

TECHNICAL SERVICE BULLETIN

12MY-16MY 195, 195h COE STABILITY UPGRADE

OVERVIEW

A COE if equipped with a severe duty body application may experience excessive body roll or poor handling at highway speeds. This TSB (Technical Service Bulletin) outlines an inspection procedure highlighting approved body installation guidelines and the need for a general suspension inspection. Also included are two repair procedures where the front and rear suspension can be modified to reduce the amount of body roll and stiffen the ride quality.

NOTE: This procedure is provided as technical information and is not an authorization for a warranty repair.

If there are any questions, contact your Technical Service Manager.

SUBJECT VEHICLES

Certain 12MY – 16MY Hino COE (Cab over Engine) trucks with a J05E engine.

BEFORE YOU BEGIN:

- Read and understand all instructions and procedures before you begin the work.
- Read and follow all WARNINGS and NOTICES set forth in this publication. These alerts help to avoid damage to components, serious personal injury, or both.
- Park the vehicle on a level and solid surface and apply the parking brake.
- Place the gear shift lever in "P" or "Park".
- Apply the parking brake firmly and confirm parking brake activation.
- Confirm the engine is stopped, the ignition switch is in the off (LOCK) position, and the key is removed.
- Always wear safety glasses to prevent eye injuries.

Place wheel chocks in front of and behind all the wheels to prevent the vehicle from moving.

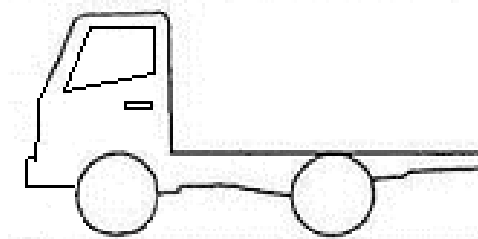
PARTS

PART NUMBER	PART DESCRIPTION	QUANTITY
SPRING ASSY, FR, LH	4811037Y60	1
SPRING ASSY, FR, RH	4811037Y70	1
U BOLT	9011716075	2
U BOLT	9011716065	2
NUT	9017816004	8
REAR HELPER LEAF	4826437F31	2
SPACER	4828237N60	2
CENTER BOLT	482473V280	2
NUT	482840W070	2
U BOLT	9011718020	4
NUT	9017818002	8
REAR BUMP STOP	4834437420	2
BOLT	9155281020	4

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VEHICLE PREPARATION:

1. Park the vehicle on level and solid surface.



2. Confirm the engine is stopped, the ignition switch in the off (LOCK) position and the key is removed.



3. Apply the parking brake.



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4. Chock the front wheels.



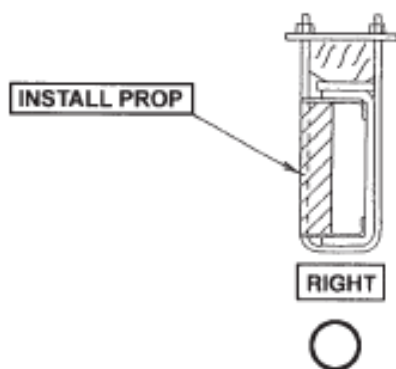
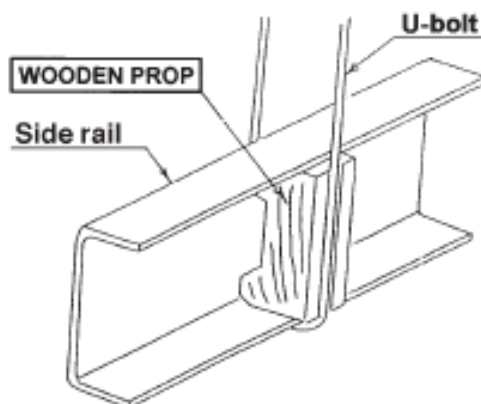
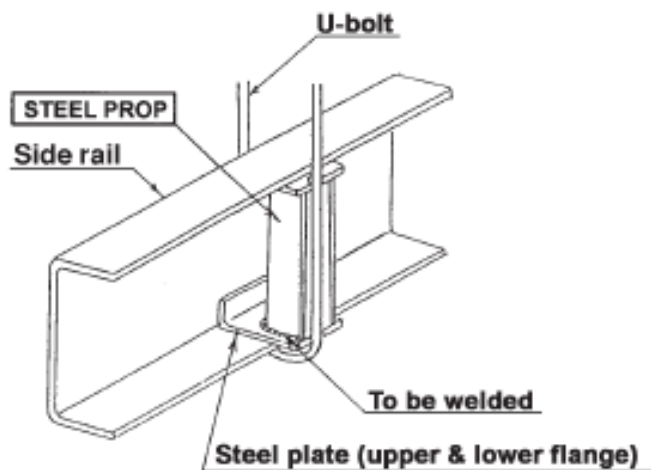
INSPECTION PROCEDURE

