

INSTALLATION INSTRUCTIONS

CATCH CAN KITS

NISSAN R35 GTR



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This document covers the installation of Radium Engineering Catch Can kits for the Nissan R35 GTR.

20-0565 PCV Catch Can Kit Instructions: Steps 1-29
 20-0555 CCV Dual Catch Can Kit Instructions: Steps 30-55
 20-0566 Triple Catch Can Kit Instructions: Steps 1-55

Catch cans require periodic maintenance. Inspect the fluid level on a regular basis by using the included dipstick.

STEP	TOOLS NEEDED	INSTRUCTIONS	PHOTO
1		<u>20-0565 PCV CATCH CAN INSTALLATION</u>	
		Lift and remove the plastic battery cover located at the rear of the RH side of the engine bay.	
2	10mm Socket	Disconnect the negative battery terminal, as shown.	
3	5mm Allen Wrench	Remove the 4 bolts that secure the engine cover. As shown, remove the engine cover from the vehicle.	
4	Flat Head Screwdriver	Gently pry up and pop out the 6 plastic retainers.	

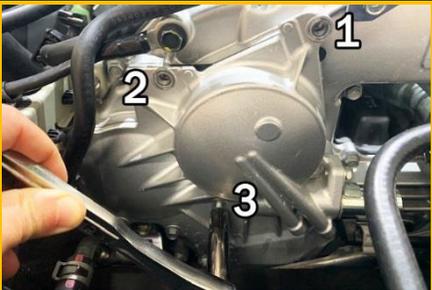
5		Pull up the rubber trim in the area shown.	
6		To pop out the last hidden plastic retainer, cautiously slide the plastic cowl forward then lift upwards to break loose.	
7	Scissors	There is a connector attached to wire loom. Cut the electrical tape off. Relocate the connector forward and out of the way of where the catch can will be positioned.	
8	10mm Wrench	Temporarily remove the two M6x1.0mm bolts in the locations shown.	
9		Gently pull the plastic wire loom stay out of the hole shown.	
10	Pliers	The OEM PCV valve is located down low at the rear of the engine and is difficult to access. Fortunately, these instructions only require access to the opposing end of the PCV hose. This connection is located at the upper rear portion of intake manifold. Loosen the clamp and pull this hose off the barb, as shown.	

11	Pliers	Push the OEM PCV hose onto one side of the provided 90 degree elbow in the kit. For securing, reuse the OEM spring clamp, as shown.	
12	Flat Head Screwdriver	Find the grey plastic cap that is a pass through between the LH cubby and engine bay. It is located below where the catch can will be mounted.	
13		Carefully pull the cap out of the engine bay. It will not be reused.	
14		Cut the provided PCV hose to 2 lengths: 4ft (1219mm) / 3ft (914mm). NOTE: These will be cut to exact lengths later. From the engine bay side, push the 2 hoses halfway through the hole.	
15	Petroleum Oil 1" Wrench	Lubricate the O-ring found on the provided 10AN ORB to 6AN male fitting. Install this fitting to the catch can side port, as shown.	
16	Threadlocker 3mm Allen Wrench	Apply a medium strength thread locker to the catch can mounting screws. Secure the catch can to the included mounting bracket.	

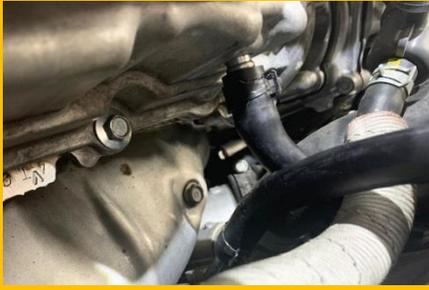
17	10mm Wrench	As shown, drop the catch can assembly just behind the short hose.	
		Lineup the 2 OEM threaded holes and catch can mounting bracket holes and secure the assembly.	
18	Petroleum Oil	Lubricate the barbs on the provided 90 degree PushLok hose end.	
19		Fully insert the 90 degree PushLok hose end to the shorter hose. NOTE: PushLok hose ends do NOT require hose clamps.	
20	11/16" Wrench	Slowly pull the short hose from the engine bay until the hose end lines up with the 6AN male catch can fitting. Carefully tighten the PushLok hose end being cautious to not cross thread the 6AN fitting.	
21	1-1/8" Socket	<p><i>For kits manufactured prior to December 2020, a green banjo fitting will be included (shown). First, be sure the black banjo fitting is oriented so the AN male portion is at the highest point. Next, insert a crush washer onto each side of the banjo. Hand tighten this fitting to the catch can top port. Orientate the 6AN male portion of the fitting towards the rear. Hold the catch can and torque the banjo fitting.</i></p> <p><i>For kits manufactured after November 2020, a silver banjo fitting will be included (not shown). Lubricate the O-ring then tighten this fitting to the catch can top port. Orientate the 6AN male portion of the fitting towards the rear.</i></p>	
	Torque Wrench		
	Oil Lubrication		
	4mm Allen Wrench		
22	Petroleum Oil	Lubricate the barbs on the provided straight PushLok hose end.	

