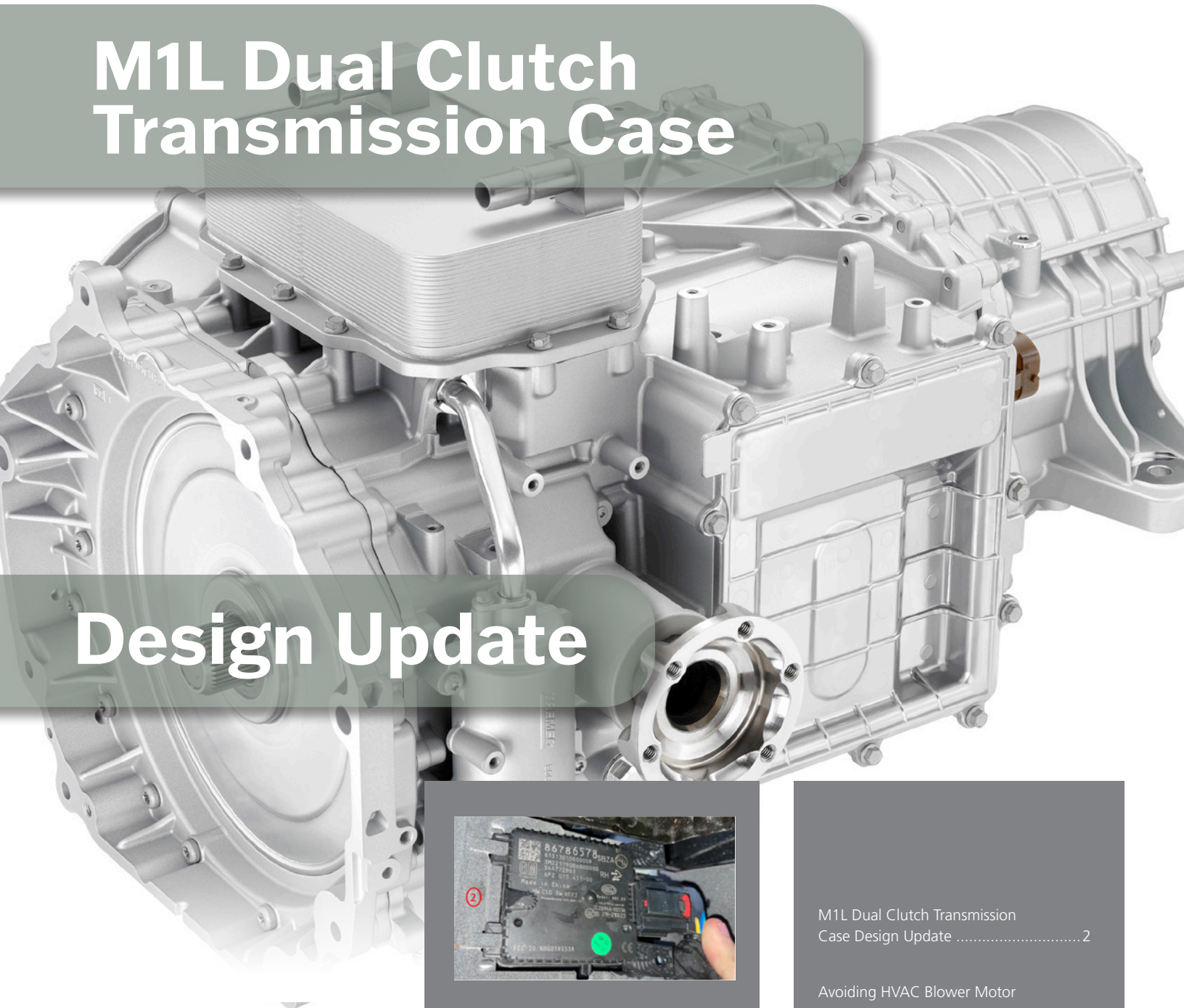


M1L Dual Clutch Transmission Case

Design Update



Side Obstacle Detection Module Installation

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M1L Dual Clutch Transmission Case Design Update

The case design of the DCT 8-speed transmission (RPO M1L) in 2020-2023 Corvettes is being updated toward the end of the 2023 model year.

