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PRIOR TO INSTALLATION READ THESE INSTRUCTION COMPETELY
For questions, Call the FORD PERFORMANCE Techline 1-800-367-3788

Please visit <https://www.performanceparts.ford.com> for warranty information

Kit contents:

- 1 - Oil separator assembly (KR3V-6A785-AD)
- 2 – PCV tubes (KR3V-6K817-AB and KR3V-6K817-BA)
- 1 - Bracket (KR3V-6D646-AB)
- 3 - 10mm flanged nut (W520411-S437)
- 1 – Cam Cover vent tube (4L2E-6762-AA)
- 1 – Elbow fitting (KR3V-6762-AA)
- 1 – Drain hose (KR3V-6C823-AA)
- 2 – Constant tension clamps (W525884-S444)
- 1 – 6.5 mm push pin tie strap (8U5T-14E047-HA)
- 2 - 8 mm push pin tie strap (AU5T-14E047-AA)
- 2 – Retainer wire harness tie strap (DU5T-14E047-MA)

Note: Photos and/or illustrations are supplied as kit installation aids and/or clarifications. Actual kit parts may have revisions for improvement resulting in an appearance difference.

Kit is installed on passenger side engine cam cover.

Before



After



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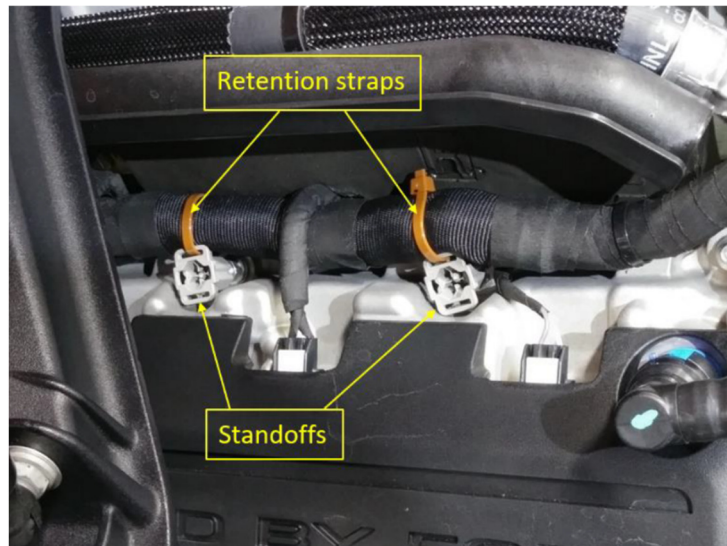
FORD PERFORMANCE

M-6766-A52
2020-2022 GT500, 2023+ Raptor R
5.2L OIL-AIR SEPARATOR

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Step 1

- Cut and remove wiring harness retention straps.
- Remove retention strap standoffs from cam cover stud bolts.



Step 2 Disengage coil wires at coil #2 and #3. Re-route from **ABOVE** the wiring harness to **BELOW** the harness.

Above

Below



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Step 3
Re-engage coil wires routed below the harness and push harness to gain clearance at cam cover stud bolts.



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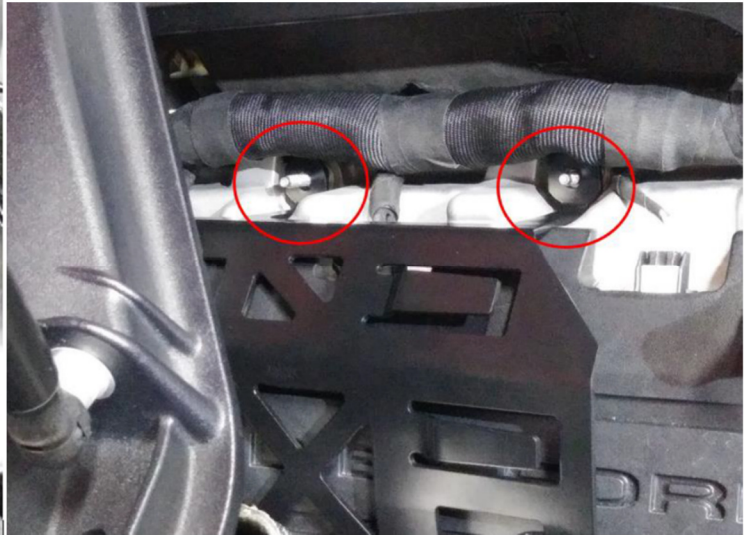


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Step 4
Position bracket under strut tower brace and wiring harness.
Install onto 3 cam cover stud bolts. Secure with 3 nuts (10mm flanged nut). Torque 5-7 Nm
Tip, to avoid dropping and/or losing flanged nut, use magnetic socket to hold nut during installation onto lower stud. **Verify clearance between bracket and coil wires.**



Step 5 Install two stud protectors DU5T-14E047-MA supplied in the kit onto cam cover stud bolts.



