

RODEO SPORT

DRIVELINE/AXLE

CONTENTS

Differential (Front)	See 2002 Rodeo(UE) Workshop Manual
Differential (Rear)	See 2002 Rodeo(UE) Workshop Manual
Driveline Control System	See 2002 Rodeo(UE) Workshop Manual
Drive Shaft System	4C
Transfer Case	See 2002 Rodeo(UE) Workshop Manual

RODEO SPORT

DRIVELINE/AXLE

DRIVE SHAFT SYSTEM

CONTENTS

Service Precaution	4C-2
General Description	See 2002 Rodeo(UE) Workshop Manual
Diagnosis	See 2002 Rodeo(UE) Workshop Manual
Front Hub and Disc (2WD Model)	See 2002 Rodeo(UE) Workshop Manual
Disassembled View	See 2002 Rodeo(UE) Workshop Manual
Disassembly	See 2002 Rodeo(UE) Workshop Manual
Inspection and Repair	See 2002 Rodeo(UE) Workshop Manual
Reassembly	See 2002 Rodeo(UE) Workshop Manual
Front Hub and Disc (4WD Model)	See 2002 Rodeo(UE) Workshop Manual
Disassembled View	See 2002 Rodeo(UE) Workshop Manual
Disassembly	See 2002 Rodeo(UE) Workshop Manual
Inspection and Repair	See 2002 Rodeo(UE) Workshop Manual
Reassembly	See 2002 Rodeo(UE) Workshop Manual
Front Drive Shaft Joint	See 2002 Rodeo(UE) Workshop Manual
Front Drive Shaft Joints Replacement	See 2002 Rodeo(UE) Workshop Manual
Front Axle Drive Shaft	See 2002 Rodeo(UE) Workshop Manual
Front Axle Drive Shaft and Associated Parts	See 2002 Rodeo(UE) Workshop Manual
Disassembly	See 2002 Rodeo(UE) Workshop Manual
Inspection And Repair	See 2002 Rodeo(UE) Workshop Manual
Bushing Replacement	See 2002 Rodeo(UE) Workshop Manual
Reassembly	See 2002 Rodeo(UE) Workshop Manual
Shift On The Fly System	See 2002 Rodeo(UE) Workshop Manual
Shift On The Fly System and Associated Parts	See 2002 Rodeo(UE) Workshop Manual
Disassembly	See 2002 Rodeo(UE) Workshop Manual
Inspection And Repair	See 2002 Rodeo(UE) Workshop Manual
Reassembly	See 2002 Rodeo(UE) Workshop Manual
Main Data and Specifications	See 2002 Rodeo(UE) Workshop Manual
Special Tools	See 2002 Rodeo(UE) Workshop Manual
Front Propeller Shaft	4C-3
General Description	4C-3
Diagnosis of Propeller Shaft and Universal Joint	4C-5
Front Propeller Shaft and Associated Parts	4C-6
Removal	4C-6
Installation	4C-6
Slip Joint Disassembly	4C-7
Universal Joint Disassembly (Single Cardan Type)	4C-8
Universal Joint Reassembly (Single Cardan Type)	4C-10
Slip Joint Reassembly	4C-12
Main Data And Specifications	4C-13
Rear Propeller Shaft	4C-14
General Description	4C-14
Diagnosis of Propeller Shaft and Universal Joint	4C-16
Rear Propeller Shaft and Associated Parts	4C-17
Removal	4C-17
Installation	4C-17
Slip Joint Disassembly (6VD1 Model Only)	4C-18
Universal Joint Disassembly	4C-19
Inspection	4C-21
Universal Joint Reassembly	4C-22

4C-2 DRIVE SHAFT SYSTEM

Slip Joint Reassembly (6VD1 Model Only)	4C-23
Main Data and Specifications	4C-24

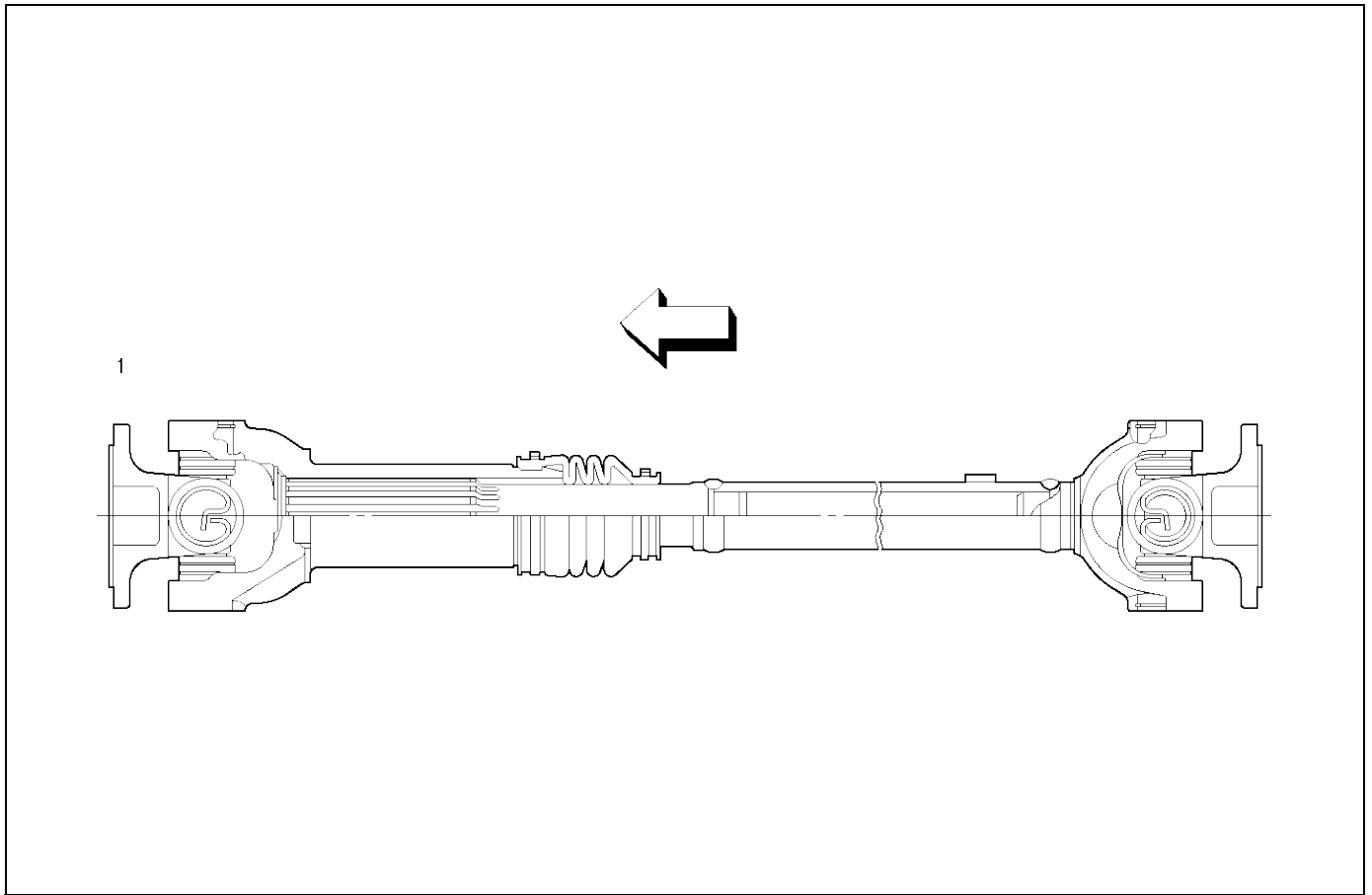
Service Precaution

WARNING: THIS VEHICLE HAS A SUPPLEMENTAL RESTRAINT SYSTEM(SRS). REFER TO THE *SRS COMPONENT AND WIRING LOCATION VIEW* IN ORDER TO DETERMINE WHETHER YOU ARE PERFORMING SERVICE ON OR NEAR THE SRS COMPONENTS OR THE SRS WIRING. WHEN YOU ARE PERFORMING SERVICE ON OR NEAR THE SRS COMPONENTS OR THE SRS WIRING, REFER TO THE *SRS SERVICE INFORMATION*. FAILURE TO FOLLOW WARNINGS COULD RESULT IN POSSIBLE AIR BAG DEPLOYMENT, PERSONAL INJURY, OR OTHERWISE UNNEEDED SRS SYSTEM REPAIRS.

CAUTION: Always use the correct fastener in the proper location. When you replace a fastener, use **ONLY** the exact part number for that application. ISUZU will call out those fasteners that require a replacement after removal. ISUZU will also call out the fasteners that require thread lockers or thread sealant. **UNLESS OTHERWISE SPECIFIED** , do not use supplemental coatings (Paints, greases, or other corrosion inhibitors) on threaded fasteners or fastener joint interfaces. Generally, such coatings adversely affect the fastener torque and the joint clamping force, and may damage the fastener. When you install fasteners, use the correct tightening sequence and specifications. Following these instructions can help you avoid damage to parts and systems.

Front Propeller Shaft

General Description



401RX00002

Legend

- (1) Single Cardan Joint Type (for 6VD1)

Propeller Shaft

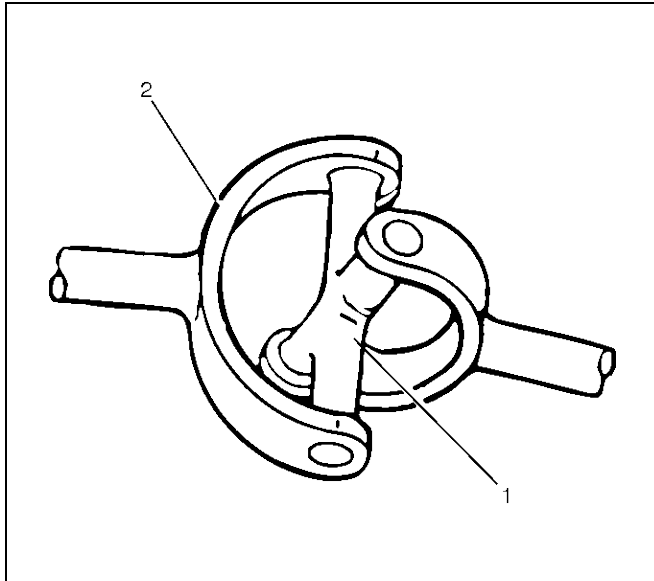
Torque is transmitted from the transmission to the front axle through one propeller shaft and universal joint assemblies. All propeller shafts are the balanced tubular type. A splined slip joint is provided in some drivelines.

- Since the propeller shaft is balanced carefully, welding or any other modification are not permitted.
- Alignment marks should be applied to each propeller shaft before removal.
- Be sure vehicle is parked and secured, the engine is not running, and the parking brake is applied.
- Be careful not to grip the propeller shaft tube too tightly in the vise as this will cause deformation.

Phasing

The propeller shaft is designed and built with the yoke lugs (ears) in line with each other. This design produces the smoothest running shaft possible, called phasing. Vibration can be caused by an out-of-phase propeller shaft. The propeller shaft will absorb vibrations from speeding up and slowing down each time the universal joint spins. This vibration would be the same as a person snapping a rope and watching the "wave" reaction flow to the end. A propeller shaft working in phase would be similar to two persons snapping a rope at the same time, and watching the "waves" meet and cancel each other out. In comparison, this would be the same as the universal joints on a propeller shaft. A total cancellation of vibration produces a smooth flow of power in the driveline. It is very important to apply a reference mark to the propeller shaft before removal, to assure installation alignment.

