

INSTALLATION and OPERATING INSTRUCTIONS

TAKATA Static Harness Belts

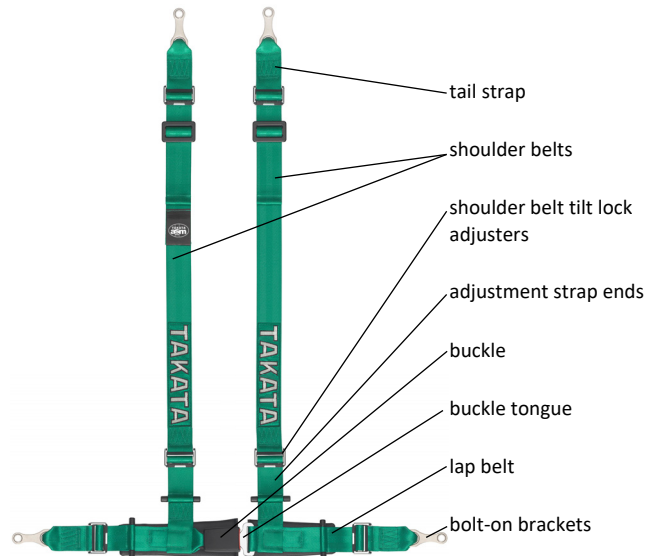
For detailed information see
www.takataracing.com

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PACKAGE CONTENTS

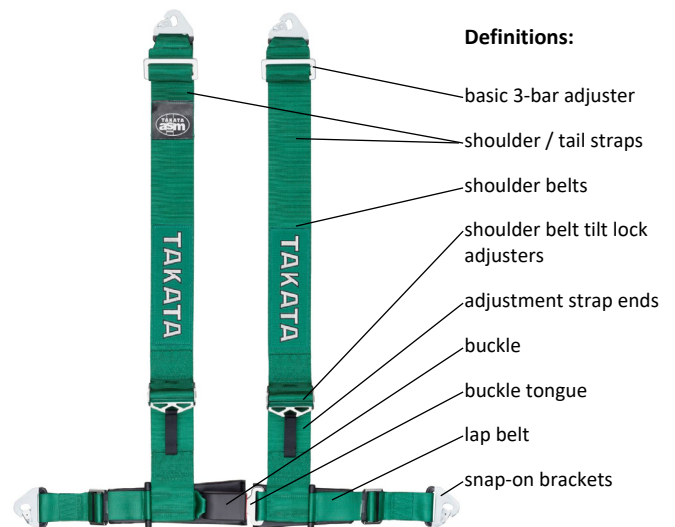
DRIFT II [bolt-on]

Definitions:



DRIFT III [snap-on]

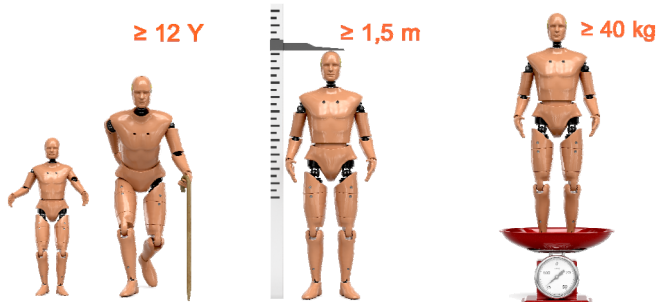
Definitions:



! WARNING

Risk of serious injury or death!
 Do not allow cargo or a folding rear seat to interfere with or misdirect the harness belt tail straps.

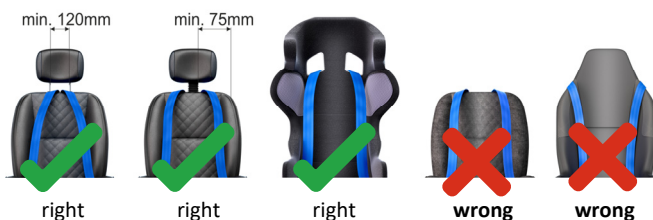
This harness restraint is manufactured and approved in accordance to the European Standard ECE-R 16.04 and/or FMVSS 209. This TAKATA asm harness belt is only suitable for adults on front outboard seating positions.



