GLOW PLUG TROUBLE TRACER CHART

Destroyed/lacking probe tip

- 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

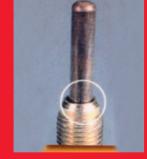
Bulging ring on the probe tip

- Oil in the combustion chamber (probable cause: car engine wear). Remedy:
- Check piston tightness in engine cylinders.
- Check engine oil consumption.
- Replace your plugs



Probe in contact with the glow plug body

- Tightening torque too high. • Inappropriate tool used or damage
- of the cylinder head hole thread.
- Check the cylinder head hole thread for damage/carbon fouling.
- Check correct glow plug tightening.
- Replace your plugs



Power supply terminal bent

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

- 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

Dimples on the probe tip

- 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)

- 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
- Alternator & regulator failure.
- Injection unit operation/timing failure.
- 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:
- · 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.

Power supply terminal broken off

Cause:

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

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

Broken probe tip

- 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

Lacking probe

• Incorrect/irregular fuel jet direction.

• Injection unit operation/timing failure.

incorrect spraying position.

causing incorrect plug seating.

installation of the ignition unit.

damage/carbon fouling.

Replace your plugs

· Check ignition pump timing.

• Incorrect number or size of sealing causing

Damaged glow plug installation hole thread in the cylinder head/not tightened glow plug

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

Carbon fouling in the glow plug seat

• Check the glow plug installation hole thread in the cylinder head for

- voltage. · Check charging system voltage
- Replace your plugs

Ignition unit failure.

Cause:



'Swollen" probe tip

- 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.

- · 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

- Incorrect glow plug seating.
- Remedy:

Cause:

- 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

Other damage



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

• Check the glow plug installation hole

Cause:

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



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

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 carbon fouling.
- Check glow plug regulator (contacts).
- · Check the ignition pump and its timing. Replace your plugs



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