Universal Joint



401 RW015

Legend

- (1) Spider
- (2) Yoke

A universal joint consists of two Y-shaped yokes connected by a crossmember called a spider.

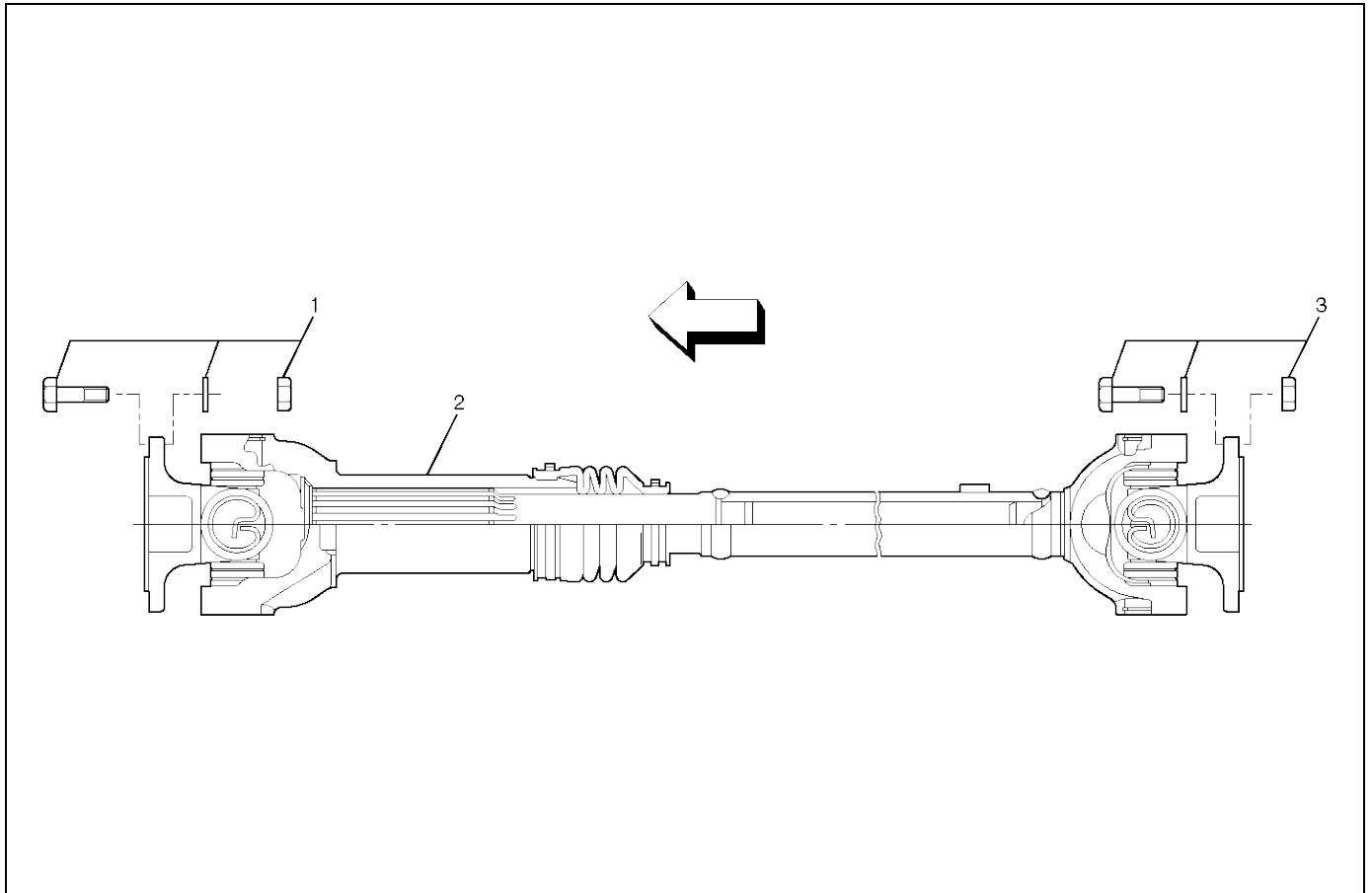
The spider is shaped like a cross. Universal joints are designed to handle the effects of various loads and front or rear axle windup during acceleration. Within the designed angle variations, the universal joint will operate efficiently and safely. If the design angle is changed, the operational life of the joint may decrease.

The bearings used in universal joints are of the needle roller type. The needle rollers are held in place on the trunnions by round bearing cups. The bearing cups are held in the yokes by snap rings.

Diagnosis of Propeller Shaft and Universal Joint

Condition	Possible cause	Correction
Universal Joint Noise.	Worn universal joint bearings.	Replace.
	Improper lubrication.	Lubricate as directed.
	Loose flange bolts.	Tighten to specifications.
Ping, Snap, or Click in Drive Line (Usually Heard on Initial Load after the Transmission is in Forward or Reverse Gear)	Loose bushing bolts on the rear springs or upper and lower control arms.	Tighten the bolts to specified torque.
	Loose or out-of-phase end yoke.	Remove end yoke, turn 180 degrees from its original position, lubricate the splines and reinstall. Tighten the bolts and pinion nut to specified torque.
Knocking or Clanking Noise in the Driveline when in High or Neutral Gear at 16km/h(10mph)	Worn or damaged universal joint	Replace the universal joint.
Squeak	Lack of lubricant.	Lubricate joints and splines. Also check for worn or brinelled parts.
Shudder on Acceleration (Low Speed)	Loose or missing bolts at the flanges.	Replace or tighten bolts to specified torque.
	Incorrectly set front joint angle.	Install shim under the transmission support mount to change the front joint angle.
	Worn universal joint.	Replace.
Vibration	Incorrect shaft runout.	Replace.
	Shaft out of balance.	Adjust.
	Transmission rear housing bushing, transfer case housing bushing worn.	Replace.
	Yoke spline jammed.	Replace.

Front Propeller Shaft and Associated Parts



Legend

(1) Bolt, Nut and Washer (Front Axle Side)

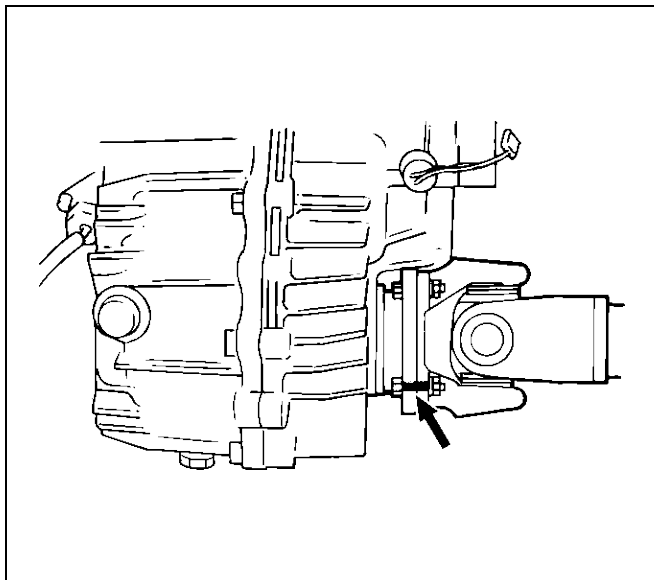
(2) Front Propeller Shaft (Single Cardan Type)

(3) Bolt, Nut and Washer (Transfer Side)

Removal

1. Raise the vehicle on a hoist.

NOTE: Apply alignment marks on the flange at the front propeller shaft both front and rear side.



2. Remove bolt, nut and washer (Front axle side).
3. Remove bolt, nut and washer (Transfer side).
4. Remove front propeller shaft.

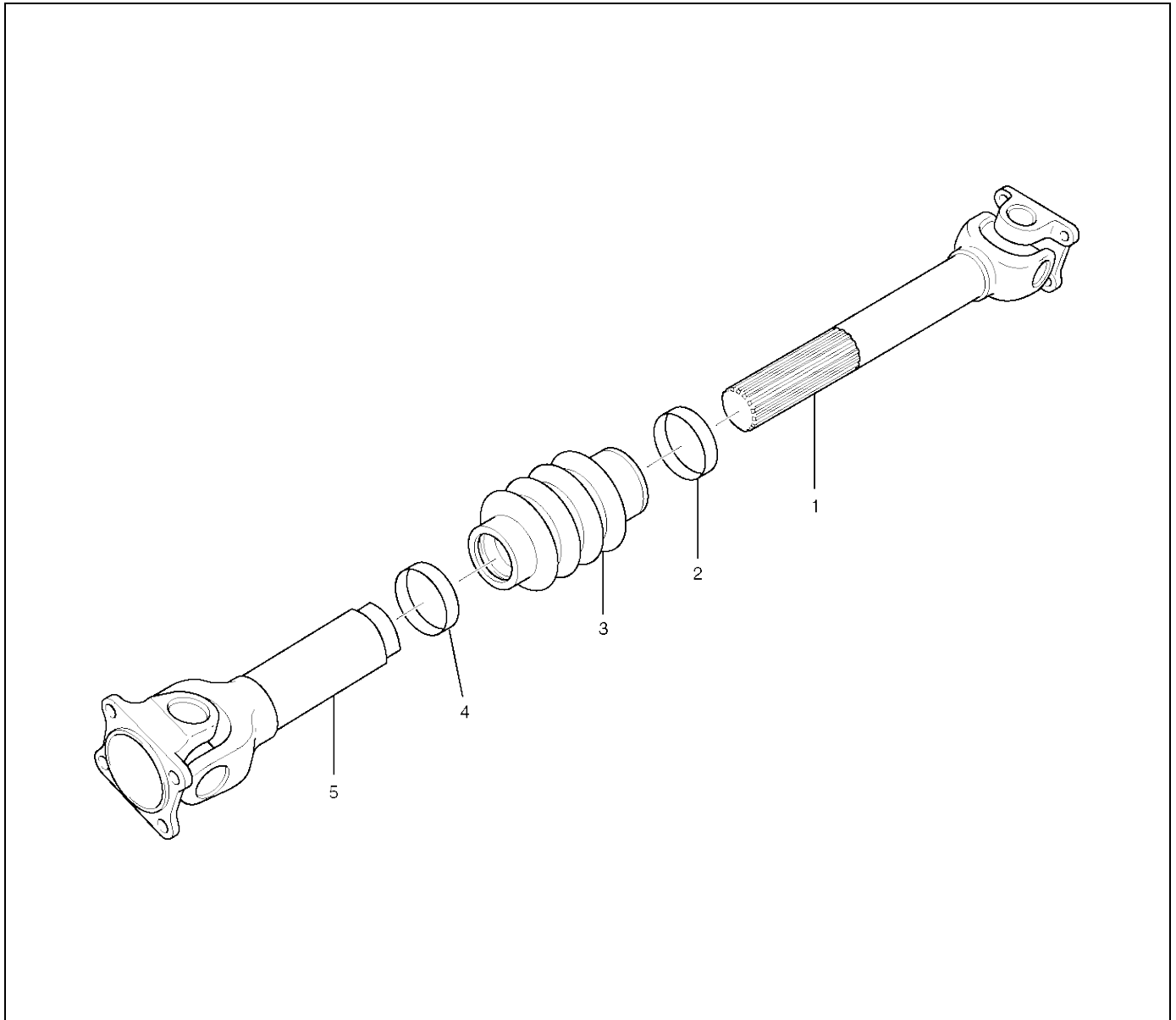
Installation

NOTE: Never install the shaft assembly backwards. Never insert bar between yoke lugs when tightening or removing bolts. Completely remove the black paint from the connecting surface of flange coupling on each end of propeller shaft. Clean so that no foreign matter will be caught in between.

