

SEAT BELT SYSTEM

SB

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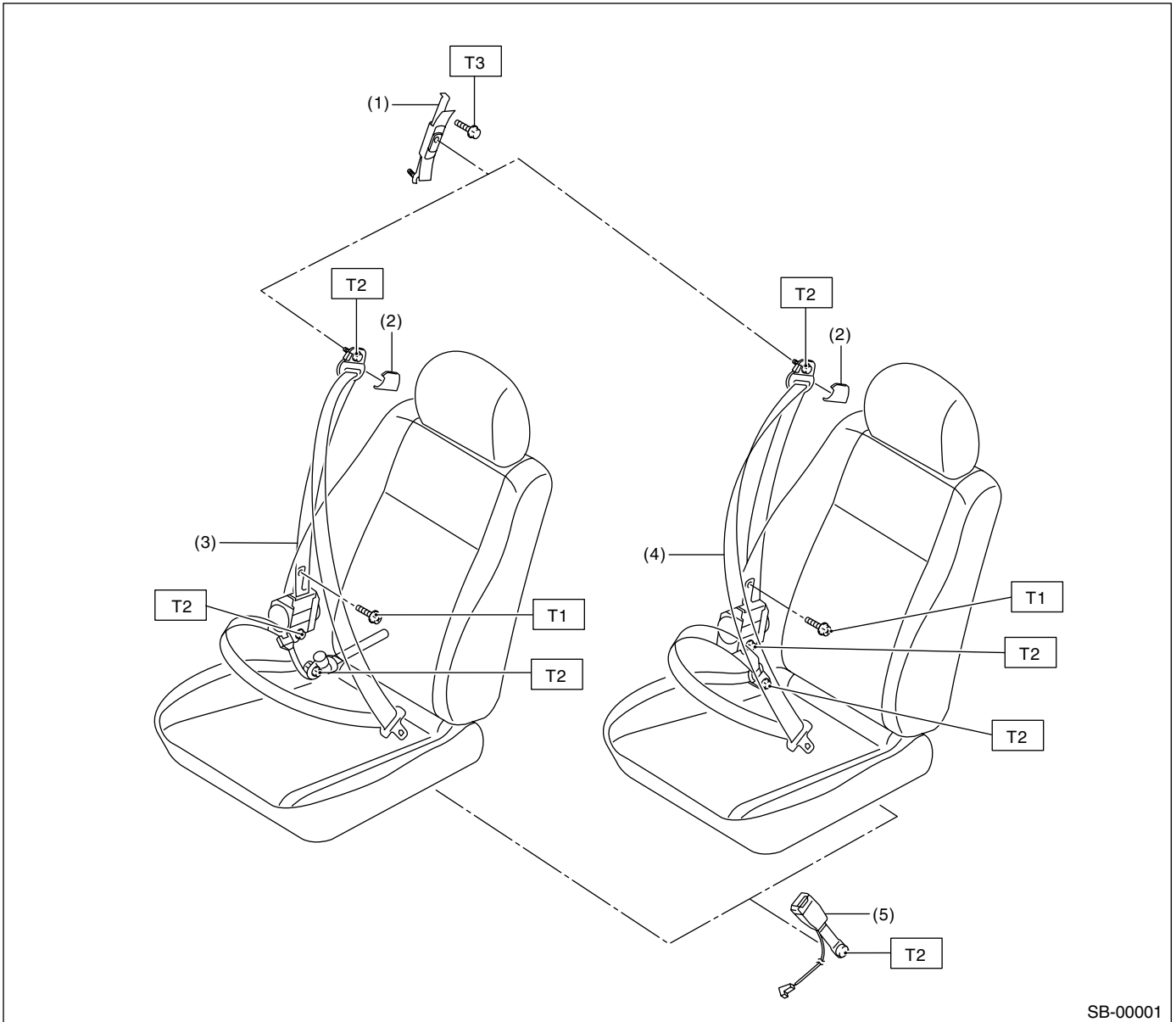
GENERAL DESCRIPTION

SEAT BELT SYSTEM

1. General Description

A: COMPONENT

1. FRONT SEAT BELT



- | | |
|--|---------------------|
| (1) Adjuster anchor ASSY | (4) Outer belt ASSY |
| (2) Anchor cover | (5) Inner belt ASSY |
| (3) Outer belt ASSY with lap pretensioner (For Australia model only) | |

