

EL-35616-300-A Kit



EL-38125-300-A Kit

New Terminal Probe and Remover Kits Available

Electrical diagnosis requires the right tools well as the right knowledge. Two new kits of wiring tools, engineered to GM specifications, are now available through the GM Tools and Equipment website (U.S.) at gmtoolsandequipment.com. Both kits are GM approved and designed to support proper diagnosis without damaging terminals or harnesses.

EL-35616-300-A Terminal Probe Kit

The EL-35616-300 kit features the most popular probes and components that are required to service the majority of current GM vehicles. It includes a package of male terminals, two 48-inch patch cords, and eight different probes, including the EL-35616-58 probe required to probe the Nano 50 mini female connectors. Compared to the complete J-35616-F kit, the EL-35616-300 kit is a less expensive option.

The EL-35616-300 kit includes:

963716-2-Pkg	Terminal, Male (10pk)
J-35616-64b	Probes, Micro 64, Male Flex (2pk)
J-35616-65b	Probes, Micro 64, Female Flex (2pk)
J-35616-35	Probes, Male Terminal Test (2pk)
J-35616-14	Probes, Test, Green 150, Male (2pk)
J-35616-16	Probes, Yazaki Lt, Green, Male (2pk)
J-35616-2a	Probe, Flex 150 Mp, Male, Gray Boot
J-35616-4a	Probe, Spade, Male, Pink Boot
J-35616-20w	Cord, Patch, White, 48"
J-35616-20g	Cord, Patch, Green, 48"
EI-35616-58	Probe, Female Connector

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Customer Care and Aftersales

Generation 2 Volt Manual Service Disconnect Base Inspection

When servicing a 2016-2019 Volt (2nd Generation) high voltage battery, it may be possible to neglect to remove the four fasteners on top for the Manual Service Disconnect (MSD) base and lift the high voltage battery cover with the MSD base still attached. As a result, the two high voltage terminals can become strained inside the MSD base and not operate properly when the MSD is reinstalled.

Misalignment of the MSD base and subsequent terminal damage can cause a high resistance connection that causes further damage to the base.

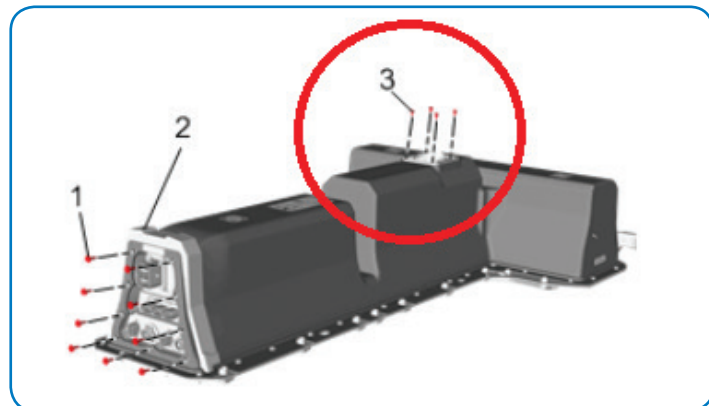
To help address this condition, an additional step has been added to the high voltage battery cover installation procedure (SI Doc ID 4162125) that calls for checking for terminal damage and proper alignment of the MSD base with the high voltage cover opening.

When checking the terminals, ensure the terminal fingers are aligned to the terminal slot. The terminal fingers should be centered to the terminal slot and should not be misaligned, bent or deformed.

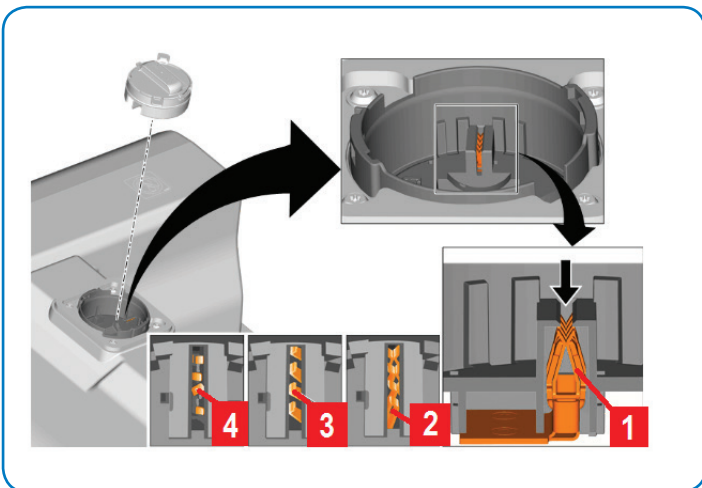
The proper vertical alignment of the terminals depends on the positioning of the orange high voltage cable. If the cable is moved or manipulated, the terminals may rotate out of the correct position.

