

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. Vehicles in Dealer Stock**

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	
		VDS	Range
Prius	2004	KB20U	0001086 – 0116870
		KB22U	0001142 – 0116845
	2005	KB20U	0116874 – 0133248
			3000000 – 3128076
			7003414 – 7057937
		KB22U	0116872 – 0133240
			3000008 – 3128067
			7004342 – 7057888
	2006	KB20U	3099688 – 3129959
			7057941 – 7059090
		KB22U	3128082 – 3129958
			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.

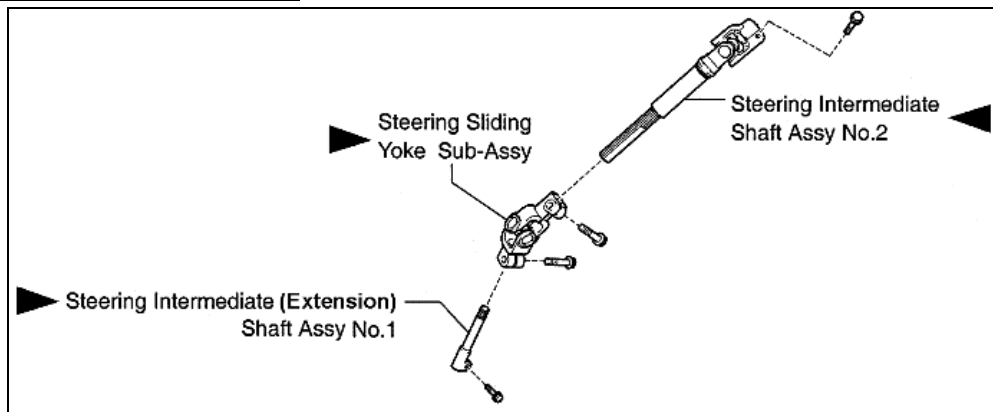
A UIO by state matrix is listed below to inform dealers of the number of vehicles in their area.

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	TX	6673
AZ	3602	IL	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
CT	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

## 6. Repair Procedures

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

## 7. Reimbursement Procedures



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	<ul style="list-style-type: none"> <li>Inspect the Steering Intermediate (Extension) Shaft No. 1*.</li> <li>Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be <b>REPLACED</b>.)</li> <li>Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles)</li> </ul>	0.9 hr/vehicle
	6509E2	<ul style="list-style-type: none"> <li>Inspect &amp; replace Steering Intermediate (Extension) Shaft No. 1*.</li> <li>Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be <b>REPLACED</b>.)</li> <li>Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles)</li> </ul>	1.0 hr/vehicle

**The Additional Operation Codes you may use are:**

SSC #	Op. Code	Description	Flat Rate Hour
60C	6509EJ	<ul style="list-style-type: none"> <li>Inspect the Steering Intermediate (Extension) Shaft No. 1*.</li> <li>Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be <b>REPLACED</b>.)</li> <li>Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles)</li> <li>Adjust the vehicle's alignment if the steering wheel is off center.</li> </ul>	2.2 hr/vehicle
	6509EK	<ul style="list-style-type: none"> <li>Inspect &amp; replace Steering Intermediate (Extension) Shaft No. 1*.</li> <li>Inspect and replace the Steering Sliding Yoke Sub-Assy**. (Approximately 50% of the vehicles will require the Sliding Yoke Sub-Assy to be <b>REPLACED</b>.)</li> <li>Replace the Steering Intermediate Shaft Assy No. 2. (All vehicles)</li> <li>Adjust the vehicle's alignment if the steering wheel is off center.</li> </ul>	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 step-by-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. 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.



**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.

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

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

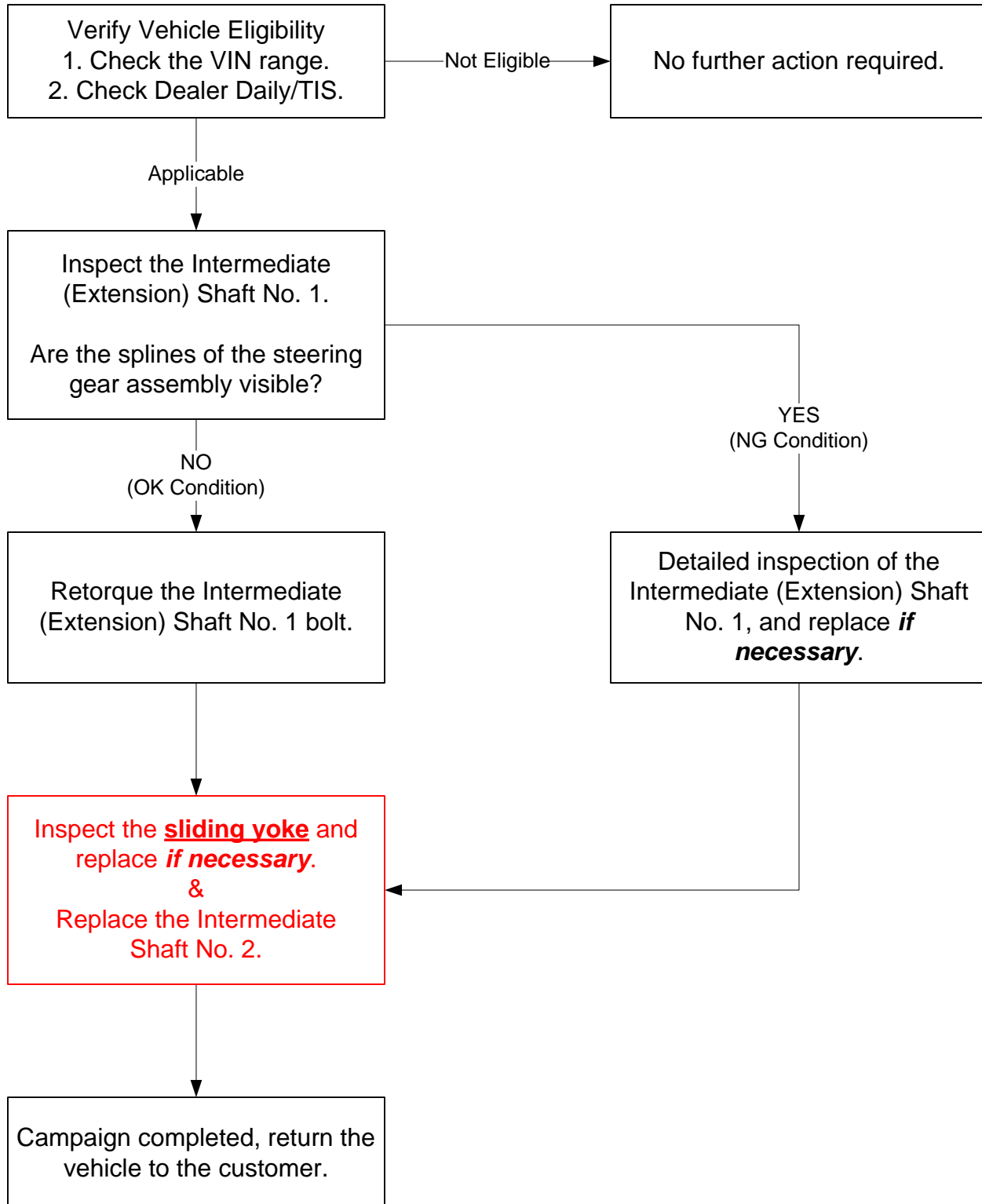
**TECHNICAL INSTRUCTIONS**

**FOR**

**SPECIAL SERVICE CAMPAIGN 60C**

**2004 THROUGH EARLY 2006 MODEL YEAR PRIUS**  
**STEERING INTERMEDIATE SHAFT REPLACEMENT**

## I. OPERATION FLOW CHART





## II. IDENTIFICATION OF AFFECTED VEHICLES

### A. AFFECTED VIN RANGE

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

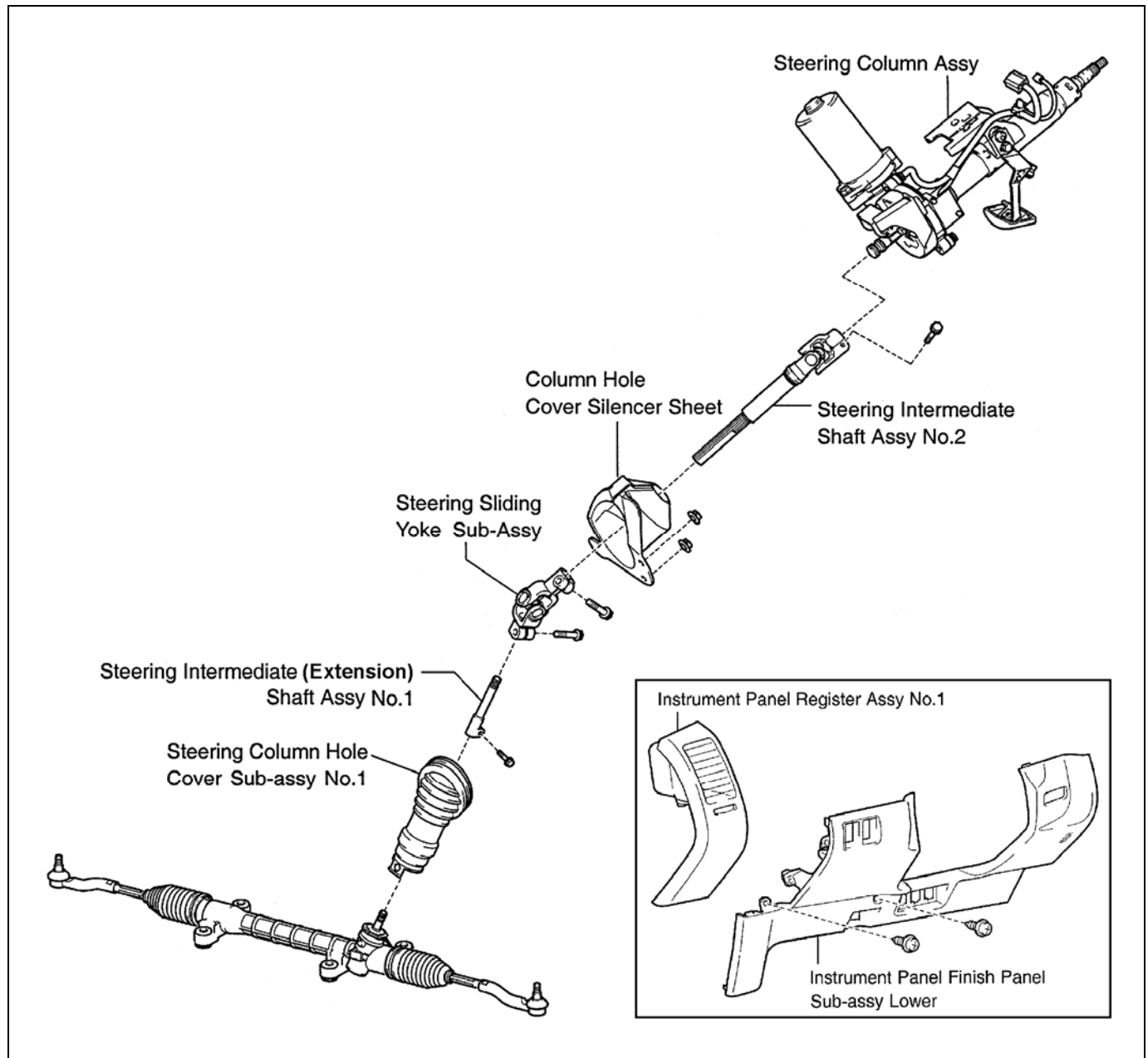
\* Only 50% of all vehicles will require Sliding Yoke replacement. Make sure to perform the inspection procedure prior to replacement.

