



 HammerheadArmor  Hammerheadarmor  HammerheadOff-RoadArmor

2021-20XX CHEVROLET TAHOE/SUBURBAN GUARDIAN SERIES TVI BUMPER





SAFETY

Know safety, no injury. Know injury, no safety. ~Author Unknown

If there are any questions, call 1-855-HHTOUGH

READ ALL SAFETY INSTRUCTIONS BEFORE INSTALLATION

- FOLLOW ALL INSTRUCTIONS FOR PROPER ASSEMBLY
- WEAR APPROPRIATE EYE PROTECTION
- EXERCISE CARE WHEN LIFTING COMPONENTS
- USE APPROPRIATE TORQUE FOR BOLTS
- RE-TORQUE HARDWARE AT EVERY OIL CHANGE.



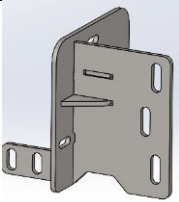

BOLT DIAMETER (INCH)	THREADS PER INCH	TORQUE (POUND - FEET)
1/4	20	7
5/16	18	14
3/8	16	25
7/16	14	40
1/2	13	60
9/16	12	88
5/8	11	120
3/4	10	200
7/8	9	302
1	8	466

BOLT DIAMETER (mm)	THREAD PITCH (mm)	TORQUE (POUND-FEET)
6	1.0	7
8	1.25	16
10	1.5	32
12	1.75	55
14	2.0	88
16	2.0	140
18	2.5	195
20	2.5	275
22	2.5	375
24	3.0	475

	<p>WARNING: Cancer and Reproductive Harm</p> <p>www.P65Warnings.ca.gov</p>
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Note: Brush guard configuration may differ.

I. PARTS LIST

ITEM 1	<i>Guardian Series TVI Bumper</i>	QTY. 1	ITEM 2	<i>CUT TEMPLATE</i>	QTY. 1
					
ITEM 3	<i>FRAME MOUNT WELDMENT</i>	QTY.2	ITEM 4	<i>LICENSE PLATE MOUNT</i>	QTY. 1
					
ITEM 5		HARDWARE KITS			
<ul style="list-style-type: none"> ✓ HARDWARE KIT #58 (60K-56-0058) ✓ HARDWARE KIT #443-01-0086 					

REMOVE CONTENTS FROM BOX AND VERIFY ALL PARTS ARE PRESENT.

If there are any questions, call 1-855 HHTOUGH or email HHORDERS@hammerheadarmor.com

II. TOOL LIST

- ✓ A good friend
- ✓ Basic tool set
- ✓ Blue masking tape
- ✓ Torx 15 bit
- ✓ 7mm socket
- ✓ 10mm socket
- ✓ 15mm socket
- ✓ 18mm socket



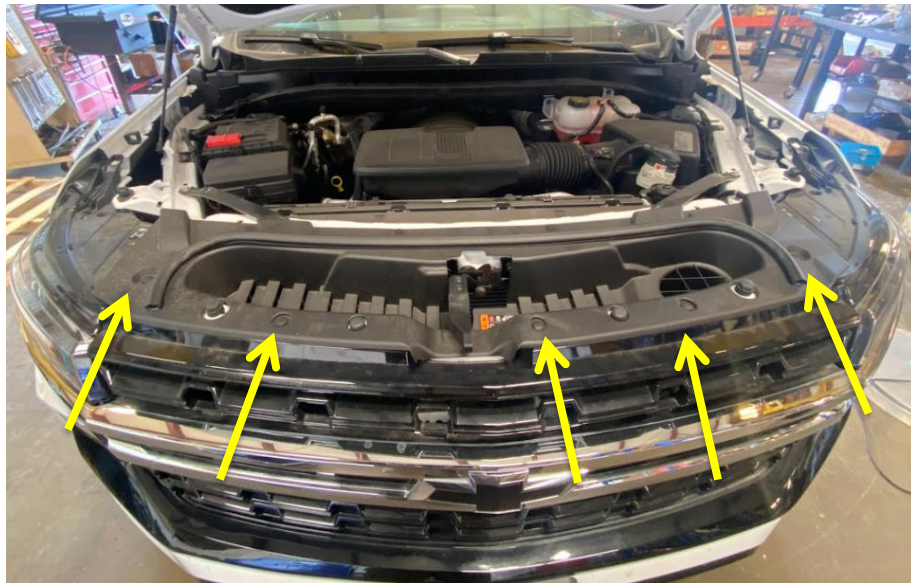
- ✓ 3/4" socket
- ✓ Ratchet
- ✓ Ratchet extension

III. VEHICLE PREPARATION

1. Park vehicle on level surface.
2. Engage parking brake and disconnect battery.
3. Using blue masking tape, mask along the profile of your truck above the bumper. This will help protect your truck from any accidental scratches.

