667TA/EEG
667TA/EEC
667TA/EBF
667TA/EED
667TA/EBJ
667TA/EDJ
Engines

Service Manual

87519803

CASE CONSTRUCTION

MidWestTech | Case 667TA/EEG, 667TA/EEC, 667TA/EBF, 667TA/EED, 667TA/EBJ, 667TA/EDJ Engine Service Manual | Publication 87519803

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ENGINE REPAIR MANUAL

TABLE OF CONTENTS

CHAPTER 1
DIAGNOSTICS
TABLE OF CONTENTS . . . 1-1
CNH- EST DIAGNOSTIC TOOL . . . 1-3
TROUBLESHOOTING . . . 1-4

CHAPTER 2
667TA ENGINE OVERHAUL
TABLE OF CONTENTS . . . 2-1
ENGINES . . . 2-5
CODING OF SOURCE ENGINES . . . 2-6
ENGINE PROPERTIES . . . 2-6
GENERAL ENGINE FEATURES . . . 2-7
CRANK GEAR COMPONENTS AND CYLINDER ASSEMBLY . . . 2-9
VALVE GEAR - CYLINDER ASSEMBLY . . . 2-12
TORQUE SPECIFICATIONS . . . 2-14
SPECIAL TOOLS . . . 2-16
667TA ENGINES . . . 2-17
DESCRIPTION OF MAIN ENGINE COMPONENTS . . . 2-18
EGR EXHAUST GAS RECIRCULATION SYSTEM . . . 2-22
ENGINE LUBRICATION . . . 2-30
ENGINE COOLING . . . 2-35
HIGH PRESSURE ELECTRONIC INJECTION SYSTEM (COMMON RAIL) . . . 2-37
EDC7UC31 -ELECTRONIC CONTROL UNIT OPERATION . . . 2-38
FUEL SUPPLY SYSTEM . . . 2-40
COMMON RAIL . . . 2-50
COMMON RAIL PRESSURE RELIEF VALVE . . . 2-51
ELECTRO-INJECTOR . . . 2-52
LOCATION OF THE MAIN ELECTRICAL COMPONENTS . . . 2-55
CHECKING THE FUEL SYSTEM . . . 2-67
ENGINE OVERHAUL ON THE BENCH . . . 2-72
CHECKS AND SPECIFICATIONS ON ENGINE CRANKCASE . . . 2-82
CRANKSHAFT . . . 2-87
ENGINE FLYWHEEL . . . 2-102
CYLINDER HEAD . . . 2-107
VALVES . . . 2-108
VALVE GUIDE . . . 2-109
VALVE SEATS . . . 2-110
VALVE SPRINGS . . . 2-112
CYLINDER HEAD . . . 2-112
RODS AND TAPPETS . . . 2-115

CHAPTER 3
CHARGING AND START-UP
TABLE OF CONTENTS . . . 3-1
STARTER MOTOR . . . 3-3
ALTERNATOR . . . 3-6

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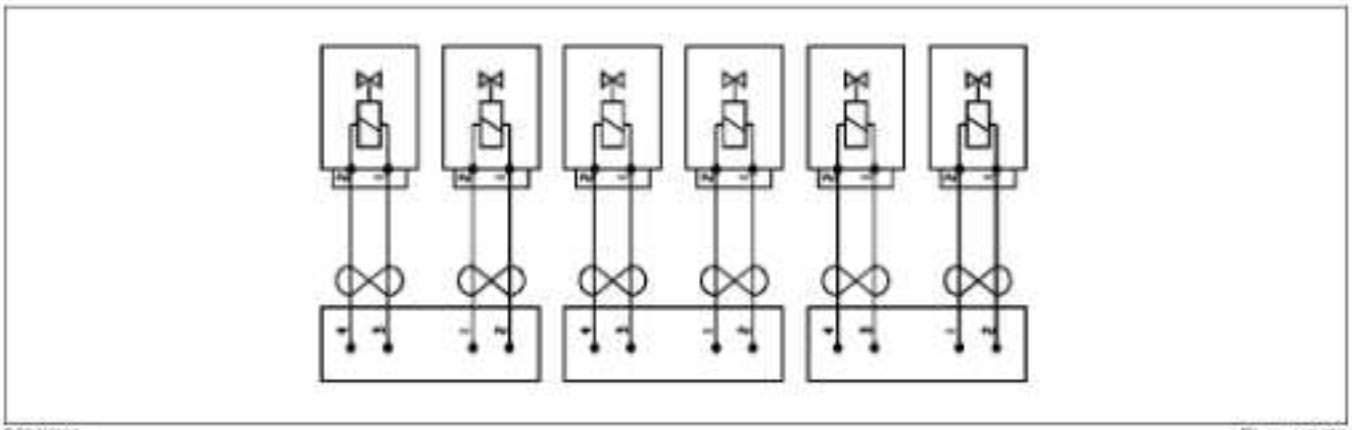
TROUBLESHOOTING

