TECHIN



April 2001 Volume 3, No. 4

A Monthly Publication for GM Dealership Service Professionals

How to Find a Vehicle's RPO Codes

When you're looking at a vehicle's Service Parts ID label, you'll find a code list of all the Regular Production Options (RPO) installed on that vehicle.

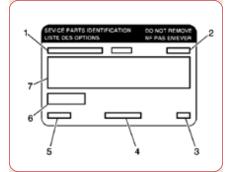
If you need a clue in interpreting the RPO codes, help is as close as SI 2000. Here's how.

On the Basic Version:

- Open SI 2000
- Click on Service Manual
- "Build" the vehicle
- Click on Service Manual
- Type RPO in the keyword box and click on Search
- Click on RPO Code List

On the Enhanced Version:

- Open SI 2000
- "Build" the vehicle
- Click on Service Manual
- Type RPO in the keyword box and click on Search
- Click on RPO Code List



This brings up a table providing a description of all the RPOs available on the vehicle.

- Thanks to Mark Stesney



New J-45080 32MB Card for Tech2

When the Tech 2 was introduced in 1996, it was equipped with a 10MB (megabyte) card, which had 10 times the capacity of the original Tech 1's mass storage cartridge. The 10MB card was installed in Slot 1, closest to the screen, with Slot 2 reserved for future use.

Vehicle on-board computer capabilities multiply with each new model year, and the Tech 2 has had to keep pace. Now, the capacity of the 10MB card is reaching its limits, and it's time to expand again.

Why is a larger memory card needed?

The memory card contains diagnostic and reprogramming applications, and space for vehicle calibrations. As the functions of the Tech 2 expand, more space is needed for new diagnostic applications. For convenience, coverage of the 1991 to 2002 vehicles is being retained, and capacity is being added to accommodate upcoming model years. For one example, calibration files are continued on page 2

TECHTINK 1

Contents

New J-45080 32MB Card for Tech 21
How to Find a Vehicle's RPO Code
Evap Code PO442 Caused by Fuel Sender Seal 2
Garage Shift Concern Summary
How Do Your Brake Jobs Measure Up?4
2001 Vehicle Data Recorder Software Update5
Door Trim Pad Damage
Intermittent Communication Conditions 5
Virus Protection
TAC Tips

<u>GM</u>

Service Operations



GM TechLink is a monthly magazine for all GM retail technicians and service consultants providing timely information to help increase knowledge about GM products and improve the performance of the service department. This magazine is a companion to the GM Edge publication.

Publisher & Editor:

Mark Stesney **GM Service Operations** → Mark.Stesney@GM.com

Technical Editor:

Jim Horner

1-248-816-3641

Production Manager:

Marie Meredith

Desktop Publishing:

Greg Szpaichler, MediaWurks □ spake@mediawurks.com

FAX number:

1-248-649-5465

Write to:

TechLink PO Box 500 Troy, MI 48007-0500

GM TechLink on the Web:



http://service.gm.com

General Motors service tips are intended for use by professional technicians, not a "do-it-yourselfer." They are written to inform those technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions and know-how to do a job properly and safely. If a condition is described, do not assume that the bulletin applies to your vehicle or that your vehicle will have that condition. See a General Motors dealer servicing your brand of General Motors vehicle for information on whether your vehicle may benefit from the information.

Inclusion in this publication is not necessarily an endorsement of the individual or the company.

Copyright© 2001 General Motors Corporation All rights reserved.

New J-45080 32MB Card for Tech2 continued from page 1

continually growing in size and will soon be 1MB.

When will the larger memory card be available?

Beginning in April 2001, all new Tech 2 orders will be shipped with the new 32MB card installed.

Also in April 2001, each dealer will receive one 32MB card J-45080 to meet essential tool requirements. The price is \$415.80 plus shipping.

What about additional memory cards?

Replacement cards for additional units can be ordered through Kent-Moore (1.800.GMTOOLS).

The Tech 2 requires a 32MB card called a linear flash card. The low-priced 32MB cards, available on internet sites, are called strata flash cards, and they will not work in the Tech 2.

Which software should be loaded on the new 32MB card?

The 32MB card will come with startup software only. It should be placed in Slot 1 (closest to the screen), where the

10MB card is presently located. The 10MB card should be moved to Slot 2. It can be utilized for other applications that are 10MB or less, or older versions of software (for instance, Saab or Isuzu). With the new card installed, follow the normal update procedure using TIS 2000.

