INSTALLATION INSTRUCTIONS
OIL CATCH CAN KITS
SUBARU WRX (VB)

Document: 19-0288
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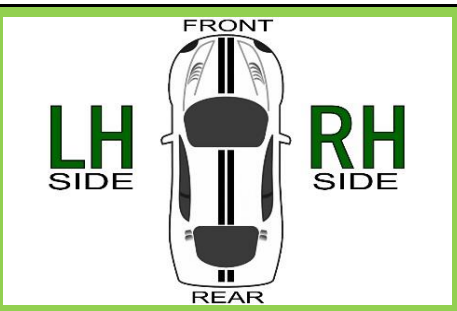
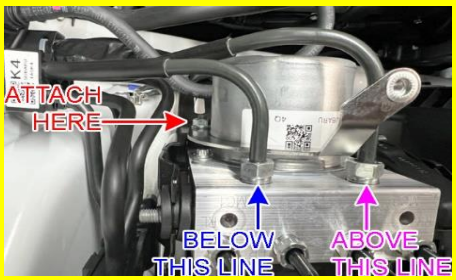
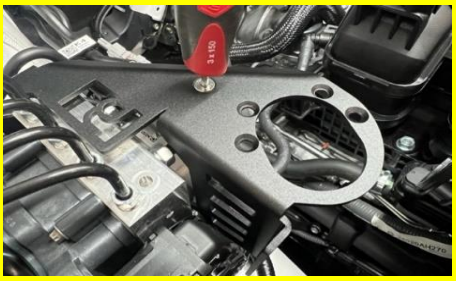
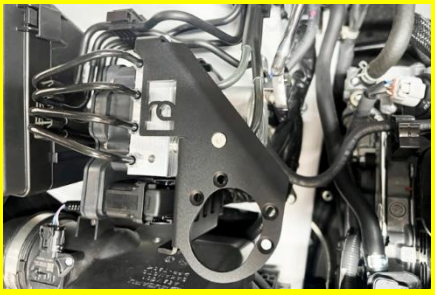
COLOR LEGEND FOR EACH STEP

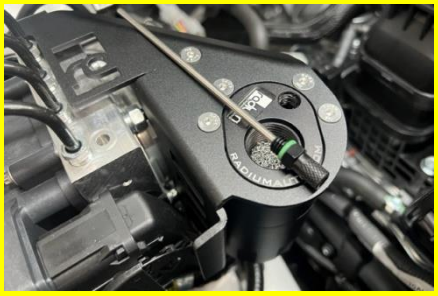
20-0754-FL PCV CATCH CAN KIT, SUBARU WRX VB, FLUID LOCK
Follow GREEN and YELLOW areas below
20-0755-FL CCV CATCH CAN KIT, SUBARU WRX VB, FLUID LOCK
Follow GREEN and ORANGE areas below
20-0756-FL DUAL CATCH CAN KIT, SUBARU WRX VB, FLUID LOCK
Follow GREEN, YELLOW, and ORANGE areas below

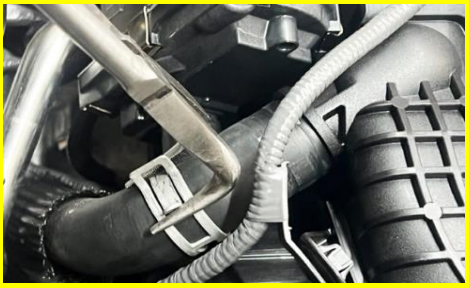
CATCH CAN SERVICING

Check the oil catch can dipstick regularly. All vehicles are unique and will accumulate oil contaminants at different rates. Unscrew the bottom portion of the catch can. Properly dispose of the contents as needed. Do NOT return the contents back into the engine. The stainless steel media can be cleaned with a degreaser.

