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DP13-001 TOYOTA 7/11/2013 ATTACHMENT RESPONSE 2 COT Dealer Letter T-CP-C0T-A510-D



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: Safety Recall - *C0T Remedy* Notification 2004 to certain 2009 Model Year Prius Vehicles Steering Intermediate Extension Shaft

Updated 1/15/2013: The remedy for Phase 2 vehicles is now available; updates have been highlighted in yellow for your convenience.

As previously announced, on November 14, 2012, Toyota filed a Defect Information Report (DIR), with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall of 2004 to certain 2009 Model Year Prius vehicles.

This communication is to inform you the Remedy for Phase 2* vehicles is now available, and Toyota will begin mailing remedy owner letters to Phase 2 vehicle owners. Phase 2 covers vehicles involved in <u>both</u> COT and COU (Prius Hybrid Electric Water Pump). Please refer to <u>Safety Recall Launch Timing</u> for further information.

*Phase 1 Remedy was launched in December, 2012

Condition for C0T

The steering shaft system of the subject vehicles consists of a steering intermediate shaft assembly, steering sliding yoke sub assembly, and steering intermediate extension shaft assembly. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box may deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed. This may create an increased backlash, and splines may eventually wear out over time, which could result in loss of steering ability, increasing the risk of a crash.

Remedy for C0T

Toyota dealers are requested to perform an inspection of the steering intermediate extension shaft. Based upon the inspection results, the extension shaft may be replaced. The inspection, and, if necessary, replacement of the steering intermediate extension shaft will be performed at **NO CHARGE** to the customer.

The following information is provided to inform you and your staff of the owner notification timing and your degree of involvement.

Safety Recall Remedy Launch Timing:

Phase	Campaign Designation and	Campaign Designation and Remedy Start		Campaigns			
Fliase	Current Status	Date	COT	COU			
1	C0T - Remedy Available	12/11/2012	<				
2	C0T* - Remedy Available	January, 2013	<	-			
*VINs prev	*VINs previously identified under (C2T Interim Phase) are now identified under (C0T Remedy Phase).						

1. Owner Notification Mailing Date

Phase	Designation	Applicable Campaigns	Interim Owner Letter	Remedy Owner Letter
1	COT	СОТ	N/A	Mid-December, 2012
2	СОТ	COT <u>and</u> COU	Mid-December, 2012	Mid-January, 2013

Note: Only owners of the covered vehicles will be notified. If dealers are contacted by owners who have not yet received a notification, please instruct them to *verify eligibility by confirming through Dealer Daily/TIS prior to performing repairs*. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

Phase 1 – Vehicles covered by COT only

• Phase 1 owner notification letters started in mid-December, 2012.

Phase 2 – Vehicles covered by both C0T and C0U

 Toyota has completed remedy preparations for Phase 2 vehicles and will begin mailing the remedy Phase 2 owner notification letter in Mid-January, 2013. Please refer to the table above for overall campaign mailing information timing.

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

2. Used Vehicles in Dealership Inventory (In-Stock Vehicles and Toyota Rent-A-Car (TRAC))

Toyota requests dealers to conduct the remedy on any pre-owned vehicles currently in dealer inventory that are covered by this Safety Recall prior to delivery to the customer.

3. Dealer Summary Reports

C0T Phase 2 Summary Reports, containing the number of covered vehicles in your dealership's primary marketing area, have been enclosed in the dealer package. (Please verify eligibility by confirming through Dealer Daily or TIS prior to performing repairs.)

4. Number and Identification of Covered Vehicles

There are approximately 670,000 Prius (2004 to certain 2009 MY) vehicles covered by Safety Recall C0T for the Steering Intermediate Extension Shaft.

Phase	Campaign Designation and Current Status	Remedy Start Date	Model	Model Year	Production Period	Appx. UIO
1	C0T- Remedy Phase	12/11/2012		2004-	Early August, 2003	320,000
2	C0T* - Remedy Phase	January, 2013	Prius	2004- 2009	through Late March, 2009	350,000
*//// 10 10 10 10	viewely identified under (C2)	T Into vine Dhaga		identified	under (COT Demander D	haaa)

*VINs previously identified under (C2T Interim Phase) are now identified under (C0T Remedy Phase).

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(Number and Identification of Covered Vehicles Continued. . .)

The following VDS breakdown is representative of *Phase 1 and Phase 2* vehicles.

WMI	MY	VDS	START	FINISH
	2004	KB20U	0001086	0116870
	2004	KB22U	0001142	0116845
			0116874	0133248
	2005	KB20U	3000000	3128076
	2005		7003414	7057937
			0116872	0133240
		KB22U	3000008	3128067
			7004342	7057888
JTD		KB20U	3099688	3202428
310	2006		7057941	7545074
	2006	KB22U	3128082	3202418
		ND220	7056471	7544598
	2007	KB20U	3201067	3296439
	2007	ND200	7083497	7694891
	2008	KB20U	<mark>3291973</mark>	<mark>3462539</mark>
	2000		<mark>7690436</mark>	<mark>7818544</mark>
	2009	KB20U	<mark>3458507</mark>	<mark>3546425</mark>
	2003		<mark>7815791</mark>	<mark>7894047</mark>

Please note that **not all vehicles in the VIN range are covered** by this Safety Recall. If a dealer is contacted by an owner who has not yet received the notification, please **verify coverage by confirming** *through Dealer Daily/TIS.* Dealers should perform the procedure as outlined in the Technical Instructions located on TIS.

5. Parts Ordering (Dealer Ordering Solutions)

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

Please refer to the table below and the Technical Instructions for part number ordering information.

Campai	gn	Part Nu	mber	Part Description	n	Quantity
C0T 04001-4 ²		1212	Extension Shaft K	it**	1	
		**The kit	t above ii	ncludes the following parts	3.	
		-	Interr	mediate Extension Shaft	1	
	901	19-08560		Bolt	3	
				pected to require shaft r	•	
pproximat	ely 50%	of vehicle	s are ex	pected to require shaft r	eplaceme	ent.
Campai		Part Nu	mber	Part Description	•	ent. Quantity
			mber		•	
Campai		Part Nu 04002-5	mber 2112	Part Description	n	
Campai	gn	Part Nu 04002-5	mber 2112 t above i	Part Description Bolt Kit***	n	

Each dealer will receive specific dealer ordering criteria in an email from their facing PDC Manager based on Repair Order Volume x 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. A sample of the Parts Allocation Report has been attached below for your reference.

(Parts Ordering (Dealer Ordering Solutions) Continued . . .)

A UIO matrix by state is provided to inform your dealership of the number of covered vehicles in your state. The state breakdown represents <u>Phase 1 and Phase 2</u> vehicles covered by C0T

STATE	UIO	S
AK	1,107	
AL	4,515	
AR	3,652	
AZ	17,201	
CA	175,545	
CO	14,708	
СТ	10,018	
DC	2,381	
DE	1,925	
FL	31,430	
GA	11,451	

STATE	UIO	STAT
HI	3,689	MI
IA	5,061	MN
ID	2,966	MO
IL	22,622	MS
IN	9,249	MT
KS	4,520	NC
KY	4,591	ND
LA	3,331	NE
MA	20,554	NH
MD	16,529	NJ
ME	4,307	NM

TATE	UIO	S
MI	10,699	
MN	12,355	
MO	8,549	
MS	1,895	
MT	2,107	
NC	17,762	
ND	573	
NE	2,221	
NH	4,461	
NJ	14,901	
NM	4,859	

TATE

NV

NY

OH

OK

OR

PA RI

SC

SD

<u>TN</u> TX UIO

5,122

29,301

15,397

4,013

17,082 21,583

2,376

5,513

32,883

984 7,438

STATE	UIO
UT	5,309
VA	23,705
VT	3,094
WA	27,035
WI	12,439
WV	1,794
WY	905

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 will be 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. Note: Chemicals, such as Grease, are not eligible for the Monthly Parts Return Program.

6. Remedy Procedures

Please refer to TIS for Technical Instructions on vehicle repair.

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

7. Warranty Reimbursement Procedure



The operation codes to be used for this campaign are:

Model	Op. Code	Description	Flat Rate Hour
	2510LA	Perform Inspection, Steering Extension Shaft OK, Replace Bolt	0.7 hr/vehicle
Prius	2510LB	Perform Inspection, Replace Steering Extension Shaft and 3 Bolts	0.9 hr/vehicle
	2510LC	Perform Inspection, Replace Steering Extension Shaft and 3 Bolts, and Adjust Steering Wheel Off Center Condition	1.2 hr/vehicle

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

The cost of the non-reusable bolt can be claimed under Op. Code 2510LA under sublet type "ZZ" at a
maximum amount of \$1.02 per vehicle.

Campaign Designation Decoder



8. 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.

9. 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 Brian Lyons (310) 468-2552 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

10. Customer Contacts

A Q&A is attached to help dealerships respond to any customer concerns. If the customer has any further questions, they are requested to contact the Toyota Customer Experience Center. The Toyota Customer Experience Center can be reached 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.

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 Safety Recall.

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

ΤΟΥΟΤΑ

Safety Recall C0T Remedy Certain 2004 through 2009 Model Year Prius Vehicles Steering Intermediate Extension Shaft

Q1: What is the condition?

A1: The steering shaft system of the subject vehicles consists of a steering intermediate shaft assembly, steering sliding yoke sub assembly, and steering intermediate extension shaft assembly. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box may deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed. This may create an increased backlash, and splines may eventually wear out over time, which could result in loss of steering ability, increasing the risk of a crash.

Q2: What is the Steering Intermediate Extension Shaft?

A2: The Steering Intermediate Extension Shaft is a mechanical link between the steering wheel and steering gear box.

Q3: Are there any warnings that this condition exists?

A3: No. There are no warnings that this condition exists.

Q4: What is Toyota going to do?

A4: Any authorized Toyota dealer will perform the remedy, which will entail an inspection of the steering intermediate extension shaft. Based upon the inspection results, the extension shaft may be replaced. The inspection and, if necessary, replacement will be performed at **NO CHARGE** to the vehicle owner.

This Safety Recall has been separated into two phases. Phase 1 covers vehicles only involved in Safety Recall COT on the Prius Steering Intermediate Extension Shaft. <u>Phase 2</u> covers vehicles involved in <u>both</u> COT and COU (Prius Hybrid Electric Water Pump).

Q4a: What are the details of the different phase?

Phase	Designation	Applicable Campaigns	Interim Owner Letter	Remedy Owner Letter
1	COT	СОТ	N/A	Mid-December, 2012
2	СОТ	COT <u>and</u> COU	Mid-December, 2012	Mid-January, 2013

Phase 1 – Vehicles covered by C0T only

• Phase 1 owner notification letters started in mid-December, 2012.

Phase 2 – Vehicles covered by both C0T and C0U

 Toyota has completed remedy preparations for Phase 2 vehicles and will begin mailing the remedy Phase 2 owner notification letter in Mid-January, 2013. Please refer to the table above for overall campaign mailing information timing.

<u>Q4b:</u> Will all of the Steering Intermediate Extension Shafts require replacement?

A4b: No. Only the extension shafts from one supplier will require replacement. Therefore, approximately one half of the vehicles will require the extension shaft to be replaced.

Q5: Which and how many vehicles are covered by this Safety Recall?

A5: There are approximately 670,000 Prius (2004 through certain 2009 Model Year) vehicles covered by this Safety Recall.

Phase	Campaign Designation and Current Status	Remedy Start Date	Model	Model Year	Production Period	Appx. UIO				
1	COT- Remedy Phase	12/11/2012			Early August,	320,000				
2	C0T* - Remedy Phase	January, 2013	Prius	2004-2009	2003 through Late March, 2009	350,000				
*VINs pre	VINs previously identified under (C2T Interim Phase) are now identified under (C0T Remedy Phase).									

Q5a: Are there any other Toyota or Lexus models covered by this Safety Recall?

A5a: No, this condition only affects some 2004 through certain 2009 model year Prius vehicles.

Q5b: Why are other vehicles not covered by this Safety Recall?

A5b: Other vehicles have an extension shaft of sufficient hardness.

Q6: How long will the repair take?

A6: The repair will take approximately 1 hour. However, it may be necessary to make the vehicle available for a longer period of time depending upon the dealer's work schedule.

<u>Q7:</u> What is the difference between this Safety Recall and Safety Recall 60C which was previously <u>announced?</u>

A7: The previous Safety Recall 60C addressed concerns with weld quality of the intermediate shaft as well as an inspection to verify correct installation of the extension shaft during the manufacturing process.

The new Safety Recall C0T is due to insufficient hardness of the extension shaft supplied by a specific supplier.

<u>Q7a:</u> If the vehicle had Safety Recall (60C) previously performed, will the customer need to have <u>Safety Recall COT performed as well?</u>

A7a: Yes. The dealer will still need to perform the inspection to determine if the extension shaft requires replacement under Safety Recall C0T. We apologize for any inconvenience, but once the remedy is available, the owner should contact his/her authorized Toyota dealer to have the extension shaft inspected and if necessary replaced at **NO CHARGE**.