1. Align the mark which is applied at removal. Install front propeller shaft and tighten the bolts to the specified torque.

Torque: 63 N·m (46 lbft)

Slip Joint Disassembly



401RX00003

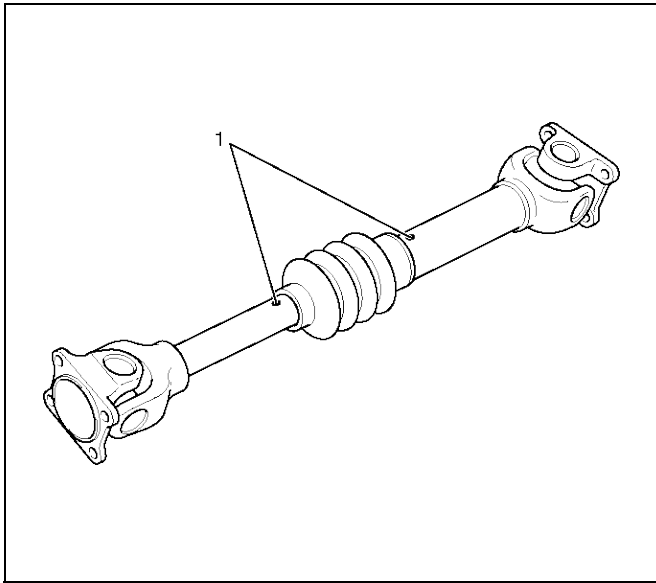
Legend

- (1) Spline Yoke Assembly
- (2) Clamp

- (3) Boot
- (4) Clamp
- (5) Tube Assembly

1. Lay the shaft horizontally on a bench and secure.
2. Indicate the original assembled position (1) by marking the phasing of the shaft prior to disassembly.

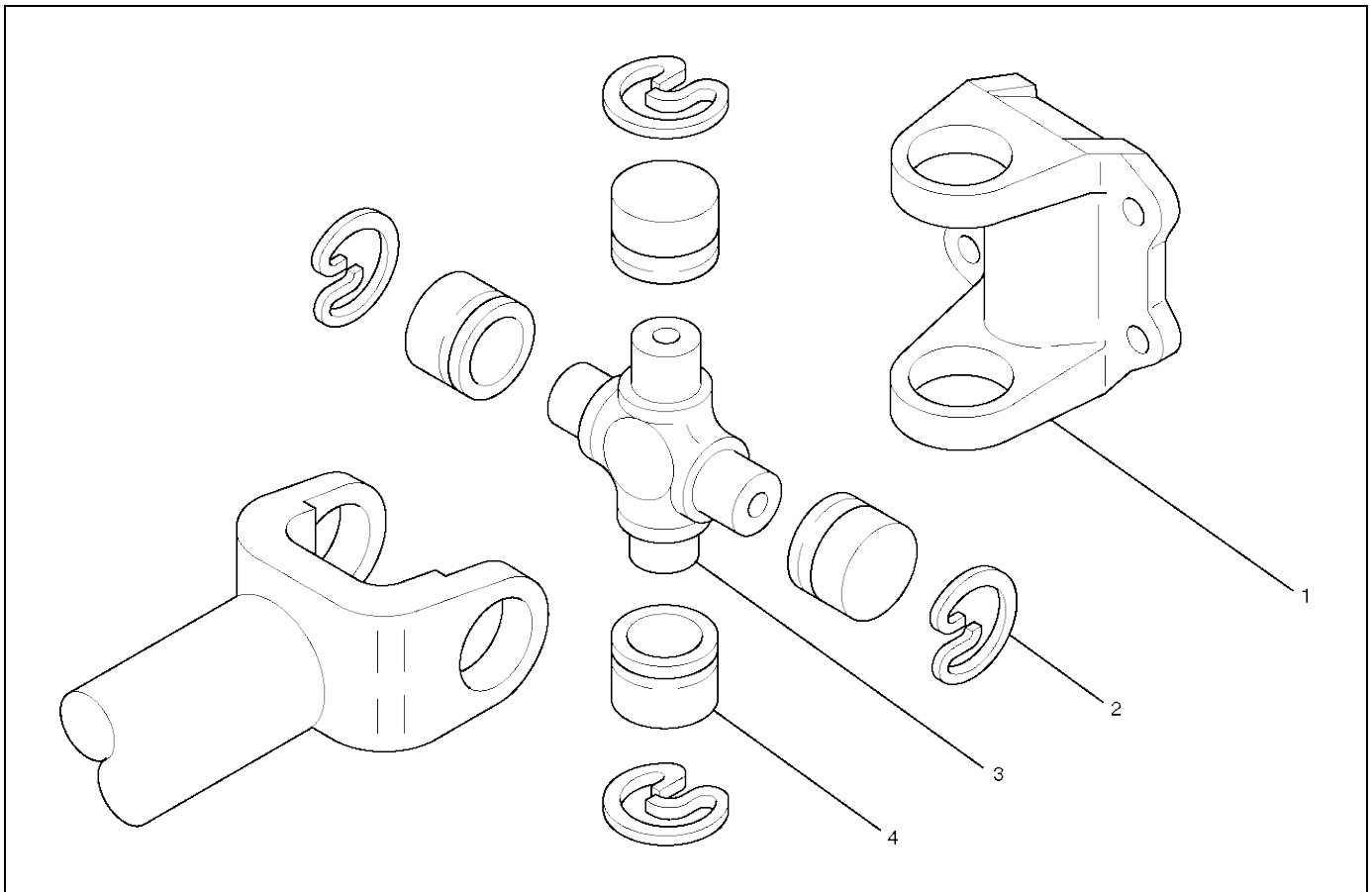
4C-8 DRIVE SHAFT SYSTEM



401RW037

3. Using the flat blade of a screwdriver, pry the loose end of the boot clamp upwards and away from the propeller shaft boot. Be careful not to damage the boot.
4. When boot clamps becomes loose, remove by hand.
5. Repeat for the other boot clamp.
6. Remove the spline yoke assembly from the tube assembly, by securing the boot with one hand and pulling on the spline yoke.
7. Remove the boot from the tube assembly.

Universal Joint Disassembly (Single Cardan Type)



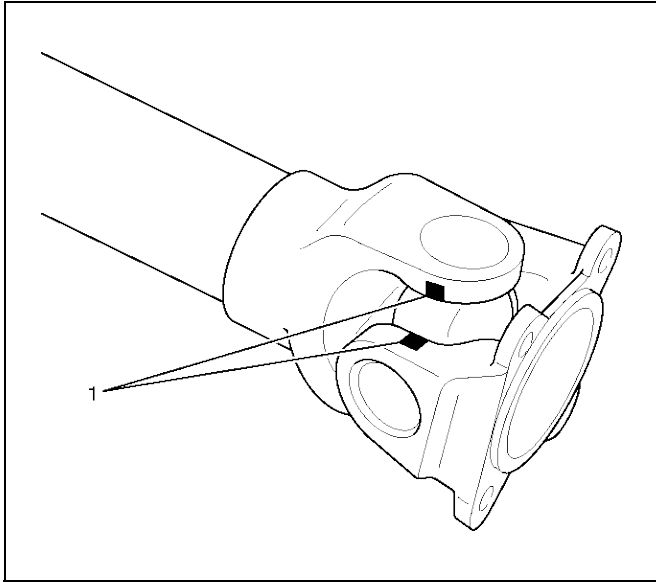
401RW031

Legend

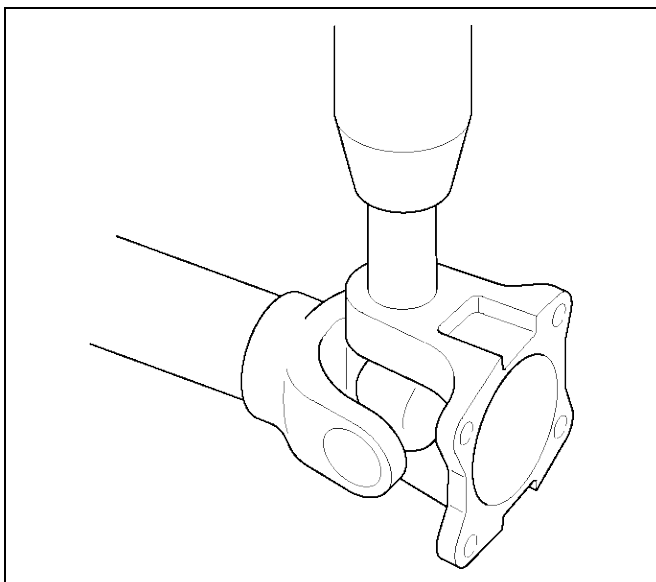
- (1) Flange Yoke
- (2) Snap Ring

- (3) Spider
- (4) Needle Roller Bearing

1. Using a soft drift, tap the outside of the bearing cup assembly to loosen snap ring. Tap bearing only hard enough to break assembly away from snap ring. Remove snap ring from yoke. Turn joint over, tap bearing away from snap ring, then remove opposite snap ring. Apply alignment marks (1) on the yokes of the universal joint, then remove snap ring.



2. Set the yoke in the arbor press with a piece of tube stock beneath it. Place a solid plug on the upper bearing assembly and press it through to release the lower bearing assembly.

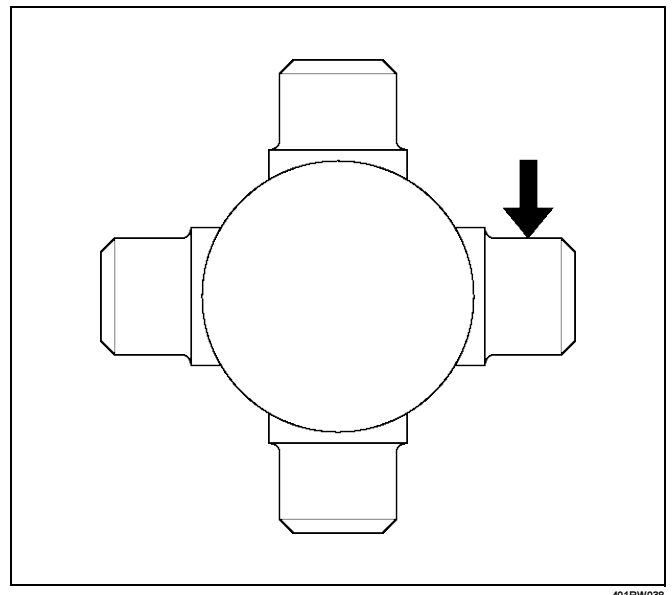


3. If the bearing assembly will not pull out by hand after pressing, tap the base of the lug near the bearing assembly to dislodge it.

4. To remove the opposite bearing, turn the yoke over and straighten the spider in the open hole. Then carefully press on the end of the spider so the remaining bearing moves straight out of the bearing spider hole. If the spider or bearing are cocked, the bearing will score the walls of the spider hole and ruin the yoke.
5. Repeat this procedure on the remaining bearing to remove the spider from the yoke.
6. Make sure of proper position for reinstallation by applying setting marks, then remove spider.

Spider pin for wear

Spider pin should be smooth and free from fretting or galling. Visible signs of needle presence is normal, but wear should not be felt.



Propeller shaft runout

Support the propeller shaft on V-blocks (2) and check for runout by holding the probe of a dial indicator (1) in contact with the shaft.

Static runout limit:

0.13mm (0.005in)

TIR on the neck of the slip tube shaft (with a boot).

0.25mm (0.010in)

TIR on the ends of the tubing 3 inch from the welds.