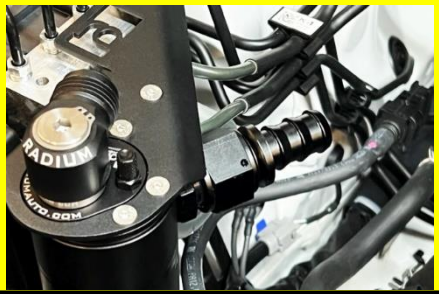
STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO
1		NOTES: a. The terms "driver-side" and "passenger-side" will NOT be referenced. As depicted, these instructions will always reference "LH" and "RH" areas of the vehicle. b. Aluminum wrenches are recommended to prevent surface marring on all anodized finishes.	
2	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		_____ **For 20-0754-FL PCV CATCH CAN KIT installation, continue with the following YELLOW section.** _____ **For 20-0755-FL CCV CATCH CAN KIT installation, skip the following YELLOW section.** _____ **For 20-0756-FL DUAL CATCH CAN KIT installation, follow all steps below.**	
4	10mm Wrench	**<u>20-0754-FL PCV CATCH CAN KIT</u>** Find the ABS unit near the RH strut tower. Three of the OEM M6x1mm nuts and washers will be removed from the ABS unit mounting studs. First, remove the lower front nut and washer shown. This OEM nut and washer will not be reused.	

5	10mm Socket Wrench	Next, remove the upper rear nut and washer shown. This OEM nut and washer will not be reused.	
6	10mm Socket Wrench	Next, remove the lower rear nut and washer shown. This OEM nut and washer will not be reused.	
7	10mm Socket Wrench	As shown, insert the stainless steel support brace through the ABS lines and around the motor. Lop the hole around the lower rear ABS stud. Loosely install the provided M6x1mm flange nut. Do NOT tighten yet!	
8	10mm Socket Wrench	Insert the catch can bracket's slotted hole in the upper rear ABS stud. Next, pull the bracket over the front lower ABS stud. Loosely install the provided M6x1mm flange nuts. Do NOT tighten yet!	
9	3mm Allen Wrench	Using one of the provided M5x0.8mm flat head screws, secure the bracket to the support brace.	
10	10mm Socket Wrench	Tighten all 3 flange nuts to the ABS studs. Because they use an isolating rubber grommet, do NOT over torque.	

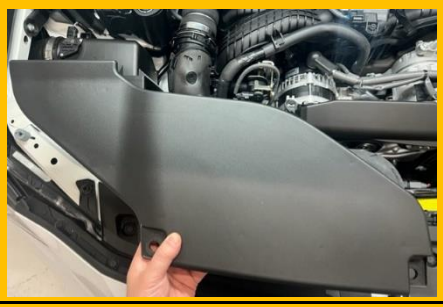
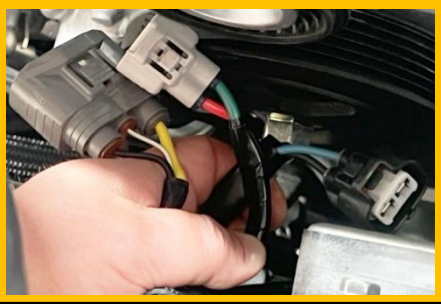
11	Adjustable Wrench	Lubricate the O-ring and secure the large 10AN ORB to 12AN side port fitting.	
12	Thread Locker 3mm Allen Wrench	Apply a medium-strength thread locker to four of the provided M5x0.8mm flat head bolts. Position the catch can into the mounting bracket and secure.	
13	10mm Socket Wrench	Remove the oil dipstick from the top of the catch can.	
14	Oil Lubrication 6mm Allen Wrench	Lubricate the O-ring found on the provided 10AN ORB to 12AN male banjo bolt fitting and install to the catch can top port. Reinstall the catch can oil dipstick.	
15	12mm Socket Wrench	Remove the LH hard tube mount bolt shown.	
16	12mm Socket Wrench	Remove the front intercooler mount bolt shown.	

