

ON-VEHICLE SERVICE

SPARK PLUG WIRES

REMOVAL

Preparation

- Disconnect battery ground cable.

1. Spark plug wires (Fig. 6D4-2)

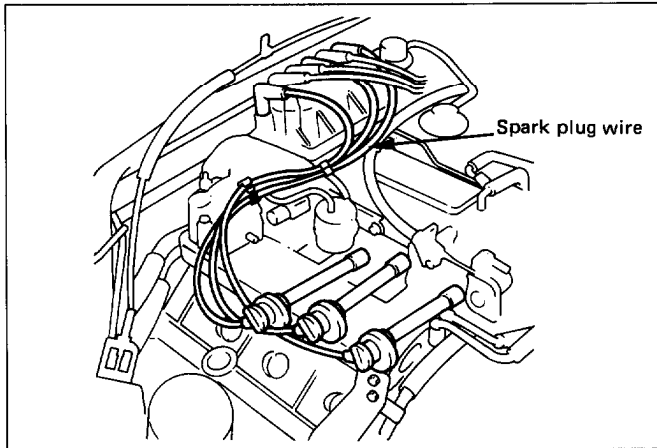


Fig. 6D4-2

INSPECTION AND REPAIR

Check the high tension cable for insulation. Check terminals for corrosion or damage, and replace as necessary.

Measuring resistance of spark plug wires (kΩ)

Spare plug wires	SOHC	DOHC
No. 1 cable	6.4 ~ 14.9	6.2 ~ 14.2
No. 2 cable	5.7 ~ 13.1	7.2 ~ 16.7
No. 3 cable	6.2 ~ 14.4	6.5 ~ 14.9
No. 4 cable	5.8 ~ 13.3	6.8 ~ 15.8
No. 5 cable	6.4 ~ 14.9	6.9 ~ 16.0
No. 6 cable	6.9 ~ 16.0	6.3 ~ 14.5

Measure resistance of spark plug wires, and replace the cable if its value exceeds the standard. (Fig. 6D4-3)

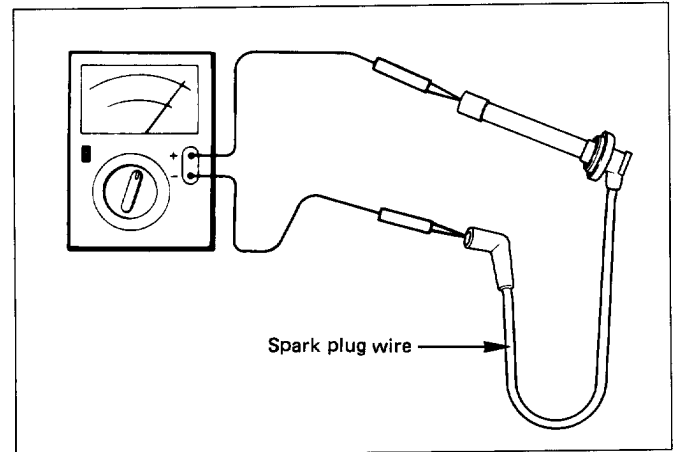


Fig. 6D4-3

INSTALLATION

1. Spark plug wires

- Connect ignition coils and spark plugs with spark plug wires respectively. Match each number (cylinder No.) marked on the ignition coil with that on spark plug wire, and connect each spark plug for the cylinder. (Fig. 6D4-4)

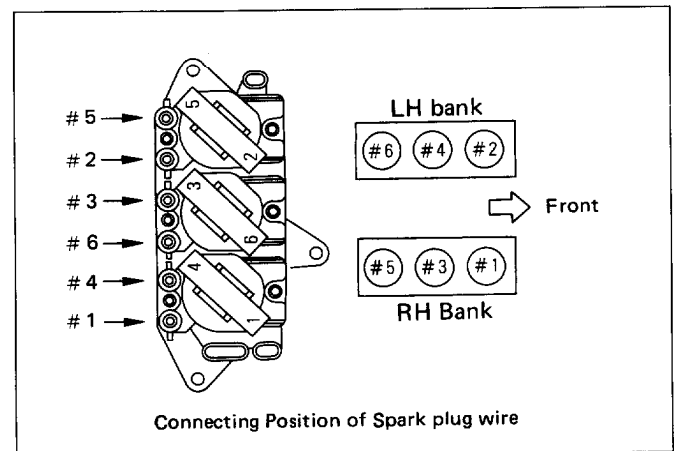


Fig. 6D4-4

- Connect battery ground cable.

CAUTION

Do not cross, twist or pull the spark plug wires.

