INSTALLATION INSTRUCTIONS

09-15 CADILLAC CTS-V CATCH CAN KITS

20-0562-FL 20-0563-FL 20-0564-FL 20-1562-FL 20-1564-FL

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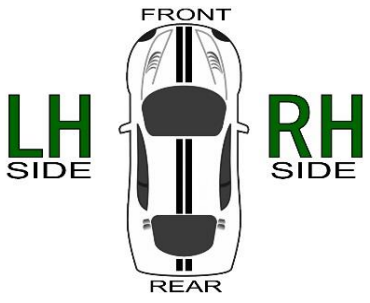
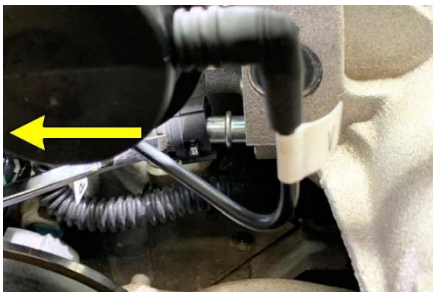
20-0562-FL & 20-1562-FL Catch Can Kit, PCV: Steps 1-31

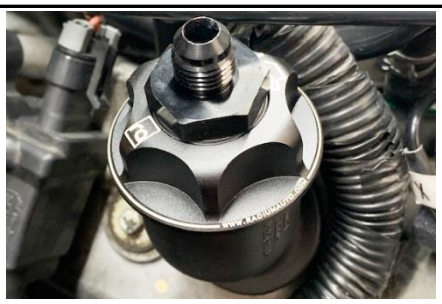
20-0563-FL Catch Can Kit, CCV: Steps 32-54

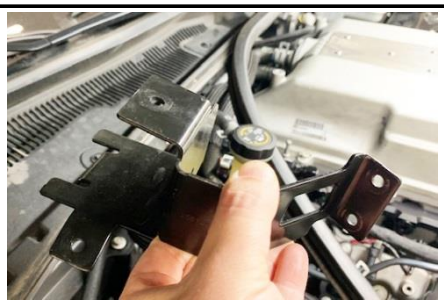
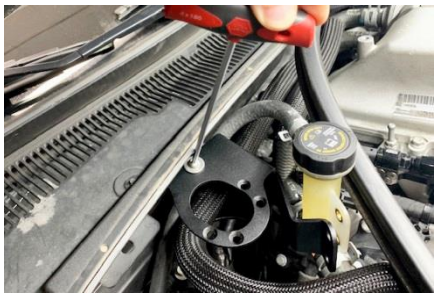
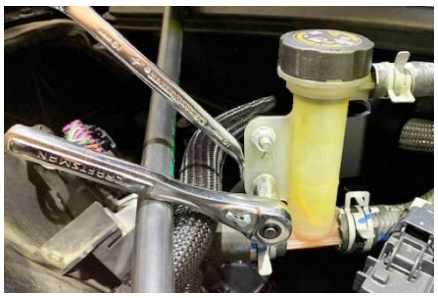
20-0564-FL & 20-1564-FL Dual Catch Can Kit: Steps 1-54

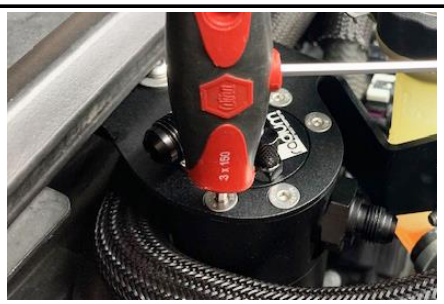
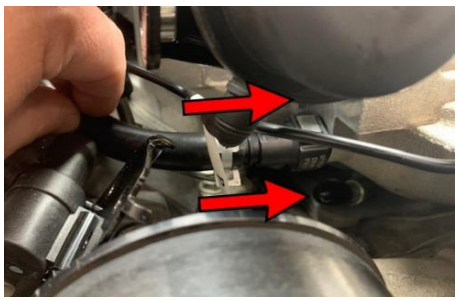
20-0564-FL			
Item Description	**Qty**	**Item Description**	**Qty**
BRACKET, CTS-V, PCV	1	10AN ORB TO 6AN MALE FITTING	2
Oil Fill Adapter, GM	1	PUSHLOK HOSE END, 6AN STRAIGHT	1
Catch Can Media	1	PUSHLOK HOSE END, 6AN 90DEG	3
Catch Can, Fluid Lock 2, Preassembled	2	10MM SAE FEMALE TO 3/8IN BARB	4
O-ring, Black	1	SPRING CLAMP, 3/8" HOSE	4
3/8 PCV/FUEL HOSE	11 ft	10AN ORB SWIVEL BANJO TO 6AN MALE	2
BRACKET, CTS-V, CCV	1	Round Caps for 5/16" to 3/8" OD	1
Plastic Barbed Tube Fitting	1	M6 Washer	1
PCV VALVE, 10AN ORB to 6AN Male	1	BHSCS, M6 x 1.0, 16mm Long, SS	1
Aluminum Spacer, 5/8" OD	3	PUSHLOK HOSE END, 6AN 45DEG	1
CATCH CAN SERVICE INTERVAL STICKER	1	10 inch Zip Tie, Black Nylon	4
		HHCS, M6 x 1, 40mm Long	3

