



# Retrofitting of Cruise Control VB Sprinter

## Description

This retrofit consists of installing a cruise control switch kit in the steering column and changing the version coding (SCN) of the Anti-Lock Brake system (ABS) to enable the cruise control feature.

## Parts Required

Parts Kit 68034928AA

## Procedure

**WARNING:** To avoid serious or fatal injury on vehicles equipped with airbags, disable the supplemental restraint system before attempting any steering wheel, steering column, airbag, seat belt tensioner, impact sensor, or instrument panel component diagnosis or service. Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the supplemental restraint system. Failure to take the proper precautions could result in accidental airbag deployment.

1. Align steering wheel pointing forward and remove key from ignition.
2. Disconnect and isolate the negative battery terminal. Wait two minutes for the system capacitor to discharge before further service.
3. From the underside of the steering wheel, remove the two screws that secure the driver airbag to the steering wheel armature.

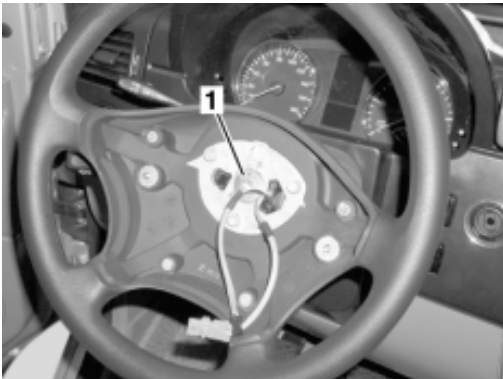
**CAUTION:** Do not pull on the clockspring pigtail wires to disengage the connectors from the driver airbag inflator, horn switch or steering wheel switch connector receptacles. Improper pulling on these pigtail wires and their connector insulators can result in damage to the airbag circuits or the connector insulators.



4. Pull the driver airbag away from the steering wheel far enough to access the electrical connections at the back of the airbag housing.
5. Disconnect the clockspring horn and steering wheel switch pigtail wire harness connector from the receptacle on the back of the driver airbag housing.
6. Disconnect the clockspring airbag pigtail wire harness connector from the airbag inflator connector receptacle, which is located on the back of the airbag housing. To disconnect the connector:
  - a. Slide the orange Connector Position Assurance (CPA) lock on the connector toward the top of the connector.
  - b. Depress the connector latch tab and pull the connector straight away from the inflator initiator.
  - c. Remove the airbag from the steering wheel.

**NOTE: The steering wheel has master splines but the steering shaft does not. The steering wheel must be marked prior to removal or the wheel can be reinstalled wrong in any position.**

7. Mark the steering wheel and steering column shaft with a paint pen to ensure the proper orientation when installing.

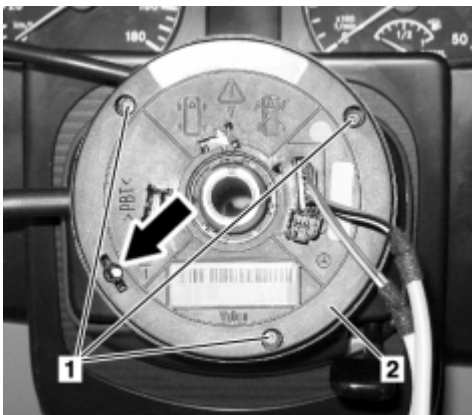


8. Remove the steering wheel bolt. (1)
9. Remove the steering wheel from the steering column.
10. Secure the clockspring rotor to the clockspring case to maintain clockspring centering until the clockspring is reinstalled on the steering column.

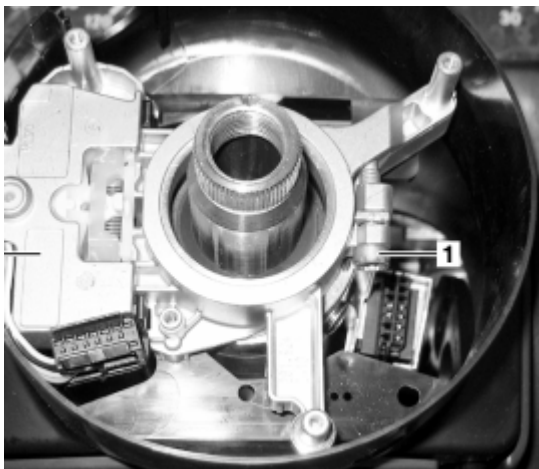
**NOTE: The clockspring rotor must be secured prior to removal. Secure with adhesive tape or with a locking pin. If the clockspring is not secured, proper alignment is not guaranteed. In the event the clockspring is not secured, follow the alignment the clockspring centering procedure as noted in the service literature. If damaged, the clockspring must be replaced.**



**NOTE:** The Steering Control Module (SCM) (also known as the steering column module/MRM) along with a Steering Angle Sensor (SAS) are internal and integral to the clockspring. Following clockspring/SCM/SAS removal and installation or replacement, turn the ignition switch to the ON position and rotate the steering wheel through its full range of travel, from right stop to left stop, then check for Diagnostic Trouble Codes (DTC) using a diagnostic scan tool. Refer to the appropriate diagnostic information.