1. Verify that all six tires are inflated to the placard specification. High or low tire pressures can cause undesirable handling characteristics. If tire pressures are proper, raise the front of the vehicle and support it with jack stands. Check for any loose or worn suspension components. Repair any worn suspension components as needed. Lower the vehicle, remove the wheel chocks, and road test it to determine if the handling has improved. If the vehicle still has undesirable handling characteristics, proceed to step 2, below.

2. Refer to chapter 6 of the current body builder guide for guidelines regarding proper mounting of the vehicle's body and frame extensions. It is important that the proper wooden shims be installed between the body and the frame of the vehicle. It is critical that wooden props be installed within the frame rail at each U-bolt mounting location. It is also critical that each U-bolt is tight and placed in the proper position. Examples from the body builder's guide are shown below, but you must refer to the body builder guide for more detailed information.

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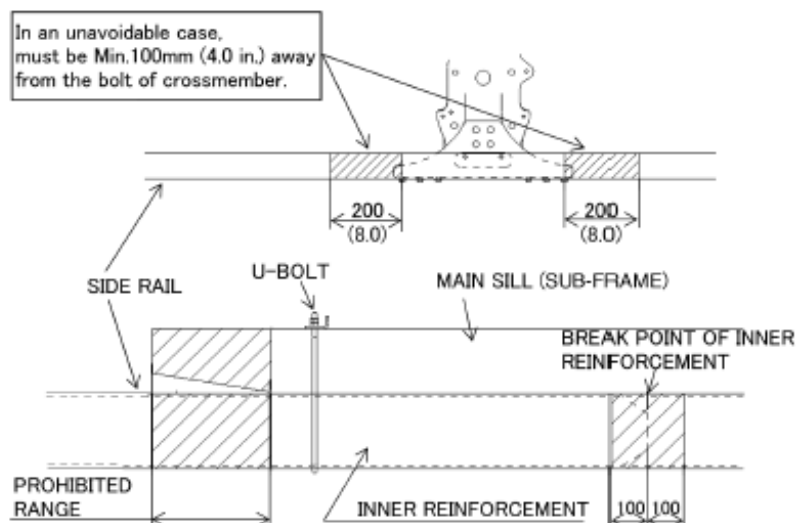
[EXAMPLE STRUCTURE OF PROPS]



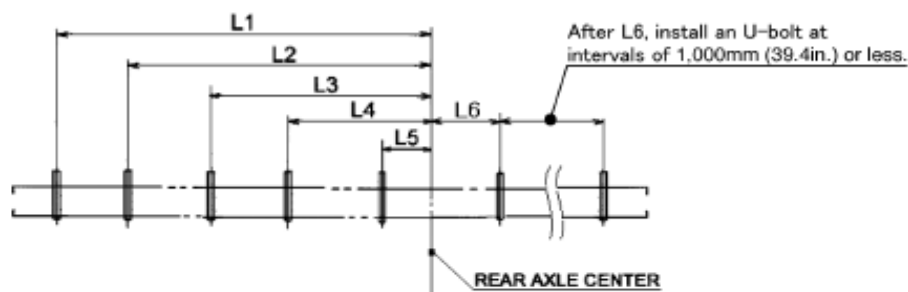
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[U-BOLT SHOULD NOT BE INSTALLED AT FOLLOWING RANGE]

Unit : mm (in.)



The setting positions of U-bolts should be observed according to the figure shown below.



