

TOYOTA

Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue
Torrance, CA 90501
(310) 468-4000

To: All Toyota Dealer Principals, Service Managers, and Parts Managers

Subject: Limited Service Campaign (LSC) D0N
Certain 2011 – 2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement

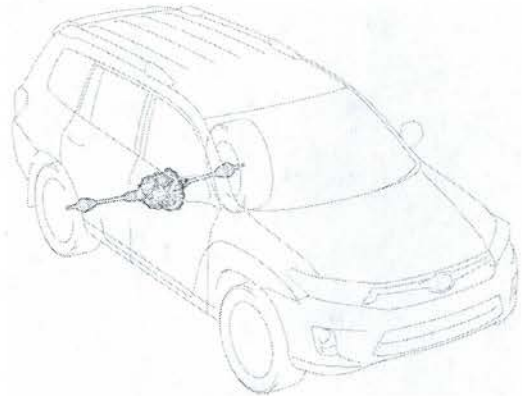
In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on certain 2011 – 2012 Model Year Highlander Hybrid Vehicles. This LSC will cover approximately 4,000 vehicles.

Background

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Limited Service Campaign (LSC) Remedy

Authorized Toyota dealerships are requested to inspect and replace the Rear Driveshaft Assemblies (both right and left) at **NO CHARGE** to the vehicle's owner. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to the vehicle's owner.



This LSC will be available until **October 31, 2016**, and will only be available at an authorized Toyota Dealer.

1. Owner Notification Mailing Date

The owner notification will commence in early October 2013, approximately 1 week after the dealer notification.

Toyota tries hard to obtain current customer name and address information from each state through industry resources when mailing owner letters. In the event your dealership receives a notice for a vehicle that was sold prior to the LSC announcement, it is the dealership's responsibility to forward the owner letter to the customer who purchased the vehicle.

Please note that only owners of the covered vehicles will be notified. If you are contacted by an owner who has not yet received a notification, please **verify eligibility by confirming through TIS prior to performing repairs**. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

2. New and Used Vehicles in Dealership Inventory (In-Stock Vehicles)

To ensure customer satisfaction Toyota requests that dealers conduct the LSC remedy on any new or used vehicles currently in dealer inventory that are covered by this LSC prior to customer delivery.

3. Number and Identification of Covered Vehicles

There are approximately 4,000 (2012 – 2013 MY) Highlander Hybrid Vehicles covered by this LSC.

WMI	MY	VDS	Start	Finish
JTE	2011	BC3EH	2003742	2003975
		DC3EH	2003733	2003980
	2012	BC3EH	2003982	2008657
		DC3EH	2003983	2008658

Please note that only owners of the covered vehicles will be notified. If a dealer is contacted by an owner who has not yet received the notification, please **verify coverage by confirming through TIS**. Dealers should perform the procedure as outlined in the Technical Instructions located on TIS. Not all vehicles in the VIN range are covered by this LSC.

A UIO matrix by state is provided to inform your dealership of the number of covered vehicles in your state.

STATE	UIO	STATE	UIO	STATE	UIO	STATE	UIO	STATE	UIO
AK	18	HI	25	ME	15	NJ	123	SD	6
AL	25	IA	32	MI	49	NM	37	TN	55
AR	13	ID	23	MN	64	NV	28	TX	159
AZ	47	IL	193	MO	53	NY	233	UT	64
CA	809	IN	56	MS	11	OH	92	VA	184
CO	127	KS	16	MT	15	OK	33	VT	13
CT	84	KY	46	NC	84	OR	118	WA	232
DE	16	LA	12	ND	8	PA	123	WI	69
FL	144	MA	170	NE	23	RI	16	WV	10
GA	71	MD	85	NH	29	SC	31	WY	11

4. Dealer Summary Reports

Summary Reports, containing the following will be enclosed in the dealer packet:

- The number of covered vehicles in your dealership's primary marketing area. (Please verify eligibility by confirming through TIS prior to performing repairs.)
- A suggested initial parts ordering quantity.

5. Parts Ordering

Dealer Ordering Solutions:

Orders can be placed through the dealership's facing PDC. The kits have been placed on Dealer Ordering Solutions and will be systematically released daily based on dealer ordering criteria

All covered vehicles will require the replacement of the Rear Driveshaft Assemblies.

Part Number	Part Description	Quantity
04003-34148	Shaft Kit Rr Drive	2
The kit above includes the following parts.		
42340-48081	Shaft Assembly, Rear Drive	1
90177-22001	Nut	1

Each dealership will receive specific dealer ordering criteria in an email from TMS Special Activities group based on Repair Order Volume * PDC Affected UIO. Dealers ordering criteria will also be available through the Customer Support Leader at their facing PDC. Therefore, it is vital that each dealership work with both Parts and Service to immediately file claims and coordinate appropriate kit orders. A sample of the Parts Allocation Report has been attached below for your reference.

(Parts Ordering Continued . . .)

Manual Allocation Control (MAC):

Approximately **1.5%** of vehicles will fail the inspection and need the following parts. **Do not** order these components until your dealership has confirmed the Rear Driveshaft has disengaged from its inboard joint assembly.
(See the Warranty Processor section for rental car information.)

Part Number	Part Description	Quantity
16492-21050*	Packing (For Radiator Drain Cock)	1
G1050-48010	Motor Assembly, Rr Traction W/ Transaxle	1
04003-36148	Bolt & Gasket Kit:	
	17451-28040	Gasket Exhaust Pipe 2
	90109-12082	Bolt 2
	90119-14099	Bolt, W/ Washer 2
	91552-81265	Bolt, Flange 2

* Part 16492-21050 will not be on MAC but is need if the Rear Differential Motor is replaced.



To ensure parts availability, the parts have been place on Manual Allocation Control (MAC). If you require a part that has been placed on MAC, please send an email to Quality_Compliance@Toyota.com with the following information:

- **Subject Line: D0N MAC Release Request (Dealer Code)**
- **Dealer Code**
- **VIN Number**
- **Part Number and Qty. Ordered**
- **Order Reference Number**
- **Order Date**
- **Contact Person**

Once a representative confirms the information provided, the part will be released. If there is a concern regarding the information provided, a representative will contact your dealership. Please allow 2-3 days for part release after providing the requested information.

Important Notes:

- *Once you have placed your order DO NOT change or upgrade your order status.*
- *Failure to provide the above information within 48 hours will result in an order cancellation.*

TOYOTA

Parts Allocation Report

99999

SAMPLE TOYOTA of NOWHERE

The below matrix provides information for parts managed by NAPO Dealer Ordering Solution (DOS) and illustrates updates to your current daily allocation quantities. Parts shipments, arrivals and inventory quantities at your local PDC will change daily as parts are received and shipped from NAPO Suppliers. Therefore, your daily allocation quantity is subject to change based on the parts in-stock availability as well as in-transit inventory to your facing PDC. This report is provided as needed when daily allocation changes for DOS parts.

Parts with recent changes will be illustrated from top to bottom with the most recent effective date.

If you have any questions or concerns, please contact your facing PDC Customer Support Leader, John Q Sample at (999) 999-9999.

Part Number	Total Allocation Quantity	Allocation Quantity	Allocation Frequency	Total Allocation Shipped	Total Allocation Remaining	Effective Date

IMPORTANT PARTS ORDERING UPDATE

All Safety Recall, Service Campaign (SSC/LSC) and Customer Support Program (CSP) parts are eligible for the Monthly Parts Return Program. Please refer to PANT Bulletin 2011-087 for campaign parts that are currently returnable under the Monthly Parts Return Program and additional details.

6. Technician Training Requirements

The repair quality of covered vehicles is extremely important to Toyota. All dealership associates involved in the recall process are required to successfully complete E-Learning course SC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair must also meet at least one of the certification levels listed below:

- Hybrid Expert
- Drivetrain Expert and completion of course 071 Toyota Hybrid System
- Master Technician
- Master Diagnostic Technician

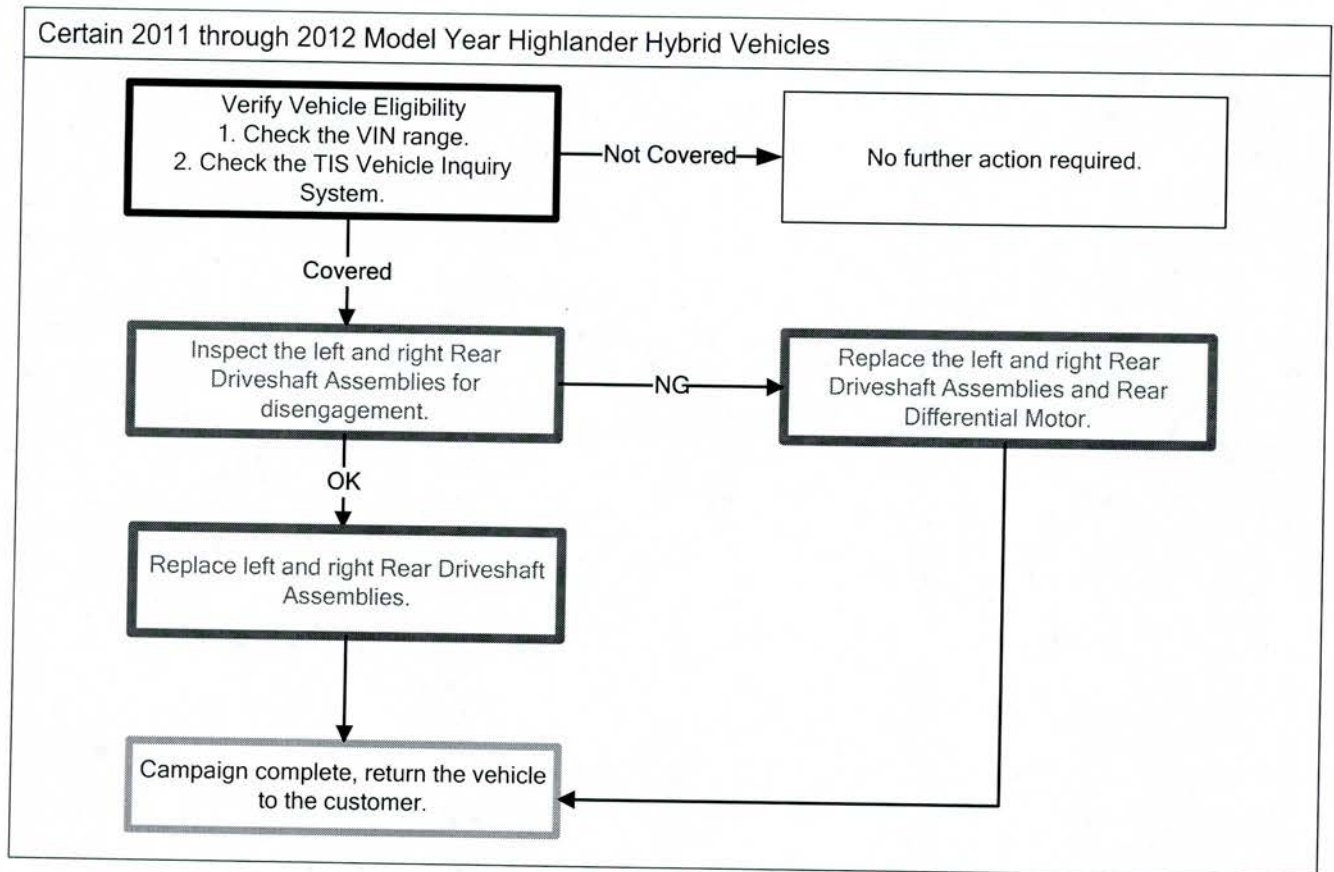
It is the dealership's responsibility to select technicians with the above certification level or greater to perform this LSC repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

7. Remedy Procedures

Please refer to TIS for Technical Instructions.

Conduct all applicable, non-completed Safety Recall and Service Campaigns on the vehicle during the time of appointment.

8. Warranty Reimbursement Procedure



(Warranty Reimbursement Procedure Continued...)

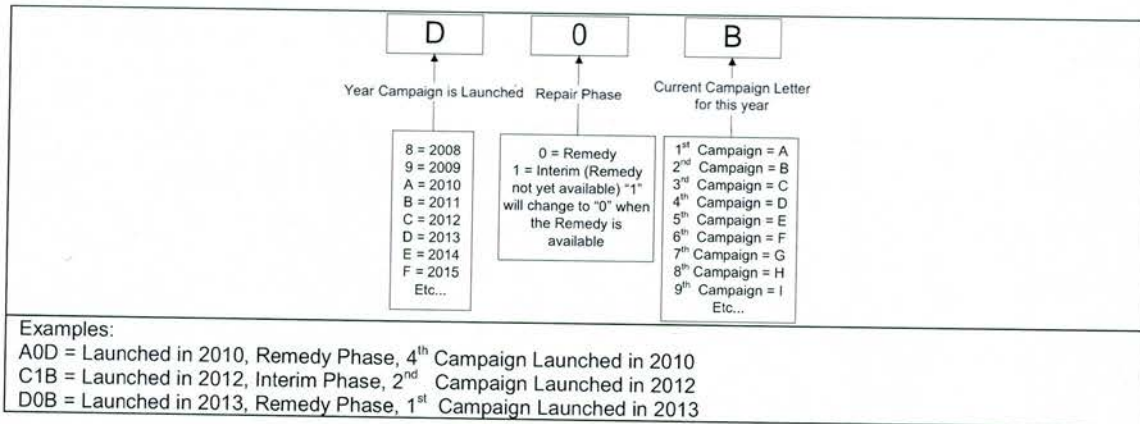
LSC	Op. Code	Description	Flat Rate
D0N	3619HA	Inspect & Replace Rear Driveshaft Assemblies	2.0 hr/veh
	3619HB <i>(Use only in limited cases where the condition has occurred.)</i>	Inspect and Replace Rear Driveshaft Assemblies and Rear Differential Motor	4.2 hr/veh

- The above operation codes include 0.1 hour for administrative cost per unit for the dealership.

Allowable Sublets for LSC D0N:

- Rental Vehicle:** Use sublet type "RT" for OpCode 3619HB. During the replacement of the driveshaft assemblies and the Rear Differential Motor, customer's rental car through the Toyota Rent-A-Car (TRAC) Program is available for a maximum of 2 days. Follow the Toyota Transportation Assistance Program (TTAP) guidelines.
- Fluids:** Use sublet type "OF" for OpCode 3619HB. A maximum of \$39/vehicle cost for hybrid transaxle fluid (Automatic Transmission Fluid – World Standard) and 50% pre-mixed Super Long Life Coolant will be accepted.

9. Campaign Designation Decoder



10. Repair Quality Confirmation

The repair quality of covered vehicles is extremely important to Toyota. To help ensure that all vehicles have the repair performed correctly, please designate at least one associate (someone other than the individual who performed the repair) to verify the repair quality of every vehicle prior to customer delivery.

11. Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Cindy Knight (310) 468-2170 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

12. Customer Contacts

Customers who receive the owner letter may contact your dealership with questions regarding the letter and/or LSC remedy. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371).

Please review this entire package with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Limited Service Campaign.

Thank you for your cooperation.
 TOYOTA MOTOR SALES, U.S.A., INC.

**Certain 2011 - 2012 Model Year Toyota Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement
LIMITED SERVICE CAMPAIGN**

[VIN]

Dear Toyota Highlander Hybrid Owner:

At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continuing efforts to provide superior customer satisfaction, Toyota is announcing a Limited Service Campaign, which includes your vehicle.

What is the condition?

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

(Please see the FAQ included with this owner letter for additional details)

You received this notice because our records, which are based primarily on state registration and title data, indicate that you are the current owner.

What is included in the Limited Service Campaign?

Any authorized Toyota dealership will inspect and replace the Rear Driveshaft Assemblies (both left and right) at **NO CHARGE** to you. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to you.

This Limited Service Campaign will be available until October 31, 2016, and will only be available at an authorized Toyota Dealer.

This offer is limited to your specific vehicle whose Vehicle Identification Number (VIN) is printed at the beginning of this letter and is subject to the same conditions set forth in the New Vehicle Limited Warranty section of your Owner's Manual Supplement or Owner's Warranty Information booklet. For additional information, please refer to the booklet.

How do you take advantage of this Limited Service Campaign?

Please contact an authorized Toyota dealer and make an appointment to have this remedy performed before **October 31, 2016**.

Inspection and replacement of the Rear Driveshaft Assemblies will take approximately 2 hours. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the repair will take approximately 12 hours because the Rear Differential Motor will need to be replaced. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Note: If the Rear Differential Motor requires replacement, a rental vehicle will be provided while your vehicle is being repaired.

If your vehicle is covered by this Limited Service Campaign, you do not need this owner letter to have the campaign completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present this notice at the time of your service appointment.

What if you have other questions?

- Your local Toyota dealer will be more than happy to answer any of your questions and set up an appointment to perform the repair.
- You can find additional information and locate a Toyota dealer in your area by going online and visiting www.toyota.com/recall.
- If you require further assistance, you may contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, Saturday 7:00 am through 4:00 pm Pacific Time.

What if you have previously paid for repairs to your vehicle for this specific condition?

If you have previously paid for a repair to your vehicle for this specific condition prior to receiving this letter, please mail a copy of your repair order, proof-of-payment and proof-of-ownership to the following address for reimbursement consideration:

Toyota Motor Sales, U.S.A., Inc
Toyota Customer Experience, WC 10
19001 South Western Avenue
Torrance, CA 90509

Include your name, address, and telephone number(s) in your request. Please allow us 6-9 weeks to process your request.

Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

If you would like to update your vehicle ownership or contact information, please go to www.toyota.com/ownersupdate. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information. If you are a vehicle lessor, please assist us by forwarding this notice to the lessee.

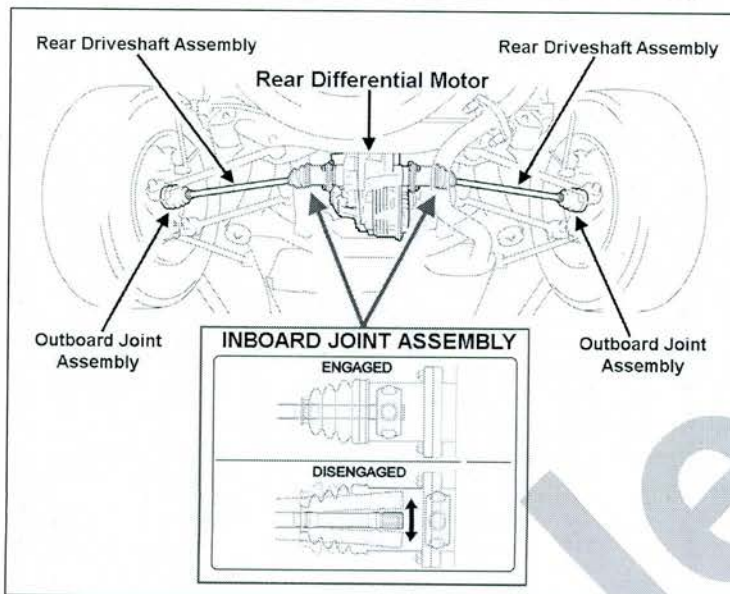
We have sent this notice in the interest of your continued satisfaction with our products, and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,
TOYOTA MOTOR SALES, USA, INC.

Sample

**Limited Service Campaign D0N
Frequently Asked Questions**



Q1: What is the condition?

A1: Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Q2: What is a Rear Driveshaft Assembly?

A2: The Rear Driveshaft Assemblies connect the Rear Differential Motor to the rear wheels. The driveshafts contain inboard and outboard joints that allow the shaft to move with the vehicle suspension. Due to an assembly error, this movement may disengage the driveshaft from the inboard joint assembly.

Q3: What is a Rear Differential Motor Assembly?

A3: The Rear Differential Motor is part of the hybrid system. The Rear Differential Motor works with the gasoline engine and the front electric motors during vehicle operation.

Q4: What will the inspection include?

A4: Before the Rear Driveshaft Assemblies are removed from the vehicle, a technician will check for excessive driveshaft movement inside the inboard joint assembly. If the driveshaft has disengaged from the inner joint the Rear Differential Motor will also be replaced.

Q5: How does Toyota obtain my mailing information?

A5: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q6: Are there any symptoms that this condition exists?

A6: Yes, if this condition exists, you will notice an abnormal noise (vibration / rattle) coming from the rear of the vehicle while it is being driven.

Q7: When will this Limited Service Campaign expire?

