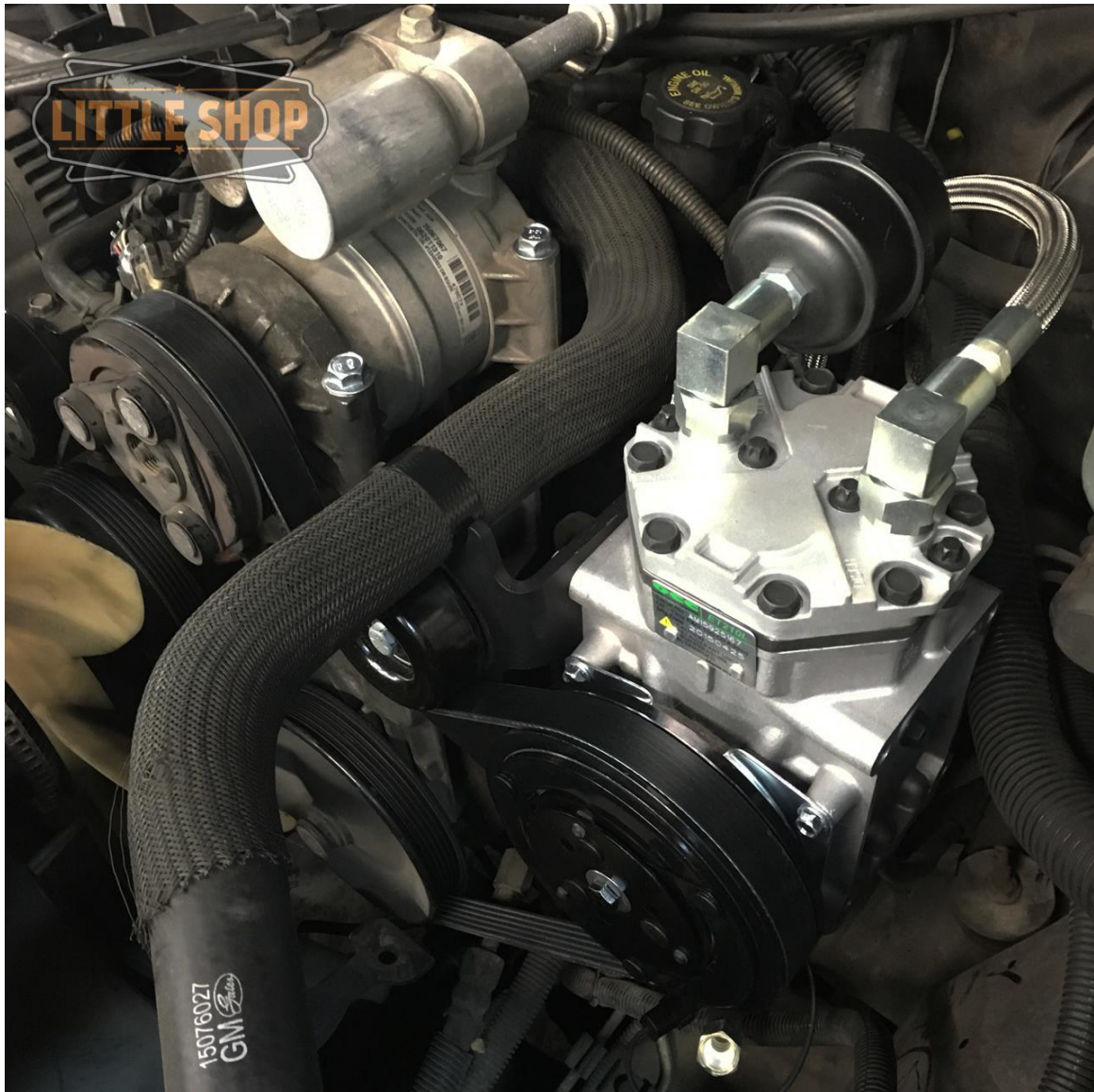


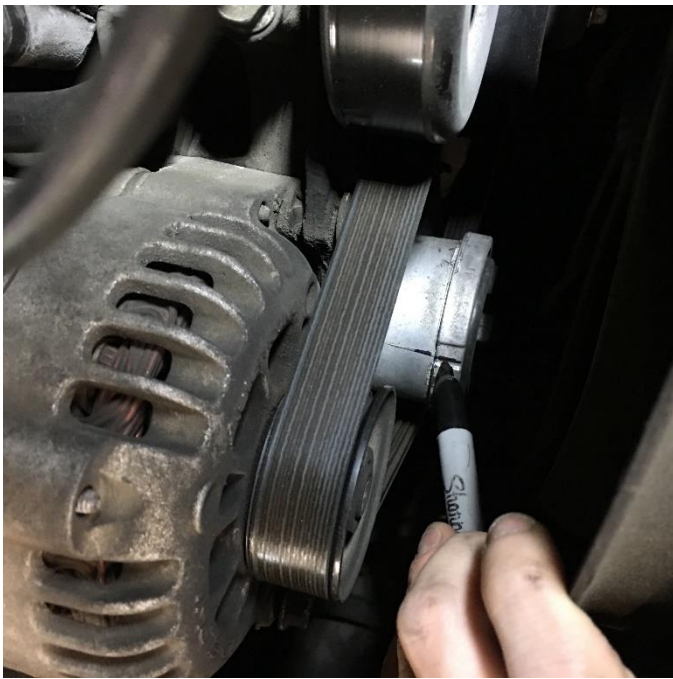


ENGINE DRIVEN COMPRESSOR --- GM 4.3, 5.0, 5.7 ENGINES

(96-07 GM Fullsize trucks and S10s)