Preliminary software required to recognize the 32MB card has already been broadcast to GM ACCESS dealers on February 24 and 25, Blockpoint version 01.1. Users of stand-alone PCs running TIS 2000 will have two ways to update:

- use CD version 01.1, to be shipped the first week of April, or
- go to website http://service.gm.com and select Incremental Update for Standalone Installation.

How can I access either the 32MB card and the 10MB card?

The Tech 2 will read whichever card is selected. At the Tech 2 logo screen, press the SHIFT key. Use the left and right arrow keys to select Slot 1 or Slot

We'll bring you news of additional features as they become available.

- Mark Stesney

H-SECTION

K-SECTION

Evap Code P0442 Caused by Fuel Sender Seal

2000-2001 Chevrolet Cavalier, Pontiac Grand Am and Sunfire, and Oldsmobile Alero

On some of these vehicles the cus-

tomer will experience an illuminated SES lamp. Diagnosis will reveal a stored P0442 Evap code. The cause may be the seal between the fuel tank and the fuel gauge sender. If the

seal is deformed and squeezed out, it can create a small air leak, causing the vehicle's self diagnostic to set the code.

Replacing the seal should correct the condition. The seal has been manufactured in two configurations, called the H cross-section and the K cross-section.

The H-seal was originally used in production, and the K-seal is the replace-

> ment. The part number for the Kseal is 22626099.

The illustration shows the old seal with an H crosssection and

the new replacement seal with a K cross-section.

Follow the procedure in SI 2000 when replacing the seal.

- Thanks to Darryl Butler



Garage Shift Concern Summary

2000-2001 Cadillac DeVille, Seville, and Eldorado, and Oldsmobile Aurora equipped with 4T80-E (RPO MH1)

A number of garage shift concerns emerged for the 4T80-E transmission in the 2000 and 2001 model years. The purpose of this article is to provide a summary of these concerns and clarify which model years are affected by which conditions.

Do this first.

- Verify complaint
- Note the state where the vehicle was originally delivered. It affects how the vehicle was factory calibrated.

2000 (California and Massachusetts Only) and 2001 (All states):

Vehicles built for California and Massachusetts in 2000 and all vehicles in 2001 are calibrated for ultra-low emissions. Engine speed at start-up is approximately 1200 rpm for 30 to 40 seconds. A harsher garage shift will occur in these vehicles than at a normal idle. No repair for harsh garage shift should be attempted on these vehicles unless the concern is exhibited after the engine attains a normal idle.

Do this second.

- Address DTCs

All 2000 and 2001 Model Years:

A large number of Diagnostic Trouble Codes (DTCs) may cause the Powertrain Control Module (PCM) to command high line pressure, resulting in possible harsh garage shifts. Look at Since Cleared and This Ignition diagnostic screens. Before any transmission repair is attempted, perform a system review. You must correct any engine DTC that is set; don't just clear it. Once all engine DTCs are corrected, you can perform transmission diagnosis. Be sure to follow DTC diagnostic procedures as shown in the service manual. If a DTC is not set, record a snapshot of the harsh shift for additional technical assistance.

Do this third.

- Skip This Step if Vehicle is not a 2001 Aurora
 - Re-flash PROM 2001, Aurora Only:

A service calibration is under development to address this concern, with an expected in-field date of March 17.

Do this fourth.

- Spacer Plate Gasket

2000 and 2001 Vehicles:

The customer may experience a harsh garage shift from park to reverse first thing in the morning or first shift of the day. This may be more prevalent in cooler weather. The condition will not repeat itself throughout the day but may return the following day. If the customer concern does not exactly match the above description, this step will not help and should be skipped.

If the customer concern exactly matches the above description, a revised



Revised spacer plate gasket with white stripe

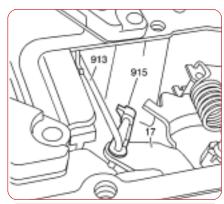
upper valve body spacer plate gasket has been developed to correct this condition. The part is currently available through Technical Assistance until inventory is available at SPO. A white colored stripe, running the length of the gasket can identify this new gasket.

Do this fifth.

- Check Electrical Components

All 2000 and 2001 Model Years:

After correcting any DTC and the problem persists, examine the transmis-



Manual Shift Shaft Retainer no. 915

sion electrical components. Inspect the wire harness assembly for being pinched, nicked or cut. Inspect the input speed sensor bolt torque (11-13 Nm or 8-9.5 lb-ft) and check the wire for possibly being pinched. Inspect the pressure control solenoid and the transmission fluid pressure switch assembly for proper connection and function. Pressure control solenoids built before Julian date 295 0 (day 295 in the year 2000) should be replaced.