The new installation procedure in the Service Information includes instructions for the MSD base to be discarded and replaced with a new base should the terminals show any signs of damage.

A properly aligned terminal without any damage will easily receive the MSD when the high voltage battery cover is reinstalled. Be sure to use four new fasteners for the MSD and tighten them in sequence.



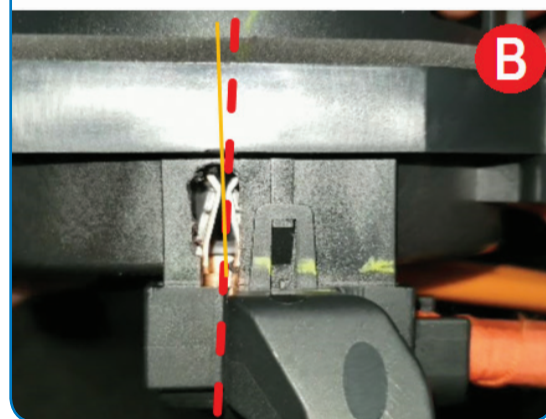
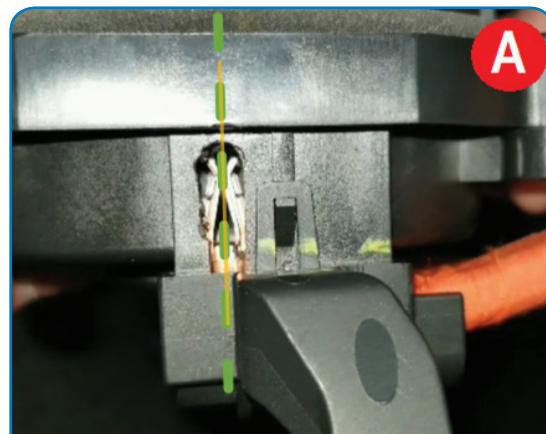
Four MSD base fasteners



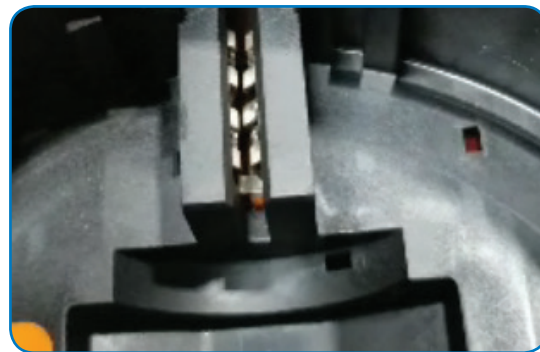
Ensure proper alignment (1) and identify terminal damage (2, 3, 4)

Once all battery cover fasteners are tightened to specification, perform a smoke test on the Rechargeable Energy Storage System using the required special tools.

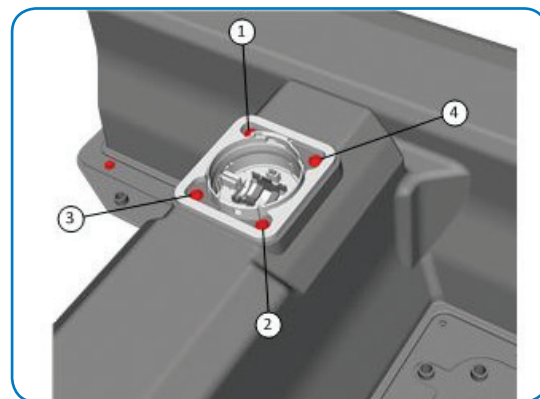
Thanks to Joe Ciagala and Lane Rezek



Proper vertical alignment of the terminals (A) and misaligned terminals caused by manipulating the orange high voltage cable (B).



Properly aligned terminals with no damage



Use four new fasteners for the MSB.

New Terminal Probe and Remover Kits Available

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EL-38125-300-A Terminal Remover Kit

Removing terminals properly from the connector body without damaging any components requires using the correct pick. To ensure the correct tools are used during diagnosis, the EL-38125-300-A kit contains the most popular picks, removers, and release tools that are required to service the majority of current GM vehicles.

