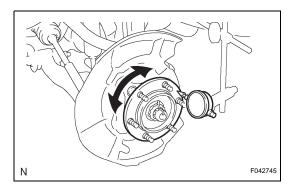
# **AXLE SYSTEM**

## **PROBLEM SYMPTOMS TABLE**

#### HINT:

Use the table below to help you find the cause of the problem. The numbers indicate the ranked order of probability of each of the possible causes. Check each part in order. If necessary, replace these parts.

Symptom	Suspected area	See page
Wander/pulls	1. Tires (Worn or improperly inflated)	TW-1
	2. Front wheel alignment (Incorrect) (2WD)	SP-2
	3. Front wheel alignment (Incorrect) (4WD and Pre-Runner)	SP-7
	4. Hub bearings (Loosen or worn)	AH-1
	5. Steering gear (Out of adjustment or broken)	-
Front wheel shimmy	1. Tires (Worn or improperly inflated)	TW-1
	2. Wheels (Out of balance)	TW-1
	3. Front shock absorber (Worn out) (2WD)	SP-16
	4. Front shock absorber (Worn out) (4WD and Pre-Runner)	SP-22
	5. Front wheel alignment (Incorrect) (2WD)	SP-2
	6. Front wheel alignment (Incorrect) (4WD and Pre-Runner)	SP-7
	7. Upper ball joints (Worn) (2WD)	SP-27
	8. Upper ball joints (Worn) (4WD and Pre-Runner)	SP-31
	9. Lower ball joints (Worn) (2WD)	SP-36
	10. Lower ball joints (Worn) (4WD and Pre-Runner)	SP-43
	11. Hub bearings (Loosen or worn)	AH-1
	12. Steering gear (Out of adjustment or broken)	-
Rear wheel shimmy	1. Tires (Worn or improperly inflated)	TW-1
	2. Wheels (Out of balance)	TW-1
	3. Rear shock absorber (Worn out)	SP-60
	4. Hub bearings (Loosen or worn)	AH-2



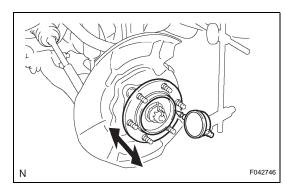
## **ON-VEHICLE INSPECTION**

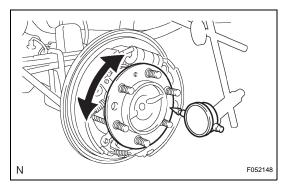
#### 1. INSPECT FRONT AXLE HUB BEARING

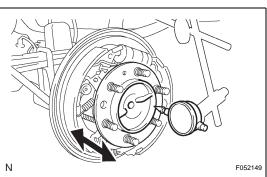
- (a) Remove the front wheel.
- (b) for 4WD:
  - (1) Remove the front axle hub grease cap (See page AH-16).
- (c) for 2WD:
  - (1) Remove the front disc brake caliper (See page AH-7).
- (d) for 4WD and Pre-Runner
  - (1) Remove the front disc brake caliper (See page AH-15).
- (e) Remove the front disc.
- (f) Inspect the axle hub backlash.
  - Using a dial indicator, check the backlash near the center of the axle hub.
    Maximum:

#### 0.05 mm (0.0020 in.)

If the backlash exceeds the maximum, replace the bearing.







- (g) Inspect the axle hub deviation.
  - Using a dial indicator, check the distortion of the surface of the axle hub.
    Maximum:

### 0.05 mm (0.0020 in.)

If the deviation exceeds the maximum, replace the bearing.

## 2. INSPECT REAR AXLE HUB BEARING

- (a) Remove the rear wheel.
- (b) Remove the rear brake drum (See page BR-68).
- (c) Inspect the axle shaft backlash.
  - (1) Using a dial indicator, check the backlash near the center of the axle shaft.Maximum:

### 0.05 mm (0.0020 in.)

If the backlash exceeds the maximum, replace the bearing.

- (d) Inspect the axle shaft deviation.
  - (1) Using a dial indicator, check the distortion of the surface of the axle shaft. Maximum:

## 0.05 mm (0.0020 in.)

If the deviation exceeds the maximum, replace the bearing.

AH