# Electric Power Steering Installation

Polaris Kit. (Check compatibility matrix)

2002-07 Saturn Vue / 2005-06 Chevrolet Equinox

Please read before you begin:

o Review the BestPractices.PDF at www.ePowerSteering.com under Installation. It is regularly updated. You can also find other parts at our online store at www.ePowerSteering.com/purchase.

o Remove the Upper Steering Mount, EPS Cover RZR EPS Unit and Steering Shafts (see below diagram for parts breakdown).
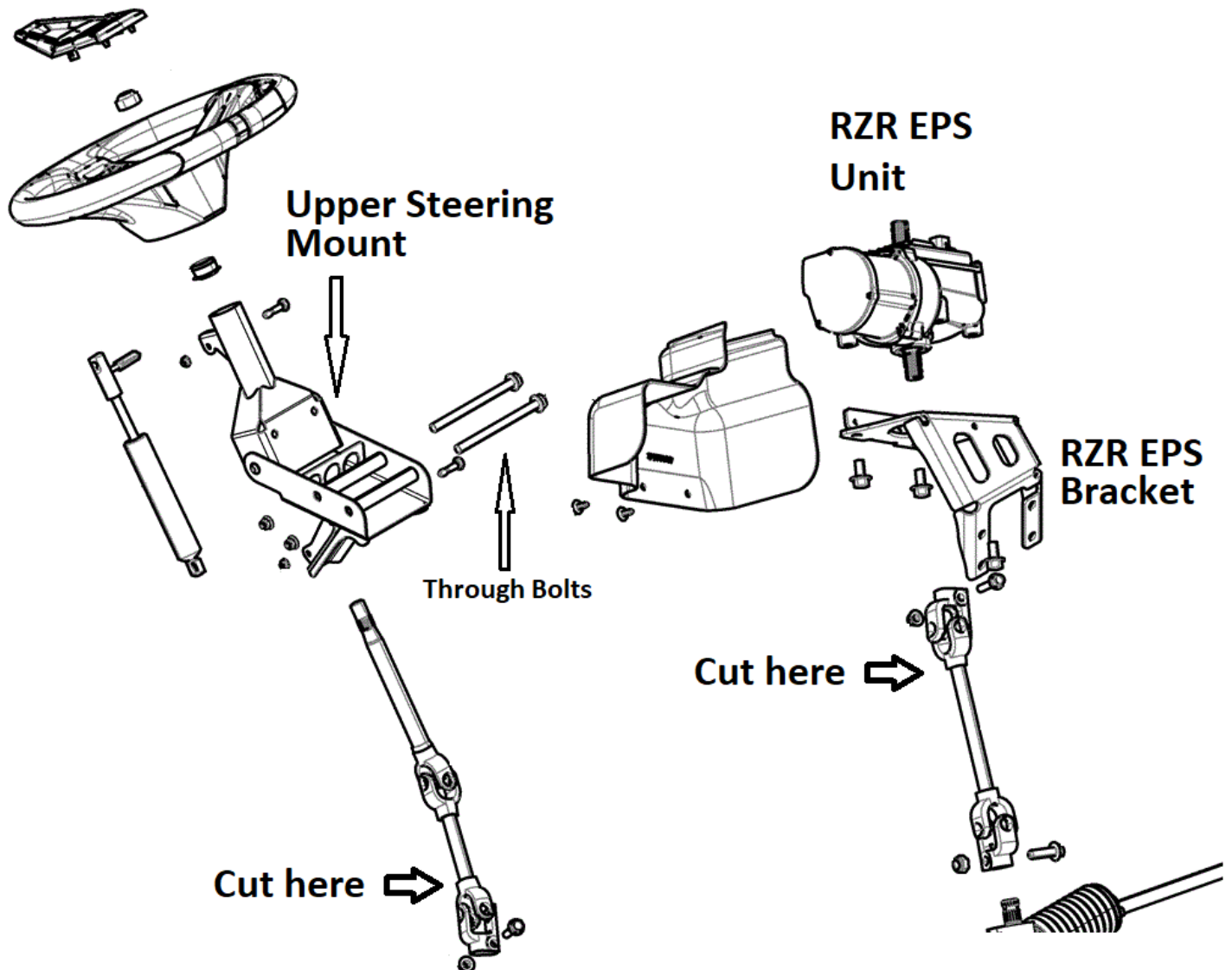

o Enlarge the 3 bolt holes on the RZR EPS Bracket to ½".

