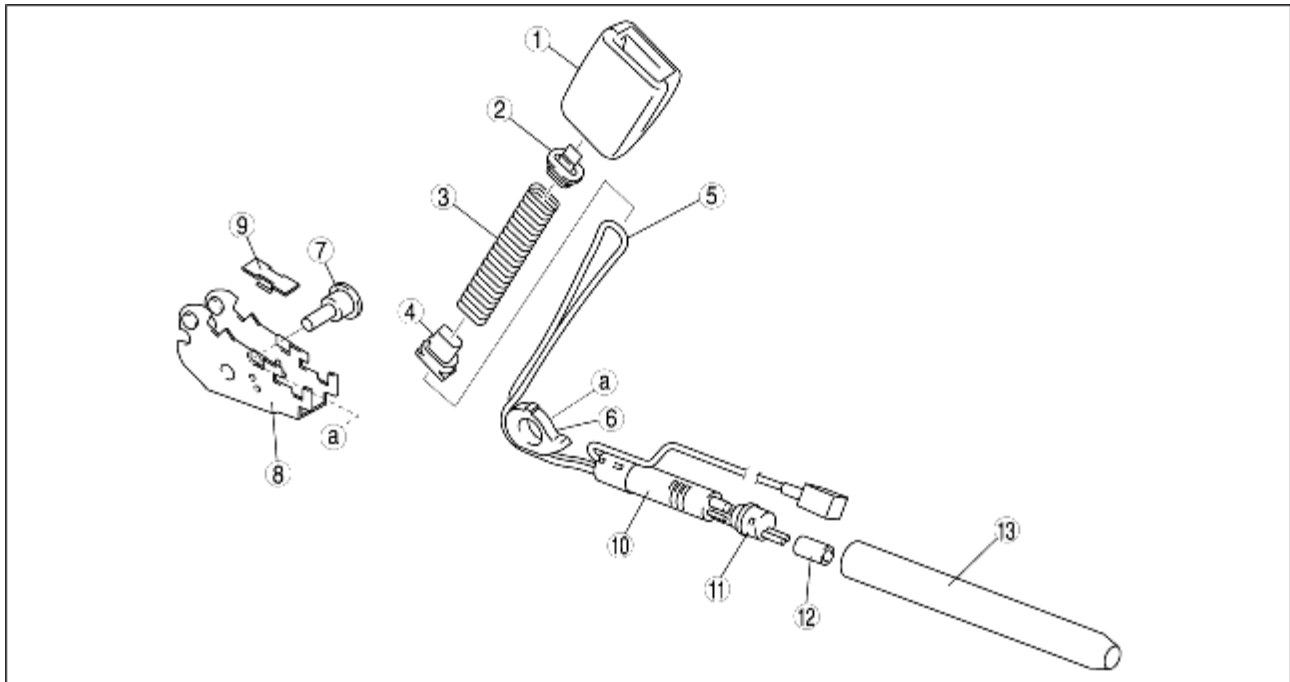


PRE-TENSIONER FRONT BUCKLE CONSTRUCTION/OPERATION

B3E081057630T02

Construction



B3E08 10T013

1	Buckle
2	Cable guide buckle
3	Corrugated tube
4	Cable guide bracket
5	Lead wire
6	Cam
7	Collar screw
8	Bracket
9	Cover
10	Gas generator
11	Piston
12	Press sleeve
13	Tube