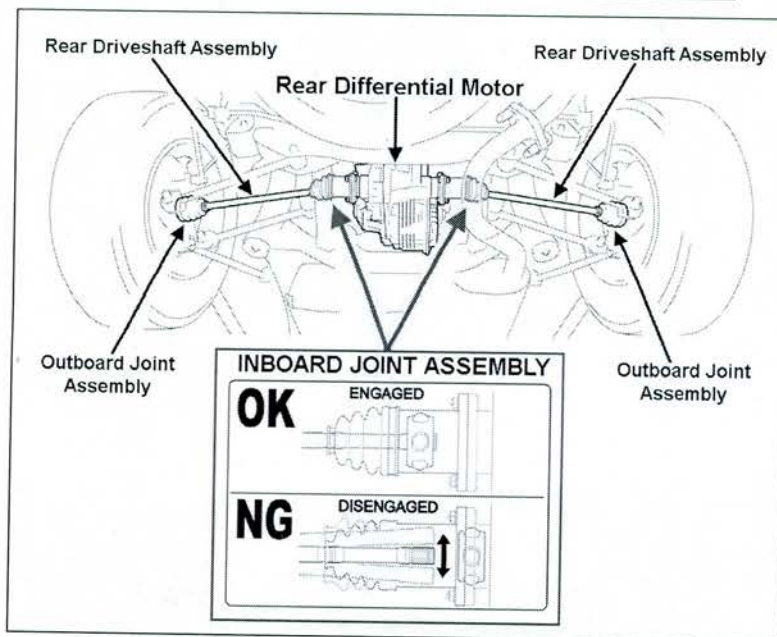
A7: This Limited Service Campaign will be available until **October 31, 2016**.



Limited Service Campaign (LSC) – D0N
Certain 2011–2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement – FAQ

Frequently Asked Questions

Published Early October 2013



Q1: What is the condition?

A1: Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Q1a: What is a Rear Driveshaft Assembly?

A1a: The Rear Driveshaft Assemblies connect the Rear Differential Motor to the rear wheels. The driveshafts contain inboard and outboard joints that allow the shaft to move with the vehicle suspension. Due to an assembly error, this movement can disengage the driveshaft from the inboard joint assembly.

Q1b: What is a Rear Differential Motor Assembly?

A1b: The Rear Differential Motor is part of the hybrid system. The Rear Differential Motor works together with the gasoline engine and the front electric motors in the following ways:

- *Starting from Stop* – The Rear Differential Motor works together with the front electric motors to propel the vehicle forward.
- *Light Acceleration, Light Load, & Cruising Conditions* – The Rear Differential Motor becomes inert to improve fuel economy.
- *Heavy Acceleration* – The Rear Differential Motor works in tandem with the front electric motors and the gasoline engine to provide the additional power.
- *Reverse* – The Rear Differential Motor works together with the front electric motors to propel the vehicle backward.
- *Decelerating & Braking* – The Rear Differential Motor and a front electric motor are used as a generator to recharge the hybrid battery & reduce the load on the brakes.

Q2: What is the cause of this condition?

A2: During the manufacturing process, there was an error in the equipment used to assemble the Rear Driveshaft Assemblies.

Q3: What is Toyota going to do?

A3: Owners of vehicles covered by this Limited Service Campaign will receive an owner notification letter by first class mail starting in early October 2013.

Any authorized Toyota dealership will inspect and replace the Rear Driveshaft Assemblies (both left and right) at **NO CHARGE** to you. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to you.

Q3a: What will the inspecting entail?

A3a: Before the Rear Driveshaft Assemblies are removed from the vehicle, a technician will check for excessive driveshaft movement inside the inboard joint assembly.

Q3b: How does Toyota obtain my mailing information?

A3b: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q3c: Do I need my owner letter to have the remedy performed?

A3c: No, you do not need an owner letter to have this LSC completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present the owner notification at the time of your service appointment.

Q4: Are there any symptoms that this condition exists?

A4: Yes, if this condition exists, you will notice an abnormal noise (vibration / rattle) coming from the rear of the vehicle while it is being driven.

Q5: Which and how many vehicles are covered?

A5: There are approximately 4,000 vehicles, certain 2011-2012 Model Year Highlander Hybrid Vehicles, covered in the USA.

Model	Model Year	Production Range	Appx. UIO
Highlander Hybrid	2011 – 2012	Late June, 2011 through mid-March, 2012	4,000

Q6: Are there any other vehicles covered by this Limited Satisfaction Campaign?

A6: No. This specific condition only affects certain 2011-2012 Model Year Highlander Hybrid Vehicles.

Q7: How long will the repair take?

A7: Inspection and replacement of the Rear Driveshaft Assemblies will take approximately 2 hours. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the repair will take approximately 12 hours because the Rear Differential Motor will need to be replaced. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Note: If the Rear Differential Motor requires replacement, a rental vehicle will be provided while your vehicle is being repaired.

Q8: When will this Limited Service Campaign expire?

A8: This Limited Service Campaign will be available until **October 31, 2016**.

Q9: What if you have previously paid for repairs to your vehicle for this specific condition?

A9: Owners who have previously paid for repairs to address this specific condition should refer to the owner letter for instructions regarding reimbursement consideration.

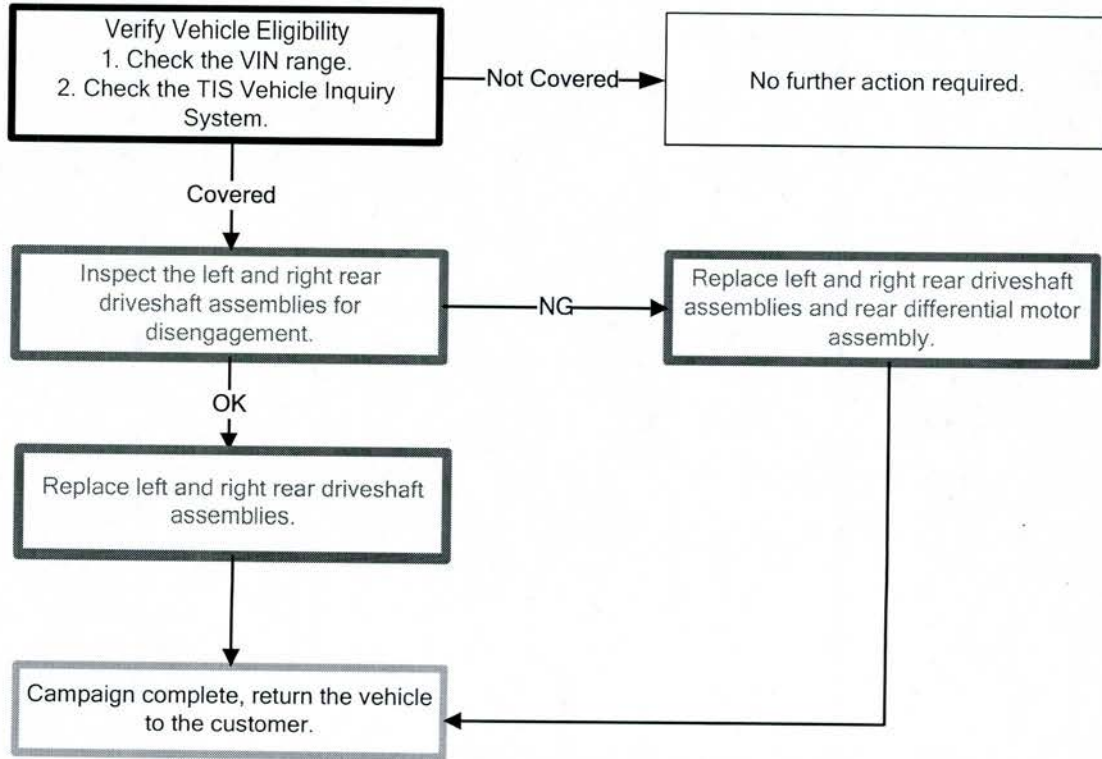
Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

Q10: What if an owner has additional questions?

A10: Owners with questions or concerns are asked to please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

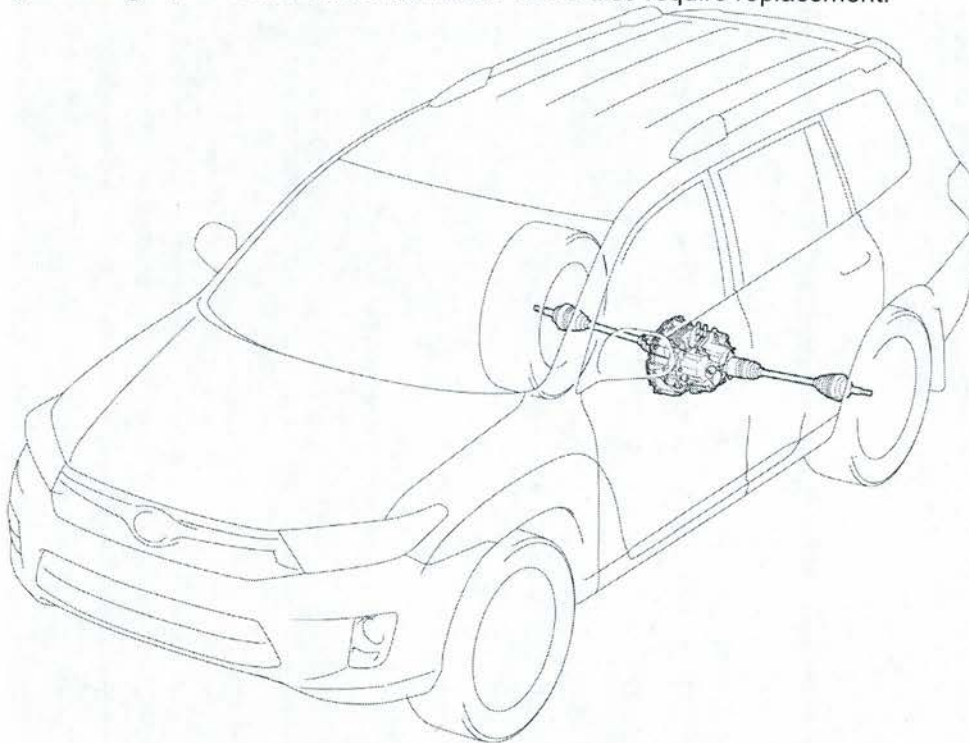
TECHNICAL INSTRUCTIONS
FOR
LIMITED SERVICE CAMPAIGN D0N
REAR DRIVESHAFT ASSEMBLY REPLACEMENT
CERTAIN 2011-2012 MODEL YEAR HIGHLANDER HV

I. OPERATION FLOW CHART



II. BACKGROUND

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.



III. IDENTIFICATION OF AFFECTED VEHICLES

A. COVERED VIN RANGE

WMI	Year	VIN Range	
		VDS	Range
JTE	2011	BC3EH	2003742 - 2003975
		DC3EH	2003733 - 2003980
	2012	BC3EH	2003982 - 2008657
		DC3EH	2003983 - 2008658

NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Limited Service Campaign, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

IV. PREPARATION

A. PARTS

<i>All covered vehicles will require the replacement of the rear driveshaft assemblies.</i>		
Part Number	Part Description	Quantity
04003-34148	Shaft Kit Rr Drive	2
The kit above includes the following parts.		
42340-48081	Shaft Assembly, Rear Drive	1
90177-22001	Nut	1

Only a very small number of vehicles will require the replacement of this part, follow the inspection procedure in these instructions to determine if replacement is required. Parts will be on Manual Allocation Control (MAC), refer to the dealer letter for details.

Part Number	Part Description	Quantity	
16492-21050	Packing (For Radiator Drain Cock)	1	
G1050-48010	Motor Assembly, Rr Traction W/ Transaxle	1	
04003-36148	Bolt & Gasket Kit:		
	17451-28040	Gasket Exhaust Pipe	2
	90109-12082	Bolt	2
	90119-14099	Bolt, W/ Washer	2
	91552-81265	Bolt, Flange	2

B. MATERIALS

ONLY use Toyota Super Long Life Coolant and Hybrid transaxle fluid if replacement of the rear differential motor assembly is required. Refer to the inspection in these instructions for details.

- Hybrid Transaxle Fluid (ATF WS)=1.8 liters (1.9 US qts, 1.6 Imp. qts)*
- Toyota Genuine 50/50 Pre-Diluted SLLC = Approximately 1quart*
- Shop Cloth
- Brake Cleaner

NOTE:

- The coolant drained from the radiator must be reused.
- Because some coolant will be lost when disconnecting the hoses by the exhaust pipe, a small amount of coolant will be needed.

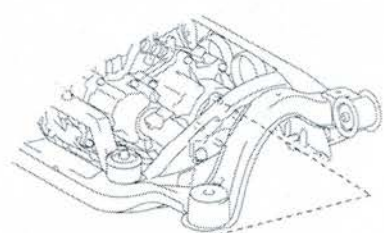
C. TOOLS & EQUIPMENT

- Standard Hand Tools
- Techstream
- Wooden Block
- Protective Eye Wear
- 4 Wheel Alignment machine

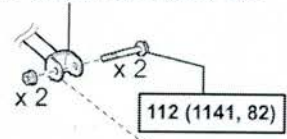
SST – These are essential special service tools that the dealership should have.

Part Number	Part Name	Quantity
00002-03100-S	Electrical Insulating Gloves (Small)	1
00002-03200-M	Electrical Insulating Gloves (Medium)	
00002-03300-L	Electrical Insulating Gloves (Large)	
09930-00010	DriveShaft Nut Chisel	1
09961-00950	Torque Wrench Adaptor	1

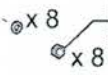
V. COMPONENTS



REAR No.2 SUSPENSION ARM ASSEMBLY LH & RH

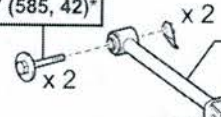


56 (571, 41)



● REAR DRIVE SHAFT ASSEMBLY LH & RH

80 (815, 59)
57 (585, 42)*



REAR No.1 SUSPENSION ARM ASSEMBLY LH & RH

112 (1141, 82)



294 (2996, 216)

● REAR AXLE SHAFT NUT LH & RH

BE CAREFUL!
DO NOT apply any lubricants to the threaded parts.

80 (815, 59)

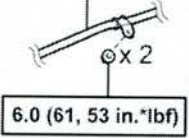


80 (815, 59)



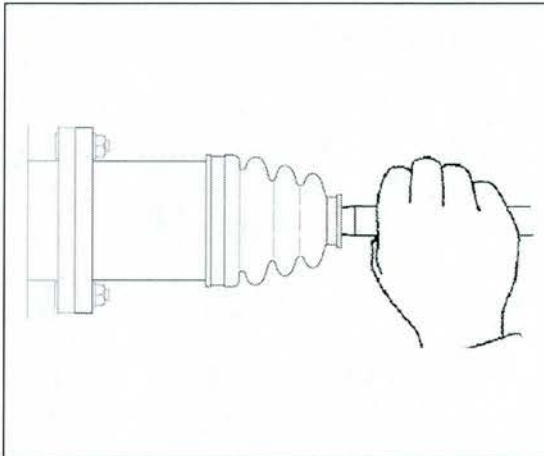
REAR STRUT ROD ASSEMBLY LH & RH

No.3 PARKING BRAKE CABLE ASSEMBLY LH & RH



- Replacement Part
- ← Do not apply any lubricants to the threaded parts
- * For use with SST
- N*m (kgf*cm, ft.*lbf)** : Specified torque

VI. INSPECT THE REAR DRIVESHAFT ASSEMBLY



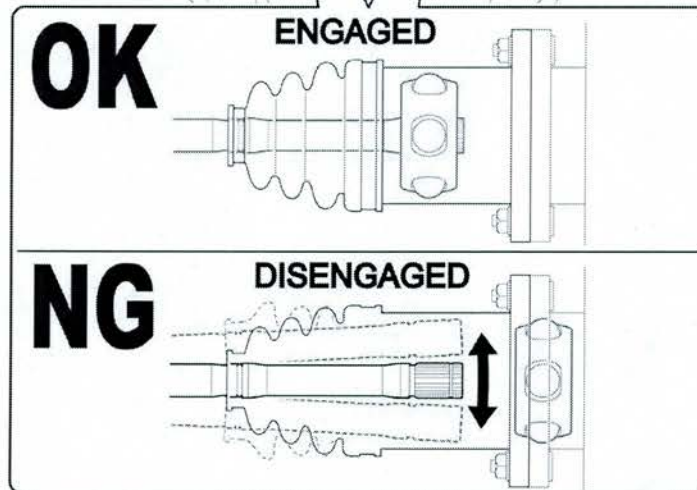
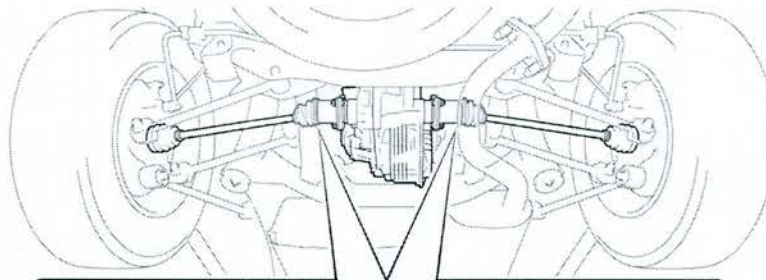
1. INSPECT THE REAR DRIVESHAFT ASSEMBLY FOR DISENGAGEMENT

- a) Approximately one inch from the inner rubber boot, firmly grab the metal portion of the driveshaft.
- b) Move the driveshaft assembly from side to side and up-and-down. If the driveshaft moves excessively, the inner bearing has disengaged from the shaft.

Note: The driveshaft has some slight backlash by design.

- c) Check both driveshafts in the same manner.

NOTE: Disengagement of the driveshaft may cause damage to the inside of the rear differential motor. If either driveshaft is found to be disengaged, replacement of the rear differential motor is required.

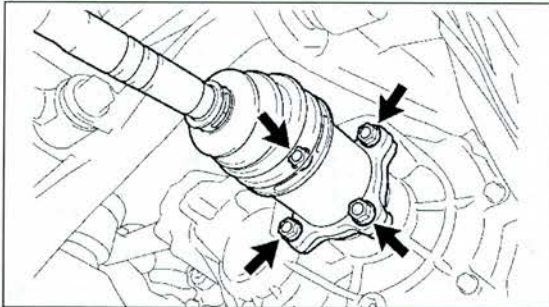


Results	ACTION REQUIRED
BOTH Driveshafts Engaged OK	REPLACE THE REAR DRIVESHAFT ASSEMBLY Both drive shafts must be replaced. Proceed to section VII
One or both shafts disengaged NG	REPLACE THE REAR DIFFERENTIAL MOTOR ASSEMBLY AND REAR DRIVESHAFT ASSEMBLY. The rear differential motor assembly AND both driveshafts must be replaced. Proceed to Section VIII

VII. REPLACE THE REAR DRIVESHAFT ASSEMBLY

STOP

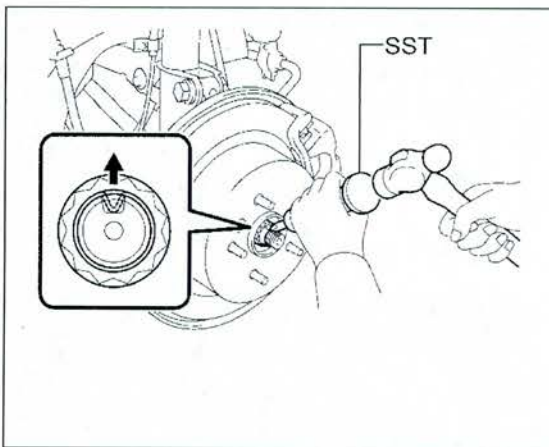
The work procedures are performed on both the right and left sides. These instructions use the left side in explaining the procedures. Always be sure to perform the same procedures on both the left and right sides.



1. LOOSEN THE 4 DRIVE SHAFT NUTS

- a) Loosen the 4 nuts. DO NOT remove them at this time.

NOTE: If the nuts cannot be loosened due to the driveshaft spinning, apply the parking brake to hold the rear tire.

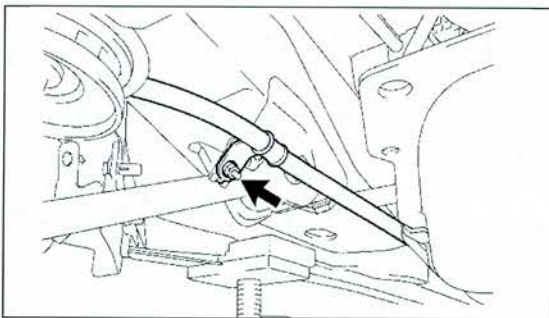


2. REMOVE THE AXLE NUT

- a) Remove the rear wheels.
b) Using the SST and a hammer, release the staked part of the rear axle shaft nut.