MODEL		WHEELBASE mm (in.)	CAB	SIDE RAIL	DIMENSION mm (in.)					
					L1	L2	L3	L4	L5	L6
XJC XFC	700	2900 (114)	SINGLE	RH	1930 (76.0)			780 (30.7)	230 (9.1)	1275 (50.2)
				LH	1890 (74.4)			830 (32.7)		
	710	3500 (138)	SINGLE	RH	2530 (99.6)	1375 (54.1)			275 (10.8)	1275 (50.2)
				LH	2490 (98.0)					
	720	3800 (150)	SINGLE	RH	2830 (111.4)	1675 (65.9)		825 (32.5)	275 (10.8)	1275 (50.2)
				LH	2790 (109.8)					
			DOUBLE	RH		1675 (65.9)		825 (32.5)	275 (10.8)	1275 (50.2)
				LH						
	730	4100 (161)	SINGLE	RH	3130 (123.2)	1975 (77.8)		1125 (44.3)	275 (10.8)	1275 (50.2)
				LH	3090 (121.7)					
	740	4400 (173)	SINGLE	RH	3430 (135.0)	2275 (89.6)	1375 (54.1)		275 (10.8)	1275 (50.2)
				LH	3390 (133.5)					
			DOUBLE	RH		2275 (89.6)	1375 (54.1)		275 (10.8)	1275 (50.2)
				LH						

NOTE : When you do not extend rear overhang, the dimensions of L6 recommend 1025mm (40.4in).



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3. If any body mounting concerns are identified, correct them and road test the vehicle for improved handling. If the vehicle still has undesirable handling characteristics as described within the overview above, proceed to the repair procedure, below.

NOTICE: This TSB contains two repair procedures which outline modifications to the front and rear suspension on the vehicle. Vehicles with the VIN numbers starting with "JHH" built on or after March 4, 2015. DO NOT perform Repair Procedure A as the vehicle already has factory installed updated front springs. If the subject vehicle was built before the dates mentioned above, first perform Repair Procedure A. After Repair Procedure A has been completed, ask the customer to drive the vehicle and assess its handling capabilities. If the handling is acceptable after installing the updated front springs, **DO NOT** perform Repair Procedure B.

If the customer still feels that body roll is excessive, even after the updated front springs are installed, perform Repair Procedure B. Note that performing Repair Procedure B will result in a firmer ride.

REPAIR PROCEDURE A

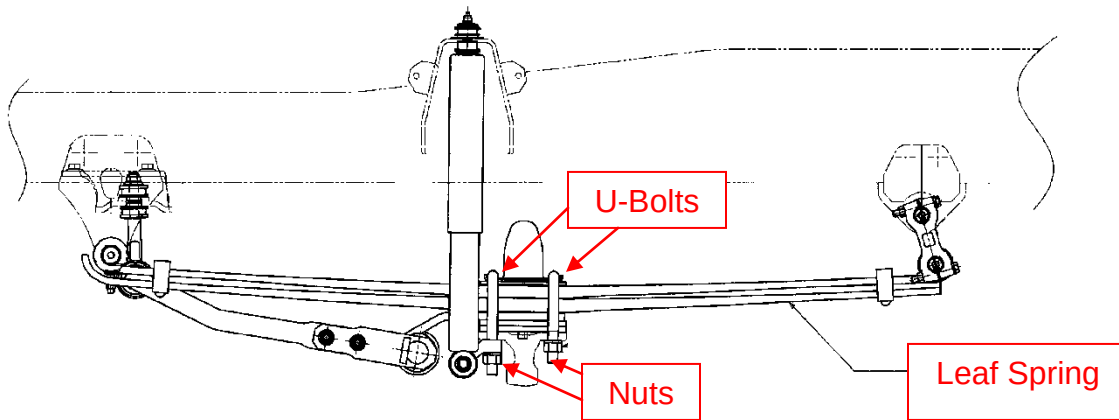
Front suspension modification for vehicles with VIN number beginning in JHH built before March 4, 2015.