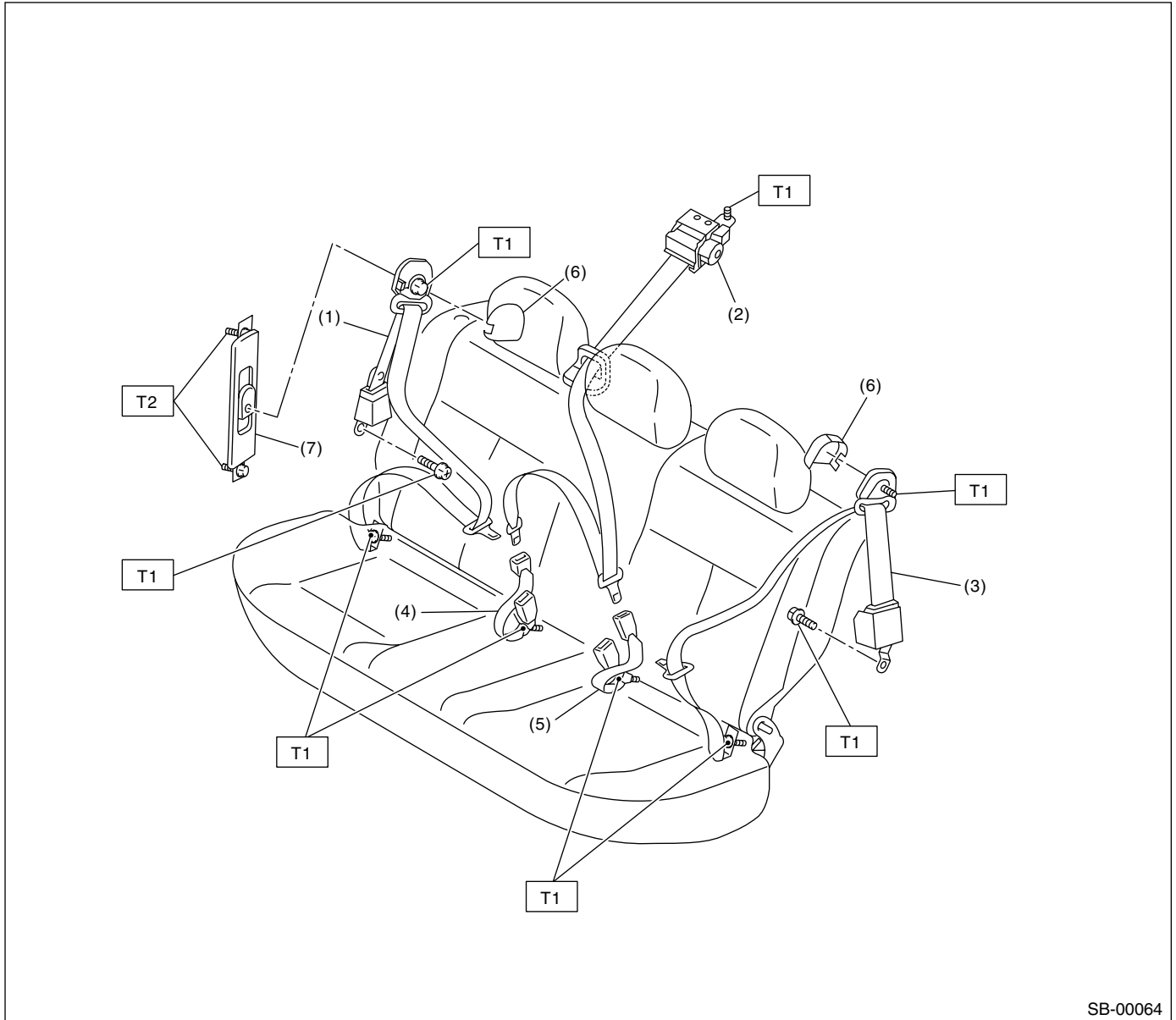
Tightening torque: N·m (kgf·m, ft·lb)

T1: 7.5 (0.76, 5.5)

T2: 30 (3.1, 22)

T3: 53 (5.4, 39)

2. REAR SEAT BELT



SB-00064

- | | |
|----------------------------|--------------------------|
| (1) Outer seat belt RH | (5) Inner seat belt LH |
| (2) Outer seat belt CENTER | (6) Anchor cover |
| (3) Outer seat belt LH | (7) Adjuster anchor ASSY |
| (4) Inner seat belt RH | |

Tightening torque: N-m (kgf-m, ft-lb)

T1: 30 (3.1, 22)

T2: 53 (5.4, 39)

GENERAL DESCRIPTION


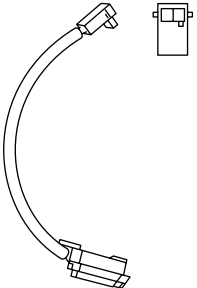
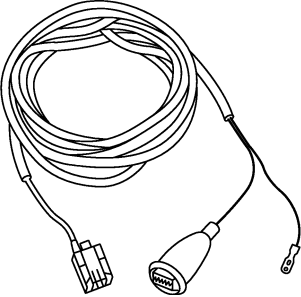
SEAT BELT SYSTEM

B: CAUTION

- Before starting, turn the ignition switch to OFF, disconnect the battery ground cable and wait for 20 seconds or more.
- The pretension system has a backup power source. The pretensioner might deploy if you do not wait for 20 seconds or more before starting work.
- Do not drop or apply any impact to the pretensioner.
- If oil, grease, or water gets on the pretensioner, wipe it off immediately with a dry cloth.
- Do not expose the pretensioner to high temperature or flame.
- Do not allow current to flow through or voltage to reach the pretensioner. Do not use a circuit tester to check resistance of the pretensioner.
- Do not disassemble or attempt to repair the pretensioner. If it is dented, cracked, or deformed, replace it with a new one.
- Do not use the airbag or pretensioner parts from other vehicles. Always replace parts with new parts.
- When handling a seat belt with a deployed pretensioner, wear gloves and goggles. Wash your hands afterwards.
- Do not re-use a seat belt with a deployed pretensioner again.
- Be sure to deploy pretensioner before disposal. <Ref. to SB-11, OPERATION, Disposal of Pretensioner.>
- If the material gets in your eyes or on your skin during deployment, wash it away with clean water, and then consult a doctor.

C: PREPARATION TOOL

1. SPECIAL TOOLS

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 <p>ST98299FC030</p>	98299FC030	ADAPTER A (DEPLOYMENT)	<ul style="list-style-type: none"> • Used for deploying the pretensioner. • Used with DEPLOYMENT TOOL (98299PA030).
 <p>ST98299SA050</p>	98299SA050	ADAPTER F (DEPLOYMENT)	<ul style="list-style-type: none"> • Used for deploying the lap pretensioner. • Used with DEPLOYMENT TOOL (98299PA030).
 <p>ST98299PA030</p>	98299PA030	DEPLOYMENT TOOL	<ul style="list-style-type: none"> • Used for deploying the pretensioner. • Used with ADAPTER A or ADAPTER F (DEPLOYMENT) (98299FE010/98299SA050).

INSPECTION LOCATIONS AFTER A COLLISION

SEAT BELT SYSTEM

2. Inspection Locations After a Collision

A: INSPECTION

Check for the following, and then replace with new parts if necessary.

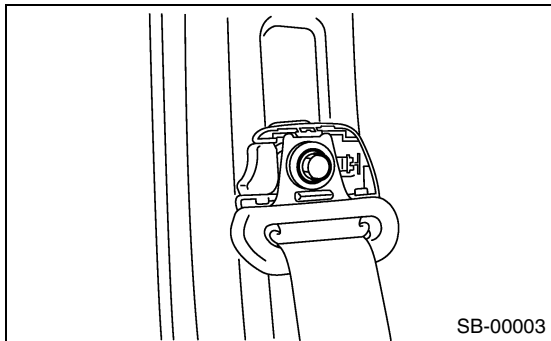
- Center pillar lower garnish is discolored or cracked.
- Wire harness and/or connector is damaged.