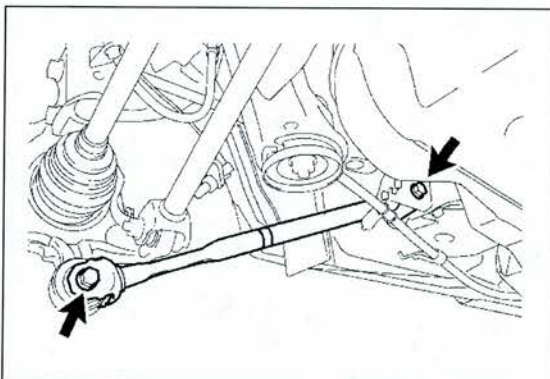
SST 09930-00010

- c) While applying the brakes, remove the rear axle shaft nut.
d) Put a mark on the removed nut to identify it cannot be reused.



3. REMOVE PARKING BRAKE CABLE AND SUSPENSION COMPONENTS

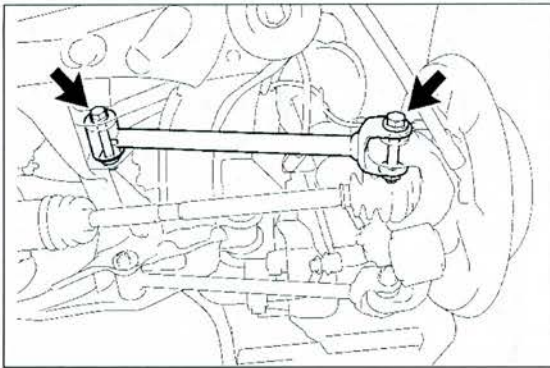
- a) Remove the nut and separate the No.3 parking brake cable assembly.



- b) Remove the 2 bolts, the 2 nuts, and the rear strut rod assembly.

NOTE:

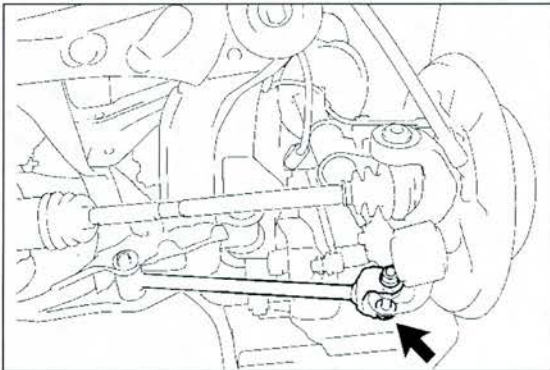
- Since lock nuts are used, loosen the bolts.
- If difficult to remove the bolts, use a wooden block and a jack to slightly lift up the axle carrier and remove the bolts.



- c) Remove the 2 bolts, the 2 nuts, and the rear No.1 suspension arm assembly.

NOTE:

- Since lock nuts are used, loosen the bolts.
- Before removing the driveshaft, be sure to remove the rear No.1 suspension arm assembly, otherwise it may be damaged by interference with the boot of the axle carrier.

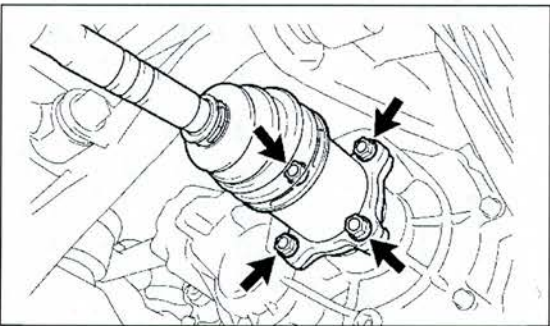


- d) Remove the bolt and the nut, and separate the rear No.2 suspension arm assembly.

NOTE: Since lock nuts are used, loosen the bolts.

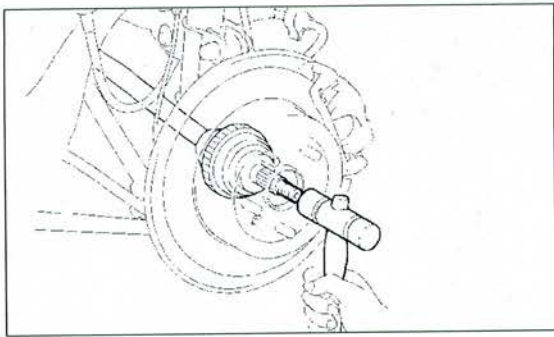


STOP DO NOT allow the rear No.2 suspension arm assembly to strike the boot of the wheel hub assembly as it will damage it.

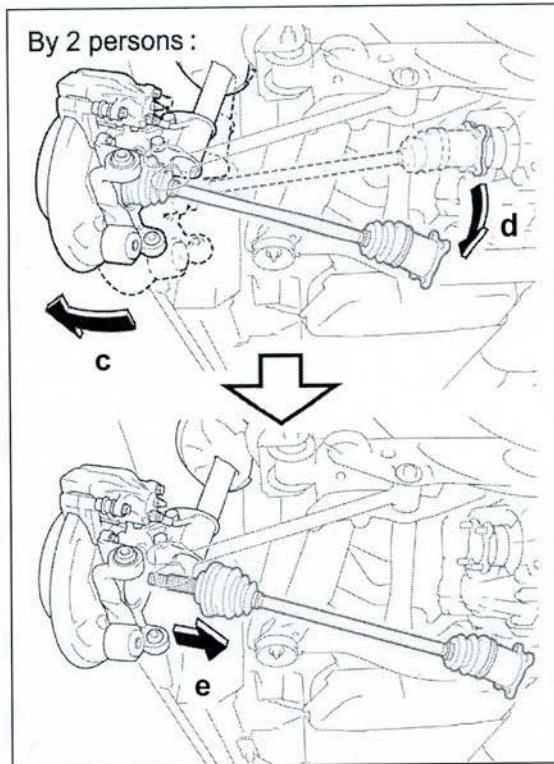


4. REMOVE THE REAR DRIVESHAFT


- a) Remove the 4 nuts and washers.



- b) Using the plastic hammer, disengage the driveshaft.



- c) Move the wheel hub assembly towards the outside of the vehicle and hold it in place.



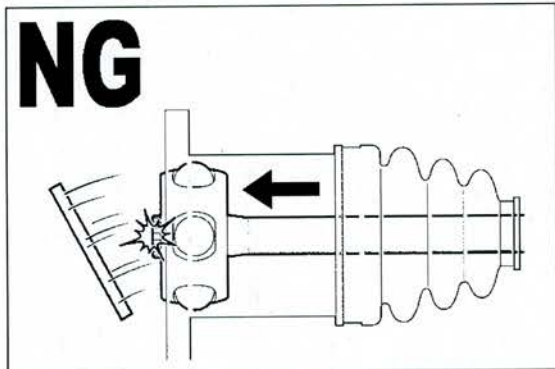
- Move the wheel hub assembly only far enough to allow the inboard side of the axle shaft to be cleanly removed from the motor side flange.
- **DO NOT** excessively move the wheel hub assembly, as it may stress the upper support of the suspension strut.

- d) Separate the inboard side of the driveshaft, and remove the driveshaft from the wheel hub assembly.


NOTE: Two people may be needed.

- e) Put a mark on the removed driveshaft to identify it cannot be reused.

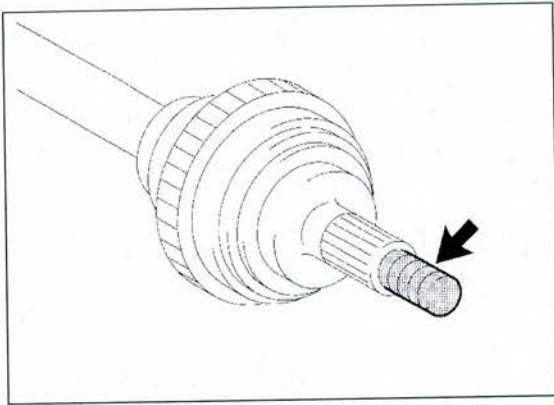
NOTE: The parts return instructions must be followed as 100% of axle shaft will be recovered for this activity.



5. **INSTALL THE NEW REAR DRIVESHAFT**



DO NOT apply excessive force to the rear driveshaft to prevent the end cover from being removed.

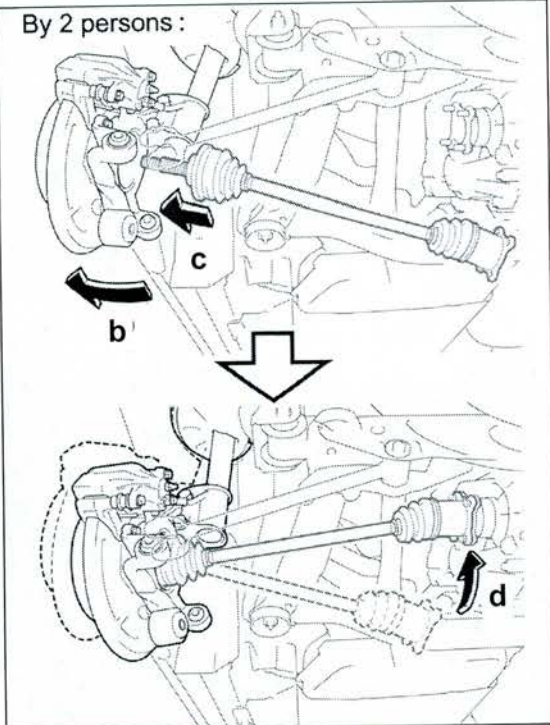


- a) Using brake cleaner, remove the corrosion inhibitor on the tip of the **NEW** driveshaft.



- The corrosion inhibitor is colorless and transparent.
- If the rear driveshaft is installed without removal of the corrosion inhibitor, it may cause an over-torqued rear axle shaft nut and damage the driveshaft.
- **DO NOT** apply oils or fats after cleaning of the tip.

By 2 persons :



- b) Move the axle carrier towards the outside of the vehicle and hold it in place.

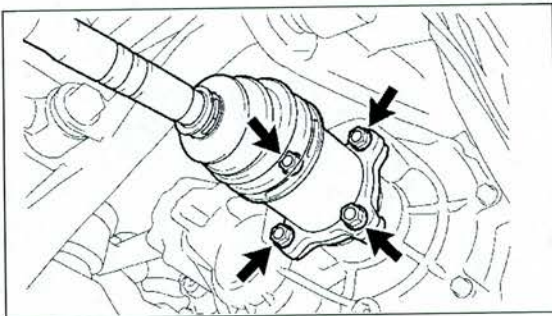
- c) Insert the **NEW** driveshaft into the wheel hub assembly.



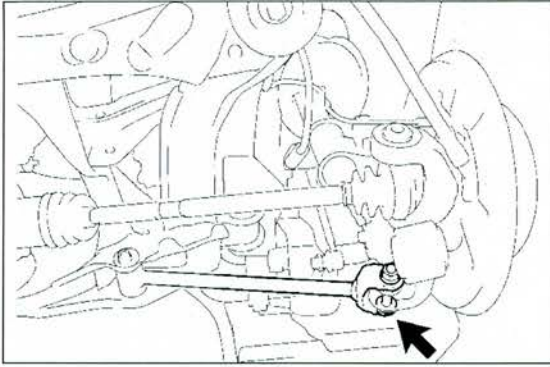
Move the rear wheel hub assembly until the inner driveshaft flange does not interfere with the motor side mounting flange.

- d) Install the inboard side of the driveshaft.

NOTE: Two people may be needed.



- e) Loosely install the 4 nuts and the 4 washers.

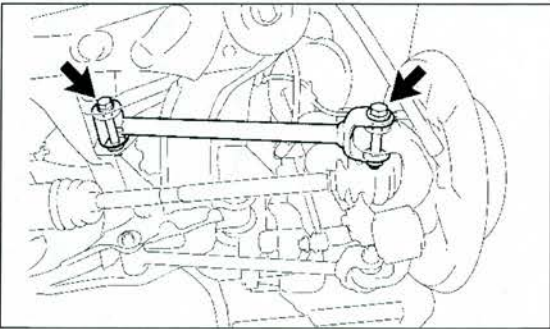


6. INSTALL THE SUSPENSION COMPONENTS AND THE PARKING BRAKE CABLE

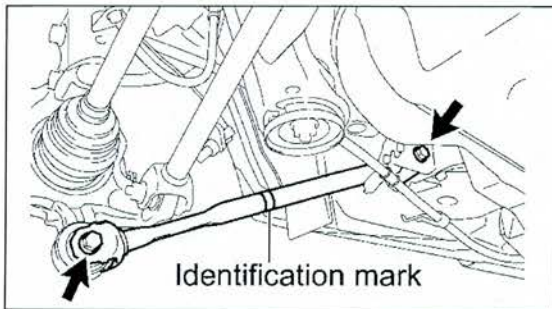
- a) Temporarily install the rear No.2 suspension arm assembly with the bolt and nut.



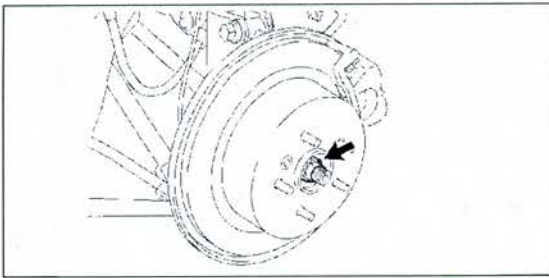
STOP DO NOT allow the rear No.2 suspension arm assembly to strike the boot of the wheel hub assembly as it will damage it.



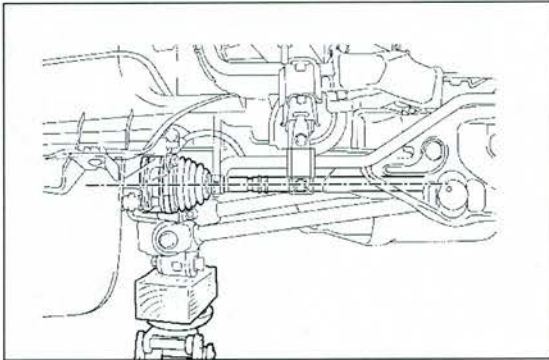
- b) Loosely install the rear No.1 suspension arm assembly with the 2 bolts and the 2 nuts.



- c) Check that the identification mark of the rear strut rod assembly is positioned on the inner side of the vehicle.
- d) Loosely install the rear strut rod assembly with the 2 bolts and the 2 nuts.



7. LOOSELY INSTALL A NEW REAR AXLE SHAFT NUT.



8. JACK UP THE REAR AXLE SUB-ASSEMBLY

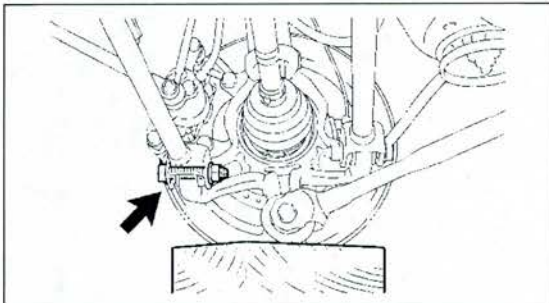
- a) Jack up the rear axle sub-assembly, placing a wooden block underneath to avoid damage. Apply load to the suspension so that the rear driveshaft assembly is positioned horizontally.



- DO NOT jack up the rear axle sub-assembly too high as the vehicle may fall off of the lift.
- DO NOT bend the brake dust cover.

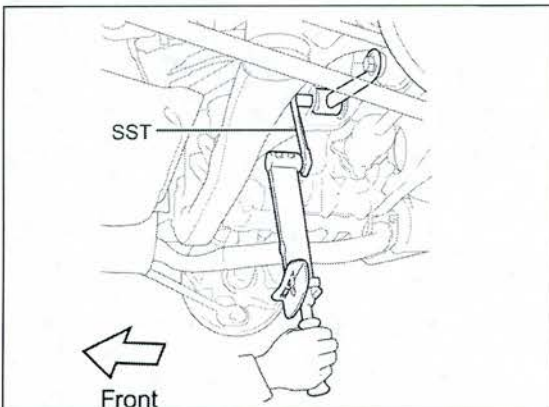
NOTE:

- If the rear driveshaft assembly cannot be positioned horizontally as shown in the illustration even when the rear wheel hub assembly is jacked up, apply additional load to the vehicle such as by having a person sit in the rear seat.
- Use the same procedure for the RH and LH side.



9. TORQUE THE REAR NO. 2 SUSPENSION ARM ASSEMBLY BOLT AND NUT.

Torque: 82 ft. lbf (112 N m)



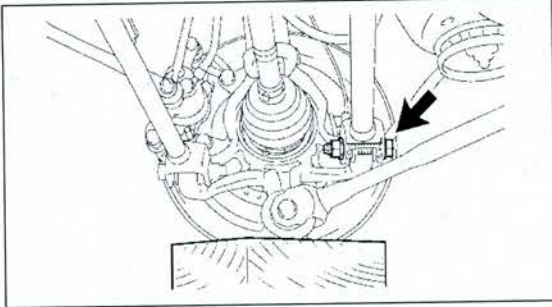
10. TORQUE THE NO. 1 SUSPENSION ARM ASSEMBLY

- a) Using a torque wrench that is 14.96 in (380mm) long with SST 09961-00950, torque the bolt and nut on the inside of the No.1 suspension arm assembly.

Torque:
with SST: 42 ft lbf (57 N m)

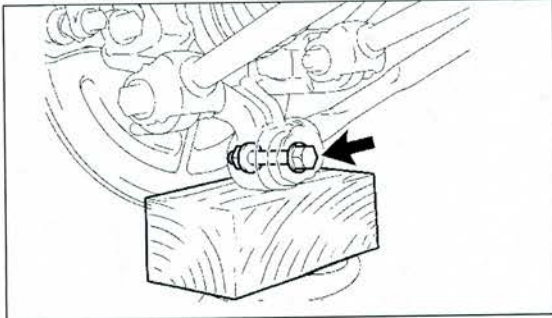


- If you are not using the exact tools described in step b) you must refer to the repair manual for torque specifications. (Link)
- Since a lock nut is used, torque the bolt.
- The final torque must be applied under standard vehicle height conditions.



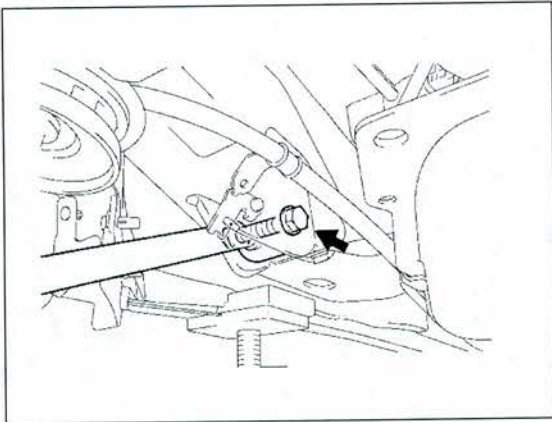
11. Torque the bolt and nut on the outside of the No.1 suspension arm assembly.

Torque: 82 ft lbf(112 N m)



12. Torque the bolt and the rear strut rod assembly.

Torque: 59 ft lbf (80 N m)



13. TORQUE THE BOLT AND THE REAR STRUT ROD ASSEMBLY.

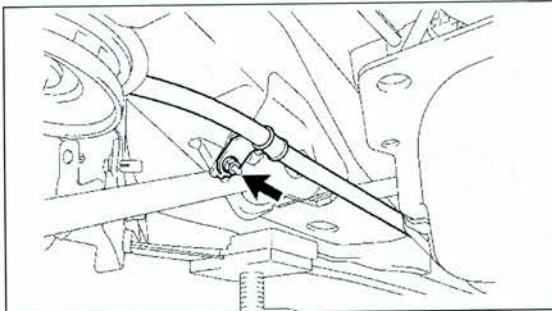
Torque: 59 ft lbf (80 Nm)



NOTE: For steps "k" through "o"

- Since a lock nut is used, tighten the bolt.
- The final torque must be applied under standard vehicle height conditions.

a) Remove the jack and the wooden block.