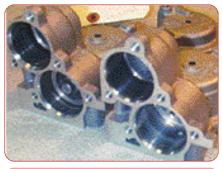
If the lower control valve body is removed from the transmission, a new manual shift shaft retainer (part ID 915 in the service manual) must be installed during assembly.

Do this sixth.

- Skip this step if vehicle is a 2000 model or if condition is not "delayed engagement into reverse."
 - Check Accumulator Housing

2001 Vehicles ONLY

The customer may comment on a delayed engagement into reverse at any time. The condition is not temperature dependent. The cause is a reverse accu-



Bad chamfer on left, good chamfer on right

mulator seal (number 947) that is cut. If the reverse accumulator bore chamfer is cut too deep, the piston seal can travel onto the chamfer area, rolling the seal and cutting it. This is generally found in vehicles built in August and September 2000. Replace the entire accumulator housing (number 944).

Be aware that there is a small chance that you may receive an accumulator housing from SPO with the chamfer cut too deep. There is also the possibility that if you replace the accumulator housing for some other reason, you may introduce the subject condition into the vehicle

- Thanks to Chris Anderson

How Do Your Brake Jobs Measure Up?

Bulletin 01-05-23-001, released February 2001, establishes a new, tighter lateral runout specification of 0.050 mm (0.002 in.) or less, for new or refinished brake rotors. The previous spec was 0.080 mm (0.003 in).

The fact that a runout specification exists suggests that you must make a measurement to find out if the rotor you're dealing with meets the specification. And if it doesn't, you'll need to do something to correct it. It may surprise you that in most cases excessive lateral runout is not that difficult to correct.

But first, why is lateral runout so important?

Consequences of Excessive Lateral Runout

Let's begin with a definition of lateral runout. It's a measurement of the wobble or waviness of the rotor face, measured with a dial indicator placed at right angles with the rotor face.

During braking, wear typically occurs on both the pad and the rotor. But if the rotor has excessive lateral runout (LRO), additional wear also occurs on the "high spot" of the rotor during non-braking situations. When the vehicle is being driven, the high spot of the rotor rubs the brake pad once per revolution. In time, this wears down the high spot, causing a thin spot on the rotor (rotor thickness variation).

Wear occurs to a rotor with excess LRO when the brakes are not applied, and the pulsation is evident when the brakes are applied.

Pulsation is the result of brake rotor thickness variation causing the brake caliper piston to move in and out of the brake caliper housing. The hydraulic pumping/pulsing effect is transmitted through the brake system and may be felt in the brake pedal or transmitted through the vehicle structure, chassis system components or steering column.

Preventing Pulsation

It's certainly important to fix the cause of a pulsation complaint, but it's

even more important to take steps to prevent it from occurring again in the future. This is where the new LRO specification comes into play.

Any time a rotor is serviced, you should measure LRO after the repair. It's that simple. Mount the rotor to the hub with lug nuts and washers, torqued to specification, and measure the runout. Eliminating runout prevents pulsation.

With the tighter specification in mind,



Measuring lateral runout

today's hubless rotor design demands careful attention to the hub-to-rotor interface. Cleaning, machining and proper lug nut torque are important elements to consider. Carefully examine the hub-to-rotor interface every time this area is serviced.

So how does your brake service measure up? Are there dial indicators located at the brake lathe? Does your toolbox include a dial indicator? A quality flex-arm dial indicator with vise grip attachment is a MUST for every technician. Using a dial indicator to inspect for lateral runout after the repair is now a critical step in the prevention of brake pulsation.

Dealing with Excessive I RO

What can you do if a rotor is found to have excessive lateral runout? Its difficult to cover all situations within every service department, but here are some points to consider and the options as

technology presents itself today.

Bench Lathe Maintenance - Precision machining depends on precision equipment. With today's tighter specifications, bench lathe performance must be checked regularly. Check adapters for nicks and burrs, which may affect the machining process. Also, measure the runout of the bench lathe arbor to be sure it is machining accurately.

Indexing The Rotor - Moving the

brake rotor on the hub one lug at a time will often reduce LRO to within specifications.

Parts Replacement Determine what's at fault.
Measure the rotor on the lathe
before mounting it on the vehicle.
Measure runout of the hub.
Replace parts if necessary.