! WARNING

Risk of severe injuries or death.

TAKATA harness belts will function properly only when installed in vehicles equipped with seats having a headrest or backrests with seatbelt openings in an integrated headrest. Otherwise the shoulder belts will slide off occupant's shoulders during an accident. Never modify factory seats to create new slots. The seat structure may be impaired or sharp edges of the seat frame may damage the racing harness webbing.



INSTALLATION

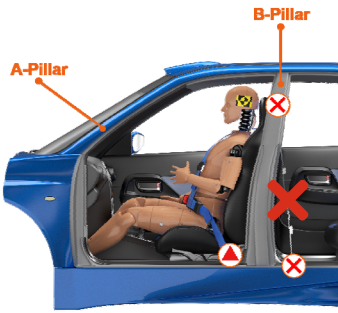
1 General Instructions

Only install DRIFT if rear seat occupation is not intended at any time. The crossing shoulder straps restrict the rear seat capacity because the tail straps cannot be released.

! WARNING

Risk of severe injuries or death. On 2-door vehicles the folding front seat backrests will be restricted in their range of motion. Evacuation or rescue of rear seat passenger can be restricted or even impossible after an accident. Do not transport rear seat passengers in 2-door vehicles while harness belt is installed.

Always leave original equipment seat belts in place and available for use.



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

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.

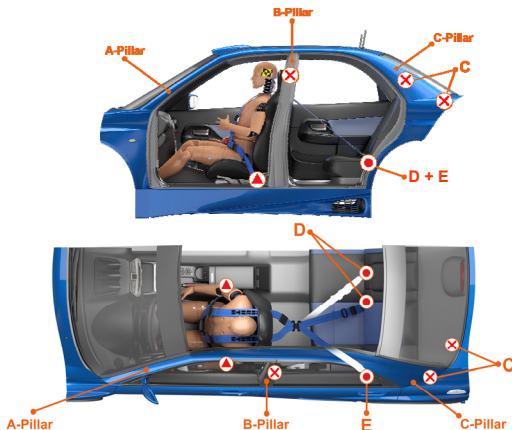
2. Outer/Outboard anchor points

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 and Drift III] crossing over to prevent the shoulder belts from slipping off the shoulders during normal wear as well as during an accident.



! WARNING

Risk of severe head injury or death during rebound phase of frontal collision!

Separate TAKATA asm harness belts are supplied for the left and right sides. Install harness belts on the correct side of vehicle. Left and right belts are not interchangeable! Make sure asm-label is on inboard strap.

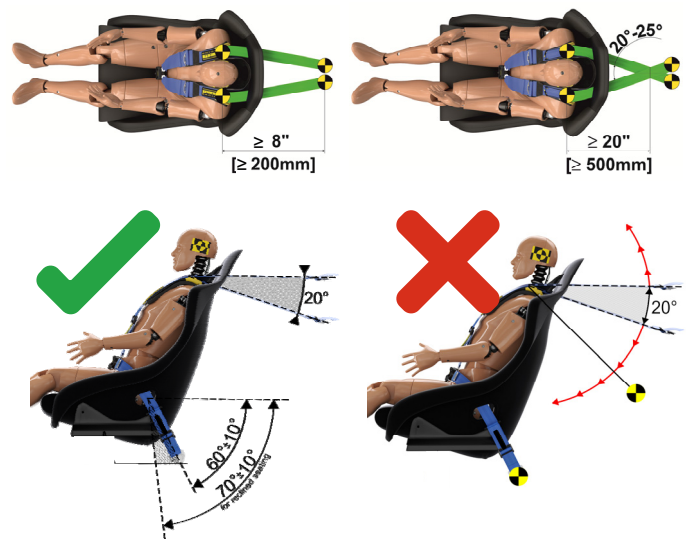
2. Other anchor points

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 [3300 ft-lb] each

b) Geometry:

Route shoulder belts symmetrically to seat centre line backwards.



