



## Electric Power Assisted Steering (EPAS) kit - Datsun 510

**Please take the time to read this thoroughly**

Your Datsun Restomods kit will have everything you need for a quick swap. Installation should take about 2 hours.

If you have any questions, please don't hesitate to reach me: [fritz@datsunrestomods.com](mailto:fritz@datsunrestomods.com)



# Safety

- This kit involves swapping out the entire steering column on your Datsun 510.
- Incorrect installation could result in **injury or death**.
- We strongly recommend you have a professional mechanic perform the installation.
- Periodically check all parts related to the installation to ensure that they remain properly fastened

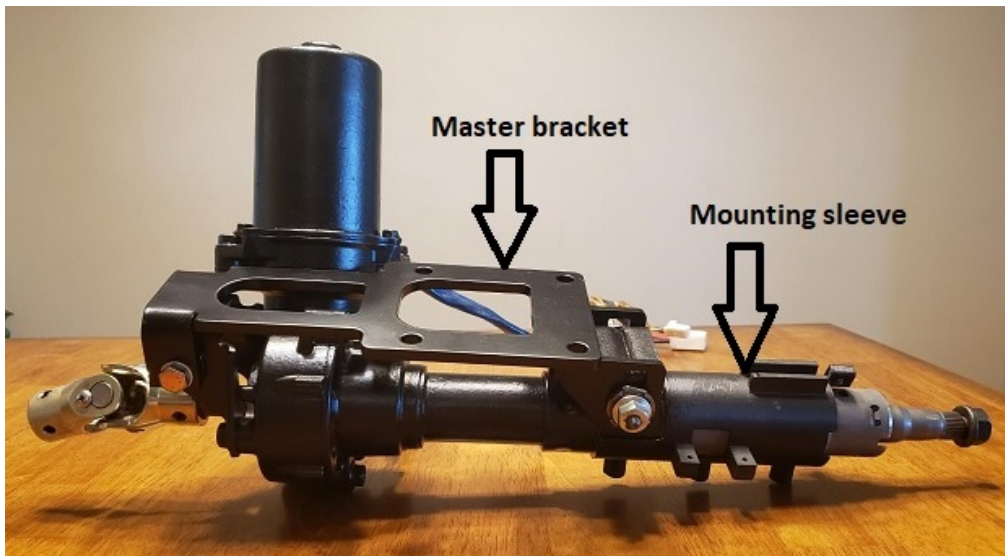
In the kit you will see red electrical tape applied to various parts. You **must** apply the provided thread lock to the screws located under the tape.



# Parts

Your kit will contain the following items:

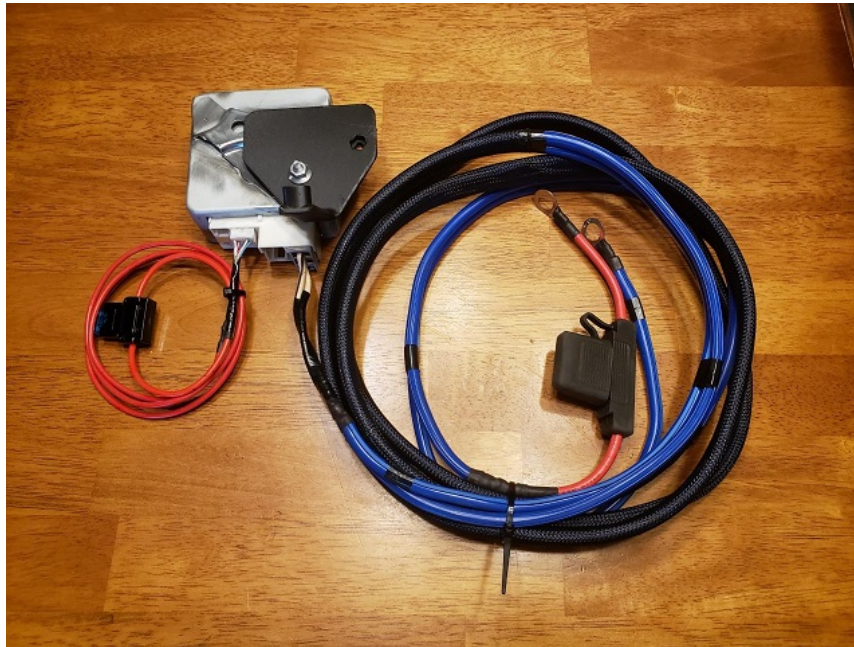
- Fully tested Toyota steering column with mounting sleeve, master bracket, and U-joint