On-Car Lathe - On-car lathe technology compensates for variables in hub-to-rotor mounting and will automatically give you a quality job within LRO specifications. Cleaning is still important regardless of the machining process. The Pro-Cut PFM 900 has automatic compensation for set-up and has set the standard for the industry. It is precise, it is easy to operate, and it is a great time saver for captured rotor situations

Correction Plates - If your shop doesn't have an on-car brake lathe, there is a new technology for correcting brake rotor lateral runout called Brake Align®. Measure

runout called Brake Align®. Measure runout and install a specially selected, tapered correction plate between the rotor and the hub. Bulletin 01-05-23-001 provides complete information on this new service practice.

IMPORTANT: Never attempt to stack two or more correction plates together on one hub. And never attempt to reuse a previously installed correction plate.

Torque Sockets - A perfect job of final measurement is undone if an impact wrench is used when remounting the wheel without the appropriate torque limiting socket. Uneven torque results in warping of the rotor, inducing excess lateral runout. Use the appropriate J-39544 Torque Socket or equivalent with your impact wrench.

For additional details on brake rotor service guidelines, refer to GM Bulletin number 00-05-22-002.

- Thanks to Russ Dobson

2001 Vehicle Data Recorder Engine and Transmission Software Update (release 4.0)

In January, your dealership received updated software for your J-42598 Vehicle Data Recorder. This is a reminder to install the software in your Techline terminal right away, if you haven't already done so. It will expand the usefulness of your VDR to record transmission data as well as engine system data.

Review of VDR Operation

The VDR is a convenient aid in diagnosing intermittent operating conditions. It has the same snapshot recording capabilities as your Tech 2.

Before installing the VDR into a customer's vehicle, you need to download instructions from your Techline terminal, which has been programmed with the CD-ROM you get with the VDR.

Because there's only one button to press, it's easy for a customer to trigger a snapshot when the event occurs. The Data Recorder will hold four snapshot events, and will overwrite the first one if the customer attempts a fifth recording.

When the customer brings the Data Recorder back with stored snapshots, simply hook the Recorder to your Techline terminal again. Data can be displayed and played exactly as it would be on your Tech 2 snapshot playback software. This allows you to learn more about the conditions surrounding the complaint.

Features of the Software Update

The 2001 Vehicle Data Recorder Powertrain Software Update now includes transmission system support along with engine system support for 1995.5 to 2001 model year General Motors Enhanced OBD 2 vehicles.

Note: Coverage for the Duramax LB7 6.6 diesel and Allison M74 1000 transmission are scheduled for a future release. The Catera, Geo and Tracker are not covered at this time

An additional new feature of this software update is a feature called the Service Engineering Tool or SET. This tool converts a Vehicle Data Recorder (VDR) file to a text file. The text file can then be imported into a spreadsheet software program. This permits creating custom graphs, to perform a detailed analysis of the snapshot.

You can read more about how to use the Service Engineering Tool in the help section of the VDR software. To access this information, go to the Help option on the main tool bar.

- Select Menus
- Select Snapshot Menu
- Select Save Snapshot
- Select Save Snapshot Dialog to see the information

Installing the Update

Follow the instructions on the CD-ROM in order to install the release 4.0 software. The software will automatically overwrite the previous release 3.0 software. When the installation is complete, you will see the Vehicle Data Recorder icon on the desktop that indicates it is release 4.0 when it is highlighted. During the transition from release 3.0 to release 4.0, it is recommended to utilize Vehicle Data Recorder Software release 3.0 to play back snapshots captured with release 3.0. This will insure accurate playback and display of the data.

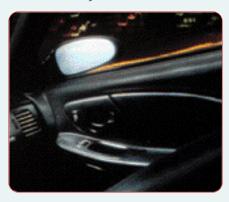
Questions or concerns about the Vehicle Data Recorder or the 2001 Software Update should be directed to Kent-Moore Tools at 1-800-345-2233.



Door Trim Pad Damage

On 2000 - 2001 Chevrolet Monte Carlo models, the door trim pad may be damaged by attempting to remove the power window switch bezel by prying between the door trim panel and the bezel. The bezel does not snap into place and cannot be removed without removing the door trim panel from the door. The power window switch plate, with integral door pull handle bezel, is retained by three fasteners. Once the door trim is removed, two screws located on the metal mounting plate can be removed to separate the two halves of the pull handle bezel. An easily overlooked recessed third screw must be removed from the bottom side of the door pull to release the bezel.

