

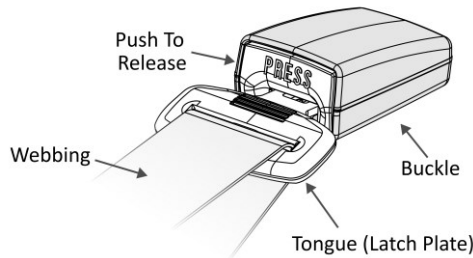
Retractable Lap Sash Seat Belt Fitting Instructions

This restraint system has been designed and manufactured in Australia to "Keep you safe". APV-S is the major original equipment supplier of seat belts in Australia and strives to present the best products in quality and performance. This seatbelt is suitable for passenger cars without airbags (unless vehicle specific).

HOW TO WEAR YOUR SEATBELT CORRECTLY

To "Buckle Up" slide the tongue (latch plate) into the slot at the open end of the buckle. It is correctly engaged when you hear a positive "click".

To release the belt, push the red button in the centre of the buckle.



To wear your seatbelt correctly, first adjust the lap portion of the belt so that it fits snugly across your hips. The belt should be low and snug across your pelvis, not across your stomach. Then, adjust the shoulder portion of the belt so that it fits comfortably across your chest and shoulder.

The shoulder belt should not be twisted or tangled, and it should not be resting on your neck or face. It is important to make sure that the seatbelt is properly adjusted and fastened before starting to drive, and to keep it on for the entire duration of the trip.

THE EMERGENCY LOCKING RETRACTOR SEAT BELT

The Emergency Locking Retractor (ELR) locks when either:

1. Webbing is withdrawn quickly from the retractor.
2. The retractor sensors rapid acceleration or deceleration.
3. The retractor is tilted more than approximately 15° in any direction from the design angle.

WARNING!

REPLACE THE SEAT BELT ASSEMBLY WHEN IT HAS BEEN USED IN A SEVERE ACCIDENT OR SHOWS SIGNS OF SEVERE FRAYING OR HAVING BEEN CUT; OR IF IT COMES INTO CONTACT WITH CHEMICALS; OR WHEN, WITH A BELT FITTED WITH A VISUAL OVERLOAD INDICATOR, IT INDICATES THE UNSUITABILITY OF THE BELT FOR FURTHER USE; OR WHEN A SEAT BELT IS EQUIPPED WITH A PRE-LOADING DEVICE, WHEN THE LATTER HAS BEEN ACTIVATED.

HOW TO UNLOCK THE RETRACTOR

To unlock the retractor:

1. Pull the webbing firmly to remove slack from the spool.
2. Allow the retractor to retract ~20mm.
3. Slowly withdraw webbing from the retractor.

The retractor must be orientated at the design angle, as if it is mounted in the vehicle during this entire process. Refer to the 2nd page of these instructions to identify your retractors design angle. For best results, place the retractor in a bench vice or on the side of a table, bench, or cabinet for stability.

WARNING!

- Read the whole of the instructions for installation carefully and to consult the seat belt manufacturer in doubt.
- Do not anchor seat belts to unsound metal structures, to wooden or plastic structures or to seats (unless the vehicle has been provided with seat belt anchorages on the seat).
- Webbing must not be allowed to chafe against sharp edges on seat or bodywork.
- Do not make any alterations or additions to the seat belt.
- Do not attach this seat belt to a child restraint anchor point.
- No modifications or additions should be made by the user which will either prevent the seat belt adjustment devices from operating to remove slack, or prevent the seat belt assembly being adjusted to remove slack.

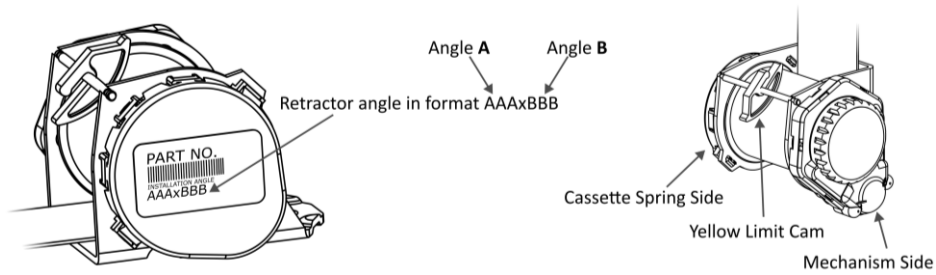
WARNING!

