

# INSTALLATION INSTRUCTIONS

## 15-19 CHEVROLET CORVETTE

### Z06 DUAL CATCH CAN KIT

P/N: 20-1186-FL

Document: 19-0450







Support: info@radiumauto.com



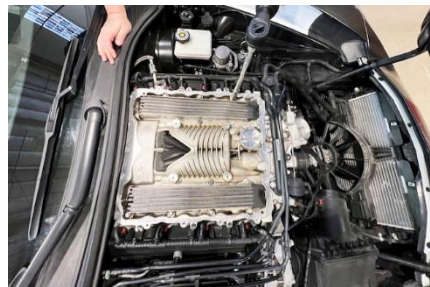





#### 20-1186-FL







ITEM DESCRIPTION	QTY	ITEM DESCRIPTION	QTY
CATCH CAN, FLUID LOCK, PREASSEMBLED	2	10AN ORB SWIVEL BANJO TO 10MM SAE MALE	2
BRACKET, CATCH CAN, DUAL, C7	1	2AN ORB TO 8MM SAE MALE	1
MOUNT, CATCH CAN, DUAL, C7	1	PCV VALVE BYPASS, GM	1
10MM SAE FEMALE TO 3/8IN BARB, STRAIGHT	2	ALUMINUM SPACER, 5/8" OD, 13/16" LONG	3
10MM SAE FEMALE TO 3/8IN BARB, 45DEG	2	SOCKET HEAD CAP SCREW, M6X1X35, SS	3
10MM SAE FEMALE TO 3/8IN BARB, 90DEG	3	CABLE ZIP TIE, 10IN, BLACK	8
12MM SAE FEMALE TO 3/8IN BARB, 90DEG	1	SPRING CLAMP, 3/8IN HOSE	8
12MM SAE FEMALE TO MALE/MALE TEE	1	CATCH CAN SERVICE INTERVAL STICKER	2
10AN ORB TO 10MM SAE MALE	1	3/8IN PCV/FUEL HOSE	9FT
10AN ORB TO 10MM SAE MALE PCV VALVE	1		




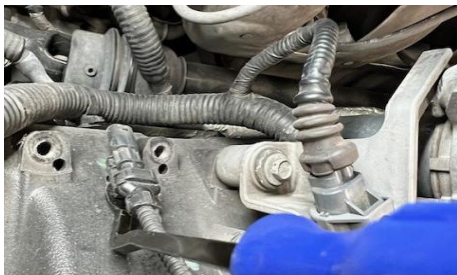


STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO
1		<p>NOTES:</p> <p>a. The terms "driver-side" and "passenger-side" will NOT be referenced. As depicted, these instructions will always reference "LH" and "RH" areas of the vehicle.</p> <p>b. Aluminum wrenches are recommended to prevent surface marring on all anodized finishes.</p> <p>c. Lubricate all O-rings with engine oil prior to installation.</p>	






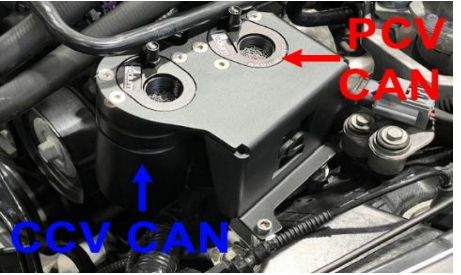
2	10mm Socket Wrench	Disconnect the negative battery terminal.	
		CAUTION: Disconnecting the battery may cancel fault memories of some control units. Consequently, before disconnecting the battery, always cross examine any fault memories.	
3		Pop the hood and allow the engine to cool before proceeding.	
4	7mm Socket Wrench	To gain workspace, loosen the 4 screws and remove the front air duct, as shown. Optionally, remove the hood.	
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		
		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.  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.	
	10mm Wrench		
	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.	

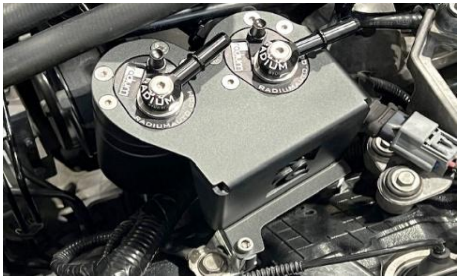













14	14mm Allen Wrench	Remove the PCV valve.	
15	Oil Lubrication	Lubricate the 2 O-rings found on the provided PCV valve bypass fitting.	
	14mm Wrench	Hand tighten, then use a wrench to fully seat the fitting. Now rotate the fitting slightly counterclockwise until it is pointed towards the RH side of the vehicle.	
16	Oil Lubrication	Unplug the 2 connectors shown.	
	12mm Wrench	Lubricate the O-ring found on the provided male SAE quick connect fitting. 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 chafed. 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	13mm Socket Wrench	On the LH frame rail, remove the M8x1.25mm screws that secure the 3 ground ring terminals shown.	
23	Pry Tool	If the MRC (Magnetic Ride Control) is still installed, carefully pry up to dislodge the plastic wire harness stay shown.	
24		Move the connector towards the front of the engine bay and out of the way.	
25	13mm Socket Wrench	Place the provided aluminum grounding block down and lineup the 3 holes. Place the ring terminals down and secure with the OEM screws, as shown.	
		NOTE: carefully tweaking the wire harnesses underneath can permit additional space.	