o Cut off or bend down the plastic cover mount lip at a 45 degree angle.

o Cut off the factory U-Joints. See above diagram.

o Before welding on the new U-Joints, test fit both shafts for length. The lower shaft should be approximately 13 ¾" from end to end. The upper shaft should be approximately 4 ¼" from center to center of the U-Joint caps. Note: Each machine is unique and will require individual measurements.


CORRECT PHASING

INCORRECT PHASING
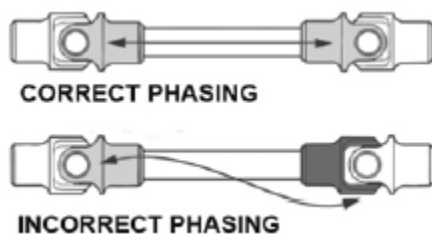
o Remember to clock/phase the U-Joint ends. See above diagram.
o Working from the bottom up, install the ePowerSteering EPS Unit.
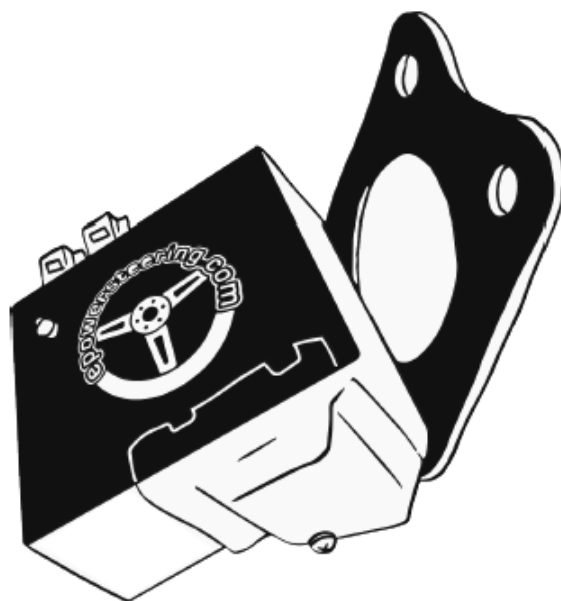
o Use the RZR's Upper Steering Through Bolts to mount the ECU bracket. Mount it on the left side of the RZR's upper steering mount.
o Install the EPS Controller in a convenient place where you can reach while driving. If you want, you can cut the Adjustment Knob shaft to the desired length, the shaft is made of plastic.
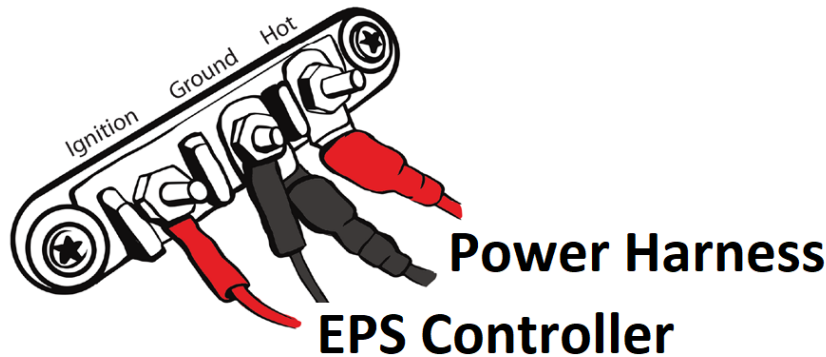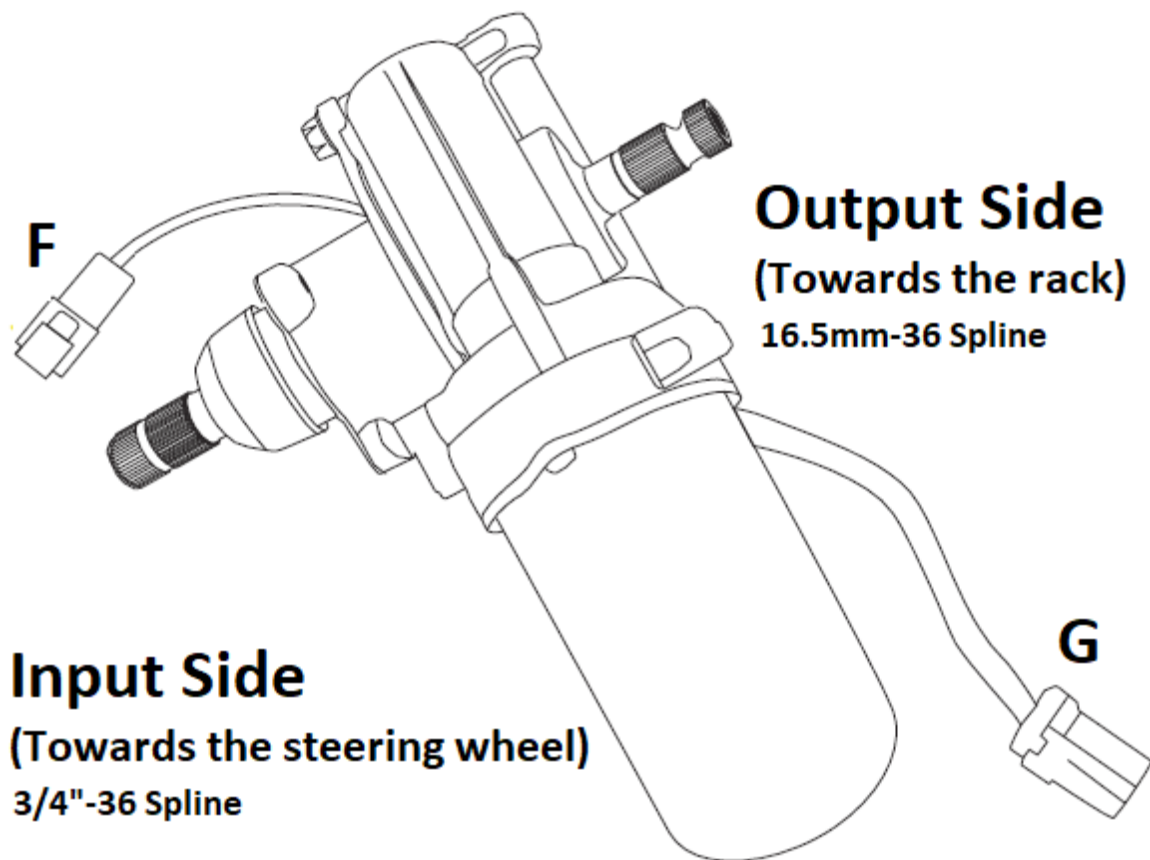
EPS Controller