- Steering shaft with Datsun steering box u-joint, firewall plate, and support bearing



- Computer module with mounting bracket, wiring harness complete with fuses



- 3-bolt to 6 bolt steering wheel black adapter (Nardi & Sparco standard).



- New steering shroud



- Zip lock bag with:
  - Mounting bolts
  - Splined steering hub
  - Loctite, screw driver, tilt nut cap, mounting bolts/washers
- Note: JBC kits will include two additional UJoints, 1 Rose Joint, 1 bracket

# Installation

It can get pretty tight under the dash so we recommend following these exact steps for the easiest installation.

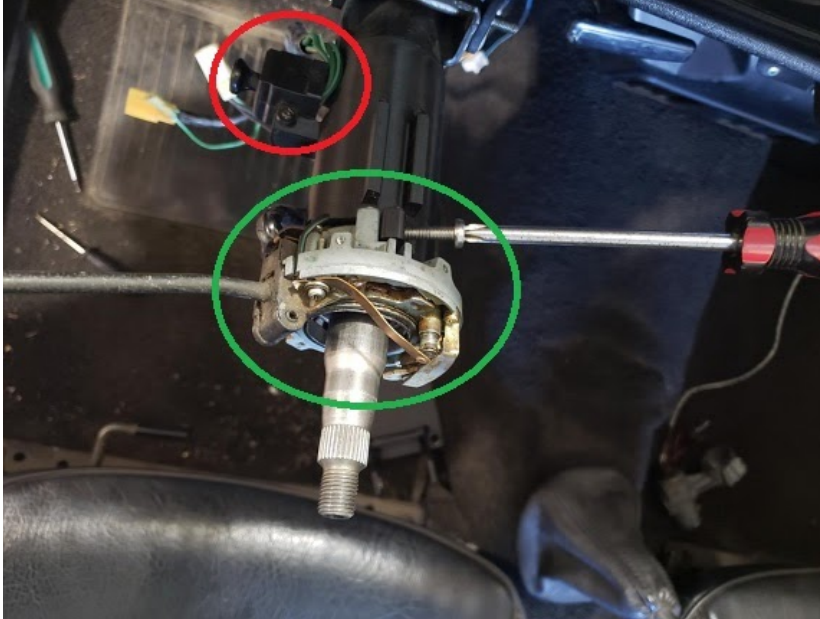
- Park your 510 on a level surface. It is not required to put the car on stands.
- Align your front wheels so that they are straight.
- Ensure the steering is approximately straight. You'll be able to fine-tune near the end.
- Disconnect the battery

## Steering Column removal:

- If applicable, remove your aftermarket steering wheel.  
*Note: this kit only works with aftermarket 6 bolt steering wheels. We do not yet have an adapter that fastens the stock Datsun steering wheel spline to a Toyota steering spline.*
- Unbolt the steering shroud (plastic cover). There are several screws located underneath as pictured below, green is a smaller screw. Do not force apart, if it doesn't separate there's likely another hidden screw.



- Unscrew and remove the turn signal stalk, save the two screws.
  - Follow the wire to the connector under the dash and disconnect.
  - Reinstall stalk on new column's accessories bracket (see pic below - green circle)
- Perform the same task in step as above for the hazard switch.
  - Remove, unplug, reinstall on the column mounting sleeve (see pic below - red circle).