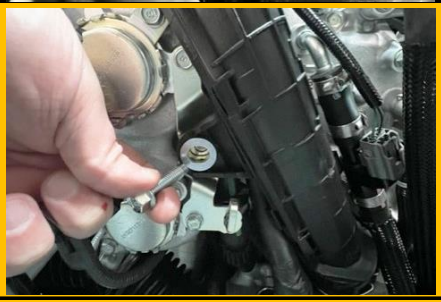
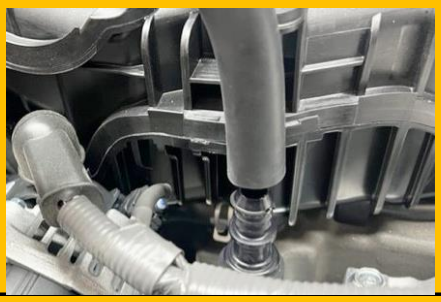
17	12mm Socket Wrench	Remove the throttle body intercooler mount bolt shown.	
18	12mm Socket Wrench	Remove the two RH intercooler mount bolts shown.	
19	12mm Socket Wrench	Remove the two LH intercooler mount bolts shown.	
20	Pick Tool	Pry the charge pipe latch up on both sides.	
21		Remove the intercooler from the vehicle.	
22	Pliers	Find the large PCV hose that attaches the backside of the intake manifold plenum to the PCV valve on the top of the engine block. Loosen the intake manifold clamp shown.	

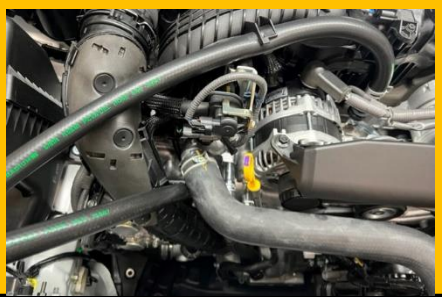
23	Pliers	Loosen the PCV valve clamp shown.	
24		Remove the PCV hose from the vehicle.	
25	Pliers	Remove the black PCV valve clamp and the black braiding.	
26	Hose Cutter	Cut the PCV hose in the exact area shown.	
27	Pliers	This step will use of one of the provided barb reducers and the portion of the cut hose that attached to the intake manifold. Slide the large barb into the cut portion of the hose. Secure using one of the provided spring clamps.	
28	Hose Cutter	Cut the provided Radium Engineering hose exactly in half.	

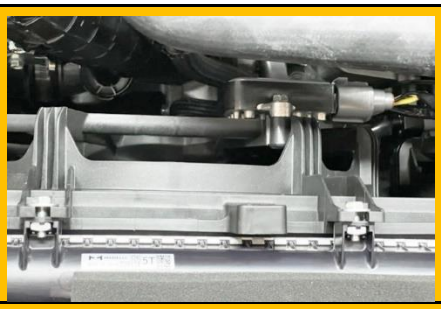
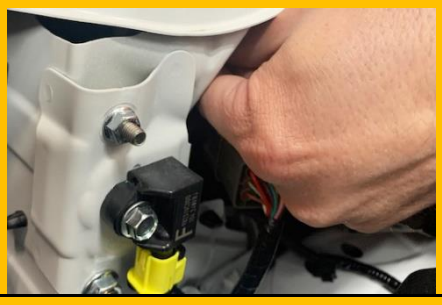
29	Oil Lubrication	Lubricate the barb reducer. Then fully insert the barb reducer into one of the cut Radium Engineering hoses until it bottoms out. NOTE: A clamp is not necessary for this connection.	
30	Pliers	This step will use of one of the provided barb reducers and the portion of the cut hose that attached to the PCV valve. Slide the large barb into the cut portion of the hose. Secure using one of the provided spring clamps.	
31	Oil Lubrication	Lubricate the barb reducer. Then fully insert the barb reducer into the other cut Radium Engineering hose until it bottoms out. NOTE: A clamp is not necessary for this connection.	
32	Pliers	Reinstall the modified OEM hose back to to the PCV valve. **NOTE: The hose must point towards the rear of the engine bay and route underneath the 2 hard tubes exactly as shown. If not, there will be intercooler interference with the hose.**	
33	Pliers	Reinstall the other modified OEM hose back to the intake manifold. **NOTE: This OEM hose has a 80 degree bend. It must be rotated inwards and route underneath the hard tube exactly as shown. If not, there will be intercooler interference with the hose.**	
34	Hose Cutter	As shown, loosely install the provided straight hose end to the catch can side port fitting. Route the intake manifold hose to the side port hose end. Cut to length. The length of the Radium hose (alone) will be roughy 30" (762mm).	

