



FITTING INSTRUCTIONS

Congratulations on purchasing the SpringBelt, the new way to ensure operators of plant and industrial equipment Stay in their Seat in the event of a roll over or collision.

The SpringBelt is simple to use but, care must be taken during the installation process to ensure the correct mounting and fit for the operator of the vehicle.

These fitting instructions should be closely followed to ensure compliance to the relevant earthmoving standard for seatbelts, ISO 6683.

For product updates and further information please visit www.springbelt.com

Design intent

The unique feature of SpringBelt is the patented design that gives the belt rigidity creating an annoyance to the operator of the vehicle. It compels the operator of the vehicle to wear SpringBelt. These features separates SpringBelt from conventional seat belts that are often not worn or where lock out safety systems are over ridden.





Step 1: Fitting the buckle to the Vehicle.

Bolt the SpringBelt buckle to the existing buckle mounting hole. The 10025 bolt and 10038 spring washer are already fitted to the buckle and are secured with a red fibre washer which can be left on the bolt when assembled. If the buckle mount on the vehicle is not a threaded hole use the Nyloc nut provided to bolt the SpringBelt buckle to the vehicle.

If you have purchased the SpringBelt with the optional on / off buckle switch secure the loom with the fastening clip and connect the spade terminals.

Step 2: Bolt the SpringBelt to Stainless Steel Bracket

The stainless steel bracket should be attached as shown in the exploded diagram, figure 1, below. The 11564 bolt is the bolt that fastens the SpringBelt to the seat. The position of the seat in the assembly is shown below as "SEAT". The Nyloc nut should only be used if the seat belt mount is not threaded.

Ensure the thick foam on the SpringBelt is on the same side as the stainless steel bracket.