ENGINE WON'T START

Batteries fully charged.	No →	Perform the checks described in the Electrical section of the Shop manual.
Yes ↓		
Connections to battery terminals are tight and clean.	No →	Inspect, clean, tighten or replace connections.
Yes ↓		
Starter motor working properly.	No →	Perform the checks described in the Electrical section of the Shop manual.
Yes ↓		
Pre-Post heating system working properly.	No →	Check using a multi meter replace or repair.
Yes ↓		
Fuel filters plugged.	Yes →	Replace.
No ↓		
The fuel system or injection pump shows signs of air in system.	Yes →	Check and repair air leaks.
No ↓		
The fuel system shows traces of water.	Yes →	Check and clean the fuel system including the fuel tank.
No ↓		
High pressure pump working properly.	No →	Check using Electronic Service Tool (EST) and repair or replace if necessary.
Yes ↓		
Injectors working properly.	No →	Check using Electronic Service Tool (EST). Check O-ring seal. Replace injectors if defective.
Yes ↓		
Compression good on all cylinders.	No →	Check each cylinder for proper compression, overhaul the engine or make repairs on defective parts (valves, piston rings, etc.).

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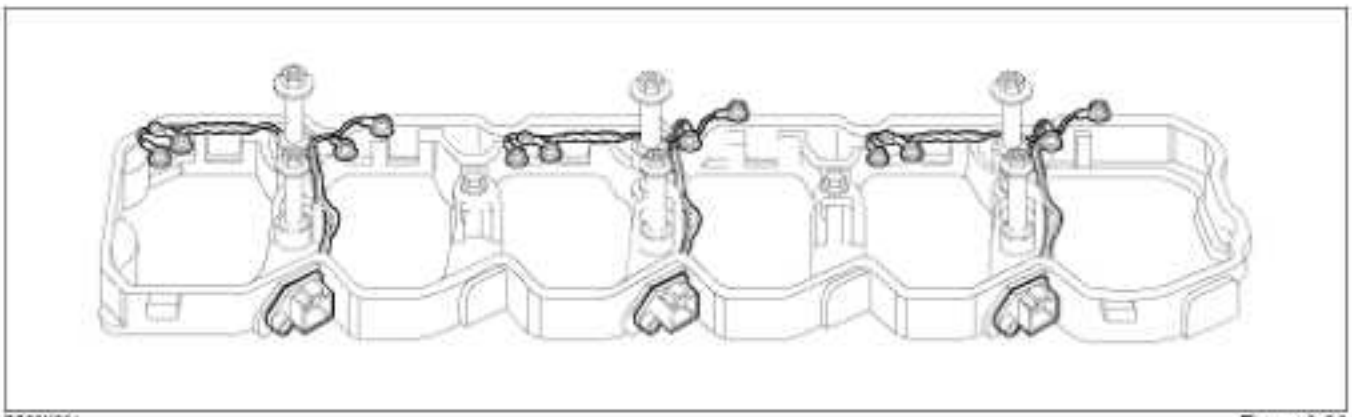
ELECTRO-INJECTORS



BS05K080

Figure 2-79

INJECTOR WIRE HARNESS LAYOUT



BS06K081

Figure 2-80

INJECTOR WIRE HARNESS

The electro-injectors are a normally Closed (N.C.) solenoid valve.