NOTICE: This repair procedure requires the removal and discarding of both front leaf spring assemblies. These original front leaf spring assemblies have a weight rating of 3,100kg. This TSB directs you to install new front leaf spring assemblies which have an increased weight rating of 3,300kg. The increased weight rating of the front spring leaf assemblies does **NOT** change the overall GVWR (Gross Vehicle Weight Rating) of the vehicle.

WARNING: ALWAYS make certain that all four steps of the Vehicle Preparation Procedure, described above, have been performed before proceeding with this repair procedure.

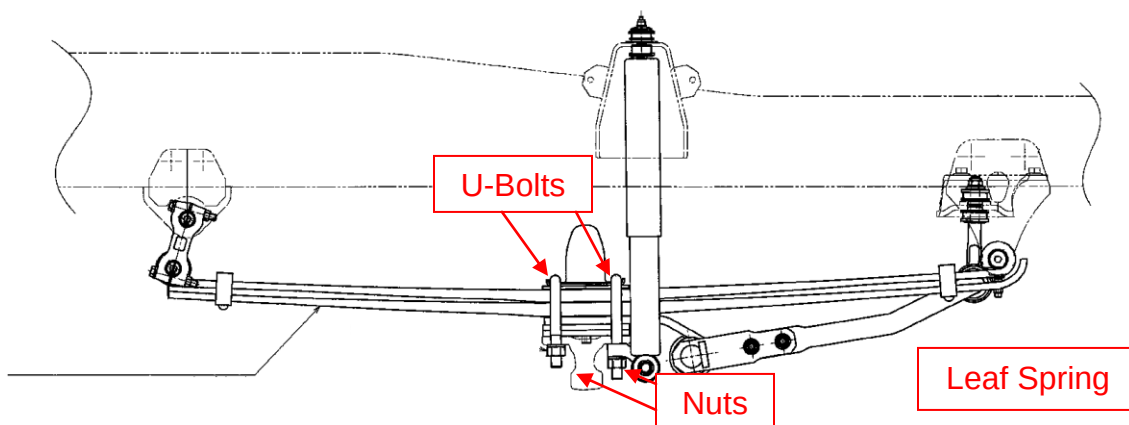
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1. Raise and support the front of the vehicle using jack stands. Remove and discard the driver's side front leaf spring as outlined in the Suspension section of the Chassis Workshop Manual. The 2 U-bolts and 4 U-bolt nuts which secure the leaf springs to the front axle must be discarded.



2. Install the replacement front driver's side leaf spring (Part No. 4811037Y60) into the vehicle using new U-bolts and new U-bolt nuts following the procedure in the Chassis Workshop Manual Suspension section.

3. Remove and discard the passenger side front leaf spring as outlined in the Suspension section of the Chassis Workshop Manual. The 2 U-bolts and 4 U-bolt nuts which secure the leaf springs to the front axle must be discarded.



4. Install the replacement front passenger side leaf spring (Part No. 4811037Y70) into the vehicle using new U-bolts and new U-bolt nuts following the procedure in the Chassis Workshop Manual Suspension section. Lower the front of the vehicle onto the ground.

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REPAIR PROCEDURE B

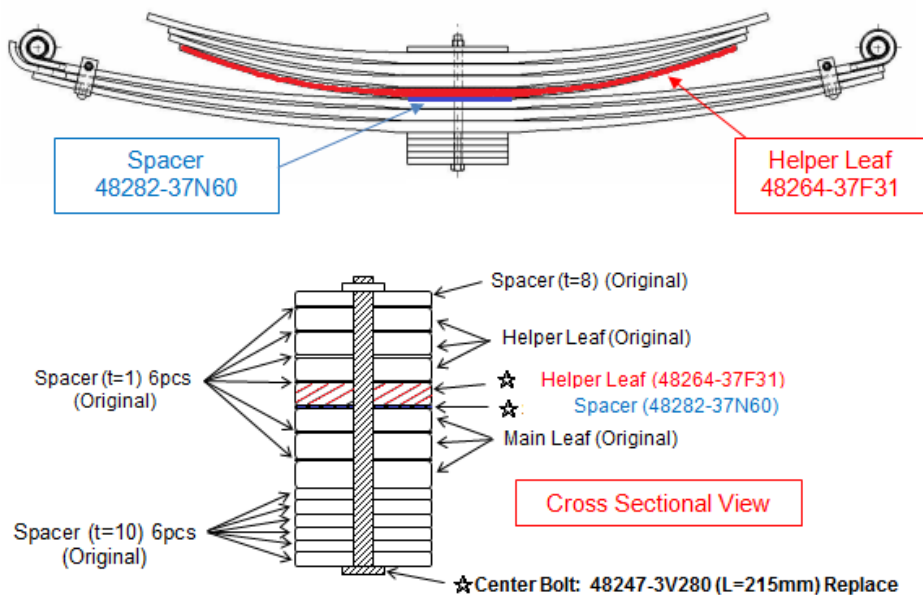
Rear suspension modification for all subject vehicles with updated front springs