Adjustment Knob ⇐

Steering ECU

Calibration Potentiometer ⇐

A

B C D

E
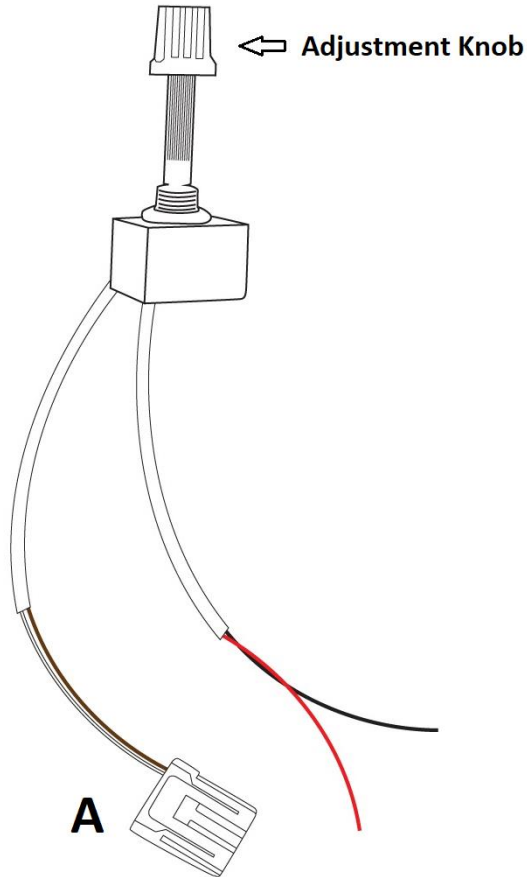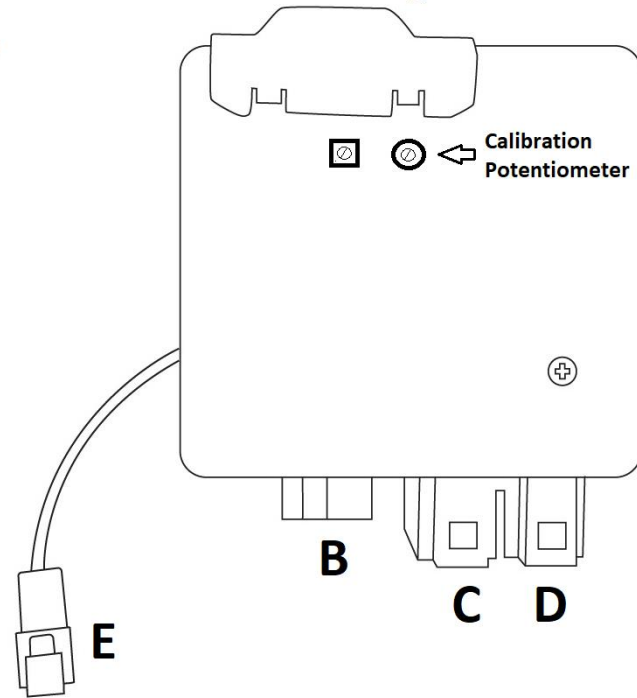
o The plug labeled '**A**' with a brown and white wire gets connected to the Steering ECU receptacle labeled '**B**'.

Ignition Ground Hot

Power Harness
EPS Controller

o The red wire going out of the EPS Controller gets connected to the left post on the firewall terminal block.
o The black wire going out of the EPS Controller gets connected to the middle post on the firewall terminal block.
o The receptacle labeled '**C**' on the Steering ECU is where you connect the Power Loom.
o The receptacle labeled '**D**' on the Steering ECU is where the Blue Plug labeled '**G**' from the electric motor is connected.
o Connect the 4 wire plugs '**E**' and '**F**' need together. Ensure that the pins in the female connector don't get bent while connecting them. Ensure that the plugs are securely connected. Use the enclosed **DTM Mounting Clip** to secure the plug to your chassis.

F

Output Side
(Towards the rack)
16.5mm-36 Spline

Input Side
(Towards the steering wheel)
3/4"-36 Spline

G

Basic System Verification:

o   Turn Adjustment Knob fully counterclockwise (left).
o   Turn Ignition ON. You should hear the relay click on once.
o   Wait about 10 seconds. You should hear the relay click off. You will have no steering assistance.
o   Start turning the Adjustment Knob slowly clockwise (right) until you hear the relay click on again. This is the point where you start having steering assistance, but at the minimum. Test to verify.
o   Then turn the Adjustment Knob further to the right. This will increase the assistance. Test to verify.

Adjusting Steering Assistance:

o   If you turn the Adjustment Knob fully counterclockwise (left) you will have no steering assistance.
o   If you turn the Adjustment Knob fully clockwise (right) you will have the maximum steering assistance.
o   Between these two points you have various intermediate steering assistance levels.

Additional Information:

o   When you turn the ignition ON, you will hear the relay on the Steering ECU click on. One single click. If you hear it double click, there is something incorrectly installed or not functioning properly.
o   While you turn the Adjustment Knob you must wait for the Steering ECU to adjust the steering assistance level. The amount of assistance is not immediately felt. There is a very slight delay.
o   The steering can feel slightly softer to turn left than right (or the opposite). There is a Calibration Potentiometer on the Steering ECU to adjust this. It is accessible under the round hole in the Steering ECU cover. You may need to peel back the cover sticker to gain access. It is EXTREMELY sensitive. Make very small adjustments if you feel that the calibration is off.