GLOW PLUG TROUBLE TRACER CHART

Destroyed/lacking probe tip

Cause:

- Ignition unit failure.
- Incorrect/irregular fuel jet direction. • Incorrect number or size of sealing
- causing incorrect spraying position

Remedy: Check the

- correspondence of ignition unit with the car type and proper installation of the ignition unit.
- Check glow plug installation hole for carbon fouling.
- Replace your plugs

Bulging ring on the probe tip

Cause:

• Oil in the combustion chamber (probable cause: car engine wear).

Remedv:

- Check piston tightness in engine cylinders.
- Check engine oil consumption.
- Replace your plugs



Dimples on the probe tip

Cause:

Ignition unit failure.

• Incorrect/irregular fuel jet direction. • Incorrect number or size of sealing causing incorrect spraying position

Remedy:

 Check the correspondence of ignition unit with the car type and proper installation of the ignition unit.

- Check glow plug installation hole for carbon fouling.
- Replace your plugs

Probe deformation (due to overheating)

Cause:

- Ignition unit failure.
- Incorrect/irregular fuel jet direction. • Incorrect number or size of sealing causing
- incorrect spraying position.
- Glowing time too long or excessive voltage (12-V glow plug used in the 24-V system or vice versa)
- Alternator & regulator failure.
- Injection unit operation/timing failure. Remedy:
- Check the correspondence of the ignition unit with the car type and proper installation of the ignition unit.
- Check glow plug installation hole for carbon fouling.
- Check glow plug regulator (contacts).
- · Check on-board voltage and glow plug voltage.
- Check charging system voltage.
- Check fuel injection timing.
- Replace your plugs

Carbon fouling between the plug body and the probe glow

Cause:

- Ignition unit failure.
- Incorrect/irregular fuel jet direction.
- Incorrect number or size of sealing causing incorrect spraying position.
- Ignition pump operation/timing failure.

Remedy:

Cause:

Remedy:

fouling.

Replace your plugs

- Check the correspondence of the ignition uni with the car type and proper installation
- of the ignition unit.
- Check the glow plug installation hole thread in the cylinder head for carbon fouling.
- Check ignition pump and its timing
- Replace your plugs

Tightening torque too high.

cylinder head hole thread.

• Inappropriate tool used or damage of the

Check the glow plug installation hole thread

in the cylinder head for damage/carbon

Check correct tightening of the glow plug

Power supply terminal broken off



Broken probe tip

Cause:

- Glowing time too long or voltage too high (12-V glow plug used in the 24-V system or vice versa).
- Alternator & regulator failure.
- Remedy:
- Check glow plug regulator (contacts). Check on-board voltage and glow plug voltage.
- Check charging system voltage.
- Replace your plugs

Lacking probe

Cause:

- Ignition unit failure.
- Incorrect/irregular fuel jet direction.
- Incorrect number or size of sealing causing incorrect spraying position.
- Injection unit operation/timing failure. • Damaged glow plug installation hole thread in the cylinder head/not tightened glow plug
- causing incorrect plug seating. Remedy:
- Check the correspondence of the ignition unit with the car type and proper installation of the ignition unit.
- . Check the glow plug installation hole thread in the cylinder head for damage/carbon fouling.
- Check ignition pump timing.
- Replace your plugs

Carbon fouling in the glow plug seat

Cause:

- Incorrect glow plug seating.
- Remedy:
- Check the glow plug installation hole
- thread in the cylinder head for damage/carbon fouling.

Other damage

- Check correct tightening of the glow plug
- Replace your plugs

Cause:

- Glowing time too long.
- Ignition pump operation/timing failure
- Remedy:
- installation of the ignition unit. • Check the glow plug installation hole thread in the cylinder head for carbon
- fouling.
- Check glow plug regulator (contacts). · Check the ignition pump and its timing.
- Replace your plugs

Power supply terminal bent

Probe in contact with the glow plug body

Cause:

Cause:

Remedy:

• Tightening torque too high.

for damage/carbon fouling.

• Replace your plugs

Inappropriate tool used or damage

• Check the cylinder head hole thread

• Check correct glow plug tightening.

of the cylinder head hole thread.

 Tightening torque too high. Inappropriate tool used or damage of the cylinder head hole thread.

Remedy:

- Check the glow plug installation hole thread in the cylinder head for damage carbon fouling.
- Check correct tightening of the glow plug. Replace your plugs



'Swollen" probe tip

Cause:

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- Excessive voltage (12-V glow plug used in the 24-V system or vice versa)
- Alternator & regulator failure.
- Inappropriate storage (moisture).

Remedy:

- Check on-board voltage and glow plug operation voltage.
- Check charging system.
- Check storage conditions.
- Replace your plugs

Probe perforation, fissures or melting close to the glow plug body

Cause:

- Ignition unit failure.
- Incorrect/irregular fuel jet direction. Incorrect number or size of sealing causing
- incorrect spraying position.
- Injection unit operation/timing failure.
- Damaged glow plug installation hole thread in the cylinder head/not tightened glow plug causing incorrect plug seating. Remedy:

- · Check the correspondence of the ignition unit with the car type and proper installation of the ignition unit.
- Check the glow plug installation hole thread in the cylinder head for damage/carbon fouling.
- Check ignition pump timing.
- Replace your plugs

Damaged glow plug hexagon/thread

Cause:

- Tightening torque too high.
- Inappropriate tool used or damage of the cylinder head hole thread.

Remedy:

- Check the glow plug installation hole thread in the cylinder head for damage/ carbon fouling.
- Check correct tightening of the glow plug
- Replace your plugs



· Check the correspondence of the ignition unit with the car type and proper





TURNIT ON



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