

# HANS Device Quick Start Guide

# The HANS<sup>®</sup> Device Quick Start Guide

Welcome - you're ready to use the same technology that protects the world's top racers. Follow these steps to get started.

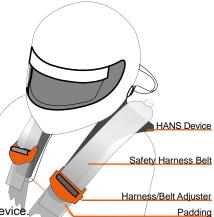
Install the <u>helmet tether anchors</u>.

- Pg. 10 Helmets without holes for tether anchors.
- Pg. 11 Helmets pre-drilled for tether anchors.
- Pg. 12 Helmets with threaded anchor terminals.
- Get in your car and try the product with all your safety gear in place and tightened.
- Practice exiting your vehicle wearing all of your safety gear.
- That's it you should be all set.



# <u>Overview</u>

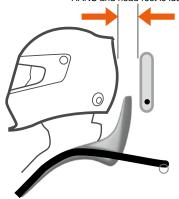
- The HANS Device is worn <u>under</u> your safety harness belts.
- Belt adjusters should rest on or below the lower portion of the HANS Device.
- Change or remove padding for best fit - pads are for comfort only.
- Never modify the body of the HANS Device.



A small space between helmet, HANS and head rest is ideal

# Head Rest Clearance

- The HANS Device may lightly contact helmet or head rest.
- If your HANS pushes your head forward uncomfortably, a more upright device may be required.
- The HANS Device may move back and forth a little during racing.



# Belt Mounting

If the mounting points for the belts are far behind the seat, the belt mounts should be very close together

> Belts may touch or even be crossed over each other if necessary

3-4" (75-100mm) distance between inner edges is typical

If the mounting points are close to the seat, the width between the inner edges of the belts should be equal to or 1" less than the width of the HANS collar

Mount shoulder belts

1-2" (25-50mm)

below horizontal.

HANS works with any 2" or 3" shoulder belts. 3" belts may wrap up HANS Device collar as shown below.



# Tethers

- Standard 18" (450mm) length fits most applications.
- Do not over tighten tether carrier screws!
- Tethers are dated. Replace every 5 years, after major impacts or sooner if wear is observed.

# <u>Helmet Anchors</u>

# Post Anchor

- To Attach Align slots in catch with flats on anchor, push in and slide catch rearward.
- To Release Align slots in catch with flats on anchor, push in and slide catch forward.

# QuickClick Anchor

- To Attach Open anchor by pulling orange release strap, slip tether loop over hasp, close.
- To Release Pull orange release strap and remove tether loop from hasp.

# LW2 Anchor

Tether is sewn directly to LW2 anchor, permanently connecting HANS to helmet.



Tether slides





# HANS Adjustable

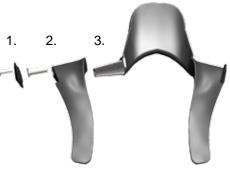
- These instructions apply to the HANS Adjustable only.
- Devices come pre-adjusted to your order. To change the angle follow these instructions.
- Use the numbers embossed on both sides to help line up legs evenly.
  Legs must be even with each other to work properly.
- Remove the epaulet screw using a 5/32" (4mm) Allen (hex) wrench. Remove the epaulet.
- Remove the main screw using a 5/16" (8mm) Allen wrench. Use the leg removal tool to loosen leg. See pg. 8 for more information on leg removal.
- Rotate the leg to the desired angle. Repeat with other side. Place on a flat surface to ensure both legs are evenly positioned and level. Legs must be even with each other to work properly.
- Tighten the main screw on each side. Do not over tighten. Torque spec is 10 lb-ft (1.4 kg-m), or fully seated plus one eighth turn. Install the epaulet screw and tighten until fully seated.





Leg removal tool.





# HANS Adjustable

Use only genuine HANS screws.



Main screws secure leg to collar. Epaulet screws secure belt guides. Devices come with 2 of each.

- Maximum Torque 10 lb-ft (1.4 kg-m) fully seated plus 1/8 turn.
- <u>Do not over tighten the main screw.</u> This screw uses special threads and will not loosen, even in severe use.
- Use a 5/16" (8mm) Allen wrench to tighten.



# HANS Adjustable

Removing and adjusting leg angle.

PREFERRED METHOD: Use the leg removal tool.