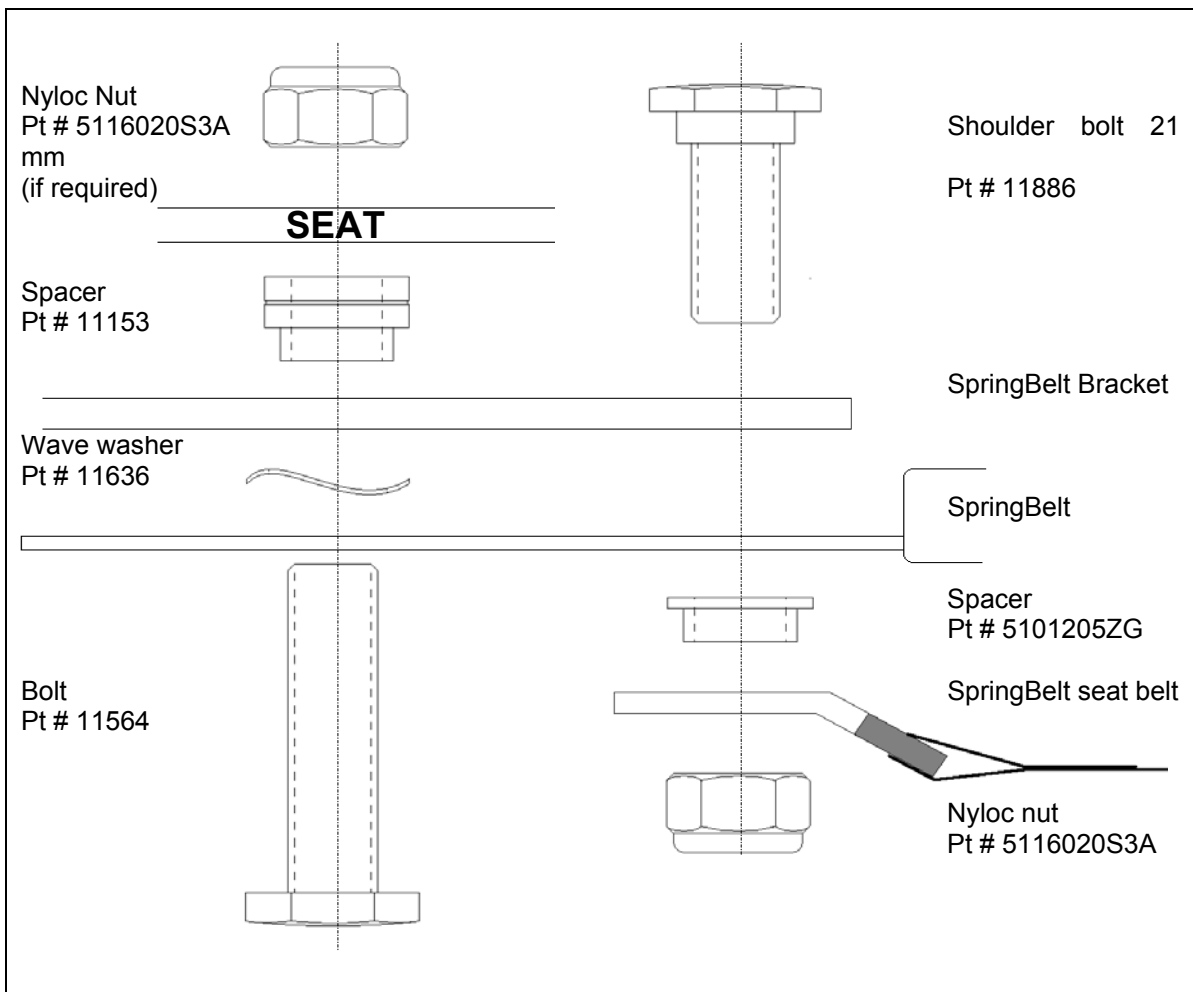




Figure 1.

Step 3: Mount SpringBelt

There are two ways of mounting SpringBelt depending on the type of seat in the vehicle. In both options SpringBelt should be mounted at about 45 degrees to enable a comfortable fit.

1) ONE HOLE MOUNTING (Refer to Figure 2).

Use the tech screw (part number 5116633S3A) to lock the stainless steel bracket to the steel frame of the seat. The location of the tech screw should restrict the movement of the stainless steel bracket, but not the SpringBelt on the stainless steel bracket. Drill a pilot hole in the stainless steel bracket to accommodate the tech screw. If a suitable location for the tech screw cannot be found, the stainless steel bracket can be bent to obtain a suitable fixing point. Any excess length of the stainless steel bracket can be removed, but leave at least 25 mm around the fixing hole.

2) TWO HOLE MOUNT (refer to Figure 3).

Suspension seats generally use tether straps to prevent the seat from coming loose in an accident. Use the tether strap bolt hole and the original seat belt mounting hole to mount the stainless steel bracket. The stainless steel bracket should be marked and drilled, then the SpringBelt assembly should be fastened to the seat through the tether strap and seat belt mounting holes. Any excess length of the stainless steel bracket can be removed, but leave at least 25 mm around the fixing hole.

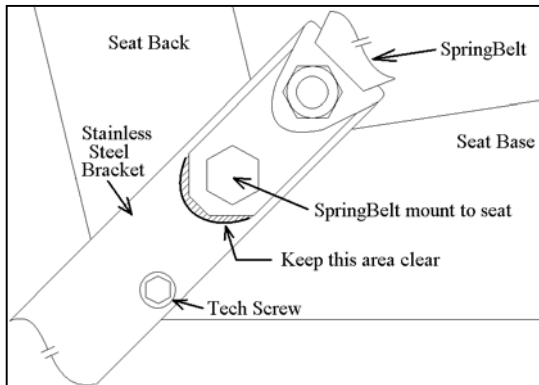


Figure 2.

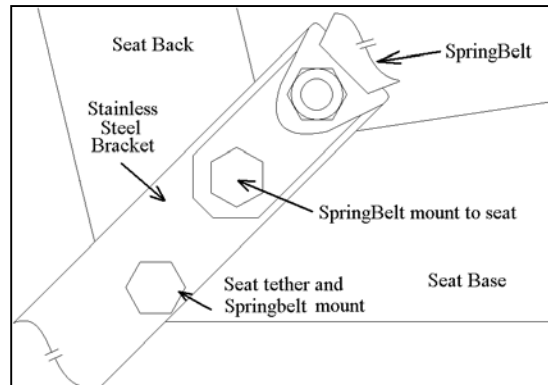


Figure 3.



Step 4: Check SpringBelt for fit

The mounting position of SpringBelt should be checked for the following,

- 1) With an operator sitting in the vehicle, SpringBelt should be a comfortable fit. **SpringBelt can be bent over the operator's right thigh to ensure a comfortable fit.**
- 2) Mounting location of the SpringBelt should comply with ISO6683 as shown in Figures 4 and 5.
- 3) Ensuring the buckle position is at the Hip Point of the operator.
- 4) The mounting angles of the buckle and the stainless steel bracket are the same.
- 5) Use only the hardware supplied to fasten SpringBelt or grade equivalents

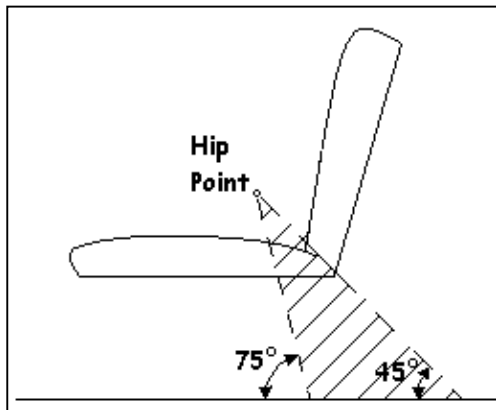
SpringBelt mounting position

If you are unable to use the existing seat belt mounting points then the anchoring position of the seat belts must comply to the ISO 6683 standard. Figures 4 and 5 show the correct mounting geometry. If the seat is adjustable, it must be located in the mid position.

