

INSTALLATION INSTRUCTIONS

OIL CATCH CAN KITS

2003-2009 Nissan 350Z, 2003-2007 Infiniti G35

Kit # 20-0728-FL, 20-0729-FL

Document: 19-0287

Support: info@radiumauto.com

COLOR LEGEND FOR EACH STEP

20-0728 PCV CATCH CAN KIT, NISSAN Z33 V35, VQ35DE

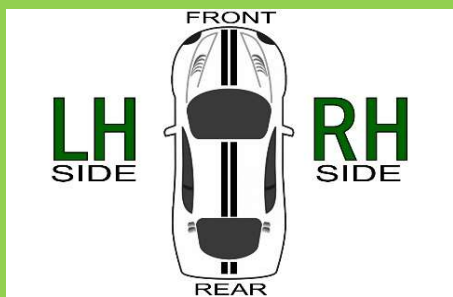





Follow **GREEN** and **YELLOW** areas below

20-0729 DUAL CATCH CAN KIT, NISSAN V35, VQ35DE/HR



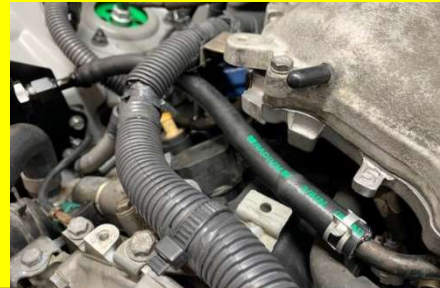



Follow **GREEN**, and either **ORANGE** or **BLUE** areas below












20-0729-FL	
Item Description	Qty
Bracket, 350Z, Dual	1
PUSHLOK HOSE END, 6AN STRAIGHT	2
PUSHLOK HOSE END, 10AN STRAIGHT	2
SPRING CLAMP, 3/8" HOSE	2
SPRING CLAMP, 5/8" HOSE	2
Catch Can, Fluid Lock 2, Preassembled	2
10AN ORB SWIVEL BANJO TO 6AN MALE	2
10AN ORB SWIVEL BANJO TO 10AN MALE	2
3/8 PCV/FUEL HOSE	10 ft
5/8 PCV/FUEL HOSE	6 ft
BHSCS, M5 x 0.8, 12mm Long, SS	1
BHSCS, M6 X 1.0, 12mm Long, SS	1
M5 Flange Nut	1
10 inch Zip Tie, Black Nylon	3







STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO	
1		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.		
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	10mm Socket Wrench	If equipped, remove the strut bar. NOTE: This procedure will differ depending on the vehicle or if an aftermarket strut bar was installed.		
		Remove the engine vanity cover.		
		For 20-0728 PCV CATCH CAN KIT installation, continue with the following YELLOW section.		
		For 20-0729 DUAL CATCH CAN KIT installation, skip the following YELLOW section.		
4	Pliers	<u>20-0728 PCV CATCH CAN KIT</u>		
		The PCV valve is located on the front RH side of the engine on top of the valve cover. Loosen and slide the clamp down the hose.		
		To separate, pull the hose from the PCV valve.		
5	Pliers	Follow the hose to the intake manifold. Loosen and slide the clamp down the hose.		
		To separate, pull the hose from the intake manifold.		
6		Remove the hose assembly from the engine bay.		
		The OEM hose and OEM clamps shown will NOT be reused.		

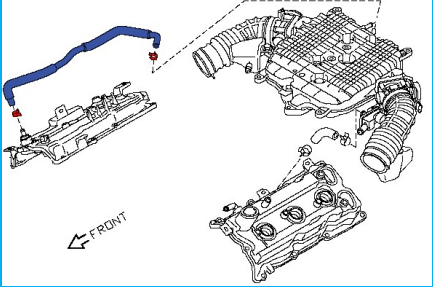

7	10mm Socket Wrench	Remove the oil dipstick from the top of the catch can.	
	Oil Lubrication	Lubricate the O-ring found on the provided banjo bolt fitting. Install the banjo fitting to the catch can top port.	
	4mm Allen Wrench		
8	Oil Lubrication	Reinstall the oil dipstick.	
	1" Wrench	Lubricate the O-ring on the 6AN male adapter fitting. Install to the side catch can port. NOTE: an aluminum wrench can prevent surface finish marring.	
9	10mm Wrench	Find the power steering reservoir mount on the RH strut tower. Remove the 3 bolts.	
10	10mm Wrench	Lineup the catch can bracket on top of the power steering mount rubber isolators. Secure using the three OEM bolts.	
11		Temporarily pull up on the power steering reservoir to release it from the OEM mount.	
12	Thread Locker	Apply a medium-strength thread locker to the four provided M5x0.8mm bolts.	
	3mm Allen Wrench	Position the catch can in place and secure.	