! WARNING

Use of improper attachment points will impair system performance. Inappropriate or weak tail strap anchor points will not withstand the forces in an accident and increase the risk of personal injury or death in an accident.

Never attach the tail straps/shoulder belts to anchorages intended for the fixation of child seats (ISOFIX, LUAS, LATCH, UCSSS or CANFIX), which are found on the filler panels behind the rear seats of some passenger cars or the luggage area of some hatchbacks or station wagons. These child seat anchor points are not strong enough to withstand the forces of an accident and are not intended for adult safety belts.

Harness belt systems may only be installed at suitable anchor points for seat belt systems as originally installed by the vehicle manufacturer.

For suitable anchor points for make, model and model year of your vehicle, see Certified Vehicle List (Vehicle Reference List). If in doubt, ask your dealer to show you where these.

Installation of Brackets

1. Stainless Steel Bolt-on Bracket Installation

! WARNING

Risk of severe injuries or death.

Repeated bending could weaken the bracket and cause it to fail when loaded in an accident.

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

Never bend the bracket back and forth several times.

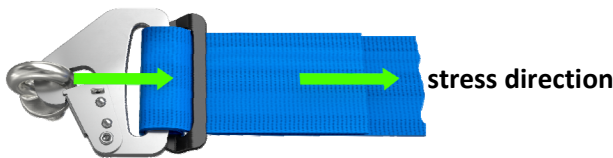


2. Snap-on bracket with eye bolt Installation

Assemble eye bolt and spring washer as shown in the sketch. Bolt in eye bolt and tighten securely. The optimum torque setting is 40 Nm [30 ft-lb]. Pull either screw driver or similar tool through eye and turn clockwise to tighten the bolt securely.

Make sure the eye's ring is pointing in direction of pull (stress direction) as shown in the following drawing.

This position will reduce the risk of unintended loosening of the eye bolt by torque forces applied by the harness during racing. If you cannot achieve this position by further tightening or loosening the bolt by a maximum of ¼ turn, dismount the eye bolt and use 2 spring washers achieve the recommended position.



Splint pin must be used!

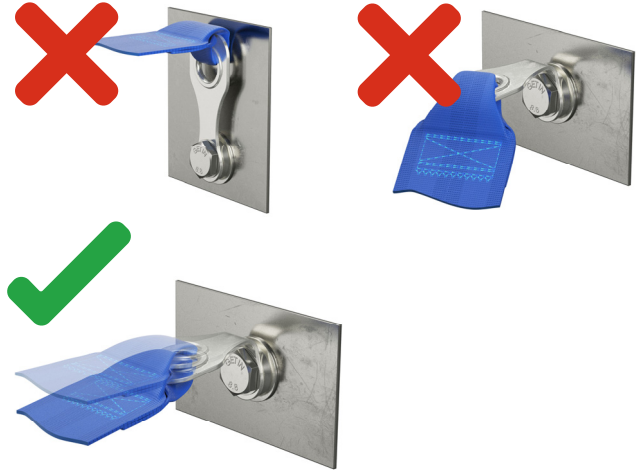


3. Bending Procedure

! 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.



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

! WARNING

Risk of severe injuries or death.

Follow all instructions for Wrap Systems. Avoid slack in the system. 3-bar slides incorrectly wrapped or wrapped too far away from the roll cage bar may allow webbing to slide during an accident. Slippage or elongation will occur which may reduce the effectiveness of the harness belt. Shoulder belts will give extra travel allowing possible head and chest impact into the steering wheel.

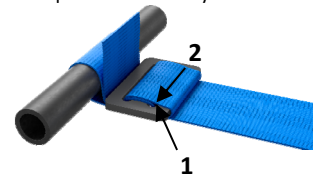
The webbing must be wrapped tightly!

