

INDUSTRIAL STATIC AND ALR LAP BELT INSTRUCTIONS

This restraint system has been designed and manufactured in Australia to “Keep you safe”. APV is the major original equipment supplier of seat belts in Australia and strives to present the world with the best products in quality and performance. This restraint conforms to SAE J386, ISO6683 and FMVSS302, meeting global safety standards when installed per enclosed instructions.

This instruction assumes the seat/vehicle has existing seat belt anchorage points. If no anchorages exist, consult your local authority and the SAE J386 standard.

BUCKLE INSTALLATION

1. Identify your buckle type and assemble the fittings using the diagram below as reference.
2. Angle the buckle so that the belt will run over the operator's lap ($60^{\circ} \pm 15^{\circ}$ from horizontal is ideal) and tighten the bolt to 35-40Nm (25-30lbft).
3. For electric buckles, connect the wires per the vehicle manual & the 4th page of these instructions.
4. For Springbelt only, clip on the plastic bolt cover per Figure 1 below.

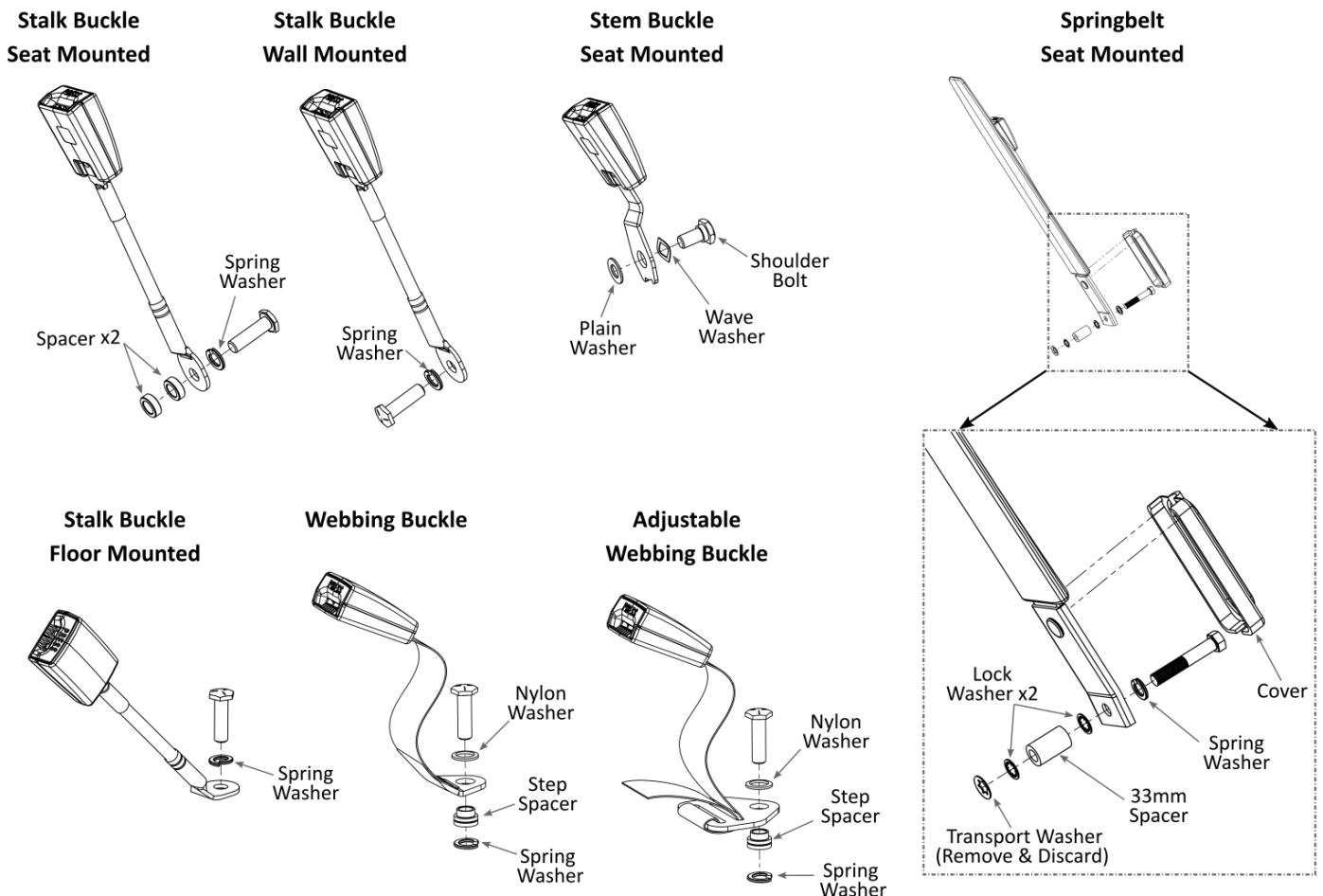


Figure 1

AUTOMATIC LOCKING RETRACTOR LAP BELT INSTALLATION

1. For 3 Inch ALR kits, remove and discard the fibre transport washer. For 2 Inch ALR kits, assemble the fittings Figure 2 below.
2. Angle the ALR so that the belt will run over the operator's lap ($60^{\circ} \pm 15^{\circ}$ from horizontal is ideal) and tighten the bolt to 35-40Nm (25-30lbft).
3. Confirm that the retractor locks and unlocks correctly.

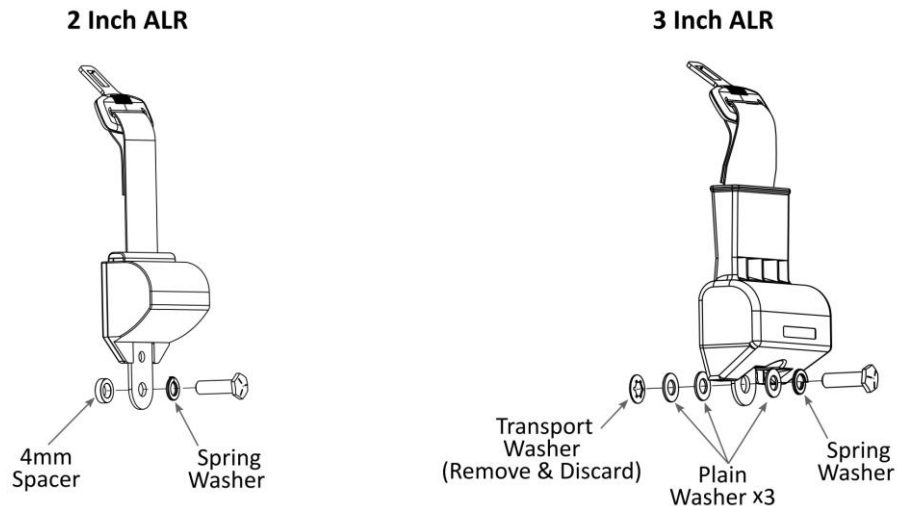


Figure 2

2 " & 3" STATIC LAP BELT INSTALLATION

1. Identify the static lap belt type and assemble the fittings using the Figure 3 below.
2. Angle the anchor so that the belt will run over the operator's lap ($60^{\circ} \pm 15^{\circ}$ from horizontal is ideal) and tighten the bolt to 35-40Nm (25-30lbft).