A new Die 3 transmission can be easily identified by the 4 fasteners along the front edge of the sump pan. The previous Die 2 transmission has 6 fasteners along the front edge of the sump pan.

Service transmissions will also begin to migrate to this updated design for older model years and will require additional parts to be ordered when used in an older model year.

Die 1 cases were originally produced with a stamped sump pan with rails. The stamped pans were replaced with the Die 2 cast pans.

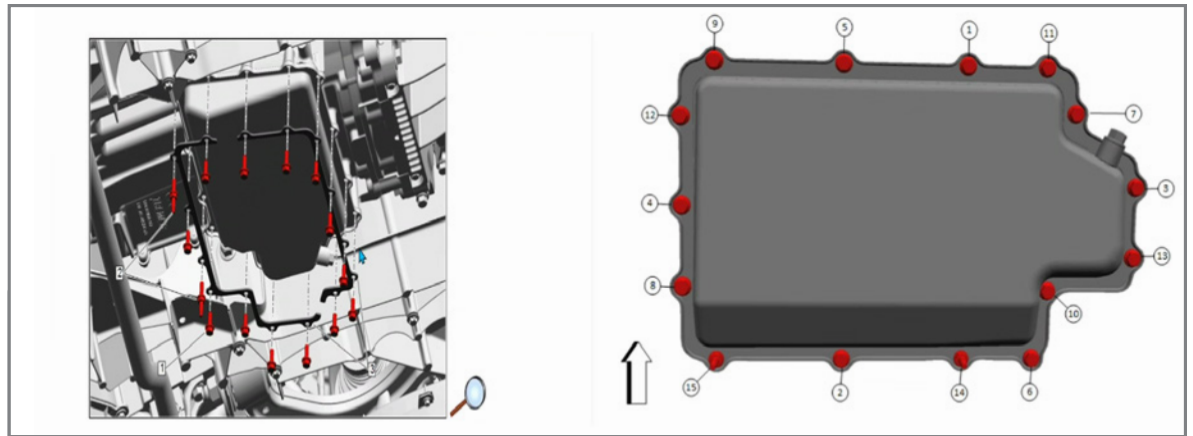
If any repairs were needed on a Die 1 transmission, it is possible to find a Die 1 transmission with a Die 2 pan installed, which can be identified by comparing the Die 1 and Die 2 bolt patterns. The Die 1 transmission sump pan has 15 bolts and the Die 2 cast sump pan has 19 bolts. If the Die 2 pan is installed on the Die 1 transmission, there will be holes in the pan without bolts.

TIP: For track use, Z51-equipped Stingrays with Die 3 cases no longer need the additional 2 quarts (1.89 L) of transmission fluid.

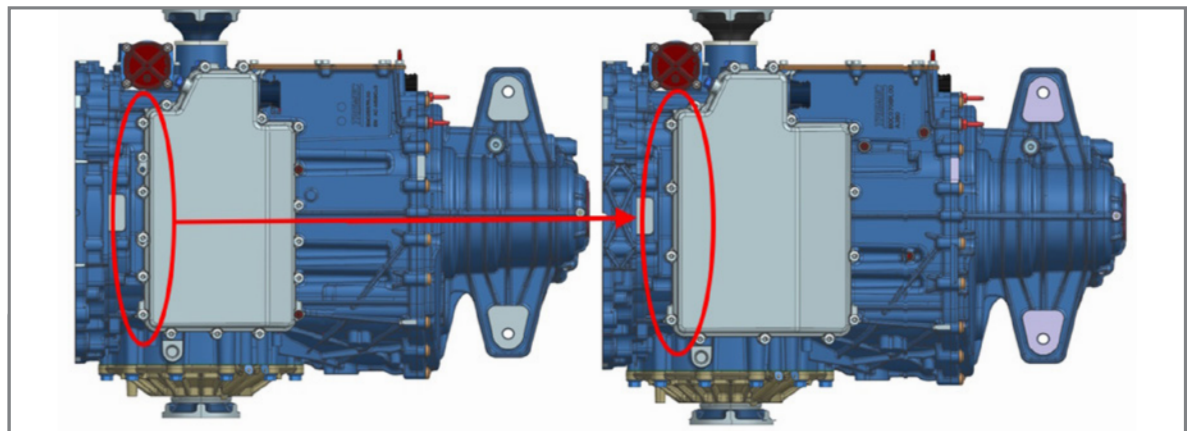
TIP: The canister filter for regular maintenance remains unchanged.

