# Installation Guide for the 2023+ Chevy Silverado/GMC Sierra Light Duty Truck Winch (PN 19434344) and Installation Kit (PN 19434379)

#### **Installation Summary**

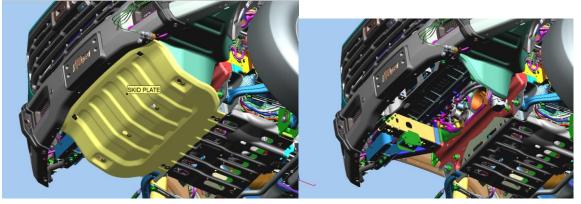
- A. Winch Controller and Mount Bracket Installation
- B. Winch and Fairlead to Bumper Installation
- C. Winch Controller Power Cable, Block Kit (84669070), and Mega fuse Installation
- D. Winch Controller Harness to Winch Routing
- E. Center Top Cap Trim Preparation and Front Bumper Reinstallation
- F. Chassis Ground Cable Attachment for Battery Ground
- G. On/Off Winch Controller Switch Installation
- H. Winch Hook Installation
- I. Final Harness to Battery Connections and Winch Operation Check

## A. Winch Controller and Mount Bracket Installation

1. Remove the front passenger wheel and wheel liner. This provides access to route the winch controller into position from below.



2. Remove the skid plate on the front underside of the truck to provide access to route the winch controller wire harness to the winch.



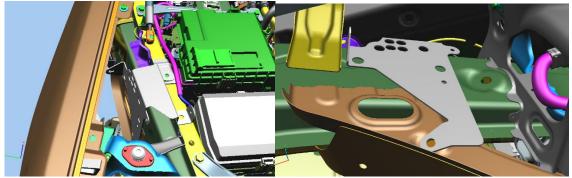
3. Remove the M8 bolt that secures the front battery tray support to the inner frame rail. Replace it with the double ended M8 stud.



4. For GMC trucks <u>only</u>, bend the upper fender bracket tab located behind the passenger head light (see pictures below) down 90 degrees to provide extra clearance for the winch control module. Use a channellock or vise grip pliers. This will provide added clearance during the installation process.



5. Loosely drape the larger primary winch controller mount bracket over the passenger side frame rail behind the front head light and outside the battery and in front of the hood hinge. The bracket's top rear bolt hole will align with the double ended stud.





6. Attach the small secondary bracket to the control module with the two M5 x 8 mm screws, flat washers and lock washers as shown. These fasteners will be in the winch kit with the controller and harness.



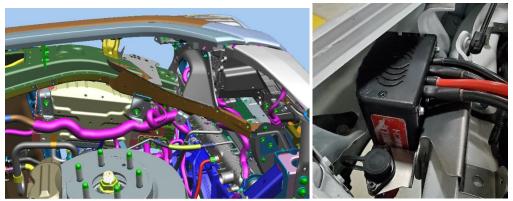
7. Place the wired remote plug in the secondary bracket receiving hole. Securely tighten the two wired remote plug mounting bolts and nuts into the bracket.



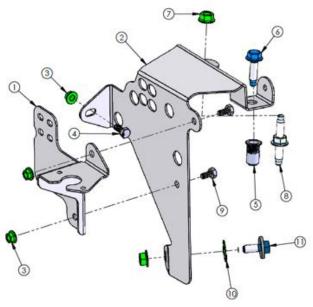




8. Route the long winch controller harness from below through the passenger side wheel well and up through the frame rail opening at the main attaching bracket. Shift the main attaching bracket up and rearward angling the lower leg toward the rear of the truck. Then, move the controller completely to the top of the frame rail. Positioning adjustment of the bracket will be needed as the controller is moved into place.



9. Loose fit the M6 -1.0 x 16mm bolt head (bolt ④ in bracket and fastener diagram below) into the control module T-slot closest to the controller's flat side next to the frame rail. Guide the bolt threads through the bracket slot manipulating the bracket rearward to insert the bolt. Loosely attach the flange nut on the bolt a few turns (nut ③ in bracket and fastener diagram below).



