WSM

WORKSHOP MANUAL

TRACTOR,ROTARY MOWER, FRONT LOADER

BX2350D,RCK48-23BX-EU, RCK54-23BX-EU,RCK60B-23BX-EU, LA243

Kubota

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Implement		Remarks	BX2350D
Mower	Mid-Mount	Max. Cutting Width	1520 mm (60 in.)
		Max.Weight	115 kg (254 lbs)
	Rotary-Cutter (1 Blade)	Max. Cutting Width	1070 mm (42 in.)
		Max.Weight	140 kg (300 lbs)
	Rear-Mount (2 or 3 Blade)	Max. Cutting Width	1520 mm (60 in.)
		Max.Weight	140 kg (300 lbs)
	Flail Mower	Max. Cutting Width	1070 mm (42 in.)
	Sickle Bar	Max. Cutting Width	1220 mm (48 in.)
Rotary Tiller		Max. Tilling Width	1070 mm (42 in.)
		Max. Weight	170 kg (375 lbs)
Bottom Plow		Max. Size	360 mm (14 in.) × 1
Disc Plow		Max. Size	560 mm (22 in.) × 1
Cultivator		Max. Width	1220 mm (48 in.) 1 Row
Disc Harrow		Max. Harrowing Width	1370 mm (54 in.)
		Max. Weight	140 kg (300 lbs)
Sprayer		Max. Tank Capacity	150 L (40 U.S.gals, 33 Imp.gals)
Front Blade		Max. Cutting Width	1520 mm (60 in.)
		Sub Frame	Necessary
Rear Blade		Max. Cutting Width	1520 mm (60 in.)
		Max. Weight	160 kg (350 lbs)
Front Loader		Max. Lifting Capacity	240 kg (530 lbs)
		Max. Width	1220 mm (48 in.)
Box Blade		Max. Cutting Width	1220 mm (48 in.)
		Max. Weight	170 kg (375 lbs)
Snow Blower (Front)		Max. Working Width	1270 mm (50 in.)
		Max. Weight	160 kg (350 lbs)
		Sub Frame	Necessary
Post Hole Digger		Digging Depth	1140 mm (45 in.)
Rotary Broom		Cleaning Width	1190 mm (47 in.)
Trailer		Max. Load Capacity	800 kg (1765 lbs)

■ **NOTE**

- **Backhoe cannot be attached.**
- **Implement size may very depending on soil operating conditions.**
- **Reduce speed and trailer loads when operating in slippery conditions or when operating on slopes and utilize front wheel drive.**

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1. TROUBLESHOOTING

Symptom	Probable Cause	Solution	Reference Page
Cannot Be Steered	Steering controller malfunctioning	Replace	4-S5
Hard Steering	Power steering oil improper	Change with specified oil	G-7
	Hydraulic pump malfunctioning	Replace	5-S15
	Flow priority valve malfunctioning	Repair or replace	5-M6
	Steering controller malfunctioning	Replace	4-S5
Steering Force Fluctuates	Steering controller malfunctioning	Replace	4-S5
	Flow priority valve malfunctioning	Replace	5-M7
	Air sucked in pump due to lack of oil	Replenish	G-7
	Air sucked in pump from suction circuit	Repair	5-S13
Steering Wheel Turns Spontaneously When Released	Steering controller malfunctioning	Replace	4-S5
Front Wheels Wander to Right and Left	Steering controller malfunctioning	Replace	4-S5
	Air sucked in pump due to lack of oil	Replenish	G-7
	Air sucked in pump from suction circuit	Repair	5-S15
	Insufficient bleeding	Bleed	4-S4
	Cylinder malfunctioning	Repair or replace	4-S8
	Improper toe-in adjustment	Adjust	3-S4
	Tire pressure uneven	Inflate	G-42
Wheels Are Turned to a Direction Opposite to Steering Direction	Cylinder piping connected in reverse	Repair	4-S6, S7
Steering Wheel Turns Idle in Manual Steering	Insufficient bleeding	Bleed	4-S4
	Air sucked in due to lack of oil	Replenish	G-7
Noise	Air sucked in pump due to lack of oil	Replenish	G-7
	Air sucked in pump from suction circuit	Repair	5-S15
	Pipe deformed	Replace	–
Oil Temperature Increases Rapidly	Steering controller (relief valve) malfunctioning	Replace	4-S5