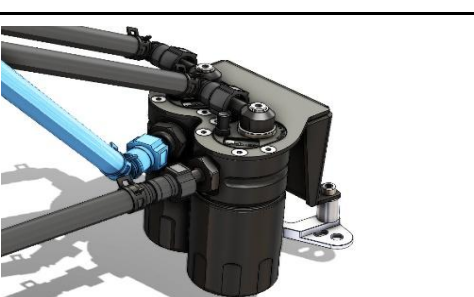
26		As shown, place the 3 provided aluminum spacers down on top of the ground block's M6x1mm threaded holes.	
27	4mm Allen Wrench	<p>Place the catch can mounting bracket down and lineup the 3 bracket holes through the spacers and to the M6x1mm threaded bosses.</p> <p>Using the three M6x1mm socket head screws, secure the bracket.</p>	
28		Find the 10AN ORB to 10mm SAE quick connect male fitting (right) and the 10AN ORB to 10mm SAE quick connect male PCV valve fitting (left).	
29	Oil Lubrication	As shown, install these aforementioned fittings to the catch can side ports.	
	25mm Socket		
30	Thread Locker	Apply a medium-strength thread locker to the eight provided M5x0.8mm flat head screws.	
31	3mm Allen Wrench	<p>Position the catch cans into the mounting bracket and secure.</p> <p>The catch can with the PCV valve fitting (red) should be at the rear.</p> <p>The catch can without a PCV valve (blue) should be at the front.</p>	


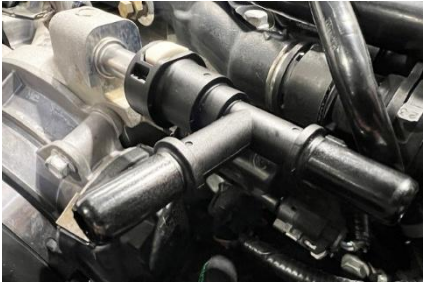



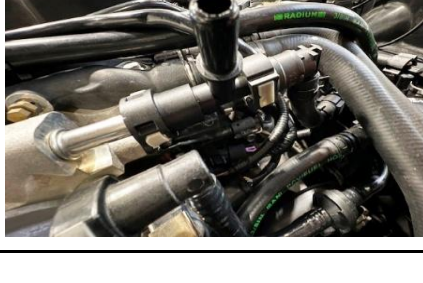



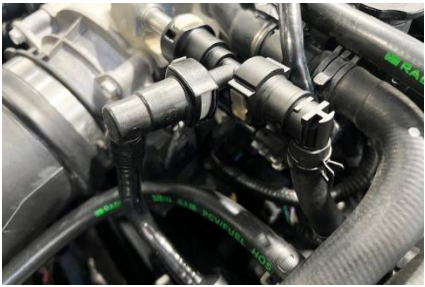

32	Oil Lubrication	Find the 10AN ORB 10mm SAE swivel banjo fittings in the kit. Lubricate the O-rings and screw the fittings into the catch can top ports, as shown.	
	4mm Allen Wrench		
33		<p>For the CCV (crankcase vent) catch can, only the tubing from the dry sump to the intake system will be removed. To release, squeeze the SAE quick connector locks from the dry sump and from the intake system and pull to release the tubing (shown).</p> <p>NOTE: The crankcase vent tubing from the front RH and LH valve covers to the dry sump will NOT be removed or altered in any way.</p>	
34	Oil Lubrication	<p>Slide one of the provided spring clamps on the end of the included hose. Find one of the 10mm SAE female straight connectors in the kit. Lubricate the barbs and O-ring and insert into the 3/8" hose. As shown, secure the connector using the spring clamp.</p>	
	Pliers		
35	Oil Lubrication	<p>Lubricate the internal O-rings inside the SAE quick connector. Temporarily insert the connector into the side port of the front CCV catch can.</p> <p>NOTE: When installing SAE quick connectors, wait for a "click". Gently tug on the connection to confirm they have locked in place.</p>	
36	Oil Lubrication	<p>Find one of the 10mm SAE female 90 degree connectors, shown in yellow. Lubricate the internal O-rings inside the SAE quick connector and temporarily insert it into the air intake connection.</p> <p>Run the hose (shown in blue) from the front CCV catch can side port to the 90 degree SAE connector. Mark a cut location on the hose.</p>	
	Marker		
37	Hose Cutter	<p>Remove the hose and SAE quick connectors from the engine bay. Cut the hose at the marked area.</p> <p>NOTE: The cut length will be determined by the air intake brand and the specific hose routing. Our cut length for this hose was 15.5" (394mm).</p>	