IV. REMOVAL OF BUMPER

1. Open the hood and find the (9) plastic rivets found on top of the grille shroud. Using a trim removal tool pry the head and body of the rivets out. Set plastic rivets aside to be reused.



2. On each side of the vehicle, locate the (6) T15 screws (3 per side). This will give you access to the (6) 7mm bolts (3 per side) holding the fender onto the body. Remove these and set aside for reuse.



- Using a T15 bit, locate the two screws at the back of the hood release lever. Remove the screws and lever so the upper panel will lift off the vehicle. Then reinstall the two T15 screws and lever in case the hood closes during install.



- On the bottom of the bumper, locate the (6) M7 bolts in the center and (4) T15 screws on each side in front of the wheels. Use a 7 mm wrench or socket to remove the (6) M7 bolts and a T15 to remove the screws in front of each wheel. Set hardware aside to be reused.



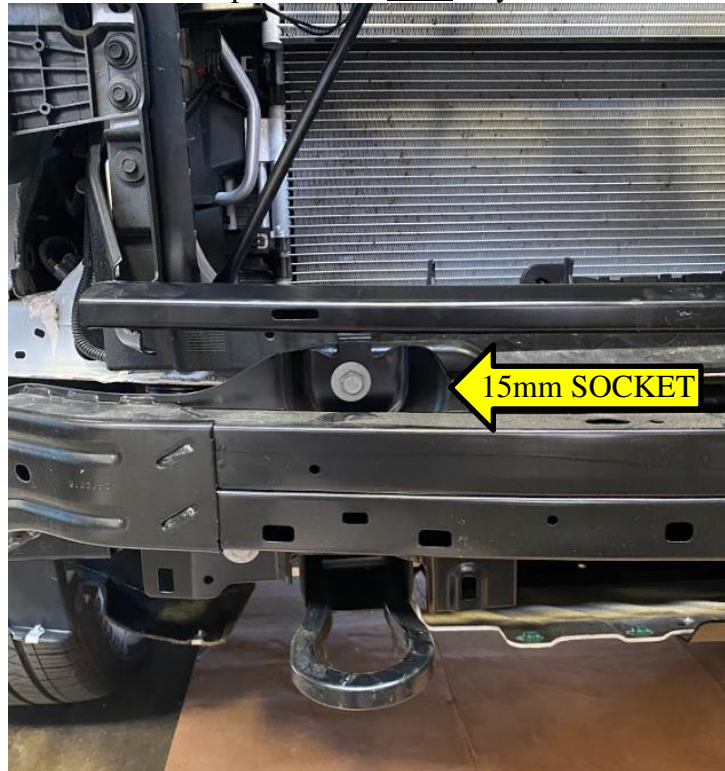
- Next with a 10mm socket or wrench begin by removing the (6) 10mm bolts holding the top of the grille to the radiator support. With the bolts removed, remove the bumper by lifting up the top of the grille. There are two clips holding the bumper in place, lifting up and pulling forward on the bumper to remove it from the vehicle. Remember to unplug any wiring harness.



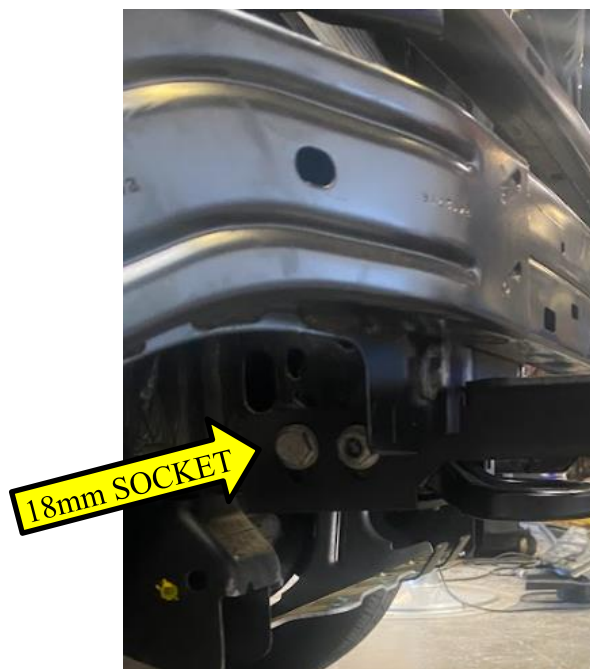
6. With the bumper removed, you can now remove the lower air guide. The lower air guide is held in place on the bottom with (4) plastic rivets. Using a trim removal tool remove the inner plug then the outer plug will pop out.



