



# INSTALLATION INSTRUCTIONS

## 17-19 CORVETTE LT1 W/ DRY SUMP DUAL CATCH CAN KIT

P/N: 20-1286-FL

Document: 19-0451

Support: info@radiumauto.com

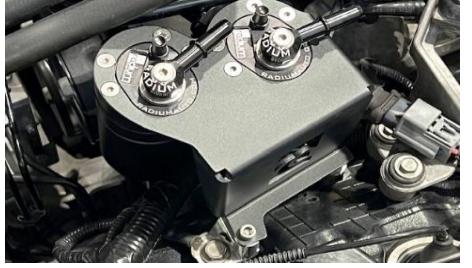


### 20-1286-FL

| 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   | BUTTON HEAD CAP SCREW, M6X1X10, SS     | 3   |
| MOUNT, CATCH CAN, DUAL, C7              | 1   | CABLE ZIP TIE, 10IN, BLACK             | 4   |
| 10MM SAE FEMALE TO 3/8IN BARB, STRAIGHT | 2   | SPRING CLAMP, 3/8IN HOSE               | 8   |
| 10MM SAE FEMALE TO 3/8IN BARB, 45DEG    | 3   | CATCH CAN SERVICE INTERVAL STICKER     | 2   |
| 10MM SAE FEMALE TO 3/8IN BARB, 90DEG    | 3   | 3/8IN PCV/FUEL HOSE                    | 9FT |
| 10AN ORB TO 10MM SAE MALE               | 2   |  |     |

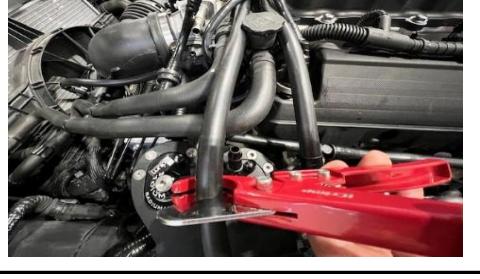
| STEP | TOOLS NEEDED | INSTRUCTIONS   | PHOTO |
|------|--------------|--|-------|
| 1    |              | <p>NOTES:</p> <p>a. The terms "driver-side" and "passenger-side" will NOT be referenced. As depicted, these instructions will always reference "LH" and "RH" areas of the vehicle.</p> <p>b. Aluminum 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 | <p>Disconnect the negative battery terminal.</p> <p>CAUTION: Disconnecting the battery may cancel fault memories of some control units. Consequently, before disconnecting the battery, always cross examine any fault memories.</p> |    |
| 3 | Oil Lubrication    | <p>Find the two 10AN ORB to 10mm SAE quick connect fittings in the kit. Lubricate the O-rings and install the fittings to the catch can side ports, as shown.</p>  |    |
| 4 | 13mm Socket Wrench | <p>On the LH frame rail, remove the M8x1.25mm screws that secure the 3 ground ring terminals shown.</p>  |   |
| 5 | Pry Tool           | <p>For Corvette trims that have MRC (Magnetic Ride Control), carefully pry up to dislodge the plastic wire harness stay shown.</p>   |  |
| 6 | 13mm Socket Wrench | <p>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.</p>  |  |
| 7 | 4mm Allen Wrench   | <p>Place the catch can mounting bracket down and lineup the 3 holes.</p> <p>Using the three M6x1mm button head screws, secure the bracket.</p>   |  |

|    |  |   |
|----|--|---|
| 8  | Thread Locker<br>Apply a medium-strength thread locker to all the provided M5x0.8mm flat head screws.  |    |
| 9  | 3mm Allen Wrench<br>Position the catch cans into the mounting bracket and secure.<br><br>NOTE: carefully tweaking the wire harnesses underneath can permit additional space.<br><br>At the rear will be the PCV catch can (red).<br>At the front will be the CCV catch can (yellow).   |    |
| 10 | Oil Lubrication<br>4mm Allen Wrench<br>Find the swivel banjo fittings in the kit. Lubricate the O-rings and screw the fittings into the catch can top ports, as shown.   |   |
| 11 | Oil Lubrication<br>Find two of the 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.<br><br>Repeat this step for a 45 degree SAE quick connector to the rear catch can side port and a straight SAE quick connector to the front catch can side port. |  |
| 12 | At the front LH side of the LT1 engine, there is a short line that loops from the PCV valve to the intake manifold. To disconnect the SAE quick connectors, squeeze the grey locks and simultaneously pull to release.<br><br>As shown, pull the OEM line out. This will NOT be reused.  |  |
| 13 | Oil Lubrication<br>Pliers<br>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.<br><br>Secure using one of the spring clamps, as shown.  |  |