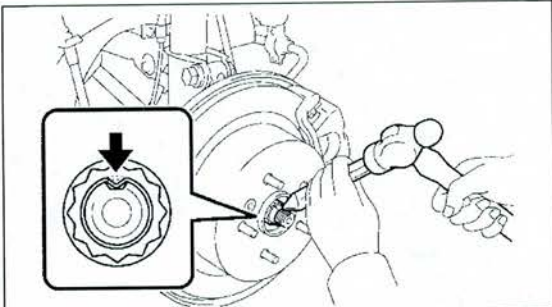


14. REINSTALL THE NO. 3 PARKING BRAKE CABLE ASSEMBLY WITH THE NUT.

Torque: 53 in lbf (6.0 N m)



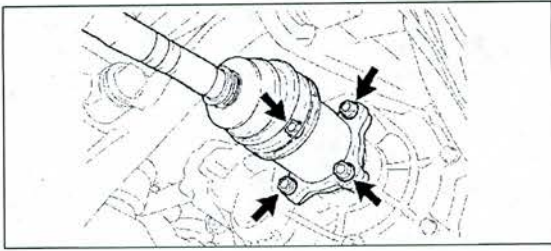
DO NOT twist the No. 3 parking brake cable assembly when installing it.



15. TORQUE THE NEW AXLE SHAFT NUT.

Torque: 216 ft lbf (294 N m)

a) Using a chisel and a hammer, stake the rear axle shaft nut.



16. TORQUE THE NEW REAR DRIVESHAFT ASSEMBLY WITH THE 4 NUTS AND 4 WASHERS.

Torque: 41 ft lbf (56 N m)

17. REINSTALL THE REAR WHEEL.

Torque: 76 ft lbf (103 N m)

18. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

- a) Inspect and adjust rear wheel alignment.
Refer to TIS for instructions on inspect and adjust rear wheel alignment.

19. CHECK FOR SPEED SENSOR SIGNAL

- a) Check for speed sensor signal.
Refer to TIS for instructions on check for speed sensor signal.

VIII. REPLACE THE REAR TRACTION W/ TRANSAXLE MOTOR ASSEMBLY AND REAR DRIVESHAFT ASSEMBLY



- When working with or around a high voltage circuit (in which wiring and connectors are orange), wear insulated gloves to prevent electric shock.
- Before working with a high voltage system, disconnect the negative terminal of the auxiliary battery and then the service plug grip. Then leave the vehicle for ten minutes and, after testing to verify that the capacitor has discharged, start working.

1. SAFETY PRECAUTIONS



CRITICAL INFORMATION – READ THOROUGHLY



These cautions should be observed when performing this campaign. Failure to follow these cautions could result in injury.



1. PLACE CAUTION SIGN ON ROOF OF VEHICLE

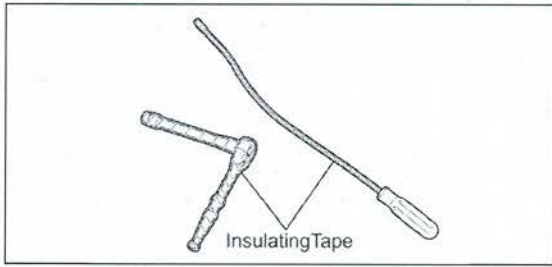
- a) Place the "Working High Voltage Sign" provided on the next page to warn others in the shop area.



2. REMOVE ALL PERSONAL JEWELRY AND BELONGINGS

- a) To prevent shock and short circuits remove all jewelry and personal belongings (i.e. watch, bracelet, pocket screw drivers, etc.)

(Safety Precautions Continued)



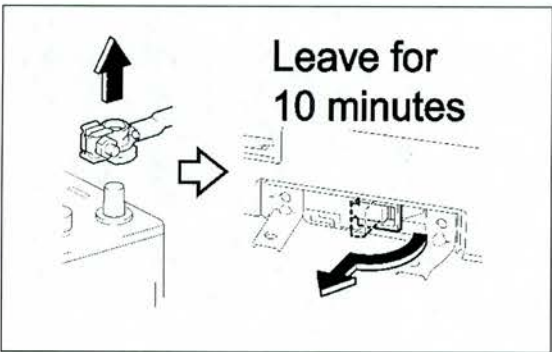
3. USE INSULATED TOOLS OR INSULATE TOOLS

- a) To prevent shock and short circuits use insulated tools. If insulated tools are not available insulate the tools being used with tape.



4. WEAR INSULATED GLOVES (INSULATED GLOVES ARE SSTs)

- a) When working around or with high voltage circuit use insulated gloves.
- b) DO NOT use damaged or wet insulated gloves.
- c) If gloves are dirty, clean them before use as directed by the glove instruction manual.



5. PROPERLY HANDLE SERVICE PLUG

- a) Disconnect the negative terminal of the auxiliary battery and remove the service plug.
- b) Place service plug in your pocket to ensure that it cannot be accidentally reinstalled by another technician.
- c) Wait ten minutes before working on any high voltage system.

Person in charge:

**CAUTION:
HIGH-VOLTAGE
DO NOT TOUCH.**

**CAUTION:
HIGH-VOLTAGE
DO NOT TOUCH.**

Person in charge:

When performing work on the HV system, fold this sign and
put it on the roof of the vehicle.

NOTE:

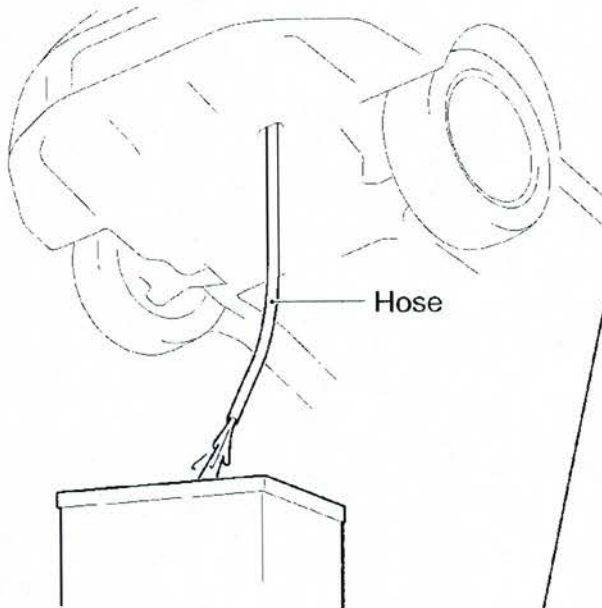
- See step VII. REPLACE THE REAR DRIVESHAFT ASSEMBLY for the detachment procedure of the driveshaft.
- DO NOT contaminate or damage the O-ring when the No.3 wire cable and extension wire assembly are removed.
- DO NOT disconnect the ground cable from a location other than what is shown in the technical instructions; otherwise it will be difficult to remove the rear differential motor assembly. Perform the work according to the procedure.

2. REMOVE THE REAR DIFFERENTIAL MOTOR ASSEMBLY AND REAR DRIVESHAFT ASSEMBLY



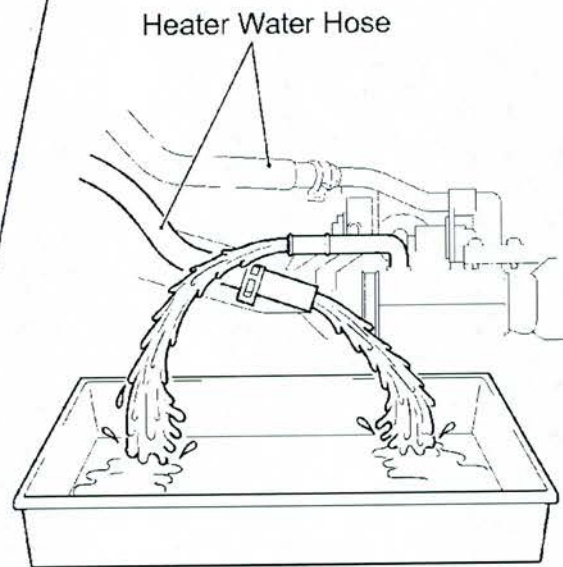
- Confirm the coolant is not hot before beginning any work.
- The coolant drained from the radiator must be reused, confirm that a clean container is used when draining the coolant.
- DO NOT reuse any coolant that is drained when disconnecting the coolant hoses by the exhaust gas control actuator, this coolant may be contaminated when drained.
- DO NOT mix the coolant drained from the radiator with the coolant drained from the hoses.

Radiator side:



Reusable

Exhaust heat recirculation system side:



Non-reusable

- a) Remove the rear differential motor assembly and rear driveshaft assembly. Refer to TIS for instructions on rear differential motor assembly removal.

3. INSTALL NEW REAR DIFFERENTIAL MOTOR ASSEMBLY AND NEW REAR DRIVESHAFT ASSEMBLY

- a) Install the rear differential motor assembly and rear driveshaft assembly.
Refer to TIS for instructions on rear differential motor assembly installation.

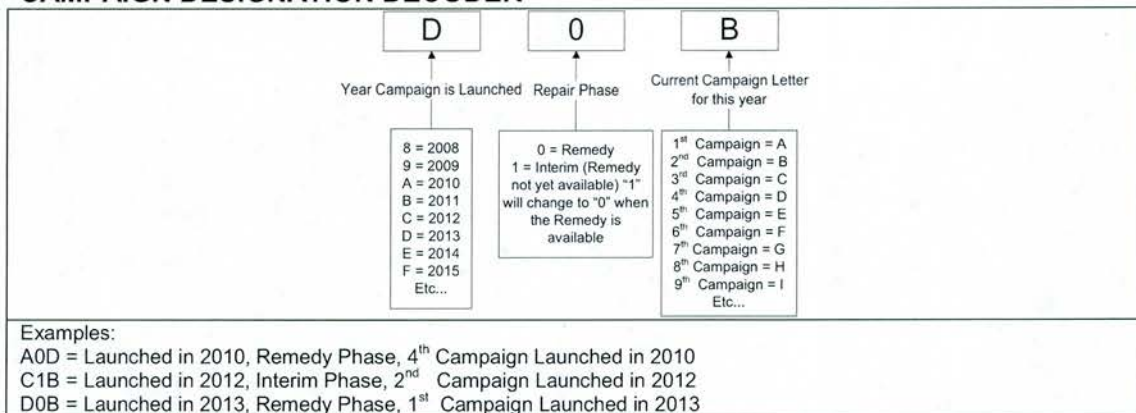
◀ VERIFY REPAIR QUALITY ▶

- Confirm the torque on all lock nuts.
- Confirm the rear axle shaft nut.
- Ensure all nuts and bolts are torqued to the specifications.
- Confirm the 4 nuts and washers are torqued on each inboard side of the driveshaft assemblies.
- Confirm the No. 2 suspension arm assembly bolts and nuts are torqued to specifications.
- Ensure the rear strut road assembly bolts and nuts are torqued (2 on each side).

If you have any questions regarding these technical instructions, please contact your regional representative.

IX. Appendix

A. CAMPAIGN DESIGNATION DECODER



B. CAMPAIGN PARTS RETURN

- a) All parts replaced under this campaign will be on 100% parts recovery. Failure to return the replaced parts will result in an immediate debit.

Wayne Hutchinson / TMS Toyota Customer Services
Product Quality and Service Support, Quality Compliance
September 30, 2013
Approved By: Bob Waltz

To: All Toyota Dealers
From: Product Support Division

**Limited Service Campaign D0N
Certain 2011 – 2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement**

In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on certain 2011 – 2012 Model Year Highlander Hybrid Vehicles. This LSC will cover approximately 4,000 vehicles.

Background

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Limited Service Campaign (LSC) Remedy

Authorized Toyota dealerships are requested to inspect and replace the rear Driveshaft Assemblies (both right and left) at **NO CHARGE** to the vehicle's owner. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to the vehicle's owner.

Customer and Media Contacts

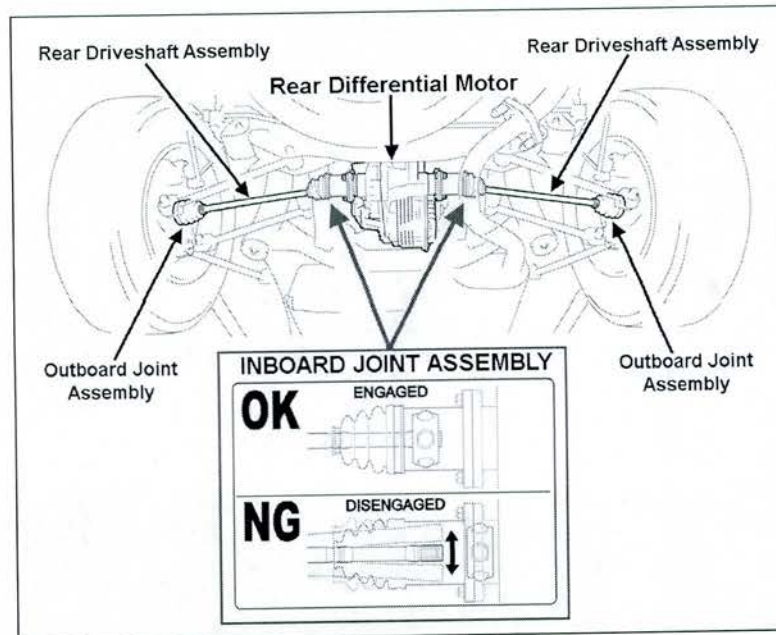
- A FAQ has been attached for your use in the event you receive a customer contact. If a customer has further questions, please direct the inquiry to the Toyota Customer Experience Center at 1-800-331-4331.
- If you are a dealership associate and have any questions, please contact your District Service/Parts Manager.
- ***In the event you are contacted by the News media***, it is imperative that all media contacts (local and national) receive a consistent message. Please direct all media contacts to Cindy Knight (310) 468-2170, in Toyota Corporate Communications. (Please do not provide these numbers to customers or call if you are a dealer associate. Please provide these contacts to only media associates.)



Limited Service Campaign (LSC) – D0N
Certain 2011–2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement – FAQ

Frequently Asked Questions

Published Early October 2013



Q1: What is the condition?

A1: Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Q1a: What is a Rear Driveshaft Assembly?

A1a: The Rear Driveshaft Assemblies connect the Rear Differential Motor to the rear wheels. The driveshafts contain inboard and outboard joints that allow the shaft to move with the vehicle suspension. Due to an assembly error, this movement can disengage the driveshaft from the inboard joint assembly.

Q1b: What is a Rear Differential Motor Assembly?

A1b: The Rear Differential Motor is part of the hybrid system. The Rear Differential Motor works together with the gasoline engine and the front electric motors in the following ways:

- *Starting from Stop* – The Rear Differential Motor works together with the front electric motors to propel the vehicle forward.
- *Light Acceleration, Light Load, & Cruising Conditions* – The Rear Differential Motor becomes inert to improve fuel economy.
- *Heavy Acceleration* – The Rear Differential Motor works in tandem with the front electric motors and the gasoline engine to provide the additional power.
- *Reverse* – The Rear Differential Motor works together with the front electric motors to propel the vehicle backward.
- *Decelerating & Braking* – The Rear Differential Motor and a front electric motor are used as a generator to recharge the hybrid battery & reduce the load on the brakes.

Q2: What is the cause of this condition?

A2: During the manufacturing process, there was an error in the equipment used to assemble the Rear Driveshaft Assemblies.

Q3: What is Toyota going to do?

A3: Owners of vehicles covered by this Limited Service Campaign will receive an owner notification letter by first class mail starting in early October 2013.

Any authorized Toyota dealership will inspect and replace the Rear Driveshaft Assemblies (both left and right) at **NO CHARGE** to you. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to you.

Q3a: What will the inspecting entail?

A3a: Before the Rear Driveshaft Assemblies are removed from the vehicle, a technician will check for excessive driveshaft movement inside the inboard joint assembly.

Q3b: How does Toyota obtain my mailing information?

A3b: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q3c: Do I need my owner letter to have the remedy performed?

A3c: No, you do not need an owner letter to have this LSC completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present the owner notification at the time of your service appointment.

Q4: Are there any symptoms that this condition exists?

A4: Yes, if this condition exists, you will notice an abnormal noise (vibration / rattle) coming from the rear of the vehicle while it is being driven.

Q5: Which and how many vehicles are covered?

A5: There are approximately 4,000 vehicles, certain 2011-2012 Model Year Highlander Hybrid Vehicles, covered in the USA.

Model	Model Year	Production Range	Appx. UIO
Highlander Hybrid	2011 – 2012	Late June, 2011 through mid-March, 2012	4,000

Q6: Are there any other vehicles covered by this Limited Satisfaction Campaign?

A6: No. This specific condition only affects certain 2011-2012 Model Year Highlander Hybrid Vehicles.

Q7: How long will the repair take?

A7: Inspection and replacement of the Rear Driveshaft Assemblies will take approximately 2 hours. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the repair will take approximately 12 hours because the Rear Differential Motor will need to be replaced. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Note: If the Rear Differential Motor requires replacement, a rental vehicle will be provided while your vehicle is being repaired.

Q8: When will this Limited Service Campaign expire?

A8: This Limited Service Campaign will be available until **October 31, 2016**.

Q9: What if you have previously paid for repairs to your vehicle for this specific condition?

A9: Owners who have previously paid for repairs to address this specific condition should refer to the owner letter for instructions regarding reimbursement consideration.

Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

Q10: What if an owner has additional questions?

A10: Owners with questions or concerns are asked to please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

TOYOTA

PRODUCT SUPPORT DIVISION

Volume: XIX
Number: TC13-025
Date: 09/29/2013
 Action
 Retain
 Information

INTEROFFICE MEMORANDUM

To: All Toyota Region General Managers/Vice Presidents
From: Bob Waltz,
Group Vice President, Product Quality and Service Support
Subject: Limited Service Campaign (LSC) D0N
Certain 2011 – 2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement

In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on certain 2011 – 2012 Model Year Highlander Hybrid Vehicles. This LSC will cover approximately 4,000 vehicles.

Background

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Limited Service Campaign (LSC) Remedy

Authorized Toyota dealerships are requested to inspect and replace the rear Driveshaft Assemblies (both right and left) at **NO CHARGE** to the vehicle's owner. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to the vehicle's owner.

This LSC will be available until **October 31, 2016**, and will only be available at an authorized Toyota Dealer.

1. Dealer Letter Mailing Date

The attached Dealer Letter will be sent to all Toyota dealers in early October, 2013.

2. Owner Notification Mailing Date

The owner notification will commence in early October, 2013, approximately one week after the Dealer Letter.

Please note that only owners of the covered vehicles will be notified. If a dealer is contacted by an owner who has not yet received a notification, please instruct them to **verify eligibility by confirming through TIS prior to performing repairs**. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

3. New and Used Vehicles in Dealership Inventory (In-Stock Vehicles)

To ensure customer satisfaction Toyota requests that dealers conduct this LSC remedy on any new or used vehicles currently in dealer inventory that are covered by this LSC prior to customer delivery.

4. Number and Identification of Covered Vehicles

There are approximately 4,000 Highlander Hybrid Vehicles covered under this LSC

5. Parts Ordering Process (Dealer Ordering Solutions)

Orders can be placed through the dealership's facing PDC. The Rear Driveshaft Assembly kits have been placed on Dealer Ordering Solutions and will be systematically released daily based on dealer ordering criteria. Each dealer has received specific dealer ordering criteria in an email from their facing PDC Manager based on Repair Order Volume * PDC Affected UIO. Therefore, it is vital that each dealership work with both Parts and Service to immediately file claims and coordinate appropriate kit orders.

Additional Part Ordering information can be found in the dealer communication.

6. Region/District Summary Reports

We have enclosed the following LSC D0N Summary Reports in the Region/Private Distributor (PD) Service Manager/Customer Service Operations Manager/Director of Service package:

- Region/PD Summary Report that provides an overview of the entire Region/PD for this LSC.
- A District Summary Report that indicates the number of covered vehicles per dealership in each district for this LSC.

The attached Dealer Notification Letter contains additional details.

Please review this notification with your staff to assure that all relevant personnel have been briefed regarding this subject.

Thank you for your cooperation.