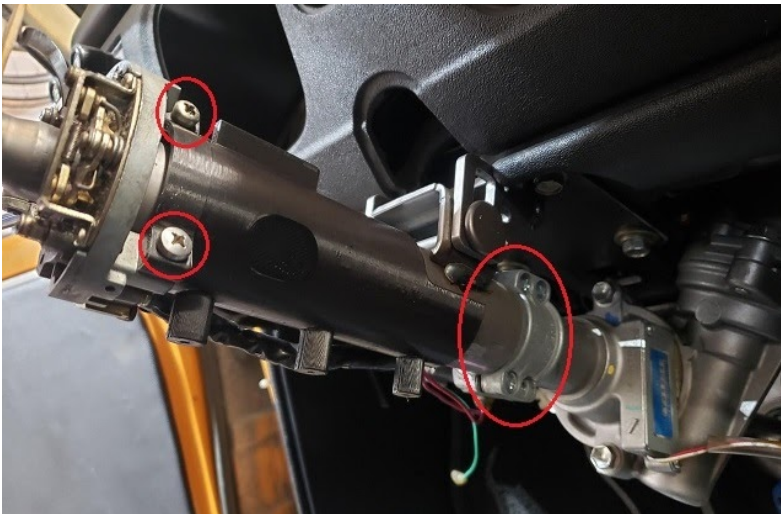
- Do not remove the keyed ignition part just yet. Only disconnect the wires.
- There should be no wire connections from the stock column to the harness under the dash
- Follow the stock steering column to the firewall. Remove the 4 bolts holding the integrated 'plate' from the firewall. You may have to peel back some insulation to access it.
- Go to the engine bay and loosen, then remove the U-Joint pinch-bolt holding the steering shaft to the steering box.
- Taking a large flat blade screwdriver, wedge it between the U-Joint and steering box, then lightly wiggle the screwdriver to break the U-Joint free.
- Go back under the dash and remove the 4 bolts holding the stock steering column to the underside of the dash (they go straight up near the gauges). Be ready, when the last bolt is removed the column is ready to be pulled out.
- Have a friend help by 'pushing' the steering box U-Joint apart with a screwdriver. Take care when removing the column, the gasket between the firewall and the column plate needs to be reused. Keep the bolts handy.

### **Firewall plate installation:**

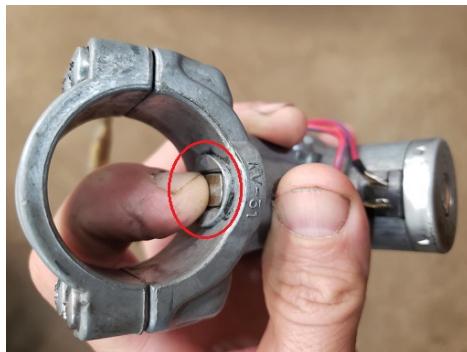
- Slide the steering shaft through the support bearing. The u-joint should be on the side where the smooth bolt heads are facing (per the picture above)
- Gently position your stock firewall gasket in place
- Install the firewall plate within the cabin with the smooth bolt heads facing the engine bay. Fasten with the original bolts.

## Keyed ignition removal & installation:

- You are ready to remove the keyed ignition from the stock column.
  - It is equipped with four screws, two regular phillips head screws, and two anti-theft smooth-head screws.
  - Remove the two regular screws.
  - To remove the anti theft screws you need to create a notch into the soft metal so a flat blade screwdriver can unthread it. You can either take a flat punch to 'notch' a slot to use a flat blade screwdriver (the metal is quite soft), or use a small dremel/hacksaw blade to cut a notch.
- Once the keyed ignition is removed, lightly fasten it to the new column as pictured below. Use the supplied two extra screws in the zip-lock bag to replace the destroyed anti-theft units. Tighten to hold in place only, you will need to adjust once the steering shroud is installed.

