CASE

PROFESSIONAL PARTNER

SERVICE MANUAL

6WG1-TC (COMMON RAIL) ISUZU ENGINE

9-36410 NA

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GENERAL INFORMATION

General Information

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Engine

Engine mechanical (6WG1 (Common rail))

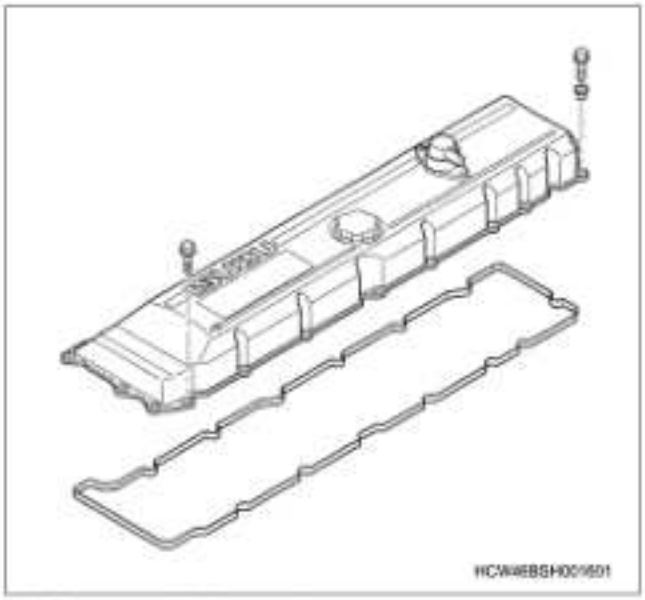
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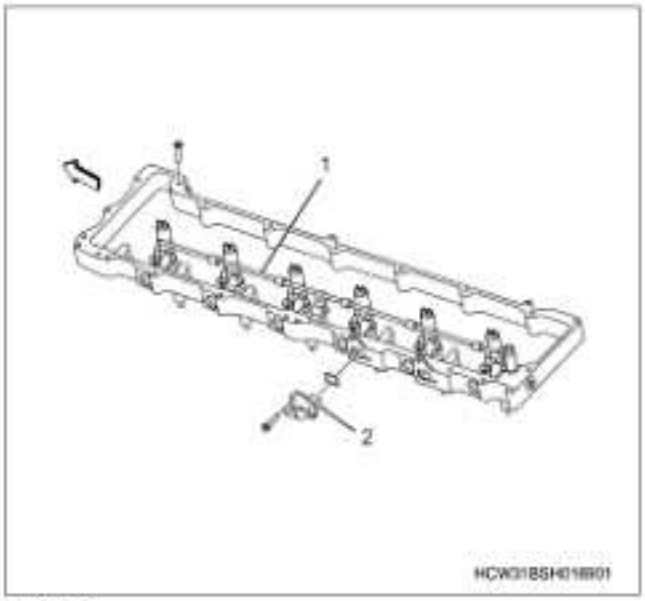
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Model		6WG1-TC
Item		
Injection pump type		Electronic control fuel-injection system (common rail type)
Governor type		Electronic type
Timer type		Electronic type
Nozzle type		DLL-P
Intake/exhaust valve clearance (while cool)	(mm)	0.4
Intake valve opening and closing time	(Open)	21 degree (BTDC)
Intake valve opening and closing time	(Closed)	27 degree (ABDC)
Exhaust valve opening and closing time	(Open)	52 degree (BBDC)
Exhaust valve opening and closing time	(Closed)	17.5 degree (ATDC)
Fuel filter type		Filter paper type
Oil filter type		Filter paper type
Oil pump type		Gear type
Oil cooler type		Water cooling type
Amount of engine oil	(L)	Oil pan :37 – 52
Cooling system method		Water-cooled controlled circulation type
Cooling water full capacity	(L)	36
Water pump type		Centrifugal gear type
Thermostat type		Wax type
Air cleaner type		Filter paper type
Generator capacity	(V-A)	24 – 50
Starter	(V-kW)	24 – 7.0
Turbocharger type		TD08H (Made by Mitsubishi)
Intercooler type		Aluminium tube and endplate type
Thermostat valve open temperature	(°C)	80 – 84
Thermostat all open temperature/ amount of lift	(°C/mm)	95 (10mm lift when at 95 °C)
Oil thermostat all open temperature/ Amount of lift	(°C/mm)	98 (8 mm lift when at 110 °C)
Exhaust gas recirculation device (EGR)		Installed

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3. Remove the injector harness.
4. Remove the nozzle leak off pipe.
5. Remove the harness connector.