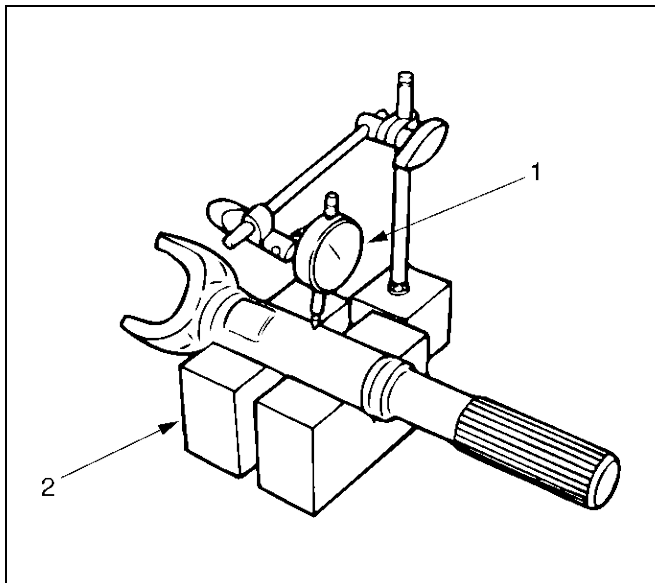
0.38mm (0.015in)

TIR at the linear center of the tube.

0.38mm (0.015in)

TIR for the full length of tube with 30" or less of tubing.

(TIR : Total Indicator Reading)



401RS027

Spline

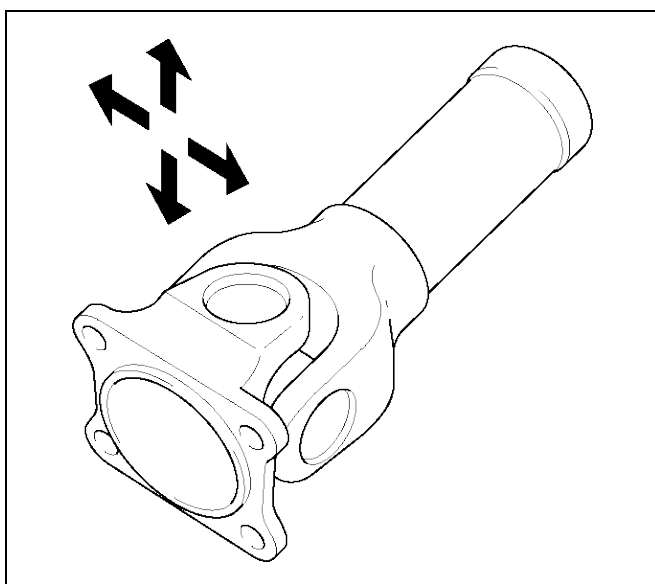
The nylon-coated spline should be free from nicks and dings and the underlying steel spline should not be visible.

After cleaning the nylon coating spline, the coating should exhibit only a slight indication of wear.

Grease volume is approximately 10 grams of grease in total. Grease should be evenly applied to both the female and the male slip splines using a small brush. After assembly of the slip joint, the sliding joint should be fully worked from the full collapsed to the full extended position.

Play in the universal joint

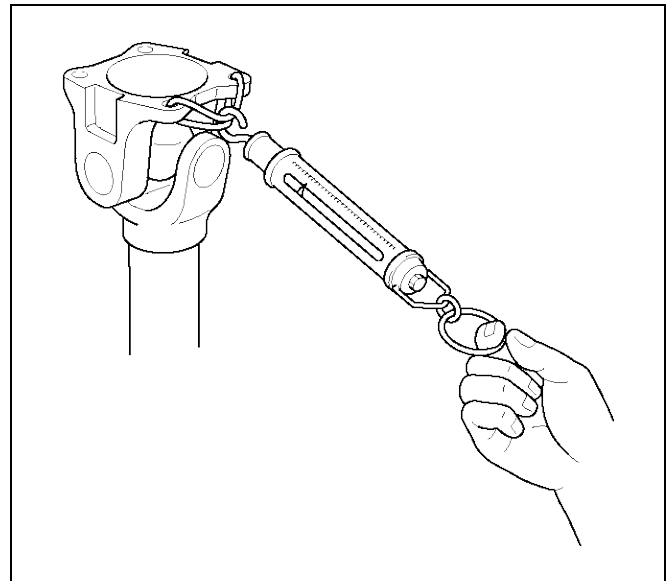
Limit: Less than 0.15mm (0.006in)



401RW023

Preload of the universal joint

Preload should be 0 to 24.9 kg(0 to 11.3 lb). Joints should rotate smoothly and freely and should exhibit no rough or ratchety movement.



401RW085

Boot

Check the boot for crack or damage. If necessary, replace the boot.

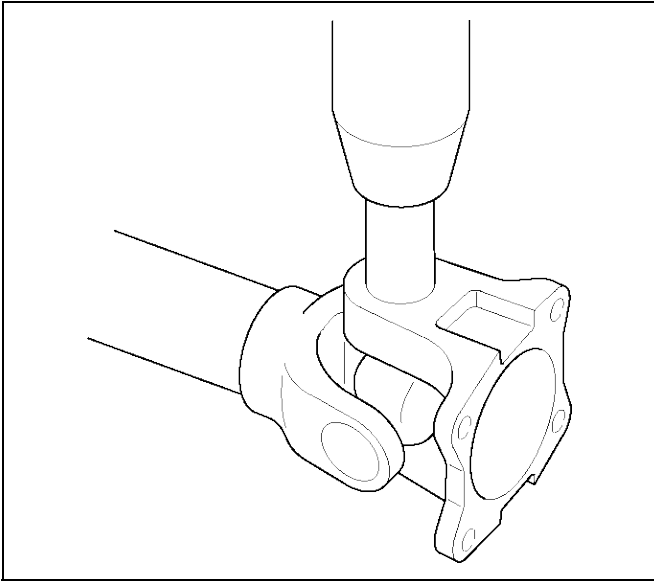
If abnormal condition are found on the boot, inspect the grease for mixing of foreign material.

If the grease is in good condition, and slip joint works well, then replace the boot, replenish with new grease, and reassemble the slip joint.

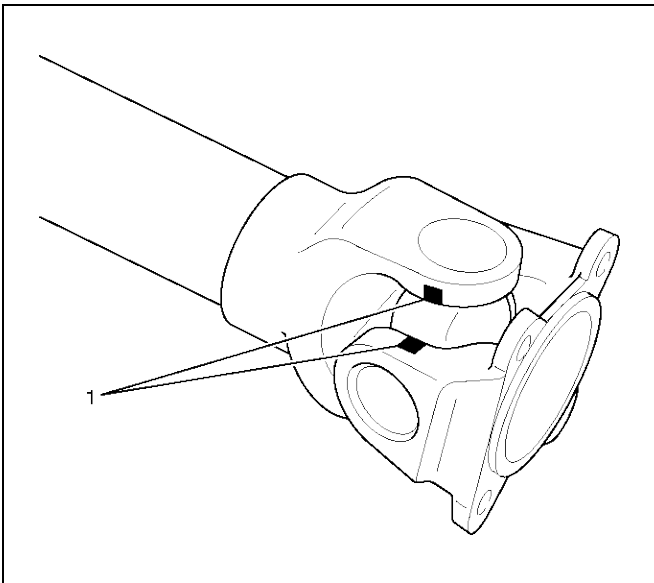
If the foreign material is found in the grease, check the spline for wear and damage.

Universal Joint Reassembly (Single Cardan Type)

1. Install spider to flange yoke. Be sure to install the spider by aligning the setting marks made during disassembly.
2. Pack the four grease cavities of the spider with a high quality, extreme pressure N.L.G.I. Grade 2 grease. Do not add additional grease to the bearing cup assembly.
3. Move one end of the spider to cause a trunnion to project through the spider hole beyond the outer machined face of the yoke lug. Place a bearing over the trunnion diameter and align it to the spider hole. Using an arbor press, hold the trunnion in alignment with the spider hole and place a solid plug on the upper bearing. Press the bearing into the spider hole enough to install a snap ring.

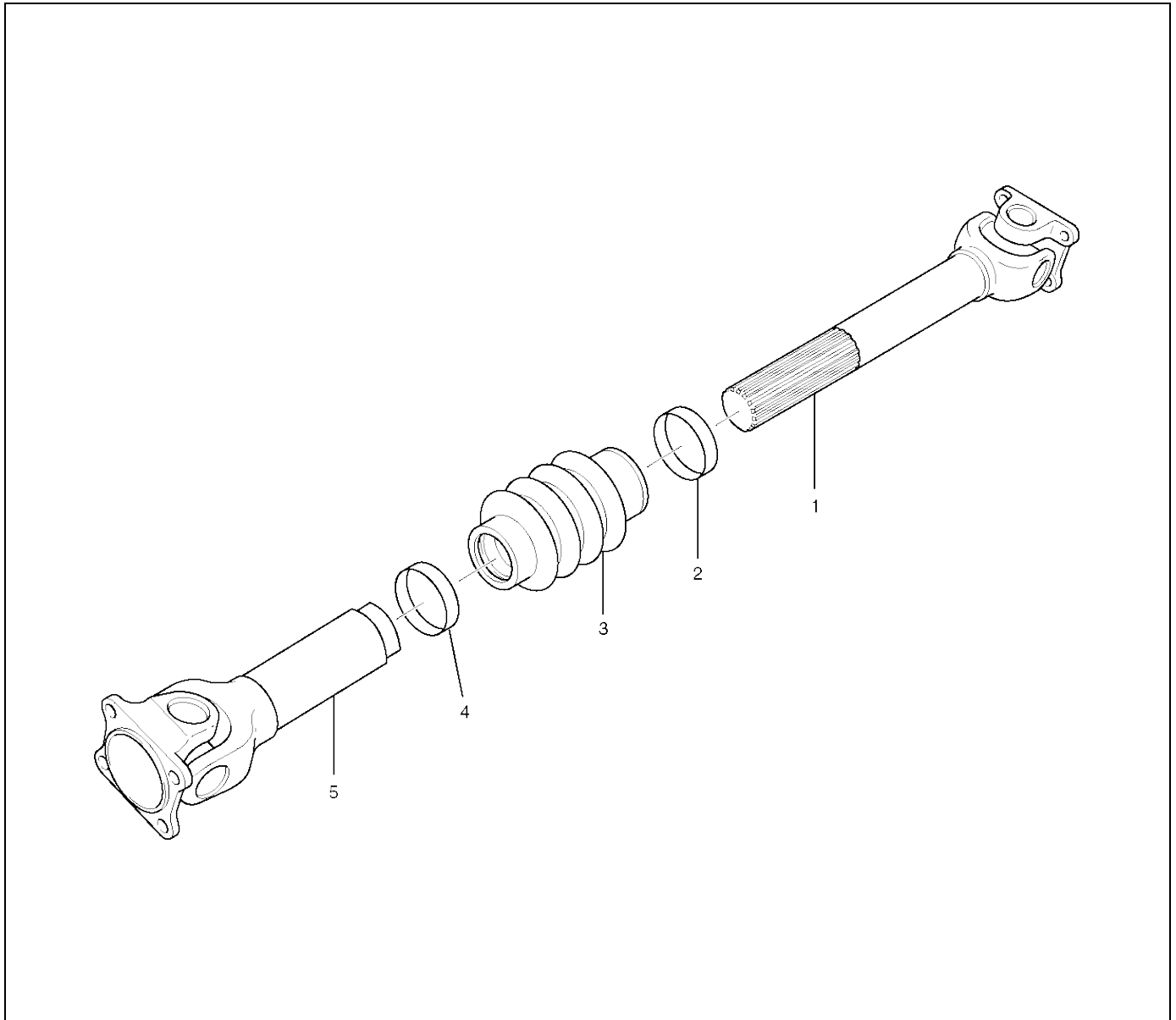


4. Install a snap ring.
Be sure the snap rings are properly seated in the grooves.
5. Repeat steps 3 and 4 to install the opposite bearing.
If the joint is stiff, strike the yoke ears with a soft hammer to seat needle bearings.
6. Align setting marks (1) and join the yokes.



