TOYOTA

REPAIR MANUAL

1DZ ENGINE

CE618

MidWestTech | Toyota 1DZ Engine Service Manual | Publication CE618

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GENERAL

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13 Remove the camshaft w/timing gear. (Removal and installation: Point 6)
14 Remove the crankshaft timing gear. (Removal and installation: Point 7)
☐ Remove the timing gear case.
16 Remove the front oil seal. (Installation: Point 8)

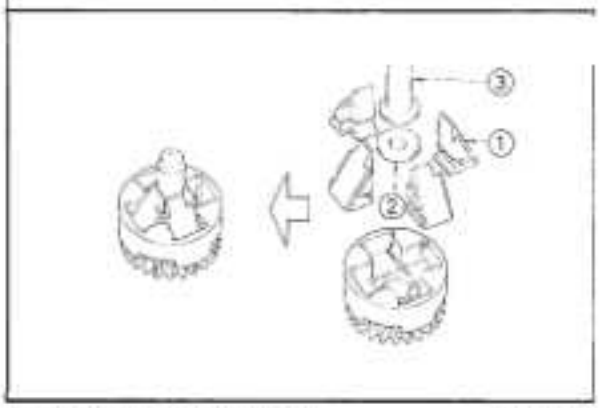
ASSEMBLY PROCEDURE

The assembly procedure is the reverse of the removal procedure

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(2) Install the following parts to the weight holder:
   ① Fly weights
   ② Fly weight washer
   ② Governor sleeve

Caution:
Whenever fly weight replacement is necessary, replace all four weights as a set.



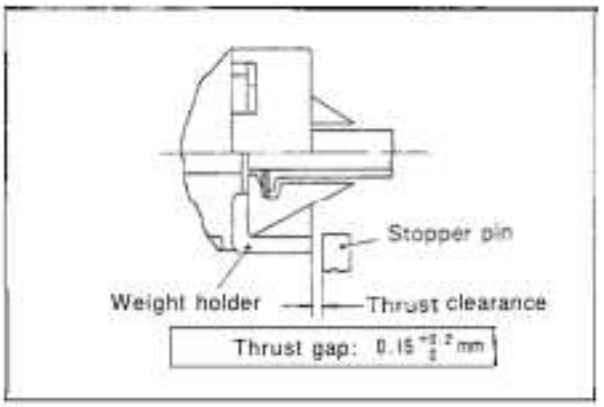
Assembling the Fly Weights KAHS65

(3) Install the O-ring to the governor shaft.
(4) Assemble the following parts:
   ① Governor shaft
   ② Adjusting washer
   ③ Washer
   ④ Governor fly weight ASSY

Note:
The governor shaft threading is left-handed.


Assembling the Governor Shaft LAD35-27,29

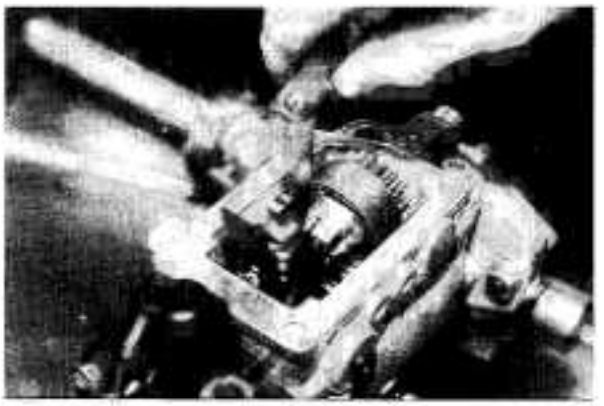
(5) Measure the thrust clearance of the weight holder with a thickness gauge. If the standard is not satisfied, adjust the clearance by changing the adjusting washer thickness.
   Thrust clearance:
   0.15 – 0.35mm (0.0059 – 0.0137 in.)
   (Clearance on entire circumference)



Assembling the Weight Holder KAHS66

Adjusting washer type

Part No.	Thickness mm (in.)
22713-54010	1.05 (0.0413)
22714-54010	1.25 (0.0492)
22715-54010	1.45 (0.0571)
22716-54010	1.65 (0.0650)
22717-54010	1.85 (0.0728)