\*\* 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



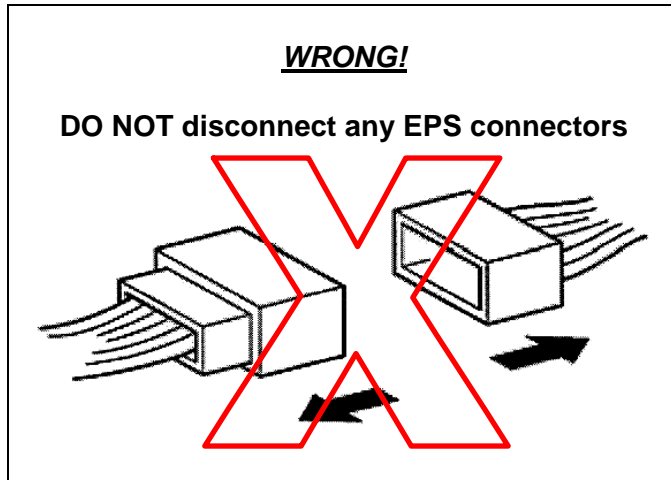
## V. BACKGROUND

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

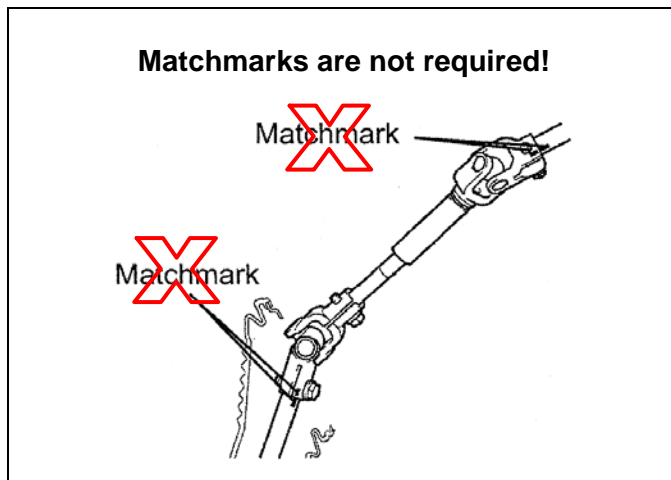


### A. SERVICE PRECAUTIONS



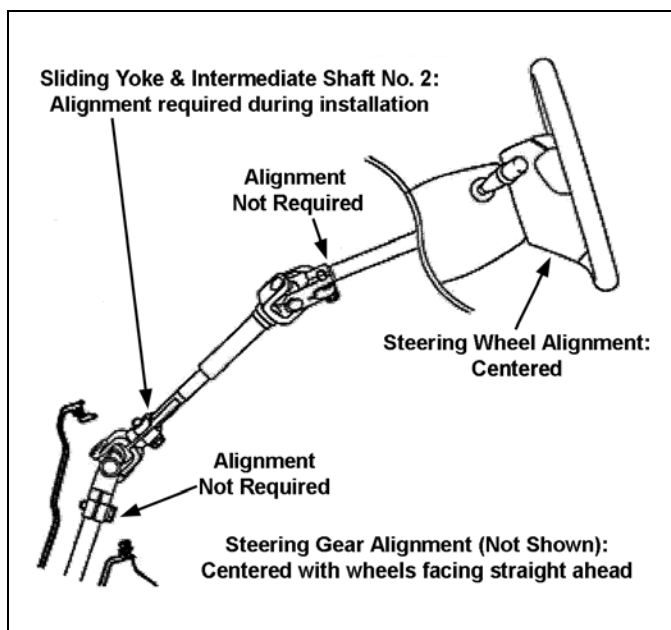
#### 1. DO NOT DISCONNECT ANY ELECTRONIC POWER STEERING (EPS) CONNECTORS (EXCEPT FOR THE STEERING SENSOR CONNECTOR ON VEHICLES WITH VSC)

- 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.

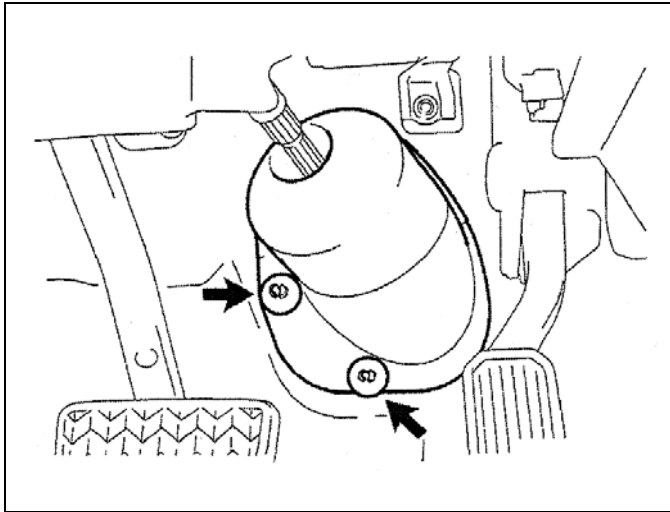


#### 3. PARTS ALIGNMENT DURING INSTALLATION

- 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

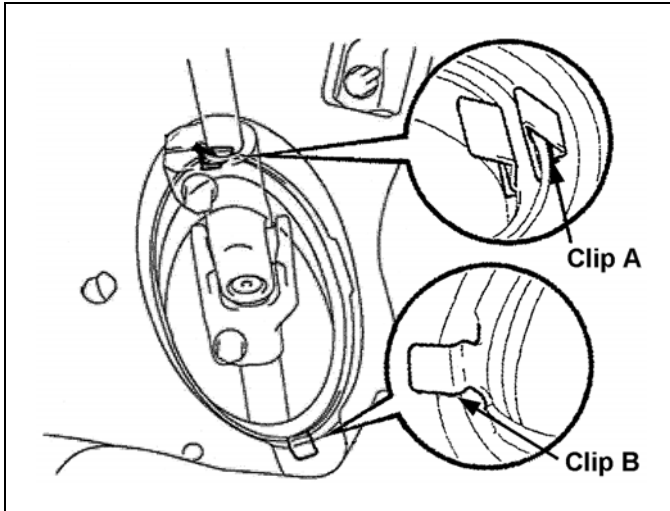
If these parts are not aligned correctly, the steering wheel may be off center or damage to the airbag spiral cable may occur.

## B. INTERMEDIATE (EXTENSION) SHAFT NO. 1 INSPECTION



### 1. REMOVE THE COLUMN HOLE COVER SILENCER SHEET

- Fold back the floor carpet.
- Remove the 2 clips.
- Remove the column hole cover silencer sheet.

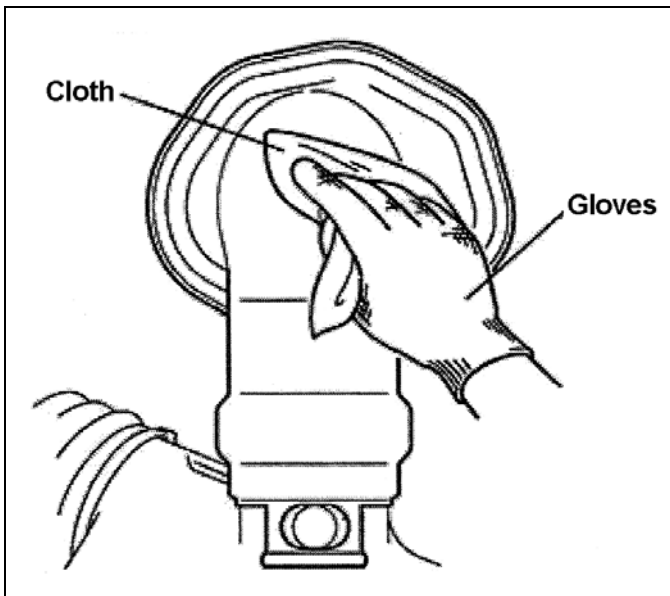


### 2. DISCONNECT THE STEERING COLUMN HOLE COVER NO. 1

- Unseat clip A then clip B.

#### NOTE:

Be careful not to damage clip B.



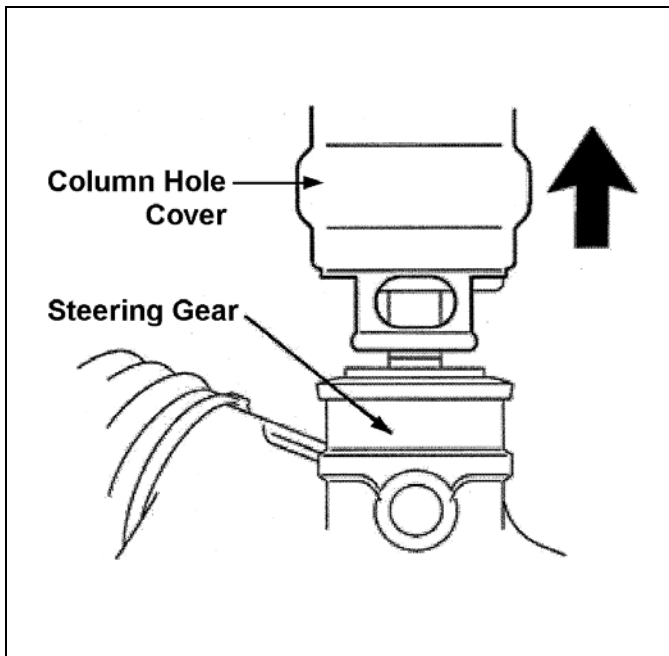
### 3. CLEAN THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)

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

#### NOTE:

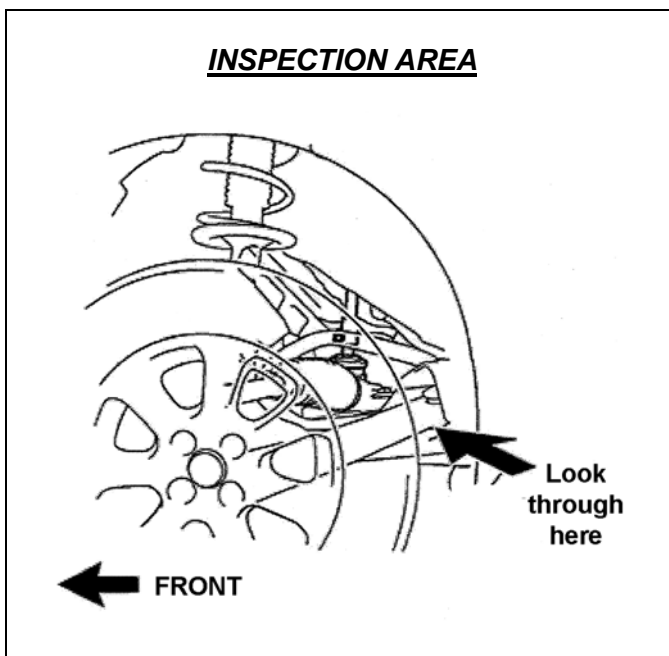
- Cleaning the column hole cover prior to disconnecting it will prevent dirt and water from entering the steering gear oil seal.
- When working under the vehicle or around the steering gear, wear work gloves to prevent burns from exhaust components or injuries from burrs on surrounding parts.

## SECTION B



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

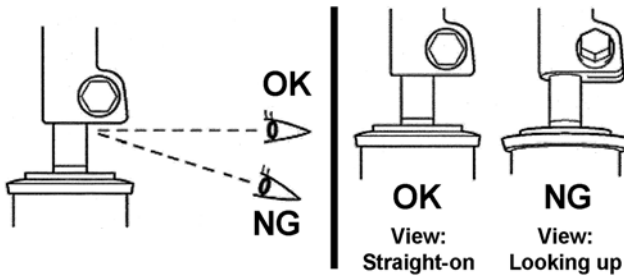
- a) Disconnect the bottom section of the column hole cover by pushing it up and away from the steering gear assembly.



**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.

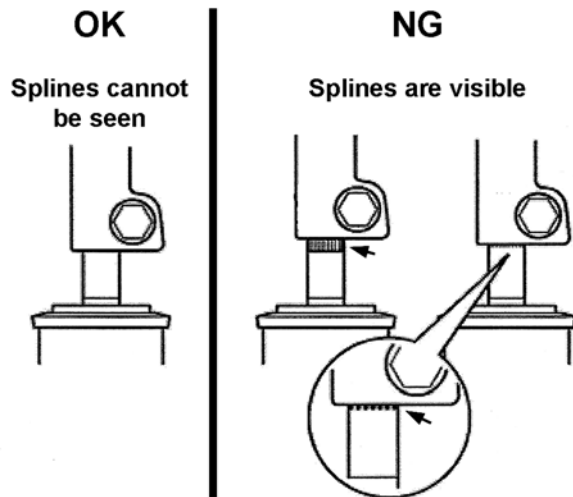
### INSPECTION METHOD



### 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.

### INSPECTION JUDGEMENT



- 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.

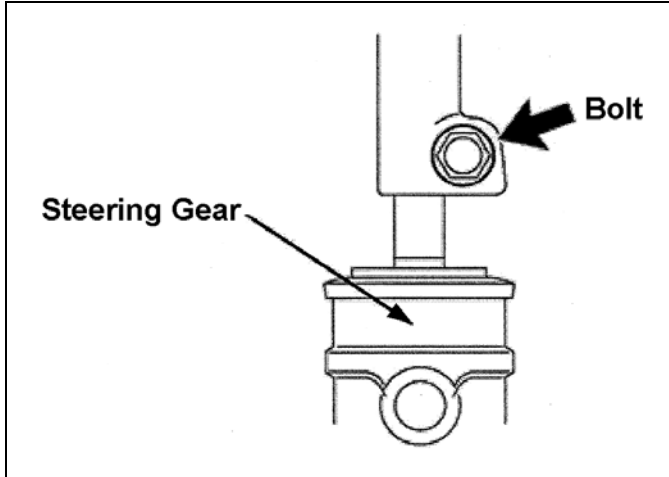
“C. RETORQUE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2” on page 09.

- **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.