7. Install snap ring.

Slip Joint Reassembly



401RX00003

Legend

- (1) Spline Yoke shaft
- (2) Clamp

- (3) Boot
- (4) Clamp
- (5) Tube Assembly

1. Apply grease evenly to both the female and male splines.
2. Apply a small amount of grease by finger to the outer lips of the boot.
3. Slide the boot (smaller diameter side) onto the spline yoke shaft being careful not to damage the spline coating or boot.
4. Carefully insert the spline yoke shaft into the tube assembly to maintain proper phasing. The spider holes should be in line according to the marks made prior to disassembly.
5. Position boot over tube assembly and yoke shaft in its assembled position over boot grooves.
6. Attach boot clamps and secure using pliers.

7. Be sure clamp is properly seated and secure.

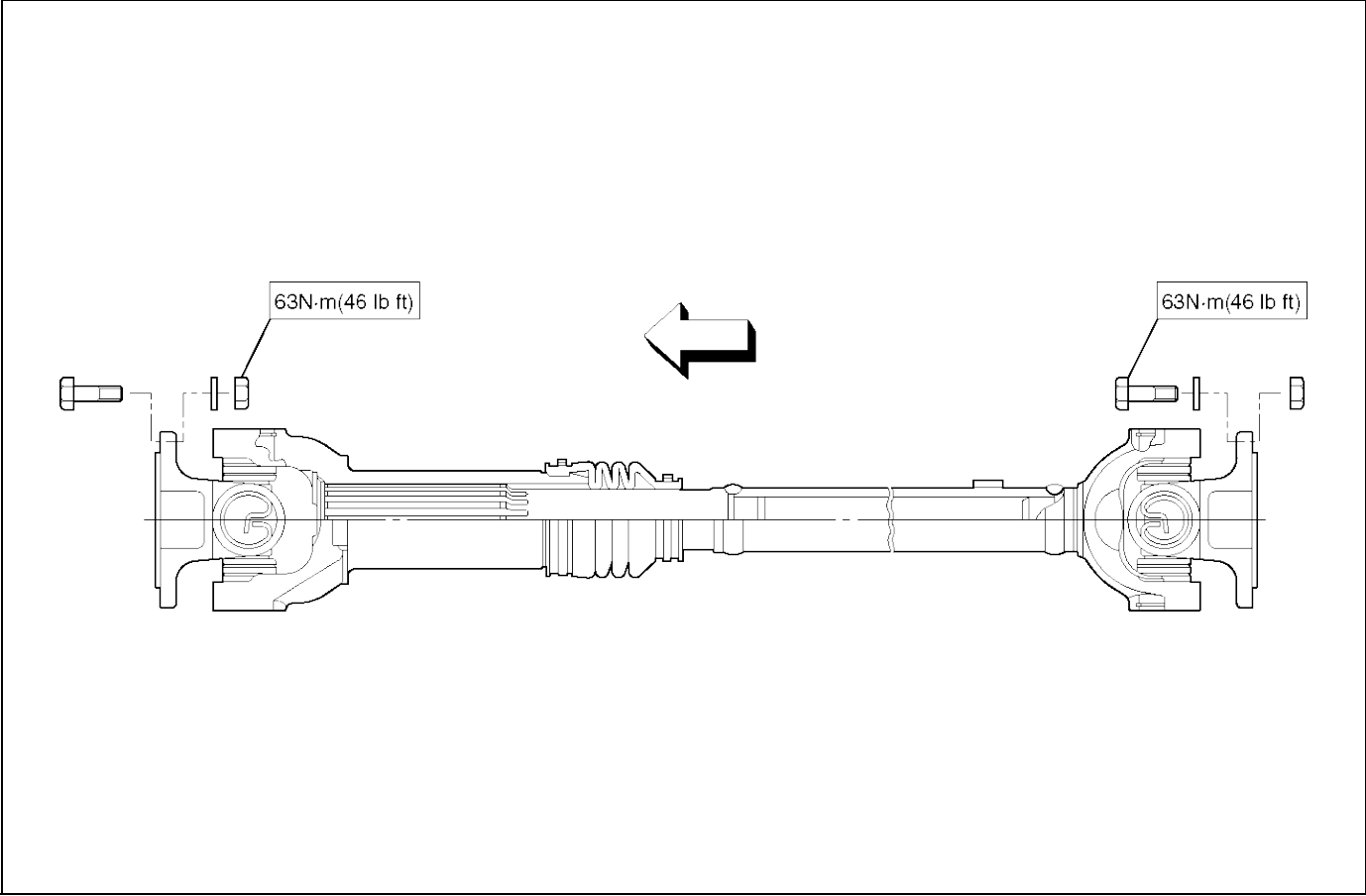
CAUTION: Use a new clamp similar to original clamp. Use of any other clamp may cause shaft imbalance and/or grease leakage.

Main Data And Specifications

General Specifications

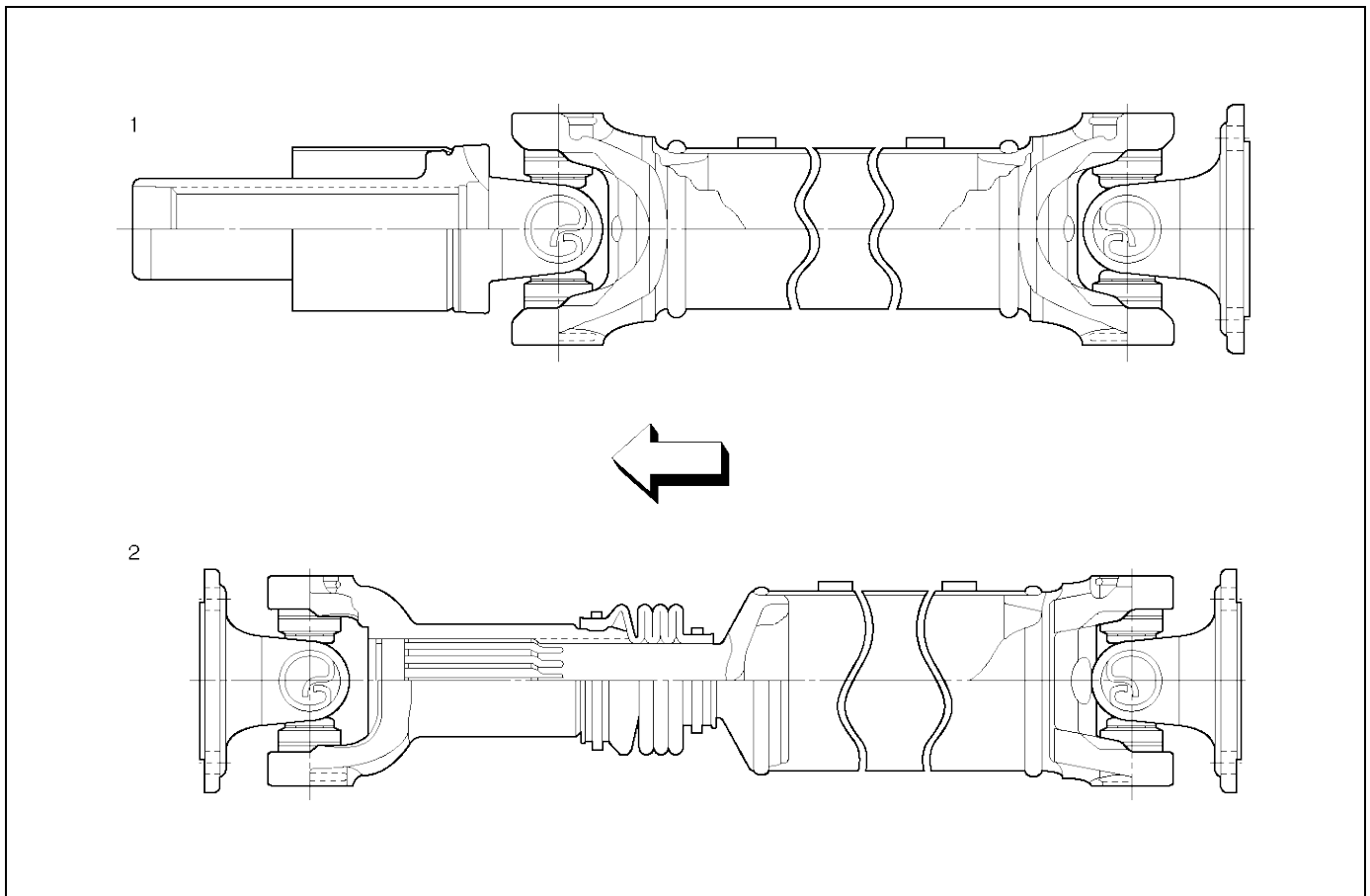
Engine	6VD1
Length (between flange surfaces at installed)	453.2 mm (18.37 in)

Torque Specifications



Rear Propeller Shaft

General Description



401RX00005

Legend

- (1) For Y22SE 4×2 M/T Model
- (2) For 6VD1 Model and Y22SE 4×2 A/T Model

Propeller Shaft

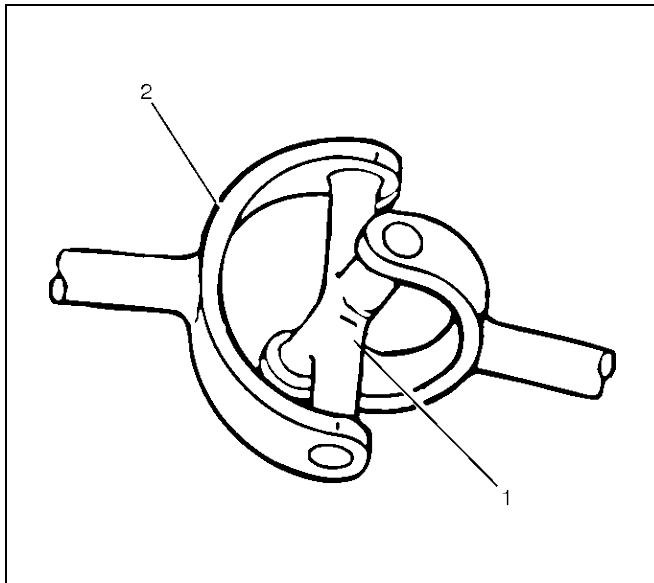
Torque is transmitted from the transmission to the rear axle through one propeller shaft and universal joint assemblies. All propeller shafts are the balanced tubular type. A splined slip joint is provided in some drivelines.

- Since the propeller shaft is balanced carefully, welding or any other modification are not permitted.
- Alignment marks should be applied to each propeller shaft before removal.
- Be sure vehicle is stopped, engine is not running, brake is secured and vehicle is secured to prevent injury.
- Be careful not to grip the propeller shaft tube too tightly in the vise as this will cause deformation.