3. Front Seat Belt

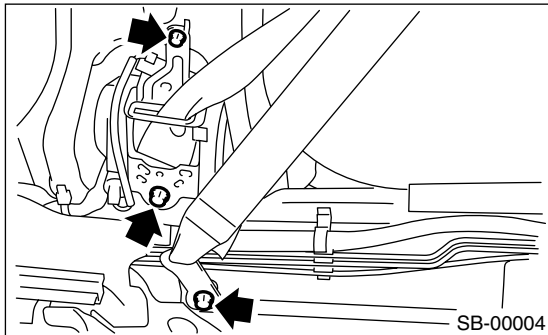
A: REMOVAL

1. FRONT OUTER BELT

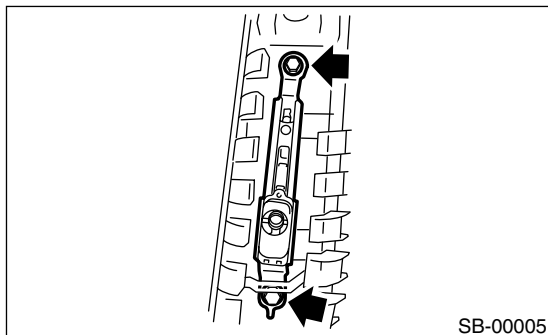
- 1) Fold backrest all the way forward, and then move front seat all the way forward.
- 2) Turn the ignition switch to OFF, disconnect the ground cable from battery, and wait for more than 20 seconds before starting work.
- 3) Remove the center pillar lower trim. <Ref. to EI-44, REMOVAL, Lower Inner Trim.>
- 4) Remove the anchor cover. Loosen the shoulder anchor bolt, and then detach the shoulder anchor from center pillar.



- 5) Turn over the floor mat to remove the bolts.



- 6) Disconnect the yellow connector of pretensioner harness, and remove the front outer belt.
- 7) Remove the center pillar upper trim. <Ref. to EI-43, REMOVAL, Upper Inner Trim.>
- 8) Remove the two bolts and adjustable anchor assembly.

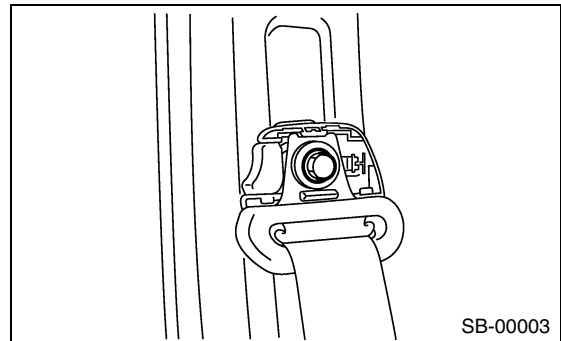


CAUTION:

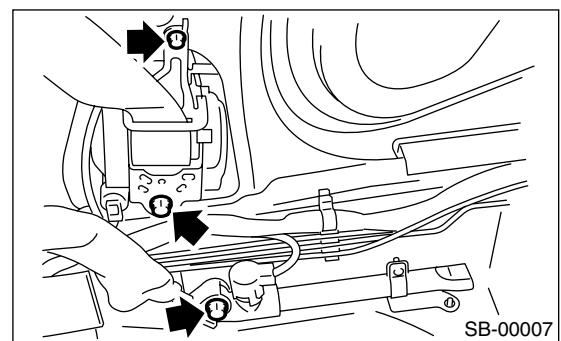
- Do not drop or apply any impact to the pretensioner.
- Pretensioner and bracket should be treated as an assembly. Do not attempt to disassemble it.

2. FRONT OUTER SEAT BELT WITH LAP PRETENSIONER

- 1) Fold backrest forward, and then move front seat forward.
- 2) Turn the ignition switch to OFF, disconnect the ground cable from battery, and wait for more than 20 seconds before starting work.
- 3) Remove the center pillar lower trim. <Ref. to EI-44, REMOVAL, Lower Inner Trim.>
- 4) Remove the anchor cover. Loosen the shoulder anchor bolt, and then detach the shoulder anchor from center pillar.



- 5) Turn over the floor mat to remove the bolts.

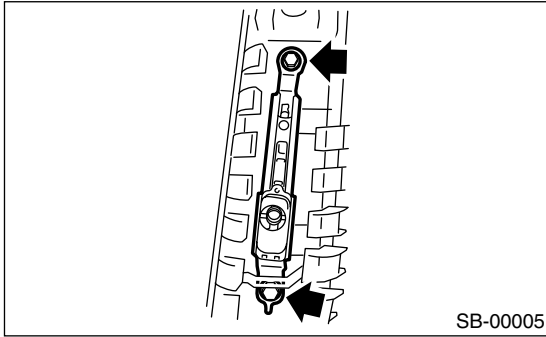


- 6) Disconnect the yellow connector of pretensioner harness and orange connector of lap pretensioner harness, and remove the front outer belt.
- 7) Remove the center pillar upper trim. <Ref. to EI-43, REMOVAL, Upper Inner Trim.>

FRONT SEAT BELT

SEAT BELT SYSTEM

8) Remove the two bolts and adjustable anchor assembly.

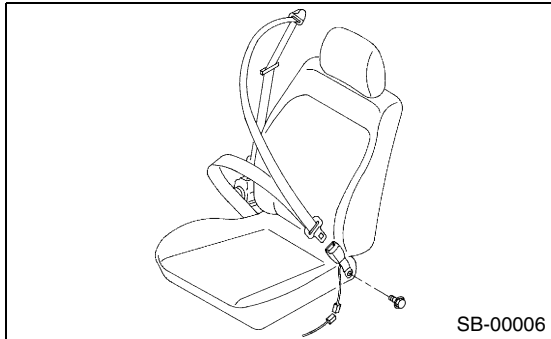


CAUTION:

- Do not drop or apply any impact to the pretensioner.
- Pretensioner and bracket should be treated as an assembly. Do not attempt to disassemble it.

3. FRONT INNER BELT

- 1) Disconnect the connector.
- 2) Remove the anchor bolt, and then detach the inner belt.



B: INSTALLATION

1. FRONT OUTER BELT

Install in the reverse order of removal.

CAUTION:

- The parts on right and left are not identical. Before installation, make sure that the correct part is used.
- Be careful not to twist the belts during installation.

Tightening torque:

<Ref. to SB-2, FRONT SEAT BELT, COMPONENT, General Description.>

2. FRONT OUTER BELT WITH LAP PRE-TENSIONER

Install in the reverse order of removal.