Q8: What if an owner has previously paid for repairs for this condition?

A8: Owner reimbursement instructions will be provided in the remedy owner letter.

Q9: What if an owner has additional questions or concerns?

A9: 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 Standard Time.

ΤΟΥΟΤΑ

Toyota Motor Sales, U.S.A., Inc. 19001 South Western Avenue P.O. Box 2991 Torrance, CA 90509-2991

URGENT SAFETY RECALL

This is an important Safety Recall. The remedy will be performed at **NO CHARGE** to you.

2004 to certain 2009 Model Year Prius Vehicles C0T – Steering Intermediate Extension Shaft SAFETY RECALL NOTICE (*Remedy Available*)

[VIN]

Dear Toyota Customer:

This notice is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Toyota has decided that a defect, which relates to motor vehicle safety, exists in some 2004 to certain 2009 Model Year Prius vehicles.

What is the condition?

The steering intermediate extension shaft ("extension shaft") is a component of the steering assembly and connects the steering column to the steering rack. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box could deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed, such as parking in a tight parking space. The splines could eventually wear out over time, which could result in loss of steering ability, increasing the risk of a crash.

What will Toyota do?

The remedy for your vehicle is available. Any authorized Toyota dealer will perform an inspection of the steering intermediate extension shaft. If the shaft is one supplied with insufficient hardness, it will be replaced. The inspection and, if necessary, replacement of the steering intermediate extension shaft will be performed at NO CHARGE to you.

What should you do?

This is an important Safety Recall

Please contact any authorized Toyota dealer and make an appointment to have the remedy performed as soon as possible.

The inspection and, if necessary, replacement of the steering intermediate extension shaft will take approximately 1 hour. However, depending upon the dealer's work schedule, it may be necessary to make your vehicle available for a longer period of time.

You do not need an owner letter to have this recall completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present this notice at the time of your service appointment.

If you would like to update your vehicle ownership or contact information, you may do so by registering at <u>www.toyota.com/ownersupdate</u>. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information.

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
 <u>www.toyota.com/recall</u>.
- Additional information is also available by contacting 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.

If you believe that the dealer or Toyota has failed or is unable to remedy the defect within a reasonable time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue S.E., Washington, D.C. 20590, or call the toll free Vehicle Safety Hot Line at 1-888-327-4236 (TTY: 1-800-424-9153), or go to www.safercar.gov.

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

If you have previously paid for 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, WC10, 19001 South Western Avenue, Torrance, CA 90509

Include your name, address, and telephone number(s) in your request. Please allow us 6-8 weeks to process your request. If you are a vehicle lessor, Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

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, U.S.A., INC.

Spanish translation on back side Traducción en español en el reverso DP13-001 TOYOTA 7/11/2013 ATTACHMENT RESPONSE 2 C0T Technical Instruction T-CP-C0T-A510-D

TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL COT

STEERING INTERMEDIATE EXTENSION SHAFT 2004 – CERTAIN 2009 MODEL YEAR PRIUS



II. IDENTIFICATION OF AFFECTED VEHICLES

A. COVERED VIN RANGE

WMI	Year	VIN Range				
VVIVII	Tear	VDS	Range			
	2004	KB20U	0001086-0116870			
	2004	KB22U	0001142-0116845			
			0116874-0133248			
		KB20U	300000-3128076			
	2005		7003414-7057937			
	2005		0116872-0133240			
		KB22U	300008-3128067			
			7004342-7057888			
JTD	2006	KB20U	3099688-3202428			
JID		KB200	7057941-7545074			
		KB22U	3128082-3202418			
		KB22U	7056471-7544598			
	2007	KB20U	3201067-3296439			
	2007	KB200	7083497-7694891			
	2008	KB20U	3291973-3462539			
	2000	ND200	7690436-7818544			
	2009	KB20U	3458507-3546425			
	2009	NB200	7815791-7894047			

NOTE:

• Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, 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.

III. PREPARATION

A. PARTS

	Part Number	Quantity					
	04001-41212	1					
	*The kit above includes the following parts.						
ſ	-	Intermediate Extension Shaft	1				
ſ	90119-08560	Bolt	3				

Approximately 50% of vehicles are expected to require shaft replacement.

Part Number	Part Number Part Description						
04002-52112	002-52112 Bolt Kit*						
*The kit above includes the following parts.							
90119-0856	0 Bolt	10					
90119-0850	U BOIL	10					

Approximately 50% of vehicles are expected to require the replacement of one bolt *ONLY*. Note that this kit includes 10 bolts and will therefore remedy 10 vehicles.

B. TOOLS & EQUIPMENT

- Standard hand tools
- Torque wrench
- Protective tape
- Marking pen

Campaign Tools – These tools are provided to the dealership.



NOTE: These tools *CANNOT* be ordered through the parts or tools system. If additional tools are needed, contact your regional representative.

IV. BACKGROUND

The steering shaft system of the subject vehicles consists of a steering intermediate shaft assembly, steering sliding yoke sub assembly, and steering intermediate extension shaft assembly. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box may deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed. This may create an increased backlash, and splines may eventually wear out over time, which could result in loss of steering ability.

V. COMPONENTS



VI. EXTENSION SHAFT INSPECTION



1. REMOVE THE FLOOR MAT

- 2. REMOVE THE COLUMN HOLE COVER SILENCER SHEET
 - a) Fold back the floor carpet.
 - b) Remove the two clips and the silencer sheet.



DISENGAGE THE No.1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY

- c) Disengage the clip.
- d) Disengage the claw and the hole cover.

STOP The silencer sheet *MUST* be removed and the hole cover *MUST* be disengaged, otherwise the cover may be damaged during the inspection.

- 2. LIFT THE VEHICLE NOTE: It may be necessary to turn the wheels; therefore, lift the vehicle in a way that does not interfere with the wheels.
- 3. REMOVE THE No.3 ENGINE UNDER COVER
 - a) Remove the 3 nuts and the under cover.

4. INSTALL THE HOLDING TOOL

- a) Lift the column hole cover using the supplied lift-up tool.
- b) Install the supplied holding tool.

NOTE:

- Wrap the lift-up tool with protective tape to avoid damaging the stabilizer bar.
- DO NOT use any tool other than the campaign tool to lift the column hole cover or the cover may be damaged.
- Pay attention to the position of the lift-up tool to avoid putting pressure on the extention shaft.





NOTE: The new shaft in the kit (04001-41212) is manufactured with a countersink. *DO NOT* mix the old and new shaft.

VII. EXTENSION SHAFT & BOLT REPLACEMENT







- 14. CONFIRM THE STEERING WHEEL AND THE WHEELS ARE POINTED STRAIGHT AHEAD
- 15. SECURE THE STEERING WHEEL IN THE STRAIGHT AHEAD POSITION

a) Use the seat belt to secure the steering wheel.

NOTE:

- **DO NOT** damage the steering wheel.
- If the steering wheel is not secured, the spiral cable may be damaged.

16. LOWER THE VEHICLE SO THE WHEELS ARE ON THE GROUND

a) Confirm the steering wheel is still centered.

NOTE: The shaft *MUST* be exchanged while the wheels are on the ground to prevent the gear from becoming misaligned.

17. REMOVE THE STEERING SLIDING YOKE SUB-ASSEMBLY

- a) Remove the upper yoke bolt and the sliding yoke.
- b) Mark the bolt so it is not reused.

STOP After removing the shaft and yoke, *DO NOT* do anything that will cause the wheels to move, this may change the alignment of the steering wheel.





20. LOOSELY INSTALL THE SLIDING YOKE SUB-ASSEMBLY

- a) Install the upper end of the yoke.
- b) Confirm the steering wheel is still centered.

NOTE:

- The yoke can only be installed in one position.
- The yoke cannot be installed upside down because the shaft sizes are different.
- c) Fully install the lower end of the yoke and loosely install a *NEW* bolt.
- d) Loosely tighten the two bolts following the sequence in the illustration.

- 21. RELEASE THE STEERING WHEEL
 - a) Disconnect the seat belt to release the steering wheel.
- 22. LIFT UP THE VEHICLE

23. INSTALL THE COVER HOLDING TOOL USING THE COVER LIFT-UP TOOL

STOP NOTE: Perform steps 24-28 and 36-37 if the shaft inspection is OK and only 1 bolt is being replaced. There is *NO NEED* to perform the other steps in SECTION VII. as they relate to shaft replacement.

24. INSTALL THE EXTENSION SHAFT BOLT

a) Grab the shaft and hole cover together and pull down to confirm the shaft is fully seated.









34. REINSTALL THE FLOOR MAT

35. INSPECT THE STEERING COLUMN TILT FUNCTION FOR PROPER OPERATION

STOP

NOTE: Perform steps 24-28 and 36-37 if the shaft inspection is OK and only 1 bolt is being replaced. There is *NO NEED* to perform the other steps in SECTION VII. as they relate to shaft replacement.

36. TURN THE STEERING WHEEL FROM LOCK TO LOCK TO INSPECT FOR PROPER OPERATION AND FEEL

a) Check for rough movement and abnormal noise.

37. TEST DRIVE THE VEHICLE

38. ADJUST THE STEERING WHEEL CENTER POSITION IF NEEDED

a) If needed, adjust toe to align the steering wheel correctly.

NOTE:

- There is *NO NEED* to adjust toe if the shaft is not replaced.
- Because the extension shaft has been replaced, the steering wheel may be off center due to slight variations in the extension shaft.
- 39. RETURN THE STEERING WHEEL AND SEAT TO THEIR ORIGINAL POSITIONS

◄ VERIFY REPAIR QUALITY ►

- Be sure to remove the bolt to inspect the extension shaft bolt hole for countersink
- Confirm NEW bolt(s) are used when reassembling the vehicle
- Confirm ALL inspection and bolt tightening steps are performed exactly as described
- Confirm the steering wheel is centered before returning the vehicle to the customer

If you have any questions regarding this update, please contact your regional representative.

VIII. APPENDIX

A. CAMPAIGN DESIGNATION DECODER



B. CAMPAIGN PARTS DISPOSAL

As required by Federal Regulations, please make sure all campaign parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, **unless requested for parts recovery return.**

DP13-001 TOYOTA 7/11/2013 ATTACHMENT RESPONSE 2 Safety Recall COT (C2T - Phase 2) Dealer Letter T-CP-C2T-A11

ΤΟΥΟΤΑ

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: Safety Recall - COT Phase 1 Remedy Notification C2T Phase 2 Interim Notification 2004 to certain 2009 Model Year Prius Vehicles

Steering Intermediate Extension Shaft

As previously announced, on November 14, 2012, Toyota filed a Defect Information Report (DIR), with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety Recall of 2004 to certain 2009 Model Year Prius vehicles.

This Safety Recall will be separated into two phases. Phase 1 will cover vehicles only involved in Safety Recall C0T for the Prius Steering Intermediate Extension Shaft. <u>Phase 2</u> will cover vehicles involved in <u>both</u> C0T and C0U (Prius Hybrid Electric Water Pump). Toyota is currently preparing the remedy for C0U. *Please refer to <u>Safety Recall Launch Timing</u> for further information.*

Condition for COT

The steering shaft system of the subject vehicles consists of a steering intermediate shaft assembly, steering sliding yoke sub assembly, and steering intermediate extension shaft assembly. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box may deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed. This may create an increased backlash, and splines may eventually wear out over time, which could result in loss of steering ability, increasing the risk of a crash.

Remedy for C0T

Toyota dealers are requested to perform an inspection of the steering intermediate extension shaft. Based upon the inspection results, the extension shaft may be replaced. The inspection, and, if necessary, replacement of the steering intermediate extension shaft will be performed at **NO CHARGE** to the customer.

The following information is provided to inform you and your staff of the owner notification timing and your degree of involvement.

Safety Recall Remedy Launch Timing:

Phase	Campaign Designation and	Remedy Start	Applicable Campaigns			
Fliase	Current Status	Date	C0T	COU		
1	COT - Remedy Available	12/11/2012	1			
2	C2T* - Interim Phase	January, 2013	>	-		

*C2T will change to C0T at the time Phase 2 is launched.

1. Owner Notification Mailing Date

Phase	Designation	Applicable Campaigns	Interim Owner Letter	Remedy Owner Letter
1	COT	СОТ	N/A	Mid-December, 2012
2	C2T	C0T <u>and</u> C0U	Mid-December, 2012	January, 2013

Note: 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 Dealer Daily/TIS prior to performing repairs**. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

Phase 1 – Vehicles covered by C0T only

 Toyota has completed remedy preparations for Phase 1 vehicles and will begin to notify owners in mid-December, 2012.

Phase 2 – Vehicles covered by both C0T and C0U

- These vehicles are designated C2T in TIS and are covered by both Safety Recall COT and COU.
- Toyota is currently making preparations for C0U. However, as required by NHTSA, in mid-December, 2012, Toyota will be mailing an interim owner letter to vehicle owners covered in Phase 2.
- The Interim Owner Notification Letter will advise owners of (1) this safety recall, (2) the fact they will receive a future notice once the remedy is available.