7. Using a 15 mm socket, remove (6) hex head bolts (3 per side) from the bumper bar as shown below. Set hardware aside for reuse. Note the bumper bar will **NOT** stay installed for this installation procedure.



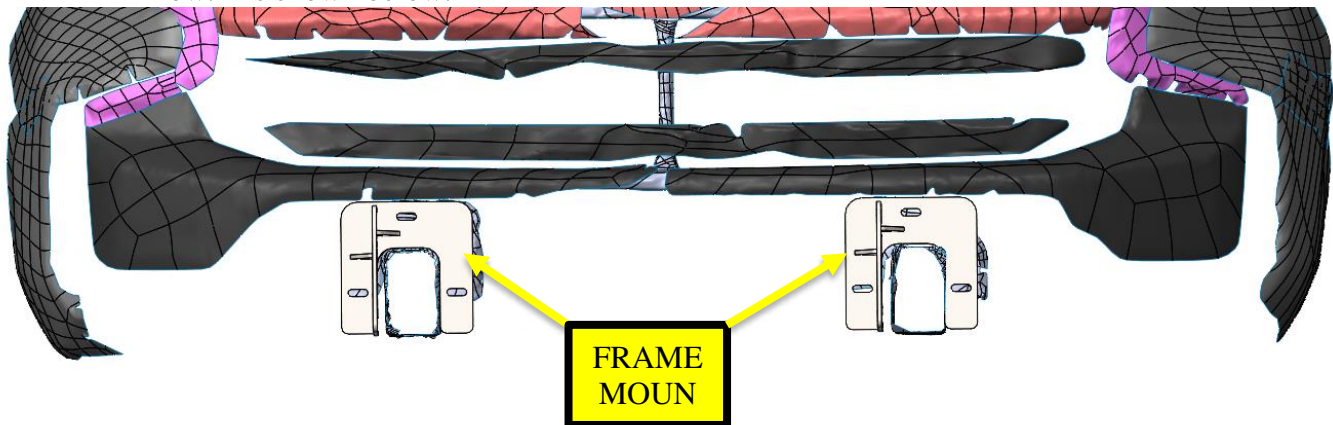
8. Using an 18mm socket and wrench remove the (4) 18mm bolts (2 per side) securing the tow hooks to the frame. Keep the tow hooks and hardware for bumper install.



9. **IF Grille has sensors. Remove wiring harness and sensors. Make a note of sensor location and orientation.

V. INSTALLATION OF HAMMERHEAD TVI BUMPER

1. Lay TVI bumper face down on a carpeted surface or a piece of cardboard. Install all lights in bumper with brackets and hardware provided by light manufacturer.
2. Using a 15mm socket or wrench install the frame mount brackets on the frame horns using the 15mm hardware removed previously. Repeat on the opposite side. Leave hardware hand tight for now. As shown below.



3. Next, install the bumper using Hardware kit #58 and both Weldnut tab #3. Hand tighten hardware so the bumper can easily be adjusted and moved. Pull bumper so that it is as far forward in the frame mount slots as possible. Push bumper downward so that it is in the lowest adjustment position. Note: Make sure bumper is level at this point.



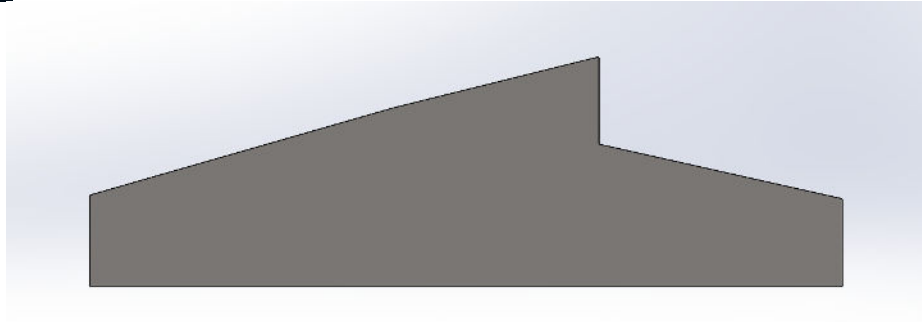
4. Using a tape measure, take measurements from the ground to the top of the bumper. Measure each spot marked below and record the measurements. The measurements should be consistent across the top of the bumper from left to right.



