WSM

WORKSHOP MANUAL
TRACTOR

B3200

Kubota

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GENERAL

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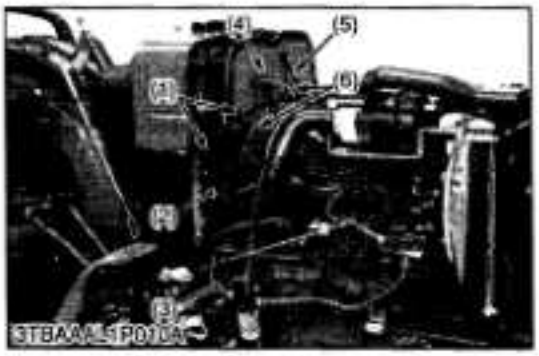
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1. TROUBLESHOOTING

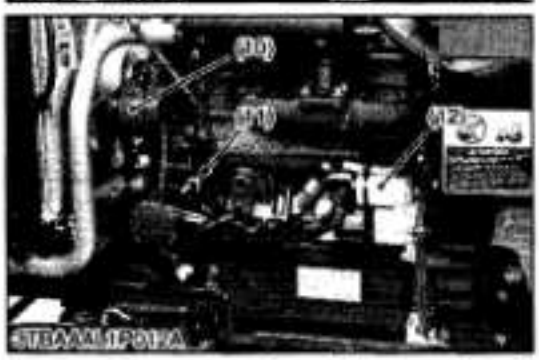
Symptom	Probable Cause	Solution	Reference Page
Engine Does Not Start	No fuel	Replenish fuel	–
	Air in the fuel system	Bleed	G-35
	Water in the fuel system	Change fuel and repair or replace fuel system	–
	Fuel hose clogged	Clean	–
	Fuel filter clogged	Change	G-30
	Excessively high viscosity of fuel or engine oil at low temperature	Use specified fuel or engine oil	G-9
	Fuel with low cetane number	Use specified fuel	–
	Incorrect injection timing	Adjust	1-S15
	Injection nozzle clogged	Repair or replace	1-S18
	Injection pump malfunctioning	Replace	1-S31
	Seizure of crankshaft, camshaft, piston, cylinder or bearing	Repair	–
	Compression leak from cylinder	Replace head gasket, tighten cylinder head screw, glow plug and nozzle holder	1-S29
	Improper valve timing	Correct or replace timing gear	1-S32
	Piston ring and cylinder worn	Replace	1-S50
	Excessive valve clearance	Adjust	1-S11
Engine Revolution Is Not Smooth	Fuel filter clogged or dirty	Replace	G-30
	Air cleaner clogged	Clean or replace	G-25, 31
	Fuel leak due to loosing injection pipe retaining nut	Tighten retaining nut	–
	Injection pump malfunctioning	Replace	1-S35
	Incorrect nozzle injection pressure	Adjust	1-S18
	Injection nozzle stuck or clogged	Repair or replace	1-S18
	Governor malfunctioning	Repair	–
Either White or Blue Exhaust Gas Is Observed	Excessive engine oil	Reduce to specified level	1-S21
	Piston ring and cylinder worn or stuck	Repair or replace	1-S50
	Incorrect injection timing	Adjust	1-S15
	Deficient compression	Repair	1-S10, 28, 34

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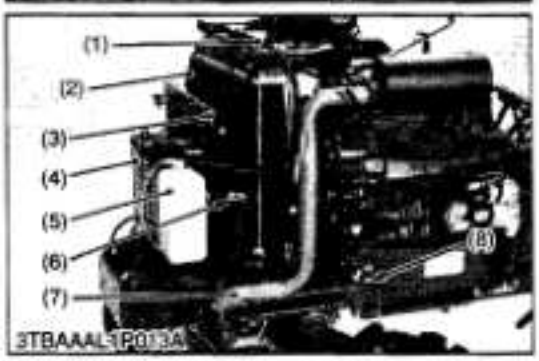