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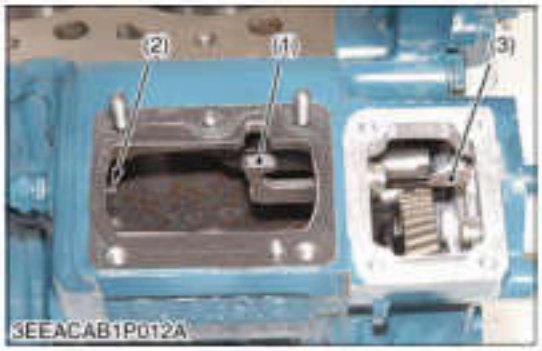
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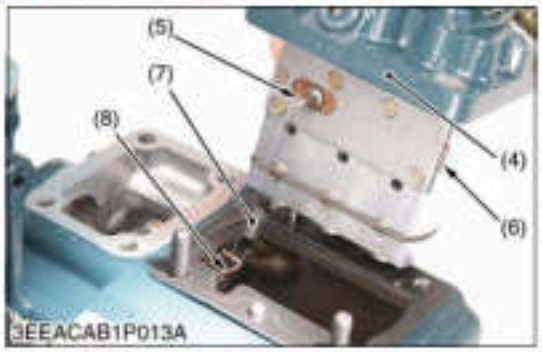
GAUGES AND TACH. AND HOUR METER

Symptom	Probable Cause	Solution	Reference Page
Fuel Warning Lamp Does Not Light	Fuel gauge defective	Replace	–
	Fuel level sensor defective	Replace	6-S24
	Wiring harness disconnected or improperly connected (between fuel gauge and fuel level sensor)	Repair or Replace	–
Coolant Temperature Gauge Does Not Function	Coolant temperature gauge defective	Replace	–
	Coolant temperature sensor defective	Replace	6-S24
	Wiring harness disconnected or improperly connected (between coolant temperature gauge and coolant temperature sensor)	Repair or Replace	–
Hour And Tach. Meter Does Not Function	Alternator defective	Replace	6-S25
	Hour and tach. meter defective	Replace	–
	Wiring harness defective (between alternator and meter panel)	Replace	–

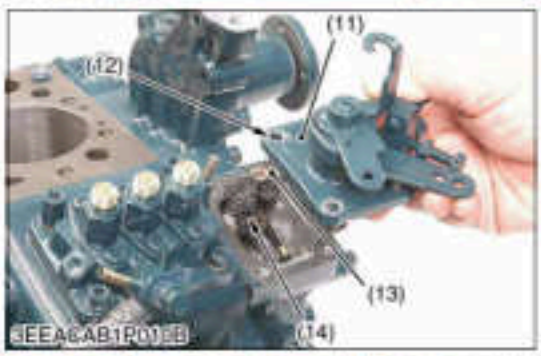
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Injection Pump, Fuel Feed Pump and Speed Control Plate (for Energize to Run Type Engine Stop Solenoid) (Continued)

(When reassembling)

1. Move the fork lever (1) to the gear case side.
2. Hook the start spring (7) to the injection pump control rack pin (5).
3. Put the specific tool (8) through the fork lever hole of cylinder block (9) and hook the start spring (7).
4. Keep this spring slightly extended and install the injection pump (4). Make sure the control rod (6) should be pushed by the idling adjusting spring (2) and the pin (5) on the rod engages with the fork lever (1).
5. Hook the start spring (7) to the bracket (3) using the specific tool (8).
6. Hook the governor springs (small and large) (14) to the governor lever (13) using the governor spring hooking special tool (8) and install the speed control plate (11). Be sure to place the copper washers underneath two screws (12) in the upper of the speed control plate.
7. Install the engine stop solenoid rod (15) to the guide hole of cylinder block (10) and fix the engine stop solenoid (16) with socket head screws.