## SECTION B

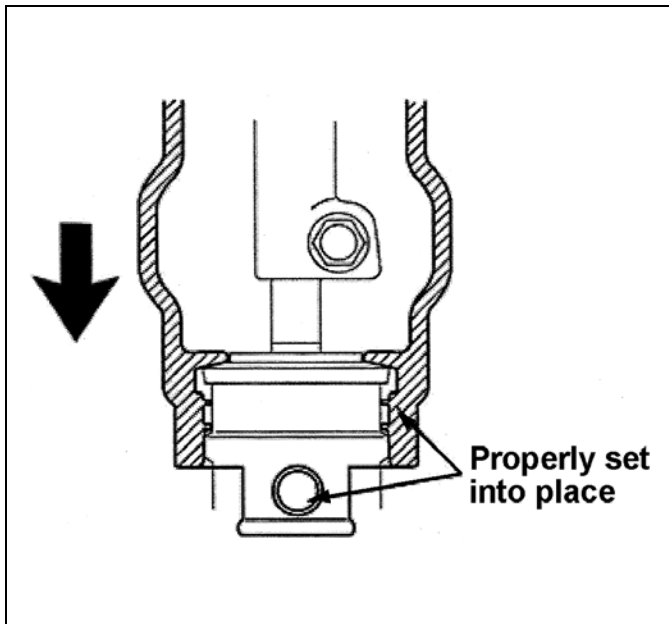
## C. RETORQUE THE INTERMEDIATE (EXTENSION) SHAFT NO. 1 BOLT, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2



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

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

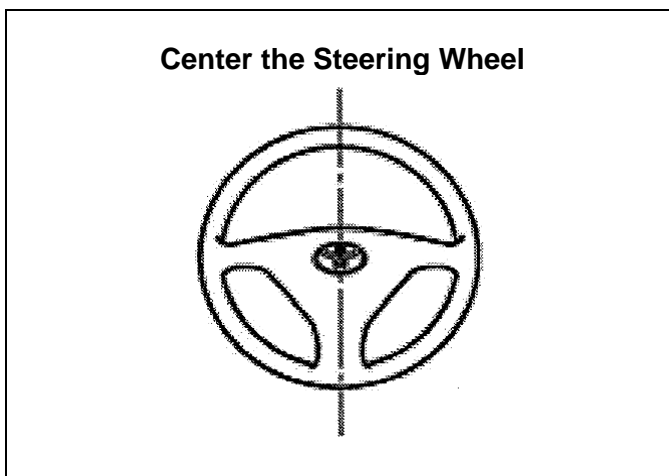
**Torque Specification:**  
35 N·m (360 kgf·cm, 26 ft·lbf)



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

- Align the hole on the steering column hole cover with the raised circle on the steering gear.
- Pull the column hole cover down and over the steering gear assembly.
- Confirm the following:

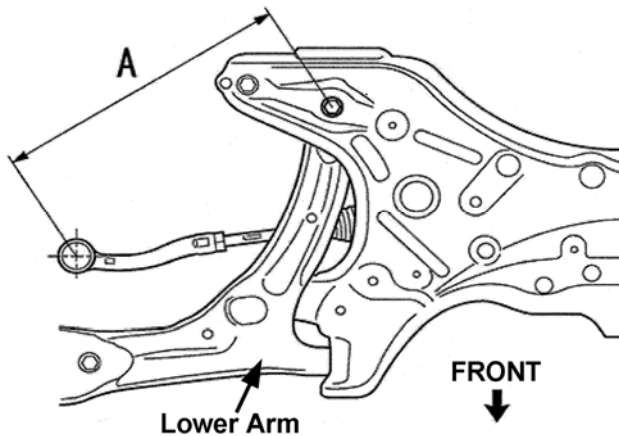
- The column hole cover is properly set onto the entire circumference of the steering gear, see illustration.
- The hole in the column hole cover is properly set over the raised circle of the steering gear, see illustration.



### 3. DETERMINE THE STEERING GEAR CENTER POINT POSITION

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

### Measurement Points



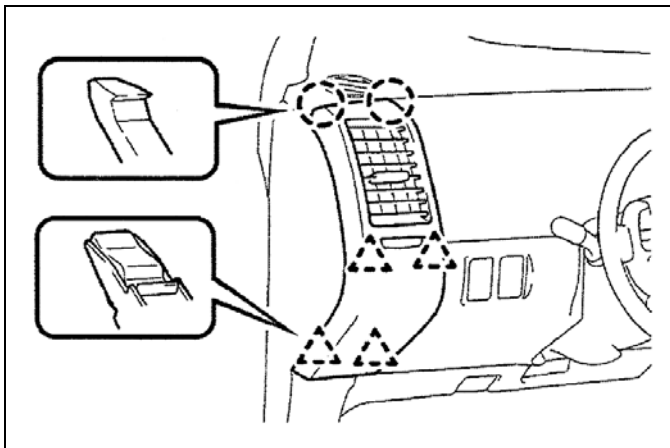
- b) Measure and record the distance between the left or right steering gear tie rod end and the corresponding bolt for the rear section of the front lower arm as shown in the illustration.

### Original Measurement Value:

- A = \_\_\_\_\_ mm

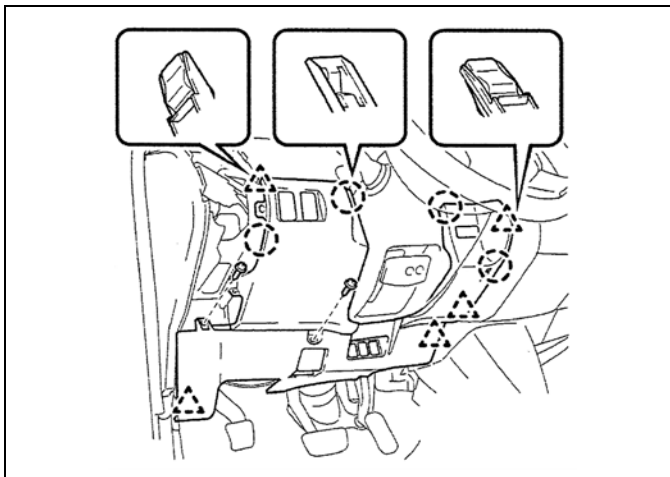
### NOTE:

- 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.



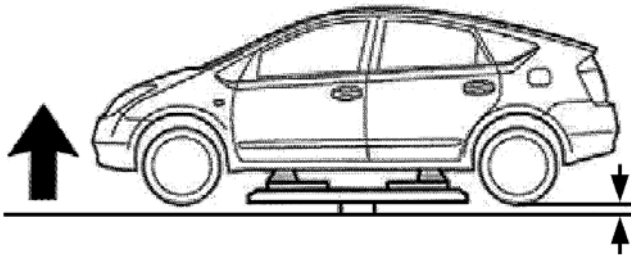
### 5. REMOVE THE LOWER INSTRUMENT FINISH PANEL

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

## SECTION C



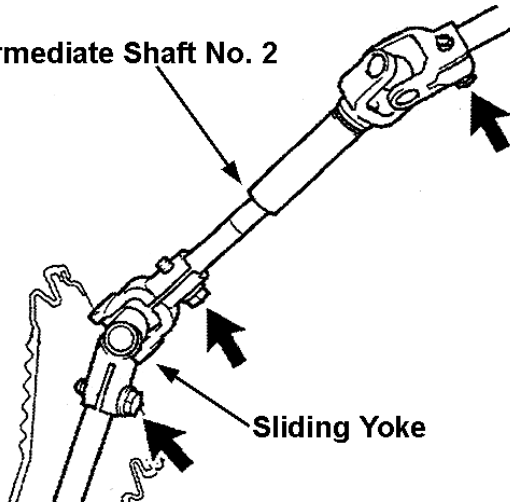
Raise the vehicle off the ground



## 6. RAISE THE VEHICLE OFF THE GROUND

- 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.

Intermediate Shaft No. 2

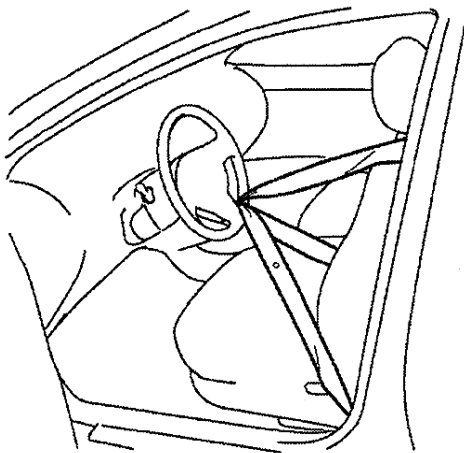


## 7. LOOSEN THE BOLTS FOR THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE

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

### NOTE:

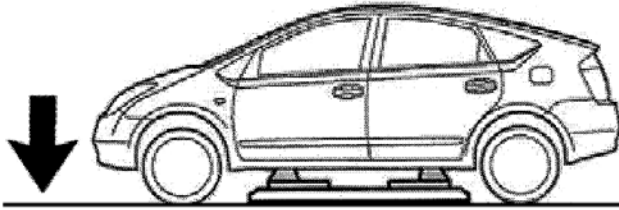
**DO NOT** remove the 3 bolts! Doing so may cause the splines to disengage, changing the center point position.



## 8. HOLD THE STEERING WHEEL IN POSITION

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

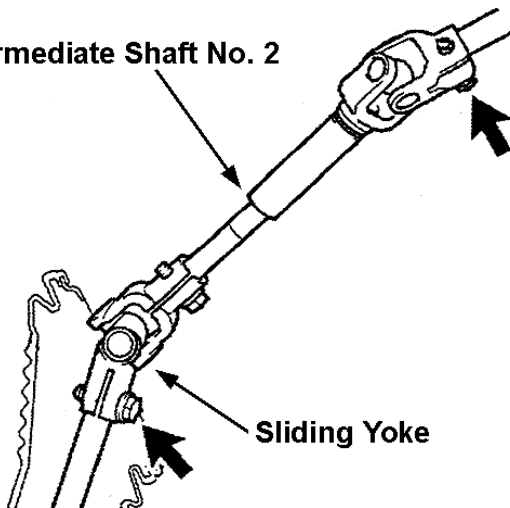
**Lower the vehicle to the ground**



## **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.

**Intermediate Shaft No. 2**



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

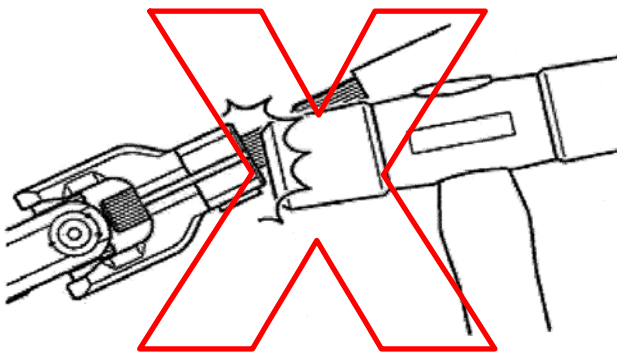
- a) Remove the 2 bolts shown in the illustration.
- b) Remove the intermediate shaft No. 2 and the sliding yoke as an assembly.

### **NOTE:**

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

### **WRONG!**

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

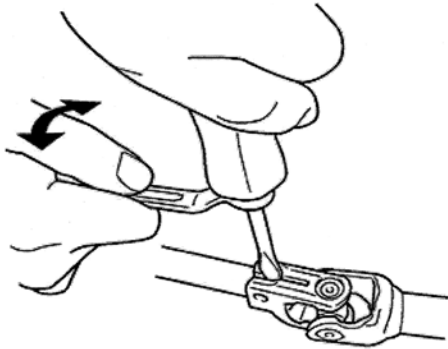


### **NOTE:**

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.

**CORRECT!**

If necessary, use a screwdriver

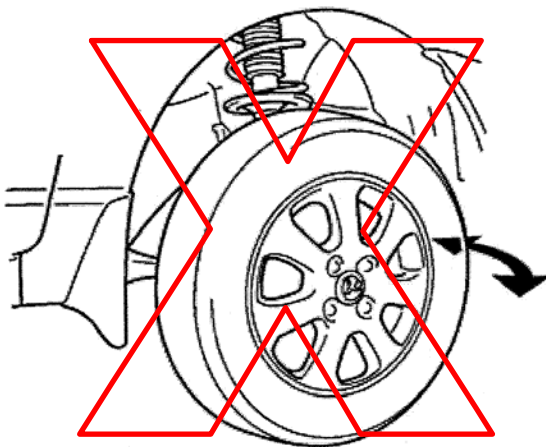


**NOTE:**

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.

**WRONG!**

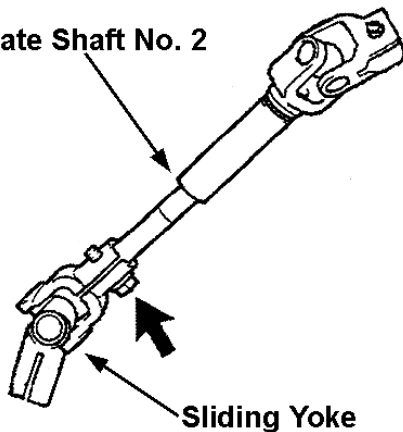
DO NOT move the tires!



