

# Your Ultimate Source for OEM Repair Manuals

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## 2005 NISSAN Almera / Pulsar 3 Doors OEM Service and Repair Workshop Manual

[Go to manual page](#)

# SEAT BELT RETRACTOR ON-VEHICLE CHECK

## Emergency Locking Retractors (ELR)



### NOTE:

All seat belt retractors are Emergency Locking Retractors (ELR) type. In an emergency (sudden stop) the retractor will lock and prevent the webbing from extending any further.

Check the seat belt retractors with the following test(s) to determine if a retractor assembly is operating properly.

## ELR Function Stationary Check

Grasp the shoulder webbing and pull forward quickly. The retractor should lock and prevent the belt from extending further.

## ELR Function Moving Check

### WARNING:

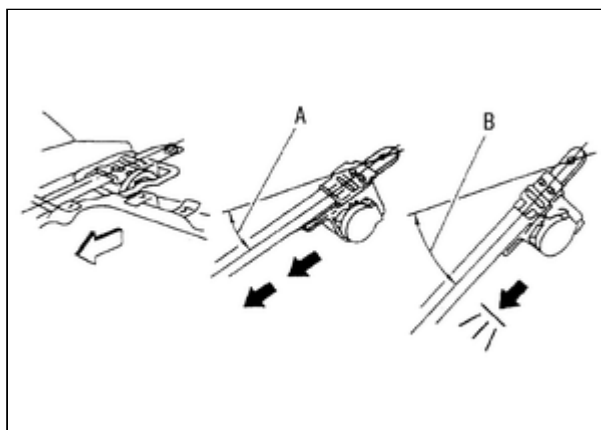
Perform the following test in a safe, open area clear of other vehicles and obstructions (for example, a large, empty parking lot). Road surface must be paved and dry. Never perform the following test on wet or gravel roads or on public streets and highways. This could result in an accident and serious personal injury. The driver and passenger must be prepared to brace themselves in the event that the retractor does not lock.

- 1 Fasten driver seat belt. Buckle a passenger into the seat for the belt that is to be tested.
- 2 Proceed to the designated safe area.
- 3 Drive the vehicle at approximately 16 km/h (10 MPH). Notify any passengers of a pending sudden stop and the driver and passenger must be prepared to brace themselves in the event that the retractor does not lock. Apply brakes firmly and make a very hard stop.  
During stopping, seat belts should lock and not be extended. If the seat belt retractor assembly does not lock, perform the retractor off-vehicle check.

## SEAT BELT RETRACTOR OFF-VEHICLE CHECK

- 1 Remove rear seat belt retractor assembly. Refer to [Removal & Installation](#).
- 2 Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the figure.  
Outer Seat Belt Retractor

- The webbing can be pulled out when the angle (A) is 12 degrees or less.



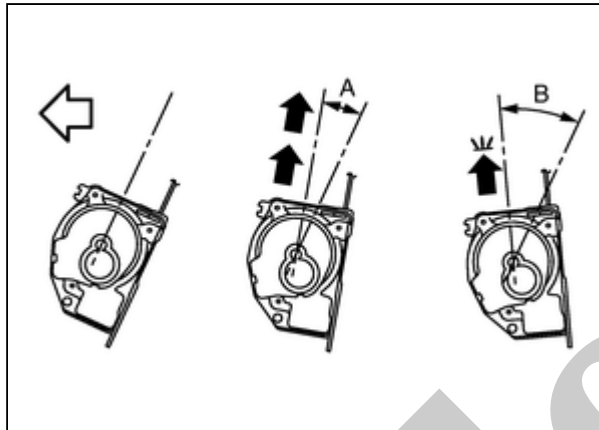
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- The webbing cannot be pulled out when the angle (B) is 27 degrees or more.

A and B	: Tilting angles
←	: Vehicle front

Center Seat Belt Retractor

- The webbing can be pulled out when the angle (A) is 12 degrees or less.



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- The webbing cannot be pulled out when the angle (B) is 27 degrees or more.

