

Tear-Off Machine to Shield Installation



NOTE: We recommend installation on a new unscratched shield.

WARNING: Velcro adhesive might not stick properly to older shields due to scratch proof coating peeling off due to age.

- 1. The following instructions are for a new shield with protective film on both sides. If shield does not have the protective film cover shield with a clear food wrap to protect during installation.
- 2. Sit in vehicle with helmet on your head and using a marker place a small mark to identify the horizotal center point of eyes. This is the comfortable height at which you will look out of the shield while sitting in the race car seat. Transfer marks to the backside of shield also for later use.
- 3. Remove shield from helmet, then remove pegs that hold manual tear offs if applicable.
- 4. Mark the vertical centerline of shield using tape measure. This is the center from right to left. Transfer these marks to the backside of shield for later use.
- 5. Using a pinch type clamp, clamp the tear-off machine to the center point of your shield. Make sure protective material is used to prevent damage to the shield or tear-off machine.
- 6. By hand, hold each end of guiding system tight to shield and verify that the 2 outside quick release mounting points are within the shield.

Allstar Performance 8300 Lane Dr., Watervliet, MI 49098 Phone: (269) 463-8000 Fax: (800) 772-2618 www.allstarperformance.com



- 7. Also check that the installation will not interfere with the shield pivot points, side air input ports or shield opening and closing.
- 8. If hole placement or interference is a problem, reposition tear-off machine if possible. If repositioning is not possible you may not be able to use this machine with this style helmet.
- 9. While unit is clamped to shield mark the backside of the shield with a marker to show the inside and outside edge of the Velcro located on the tear-off machine. Marking the inside and outside will help with placement of the Velcro strips that are installed in Step 13.
- 10. Remove protective film or food wrap from front of shield and clean shield with rubbing alcohol pad provided making sure to remove any dirt or oil from outside of shield.
- 11. Prep front of shield Velcro mounting area with primer 94 provided using the guidelines on the bac side of shield from Step 9. Pinch the black dot on 3M Primer 94 to start flow. Use primer <u>ONLY</u> in the Velcro mounting areas, being <u>EXTREMELY</u> careful not to get primer on viewing area. Let primer dry completely (about 5 to 10 minutes).
- 12. Cut the Velcro into four strips matching for the Velcro on the unit using the guidelines as a template. These will be attached to the shield in the next step.

WARNING: You only have one chance to get this next step right; once you touch the Velcro adhesive to the shield you cannot reposition it without damaging the adhesive.

- 13. Remove the backing material from Velcro strips and mount to the shield without touching the adhesive tape surface with your fingers. Use the guidelines on the backside of shield from Step 9 to properly position the Velcro strips.
- 14. Press the Velcro strips firmly in position trying to remove all air bubbles. Let Velcro adhesive cure for 72 hours before any use.
- 15. Remove the black aluminum film housing from the film guide lens.
- 16. Install the film guide lenses onto the shield with Velcro fully engaged.
- 17. With the film guide lenses Velcroed into position; using a ¼" drill from the outside of the shield drill the two quick release mounting holes using the holes in the lens as the guide.
- 18. Remove film guide lens from the shield and install the two quick release pins into the backside of the shield and use the E-clips on the front side to hold pins in place.
- 19. Re-install black aluminum film housings onto the lens.
- 20. Install the machine on shield <u>starting with new film housing side</u> ¹/₄"quick release pin and clip. Work Velcro together from new film housing side to motor housing side, then install second clip to complete installation of tear-off machine to helmet shield.