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

2. Interim Customer Handling

If you are contacted by a customer whose vehicle is exhibiting the condition or prefers not to wait for Phase 2, please assist the customer by setting up an appointment to have the remedy performed. The dealer must inform the customer they will need to return at a later date once the remedy for Safety Recall C0U Hybrid Electric Water Pump is available.

3. Used Vehicles in Dealership Inventory (In-Stock Vehicles and Toyota Rent-A-Car (TRAC))

Toyota requests dealers to conduct the remedy on any pre-owned vehicles currently in dealer inventory that are covered by Safety Recall COT prior to delivery to the customer. If the vehicle is included in Phase 2, we ask the dealer's patience in holding the claim until Phase 2 is launched in early January, 2013.

4. Dealer Summary Reports

Summary Reports, containing the number of covered vehicles in your dealership's primary marketing area, have been enclosed in the dealer package. (Please verify eligibility by confirming through Dealer Daily or TIS prior to performing repairs.)

5. Number and Identification of Covered Vehicles

There are approximately 670,000 Prius (2004 to certain 2009 MY) vehicles covered by Safety Recall C0T for the Steering Intermediate Extension Shaft.

Phase	Campaign Designation and Current Status	Remedy Start Date	Model	Model Year	Production Period	Appx. UIO	
1	COT- Remedy Phase	12/11/2012		2004-	Early August, 2003	320,000	
2	C2T* -Interim Phase	January, 2013	Prius	2004- 2009	through Late March, 2009	350,000	

*C2T will change to C0T in Phase 2 when the remedy is launched.

(Number and Identification of Vehicles Continued. . .)

The following VDS breakdown is representative of Phase 1 vehicles only; the table will be updated at the launch of Phase 2.

Model	WMI	MY	VDS	START	FINISH
		2004	KB20U	0001086	0116870
		2004	KB22U	0001142	0116845
				0116874	0133248
	JTD		KB20U	3000000	3128076
		2005		7003414	7057937
			KB22U	0116872	0133240
Prius				3000008	3128067
Phus				7004342	7057888
			KB20U	3099688	3202428
		2006	ND200	7057941	7545074
		2000	KB22U	3128082	3202418
			ND220	7056471	7544598
		2007	KB20U	3201067	3296439
		2007	ND200	7083497	7694891

Please note that **not all vehicles in the VIN range are covered** by this Safety Recall. If a dealer is contacted by an owner who has not yet received the notification, please **verify coverage by confirming** *through Dealer Daily/TIS.* Dealers should perform the procedure as outlined in the Technical Instructions located on TIS.

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	1,101	HI	791	MI	10,697	NV	5,107	UT	5,298
AL	4,510	IA	5,058	MN	12,352	NY	29,296	VA	23,686
AR	3,650	ID	2,963	MO	8,547	OH	15,395	VT	3,093
AZ	17,192	IL	22,619	MS	1,893	OK	4,008	WA	26,992
CA	175,408	IN	9,246	MT	2,106	OR	17,054	WI	12,435
CO	14,686	KS	4,518	NC	17,752	PA	21,578	WV	1,794
СТ	10,015	KY	4,591	ND	573	RI	2,373	WY	905
DC	2,381	LA	3,329	NE	2,220	SC	5,508		
DE	1,925	MA	20,547	NH	4,460	SD	983		
FL	31,397	MD	16,519	NJ	14,898	TN	7,433		
GA	11,445	ME	4,305	NM	4,856	TX	32,851		

6. Parts Ordering (Dealer Ordering Solutions)

Campaign			
Campaign	Part Number	Part Description	Quantity
COT	04001-41212	Extension Shaft Kit**	1
		nediate Extension Shaft 1	
		nediate Extension Shaft 1	
901	119-08560	Bolt 3	}
oproximately 50 Campaign	% of vehicles are ex	Dected to require shaft replace Part Description	ment.
COT	04002-52112	Bolt Kit***	1
	***The kit above i	ncludes the following parts. Bolt 10	

Each dealer will receive specific dealer ordering criteria in an email from their facing PDC Manager based on Repair Order Volume x 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. A sample of the Parts Allocation Report has been attached below for your reference.

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 intransit 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 qu John Q Sample at (contact you	r facing PDC (Customer Sup	port Leader,			
Part Number	Total Allocation Quantity	Allocation Quantity	Allocation Frequency	Total Allocation Shipped	Total Allocation Remaining	Effective Date			

IMPORTANT PARTS ORDERING UPDATE

Effective January 1, 2012, All Safety Recall, Service Campaign (SSC/LSC) and Customer Support Program (CSP) parts will be 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.

Note: Chemicals, such as Grease, are not eligible for the Monthly Parts Return Program.

7. <u>Remedy Procedures</u>

Please refer to TIS for Technical Instructions on vehicle repair.

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

8. Warranty Reimbursement Procedure



The operation codes to be used for this campaign are:

Model	Op. Code	Description	Flat Rate Hour
	2510LA	Perform Inspection, Steering Extension Shaft OK, Replace Bolt	0.7 hr/vehicle
Prius	2510LB	Perform Inspection, Replace Steering Extension Shaft and 3 Bolts	0.9 hr/vehicle
	2510LC	Perform Inspection, Replace Steering Extension Shaft and 3 Bolts, and Adjust Steering Wheel Off Center Condition	1.2 hr/vehicle

- The above operation codes include 0.1 hour for administrative cost per unit for the dealership.
- The cost of the non-reusable bolt can be claimed under op code 2510LA under sublet type "ZZ" at a
 maximum amount of \$1.02 per vehicle.

Campaign Designation Decoder



9. 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.

10. 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 Brian Lyons (310) 468-2552 in Toyota Corporate Communications. (Please do not provide this number to customers. Please provide this contact to only media associates.)

11. Customer Contacts

A Q&A is attached to help dealerships respond to any customer concerns. If the customer has any further questions, they are requested to contact the Scion Customer Experience Center. The Scion Customer Experience Center can be reached at 1-866-707-2466 Monday through Friday, 5:00 am to 6:00 pm, or Saturday 7:00 am through 4:00 pm Pacific Time.

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 Safety Recall.

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

ΤΟΥΟΤΑ

Safety Recall C0T & (C2T) Certain 2004 through 2009 Model Year Prius Vehicles Steering Intermediate Extension Shaft

Q1: What is the condition?

A1: The steering shaft system of the subject vehicles consists of a steering intermediate shaft assembly, steering sliding yoke sub assembly, and steering intermediate extension shaft assembly. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box may deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed. This may create an increased backlash, and splines may eventually wear out over time, which could result in loss of steering ability, increasing the risk of a crash.

Q2: What is the Steering Intermediate Extension Shaft?

A2: The Steering Intermediate Extension Shaft is a mechanical link between the steering wheel and steering gear box.

Q3: Are there any warnings that this condition exists?

A3: No. There are no warnings that this condition exists.

Q4: What is Toyota going to do?

A4: This Safety Recall will be separated into two phases. Phase 1 will cover vehicles only involved in Safety Recall C0T on the Prius Steering Intermediate Extension Shaft. <u>Phase 2</u> will cover vehicles involved in <u>both</u> C0T and C0U (Prius Hybrid Electric Water Pump). Toyota is currently preparing the remedy for C0U.

Any authorized Toyota dealer will perform the remedy, which will entail an inspection of the steering intermediate extension shaft. Based upon the inspection results, the extension shaft may be replaced. The inspection and, if necessary, replacement will be performed at **NO CHARGE** to the vehicle owner.

Q4a: What are the details of the different phase?

Phase	Designation	Applicable Campaigns	Interim Owner Letter	Remedy Owner Letter	
1	COT	СОТ	N/A	Mid-December, 2012	
2	C2T	C0T <u>and</u> C0U	Mid-December, 2012	January, 2013	

Phase 1 – Vehicles covered by C0T only

 Toyota has completed remedy preparations for Phase 1 vehicles and will begin to notify owners in mid-December, 2012. Any authorized Toyota dealer will complete the remedy at NO CHARGE to the vehicle owner.

Phase 2 – Vehicles covered by both C0T and C0U

- These vehicles are designated C2T in TIS and are covered by both Safety Recall <u>C0T and</u> <u>C0U.</u>
- Toyota is currently making preparations for C0U. However, as required by NHTSA, in mid-December, 2012, Toyota will be mailing an interim owner letter to vehicle owners covered in Phase 2.
- The Interim Owner Notification Letter will advise owners of (1) this safety recall, (2) the fact they will receive a future notice once the remedy is available.

Q4b: Will all of the Steering Intermediate Extension Shafts require replacement?

A4b: No. Only the extension shafts from one supplier will require replacement. Therefore, approximately one half of the vehicles will require the extension shaft to be replaced.

<u>Q4c:</u> What if a customer received an interim owner letter and would like to have the remedy for <u>Safety Recall C0T performed?</u>

A4c: If you are contacted by a customer whose vehicle is exhibiting the condition or prefers not to wait for Phase 2, please assist the customer by setting up an appointment to have the remedy performed. The dealer must inform the customer they will need to return at a later date once the remedy for Safety Recall C0U Hybrid Electric Water Pump is available.

Q5: Which and how many vehicles are covered by this Safety Recall?

A5: There are approximately 670,000 Prius (2004 through certain 2009 Model Year) vehicles covered by this Safety Recall.

Phase	Campaign Designation and Current Status	Remedy Start Date	Model	Model Year	Production Period	Appx. UIO
1	C0T- Remedy Phase	12/11/2012			Early August,	320,000
2	C2T* -Interim Phase	January, 2013	Prius	2004-2009	2003 through Late March, 2009	350,000

Q5a: Are there any other Toyota or Lexus models covered by this Safety Recall?

A5a: No, this condition only affects some 2004 through certain 2009 model year Prius vehicles.

Q5b: Why are other vehicles not covered by this Safety Recall?

A5b: Other vehicles have an extension shaft of sufficient hardness.

Q6: How long will the repair take?

A6: The repair will take approximately 1 hour. However, it may be necessary to make the vehicle available for a longer period of time depending upon the dealer's work schedule.

<u>Q7:</u> What is the difference between this Safety Recall and Safety Recall 60C which was previously <u>announced?</u>

A7: The previous Safety Recall 60C addressed concerns with weld quality of the intermediate shaft as well as an inspection to verify correct installation of the extension shaft during the manufacturing process.

The new Safety Recall COT is due to insufficient hardness of the extension shaft supplied by a specific supplier.

<u>Q7a:</u> If the vehicle had Safety Recall (60C) previously performed, will the customer need to have <u>Safety Recall COT performed as well?</u>

A7a: Yes. The dealer will still need to perform the inspection to determine if the extension shaft requires replacement under Safety Recall C0T. We apologize for any inconvenience, but once the remedy is available, the owner should contact his/her authorized Toyota dealer to have the extension shaft inspected and if necessary replaced at **NO CHARGE**.

<u>Q8: What if an owner has previously paid for repairs for this condition?</u>

A8: Owner reimbursement instructions will be provided in the remedy owner letter.

Q9: What if an owner has additional questions or concerns?

A9: 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 Standard Time.

2004 to certain 2009 Model Year Prius Vehicles Steering Intermediate Extension Shaft SAFETY RECALL NOTICE (*Remedy Available*)

[VIN]

Dear Toyota Customer:

URGENT SAFETY RECALL This is an important Safety Recall. The remedy will be performed at NO CHARGE to you.

This notice is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Toyota has decided that a defect, which relates to motor vehicle safety, exists in some 2004 to certain 2009 Model Year Prius vehicles.

What is the condition?

The steering shaft system of the subject vehicles consists of a steering intermediate shaft assembly, steering sliding yoke sub assembly, and steering intermediate extension shaft assembly. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box could deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed. The splines could eventually wear out over time, which could result in loss of steering ability, increasing the risk of a crash.

What will Toyota do?

The remedy for your vehicle is available. Any authorized Toyota dealer will perform an inspection of the steering intermediate extension shaft. Based upon the inspection results, the extension shaft may be replaced. The inspection and, if necessary, replacement of the steering intermediate extension shaft will be performed at **NO CHARGE** to you.

What should you do?

This is an important Safety Recall

Please contact any authorized Toyota dealer and make an appointment to have the remedy performed as soon as possible.

The inspection and, if necessary, replacement of the steering intermediate extension shaft will take approximately 1 hour. However, depending upon the dealer's work schedule, it may be necessary to make your vehicle available for a longer period of time.

You do not need an owner letter to have this recall completed; however, to assist the dealer in confirming vehicle eligibility, we request that you present this notice at the time of your service appointment.

If you would like to update your vehicle ownership or contact information, you may do so by registering at <u>www.toyota.com/ownersupdate</u>. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information.

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 <u>www.toyota.com/recall</u>.
- Additional information is also available by contacting 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.