**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.

Intermediate Shaft No. 2

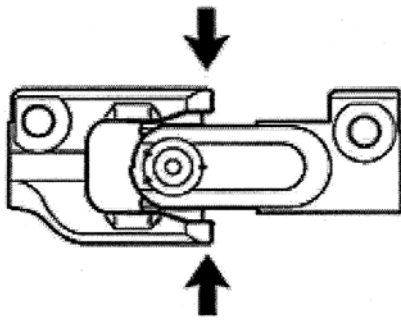


Sliding Yoke

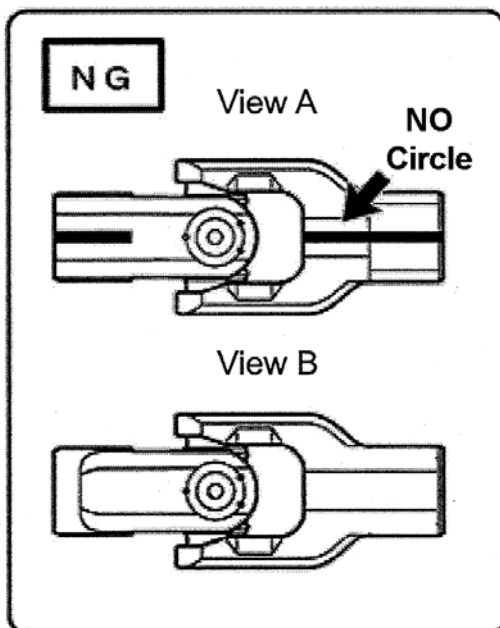
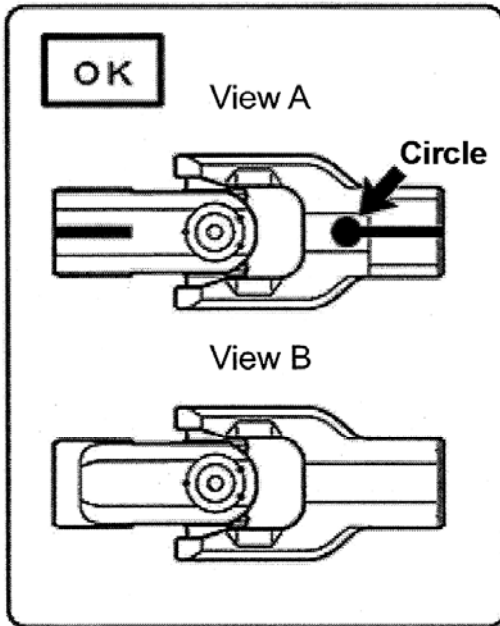
**11. SEPARATE THE INTERMEDIATE SHAFT NO. 2 AND THE SLIDING YOKE**

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

View A



View B



## 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 BY CLICKING ON THIS LINK:**

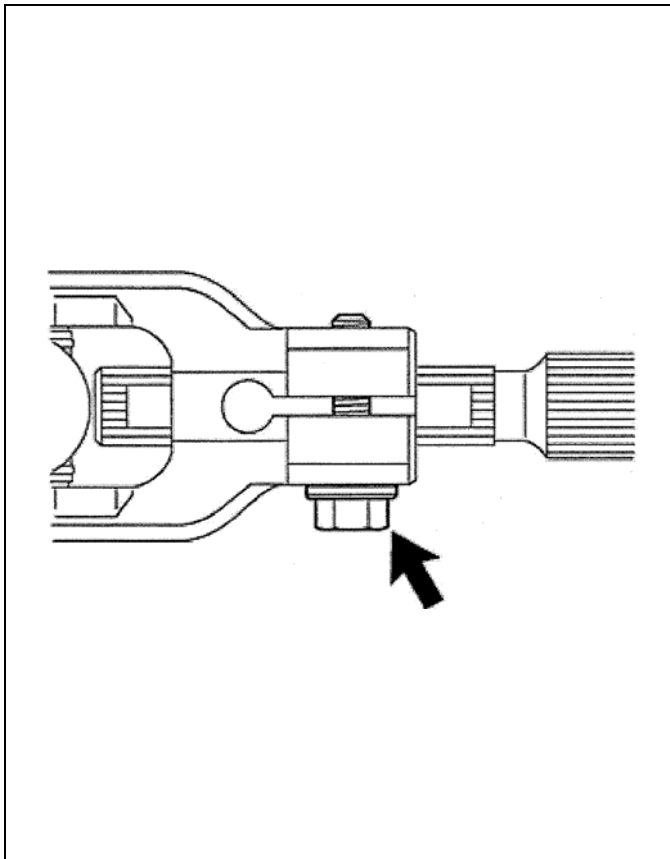
[\(PRIUS\\_02C\)](#)

### 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:**

[\(PRIUS\\_03C\)](#)



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

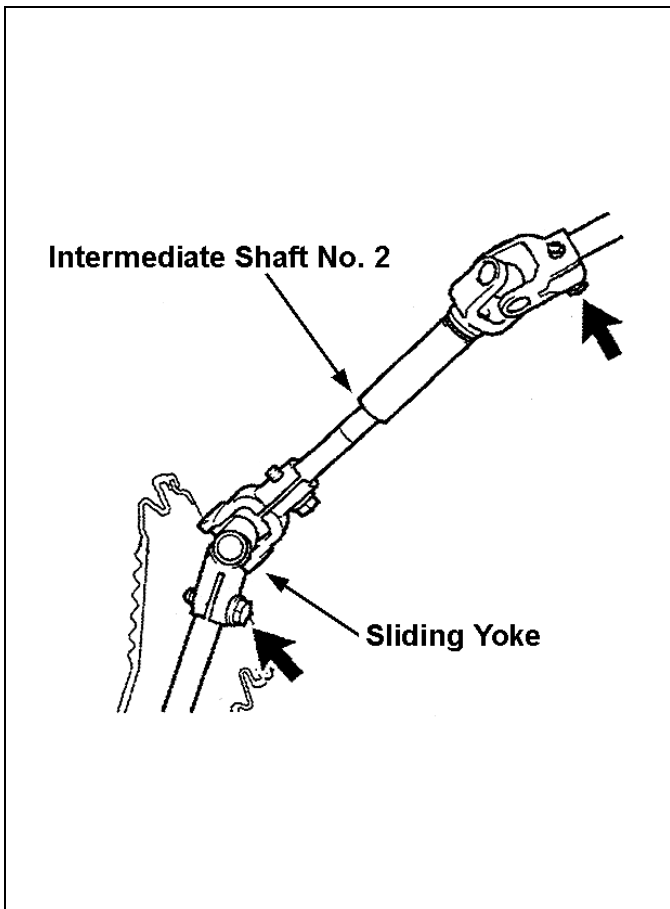
- Insert a **NEW** intermediate shaft No. 2 into the (REUSED\* or NEW\*) sliding yoke.

\* Depends on the inspection results from step 12 on the previous page.

- 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.



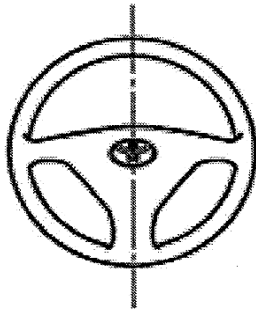
### 14. REINSTALL THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

- Make sure that the front tires are still on the ground and facing straight ahead.
- While another technician is holding the steering wheel in the center point position, reinstall the intermediate shaft No. 2 and the sliding yoke assembly.
- 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.

Hold the steering wheel  
in its centered position



## 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:**

- A = \_\_\_\_\_ mm

- 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.

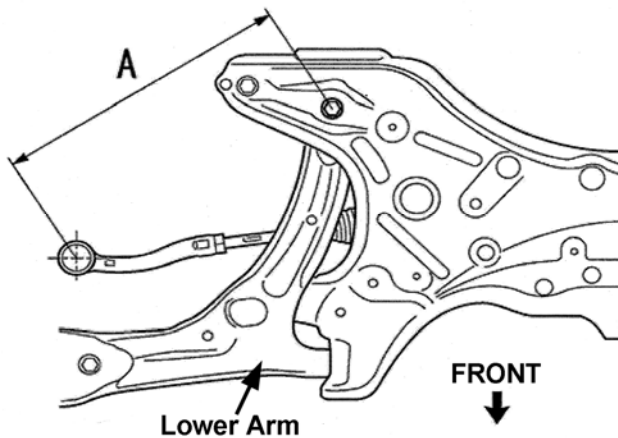
Step "14. REINSTALL THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY" on page 15.

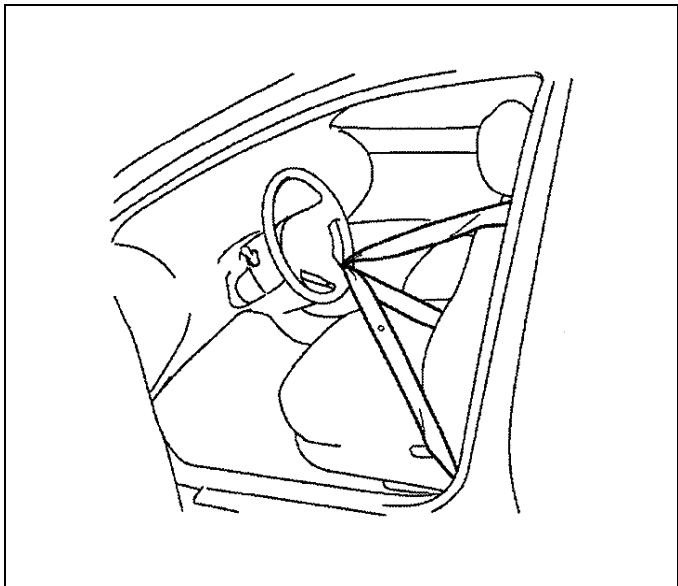
Step "15. CONFIRM THE STEERING GEAR CENTER POINT POSITION", on this page.

**YES:**

- **Proceed to the next step.**

**Measurement Points**



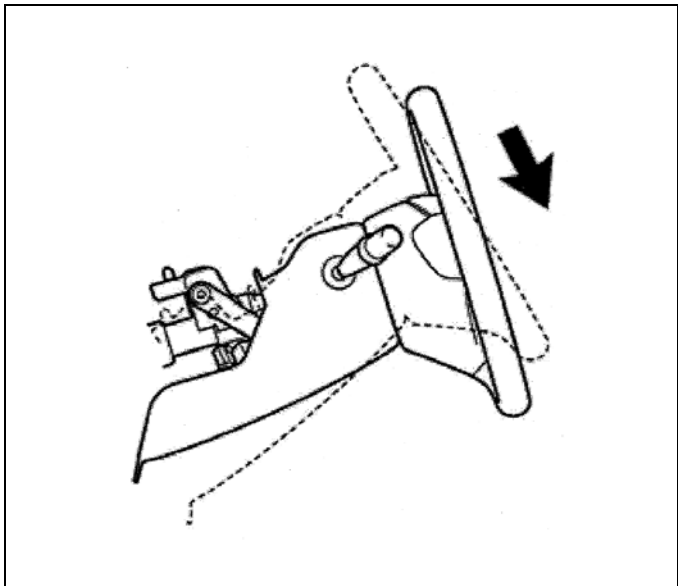


## 16. RELEASE THE STEERING WHEEL

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

### NOTE:

**DO NOT** damage the steering wheel during this process.

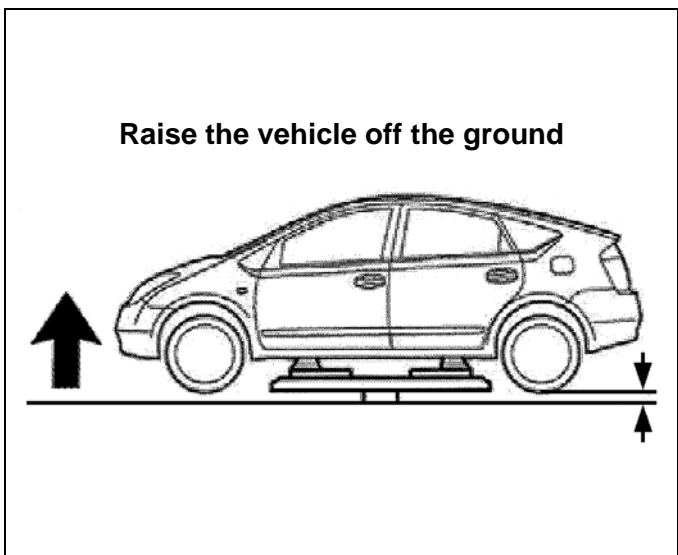


## 17. TILT THE STEERING COLUMN TO THE LOWEST POSITION

- 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.

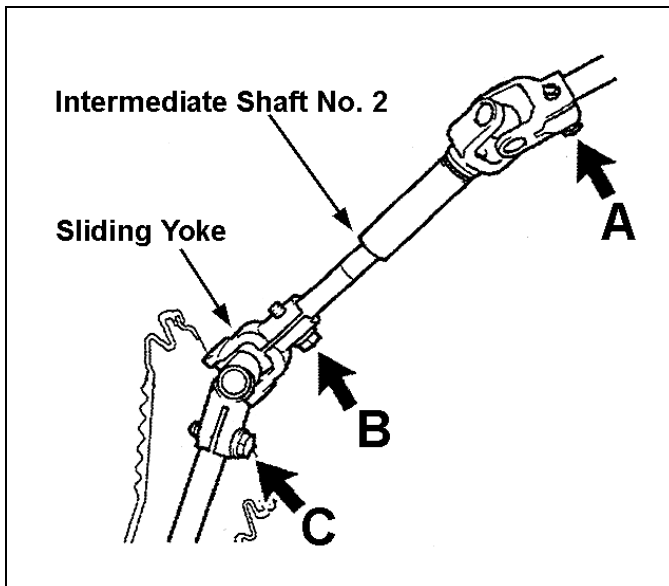


## 18. RAISE THE VEHICLE OFF THE GROUND

- 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.