CAUTION:

- The parts on right and left are not identical. Before installation, make sure that the correct part is used.
- Be careful not to twist the belts during installation.

Tightening torque:

<Ref. to SB-2, FRONT SEAT BELT, COMPONENT, General Description.>

3. FRONT INNER BELT

Install in the reverse order of removal.

Tightening torque:

<Ref. to SB-2, FRONT SEAT BELT, COMPONENT, General Description.>

C: INSPECTION

1. FRONT OUTER BELT

Check for the following, and replace with new parts if necessary.

- Pretensioner is cracked or deformed.
- Seat belt is slackened, bent, or frayed. Seat belt is abnormally wound or extended.

2. FRONT INNER BELT

Check for the following, and replace with new parts if necessary.

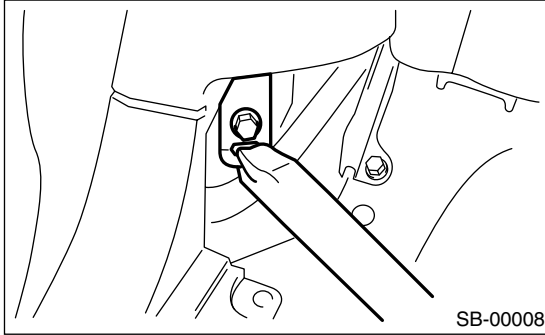
- Inner belt is deformed or damaged.
- Seat belt buckle is engaged improperly.

4. Rear Seat Belt

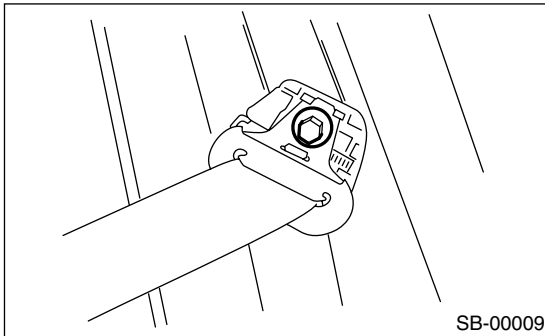
A: REMOVAL

1. OUTER BELT SIDE

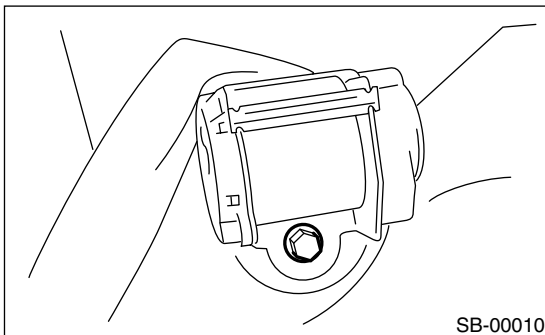
- 1) Remove the luggage floor mat. <Ref. to EI-50, REMOVAL, Luggage Floor Mat.>
- 2) Remove the rear seat. <Ref. to SE-10, REMOVAL, Rear Seat.>
- 3) Remove the rear quarter trim. <Ref. to EI-45, REMOVAL, Rear Quarter Trim.>
- 4) Remove the seat belt lower anchor bolt.



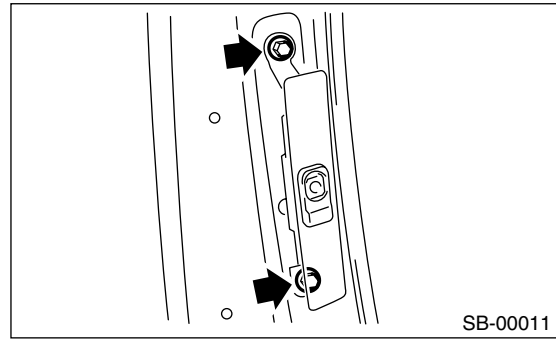
- 5) Remove the anchor cover. Remove the bolt and shoulder anchor from pillar.



- 6) Remove the rear quarter trim. <Ref. to EI-45, REMOVAL, Rear Quarter Trim.>
- 7) Remove the bolts, and then detach the outer belt side.

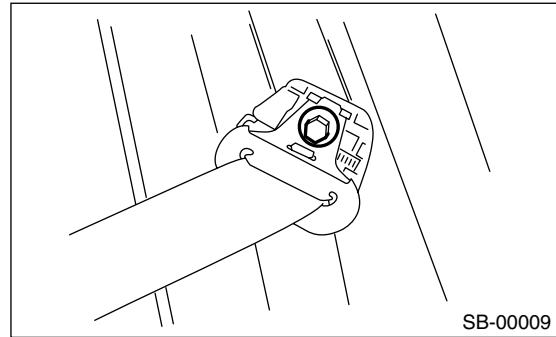


- 8) Remove the two bolts and adjustable anchor assembly.

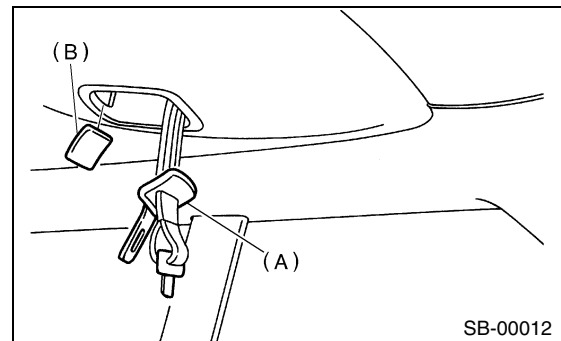


2. OUTER BELT CENTER

- 1) Remove the anchor cover. Remove the bolt and then detach the shoulder anchor from pillar.



- 2) Remove the strut cap. <Ref. to EI-45, REMOVAL, Rear Quarter Trim.>
- 3) Remove the rear rail trim. <Ref. to EI-45, REMOVAL, Rear Quarter Trim.>
- 4) Remove the rear pillar upper trim. <Ref. to EI-45, REMOVAL, Rear Quarter Trim.>
- 5) Remove the rear skirt trim. <Ref. to EI-45, REMOVAL, Rear Quarter Trim.>
- 6) Remove the rear quarter lower trim. <Ref. to EI-45, REMOVAL, Rear Quarter Trim.>
- 7) Remove the cover (B) while detaching snap lock carefully. Put the outer belt center tongue (A) out to the other side of the trim through the hole.