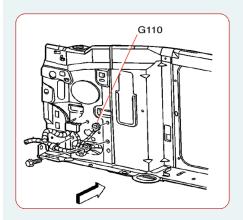
- Thanks to Gary McAdam



Intermittent Communication Conditions

When diagnosing intermittent communication problems on 2000 and 2001 S/T pickup and sport utility vehicles, follow service information diagnostic procedures and specifically check G110 at the radiator core support before replacing the EBCM. DTC codes U1031, U1041, C0243 through C0248, C0253, C0255, C0268 and C0286 have often been traced to a loose ground at the radiator core support.

- Thanks to Dan Oden



Virus Protection

A dealership's in-house computer network had become infected with a virus. They cleaned the server, but did not clean all of the Techline "clients." An infected client reinfected the server, which passed the virus on to all the other clients. Before they got the situation under control, and all the computers cleaned, down-time was just over three

weeks. This resulted in a lot of lost business, as vehicles had to be taken to another dealership for programming.

Could something like that happen in your dealership? Can you take precautions against it? Here's the latest information.

What kinds of communication links connect to your dealership's computers?

GM ACCESS is a private intranet infrastructure that allows two-way communication between your dealership and various locations within the GM Corporation.

Communication takes place over the PUL-SAT satellite system. Your dealership is equipped with a GM ACCESS server to handle communication with the satellite.

GM ACCESS provides a limited number of direct links to approved websites from www.gmaccess.com. These include the anti-virus software providers discussed later in this article.

Because GM ACCESS is totally within the control of GM, it is constantly monitored against any virus infections. Viruses are unlikely to originate from GM due to the various safeguards built into the corporate infrastructure.

In addition, your dealership may have a connection to the totally public internet, through an independent ISP (internet service provider). This is how e-mail messages can travel to and from your dealership. The public internet connection represents the weak link in your dealership's communication system, because it cannot be monitored by GM, as GM ACCESS is monitored.

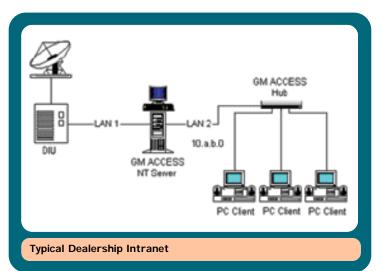
E-mail originating from GM won't be infected, but it's possible for infected e-mail to pass through GM ACCESS, for instance from one dealer to another. An infected e-mail from the originating sender can travel within the GM ACCESS infrastructure.

And finally, within your dealership, there may be a network of computers communicating with each other and the GM ACCESS server.

What is a virus?

In the medical world, a virus is a tiny microorganism that invades your body from outside. This is the virus infection. Once inside, it attacks, causing a wide range of effects, from discomfort, to illness, or even in severe cases to death.

Computer viruses are so named because they behave much like the biological kind. They infect your program by



entering from the outside, and once inside, viruses may cause simple mischief, may interrupt your operating programs, may destroy data, or cause other disruptions. And frequently, the virus is designed to self-destruct, so it leaves no trace of itself behind.

Once a virus attack has occurred, it may take weeks or months to correct the situation, resulting in customer dissatisfaction, lost productivity and negative financial impact. Each Techline "client" must be cleaned or preferably reformatted. The clients can't log into the server until all computers are cleaned, as they risk reinfection. After the clients are cleaned, the server must be cleaned.

Where do viruses come from?

Most viruses are carried into your computer attached to e-mail messages, downloaded from the internet, or on infected discs brought in from the outside.

This means that an e-mail from a customer or from a supplier could be infected, without the sender even knowing about it. By the time the virus is discovered, it's already been passed on.

Or, one of your fellow employees may have brought in a copy of a game or other entertainment. Such files often pass from machine to machine, and it's impossible to determine at which point the file got corrupted.

What are some current typical viruses?

At any given time, there may be 50,000 or more viruses in circulation, so your chances of coming into contact with one are much greater than you may think

New viruses crop up at the rate of 10-12 per day; here are some recent ones, and a description of what they

> Kriz.4050 -- Self replicating virus that tries to format your hard drive on Christmas every year

W32/Naked@MM (also known as Naked Wife) -- E-mails itself to everyone in your address book, tries to delete all system files in the Windows folder

VBS/SST@MM (also known as AnnaKournikova) -- E-mails itself to everyone in your address book, may also delete various files

What are some good practices that minimize

virus infections?