Phasing

The propeller shaft is designed and built with the yoke lugs (ears) in line with each other. This design produces the smoothest running shaft possible, called phasing. Vibration can be caused by an out-of-phase propeller shaft. The propeller shaft will absorb vibrations from speeding up and slowing down each time the universal joint spins. This vibration would be the same as a person snapping a rope and watching the "wave" reaction flow to the end. A propeller shaft working in phase would be similar to two persons snapping a rope at the same time, and watching the "waves" meet and cancel each other out. In comparison, this would be the same as the universal joints on a propeller shaft. A total cancellation of vibration produces a smooth flow of power in the driveline. It is very important to apply a reference mark to the propeller shaft before removal, to assure installation alignment.

Universal Joint



401 RW015

Legend

- (1) Spider
- (2) Yoke

A universal joint consists of two Y-shaped yokes connected by a crossmember called a spider.

The spider is shaped like a cross. Universal joints are designed to handle the effects of various loads and front or rear axle windup during acceleration. Within the designed angle variations, the universal joint will operate efficiently and safely.

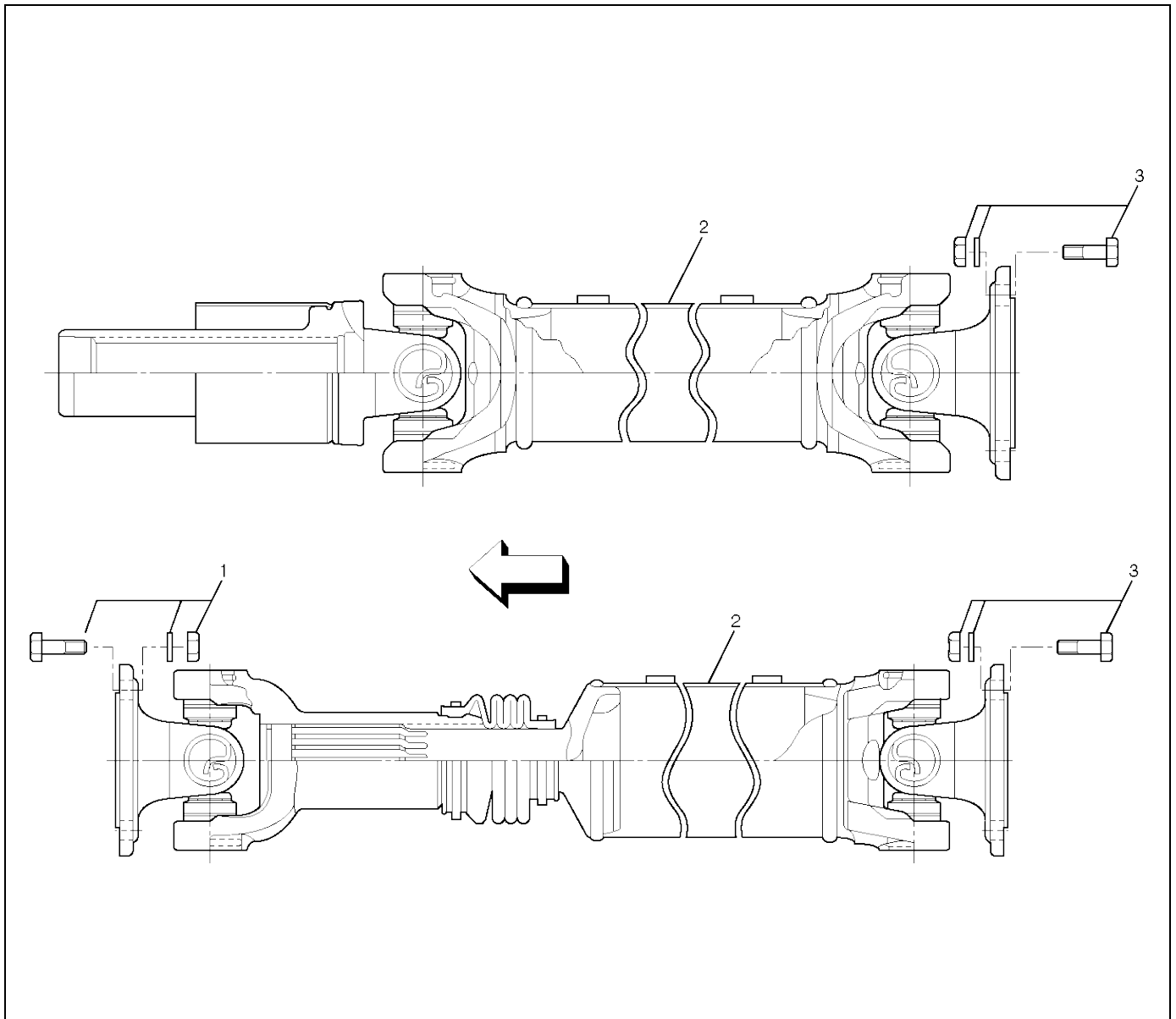
If the design angle is changed, the operational life of the joint may decrease.

The bearings used in universal joints are of the needle roller type. The needle rollers are held in place on the trunnions by round bearing cups. The bearing cups are held in the yokes by snap rings.

Diagnosis of Propeller Shaft and Universal Joint

Condition	Possible cause	Correction
Leak at the Front Slip Yoke (An Occasional Drop of Lubricant Leaking from the Splined Yoke is Normal)	Rough surface on splined yoke; burred nicked or worn.	Replace the seal. Minor burrs can be Smoothed by careful use of crocus cloth or fine stone honing. Replace the yoke if badly burred.
	Defective transmission rear oil seal.	Replace the transmission rear oil seal and replenish the transmission oil.
Universal Joint Noise.	Worn universal joint bearings.	Replace.
	Improper lubrication.	Lubricate as directed.
	Loose flange bolts.	Tighten to specifications.
Ping, Snap, or Click in Drive Line (Usually Heard on Initial Load after the Transmission is in Forward or Reverse Gear)	Loose bushing bolts on the rear springs or upper and lower control arms.	Tighten the bolts to specified torque.
	Loose or out-of-phase end yoke.	Remove end yoke, turn 180 degrees from its original position, lubricate the splines and reinstall. Tighten the bolts and pinion nut to specified torque.
Squeak	Lack of lubricant.	Lubricate joints and splines. Also check for worn or brinelled parts.
Shudder on Acceleration (Low Speed)	Loose or missing bolts at the flanges.	Replace or tighten bolts to specified torque.
	Incorrectly set front joint angle.	Install shim under the transmission support mount to change the front joint angle.
	Worn universal joint.	Replace.
Vibration	Incorrect shaft runout.	Replace.
	Shaft out of balance.	Adjust.
	Transmission rear housing bushing, transfer case housing bushing worn.	Replace.
	Yoke spline jammed.	Replace.

Rear Propeller Shaft and Associated Parts



401RX00006

Legend

(1) Bolt, Nut and Washer (Transfer Side)

(2) Rear Propeller Shaft

(3) Bolt, Nut and Washer (Rear Axle Side)

Removal

1. Raise the vehicle on a hoist.

NOTE: Apply alignment marks on the flange at the rear propeller shaft both front and rear side.

2. Remove transfer side bolt, nut and washer (4×4 model only).
3. Remove rear axle side bolt, nut and washer.
4. Remove rear propeller shaft.

NOTE: Plug the hole of the transmission rear end to prevent oil leakage (4×2 model only).

Installation

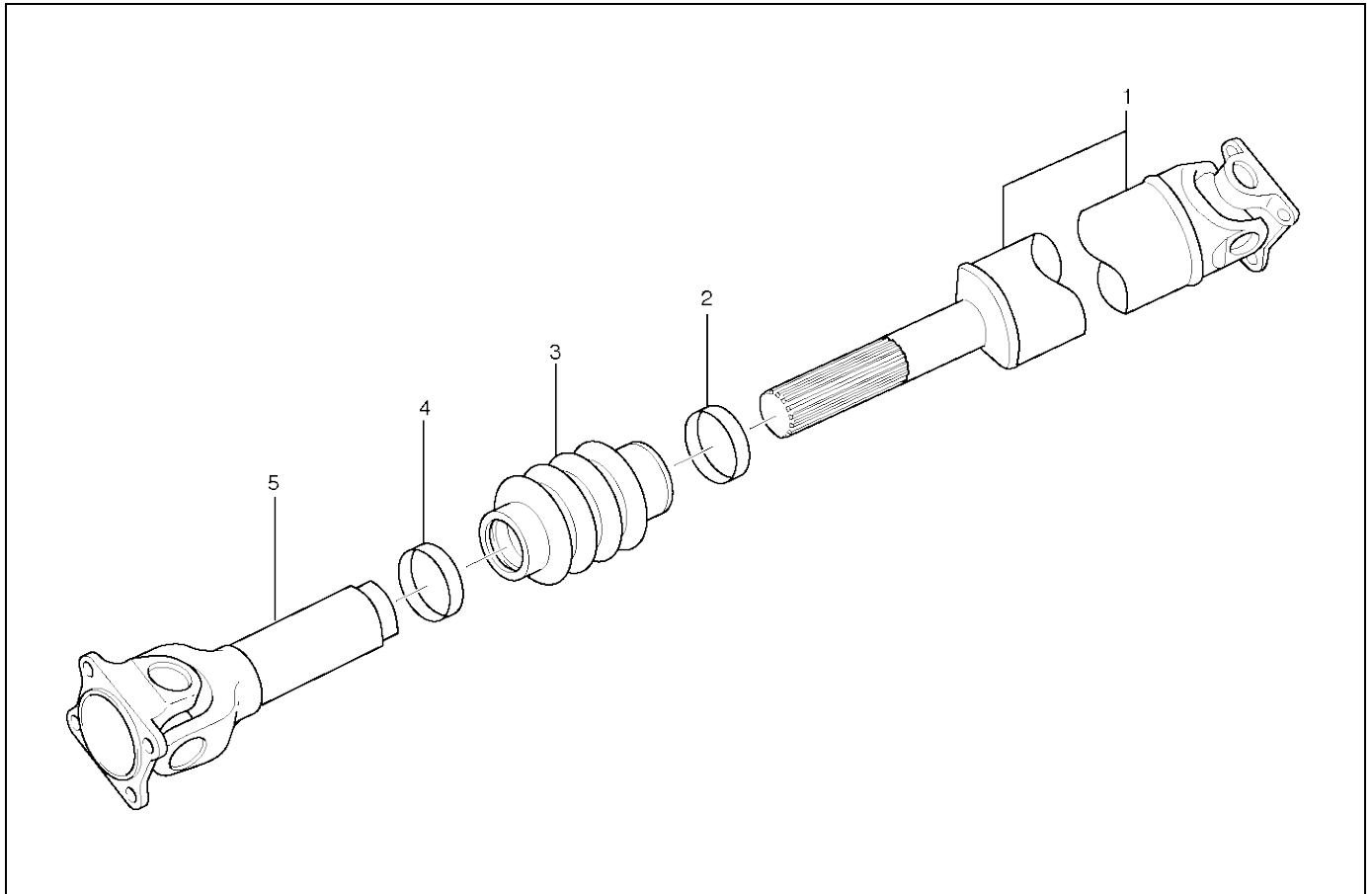
NOTE: Never install the shaft assembly backwards. Never insert bar between yoke lugs when tightening or removing bolts.

Completely remove the dust or foreign matter from the connecting surface of flange coupling on each end of the propeller shaft.

1. Align the mark applied during disassembly.
2. Install rear propeller shaft and tighten the bolts to the specified torque.