ITEM NO.	SERIAL #	PartNo	DESCRIPTION	QTY.
1	D039636	ATIB1009AA	BRACKET, COME UP SOLENOID, TI LD WINCH MOUNT	1
2	D039634	AT1B1008AA	BRACKET, COME UP SOLENOID ATTACHING, TI LD WINCH MOUNT	1
3	D014725	11546389	M6 X 1.0 NUT - HEX FLANGE	3
4	91310A332	AEV91118AA	M6 X 1.0 X16 HEX HEAD CAP SCREW, CLASS 10.9 PS5873S	1
5	95105A191	11601734	M8 X 1.25 RIVNUT (GRIP RANGE 0.7-3.8)	1
6	D036407	11588724	M8 X 1.25 X 30 HEX FLANGE BOLT	1
7	D004461	11546377	M8 X 1.25 HEX FLANGE NUT	2
8	D040050	11603968	M8 X 1.25 X 24.05 DOUBLE ENDED STUD	1
9	91310A330	AEV91193AA	M6 X 1.0 X 12 HEX HEAD CAP SCREW	2
10	D049496	11588441	BOLT RETAINER	1
11	D051734	11601723	M8 X 1.25 X 20 HEX SCREW AND WASHER ASM	1



10. At the lower front controller edge install a M6 -1.0 x 12mm bolt (item <sup>(1)</sup>) in the bracket and fastener diagram above) through the back of the large primary bracket into the small secondary bracket. The bolt head will be next to the frame rail and the bolt threads will point outward. Loosely tighten the flange nut a few turns (item <sup>(3)</sup>) in bracket and fastener diagram above).



11. At the front middle controller edge install a M6 -1.0 x 12mm bolt through the back of the large primary bracket into the small secondary bracket (item <sup>(1)</sup>) in the bracket and fastener diagram above). The bolt head will be next to the frame rail and the bolt threads will point outward. Fully tighten the flange nut (item <sup>(3)</sup>) in bracket and fastener diagram above).



12. Fully tighten T-slot nut and lower front controller edge flange nuts.



13. For the large primary bracket's lower attachment hole install the M8 x 1.25 x 20 hex head bolt with conical washer in the vehicle frame rail (item 11 in the bracket and fastener diagram above). Use a magnetic extension pickup tool to feed the bolt through the large oval shaped window in the frame rail down to the circular bolt hole opening.



- 14. While holding the bolt threads extending through the hole, hold the threaded bolt with your right hand and remove the magnetic extension pickup tool. With your left hand press the hex head bolt outward from behind against the frame rail. From outside the frame rail press the conical spring washer (item <sup>(1)</sup>) in the bracket and fastener diagram above) inward over the bolt threads until it is flush against the frame rail.
- 15. Hand tighten the M8 hex flange nut (item  $\bigcirc$  in the bracket and fastener diagram above) on the primary bracket bottom bolt.



- 16. Hand tighten the M8 hex flange nut (item  $\bigcirc$  in the bracket and fastener diagram above) to the primary bracket double ended stud on the battery tray.
- 17. Mark the forward most hole on the top primary bracket as the location to install the rivnut (paint pen or marker recommended). Loosen the mounting nuts at the double ended stud and lower primary bracket mounting bolt. Reposition the primary bracket out of the way and drill a 13.5 to 14 mm diameter hole at the marked rivnut location. If metric drill bits are not available drill a 17/32-inch diameter hole, or if drills are only available in 16<sup>th</sup> of an inch increments, then use a 9/16-inch drill bit.



- 18. Add rust preventative to the drilled hole.
- 19. Install the M8 rivnut on upper frame rail for the forward primary bracket bolt mount (item <sup>⑤</sup> in the bracket and fastener diagram above).
- 20. Reposition the primary bracket assembly to the bolting attachment locations. Securely tighten the M8 bolts and nuts at the three mounting points (item <sup>®</sup> and <sup>⑦</sup> in the bracket and fastener diagram above). Torque the M8 bolts to 22 Nm.