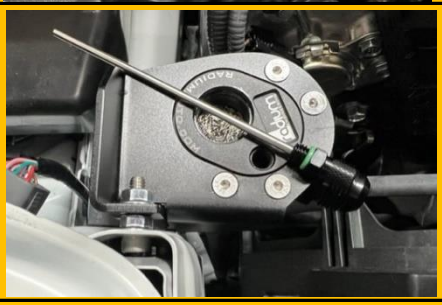
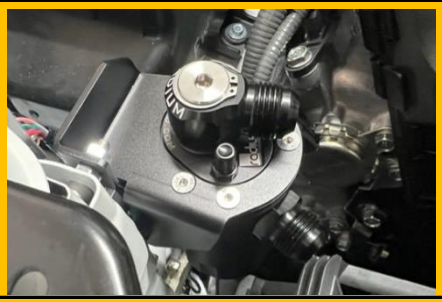
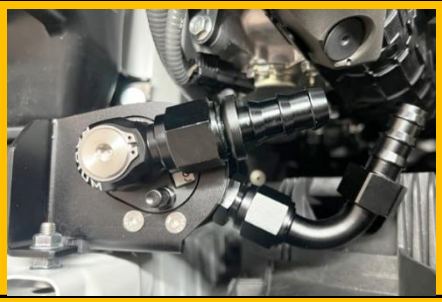
35	Hose Cutter	As shown, loosely install the provided 45 degree hose end to the catch can top port fitting. Route the hose from the PCV valve to the top port hose end. Cut to length. The length of the Radium hose (alone) will be roughy 32.5" (826mm).	
36	Oil Lubrication	Liberally lubricate the PushLok barbs on both hose ends.	
37		Fully insert each hose over their respective PushLok hose end barbs until they bottom out. NOTE: Clamps are not necessary for PushLok hose ends.	
38	1-1/4" Wrench	Position each hose and tighten the hose ends. NOTE: An aluminum wrench will prevent surface finish marring.	
39	Diagonal Cutters	As shown, use the provided cable zip ties to secure the hoses together. **NOTE: The hoses should be routed as shown. If not, there will be intercooler interference.**	
40	10mm Wrench	Reconnect the battery and start the engine. Confirm there are no leaks. Reinstall all other components in reverse order. **PCV CATCH CAN INSTALLATION COMPLETE**	

41	Flathead Screwdriver	To unlatch the front 2 plastic fasteners, turn and pry. Pull the fasteners out of the front air duct.	
42		As shown, pull the front air duct up and out of the engine bay.	
43		To unplug the 3 radiator fan electrical connectors, depress the thumb locks and pull.	
44	10mm Socket Wrench	Remove the two upper M6x1mm bolts the secure the fan shroud to the radiator.	
45		To remove the fan shroud assembly, push the large upper radiator hose inward and pull straight up.	
46	Pick Tool	Behind the radiator down low, find the turbo inlet pipe. The connection shown is the crankcase breather connection. Pry the latch down on both sides, as shown.	

47		Next to the crankcase breather is the charge pipe. Pry the latch forward on both sides, as shown.	
48		Follow the charge pipe towards the intercooler. Pry the latch up on both sides, as shown.	
49	12mm Socket Wrench	Remove the single bolt that attaches the charge pipe to the engine.	
50		Remove the charge pipe from the vehicle.	
51	Knife	Follow the crankcase breather pipe to the crankcase junction just in front of the intake manifold. NOTE: this is a non serviceable connection and cannot be removed. To remove the OEM tubing from this point, carefully cut a slit at the barbed connection, as shown.	
52	Knife	On the turbo inlet end of the crankcase breather tubing, carefully cut a slit at the barbed connection, as shown. The OEM crankcase breather tubing will NOT be reused.	

