CORKSPORT
EGR Delete Kit

PART #: GEN-6-531-10

Need Help With Your Installation? Call (360) 260-CORK
CORKSPORT EGR Delete Kit
Mazdaspeed 3, Mazdaspeed 6, Mazda CX-7 Turbo

PRODUCT DESCRIPTION:
Help your engine stay healthy and clean with the CorkSport EGR Delete Kit. Fully remove the exhaust gas recirculation (EGR) system from your Mazdaspeed to keep exhaust from entering your intake manifold and dirtying your intake valves. This comes wrapped up in a good looking, easy to install package that will even free up some much needed space in your engine bay!

Please let us know your feedback of the by submitting a review at: https://corksport.com/egr-delete-kit-for-mazdaspeed-3-mazdaspeed-6-and-mazda-cx-7.html

PRE-INSTALLATION NOTES:

⚠️ Make sure your vehicle is completely cooled down prior to starting installation. If you are going to work on your car within an hour or two of having driven it, use a fan to cool off the car.

⚠️ This modification will remove components of your vehicle's emission system and cause a CEL. It is intended for off-road or track use only.

These instructions were written for reference only and the use of a factory service manual is recommended.

How our instructions work: To best cover all of our customers experience levels, we have included a table of contents/order of operations along with step-by-step instructions.

These instructions were written using a 2009 Mazdaspeed 3. Other years and/or models will be similar.

MATERIALS & TIME:
GENERAL INFO:

<table>
<thead>
<tr>
<th>Time Est.</th>
<th>Difficulty</th>
<th>CEL</th>
<th>Warranty</th>
</tr>
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<td>2hr</td>
<td>3/5</td>
<td>Yes</td>
<td>2-Year</td>
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TOOLING LIST:

• 10mm Wrench
• 12mm Wrench
• 13mm Wrench
• 22mm Wrench
• Adjustable Wrench
• 8mm socket
• 10mm Socket
• 12mm Socket
• 13mm Socket
• 1/4” or 3/8” drive Ratchet
• 10mm Allen Wrench or Socket
• Thread Sealant
• Needle Nose Pliers
• Hose Clamps

PARTS LIST:

• One (1) CorkSport EGR Valve Delete Plate
• One (1) CorkSport EGR Tube Delete Plate
• One (1) CorkSport Intake Manifold Plug
• One (1) Four Inch Section of Coolant Hose
• Two (2) M8x1.25x20mm Bolts
• Two (2) M8 Washers

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ORDER OF OPERATIONS & TABLE OF CONTENTS:

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CORKSPORT EGR DELETE KIT INSTALLATION
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1. Intake Removal

**DETAILED INSTRUCTIONS:**

- Intake Removal

  **a)** Remove the cover from the top mount intercooler (TMIC) by removing the two 10mm bolts. Circled in red in Figure 1a.

  ![Figure 1a](image)

  **b)** Loosen the 10mm hose clamp that connects the OEM intake elbow to the OEM turbo inlet pipe (TIP). Circled in red in Figure 1b.

  ![Figure 1b](image)

  **c)** Unplug the MAF sensor connector by pressing down on the upper tab and gently pulling in the direction shown in Figure 1b. MAF sensor connector circled in blue in Figure 1b.

  ![Figure 1b](image)

  **d)** Remove the two 10mm bolts on the air filter housing. Shown circled in red in Figure 1c.

  ![Figure 1c](image)
DETAILED INSTRUCTIONS:

1. Intake Removal (continued)

e) Remove the valve cover breather tube from the rear right of the valve cover. Push the hose connector toward the valve cover and press both sides of the colored clip simultaneously. Then pull the hose away from the valve cover. Hose shown removed in Figure 1d.

f) Pull the OEM intake elbow off of the TIP by pulling toward the front of the vehicle near the clamp that was loosened in step 1b.

g) Pull up on the filter housing to remove it from the rubber mounts. The housing will “pop” off the rubber mounts.

h) Remove the filter housing, intake elbow, and breather tube from the vehicle.

