



**Fitting instructions for:**  
**Split Screen**  
**Vehicles**

**Important document!**  
**Please read these instructions before fitting!**

## **Safety first:**

Before you start any work on your steering system, carefully read and ensure you understand **all** of the instructions. Ensure all tools and equipment are working correctly before use and wear the relevant safety equipment and PPE during the installation process at all times.

## **Tools and equipment required:**

**Access to milling machine or lathe is required to fit this system**

A good trolley jack

Axle stands

5 and 6mm allen keys

Selection of spanners/sockets

Side cutters

Pitman arm puller or ball joint splitter

17mm and 24mm Socket and Ratchet

A selection of screw drivers

Tube cutter or hacksaw

Tape measure.

## **Getting started:**

Firstly, boil the kettle! Sit down and **read through the instructions first!** Allow yourself plenty of time to finish the install - **don't rush!**

Installation normally takes an experienced VW mechanic (with the use of a ramp) around 4 hours. If you are working on axle stands and you have limited experience, then expect it to take longer and give yourself a clear 6 to 8 hours.

At the rear of these instructions, you will find a set of diagrams which will make components easier to identify. Within the instructions, these components will be coloured **blue**. Throughout the fitting, you will often be asked to view certain "item" numbers. These numbers will be highlighted in **red**. An expanded view of these items and their respective numbers is also attached.

## Removal:

1. Ensure the vehicles wheels are in the straight-ahead position. Jack the vehicle up so that you can comfortably work with your arms stretched out. Ensure you use axle stands. Check all of the steering and suspension system for wear and defects and ensure all components are well greased. Any problems with suspension can affect the Lite-steer system's performance.
2. Disconnect the negative battery terminal.
3. Remove the horn button using a suitable trim tool or small flat-blade screwdriver.
4. Remove the 24mm steering wheel nut with a socket and remove the wheel. Be sure not to lose the woodruff key that may come out with it! (Small semi-circular metal piece)
5. Remove the indicator switch (there is no need to disconnect the wiring!)
6. Remove the 2 M6 bolts holding the top column retaining bracket.
7. Remove the Pitman arm and 5 17mm bracket bolts.
8. Remove the steering box. Strip and inspect the steering box for wear or damage. New bearings and pins are readily available.

## Fitting:

1. Below is a very useful link to a video showing how to strip and inspect your steering box, also how to fit the system.  
  
[\(234\) HOW TO FIT POWER STEERING TO A VW T1 SPLIT SCREEN CAMPER, and rebuild the steering box! - YouTube](#)
2. With the shaft removed measure from the top of the column and mark and cut the tube at 440mm.
3. Measuring again from the top of the column mark and cut the tube at 205mm (the Lite Steer replaces the center section)
4. The inner shaft (removed in step 2) also requires cutting. Measuring from the top of the shaft (steering wheel end) cut the shaft at 440mm and discard the steering wheel end. The remaining shaft will need a 3/16<sup>th</sup> x30mm keyway slot milled into the top section along with a bolt clearance 45 degrees from the slot. Use the coupling as a guide prior to milling. (This can be done with a milling machine, lathe or local machine shop). Once this has been done the box (or creative column) is ready to clean, reassemble and paint as per video.
5. Refit the steering box as before. Inside the vehicle, turn the **inner shaft** until the steering box/rack is centered (you can find the center by counting the amount of revolutions lock-to-lock and half it)
6. Fit the **round coupling** to the steering box **shaft**

7. The system can now be installed. Turn the **top shaft** on the system until the keyway for the steering wheel is facing at 12 o'clock. now lower the system onto the **coupling**.
8. Once the system is seated insert the allen bolt into the top hole in the **square coupling** (you may have to turn the steering until it becomes visible through the inspection/bolt holes). If the bolts and holes are not aligned then height adjustment may be required.
9. You may now refit the original top bracket assembly (**Item 42-47**) to hold the unit firmly to the dash.
10. Under the vehicle, refit the pitman arm and drag link. Always fit new split pins.
11. You may now refit the steering wheel.
12. The **control unit** must be mounted to a shelf/bracket under the dash Find a suitable space and be sure to avoid any wiring when drilling holes (ensure the torque sensor wires can reach your chosen position before mounting).

### **Wiring:**

1. The Lite-steer wiring loom follows the original loom through a hole in the bulkhead. Remove the kick panel (if not removed) to access this area. Then, feed the **main power wire** end of the loom through the grommet in the bulkhead until the **horn wire** connector is through.
2. Connect the blue plug from the motor and the black torque sensor plug to the mounted **control unit**.
3. Fit the white spade terminal wire (the **horn contact wire**) to the white **horn contact** just above the motor.
4. Connect the **earth point wire** to the **grounding point** located on the Lite-steer system. Secure using the m8 spring washer and nut provided.
5. Connect the **ignition live wire** to a suitable ignition live feed from the fuse box under the dash.
6. Under the vehicle, connect the **horn wire** to the existing horn connector. Then you can run the **main power wire** to the engine bay by following a path over the front beam and down the chassis. Feed it through the original grommets in the engine bay bulkhead. Ensure the loom is not on/near any moving parts or any sharp objects. (Do not cable tie in place until step 7 is complete)
7. Fit the **short fly lead** to the positive terminal of the battery and fit the **30 amp fuse** box to the other end. Next, fit the **main power wire** from the Lite-steer loom to the other end of the fuse box. Once secure, find a suitable place to mount the fuse box using cable ties provided.
8. You may now secure the loom under the car with cable ties, starting from the back of the vehicle. Any surplus wiring loom can be hidden at the front of the vehicle behind the kick panel.
9. Fit the **GPS speed sensor** to the Split Screen shelf under the dash using the 3M double-sided, adhesive tape supplied. (Be sure to clean the dash surface with a solvent-based cleaner/alcohol wipe to ensure secure adhesion)