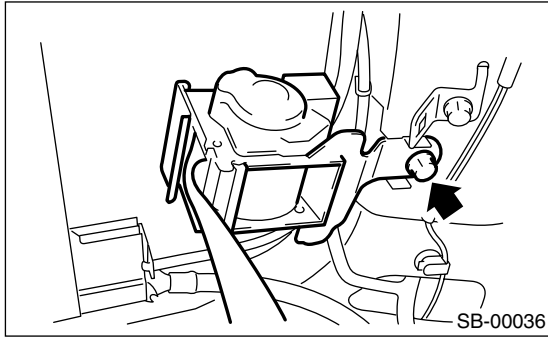


- 8) Remove the clips and hang down rear end of roof trim.

REAR SEAT BELT

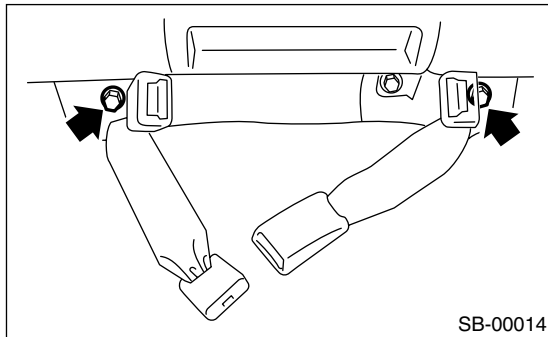
SEAT BELT SYSTEM

9) Disconnect the harness and connector, and then remove the outer belt center assembly.



3. INNER BELT

- 1) Remove the rear cushion.
- 2) Remove the bolt, and then detach the inner belt.



B: INSTALLATION

1. OUTER BELT SIDE

Install in the reverse order of removal.

CAUTION:

- During installation, make sure that the seat belts are not twisted.
- After installation, make sure that the seat belts can be smoothly extended and wound.

Tightening torque:

<Ref. to SB-3, REAR SEAT BELT, COMPONENT, General Description.>

2. OUTER BELT CENTER

Install in the reverse order of removal.

CAUTION:

- During installation, make sure that the seat belts are not twisted.
- After installation, make sure that the seat belts are smoothly extended and wound.

Tightening torque:

<Ref. to SB-3, REAR SEAT BELT, COMPONENT, General Description.>

3. INNER BELT

Install in the reverse order of removal.

CAUTION:

During installation, make sure that the seat belts are not twisted.

Tightening torque:

<Ref. to SB-3, REAR SEAT BELT, COMPONENT, General Description.>

C: INSPECTION

1. OUTER BELT SIDE

Check for the following, and replace with new parts if necessary.

- Seat belt is slackened, bent, or frayed. Seat belt is abnormally wound or extended.

2. OUTER BELT CENTER

Check for the following, and replace with new parts if necessary.

- Seat belt is slackened, bent, or frayed. Seat belt is abnormally wound or extended.

3. INNER BELT

Check for the following, and replace with new parts if necessary.

- Inner belt is deformed or damaged.
- Seat belt buckle is engaged improperly.

5. Disposal of Pretensioner

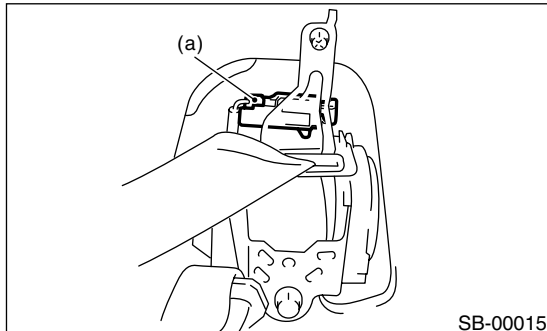
A: CAUTION

- Do not discard undeployed pretensioners, because they may cause serious personal injury when accidentally deployed.
- Deployment of the pretensioners should be done on a flat place free from any possible danger. Avoid deploying outdoors during heavy rainy or strong windy weather.
- Do not drop or damage the pretensioner.
- Because deploying the pretensioners causes a high-explosive noise, be sure to warn people in the area, and do not allow anyone within a 5 m (16 ft) radius of the disposal site.
- Some smoke will be emitted after deployment of the pretensioners. Therefore, it must be deployed in a well-ventilated area with no smoke alarms nearby.
- Wear gloves, goggles, and earplugs during this operation. Wash your hands afterwards.
- After deployment, the pretensioner is especially hot. Leave it unattended for 40 minutes or longer, and then discard it.
- Do not let water get on the deployed pretensioner.
- Wrap the deployed pretensioner in an airtight vinyl bag, and then discard it.
- If circumstances do not permit pretensioner deployment, contact a SUBARU dealer.

B: OPERATION

1. DEPLOYING OF PRETENSIONER WHILE INSTALLED IN VEHICLE

- 1) Fold backrest all the way forward, and then move front seat all the way forward.
- 2) Turn the ignition switch to OFF, disconnect the ground cable from battery, and wait for more than 20 seconds before starting work.
- 3) Remove the center pillar lower trim. <Ref. to EI-44, REMOVAL, Lower Inner Trim.>
- 4) Disconnect the yellow connector (a) from pretensioner.

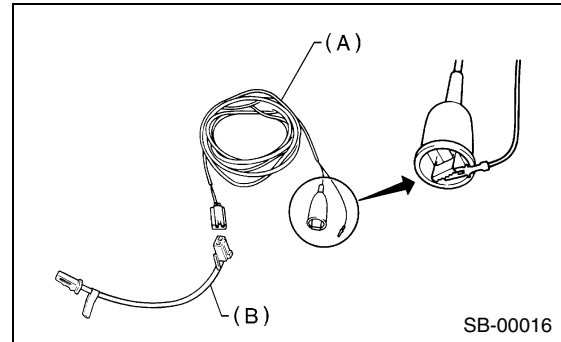


SB-00015

- 5) Short the terminal to alligator clip furnished as deployment tool (A).
- 6) Connect the deployment tool and adapter A (deployment) (B).