23		Fully insert the straight PushLok hose end to the longer hose.	
		NOTE: PushLok hose ends do NOT require hose clamps.	
24	11/16" Wrench	Slowly pull the long hose from the engine bay until the hose end lines up with the top 6AN male catch can fitting.	
		Carefully tighten the PushLok hose end being cautious to not cross thread the 6AN fitting.	
25	Hose Cutter	Route the long hose from the top catch can port cleanly along the firewall. Lineup the hose to the OEM PCV valve hose and cut to length (if necessary).	
	9/32" Nut Driver		
		Secure the hose to the 90 degree elbow from an earlier step and secure using one of the provided clamps.	
26	Hose Cutter	Route the short hose from the side catch can port along the long hose then towards the intake manifold port.	
	9/32" Nut Driver		
		Cut hose to length (if necessary) and secure using one of the provided clamps.	
27	Diagonal Cutters	As shown, secure the 2 hoses together using the included zip ties.	
28		Reinstall all OEM components in reverse order.	

29		<p>Servicing: Check dipstick regularly. All vehicles are unique and will accumulate oil at different rates. Unscrew bottom portion of catch can and properly dispose of contents as needed. Do NOT return contents back into engine. If needed, stainless steel media can be cleaned with a degreaser. The 20-0024 Petcock Drain Kit (shown) could be added for easier serviceability. Nissan R35 GT-R specific instructions do not exist.</p> <p>20-0565 PCV CATCH CAN INSTALLATION COMPLETE</p>	
		<p>20-0555 DUAL CCV CATCH CAN INSTALLATION</p> <p>Allow engine to cool before proceeding.</p> <p>Lift and remove the plastic battery cover located at the rear of the RH side of the engine bay.</p>	
		<p>10mm Socket</p> <p>Disconnect the negative battery terminal, as shown.</p>	
		<p>5mm Allen Wrench</p> <p>Remove the 4 bolts that secure the engine cover.</p> <p>As shown, remove the engine cover from the vehicle.</p>	
		<p>7mm Socket</p> <p>Loosen the hose clamps on both RH and LH throttle body couplers.</p> <p>Dislodge and remove couplers (x2) with clamps (x4) from the vehicle.</p>	
34		<p>Pliers</p> <p>Find the short crankcase breather hose that connects the RH valve cover to the RH turbo inlet pipe. Loosen the spring clamps and remove the hose.</p>	

35	Pliers	Find the short crankcase breather hose that connects the LH valve cover to the LH turbo inlet pipe. Loosen the spring clamps and remove the hose.	
36	Pliers	Remove the OEM spring clamps from the crankcase breather hoses. The OEM spring clamps will be reused. The hoses will NOT be reused.	
37	10mm Socket	Remove the three M6x1.0mm hex bolts shown. These OEM bolts will not be reused.	
38	10mm Socket	To install the catch can mounting bracket with proper clearance, the 3 included spacers and long bolts are required.	
39	Thread locker	Apply a medium strength thread locker to the eight provided M5x0.8mm bolts.	
40	3mm Allen Wrench	Using the 8 bolts, install the 2 catch cans to the mounting bracket.	