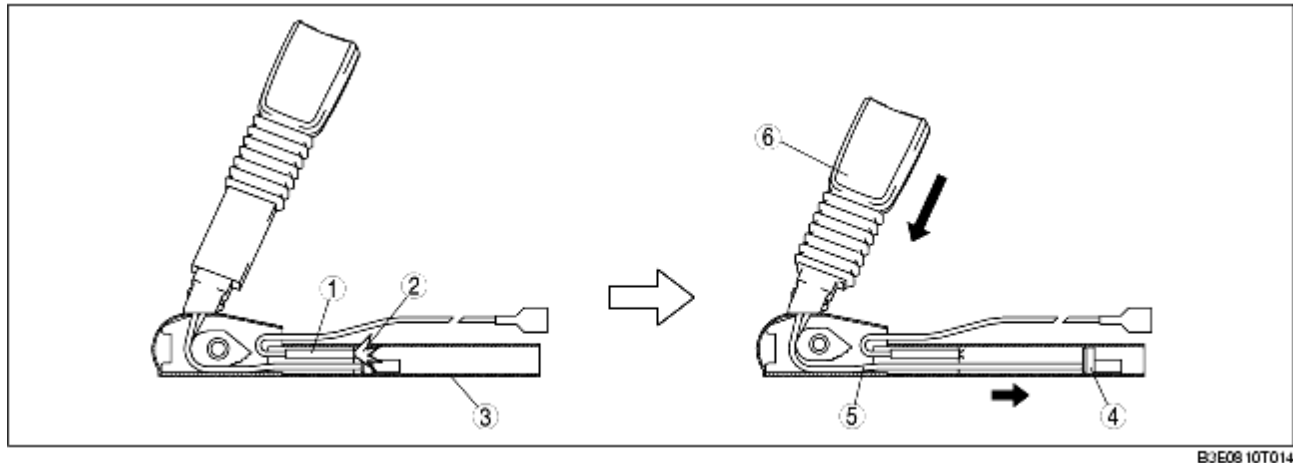
Operation

During Activation

1. The gas generator emits a spark when a signal is received from the SAS control module, causing gas to

form.

2. The gas pressure pushes the piston inside the tube, pulling the lead wire.
3. As the lead wire is pulled, the part of the buckle attached to the wire is also pulled.
4. The slack in the belt is tightened due to the buckle being pulled and the seat belt ELR mechanism, safely restraining the driver and front seat passenger.

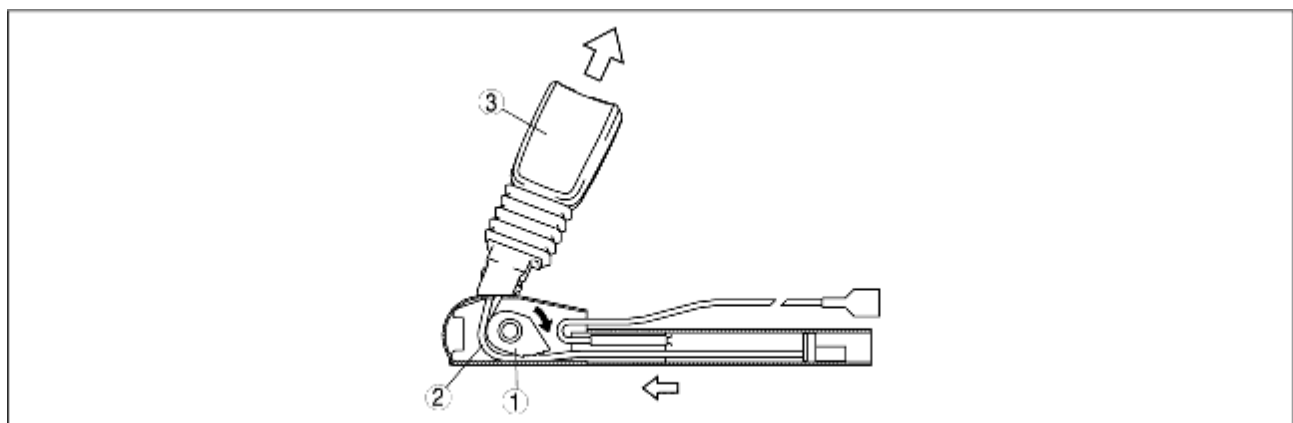


B3E08 10T014

1	Gas generator
2	Gas generator spark
3	Tube
4	Piston
5	Lead wire
6	Buckle

After Activation

1. When a force of **approx. 20 kN {2039 kgf, 4496 lbf}** is applied to the buckle after pre-tensioner activation, the lead wire is clinched by the cam to lock the buckle so that the belt does not extend.
2. The restraint force of the seat belt is adjusted by the front seat belt load limiter mechanism, preventing injury to the driver and passenger due to seat belt pressure.



B3E08 10T015

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1	Cam
2	Lead wire
3	Buckle