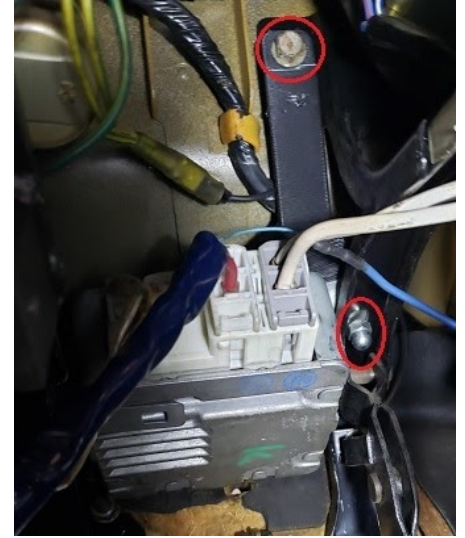


- Note: The keyed ignition will not sit perfectly flush to the steering column due to the stock steering lock boss (pictured below). You do not have to shave the boss, it can be mounted and fastened securely as-is (and it allows for 100% reversibility if you chose to do so down the road)



## Steering Control Module installation:

- Carefully unwrap the steering computer module and test fit it under the dash.
- In the picture you can see the mounting points circled in red. One is on the upper firewall, and the other is on the parking brake lever
- Note: There is a lot of variance in 510s over the years. Some cars were converted from automatics (kick-down switch will be in the way and will have to be cut), or the handbrake itself was completely removed. If this option doesn't work, the mount can be relocated anywhere so long as it's within reach of the steering column's wires and out of the way from feet etc...



## Master Bracket installation:

- Your master bracket was shipped lightly fastened to the steering column.
- Remove the rear pivot bolt, and the front tilt bolt. The front bolt is reverse threaded.
- Install the master bracket with the stock bolts in the back and the two provided cap bolts (zip lock bag) in the front where clearance is tight.



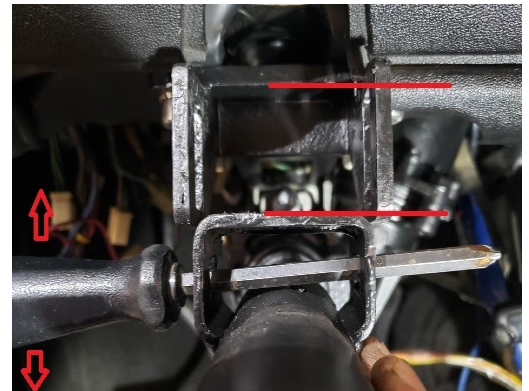
## Steering Column installation:

- Clip-in the column's two cables to the module BEFORE lifting the column into place.
- Lift the column, securing the rear bolt first, then the front. Tighten the rear bolt enough that it's secure but doesn't prevent the column from tilting.
  - Reconnect the Hazard/Turning stalk/Keyed Ignition pieces to the stock wiring harness under the dash.



- Remove the black bezel around the keyed ignition by grabbing both sides and gently pulling it out.

- The column's front mounting bracket was adjusted prior to shipping but it may have moved. Make sure the column's main pivot bracket is in line with the master bracket. If adjustment is required just use a screwdriver to twist into place.