Refer to Bulletin #23-NA-156 for more information.

► Thanks to Marty Leach



Die 1 transmission sump pan has 15 bolts.



Previous Die2 transmission (left) with 6 fasteners along the front edge of the sump pan and the new Die3 transmission (right) with 4 fasteners.

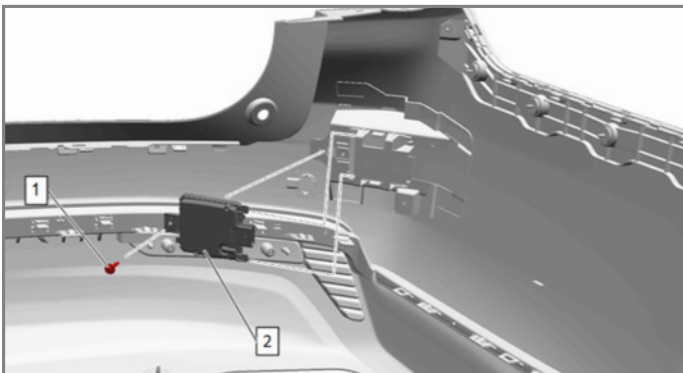
Side Obstacle Detection Module Installation

The Rear Cross Traffic Alert and/or Side Blind Zone Alert system on some 2021-2023 Tahoe, Suburban, Yukon and Escalade models may not detect certain vehicles. A "system unavailable" message also may be displayed on the Driver Information Center.



Side Blind Zone Alert warning

If vehicles are not detected properly, it may be due to the incorrect installation of one or both of the left/right Side Object Detection Control Modules in the rear bumper fascia bracket.

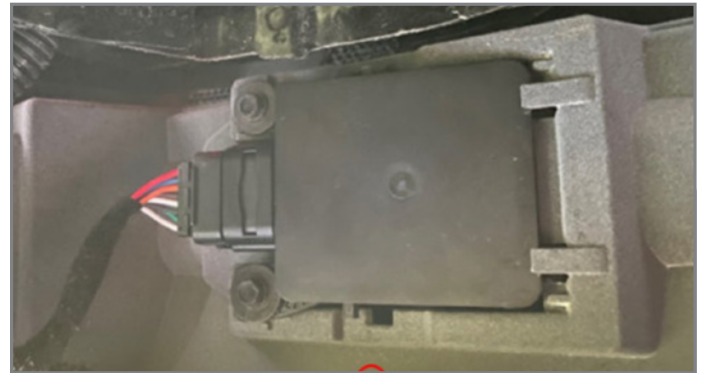


Side Object Detection Control Module in the rear bumper fascia bracket.

The Side Object Detection Control Modules have an internal antenna that emits a signal (radar wave) that is used to detect vehicles nearby. The modules must be installed correctly for the system to work as designed.

If the modules are not detecting certain vehicles, check that the modules are not installed on the wrong side of the vehicle, upside down, backwards or flipped over. Typically, the module are found to be installed incorrectly after there has been some type of repair work done to the vehicle.

For example, if the Side Object Detection Module is flipped over (as shown below), the module's internal antenna that emits the radar wave will be pointed inward toward the passenger compartment. Despite the module being mounted incorrectly and pointing in the wrong direction, the system may still have some partial functionality.



Incorrectly installed Side Object Detection Module

When installed correctly, the Side Object Detection Module label will point toward the front of the vehicle.



Correctly installed Side Object Detection Module

When diagnosing a performance-related issue with the Rear Cross Traffic Alert and / or Side Blind Zone systems, first verify the proper installation of the left and right Side Obstacle Detection Control Modules. Review the appropriate Service Information for additional information.

Refer to #PIT6087 for more details.

► Thanks to Jim Will

Avoiding HVAC Blower Motor Parts Return Damage

Many times, common warranty repairs like HVAC blower motor replacements require that the part be returned to GM. Just like other vehicle components that are returned under warranty, HVAC blower motors are analyzed at the Warranty Parts Center (WPC) to determine the root cause of the failure in order to help resolve product issues. However, if the returned parts are damaged during return shipping, they cannot be properly tested.