CAUTION:

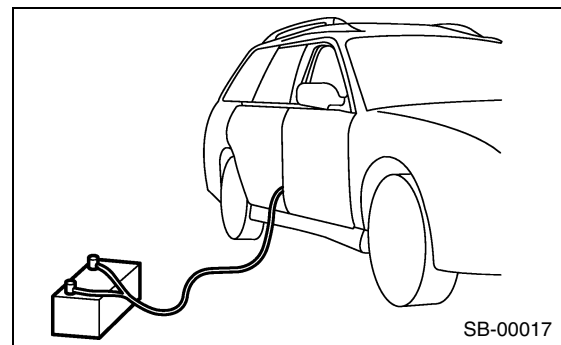
The deployment tool terminals should be kept shorted until just before deployment of the pretensioner.



SB-00016

- (A) Deployment tool: (Part No. 98299PA030)
 (B) Adapter A (deployment): (Part No. 98299FC030)

- 7) Connect the adapter A (deployment) connector and pretensioner yellow connector.
- 8) Extend the deployment tool to the limit, and make sure that the vehicle is empty. Close all windows, sunroof, and rear gate completely.



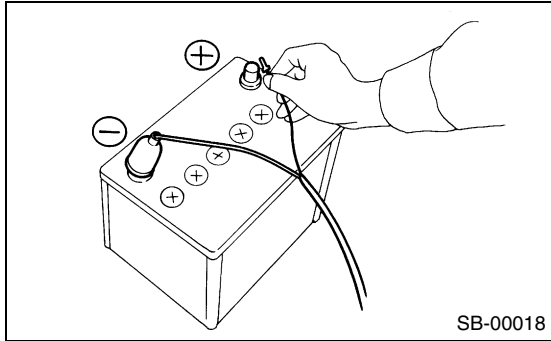
SB-00017

- 9) Move the battery at least 5 m (16 ft) from the vehicle, and secure the nearby area. Connect the deployment tool alligator clip to the battery negative (-) terminal.

DISPOSAL OF PRETENSIONER

SEAT BELT SYSTEM

10) Connect the other cable of deployment tool to the battery positive (+) terminal. Then deploy the pretensioner.

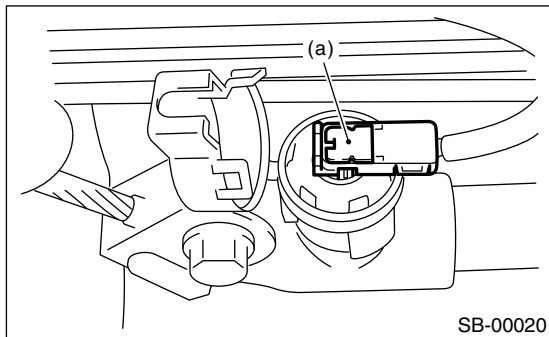


CAUTION:

- After deployment, pretensioner is especially hot. Leave it unattended for 40 minutes or longer.
- Do not let water get on the deployed pretensioner.

11) Perform the following steps 12) through 17) for the vehicle with lap pretensioner.

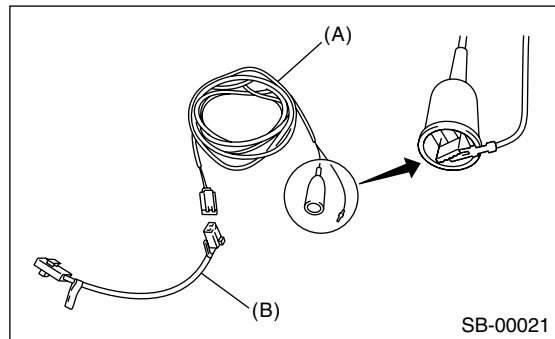
12) Disconnect the orange connector (a) from lap pretensioner.



13) Connect the deployment tool (A) and adapter F (deployment) (B).

CAUTION:

The deployment tool terminals should be kept shorted until just before deployment of the pretensioner.

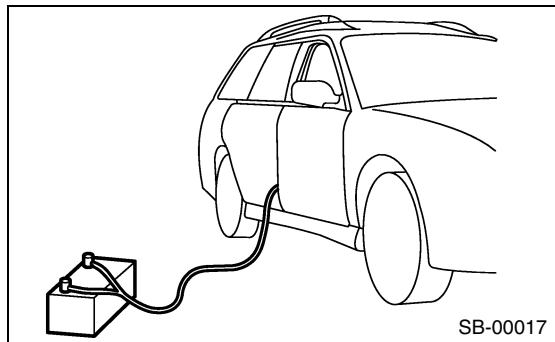


(A) Deployment tool: (Part No. 98299PA030)

(B) Adapter F (Deployment): (Part No. 98299SA050)

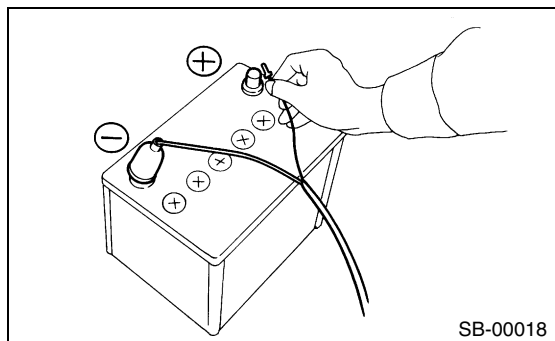
14) Connect the adapter F (deployment) connector and lap pretensioner orange connector.

15) Extended the deployment tool to the limit, and make sure that the vehicle is empty. Close all windows, sunroof and rear gate completely.



16) Move the battery at least 5 m (16 ft) from the vehicle, and secure the nearby area. Connect the deployment tool alligator clip to the battery negative (-) terminal.

17) Connect the other cable of deployment tool to the battery positive (+) terminal. Then deploy the pretensioner.

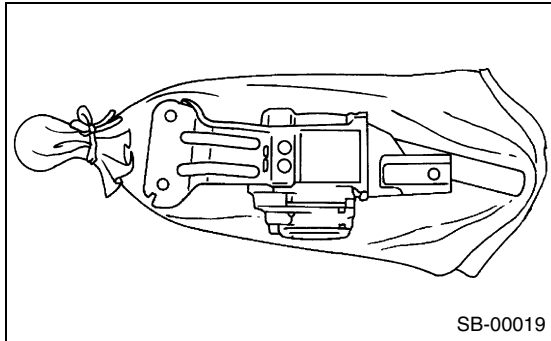


CAUTION:

- After deployment, pretensioner is especially hot. Leave it unattended for 40 minutes or longer.
- Do not let water get on the deployed pretensioner.

