
SUBJECT: Radio Interference from Generator(Whine)

MODEL: E36

Situation: Complaints of slight whistling or whining noise from radio set at very low volume, especially noticed during high battery current drain. (Generator harmonics high when items such as defogger grid, headlights, foglamps, etc. switched on). Noise tends to rise in frequency relative to engine RPM. The noise can often be heard on AM and FM bands as well as DISC setting if the car is equipped with a CD changer.

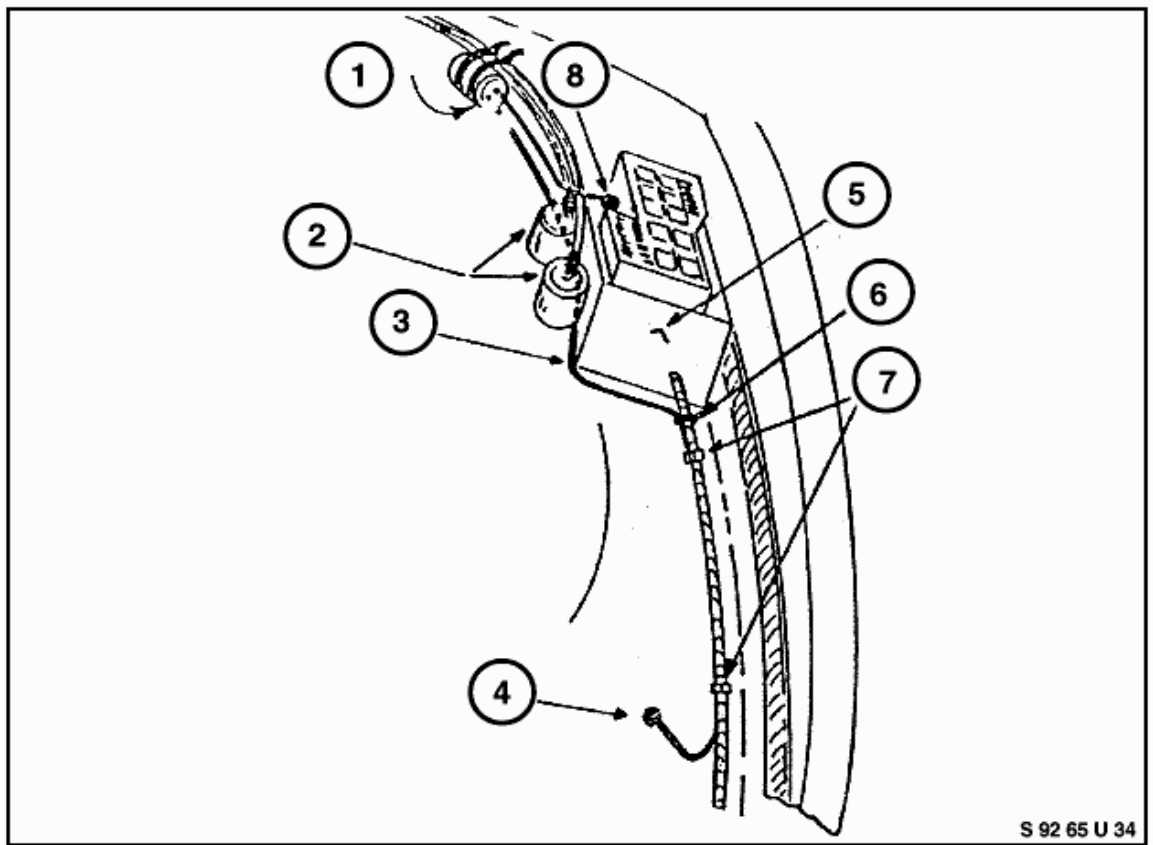
Solution: A special 6,800uF filter capacitor has been developed to limit the amount of high-frequency power supply interference reaching the radio.

1. Make certain that other problems are not affecting the noise rejection of the radio. Verify the connections on the rear of the radio, and also check the connections of antenna coax cables at both ends. Check the CD power and data cables if the car is so equipped. In some cases, unapproved non-BMW accessories such as cellular phones and radar detectors have been wired poorly and act as an antenna, boosting the interference into the power supply of the radio. Disconnect all such aftermarket accessories and verify that the problem still exists. In some extreme cases it will be necessary to proceed with step 2.

2. Install the capacitor (refer to illustration). **Be certain to disconnect the vehicle battery before attempting to make the connections.** Remove the plastic cover from the front power distribution box, located near the bulkhead on the driver's side. Connect the red (positive) capacitor wire to the battery stud on the power distribution box. Connect the black (negative) capacitor wire to the grounding lug on the inner driver's fender, approximately under the cruise control actuator. **Correct polarity must be observed** Secure the capacitor wiring to the existing vehicle harness with tie-wraps. Secure the capacitor body under the large wiring harness near the brake servo booster with large tie-wraps. Reinstall the distribution box cover and reconnect the battery.

Parts Information: 6,800uF Radio Capacitor Kit 90 00 1 000 002

Warranty Status: Defect Code 65 31 00 12 00
Labor Operation 00 50 380
Labor Allowance 6 FRU



S 92 65 U 34

- 1 Position capacitor under wire harness. Use large tie wraps.
- 2 Engine wire harness screw-in connectors.
- 3 Route and connect black wire from capacitor to chassis ground.
- 4 Chassis ground.
Connect red wire from capacitor to B-connection on power distribution box.

Torque: (M8) 8 + 1 (Nm)
6 + 0,5 (ft x lbs)

- 5 Front power distribution box.
- 6 Use small tie wrap here.
- 7 Factory wire harness clips.