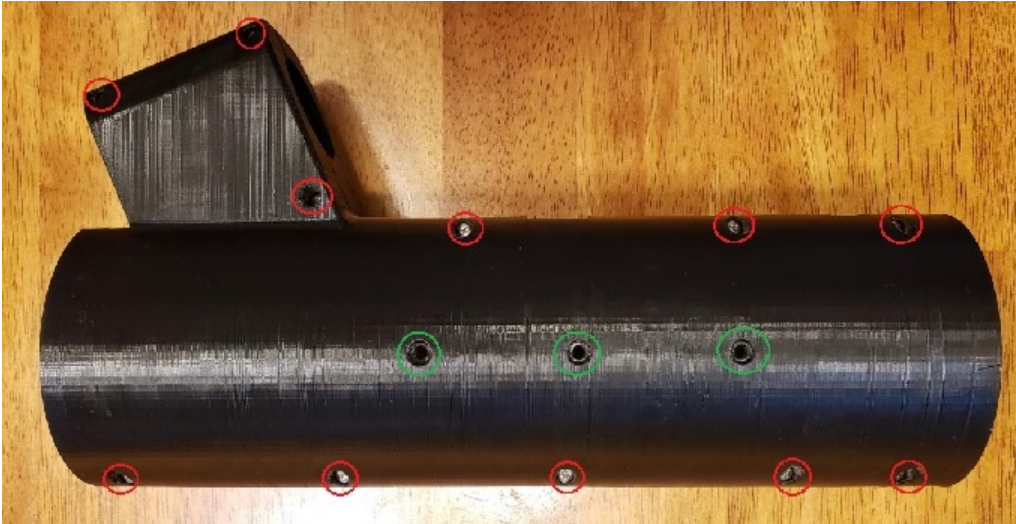


- Push the column up into the master bracket.
- Secure with the tilt bolt, the reverse-thread nut on the left - finger tight
- Once complete, pay careful attention that both ends seat flat



## Steering shroud installation:

- Remove the three fastening screws on the main sleeve.
- Remove all 11 screws that holds the two shroud halves together
  - The shroud will become quite a bit weaker once separated, handle with care.
- Fasten the lower shroud to the mounting sleeve's bosses using the screws from step #1.
  - As you tighten, make sure the keyed ignition is not interfering with the shroud's cut-out. If so, loosen the 4 bolts to adjust then repeat fitment.
  - Do NOT overtighten. Very little force is required to hold everything in place.

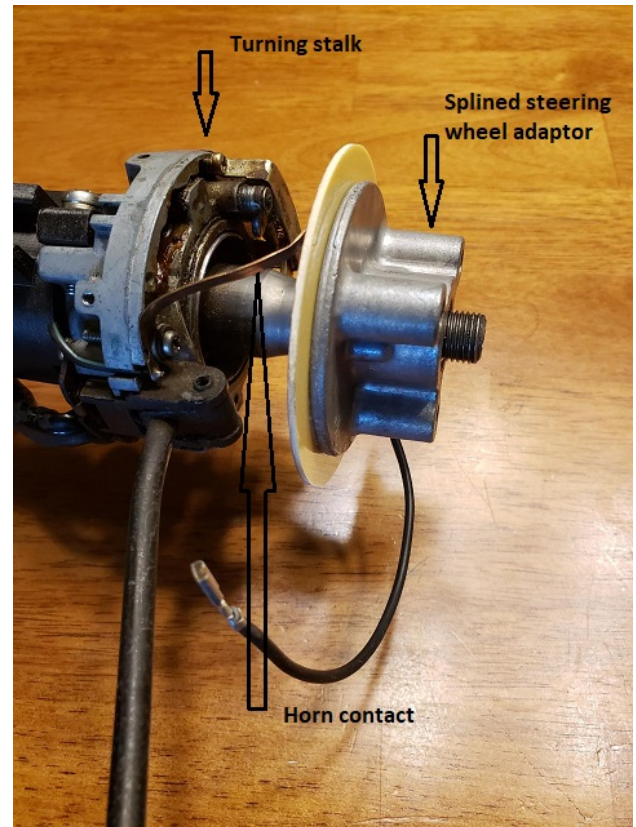


- Test fit the top half of the shroud to see where the keyed ignition unit is located. Adjust as required.
- Fasten the top half of the shroud to the bottom half. Again, do not overtighten.
- Reinstall the black bezel around the keyed ignition. Make sure the notch in the bezel is oriented to clear the wires.