#### B. Winch and Fairlead to Bumper Installation

 Remove the front bumper from the truck. Refer to Service Information Document ID: 6103251 for removal and reinstallation instructions. <u>Document ID: 6103251 (gm.com)</u>



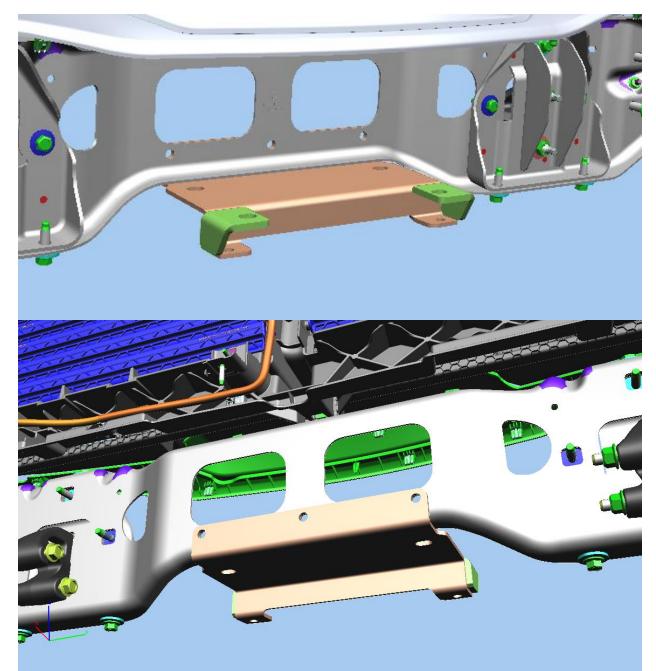
- 2. Install the "COMEUP" fairlead and front license plate bracket (where required) on the front bumper.
  - a. License plate bracket (where required): Obtain the license plate bracket and fasteners from the installation kit. Align the license plate bracket bolt holes and fairlead window slot to the fairlead's back side. The license plate bracket will sandwich between the front bumper and fairlead. When properly installed the license plate bracket overhangs on the top side of the fairlead. Attach the bolts and mounting knobs to the bracket. But, do not secure the license plate backer plate and front license plate until later after the winch hook is installed.



b. Fairlead: From the winch kit box locate the fairlead and two M10 low profile bolts with washers and nuts. Place the fairlead on the front side of the bumper. Place the bolt head with lock washer on the rear inboard side of the bumper in two places and press the bolt through the fairlead on the front side. On the forward side add a flat washer and nut in two places. Torque the nuts to 58 Nm each.

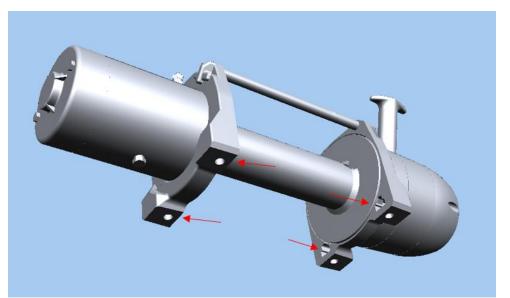


3. Position the winch mount platform aligning the three attachment bolt holes behind the three bumper cross member bolt holes. Install three M10 x 1.5 x 25 flange bolts in the holes with the bolt head on the front side of the bumper cross member. Secure three M10 x 1.5 hex flange nuts on the back side of the bumper. Torque to 58 Nm.

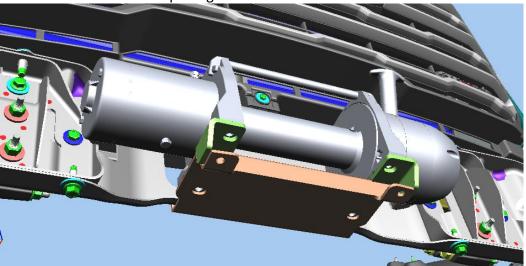


4. Insert square nuts from the winch kit box at 4 places in the winch mounting feet pockets.\_\_\_\_\_





5. Place the winch feet down on the winch mount platform, aligning the mount feet bolt holes to the four slotted openings.



6. Bolt the winch to the front bumper mounting platform at the four mounting feet into the square nuts with four M10 flange hex head bolts from the winch kit box. Torque the four bolts to 58 Nm. The front two bolts will require a crow's foot extension on the torque wrench to access the bolt head and achieve the 58 Nm torque (see pictures below). Use the crow's foot at a 90-degree angle to the torque wrench to maintain the moment arm and achieve the 58 Nm torque.