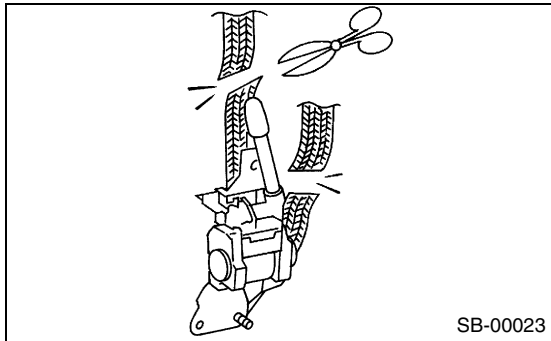
18) Remove the front outer belt. <Ref. to SB-7, REMOVAL, Front Seat Belt.>

19) Wrap the deployed pretensioner in an airtight vinyl bag, and discard it.



2. DEPLOYING OF RETRACTOR PRETENSIONER AFTER REMOVAL FROM VEHICLE

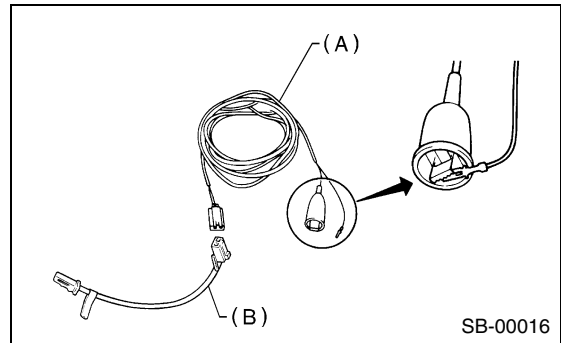
- 1) Fold backrest all the way forward, then move front seat all the way forward.
- 2) Turn the ignition switch to OFF, disconnect the ground cable from battery, and wait for more than 20 seconds before starting work.
- 3) Remove the front outer belt. <Ref. to SB-7, Removal.>
- 4) Cut off the seat belt as close to retractor as possible.



- 5) Short the terminal to alligator clip furnished as a deployment tool.
- 6) Connect the deployment tool (A) and adapter A (deployment) (B).

CAUTION:

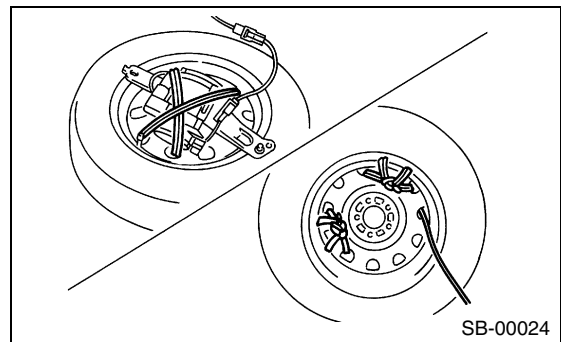
The deployment tool terminals should be kept shorted until just before deployment of the pretensioner.



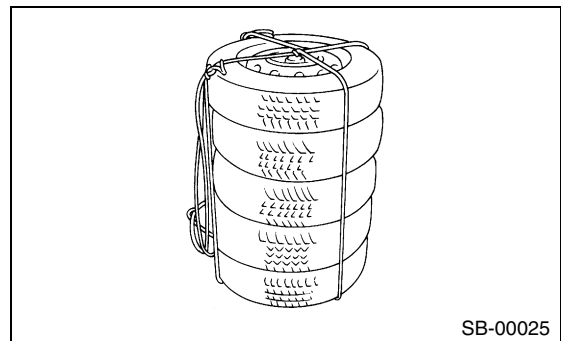
- (A) Deployment tool: (Part No. 98299PA030)
 (B) Adapter A (deployment): (Part No. 98299FC030)

7) Connect the adapter A (deployment) connector and pretensioner yellow connector.

8) Install the pretensioner on a wheel with tire. Then, bundle three wire automotive harness [each with a sectional area of 1.25 mm² (0.00194 sq in) or more], and bind them twofold around the pretensioner bracket and wheel.



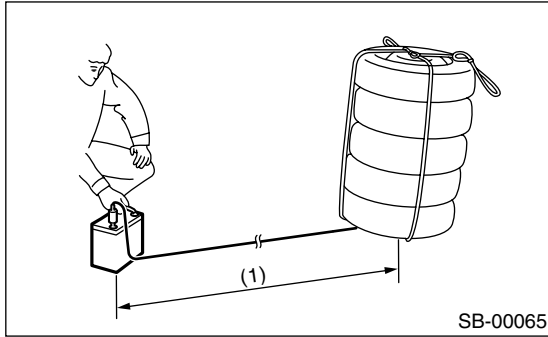
9) Put three tires without a wheel on the tire installed with pretensioner. Put on an additional tire with a wheel on top, and then fasten them tight with a rope.



DISPOSAL OF PRETENSIONER

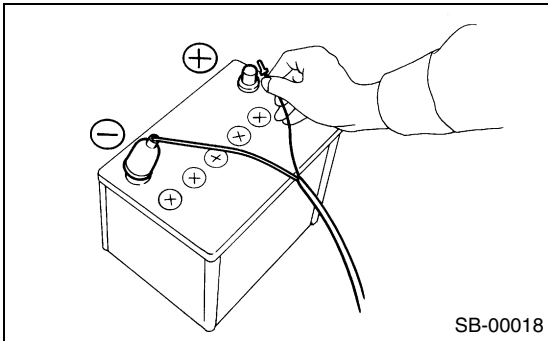
SEAT BELT SYSTEM

10) Move the battery at least 5 m (16 ft) from the vehicle, and secure the nearby area. Connect the deployment tool alligator clip to the battery negative (-) terminal.



(1) 5 m (16 ft) or more

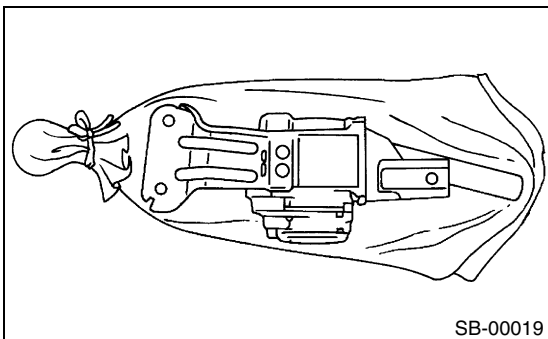
11) Connect the other cable of deployment tool to the battery positive (+) terminal. Then deploy the pretensioner.



