



# INSTALLATION & OPERATING INSTRUCTIONS

## TUNING Models

Edition: 08/2012

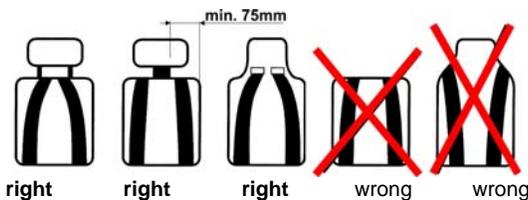
Part No: EA 12.1

This harness restraint is manufactured in accordance to the European Standard ECE-R 16.04 and/or FMVSS 209. It must only be installed in cars on front outer seating positions and must only be used by **adult occupants** [minimum age of 12] and a weight of at least 40 kg [88 lbs]. Please heed national laws and DOT requirements when installing this product.

This harness restraint is not approved or intent to be used by children less than 12 years of age or less than 40 kg [88 lbs] of weight.

### SEAT REQUIREMENTS

Harness belt systems must **not** be installed in vehicles equipped with seats which do not have adjustable head restraints or seats with backrests with integrated head restraints where there are no openings for the shoulder belts. The seatbelts will not function properly in these type of seats. Shoulder belts will tend to slip off the shoulders. Never create a new opening in the seats installed in your car.



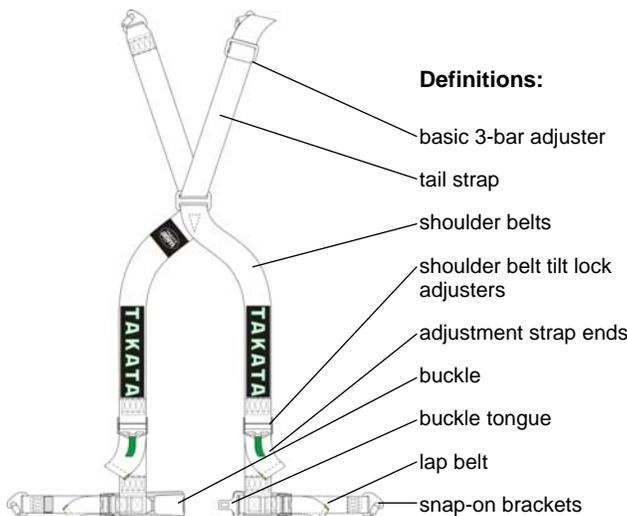
When shoulder belts are installed to rear seat lap belt anchorages, the front seat backrest must be able to take load applied by the shoulder belts during an accident. Tested and approved seats must be used for such installation only. Horizontal installation of shoulder belts is preferred (to a roll-cage or approved harness bar).

[A list of approved stock and special seats can be obtained from the TAKATA website [www.takataracing.com/seat-list](http://www.takataracing.com/seat-list)]



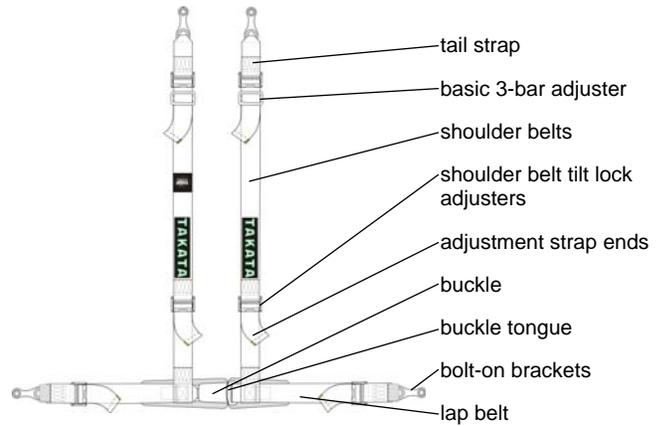
Never install shoulder belts directly to the floor behind the seat!

### DRIFT III [snap-on]



### DRIFT II [bolt-on]

Definitions:



## INSTALLATION

### ANCHOR POINTS, BOLTS AND THREADS:

These harness restraints are designed for installation to OEM stock anchor points providing threads with the dimension of 7/16" 20 UNF. Bolts supplied match with this 7/16" 20 UNF thread size. Self-drilled holes may be too weak or may be in an incorrect or dangerous geometrical location. TAKATA does not take any responsibility for the adequate performance of such anchor points. Always check for the proper length of bolts used, the stock thread must be fully filled by the bolt. Tighten 7/16" bolts with a torque of 40 Nm (30 ft-lb)

# WARNING

Incorrect thread dimensions, using bolts that are too short or not properly tightened bolts may result in belt failure during an accident. Severe injuries or death may occur.

### LAP BELT ANCHOR POINTS

#### 1. Anchor points to the car centre/middle

They are either located to the centre tunnel or to the seat structure close to the seat rail.