5. Next, remove the bumper and frame mounts. Place bumper and frame mounts on a carpeted surface or on a piece of cardboard.
6. Reinstall the OEM grille that was removed in step IV. 5. Replace hardware so that it is firmly mounted back on the vehicle. Once grille is installed, begin covering the center portion of the grille with masking tape. As shown below.



7. Next, Using the Tahoe Cut Template provided. Trace the shape onto paper and using scissors cut out template.



8. Align the paper cut template on the vehicle as shown below. Do this on both sides. The bottom of the cut template will help draw a straight line across the corners of the bumper.



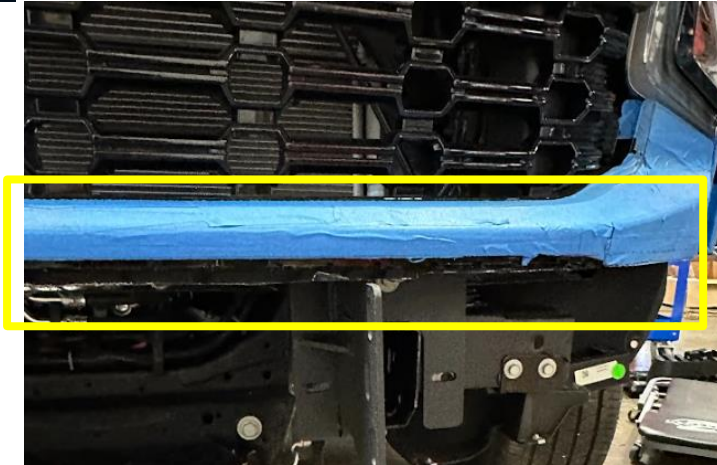
9. Using the cut template and the measurements taken in step. 4. Draw a line across the front of the vehicle for the 1st cut. Take your time during this step. Measure many times and double check the cut line before proceeding to step 9.



10. Put on safety glasses, face shield, earplugs, and gloves. Using a cutoff wheel, oscillating multi tool, electric grinder, or air die grinder, cut the 1st cut line across the grille. Go slow and take your time.



11. With the 1st cut complete. Remove the center trim left over.



12. Reinstall the frame mounts and bumper as steps 2 through step 4 outlined earlier.
13. With the frame mounts and bumper installed there will be a gap in the grille where the center trim was removed. Measure this gap and mark the grille for the 2nd cut. Extend this line from the gap to the wheel well.



14. Before cutting, the bumper can be loosened and angled out of the way. Put on safety glasses, face shield, earplugs, and gloves. Using a cutoff wheel, oscillating multi tool, electric grinder, or air die grinder, cut the second cut line across the grille. Go slow and take your time.



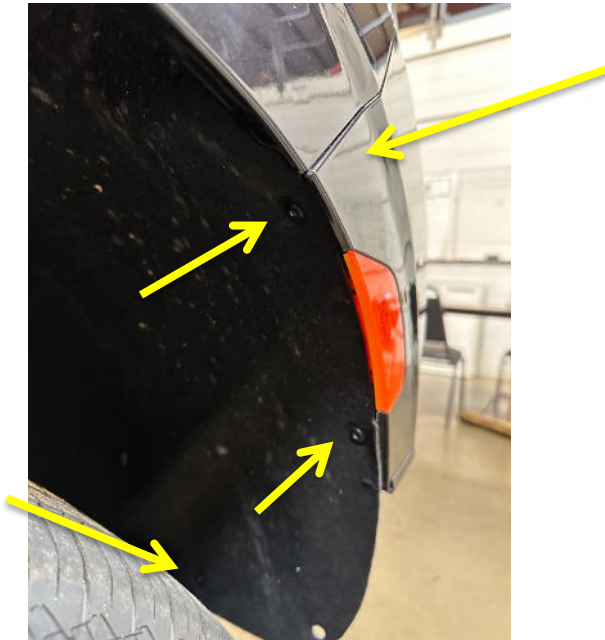
15. Once the second cut is complete. Remove the grille again by removing any hardware that was replaced to keep grille firmly on the vehicle during cutting. Place grille on a carpeted surface or on cardboard.
16. Now with the grille removed from the vehicle. Remove masking tape. Flip the grille upside down to apply the U-trim provided in install kit #313. Apply U-Trim on the left and right sides of the Grille along the cut line where the grille thickness is minimal.



17. Next, start attaching the grille from the center and working your way out. This allows for the clips to line back up properly making sure the grille is on correctly. Work your way out to the fender flairs.



