TOYOTA SERVICE BULLETIN

Group: 04 No.: 01 Date: Feb, 19

Model: Hiace

Subject: Corrections to Repair Manual RM26T6E

Please ensure these pages are distributed to all relevant staff for their information; and a copy made available for future reference, with the above repair manual.

Section	Title	Paragraph
SPECIFICATIONS	1KD-FTV STARTING	SERVICE DATA (2014/10- 2015/12)
SPECIFICATIONS	1KD-FTV STARTING	SERVICE DATA (2015/12-)
1KD-FTV STARTING	GLOW PLUG (w/ DPF)	ON-VEHICLE INSPECTION (2014/10-)
1KD-FTV STARTING	GLOW PLUG (w/o DPF)	INSPECTION (2014/10-)

The revised pages listed above are attached.

(The corrected parts are indicated by arrows.)

This bulletin does not cause the Flat Rate Manual to be changed

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1KD-FTV STARTING

SERVICE DATA

[Corrected]

GLOW PLUG (w/o DPF)

Glow plug	Standard resistance	0.15 to 1.75 Ω

GLOW PLUG (w/ DPF)

Glow plug	Standard resistance	0.15 to 1.75 Ω

[Corrected]

STARTER (for 2.2 kW Type)

No-load characteristics	Standard current	120 A or less at 11.5 V
Starter armature assembly resistance	Segments	Below 1 Ω
	Commutator - Armature coil	10 kΩ or higher
Starter armature assembly commutator circle runout	Maximum circle runout	0.05 mm (0.0020 in.)
Starter armature assembly commutator diameter	Standard commutator diameter	35.0 mm (1.378 in.)
	Minimum commutator diameter	34.0 mm (1.339 in.)
Starter armature assembly undercut depth	Standard undercut depth	0.7 mm (0.028 in.)
	Minimum undercut depth	0.2 mm (0.008 in.)
Starter yoke assembly resistance	Terminal C - Brush lead	Below 1 Ω
	Terminal C - Starter yoke body	10 kΩ or higher
	Brush lead - Starter yoke body	10 kΩ or higher
Brush length	Standard length	16.5 mm (0.650 in.)
	Minimum length	9.0 mm (0.354 in.)
Starter brush holder assembly resistance	Standard resistance (positive and negative brush holders)	10 kΩ or higher
Starter brush holder assembly Brush spring lead	Standard spring installed load	26.5 to 32.3 N (2.7 to 3.3 kgf, 5.9 to 7.3 lbf)
	Minimum spring installed load	17.6 N (1.8 kgf, 4.0 lbf)
Magnet starter switch assembly resistance	Terminal 50 - Terminal C	Below 1 Ω
	Terminal 50 - Switch body	Below 2 Ω

STARTER (for 2.7 kW Type)

No-load characteristics	Specified current	180 A or less at 11.5 V
Starter armature assembly resistance	Segments	Below 1 Ω
	Commutator - Armature coil	10 kΩ or higher
Starter armature assembly commutator circle runout	Maximum runout	0.05 mm (0.002 in.)
Starter armature assembly commutator diameter	Standard diameter	36.0 mm (1.417 in.)
	Minimum diameter	35.0 mm (1.378 in.)
Starter armature assembly undercut depth	Standard undercut depth	0.7 mm (0.028 in.)
	Minimum undercut depth	0.2 mm (0.008 in.)
Starter yoke assembly resistance	Terminal C - Brush lead	Below 1 Ω
	Brush lead - Starter yoke body	10 MΩ or higher
Brush length	Standard length	20.5 mm (0.807 in.)
	Minimum length	11.0 mm (0.433 in.)
Starter brush holder assembly resistance	Standard resistance (positive and negative brush holders)	10 MΩ or higher
Starter brush holder assembly Brush spring lead	Standard spring load	34.3 to 42.1 N (3.5 to 4.3 kgf, 7.7 to 9.5 lbf)
	Minimum spring load	18.6 N (1.9 kgf, 4.2 lbf)
Magnet starter switch assembly resistance	Terminal 50 - Terminal C	Below 1 Ω
	Terminal 50 - Switch body	Below 1 Ω

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1KD-FTV STARTING

SERVICE DATA

[Corrected]

GLOW PLUG (w/o DPF)

Glow plug	Standard resistance	0.15 to 1.75 Ω

GLOW PLUG (w/ DPF)

Glow plug	Standard resistance	0.15 to 1.75 Ω

STARTER (for 2.2 kW Type)

[Corrected]