- 7. DO NOT REINSTALL THE FRONT BUMPER UNTIL INSTRUCTED TO AT A LATER STEP IN THE PROCESS. THE SKID PLATE WILL NOT FIT IF THE FRONT BUMPER IS INSTALLED FIRST. First, when instructed to do so in later steps route and attach the winch electrical harnesses to the winch. Then, the skid plate must be attached before the front bumper is reinstalled.
- C. Winch Controller Power Cable, Block Kit (84669070), and Mega Fuse Installation

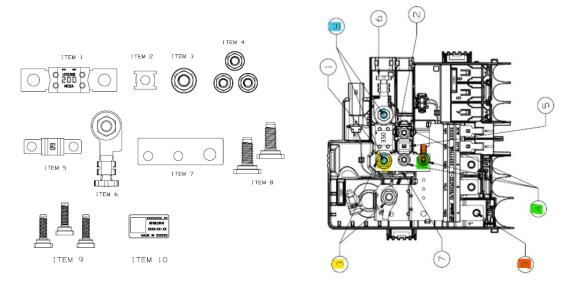


1. Remove the top cover from the Prefuse

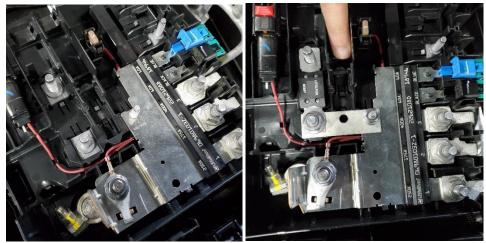
2. Install the following components from Block Kit 84669070 contained in the AEV winch installation kit (items 3, 4,7,8, and 9) referencing the diagrams and pictures below. Discard the remaining parts in the Block Kit 84669070 (items 1, 2, 5, 6).



Item	DPN	Description	Qty
3	15512212	M8 Nut	1
4	15512213	M6 Nut	1
7	33375927	Busbar	1
8	35038621	M8 Stud, Mathread	2
9	35038623	M6 Stud, Mathread	1

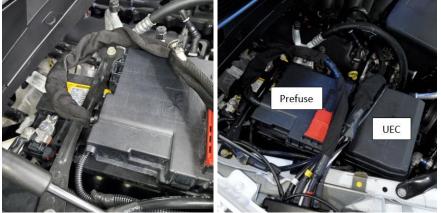


350A Mega Fuse – Note: Discard the 200A Mega Fuse contained in Block Kit 84669070

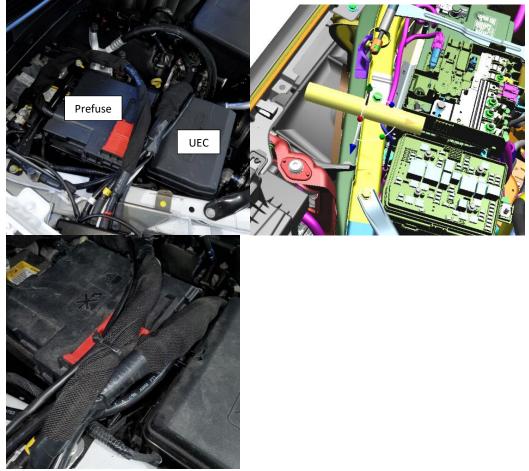


- 3. Obtain items a (350 A Mega fuse) from the Comeup winch kit box and item b (M8 flange nut) from the AEV winch installation kit. Install the 350 A Mega fuse on the two M8 threaded studs. Place the power cable terminal on the rearward most M8 threaded stud routing the cable as shown below. Secure the power cable terminal to the M8 stud with the M8 flange nut.
  - a. 350 A Mega fuse
  - b. M8 flange nut

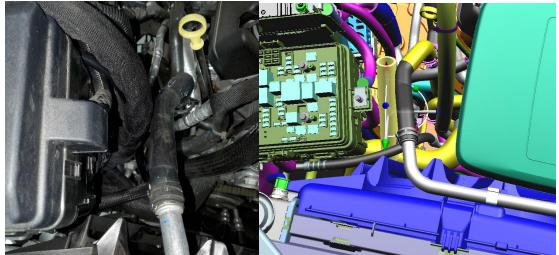
4. Reinstall the Prefuse cover.