FOR THE FULL BENEFIT FROM THIS SEAT BELT:

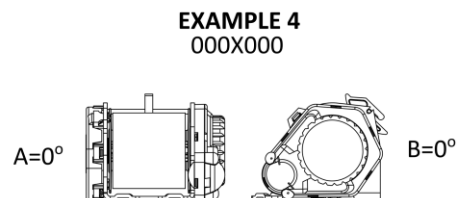
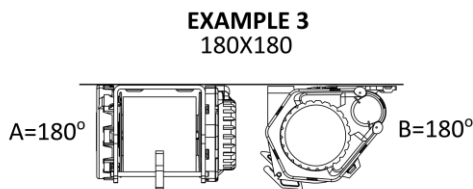
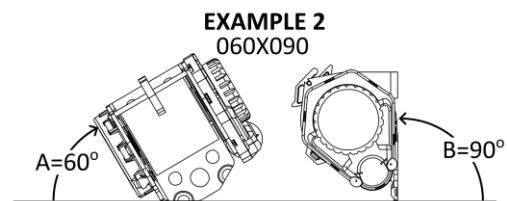
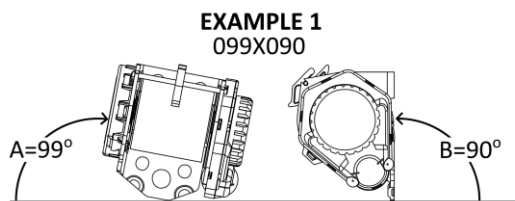
- IT MUST BE FIRMLY ADJUSTED
- IT MUST NOT BE TWISTED
- THE LAP SECTION MUST BE WORN ACROSS THE HIPS
- THE BUCKLE MUST BE LOCATED AT OR BELOW THE WEARER'S HIP
- EACH SEAT BELT MUST ONLY RESTRAIN ONE OCCUPANT
- CLEAN ONLY WITH A DAMP CLOTH.

RETRACTOR ANGLES

Emergency Locking Retractors are designed to operate at specific angles and will lock if tilted more than approximately 15° in any direction from this angle. Positioning the retractor within 2° of this angle ensures optimum performance. The angle can be found on the sticker on the side of the retractor.



Angle A is measured from the cassette spring side, with 0° defined at horizontal. Angle B is measured from the mounting side of the retractor, also with 0° defined at horizontal.



Note: APV retractors have RH or LH variants, with the RH retractor drawn in the above example. The LH retractor has the cassette spring and mechanism side reversed. Angle A is still measured from the cassette spring side.

Note: The LH and RH retractors are **unrelated** to the belt being intended for use in RH or LH seating positions.

SEAT BELT INSTALLATION

IMPORATANT: Do not remove the yellow limit cam until the retractor has been mounted at the correct angle!

1. Mount the retractor and anchor using the fittings provided, hand tight only. Common configurations are pictured below:

