

GROUP Transmission	MODEL 2003-20 Sorento
NUMBER	DATE
031 [Revised]	April 20

03-2006 MY rento (BL) ΤE ril 2010

## **TECHNICAL SERVICE BULLETIN**

SUBJECT:

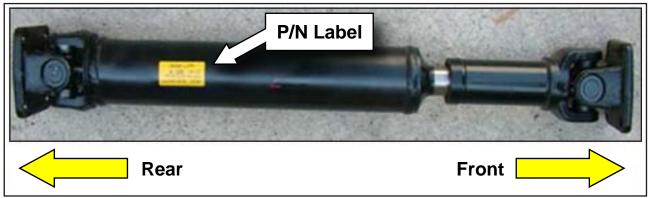
### 2003-2006MY SORENTO PARTIAL COMPONENTS OF PROPELLER SHAFT

This bulletin provides information relating to some Sorento (BL) vehicles built from March 1, 2002 to September 17, 2006. The propeller shaft universal joint and center bearing can now be acquired individually. This bulletin provides the revised information about parts and related operation codes. In addition, this bulletin also provides detailed service procedures for removal and installation of these components. Please refer to the information below when servicing the propeller shaft and related components.



This bulletin has been revised to include an updated Parts Information section. New or revised sections of this bulletin are indicated by a black bar in the margin area.

### Identifying Part Number on Propeller Shaft



Before replacing center bearing and/or universal joints, make sure to check the part number on the propeller shaft assembly by identifying the part number label attached on the rear of the shaft. This will ensure that the correct parts are used.

#### File Under: Transmission

Circulate To:	X General Manager	X Service Manager	X Parts Manager
X Service Advisor(s	) X Technician(s)	X Body Shop Manager	X Fleet Repair

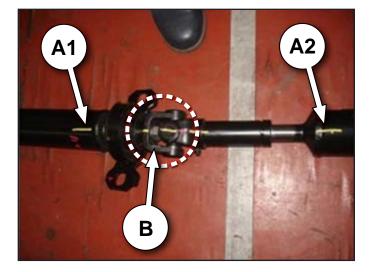
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#### Universal Joint Assembly Replacement Service Procedure:

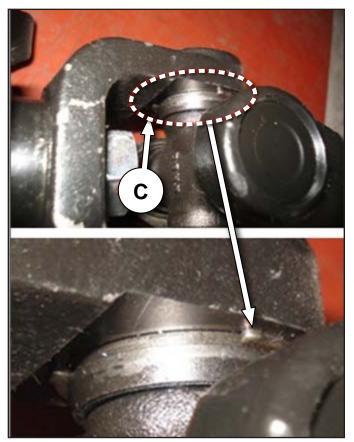
- 1. Lift the vehicle up on a hoist.
- 2. Make a paint line across the companion flange to mark the indexing of the propeller shaft to the differential and transfer case.
- 3. Remove the propeller shaft assembly from the vehicle following the applicable service manual.
- Paint straight lines as reference marks on the propeller shaft housing (A1, A2) and the tube & yoke flange (B) as shown in the photo to reference the original location of the components for reassembly.



5. Remove the universal joint snap ring (C) as indicated in the photos.

# \*NOTICE

The preferred method for universal joint removal from the yoke is to use a universal joint press. If a press is not available, please use the procedure outlined in this TSB.

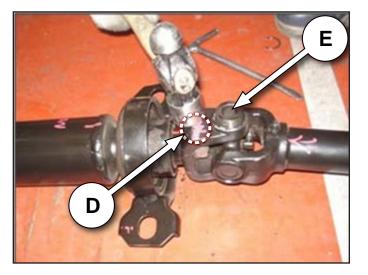


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6. Slightly tap the yoke (D) with a hammer to separate the needle bearing cap (E) from the yoke.

## 

Be careful not to damage the yoke due to excessive force.



7. Remove the universal joint needle bearing cap as shown.



8. Repeat steps 6 & 7 for the opposite side to remove the needle bearing caps.

Remove the needle bearing caps from the tube yoke (F).

Remove the universal joint assembly.



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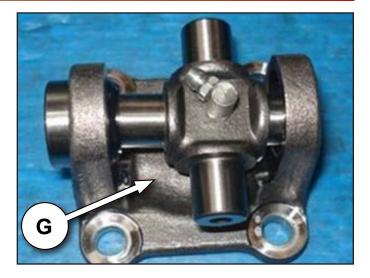
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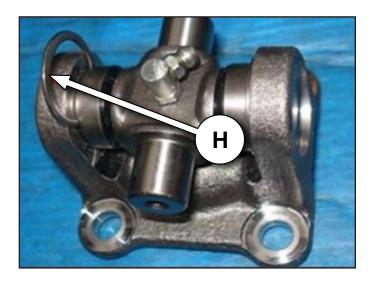
9. Fit the new universal joint into the yoke flange (G) and install the needle bearing caps as shown in the photo.



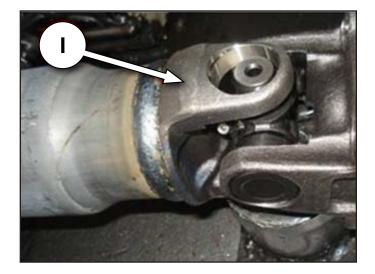
Be careful not to lose any of the needle bearings from bearing caps during the universal joint installation procedure.



10.Install snap rings (H) into grove using a drift punch or equivalent tool.