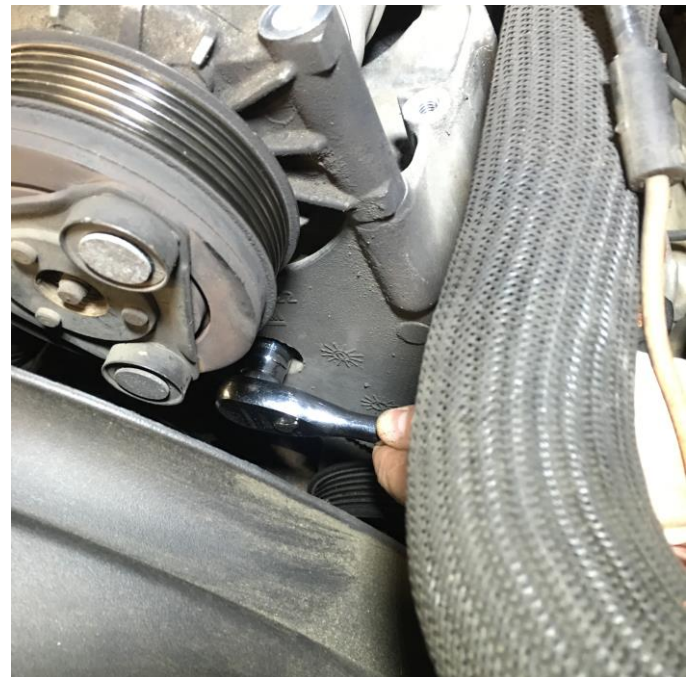
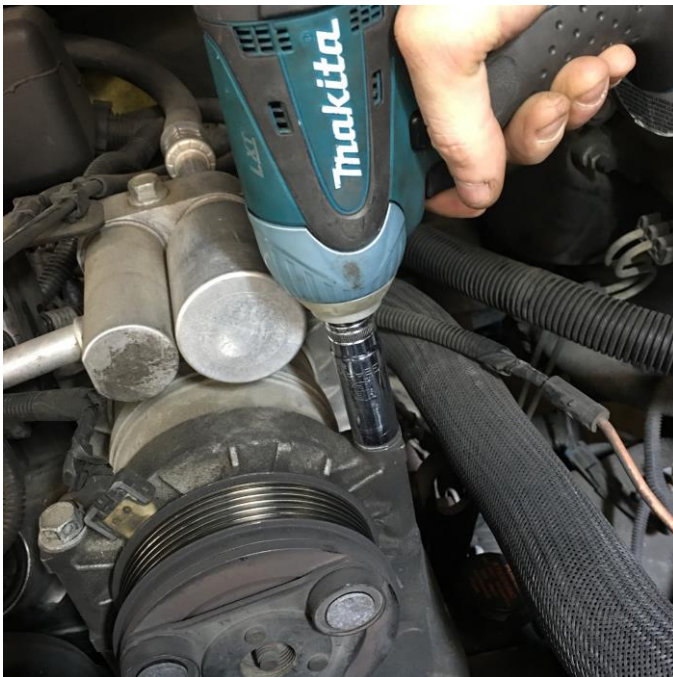
NOTE: Determine your proper belt length on **Step 19** before beginning the installation.





