and remove adapter.



**Step 4:** Lubricate the 1/8" hex plug and install in unused port and tighten.



**Step 5:** Using diagonal pliers, cut four supports below bypass valve spring base.



Sample oil filter/cooler used for clarity.

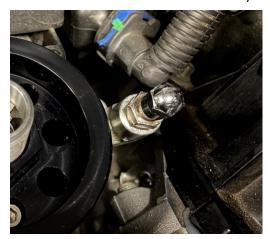
Supports following bypass removal shown.



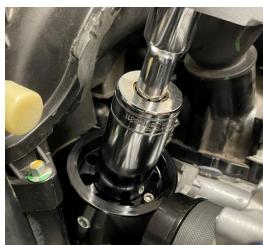
**Step 6:** Install body O-ring seal and lubricate with engine oil.



**Step 9:** Lubricate threads on Schrader valve and install. (Use optional 90-degree fitting if needed for better access or clearance)



**Step 7:** Reinstall adapter using 1" deep socket, to the previously determined orientation.



**Helpful Hint:** 90-degree fitting can be installed using a 15/16" 12-point closed end wrench.



**Step 8:** Lock the adapter in place, by tightening the socket head cap screw with a 5/32 hex wrench.



**Step 9:** Install oil filter with 22 X 1.5 threads, WIX 57502, Purolator PSL22500 or MOBIL1 M1-212 or equivalent. Make certain to lubricate oil filter gasket prior to installation.



**Servicing instructions at Oil Change:** Prior to oil filter removal and draining engine oil from the oil pan, apply minimum 30 PSI to the Schrader valve

for at least three seconds. This will evacuate the oil retained in the oil filter and cooler. Then, remove the oil filter and replace.



These instructions are also available on the website.