## SECTION C





## 19. TIGHTEN THE BOLTS FOR THE INTERMEDIATE SHAFT AND SLIDING YOKE

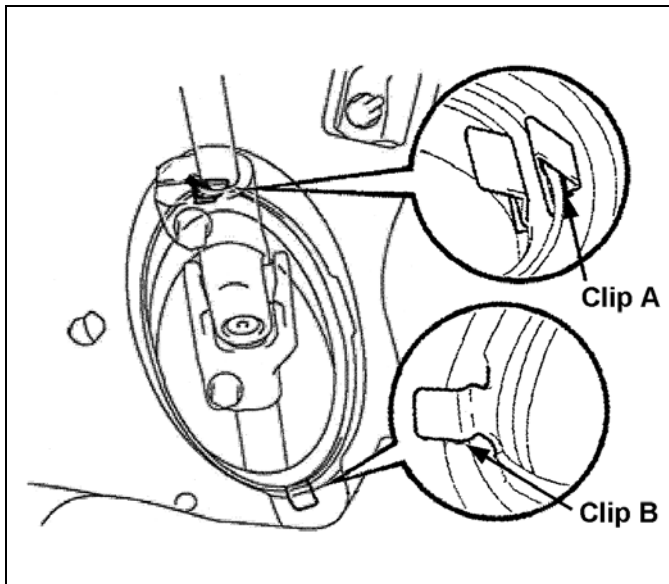
- Tighten the 3 bolts to specification in the following order:

### Tightening Sequence:

Bolt "A", Bolt "C" then Bolt "B"

### Torque Specification:

35 N·m (360 kgf·cm, 26 ft·lbf)

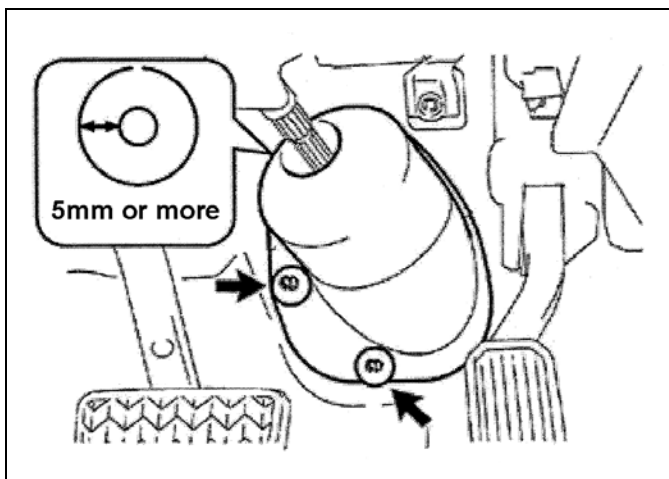


## 20. RECONNECT THE STEERING COLUMN HOLE COVER NO. 1

- Seat clip B then clip A.

### NOTE:

Be careful not to damage clip B.

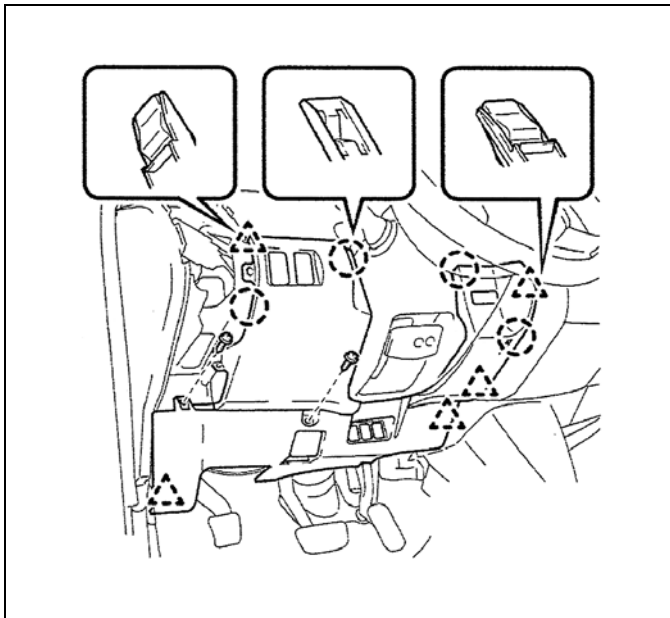


## 21. REINSTALL THE COLUMN HOLE COVER SILENCER SHEET

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

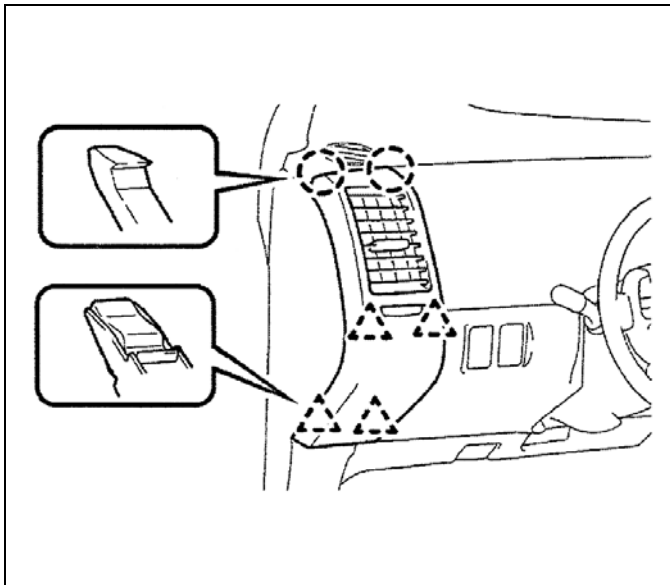
## SECTION C





## 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

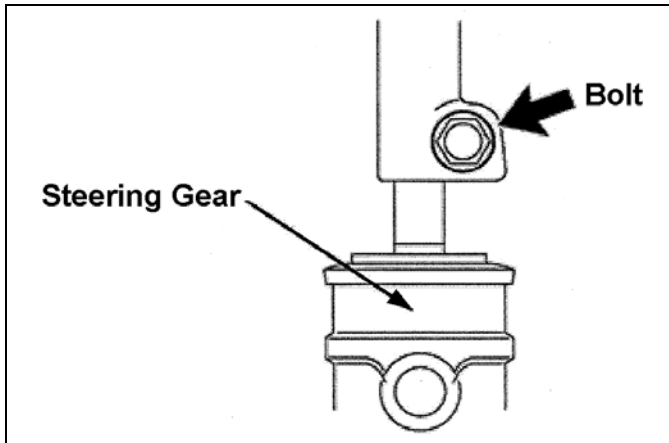
## 25. TURN THE STEERING WHEEL FROM LEFT-TO-RIGHT TO INSPECT FOR PROPER OPERATION AND FEEL

## 26. INSPECT THAT THE STEERING WHEEL IS CENTERED

## 27. REPAIRS ARE COMPLETED

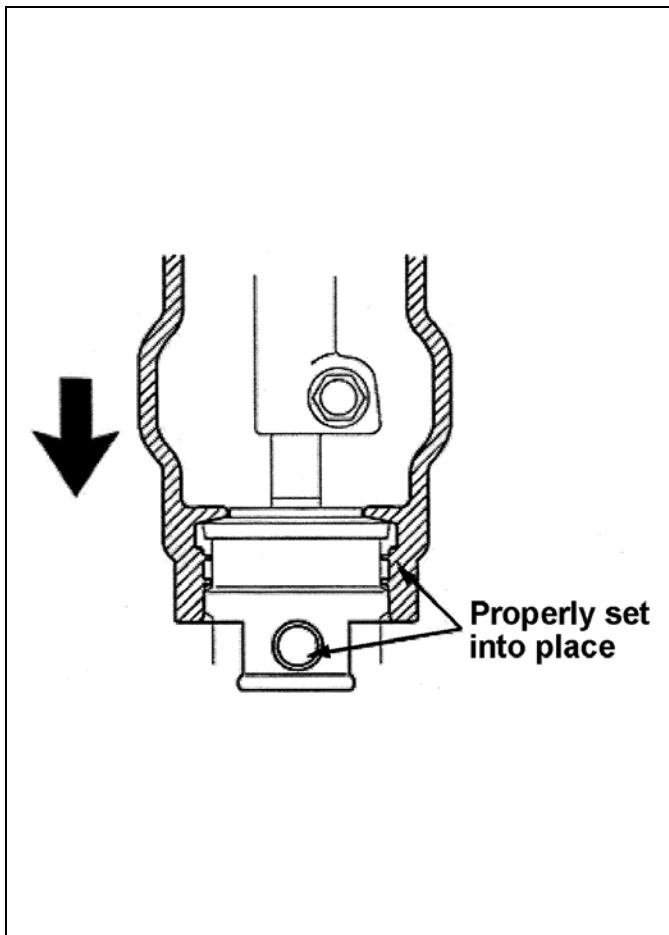
**D. DETAILED INSPECTION OF THE INTERMEDIATE (EXTENSION) SHAFT NO. 1, INSPECT THE SLIDING YOKE AND REPLACE THE INTERMEDIATE SHAFT NO. 2**

***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.



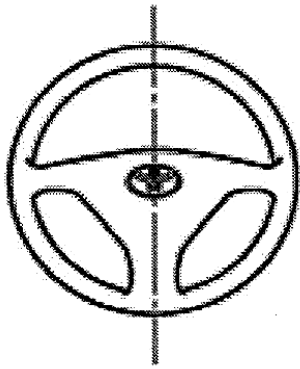
**2. REINSTALL THE STEERING COLUMN HOLE COVER NO. 1 (ENGINE SIDE)**

- 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.

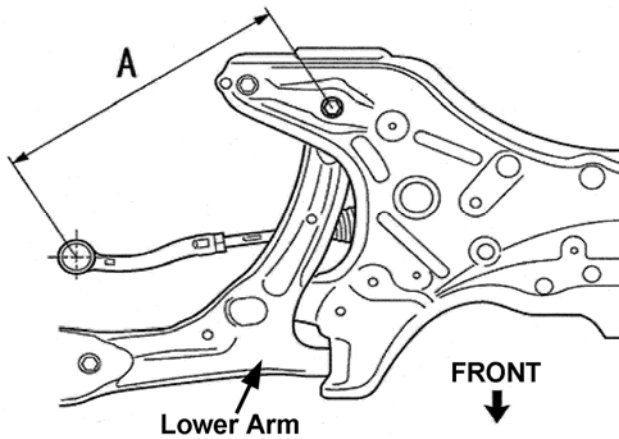
### Center the Steering Wheel



### 3. DETERMINE THE STEERING GEAR CENTER POINT POSITION

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

### Measurement Points



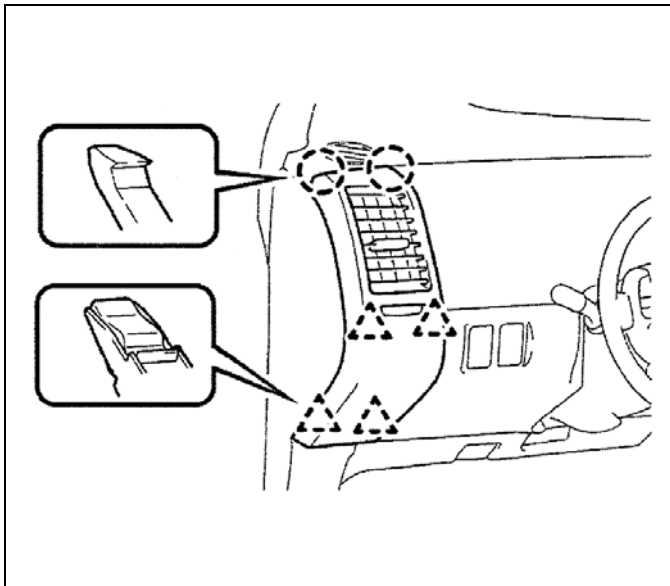
- b) Measure and record the distance between one of the steering gear tie rod ends and the corresponding bolt for the rear section of the front lower arm, as shown in the illustration.

### Original Measurement Value:

- A = \_\_\_\_\_ mm

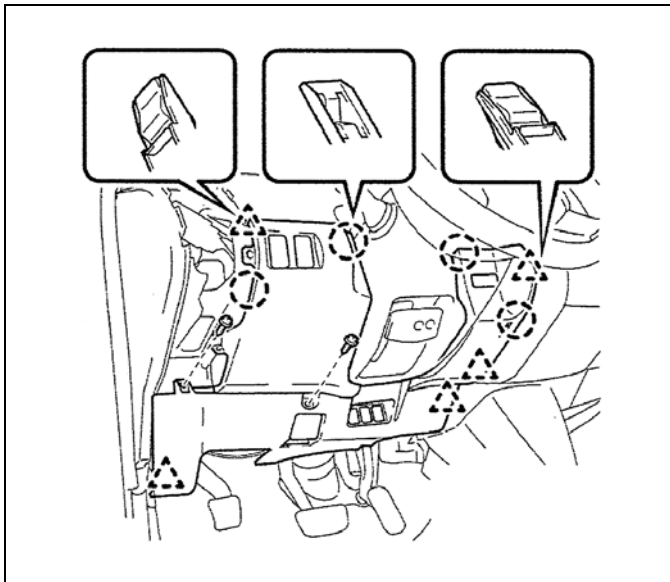
### NOTE:

- 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.



