

Thank you for taking this important step towards safety!

Impact is more than just a business; it is my life and my passion. As a racer, there is nothing more important than protecting my fellow competitors in all forms of motorsports. As the owner of Impact, I take pride in knowing that my company, our products, and the dedicated Impact staff are a small part in returning my friends and fellow racers to their families after a good and a bad day on the track.

Thank you for choosing the Impact line of products and we will see you in victory lane!

Yours in Safety,

Robbie Pierce  
Impact & MasterCraft Owner & CEO  
Driver of the No. 30 SCORE Trophy Truck

## MOUNTING THE HELMET HARDWARE

There are Three Types of Helmets:

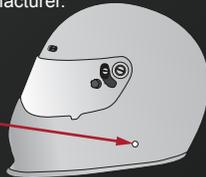
- 1) Snell SAH2010, Snell SA2015 and FIA8858
- 2) Pre-Drilled
- 3) Snell SA2010 and Un-Drilled

\* Read particular instructions for your type of helmet below

**1) Snell SAH2010, SA2015 & FIA 8858 Helmets:** These have 6mm threaded inserts bonded into the helmet by the helmet manufacturer.



Bonded 6mm inserts  
or pre-drilled hole



**Installation for Snell SAH2010, SA2015 & FIA 8858 Helmets:**

You will NOT need the helmet load plate. There is a helmet hardware set supplied with the device.

- 1) Using the allen key & wrench supplied, unscrew the helmet load plate and discard the load plate.
- 2) Using the allen key, screw the helmet hardware onto the left side of the helmet.
- 4) Align helmet hardware so the point is pointing toward the rear of the helmet.
- 5) Tighten the 6mm bolt to 30 Inch Pounds (3.4 Newton Meters).
- 6) Repeat steps for the right side of the helmet.

**2) Pre-Drilled Helmets:** If your helmet was pre-drilled for a previous FHR, it is OK to use these holes. If your helmet was pre-drilled by the helmet manufacturer, it is OK to use these holes. See "How to Drill Your Helmet" diagram.

**Installation for Pre-Drilled Helmets:**

You will need the helmet load plate. There is a helmet hardware set supplied with the device.

- 1) Using the allen key & wrench supplied, unscrew the helmet load plate.
- 2) Using the supplied wrench to hold in place, slide the load plate between the helmet shell and inner liner to line the load plate up with your pre-drilled holes.
- 3) Continue with steps 2-7 above.

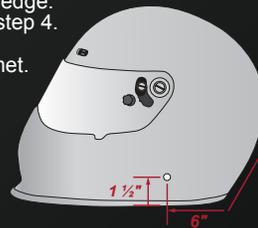
**3) Un-Drilled and SA2010 Helmets:** If your helmet has not been drilled, you will need to drill the installation holes as per the instructions below.

**How to Drill Your Helmet:**

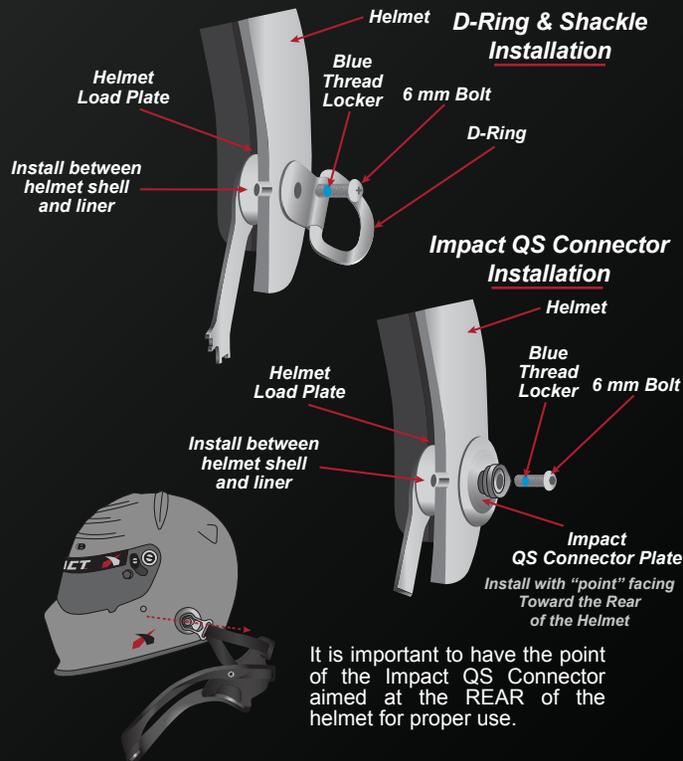
Many helmet manufacturers will already have this location marked on the helmet for you (Most Impact SA2010 helmets have a small indent where FHR posts should be mounted). If your helmet has been pre-drilled or pre-marked and is within a 1" radius of this diagram, it is OK to use these holes.