If you believe that the dealer or Toyota has failed or is unable to remedy the defect within a reasonable time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue S.E., Washington, D.C. 20590, or call the toll free Vehicle Safety Hot Line at 1-888-327-4236 (TTY: 1-800-424-9153), or go to http://www.safercar.gov.
What if you have previously paid for repairs to your vehicle for this specific condition?

If you have previously paid for 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

If you are a vehicle lessor, Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

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, U.S.A., INC.

2004 to certain 2009 Model Year Prius Vehicles Phase 2 - Steering Intermediate Extension Shaft & Hybrid Electric Water Pump SAFETY RECALL NOTICE (Interim Notice)

[VIN]

Dear Toyota Customer:

This notice is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Toyota has decided that two defects, which relates to motor vehicle safety, exist in some 2004 to certain 2009 Model Year Prius vehicles.

The purpose of this letter is to explain what the recalls are about and to keep you informed of Toyota's implementation plan. We are currently making preparations to implement the Safety Recall remedies. We will send you another notification when the preparations are complete.

What is the Steering Intermediate Extension Shaft condition?

The steering shaft system of the subject vehicles consists of a steering intermediate shaft assembly, steering sliding yoke sub assembly, and steering intermediate extension shaft assembly. Due to insufficient hardness of the extension shaft supplied by a specific supplier, the splines which connect the extension shaft to the steering gear box could deform if the steering wheel is frequently and forcefully turned to the full-lock position while driving at a slow speed. The splines could eventually wear out over time, which could result in a loss of steering ability, increasing the risk of a crash.

What is the Hybrid Electric Water Pump condition?

There is a possibility that the coil wire of the electric motor installed in the Water Pump for the Hybrid System may have been scratched during the coiling manufacturing process at the supplier. In this condition, the coil wire may corrode at the scratched portion and in some cases break. If this occurs, the water pump could stop, leading to the illumination of various warning lights in the instrument panel. In limited instances, a short circuit can occur between adjacent coil wires, resulting in an open fuse for the electric power supply circuit. If the fuse is open, the hybrid system will stop while the vehicle is being driven, increasing the risk of a crash.

What should you do?

We appreciate your patience while we prepare the remedy parts. In the meantime, if you experience either condition described above, please contact your local Toyota dealer for diagnosis and appropriate repair. If the problem is related to the issues addressed by these recalls, the repair will be performed at **no charge** to you.

At this time the remedy for the Steering Intermediate Extension Shaft is available; however to minimize your inconvenience Toyota recommends that you wait until the Hybrid Electric Water Pump remedy is available and have both remedies performed at the same time. In the event you choose to have the Steering Intermediate Extension Shaft remedy performed prior to receiving the remedy notice, you will still need to return to the dealership to have the Hybrid Electric Water Pump replaced when the remedy is available.

If you would like to update your vehicle ownership or contact information, you may do so by registering at <u>www.toyota.com/ownersupdate</u>. You will need your full 17-digit Vehicle Identification Number (VIN) to input the new information.

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 <u>www.toyota.com/recall</u>.
- Additional information is also available by contacting 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.

If you believe that the dealer or Toyota has failed or is unable to remedy the defect within a reasonable time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Avenue S.E., Washington, D.C. 20590, or call the toll free Vehicle Safety Hot Line at 1-888-327-4236 (TTY: 1-800-424-9153), or go to http://www.safercar.gov.

What if you have previously paid for repairs to your vehicle for these specific conditions?

If you have previously paid for repairs to your vehicle for these specific conditions prior to receiving this letter, we will provide you instructions for reimbursement consideration in the second owner letter once the remedy preparations are completed.

If you are a vehicle lessor, Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

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, U.S.A., INC.

DP13-001 TOYOTA 7/11/2013 ATTACHMENT RESPONSE 2 60C Prius Technical Instruction

TECHNICAL INSTRUCTIONS

FOR

SPECIAL SERVICE CAMPAIGN 60C

2004 THROUGH EARLY 2006 MODEL YEAR PRIUS STEERING INTERMEDIATE SHAFT REPLACEMENT

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

Model	Year	VIN Range		
	rear	VDS	Range	
	2004 -	KB20U	0001086 - 0116870	
Prius	2004	KB22U	0001142 – 0116845	
			0116874 – 0133248	
		KB20U	3000000 – 3128076	
	2005		7003414 – 7057937	
			0116872 – 0133240	
		KB22U	3000008 – 3128067	
			7004342 – 7057888	
		KB20U -	3099688 – 3129959	
	2006 -		7057941 – 7059090	
		KB22U	3128082 – 3129958	
		NDZZU	7056471 – 7059063	

NOTE:

Not all vehicles in the VIN range are affected. As always, consult Dealer Daily/TIS to confirm VIN eligibility and to assure the SSC is applicable. This will verify the vehicle is affected and 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.

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
04005-72247	Intermediate Shaft No. 2	1
04005-72147	Intermediate Shaft No. 2 with Sliding Yoke	1*
45221-12281	Intermediate (Extension) Shaft No. 1	1**
90119-08560	Bolt	1**

NOTE:

* Only 50% of all vehicles will require Sliding Yoke replacement. Make sure to perform the inspection procedure prior to replacement.

** Only a small number of vehicles (less than 10) will require Intermediate (Extension) Shaft No. 1 and Bolt replacement. Make sure to perform the inspection procedure prior to replacement.

B. TOOLS

- Standard hand tools
- Nylon pry tools
- Torque wrench
- Tape measure

IV. COMPONENTS



V. BACKGROUND

In certain 2004 through early 2006 model year Prius vehicles, due to insufficient strength, a portion of the Steering Shaft Assembly may become loose or may develop a crack under certain operating conditions, such as when the wheel is turned forcefully to the locked position at low speed or the tire contacts roadside curbs while driving. The Steering Shaft Assembly consists of the Intermediate Shaft and Sliding Yoke which connects the steering wheel to the steering gear box. The campaign will entail the replacement of the Steering Intermediate Shaft Assembly No. 2 in all involved vehicles. The Steering Sliding Yoke and Steering Intermediate Extension Shaft No. 1 will be inspected and replaced only as necessary.

VI. WORK PROCEDURE



A. SERVICE PRECAUTIONS



- 1. DO NOT DISCONNECT ANY ELECTRONIC POWER STEERING (EPS) CONNECTORS (EXCEPT FOR THE STEERING SENSOR CONNECTOR ON VEHICLES WITH VSC)
 - a) Disconnecting an EPS system connector may cause a difference in steering effort between the left and the right. If steering effort is affected, a zero point calibration may be required.

2. MATCHMARK USAGE IS NOT NECESSARY

a) It is not necessary to place matchmarks as the part(s) will be replaced.



3. PARTS ALIGNMENT DURING INSTALLATION

- a) During installation make sure to follow the specified procedures to align the following parts:
 - Steering wheel position
 - Steering gear position
 - Sliding yoke to intermediate shaft No. 2 installation

If these parts are not aligned correctly, the steering wheel may be off center or damage to the airbag spiral cable may occur.

Alignment Not Required Steering Gear Alignment (Not Shown): Centered with wheels facing straight ahead

Sliding Yoke & Intermediate Shaft No. 2: Alignment required during installation

Alignment

Not Required

Steering Wheel Alignment:

Centered

B. INTERMEDIATE (EXTENSION) SHAFT NO. 1 INSPECTION



1. REMOVE THE COLUMN HOLE COVER SILENCER SHEET

- a) Fold back the floor carpet.
- b) Remove the 2 clips.
- c) Remove the column hole cover silencer sheet.



Clip B

2. DISCONNECT THE STEERING COLUMN **HOLE COVER NO. 1**

a) Unseat clip A then clip B.

Be careful not to damage clip B.



3. CLEAN THE STEERING COLUMN HOLE **COVER NO. 1 (ENGINE SIDE)**

a) Using a piece of cloth, clean the column hole cover.

NOTE:

- Cleaning the column hole cover prior to disconnecting it will prevent dirt and water from entering the steering gear oil seal.
- When working under the vehicle or • around the steering gear, wear work gloves to prevent burns from exhaust components or injuries from burrs on surrounding parts.

SECTION B

Л.



4. DISCONNECT THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

a) Disconnect the bottom section of the column hole cover by pushing it up and away from the steering gear assembly.



5. INSPECT THE INTERMEDIATE (EXTENSION) SHAFT NO. 1

- a) Turn the steering wheel to the right.
- b) While holding up the column hole cover, inspect the engagement point for the intermediate (extension) shaft No. 1 and steering gear by looking at it straight-on through the opening on the backside of the left front wheel well.

SECTION B





NOTE:

Be sure to look at the engagement point straight-on. If viewed from underneath the vehicle the ends of the splines can be seen, even when the intermediate (extension) shaft No. 1 is fully inserted onto the steering gear. This may lead to an incorrect judgment of the condition.

c) Are the splines of the steering gear visible?

A VIDEO SHOWING BOTH AN OK CONDITION (SPLINES NOT VISIBLE) AND AN NG CONDITION (SPLINES VISIBLE) IS AVAILABLE TO VIEW ON TIS.

- OK Condition (splines not visible): Proceed to step C.
 - "C. RETORQUE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2" on page 09.
- NG Condition (spline visible): Proceed to step D.
 - "D. DETAILED INSPECTION OF THE INTERMEDIATE (EXTENSION) SHAFT NO. 1, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2" on page. 20.

SECTION B

C. RETORQUE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2







1. TIGHTEN THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT

a) While holding up the column hole cover, tighten the bolt to specification.

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)

2. REINSTALL THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

- a) Align the hole on the steering column hole cover with the raised circle on the steering gear.
- b) Pull the column hole cover down and over the steering gear assembly.
- c) Confirm the following:
 - The column hole cover is properly set onto the entire circumference of the steering gear, see illustration.
 - The hole in the column hole cover is properly set over the raised circle of the steering gear, see illustration.
- 3. DETERMINE THE STEERING GEAR CENTER POINT POSITION
 - a) Place the front wheels in a straight-ahead position and center the steering wheel.







b) Measure and record the distance between the left or right steering gear tie rod end and the corresponding bolt for the rear section of the front lower arm as shown in the illustration.

Original Measurement Value:

• A =_____ mm

NOTE:

- While working on the vehicle it is possible to accidentally move the steering gear off its center point position.
- If the repairs are completed with the steering gear off-center damage to the airbag spiral cable may occur.
- The measurement must be done prior to vehicle disassembly.
- The measurement can be performed on either the left or right steering gear tie rod.
- 4. REMOVE THE NO. 1 INSTRUMENT PANEL REGISTER
 - a) Using a nylon pry tool, detach the 2 claws and 4 clips, and remove the instrument panel register.

5. REMOVE THE LOWER INSTRUMENT FINISH PANEL

- a) Remove the 2 screws.
- b) Disconnect the hood lock control cable.
- c) Using a nylon pry tool, detach the 4 claws and 5 clips.
- d) Disconnect all connectors and remove the finish panel.



6. RAISE THE VEHICLE OFF THE GROUND

 a) Confirm that the vehicle is raised so that the tires are off the ground. This is to prevent a load from being placed on the intermediate shaft when the steering wheel is being turned.

7. LOOSEN THE BOLTS FOR THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE

a) Loosen the 3 bolts shown in the illustration, but *DO NOT* remove them.

NOTE:

DO NOT remove the 3 bolts! Doing so may cause the splines to disengage, changing the center point position.



8. HOLD THE STEERING WHEEL IN POSITION

- a) Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
- b) Using the seat belt, hold the steering wheel in position as shown in the illustration, in order to prevent damage to the spiral cable.



WRONG! DO NOT hit the intermediate shaft no. 2 and sliding yoke assembly!

9. LOWER THE VEHICLE TO THE GROUND

 a) While holding the steering wheel in the centered position, lower the vehicle to the ground until the tires touch. This will hold the steering gear in its center point position.

10. REMOVE THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- a) Remove the 2 bolts shown in the illustration.
- b) Remove the intermediate shaft No. 2 and the sliding yoke as an assembly.

NOTE:

DO NOT turn the steering shaft when removing the intermediate shaft No. 2 and the sliding yoke assembly.

NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, DO NOT hit them with a hammer or any other tool. Doing so may damage the shock absorbing mechanism or the joints of the steering system.



WRONG!

DO NOT move the tires!

NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, pry on the slot(s) with a screwdriver as shown in the illustration.

NOTE:

After removing the intermediate shaft No. 2 and sliding yoke assembly, DO NOT do anything that will cause the tires to move. Doing so will change the center point position of the steering gear.



11. SEPAR ATE THE INTERMEDIATE SHAFT NO. 2 AND THE SLIDING YOKE

- a) Remove the bolt.
- b) Separate the intermediate shaft No. 2 from the sliding yoke.



12. INSPECT THE SLIDING YOKE

a) Inspect the shape of the slot on the sliding yoke as shown in the illustration to determine if it is OK or NG.

Sliding Yoke is OK:

• Replacement is *NOT* necessary, reuse the sliding yoke.