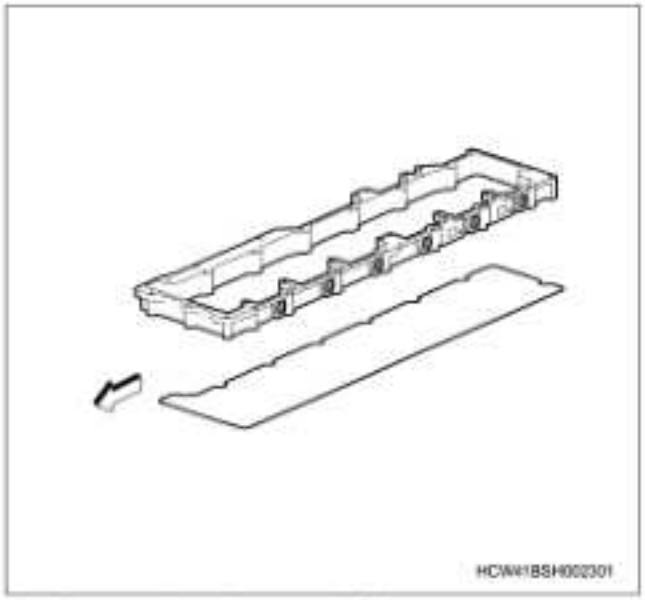


Legend

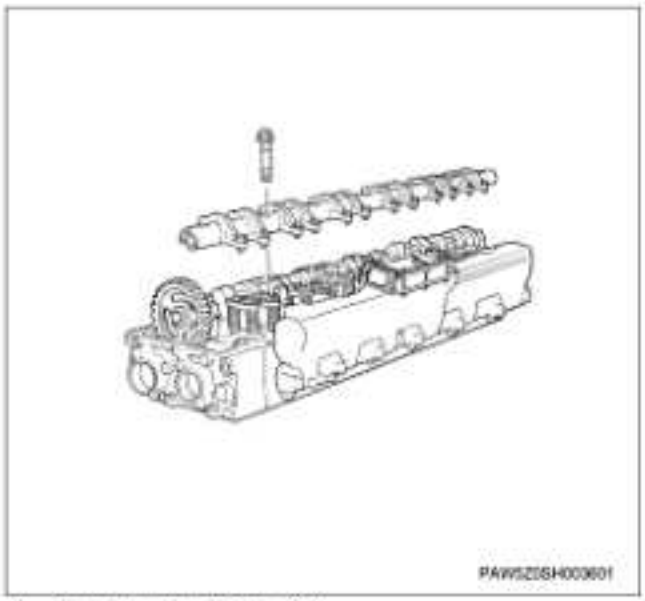
1. Nozzle leak off pipe
2. Harness connector

6. Remove the head lower cover.
7. Remove the head lower cover gasket.

Notes:
When removing the lower cover, a small amount of oil may spill, so be prepared to clean it with a rag.



8. Remove the rocker arm ASM.
   - While maintaining the bracket's balance, loosen and remove the tightening bolts from both sides of the rocker arm ASM bracket.



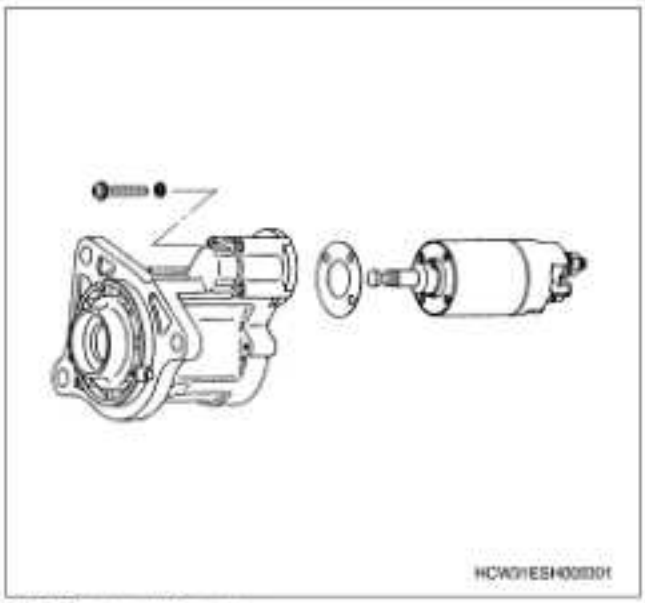
9. Remove the bridge (1).