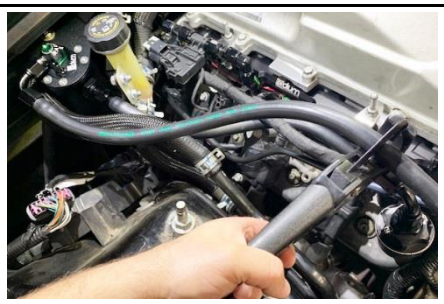
STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO
1		**20-0562-FL & 20-1562-FL CATCH CAN KIT, PCV, CADILLAC CTS-V** NOTE: Because of RHD and LHD variations, the terms "driver-side" and "passenger-side" will NOT be referenced. As depicted, these instructions will always reference "LH" and "RH".	

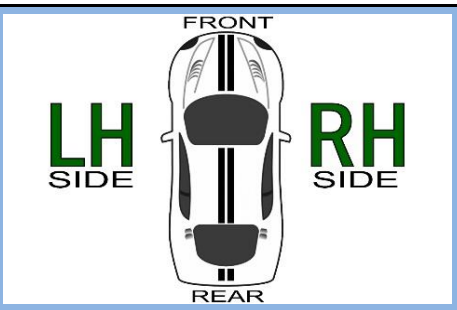
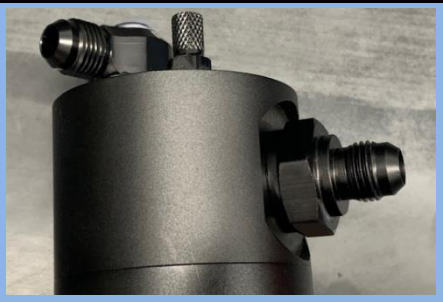
2	10mm Socket	Open the trunk. On the RH side, remove the battery cover. Disconnect the negative battery terminal, as shown.	
3	10mm Socket	At the front RH side of the engine, there is a short convoluted tube that loops from the crankcase to the intake manifold. First, remove the solenoid bracket (shown) to gain access to this area.	
4	Flat Head Screwdriver	To disconnect the SAE quick connections, gently pry and rotate the locks. Simultaneously pull each connection to release, as shown.	
5		As shown, pull the OEM tubing out. This will NOT be reused.	
6		For these GEN IV engines, GM replaced the mechanical PCV valve with a small 2.5mm fixed orifice integrated into the lower port. Without a PCV valve, pressure (equal to or greater than atmospheric pressure) will flow into the crankcase. This is undesireable making this port useless. As shown, gently clasp the rubber cap included in the kit using long needle nose pliers.	
7		Push the rubber cap all the way onto the lower port on the engine as shown. NOTE: This will be tight. Also, a clamp is not necessary as the crankcase will only experience negative pressure.	