A VIDEO SHOWING AN OK SLIDING YOKE IS AVAILABLE TO VIEW ON TIS.

Sliding Yoke is NG:

• Replace the sliding yoke with a **NEW** one.

A VIDEO SHOWING AN NG SLIDING YOKE IS AVAILABLE TO VIEW ON TIS.



13. ASSEMBLE THE INTERMEDIATE SHAFT NO. 2 AND THE SLIDING YOKE ASSEMBLY

- a) Insert a NEW intermediate shaft No. 2 into the (REUSED* or NEW*) sliding yoke.
 - * Depends on the inspection results from step 12 on the previous page.
- b) Reinstall the bolt, but **DO NOT** tighten so that the sliding yoke can move freely on the splines of the intermediate shaft.

NOTE:

The sliding yoke can ONLY be installed one way onto the intermediate shaft No. 2 that allows the bolt to be reinstalled without damaging the splines.

14. REINSTALL THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- a) Make sure that the front tires are still on the ground and facing straight ahead.
- b) While another technician is holding the steering wheel in the center point position, reinstall the intermediate shaft No. 2 and the sliding yoke assembly.
- c) Reinstall the 2 bolts shown in the illustration, but *DO NOT* tighten.

NOTE:

- DO NOT install the intermediate shaft No. 2 and sliding yoke assembly upside down.
- The splines can be inserted in any direction. It is NOT necessary to align the ends of the intermediate shaft No. 2 and sliding yoke assembly.
- During reinstallation, DO NOT hit the intermediate shaft No. 2 and sliding yoke assembly with a hammer or any other tool.





16. RELEASE THE STEERING WHEEL

a) Release the seat belt and remove it from the steering wheel.

NOTE: DO NOT damage the steering wheel during this process.

17. TILT THE STEERING COLUMN TO THE LOWEST POSITION

a) Tilt the steering column to its lowest point.

NOTE:

The length of the steering column shaft varies slightly depending on the tilt angle. Make sure to place the steering column at its lowest position (as seen in the illustration) before tightening the bolts.



18. RAISE THE VEHICLE OFF THE GROUND

a) Confirm that the vehicle is raised so that the tires are off the ground to prevent a load on the steering shaft when the steering wheel is turned.





5mm or more

- 19. TIGHTEN THE BOLTS FOR THE INTERMEDIAT E SHAFT AND SLIDING YOKE
 - a) Tighten the 3 bolts to specification in the following order:

Tightening Sequence: Bolt "A", Bolt "C" then Bolt "B"

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)

20. RECONNECT THE STEERING COLUMN HOLE COVER NO. 1

a) Seat clip B then clip A.

NOTE: Be careful not to damage clip B.

- 21. REINSTALL THE COLUMN HOLE COVER SILENCER SHEET
 - a) Reinstall the column hole cover silencer sheet.
 - b) Reinstall the 2 clips.
 - c) Confirm that the clearance between the intermediate shaft No. 2 and the column hole cover is 5 mm or more.
 - d) Fold the floor carpet back into position.



22. REINSTALL THE LOWER INSTRUMENT FINISH PANEL

- a) Reinstall the lower instrument finish panel and reconnect all connectors.
- b) Reattach the 4 claws and 5 clips.
- c) Reconnect the hood lock control cable.
- d) Reinstall the 2 screws.



23. REINSTALL THE NO. 1 INSTRUMENT PANEL REGISTER

a) Reinstall the instrument panel register, and reattach the 2 claws and 4 clips.

- 24. INSPECT THE STEERING COLUMN TILT FUNCTION FOR PROPER OPERATION
- 25. TURN THE STEERING WHEEL FROM LEFT-TO-RIGHT TO INSPECT FOR PROPER OPERATION AND FEEL
- 26. INSPECT THAT THE STEERING WHEEL IS CENTERED
- 27. REPAIRS ARE COMPLETED

D. DETAILED INSPECTION OF THE INTERMEDIATE (EXTENSION) SHAFT NO. 1, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2

NOTE: USE THIS PROCEDURE ONLY IF THE SPLINES WERE VISIBLE IN SECTION "B. INTERMEDIATE (EXTENSION) SHAFT NO.1 INSPECTION," OTHERWISE FOLLOW STEPS IN SECTION C.



Properly set into place

1. REMOVE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT

a) While holding up the column hole cover, remove the bolt.

2. REINSTALL THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

- a) Align the hole on the steering column hole cover with the raised circle on the steering gear.
- b) Pull the column hole cover down and over the steering gear assembly.
- c) Confirm the following:
 - The column hole cover is properly set onto the entire circumference of the steering gear, see illustration.
 - The hole in the column hole cover is properly set over the raised circle of the steering gear, see illustration.

NOTE:

The intermediate (extension) shaft No.1 will be removed from inside the cabin. If the steering hole cover is not positioned correctly, it will be difficult to reinsert the intermediate (extension) shaft No.1 to the steering gear.



3. DETERMINE THE STEERING GEAR CENTER POINT POSITION

a) Place the front wheels in a straight-ahead position and center the steering wheel.

b) Measure and record the distance between one of the steering gear tie rod ends and the corresponding bolt for the rear section of the front lower arm, as shown in the illustration.

Original Measurement Value:

• A =_____ mm

NOTE:

- While working on the vehicle it is possible to accidentally move the steering gear off its center point position.
- If the repairs are completed with the steering gear off-center damage to the airbag spiral cable may occur.
- The measurement must be done prior to vehicle disassembly.
- The measurement can be performed on either the left or right steering gear tie rod.





4. REMOVE THE NO. 1 INSTRUMENT PANEL REGISTER

a) Using a nylon pry tool, detach the 2 claws and 4 clips, and remove the instrument panel register.

5. REMOVE THE LOWER INSTRUMENT FINISH PANEL

- a) Remove the 2 screws.
- b) Disconnect the hood lock control cable.
- c) Using a nylon pry tool, detach the 4 claws and 5 clips.
- d) Disconnect all connectors and remove the finish panel.



6. RAISE THE VEHICLE OFF THE GROUND

a) Confirm that the vehicle is raised so that the tires are off the ground. This is to prevent a load from being placed on the intermediate shaft when the steering wheel is being turned.





7. LOOSEN THE BOLTS FOR THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE

a) Loosen the 3 bolts shown in the illustration, but *DO NOT* remove them.

NOTE:

DO NOT remove the 3 bolts! Doing so may cause the splines to disengage, changing the center point position.

8. HOLD THE STEERING WHEEL IN POSITION

- a) Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
- b) Using the seat belt, hold the steering wheel in position as shown in the illustration, in order to prevent damage to the spiral cable.



9. LOWER THE VEHICLE TO THE GROUND

 a) While holding the steering wheel in the centered position, lower the vehicle to the ground until the tires touch. This will hold the steering gear in its center point position.



<u>WRONG!</u>

DO NOT hit the intermediate shaft no. 2 and sliding yoke assembly!



10. REMOVE THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- a) Remove the 2 bolts shown in the illustration.
- b) Remove the intermediate shaft No. 2 and the sliding yoke as an assembly.

NOTE:

DO NOT turn the steering shaft when removing the intermediate shaft No. 2 and the sliding yoke assembly.

NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, DO NOT hit them with a hammer or any other tool. Doing so may damage the shock absorbing mechanism or the joints of the steering system.



NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, pry on the slot(s) with a screwdriver as shown in the illustration.







NOTE:

After removing the intermediate shaft No. 2 and sliding yoke assembly, DO NOT do anything that will cause the tires to move. Doing so will change the center point position of the steering gear.

11. REMOVE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 AND INSPECT FOR DAMAGE

a) Remove the intermediate (extension) shaft No. 1 from the passenger compartment side.

NOTE:

- DO NOT turn the intermediate (extension) No. 1 shaft when removing it. Doing so will change the center point position of the steering gear.
- If you are having difficulty removing the intermediate (extension) shaft No. 1 from the steering gear, DO NOT hit it with a hammer or any other tool.
- b) Inspect the internal splines of the intermediate (extension) shaft No. 1 for damage. Is damage present?

OK, NO damage:

 Intermediate (extension) shaft is OK. Replacement is NOT necessary, reuse the intermediate (extension) shaft and bolt.

NG, damaged:

 Intermediate (extension) shaft is NG. Replace the intermediate (extension) shaft No. 1 and the bolt with a NEW one.





12. INSTALL THE INTERMEDIATE (EXTENSION) SHAFT NO. 1

- a) Clean the steering gear shaft.
- b) Install the (REUSED* or NEW*) intermediate (extension) shaft No. 1 from the passenger compartment, making sure to insert it all the way onto the steering gear.
 - * Depends on the inspection results from the previous step above.

NOTE:

- The intermediate (extension) shaft can be inserted onto the steering gear in any direction.
- DO NOT turn the intermediate (extension) shaft when installing it. Doing so will change the center point position of the steering gear.

13. SEPARATE THE INTERMEDIATE SHAFT NO. 1 AND THE SLIDING YOKE

- a) Remove the bolt.
- b) Separate the intermediate shaft No. 2 from the sliding yoke.



14. INSPECT THE SLIDING YOKE

a) Inspect the shape of the slot on the sliding yoke as shown in the illustration to determine if it is OK or NG.

Sliding Yoke is OK:

• Replacement is *NOT* necessary, reuse the sliding yoke.

A VIDEO SHOWING AN OK SLIDING YOKE IS AVAILABLE TO VIEW ON TIS.

Sliding Yoke is NG:

• Replace the sliding yoke with a **NEW** one.

A VIDEO SHOWING AN NG SLIDING YOKE IS AVAILABLE TO VIEW ON TIS.





15. ASSEMBLE THE INTERMEDIATE SHAFT NO. 2 AND THE SLIDING YOKE ASSEMBLY

a) Insert a **NEW** intermediate shaft No. 2 into the (REUSED* or NEW*) sliding yoke.

* Depends on the inspection results from step 14 on the previous page.

b) Reinstall the bolt, but **DO NOT** tighten so that the sliding yoke can move freely on the splines of the intermediate shaft.

NOTE:

The sliding yoke can ONLY be installed one way onto the intermediate shaft No. 2 that allows the bolt to be reinstalled without damaging the splines.

16. REINSTALL THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- a) Make sure that the front tires are still on the ground and facing straight ahead.
- b) While another technician is holding the steering wheel in the center point position, reinstall the intermediate shaft No. 2 and the sliding yoke assembly.
- c) Reinstall the bolts "A" and "C" shown in the illustration, but *DO NOT* tighten.

NOTE:

- DO NOT install the intermediate shaft No. 2 and sliding yoke assembly upside down.
- The splines can be inserted in any direction. It is NOT necessary to align the intermediate shaft No. 2 and sliding yoke assembly.
- During reinstallation, DO NOT hit the intermediate shaft No. 2 and sliding yoke assembly with a hammer or any other tool.
- d) Temporarily tighten bolts "B" so that the intermediate shaft No.2 will not extend or retract.

NOTE:

If bolt "B" is not securely tightened, the intermediate (extension) shaft No. 1 may disengage from the steering gear when moving the steering column hole cover to install the intermediate (extension) shaft No. 1 bolt.





Column Hole

Steering Gear

Cover

18. RELEASE THE STEERING WHEEL

a) Release the seat belt and remove it from the steering wheel.

NOTE: DO NOT damage the steering wheel during this process.

19. DISCONNECT THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

a) Disconnect the lower portion of the column hole cover by pushing it up and away from the steering gear assembly.



20. INSTALL AND TIGHTEN THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT

- a) While holding up the column hole cover, check that the intermediate (extension) shaft is fully inserted onto the steering gear.
- b) Install a (REUSED* or NEW*) bolt and torque to specification. If necessary, turn the steering gear to make it easier to tighten the bolt.
 - * Depends on the inspection results from step 11b, pg. 25.

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)





21. REINSTALL THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

- a) Align the hole on the steering column hole cover with the raised circle on the steering gear.
- b) Pull the column hole cover down and over the steering gear assembly.
- c) Confirm the following:
 - The column hole cover is properly set onto the entire circumference of the steering gear, see illustration.
 - The hole in the column hole cover is properly set over the raised circle of the steering gear, see illustration.

22. TILT THE STEERING COLUMN TO THE LOWEST POSITION

a) Tilt the steering column to its lowest point.

NOTE:

The length of the steering column shaft varies slightly depending on the tilt angle. Make sure to place the steering column at its lowest position (as seen in the illustration) before tightening the bolts.



23. RAISE THE VEHICLE OFF THE GROUND

a) Confirm that the vehicle is raised so that the tires are off the ground to prevent a load on the steering shaft when the steering wheel is turned.







24. TIGHTEN THE BOLTS FOR THE INTERMEDIATE SHAFT AND SLIDING YOKE

- a) Loosen bolt "B" so that it can be turned by hand.
- b) Tighten the 3 bolts to specification in the following order:

Tightening Sequence: Bolt "A", Bolt "C" then Bolt "B"

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)

25. RECONNECT THE STEERING COLUMN HOLE COVER NO. 1

a) Seat clip B then clip A.