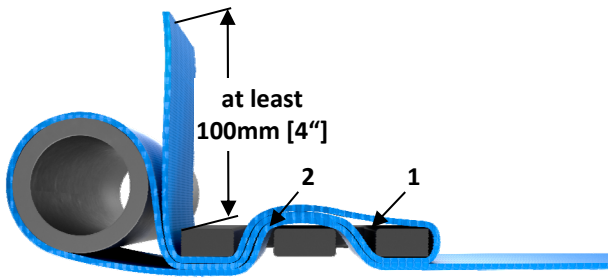
Never install a lap belt directly to a roll cage using the wrap around technique.

- Slide the webbing through slot 1 and 2 as shown



- Make sure the strap end protrudes at least 100 mm [4"] or even longer from slot 2. If it is less than 100 mm [4"] disassemble and start over again. If longer, roll in the strap end and fix it by a cable tie to the shoulder belt.





3. Check again for proper shoulder belt tilt lock adjuster positioning and for the 3-bar slide to be as close as possible to the roll cage bar or end bracket.

OPERATING

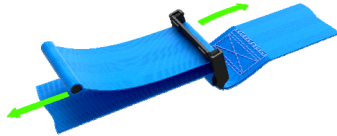
1. Basic adjustment

This harness belt model comes with adjusters on each side of the lap belt and on the shoulder / 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

- a) 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
- b) 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
- c) insert buckle tongue into buckle until you hear a distinct “click” indicating the tongue is properly engaged
- d) **FIRST** tighten lap belt, **ALWAYS** tighten lap belt first!
- e) 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 shoulder / tail straps do not sag behind the seat!

4. Releasing / Removing the harness restraint

- a) 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.
- b) Press red button on the buckle to eject the latch from the buckle.

WARNING

Improper use of any harness belt can cause serious personal injury or death.

To help reduce the risk of serious injury in an accident:

- Never use the harness belt system for persons which weigh less than 40 kg (88 lbs.) or those who are less than 150 cm (4'11") tall, regardless of age.
- Never strap more than one person in place with each harness belt.
- Never use the lap belt portion of the harness belt without the shoulder belts and the anti-submarining strap (if a 5- or 6 point belt is installed).
- All straps must permanently run through the slots of the bucket seat.
- Always make sure that no strap is twisted when worn.
- Always wear the lap belt portion of the harness system low and tight across the pelvis.
- Never wear the belts over heavy clothing as it can interfere with proper positioning and adjustment of the belts, reducing the overall effectiveness of the system.
- Never wear the belts over rigid or breakable objects in or on your clothing, such as eye glasses, pens, jewellery, keys etc. as these may cause injury.
- Never allow straps to rub against sharp objects.

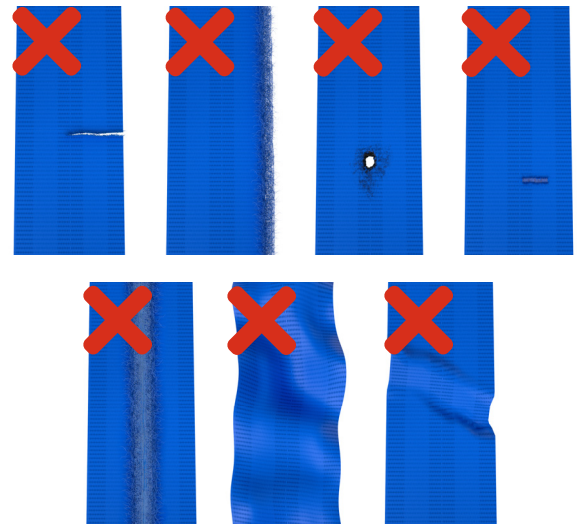
Never allow the belts to be damaged by becoming caught in door or seat hardware.

CARE and MAINTENANCE

1. Inspection

Check the safety belt once a month for any damage. Cuts, tears and other damage to the belt will greatly reduce its effectiveness. Replace the belt or damaged parts immediately with original spare parts (see page Spare Parts on www.takataracing.com). Never use a damaged harness belt, use the standard 3-point belts which remain available for use.

