

Protective Equipment Review

How it effects access

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Disclosure

I, Michael Kordecki do have a financial interest as sole inventor and owner of the RipKord technology and have entered into an exclusive licensing agreement with Riddell Sports



Helmets



With newer helmets the padding conforms to the head. Helmets fit better but come off easier.



Which is :

GOOD

The helmet can be removed much easier in case of a cervical spine injury or breathing emergency.

Bad

If the chin strap is not on correctly.....



Helmets



The older style helmets were concave in the front. Cheek pads needed to be removed.

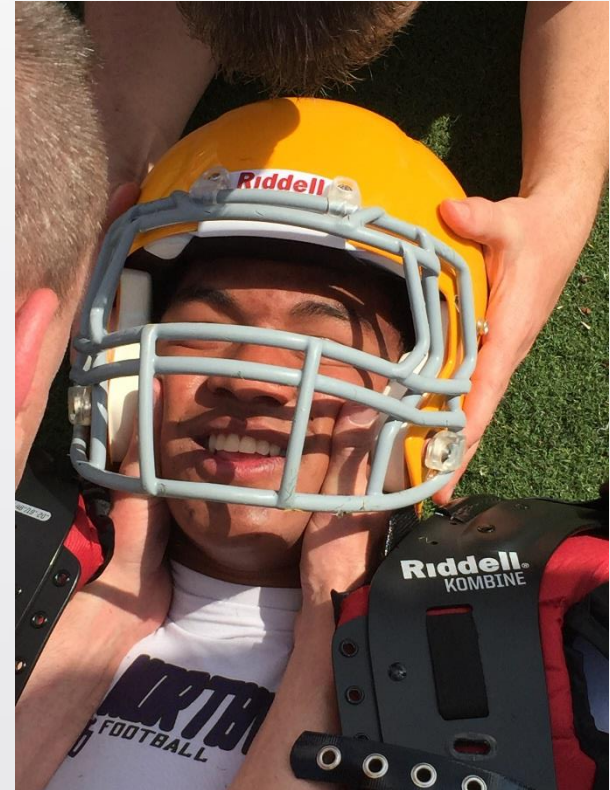
The newer helmets are more open in the front. Cheek pads do not have to be removed.



New Designs Facemask



New Designs Facemask 3-bar



Riddell Axiom

4 point quick release

Face shield stays in place during helmet removal



Vicis Zero2

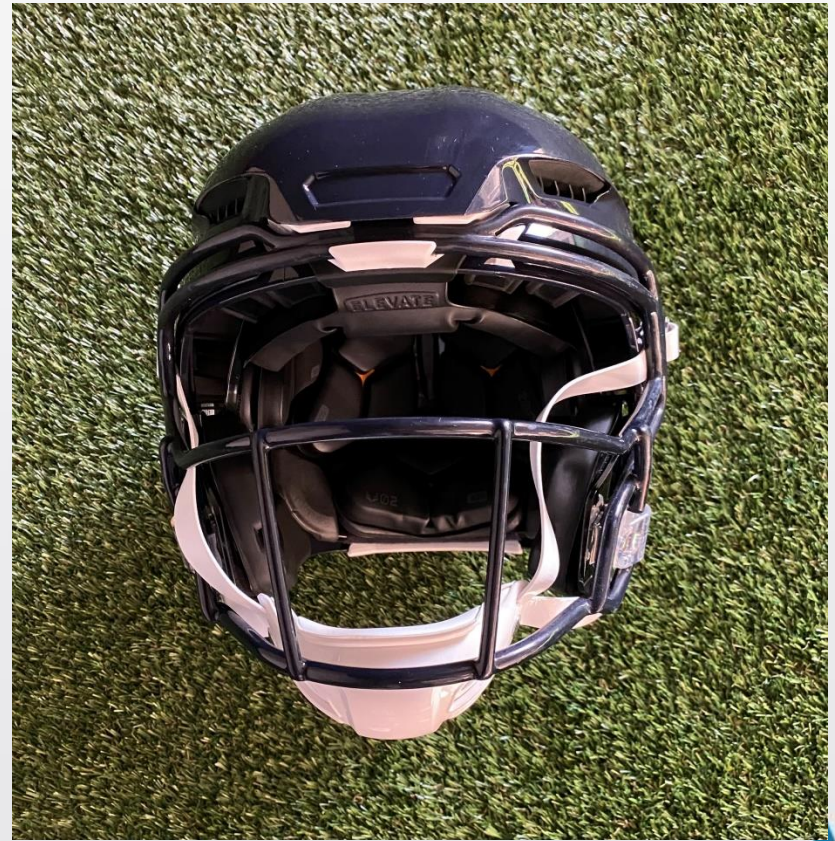
Lower loop straps are too big for FM extractor

Upper bar at nose bumper releases forward once the bottom loop straps are released