Enclosures

- cc: Region/Private Distributor Assistant General Managers
Region/Private Distributor Customer Service Operations Managers
Region/Private Distributor Service Managers/Directors/VPs
Region/Private Distributor Parts Managers/Directors/VPs
Region/Private Distributor Customer Services Field Managers
Region/Private Distributor Technical Services and Training Managers
Region/Private Distributor District Service and/or Parts Managers
Region/Private Distributor Customer Relations Managers
Region/Private Distributor PDC Managers
Region/Private Distributor Field Technical Specialists
Region/Private Distributor Service Training Specialists
Region/Private Distributor Vehicle Operations Managers
All NAPC General Managers
All TMS Sales Administration Managers
All TMS Product Quality & Service Support Managers
All Field Product Engineers

- | | | | | |
|--------------|--------------|-------------|----------------|------------|
| M. Bevan | R. Dufresne | C. Knight | R. Perez | P. Turner |
| G. Borst | B. Fay | V. Katayama | D. Pettitt | K. Ura |
| J. Bracken | N. Fein | M. King | R. Pflughaupt | P. Uribe |
| R. Broughman | G. Fogg | J. Lang | M. Reding | A. Vaish |
| G. Bryan | K. Fukushima | S. Lending | C. Reynolds | B. Waltz |
| W. Burns | J. Grosso | J. Lentz | R. Sakai | M. Warrick |
| B. Carter | J. Hanson | R. Lofaso | B. Sciumbato | D. Zellers |
| G. Christoff | B. Hare | D. Marsh | H. Siddiqi | |
| A. Coetzee | S. Heyer | E. Matsuda | G. Smith | |
| J. Colon | Z. Hicks | F. Matsuoka | R. Specht | |
| D. Colvin | K. Higgins | M. Michels | J. Stempkowski | |
| B. Daly | E. Hirata | A. Mito | N. Swartz | |
| F. Davidson | H. Hirata | T. Morrison | M. Templin | |
| D. Depew | C. Hostetter | J. Moses | J. Tetherow | |
| T. Doi | Y. Inaba | C. Neff | M. Tojo | |

To: All Toyota Dealer Principals, Service Managers, and Parts Managers

Subject: Limited Service Campaign (LSC) D0N
Certain 2011 – 2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement

In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on certain 2011 – 2012 Model Year Highlander Hybrid Vehicles. This LSC will cover approximately 4,000 vehicles.

Background

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Limited Service Campaign (LSC) Remedy

Authorized Toyota dealerships are requested to inspect and replace the Rear Driveshaft Assemblies (both right and left) at **NO CHARGE** to the vehicle's owner. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to the vehicle's owner.

This LSC will be available until **October 31, 2016**, and will only be available at an authorized Toyota Dealer.

1. Owner Notification Mailing Date

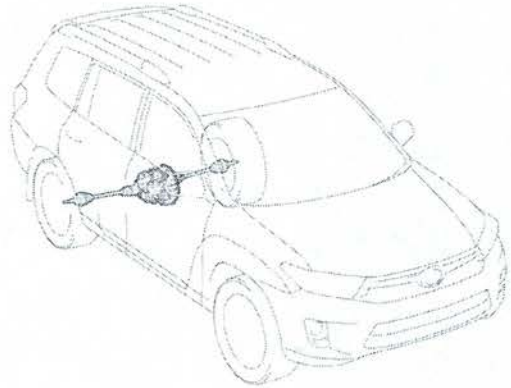
The owner notification will commence in early October 2013, approximately 1 week after the dealer notification.

Toyota tries hard to obtain current customer name and address information from each state through industry resources when mailing owner letters. In the event your dealership receives a notice for a vehicle that was sold prior to the LSC announcement, it is the dealership's responsibility to forward the owner letter to the customer who purchased the vehicle.

Please note that only owners of the covered vehicles will be notified. If you are contacted by an owner who has not yet received a notification, please **verify eligibility by confirming through TIS prior to performing repairs**. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

2. New and Used Vehicles in Dealership Inventory (In-Stock Vehicles)

To ensure customer satisfaction Toyota requests that dealers conduct the LSC remedy on any new or used vehicles currently in dealer inventory that are covered by this LSC prior to customer delivery.



3. Number and Identification of Covered Vehicles

There are approximately 4,000 (2012 – 2013 MY) Highlander Hybrid Vehicles covered by this LSC.

WMI	MY	VDS	Start	Finish
JTE	2011	BC3EH	2003742	2003975
		DC3EH	2003733	2003980
	2012	BC3EH	2003982	2008657
		DC3EH	2003983	2008658

Please note that only owners of the covered vehicles will be notified. If a dealer is contacted by an owner who has not yet received the notification, please **verify coverage by confirming through TIS**. Dealers should perform the procedure as outlined in the Technical Instructions located on TIS. Not all vehicles in the VIN range are covered by this LSC.

A UIO matrix by state is provided to inform your dealership of the number of covered vehicles in your state.

STATE	UIO	STATE	UIO	STATE	UIO	STATE	UIO	STATE	UIO
AK	18	HI	25	ME	15	NJ	123	SD	6
AL	25	IA	32	MI	49	NM	37	TN	55
AR	13	ID	23	MN	64	NV	28	TX	159
AZ	47	IL	193	MO	53	NY	233	UT	64
CA	809	IN	56	MS	11	OH	92	VA	184
CO	127	KS	16	MT	15	OK	33	VT	13
CT	84	KY	46	NC	84	OR	118	WA	232
DE	16	LA	12	ND	8	PA	123	WI	69
FL	144	MA	170	NE	23	RI	16	WV	10
GA	71	MD	85	NH	29	SC	31	WY	11

4. Dealer Summary Reports

Summary Reports, containing the following will be enclosed in the dealer packet:

- The number of covered vehicles in your dealership's primary marketing area. (Please verify eligibility by confirming through TIS prior to performing repairs.)
- A suggested initial parts ordering quantity.

5. Parts Ordering

Dealer Ordering Solutions:

Orders can be placed through the dealership's facing PDC. The kits have been placed on Dealer Ordering Solutions and will be systematically released daily based on dealer ordering criteria

All covered vehicles will require the replacement of the Rear Driveshaft Assemblies.

Part Number	Part Description	Quantity
04003-34148	Shaft Kit Rr Drive	2
The kit above includes the following parts.		
42340-48081	Shaft Assembly, Rear Drive	1
90177-22001	Nut	1

Each dealership will receive specific dealer ordering criteria in an email from TMS Special Activities group based on Repair Order Volume * PDC Affected UIO. Dealers ordering criteria will also be available through the Customer Support Leader at their facing PDC. Therefore, it is vital that each dealership work with both Parts and Service to immediately file claims and coordinate appropriate kit orders. A sample of the Parts Allocation Report has been attached below for your reference.

(Parts Ordering Continued . . .)

Manual Allocation Control (MAC):

Approximately **1.5%** of vehicles will fail the inspection and need the following parts. **Do not** order these components until your dealership has confirmed the Rear Driveshaft has disengaged from its inboard joint assembly.

(See the Warranty Processor section for rental car information.)

Part Number	Part Description	Quantity
16492-21050*	Packing (For Radiator Drain Cock)	1
G1050-48010	Motor Assembly, Rr Traction W/ Transaxle	1
04003-36148	Bolt & Gasket Kit:	
	17451-28040 Gasket Exhaust Pipe	2
	90109-12082 Bolt	2
	90119-14099 Bolt, W/ Washer	2
	91552-81265 Bolt, Flange	2

* Part 16492-21050 will not be on MAC but is need if the Rear Differential Motor is replaced.



To ensure parts availability, the parts have been place on Manual Allocation Control (MAC). If you require a part that has been placed on MAC, please send an email to Quality_Compliance@Toyota.com with the following information:

- **Subject Line: D0N MAC Release Request (Dealer Code)**
- **Dealer Code**
- **VIN Number**
- **Part Number and Qty. Ordered**
- **Order Reference Number**
- **Order Date**
- **Contact Person**

Once a representative confirms the information provided, the part will be released. If there is a concern regarding the information provided, a representative will contact your dealership. Please allow 2-3 days for part release after providing the requested information.

Important Notes:

- *Once you have placed your order DO NOT change or upgrade your order status.*
- *Failure to provide the above information within 48 hours will result in an order cancellation.*

TOYOTA

Parts Allocation Report

99999

SAMPLE TOYOTA of NOWHERE

The below matrix provides information for parts managed by NAPO Dealer Ordering Solution (DOS) and illustrates updates to your current daily allocation quantities. Parts shipments, arrivals and inventory quantities at your local PDC will change daily as parts are received and shipped from NAPO Suppliers. Therefore, your daily allocation quantity is subject to change based on the parts in-stock availability as well as in-transit inventory to your facing PDC. This report is provided as needed when daily allocation changes for DOS parts.

Parts with recent changes will be illustrated from top to bottom with the most recent effective date.

If you have any questions or concerns, please contact your facing PDC Customer Support Leader, John Q Sample at (999) 999-9999.

Part Number	Total Allocation Quantity	Allocation Quantity	Allocation Frequency	Total Allocation Shipped	Total Allocation Remaining	Effective Date

IMPORTANT PARTS ORDERING UPDATE

All Safety Recall, Service Campaign (SSC/LSC) and Customer Support Program (CSP) parts are eligible for the Monthly Parts Return Program. Please refer to PANT Bulletin 2011-087 for campaign parts that are currently returnable under the Monthly Parts Return Program and additional details.

6. Technician Training Requirements

The repair quality of covered vehicles is extremely important to Toyota. All dealership associates involved in the recall process are required to successfully complete E-Learning course SC13A. To ensure that all vehicles have the repair performed correctly; technicians performing this recall repair are also required to have the following minimum certification:

- **Hybrid Expert**
- **Drivetrain Expert and completion of course 071 Toyota Hybrid System**
- **Master Technician**
- **Master Diagnostic Technician**

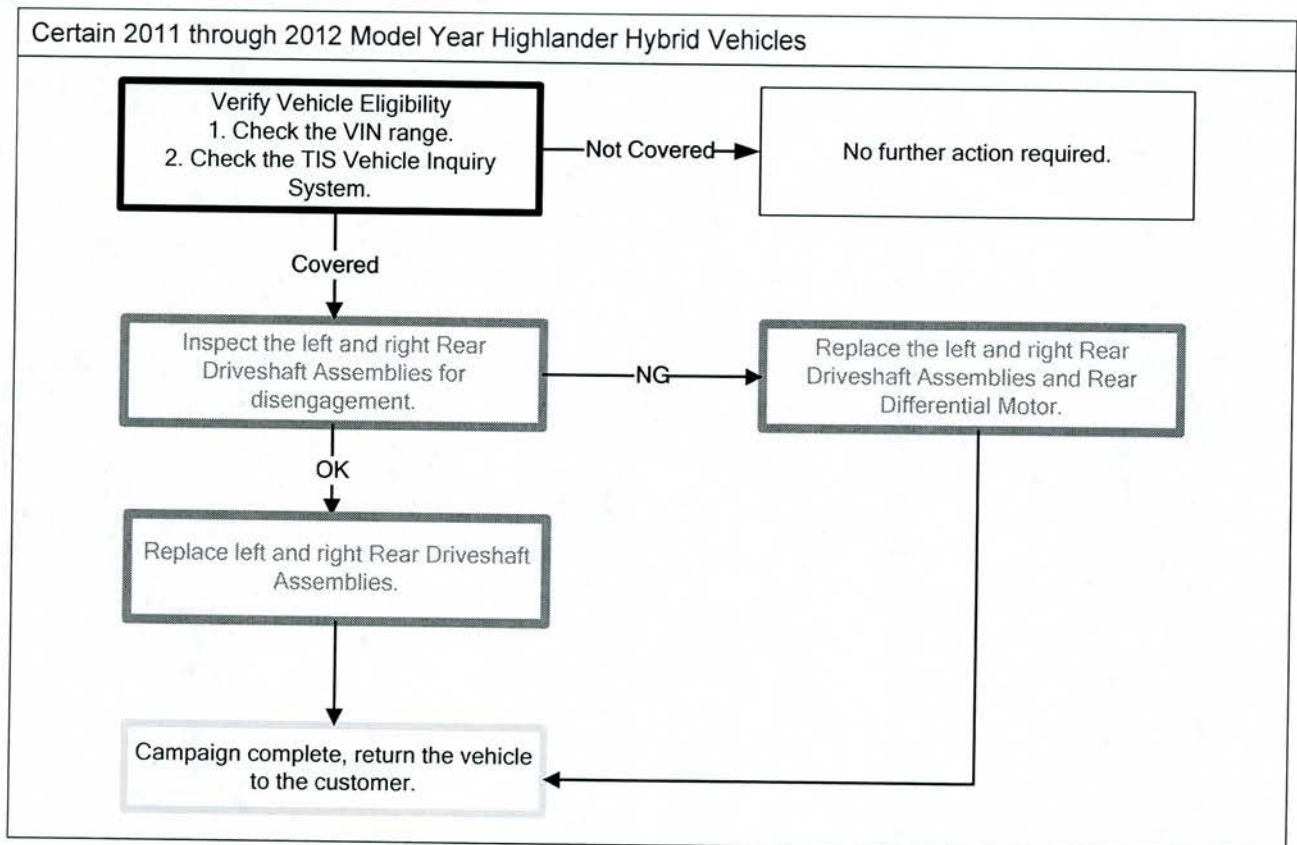
It is the dealership's responsibility to select technicians with the above certification level or greater to perform this LSC repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to perform this repair at all times.

7. Remedy Procedures

Please refer to TIS for Technical Instructions.

Conduct all applicable, non-completed Safety Recall and Service Campaigns on the vehicle during the time of appointment.

8. Warranty Reimbursement Procedure



(Warranty Reimbursement Procedure Continued...)

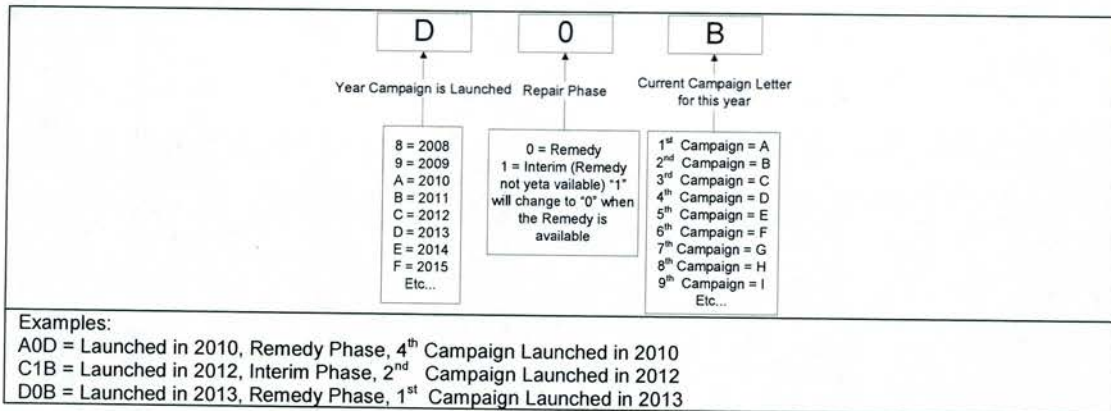
LSC	Op. Code	Description	Flat Rate
D0N	3619HA	Inspect & Replace Rear Driveshaft Assemblies	2.0 hr/veh
	3619HB <i>(Use only in limited cases where the condition has occurred.)</i>	Inspect and Replace Rear Driveshaft Assemblies and Rear Differential Motor	4.2 hr/veh

- The above operation codes include 0.1 hour for administrative cost per unit for the dealership.

Allowable Sublets for LSC D0N:

- Rental Vehicle:** Use sublet type "RT" for OpCode 3619HB. During the replacement of the driveshaft assemblies and the Rear Differential Motor, customer's rental car through the Toyota Rent-A-Car (TRAC) Program is available for a maximum of 2 days. Follow the Toyota Transportation Assistance Program (TTAP) guidelines.
- Fluids:** Use sublet type "OF" for OpCode 3619HB. A maximum of \$39/vehicle cost for hybrid transaxle fluid (Automatic Transmission Fluid – World Standard) and 50% pre-mixed Super Long Life Coolant will be accepted.

9. Campaign Designation Decoder



10. Repair Quality Confirmation

The repair quality of covered vehicles is extremely important to Toyota. To help ensure that all vehicles have the repair performed correctly, please designate at least one associate (someone other than the individual who performed the repair) to verify the repair quality of every vehicle prior to customer delivery.

11. Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Cindy Knight (310) 468-2170 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

12. Customer Contacts

Customers who receive the owner letter may contact your dealership with questions regarding the letter and/or LSC remedy. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Customers with additional questions or concerns are asked to please contact the Toyota Customer Experience Center (1-888-270-9371).

Please review this entire package with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Limited Service Campaign.

Thank you for your cooperation.
TOYOTA MOTOR SALES, U.S.A., INC.

**Certain 2011 - 2012 Model Year Toyota Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement
LIMITED SERVICE CAMPAIGN**

[VIN]

Dear Toyota Highlander Hybrid Owner:

At Toyota, we are dedicated to providing vehicles of outstanding quality and value. As part of our continuing efforts to provide superior customer satisfaction, Toyota is announcing a Limited Service Campaign, which includes your vehicle.

What is the condition?

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

(Please see the FAQ included with this owner letter for additional details)

You received this notice because our records, which are based primarily on state registration and title data, indicate that you are the current owner.

What is included in the Limited Service Campaign?

Any authorized Toyota dealership will inspect and replace the Rear Driveshaft Assemblies (both left and right) at **NO CHARGE** to you. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to you.

This Limited Service Campaign will be available until October 31, 2016, and will only be available at an authorized Toyota Dealer.

This offer is limited to your specific vehicle whose Vehicle Identification Number (VIN) is printed at the beginning of this letter and is subject to the same conditions set forth in the New Vehicle Limited Warranty section of your Owner's Manual Supplement or Owner's Warranty Information booklet. For additional information, please refer to the booklet.

How do you take advantage of this Limited Service Campaign?

Please contact an authorized Toyota dealer and make an appointment to have this remedy performed before **October 31, 2016**.

Inspection and replacement of the Rear Driveshaft Assemblies will take approximately 2 hours. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the repair will take approximately 12 hours because the Rear Differential Motor will need to be replaced. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Note: If the Rear Differential Motor requires replacement, a rental vehicle will be provided while your vehicle is being repaired.

If your vehicle is covered by this Limited Service Campaign, you do not need this owner letter to have the campaign completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present this notice at the time of your service appointment.

What if you have other questions?

- Your local Toyota dealer will be more than happy to answer any of your questions and set up an appointment to perform the repair.
- You can find additional information and locate a Toyota dealer in your area by going online and visiting www.toyota.com/recall.
- If you require further assistance, you may contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, Saturday 7:00 am through 4:00 pm Pacific Time.

What if you have previously paid for repairs to your vehicle for this specific condition?

If you have previously paid for a repair to your vehicle for this specific condition prior to receiving this letter, please mail a copy of your repair order, proof-of-payment and proof-of-ownership to the following address for reimbursement consideration:

Toyota Motor Sales, U.S.A., Inc
Toyota Customer Experience, WC 10
19001 South Western Avenue
Torrance, CA 90509

Include your name, address, and telephone number(s) in your request. Please allow us 6-9 weeks to process your request.

Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

If you would like to update your vehicle ownership or contact information, please go to www.toyota.com/ownersupdate. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information. If you are a vehicle lessor, please assist us by forwarding this notice to the lessee.

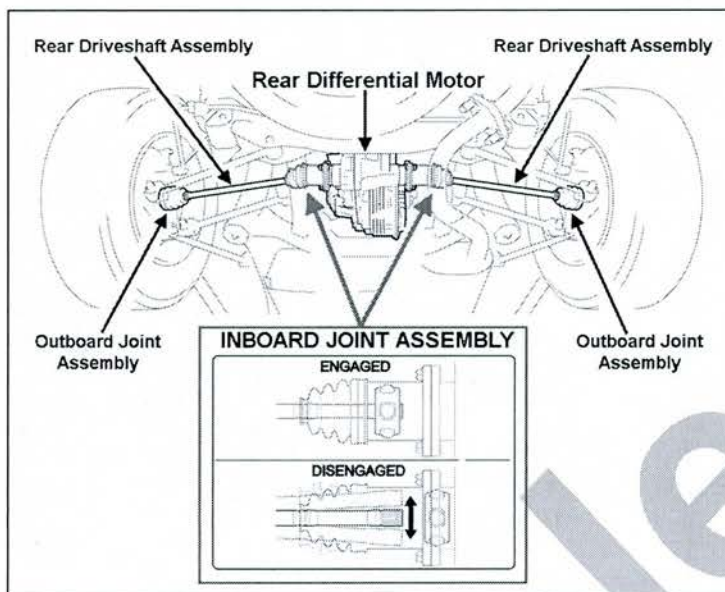
We have sent this notice in the interest of your continued satisfaction with our products, and we sincerely regret any inconvenience this condition may have caused you.

Thank you for driving a Toyota.

Sincerely,
TOYOTA MOTOR SALES, USA, INC.

Sample

**Limited Service Campaign D0N
Frequently Asked Questions**



Q1: What is the condition?

A1: Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Q2: What is a Rear Driveshaft Assembly?

A2: The Rear Driveshaft Assemblies connect the Rear Differential Motor to the rear wheels. The driveshafts contain inboard and outboard joints that allow the shaft to move with the vehicle suspension. Due to an assembly error, this movement may disengage the driveshaft from the inboard joint assembly.