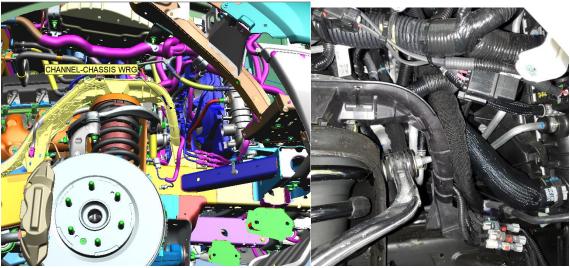
- D. Winch Controller Harness to Winch Routing
  - 1. Route the controller to winch harness bundle between the Prefuse box to the rear and Underhood Electrical Center (UEC) to the front (see picture)



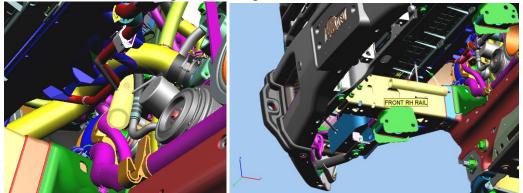
2. Route winch harness bundle downward between the inboard side of the UEC and outboard side of the hose heater outlet assembly.



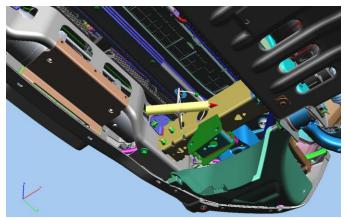
3. Route winch harness bundle down from the UEC to the frame front passenger corner through the chassis wiring channel.



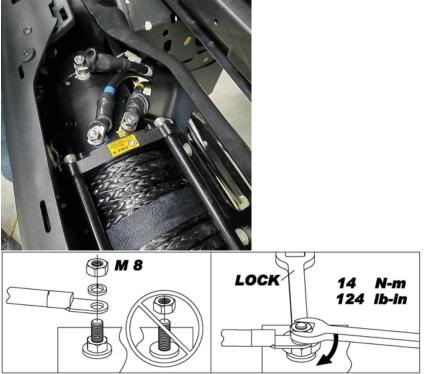
4. At the bottom of the chassis wiring harness channel route the winch wiring harness inboard and forward along the front right hand frame rail



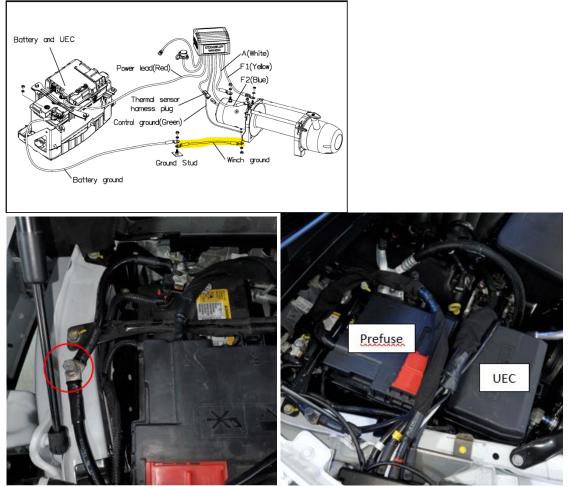
5. Continue routing the winch wire harness forward along the front passenger side frame rail to the passenger side of the winch.



6. Route the Blue, White, and Yellow marked harness end terminals through the passenger side bumper window. Secure each of the terminals to the corresponding color winch threaded studs by holding the lower nut on the stub and fastening the upper nut clockwise to a torque of 14 Nm. Include a lock washer on each threaded stud per the diagram shown here.



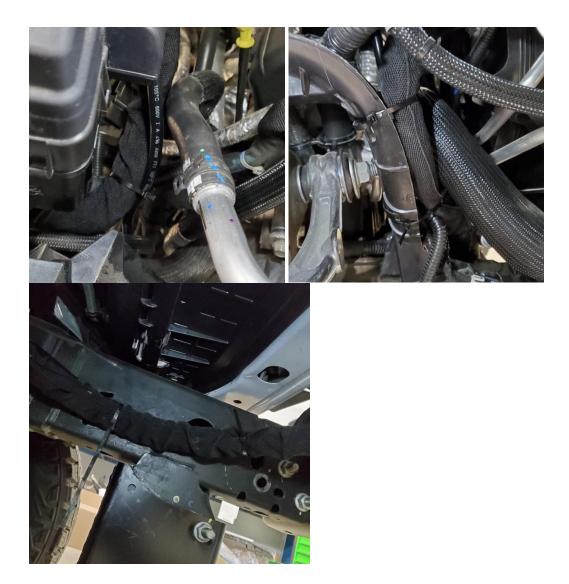
7. Install the separate longer black 2AWG cable from the chassis ground stud to the winch ground. Attach one end to the chassis ground stud located at the rear passenger underhood corner. Route the other end on the same path as the winch controller to winch harness between the Prefuse and UEC. Route the chassis ground stud to the winch ground cable down through the chassis wiring channel, and then downward and forward to the winch.



