

**GM SERVICE AND PARTS OPERATIONS  
DCS1778  
URGENT DISTRIBUTE IMMEDIATELY**

Date: May 16, 2007

Subject: 07066 Product Safety Recall  
Air Compressor Does Not Build Air Pressure

Models: 2007 Chevrolet Kodiak, T-Series  
2007 GMC TopKick, T-Series  
2007 Isuzu F-Series, H Series 7500/8500 Series  
with 7.8L Diesel Engine (RPO LG4/LF8) and Air Brakes (RPO JE4)

To: All Chevrolet, GMC and Isuzu Dealers

Attention: Service Manager, Parts Manager and Warranty Administrator

**PRODUCT FIELD ACTION ANNOUNCEMENT**

General Motors is announcing Product Safety Recall 07066 today. The total number of vehicles involved is 2,000. Please see the attached bulletin for details.

**Mailing Information**

Customer notification letter mailing will begin on May 23, 2007.

**GM Vehicle Inquiry System (GMVIS)**

GMVIS information will be available on May 16, 2007.

**Service Information System (SI)**

Bulletin 07066 is scheduled to be available on May 17, 2007.

**Campaign Initiation Detail Report (CIDR)**

The CIDR will be available in GM DealerWorld on May 16, 2007.

**PLEASE DOUBLE CLICK ON THE ICON BELOW  
THEN SINGLE CLICK ON THE LAUNCH BUTTON  
TO VIEW OR PRINT THE BULLETIN**

END OF MESSAGE  
GM SERVICE AND PARTS OPERATIONS



# Recall Bulletin



## PRODUCT SAFETY RECALL

**SUBJECT:** Air Compressor Does Not Build Air Pressure

**MODELS:** 2007 Chevrolet Kodiak, T-Series  
 2007 GMC TopKick, T-Series  
 2007 Isuzu F-Series, H Series  
 7500/8500 Series with 7.8L Diesel Engine (RPO LG4/LF8) and Air Brakes (RPO JE4)

### CONDITION

General Motors has decided that a defect, which relates to motor vehicle safety, exists in **certain** 2007 7500/8500 series Chevrolet Kodiak and T-Series; GMC TopKick and T-Series; and Isuzu F-Series and H-Series vehicles equipped with a 7.8L diesel engine (RPO LG4/LF8) and air brakes (RPO JE4). The air compressor in some of these vehicles may not build enough air pressure to support the air brake system. If this condition were to occur while the vehicle was stationary (brakes applied) the air brakes would remain applied and prevent the vehicle from moving.

If this condition were to occur while the vehicle was in motion, the dual system air pressure gauges would register the drop in pressure. If the pressure continued to drop, the low air pressure warning buzzer and warning lamp would activate as designed, warning the driver to move the vehicle to a safe location. If the driver ignores these warnings and continues to drive the vehicle, and if there was a continued loss of pressure, the rear spring parking brakes would automatically apply, preventing the truck from being driven.

### CORRECTION

Dealers are to replace the air compressor cylinder head, or in a few instances, the air compressor assembly.

### VEHICLES INVOLVED

Involved are **certain** 2007 7500/8500 series Chevrolet Kodiak and T-Series; GMC TopKick and T-Series; and Isuzu F-Series and H-Series vehicles with a 7.8L diesel engine (RPO LG4/LF8) equipped with air brakes (RPO JE4) and built within these VIN breakpoints:

YEAR	DIVISION	MODEL	FROM	THROUGH
2007	Chevrolet	Kodiak	7F400032	7F421336
2007	Chevrolet	T-Series	7F400491	7F418915

VEHICLES INVOLVED, Cont'd.

YEAR	DIVISION	MODEL	FROM	THROUGH
2007	GMC	TopKick	7F400002	7F421325
2007	GMC	T-Series	7F400000	7F421285
2007	Isuzu	F-Series	7F700008	7F701000
2007	Isuzu	H-Series	7F700273	7F700582

**Important:** Dealers are to confirm vehicle eligibility prior to beginning repairs by using GMVIS. Not all vehicles within the above breakpoints may be involved.

For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle identification number, customer name, and address information has been prepared and will be provided through the applicable system listed below. Dealers will not have a report available if they have no involved vehicles currently assigned.

- US dealers - GM DealerWorld Recall Information
- Canadian dealers - GMinfoNet Recall Reports
- Export dealers - sent directly to dealers

The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this recall.