NOTICE: For vehicles with VIN number beginning in JHH built before March 4, 2015, repair Procedure B should not be performed unless the customer has assessed vehicle handling after Repair Procedure A has been performed, and the customer still feels that body roll is excessive.

WARNING: ALWAYS make certain that all four steps of the Vehicle Preparation Procedure, described above, have been performed before proceeding with this repair procedure.

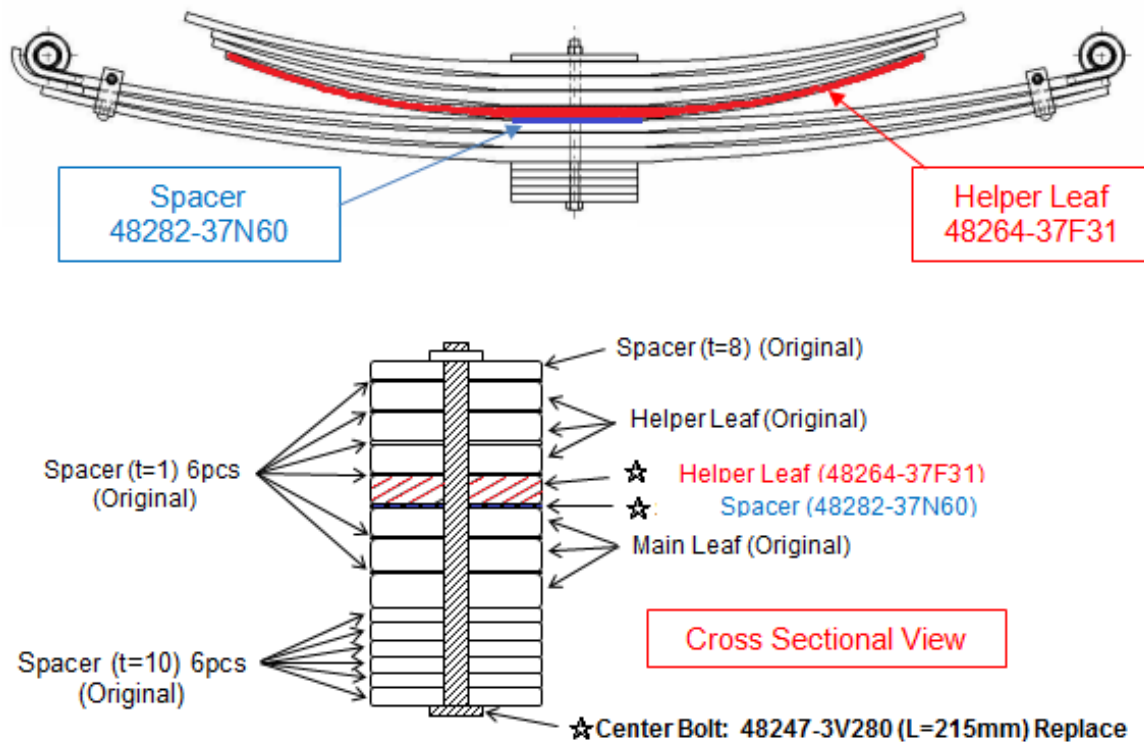
1. Raise and support the rear of the vehicle using jack stands. Remove the driver's side rear leaf spring from the vehicle as outlined by the Suspension section of the Chassis Workshop Manual. Discard the 2 U-bolts and 4 U-bolt nuts which secure the leaf spring to the axle. Remove and discard the center bolt from the leaf spring as outlined in the manual. Discard the center bolt and center bolt nut. Retain the rear leaf spring for reinstallation. The spring pack will be modified to add an additional helper leaf and spacer.