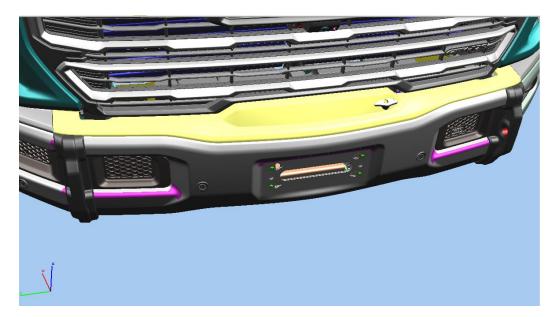
8. At the winch route the chassis ground stud to the winch ground cable below the bottom of the bumper and place the end terminal on the winch's bottom threaded stud. Also, place the control ground (green with outer white sheathing) wire connector on the same winch bottom threaded stud. Secure both terminals to the same winch threaded stud by holding the lower nut on the stud and fastening the outer nut clockwise to a torque of 14 Nm. Include a lock washer on the threaded stud.

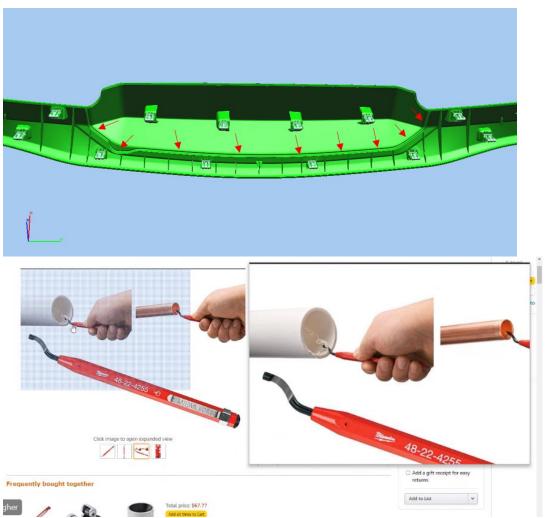


- 9. Zip tie the winch harness bundle, and the separate longer black 2AWG cable from the chassis ground stud to the winch ground (referred to as the two wire bundles below), together to surrounding attachment points in at least six locations as shown.
  - a. Zip tie the two wire bundles together at one (1) location downward through the engine at the inboard side of the UEC.
  - b. Zip tie the two wire bundles at both the upper (1) and lower (1) portion of the chassis wiring harness channel
  - c. Zip tie the two wire bundles together routing the zip tie through a window in the passenger side frame rail in two (2) locations along the path to the front bumper.
  - d. Zip tie the two wire bundles together at one (1) location behind the bumper and winch as the separate wires split off to their winch attachment points.

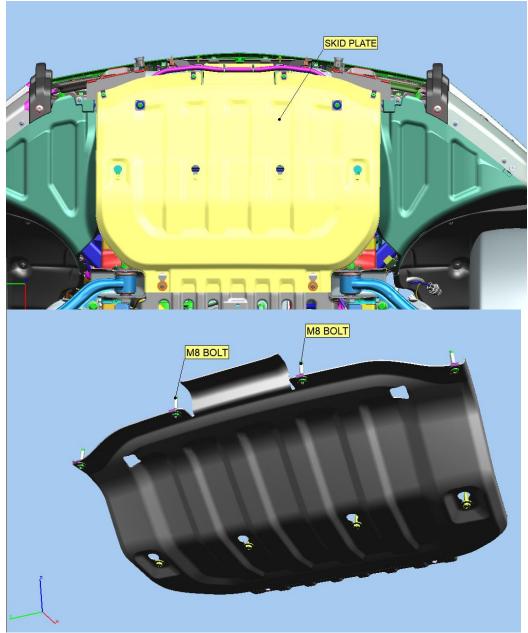


- E. Center Top Cap Trim Preparation and Front Bumper Reinstallation
  - Remove the front bumper top cap center piece. Refer to Service Information Document ID: 6100867 for removal and reinstallation instructions. <u>Document ID: 6100867</u> (gm.com)
  - Prepare the top cap center piece for installation with the winch. On the back side of the center top cap cut out the center area by following the groove line (see arrows on image). Remove rough edges and burrs with a reaming pen (see image). Do not reinstall the top cap center piece until a later step, after the front bumper has been reinstalled.