1. Remove epaulet and main screw.



2. Thread leg removal tool slowly into leg.



3. Tighten tool to slide leg off splines.

OPTIONAL METHOD:

1. Remove epaulet to expose main screw.

minimum 1/4" (6mm).



1A. Main screw fully tightened.



 Strike main screw gently against firm, soft surface or strike with soft mallet to slide leg off splines.

# HANS Adjustable FAQ

### What are the benefits of the HANS Adjustable?

The Adjustable provides award-winning HANS performance plus additional comfort by adjusting the angle of the device in 5-degree increments.

### Does the HANS Adjustable fit all types of racing seats?

Yes. The device adjusts in 5-degree increments from 10 to 40 degrees.

### What if the collar size I ordered does not fit me?

Please contact your dealer, who will be able to offer further assistance about fitting your HANS. The medium and large collars fit 90% of all drivers.

### How much does the HANS Adjustable weigh?

It weighs 970 grams. This is heavier than the Pro (550 g) and Sport II (770 g) but lighter than the Sport I (1,110 grams).

### How is the Adjustable manufactured? Is it fire-resistant?

It is made from a metal matrix Thixotropic molded construction before a polymer coating is applied. This DuPont Zytel® coating makes the Adjustable HANS extremely fire-resistant.

### How do the Spiralock® anti-vibration fasteners work?

The receiving threads are specially shaped to resist loosening from vibration by making full contact with the male fastener (screw).

### Can I order belt retention clips for the lower part of the legs?

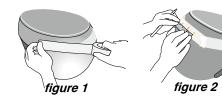
Yes. Please contact your dealer.

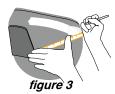
# Anchor Installation Instructions

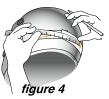
### Initial Steps - Helmets without holes for tether anchors.

- Apply masking tape around the bottom of your helmet approximately 1" (25mm) up from the top edge of the rubber molding (fig. 1).
- On the masking tape at the back of the helmet, mark three points 1.5" (39mm) above the rubber molding and spaced about a half inch apart. Connect the dots to create a horizontal line (fig. 2).
- 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 (fig. 3). 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 6" (150mm) forward from the rear center line on each side of the helmet to a point 1.5" (39mm) above the rubber molding (fig. 4). Make sure you have two marks (hole centers), each 6" forward from the rear center line and 1.5" above the top edge of the rubber edge molding\*.
- 5. Slowly drill a ¼" (6mm) hole at the two hole centers marked above. Drill through the helmet shell but <u>not</u> through the soft padding. A thin piece of sheet metal can be slipped between the shell and padding to help protect the padding (fig. 5). De-burr and clean the holes.

\*Tolerance for the anchor hole is +/- one half inch in any direction.







### Final Steps - Helmets without holes and pre-drilled helmets.

### Post Collar Anchors

- A. Gently pry helmet liner away from shell using blunt instrument (fig. 6) and insert the nutwasher inside the helmet against the shell using a wrench. Align with hole. Insert bolt through collar cap, spring and base and screw into nutwasher. Tighten with <u>the point of the anchor facing rearward</u>.
- B. Use small black wrench to hold the anchor collar outside of the helmet in position and tighten bolt (see pg. 12). Tighten ¼ turn beyond snug. The flats of the anchor collar should be parallel with the ground and <u>the point</u> of the anchor should face the rear of the helmet.

### LW2 and Quick Click Anchors

Gently pry helmet liner away from shell using blunt instrument (fig. 6) and insert the nutwasher inside the helmet against the shell using a wrench. Align with hole. Screw anchor into nutwasher. Hand tighten until the tether or hasp faces rearward. Use a 7/16" (11mm) wrench to hold the nutwasher inside the helmet and tighten exterior screw ¼ turn beyond snug.

THREADLOCKER - All HANS Device anchors are supplied with screws coated with a dry threadlocker compound. You must use threadlocker when assembling HANS helmet anchors.







Final Steps - Post Collar Anchors. Photo shows position and use of wrenches supplied with anchors.