Torque: 63 N·m(46 lbft)

Slip Joint Disassembly (6VD1 Model Only)



401RW081

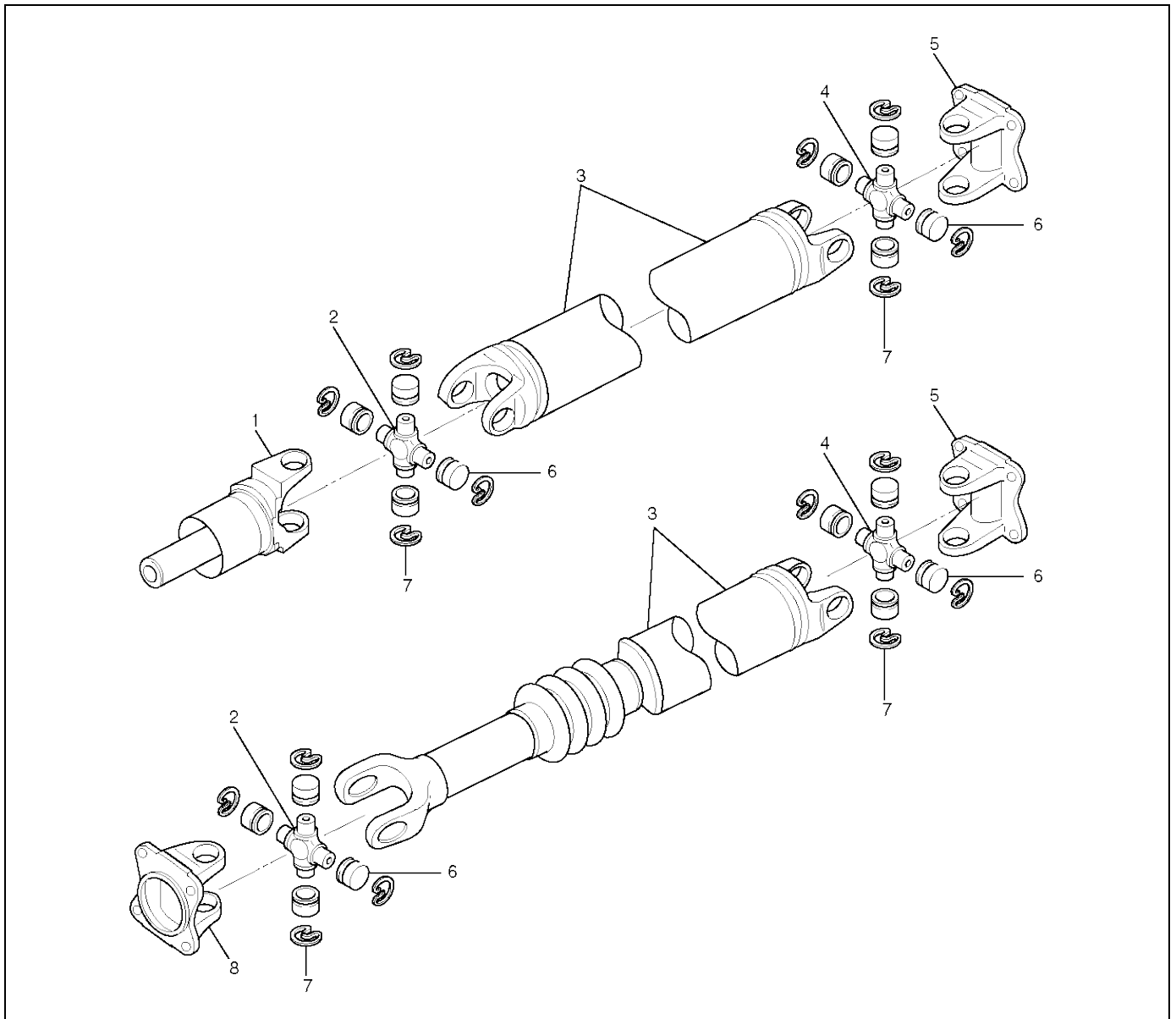
Legend

- (1) Spline Yoke and Universal Joint Assembly
- (2) Clamp

- (3) Boot
- (4) Clamp
- (5) Tube and Universal Joint Assembly

1. Lay the shaft horizontally on a bench and secure.
2. Indicate the original assembled position by marking the phasing of the shaft prior to disassembly.
3. Using the flat blade of a screwdriver, pry the loose end of the boot clamp upwards and away from the propeller shaft boot. Be careful not to damage the boot.
4. When boot clamps becomes loose, remove by hand.
5. Repeat for the other boot clamp.
6. Remove the spline yoke assembly from the tube assembly, by securing the boot with one hand and pulling on the spline yoke.
7. Remove the boot from the tube assembly.

Universal Joint Disassembly



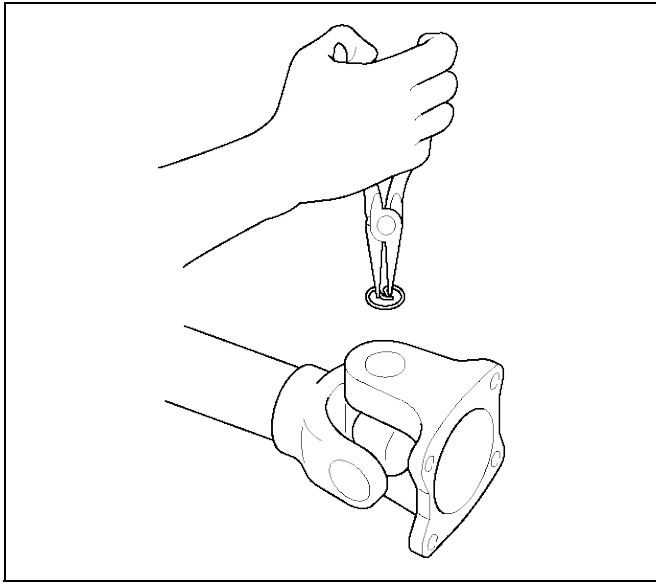
401RX00007

Legend

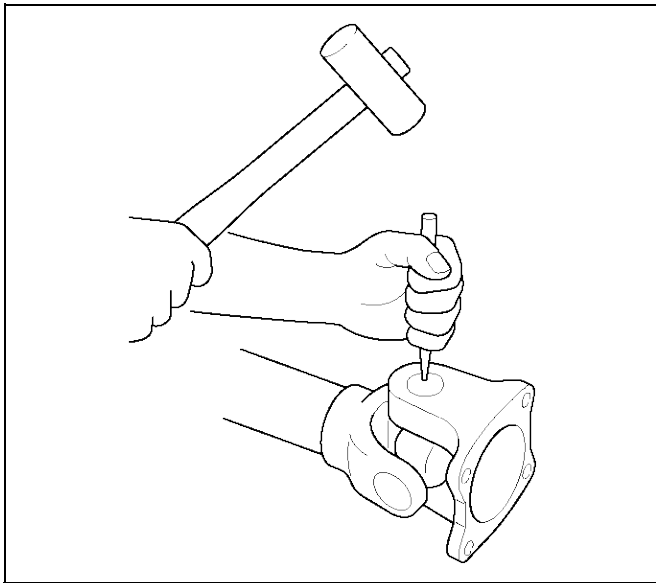
- | | |
|---------------------------------------|--|
| (1) Spline Yoke (Y22SE 4×2 M/T model) | (5) Flange Yoke |
| (2) Spider | (6) Bearing |
| (3) Propeller Shaft Assembly | (7) Snap Ring |
| (4) Spider | (8) Flange Yoke (6VD1 model and Y22SE 4×2 A/T model) |

4C-20 DRIVE SHAFT SYSTEM

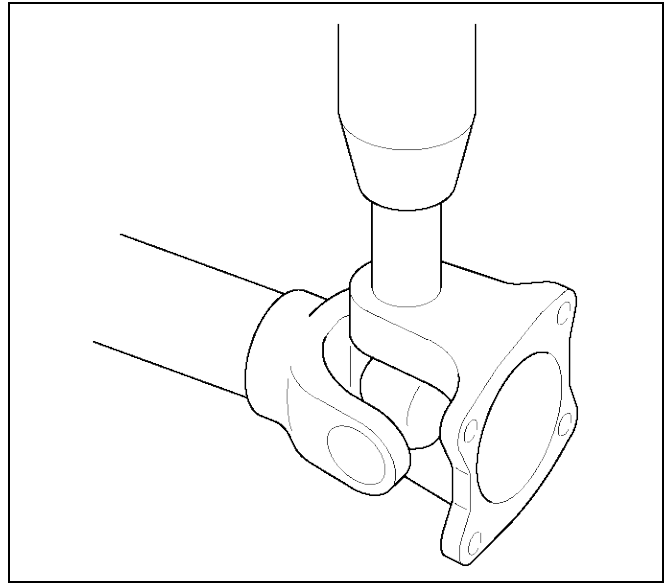
1. Apply alignment marks on the yokes of the universal joint, then remove the snap ring.



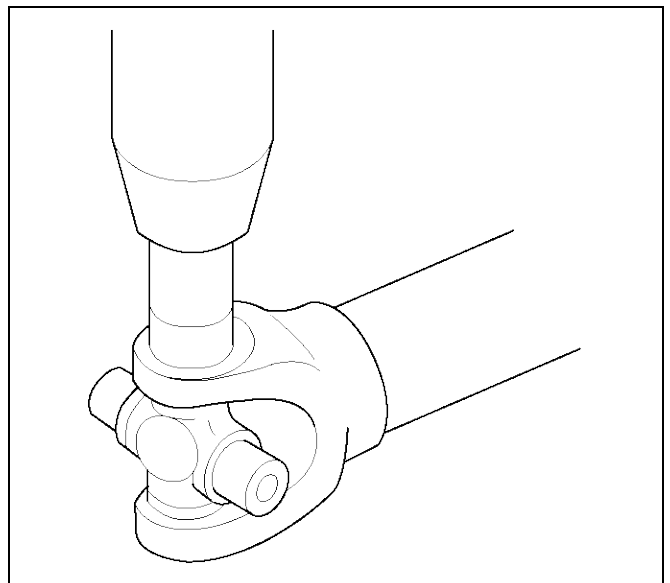
If the snap ring is stuck in position, remove paint from the hole in the yoke or tap around the edge of the bearing lightly with a soft drift.



2. Set the yoke in the arbor press with a piece of tube stock beneath it.
Place a solid plug on the upper bearing and press it through to release the lower bearing.



3. If the bearing will not pull out by hand after pressing, tap the base of the lug near the bearing to dislodge it.
4. To remove the opposite bearing, turn the yoke over and straighten the spider in the open spider hole. Then carefully press on the end of the spider so the remaining bearing moves straight out of the bearing spider hole. If the spider or bearing are cocked, the bearing will score the walls of the spider hole and ruin it.



5. Repeat this procedure on the remaining bearing to remove the spider from the yoke.

Inspection

- Propeller shaft for runout.

Static runout limit : 0.13mm(0.005in)

TIR on the neck of the slip tube shaft (with a boot).

0.25mm(0.010in)

TIR on the ends of the tubing 3 inch from the welds.

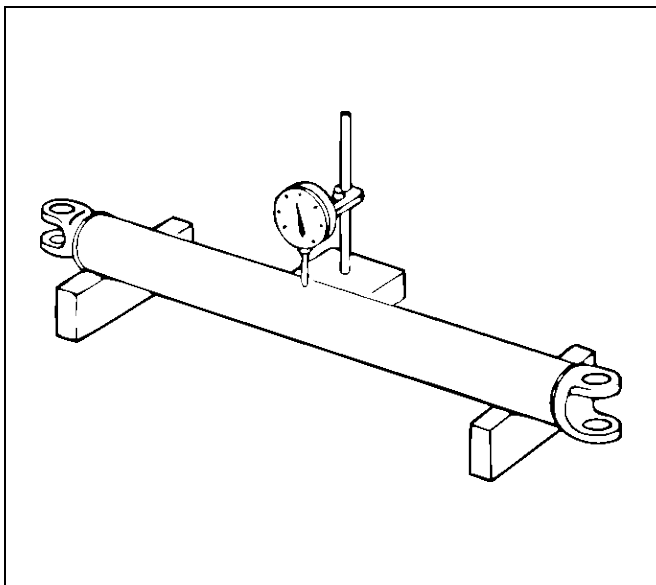
0.38mm(0.015in)

TIR at the linear center of the tube.