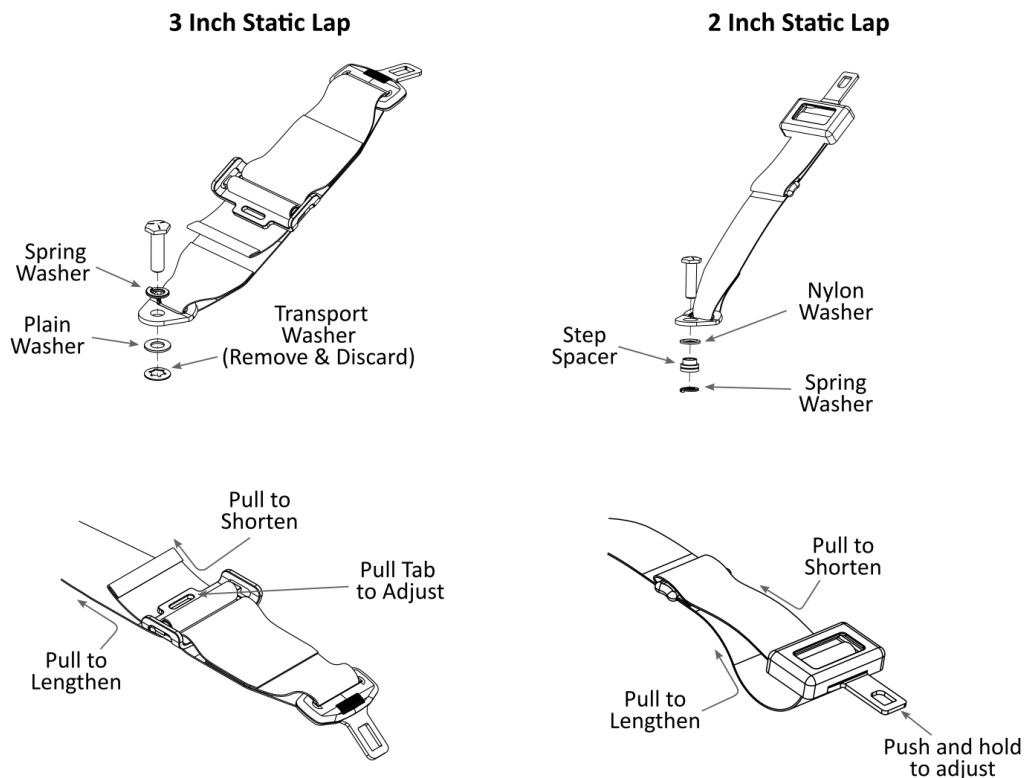


Figure 3

HOW TO WEAR YOUR SEATBELT CORRECTLY

To “Buckle Up”, slide the tongue (latch plate) into the slot of the open end of the buckle. It is correctly engaged when you hear an audible “click”. To release the belt, push the button in the centre of the buckle.

To adjust the length of 3-inch static lap belts, use the pull tab to tilt the adjuster away from the webbing while pulling the appropriate length of webbing as depicted above.

To adjust the length of 2-inch static lap belts, push and hold the tongue into its cover while pulling the appropriate length of webbing as depicted in Figure 3.

THE AUTOMATIC LOCKING RETRACTOR (ALR) SEAT BELT

The Automatic Locking Retractor retracts the webbing to the body after the tongue and buckle are engaged. This type of seat belt automatically locks when the mechanism is activated after a certain amount of webbing is withdrawn from the spool then allowed to retract a small distance. An ALR is unlocked once a certain amount of webbing is retracted back onto the spool.

No modifications or additions should be made by the user that will prevent the retractor from operating to remove slack.

WARNING!

Ensure the ALR locking mechanism has engaged before operating the vehicle. If the ALR is not locked, activate it by allowing a small amount of webbing to retract back into to spool.

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

WARNING!