**If your helmet has no indication marks:**

- 1) Find the center at the back of the helmet by applying masking tape around the bottom of your helmet approximately 1" (25mm) up from the top edge of the rubber molding.
- 2) Create a horizontal line on the masking tape at the back of the helmet 1.5" (39mm) above the rubber molding.
- 3) Using a flexible ruler, measure the same distance from a fixed point (for example - the visor mounting hole) on each side of the helmet back to the horizontal line. The center line of the helmet is midway between where the two lines intersect the horizontal line at the back of the helmet.
- 4) Measure forward 6" along the lower edge.
- 5) Measure & mark 1 1/2" upward from step 4.
- 6) Drill a 1/4" (6mm) hole.
- 7) Repeat for the other side of the helmet.



## INSTALLATION ON DRILLED HELMETS

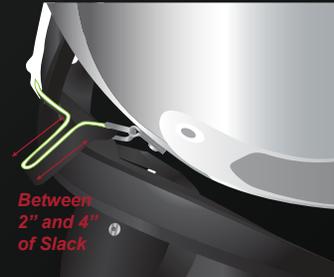


## FIXED TETHER

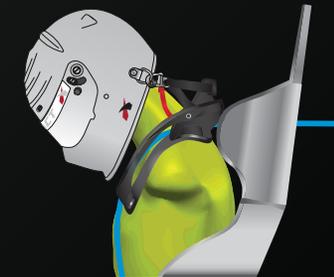
The Impact Accel FHR uses a fixed length tether which has been predetermined in testing to allow proper protection.

### TYPICAL SLACK:

Pinch the tether to form a loop as indicated in the illustration and measure the total length of the excess tether. This number should ideally be between 2.0 and 4.0 inches of total slack. If your tether slack is not in this range, contact an Impact representative for more information..



Some drivers may be able to move their head forward and still not feel the tension of the tethers, this is OK. Also do not worry if the base of the helmet touches the bar. In the event of an accident, the device is held back by the seat belts, whereas the body, neck & head will move forward and away from the device. It is at this point that the tethers will tighten up to minimize neck tension.



## TO VERIFY THE FITMENT

- 1) Strap yourself securely in your seat with the shoulder and lap belts firmly tightened (as you would be positioned for race conditions) with your helmet and Accel securely in place. The device should sit approximately 1-inch to 3-inches from the back of the driver's neck. Do NOT pull the device forward to rest against the neck!
- 2) Sit in a neutral position with your head facing forward as you would be while driving in a straight line.
- 3) Have someone pinch the tether to one side taking up all the slack from both sides. Measure the overall amount the tether is pinched and verify that it is no more than 2 to 4 inches overall. If there is more than 4-inches, there is a chance your helmet is drilled incorrectly. Contact an Impact representative for more information.
- 4) In most cases, you will have a full range of motion from side to side.

## IMPORTANT!

Prior to each use, check all hardware and tethers for correct installation. If for any reason you disassemble any part of the device, it is recommended that you reassemble using medium strength threadlocker on the threads of the hardware. The Impact Accel must be properly cared for and maintained in order to work properly.

If you are in need of any replacement hardware, tethers, or other components please contact Impact.