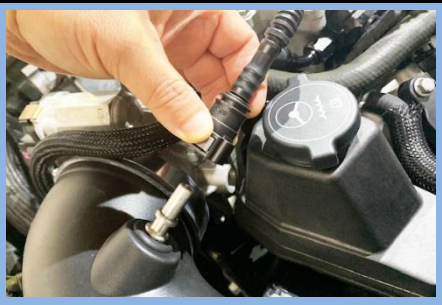
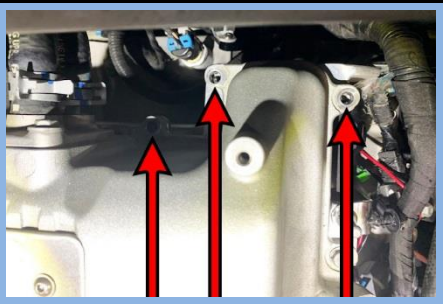
8	Adjustable Wrench 4mm Allen Wrench	Lubricate the O-ring found on the provided 10AN ORB fitting and install to the oil cap. NOTES: 1. 20-0562-FL and 20-0564-FL include a 10AN ORB to 6AN male fitting (shown). 2. 20-1562-FL and 20-1564-FL include a 10AN ORB to 6AN male low profile banjo fitting.	
9		Pop the hood and find the oil cap at the front RH side of the engine. Spin counterclockwise and pull up to remove the OEM oil cap.	
10		Spin the Radium Engineering cap clockwise install. NOTE: The Radium Engineering oil cap can be installed in 2 different orientations (180 degrees apart).	
11	18mm Socket Wrench	Unscrew the 2 strut bar bolts and 2 strut bar nuts.	
12		Remove the strut bar from the vehicle.	
13	10mm Wrench 10mm Socket Wrench	Unscrew the 2 bolt/nuts that secure the firewall bracket to the supercharger coolant fill neck.	

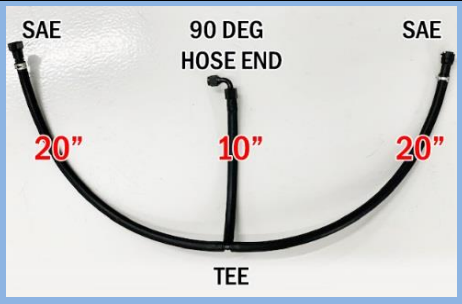
14	10mm Wrench	Near the firewall, peel up the weather stripping for added access. Remove the M6 mounting bolt shown.	
15		Remove the supercharger coolant fill bracket from the vehicle. This will NOT be reused.	
16	4mm Allen Wrench	The included catch can bracket will mount similarly to the OEM bracket. First, insert the bracket into the lower peg, then lineup the upper hole. Rather than reusing the OEM hex bolt, which is difficult to access, secure the bracket using the included M6x1mm Allen head bolt and washer, as shown.	
17	10mm Wrench 10mm Socket Wrench	When resecuring the supercharger coolant fill neck, make sure the OEM nuts are on the front side and the OEM bolts are are on the rear side of the mount. This will permit additional clearance for the catch can side port in a later step.	
18	Oil Lubrication 1" Wrench 4mm Allen Wrench	As shown, install the banjo fitting to the top catch can port and the PCV valve into the side port. Use lubrication for the O-rings.	
19	3/16" Allen Wrench	If installing the optional petcock drain, follow the next 2 steps. ***20-0224 Petcock Drain Kit ONLY*** Remove the lower 4AN ORB plug.	

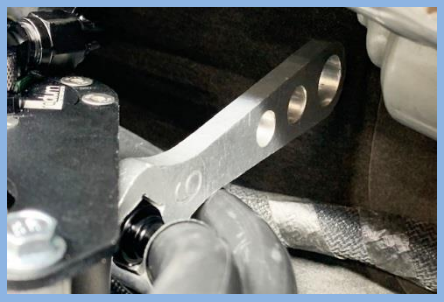
20	Oil Lubrication 14mm Wrench	***20-0224 Petcock Drain Kit ONLY*** Install the barbed fitting to the bottom drain port. NOTE: The rest of the petcock drain installation will not be discussed as the location of the valve is specfiic to the customer's requirements.	
21	Threadlocker	Apply a medium-strength threadlocker to the provided M5x0.8x10mm flat head screws.	
22	3mm Allen Wrench	Install the catch can to the mounting bracket, as shown. It can only go on one way.	
23	Pliers	Insert the provided SAE quick connect fitting into the included hose. As shown, secure using a spring clamp.	
24		Fully insert the hose onto the (upper) intake manifold port until a "click" is felt.	
25	Hose Cutter	Temporarily spin the straight PushLok hose end to the 6AN male portion of the PCV valve. Strategically route the hose tightly around the engine towards the hose end. Line up the hose and cut it to a length that will still permit the engine to move feely on the motor mounts. This hose will be roughly 21" long.	