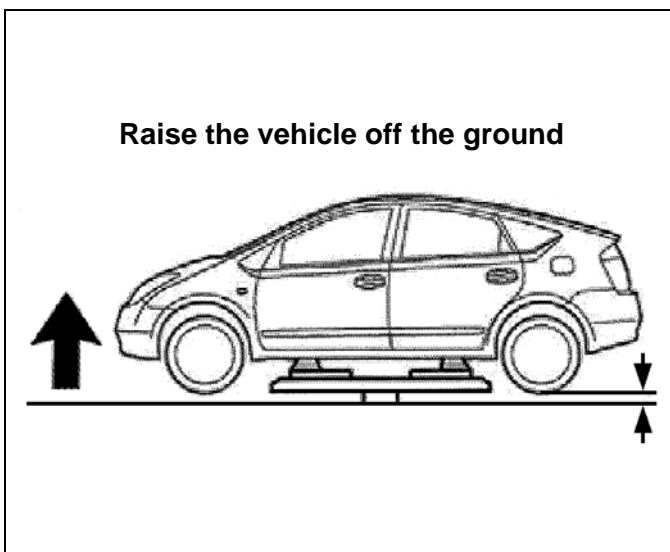
#### 4. REMOVE THE NO. 1 INSTRUMENT PANEL REGISTER

- 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

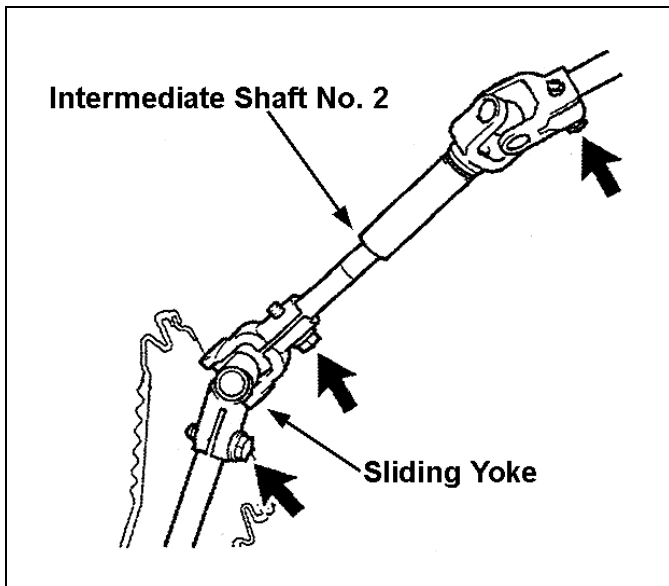
- a) Remove the 2 screws.
- b) Disconnect the hood lock control cable.
- c) Using a nylon pry tool, detach the 4 claws and 5 clips.
- d) Disconnect all connectors and remove the finish panel.



#### 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.

## SECTION D

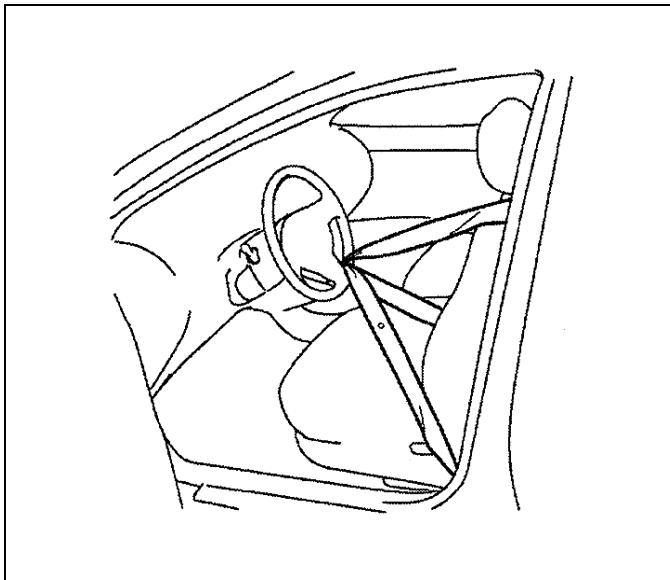


**7. LOOSEN THE BOLTS FOR THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE**

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

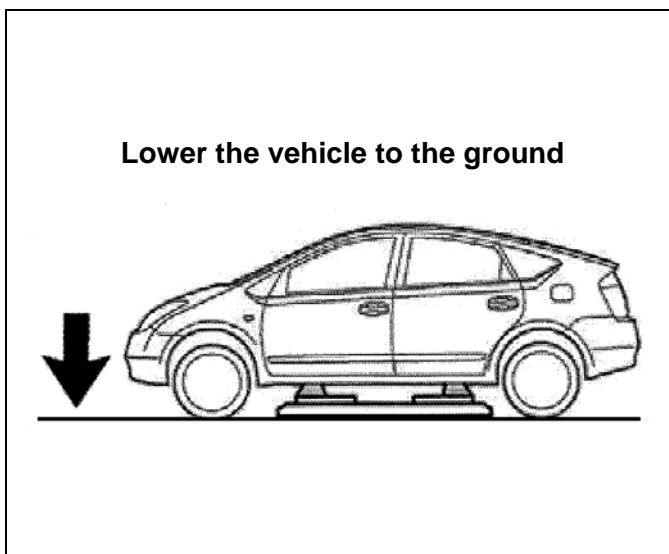
**NOTE:**

**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**

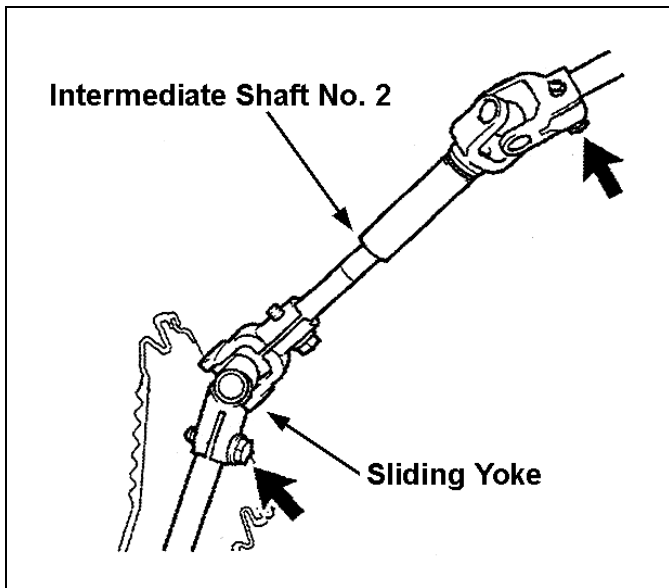
- a) Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
- b) Using the seat belt, hold the steering wheel in position as shown in the illustration, in order to prevent damage to the spiral cable.



**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.

**SECTION D**

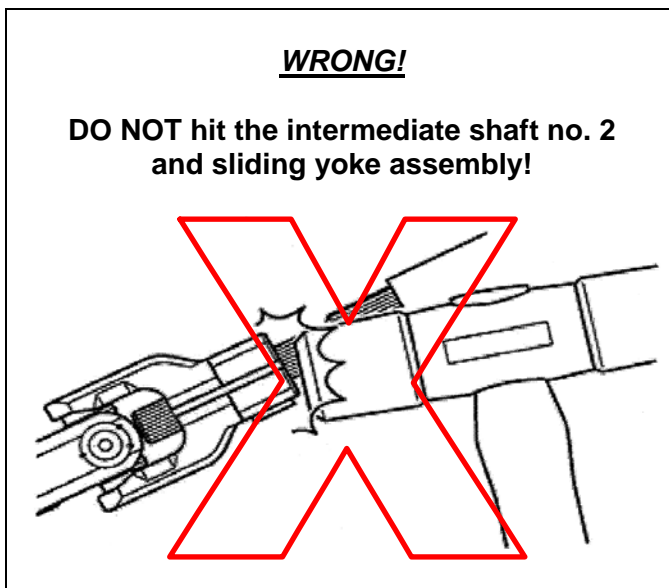


#### 10. REMOVE THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY

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

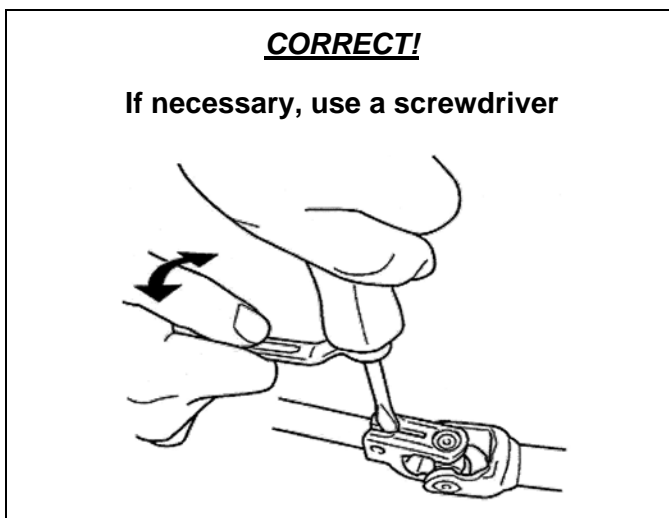
##### NOTE:

**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.



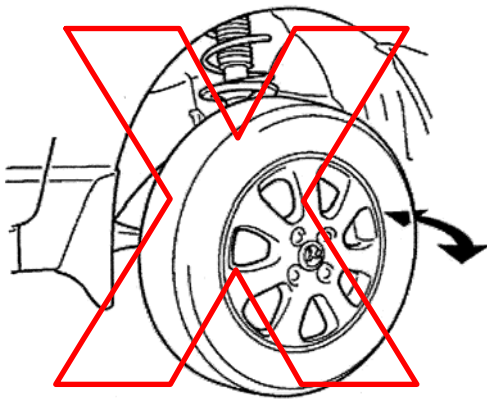
##### NOTE:

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.

## SECTION D

**WRONG!**

**DO NOT move the tires!**



**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.

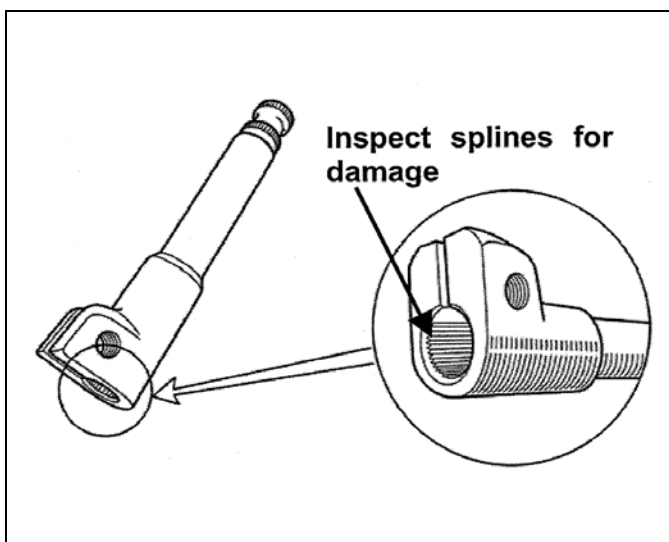
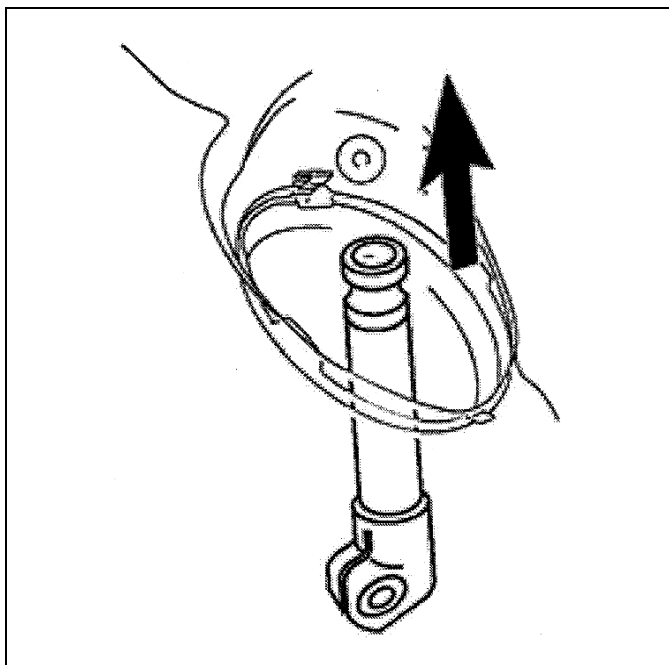
- b) Inspect the internal splines of the intermediate (extension) shaft No. 1 for damage. Is damage present?