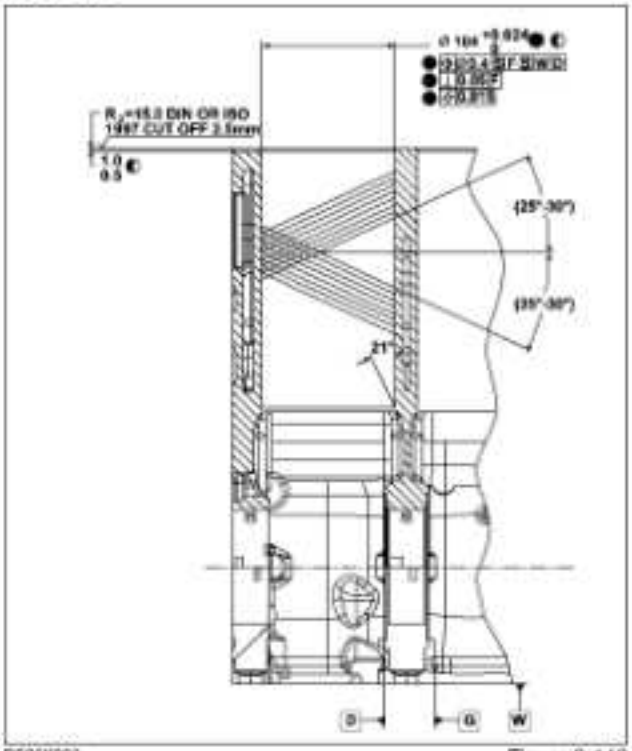
Each injector is connected to the EDC7UC31 control unit on connector A.

The impedance of the coil of each injector is 0.56 - 0.57 ohms.

Reference		Description	EDC7UC31 control unit pin
CONNECTOR 1	1	Cylinder 2 injector	11A
	2	Cylinder 2 injector	6A
	3	Cylinder 1 injector	13A
	4	Cylinder 1 injector	4A
CONNECTOR 2	1	Cylinder 4 injector	14A
	2	Cylinder 4 injector	3A
	3	Cylinder 3injector	12A
	4	Cylinder 3 injector	5A
CONNECTOR 3	1	Cylinder 6 injector	15A
	2	Cylinder 6 injector	2A
	3	Cylinder 5 injector	1A
	4	Cylinder 5 injector	16A

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STEP 49



BS06K269 Figure 2-142

CYLINDER BORE DIMENSIONS AND SPECIFICATIONS

IMPORTANT: *In case of reconditioning all the bores must be machined to the standard increments of over sized bores 0.5mm (0.02in.).*

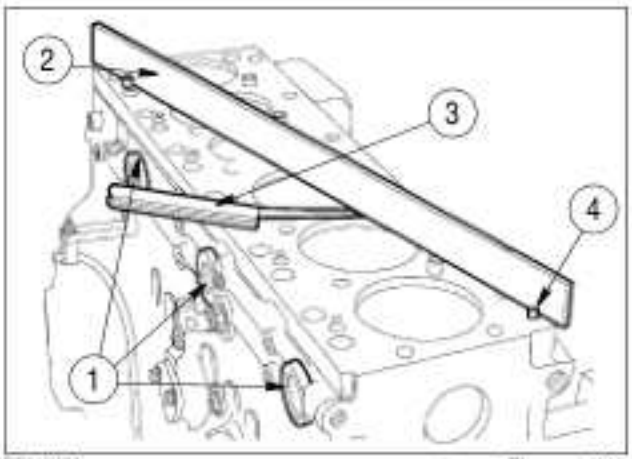
Check the main bearing seats as follows:

- Install the bed caps on the supports without bearing.
- Tighten the fastening bolts to the specified torque.
- Check with a internal comparator, that the seat diameter is the same as the specified value.

If a value is found out of tolerance replace crankcase.

CHECKING THE CRANKCASE CYLINDER HEAD MATING SURFACE

STEP 50



BS06K270 Figure 2-143

Verify that the crankcase cylinder head mating surface does not show any warping. This check can be accomplished by taking out dowels (4), with a straight edge (2) and a thickness gauge (3). If there are any deformed areas, resurface the block. The warpage must not be greater than 0.075mm (0.0030 in.).

IMPORTANT: *When the repair work has been completed, check that the protrusion of the piston from the bore is not greater than the specified value.*

After flattening, restore the bore countersink, as shown on page 2-84.

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