NOTE: Be careful not to damage clip B.

26. REINSTALL THE COLUMN HOLE COVER SILENCER SHEET

- a) Reinstall the column hole cover silencer sheet.
- b) Reinstall the 2 clips.
- c) Confirm that the clearance between the intermediate shaft No. 2 and the column hole cover is 5 mm or more.
- d) Fold the floor carpet back into position.


27. REINSTALL THE LOWER INSTRUMENT FINISH PANEL

- a) Reinstall the lower instrument finish panel and reconnect all connectors.
- b) Reattach the 4 claws and 5 clips.
- c) Reconnect the hood lock control cable.
- d) Reinstall the 2 screws.



28. REINSTALL THE NO. 1 INSTRUMENT PANEL REGISTER

a) Reinstall the instrument panel register, and reattach the 2 claws and 4 clips.

- 29. INSPECT THE STEERING COLUMN TILT FUNCTION FOR PROPER OPERATION
- 30. TURN THE STEERING WHEEL FROM LEFT-TO-RIGHT TO INSPECT FOR PROPER OPERATION AND FEEL
- 31. INSPECT THAT THE STEERING WHEEL IS CENTERED
- 32. REPAIRS ARE COMPLETED

DP13-001 TOYOTA 7/11/2013 ATTACHMENT **RESPONSE 2 60C** Technical Instruction Revised 10-18-2006 T-CP-60C-0001-W



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

TO: ALL TOYOTA DEALER PRINCIPALS, SERVICE MANAGERS, PARTS MANAGERS

SUBJECT: SPECIAL SERVICE CAMPAIGN (SSC) – 60C (SAFETY RECALL) (2004 THROUGH EARLY 2006 STEERING INTERMEDIATE SHAFT REPLACEMENT)

Toyota will initiate a Special Service Campaign on the Steering Shaft Assembly on certain 2004 through early 2006 Model Year Prius vehicles.

In certain 2004 through early 2006 model year Prius vehicles, due to insufficient strength, a portion of the Steering Shaft Assembly may become loose or may develop a crack under certain operating conditions, such as when the wheel is turned forcefully to the locked position at low speed or the tire contacts roadside curbs while driving. The Steering Shaft Assembly consists of the Intermediate Shaft and Sliding Yoke which connects the steering wheel to the steering gear box. The campaign will entail the replacement of the Steering Intermediate Shaft Assembly No. 2 in all involved vehicles. The Steering Sliding Yoke and Steering Intermediate Extension Shaft No. 1 will be inspected and replaced only as necessary.

The following vital information is provided to inform you and your staff of the owner notification phase of the campaign and your degree of involvement.

1. Owner Notification Letter Mailing Date

The owner notification will commence in early June, 2006, approximately one week after the dealer notification.

Please note that only owners of the affected vehicles will be notified. If you are contacted by an owner of an involved vehicle, who has not yet received a notification, please instruct them to **verify** *eligibility by confirming through Dealer Daily/TIS prior to performing repairs*. Dealers should perform the inspections/replacements as outlined in the attached Technical Instructions.

2. <u>Vehicles in Dealer Stock</u>

As required by Federal Regulation, dealers are not to deliver any vehicle acquired in their inventory, which is involved in a safety recall, until the necessary inspections/replacements have been performed.

3. Dealer/Owner Lists

Affected vehicle VIN lists (VIN only due to changes in Privacy Laws) for the SSC 60C campaign have been distributed to each dealership's Service and Parts Managers. These lists are based upon the dealership's Primary Marketing Area (PMA) or selling dealership where applicable. Based upon our records, a dealership which does not have an affected vehicle in their PMA will receive a report indicating so.

4. Number and Identification of Involved Vehicles

There are approximately 170,000 Prius (2004 through early 2006 Model Year) vehicles involved in the U.S.

MODEL	YEAR	VIN Range					
WODEL	ILAK	VDS	Range				
	2004	KB20U	0001086 – 0116870				
	2004	KB22U	0001142 – 0116845				
	2005		0116874 – 0133248				
		KB20U	300000 - 3128076				
			7003414 – 7057937				
Drive		KB22U	0116872 – 0133240				
Prius			3000008 – 3128067				
			7004342 – 7057888				
		KBOOL	3099688 – 3129959				
	2006	KB20U	7057941 – 7059090				
		KB0011	3128082 – 3129958				
		KB22U	7056471 – 7059063				

Please note that not all vehicles in the VIN range are affected by this SSC. If a dealer is contacted by an owner of an involved vehicle, who has not yet received a notification, please instruct them to **verify eligibility by confirming through Dealer Daily/TIS prior to performing repairs**. Dealers should perform the inspections/replacements as outlined in the attached Technical Instructions.

5. Parts Ordering

The necessary parts can be ordered through the dealer's facing PDC. Please refer to the table below and the Technical Instructions for part number information.

Part Number	Part Description	Qty.
04005-72247	Intermediate Shaft No. 2	1
04005-72147	Intermediate Shaft No. 2 with Sliding Yoke	1*
45221-12281	Intermediate (Extension) Shaft No. 1	1**
90119-08560	Bolt	1**

* Please note that only 50% of all vehicles will require Sliding Yoke replacement.

** Please note that only a small number of vehicles (less than 10) will require Intermediate (Extension) Shaft No. 1 and Bolt replacement. The Intermediate (Extension) Shaft No. 1 and Bolt will be placed on Manual Allocation Control (MAC). This will assure an adequate and balanced parts inventory.

[Parts Ordering Continued...]

Since only a small number of vehicles (less than 10) will require Intermediate (Extension) Shaft and Bolt replacement, dealers will not be allowed to stock these parts. They will be placed on Manual Allocation Control.

If there are **special** circumstances where a dealer is having difficulty receiving parts, dealer associates may contact 310-468-5516 to research the Intermediate (Extension) Shaft and Bolt order. The associate should have the following information ready to expedite research of the order status:

- Dealer Information (Dealer Code, Contact Name, Telephone Number)
- Order Reference Number
- Customer Name and Vehicle 17-digit VIN

Please note that during the period the parts are on-order for the sliding yoke or intermediate (extension) shaft No. 1 replacement, customer rental car through the Toyota Rent-A-Car (TRAC) Program is available. Follow the Toyota Transportation Assistance Program (TTAP) guidelines. DSPM authorization will be required for vehicle rentals exceeding 2 days.

STATE	UIO	STATE	UIO]	STATE	UIO]	STATE	UIO	STATE	UIO
AK	219	GA	2294		ME	1157		NJ	3979	SD	208
AL	971	IA	930		MI	2736		NM	1355	TN	1526
AR	685	ID	694		MN	2577		NV	1473	ТХ	6673
AZ	3602	L	5658		MO	1680		NY	7039	UT	1167
CA	49640	IN	2008		MS	410		OH	3532	VA	7906
CO	3976	KS	870		MT	525		OK	755	VT	679
СТ	2255	KY	960		NC	3678		OR	4355	WA	6859
DC	615	LA	854		ND	117		PA	5893	WI	3011
DE	584	MA	5366		NE	453		RI	727	WV	576
FL	7470	MD	5111		NH	1238		SC	926	WY	312

A UIO by state matrix is listed below to inform dealers of the number of vehicles in their area.

6. <u>Repair Procedures</u>

Refer to the attached Technical Instructions and appropriate Repair Manual as indicated.

7. <u>Reimbursement Procedures</u>



Submit SSC claims following the procedures described in the Toyota Warranty Policy and Procedures Manual. The operation codes to be used for this campaign are:

SSC #	Op. Code	Description	Flat Rate Hour
60C	6509E1	 Inspect the Steering Intermediate (Extension) Shaft No. 1*. Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be REPLACED.) Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles) 	0.9 hr/vehicle
	6509E2	 Inspect & replace Steering Intermediate (Extension) Shaft No. 1*. Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be REPLACED.) Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles) 	1.0 hr/vehicle

The Additional Operation Codes you may use are:

SSC #	Op. Code	Code Description			
60C	6509EJ	 Inspect the Steering Intermediate (Extension) Shaft No. 1*. Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be REPLACED.) Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles) Adjust the vehicle's alignment if the steering wheel is off center. 			
	6509EK	 Inspect & replace Steering Intermediate (Extension) Shaft No. 1.* Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be REPLACED.) Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles) Adjust the vehicle's alignment if the steering wheel is off center. 	2.3 hr/vehicle		

* Affects approximately 10 vehicles nationwide.

** Approx. 85,000 vehicles (1/2 the involved Prius vehicles will require replacement of the Yoke.)

NOTE: Above flat rate time(s) include 0.1 hr for SSC admin. cost per unit for the dealership.

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

SSC 60C – 2004 Through early 2006 Prius Steering Intermediate Shaft Replacement SAFETY RECALL NOTICE

Dear Toyota Customer:

This notice is being sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. Toyota has decided that a defect, which relates to motor vehicle safety, exists in the steering intermediate shaft of certain 2004 through early 2006 Toyota Prius vehicles.

What is the problem?

In certain 2004 through early 2006 model year Prius vehicles, due to insufficient strength, a portion of the Steering Shaft Assembly may become loose or may develop a crack under certain operating conditions, such as when the wheel is turned forcefully to the locked position at low speed or the tire contacts roadside curbs while driving. If this condition has occurred on your vehicle, in some cases due to the components becoming loose and possibly rattling, an abnormal noise may be heard from the area of the Steering Shaft Assembly. The Steering Shaft Assembly consists of the Intermediate Shaft and Sliding Yoke which connects the steering wheel to the steering gear box. If this condition has occurred on your vehicle, in the worst case, you may lose vehicle steering control, thus increasing the possibility of a crash.

What will Toyota do?

Any Toyota dealer will replace the Steering Intermediate Shaft at **NO CHARGE** to you.

In addition, the dealer will inspect the sliding yoke and the intermediate extension shaft and replace them as necessary. Both inspection and if necessary, replacement of the sliding yoke and intermediate extension shaft will also be performed at **NO CHARGE** to you.

What should you do?

Please contact your authorized Toyota dealer to make an appointment to have your vehicle repaired. The repair will take approximately one hour. However, depending upon the inspection results and the dealer's work schedule, it may be necessary to make your vehicle available for a longer period of time.

We request that you present this notice to the dealer at the time of your service appointment.

If you no longer own the vehicle, please indicate so on the enclosed postage-paid form, providing us with the name and address of the new owner.

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 necessary repairs and inspections. 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 9:30 pm, Saturday and Sunday 7:00 am through 3:00 pm Pacific Standard Time.

If you believe that the dealer or Toyota has failed or is unable to remedy the defect within a reasonable time, you may submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street S.W., Washington, D.C. 20590, or call the toll free Auto Safety Hot Line at 1-888-327-4236 (TTY: 1-800-424-9153), or go to http://www.safercar.gov.

If you are a vehicle lessor, Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days.

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, U.S.A., INC.

ΤΟΥΟΤΑ

Special Service Campaign (SSC) 60C Q&A 2004 through early 2006 Model Year Prius Steering Intermediate Shaft

Q1: What is the condition?

A1: In certain 2004 through early 2006 model year Prius vehicles, due to insufficient strength, a portion of the Steering Shaft Assembly may become loose or may develop a crack under certain operating conditions, such as when the wheel is turned forcefully to the locked position at low speed or the tire contacts roadside curbs while driving. The Steering Shaft Assembly consists of the Intermediate Shaft and Sliding Yoke which connects the steering wheel to the steering gear box.

Q2: What is the cause of this condition?

A2: Due to insufficient strength a portion of the Steering Shaft Assembly may become loose or may develop a crack under certain operating conditions, such as when the wheel is turned forcefully to the locked position at low speed or the tire contacts roadside curbs while driving.

Q3: Are there any warnings that this condition will occur?

A3: In some cases due to the components becoming loose and possibly rattling, an abnormal noise may be heard. If this occurs, please bring your vehicle to the nearest Toyota dealer for diagnosis and appropriate repair as soon as possible.

Q4: Which and how many vehicles are involved?

A4: There are approximately 170,000 2004 through early 2006 Model Year Prius vehicles involved in the U.S.

Q5: What is the production period of the affected vehicles?

A5: The affected Prius vehicles were produced from August, 2003 to November, 2005.

Q6: Are there any other Toyota, Lexus or Scion vehicles involved?

A6: No, this specific condition affects only 2004 through early 2006 Model Year Prius vehicles.

Q7: How many incidents of this condition have been reported?

A7: There have been no cases of this condition reported in the affected vehicles in the U.S. market.

Q8: Have there been any accidents reported?

A8: There have been no reported cases of accidents in the affected vehicles which may relate to this condition.

Q9: Have there been any injuries related to the alleged accidents?

A9: There have been no reported cases of injuries related to this condition in the affected vehicles.

Q10: What is Toyota going to do?