PARTS INFORMATION – GM Only

Parts required to complete this recall are to be obtained from General Motors Service and Parts Operations (GMSPO). Please refer to your “involved vehicles listing” before ordering parts. Normal orders should be placed on a DRO = Daily Replenishment Order. In an emergency situation, parts should be ordered on a CSO = Customer Special Order.

Part Number	Description	Quantity/Vehicle
25884964	Compressor Kit, Air	1

PARTS INFORMATION – Isuzu Only

Parts required to complete this recall are to be obtained from American Isuzu Parts Distribution Network (AIPDN). Please refer to your “involved vehicles listing” prior to ordering requirements.

Part Number	Description	Quantity/Vehicle
8-25884964-0	Compressor Kit, Air	1

## SERVICE PROCEDURE

**Important:** Refer to the information below.

The information in the *Service Procedure* section of this bulletin provides instructions for removing the air compressor and replacing the air compressor and/or air compressor cylinder head.

Do **not** replace the whole air compressor **unless** there is damage to the piston and/or cylinder bore of the air compressor. Refer to *Conditions Requiring Compressor Replacement* in this bulletin.

### **Tools Required**

- J42971
- J-45666
- J-45275 or equivalent

### **Caution:**

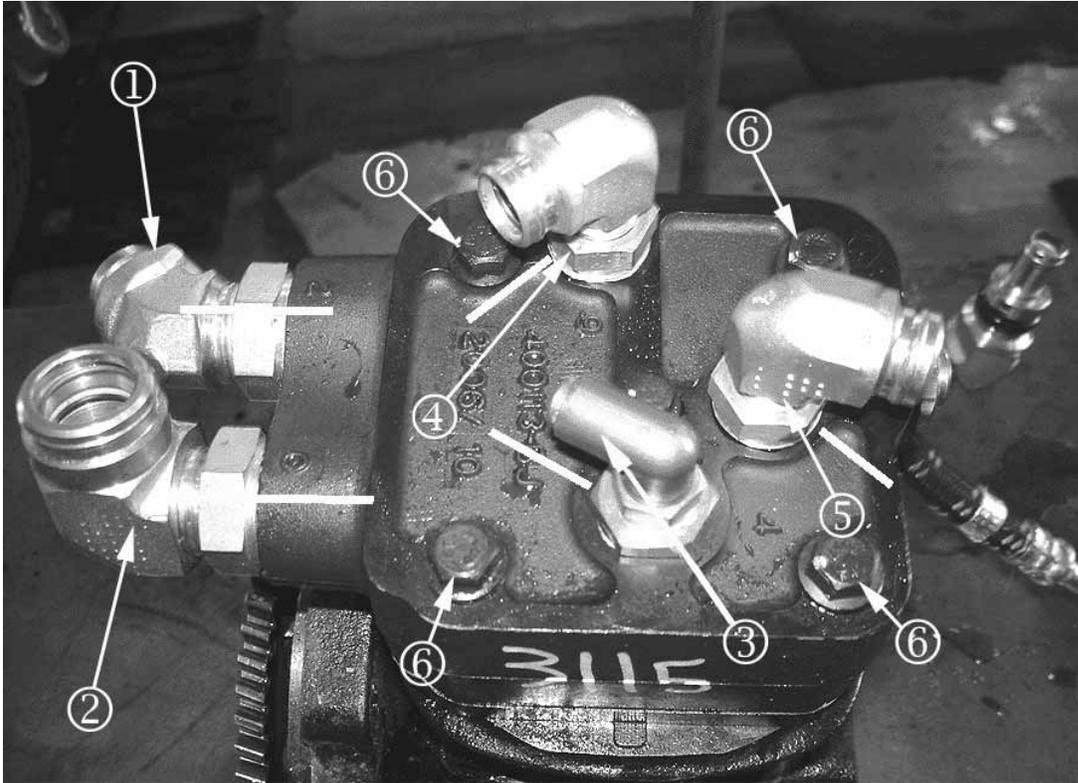
- Turn the engine off when working on a vehicle. Always block the vehicle wheels to prevent a fore or aft roll. Bleeding off system pressure may cause the vehicle to roll. Keep hands away from the brake chamber push rods and brake adjusters; they may apply as system pressure drops.
  - Never connect or disconnect a hose or line containing air pressure. It may whip as air escapes. Never remove a component or a pipe plug unless you are certain all system air pressure has been exhausted.
  - Never exceed the recommended working air pressure and always wear safety glasses when working with air pressure. Never look directly into the component ports or direct a pressurized air flow at anyone.
  - Never attempt to disassemble a component until you have read and understood all recommended procedures. Some components contain powerful springs and injury can result if not properly disassembled. Use only proper tools and observe all precautions pertaining to the use of those tools.
1. Apply the parking brake.
  2. Block the wheels.
  3. C-Models: Open the hood.
  4. Remove the right-side splash shield. Refer to *Splash Shield Replacement — Wheelhouse* in SI.
  5. Remove the engine cover. Refer to *Engine Cover Replacement* in SI.
  6. T-Models: Tilt the cab forward according to the Owners Manual cab tilting and lowering instructions.
  7. Drain all of the air reservoirs. Refer to *Draining Reservoirs* in Air Brakes in SI.
  8. Drain the engine coolant to below the level of the air compressor. Refer to *Cooling System Draining and Filling* in SI.
  9. Remove the air compressor discharge pipe at the air compressor.
  10. Remove the air compressor governor line at the air compressor.