18. Using a 7mm wrench or socket reinstall the (6) flange bolts (3 per side) from the fender wheel well to the bumper. Followed by installing the (6) T15 (3 per side) screws in the inner fenders as well. NOTE: there will be some hardware not reused**



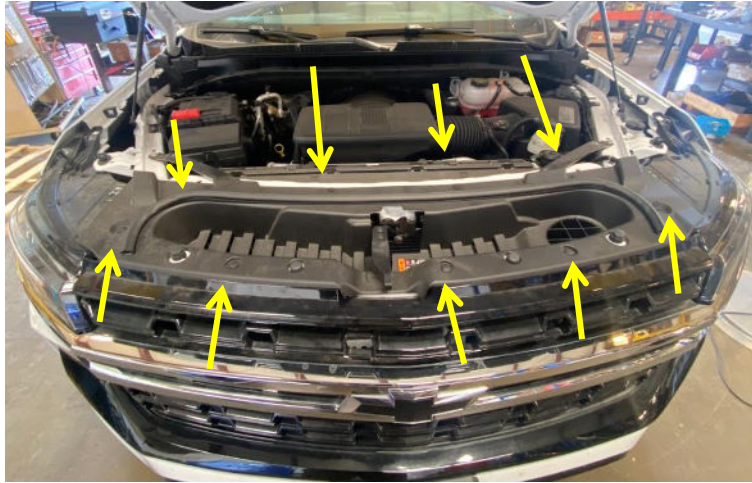
19. Using a 10mm socket or wrench, reinstall the (6) 10mm bolts on the top of the grille



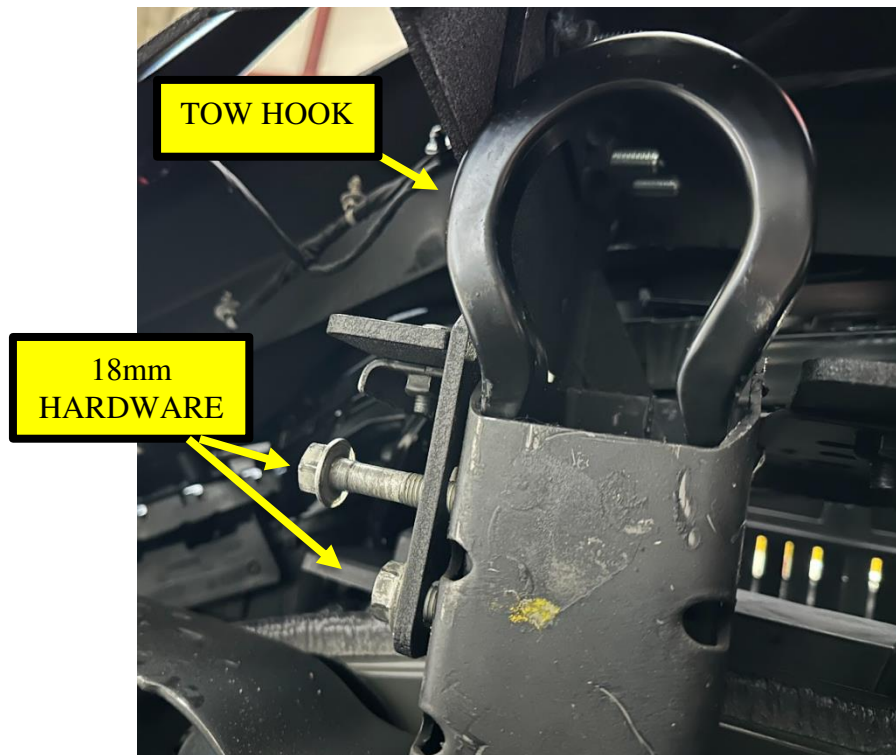
20. Next, Using a T15 bit remove the (2) T15 screws connecting the hood latch release lever again,
Note: Do not shut the hood before reattaching the hood latch release lever



21. Next, Reinstall the (9) push rivets back into the top grille shroud.



22. Next, install tow hooks using 18mm OEM hardware removed earlier.



23. Install sensors and sensor harness using the sensor retainer clips and rubber grommets supplied in install kit #313. Run the sensor harness through the bumper and attach the side blinker connectors first. Then gently push the sensors into the grommets. Applying the sensor retainer clips once sensor is in place. With all the sensors installed reconnect the main harness connector on the passenger side.



24. Finally, make sure bumper is level and torqued down based on the torque chart provide at the top of these instructions.



**Congratulations! Your product installation is now complete.
Thank you for your purchase!**