**OK, NO damage:**

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

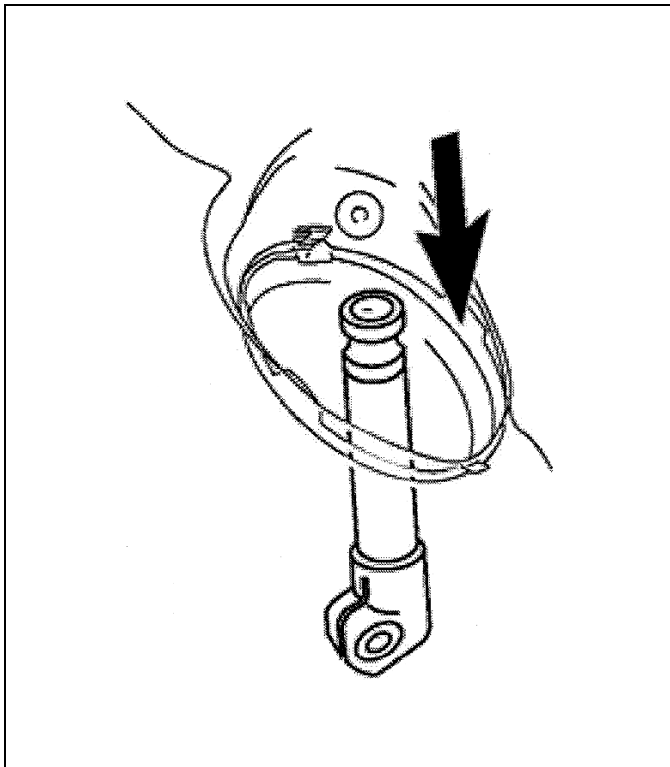
**NG, damaged:**

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



**SECTION D**





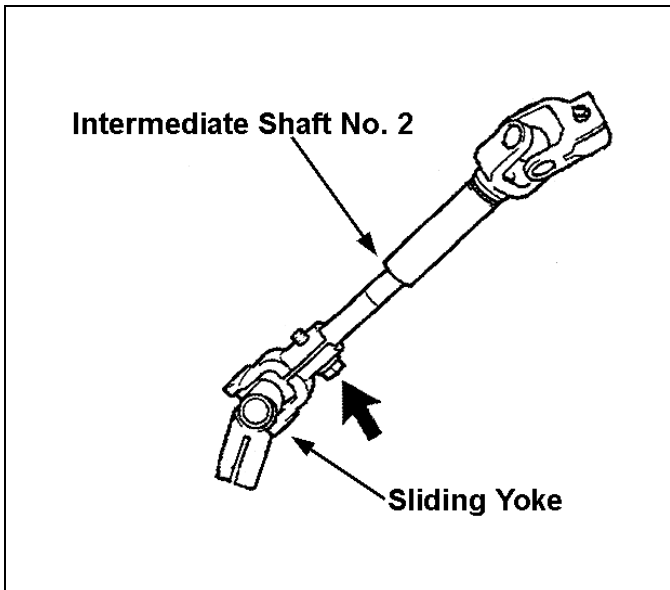
## 12. INSTALL THE INTERMEDIATE (EXTENSION) SHAFT NO. 1

- 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.

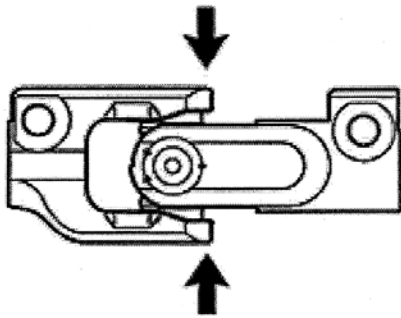


## 13. SEPARATE THE INTERMEDIATE SHAFT NO. 1 AND THE SLIDING YOKE

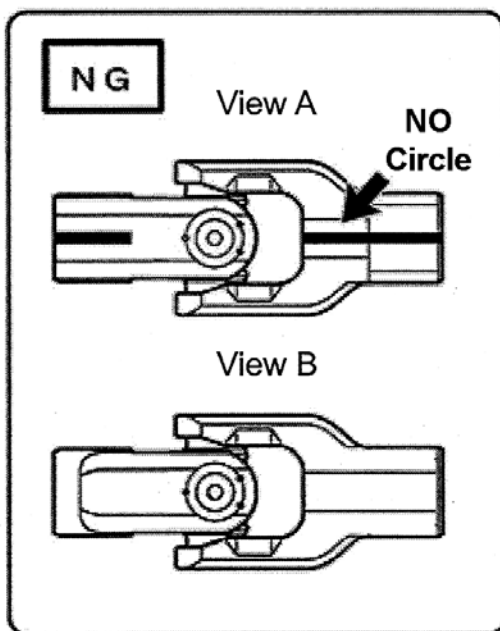
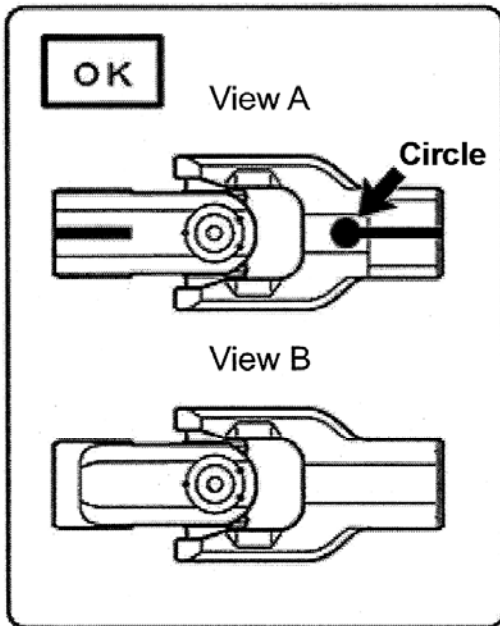
- a) Remove the bolt.
- b) Separate the intermediate shaft No. 2 from the sliding yoke.



View A



View B



#### 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:**

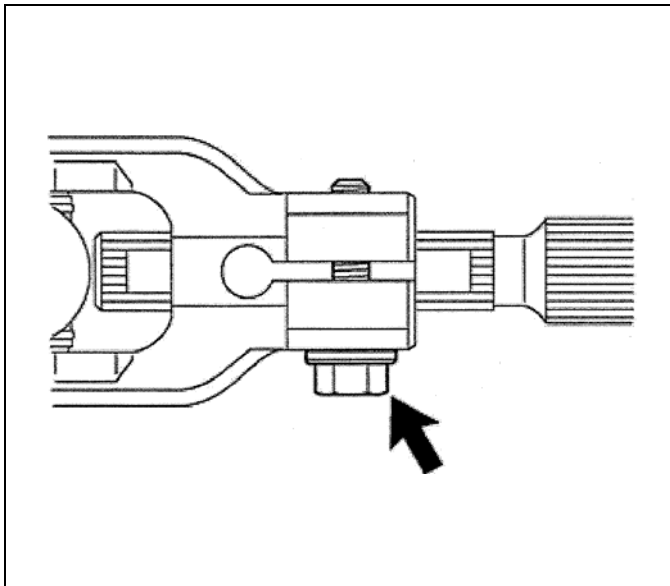
[\(PRIUS\\_02C\)](#)

##### 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:**

[\(PRIUS\\_03C\)](#)



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

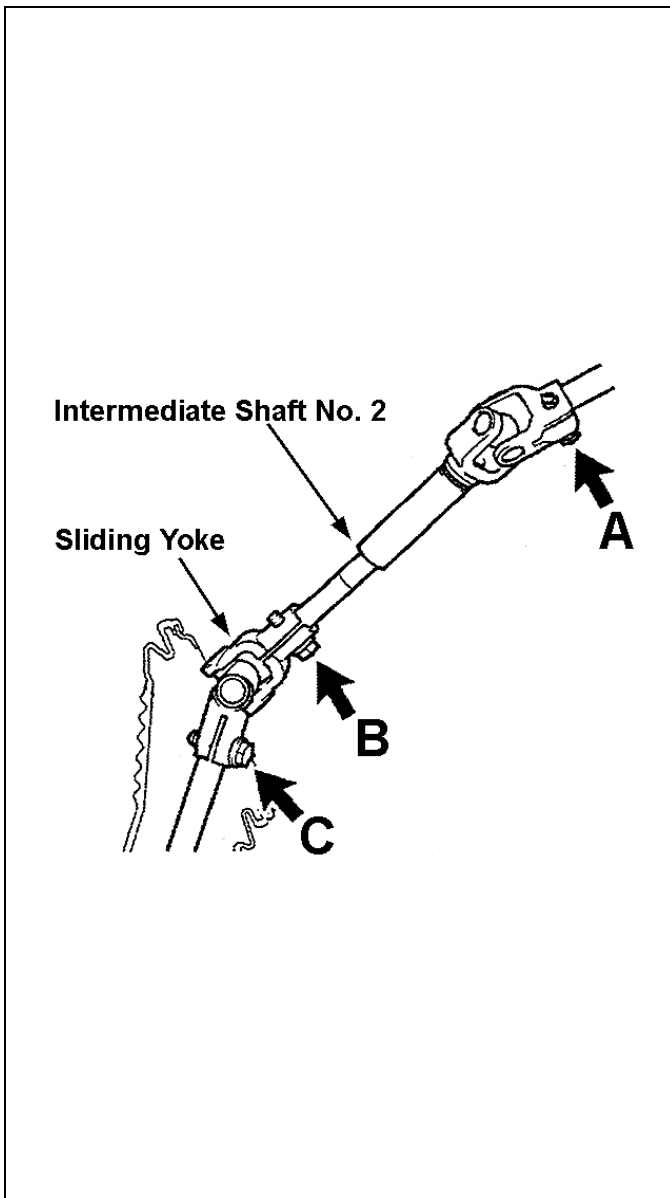
- a) Insert a **NEW** intermediate shaft No. 2 into the (REUSED\* or NEW\*) sliding yoke.

\* 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:

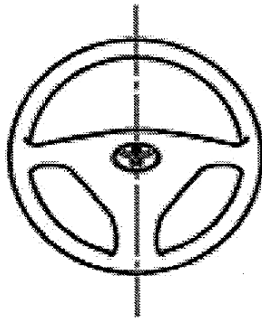
- **DO NOT** install the intermediate shaft No. 2 and sliding yoke assembly upside down.
- The splines can be inserted in any direction. It is **NOT** necessary to align the intermediate shaft No. 2 and sliding yoke assembly.
- During reinstallation, **DO NOT** hit the intermediate shaft No. 2 and sliding 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.

Hold the steering wheel  
In its centered position



## 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:

- A = \_\_\_\_\_ mm

- 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.

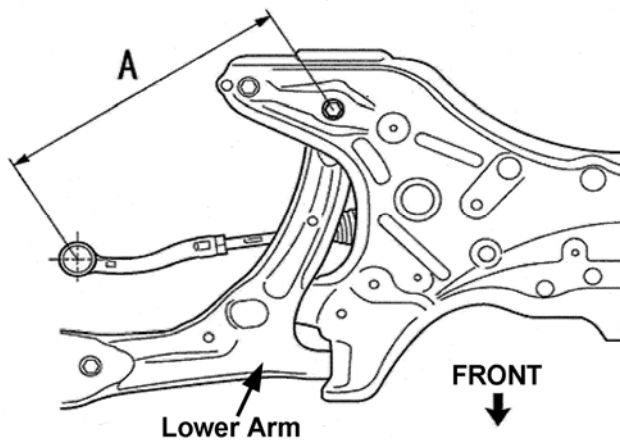
Step "16. REINSTALL THE INTERMEDIATE SHAFT NO. 2 AND SLIDING YOKE ASSEMBLY" on page 28.

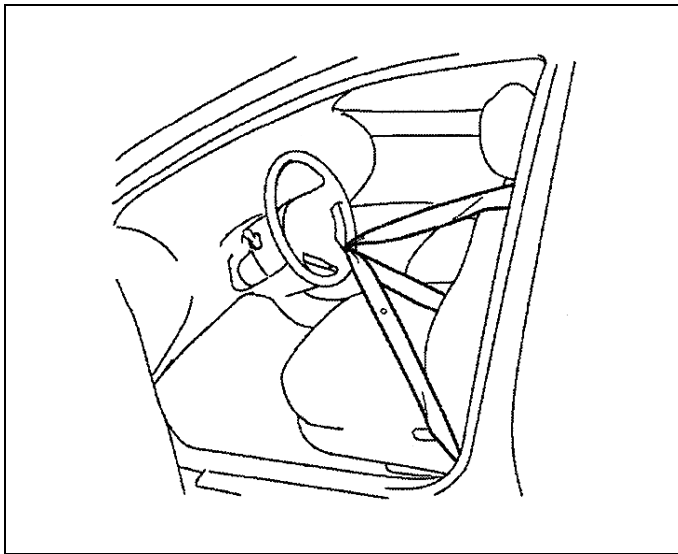
Step "17. CONFIRM THE STEERING GEAR CENTER POINT POSITION" on this page.