🙏 Thanks to Chuck Berecz

The EL-38125-300-A kit includes:

J-38125-11A	Pick, Terminal, Wide (Blue)
J-38125-12A	Extractor, Terminal (Green)
J-38125-21	Remover, Micro 64 Terminal (Red)
J-38125-553	Extractor, Terminal (Black)
J-38125-36	Tool, Tyco 280 Terminal Release
J-38125-215A	Release, Terminal, Kaizan (Purple)
J-38125-213	Remover, Terminal (Gray)
EL-38125-58	Release Tool, Terminal

Enabling and Disabling Passive Unlocking

The passive unlocking feature (RPO ATH) can be enabled and disabled on 2019 CT6, Escalade, XT4, Bolt EV, Camaro, Cruze, Malibu, Silverado 1500, Spark, Suburban, Tahoe, Trax, Volt, Acadia, Sierra 1500, and Yukon models, excluding vehicles equipped with the Remote Ready Start Package (RPO AP8). This is a new feature of the keyless entry system for the 2019 model year.

If the passive door unlocking feature is disabled, the doors will not unlock when pressing any door handle button, or the tailgate will remain locked when pressing the tailgate release, and the turn signals will flash quickly four times.

The passive unlocking feature can be cycled between enabled and disabled using the Remote Keyless Entry transmitter (key fob).



Passive entry button on the door handle

Passive Unlocking Enable

To enable the unlocking feature, with the vehicle off, press and hold the Lock and Unlock buttons on the key fob for three seconds. The turn signals will flash four times to indicate that passive unlocking is now enabled.

With passive unlocking enabled, the doors will unlock when pressing the button on the door handle. On the driver's door, press the button once to unlock only the driver's door and press it a second time to unlock all doors.

Passive Unlocking Disable

To disable the unlocking feature, with the vehicle off, press and hold the Lock and Unlock buttons on the key fob for three seconds. The turn signals will flash four times to indicate that passive unlocking is now disabled.

With passive unlocking disabled, the doors will remain locked when pressing the button on the door handle.

If there is a concern with the operation of the passive locking and unlocking system, ask owners where the key fob is kept or if multiple drivers use the same key fob to help determine if the system has been disabled inadvertently.

🙏 Thanks to Bob Wittmann



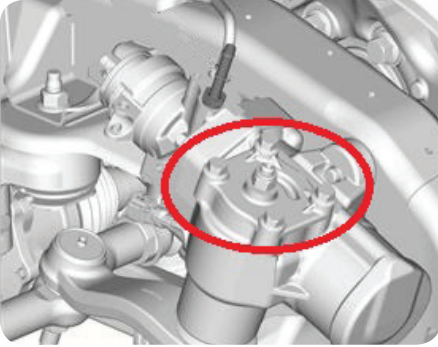
Press the Lock and Unlock buttons to enable/disable the passive unlocking system.

Excessive Steering Play, Lash, and/or Steering Gear Leak Conditions

There may be excessive play in the steering or the steering may feel loose on some 2016 Silverado 2500/3500 and Sierra 2500/3500 trucks. There also may be a small power steering fluid leak from the steering gear lash adjuster stud/nut area on top of the steering gear.

These conditions may be caused by the pitman shaft adjuster stud unthreading up or out of the cover plate, which can cause excessive lash in the steering gear as well as a small fluid leak past the stud threads. These conditions are not caused by the steering gear pitman shaft adjuster lock nut turning on the adjuster stud. Do not turn the lock nut on the adjuster stud.

TIP: Do not replace the power steering gear for excessive lash, a fluid leak, or a loose play condition without checking the pitman shaft adjuster stud threading.

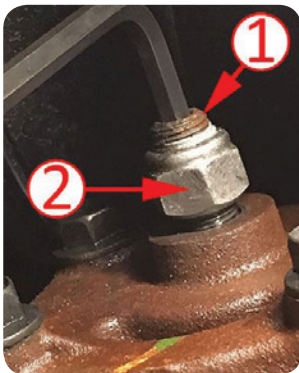


Steering gear with pitman shaft adjuster stud

Check the Steering Gear

Check the steering gear through the top of the engine compartment for stud unthreading or fluid leak conditions. It's not necessary to remove any components to inspect the steering gear. However, if any of the following conditions are found, the wheelhouse liner, wheel, and charge air cooler inlet pipe (if equipped) must be removed to make the repair.