13	Hose Cutter	<p>Cut the provided 3/8" PCV hose in half. These lengths do NOT have to be exact. In later steps, a couple inches will be cut off each hose to make a perfect fit.</p> <p>Lubricate the PushLok barbs on the provided 45 degree 6AN hose ends. Fully seat one into each hose, as shown.</p> <p>NOTE: PushLok hose ends do NOT require hose clamps.</p>	
	Oil Lubrication		
14	Hose Cutter	<p>Route the side port hose towards the intake manifold barb. Cut the hose to length allowing enough slack for engine movement.</p> <p>Lubricate both the intake manifold barb and the inner portion of the hose.</p>	
	Oil Lubrication		
15	Pliers	<p>Secure the hose to the intake manifold barb using the provided spring clamp.</p>	
16	Hose Cutter	<p>Route the top port hose to the PCV valve. Cut the hose to length allowing enough slack for engine movement.</p> <p>Lubricate both the PCV valve barb and the inner portion of the hose.</p>	
	Oil Lubrication		
17	Pliers	<p>Secure the hose to the PCV valve using the provided spring clamp.</p> <p>Once everything is nicely positioned, tighten the hose ends.</p> <p>Reinstall all OEM parts in reverse order.</p> <p>Reconnect the battery and start the engine. Confirm there are no leaks.</p> <p>20-0728 PCV CATCH CAN KIT INSTALLATION COMPLETE</p>	
	11/16" Wrench		
18	Pliers	<p><u>20-0729 CCV CATCH CAN KIT INSTALLATION</u></p> <p><i>FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR</i></p> <p>The PCV valve hose is located on the front RH topside of the engine.</p> <p>Loosen and slide the clamps down the hose. To separate, pull the hose from the PCV valve and the intake manifold.</p> <p>Remove the PCV valve hose assembly from the engine bay. This will NOT be reused.</p>	



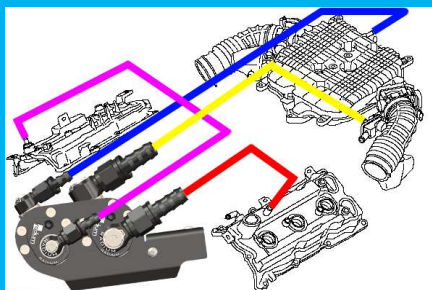


19		FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Unplug the MAF sensor electrical connector found on the air intake pipe.	
20	Pliers	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Loosen the throttle body coupler clamp and slide off the air intake pipe slightly.	
		Rotate the intake pipe just enough to expose the crankcase breather hose. Loosen the spring clamp.	
21		FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Pull the crankcase breather hose off the barb. Remove the air intake pipe from the vehicle.	
22	5mm Allen Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		To unplug the large throttle body electrical connector, depress the thumb tab and simultaneously pull away from the throttle body. NOTE: A throttle re-learn procedure may need to be completed after installation is complete. Consult the factory service manual for details.	
		Unscrew the 4 throttle body bolts and remove from the engine bay. Do not loose the gasket.	
23	Pliers	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		As shown, slide the spring clamp down the crankcase breather hose.	
		Remove the crankcase breather from the engine bay. It will NOT be reused.	
24	4mm Allen Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		NOTE: THIS KIT IS NOT COMPATIBLE WITH THE OEM AIR INTAKE BOX.	
		Find the catch can mounting bracket and place it where the factory intake box use to reside.	
		As shown, loosely screw in the included M6x1mm button head bolt. Do not tighten.	

25	3mm Allen Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	8mm Wrench	Using the provided M5x0.8mm button head bolt and the M5x0.8mm flange nut, secure the side of the bracket, as shown.	
	4mm Allen Wrench		
		Next, tighten the top M6x1mm button head bolt.	
26	Oil Lubrication	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	4mm Allen Wrench	Lubricate the O-rings on the 4 adapter fittings. Install one 6AN and one 10AN fitting to the side of the catch cans, as shown.	
	6mm Allen Wrench		
27	Thread Locker	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	3mm Allen Wrench	As shown, insert the 6AN catch can (PCV) into the front location and the 10AN catch can (CCV) into the rear location.	
		To secure the catch can(s), apply a medium-strength thread locker to the M5x0.8mm bolts.	
28	4mm Allen Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	6mm Allen Wrench	Remove the oil dipsticks from the top of the catch cans. Install the banjo fittings to the catch can top ports. Reinstall the catch can oil dipsticks.	
29	Hose Cutter	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Cut the provided 3/8" (6AN) hose in half.	
		Cut the provided 5/8" (10AN) hose in half.	
		There will now be 4 hoses.	
30	Oil Lubrication	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Find the 4 PushLok hose ends included in the kit.	
		Lubricate the PushLok barbs. Fully seat one hose end into each hose.	
		NOTE: PushLok hose ends do NOT require hose clamps.	