1 & 2

Start by making a witness mark across the idler pulley arm to indicate the factory belt tension. Then rotate the idler pulley to remove the belt. Then remove the factory alternator bolt. You may wish to remove the upper fan shroud at this time to make the installation easier.



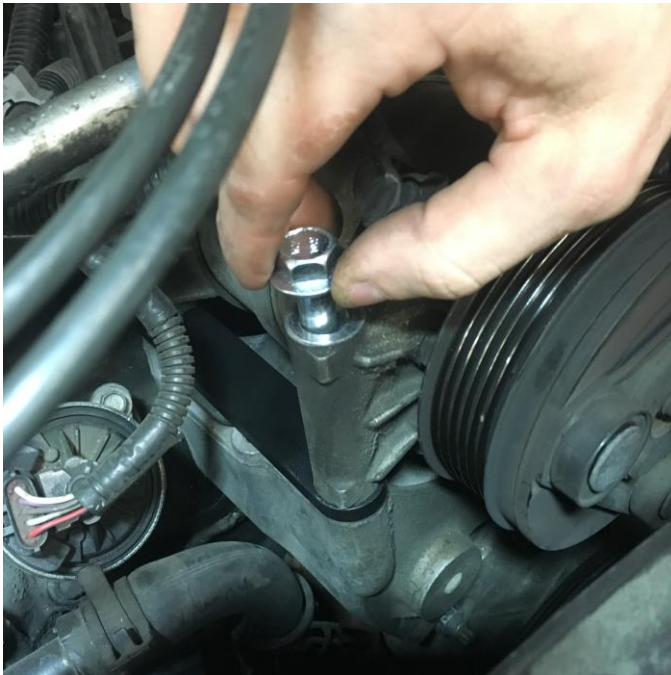
3 & 4

Remove the 4 bolts holding the AC compressor, but leave the compressor in place. Then remove the front accessory bracket bolt as shown.



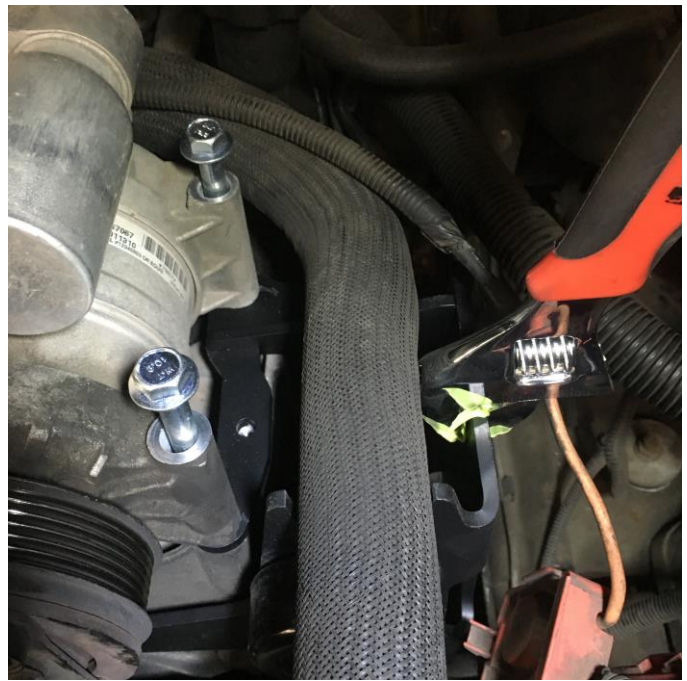
5 & 6

Remove the factory power steering bracket as shown and apply medium strength threadlocker to the nut.



