STEERING SYSTEM

PRECAUTION

NOTICE:
When disconnecting the negative (-) battery terminal, initialize the following systems after the terminal is reconnected.

System Name	See procedure
Lighting System (Adaptive Front-Lighting System)	LI-17
Power Window Control System	WS-12
Power Back Door System	ED-33
Sliding Roof System	RF-22 and RF-4

1. HANDLING PRECAUTIONS FOR STEERING SYSTEM

(a) Care must be taken when replacing parts. Incorrect replacement could affect the performance of the steering system and result in a driving hazard.

2. HANDLING PRECAUTIONS FOR SRS AIRBAG SYSTEM

(a) The RX330 is equipped with SRS (Supplemental Restraint System) such as the driver airbag and front passenger airbag. Failure to carry out service operations in the correct sequence could cause the SRS to unexpectedly deploy during, possibly leading to a serious accident. Before servicing (including removal or installation of parts, inspection or replacement), be sure to read the precautionary notice for the supplemental restraint system (See page RS-1).

PROBLEM SYMPTOMS TABLE

HINT:
Use the table below to help you find the cause of the problem. The numbered suspect are as indicate the priority of the likely cause of the problem. Check each part in the order shown. If necessary, repair or replace these parts.

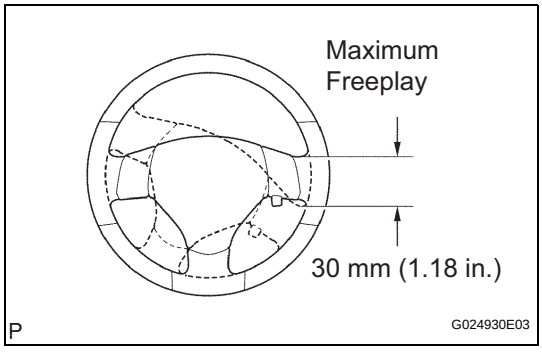
STEERING SYSTEM

SR

Symptom	Suspected area	See page
Herd steering	1. Tires (improperly inflated)	TW-1
	2. Power steering fluid level (Low)	PS-2
	3. Drive belt (Loose)	EM-22
	4. Front wheel alignment (Incorrect)	SP-2
	5. Steering system joints (Worn)	-
	6. Suspension arm ball joints (Worn)	SP-24
	7. Steering column (Binding)	-
	8. Power steering vane pump	PS-8
	9. Power steering link	PS-19
Poor return	1. Tires (Improperly inflated)	TW-1
	2. Front wheel alignment (Incorrect)	SP-2
	3. Steering column (Binding)	-
	4. Power steering link	PS-19
Excessive play	1. Steering system joints (Worn)	-
	2. Suspension arm ball joints (Worn)	SP-24
	3. Intermediate shaft, Universal joint, Sliding yoke (Worn)	-
	4. Front wheel bearing (Worn)	AH-5
	5. Power steering link	PS-19
Abnormal noise	1. Power steering fluid level (Low)	PS-2
	2. Steering system joints (Worn)	-
	3. Power steering link	PS-19

HINT:
When the problem occurs in the power tilt and telescopic steering system, refer to the DI section.

ON-VEHICLE INSPECTION

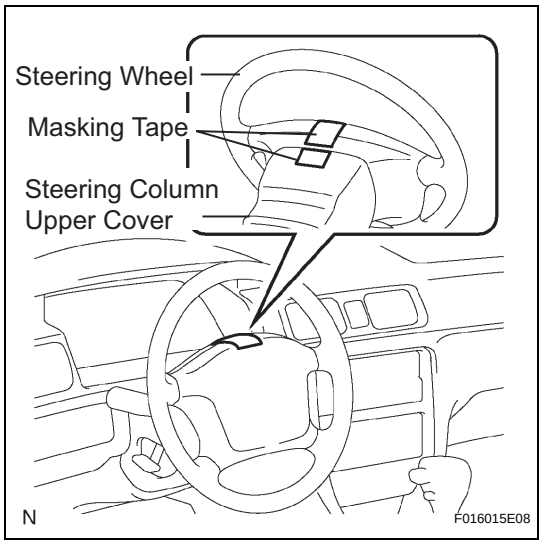


1. CHECK STEERING WHEEL FREEPLAY

(a) Stop the vehicle and face the tires straight ahead.

(b) Turn the steering wheel gently right and left by hand, and check the steering wheel freeplay.

Maximum freeplay:
30 mm (1.18 in.)



