



Lacrosse Helmet Facemask/Chinguard Removal Hints
for
Certified Athletic Trainers

Current lacrosse helmet design calls for a firm fit to the head of the athlete. The days of the lacrosse helmet being allowed to "spin" around the head are gone. A 2006 published study on the effect of removing a lacrosse helmet on the cervical spine alignment concluded that the helmet and shoulder pads of an injured lacrosse athlete should be left in place until they could be removed in a controlled environment (1). This study compliments accepted athletic training protocols for leaving football helmets in place on seriously injured athletes.

While many certified athletic trainers (ATs) are well versed in the removal of a football helmet facemask, the emergence of lacrosse helmets into one's world presents a "horse of another color". Review of current lacrosse helmets and discussions with the helmet manufacturers provides insight into effective methods of removing the facemask/chinguard in case of emergency.

The lacrosse helmet shall be NOCSAE approved and it shall fit properly. It is highly recommended to follow the manufacturer recommendations for helmet fitting. Some general thoughts for helmet fit are:

1. Helmets are generally measured in inches. Charts are available from manufacturers to show the proper size helmet for the athlete's head;
2. The helmet is to sit squarely on the head, with the front of the helmet approximately one finger width above the eyebrows. This way the helmet will protect the forehead;
3. Padding of the helmet shall give firm and uniform pressure about the head. The skin of the forehead should move as the helmet is moved from left to right and from back to front;
4. There shall be a four-point chin-strap. The chin strap shall be tightened so that there is no slack;
5. Properly fitted helmets must take into account the hairstyle of the athlete; if the athlete has a great deal of thick hair and then receives a "buzz" cut the helmet must be refitted.
6. Proper helmet fit does not need to cause the athlete to have headaches.
7. Screws and T-nuts shall be replaced with new ones at the beginning of each season.
8. The facemask shall attach cleanly to the helmet; it shall be replaced if it is bent.

ATs should review all helmets and be prepared with knowledge of how to deal with their own team helmets as well as those of opponents.

Removing the Facemask/Chinguard of the Lacrosse Helmet

The chinguard of the lacrosse helmet attaches to the facemask. For clear access to the athlete's face and neck it is necessary to remove both the facemask and chinguard.

Tools.

There are two types of tools appropriate for the facemask/chinguard removal: a power screwdriver and a cutting tool. The AT will find cutting tools to be specific to the helmet. Common cutting tools are the: FMXtractor, the Trainer's Angel, anvil pruner, modified pruning shears and other cutting tools the AT personally prefers. Specific types of tools will be designated for specific helmets in the following information.

The primary tool the AT will find helpful is the power screwdriver. Screws on the lacrosse helmet are a "combo" screw which means that a flathead or Phillips head screwdriver will work. There is no recommendation on the specific brand of power screwdriver. Suggestions for the power screwdriver include:

- A. One with a light to allow better viewing of the mechanical action;
- B. 2 charged batteries at all times;
- C. Charging the batteries daily;
- D. Familiarize yourself with the torque of the screwdriver to prevent accidental damage to the screw and/or T-bolt.

Screws/Clips.

Helmets have between 3 to 5 specific screws to be removed and/or clips to be cut. Screws may be stainless steel, covered brass or anodized screws. They are similar in mechanism to football screws in that the screw attaches to a T-bolt. Many of the screws attaching the clip to the chinguard also attach the chinguard to the helmet. In this case the screw must be removed leaving cutting the connecting clip useless. Lacrosse helmet clips are smaller and may be thinner than football clips, making them easier to cut.

Specific Helmet Facemask/Chinguard Removal Hints.

The information following regards the current helmets for 2008. However, these hints may be applicable to multiple helmets from the same manufacturer. It is highly recommended that the AT not only have some responsibility in the fitting of the lacrosse helmet, but that the AT and his/her staff practice removal of the facemask/chinguard prior to the season. Practice only benefits the AT and the injured athlete with quick and efficient removal of the items allowing effective assessment of the athlete. Problems of removal can be identified and strategies developed to eliminate or compensate for them.

The chinstrap should remain snug and attached at all four (4) points on the helmet.

The following lacrosse helmets are shown in alphabetical order by manufacturer.

Brine Triad:

1. Use a screwdriver to remove the screws on either side of the chinguard (red area in this photo)- may need angle or extender on the screwdriver;
2. Remove the top center screw on the visor (may remove the other 2 side screws on the visor to remove entire visor);
3. Facemask/chinguard will remove as one unit.



Brine Triumph:

1. Use a screwdriver to remove the screws on either side of the facemask; the screw must be removed entirely to allow the will separation from the helmet;
2. Use a screwdriver to remove the screw at the visor;
3. The facemask/chinguard unit should come away as a single unit.



Cascade CPX, CLH2, PRO7, CS, etc:

1. Remove 2 side screws with screwdriver or clip with cutting tool;
2. Remove top screw at visor with screwdriver, one may be able to cut clip under visor;
3. Cut chinguard at back vent on both side with cutting tool;
4. After cutting the chinguard the facemask/chinguard should come off as a unit.



DeBeer Identity (Gait):

1. Screws are brass with a rust resistant coating; T-square bolts are nickel plated;
2. Remove the 2 top screws on the visor (upper orange);
3. Under the visor piece (orange), remove this screw;
4. With cutting tool (Trainer's Angel not likely to work here), cut the chinguard first layer (orange on this helmet) on each side back as far as you can. The plastic is a medium density polyethylene which is relatively easy to cut. It is necessary to cut the first layer of the chinguard as there is a recessed screw which is impossible to access. NOTE: Future runs of the helmet will show the screw to be accessible outside the chinguard.
5. Removing the lower (orange) plastic piece will allow the entire facemask/chinguard to come off as a unit. There is still some secondary chinguard plastic (dark blue) that may or may not need to be trimmed based on the AT's preference.



Onyx Riddell (formerly Shamrock Lacrosse):

1. Screws are stainless steel;
2. Use a power screwdriver to remove the 2 side screws; the entire screw must be removed to allow separation of the chinguard;
3. Use a power screwdriver remove the screw at the visor;
4. The entire facemask/chinguard should come off as a unit.



Warrior Viking:

1. Use a screwdriver to remove the 2 screws on each side; the bottom screw must be removed entirely to allow the chinguard to release;
2. Use a screwdriver to remove the screw at the middle of the visor;
3. The facemask/chinguard will remove as one unit.



References:

1. Sherbondy, P, Hertel, J and Sebastianelli, W, "The Effect of Protective Equipment on Cervical Spine Alignment in Collegiate Lacrosse Players," The American Journal of Sports Medicine, May 2006, 34:1675-1679.

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