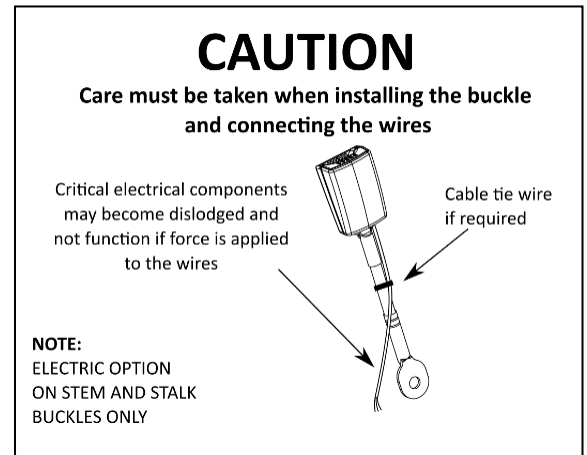
- The bolts supplied in this kit are for a single seat belt assembly only.
- Please have the assembly installed by a licensed mechanic.
- Do not make any alterations or additions to the belt.
- No excessive slackness in the belt should be evident.
- Webbing must not be allowed to chafe against sharp edges on seat or bodywork. Any fraying of webbing will reduce the strength and retraction performance of the seat belt and the seat belt assembly should be replaced.
- Do not attach the belt assembly to unsound metal, wood, or plastic structures.
- The lap section must be worn across the hips.
- Do not bleach or dye under any circumstances.
- Avoid contamination of the webbing with polishes, oil, and chemicals, particularly battery acid.
- Cleaning may safely be carried out using mild soap and water.
- Do not attach the seat belt assembly to a vehicle seat or seat mounting bolts, unless the vehicle manufacturer has provided seat belt anchorages in the seat or uses the seat anchor bolts for this purpose.
- After installation, please ensure that bolts are securely tightened and there are no apparent loose or ill-fitting parts present. Also check that the webbing in the ALR Lap belt will pay out and retract fully.
- Belts should not be worn with straps twisted.
- Each seat belt assembly must be worn by only one occupant.
- It is essential that the entire assembly be replaced if it has been worn during a severe impact or rollover, even if damage to the assembly is not obvious.
- The belt should be replaced if webbing becomes frayed, contaminated, or damaged.
- Replace your Seat Belt if:
 - a. The vehicle should be involved in a serious accident
 - b. The webbing or fittings become damaged
- It is recommended that Industrial Restraints are replaced every 18-24 months.

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.

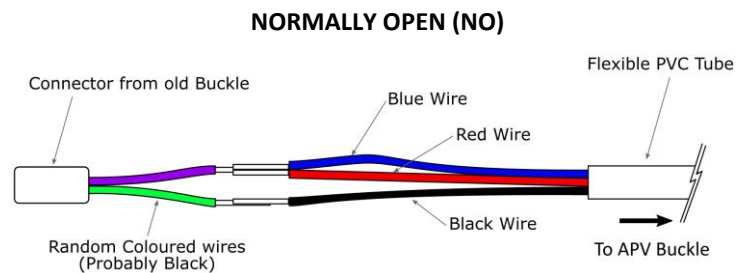
1. Remove the old buckle from the vehicle and cut off the connector, leaving plenty of wire attached to the vehicle. Strip the ends off these wires.
2. Turn the vehicle ignition on without starting it.
3. If your seat belt warning light/alarm does not come on, then a NO (Normally Open) circuit is required (Figure 1). If your seat belt warning light/alarm comes on, then a NC (Normally Closed) circuit is required (Figure 2).
4. Turn the vehicle off.



ELECTRICAL CONNECTION		
BUCKLE WIRING:	BLUE WIRE	Normally Closed
	BLACK WIRE	Normally Open
	RED WIRE	Common
MAXIMUM POWER:	2A at 12V or 1A at 24V	

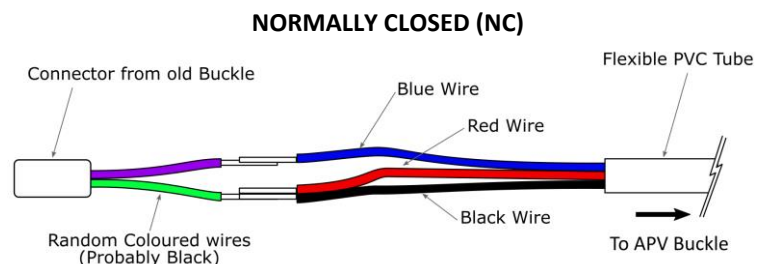
For a Normally Open connection:

- 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



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



5. Turn the vehicle ignition on without starting it 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.