10. The **GPS speed sensor** has a small LED light located at the side of its plug. On initial start-up, the LED will flash **orange** 3 times. After this, the LED signals are as follows:

- **Red** – No GPS fix (searching)
- **Green** - GPS Fix acquired
- **Green (flashing)** – GPS fix acquired and vehicle moving

## **Finally**

Re-fit the negative battery terminal and start the engine. (The control unit will make a click sound on ignition which is an indication that the unit is operational. You will also hear the unit click a few seconds after you have switched the vehicle off).

Once the system has been successfully installed, jack the vehicle back up, remove the axle stands and lower the vehicle back onto the ground.

Now, carry out a spanner check, including **every** nut, bolt and screw that you have come in contact with. We can't stress the importance of this step strongly enough! This is a safety critical process and it is the responsibility of the fitter to ensure it is fitted correctly.

Check electrical equipment; lights, wipers, etc, just in case you have disturbed any wiring. Take the vehicle for a test drive. During the test drive, note the position of the steering wheel whilst the vehicle is driving in a straight line. If the steering wheel is not in the correct position, you may need to center the wheel. To do this, you will have to take off the top half of the unit and reposition the unit accordingly.

**Note:** Please remember that just because you can turn the steering very easily, you should avoid static/dry steering as it damages tires!

## **Enjoy!**

Thank you for purchasing one of our Lite-steer systems! If you have any feedback or questions regarding this product, please don't hesitate to call, e-mail us or visit our Facebook page!

Finally, if you love the product as much as we think you will, please spread the word by fitting the Lite-steer sticker (enclosed with your kit) to your rear window!

Many thanks again from,

The Lite-steer Team!



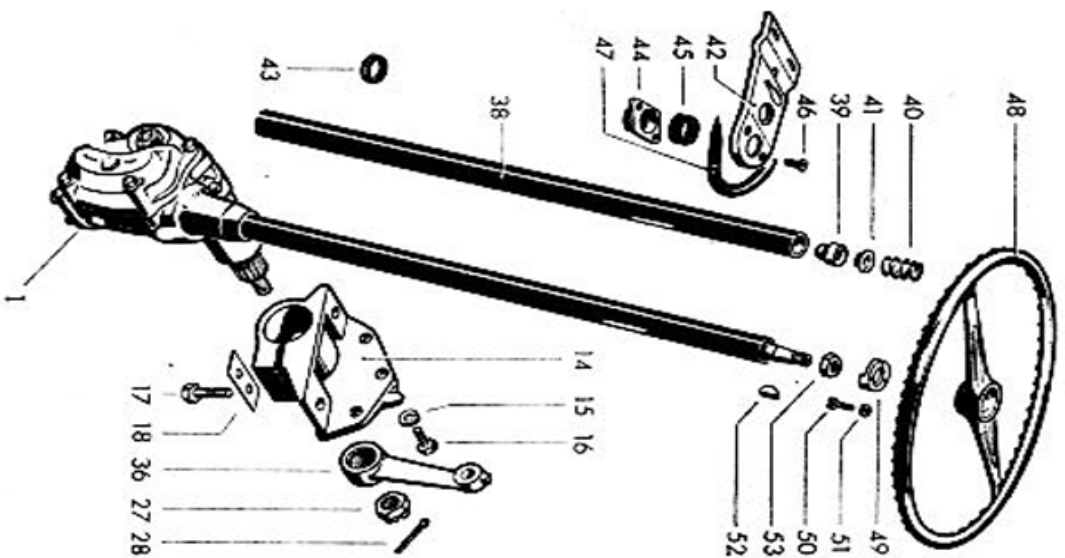
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# Split Screen



## Legend

1. Steering Box
14. Chassis Mounting Bracket
15. Chassis Mounting Washer
16. Chassis Mounting Bolt (Upper)
17. Chassis Mounting Bolt (Lower)
18. Lock Tab
27. Output Shaft Nut
28. Split Pin
36. Pitman Arm
38. Outer Steering Column Tube
39. Steering Shaft Bearing
40. Spring
41. Bearing Collet
42. Column To Dash Mounting Bracket
43. Floor Grommet
44. Column Mounting Cup
45. Rubber Column Bush
46. Mounting Cup Bolts
47. Bracket Trim
48. Steering Wheel
49. Indicator Cancel
50. Indicator Cancel Bolt
51. Indicator Cancel Washer
52. Woodruff Key
53. Steering Wheel Nut

Galaxy A53 5G