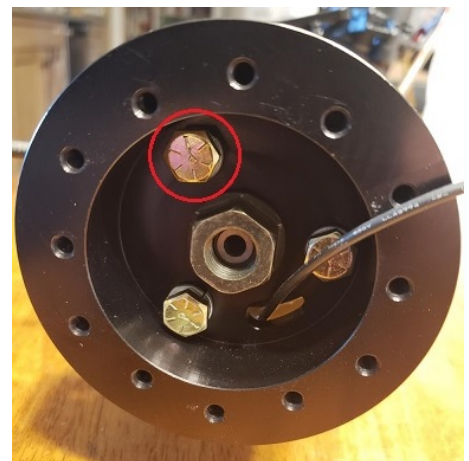


## Steering Hub installation:

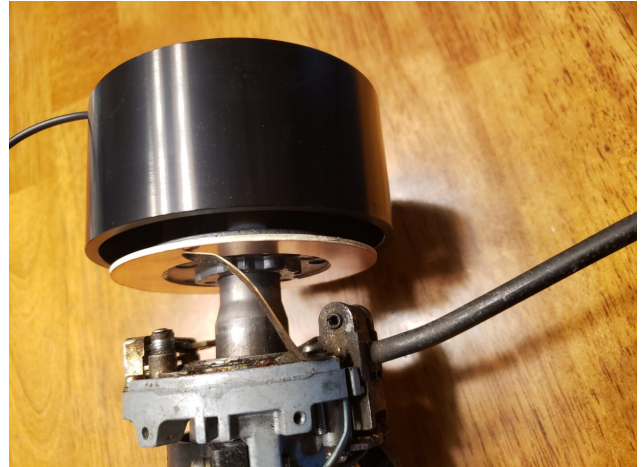
- With the steering shroud installed you can proceed with the steering hub.
- Two adapters are required:
  - Splined adapter (in the zip lock bag)
  - Black steering wheel adaptor



- Install the splined adapter. Ensure the turning stalk's copper horn contact lead is able to physically touch the adapter per the picture above.
  - Note: The entire steering hub kit was shipped in the zip lock bag but you'll likely only need the splined adapter.
- Install the steering wheel adaptor. Use the three bolts supplied in the zip lock bag (red circle).



- The black adapter should be nearly flush with the shroud. Test the turning stalk movement along with high beam etc...
- Bolt your steering wheel to the black adapter and then check approximate alignment with the wheels pointing straight. If adjustment is needed, pull the steering wheel/adapters off the column and readjust on the splined interface.
- At this point you can reinstall the main centre nut. Note that once you tighten the adapter it will friction-fit to the steering column and become more difficult to later remove.



## Column tilt:

- Note: Most of the connection points between the steering column and the steering box should only be finger tightened. This is to allow some play while adjusting your column's tilt.
- Adjust the column's tilt. Once the desired angle is achieved use a 14mm socket to tighten it in place, remember it's reverse threaded so you're 'loosening' the nut to tighten.
  - Once done you can cover the hole with the provided cap in the zip lock bag.
- Tighten the rear thru-bolt holding the steering column to the master bracket.
- Tighten the two bolts holding the bearing on the firewall plate.
- Tighten the pinch bolts on the u-joints and firewall bearing. PLEASE use the provided thread locker.

## Wiring:

- Connect the positive & negative to your battery. Extra wire was supplied for rear mount batteries. If it's not needed you can shorten the length, or leave as-is.
- Supply a 12v ignition feed to the red wire coming off the module. Typically this is located in the fuse box on the passenger side in the engine bay.
  - Fastened the wire to your 510 electric system as you see fit (no connectors were provided as there's many ways users will approach this step).
  - Be sure that the connection is secure and insulated (ie: electric tape).
- Test the system by placing your key in the ignition and energizing the electrical system (no need to actually start your car). Listen carefully for a 'click' sound coming from the module, this will take 3-5 seconds after the system is energized. Your assist will be activated, test by turning the steering wheel. Look & listen for any looseness.

## BEFORE DRIVING YOUR 510, PLEASE BE SURE THAT YOU:

- Loctite the jam screws on the U-Joints & firewall bearing (**10**)
- Tighten the firewall plate and bearing bolts (**6**)
- Tighten the bolts holding the master bracket to the dash (**4**)
- Tighten the steering column rear pivot bolt and front tilt bolt (**2**)
- Tighten the main steering nut on the black adapter to the column (**1**)
- Tighten down your steering wheel to the adapter (**6**)