2. Battery Box and ECU Removal

a) Remove the battery box cover. There are two clips (shown with red arrows in Figure 2a). Pry the clips outward by hand and lift the lid off the box.
2. Battery Box and ECU Removal (continued)

b. **Disconnect the battery.** Disconnect the negative terminal first with a 10mm wrench, then disconnect the positive with the same wrench. Terminals are labeled in Figure 2b for reference.

c. **Remove the two 10mm nuts from the battery tie down bracket.** Shown circled in red in Figure 2b.

d. **Remove the battery and tie down bracket from the vehicle.**

e. **Remove the front battery box panel.** Remove the MAF wiring harness clip (red circle in Figure 2c), and negative battery cable clip (blue circle in Figure 2c) from the front battery box panel. Use needle nose pliers to compress the clips on the inside of the battery box. Then slide the panel upwards and remove it (green arrow in Figure 2c).
2. Battery Box and ECU Removal (continued)

f. Disconnect the ECU plugs. Push on the tabs (red arrows in Figure 2d) and pull the white lock upward simultaneously (green arrows in Figure 2d).

When done correctly, the ECU plugs will disconnect easily. Do not force or pry the plugs as you could damage them.

g. Remove the battery box by removing the three 10mm bolts in the bottom of the box (circled in red in Figure 2e). The battery box and ECU can then be removed from the vehicle.

3. Intercooler Removal

a. Using pliers, release the hose clamp connecting the bypass valve (BPV) hose to the TIP (clamp circled in red in Figure 3a). Slide the clamp back along the tube.

b. Pull the end of the BPV hose off the end of the TIP. Pull in direction shown with blue arrow in Figure 3a.
3. Intercooler Removal (continued)

c. Loosen the clamps that connect the boost tubes to the intercooler using a 10mm socket. Clamps circled in red in Figure 3b.

d. Detach the vacuum signal hose from the top of the BPV. Use pliers to release the clamp, then pull the line off the barbed fitting. Hose/clamp location circled in blue in Figure 3b.

e. Remove the three 12mm nuts that attach the intercooler to the top of the engine. Nuts shown circled in red in Figure 3c.

f. Pull upwards to remove the intercooler from the vehicle. The BPV will remain attached to the intercooler pipe.
4. Turbo Inlet Pipe Removal

a. Remove the 10mm nut that holds the TIP to the engine. Location shown circled in red in Figure 4a.

b. Remove the two wiring harness clips. Squeeze the back side with needle nose pliers to remove. Circled in blue in Figure 4a.

⚠️ Be very careful not to break the plastic barb in the next step.

c. Remove the hose from the plastic barb near the turbocharger. Use needle nose pliers to release the clamp, then pull straight up to disconnect the hose. Plastic barb shown circled in green in Figure 4a.

d. Loosen the clamp that connects the TIP to the turbocharger using a 10mm socket and extension. Location shown in Figure 4a with purple arrow.

e. Pull the TIP off of the turbocharger, then remove the TIP from the vehicle.
5. EGR Valve Removal

a. Disconnect the electrical plug from the EGR valve. There is a small tab on the top that must be pushed to release the connector. Connector location shown circled in red in Figure 5a.

b. Trace the coolant line that attaches to the EGR valve back to the turbocharger (coolant line shown in Figure 5a with blue arrow & circle). Using needle nose pliers, release the clamp that attaches the line to the turbocharger.

![Figure 5a](image)

Coolant will leak from the coolant line and EGR valve during the next steps. Use a cup to catch the coolant and/or put towels below the EGR valve to soak up any coolant that spills.

c. Pull the coolant line free from the turbocharger. Catch any coolant that leaks out.

d. Remove the two 10mm bolts from the EGR valve (bolt locations circled in green in Figure 5a). Catch any coolant that leaks out as these are loosened.

e. Remove the EGR valve from the vehicle with the coolant line still attached.
6. Throttle Body Removal

The coolant lines can remain attached to the throttle body EGR delete install. The steps below labeled “OPTIONAL” show how to remove the hoses if desired.

a. **OPTIONAL:** Use needle nose pliers to release the clamps from the throttle body coolant lines. Shown with red circles in Figure 6a.

⚠️ **OPTIONAL:** Do not remove the hoses off the coolant ports until vise-grips or c-clamps have been installed in the next step. Failure to do so will lead to messy coolant everywhere.

b. **OPTIONAL:** Clamp the coolant hoses with vise-grips or c-clamps to stop the coolant flow. Excessive clamping force is not required and may damage the hoses. Clamping locations shown with green arrows in Figure 6a.

c. **OPTIONAL:** Remove the coolant hoses from the throttle body.

d. **Loosen the clamp on the throttle body inlet hose** using a 10mm socket and extension. Then remove the throttle body inlet hose. Clamp shown with blue circle in Figure 6a.
6. Throttle Body Removal (continued)

e. Unplug the throttle body wiring from the throttle body connector shown with blue circle in Figure 6b.

f. Remove the throttle body by removing the four 8mm bolts. Use an 8mm socket and extension. The bolts are shown with red circles in Figure 6b.

g. Place the throttle body out of the way.