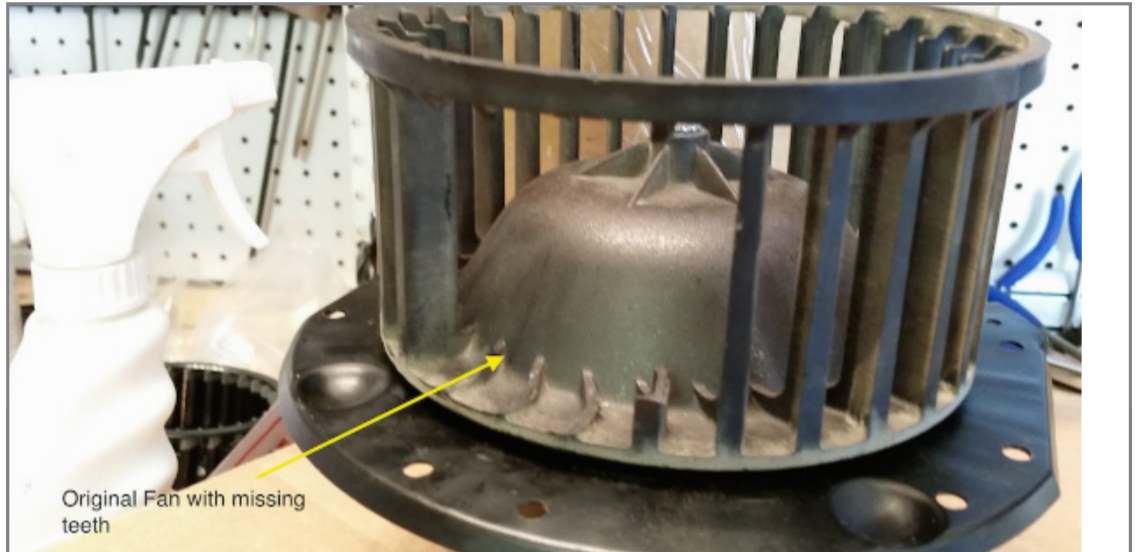
It's critical that the parts arrive at the WPC in the same condition as removed from the vehicle. Missing or broken teeth on a fan, for example, is a common occurrence of damage that occurs during shipping.

USE ORIGINAL CONTAINERS

When returning parts under warranty, dealerships are strongly encouraged to use the original packaging and packaging orientation of the new part whenever possible to ship back the failed part (see below for an example). The original packaging will help to properly protect the part during shipment.

TIP: Be sure to remove or cover all previous labeling on the box prior to re-use to reduce the possibility of shipping errors.

Replacement blower motor assemblies are fragile components that require containers that properly support and protect the blower motor during shipment. Parts travel a long way and pass through many hands as they travel from the supplier to the Customer Care and Aftersales warehouse, and then to dealerships. Motors returned under warranty without suitable packaging (or no packaging at all) puts the parts at risk for damage during shipping. These damaged components limit



Proper packaging helps avoid shipping damage.



Use the original packaging of the new part to ship back the failed part.

the ability to properly test a failed component, which makes it difficult to identify the failure mode — and most importantly — to improve the quality and durability of the component.