11. Remove the power steering pump. Refer to *Power Steering Pump Replacement* in SI.
12. Remove the air compressor inlet hose at the air compressor.
13. Remove the air compressor water inlet hose at the air compressor.
14. Remove the air compressor water outlet hose at the air compressor.
15. Remove the air compressor oil inlet hose at the engine block.
16. Remove the air compressor.
  - 16.1 Support the air compressor.
  - 16.2 Remove the air compressor mounting stud nuts.
  - 16.3 Remove the air compressor from the vehicle.



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17. Use a bench vise to secure the air compressor.



- (1) Air Discharge
- (2) Air Supply
- (3) Control 1/4 PTC Tube
- (4) Coolant
- (5) Coolant
- (6) Head Bolts

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- 18. Note the location and orientation of the fittings on the cylinder head. Mark the location and orientation of the cylinder head fittings with a white marker. Mark both the fitting and the cylinder head. Transfer of these marks and fittings to the new cylinder head is required.
- 19. Loosen the locking nut of the coolant fitting closest to the engine and rotate the fitting counterclockwise to access the top left head bolt.
- 20. Loosen and remove the four head bolts.
- 21. Note the orientation of the cylinder head ports to the engine. Remove the cylinder head/reed plate assembly from the cylinder block. If necessary, insert a lever arm between the reed plate and cylinder block.



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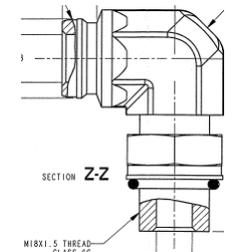
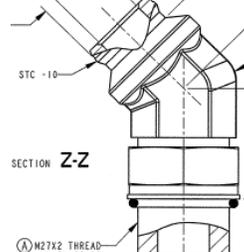
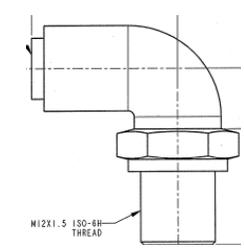
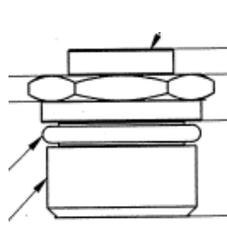
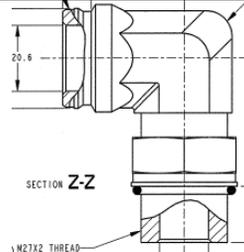
22. Inspect the cylinder bore and piston for damage or debris. Replace the air compressor if the bore and/or the piston are damaged. The piston and bore in the illustration are not damaged. Refer to *Conditions Requiring Compressor Replacement* illustration in this bulletin.
23. Remove the gasket on top of the cylinder block and discard. If necessary, scrape the gasket from the cylinder block. Use special care to not damage the top of the cylinder block.
24. Loosen and remove the coolant port fittings from the old cylinder head.



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25. Loosen and remove the air discharge fitting from the old cylinder head.
26. Loosen and remove the air supply fitting from the old cylinder head.
27. Hold the control cap with a 24 mm wrench. Loosen the 90 degree P-T-C control fitting from the old cylinder head.
28. Loosen and remove the safety valve from the old cylinder head.