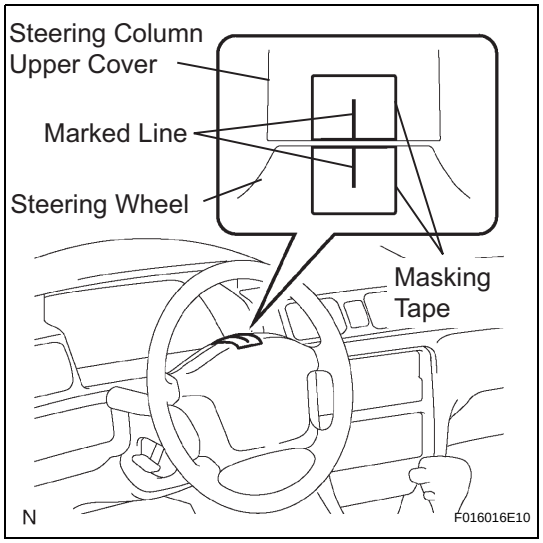
REPAIR

1. STEERING OFF CENTER REPAIR PROCEDURE

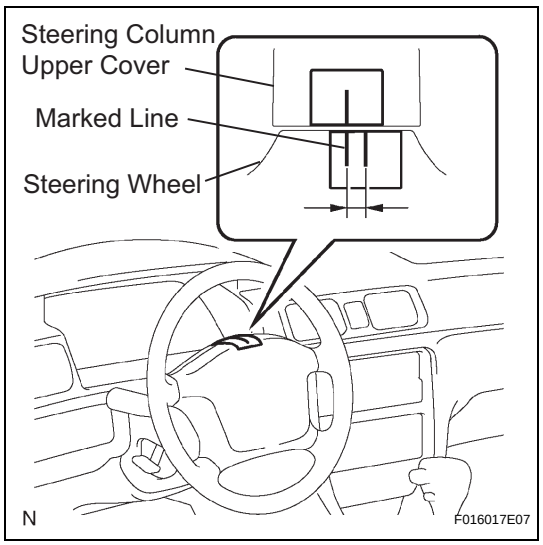
(a) Inspect steering wheel off center.

(1) Apply masking tape on the top center of the steering wheel and steering column upper cover.

(2) Drive the vehicle in a straight line for 100 meters at a constant speed of 35 mph (56 km/h), and hold the steering wheel to maintain the course.



(3) Draw a line on the masking tape as shown in the illustration.



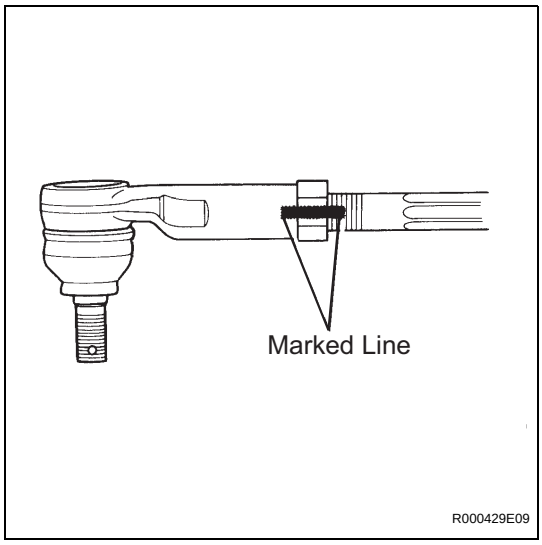
(4) Turn the steering wheel to its straight position.
HINT:
Refer to the upper surface of the steering wheel, steering spoke and SRS airbag line for the straight position.

(5) Draw a new line on the masking tape or the steering wheel as shown in the illustration.

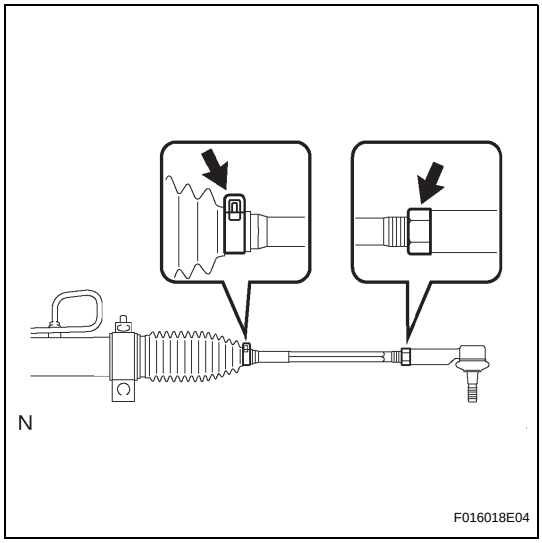
(6) Measure the distance between the 2 lines on the masking tape of the steering wheel.

(7) Convert the measured distance to steering angle.
HINT:
Measured distance 1 mm (0.04 in.) = Steering angle approximately 1 deg.
HINT:
Make a note of the steering angle.

(b) Adjust steering angle.
NOTICE:
The adjustment method for steering angle is different depending on the models. Check whether it is type A or B.



(1) Draw a line on the RH and LH tie rod and rack ends where is can easily be seen.
(2) Using a paper gauge, measure the distance from RH and LH tie rod ends to the rack end screws.
HINT:
- Measure the RH side and LH side.
- Make a note of the measured values.



(3) Remove the RH and LH boot clips from the rack boots.
(4) Loosen the RH and LH lock nuts.
(5) Turn the RH and LH rack end by the same amount (but in different directions) according to the steering angle.
HINT:
1 turn 360 deg. of rack end (1.5 mm(0.059 in.) horizontal movement) - 12 deg. of steering angle.
(6) Tighten the RH and LH lock nuts by the specified torque.
Torque: 74 N*m (750 kgf*cm, 54 ft.*lbf)
NOTICE:
Make sure that the difference in length between RH and LH tie rod ends and rack end screws are within 1.5 mm (0.059 in.).
(7) Install the RH and LH boot clips.