Q3: What is a Rear Differential Motor Assembly?

A3: The Rear Differential Motor is part of the hybrid system. The Rear Differential Motor works with the gasoline engine and the front electric motors during vehicle operation.

Q4: What will the inspection include?

A4: Before the Rear Driveshaft Assemblies are removed from the vehicle, a technician will check for excessive driveshaft movement inside the inboard joint assembly. If the driveshaft has disengaged from the inner joint the Rear Differential Motor will also be replaced.

Q5: How does Toyota obtain my mailing information?

A5: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q6: Are there any symptoms that this condition exists?

A6: Yes, if this condition exists, you will notice an abnormal noise (vibration / rattle) coming from the rear of the vehicle while it is being driven.

Q7: When will this Limited Service Campaign expire?

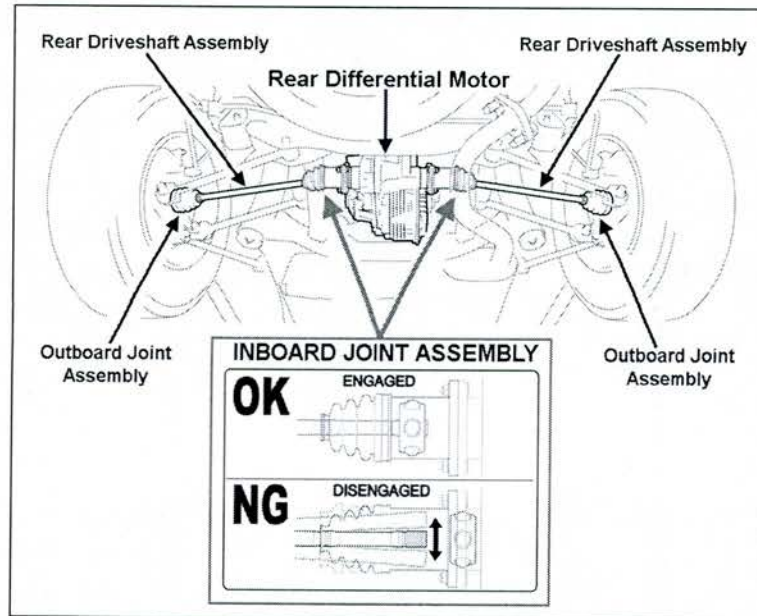
A7: This Limited Service Campaign will be available until **October 31, 2016**.



Limited Service Campaign (LSC) – D0N
Certain 2011–2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement – FAQ

Frequently Asked Questions

Published Early October 2013



Q1: What is the condition?

A1: Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Q1a: What is a Rear Driveshaft Assembly?

A1a: The Rear Driveshaft Assemblies connect the Rear Differential Motor to the rear wheels. The driveshafts contain inboard and outboard joints that allow the shaft to move with the vehicle suspension. Due to an assembly error, this movement can disengage the driveshaft from the inboard joint assembly.

Q1b: What is a Rear Differential Motor Assembly?

A1b: The Rear Differential Motor is part of the hybrid system. The Rear Differential Motor works together with the gasoline engine and the front electric motors in the following ways:

- *Starting from Stop* – The Rear Differential Motor works together with the front electric motors to propel the vehicle forward.
- *Light Acceleration, Light Load, & Cruising Conditions* – The Rear Differential Motor becomes inert to improve fuel economy.
- *Heavy Acceleration* – The Rear Differential Motor works in tandem with the front electric motors and the gasoline engine to provide the additional power.
- *Reverse* – The Rear Differential Motor works together with the front electric motors to propel the vehicle backward.
- *Decelerating & Braking* – The Rear Differential Motor and a front electric motor are used as a generator to recharge the hybrid battery & reduce the load on the brakes.

Q2: What is the cause of this condition?

A2: During the manufacturing process, there was an error in the equipment used to assemble the Rear Driveshaft Assemblies.

Q3: What is Toyota going to do?

A3: Owners of vehicles covered by this Limited Service Campaign will receive an owner notification letter by first class mail starting in early October 2013.

Any authorized Toyota dealership will inspect and replace the Rear Driveshaft Assemblies (both left and right) at **NO CHARGE** to you. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to you.

Q3a: What will the inspecting entail?

A3a: Before the Rear Driveshaft Assemblies are removed from the vehicle, a technician will check for excessive driveshaft movement inside the inboard joint assembly.

Q3b: How does Toyota obtain my mailing information?

A3b: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q3c: Do I need my owner letter to have the remedy performed?

A3c: No, you do not need an owner letter to have this LSC completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present the owner notification at the time of your service appointment.

Q4: Are there any symptoms that this condition exists?

A4: Yes, if this condition exists, you will notice an abnormal noise (vibration / rattle) coming from the rear of the vehicle while it is being driven.

Q5: Which and how many vehicles are covered?

A5: There are approximately 4,000 vehicles, certain 2011-2012 Model Year Highlander Hybrid Vehicles, covered in the USA.

Model	Model Year	Production Range	Appx. UIO
Highlander Hybrid	2011 – 2012	Late June, 2011 through mid-March, 2012	4,000

Q6: Are there any other vehicles covered by this Limited Satisfaction Campaign?

A6: No. This specific condition only affects certain 2011-2012 Model Year Highlander Hybrid Vehicles.

Q7: How long will the repair take?

A7: Inspection and replacement of the Rear Driveshaft Assemblies will take approximately 2 hours. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the repair will take approximately 12 hours because the Rear Differential Motor will need to be replaced. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Note: If the Rear Differential Motor requires replacement, a rental vehicle will be provided while your vehicle is being repaired.

Q8: When will this Limited Service Campaign expire?

A8: This Limited Service Campaign will be available until **October 31, 2016**.

Q9: What if you have previously paid for repairs to your vehicle for this specific condition?

A9: Owners who have previously paid for repairs to address this specific condition should refer to the owner letter for instructions regarding reimbursement consideration.

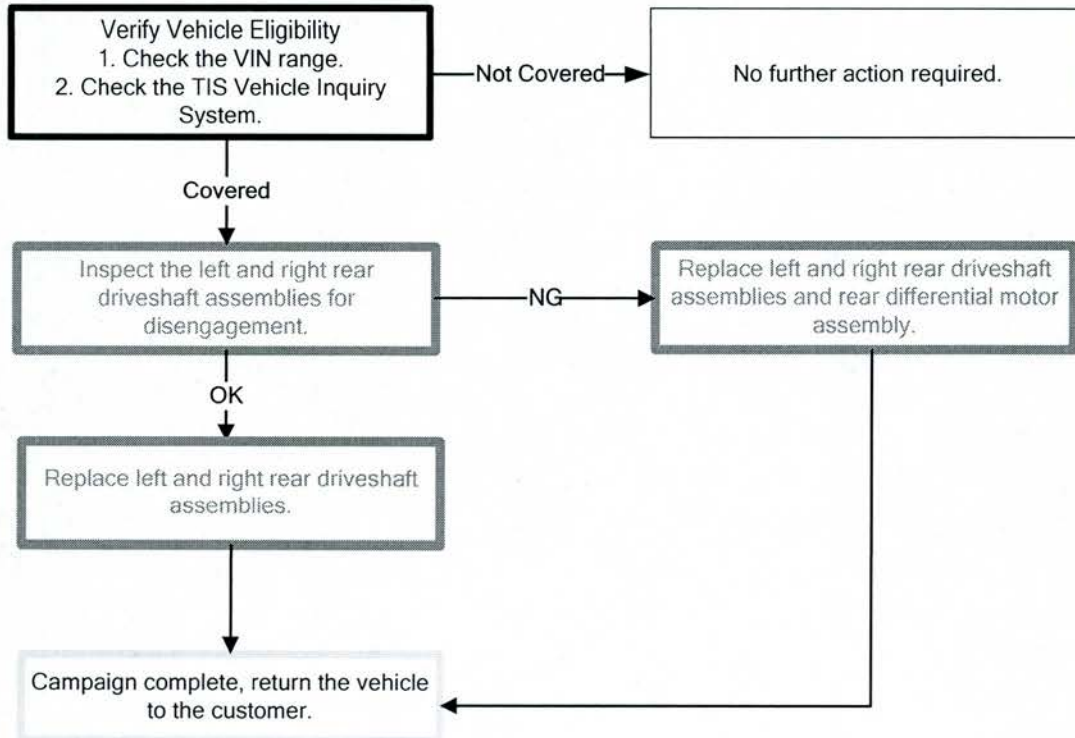
Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

Q10: What if an owner has additional questions?

A10: Owners with questions or concerns are asked to please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

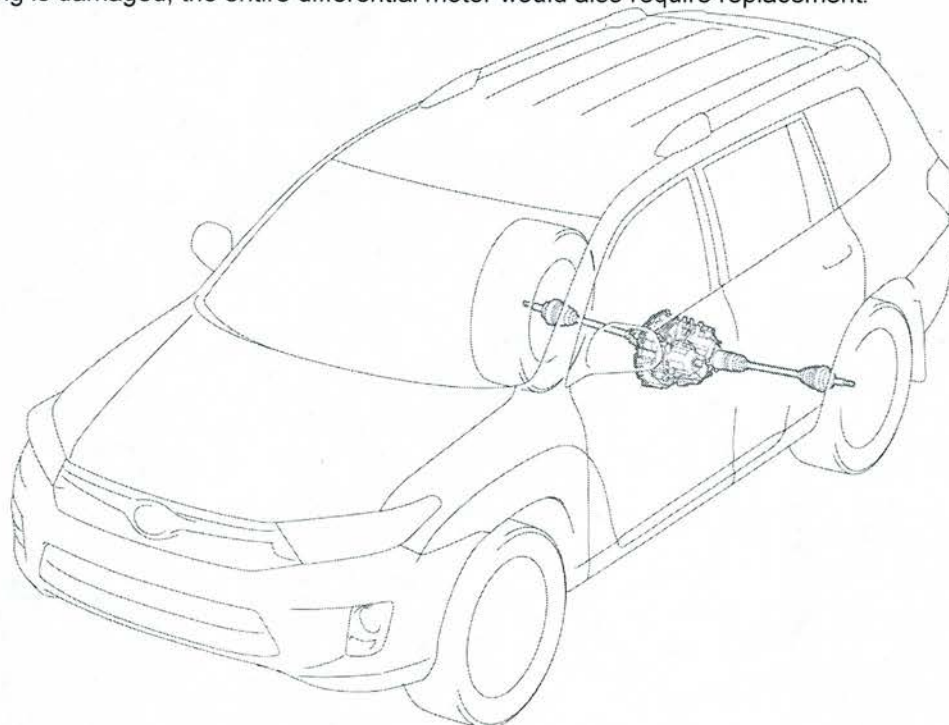
TECHNICAL INSTRUCTIONS
FOR
LIMITED SERVICE CAMPAIGN D0N
REAR DRIVESHAFT ASSEMBLY REPLACEMENT
CERTAIN 2011-2012 MODEL YEAR HIGHLANDER HV

I. OPERATION FLOW CHART



II. BACKGROUND

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.



III. IDENTIFICATION OF AFFECTED VEHICLES

A. COVERED VIN RANGE

WMI	Year	VIN Range	
		VDS	Range
JTE	2011	BC3EH	2003742 - 2003975
		DC3EH	2003733 - 2003980
	2012	BC3EH	2003982 - 2008657
		DC3EH	2003983 - 2008658

NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Limited Service Campaign, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

IV. PREPARATION

A. PARTS

<i>All covered vehicles will require the replacement of the rear driveshaft assemblies.</i>		
Part Number	Part Description	Quantity
04003-34148	Shaft Kit Rr Drive	2
The kit above includes the following parts.		
42340-48081	Shaft Assembly, Rear Drive	1
90177-22001	Nut	1

Only a very small number of vehicles will require the replacement of this part, follow the inspection procedure in these instructions to determine if replacement is required. Parts will be on Manual Allocation Control (MAC), refer to the dealer letter for details.

Part Number	Part Description	Quantity	
16492-21050	Packing (For Radiator Drain Cock)	1	
G1050-48010	Motor Assembly, Rr Traction W/ Transaxle	1	
04003-36148	Bolt & Gasket Kit:		
	17451-28040	Gasket Exhaust Pipe	2
	90109-12082	Bolt	2
	90119-14099	Bolt, W/ Washer	2
	91552-81265	Bolt, Flange	2

B. MATERIALS

ONLY use Toyota Super Long Life Coolant and Hybrid transaxle fluid if replacement of the rear differential motor assembly is required. Refer to the inspection in these instructions for details.

- Hybrid Transaxle Fluid (ATF WS)=1.8 liters (1.9 US qts, 1.6 Imp. qts)*
- Toyota Genuine 50/50 Pre-Diluted SLLC = Approximately 1quart*
- Shop Cloth
- Brake Cleaner

NOTE:

- The coolant drained from the radiator must be reused.
- Because some coolant will be lost when disconnecting the hoses by the exhaust pipe, a small amount of coolant will be needed.

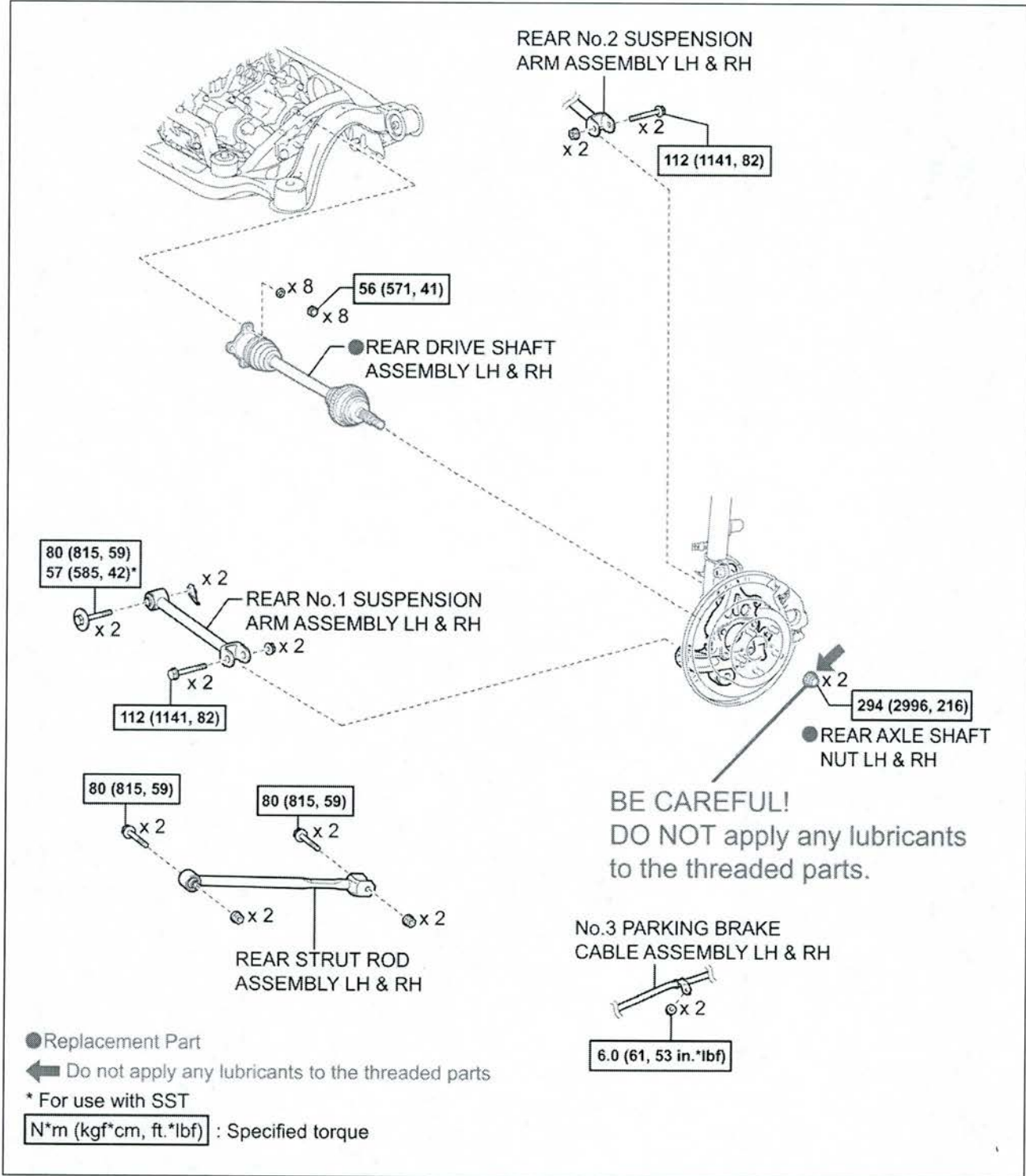
C. TOOLS & EQUIPMENT

- Standard Hand Tools
- Techstream
- Wooden Block
- Protective Eye Wear
- 4 Wheel Alignment machine

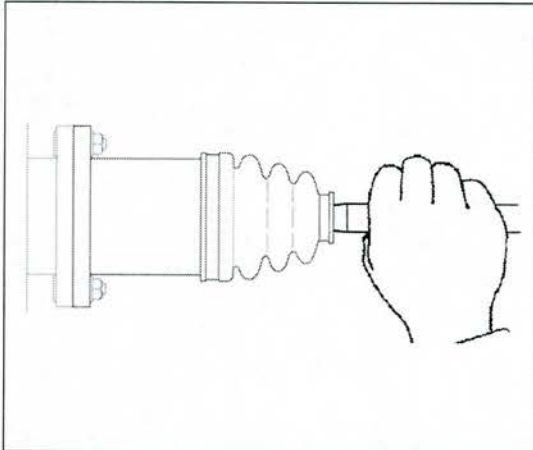
SST – These are essential special service tools that the dealership should have.

Part Number	Part Name	Quantity
00002-03100-S	Electrical Insulating Gloves (Small)	1
00002-03200-M	Electrical Insulating Gloves (Medium)	
00002-03300-L	Electrical Insulating Gloves (Large)	
09930-00010	DriveShaft Nut Chisel	1
09961-00950	Torque Wrench Adaptor	1

V. COMPONENTS



VI. INSPECT THE REAR DRIVESHAFT ASSEMBLY



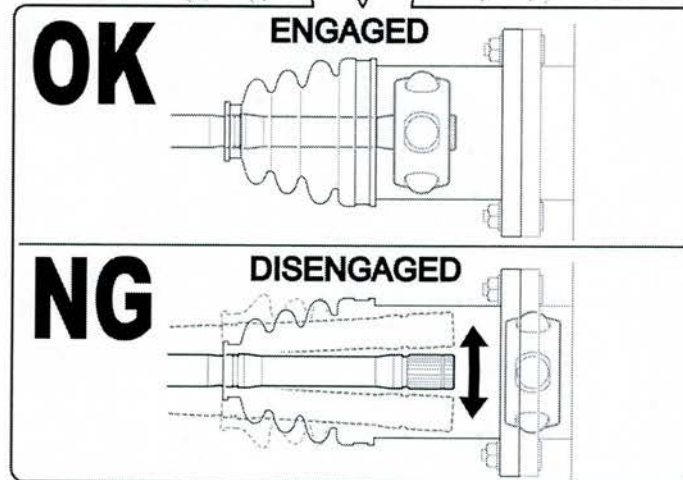
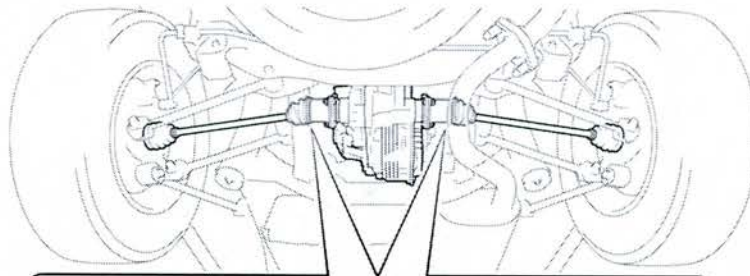
1. INSPECT THE REAR DRIVESHAFT ASSEMBLY FOR DISENGAGEMENT

- a) Approximately one inch from the inner rubber boot, firmly grab the metal portion of the driveshaft.
- b) Move the driveshaft assembly from side to side and up-and-down. If the driveshaft moves excessively, the inner bearing has disengaged from the shaft.

Note: The driveshaft has some slight backlash by design.

- c) Check both driveshafts in the same manner.

NOTE: Disengagement of the driveshaft may cause damage to the inside of the rear differential motor. If either driveshaft is found to be disengaged, replacement of the rear differential motor is required.