First, every computer in your dealership should have an anti-virus program installed. And the program should be run at regular intervals.

Second, never open an e-mail attachment without first scanning it with your anti-virus software.

Third, never allow a disc from outside be read into one of your computers without first scanning it with your anti-virus software.

Anti-Virus Software

The installation and use of antivirus software is your dealership's responsibility.

There are numerous anti-virus software programs available in the marketplace. GM has tested all of the major ones and recommends two that have few if any incompatibilities with the Techline terminal.

These are McAfee Viruscan 5.x or later and Norton Antivirus 2000 or later. GM Dealer World contains direct links to both of these software sources. This provides you with a convenient way to contact their websites. You can research their offerings and can place an order online

Although software can be purchased and downloaded from McAfee and Symantec, it is not a recommended

method of obtaining software. When software is purchased in a retail store, it comes on a CD-ROM, which can't be infected by a virus.

Suitable anti-virus software can be purchased for \$30-40 at such retail outlets as Best Buy, Circuit City, CompUSA, Fry's Electronics, Media Play, Micro Center, Office Depot, Office Max, Software City, Staples, WalMart, and others.

Once you have installed the anti-virus software, you're not finished. Because hackers are constantly coming up with

new viruses, your anti-virus software must be periodically updated. This can be done automatically. At the intervals you select with the update tool provided in the software, your computer will check the software manufacturer's data base for the latest version; this update will be installed automatically on your computer. GM considers every 10 days as a reasonable update rate.

Who is responsible for providing virus protection?

It is the responsibility of the dealer-

ship to install anti-virus software on all PCs and to educate employees on the negative impact of a virus attack. If GM is required to assist in eradicating a virus, the dealership will be billed accordingly.

Some Important Websites

Anti-virus Software:

www.computerassociates.com www.mcafee.com

www.symantec.com

- Thanks to Mike Waszczenko and Steven Sturza

TAC Tips

Tracker High Transfer Case Shift Effort

Bulletin 00-04-21-002 pertains to 1999-2000 Tracker 4WD. While performing the repair procedures outlined in the bulletin, some technicians may have concerns of the correct location of the three inch diameter steel ring which is included in part number 91176201.

Parts included in p/n 91176201 are the blocker ring, brass cone, steel cone and a three inch diameter steel ring. The three inch diameter steel ring is placed between the blocker ring teeth and the synchronizer hub. Because the inserts and springs are to be discarded, the steel ring is used as a spacer. Failure to



install the steel ring in the correct location will cause a constant mesh of the blocker ring to the sleeve.

The brass inner cone may not fit into the drive sprocket on some 1999 Trackers. Some early built 1999 Trackers may have the 1998 design drive sprocket. For this condition, order drive sprocket p/n 91175753.

- GM Technical Assistance

Steering Column Doesn't Lock in Park

On some 2001 full-size light duty Chevrolet and GMC trucks, the steering column doesn't lock and some models in stock have "ears" on the ignition switch, while others don't.

The column lock feature has been deleted on the models listed below with automatic transmissions, and the new ignition switch will not have the "ears." Models with manual transmission will continue to use the steering column lock and these ignition switches will have the "ears".

Do not attempt to replace the non-column locking switch with a locking switch, or vice-versa.

MODELS:

2001 Chevrolet Silverado C1 C2 C3

2001 Chevrolet Silverado K1 K2 K3

2001 GMC Sierra C1 C2 C3

2001 GMC Sierra K1 K2 K3

– GM Technial Assistance

Bulletins - continued from page 8

01-07-30-004; 1995-2000 Summary of 4T40/45-E Transaxle Technical Information; 1995-2000 Chevrolet Cavalier, Pontiac Sunfire, 1997-2000 Chevrolet Malibu, 1999 Oldsmobile Cutlass, 1999-2000 Pontiac Grand Am, Oldsmobile Alero with 4T40/45-E Automatic Transmission (RPO MN4, MN5)

BODY AND ACCESSORIES:

01-08-42-001; replaces bulletin 63-82-06A; Exterior Lamp Condensation and Replacement Guidelines; 1993-2001 Passenger Cars, 1993-2002 Light and Medium Duty Trucks

01-08-48-001; Windshield Reveal

Molding Squeak (Add Anti-Squeak Tape); 1999-2001 Chevrolet Camaro, Pontiac Firebird with T-Tops

01-08-49-001; Speedometer Control Unit Configuration/Replacement; 2000 Chevrolet and GMC WT5500 Series Medium Duty Tilt Cab Models

