INSTALLATION GUIDELINES

AAE GM EPS RACK

aae STEERING SPECIALISTS

REPLACING GM EPS RACK WITH AAE REMANUFACTURED UNIT

STEP 1

When selecting a replacement steering unit keep in mind that GM uses RPO codes which refer to specific options or modifications. Each RPO (Regular Production Option) code is a combination of three alphanumeric characters such as NJ1, FX3, etc.

You can find specific application information at www.showmetheparts.com/crp/.

STEP 2

When installing a GM EPS rack, the power steering control module has to be programmed. See below for hardware and software required to perform the programming procedure:

HARDWARE: COMPATIBLE J2534 PASS-THRU DEVICE

- There are many different J2534 devices available in the market from manufacturers such as Snap-On, Bosch, Autel, Denso, etc.
- AAE suggests CarDAQ-Plus 3 or MongoosePro GM 2 from Drew Technologies
- For more information visit www.drewtech.com

SOFTWARE: GM SPS (SERVICE PROGRAMING SYSTEM)

- The SPS application is part of the TIS2Web system.
- SPS is used to update the flash calibration files which are stored in the power steering control module.
- The cost for programming with SPS is **$40 per vehicle (VIN)** and includes 24 months access.

For subscription information, visit www.acdelcotds.com/subscriptions and look under "Programming".

Note: Service Repair Manual Information provided by GM should always be reviewed for the appropriate programming and set-up procedures.

STEP 3

Before programming a newly installed steering rack GM recommends to install EL-49642 SPS Programming Support Tool which helps to maintain stable battery voltage. If the EL-49642 tool is not available, connect a fully charged 12V jumper or booster pack disconnected from the AC voltage supply. Do not connect a battery charger.

STEP 4

During the programming procedure, always follow the SPS prompts for the correct ignition switch position.

STEP 5

- Start SPS and select the option to "Reprogram ECU"
- Perform the following in order to program the Power Steering Control Module:
  - Under "Select Controller" choose "**K43 Power Steering Control Module**"
  - Under "Select Function / Sequence" choose "**Programming**"
- Follow the prompts to continue with the programming procedure
- If no errors were detected you will see "**Action Complete**" notification

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MANUFACTURED AGAIN CERTIFIED QUALITY PROCESS

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STEP 6

- Next perform the following to check and complete any additional calibrations:
  - Under "Select Controller" choose "**K43 Power Steering Control Module**"
  - Under "Select Function / Sequence" choose "**Setup**"
  - Proceed to next screen for any "**Special Functions**" required for the particular model, such as Power Steering Torque Sensor Learn, Software Endstop Learn, Steering Angle Sensor Centering, etc.
- A green check in the "Special Function Session Log" means procedure is complete

STEP 7

Clear Diagnostic Trouble Codes (DTC) after programming is complete. Test drive to confirm normal operation of EPS gear.

AAE GM EPS PART NUMBERS

AAE Part No.	Description	OE Cross References	GM Model(s)
ER4111	REMAN ELECTRIC RACK & PINION	84368395	Silverado | Sierra
ER4113	REMAN ELECTRIC RACK & PINION	84368393	Silverado | Sierra
ER1011	REMAN ELECTRIC RACK & PINION	20857570	Equinox | Terrain
ER1085	REMAN ELECTRIC RACK & PINION	84037522	Equinox | Terrain
ER64101	REMAN ELECTRIC RACK & PINION	22985119	Equinox | Terrain
ER1015	REMAN ELECTRIC RACK & PINION	39032955	Cruze | Verano
ER1083	REMAN ELECTRIC RACK & PINION	13413955	Cruze | Volt
ER1084	REMAN ELECTRIC RACK & PINION	13372110	Verano
ER1103	REMAN ELECTRIC RACK & PINION	13337583	Malibu
ER1105	REMAN ELECTRIC RACK & PINION	22943369	Malibu | LaCrosse | Impala | Regal
ER1106	REMAN ELECTRIC RACK & PINION	22943370	Malibu | LaCrosse | Impala | Regal
ER1107	REMAN ELECTRIC RACK & PINION	22943371	Malibu

GM Service Bulletins listed below contain recommendations and instructions on EPS related fault codes (DTCs):

DTCs	Link to GM Bulletin
C0544, U0415	https://static.nhtsa.gov/odi/tsbs/2014/SB-10050239-9970.pdf
C056D-39	https://static.nhtsa.gov/odi/tsbs/2014/MC-10126312-9999.pdf
U0100, U0121, U0126, U140, U0073, U0077, U0415, U2099, C0800, C044B_56, C0544_5A	https://static.nhtsa.gov/odi/tsbs/2014/MC-10112095-9999.pdf

For Electric Power Steering related questions contact AAE Tech Support Hotline at 1-800-654-7565 (Press 2 for EPS)

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