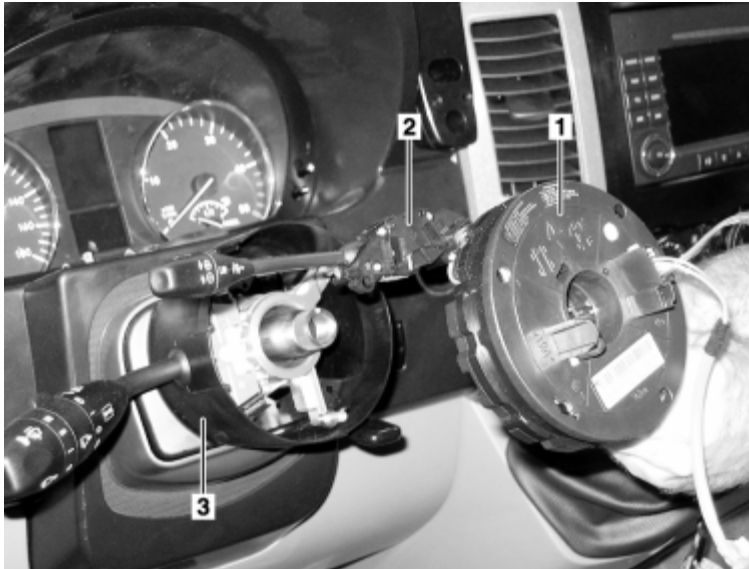


11. Remove the three screws (1) that secure the clockspring (2) and the multi-function switch to the bracket within the steering column. Note: Arrow points to locking pin location.
12. Remove the clockspring from the steering column.





13. Remove bolt at multifunction switch. (1)
14. Remove multifunction switch from steering column.
15. Remove multifunction switch trim.



16. Install new multifunction switch trim (3) with cutout for cruise control switch.
17. Install cruise control pushbutton switch. (2)
18. Install multifunction switch and tighten bolt.
19. Carefully slide the centered clockspring (1) down over the steering column upper shaft and bracket within the steering column until the self docking wire harness connectors are fully engaged.
20. Install and tighten the three screws that secure the clockspring and the multifunction switch to the bracket within the steering column. Tighten the screws securely.
21. Remove the plastic locking pin or the adhesive tape that secures the clockspring rotor to the clockspring case to maintain clockspring centering.
22. Install the steering wheel onto the column.
23. Install the steering wheel bolt. Tighten to 59 ft. lbs (80 N·m).
24. Position the driver airbag close enough to the steering wheel to reconnect the electrical connections on the back of the airbag housing.
25. Reconnect the clockspring driver airbag pigtail wire harness connector to the airbag inflator connector receptacle, which is located on the back of the driver airbag housing. Be certain that the latch on the connector and the orange Connector Position Assurance (CPA) lock are each fully engaged.
26. Reconnect the clockspring horn and steering wheel switch pigtail wire



- harness connector to the receptacle on the back of the driver airbag housing.
27. Carefully position the driver airbag in the steering wheel. Be certain that the clockspring pigtail wires in the steering wheel hub area are not pinched between the driver airbag and the steering wheel armature.
  28. From the underside of the steering wheel, install and tighten the two screws that secure the driver airbag to the steering wheel armature. Tighten the screws to 53 in. lbs (6 N·m.).
  29. Connect the Negative battery terminal.
  30. Add Cruise control sales code to vehicle. Login to DealerCONNECT. Select *Service*. Select *Vehicle Options*. Enter the *VIN Number*. Select *NHM Speed Control*. Select *Add*. Select *Save*.
  31. Perform variant coding of ESP. Connect StarScan or StarMobile, Ignition on, Select *ABS*. Select *Misc Functions*. Select *Activate/Deactivate Cruise Control*. Select *Start*.
  32. Verify operation of Cruise control and check for fault codes.