Notes:
Install numbered tags to each cylinder in the bridge.

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- Remove the magnetic switch's M terminal nut, and remove the lead wire with the terminal installed.
  Next, remove the magnetic switch Installation screw and remove the magnetic switch.

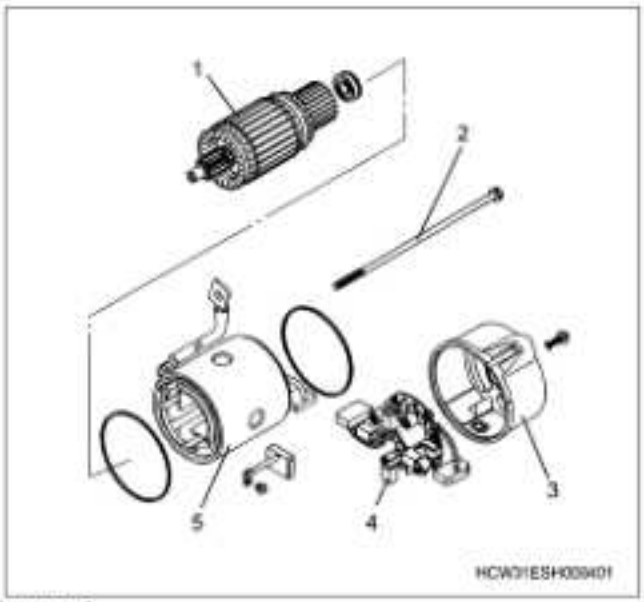
Notes:
The Installation screw is very tight, so an impact driver should be used to loosen it.



7. Remove the screw.
8. Remove the through bolt.
   - Remove the brush holder Installation screw and through bolt.
     Next, remove the rear bracket. At the same time, remove the O-ring.

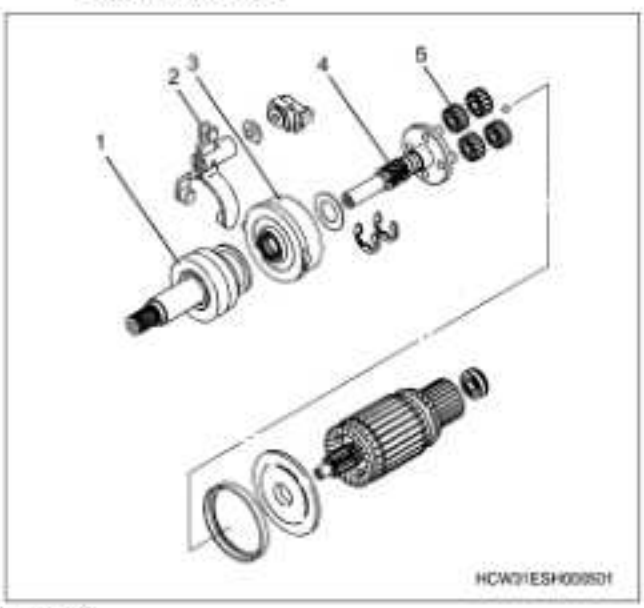
Important:
Do not re-use the O-ring.

9. Remove the rear bracket.
10. Remove the yoke ASM.
11. Remove the O-ring.
    - Place a socket (outer diameter 38mm) against the armature commutator.
      Next, allow the brush to slide on the top of the socket, and with the brush rested on the socket, remove the yoke ASM.
      Remove the O-ring at the same time.
12. Remove the brush holder.
    - Pull the brush spring upwards, and remove the brush from the brush holder.
      Next, remove the brush holder.
13. Remove the armature.
14. Remove the ball.
    - Remove the armature.
      The ball also comes out at the same time, but sometimes it becomes stuck in grease and doesn't come out.
      The bearing can be removed using a common puller.



Legend
1. Armature
2. Through bolt
3. Rear bracket
4. Brush holder
5. Yoke ASM

15. Remove the plate.
16. Remove the gasket.
17. Remove the planet gear.
    - Remove the four planetary gears.
    - Pull the internal gear, gear shaft, overrunning clutch and lever out of the front bracket together as one.



Legend
1. Overrunning clutch
2. Lever
3. Internal gear
4. Gear shaft
5. Planetary gear

18. Remove the lever.

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