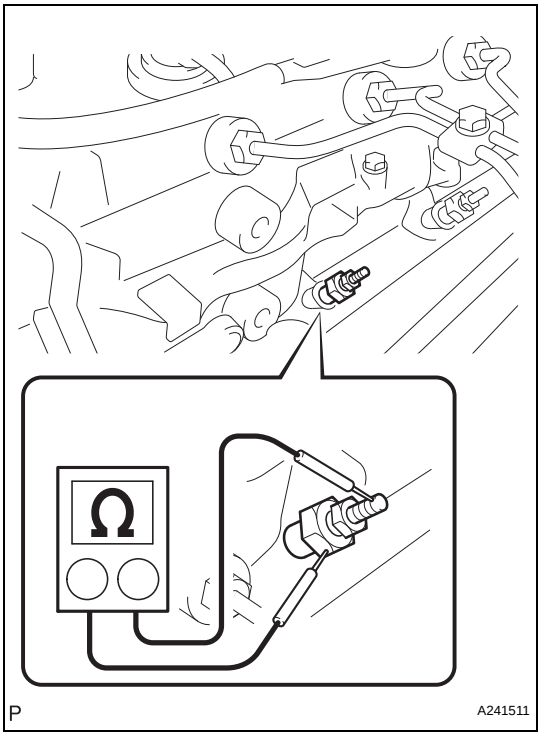
No-load characteristics	Standard current	120 A or less at 11.5 V
Starter armature assembly resistance	Segments	Below 1 Ω
	Commutator - Armature coil	10 kΩ or higher
Starter armature assembly commutator circle runout	Maximum circle runout	0.05 mm (0.0020 in.)
Starter armature assembly commutator diameter	Standard commutator diameter	35.0 mm (1.378 in.)
	Minimum commutator diameter	34.0 mm (1.339 in.)
Starter armature assembly undercut depth	Standard undercut depth	0.7 mm (0.028 in.)
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Starter yoke assembly resistance	Terminal C - Brush lead	Below 1 Ω
	Terminal C - Starter yoke body	10 kΩ or higher
	Brush lead - Starter yoke body	10 kΩ or higher
Brush length	Standard length	16.5 mm (0.650 in.)
	Minimum length	9.0 mm (0.354 in.)
Starter brush holder assembly resistance	Standard resistance (positive and negative brush holders)	10 kΩ or higher
Starter brush holder assembly Brush spring lead	Standard spring installed load	26.5 to 32.3 N (2.7 to 3.3 kgf, 5.9 to 7.3 lbf)
	Minimum spring installed load	17.6 N (1.8 kgf, 4.0 lbf)
Magnet starter switch assembly resistance	Terminal 50 - Terminal C	Below 1 Ω
	Terminal 50 - Switch body	Below 2 Ω

STARTER (for 2.7 kW Type)

No-load characteristics	Specified current	180 A or less at 11.5 V
Starter armature assembly resistance	Segments	Below 1 Ω
	Commutator - Armature coil	10 kΩ or higher
Starter armature assembly commutator circle runout	Maximum runout	0.05 mm (0.002 in.)
Starter armature assembly commutator diameter	Standard diameter	36.0 mm (1.417 in.)
	Minimum diameter	35.0 mm (1.378 in.)
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	Brush lead - Starter yoke body	10 MΩ or higher
Brush length	Standard length	20.5 mm (0.807 in.)
	Minimum length	11.0 mm (0.433 in.)
Starter brush holder assembly resistance	Standard resistance (positive and negative brush holders)	10 MΩ or higher
Starter brush holder assembly Brush spring lead	Standard spring load	34.3 to 42.1 N (3.5 to 4.3 kgf, 7.7 to 9.5 lbf)
	Minimum spring load	18.6 N (1.9 kgf, 4.2 lbf)
Magnet starter switch assembly resistance	Terminal 50 - Terminal C	Below 1 Ω
	Terminal 50 - Switch body	Below 1 Ω

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ST



(b) Check the resistance.

(1) Using an ohmmeter, measure the resistance according to the value(s) in the table below.

Standard Resistance

Tester Connection	Specified Condition
Glow plug terminal - Body ground	0.15 to 1.75 Ω

[Corrected]

NOTICE:

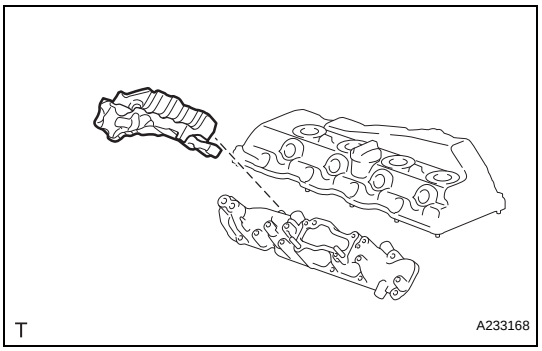
Measure the resistance of the glow plug with it installed to the cylinder head.

If the result is not as specified, replace the glow plug.

(c) Install the No. 1 glow plug connector (See page ST-3).