## ADJUST REAR ANGLE FOR MAXIMUM COMFORT

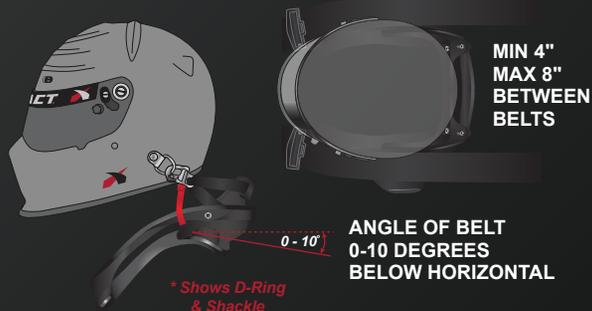


FIND YOUR SEAT ANGLE IN DEGREES

REMOVE THESE TWO BOLTS TO ADJUST THE ANGLE TO MATCH YOUR SEATING POSITION \*

\* DO NOT USE THE DEVICE WITHOUT THESE BOLTS INSTALLED!

## PROPER SEAT BELT ALIGNMENT



## RECERTIFICATION

Effective Jan 1, 2012, SFI Specification 38.1 now requires Frontal Head Restraint devices be inspected and recertified after five (5) years from the date of manufacture punched on the label.

## TETHER REPLACEMENT

Tethers will need to be replaced every five (5) years. Tethers should also be replaced after a serious accident or if they are showing any signs of wear.

## WARNING!

Motorsports are dangerous! This product is sold without warranty expressed or implied. No warranty or representation is made as to this product's ability to protect the user from injury or death. Be advised that motorsports are dangerous. The user assumes all risk and responsibility.

## WARRANTY

The Impact Accel Frontal Head Restraint (FHR) is warranted to be free from defects in material and workmanship for a period of one year from the date of purchase by the original purchaser. The Accel FHR will be repaired or replaced at the sole discretion of Impact. All claims must be submitted to us and accompanied by the device, the original sales receipt, and a statement signed by the purchaser regarding the nature of the defect. This warranty does not apply to damage to the product that is the result of accidents, normal wear and tear, or misuse. Any modifications to the product will null and void this warranty.

## DISCLAIMER

Please inspect the Impact Accel before each use. If you believe that the product is not in good working order according to the instructions, stop use immediately and contact Impact. As a condition of purchase and/or receipt of the Impact Accel FHR, the user has read and familiarized him/herself with the technical aspects, research and test results relating to the Accel FHR provided at the Impact website (ximpactusa.com), and understands the nature of the device and the conditions under which it can be used. The user understands and recognizes that the device has not been tested on humans in race conditions for instrumented impact assessment and this is a new design. Should you not wish to accept the terms of this warranty or of this product prior to its use, please return the Accel FHR for a refund. As a condition of this purchase and /or receipt of the Impact Accel FHR, the user waives any claims against Impact, the inventor, manufacturer, any subcontractor, agent, or distributor. Impact, the inventor, manufacturer, any subcontractor, agent, or distributor, will under no circumstances be liable to any person for damages, including but not limited to direct injury, indirect injury, bodily or otherwise, including death, that may be sustained by any person as a result of the use of the Impact Accel FHR. Any alleged defect therein or its alleged failure to afford the protection offered by it, or for any consequential loss of profits or damages suffered by any person, however such loss OR damage may arise or for any other reason OR from any other circumstance or whatsoever nature. The parties' liability is limited to the actual price paid for the product. The user assumes all risk for the use of the product. As a condition of purchase/receipt of the Accel FHR, the user has fully read and understood the manual and installation guide and understands that although the device is designed to help reduce brain and head and neck injuries when worn in conjunction with a helmet with a fixed chin part, there is no guarantee that any injury will be prevented by the use of this device. Each device must be set up for the individual user and be of the correct size and fit. This warranty expires upon resale or transfer by the original purchaser. Always attach your helmet correctly according to its manufacturer's guidelines. Always ensure all your safety equipment has not passed its recommended lifespan and is inspected before each race. Impact recommends integrity inspections be performed by the original safety equipment manufacturer after any crash to ensure the equipment is in proper working order.

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# ACCEL

## USER MANUAL AND INSTALLATION GUIDE



ACCEL FHR

 SFI COMPLIANT