7. EGR Tube Removal

a. Loosen the EGR tube at the intake manifold with a 22mm wrench or adjustable wrench. Compression nut shown with red circle in Figure 7a.

b. Remove the two 8mm bolts that connect the other end of the tube to the engine block. These bolts are shown circled in blue in Figure 7b.

c. Pull the EGR tube from the intake manifold to remove it from the vehicle.
8. CorkSport EGR Valve Delete Installation


b. Place EGR valve delete plate into position and test fit the hose length. Connect the hose to your turbocharger coolant inlet. There should be no kinks in the hose. If kinks are present, trim the hose as needed.

c. Inspect the OEM EGR valve gasket. Replace if gasket is in poor condition.

Failure to inspect and/or replace the EGR valve gasket can result in a coolant leak.

d. Install the CorkSport EGR valve delete plate using the OEM gasket and the provided bolts and washers. Tighten the two 13mm bolts to 15-22 ft-lbs. Shown installed in Figure 8a.

Supplied hardware is the correct length to clear the high pressure fuel line. Failure to use this hardware can damage the line and cause a fuel leak.

e. Connect the supplied hose to the turbocharger coolant inlet pipe. Secure with OEM clamp. Completed installation shown in Figure 8b. Note: this vehicle owner chose to use worm gear clamps instead of the OEM spring clamps.
9. CorkSport EGR Tube Delete Installation

a. **Install the CorkSport EGR tube delete plate** using the OEM gasket and hardware. Tighten the bolts to 8-10ft-lbs with an 8mm socket. Shown installed in Figure 9a.

- **NOTE**: With the EGR Valve deleted, no exhaust gas should be passing through to the EGR tube location so the gasket is likely not needed. However, installing the gasket keeps it easily findable should you ever need to reinstall your EGR system.

b. **Place some thread sealant on the M22x1.5 intake manifold plug.** We recommend liquid thread sealant for best results.

c. **Install the plug into the intake manifold** using a 10mm Allen wrench or Allen socket. Tighten to 37-44ft-lbs. Shown installed in Figure 9b.
10. Vehicle Reassembly

a. Follow the instructions in sections 1-4 and 6 in reverse order to complete vehicle assembly
   1. Reinstall throttle body
   2. Reinstall turbo inlet pipe
   3. Reinstall intercooler
   4. Reinstall Battery box & ECU
   5. Reinstall Intake System

b. Refer to the torque specifications below for vehicle reassembly.
   • 8mm Nut/Bolt  8-10 ft-lbs
   • 10mm Nut/Bolt  15-17 ft-lbs
   • 12mm Nut/Bolt  19-21 ft-lbs
   • 14mm Nut/Bolt  30-32 ft-lbs

This completes the installation of your CorkSport EGR Delete Kit. Enjoy the extra engine bay space and engine health!
WHAT’S NEXT?

CorkSport Mazdaspeed Turbocharger

Give Experience a boost in performance with our drop-in Mazdaspeed turbocharger. It easily bolts in and replaces your undersized OEM turbo with NO mechanical modifications. The CorkSport turbo supports a range of 250-450* horsepower in your Mazdaspeed. If your Mazdaspeed 3 or Mazdaspeed 6 turbo is worn out or is smoking, you need our turbo. Add the power without the hassle today!

CorkSport 72mm Throttle Body

Introducing the first and only performance throttle body for the MZR DISI that offers no sacrifices. By taking a ground-up approach we were able to succeed in making a throttle body that performs better than OE while retaining OE fitment and daily drivability. With easy installation and drop in fitment, you are sure to enjoy the gains from the CorkSport Throttle Body.

CorkSport Oil Catch Can

Enhance the reliability of your engine, improve performance, and improve fuel economy with the CorkSport Oil Catch Can. By adding an oil catch can, you will increase the longevity of your engine by helping keep unclean crankcase vapors and oil out of the engine’s intake. Made of billet aluminum for strength, the CorkSport Oil Catch Can includes everything you need for a complete install. Don’t let your Mazda get contaminated by sediment, crankcase vapors, or unclean oil. With the CorkSport Oil Catch Can you will remove unwanted debris that would normally contaminate the intake tract. This allows for cleaner air entering the engine, lower detonation rates and increases longevity.