Using a telescoping mirror, examine the steering gear lash adjuster stud and nut:



1. Steering gear lash adjuster stud
2. Adjuster stud lock nut

- The adjuster stud nut will not be seated up against the cover plate if the adjuster stud has become unthreaded.
- The adjuster stud can easily be turned in or out by hand using an Allen wrench.
- Oil residue may be seen leaking past the stud onto the cover plate.

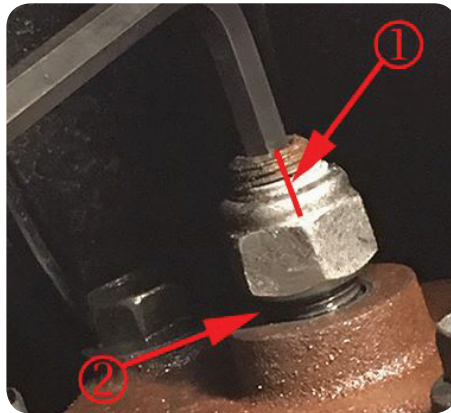
If the pitman shaft adjuster stud has unthreaded from the cover, threadlocker should be applied on the stud threads.

Apply Threadlocker

With the steering wheel centered so the wheels are pointed straight ahead, remove the left front wheel and wheelhouse liner to access the steering gear. Also remove the charger air cooler inlet pipe (if equipped).

Use a marker or scribe to mark the adjuster stud in relation to the adjuster stud nut. Next, loosen the adjuster stud (turning counter-clockwise) with an Allen wrench until it is fully backed off. Typically, two threads will be shown.

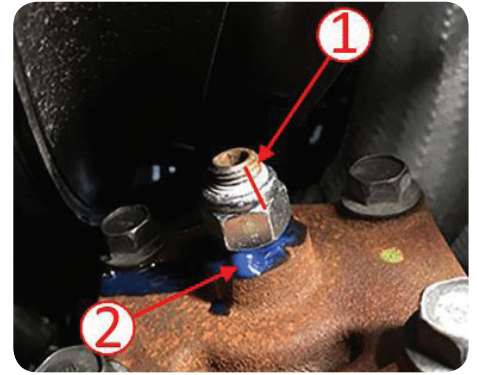
TIP: Do not turn the steering gear pitman shaft lash adjuster nut relative to the stud. Only loosen the stud.



1. Mark adjuster stud in relation to nut.
2. Two threads showing when stud is fully backed off.

With the threads exposed, spray brake cleaner solvent on the stud threads to remove all oil residue. Use compressed air to blow away any remaining debris and the brake cleaner from the stud area.

Apply a thick layer of blue threadlocker around the adjuster stud threads and tighten the adjuster stud (turning clockwise) until the lock nut bottoms out on the cover plate. Do not hold the nut while tightening the adjuster stud. If the relation of the adjuster stud and nut is changed, the adjuster could seat at the incorrect depth, which would change the lash adjustment of the steering gear.



1. Maintain the relation of the stud and nut.
2. Apply blue threadlocker to the stud threads.

Once the threadlocker is applied, use a torque wrench with a crow's foot and the Allen wrench to turn the adjuster stud and nut simultaneously. Torque the nut to 68 lb.-ft. (92 Nm).



Use a torque wrench with a crow's foot and the Allen wrench to turn the adjuster stud and nut simultaneously.

Be sure to keep the adjuster stud and nut in alignment with the mark or scribe. If the stud and nut are not in alignment, slightly loosen the nut to realign the marks and then re-torque the nut.

Allow the threadlocker to cure for approximately four hours. Install the charge air cooler pipe (if equipped), and the left front wheelhouse liner and wheel. The vehicle can be removed from the hoist while the threadlocker cures.

Active Hydraulic Assist System

The Active Hydraulic Assist (AHA) system (RPO NV8) is an updated recirculating ball hydraulic power steering system that allows for some of the performance benefits of electric power steering, such as variable effort steering, active return to center, active damping, and lead/pull compensation.

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Excessive Steering Play, Lash, and/or Steering Gear Leak Conditions – continued from page 4

On trucks with the Active Hydraulic Assist system, it will be necessary to:

- Program the Power Steering Control Module with the latest calibrations available in TIS2Web
- Perform the Steering Angle Centering procedure using GDS2. Refer to the appropriate Service Information.

- Perform the Power Steering Pressure Sensor Learn procedure using GDS2. Refer to the appropriate Service Information.