### Anchor Installation Instructions Hex wrench Small wrench. tightens screw holds collar Rear of heimet

Large wrench holds nutwasher inside helmet (SA helmets only)

### SAH2010 Helmets with Bonded-In Threaded Anchor Terminals

You may have purchased one of the newest helmets marked Snell SAH2010. These helmets are certified for head and neck restraint system use. Helmets marked Snell SAH2010 have a bonded-in and threaded terminal (nutwasher)

making HANS anchor installation easy. Screw the anchor into the nutwasher. Hand tighten until the point on the collar (if post anchor) or hasp (if quick click) faces rearward. Tighten screw 1/4 turn beyond snug.



Snell SAH2010 decal located inside helmet

Bonded-in terminal on side of helmet



THREADLOCKER - All HANS Device anchors are supplied with screws coated with a dry threadlocker compound. You must use threadlocker when assembling HANS helmet anchors.

# Complete, Correct Anchor Installation





Screw or collar on post anchor style <u>faces rearward</u> after installation

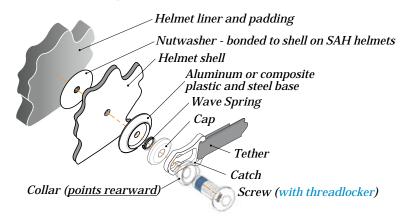
**Rear of helmet** 



Hasp / tether on quick click style <u>faces rearward</u> after installation

**Rear of helmet** 

# <u>Helmet / Post Anchor Exploded View</u>



# Frequently Asked Questions

### I can touch my chin to my chest with the device on. Are my tethers too long?

No. The HANS Device comes properly adjusted for all drivers. Unless you have changed the tether length it is fine and will work in an impact. The slack in the tethers is automatically taken up during impact.

#### When I put the device on, it rubs against my neck. Is that normal?

Yes. The front of the HANS Device is narrower to accommodate arm movement. Padding can be modified or removed - it does not affect the device's performance.

### What type of shoulder belts work best with a HANS Device?

Any SFI or FIA approved harness system works with the HANS Device. Two inch or three inch belts, as well as 4-5-6 or more multi-point systems are all fine.

### Do some shoulder belts slip off the HANS Device?

No. Properly mounted belts do not slip off the device. If your shoulder belts will not stay securely on the device, chances are that you do not have the belt mounts properly located in your chassis. See page 4 on shoulder belt mounting.

### I race on a short track at relatively low speeds. Do I need a HANS Device?

Yes. Serious head and neck injuries happen at impact speeds as low as 35mph. On short tracks with tight turns it is easy to be "Q-balled" almost straight into the wall.

### Can I share a HANS Device?

Provided that you are of similar physical size and shape to your partner, chances are good that you can share a HANS Device.

#### Do I need a special helmet?

No. HANS helmet anchors fit any competition approved racing helmet.

### Can I wear a "horse collar" foam pad with a HANS Device?

Yes. Remember foam collars are comfort accessories, not safety equipment. Wear one to stabilize your head and helmet on rough tracks.

### I have an unusual racecar. Do you make a HANS Device that will fit?

Yes. The HANS Device can be worn in virtually any vehicle (not just cars) that uses two shoulder belts as part of the driver restraint harness.

### How do I care for my HANS device?

HANS Devices need almost no maintenance but should be kept clean and dry. To protect them, HANS Devices should be stored out of direct sunlight. They may be cleaned with soapy warm water but avoid solvent-based cleaners. Ensure rubber top surfaces stay clean and free of wear. Tethers should be replaced after any major impact or every 5 years. Tethers carry dated labels. Check your helmet anchors for tightness occasionally.

### How much does a HANS Device weigh?

Professional devices weigh 550 grams. The Sport II weighs 770 grams, the Adjustable HANS weighs 970 grams and the original Sport I weighs 1,110 grams.

### What if my HANS Device is in an impact?

HANS Devices should be inspected periodically or after major impacts. Examine your device in bright sunlight and run your finger around the edges. Any sign of de-lamination, cracking or exposed composite material means the device has served its purpose and should be replaced. Check your helmet anchors for tightness.

### How long are the SFI and FIA certifications acceptable?

Different race series may have different rules regarding age of certifications. As of June 2012, SFI 38.1 requires recertifying your HANS every 5 years, and FIA 8858 certifications do not expire. Check our website or your race sanctioning body for more information.

### Can I buy parts and support for my older HANS Device?

Yes. The sliding tether upgrade which allows unrestricted vision fits all HANS Devices. We no longer offer parts or services for the original (pre-1998) Model 1 HANS Device.