2. Assemble the spring pack referring to the diagram below for proper placement of the new helper leaf and spacer. Install the new center bolt (Part No. 482473V280) and center bolt nut (Part No. 482840W070) following the procedure in the Chassis Workshop Manual Suspension section.



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- Reinstall the driver's side rear leaf spring assembly with the new helper leaf and spacer into the vehicle following the procedure in the Chassis Workshop Manual using new U-bolts and new U-bolt nuts.
- Remove the passenger side rear leaf spring from the vehicle as outlined in the Suspension section of the Chassis Workshop Manual. Discard the 2 U-bolts and 4 U-bolt nuts which secure the leaf spring to the axle. Remove the center bolt from the leaf spring as outlined in the manual. Discard the center bolt and center bolt nut. Retain the rear leaf spring for reinstallation. The spring pack will be modified to add an additional helper leaf and spacer.
- Assemble the spring pack referring to the diagram below for proper placement of the new helper leaf and spacer. Install the new center bolt (Part No. 482473V280) and center bolt nut (Part No. 482840W070) following the procedure in the Chassis Workshop Manual Suspension section.

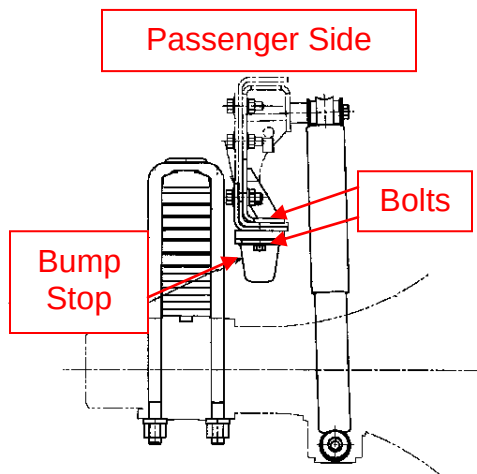


- Reinstall the passenger side rear leaf spring assembly with the new helper leaf and spacer into the vehicle following the procedure in the Chassis Workshop Manual using new U-bolts and new U-bolt nuts.

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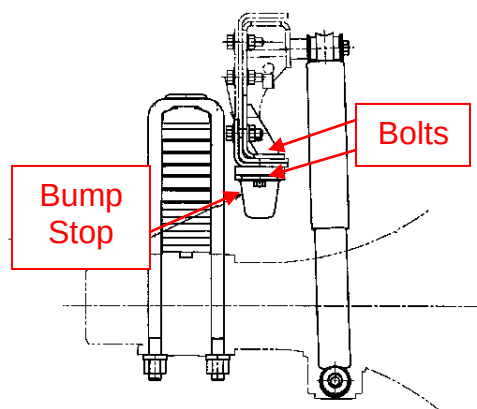
7. Remove and discard the 2 bolts retaining the left rear and right rear bump stops onto the frame. Discard the left rear and right rear bump stops.

NOTICE: The passenger side is shown in the illustration to the right. The driver's side, not shown, is similar.



8. Install the new left rear and right rear bump stops (Part No. 4834437420). Install the 2 bolts retaining the left and the right rear bump stops onto the frame (Part No. 9155281020). Tighten the 2 bolts to the specified torque.

NOTICE: The passenger side is shown in the illustration to the right. The driver's side, not shown, is similar.



Specified Torque: 29 lb-ft (39 Nm)

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FINAL INSPECTION PROCEDURE

1. To complete this Technical Service Bulletin, review the bulletin and confirm the following:
 - Any components which have been replaced were installed following workshop manual procedures.
 - The U-bolts and U bolt nuts were replaced on any leaf springs which were removed, and all replaced U-bolt and U bolt nuts have been discarded.
 - All nuts and bolts have been tightened to their specified torque.

NOTE: This procedure is provided as technical information and is not an authorization for a warranty repair.
If there are any questions, contact your Technical Service Manager.