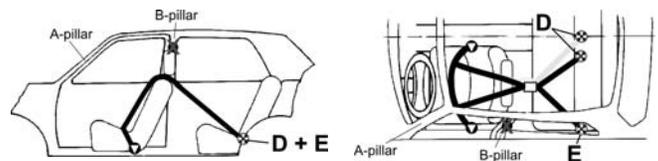
#### 2. Outer/Outboard anchor points

They are either located to the door sill or to the seat structure close to the seat rail. In case of a 2-door car with a lap belt slide-bar at the door sill, use the front slide attachment point for harness restraint door side lap belt installation.

### SHOULDER BELT ANCHORAGES

#### 1. Shoulder belt anchor points for harness restraints with 2 tail straps.

The rear seat lap belt anchor points [D & E] are available for installation. Always install the shoulder belts [Drift II] crossing over to prevent the shoulder belts from slipping off the shoulders during normal wear as well as during an accident.

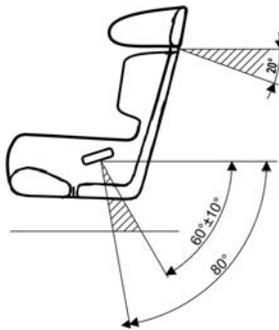


## 2. Other anchor points

Self-drilled anchor points or anchor points to a roll cage or harness bar must meet the following requirements to provide adequate performance:

a) Strength: > 14.7 kN [3200 lbs] each

b) Geometry:



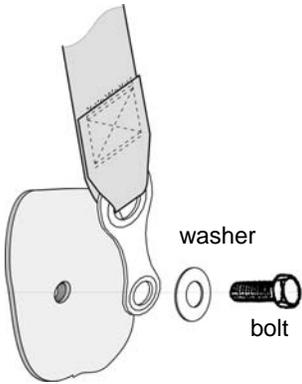
Lap belt shall route between 60° and 80° down

Shoulder belts routing shall be horizontal and not more than -20° down.

Route shoulder belts symmetrically to seat centre line backwards.

## INSTALLATION OF BRACKETS

### 1. Stainless Steel Bolt-on Bracket Installation



The brackets are made from special stainless steel so they can be pre-bent at installation to the direction of pull of the webbing where it is attached to the bracket as the belt flows over the body.

Proper alignment of the webbing pull through the bracket reduces the bending stress [risk of fatigue cracks] to anchor points during driving and during an accident.



### 2. Snap-on bracket with eye bolt Installation



The eye bolt must be positioned so the snap-on bracket can hook into the eye with enough freedom for the bracket to move into the direction of pull. The snap-on bracket must be allowed to fully align with the webbing routing when loaded.

### 3. Bending Procedure

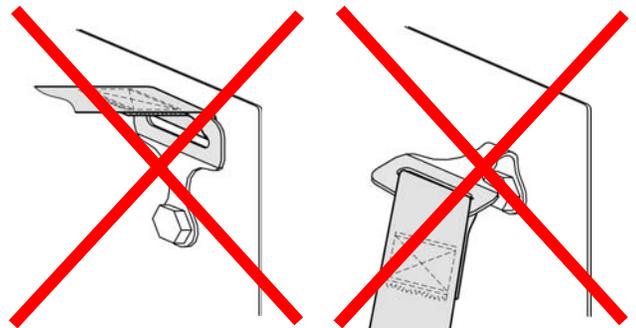
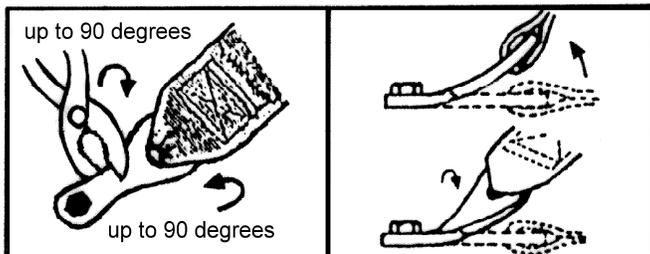
**WARNING**

Brackets which are restricted in alignment to the direction of pull may be damaged or cut during an accident causing complete or partial belt failure during an accident.  
Severe injuries or death may occur.

**WARNING**

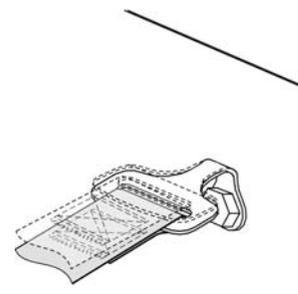
Do not bend bracket back and forth several times. Multiple bends in opposite directions will weaken the material and the bracket may fail during an accident.

Make sure the webbing is not damaged during bracket bending or the webbing may fail during an accident.  
Severe injuries or death may occur.