0.38mm(0.015in)

TIR for the full length of tube with 30" or less of tubing.

TIR: Total Indicator Reading)

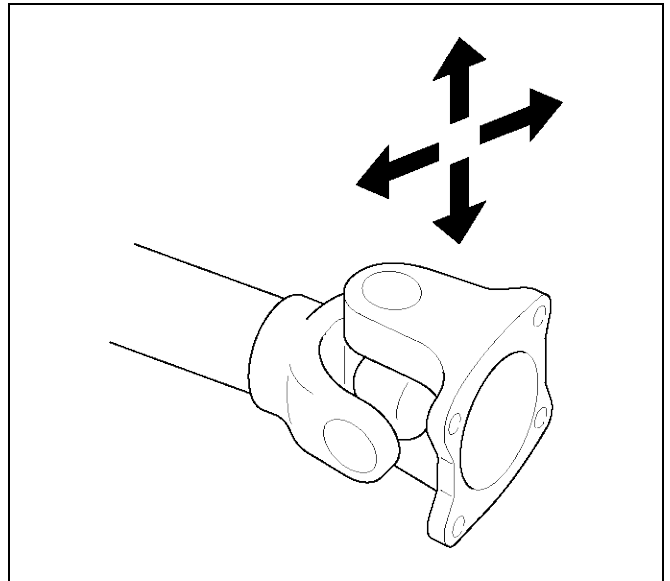


401RW017

- Play in universal joint.

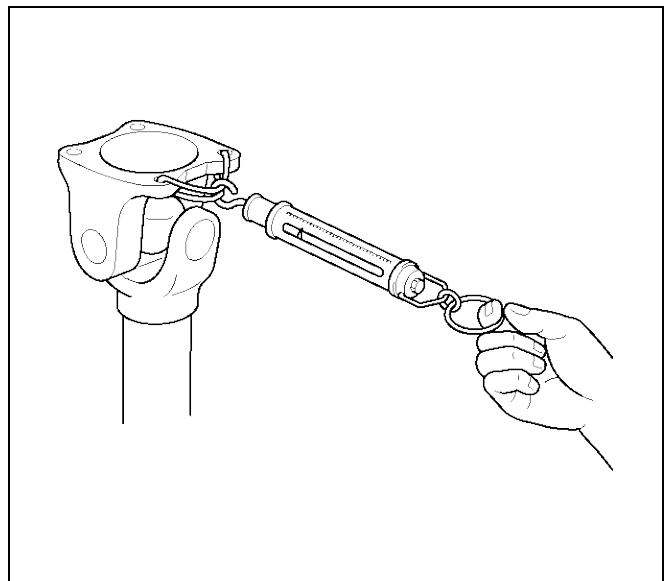
Limit: Less than 0.15mm(0.006in)

- Spider pin should be smooth and free from fretting or galling.
Visible signs of needle presence is normal, but wear should not be felt.
- Inspect boot.
Check the boot for crack or damage. If necessary, replace the boot.
If abnormal condition are found on the boot, inspect the grease for mixing of foreign material.
If the grease is in good condition, and slip joint works well, then replace the boot, replenish the grease, and reassemble the slip joint.
If the foreign material is found in the grease, then inspect the spline for wear and damage.



401RW074

- Preload of the universal joint.
Preload should be 0 to 24.9 kg (0 to 11.3 lb).
Joints should rotate smoothly and freely and should exhibit no rough or ratchety movement.

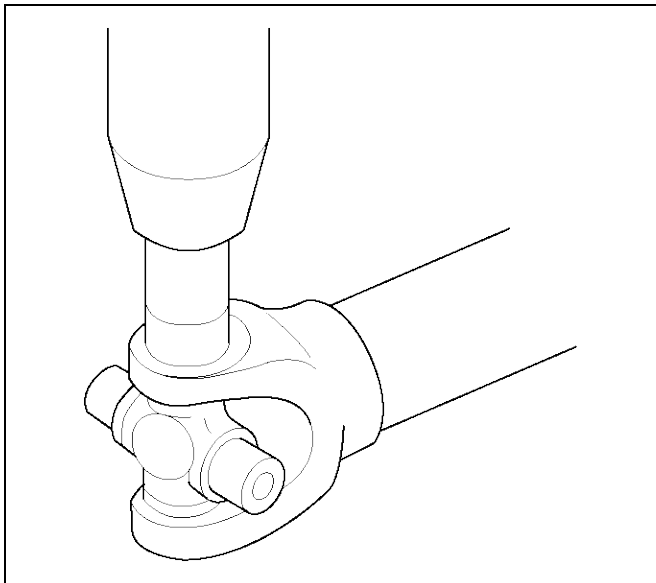


401RW078

- Inspect splines for wear.
The nylon-coated spline should be free from nicks and dings and the underlying steel spline should not be visible.
After cleaning the nylon coating spline, the coating should exhibit only slight indicator of wear.
Grease volume is approximately 10 grams of grease in total. Grease should be evenly applied to both the female and the male slip splines using a small brush.
After assembly of the slip joint, the sliding joint should be fully worked from the full collapsed to the full extended position.

Universal Joint Reassembly

1. Pack the four grease cavities of the spider with a high quality, extreme pressure N.L.G.I. Grade 2 grease. Do not add additional grease to bearing cup assembly.
2. Move one end of the spider to cause a trunnion to project through the spider hole beyond the outer machined face of the yoke lug. Place a bearing over the trunnion diameter and align it to the spider hole. Using an arbor press, align the trunnion to the spider hole and place a solid plug on the upper bearing. Press the bearing into the spider hole enough to install snap ring.



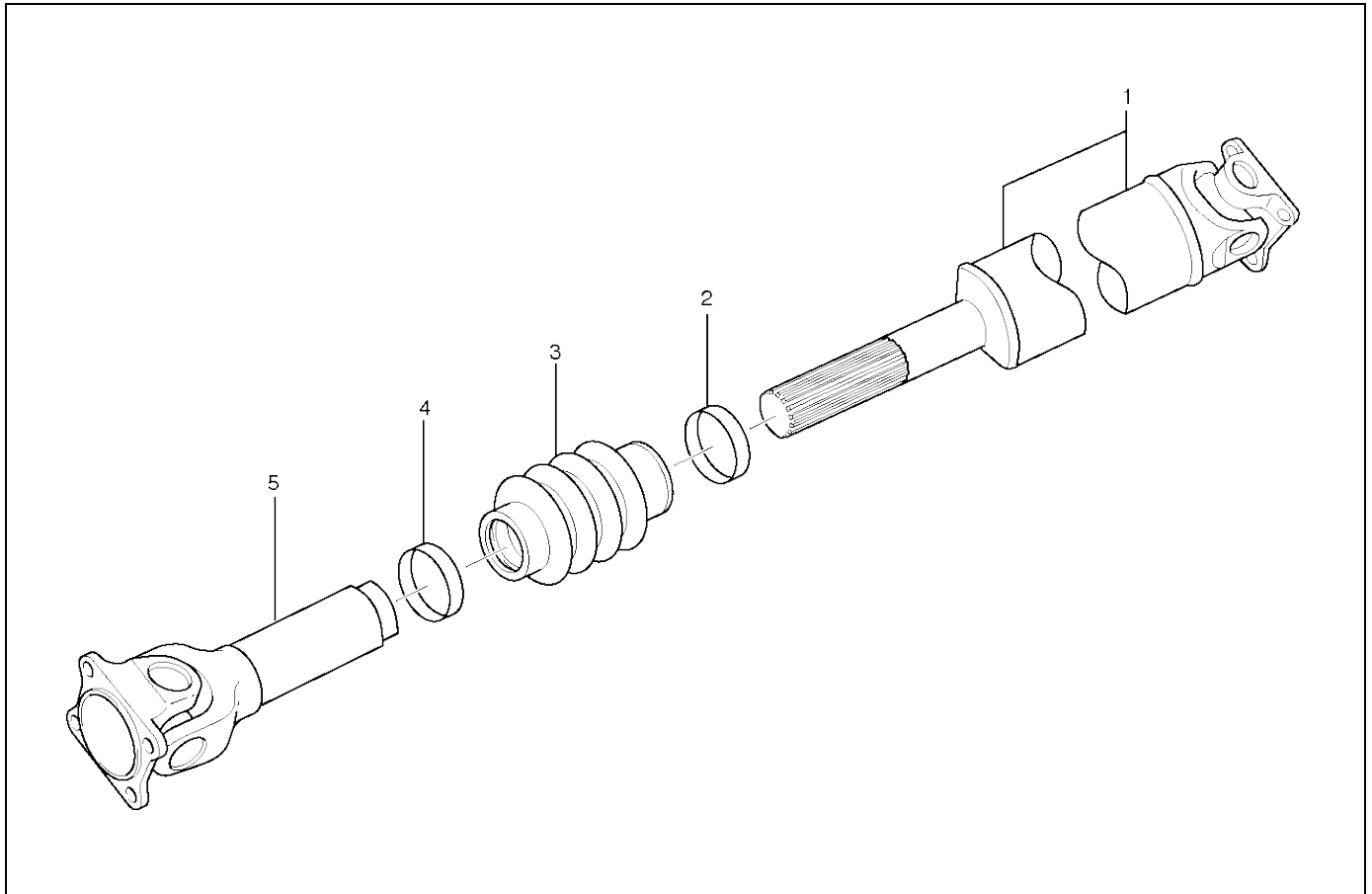
401 RW087

3. Install a snap ring.

NOTE: Be sure the snap rings are properly seated in the grooves.

4. Repeat steps 2 and 3 to install the opposite bearing. If the joint is stiff, strike the yoke ears with a soft hammer to seat the bearing.
5. Align the setting marks and join the yokes.

Slip Joint Reassembly (6VD1 Model Only)



401RW081

Legend

- (1) Spline Yoke and Universal Joint Assembly
- (2) Clamp

- (3) Boot
- (4) Clamp
- (5) Tube and Universal Joint Assembly

1. Apply grease evenly to both the female and male splines.
2. Apply a small amount of grease by finger to the outer lips of the boot.
3. Slide the boot (smaller diameter side) onto the spline yoke shaft being careful not to damage the spline coating or boot.
4. Carefully insert the spline yoke shaft into the tube assembly to maintain proper phasing. The spider holes should be in line according to the marks made prior to disassembly.

5. Position boot over tube assembly and yoke shaft in its assembled position over boot grooves.
6. Attach boot clamps and secure using pliers.
7. Be sure clamp is properly seated and secure.

CAUTION: Use a new clamp similar to the original clamp. Use of any other clamp may cause shaft imbalance and/or grease leakage.

Main Data and Specifications

General Specifications

	2WD Model			4WD Model	
Engine	Y22SE		6VD1	6VD1	
Transmission	M/T	A/T	A/T	M/T	A/T
Type (See illustration)	1	2	2	2	2
Length (between two spiders center)	1076.4mm (42.38in)	1106.4mm (43.56in)	1096.7mm (43.18in)	963.2mm (37.92in)	774.9mm (30.51in)
Universal joint type	Cardan type				

Torque Specifications