In Pillar 90-90

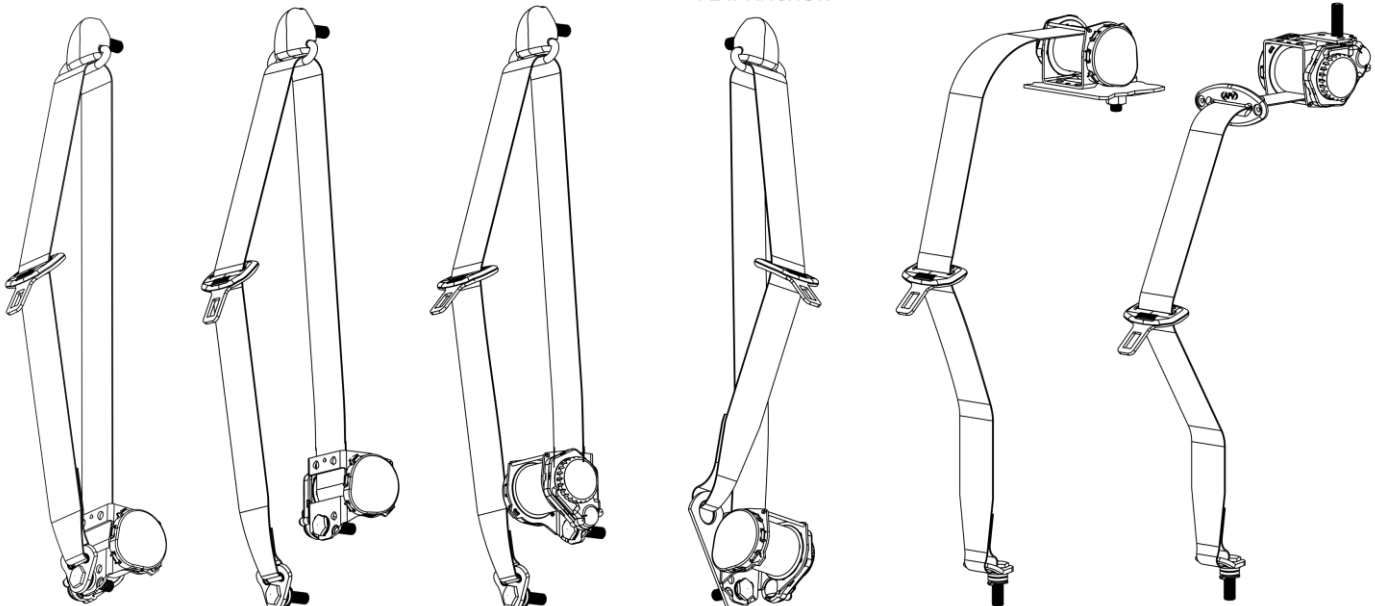
In Pillar 90-90

On Pillar 90-90

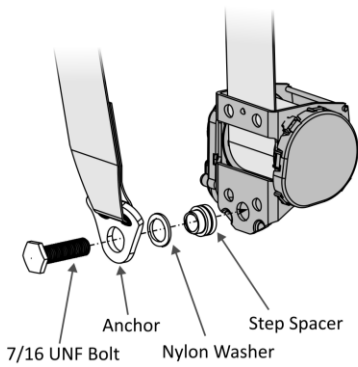
On Pillar 90-90
FLAT ANCHOR

On Parcel Shelf 0-0

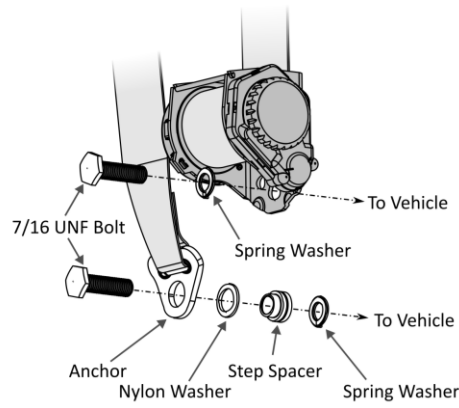
Under Parcel Shelf 180-180



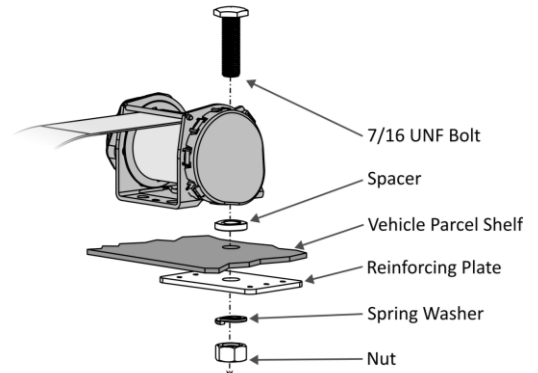
EXAMPLE 1 In Pillar 90-90



EXAMPLE 2 On Pillar 90-90



EXAMPLE 3 On Parcel Shelf 0-0

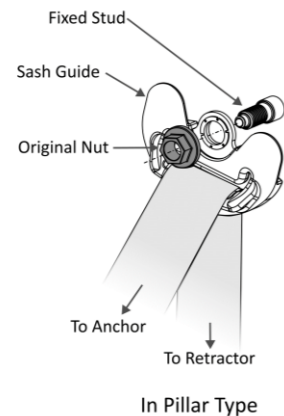
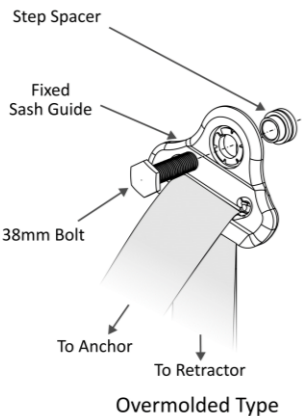
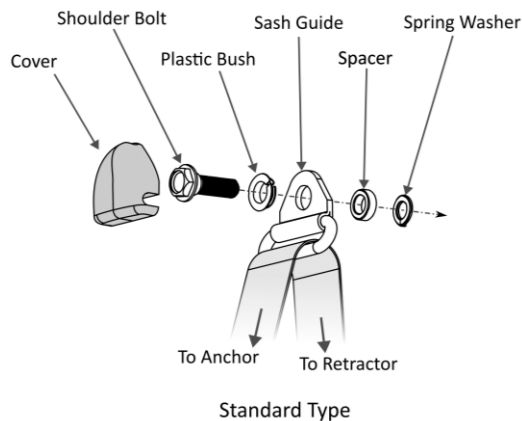


Note: The vehicle may have alignment tabs that can be bent out the way so that the retractor sits flush.

Note: A multifit extension bracket such as the APV-S K4425 may be required to mount the retractor.

Note: The OEM retractor may have a second upper mounting point used for alignment in a high-volume manufacturing environment. This is not load bearing and not required.