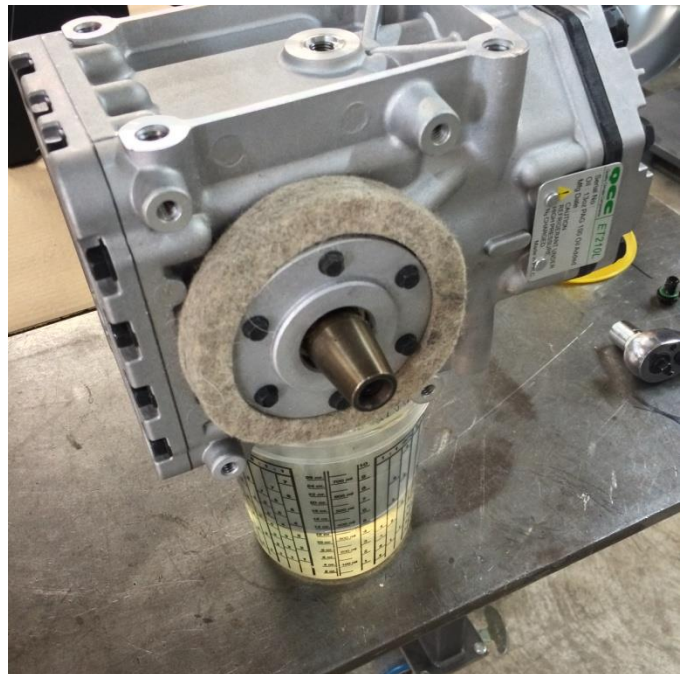
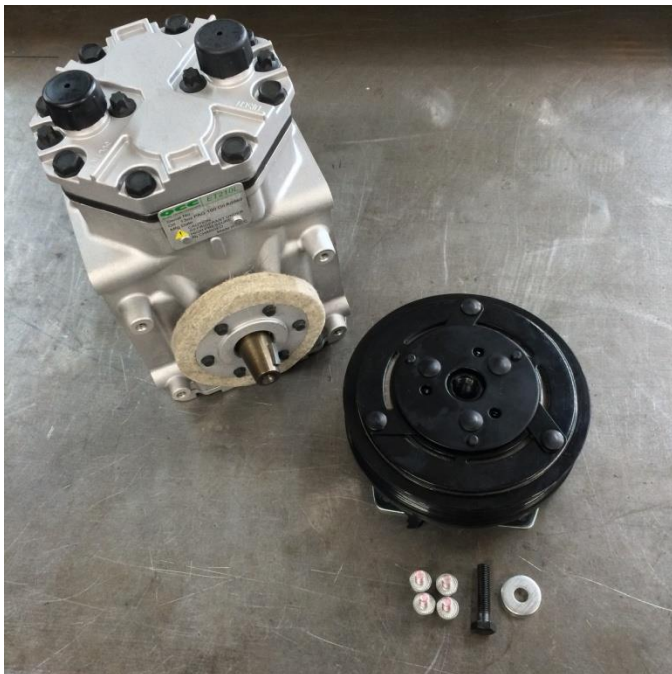
7 & 8

Insert the supplied compressor spacer and start the M10x1.5 100mm bolts on that side, but do not tighten. Start installing the compressor bracket by slipping the slotted opening over the power steering stud as shown.



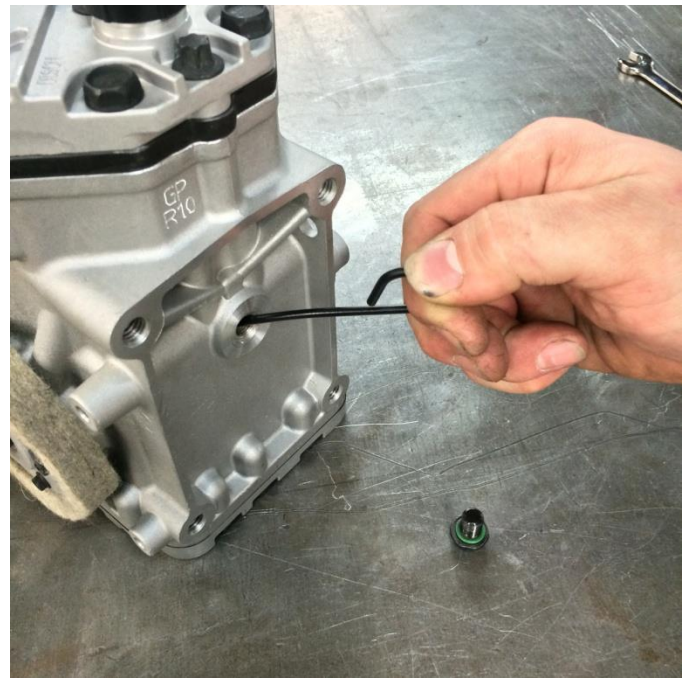
9 & 10

Start the 3/8-16 x 5.0 bolt and washer through the bracket and into the head, but do not tighten. Then start the remaining M10x1.5 100mm through the AC compressor and the bracket. It may be necessary to use an adjustable wrench to apply pressure in or out until the bolts freely register into the threads. After all bolts are started, confirm that the slotted foot of the bracket is seated on the power steering stud, and tighten all bolts including the threadlocked nut back on to the power steering stud.