A and B	: Tilting angles
←	: Vehicle front

3 Replace the seat belt assembly if it does not operate normally.

**WARNING:**

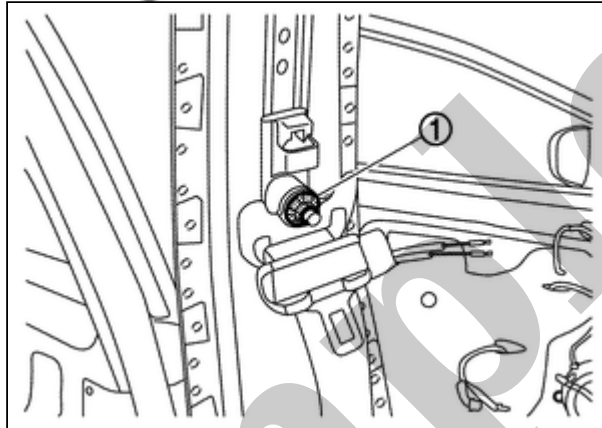
- Before servicing, disconnect ground line of battery. Refer to [Precautions for Removing Battery Terminal](#).
- Prevent accidental activation. Refer to [Precaution for Supplemental Restraint System \(SRS\) "AIR BAG" and "SEAT BELT PRE-TENSIONER"](#).

## REMOVAL

1 Remove shoulder anchor.

a Remove center pillar upper garnish. Refer to [Removal & Installation](#).

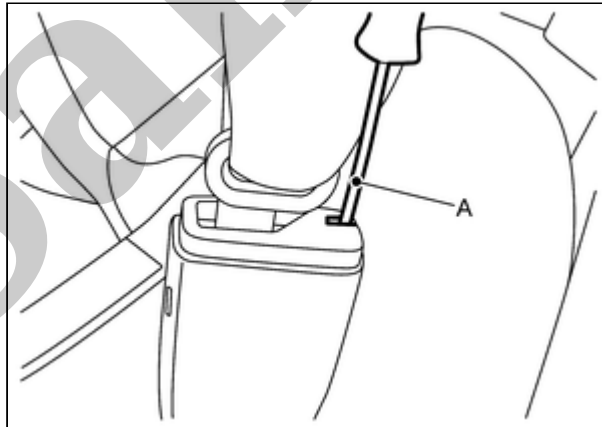
b Remove shoulder anchor mounting anchor nut ①, and then remove shoulder anchor.



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2 Remove lap anchor.

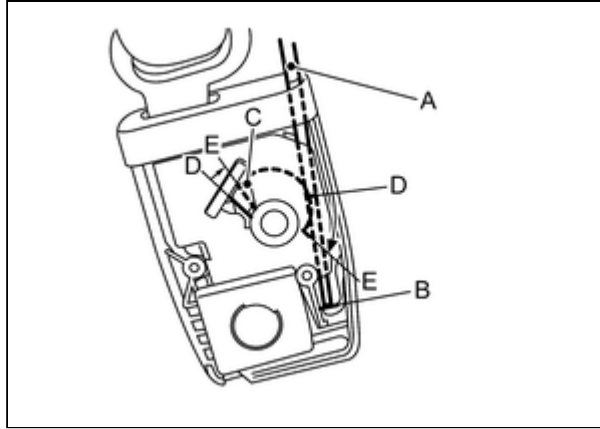
a Insert appropriate tool (A) from the top hole to the internal stopper position.



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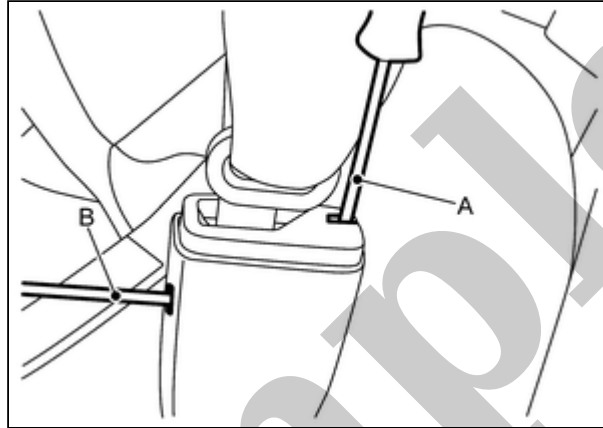
**NOTE:**

When insert appropriate tool (A) to stopper position (B), the cam (C) rotates from (D) position to (E) position.