2. Remove all twists from the webbing and bolt the sash guide to the vehicle B pillar (hand tight only).



3. Align the retractor by firmly pulling webbing through the sash guide (toward the anchor).

4. Check that the seatbelt unwinds, retracts, and locks when pulled quickly.

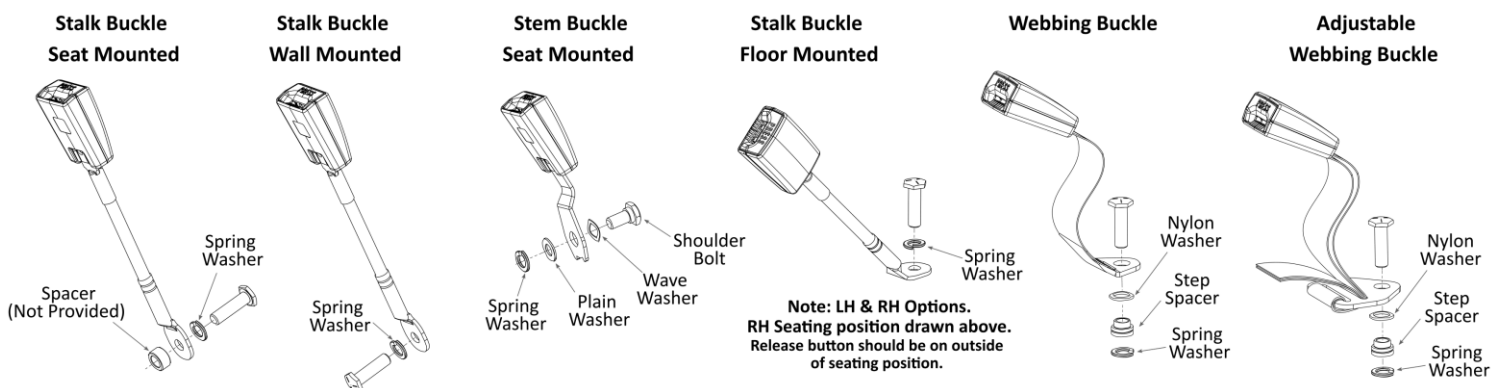
5. Tighten all bolts to 35-40Nm (26-30 lb-ft). Recheck following step 4. Adjust and re-tighten if necessary.

6. Remove and discard the yellow limit cam from the retractor.

BUCKLE INSTALLATION

1. If the buckle is an adjustable webbing type, adjust the buckle length so that the buckle is at or below the hip.

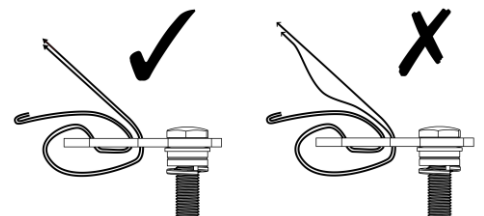
2. Thread the provided fittings as depicted below and mount at the desired angle. Tighten the bolt to 35-40Nm (26-30 lb-ft).