A10: Any Toyota dealer will replace the Steering Intermediate Shaft at **NO CHARGE**. In addition, the dealer will inspect the sliding yoke and the intermediate extension shaft and replace them as necessary at **NO CHARGE** as well.

Q11: How long will the repair take?

A11: The repair will take approximately one hour. However, depending upon the inspection results and the dealer's work schedule, it may be necessary to make the vehicle available for a longer period of time.

<u>Q12:</u> What should an owner do if they experience the condition or have immediate concerns about the <u>current safety of their vehicle?</u>

A12: Owners are requested to contact their local Toyota dealer for diagnosis and repair.

TECHNICAL INSTRUCTIONS

FOR

SPECIAL SERVICE CAMPAIGN 60C

2004 THROUGH EARLY 2006 MODEL YEAR PRIUS STEERING INTERMEDIATE SHAFT REPLACEMENT

REVISED October 18, 2006

Pages 14 and 27 have been revised.

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

Model	Year	VIN Range				
MOGEI	Tear	VDS	Range			
	2004	KB20U	0001086 - 0116870			
	2004	KB22U	0001142 - 0116845			
			0116874 – 0133248			
		KB20U	3000000 – 3128076			
	2005		7003414 – 7057937			
Prius	2005		0116872 – 0133240			
Filus		KB22U	3000008 - 3128067			
			7004342 – 7057888			
		KB20U	3099688 – 3129959			
	2006	ND200	7057941 – 7059090			
	2000	KB22U	3128082 – 3129958			
		NDZZU	7056471 – 7059063			

NOTE:

Not all vehicles in the VIN range are affected. As always, consult Dealer Daily/TIS to confirm VIN eligibility and to assure the SSC is applicable. This will verify the vehicle is affected and 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.

III. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
04005-72247	Intermediate Shaft No. 2	1*
04005-72147	Intermediate Shaft No. 2 with Sliding Yoke	1**
45221-12281	Intermediate (Extension) Shaft No. 1	1***
90119-08560	Bolt	1***

NOTE:

* If this part number is no longer available, use part number 04005-72147.

- ** Only 50% of all vehicles will require Sliding Yoke replacement. Make sure to perform the inspection procedure prior to replacement.
- *** Only a small number of vehicles (less than 10) will require Intermediate (Extension) Shaft No. 1 and Bolt replacement. Make sure to perform the inspection procedure prior to replacement.

B. TOOLS

- Standard hand tools
- Nylon pry tools
- Torque wrench
- Tape measure

IV. COMPONENTS



V. BACKGROUND

In certain 2004 through early 2006 model year Prius vehicles, due to insufficient strength, a portion of the Steering Shaft Assembly may become loose or may develop a crack under certain operating conditions, such as when the wheel is turned forcefully to the locked position at low speed or the tire contacts roadside curbs while driving. The Steering Shaft Assembly consists of the Intermediate Shaft and Sliding Yoke which connects the steering wheel to the steering gear box. The campaign will entail the replacement of the Steering Intermediate Shaft Assembly No. 2 in all involved vehicles. The Steering Sliding Yoke and Steering Intermediate Extension Shaft No. 1 will be inspected and replaced only as necessary.

VI. WORK PROCEDURE



A. SERVICE PRECAUTIONS



1. DO NOT DISCONNECT ANY ELECTRONIC POWER STEERING (EPS) CONNECTORS (EXCEPT FOR THE STEERING SENSOR CONNECTOR ON VEHICLES WITH VSC)

 a) Disconnecting an EPS system connector may cause a difference in steering effort between the left and the right. If steering effort is affected, a zero point calibration may be required.

2. MATCHMARK USAGE IS NOT NECESSARY

a) It is not necessary to place matchmarks as the part(s) will be replaced.



3. PARTS ALIGNMENT DURING INSTALLATION

- a) During installation make sure to follow the specified procedures to align the following parts:
 - Steering wheel position
 - Steering gear position
 - Sliding yoke to intermediate shaft No. 2 installation

If these parts are not aligned correctly, the steering wheel may be off center or damage to the airbag spiral cable may occur.



B. INTERMEDIATE (EXTENSION) SHAFT NO. 1 INSPECTION

. Clip A

Clip B



1. REMOVE THE COLUMN HOLE COVER SILENCER SHEET

- a) Fold back the floor carpet.
- b) Remove the 2 clips.
- c) Remove the column hole cover silencer sheet.

- 2. DISCONNECT THE STEERING COLUMN HOLE COVER NO. 1
 - a) Unseat clip A then clip B.

NOTE: Be careful not to damage clip B.

Cloth Gloves

a

3. CLEAN THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

a) Using a piece of cloth, clean the column hole cover.

NOTE:

- Cleaning the column hole cover prior to disconnecting it will prevent dirt and water from entering the steering gear oil seal.
- When working under the vehicle or around the steering gear, wear work gloves to prevent burns from exhaust components or injuries from burrs on surrounding parts.



4. DISCONNECT THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

 a) Disconnect the bottom section of the column hole cover by pushing it up and away from the steering gear assembly.



5. INSPECT THE INTERMEDIATE (EXTENSION) SHAFT NO. 1

- a) Turn the steering wheel to the right.
- b) While holding up the column hole cover, inspect the engagement point for the intermediate (extension) shaft No. 1 and steering gear by looking at it straight-on through the opening on the backside of the left front wheel well.





NOTE:

Be sure to look at the engagement point straight-on. If viewed from underneath the vehicle the ends of the splines can be seen, even when the intermediate (extension) shaft No. 1 is fully inserted onto the steering gear. This may lead to an incorrect judgment of the condition.

c) Are the splines of the steering gear visible?

A VIDEO SHOWING BOTH AN OK CONDITION (SPLINES NOT VISIBLE) AND AN NG CONDITION (SPLINES VISIBLE) CAN BE SEEN BY CLICKING ON THIS LINK: (PRIUS_01C)

- OK Condition (splines not visible): Proceed to step C.
 - "C. RETORQUE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2" on page 09.
- NG Condition (spline visible): Proceed to step D.
 - "D. DETAILED INSPECTION OF THE INTERMEDIATE (EXTENSION) SHAFT NO. 1, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2" on page. 20.

C. RETORQUE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2







1. TIGHTEN THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT

a) While holding up the column hole cover, tighten the bolt to specification.

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)

- 2. REINSTALL THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)
 - a) Align the hole on the steering column hole cover with the raised circle on the steering gear.
 - b) Pull the column hole cover down and over the steering gear assembly.
 - c) Confirm the following:
 - The column hole cover is properly set onto the entire circumference of the steering gear, see illustration.
 - The hole in the column hole cover is properly set over the raised circle of the steering gear, see illustration.
- 3. DETERMINE THE STEERING GEAR CENTER POINT POSITION
 - a) Place the front wheels in a straight-ahead position and center the steering wheel.







 b) Measure and record the distance between the left or right steering gear tie rod end and the corresponding bolt for the rear section of the front lower arm as shown in the illustration.

Original Measurement Value:

• A =_____ mm

NOTE:

- While working on the vehicle it is possible to accidentally move the steering gear off its center point position.
- If the repairs are completed with the steering gear off-center damage to the airbag spiral cable may occur.
- The measurement must be done prior to vehicle disassembly.
- The measurement can be performed on either the left or right steering gear tie rod.
- 4. REMOVE THE NO. 1 INSTRUMENT PANEL REGISTER
 - a) Using a nylon pry tool, detach the 2 claws and 4 clips, and remove the instrument panel register.

5. REMOVE THE LOWER INSTRUMENT FINISH PANEL

- a) Remove the 2 screws.
- b) Disconnect the hood lock control cable.
- c) Using a nylon pry tool, detach the 4 claws and 5 clips.
- d) Disconnect all connectors and remove the finish panel.



. RAISE THE VEHICLE OFF THE GROUND

a) Confirm that the vehicle is raised so that the tires are off the ground. This is to prevent a load from being placed on the intermediate shaft when the steering wheel is being turned.

7. LOOSEN THE BOLTS FOR THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE

HOLD THE STEERING WHEEL IN

a) Make sure the front wheels are in a

b) Using the seat belt, hold the steering wheel in position as shown in the

wheel is centered.

the spiral cable.

straight-ahead position and the steering

illustration, in order to prevent damage to

a) Loosen the 3 bolts shown in the illustration, but *DO NOT* remove them.

NOTE:

POSITION

DO NOT remove the 3 bolts! Doing so may cause the splines to disengage, changing the center point position.



9. LOWER THE VEHICLE TO THE GROUND

a) While holding the steering wheel in the centered position, lower the vehicle to the ground until the tires touch. This will hold the steering gear in its center point position.

10. REMOVE THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- a) Remove the 2 bolts shown in the illustration.
- b) Remove the intermediate shaft No. 2 and the sliding yoke as an assembly.

NOTE:

DO NOT turn the steering shaft when removing the intermediate shaft No. 2 and the sliding yoke assembly.

WRONG!



NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, DO NOT hit them with a hammer or any other tool. Doing so may damage the shock absorbing mechanism or the joints of the steering system.



NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, pry on the slot(s) with a screwdriver as shown in the illustration.

NOTE:

After removing the intermediate shaft No. 2 and sliding yoke assembly, DO NOT do anything that will cause the tires to move. Doing so will change the center point position of the steering gear.



WRONG!



11. SEPARATE THE INTERMEDIATE SHAFT NO. 2 AND THE SLIDING YOKE

- a) Remove the bolt.
- b) Separate the intermediate shaft No. 2 from the sliding yoke.





Sliding Yoke

13. ASSEMBLE THE INTERMEDIATE SHAFT NO. 2 AND THE SLIDING YOKE ASSEMBLY

- a) Insert a NEW intermediate shaft No. 2 into the (REUSED* or NEW*) sliding yoke.
 - * Depends on the inspection results from step 12 on the previous page.
- b) Reinstall the bolt, but **DO NOT** tighten so that the sliding yoke can move freely on the splines of the intermediate shaft.

NOTE:

The sliding yoke can ONLY be installed one way onto the intermediate shaft No. 2 that allows the bolt to be reinstalled without damaging the splines.

14. REINSTALL THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- a) Make sure that the front tires are still on the ground and facing straight ahead.
- b) While another technician is holding the steering wheel in the center point position, reinstall the intermediate shaft No. 2 and the sliding yoke assembly.
- c) Reinstall the 2 bolts shown in the illustration, but **DO NOT** tighten.

NOTE:

- DO NOT install the intermediate shaft No. 2 and sliding yoke assembly upside down.
- The splines can be inserted in any direction. It is NOT necessary to align the ends of the intermediate shaft No. 2 and sliding yoke assembly.
- During reinstallation, DO NOT hit the intermediate shaft No. 2 and sliding yoke assembly with a hammer or any other tool.



15. CONFIRM THE STEERING GEAR CENTER POINT POSITION

a) While holding the steering wheel in the centered position, raise the vehicle up so that the tires are off the ground.

 b) Measure the distance between the same steering gear tie rod end and the corresponding bolt for the rear section of the front lower arm that was done in step 3b on page 10.

New Measurement Value:



c) Is the new measurement the same as the original measured value taken in step 3b on page 10?

NO:

- Readjust the steering gear center point position back to the original measurement value.
- Repeat the following steps:
 - Step "8 HOLD THE STEERING WHEEL IN POSITION" on page 11.
 - Step "9. LOWER THE VEHICLE TO THE GROUND" on page. 12.
 - Step "10. REMOVE THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY" on pages 12-13.
 - Step "14. REINSTALL THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY" on page 15. Step "15. CONFIRM THE STEERING GEAR CENTER POINT POSITION", on this page.

YES:

• Proceed to the next step.



16. RELEASE THE STEERING WHEEL

a) Release the seat belt and remove it from the steering wheel.

NOTE:

DO NOT damage the steering wheel during this process.

17. TILT THE STEERING COLUMN TO THE LOWEST POSITION

a) Tilt the steering column to its lowest point.

NOTE:

The length of the steering column shaft varies slightly depending on the tilt angle. Make sure to place the steering column at its lowest position (as seen in the illustration) before tightening the bolts.



18. RAISE THE VEHICLE OFF THE GROUND

a) Confirm that the vehicle is raised so that the tires are off the ground to prevent a load on the steering shaft when the steering wheel is turned.





a) Tighten the 3 bolts to specification in the following order:

Tightening Sequence: Bolt "A", Bolt "C" then Bolt "B"

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)

- 20. RECONNECT THE STEERING COLUMN HOLE COVER NO. 1
 - a) Seat clip B then clip A.

NOTE: Be careful not to damage clip B.





21. REINSTALL THE COLUMN HOLE COVER SILENCER SHEET

- a) Reinstall the column hole cover silencer sheet.
- b) Reinstall the 2 clips.
- c) Confirm that the clearance between the intermediate shaft No. 2 and the column hole cover is 5 mm or more.
- d) Fold the floor carpet back into position.