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b Insert appropriate tool (B) from the side hole while holding appropriate tool (A) and unlock to remove lap anchor.

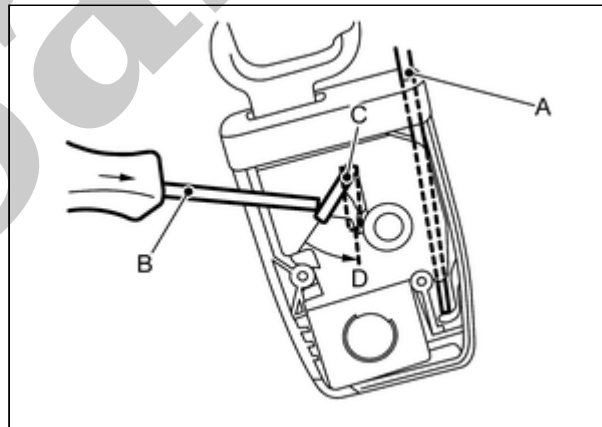


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**NOTE:**

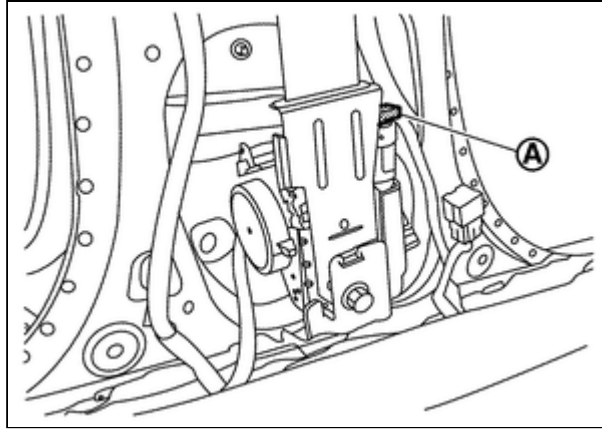
The lock is unlocked when the lock pin (C) is moved to the (D) position using an appropriate tool (B).



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3 Remove seat belt pre-tensioner retractor.

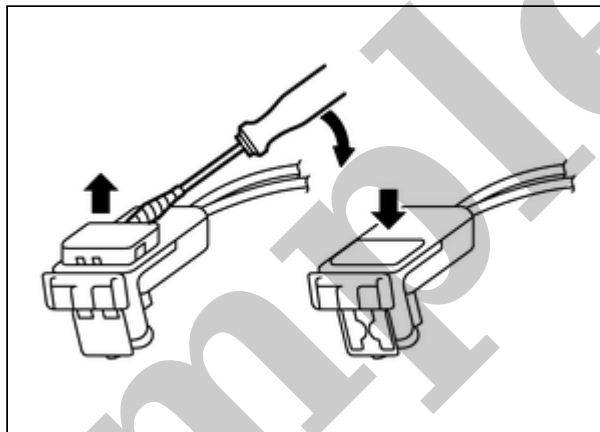
a Disconnect seat belt pre-tensioner retractor harness connector (A).



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**CAUTION:**

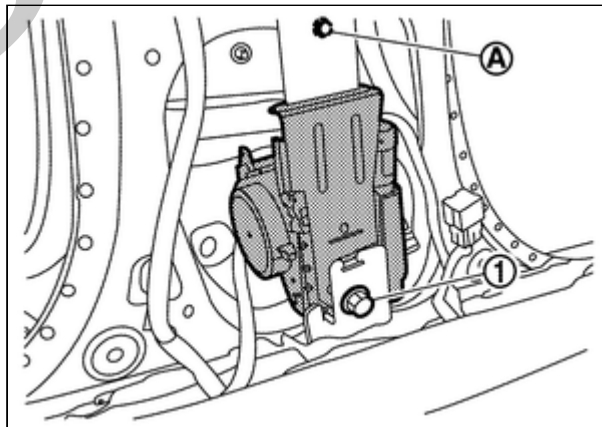
- For installing/removing seat belt pre-tensioner retractor harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove connector.



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- Install connector with lock raised, and push lock into connector.
- After installing the connector, check that the lock is pushed securely into it.

b Remove seat belt pre-tensioner retractor mounting anchor bolt ① and bolt (A), and then remove seat belt pre-tensioner retractor.