CAUTION:

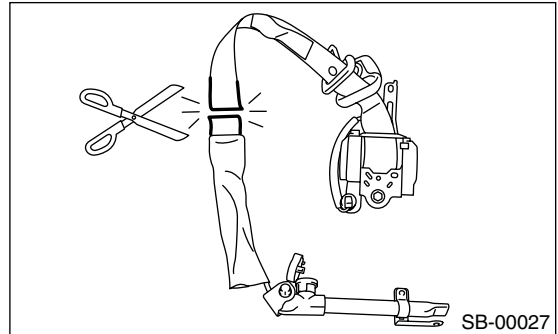
- After deployment, pretensioner is especially hot. Leave it unattended for 40 minutes or longer.
- Do not let water get on the deployed pretensioner.

12) Wrap the deployed pretensioner in an airtight vinyl bag, and discard it.



3. DEPLOYING LAP PRETENSIONER AFTER REMOVAL FROM VEHICLE

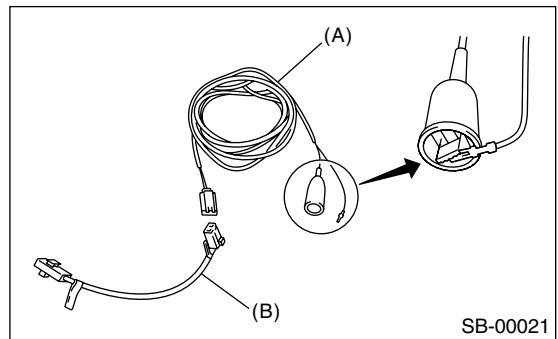
- 1) Fold backrest all the way forward, then move front seat all the way forward.
- 2) Turn the ignition switch to OFF, disconnect the ground cable from battery, and wait for more than 20 seconds before starting work.
- 3) Remove the front outer belt. <Ref. to SB-7, REMOVAL, Front Seat Belt.>
- 4) Cut off the seat belt as close to lap pretensioner as possible.



- 5) Short the terminal to alligator clip furnished as a deployment tool (A).
- 6) Connect the deployment tool and adapter F (deployment) (B).

CAUTION:

The deployment tool terminals should be kept shorted until just before deployment of the pretensioner.

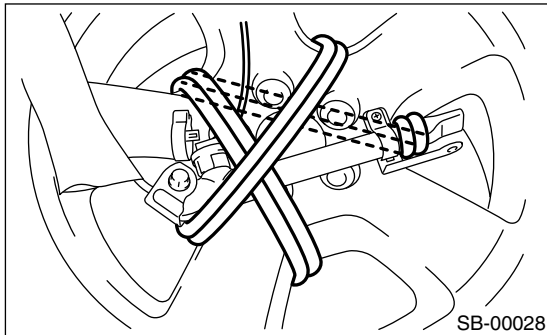


- (A) Deployment tool: (Part No. 98299PA030)
(B) Adapter F (deployment): (Part No. 98299SA050)

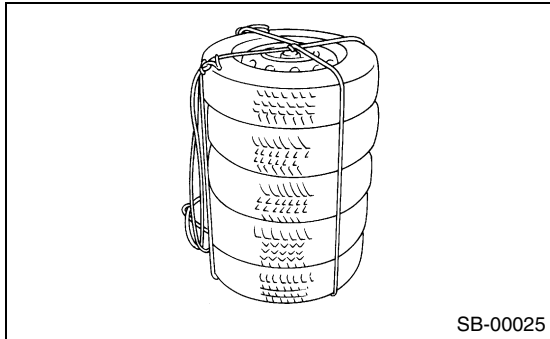
7) Connect the adapter F (deployment) connector to pretensioner yellow connector.

DISPOSAL OF PRETENSIONER

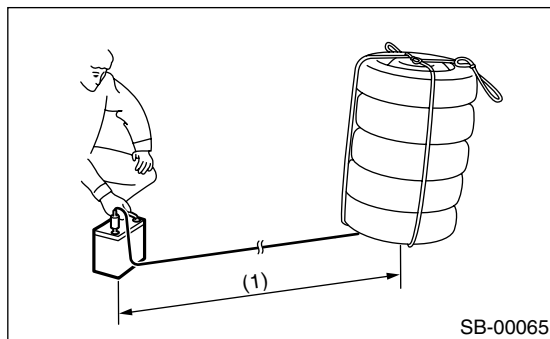
8) Install the pretensioner on a wheel with tire. Then, bundle three wire automotive harness [each with a sectional area of 1.25 mm² (0.00194 sq in) or more], and bind them twofold around the pretensioner bracket and wheel.



9) Put three tires without a wheel on the tire installed with pretensioner. Put on an additional tire with a wheel on top, and then fasten them tight with a rope.

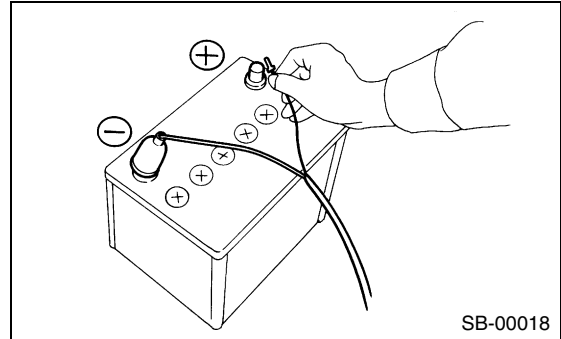


10) Move the battery at least 5 m (16 ft) from the vehicle, and secure the nearby area. Connect the deployment tool alligator clip to the battery negative (-) terminal.



(1) 5 m (16 ft) or more

11) Connect the other cable of deployment tool to the battery positive (+) terminal. Then deploy the pretensioner.



CAUTION:

- After deployment, pretensioner is especially hot. Leave it unattended for 40 minutes or longer.
- Do not let water get on the deployed pretensioner.

12) Wrap the deployed pretensioner in an airtight vinyl bag, and discard it.