26	Oil Lubrication	Lubricate the PushLok barbs and fully insert the hose end into the hose. NOTE: PushLok hose ends do NOT require hose clamps.	
27	11/16" Wrench	Install the hose end to the catch can side port using a non marring aluminum wrench.	
28	Oil Lubrication	Find one of the 90 degree PushLok hose ends provided in the kit. Lubricate the barbs.	
29		Fully insert the hose end into the included hose. NOTE: PushLok hose ends do NOT require hose clamps.	
30	Hose Cutter	Temporarily install the 90 degree hose end to the catch can top port. Line up the hose and cut it to a length that will still permit the engine to move feely on the motor mounts.	
31	Oil Lubrication 11/16" Wrench	Lubricate the other provided hose end and insert into the hose. Install this hose end to the oil cap fitting using a non marring wrench. NOTES: 1. 20-0562-FL and 20-0564-FL include a 90 degree hose end (shown). 2. 20-1562-FL and 20-1564-FL include a straight hose end. 3. PushLok hose ends do NOT require hose clamps.	

32		**20-0563-FL CATCH CAN KIT, CCV, CADILLAC CTS-V** NOTE: Because of RHD and LHD variations, the terms "driver-side" and "passenger-side" will NOT be referenced. As depicted, these instructions will always reference "LH" and "RH".	
33	10mm Socket Wrench	Open the trunk. On the RH side, remove the battery cover. Disconnect the negative battery terminal, as shown.	
34	Oil Lubrication 1" Wrench 4mm Allen Wrench	As shown, install the banjo fitting to the top catch can port and the 10AN ORB to 6AN male fitting into the side port. Use lubrication for the O-rings.	
35	3/16" Allen Wrench	If installing the optional petcock drain, follow the next couple of steps. ***20-0224 Petcock Drain Kit ONLY*** Remove the lower 4AN ORB plug.	
36	Oil Lubrication 14mm Wrench	***20-0224 Petcock Drain Kit ONLY*** Install the barbed fitting to the bottom drain port. NOTE: The rest of the petcock drain installation will not be discussed as the location of the valve is specfiic to the customer's requirements.	
37		The next few steps will remove the OEM crankcase vent line assembly shown. This will not be reused.	

38		First, at the rear LH side of the engine, gently pry and rotate the SAE lock. Simultaneously, pull the connection up to release, as shown.	
39		At the front RH side of the engine, gently pry and rotate the SAE lock. Simultaneously, pull the connection up to release, as shown.	
40		Gently pry and rotate the SAE lock located on the air filter intake tube. Simultaneously, pull the connection up to release, as shown.	
41	10mm Socket Wrench	Remove the three M6x1mm hex bolts at the RH rear corner of the supercharger lid.	
42		Shown are the 3 areas from the previous step. NOTE: The OEM bolts will NOT be reused.	
43		In the next step, 3 spacers will be placed underneath the catch can mounting bracket holes.	

44	10mm Socket Wrench	Secure the catch can mounting bracket and spacers using the provided M6x1mm hex bolts.	
45	Threadlocker	Apply a medium-strength threadlocker to the provided M5x0.8x10mm flat head screws.	
46	3mm Allen Wrench	Install the catch can to the mounting bracket, as shown. It can only go on one way.	
47	Hose Cutter Oil Lubrication Pliers	Using the supplied parts, construct the hose assembly, as depicted. NOTES: 1. Use the included spring clamps to secure the SAE quick connect fittings. 2. Hose clamps are not required on the TEE barbs and the 90 degree hose end.	
48	11/16" Wrench	Carefully place the hose assembly around the back RH side of the engine. Push the SAE quick connect fittings onto the crankcase ports until a "click" is felt. Tighten the 90 degree hose end to the catch can top port fitting.	
49	Oil Lubrication	Install the included 45 degree hose end to the supplied hose.	

50	Hose Cutter	Screw the 45 degree hose end to the catch can side port fitting. Lineup the hose to the SAE quick connect fitting on the intake and cut to length. The hose will likely measure around 25" but will vary depending on the intake system.	
51	Pliers	Install the provided SAE quick connect fitting and to the hose and secure using the included spring clamp. Push the SAE quick connect fitting on until a "click" is felt.	
52	11/16" Wrench	Tighten the 45 degree hose end to the catch can side port using non marring aluminum wrench.	
53	Diagonal Cutter	Secure the hoses using the supplied zip ties. These specific locations will vary depending on the vehicle.	
54		Reinstall all OEM components in reverse order.	
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 cases of extreme use.** Catch can contents can be monitored using the dipstick. The contents can be emptied by one of three ways: 1. Unscrewing the bottom half of the catch can and dumping out the collected fluid. 2. Extracted through the dipstick hole using a hand vacuum pump and straw. 3. A remote drain hose can be installed on the bottom of the catch can (P/N 20-0024) Carefully drain contents into an oil-safe container and dispose in the same manner as used motor oil.