NOTE

There may be more fittings than needed. Please discard unused fittings.

WARNING!
FOR ADJUSTABLE WEBBING BUCKLES,
ENSURE BOTH LENGTHS OF WEBBING ARE
EQUAL.



ELECTRIC BUCKLE LOOM CONNECTIVITY & INSTALLATION (ELECTRIC KITS ONLY)

These instructions are a generic guide only and should be completed by a qualified Auto Electrician. Ensure you read the instructions completely before starting. APV are in no way liable for the accuracy of these instructions or your actions in following them. You will need a collection of tools and materials to splice wires (cut, strip, join & insulate), these are not included.

These instructions assume that your vehicle uses a two-wire connectivity to determine the seat belt buckles state (fastened or unfastened) and operates an alarm, warning or lockout system based on this connectivity. A two-wire system will be configured using either a Normally Open (NO) or Normally Closed (NC) circuit.

1. Remove the old buckle from the vehicle and cut off the connector, leaving plenty of wire attached to the vehicle. Strip the ends off these wires.
2. Connect a multimeter to the two wires of the old buckle.
3. Ensure the old buckle does not have a tongue (latch plate) clicked in.
4. If current flows between the two wires of the old buckle, it is normally closed (NC). If current does not flow through the two wires of the old buckle, it is normally open (NO).

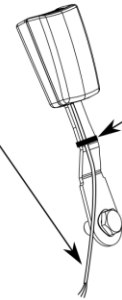
CAUTION

Care must be taken when installing the buckle and connecting the wires

Critical electrical components may become dislodged and not function if force is applied to the wires

Cable tie wire if required

NOTE:
ELECTRIC OPTION
ON STEM AND STALK
BUCKLES ONLY



ELECTRICAL CONNECTION

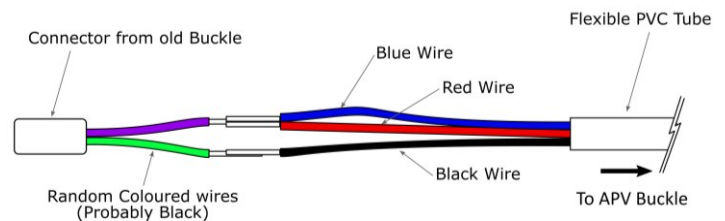
BUCKLE WIRING: BLUE WIRE Normally Closed
BLACK WIRE Normally Open
RED WIRE Common

MAXIMUM POWER: 2A at 12V or 1A at 24V

For a Normally Open connection:

- a. Join the RED & BLUE wires of the new buckle together and terminate them to either of the wires on the connector of the old buckle.
- b. Connect the BLACK wire of the new buckle to the other wire on the old connector.
- c. Insulate the connections with heat shrink or equivalent.

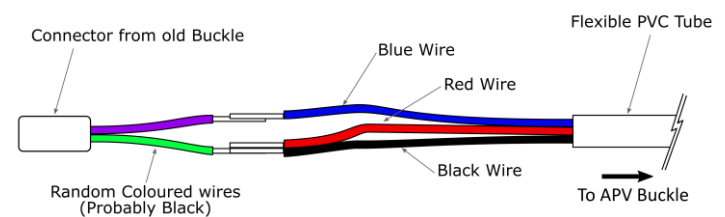
NORMALLY OPEN (NO)



For a Normally Closed connection:

- a. Join the RED & BLACK wires of the new buckle together and terminate them to either of the wires on the connector of the old buckle.
- b. Connect the BLUE wire of the new buckle to the other wire on the old connector.
- c. Insulate the connections with heat shrink or equivalent.

NORMALLY CLOSED (NC)



5. Turn the vehicle ignition on without starting the engine and double check that the warning/alarm goes off when the tongue/latch plate is engaged with the buckle.
6. Install seat belt restraint as per instructions provided.
7. Check that the wiring will not catch, get caught or come under tension over the full range of seat movement/adjustment.

Note: This electric connection is for ignition isolation or dashboard warning lights. This connection is **not** for airbags or seatbelt pretensioners!

NOTE

Please leave these instructions with the vehicle to ensure they reach the initial wearer.