38	Oil Lubrication	Slide one of the provided spring clamps on the end of the cut hose. Lubricate the barbs and O-ring of the 90 degree SAE quick connector and insert it into the 3/8" hose. As shown, secure the connector using the spring clamp. Now install the hose.	
	Pliers		
39	Oil Lubrication	Find two of the 10mm SAE female 90 degree connectors in the kit. Lubricate the internal O-rings. Temporarily insert them onto the catch can top port fittings in the orientation shown.	
40	Oil Lubrication	Slide one of the provided spring clamps on the end of the leftover hose. Find one of the 10mm SAE female straight connectors in the kit. Lubricate the barbs and O-ring and insert into the 3/8" CCV hose. As shown, secure the connector using the spring clamp.	
	Pliers		
41		As shown, temporarily insert the connector into the dry sump port.	
42	Diagonal Cutter	<p>Start routing the CCV hose, as shown.</p> <p>Although they are very small, the 2 factory plastic clips can be used. While making the path over towards the LH side (on top of the supercharger), grab the PCV hose under the supercharger from the valley. For optimal routing, keep the PCV hose rearward and the CCV hose in the front, as shown.</p> <p>Use the provided zip ties to keep the OEM lines and new lines parallel.</p>	
43	Hose Cutter	<p>Run the rear PCV hose towards the rear catch can top port. As shown, cut the hose to length.</p> <p>NOTE: The cut length will be determined by the specific hose routing. Our cut length for this hose was 34" (864mm).</p>	



44	Oil Lubrication	Slide one of the included spring clamps on the end of the hose.	
		Lubricate the 90 degree SAE quick connector O-ring and barbs.	
45	Pliers	Insert the SAE quick connector into the 3/8" PCV hose. Secure the connector using the spring clamp. Now insert the connector into the top rear catch can port fitting, as shown.	
46	Hose Cutter	Run the front CCV hose towards the front catch can top port. As shown, cut the hose to length.	
		NOTE: The cut length will be determined by the specific hose routing. Our cut length for this hose was 45" (1143mm).	
47	Pliers	Slide one of the included spring clamps on the end of the hose. Lubricate the 90 degree SAE quick connector O-ring and barbs. Insert the SAE quick connector into the 3/8" CCV hose. As shown, secure the connector using the spring clamp.	
	Oil Lubrication		
48		Insert the connector into the top front catch can port fitting in the orientation shown.	
49	Oil Lubrication	Slide one of the provided spring clamps on the end of the leftover hose. Find the last 10mm SAE female 45 degree connector in the kit. Lubricate the barbs and O-ring and insert into the hose. Secure the connector using the spring clamp.	
	Pliers		
		Insert the SAE quick connector (shown blue) onto the rear catch can side port PCV valve fitting.	

50		Remove the 12mm SAE quick connect fitting from the throttle body.	
51	Oil Lubrication	Lubricate the internal O-rings and insert the provided 12mm SAE quick connect tee fitting to the throttle body.	
52	Oil Lubrication	Find the (larger) 12mm SAE female 90 degree connector in the kit. Lubricate the internal O-rings. Temporarily insert it onto the 12mm SAE quick connector tee in the orientation shown.	
53	Hose Cutter	<p>Run the PCV valve hose (from the rear catch can side port) towards the 12mm SAE quick connector tee fitting. As shown, cut the hose to length.</p> <p>NOTE: The cut length will be determined by the specific hose routing. Our cut length for this hose was 3" (76.5mm).</p>	
54	Pliers	Slide the last spring clamp on the end of the hose. Lubricate the 90 degree 12mm SAE quick connector O-ring and barbs. Insert the 12mm SAE quick connector into the 3/8" PCV hose. As shown, secure the connector using the spring clamp.	
	Oil Lubrication		
55		Insert the 90 degree 12mm SAE quick connector into the tee fitting.	

56	Heat Gun	The OEM plastic tubing will need to be slightly modified to properly connect to the tee fitting. Carefully apply a small amount of heat directly at the tubing connection. Not very much heat is required.	
		CAUTION: The tubing can melt if too much heat is applied.	
		Use just enough heat to enable the OEM SAE quick connector to be rotated 90 degrees, as shown.	
57		Insert the OEM SAE quick connector into the tee fitting and orient as shown.	
58		Start the engine and check for any leaks or errors.	
SERVICING	It is recommended to check catch can fluid level every 5,000 miles (8,000km). It may be necessary to check more frequently in extreme cases.	<p>Catch can contents can be monitored using the dipsticks. When collected fluid reaches a certain level, a float ball in the catch can will block the passage into the collection chamber and the catch can will not collect any additional fluid.</p> <p>To empty, unscrew the bottom half of the catch can. Carefully drain contents into an oil-safe container and dispose of in the same manner as used motor oil. Contents may also be drawn out through the dip stick hole using a hand vacuum pump and a straw.</p>	