31	11/16" Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR Tighten all the hose ends to the catch can fittings.	
	1" Wrench		
32	Hose Cutter	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR Route the 10AN catch can top port hose towards the crankcase vent port at the rear of the engine. Cut the hose to length allowing enough slack for engine movement. The total hose length will be roughly ~35" (889mm). Lubricate both the crankcase vent barb and the inner portion of the hose. Secure the hose to the valve cover vent port using the provided spring clamp.	
	Pliers		
	Oil Lubrication		
33	Hose Cutter	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR Route the 6AN catch can side port hose around the backside of the engine towards the intake manifold barb. Cut the hose to length. The total hose length will be roughly ~60" (1524mm). Lubricate both the intake manifold barb and the inner portion of the hose. Secure the hose to the intake manifold barb using the provided spring clamp.	
	Pliers		
	Oil Lubrication		
34	Hose Cutter	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR Route the 6AN catch can top port hose around the backside of the engine towards the PCV valve. Cut the hose to length. The total hose length will be roughly ~56" (1422mm). Lubricate both the PCV valve barb and the inner portion of the hose. Secure the hose to the PCV valve using the provided spring clamp.	
	Pliers		
	Oil Lubrication		
35	Hose Cutter	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR Route the 10AN side port catch can hose towards the air intake pipe barb. Cut the hose to length allowing enough slack for engine movement. The total hose length will be very dependent on what air intake pipe is used. Lubricate both the air intake pipe barb and the inner portion of the hose. Secure the hose to the air intake pipe using the provided spring clamp.	
	Pliers		
	Oil Lubrication		
36	Cutters	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR Using the cable zip ties, secure the hoses together. Reinstall all OEM parts in reverse order. Reconnect the battery and start the engine. Confirm there are no leaks. 20-0729 DUAL CATCH CAN KIT INSTALLATION COMPLETE	

37	Pliers	20-0729 CCV CATCH CAN KIT INSTALLATION FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		The PCV valve hose routes from the front RH topside of the engine to the backside of the intake manifold plenum.	
		Loosen and slide the clamps (shown red) down the hose. To separate, pull the hose (shown blue) from the PCV valve and the intake manifold.	
		Remove the PCV valve hose assembly from the engine bay. This will NOT be reused.	
38	Pliers	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Towards the inside of the LH intake pipe is the crankcase vent hose. It routes from the intake pipe to the LH valve cover.	
		Loosen and slide the clamps (shown red) down the hose. To separate, pull the hose (shown green) from the valve cover and the intake pipe.	
39		FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Remove the crankcase breather hose from the engine bay. It will NOT be reused.	
40		FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		THIS KIT IS NOT COMPATIBLE WITH THE LH OEM AIR INTAKE BOX.	
41		FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		For some LHD VQ35HR engines, there are 2 grounds point that need to be relocated. Find a nearby location. Be sure to remove any dirt, debris or paint from the new grounding point of the chassis.	
42		FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		For some RHD VQ35HR engines, the hood switch will need to be address.	

43	4mm Allen Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Find the catch can mounting bracket and place it where the factory intake box use to reside.	
		As shown, loosely screw in the included M6x1mm button head bolt. Do not tighten.	
44	3mm Allen Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	8mm Wrench	Using the provided M5x0.8mm button head bolt and the M5x0.8mm flange nut, secure the side of the bracket, as shown.	
	4mm Allen Wrench		
		Next, tighten the top M6x1mm button head bolt.	
45	Oil Lubrication	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	4mm Allen Wrench	Lubricate the O-rings on the 4 adapter fittings. Install one 6AN and one 10AN fitting to the side of the catch cans, as shown.	
	6mm Allen Wrench		
46	Thread Locker	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	3mm Allen Wrench	As shown, insert the 6AN catch can (PCV) into the front location and the 10AN catch can (CCV) into the rear location.	
		To secure the catch can(s), apply a medium-strength thread locker to the M5x0.8mm bolts.	
47	4mm Allen Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	6mm Allen Wrench	Remove the oil dipsticks from the top of the catch cans.	
		Install the banjo fittings to the catch can top ports.	
		Reinstall the catch can oil dipsticks.	
48	Hose Cutter	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Cut the provided 3/8" (6AN) hose in half.	
		Cut the provided 5/8" (10AN) hose in half.	
		There will now be 4 hoses.	

49	Oil Lubrication	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Find the 4 PushLok hose ends included in the kit.	
		Lubricate the PushLok barbs. Fully seat one hose end into each hose.	
		NOTE: PushLok hose ends do NOT require hose clamps.	
50	11/16" Wrench	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	1" Wrench	Tighten all the hose ends to the catch can fittings.	
51	Hose Cutter	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
		Route the 10AN catch can top port hose to the crankcase vent port on the LH valve cover. Route the 10AN side port catch can hose the air intake pipe barb. Route the 6AN catch can side port hose to the back of the intake manifold plenum. Route the 6AN catch can top port hose around the backside of the engine towards the PCV valve.	
		Cut the hoses to length allowing enough slack for engine movement.	
52	Pliers	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	Oil Lubrication	Lubricate all 4 barbs and the inner portion of all the hoses.	
		Secure the hoses using the provided spring clamps.	
53	Cutters	FOLLOW ORANGE AREAS FOR VQ35DE AND BLUE AREAS FOR VQ35HR	
	10mm Socket Wrench	Using the cable zip ties, secure the hoses together.	
		Reinstall all OEM parts in reverse order. As shown, reconnect the battery. Start the engine and confirm there are no leaks.	
		20-0729 DUAL CATCH CAN KIT INSTALLATION COMPLETE	
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.		