

INSTALLATION INSTRUCTIONS

PCV VALVE BYPASS







GM LT4 LT5







P/N: 20-0988

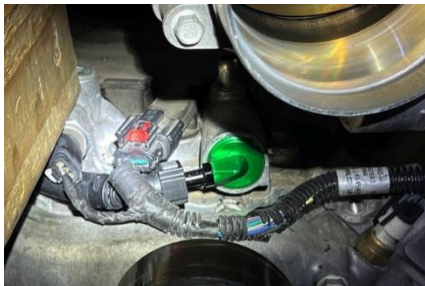
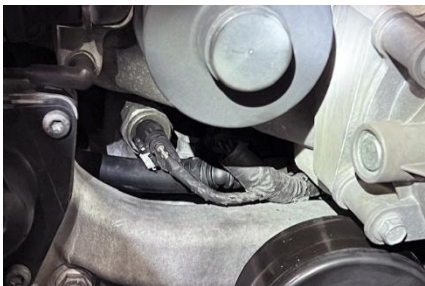



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Support: info@radiumauto.com

STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO
1		NOTES:	
		a. The terms "driver-side" and "passenger-side" will NOT be referenced. As depicted, these instructions will always reference "LH" and "RH" areas of the vehicle.	
		b. Aluminum wrenches are recommended to prevent surface marring on all anodized finishes.	
		c. Lubricate all O-rings with engine oil prior to installation.	
		d. The instructions may differ as this is compatible with many vehicles.	
2	10mm Socket Wrench	Disconnect the negative battery terminal.	
		CAUTION: Disconnecting the battery may cancel fault memories of some control units. Consequently, before disconnecting the battery, always cross examine any fault memories.	
3		Pop the hood and allow the engine to cool before proceeding.	
4		Remove anything that could be in the way.	
5	7mm Socket Wrench	Find the dry sump vent tube that connects to the intake pipe. Push the SAE quick connect further onto the intake, then simultaneously squeeze the SAE locks and pull the fitting up to release.	
	8mm Socket Wrench		
		Unplug the mass air flow sensor.	
		Loosen the hose clamps on the opposing sides of the intake pipe. As shown, remove the intake pipe from the vehicle.	

6	10mm Socket Wrench	Loosen the 20 screws that secure the supercharger cover.	
7		Remove the supercharger cover from the vehicle, as shown. Place the cover on a clean surface.	
		Temporarily protect the open supercharger housing with shop towels.	
8	15mm Wrench	Rotate the tensioner bolt (shown) towards the center of the vehicle and hold it in place.	
9		As shown, remove the supercharger belt from the pulley.	
10	10mm Socket Wrench	Loosen the 10 screws that secure the supercharger housing.	
	10mm Wrench	NOTE: The 2 screws at the rear (under the cowl) are a little tricky to get to. Use a wobbly for the LH side and a wrench for the RH side.	
	Wobbly		
11		Be prepared to lift and rotate the front of the supercharger. As shown, squeeze the two SAE locks and pull this front crankcase vent line up to temporarily disconnect it from the front LH valve cover. Make sure there is nothing else that could obstruct this movement.	

12		Wedge something between the blower and the crankcase valley. The supercharger needs to be just high enough so the OEM PCV valve can be accessed.	
13		To remove the OEM PCV valve, it uses a large 12 point drive, as shown. A (uncommon) 14mm Allen wrench can be used. But fortunately, the PCV valve is essentially hand tightened in from the factory so no excessive torque is required.	
14	14mm Allen Wrench	Remove the PCV valve.	
15	Oil Lubrication	Lubricate the 2 O-rings found on the provided PCV valve bypass fitting.	
	14mm Wrench	Hand tighten, then use a wrench to fully seat the fitting. Now rotate the fitting slightly counterclockwise until it is pointed towards the RH side of the vehicle.	
16	Oil Lubrication	Unplug the 2 connectors shown.	
	12mm Wrench	Lubricate the O-ring found on the provided male SAE quick connect fitting (or the included 2AN ORB plug). Hand tighten, then use a wrench to fully seat the fitting. Now rotate the assembly slightly downwards, exactly as shown.	
17	Oil Lubrication	Find a 45 degree female SAE quick connector in the kit and lubricate the external O-rings. Slide the 3/8" (6AN) hose over the barbs and secure using one of the spring clamps, as shown.	
	Pliers		
		Lubricate the internal O-rings inside the 45 degree SAE quick connector.	

18		As shown, install the female SAE quick connect hose to the male quick connector until a "click" is felt.	
		Route the hose behind the thermostat housing.	
19		Carefully lower the blower. As shown, check that the PCV valve hose and the sensor wiring are clear and not getting pinched or chaffed. The hose should be able to be wiggled slightly.	
20	10mm Socket	Next, reinstall the supercharger housing then the cover.	
	Torque Wrench	As always, start from the center, then move across and outwards when tightening. The torque spec for both the supercharger housing and the cover for sets of screws is 89 lb-in (7.4 lb-ft or 10 Nm).	
21	15mm Wrench	Applying force to the tensioner, reinstall the supercharger belt. Reconnect the crankcase vent line to the LH valve cover.	
22		It is up to the installer on what to do with the new crankcase hose.	
		An option is to run it to a catch can. Install a PCV valve (shown) on the catch can outlet port. Then route another hose to the intake manifold. All of these aforementioned parts are found at www.radiumauto.com .	
		INSTALLATION COMPLETE	