|    |                 |   |  |
|----|-----------------|---|--|
| 14 | Oil Lubrication | Lubricate the internal O-rings inside the 45 degree SAE quick connector and push it onto the PCV valve until a "click" is felt.   |   |
|    |                 | NOTE: This is the lower "valley" male quick connector (shown red).  |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
| 15 | Hose Cutter     | Run this hose towards the rear "PCV" catch can top port.  |   |
|    |                 | Cut the hose to length.   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
| 16 | Oil Lubrication | Slide one of the included spring clamps on the end of the hose.   |   |
|    |                 | As shown, lubricate the 90 degree SAE quick connector O-ring and barbs.   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
| 17 | Pliers          | Insert the SAE quick connector into the 3/8" hose. Secure the connector using the spring clamp.   |   |
|    | Oil Lubrication |   |  |
|    |                 | Now insert the connector into the top rear "PCV" catch can port fitting until a "click" is felt.  |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
| 18 | Oil Lubrication | Find another 45 degree female SAE quick connector in the kit and lubricate the external O-rings. Slide the spare 3/8" (6AN) hose over the barbs. Secure using one of the spring clamps, as shown. |  |
|    | Pliers          |   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
| 19 | Oil Lubrication | Lubricate the internal O-rings inside the 45 degree SAE quick connector and push it onto the upper intake manifold male quick connector (shown red) until a "click" is felt.                      |    |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |
|    |                 |   |  |

|    |   |   |
|----|---|---|
| 20 | <p>Hose Cutter</p> <p>Run this hose towards the 45 degree SAE quick connector on the rear "PCV" catch can side port.</p> <p>Cut the hose to length.</p>   |    |
| 21 | <p>Pliers</p> <p>Oil Lubrication</p> <p>Slide one of the included spring clamps on the end of the hose. Lubricate the external O-rings. Slide the 3/8" (6AN) hose over the barbs. Secure using one of the spring clamps, as shown.</p> <p>Push this connector onto the male quick connector on the rear "PCV" catch can side port until a "click" is felt.</p>  |    |
| 22 | <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> |   |
| 23 | <p>Oil Lubrication</p> <p>Pliers</p> <p>Slide one of the provided spring clamps on the end of the leftover hose. Find one of the straight SAE female 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>  |  |
| 24 | <p>Oil Lubrication</p> <p>Lubricate the internal O-rings inside the straight SAE quick connector. Temporarily insert the connector into the side port of the front "CCV" catch can.</p>   |  |
| 25 | <p>Oil Lubrication</p> <p>Marker</p> <p>Find one of the 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>                   |  |

|    |  |   |
|----|--|---|
| 26 | <p>Hose Cutter</p> <p>Remove the hose and SAE quick connectors from the engine bay. Cut the hose at the marked area.</p>   |    |
| 27 | <p>Oil Lubrication</p> <p>Pliers</p> <p>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 permanently install the hose.</p> |  |
| 28 | <p>Oil Lubrication</p> <p>Pliers</p> <p>Slide one of the provided spring clamps on the end of the leftover hose. Find one of the straight SAE female 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>           |    |
| 29 | <p>Oil Lubrication</p> <p>Lubricate the internal O-rings inside the SAE quick connector and temporarily insert the connector into the dry sump port, as shown.</p>   |    |
| 30 | <p>Hose Cutter</p> <p>Run the hose towards the front "CCV" catch can top port. As shown, cut the hose to length.</p>   |    |
| 31 | <p>Pliers</p> <p>Oil Lubrication</p> <p>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" hose. As shown, secure the connector using the spring clamp.</p>                            |    |

|           |   |   |
|-----------|---|---|
| 32        | <p>Insert the connector into the top front "CCV" catch can port fitting in the orientation shown.</p>   |    |
| 33        | <p>Illustrated is a line diagram of how the system should be plumbed.</p> <p>GREEN: Rear Can Top Port (90deg) to PCV Valve (45deg)<br/>     YELLOW: Rear Can Side Port (45deg) to Intake (45deg)<br/>     RED: Front Can Top Port (90deg) to Dry Sump Port (Straight)<br/>     BLUE: Front Can Side Port (Straight) to Intake (90deg)</p> <p>NOTE: The RED hose can fit under the throttle body, as shown.</p>  |    |
| 34        | <p>Cutters</p> <p>Use the provided cable zip ties to secure the hoses away from moving or hot areas and components.</p> <p>Start the engine and check for any leaks or errors.</p>  |   |
| SERVICING | <p>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> <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> |  |