22. REINSTALL THE LOWER INSTRUMENT FINISH PANEL

- a) Reinstall the lower instrument finish panel and reconnect all connectors.
- b) Reattach the 4 claws and 5 clips.
- c) Reconnect the hood lock control cable.
- d) Reinstall the 2 screws.



23. REINSTALL THE NO. 1 INSTRUMENT PANEL REGISTER

a) Reinstall the instrument panel register, and reattach the 2 claws and 4 clips.

- 24. INSPECT THE STEERING COLUMN TILT FUNCTION FOR PROPER OPERATION
- 25. TURN THE STEERING WHEEL FROM LEFT-TO-RIGHT TO INSPECT FOR PROPER OPERATION AND FEEL
- 26. INSPECT THAT THE STEERING WHEEL IS CENTERED
- 27. REPAIRS ARE COMPLETED

D. DETAILED INSPECTION OF THE INTERMEDIATE (EXTENSION) SHAFT NO. **1, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE** SHAFT NO. 2

NOTE: USE THIS PROCEDURE ONLY IF THE SPLINES WERE VISIBLE IN SECTION "B. INTERMEDIATE (EXTENSION) SHAFT NO.1 INSPECTION," OTHERWISE FOLLOW STEPS IN SECTION C.





1. REMOVE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT

a) While holding up the column hole cover, remove the bolt.

2. **REINSTALL THE STEERING COLUMN** HOLE COVER NO. 1 (ENGINE SIDE)

- a) Align the hole on the steering column hole cover with the raised circle on the steering gear.
- b) Pull the column hole cover down and over the steering gear assembly.
- c) Confirm the following:
 - The column hole cover is properly set onto the entire circumference of the steering gear, see illustration.
 - The hole in the column hole cover is properly set over the raised circle of the steering gear, see illustration.

NOTE:

The intermediate (extension) shaft No.1 will be removed from inside the cabin. If the steering hole cover is not positioned correctly, it will be difficult to reinsert the intermediate (extension) shaft No.1 to the steering gear.





3. DETERMINE THE STEERING GEAR CENTER POINT POSITION

a) Place the front wheels in a straight-ahead position and center the steering wheel.

 b) Measure and record the distance between one of the steering gear tie rod ends and the corresponding bolt for the rear section of the front lower arm, as shown in the illustration.

Original Measurement Value:

• A =_____ mm

NOTE:

- While working on the vehicle it is possible to accidentally move the steering gear off its center point position.
- If the repairs are completed with the steering gear off-center damage to the airbag spiral cable may occur.
- The measurement must be done prior to vehicle disassembly.
- The measurement can be performed on either the left or right steering gear tie rod.

SECTION D





REMOVE THE NO. 1 INSTRUMENT 4. PANEL REGISTER

a) Using a nylon pry tool, detach the 2 claws and 4 clips, and remove the instrument panel register.

REMOVE THE LOWER INSTRUMENT 5. **FINISH PANEL**

- a) Remove the 2 screws.
- b) Disconnect the hood lock control cable.
- c) Using a nylon pry tool, detach the 4 claws and 5 clips.
- d) Disconnect all connectors and remove the finish panel.



RAISE THE VEHICLE OFF THE GROUND 6.

a) Confirm that the vehicle is raised so that the tires are off the ground. This is to prevent a load from being placed on the intermediate shaft when the steering wheel is being turned.





7. LOOSEN THE BOLTS FOR THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE

a) Loosen the 3 bolts shown in the illustration, but *DO NOT* remove them.

NOTE:

DO NOT remove the 3 bolts! Doing so may cause the splines to disengage, changing the center point position.

8. HOLD THE STEERING WHEEL IN POSITION

- Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
- b) Using the seat belt, hold the steering wheel in position as shown in the illustration, in order to prevent damage to the spiral cable.



9. LOWER THE VEHICLE TO THE GROUND

 a) While holding the steering wheel in the centered position, lower the vehicle to the ground until the tires touch. This will hold the steering gear in its center point position.



<u>WRONG!</u>

DO NOT hit the intermediate shaft no. 2 and sliding yoke assembly!



10. REMOVE THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- a) Remove the 2 bolts shown in the illustration.
- b) Remove the intermediate shaft No. 2 and the sliding yoke as an assembly.

NOTE:

DO NOT turn the steering shaft when removing the intermediate shaft No. 2 and the sliding yoke assembly.

NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, DO NOT hit them with a hammer or any other tool. Doing so may damage the shock absorbing mechanism or the joints of the steering system.



NOTE:

If you are having difficulty removing the intermediate shaft No. 2 and sliding yoke assembly from their splines, pry on the slot(s) with a screwdriver as shown in the illustration.





After removing the intermediate shaft No. 2 and sliding yoke assembly, DO

NOT do anything that will cause the tires to move. Doing so will change the center point position of the steering





11. REMOVE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 AND INSPECT FOR DAMAGE

a) Remove the intermediate (extension) shaft No. 1 from the passenger compartment side.

NOTE:

NOTE:

- DO NOT turn the intermediate (extension) No. 1 shaft when removing it. Doing so will change the center point position of the steering gear.
- If you are having difficulty removing the intermediate (extension) shaft No. 1 from the steering gear, DO NOT hit it with a hammer or any other tool.
- b) Inspect the internal splines of the intermediate (extension) shaft No. 1 for damage. Is damage present?

OK, NO damage:

 Intermediate (extension) shaft is OK. Replacement is NOT necessary, reuse the intermediate (extension) shaft and bolt.

NG, damaged:

 Intermediate (extension) shaft is NG. Replace the intermediate (extension) shaft No. 1 and the bolt with a NEW one.





12. INSTALL THE INTERMEDIATE (EXTENSION) SHAFT NO. 1

- a) Clean the steering gear shaft.
- b) Install the (REUSED* or NEW*) intermediate (extension) shaft No. 1 from the passenger compartment, making sure to insert it all the way onto the steering gear.
 - * Depends on the inspection results from the previous step above.

NOTE:

- The intermediate (extension) shaft can be inserted onto the steering gear in any direction.
- DO NOT turn the intermediate (extension) shaft when installing it. Doing so will change the center point position of the steering gear.

13. SEPARATE THE INTERMEDIATE SHAFT NO. 1 AND THE SLIDING YOKE

- a) Remove the bolt.
- b) Separate the intermediate shaft No. 2 from the sliding yoke.



14. INSPECT THE SLIDING YOKE*

a) Inspect the shape of the slot on the sliding yoke as shown in the illustration to determine if it is OK or NG.

Sliding Yoke is OK:

• Replacement is **NOT** necessary, reuse the sliding yoke.

A VIDEO SHOWING AN OK SLIDING YOKE IS AVAILABLE BY CLICKING ON THIS LINK: (PRIUS_02C)

Sliding Yoke is NG:

• Replace the sliding yoke with a **NEW** one.

A VIDEO SHOWING AN NG SLIDING YOKE IS AVAILABLE BY CLICKING ON THIS LINK: (PRIUS_03C)

NOTE:

*

If the part number 04005-72247 is no longer available, please use the part number 04005-72147 and replace the intermediate shaft with the sliding yoke.

SECTION D





15. ASSEMBLE THE INTERMEDIATE SHAFT **NO. 2 AND THE SLIDING YOKE ASSEMBLY**

- a) Insert a **NEW** intermediate shaft No. 2 into the (REUSED* or NEW*) sliding yoke.
 - * Depends on the inspection results from step 14 on the previous page.
- b) Reinstall the bolt, but **DO NOT** tighten so that the sliding yoke can move freely on the splines of the intermediate shaft.

NOTE:

The sliding yoke can ONLY be installed one way onto the intermediate shaft No. 2 that allows the bolt to be reinstalled without damaging the splines.

16. REINSTALL THE INTERMEDIATE SHAFT **NO. 2 AND SLIDING YOKE ASSEMBLY**

- a) Make sure that the front tires are still on the ground and facing straight ahead.
- b) While another technician is holding the steering wheel in the center point position, reinstall the intermediate shaft No. 2 and the sliding yoke assembly.
- c) Reinstall the bolts "A" and "C" shown in the illustration, but **DO NOT** tighten.

NOTE:

- DO NOT install the intermediate shaft No. 2 and sliding yoke assembly upside down.
- The splines can be inserted in any direction. It is NOT necessary to align the intermediate shaft No. 2 and sliding yoke assembly.
- During reinstallation, DO NOT hit the intermediate shaft No. 2 and sliding voke assembly with a hammer or any other tool.
- d) Temporarily tighten bolts "B" so that the intermediate shaft No.2 will not extend or retract.

NOTE:

If bolt "B" is not securely tightened, the intermediate (extension) shaft No. 1 may disengage from the steering gear when moving the steering column hole cover to install the intermediate (extension) shaft No. 1 bolt.



17. CONFIRM THE STEERING GEAR CENTER POINT POSITION

a) While holding the steering wheel in the centered position, raise the vehicle up so that the tires are off the ground.

b) Measure the distance between the same steering gear tie rod end and the corresponding bolt for the rear section of the front lower arm that was done in step 3b on page 21.

New Measurement Value:



c) Is the new measurement the same as the original measured value taken in step 3b on page 21?

NO:

- Readjust the steering gear center point position back to the original measurement value.
- Repeat the following steps:

Step "8. HOLD THE STEERING WHEEL IN POSITION" on page 23.

- Step "9. LOWER THE VEHICLE TO THE GROUND" on page 23.
- Step "10. REMOVE THE **INTERMEDIATE SHAFT NO. 2** AND SLIDING YOKE ASSEMBLY" on pages 24-25.
- Step "16. REINSTALL THE **INTERMEDIATE SHAFT NO. 2** AND SLIDING YOKE ASSEMBLY" on page 28.
- Step "17. CONFIRM THE STEERING **GEAR CENTER POINT** POSITION" on this page.

YES:

Proceed to the next step.



Column Hole

Steering Gear.

Cover

18. RELEASE THE STEERING WHEEL

a) Release the seat belt and remove it from the steering wheel.

NOTE: DO NOT damage the steering wheel during this process.

- 19. DISCONNECT THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)
 - a) Disconnect the lower portion of the column hole cover by pushing it up and away from the steering gear assembly.



20. INSTALL AND TIGHTEN THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT

- a) While holding up the column hole cover, check that the intermediate (extension) shaft is fully inserted onto the steering gear.
- b) Install a (REUSED* or NEW*) bolt and torque to specification. If necessary, turn the steering gear to make it easier to tighten the bolt.
 - * Depends on the inspection results from step 11b, pg. 25.

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)





21. REINSTALL THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

- a) Align the hole on the steering column hole cover with the raised circle on the steering gear.
- b) Pull the column hole cover down and over the steering gear assembly.
- c) Confirm the following:
 - The column hole cover is properly set onto the entire circumference of the steering gear, see illustration.
 - The hole in the column hole cover is properly set over the raised circle of the steering gear, see illustration.

22. TILT THE STEERING COLUMN TO THE LOWEST POSITION

a) Tilt the steering column to its lowest point.

NOTE:

The length of the steering column shaft varies slightly depending on the tilt angle. Make sure to place the steering column at its lowest position (as seen in the illustration) before tightening the bolts.



23. RAISE THE VEHICLE OFF THE GROUND

 a) Confirm that the vehicle is raised so that the tires are off the ground to prevent a load on the steering shaft when the steering wheel is turned.

SECTION D





Simm or more

24. TIGHTEN THE BOLTS FOR THE INTERMEDIATE SHAFT AND SLIDING YOKE

- a) Loosen bolt "B" so that it can be turned by hand.
- b) Tighten the 3 bolts to specification in the following order:

Tightening Sequence: Bolt "A", Bolt "C" then Bolt "B"

Torque Specification: 35 N·m (360 kgf·cm, 26 ft·lbf)

25. RECONNECT THE STEERING COLUMN HOLE COVER NO. 1

a) Seat clip B then clip A.

NOTE: Be careful not to damage clip B.

26. REINSTALL THE COLUMN HOLE COVER SILENCER SHEET

- a) Reinstall the column hole cover silencer sheet.
- b) Reinstall the 2 clips.
- c) Confirm that the clearance between the intermediate shaft No. 2 and the column hole cover is 5 mm or more.
- d) Fold the floor carpet back into position.

SECTION D



27. REINSTALL THE LOWER INSTRUMENT FINISH PANEL

- a) Reinstall the lower instrument finish panel and reconnect all connectors.
- b) Reattach the 4 claws and 5 clips.
- c) Reconnect the hood lock control cable.
- d) Reinstall the 2 screws.



28. REINSTALL THE NO. 1 INSTRUMENT PANEL REGISTER

a) Reinstall the instrument panel register, and reattach the 2 claws and 4 clips.

- 29. INSPECT THE STEERING COLUMN TILT FUNCTION FOR PROPER OPERATION
- 30. TURN THE STEERING WHEEL FROM LEFT-TO-RIGHT TO INSPECT FOR PROPER OPERATION AND FEEL
- 31. INSPECT THAT THE STEERING WHEEL IS CENTERED
- 32. REPAIRS ARE COMPLETED