Test drive the vehicle to verify the steering condition has been corrected, the steering wheel is level, and the Steering Wheel Angle parameter is zero degrees (+/-3 degrees) while driving the truck on a flat, level, straight road at approximately 25 mph.

For trucks without the Active Hydraulic Assist System, test drive the vehicle to verify the steering condition has been corrected.

For additional information on the steering gear repair, refer to Bulletin #18-NA-280.

🔧 Thanks to Jamey Houck

Inoperative Passive Entry and Passive Start Functionality

One or both of the Remote Keyless Entry transmitters, or key fobs, with passive entry and passive start functionality may be inoperative from initial use on some 2016-2019 CT6; 2017-2019 XT5; 2018-2019 Enclave, Encore, LaCrosse, Regal, ATS, CTS, XTS, Camaro, Cruze, Equinox, Malibu, Sonic, Tahoe, Traverse, Trax, Terrain; 2019 Envision, Escalade, XT4, Bolt EV, Silverado 1500, Volt, Acadia, and Sierra 1500 models. There also may be a “No Remote Detected” or “Place Key in Transmitter Pocket” message displayed on the Driver Information Center.



Passive start button

While the passive entry and passive start functions are inoperative, the buttons on the key fob are operational. In addition, the vehicle can be started using the backup starting method of placing the key fob in the cupholder or center console to enable the vehicle to start.

If these conditions are found, it may be due to invalid data stored in the key fob. Reprogram all key fobs for the vehicle. Follow the reprogramming procedure for Replacing Transmitters (with SPS) in the appropriate Service Information.

🔧 Thanks to Bob Wittmann



Reprogram all key fobs.

Possible Misfire Condition with DTCs Set

Some 2015 City Express models may have a misfire condition along with any of the following DTCs set in the Engine Control Module (ECM): P0011, P0075, P0300, P0301, P0302, P0303 and P0304.

The misfire may be caused by the incorrect wires being spliced together or a poor splice connection made during a previous repair to the engine EGI harness for a crank/no start condition.

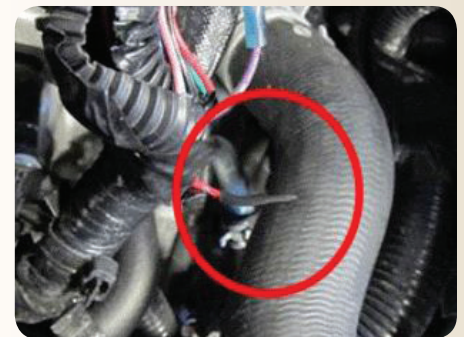
Verify the correct wires were spliced together during the previous repair, which used the largest gauge red wire and largest gauge purple wire. If the incorrect wires were spliced, return the wires to the original



The repair used the largest gauge red wire and largest gauge purple wire.

routing and perform the splice repair again using the correct wires. After the wiring repair is made, clear the DTCs and evaluate engine operation.

If the correct wires were spliced together, check the crimp at the splice for a poor connection. A DuraSeal splice sleeve should be used. Test the crimp quality by gently pulling each wire to ensure the wire does not move from the sleeve. Repair as necessary.



Check the crimp quality of the connection.

For additional information, refer to #PIP5302A.

🔧 Thanks to Tim Lightfoot

TECH LINK

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Paint Chip or Wear Mark Repair

Some 2016-2018 Camaro models may show a paint chip or wear mark (marring) on one or both of the rocker panel moldings. The chipping or marring may occur when the door makes contact with the rocker molding during an over-slam door closure. The door does not contact the molding once the door is closed. The tight door hem sealer to rocker molding clearance is by design. Adjusting the door will not resolve the wear or mark condition.

Do not replace the rocker panel molding or adjust the door if this condition is found. Complete a partial paint repair to the rocker molding to correct the paint chip or wear mark.

Refer to the latest revision of the GM Approved Refinish Materials book to identify the paint system to use to meet GM standards. The GM Approved Refinish Materials book is available within the Unit Repair Manual/Specialty Publication section of the Service Information as well as on the Genuine GM Parts website at www.genuinegmparts.com.

Once the paint repair is completed, install an approximately 1-inch (2.5 cm) piece of Mylar tape to the repair area. Carefully cut the tape to cover the repaired area.

🙏 Thanks to Ann Briedis



Paint chip



Wear mark



Apply Mylar tape to the repaired area.