01-08-58-001; Windnoise Around B-Pillar (Add Sealer); 1999-2001 Chevrolet Corvette (Hardtop)

01-08-61-001; Clunk Noise From Front of Vehicle (Replace Left Front Axle Mount Bracket, Add Reinforcements to Frame and Bracket); 1999 Chevrolet and GMC K1500 Series Pickup Models (Silverado and Sierra) 01-08-63-001; replaces bulletin 52-15-01; Hood Hinge Rattle (Install Spring Washer); 1995-2001 Chevrolet and GMC S/T Pickup and Utility Models, 1996-2001 Oldsmobile Bravada

01-08-64-004; High Rear Door Swing Effort (Replace Check Link); 1997-2001 Chevrolet Malibu, 1997-1999 Oldsmobile Cutlass

01-08-64-015A; replaces bulletin 00-08-64-015; Power Sliding Side Door Edge Guard Comes Loose (Install New Edge Guard); 1997-2000 Chevrolet Venture, Oldsmobile Silhouette, Pontiac Montana, 1997-1999 Pontiac Trans Sport

Bulletins - March 2001

This review of service bulletins released through mid-March lists the bulletin number, superseded bulletin number (if applicable), subject and models.

GENERAL INFORMATION:

99-00-89-015A; replaces bulletin 99-00-89-015; Light Tactical Support Vehicle LTSV (Formerly known as the Commercial Utility Cargo Vehicle -- CUCV II and III) Service; 1999-2002 Chevrolet K-Series Models with Military Upfit

01-00-89-005; January, 2001 Bulletin Summary; 2001 and Prior Passenger Cars and Trucks

01-00-90-001A; replaces 01-00-90-001; Recommended Rear Axle Lubricant; 2000-2001 Rear Wheel Drive Passenger Cars, Light Duty Trucks and Four Wheel Drive Vehicles

HVAC:

01-01-38-002; HVAC Pollen Air Filter; 2000-2001 Chevrolet Tracker 4-Door Models Only

01-01-38-003; Poor Heat Distribution in Driver's Area of Vehicle (Install New Heat Diverter Ducts); 1996-2001 Chevrolet and GMC M/L Van Models Built Before Breakpoints

01-01-38-004; Heater Outlet Hose Contacts or Rubs Generator (Reroute and Tie Strap Hose/Replace Hose if Necessary); 1999-2000 Chevrolet and GMC C6-7 H-Series Conventional Medium Duty Models with Gasoline Engine (VINs B, D -- RPOS L21, LP4)

SUSPENSION:

01-03-09-001; Metallic Ringing/Rattle Noise From Rear of Vehicle (Install New Shock Absorber); 2001 Pontiac Aztek without RPO G67 (Automatic Level Control) Built Prior to Breakpoint

01-03-10-001; Proper Location of Wheel Lock Wrench During Pre-Delivery Inspection; 2001 Chevrolet Camaro and Pontiac Firebird

DRIVELINE AXLE:

99-04-21-005A; replaces bulletin 99-04-21-005; Transfer Case Shudder (Flush and Replace Transfer Case Fluid); 1999-2001 Chevrolet and GMC L-Van, 1999-2001 Oldsmobile Bravada with NV136 Transfer Case (RPO NP4)

01-04-17-001; Launch Shudder on Acceleration (Install New One-Piece Propeller Shaft); 1999-2001 Chevrolet and GMC K2500/3500 Extended and Crew Cab Long Box Pickup Models with **Automatic Transmission**

01-04-17-002; Driveline Vibration (Inspect and Align Propeller Shaft); 1999-2001 Chevrolet Tracker

01-04-18-001; replaces bulletin 36-74-05A; Driveline Noise (Normal) While Operating in Four Wheel Drive; 1988-2001 Chevrolet and GMC K and T Models

01-04-19-001; Special Service Policy for S/T Utility Front Axle Service; 2002 Chevrolet and GMC S/T Utility Models (Trailblazer, Envoy) and 2002 Oldsmobile Brayada

01-04-20-002; Exchange Program for 2001 Model Year (Transfer Case/Rear Differential); 2001 Aztek with 3.4L Engine (VIN E -- RPO LA1) and Versatrak All-Wheel Drive System