WRONG

WRONG



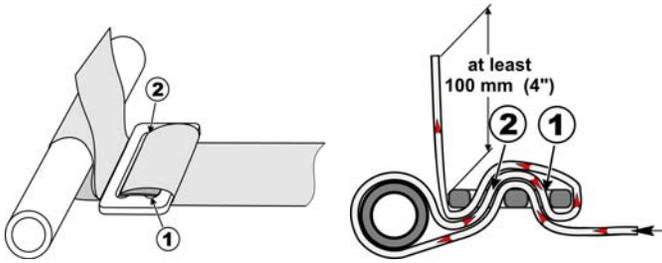
CORRECT



#### 4. Wrap [3-Bar Adjuster] systems for roll cage installation

This installation is commonly used for shoulder strap roll cage or harness bar installation

[see proper wrapping technique below]



### OPERATING

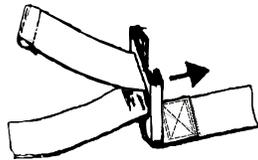
#### 1. Basic adjustment

This harness belt model comes with adjusters on each side of the lap belt and on the tail straps. **FIRST** - adjust the lap belt portion so the push button of the buckle is centred on the front of the occupant when the harness restraint is worn.

#### 2. Operation of tilt lock adjusters

##### To lengthen the restraint

Lift [tilt] adjuster to approximately 90° and pull in direction of the arrowhead.

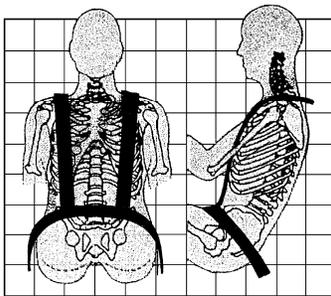


##### To tighten the restraint

Pull at adjustment strap end until the correct tightness is achieved.



#### 3. Fastening the harness restraint



- place each arm and upper torso into the shoulder-lap belt loop and make sure , the shoulder belts are running flat over the shoulders, collarbones and chest
- position each lap belt portion well into the bend between the upper thighs and the pelvic crest. If this cannot be achieved due to short shoulder belts, lengthen shoulder belts first
- insert buckle tongue into buckle until you hear a distinct "click" indicating the tongue is properly engaged
- FIRST** tighten lap belt, **ALWAYS** tighten lap belt first!
- tighten shoulder straps. Both shoulder straps must be tightened equally. Never pull to tight. Shoulder straps must not pull up the lap belt upwards from the intended position. Tighten harness so tail straps do not sag!

# ! WARNING

**Lap belts which are too loose or not tightly positioned in the bend between the upper thighs and the pelvic crest will result in submarining during a frontal impact.**

**Shoulder belts which are improperly adjusted may allow head impact, particularly in vehicles not equipped with frontal airbags.**

**Severe injuries or death may occur.**

In case of a driver/co-driver change pre-adjust the harness restraint for a proper fit to the different occupant. Make sure the head rest is properly adjusted as well. Follow the procedures from the car owner's manual.

#### 4. Releasing / Removing the harness restraint

- Lengthen shoulder belts first by 50 mm to 100 mm [2"-4"] [not required in case of accident or emergency]. This eases the exit from the harness but also helps to properly position the lap belt when fastening the harness restraint again.
- Press red button on the buckle to eject the latch from the buckle.

# SAFETY INSTRUCTIONS

- \* Harness restraint must only be worn by one person at the time.
- \* Never use harness restraint and a 3-point belt which may be kept installed in the vehicle same time.
- \* Always wear lap belts and shoulder belts same time.
- \* Do not try to secure children or child seats with this harness restraint.
- \* Do not wear restraint if straps [webbing] are twisted. All straps must lay flat when in contact with the wearer's body.
- \* Do not wear thick and padded clothing under a harness restraint [may cause unexpected slack in an accident].
- \* Never wear the belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, jewellery, keys etc.
- \* Never allow lap or shoulder belts to rub against sharp objects.
- \* Never allow the belts to be damaged by catching in door or seat hardware.

### CARE and MAINTENANCE

#### 1. Inspection

Inspect the harness restraint at least monthly for damages. Webbing with tears, cuts or severe abrasion is unsuitable for further use and must be replaced immediately. Make sure the buckles are free of any obstruction and lock securely.

#### 2. Cleaning

Use soap and warm water only. Do not use any solvents! Do not dry the belt in the sun or near a heat source.

### 3. Post-Accident

In addition to replacing any harness belt which was in use, also carefully check all seatbelt anchor points for deformation or cracks. Always make sure that the guidelines of the car manufacturer are followed if a repair is necessary.



TAKATA reserves the right to incorporate any technical changes or further development in this product without notice. Our web site will inform you about actual instructions and products. Also regional representatives and further importers are listed by countries.

### ADDRESSES

#### World-Wide Sales [except North America and Japan]:

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FAX: +49 (0) 2932-9742-42

eMail: [world-sales@takataracing.com](mailto:world-sales@takataracing.com)

[www.takataracing.com](http://www.takataracing.com)

#### North American-Importer:

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9A Electronics Avenue

Danvers, MA 01923

USA

Toll Free: (855) 4-TAKATA / (855) 884-2358

Phone: (978) 406-4116

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[www.takataracing.com](http://www.takataracing.com)

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