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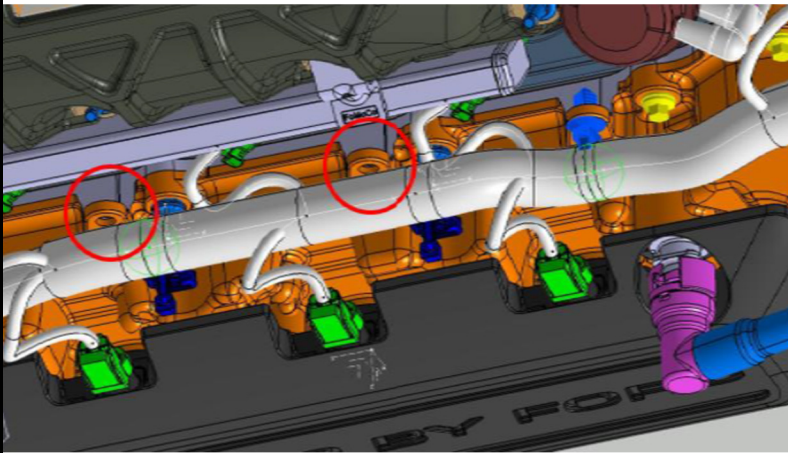
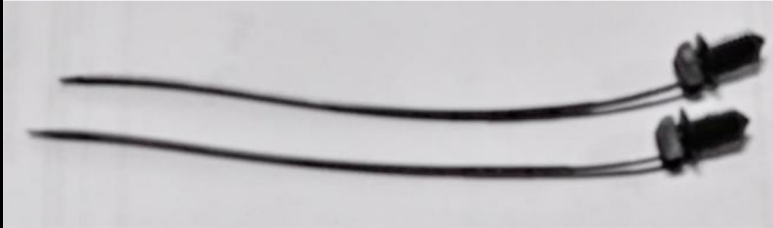


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Step 6 Install two 8 mm push pin tie straps AU5T-14E047-A supplied in the kit, to the cam cover (next to bracket mounting studs) and re-position wiring harness, then secure with the tie straps.



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Step 7. **Loosely** install 6.5 mm push pin tie strap 8U5T-14E047-HA supplied in kit onto the transmission wiring harness. Route the transmission wiring harness across tab at rear of bracket and press the push pin into the tab. Tighten the tie strap to secure wire harness to bracket.



Step 8 Remove PCV breather hose (passenger cam cover to super charger). **NOTE: Save hose for re-use when/if the kit is ever removed from the vehicle.**



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Step 9 Remove PCV from passenger side engine cam cover. **NOTE: When/if the kit is ever removed from the vehicle, a new PCV will be required.**



Step 10 Install Cam Cover vent tube supplied in kit. Slightly raise the forward edge of the coil cover, 1- 1/16" open end wrench, fully seat the vent tube.



Step 11 Connect PCV hose KR3V-6K817-AB supplied in kit to the rear inlet port of the Oil Separator.



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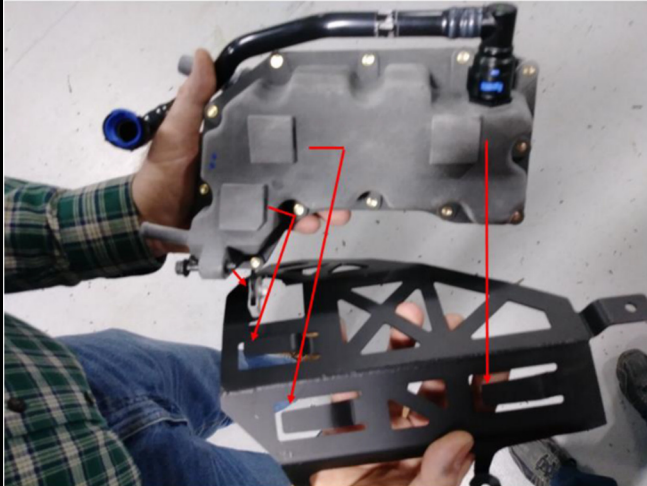
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Step 12 Install Oil Separator assembly to bracket (Slide onto bracket tabs) and secure by tightening the captive bolt. Torque 10 Nm +/- 1.5

Off vehicle views for reference:



In vehicle installation:



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Step 13 Connect Oil Separator inlet tube loose end to cam cover vent tube installed to oil separator at Step 10

Step 14. Remove plug from cam cover. Use $\frac{1}{4}$ " internal hex (allen type) drive. **NOTE: Save plug for re-use when/if the kit is ever removed from the vehicle.**



Step 16. Install 90 deg fitting. Fitting should be hand tightened 4 turns and aligned as shown.



Step 16. Disconnect VCT electrical connector to gain tool clearance for tightening the 90 deg fitting jam nut.



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Step 17 Install drain hose and clamp at the fitting, with clamp oriented towards front of vehicle for clearance to the A/C hose.



Step 18 Attach drain hose and clamp to Oil Separator drain port. Fully seat hose on drain port and align clamp with indicator on separator housing.



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Step 19 Secure fitting (11/16" crows foot) at the orientation established in Step 16 (after adjusting slightly to assure clearance to cam cover and 'no kinks' as hose routes to the oil separator assembly) by restraining the elbow while tightening jam nut. Torque 25 Nm

Step 20 Reconnect VCT electrical connector (previously removed at Step 17)

Step 21 Install remaining PCV tube KR3V-6K817-BA supplied in kit to top of Oil Separator and at the super charger.
End



Congratulations

Inspection and Cleaning of Mesh Screen

Removal of the separator top cover is required, perform steps 21, 18, 13 and 12 in reverse order to remove the separator assembly. Internal mesh screen can be removed and cleaned with solvent.

Reinstall separator assembly per steps 12,13,18 and 21. Torque 6 Nm +/-

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