Vicis Zero2 Trench

Same helmet as Zero2 with an extra “cap”



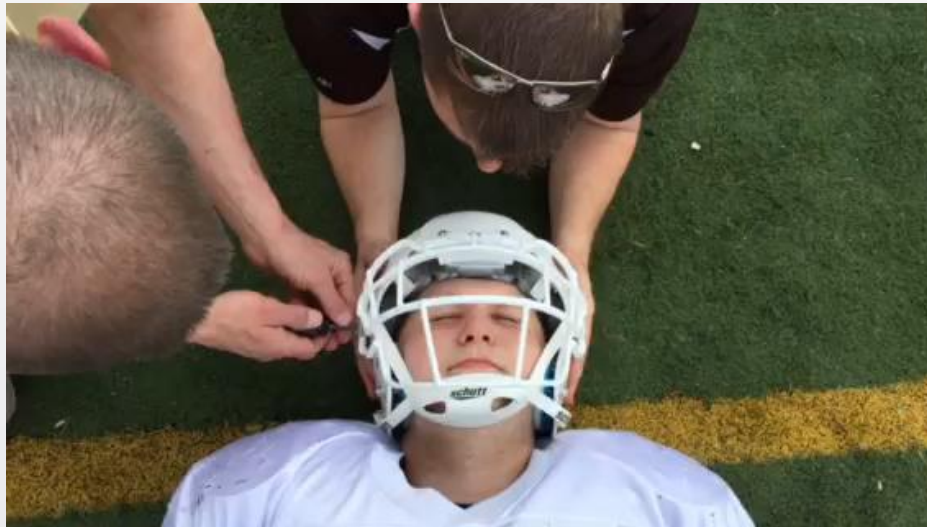
Schutt F7

$\frac{3}{4}$ Turn release on upper bar

Option of $\frac{3}{4}$ turn quick release on lower loop straps



Schutt $\frac{3}{4}$ turn F7 Facemask



Riddell Speed

Quick release lower loop straps

Traditional loop straps upper bar (Cut w/ FM extractor)

Release the upper loops straps FIRST





Riddell Speed Flex

4-point quick release

(move to the next loop strap if the first attempt is difficult)



New Designs Facemask



Some facemasks may be very difficult to remove



- Some loop straps are **NOT** accessible to a standard cutting tool (eg FM extractor) in its placement as it relates to the facemask in order to remove the entire facemask.
- Some loop straps located on the nose bumper are not flush, rather they are recessed into the bumper and do not allow access to a standard cutting tool in the event the screw and t-nut fail to disengage in order to remove the entire facemask.



Quick release hardware vs. traditional hardware

Traditional Helmet Hardware Is More Likely to Fail Following Use, Compared With Quick-release Designs

Julianne D. Schmidt, MA, ATC; Steven M. Zinder, PhD, ATC; Meredith A. Petschauer, PhD, ATC;
and Kevin M. Guskiewicz, PhD, ATC

The lateral hardware failed in 43% of the helmets outfitted with traditional hardware vs. 9.6% with QR



Quick release hardware vs. traditional hardware

Comparison of 3 Airway Access Techniques During Suspected Spine Injury Management in American Football

Julianne D. Toler, MA, ATC,† Meredith A. Petschauer, PhD, ATC,*
Jason P. Mihalik, PhD, CAT(C), ATC,*† Sakiko Oyama, MS, ATC,*†
S. Doug Halverson, MA, ATC,‡ and Kevin M. Guskiewicz, PhD, ATC*†*

The quick release helmets demonstrated less motion in the Cervical spine and took less time to remove the facemask than in helmets with traditional hardware using a cordless screwdriver.



Shoulder Pads

- Do you have access ?
- Can you open the front with scissors ?
- Can you open (bi-valve) the back with scissors ?
- Do the shoulder pads have to come off “over the head” ?
- Lower back pad ?



Football Shoulder pads



- This design makes it impossible to cut across the front or the back of the shoulder pads with standard athletic training shears
- The epaulettes are secured close and tight to the arches with prevents easy removal with standard athletic training shears
- For X-Tech consider using tin snips (due to short cutting distance)



Football Shoulder pads



- Paramedic shears may work better on some model shoulder pads
- Material such as rigid plastic that spans the entire anterior portion of the breast plate will prohibit the use of standard athletic training shears.



Restrictor Plate



Cowboy Collar



Riddell RipKord (quick release)



Riddell RipKord (quick release)



Difficult combination



Combination of

- 3 bar facemask
- Loop straps that cannot be cut
- Closed front shoulder pads
- Dark eye shield



Helmet + Shoulder pads



- Know your shoulder pads “front and back”.
- Be familiar with the different types of helmets and facemasks
- Have the proper tools “on-hand” to remove protective equipment in a safe quick and efficient manner
- Work closely with equipment manager or coach, when purchasing equipment
- **Practice Practice Practice !!!**



Thank You !!!