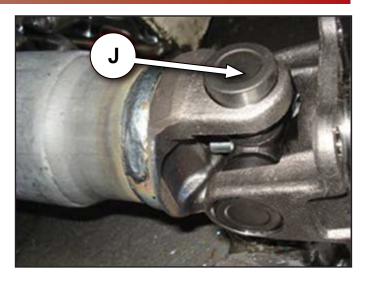


11. Install the propeller shaft yoke (I) onto the universal joint.

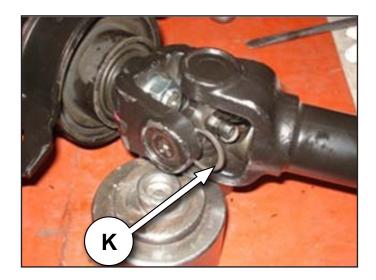


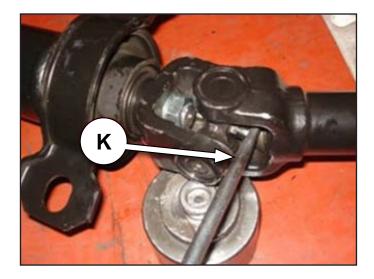
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12. Install the needle bearing cap assembly (J) as shown.



13.When installing snap rings (K), use a drift punch or equivalent tool to push them into the grooves as shown in the photos.





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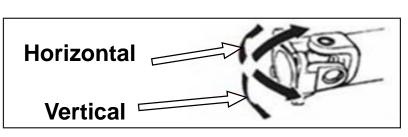
14. Tap the yoke flange with a hammer to secure and center the newly installed components.

Be careful not to use excessive force when seating the needle bearing caps into the yoke.



15. After reinstalling the universal joint, check that the universal joint operates smoothly on both vertical and horizontal axis.

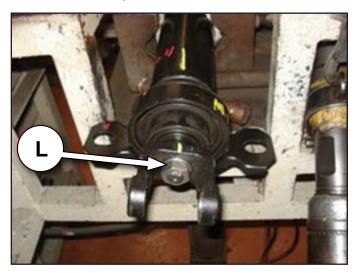




16.Refer to steps 6~7 in Center Bearing Replacement Procedure below.

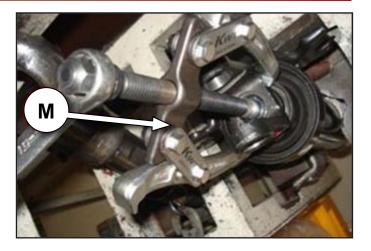
#### **Center Bearing Replacement Procedure:**

- 1. Follow steps 1~7 from the procedure listed above for universal joint removal and installation.
- 2. Remove the flange mounting nut (L) from the front propeller shaft.

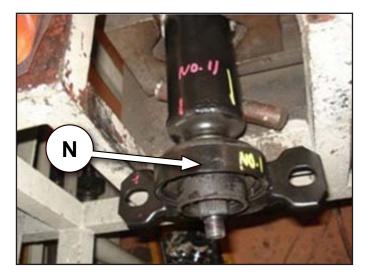


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3. Using an appropriate bearing puller (M) to remove the companion flange.



4. Remove the center bearing (N) from the propeller shaft assembly.



5. Install new center bearing and all other related components in reverse order of removal.

Flange mounting nut tightening torque: 115~130 lb-ft (157~176 Nm)

Stake the nut using a chisel and a hammer.



6. Install the propeller shaft assembly in the reverse order of removal.

Refer to Service Manual for tightening torque specifications.

7. Test drive vehicle to check for any noise or vibration before releasing the vehicle to the customer.

### 2003-2006MY SORENTO PARTIAL COMPONENTS OF PROPELLER SHAFT

### AFFECTED PRODUCTION RANGE:

Model	Production Date Range		
Sorento (BL)	March 1, 2002 to September 17, 2006		

### PARTS INFORMATION:

The charts below show combinations of part numbers for propeller shaft and partial components. When replacing either of the partial components (universal joint and center bearing), make sure the part number of propeller shaft assembly coincides with combination chart below in order to use the correct components for a given application.

#### **Propeller Shaft**

Model Year			Automatic Transmission	Manual Transmission
	2WD	Rear	49100 3E400	49100 3E800
2003-2004		Rear	49100 3E200	49100 3E200
	4WD	Front	49100 3E000	49100 3E020
		Front (TOD)	49100 3E050	49100 3E070
2005-2006	2WD	Rear	49100 3E450	49100 3E800
	4WD	Rear	49100 3E200	49100 3E200
		Front	49100 3E000	49100 3E020
		Front (TOD)	49100 3E050	491003E070

Note: "TOD = Torque On Demand

#### **Universal Joint**

Model Year		Automatic Transmission	QTY	Manual Transmission	QTY	
2003-2004	2WD	Rear	49100 3E100	3	49598 3E100	3
	4WD	Rear	49100 3E300	2	49598 3E300	2
		Front	49100 3E200	2	49598 3E100	2
		Front (TOD)	49100 3E000	1	49598 3E100	1
2005-2006	2WD	Rear	49100 3E100	3	49598 3E100	3
	4WD	Rear	49100 3E300	2	49598 3E300	2
		Front	49100 3E200	2	49598 3E100	2
		Front (TOD)	49100 3E000	1	49598 3E100	1

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### **2WD: Rear Propeller Shaft**

Part Number						
Drive	Transmission	Rear Propeller Shaft	Support Bearing	Set-Universal Joint (F)		
2WD	4 Speed Auto	49100 3E400	49575 3E100			
2WD	5 Speed Auto	49100 3E800	49575 3E200	49598 3E100		
2WD	D 4 Speed Auto 49100 3E450 49575 3E300		49575 3E300			
F: Set-Universal joint G: Set-center bearing						
<ul> <li>-Components of universal joint set: Snap ring + universal joint assembly</li> <li>-Components of center bearing set: Center bearing + spring washer + nut</li> </ul>						