Measuring the Thrust Clearance LAD35-31

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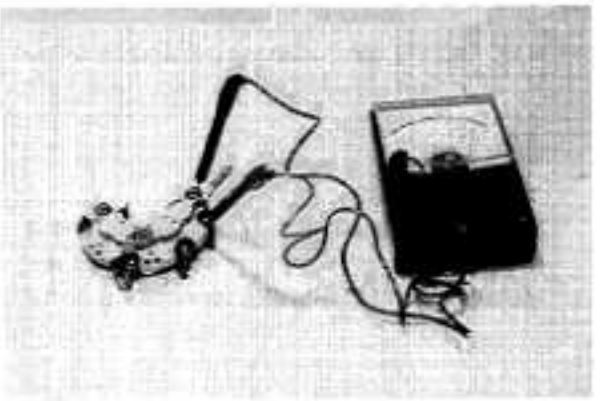
5. Rectifier sub-assy inspection

(1) Test the continuity using the kΩ range of a rnultimeter.

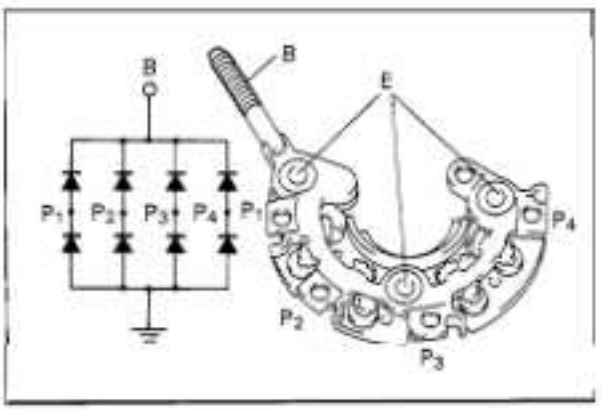
Standard:
Perfect continuity in one direction and no continuity in the other direction when tested with polarity change.

Caution:

- See the figure at right for the rectifier circuit.
- The rectifier quality cannot be judged on the basis of the resistance in the forward direction.
  Because of the diode characteristic, the forward current varies greatly with the source voltage.
  As a result, the multimeter indication depend on the multimeter type and resistance range.
  Therefore, the rectifier is judged normal if the difference between the resistances in the forward and reverse directions is great.
- Do not use a 500V meger since it will damage the rectifier.



Rectifier Sub-assy KAH21-33



Rectifier Sub-assy F3509

6. Brush inspection

(1) Measure brush protrusion length A.

Standard: 10.5 mm (0.413 in.)
Limit: 1.5 mm (0.059 in.)

(2) If the brush length is less than the limit, melt the brush holder soldered portion and remove the brush.

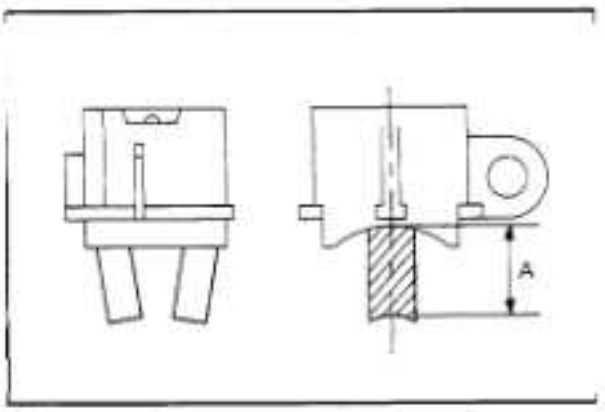
(3) Install the brush to be brush holder and solder the brush to make the brush length 10.5 mm 10.413 in.)

(4) Cut the surplus lead.

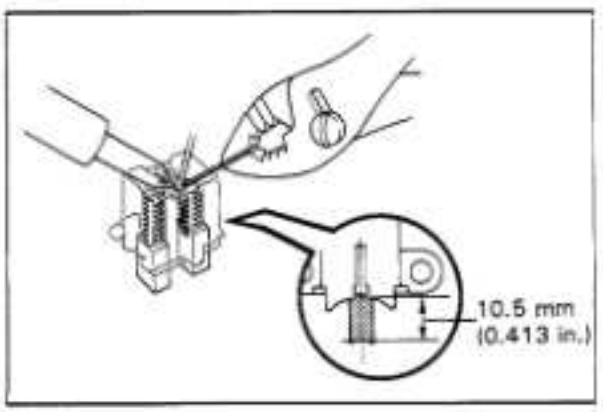
(5) Coat insulating paint on the soldered oortion.

Note:

- Always replace both brushes at the same time
- Do not let the solder thickness exceed 1.0 mm (0.039 mm).



Brush Protrusion F3510



Adjusting the brush Length B5004

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