29. Remove the O-rings from the fittings. Retrieve the new O-rings from the kit. Match the new O-rings to the appropriate fitting. Refer to the chart below.

Coolant Fitting (2ea)	Air Discharge Fitting	Control Fitting	Safety Valve
 <p>M1/8" NPT THREAD - CLASS AG</p> <p>SECTION Z-Z</p>	 <p>STC -10</p> <p>SECTION Z-Z</p> <p>1/2" NPT THREAD - CLASS 8G</p>	 <p>M1/2" NPT ISO-68 THREAD</p>	
 <p>EXAMPLE</p>	 <p>EXAMPLE</p>	 <p>EXAMPLE</p>	 <p>EXAMPLE</p>
<p>Ø15.3 ID x 2.2 c.s</p>	<p>Ø23.6 ID x 2.9 c.s</p>	<p>Ø9.3 ID x 2.2 c.s</p>	<p>Ø17.12x 2.62 c.s</p>
	 <p>SECTION Z-Z</p> <p>1/2" NPT THREAD - CLASS 8G</p>		
	<p>Air Supply Fitting</p>		

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30. Retrieve the new cylinder head assembly.



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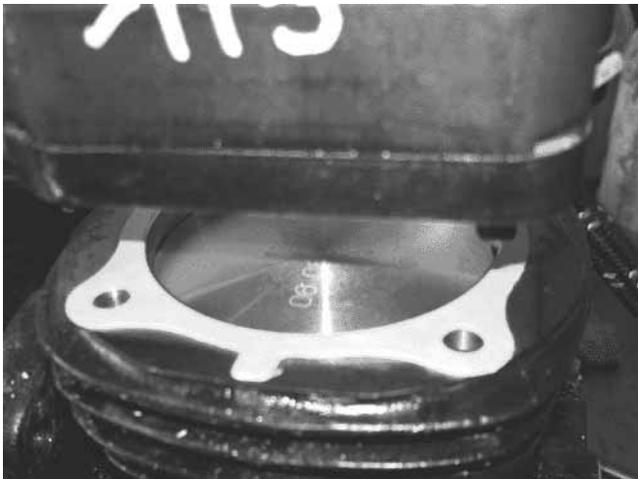


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31. Install the fittings from the old cylinder head to the new cylinder head. Transfer the fitting and orientation markings created in Step 18 to the new cylinder head. Tighten the fittings.

**Tighten:**

- Coolant fitting to 50-60 N·m (37-44 lb-ft)
  - Air discharge & air supply fittings to 130-151 N·m (96-111 lb-ft)
  - Control fitting to 20-26 N·m (15-19 lb-ft)
  - Safety valve fitting to 58-65 N·m (43-48 lb-ft)
32. Install the cylinder head onto the air compressor.
- 32.1 Ensure that the cylinder bore, piston, and the top of the cylinder block are clean and dry.
- 32.2 Oil the threads of the head bolts with 15W40 engine oil.
- 32.3 Install two head bolts into the new cylinder head assembly.
- 32.4 Install the cylinder head gasket onto the two head bolts until it is flush with the reed plate.



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- 32.5 While holding the gasket against the cylinder head assembly and the two bolts against the cylinder head, orient the cylinder head/head gasket assembly onto the

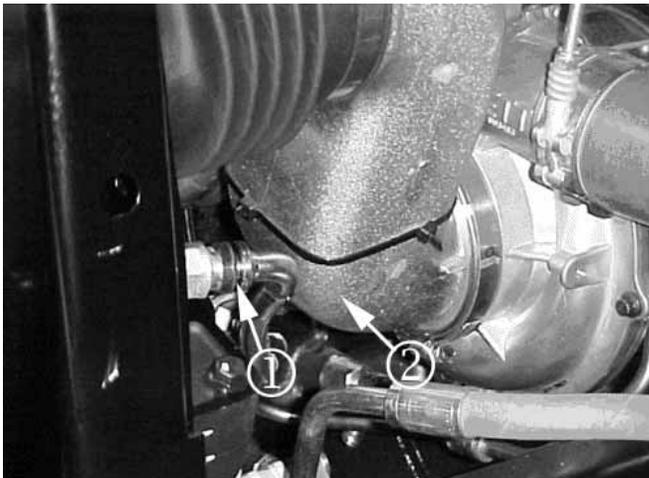
cylinder block as the original. Align the two head bolts in the thread holes of the cylinder block.