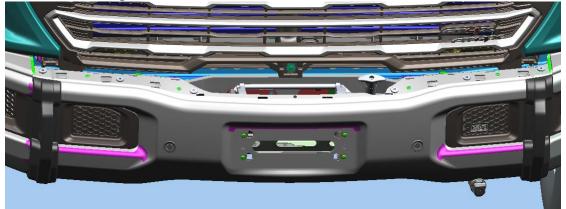
3. Install the skid plate. Replace its two front mounting bolts under the winch with two M8 x 1.25 x 34.05 bolts from the installation kit. They are 10 mm shorter than the original bolts.

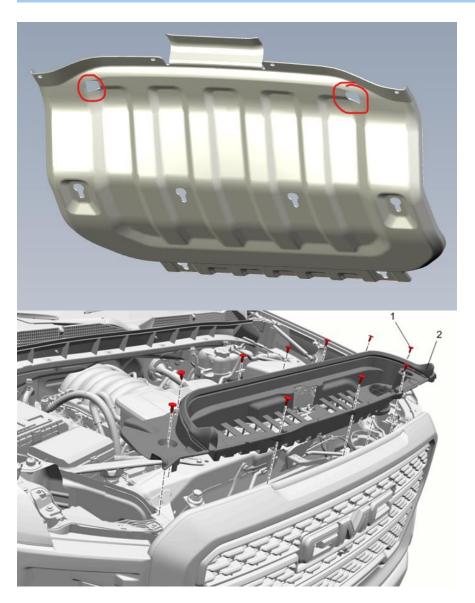


4. Using an Allen wrench remove the winch T-handle to avoid damage or scratching during front bumper installation. Keep the T-handle and Allen bolt for reinstallation.



- 5. Reinstall the front bumper. Refer to Service Information Document ID: 6103251 for reinstallation instructions. <u>Document ID: 6103251 (gm.com)</u>. Use the two access holes near the front skid plate as shown below to install the lower bumper mounting bolts.
  - DO NOT reinstall the air intake splash shield (2) at the top of the grill until directed to after drilling a hole in it for the winch on/off switch.





- 6. Reinstall the top cap with center piece cut out to the front bumper. Refer to Service Information Document ID: 6100867. <u>Document ID: 6100867 (gm.com)</u>
- 7. Using an Allen wrench reinstall the winch T-handle.



# F. Chassis Ground Cable Attachment for Battery Ground

- 1. Unscrew the Chassis ground stud at the rear passenger-side underhood corner of the frame rail next to the pre-fuse.
- 2. Double nest the two ground cable terminals under the chassis ground stud and tighten it to the frame rail. One will route to the battery negative terminal. <u>Do NOT attach the</u> <u>cable to battery negative terminal until the end of the winch installation process.</u> The other previously installed routes to the winch.

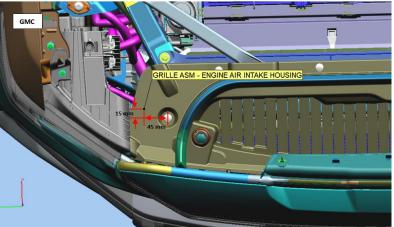


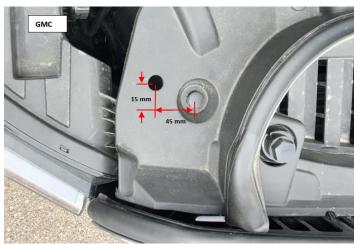
## G. On/Off Winch Controller Switch Installation

- 1. Reconfirm which brand is the truck: a Chevrolet or GMC. This will determine the hole location for the winch on/off switch, as each brand has a different air intake splash shield (GRILLE ASM ENGINE AIR INTAKE HOUSING).
- 2. While the air intake splash shield is still removed from the truck, mark the on/off switch center position. Viewing the air intake splash shield from above locate the passenger

side front pushpin hole. Measure from the pushpin hole as follows (see picture below for each brand truck).