Make sure the buckles are free of any obstruction and lock securely.



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.

! WARNING

Risk of serious injuries or death.

Modified or damaged belts, or belts that have been re sewn, are not strong enough and are dangerous in an accident.

Never modify, disassemble or repair the belts yourself.

For parts that can be replaced, use only original TAKATA spare parts.

Use only original TAKATA accessories with the harness belt system.

Use of non-authorized parts and accessories can reduce the effectiveness of the harness belt system.

! WARNING

Risk of serious injuries or death.

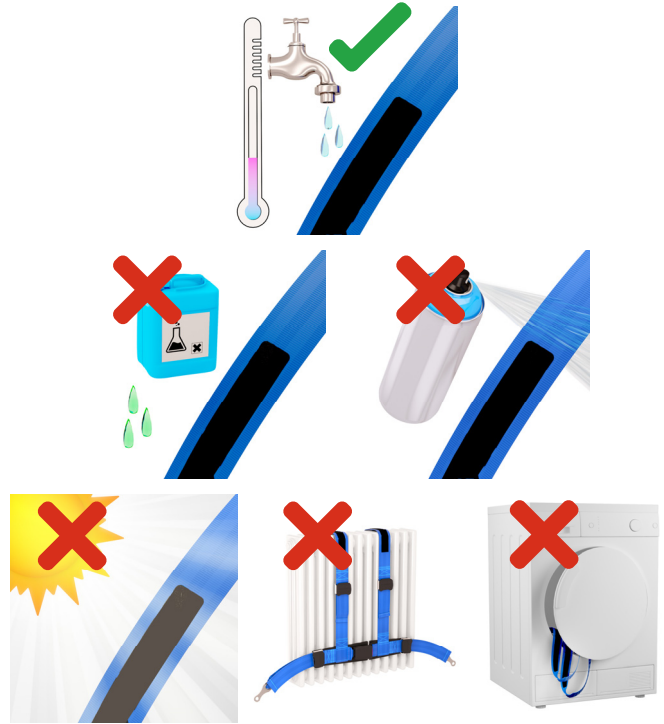
Improper cleaning or drying of the harness belts can weaken them or reduce their effectiveness. Use only clean supplies and methods as recommended at www.takataracing.com

! WARNING

Risk of serious injuries or death.

Never use any restraint system which does not operate properly.

If questions arise, immediatly contact your importer or the manufacturer!



2 In case of an accident

! WARNING

Risk of severe injuries or death.

Always replace a harness belt used during an accident. It is unfit for further use. The belt may otherwise fail in subsequent accident.

Replace it immediately.

In TAKATA asm® models a partly or fully ripped open TAKATA asm® system indicates the need for immediate replacement of the racing harness.

FIA and other sanctioning bodies require that inspectors cut the racing harness, or cut the labels off the racing harness, after an accident.

Always inspect all anchorages for damages such as deformations or cracks, after an accident.

Strictly follow the recommendations of the vehicle or roll cage manufacturer if a repair should be necessary.

Re-use a harness belt that has been in an accident of any type cause serious injuries or death.

After an accident, in addition to replacing seatbelts which were in use, also ask your car dealer to carefully check all seatbelts attachment points for deformation or cracks. Always make sure the car manufacturer's guidelines are followed if a repair is necessary.

We reserve the right to incorporate any technical changes or further development in its products without notice.

Our web site www.takataracing.com 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]:

Made in Germany under licence by

SCHROTH Safety Products GmbH

Im Ohl 14
59757 ARNSBERG
GERMANY

Phone: +49 (0) 2932-9742-0

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

eMail: germany@schroth.com

www.takataracing.com

US-Importer:

HMS Motorsport, Ltd.

119 Bevan Drive
 Mooresville, NC 28115
USA

Toll Free: (800) 884-2358

Phone: (978) 774-1640

FAX: (978) 774-1548

eMail: na-sales@takataracing.com

www.takataracing.com

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