53	Oil Lubrication	Remove the OEM O-ring from the barb and replace it with the thicker O-ring (shown) included in the kit. Lubricate the O-ring.	
54	Oil Lubrication	Remove the OEM O-ring from the barb and replace it with the thicker O-ring (shown) included in the kit. Lubricate the O-ring.	
55	Hose Cutter	Cut the provided Radium Engineering hose exactly in half.	
56	Pliers	Install one of the sections of Radium Engineering hose to the crankcase barb and secure using one of the included spring clamps.	
57	Pliers	Install one of the sections of Radium Engineering hose to the crankcase barb and secure using one of the included spring clamps. Reset the locking clip and press the crankcase breather adapter back onto the turbo inlet until it clicks in place.	
58	12mm Socket Wrench	Reset the locking clips on the charge pipe. When placing back in the engine bay, be sure the Radium Engineering hoses are routed on the inner side of the charge pipe, as shown. Press the charge pipe back onto the connections until they click in place. Reinstall the mounting bolt	

59	10mm Socket Wrench	Reinstall the fan shroud assembly. Plug in the electrical connectors.	
60		Behind the RH head light, unplug the electrical connector shown.	
61	5mm Allen Wrench Tape	Studs will be made in the sheet metal for mounting the catch can bracket. To prevent dropping the bolts, use tape to keep them stuck to the Allen wrench.	
62	5mm Allen Wrench	From the front, insert two M6x1mm socket head screws through the holes near the RH head light. **There are extras in case they get dropped.** Spin the provided M6x1mm flange nuts onto the bolts, as shown.	
63	10mm Socket Wrench	Tighten the M6x1mm flange nuts. The studs should look as depicted.	
64	10mm Socket Wrench	Place the catch can bracket over the studs. Secure using another set of M6x1mm flange nuts.	

65	Oil Lubrication 1" Wrench	Lubricate the O-ring on the provided 10AN ORB to 10AN male fitting. Secure to the side catch can port. NOTE: An aluminum wrench will prevent surface finish marring.	
66	Thread Locker 3mm Allen Wrench	Apply a medium-strength thread locker to four of the provided M5x0.8mm flat head bolts. Position the catch can into the mounting bracket and secure.	
67	10mm Socket Wrench	Remove the oil dipstick from the top of the catch can.	
68	Oil Lubrication 6mm Allen Wrench	Lubricate the O-ring found on the provided 10AN ORB banjo bolt fitting and install to the catch can top port. Reinstall the catch can oil dipstick.	
69		Loosely install the provided straight hose end to the catch can top port fitting. Loosely install the provided 90 degree hose end to the catch can side port fitting.	
70	Hose Cutter	Route the turbo inlet hose to the side port hose end. Cut to length. The length of the Radium hose will be roughy 17" (432mm). Route the crankcase hose to the top port hose end. Cut to length. The length of the Radium hose will be roughy 24" (610mm).	

71	Oil Lubrication	Liberally lubricate the PushLok barbs on the 90 degree hose end. Fully insert the hose until it bottoms out. NOTE: Clamps are not necessary for PushLok hose ends.	
72	1" Wrench	Position the hose end to the side port fitting and tighten. NOTE: An aluminum wrench will prevent surface finish marring.	
73	Oil Lubrication	Liberally lubricate the PushLok barbs on the straight hose end. Fully insert the hose until it bottoms out. NOTE: Clamps are not necessary for PushLok hose ends.	
74	1" Wrench	Position the hose end to the top port fitting and tighten. NOTE: An aluminum wrench will prevent surface finish marring.	
75		Push the crankcase hose into the intake manifold stay, as shown.	
76	10mm Wrench	Reinstall the OEM air duct. Reconnect the battery and start the engine. Confirm there are no leaks. **CCV CATCH CAN INSTALLATION COMPLETE**