41	Oil Lubrication	<p><i>For kits manufactured prior to December 2020, green banjo fittings will be included (shown). First, be sure the black banjo fitting is oriented so the AN male portion is at the highest point. Next, insert a crush washer onto each side of the banjo. Hand tighten these fittings to the catch can ports. Orientate the 6AN male portion of the fittings as shown.</i></p> <p><i>For kits manufactured after November 2020, silver banjo fittings will be included (not shown). Lubricate the O-ring then tighten this fittings to the catch can ports. Orientate the 6AN male portion of the fittings as shown.</i></p>	
	4mm Allen Wrench		
42		<p>Hand tighten the included PushLok hose ends to the 6AN banjo fittings.</p>	
43	Hose Cutter	<p>Cut out a 30" section of the included PCV hose and install an OEM spring clamp on one end. NOTE: This will likely be cut to ~27" later.</p> <p>Lubricate both the inner area of the hose and the LH crankcase barb that faces up and forward. Push the hose onto the barb and secure with the OEM clamp, as shown.</p> <p>NOTE: Nearby components may need to be temporarily removed or relocated to create the required leverage.</p>	
	Oil Lubrication		
	Pliers		
44	Hose Cutter	<p>Cut out a 35" section of the included PCV hose and install an OEM spring clamp on one end. NOTE: This will likely be cut to ~32" later.</p> <p>Lubricate both the inner area of the hose and the LH crankcase barb that faces to the left side. Push the hose onto the barb and secure with the OEM clamp, as shown.</p> <p>NOTE: Nearby components may need to be temporarily removed or relocated to create the required leverage.</p>	
	Oil Lubrication		
	Pliers		
45	Diagonal Cutters	<p>Route the 2 crankcase vent hoses above the radiator hose.</p> <p>Loosely install 3 cable zip ties in the areas shown.</p>	
46	Hose Cutter	<p>Route the valve cover hose to the LH catch can top port. Cut to length. Route the turbo inlet hose to the LH catch can front port. Cut to length.</p> <p>Lubricate the hose end barbs and inside the hose. Fully seat each hose end. NOTE: PushLok hose ends do NOT require hose clamps.</p> <p>Hand tighten each hose end onto the respective catch can port fittings. Before tightening, orientate all fittings for best fitment. Tighten the 3 cable zip ties and add 1 more cable zip tie closer to the hose ends.</p>	
	Oil Lubrication		
	Diagonal Cutters		

47	1.125" Socket	Hold the catch can and tighten the banjo fittings to the torque printed on the head of the green banjo bolt.	
	Torque Wrench		
48	11/16" Wrench	Hold the catch can and tighten both hose ends.	
49	Hose Cutter	Cut out a 21" section of the included PCV hose and install an OEM spring clamp on one end. NOTE: This will likely be cut to ~18" later.	
	Oil Lubrication		
	Pliers	Lubricate both the inner area of the hose and the RH crankcase barb that faces down and outward. Push the hose onto the barb and secure with the OEM clamp, as shown.	
		NOTE: Nearby components may need to be temporarily removed or relocated to create the required leverage.	
50	Hose Cutter	Cut out a 18" section of the included PCV hose and install an OEM spring clamp on one end. NOTE: This will likely be cut to ~15" later.	
	Oil Lubrication		
	Pliers	Lubricate both the inner area of the hose and the RH turbo inlet barb that faces to the left side. Push the hose onto the barb and secure with the OEM clamp, as shown.	
		NOTE: Nearby components may need to be temporarily removed or relocated to create the required leverage.	
51	Diagonal Cutter	Route the hoses forward. Orientate so the crankcase vent hose is on top of the turbo inlet hose.	
		Loosely install 1 cable zip tie in the area shown.	
52	Hose Cutter	Route the valve cover hose to the RH catch can top port. Cut to length. Route the turbo inlet hose to the RH catch can front port. Cut to length.	
	Oil Lubrication		
	Diagonal Cutters	Lubricate the hose end barbs and inside the hose. Fully seat each hose end. NOTE: PushLok hose ends do NOT require hose clamps.	
		Hand tighten each hose end onto the respective catch can port fittings. Before tightening, orientate all fittings for best fitment. Tighten the 1 cable zip tie and add 1 more cable zip tie closer to the hose ends.	

53	1-1/8" Socket	<p><i>For kits manufactured prior to December 2020, hold the catch cans and torque the banjo fittings.</i></p>	
54	11/16" Wrench	<p>Hold the catch can and tighten both hose ends.</p>	
55		<p>Reinstall all OEM components in reverse order.</p> <p>Servicing: Check dipstick regularly. All vehicles are unique and will accumulate oil at different rates. Unscrew bottom portion of catch can and properly dispose of contents as needed. Do NOT return contents back into engine. If needed, stainless steel media can be cleaned with a degreaser.</p> <p>20-0555 DUAL CCV CATCH CAN INSTALLATION COMPLETE</p>	