RETURN GUIDELINES

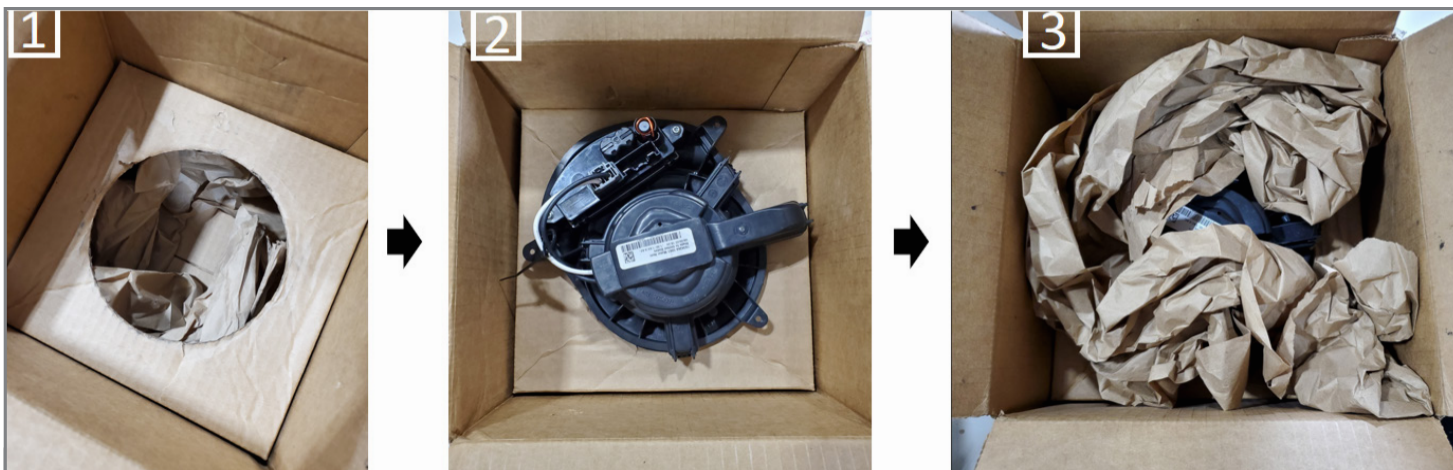
In addition to using the proper packaging and shipping container when returning parts, the following parts return guidelines are recommended:

- Clearly mark or circle the area of concern on the part, such as a leak, crack, premature wear or defect. The area of defect should be clearly marked and not defaced so that it is easily identifiable.
- When identifying parts, be sure to do so in a way that will not damage the part being sent back. For example, do not wrap a label or metal tag wire around wiper blade inserts or apply tape around door seals.
- Return the actual failed part. Do not send a similar or new part.
- Do not remove any pieces from the part being sent back.
- All parts related to the repair procedure covered by the labor operation on the part return request should be returned together.

- All parts related to a specific labor operation should be bundled together and shipped in one box.
- Do not send multiple returns in the same box. Ship each individual return in a separate box with its unique GWM shipping label affixed on the top of the box and on one outward-facing side. Include inside the package the GWM parts return shipping label, job card with technician comments, and other related documentation to so that the parts can be successfully routed and analyzed.
- Use only clean, dry boxes to return parts. Boxes that have absorbed oil or other fluids should not be used to return parts to the WPC.
- Parts must not be shipped loose. Be sure to package parts using bubble wrap or other protective packing materials to avoid damage during shipping when needed. Do not use any packaging material that may contaminate the part.

For additional information on parts returns, refer to Bulletin #99-00-89-019Y.

► Thanks to Scott Jesnig and Bob Carley



1. Place ½ of the packing paper from the service box underneath the cardboard mounting shelf to protect the returned motor assembly's fan.
2. Place the returned motor assembly as shown. Ensure that the motor assembly rests flush to the cardboard mounting shelf.
3. Place the other ½ of the packing paper from the service box on top of the returned motor assembly as shown.

Unable to Complete System Calibration for Trailering Features

There may be some difficulty in setting up several trailering features on some 2024 Silverado 1500, Silverado 2500/3500, Sierra 1500 and Sierra 2500/3500 models equipped with the Surround Vision Cameras (RPO UV2) and Trailer Camera Provisions (RPO TRG). When setting up the transparent trailer, jack knife alert, trailer length indicator, biasing view, rear trailer guidelines or articulation angle indicator, the system will not calibrate. These conditions may be caused by a software issue with the Video Processing Module.

Normal valid trailer height inputs can range between 0.39 inches (1 cm) up to 177.1 inches (450 cm), but with the current software, any trailer height input that is 119 inches (303 cm) or greater will cause the system not to calibrate.

Engineering is working on new software for the Video Processing Module. Do not replace any parts for this condition.

To enable the system to calibrate if the trailer height is 119 inches (303 cm) or greater, change the height input to 118 inches (299 cm) when setting up the system. With the lower trailer height input, the trailer calibration will complete. There are not any adverse effects by changing the trailer height input to 118 inches (299 cm) and all trailering features will operate properly.

Refer to #PIT6060 for more information.

► Thanks to Jim Will



Several trailering features may not calibrate correctly.

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