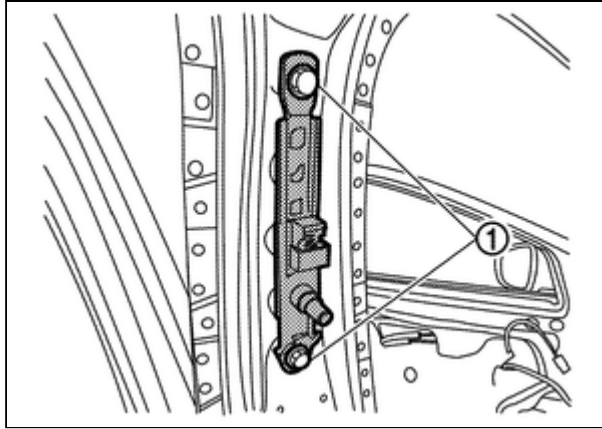


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**CAUTION:**

Never place seat belt pre-tensioner retractor in an area where the temperature reaches 80°C (176°F) or more.

4 Remove seat belt adjuster mounting anchor bolts ①, and then remove seat belt adjuster.

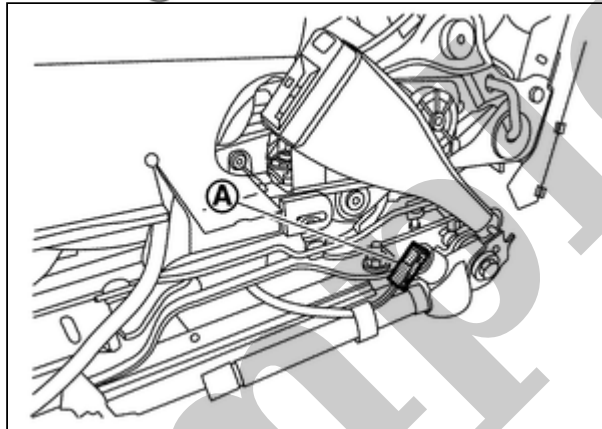


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5 Remove lap pre-tensioner.

a Remove outside seat cushion finisher lower. Refer to [Disassembly & Assembly](#).

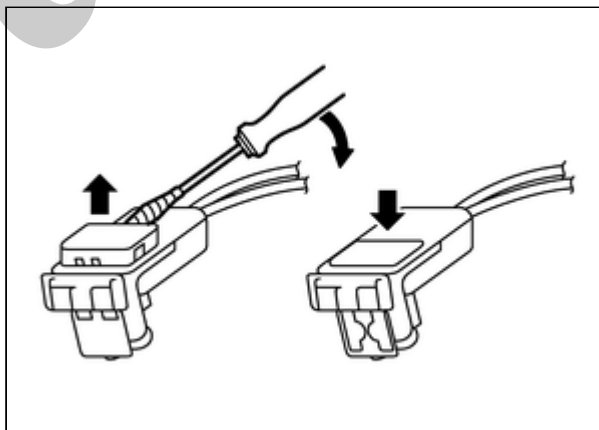
b Disconnect lap pre-tensioner harness connector (A).



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**CAUTION:**

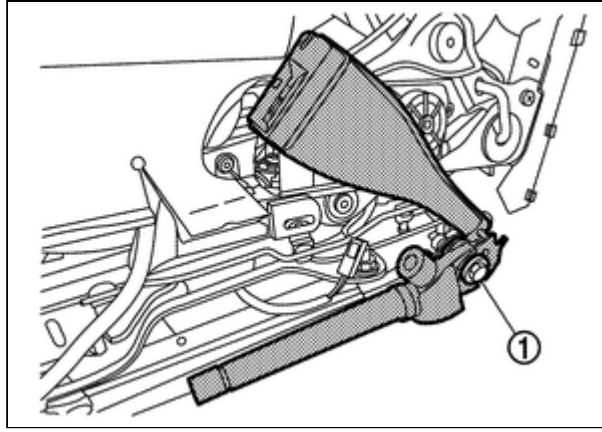
- For installing/removing lap pre-tensioner harness connector, insert thin screwdriver wrapped in tape into notch, lift lock and remove connector.