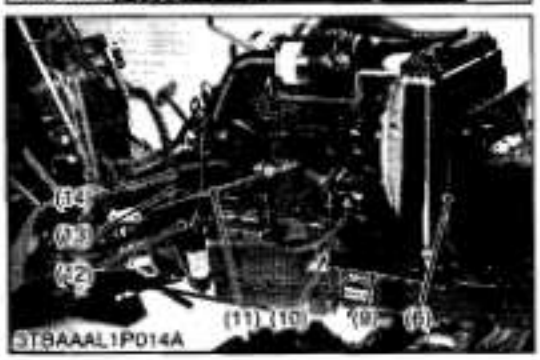
Fuel Tank and Wire Harness

1. Disconnect the fuel hose (3) at the fuel filter side, then drain fuel completely.
2. Remove the fuse box (2) and disconnect the wire harness clamp (1).
3. Remove the fuel tank frame stay bolt (4). Disconnect the overflow hoses (6) and pull out the hour meter cable (5).
4. Disconnect the lead wires for fuel gauge and disconnect the wire harness clamps.
5. Remove the fuel tank (8) with tank frame (7).
6. Disconnect the glow plug lead wire, thermo sensor lead wire, engine stop solenoid connector, engine oil pressure switch lead wire, dynamo connector and starter motor lead wire.

(1) Wire Harness Clamp
(2) Fuse Box
(3) Fuel Hose
(4) Bolt
(5) Hour Meter Cable
(6) Overflow Hose
(7) Tank Frame
(8) Fuel Tank
(9) Fuel Gauge
(10) Dynamo
(11) Engine Oil Pressure Switch
(12) Starter Motor

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Battery, Recovery Tank, Battery Stay and Hydraulic Pipes

1. Remove the battery retainer.
2. Disconnect the positive cord and remove the battery (4).
3. Remove the recovery hose (1).
4. Remove the muffler pipe (7).
5. Remove the oil cooler pipe plate spring (6).
6. Remove the battery stay (3) with oil cooler (2).
7. Remove the oil cooler pipe clamp (8), (10). Then remove the oil cooler pipe (2).
8. Disconnect the accelerator rod (11).
9. Remove the power steering delivery pipe (14).
10. Remove the pipe clamp and the disconnect the 3-point hitch delivery pipe (13) and suction hose (12).

(1) Recovery Tank Hose
(2) Oil Cooler
(3) Battery Stay
(4) Battery
(5) Recovery Tank
(6) Oil Cooler Pipe Plate Spring
(7) Muffler Pipe
(8) Clamp
(9) Oil Cooler Pipe
(10) Clamp
(11) Accelerator Rod
(12) Suction Hose
(13) 3-Point Hitch Delivery Pipe
(14) Power Steering Delivery Pipe

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2. SERVICING SPECIFICATIONS

Item		Factory Specification	Allowable Limit
Front Wheel Alignment	Toe-in	0 to 20 mm 0 to 0.78 in.	–
Front Axle	Rocking Force	50.0 to 100 N 5.10 to 10.1 kgf 11.3 to 22.4 lbf	–
Differential Case to Deferential Pinion	Clearance	0.032 to 0.068 mm 0.0013 to 0.0026 in.	0.2 mm 0.008 in.
	Differential Case (I.D.)	15.000 to 15.018 mm 0.59056 to 0.59125 in.	–
	Differential Case (O.D.)	14.950 to 14.968 mm 0.58859 to 0.58929 in.	–
Spiral Bevel Pinion Shaft	Turning Torque	0.80 to 1.0 N·m 0.082 to 0.10 kgf·m 0.59 to 0.73 lbf·ft	–
Spiral Bevel Pinion Shaft to Spiral Bevel Gear	Backlash	0.1 to 0.3 mm 0.004 to 0.01 in.	–
10T Bevel Gear to 16T Bevel Gear	Backlash	0.1 to 0.3 mm 0.004 to 0.01 in.	–
Front Axle Case Boss to Bracket Bushing (Front)	Clearance	0.125 to 0.280 mm 0.00493 to 0.0110 in.	0.45 mm 0.018 in.
	Front Axle Case Boss (O.D.)	49.950 to 49.975 mm 1.9666 to 1.9675 in.	–
	Bracket Bushing (I.D.)	50.10 to 50.23 mm 1.973 to 1.977 in.	–
Front Axle Case Boss to Bracket Bushing (Rear)	Clearance	0.0900 to 0.250 mm 0.00355 to 0.00984 in.	0.45 mm 0.018 in.
	Front Axle Case Boss (O.D.)	64.940 to 64.970 mm 2.5567 to 2.5578 in.	–
	Bracket Bushing (I.D.)	65.06 to 65.19 mm 2.562 to 2.566 in.	–

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