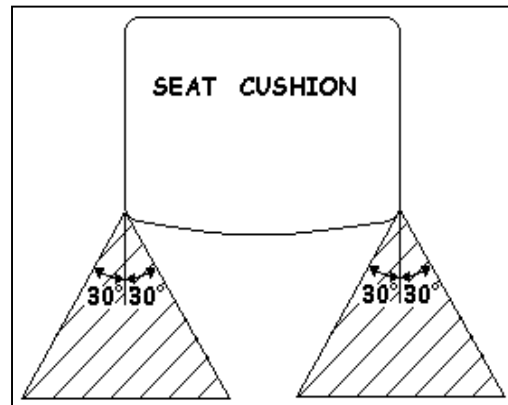
In Figure 4, the side view of the seat is shown. The angle of the seat belt when worn by the occupant must be within 45 to 75 degrees from a horizontal line. The buckle position should be alongside the operator's "Hip Point".

In Figure 5, the top view of the seat cushion is shown. The angle of the belts on both SpringBelt and Buckle from the side of the seat to the anchoring points must be within 30 degrees of a line going from the front to the back of the vehicle.

Typically the SpringBelt is mounted on the right hand side and the buckle on the left hand side of the occupant. This is to enable easy access to the driving position, as access to the vehicle is normally on the left-hand side. Should the operator gain access from the right hand side of the vehicle the SpringBelt should be mounted on the left hand side.



Side View
Figure 4.



Top View
Figure 5.



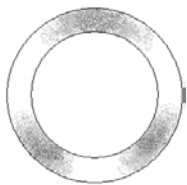
Warning

The following warnings should be noted.

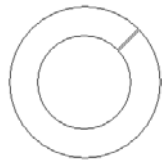
- 1) SpringBelt should be cleaned using soap and water. Chemical cleaners must not be used due to risk of damaging the belt.
- 2) Do not make any alterations to the SpringBelt other than those described in the fitting instructions.
- 3) The SpringBelt hardware should not be loose or over tightened.
- 4) SpringBelt should be adjusted to comfortably fit across the hip. Over tightening may accelerate wear and cause operator discomfort.
- 5) Ensure the tongue of SpringBelt easily engages and locks into the buckle every time. The tongue should actively eject from the buckle when the release button is pressed. If the buckle does not function as described SpringBelt should be replaced.
- 6) The buckle mechanism should be kept free of dirt, water and foreign particles to ensure its longevity.
- 7) Prolonged exposure to direct sunlight may reduce the strength of SpringBelt. Should the belt webbing become faded the belt should be replaced.
- 8) The anchorages should be free from corrosion, sharp edges and securely fastened at all times.
- 9) The SpringBelt should be checked regularly for physical damage. Key areas to check include:
 - Damage to webbing
 - Worn SpringBelt cover
 - Damaged foam inside the SpringBeltIf damage is noticed SpringBelt should be replaced.
- 10) It is recommended that when SpringBelt has been in service for ten years, it should be replaced. The date of manufacture of SpringBelt can be found on a label sewn into the SpringBelt lap belt anchoring point under the SpringBelt cover.
- 11) In the event of an accident the SpringBelt should be replaced.

Contents.

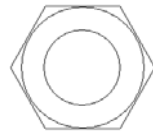
The contents of the SpringBelt fitting kit are as follows.



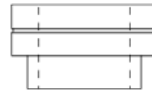
Wave Washer
Qty 1
11759



Spring Washer
Qty 1
10038



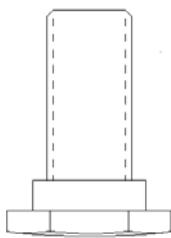
Nyloc Nut
Qty 3
5116020S3A



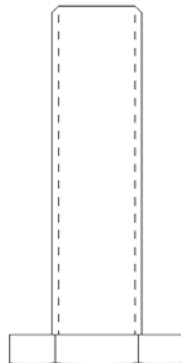
Spacer
Qty 1
11153



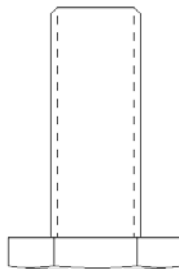
Spacer
Qty 1
5101205ZG



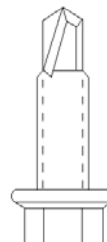
21 mm
Stepped Bolt
Qty 1
11886



35 mm
Bolt
Qty 1
11564



28 mm
Bolt
Qty 1
10025



25 mm
Tech Screw
Qty 2
5116633S3A



Bracket A
Qty 1
511587400A

* All parts shown are to scale, except part number 511587400A.