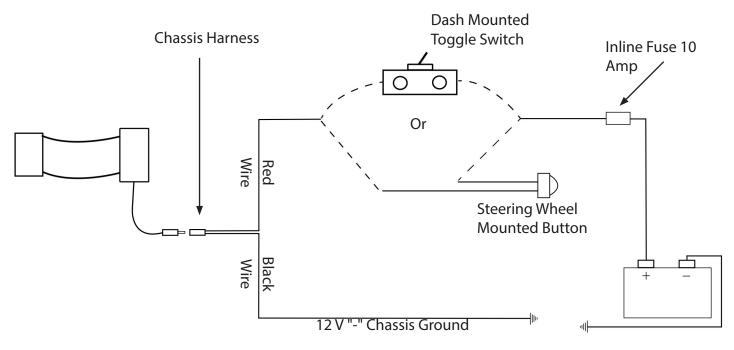
Allstar Performance 8300 Lane Dr., Watervliet, MI 49098 Phone: (269) 463-8000 Fax: (800) 772-2618 www.allstarperformance.com



Vehicle Wiring Instructions

Note: Additional wire, connectors and heat shrink may be required for proper installation. Soldering is recommended for all connections.

- 1. Install the film advance switch in steering wheel or dash panel (depending on which installation kit purchased) in a convenient and easy to reach location.
- 2. Determine a 12V (+) power supply (preferably a fused power source with no more than a 10-amp fuse) and connect this to one terminal or wire of the film advance button/switch.
- 3. Route the vehicle harness starting with the plug-in end located close to the driver seat. Verify the plug is located at a convenient location for connecting to the Tear-Off Machine with the driver in the driver's seat.
- 4. Use cable ties to secure the vehicle harness using caution to avoid sharp panels which may damage wiring.
- 5. The red wire from the vehicle harness connects to the remaining wire or terminal of the film advance button/switch (depending on which installation kit purchased).
- 6. The black wire from the vehicle harness connects to a proper chassis ground.
- 7. Connect the unit to the vehicle harness. With the top cover removed from the motorized film housing verify the spindle rotates in a clockwise direction viewed from the top. You are now ready to install film into the Tear-Off Machine.

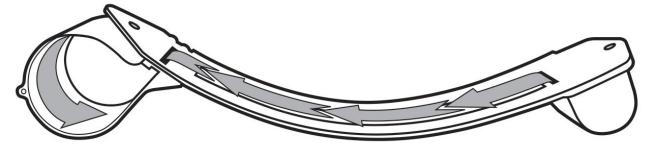


Allstar Performance 8300 Lane Dr., Watervliet, MI 49098 Phone: (269) 463-8000 Fax: (800) 772-2618 www.allstarperformance.com



Film Loading Instructions

- 1. Remove Tear-Off Machine from helmet.
- 2. Start with a clean and dry unit.
- 3. Loosen both mud scrapers screws and move scraper to upper most position.
- 4. Remove the top and bottom covers on the motorized film housing and set motor aside.
- 5. Lay the unit front side down on a soft cloth to begin routing the film.
- 6. Viewing the unit from the bottom, install the new film in the clear film housing so the film rotates counter-clockwise as it exits the film housing.
- 7. With a pair of scissors, cut a 2" long lead in the shape of a "V" on the end of a new roll of film.
- 8. Carefully separate the inner and outer guide lenses and slide film from one housing into the other while keeping the film in the guiding slots. Insert the film into the motorized housing slot.
- 9. Locate the film as it comes out of the inside slot on the motorized housing and pull about 8" of film out of the bottom side of the motorized film housing.
- 10. Cut off the "V" shaped tail with a scissors to create a square end.
- 11. Position the film on the center of the motor spindle with the film square to the axis.
- 12. Tape film to spindle in position with good quality masking or duct tape.
- 13. Rotate bottom of motor housing a few turns turn in a counter-clockwise motion and reinstall into the housing and secure with the two screws in the bottom cover.
- 14. Install on helmet shield starting with new film housing side quick release pin and clip.
- 15. Working Velcro together slowly from film housing side to motor housing side.
- 16. Plug unit into power cord and push button to advance film, make sure the film rolls flat and smooth.
- 17. Install top cover.
- 18. Reposition scrapers down till they <u>almost</u> touch the film and then lightly tighten screws.
- 19. Tip: Put a 2" long strip of electric tape over (2) vertical forward facing screws on scraper to keep mud out of screw heads.



Allstar Performance 8300 Lane Dr., Watervliet, MI 49098 Phone: (269) 463-8000 Fax: (800) 772-2618 www.allstarperformance.com