01-04-21-003A; replaces bulletin 99-04-21-003; Front Wheel Slipping with Vehicle in Four Wheel Drive (Replace Transfer Case Clutch Plates and Front Drive Axle Lubricant); 1999-2001 Chevrolet and GMC K and T Models (Silverado, Sierra, Blazer, Envoy, Jimmy) with NV236/246 Transfer Case (RPO NP8)

BRAKES:

01-05-23-001; Brake Align ® System for Brake Rotor Lateral Runout Correction; 2001 and Prior Passenger Cars

ENGINE/PROPULSION SYSTEM:

00-06-01-015B; Engine Oil Level Indicator and Tube Change; 2000-01 Chevrolet and GMC C/K Pickup Models (Silverado, Sierra), 2001 Chevrolet and GMC C/K Utility Models with 4.8L, 5.3L or 6.0L V8 Engine (VINs V, T, U -- RPOS LR4, LM7, LQ4)

01-06-01-003; Exchange Program for Early 2002 Model Year 4.2L Engine; 2002 Chevrolet Trailblazer, GMC Envoy, Oldsmobile Bravada with 4.2L Engine (VIN S -- RPO LL8)

01-06-01-005; Cold Engine Tick Noise (Replace Pistons); 2000-01 Buick Century, Chevrolet Lumina, Malibu, Pontiac Grand Prix with 3.1L Engine (VIN J -- RPO LG8)

01-06-01-006; Diagnosing Engine Oil Leak into Spark Plug Wells; 1999-2000 Chevrolet Tracker with 2.0L Engine (VIN C -- RPO L34)

01-06-01-007; Engine Coolant Consumption or Coolant Leak (Inspect for Material Degradation/Replace Intake Manifolds); Various 1995-1998 Car Models with 3.8L V6 Engine (VIN K -- RPO L36)

01-06-01-008; Engine Oil Pan Leak (Seal with RTV Sealant); Various 1995-2001 Car Models with 3.8L V6 Engine (VINs K, 1 -- RPOs L36, L67) and Stamped Steel Oil Pan

01-06-04-001; Poor Engine Performance and/or Transmission Shift Quality (Reflash Engine Calibration); 1999-2000 Chevrolet and GMC B, C and F Medium Duty Models with Caterpillar® 3126 Engine (VIN C - RPO LG5) and Allison® Transmission (Model AT545)

01-06-04-003; MIL Light On, DTC P0141 Set (Replace Oxygen Sensor, HO2S 2); 1996 Buick Skylark, Chevrolet Cavalier, Oldsmobile Achieva, Pontiac Grand Am and Sunfire, with 2.4L Engine (VIN T - RPO LD9)

01-06-04-006; Lean Hesitation, Sag or Stumble on Light/Moderate Acceleration (Reprogram PCM); 1999 Chevrolet and GMC C/K Pickup Models (Silverado, Sierra) with 4.8L, 5.3L or 6.0L V8 Engine (VINs V, T, U -- RPOS LR4, LM7, LQ4)

01-06-04-007; MIL Indicator Illuminated, DTC Code P0442 Stored (Replace Fuel Sender to Tank O-Ring); 2000-01 Chevrolet Cavalier, Oldsmobile Alero, Pontiac Grand Am and Sunfire

01-06-04-008; Inaccurate or Erratic Fuel Gauge Reading (Install New Fuel Tank Sender Sensor); 2000-01 Chevrolet Cavalier, Malibu, Oldsmobile Alero, Pontiac Grand Am, Sunfire, Toyota Cavalier

01-06-04-009; Service Engine Soon (SES) Light On with DTC 0226 Set (Replace Fuel Pressure Regulator [Limiter]); 1998-2001 Chevrolet and GMC F Model T-Series Medium Duty Tilt Cab Models, 2000-2001 Chevrolet and GMC WT5500 Series Medium Duty Tilt Cab Models with 7.8L Diesel Engine (VIN 3 --RPO LG4)

TRANSMISSION/TRANSAXLE:

01-07-30-002; Malfunction Indicator Lamp (MIL) On, Transmission Stuck in Third Gear, Instrument Cluster Inoperative (Replace Ignition Switch); 1999-2000 Cadillac Escalade, 1997-2001 Chevrolet and GMC C/K and S/T, 1997-2001 Oldsmobile Bravada with 4L60-E Automatic Transmission (RPO M30)

01-07-30-003; 1995-2000 Summary of 3T40 Transaxle Technical Information (as of 11/01/00); 1995-2000 Chevrolet Cavalier and Pontiac Sunfire with 3T40 Automatic Transmission (RPO MD9)

continued on page 7