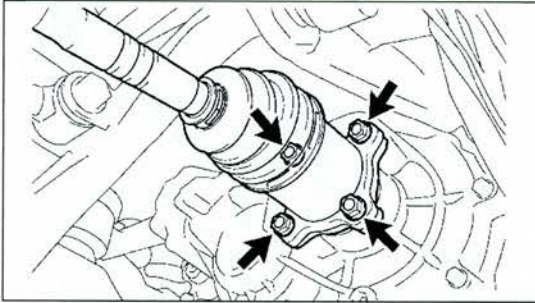


Results	ACTION REQUIRED
BOTH Driveshafts Engaged OK	REPLACE THE REAR DRIVESHAFT ASSEMBLY Both drive shafts must be replaced. Proceed to section VII
One or both shafts disengaged NG	REPLACE THE REAR DIFFERENTIAL MOTOR ASSEMBLY AND REAR DRIVESHAFT ASSEMBLY. The rear differential motor assembly AND both driveshafts must be replaced. Proceed to Section VIII

VII. REPLACE THE REAR DRIVESHAFT ASSEMBLY

STOP

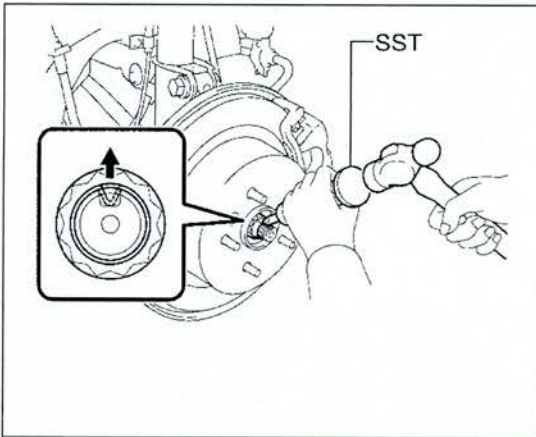
The work procedures are performed on both the right and left sides. These instructions use the left side in explaining the procedures. Always be sure to perform the same procedures on both the left and right sides.



1. LOOSEN THE 4 DRIVE SHAFT NUTS

- a) Loosen the 4 nuts. DO NOT remove them at this time.

NOTE: If the nuts cannot be loosened due to the driveshaft spinning, apply the parking brake to hold the rear tire.

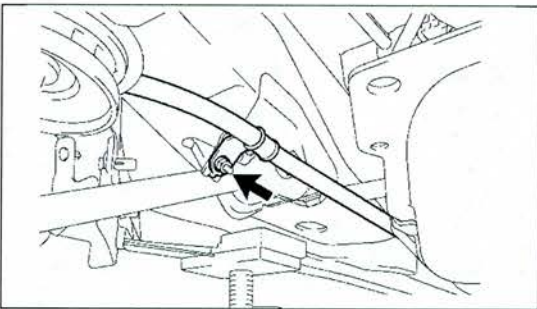


2. REMOVE THE AXLE NUT

- a) Remove the rear wheels.
b) Using the SST and a hammer, release the staked part of the rear axle shaft nut.

SST 09930-00010

- c) While applying the brakes, remove the rear axle shaft nut.
d) Put a mark on the removed nut to identify it cannot be reused.



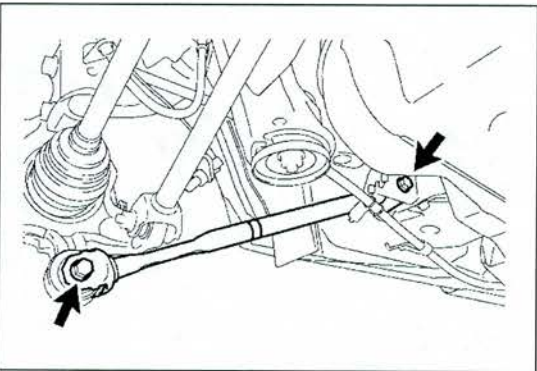
3. REMOVE PARKING BRAKE CABLE AND SUSPENSION COMPONENTS

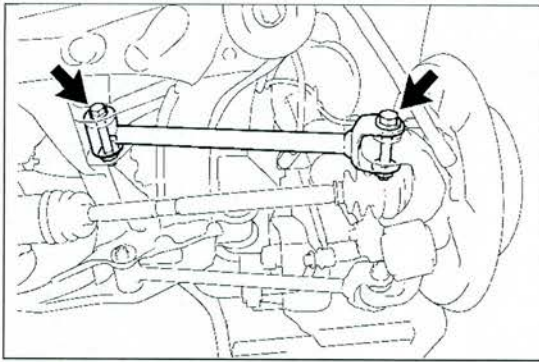
- a) Remove the nut and separate the No.3 parking brake cable assembly.

- b) Remove the 2 bolts, the 2 nuts, and the rear strut rod assembly.

NOTE:

- Since lock nuts are used, loosen the bolts.
- If difficult to remove the bolts, use a wooden block and a jack to slightly lift up the axle carrier and remove the bolts.

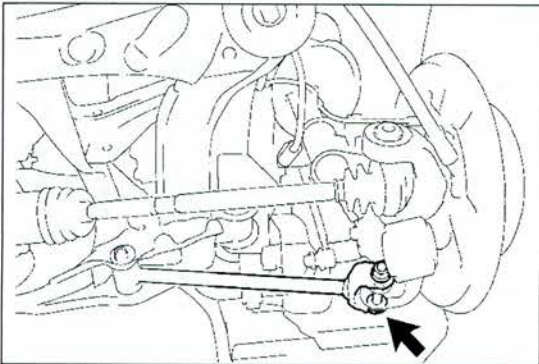




- c) Remove the 2 bolts, the 2 nuts, and the rear No.1 suspension arm assembly.

NOTE:

- Since lock nuts are used, loosen the bolts.
- Before removing the driveshaft, be sure to remove the rear No.1 suspension arm assembly, otherwise it may be damaged by interference with the boot of the axle carrier.

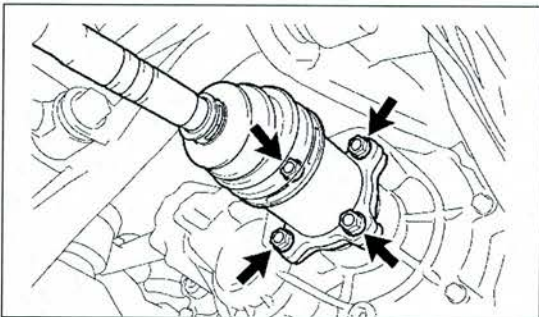


- d) Remove the bolt and the nut, and separate the rear No.2 suspension arm assembly.

NOTE: Since lock nuts are used, loosen the bolts.

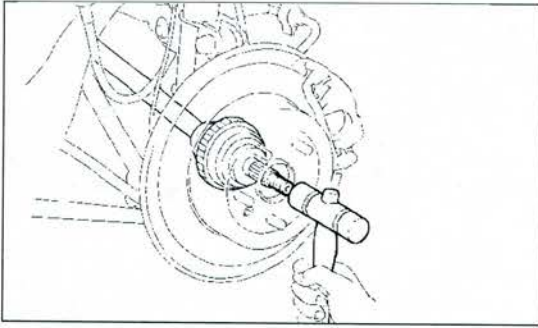


STOP DO NOT allow the rear No.2 suspension arm assembly to strike the boot of the wheel hub assembly as it will damage it.

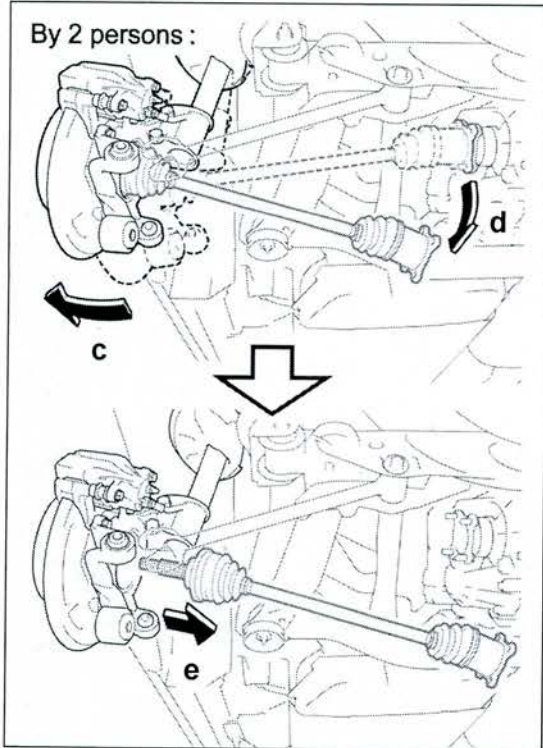


4. REMOVE THE REAR DRIVESHAFT

- a) Remove the 4 nuts and washers.



- b) Using the plastic hammer, disengage the driveshaft.



- c) Move the wheel hub assembly towards the outside of the vehicle and hold it in place.



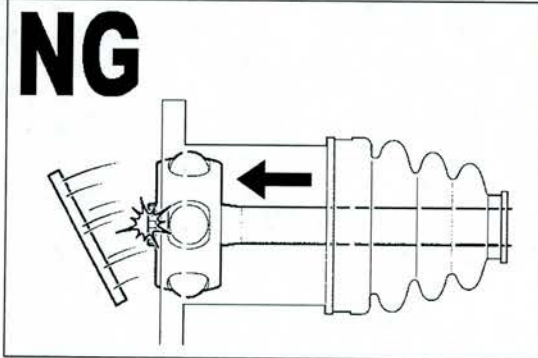
- Move the wheel hub assembly only far enough to allow the inboard side of the axle shaft to be cleanly removed from the motor side flange.
- DO NOT excessively move the wheel hub assembly, as it may stress the upper support of the suspension strut.

- d) Separate the inboard side of the driveshaft, and remove the driveshaft from the wheel hub assembly.

NOTE: Two people may be needed.

- e) Put a mark on the removed driveshaft to identify it cannot be reused.

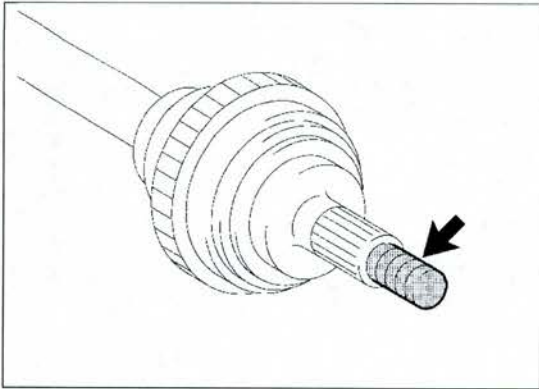
NOTE: The parts return instructions must be followed as 100% of axle shaft will be recovered for this activity.



5. INSTALL THE NEW REAR DRIVESHAFT



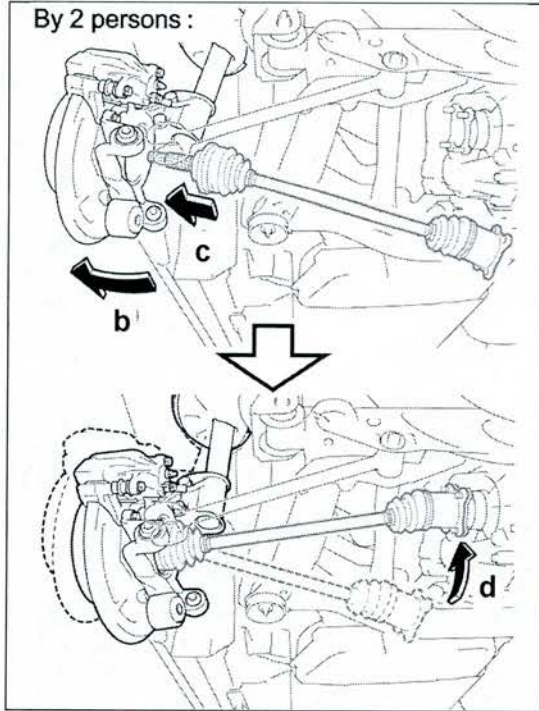
DO NOT apply excessive force to the rear driveshaft to prevent the end cover from being removed.



- a) Using brake cleaner, remove the corrosion inhibitor on the tip of the **NEW** driveshaft.



- The corrosion inhibitor is colorless and transparent.
- If the rear driveshaft is installed without removal of the corrosion inhibitor, it may cause an over-torqued rear axle shaft nut and damage the driveshaft.
- **DO NOT** apply oils or fats after cleaning of the tip.



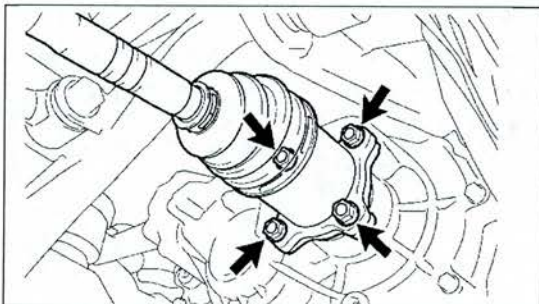
- b) Move the axle carrier towards the outside of the vehicle and hold it in place.
- c) Insert the **NEW** driveshaft into the wheel hub assembly.



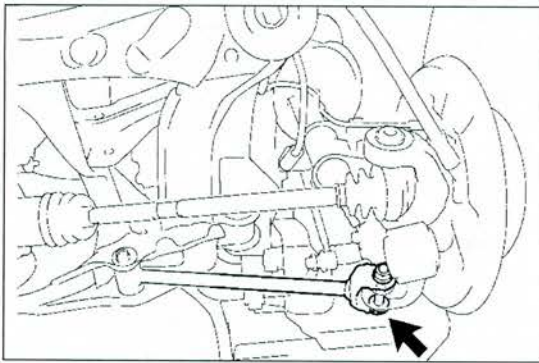
Move the rear wheel hub assembly until the inner driveshaft flange does not interfere with the motor side mounting flange.

- d) Install the inboard side of the driveshaft.

NOTE: Two people may be needed.



- e) Loosely install the 4 nuts and the 4 washers.

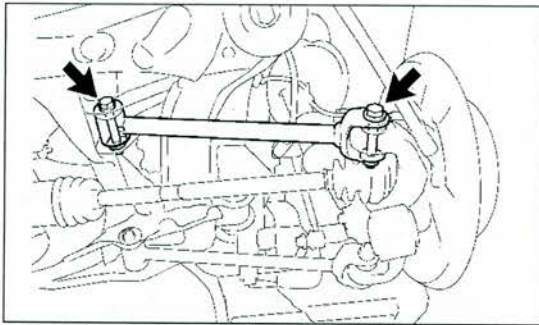


6. INSTALL THE SUSPENSION COMPONENTS AND THE PARKING BRAKE CABLE

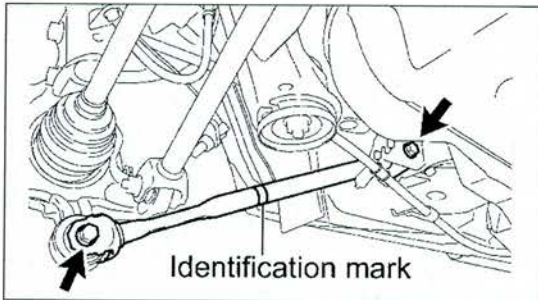
- a) Temporarily install the rear No.2 suspension arm assembly with the bolt and nut.



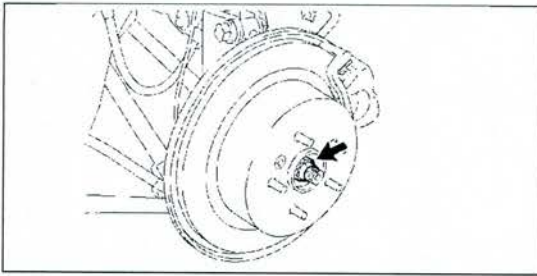
DO NOT allow the rear No.2 suspension arm assembly to strike the boot of the wheel hub assembly as it will damage it.



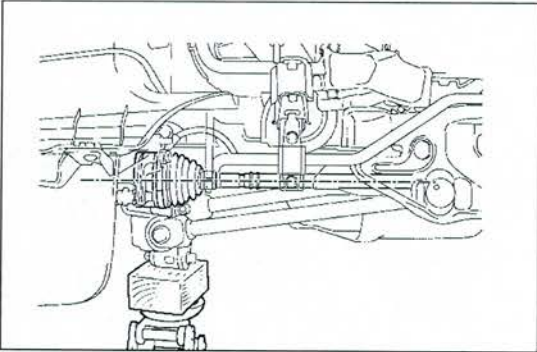
- b) Loosely install the rear No.1 suspension arm assembly with the 2 bolts and the 2 nuts.



- c) Check that the identification mark of the rear strut rod assembly is positioned on the inner side of the vehicle.
- d) Loosely install the rear strut rod assembly with the 2 bolts and the 2 nuts.



7. LOOSELY INSTALL A NEW REAR AXLE SHAFT NUT.



8. JACK UP THE REAR AXLE SUB-ASSEMBLY

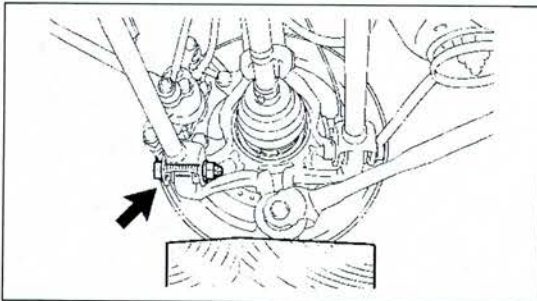
- a) Jack up the rear axle sub-assembly, placing a wooden block underneath to avoid damage. Apply load to the suspension so that the rear driveshaft assembly is positioned horizontally.



- DO NOT jack up the rear axle sub-assembly too high as the vehicle may fall off of the lift.
- DO NOT bend the brake dust cover.

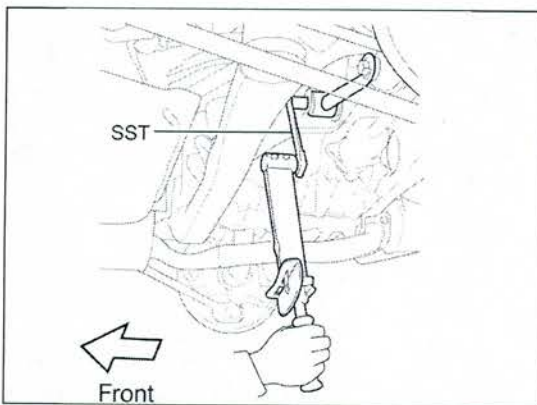
NOTE:

- If the rear driveshaft assembly cannot be positioned horizontally as shown in the illustration even when the rear wheel hub assembly is jacked up, apply additional load to the vehicle such as by having a person sit in the rear seat.
- Use the same procedure for the RH and LH side.



9. TORQUE THE REAR NO. 2 SUSPENSION ARM ASSEMBLY BOLT AND NUT.

Torque: 82 ft. lbf (112 N m)



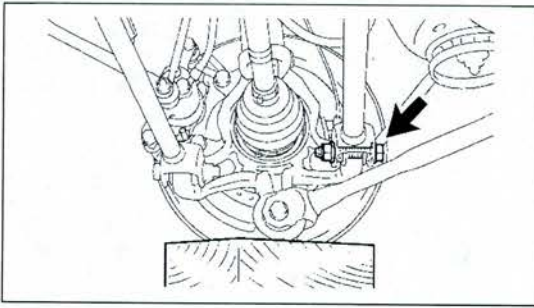
10. TORQUE THE NO. 1 SUSPENSION ARM ASSEMBLY

- a) Using a torque wrench that is 14.96 in (380mm) long with SST 09961-00950, torque the bolt and nut on the inside of the No.1 suspension arm assembly.

Torque:
with SST: 42 ft lbf (57 N m)

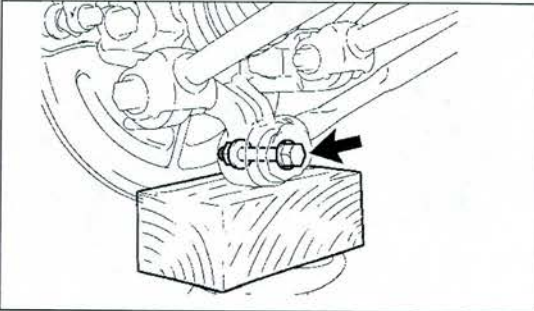


- If you are not using the exact tools described in step b) you must refer to the repair manual for torque specifications. (Link)
- Since a lock nut is used, torque the bolt.
- The final torque must be applied under standard vehicle height conditions.



