



## 18SP609\* – Series 60<sup>®</sup> Bolted-Flange EGR Cooler Replacement Kit (P/N: E23535288)

\*Revision 2 – 5/11/09

### **KIT DESCRIPTION**

Series 60 Bolted-Flange EGR Cooler Replacement Kit (P/N: E23535288) contains all the necessary parts for replacement of the Series 60 EGR bolted-flange cooler (P/N: 23538835).

### **KIT CONTENTS**

The replacement kit contains the following parts listed in Table 1.

Part No.	Qty.	Description
23527385	1	Elbow-to-Water Pump Seal Ring
23538835	1	EGR Cooler
23533534	1	Lower EGR Cooler Gasket
23533707	3	Stud, M8 x 1.25 Nimonic
23534432	3	Nut, M8
18SP609Rev2	1	Installation Instructions

**Table 1      Series 60 Bolted-Flange EGR Cooler Replacement Kit  
(P/N: E23535288) Components**

### **INSTALLATION PROCEDURE**

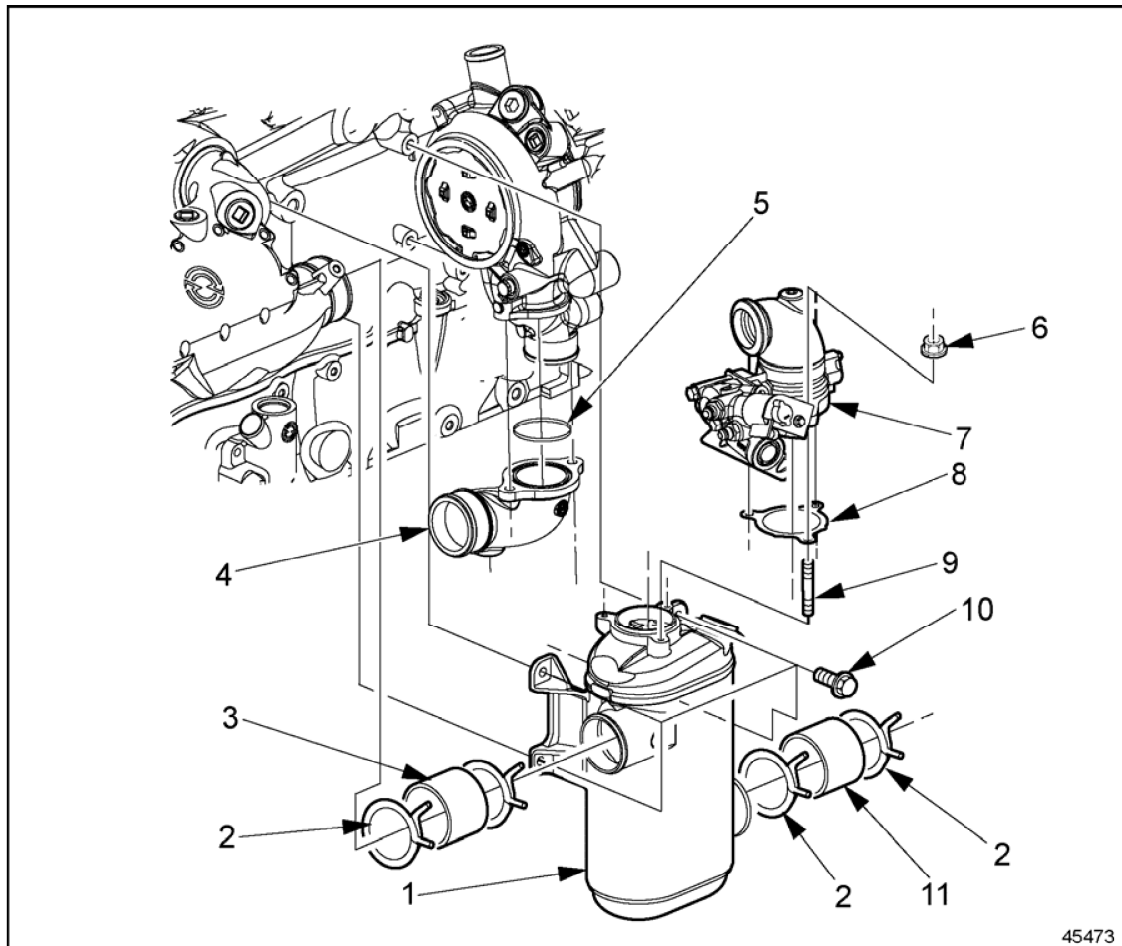
#### **NOTE:**

When removing the failed EGR cooler, do not remove the EGR valve from the bellows hot pipe. Remove the three nuts that attach the EGR valve to the cooler, and then suspend the EGR valve with wire or similar item to facilitate removal of the cooler. DO NOT dent, severely bend, or otherwise damage the bellows hot pipe; doing so requires replacement of the bellows hot pipe.

## EGR COOLER INSTALLATION

Install the EGR cooler as follows (see Figure 1):

1. Install three M8 studs into the EGR cooler. Torque to 20-24 N·m (15-18 lb·ft).



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| 1. EGR Cooler   | 7. EGR Valve (Re-use from engine)                      |
| 2. Spring Wire Clamp (Re-use from engine)             | 8. EGR Cooler Gasket                                   |
| 3. EGR Cooler-to-Oil Cooler Hose (Re-use from engine) | 9. M8 Stud (3)   |
| 4. Water Pump Elbow (Re-use from engine)              | 10. M10 Bolt (Re-use from engine)                      |
| 5. Elbow-to-Water Pump Seal Ring                      | 11. EGR Cooler-to-Water Pump Hose (Re-use from engine) |
| 6. M8 Nut (3)   |  |

**Figure 1 EGR Cooler Installation**

2. Insert EGR cooler water outlet into hose on oil cooler inlet.
3. Align EGR cooler back plate holes with four bosses on cylinder block.
4. Thread four M10 bolts through back plate of cooler and into cylinder block and tighten bolts to 46-52 N·m (34-38 lb·ft).
5. Install hose and clamps onto EGR cooler water inlet.
6. Insert water pump outlet elbow into hose on EGR cooler water inlet.
7. Install the seal ring and water pump elbow on water pump using two M10 bolts. Torque to 58-73 N·m (43-54 lb·ft).

## EGR VALVE INSTALLATION

Install the EGR valve as follows:

1. Install the EGR cooler gasket onto the three EGR cooler studs.
2. Lower the EGR valve assembly over the EGR cooler studs.
3. Tighten the EGR cooler nuts to 22-26 N·m (16-19 lb·ft).



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