11 & 12

Standard and SLM compressors: Verify the new compressor has the half-moon shaped woodruff key installed in the crankshaft. **Standard Compressors only:** The compressors are packaged pre-filled with AC refrigerant oil but it is recommended to run 12 oz. of SAE 30 non-detergent engine oil. Remove the screws from each side of the compressor fill ports and drain the oil.



13 & 14

Standard compressors only: Put one plug back in and fill new oil thru the opposite port. It is recommended to use **Valvoline non-detergent SAE30 (PN 822382)** **SLM compressors:** These are prepackaged with the proper synthetic compressor oil. It is recommended to add **Amsoil PCK or Royal Purple Synfilm Recip 100 (PN 01513)** as used. **NOTE:** the side port on these compressors is not used. Instead, use the sight glass at the back of the compressor to determine proper fluid level. (If you have trouble seeing it in the vehicle, a mirror can be used.) Since the engine is on a slight angle, the oil should be at the TOP of the sight glass which will indicate 10-12 oz of oil internally. Oil can be added through the SUCTION port on top of these compressors (this is for SLM only!). Refer to SLM compressor owner's manual for more information.

IMPORTANT:

Check oil level with your compressor on a level surface with the supplied dipstick touching the bottom "floor" of the compressor. Each mark on the dipstick represents 1 oz. (Sometimes it's necessary to rotate the shaft on the compressor if the position of the crank assembly obstructs the path of the dipstick) **You should keep a maximum of 12 oz. and minimum of 8 oz. in the compressor at all times. Once the compressor is installed, the oil level should be checked frequently to monitor consumption. This amount will depend on usage, and type of compressor. It should NEVER DROP BELOW 8 oz. For Standard compressors check every 2 weeks until you find your average use. For SLM compressors check every 2 months until you find your average use.**



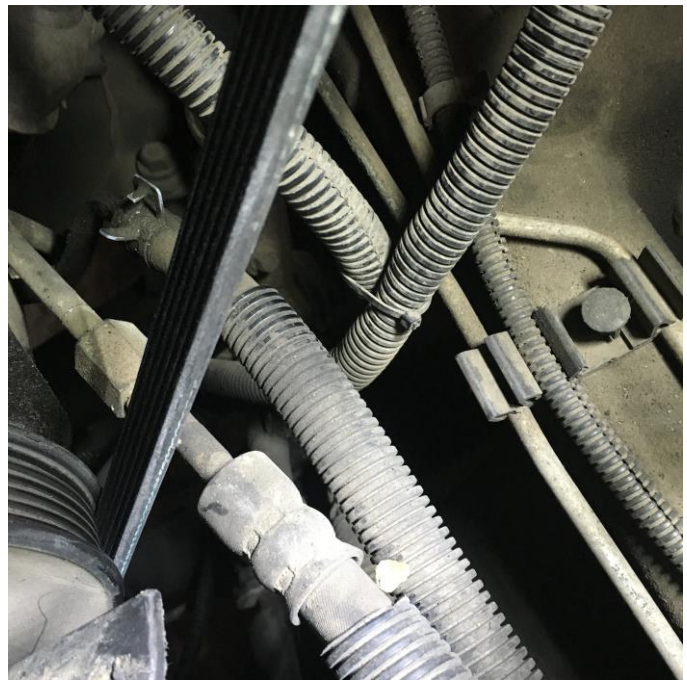
15 & 16

Tighten the 4 screws that attach the clutch. You can choose if you want the clutch wire oriented to the top or bottom. Install the 5/16 clutch retainer bolt and torque to 20-25 ft lbs. Never hammer the center bolt onto the snout. Let the screw pull it up until it seats.



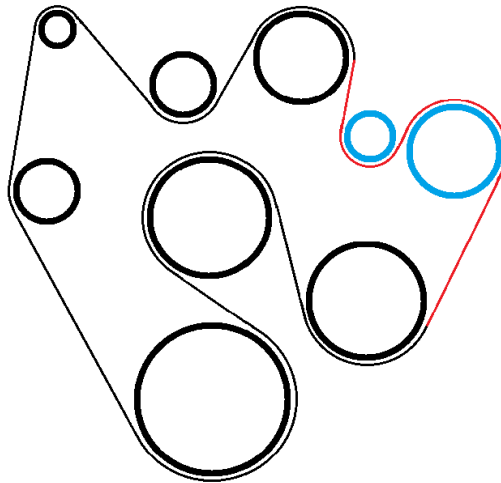
17 & 18

Four 3/8 bolts and lock washers are provided for mounting the compressor to the bracket. They should be tight but be careful not to strip the aluminum compressor body. After the compressor is mounted, it is advised to wrap a few runs of electrical tape over the area where the upper radiator hose will sit (not applicable to all models). Some models carry a throttle cable bracket, which may be mounted back thru the EDC bracket into the original threaded hole.