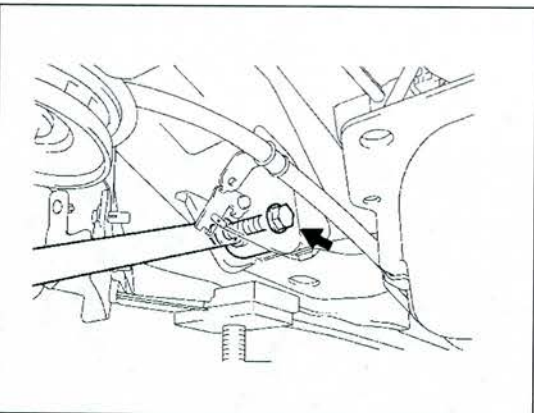
11. Torque the bolt and nut on the outside of the No.1 suspension arm assembly.

Torque: 82 ft lbf(112 N m)



12. Torque the bolt and the rear strut rod assembly.

Torque: 59 ft lbf (80 N m)



13. TORQUE THE BOLT AND THE REAR STRUT ROD ASSEMBLY.

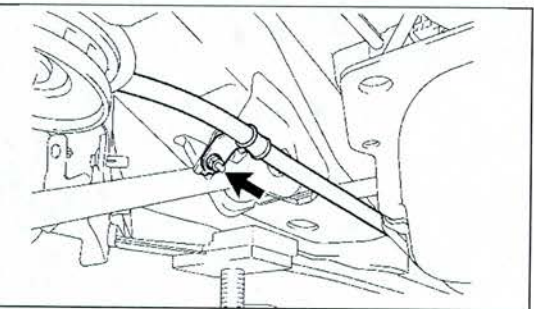
Torque: 59 ft lbf (80 Nm)



NOTE: For steps "k" through "o"

- Since a lock nut is used, tighten the bolt.
- The final torque must be applied under standard vehicle height conditions.

a) Remove the jack and the wooden block.

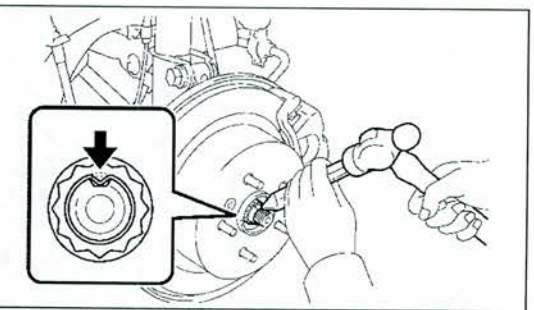


14. REINSTALL THE NO. 3 PARKING BRAKE CABLE ASSEMBLY WITH THE NUT.

Torque: 53 in lbf (6.0 N m)



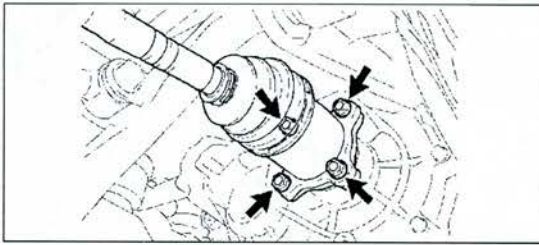
DO NOT twist the No. 3 parking brake cable assembly when installing it.



15. TORQUE THE *NEW* AXLE SHAFT NUT.

Torque: 216 ft lbf (294 N m)

a) Using a chisel and a hammer, stake the rear axle shaft nut.



16. TORQUE THE NEW REAR DRIVESHAFT ASSEMBLY WITH THE 4 NUTS AND 4 WASHERS.

Torque: 41 ft lbf (56 N m)

17. REINSTALL THE REAR WHEEL.

Torque: 76 ft lbf (103 N m)

18. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

- a) Inspect and adjust rear wheel alignment.
Refer to TIS for instructions on inspect and adjust rear wheel alignment.

19. CHECK FOR SPEED SENSOR SIGNAL

- a) Check for speed sensor signal.
Refer to TIS for instructions on check for speed sensor signal.

VIII. REPLACE THE REAR TRACTION W/ TRANSAXLE MOTOR ASSEMBLY AND REAR DRIVESHAFT ASSEMBLY



- When working with or around a high voltage circuit (in which wiring and connectors are orange), wear insulated gloves to prevent electric shock.
- Before working with a high voltage system, disconnect the negative terminal of the auxiliary battery and then the service plug grip. Then leave the vehicle for ten minutes and, after testing to verify that the capacitor has discharged, start working.

1. SAFETY PRECAUTIONS



CRITICAL INFORMATION – READ THOROUGHLY

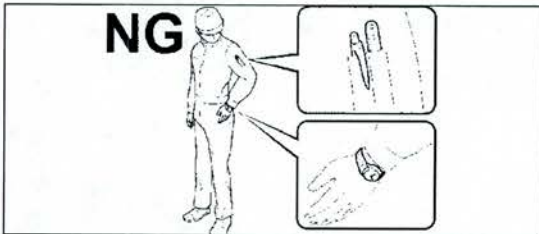


These cautions should be observed when performing this campaign. Failure to follow these cautions could result in injury.



1. PLACE CAUTION SIGN ON ROOF OF VEHICLE

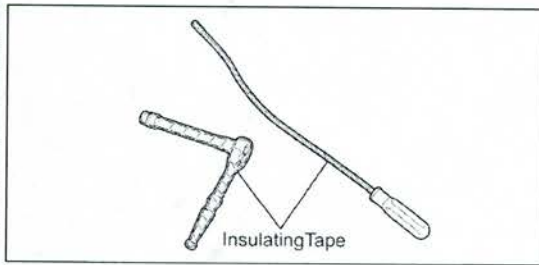
- a) Place the "Working High Voltage Sign" provided on the next page to warn others in the shop area.



2. REMOVE ALL PERSONAL JEWELRY AND BELONGINGS

- a) To prevent shock and short circuits remove all jewelry and personal belongings (i.e. watch, bracelet, pocket screw drivers, etc.)

(Safety Precautions Continued)



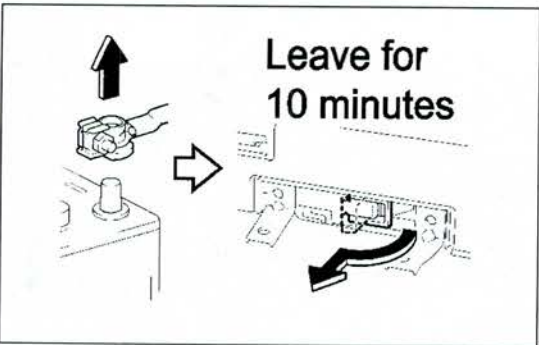
3. USE INSULATED TOOLS OR INSULATE TOOLS

- a) To prevent shock and short circuits use insulated tools. If insulated tools are not available insulate the tools being used with tape.



4. WEAR INSULATED GLOVES (INSULATED GLOVES ARE SSTs)

- a) When working around or with high voltage circuit use insulated gloves.
- b) DO NOT use damaged or wet insulated gloves.
- c) If gloves are dirty, clean them before use as directed by the glove instruction manual.



5. PROPERLY HANDLE SERVICE PLUG

- a) Disconnect the negative terminal of the auxiliary battery and remove the service plug.
- b) Place service plug in your pocket to ensure that it cannot be accidentally reinstalled by another technician.
- c) Wait ten minutes before working on any high voltage system.

Person in charge:

**CAUTION:
HIGH-VOLTAGE
DO NOT TOUCH.**

**CAUTION:
HIGH-VOLTAGE
DO NOT TOUCH.**

Person in charge:

When performing work on the HV system, fold this sign and
put it on the roof of the vehicle.

NOTE:

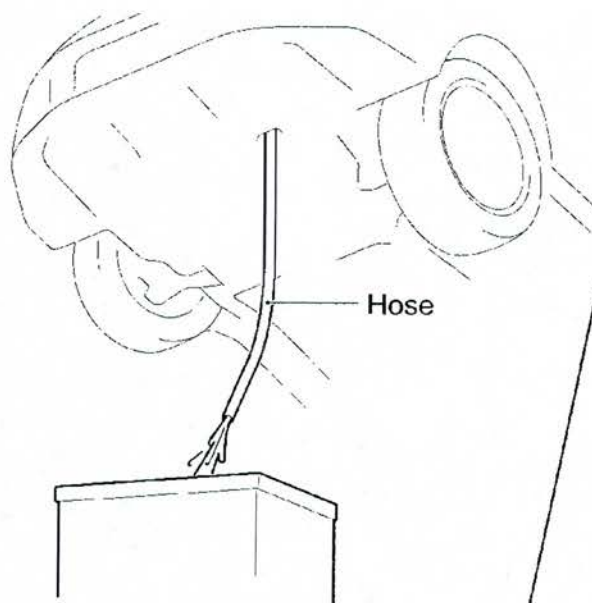
- See step VII. **REPLACE THE REAR DRIVESHAFT ASSEMBLY** for the detachment procedure of the driveshaft.
- **DO NOT** contaminate or damage the O-ring when the No.3 wire cable and extension wire assembly are removed.
- **DO NOT** disconnect the ground cable from a location other than what is shown in the technical instructions; otherwise it will be difficult to remove the rear differential motor assembly. Perform the work according to the procedure.

2. REMOVE THE REAR DIFFERENTIAL MOTOR ASSEMBLY AND REAR DRIVESHAFT ASSEMBLY



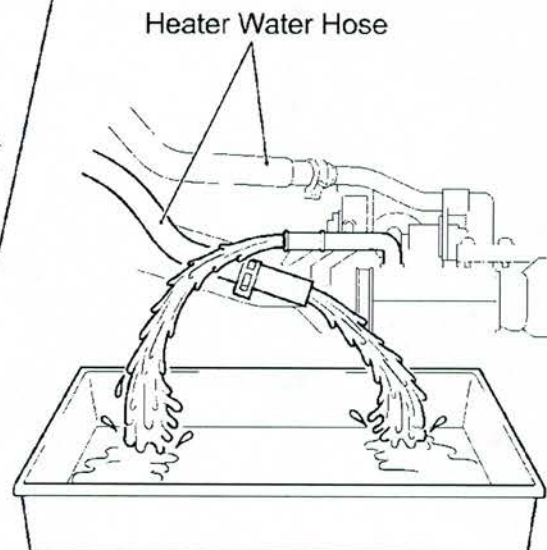
- Confirm the coolant is not hot before beginning any work.
- The coolant drained from the radiator must be reused, confirm that a clean container is used when draining the coolant.
- **DO NOT** reuse any coolant that is drained when disconnecting the coolant hoses by the exhaust gas control actuator, this coolant may be contaminated when drained.
- **DO NOT** mix the coolant drained from the radiator with the coolant drained from the hoses.

Radiator side:



Reusable

Exhaust heat recirculation system side:



Non-reusable

- a) Remove the rear differential motor assembly and rear driveshaft assembly.
Refer to TIS for instructions on rear differential motor assembly removal.

3. INSTALL NEW REAR DIFFERENTIAL MOTOR ASSEMBLY AND NEW REAR DRIVESHAFT ASSEMBLY

- a) Install the rear differential motor assembly and rear driveshaft assembly.
Refer to TIS for instructions on rear differential motor assembly installation.

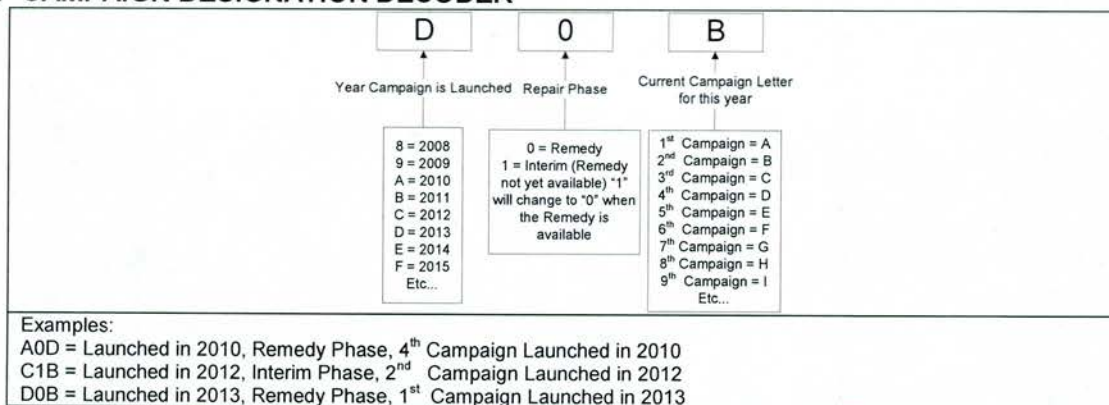
◀ VERIFY REPAIR QUALITY ▶

- Confirm the torque on all lock nuts.
- Confirm the rear axle shaft nut.
- Ensure all nuts and bolts are torqued to the specifications.
- Confirm the 4 nuts and washers are torqued on each inboard side of the driveshaft assemblies.
- Confirm the No. 2 suspension arm assembly bolts and nuts are torqued to specifications.
- Ensure the rear strut road assembly bolts and nuts are torqued (2 on each side).

If you have any questions regarding these technical instructions, please contact your regional representative.

IX. Appendix

A. CAMPAIGN DESIGNATION DECODER



B. CAMPAIGN PARTS RETURN

- a) All parts replaced under this campaign will be on 100% parts recovery. Failure to return the replaced parts will result in an immediate debit.

Wayne Hutchinson / TMS Toyota Customer Services
Product Quality and Service Support, Quality Compliance
September 30, 2013
Approved By: Bob Waltz

To: All Toyota Dealers
From: Product Support Division

**Limited Service Campaign D0N
Certain 2011 – 2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement**

In our continuing efforts to ensure the best in customer satisfaction, Toyota is launching a Limited Service Campaign (LSC) on certain 2011 – 2012 Model Year Highlander Hybrid Vehicles. This LSC will cover approximately 4,000 vehicles.

Background

Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Limited Service Campaign (LSC) Remedy

Authorized Toyota dealerships are requested to inspect and replace the rear Driveshaft Assemblies (both right and left) at **NO CHARGE** to the vehicle's owner. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to the vehicle's owner.

Customer and Media Contacts

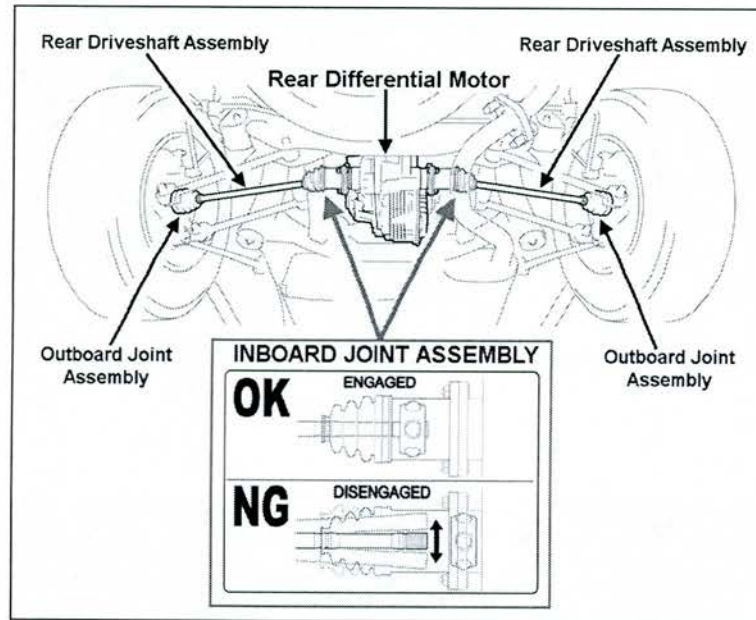
- A FAQ has been attached for your use in the event you receive a customer contact. If a customer has further questions, please direct the inquiry to the Toyota Customer Experience Center at 1-800-331-4331.
- If you are a dealership associate and have any questions, please contact your District Service/Parts Manager.
- ***In the event you are contacted by the News media***, it is imperative that all media contacts (local and national) receive a consistent message. Please direct all media contacts to Cindy Knight (310) 468-2170, in Toyota Corporate Communications. (Please do not provide these numbers to customers or call if you are a dealer associate. Please provide these contacts to only media associates.)



Limited Service Campaign (LSC) – D0N
Certain 2011–2012 Model Year Highlander Hybrid Vehicles
Rear Driveshaft Assembly Replacement – FAQ

Frequently Asked Questions

Published Early October 2013



Q1: What is the condition?

A1: Due to an assembly error during manufacturing, the Rear Driveshaft in certain 2011-2012 Model Year Highlander Hybrid vehicles can disengage from its inboard joint assembly. If this occurs, the driveshaft could vibrate and rattle inside the inboard joint, causing a loud noise from the rear of the vehicle while driving. Continuing to drive the vehicle can damage the housing of the Rear Differential Motor. If the housing is damaged, the entire differential motor would also require replacement.

Q1a: What is a Rear Driveshaft Assembly?

A1a: The Rear Driveshaft Assemblies connect the Rear Differential Motor to the rear wheels. The driveshafts contain inboard and outboard joints that allow the shaft to move with the vehicle suspension. Due to an assembly error, this movement can disengage the driveshaft from the inboard joint assembly.

Q1b: What is a Rear Differential Motor Assembly?

A1b: The Rear Differential Motor is part of the hybrid system. The Rear Differential Motor works together with the gasoline engine and the front electric motors in the following ways:

- *Starting from Stop* – The Rear Differential Motor works together with the front electric motors to propel the vehicle forward.
- *Light Acceleration, Light Load, & Cruising Conditions* – The Rear Differential Motor becomes inert to improve fuel economy.
- *Heavy Acceleration* – The Rear Differential Motor works in tandem with the front electric motors and the gasoline engine to provide the additional power.
- *Reverse* – The Rear Differential Motor works together with the front electric motors to propel the vehicle backward.
- *Decelerating & Braking* – The Rear Differential Motor and a front electric motor are used as a generator to recharge the hybrid battery & reduce the load on the brakes.

Q2: What is the cause of this condition?

A2: During the manufacturing process, there was an error in the equipment used to assemble the Rear Driveshaft Assemblies.

Q3: What is Toyota going to do?

A3: Owners of vehicles covered by this Limited Service Campaign will receive an owner notification letter by first class mail starting in early October 2013.

Any authorized Toyota dealership will inspect and replace the Rear Driveshaft Assemblies (both left and right) at **NO CHARGE** to you. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the Rear Differential Motor assembly will be replaced at **NO CHARGE** to you.

Q3a: What will the inspecting entail?

A3a: Before the Rear Driveshaft Assemblies are removed from the vehicle, a technician will check for excessive driveshaft movement inside the inboard joint assembly.

Q3b: How does Toyota obtain my mailing information?

A3b: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information based upon the DMV records. Please make sure your registration or title information is correct.

Q3c: Do I need my owner letter to have the remedy performed?

A3c: No, you do not need an owner letter to have this LSC completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present the owner notification at the time of your service appointment.

Q4: Are there any symptoms that this condition exists?

A4: Yes, if this condition exists, you will notice an abnormal noise (vibration / rattle) coming from the rear of the vehicle while it is being driven.

Q5: Which and how many vehicles are covered?

A5: There are approximately 4,000 vehicles, certain 2011-2012 Model Year Highlander Hybrid Vehicles, covered in the USA.

Model	Model Year	Production Range	Appx. UIO
Highlander Hybrid	2011 – 2012	Late June, 2011 through mid-March, 2012	4,000

Q6: Are there any other vehicles covered by this Limited Satisfaction Campaign?

A6: No. This specific condition only affects certain 2011-2012 Model Year Highlander Hybrid Vehicles.

Q7: How long will the repair take?

A7: Inspection and replacement of the Rear Driveshaft Assemblies will take approximately 2 hours. If the dealership determines that the driveshaft has disengaged from the inboard joint assembly, the repair will take approximately 12 hours because the Rear Differential Motor will need to be replaced. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

Note: If the Rear Differential Motor requires replacement, a rental vehicle will be provided while your vehicle is being repaired.

Q8: When will this Limited Service Campaign expire?

A8: This Limited Service Campaign will be available until **October 31, 2016**.

Q9: What if you have previously paid for repairs to your vehicle for this specific condition?

A9: Owners who have previously paid for repairs to address this specific condition should refer to the owner letter for instructions regarding reimbursement consideration.

Please note the dealer will need to perform this LSC before reimbursement consideration requests can be processed.

Q10: What if an owner has additional questions?

A10: Owners with questions or concerns are asked to please contact the Toyota Customer Experience Center at 1-888-270-9371 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.