- 32.6 Hand-tighten the two head bolts.
  - 32.7 Install the two remaining head bolts and hand-tighten them.
  - 32.8 Torque the four head bolts to 34-40 N·m (25-30 lb ft) in a cross pattern.
  - 32.9 Torque the center head bolt to 13-16 N·m (10-12 lb ft).
  - 32.10 Rotate the coolant fitting closest to the engine to the proper location,  $38 \pm 5$  degrees
  - 32.11 Tighten the coolant fitting nut to 50-60 N·m (37-44 lb ft).
  - 32.12 Reconnect the air and coolant S-T-C lines to the appropriate cylinder head fittings.
33. Install the air compressor. Tighten the bolts.

### Tighten

Tighten the air compressor bolts to 60 N·m (44 lb ft)

**Important:** Refer to the illustration below if the vehicle is a tilt cab model equipped with RPO LF8 engine. The LF8 engine CAC duct restricts compressor water inlet fitting accessibility. For ease of installation, the water inlet hose should be connected to the fitting before the compressor is positioned on its mounting studs.



- (1) Water Inlet Fitting
- (2) Charge Air Cooler Duct (CAC)

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34. Install the air compressor oil inlet hose at the air compressor.
35. Install the air compressor water outlet hose at the air compressor.
36. Install the air compressor water inlet hose at the air compressor.
37. Install the air compressor air inlet hose at the air compressor.
38. Install the air compressor discharge front pipe and governor line at the air compressor.
39. Install the power steering pump, if required. Refer to *Power Steering Pump Replacement in Power Steering System* in SI.
40. Fill the engine cooling system. Refer to *Cooling System Draining and Fillings* in SI.
41. Inspect the air compressor for air leaks. Refer to *Air Brake System Testing* in SI.
42. Inspect for brake system for proper operation.

43. Perform operation checks below.

### Operational Checks

After repairs are completed and all of the air and coolant lines are properly connected, start the engine. Shut the engine off after the system pressure has reached its cut-out pressure. (This is typically noted by an audible purge at the air dryer.)

- Check for air leaks at the Control and Air Discharge of the air compressor.
  - Check for coolant leaks at the cylinder head assembly and fittings. Correct any leakage problems.
  - Check for possible problems with the air dryer purge (check for flow at air dryer purge after starting the engine and while building system pressure). If there is air flow at the air dryer purge, the air dryer needs to be repaired or replaced. Refer to *Air Brake Dryer Constantly Cycling or Purging, Air Brake Dryer Safety Valve Exhausting Air, Air Brake Dryer Does Not Purge or Exhaust, and Desiccant Being Expelled From Purge Valve Exhaust* in SI as applicable.
1. C-Models: Install engine cover. Refer to Engine Cover Replacement in SI.
  2. Install the right-side splash shield. Refer to *Splash Shield Replacement — Wheelhouse* in SI.
  3. Close the hood.
  4. T-Models: Lower the tilt cab according to Owners Manual cab tilting and lowering instructions.

## Conditions Requiring Compressor Replacement



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1. Refer to the text and illustrations above to determine if the air compressor must be replaced. Do not install a new cylinder head on an air compressor with a damaged piston or cylinder. If the piston or cylinder is damaged, the whole air compressor must be replaced. Inspect the piston and cylinder for the following conditions:
  - Loose parts and/or bolts, nuts, washers lying on top of the piston.
  - Ground-up metal debris deposited on top of the piston and/or pitting of the piston top and/or underside of the reed valve plate.
  - Ground-up metal debris deposited on top of the piston and/or visible score marks on the cylinder wall.

**CLAIM INFORMATION**

Submit a Product Recall Claim with the information indicated below:

REPAIR PERFORMED	PART COUNT	PART NO.	PARTS ALLOW	CC-FC	LABOR OP	LABOR HOURS	NET ITEM
Air Compressor Cylinder Head or Air Compressor Replacement	1	---	*	MA-96	V1606	3.5	**

\* The "Parts Allowance" should be the sum total of the current GMSPO Dealer net price or AIPDN Dealer Net Price (for Isuzu) plus applicable Mark-Up or Landed Cost Mark-Up (for Export) for air compressor kit (cylinder head) or air compressor needed to complete the repair.

