S4S Unit
Installation Instructions

What is the S4S?
S4S stands for Suspension Seat Safety System.

How does it work?
In the event of a side roll, the S4S unit is deployed by the master roll sensor, pretensioning the seat belt, then pulling the seat to its lowest position. The S4S is only effective when you wear your seat belt. ALWAYS WEAR YOUR SEAT BELT.

⚠️ WARNING
Failure to read and follow these instructions may result serious injury or death to the occupant.

Important Facts
PLEASE READ THIS ENTIRE GUIDE BEFORE STARTING TO INSTALL S4S SYSTEM.

1. The S4S is to be used in a specific vehicle application and seating position, and only with a specific model seat.
2. Always follow the vehicle manufacturer’s installation guide. Use this installation guide in addition to the vehicle manufacturer’s guide.
3. Always disconnect vehicle batteries and turn off vehicle switch before accessing electrical connection.
4. DO NOT PUNCTURE DRILL OR APPLY HEAT TO S4S.
5. DO NOT MOUNT ANYTHING NEAR THE S4S that could interfere with travel path of the device.
6. The master roll sensor must be vehicle mounted before any electrical connections associated with S4S system are made.
7. The S4S is only designed to activate once. If the system is activated or is damaged, unit must be replaced by authorized personnel.

⚠️ WARNING
DO NOT APPLY HEAT
Temperatures over 85° C (185° F) could cause the unit to deploy.
The deploying S4S could cause serious injury or death.

⚠️ WARNING
HAZARDOUS OPERATION
Applying power prematurely could deploy occupant protective devices, causing serious injury to installer. Disconnect and tag out power. Always make connections to Roll Sensor last. Keep clear of protective devices when first applying power. Failure to follow these instructions could cause serious injury or death.

This information is not all inclusive and will not cover every seat, pedestal and vehicle configuration. Installers shall have sole responsibility for proper selection, application, installation and testing of the seat belt in accordance with FMVSS207, 208 and 210 as amended, or any other applicable or additional specification such as for use outside the U.S., and for providing instructions to the ultimate user concerning proper use and periodic maintenance of the seat belts.
INSTALLATION

Unpacking the S4S Unit (FIGURE 1)
1. Remove unit from the main carton. There are 2 units per carton.
2. If parts need to be returned, they must be returned in the original packaging.

Product Identification
1. Locate product identification label. This is located on the front mounting bracket of the unit. See FIGURE 2
2. Verify your unit is the proper system for your configuration.

Mounting the S4S Unit to Vehicle Floor
1. Use only pre-drilled mounting holes.
2. Metal to metal contact is mandatory on all mounting points.
3. Position the unit in place. See FIGURE 3
4. Make sure wiring harness is free and not pinched. DO NOT MAKE WIRING HARNESS CONNECTION TO UNIT AT THIS TIME.
5. Position the unit on the cab floor and align the holes in the floor with the front mounting bracket. Using the proper Seagrave supplied mounting hardware hand tighten the two front mounting bolts.
6. Next install the two rear mounting bolts which also secure the rear of the seat.
7. Finally torque each mounting bolt to the required specification.

ICP (InterConnect Point Bar)/Tether Connection
1. Make sure web tethers are routed per diagram on S4S, and not twisted, pinched or damaged before unit is torqued. See FIGURE 4
2. Remove rubber band from tether-hook assembly and pull tether taut to check for twists, pinches or damage. Make sure hook is oriented as shown.
3. Make sure seat is fully lowered.
4. Connect hook into ICP cable as shown. See FIGURE 5
5. Secure tie wrap (supplied) around hook and cable as shown in detail in Figure 5 and pull tightly. The tie-wrap assures hook maintains engagement with the cable.
6. Install seat belt. Reference the Belt & ADM Installation Instructions.

Seat Tether
1. Position SEAT in lowest position. See FIGURE 6
2. Pull tether tight and position end bracket over pre-drilled holes behind seat.
3. Make sure tethers are not twisted.
4. Hand thread bolts into holes.
5. Torque bolts to 35-40 ft-lbs.

Electrical Connection and Test
1. Ensure battery switch is OFF.
2. Make connection between cab wiring harness and S4S
3. Verify that plug and connector are latched together.

Important Final System Inspection
1. Check ICP mounting on both sides of the seat.
2. Check for proper buckle angle. Buckle’s cable should not droop or be kinked.
3. Check shoulder look and/or seat belt height adjuster (optional) for full range of adjustment.
4. Inspect for twists of seat belt.
5. Check buckle for proper latching.
6. Check for interferences. Seat belt must fully retract.