

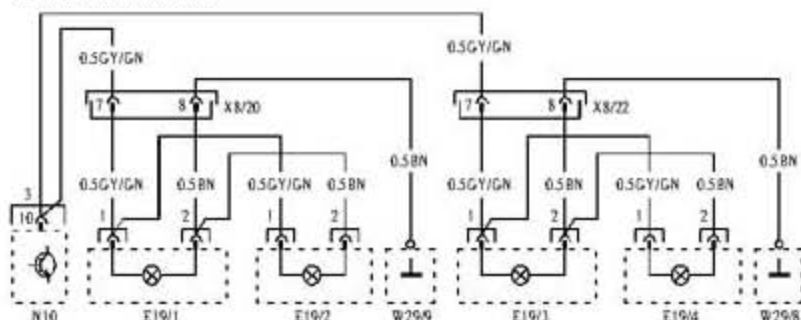
# License Plate Lamp Not ON

## Fault Description:

For a 2007 BENZ VIANO commercial car, with mileage of 20,000km, the license plate lamp cannot light up.

## Fault Diagnosis:

- 1) After checking, we find 2 rear license plate lamps are not on but rear width lamp works normal.



- 2) Firstly check the bulb of rear license plate lamp, it's OK. After testing by diagnostic tool, it displays a fault code stored in SAM module indicating positive circuit short or open. According to the circuit diagram (figure), E19/1 and E19/2 in the figure are rear license plate lamps. Use multimeter to test the grounding of rear license plate lamp and it is OK. Then test the supply voltage, no voltage. As the rear tail lights E19/3 and E19/4 can light up normally, it is deduced the fault point locates in the circuit between N10 and license plate lamp in SAM module. As indicated in the circuit diagram, there's a harness plug-in between SAM module and license plate lamp. It is possible this plug failed. Thus, we check this plug first. Remove the rear right plaque and rear right tail light to check the harness plug-in X8/20. The plug is corroded and there's water in the circuit. By further check, it is found the rear windshield washing pipe breaks off. When washing the windshield, the detergent would spout to the circuit, which caused the corrosion.
- 3) After repair the washing pipe, the fault is successfully removed.

## Summary:

It seems like a simple fault of license plate lamp, but after checking, it is unexpectedly the problem of circuit corrosion which caused by broken washing pipe. Even if it's a simple fault, we shall check carefully to find out the source and solve the problem completely.