\*\* The amount identified in the "Net Item" column should represent the actual sum total of the current GMSPO Dealer net price plus applicable Mark-Up or Landed Cost Mark-Up (for Export) for coolant needed to perform the required repairs, not to exceed \$59.68 USD, \$66.56 CAD.

Refer to the General Motors WINS Claims Processing Manual for details on Product Recall Claim Submission.

**CUSTOMER NOTIFICATION** – For US and Canada

General Motors will notify customers of this recall on their vehicle (see copy of customer letter included with this bulletin).

**CUSTOMER NOTIFICATION** – For Export

Letters will be sent to known owners of record located within areas covered by the US National Traffic and Motor Vehicle Safety Act. For owners outside these areas, dealers should notify customers using the attached sample letter.

**DEALER RECALL RESPONSIBILITY** – For US and Export (US States, Territories, and Possessions)

The US National Traffic and Motor Vehicle Safety Act provides that each vehicle that is subject to a recall of this type must be adequately repaired within a reasonable time after the customer has tendered it for repair. A failure to repair within sixty days after tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within a reasonable time, the customer may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation. To avoid having to provide these burdensome remedies, every effort must be made to promptly schedule an appointment with each customer and to repair their vehicle as soon as possible. In the recall notification letters, customers are told how to contact the US National Highway Traffic Safety Administration if the recall is not completed within a reasonable time.

**DEALER RECALL RESPONSIBILITY** – All

All unsold new vehicles in dealers' possession and subject to this recall must be held and inspected/repared per the service procedure of this recall bulletin before customers take possession of these vehicles.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers. Recall follow-up cards should not be used for this purpose, since the customer may not as yet have received the notification letter.

In summary, whenever a vehicle subject to this recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.



May 2007

Dear Commercial Truck Customer:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

General Motors has decided that a defect that relates to motor vehicle safety exists in certain 2007 model year 7500 and 8500 Series Chevrolet Kodiak and T-Series; GMC TopKick and T-Series; and Isuzu F-Series and H-Series vehicles equipped with a 7.8L diesel engine and air brakes. As a result, GM is conducting a safety recall. We apologize for this inconvenience. However, we are concerned about your safety and continued satisfaction with our products.

## I M P O R T A N T

- Your vehicle is involved in safety recall 07066.
- Schedule an appointment with your GM/Isuzu dealer.
- This service will be performed for you at **no charge**.

### Why is your vehicle being recalled?

The air compressor in your vehicle may not build enough air pressure to support the air brake system. If this condition were to occur while the vehicle was stationary (brakes applied) the air brakes would remain applied and prevent the vehicle from moving.

If this condition were to occur while the vehicle was in motion, the dual system air pressure gauges would register the drop in pressure. If the pressure continued to drop, the low air pressure warning buzzer and warning lamp would activate as designed, warning the driver to move the vehicle to a safe location. If the driver ignores these warnings and continues to drive the vehicle, and if there was a continued loss of pressure, the rear spring parking brakes would automatically apply, preventing the truck from being driven.

### What will we do?

Your GM/Isuzu dealer will inspect and replace either the air compressor cylinder head or the air compressor assembly. This service will be performed for you at **no charge**. It is likely that your dealer will need your vehicle longer than the actual service correction time of approximately 3½ hours because of service scheduling requirements.

### What should you do?

You should contact your GM/Isuzu dealer to arrange a service appointment as soon as possible. Bring the enclosed customer reply form with you when you visit your dealer. The form identifies the repairs required. If you no longer own this vehicle, please let us know by completing the form and mailing it back to us.

### Do you have questions?

If you have questions or concerns that your dealer is unable to resolve, please contact the appropriate Customer Assistance Center at the number listed below. The Customer Assistance Center's hours of operation are from 8:00 AM to 11:00 PM, EST, Monday

through Friday.

Division	Number
GMICT	1-800-862-4389
Puerto Rico – English	1-800-496-9992
Puerto Rico – Español	1-800-496-9993
Virgin Islands	1-800-496-9994

If after contacting your dealer and the Customer Assistance Center, you are still not satisfied we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh St., SW, Washington DC 20590, or call the toll-free Vehicle Safety Hotline at 1.888.327.4236 (TTY 1.800.424.9153), or go to <http://www.safercar.gov>.

Federal regulation requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

Scott Lawson  
General Director,  
Customer and Relationship Services

Enclosure  
07066