19 & 20

Choose a belt based on your factory length in the chart below. Continental Elite series belts are preferred. You can measure yours accurately with a tape measure, or reference the existing part number if it is visible. Install the new belt per the routing diagram below. Take special note to ensure the power steering hoses have clearance to the system. They can be bent gently by hand to make clearance, if necessary. **NOTE:** some models of S10s and later models of C/K 1500s with ABS may require clearance be made around the compressor. Make room as necessary to clear the compressor.



Stock Length	New Length	Continental Part # (preferred)	Gates Part #
87.35	102.26	4061017	K061016
87.59	102.50	4061020	K061020
88.01	102.92	4061025	K061025
95.59	110.50	4061098	K061099
95.75	110.66	4061105	K061105
96.58	111.49	4061110	K061110
97.18	112.09	4061115	K061120

If your belt isn't listed, you can measure the outside length of your existing belt and add **14.9** to the total to find the new belt length. Belts 1/8 inch shorter and 3/8 longer than the ideal number are acceptable.



21 & 22

Standard compressors: Two head fittings are provided with the kit. They are threaded 3/8 NPT female for direct connection to the intake filter and leader hose. Use a thread sealant such as Loctite 545 or Teflon tape to seal the connections to the filter and leader hose. Do not use sealant on the O-ring compressor threads. **SLM compressors:** Thread the provided 90 degree fittings into the head of the compressor using the provided nipples with Loctite 545 or Teflon on both sides of the nipples.



23 & 24

Standard compressors: Verify the o-rings are present in the bottoms of each of the head fittings and install on the compressor. The filter/silencer will go on the port labeled "Suction" **SLM compressors:** Install the filter/silencer into the suction port side, labeled with an "S" Make sure to hold the 90 fitting with a wrench so as not to break the fitting or compressor head while tightening.



25 & 26

Now is a good time to start the engine and verify there are no problems with the serpentine drive, and that the compressor is not visually out of line. Check the witness mark made previously on the idler. It will be an indication if the belt is looser or tighter relative to the factory belt. Bear in mind that new belts will stretch slightly during their first few minutes of run-in. It's best to check after 3-5 minutes of run time. It's preferable for the marks to line up, or be slightly tighter than the original belt. If they are significantly different, then the belt length can be changed to the next size longer or shorter as needed.

27

Since everyone has different goals for their system, we can't make exact recommendations for other parts you wish to use along with the EDC. However, here are some parts that are recommended to most installations:

- Oil/water trap – like 3/8 SMC (SMCAF30-N03-2Z) or ½ SMC (SMCAF40-N04-2Z) should be used to catch residual oil and moisture before it enters the tank. Mount this as far away from the compressor as possible to do the most good. Then mount a second unit on the outgoing port of the system before it enters a valve assembly (if using for air ride).
- Check valve – like the 3/8 SMC (SMCNAK4000-N03) and the ½ SMC (SMCNAK4000-N04) should be used just before the trap and keeps tank pressure from leaking back through the compressor
- Pressure switch/relay – we usually use a pressure switch to trigger the compressor on and off. It's preferred to use the lowest range which will still get the job done, so that it will build up less heat and live longer. Do not exceed 200 psi.
- **CHECK THE OIL OFTEN** until you become accustomed to the average consumption of the compressor. If the compressor is maintained properly it should easily outlive your ownership of the vehicle, but if the oil level is run regularly under 8 oz. then just like any piston driven engine, internal failure will likely occur. Our commitment to the customer is that this bracket system fits well and works properly. In no way do we warranty the life of the pump itself. They have been used successfully as on-board air compressors on semis and autos for decades so if it has problems, it's very likely it was improperly maintained.

[*OWNERS MANUAL FOR YORK SLM COMPRESSOR](#)

Thank you for your purchase and we appreciate your business! If you need any help at all, email eric@littleshopmfg.com