SPARK PLUG

REMOVAL

1. Spare plug wires
2. Spark plugs (Fig. 6D4-5)

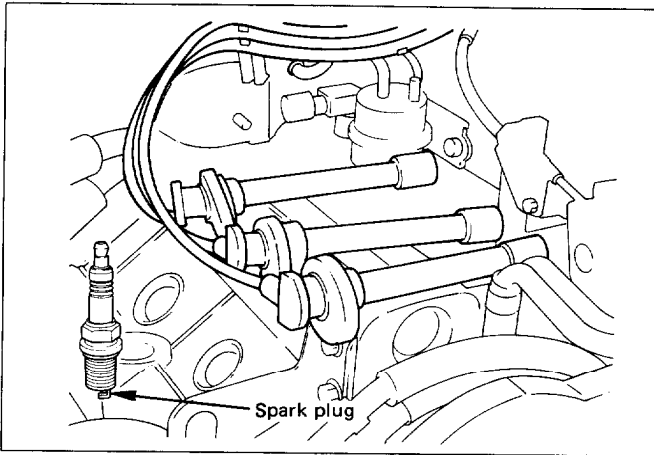


Fig. 6D4A-5

INSPECTION AND REPAIR

The spark plug affects entire engine performance and therefore its inspection is very important.

- Check electrode and insulator for presence of crack, and replace if any.
- Check electrode for wear, and replace if necessary.
- Check gasket for damage, and replace if necessary.
- Measure insulation resistance with an ohmmeter, and replace if faulty.
- Adjust spark plug gap to 1.0(0.04) ~ 1.1(0.043) mm(in).
- Check fuel and electrical systems if spark plug is extremely dirty.
- Use spark plugs having low heat value (hot type plug) if fuel and electrical systems are normal.
- Use spark plugs having high heat value (cold type plug) if insulator and electrode are extremely burned.

Sooty spark plugs

Much deposit of carbon or oil on the electrode and insulator of spark plug reduces the engine performance.

Possible causes:

- Too rich mixture
- Retarded ignition timing
- Presence of oil in combustion chamber
- Incorrectly adjusted spark plug gap

Burning electrodes

This fault is characterized by scorched or heavily oxidized electrode or blistered insulator nose.

Possible causes:

- Too lean mixture
- Advanced ignition timing
- Improper heat value

Measuring Insulation Resistance

- Measure insulation resistance using a 500 volt megohm meter. (Fig. 6D4-6)

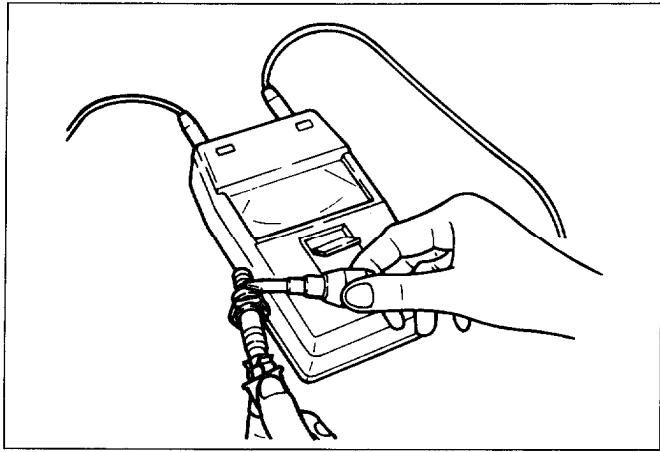



Fig. 6D4-6

- Replace spark plugs if measured value is out of standard.

	Insulation resistance	MΩ	50 or more
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Cleaning Spark Plugs

- Clean spark plugs with a spark plug cleaner.
- Raise the ground electrode to an angle of 45 to 60 degrees. If electrode is wet, dry it before cleaning.
- After spark plug is thoroughly cleaned, check insulator for presence of crack.
- Clean threads and metal body with a wire brush.
- File the electrode tip if electrode is extremely worn.
- Bend the ground electrode to adjust the spark plug gap. (Fig. 6D4-7)

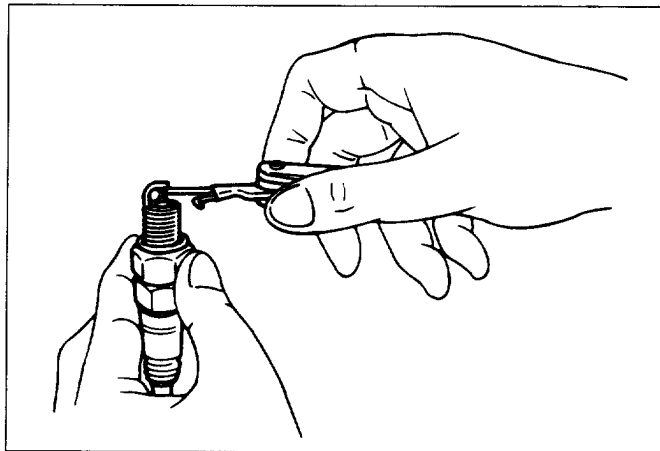


Fig. 6D4-7