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- Install connector with lock raised, and push lock into connector.
- After installing the connector, check that the lock is pushed securely into it.

c Remove lap pre-tensioner mounting anchor bolt (1), and then remove lap pre-tensioner.



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## INSTALLATION

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Install in the reverse order of removal.

Sample



## AFTER A COLLISION

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**WARNING:**

To avoid the risk of death or severe injury:

- Inspect all seat belt system components including the seat belt webbing, retractors, pretensioners, buckles, anchors, and attaching hardware after any collision.
- NISSAN/INFINITI recommends that all seat belt assemblies and buckles in use during a collision be replaced unless the collision was minor and all seat belt system components including the seat belt webbing, retractors, pretensioners, buckles, anchors, and attaching hardware show no damage and continue to operate properly.
- Inspect all seat belt assemblies and components including webbing, retractors, buckles, anchors and attaching hardware not in use during a collision. Replace if either damage or improper operation is noted.
- Seat belt pretensioners activate whenever an air bag deploys and cannot be reused. If an air bag deploys, always replace the seat belt assemblies and system components including webbing, retractors, buckles, anchors and attaching hardware, even if the seat belts were not in use during a collision.
- Failure to follow any of the above steps could result in serious personal injury in an accident.

Replace any seat belt assembly (including anchor bolts) if:

- The seat belt is in use at the time of a collision (except for minor collisions and the belts, retractors and buckles show no damage and continue to operate properly).
- The seat belt is damaged in an accident (i.e. torn webbing, bent retractor or guide, etc.).
- The seat belt attaching point is damaged in an accident. Inspect the seat belt attaching area for damage or distortion and repair if necessary before installing a new seat belt assembly.
- Anchor bolts are deformed or worn out.
- The seat belt assembly must be replaced even if the seat belts were not in use during the collision in which the air bags were deployed.

## PRELIMINARY CHECKS

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1 Check the seat belt warning lamp for proper operation as per the following:

a Turn power switch ON. The seat belt warning lamp should illuminate.

b Fasten the seat belt. The seat belt warning lamp should turn OFF.

2 If the air bag warning lamp turns ON, perform self-diagnosis using CONSULT. Refer to [CONSULT Function](#).

3 Check that the seat belt retractor, seat belt anchor and buckle bolts are tightened firmly.

4 Check the shoulder seat belt guide and shoulder belt height adjuster for front seats. Check that guide swivels freely and that webbing lays flat and does not bind in guide. Check that height adjuster operates properly and holds securely.

5 Check retractor operation:

a Fully extend the seat belt webbing and check for twists, tears or other damage.

b Allow the seat belt to retract. Check that seat belt returns smoothly and completely to the retractor. If the webbing does not return smoothly, the cause may be an accumulation of dust or dirt. Use the "SEAT BELT TAPE SET" and perform the following steps.

Inspect The Front Seat Belt Shoulder Anchor

- i. Pull the seat belt out to a length of 500 mm (19.69 in) or more.
- ii. Fix the seat belt at the center pillar webbing opening with a clip or other device.
- iii. Pass a thin wire through the shoulder anchor webbing opening. Hold both ends of the wire and pull it tightly while moving it up and down several times along the webbing opening surface to remove dirt stuck there.

iv. Any dirt that cannot be removed with the wire can be removed by cleaning the opening with a clean cloth.

v. Apply tape at the point where the webbing contacts the shoulder anchor webbing opening.



**NOTE:**

**Apply the tape so that there is no slack or wrinkling.**

vi. Remove the clip fixing the seat belt and check that the webbing returns smoothly.

c Fasten the seat belt. Check that the seat belt is securely fastened.

d Release the seat belt. Check that the webbing and tongue return to their original position.

6 Repeat steps above if necessary to check the other seat belts.

## SEAT BELT RETRACTOR ON-VEHICLE CHECK

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### Emergency Locking Retractors (ELR)

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## SEAT BELT RETRACTOR OFF-VEHICLE CHECK

---

1 Remove front seat belt retractor assembly. Refer to [Removal & Installation](#).

2 Slowly pull out webbing while tilting the retractor assembly forward from the mounted position without twisting the retractor assembly as shown in the figure.

- The webbing can be pulled out when the angle (A) is 12 degrees or less.