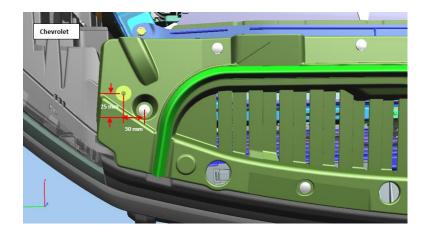
a. For <u>GMC</u> trucks measure 15 mm rearward and 45 mm outboard. Mark the location to drill a hole for the winch on/off switch.





b. For <u>Chevrolet</u> trucks measure 25 mm rearward and 30 mm outboard. Mark the location to drill a hole for the winch on/off switch.





3. Drill a 5/8-inch diameter hole for the on/off switch.



4. Unscrew the thin 2.5 mm thick hex nut from the underside of the switch button rim. Slide the nut over the male end of the quick connect. Store the nut in a safe place as it will be re-installed.



5. Thread the included washer (24 mm OD, 16 mm ID) over the quick connect male end of the on/off switch until it is seats under the switch button rim.



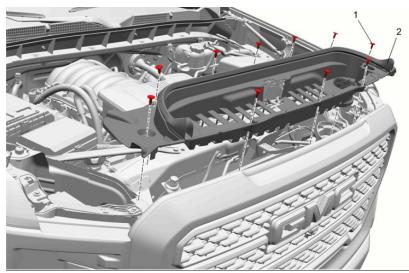
6. Thread the quick connect through the top of the drilled hole. Press the washer and button flush with the top surface of the air intake splash shield.



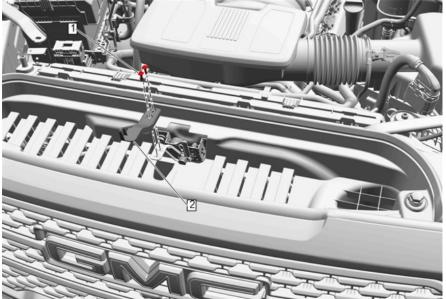
7. Reinstall the thin 2.5 mm thick hex nut by threading it over the quick connector. Screw the hex nut to the threaded switch button housing until its flush with the underside of the air intake splash shield. Firmly tighten the hex nut.



8. Reinstall the air intake splash shield (2) at the top of the grill with intake air baffle retainers (1).



9. Reinstall the secondary release latch (2) and hood latch actuator bolt (1).



10. To complete the winch controller on/off switch installation attach the quick connect male end from the button switch to the female end quick connector from the winch controller.





## H. Winch Hook Installation

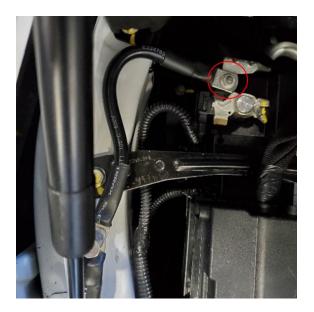
1. Install the rubber winch hook isolator over the synthetic rope loop. Install the clevis hook to the synthetic rope loop.



2. (Where required) attach the license plate backer plate and front license plate to the license plate bracket with the bolts and mounting knobs.



- I. Final Harness to Battery Connections and Winch Operation Check
  - 1. Locate the short cable connected to the chassis ground stud. Secure the free end terminal to the existing battery negative terminal M6 x 1.0 nut.



2. Attach the wired remote cable to the wired remote plug at the winch controller.



- 3. Turn on winch module by pressing the on/off switch located on air intake splash shield. The winch control module will beep, as it is not paired with the wireless blue tooth remote.
- 4. Check that the winch operates. Put outward tension on the winch rope and toggle the wired remote switch to the OUT position confirming the rope extends away from the winch. Maintain outward tension on the winch rope and toggle the wired remote switch to the IN position confirming the rope retracts inward. Retract the rope until the winch hook is tight against the front bumper.
- 5. Turn off the winch by pressing switch button. When off the winch controller will no longer beep.
- 6. Installation is complete.