### YES:

- **Proceed to the next step.**

### Measurement Points



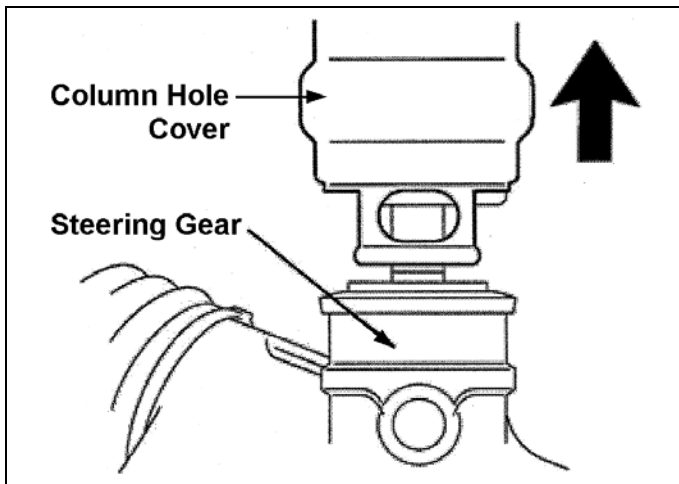


## 18. RELEASE THE STEERING WHEEL

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

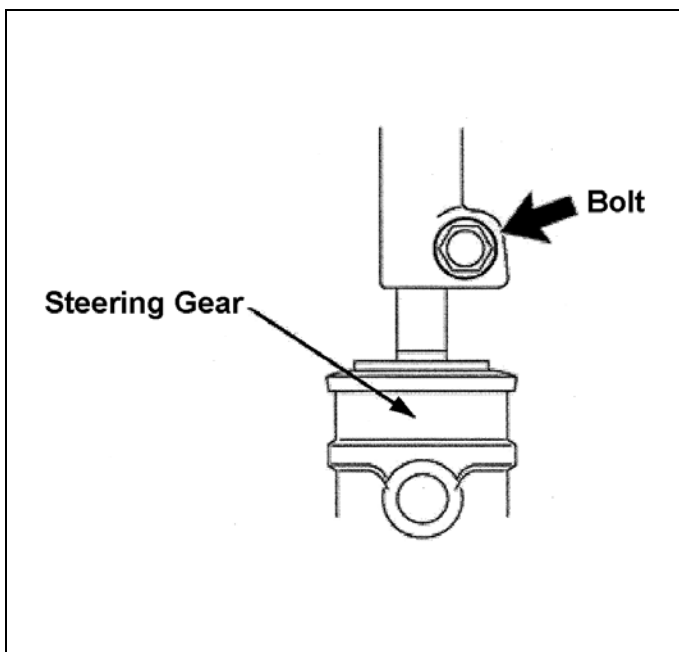
### NOTE:

**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

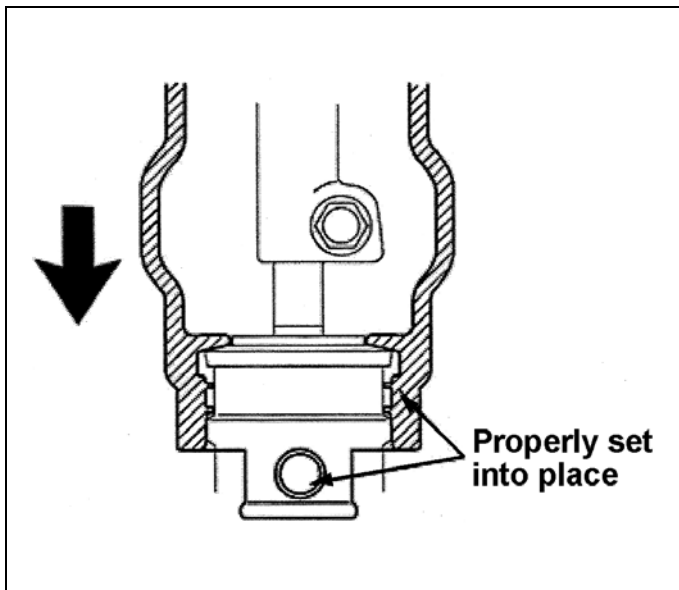
- a) While holding up the column hole cover, check that the intermediate (extension) shaft is fully inserted onto the steering gear.
- b) Install a (REUSED\* or NEW\*) bolt and torque to specification. If necessary, turn the steering gear to make it easier to tighten the bolt.

\* Depends on the inspection results from step 11b, pg. 25.

### Torque Specification:

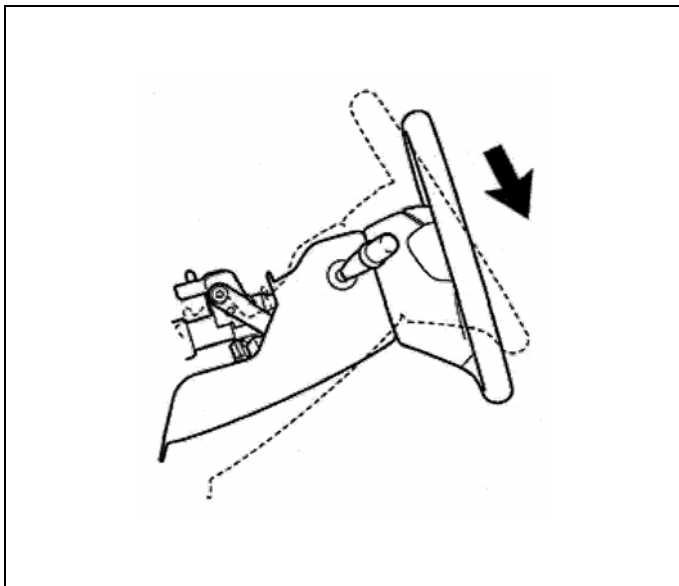
**35 N·m (360 kgf·cm, 26 ft·lbf)**

## SECTION D



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

- Align the hole on the steering column hole cover with the raised circle on the steering gear.
- Pull the column hole cover down and over the steering gear assembly.
- 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.

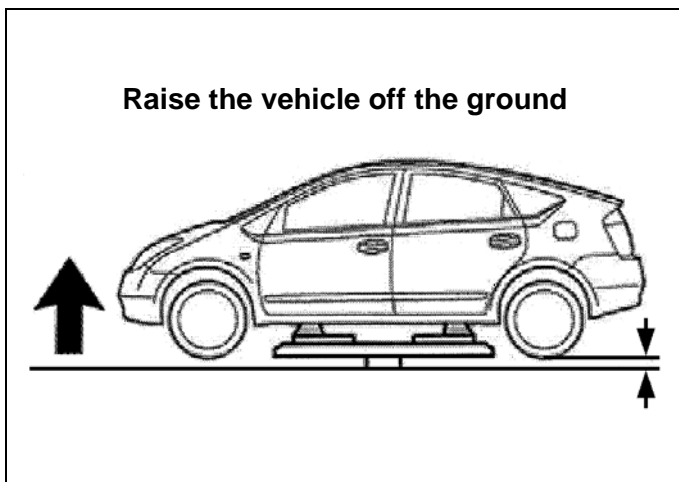


## 22. TILT THE STEERING COLUMN TO THE LOWEST POSITION

- Tilt the steering column to its lowest point.

### NOTE:

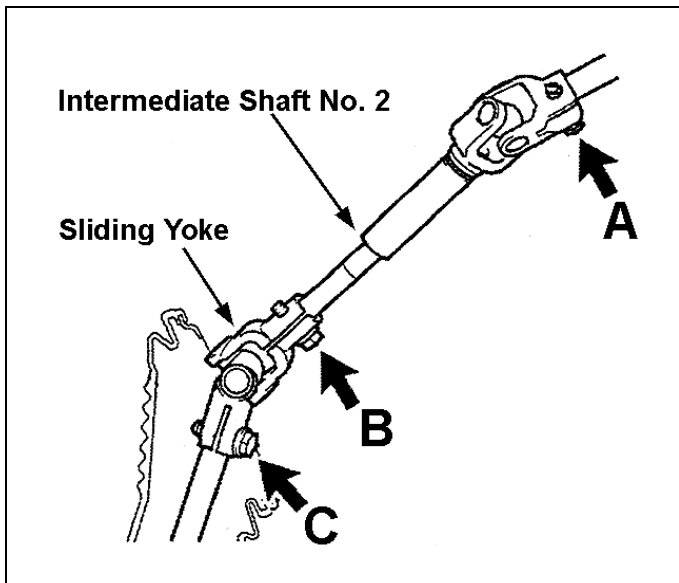
The length of the steering column shaft varies slightly depending on the tilt angle. Make sure to place the steering column at its lowest position (as seen in the illustration) before tightening the bolts.



## 23. RAISE THE VEHICLE OFF THE GROUND

- 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

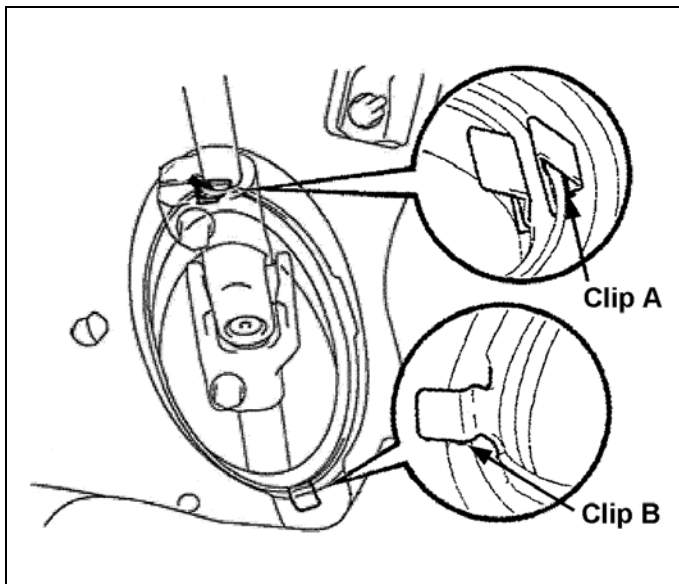


#### 24. TIGHTEN THE BOLTS FOR THE INTERMEDIATE SHAFT AND SLIDING YOKE

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

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

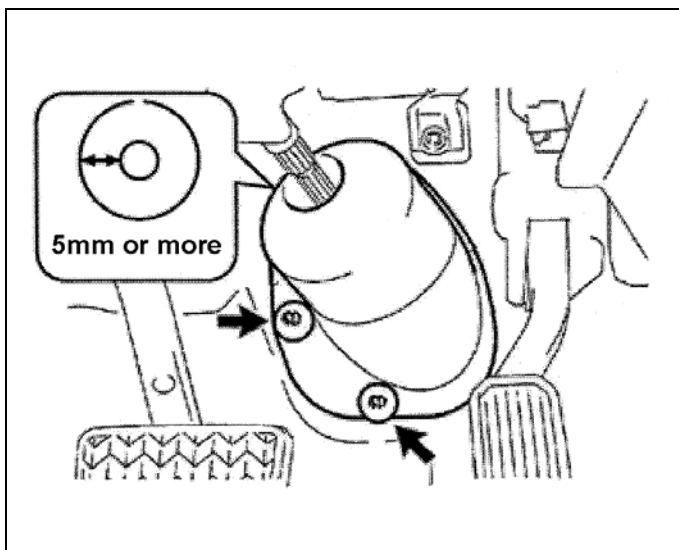
**Torque Specification:**  
35 N·m (360 kgf·cm, 26 ft·lbf)



#### 25. RECONNECT THE STEERING COLUMN HOLE COVER NO. 1

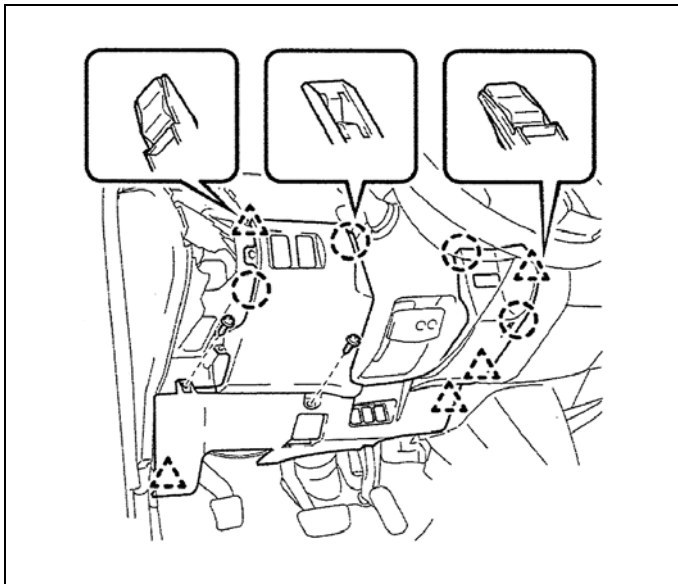
- Seat clip B then clip A.

**NOTE:**  
Be careful not to damage clip B.



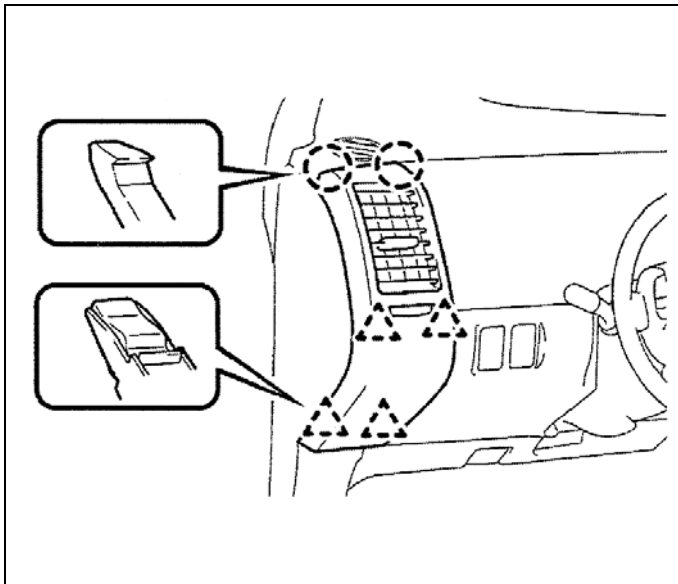
#### 26. REINSTALL THE COLUMN HOLE COVER SILENCER SHEET

- Reinstall the column hole cover silencer sheet.
- Reinstall the 2 clips.
- Confirm that the clearance between the intermediate shaft No. 2 and the column hole cover is 5 mm or more.
- 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