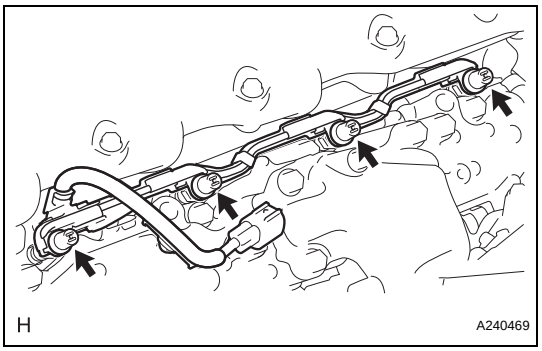
REMOVAL

1. **REMOVE COMMON RAIL ASSEMBLY** (See page)
2. **REMOVE MANIFOLD STAY (See page)**

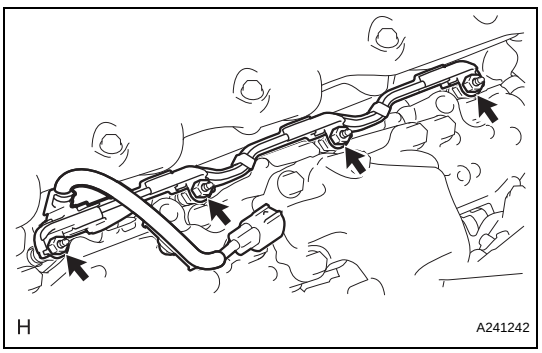


3. **REMOVE NO. 1 INTAKE MANIFOLD INSULATOR**
4. **REMOVE NO. 1 GLOW PLUG CONNECTOR**

(a) Disconnect the connector from the No. 1 glow plug connector.

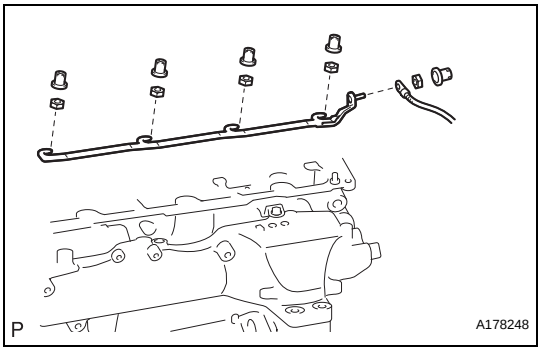


(b) Remove the 4 screw grommets from the No. 1 glow plug connector.



(c) Remove the 4 nuts from the No. 1 glow plug connector.

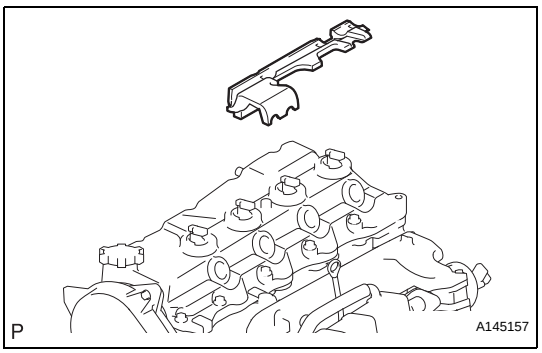
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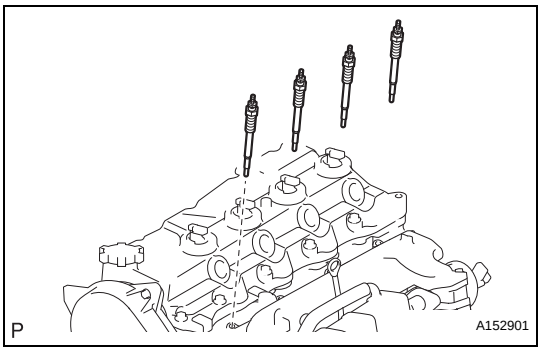
3. REMOVE NO. 1 GLOW PLUG CONNECTOR

(a) Remove the screw grommet and nut and separate the wire harness from the No. 1 glow plug connector.

(b) Remove the 4 screw grommets and 4 nuts and remove the No. 1 glow plug connector.



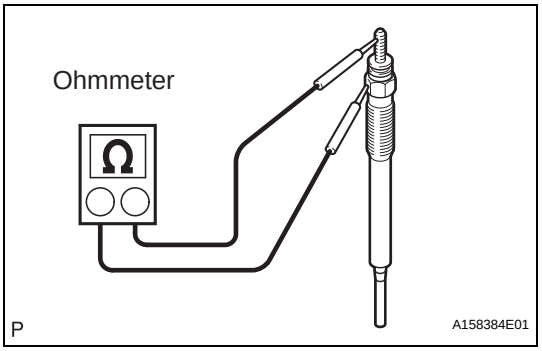
4. REMOVE NO. 2 INTAKE MANIFOLD INSULATOR



5. REMOVE GLOW PLUG

(a) Remove the 4 glow plugs.

INSPECTION



1. INSPECT GLOW PLUG

(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance between the glow plug terminal and glow plug body.

NOTICE:

Measure the resistance of the glow plug with it installed onto the cylinder head.

Standard Resistance

Tester Connection	Specified Condition
Glow plug terminal - Glow plug body	0.15 to 1.75 Ω

[Corrected]

If the result is not as specified, replace the glow plug.

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