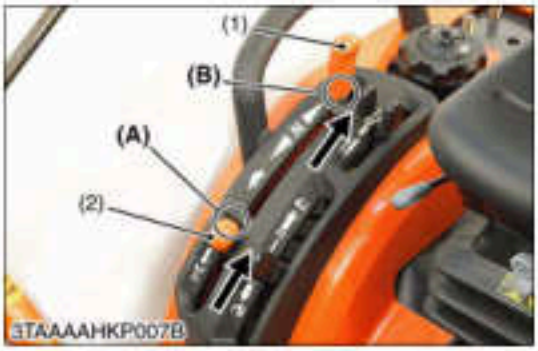
■ **NOTE**

- **Be careful not to stretch the start spring (7) too long. Otherwise it may get deformed permanently.**
- **Make sure the start spring (7) is tight on the bracket (3).**
- **The sealant is applied to both sides of the soft metal gasket shim. The liquid gasket is not required for assembling.**
- **Addition or reduction of shim (0.05 mm, 0.0020 in.) delays or advances the injection timing by approx. 0.0087 rad (0.5 °).**
- **In disassembling and replacing, be sure to use the same number of new gasket shims with the same thickness.**

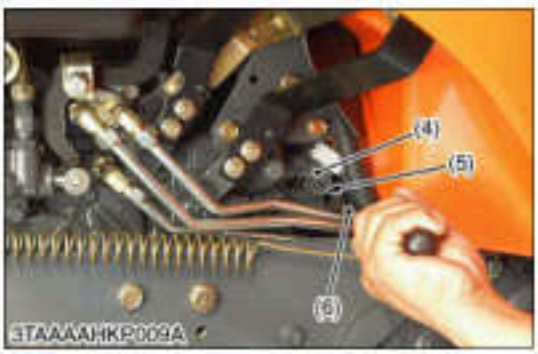
(1) Fork Lever
(2) Idling Adjusting Spring
(3) Bracket
(4) Injection Pump
(5) Injection Pump Control Rack Pin
(6) Injection Pump Control Rod
(7) Start Spring
(8) Governor Spring Hooking Special Tool
(9) Fork Lever Hole of Cylinder Block
(10) Guide Hole of Cylinder Block
(11) Speed Control Plate
(12) Screw and Copper Washer
(13) Governor Lever
(14) Governor Spring
(15) Engine Stop Solenoid Rod
(16) Engine Stop Solenoid

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Adjustment of HST Neutral Position

1. Start the engine.
2. Keep the engine at the maximum revolution.
3. Shift the range shift lever (1) to "**Hi**" position **(B)**.
4. Loosen the locking screw (5).

■ **NOTE**

- **When adjusting the HST neutral position, loosen the locking screw approximately 2 turns counterclockwise not to drop the nut inside.**
- **Make sure 4WD lever is 2WD before making adjustment.**

(Forward to Neutral Position)

5. Depress the speed control pedal (3) to "**Forward**" speed position, and release the foot from the speed control pedal (3). Check that the rear axle (or the wheel) stops rotating.
   If the rear axle (or the wheel) does not stop rotating, move the position of the locking screw (5) to the machine front side to stop rotating.

(Reverse to Neutral Position)

6. Depress the speed control pedal (3) to "**Reverse**" speed position, and release the foot from the speed control pedal (3). Check the rear axle (or the wheel) stops rotating. If the rear axle (or the wheel) does not stop rotating, adjust the locking screw (5) to stop rotating.
7. After adjusting the neutral position, tighten the lock screw (5) securely.

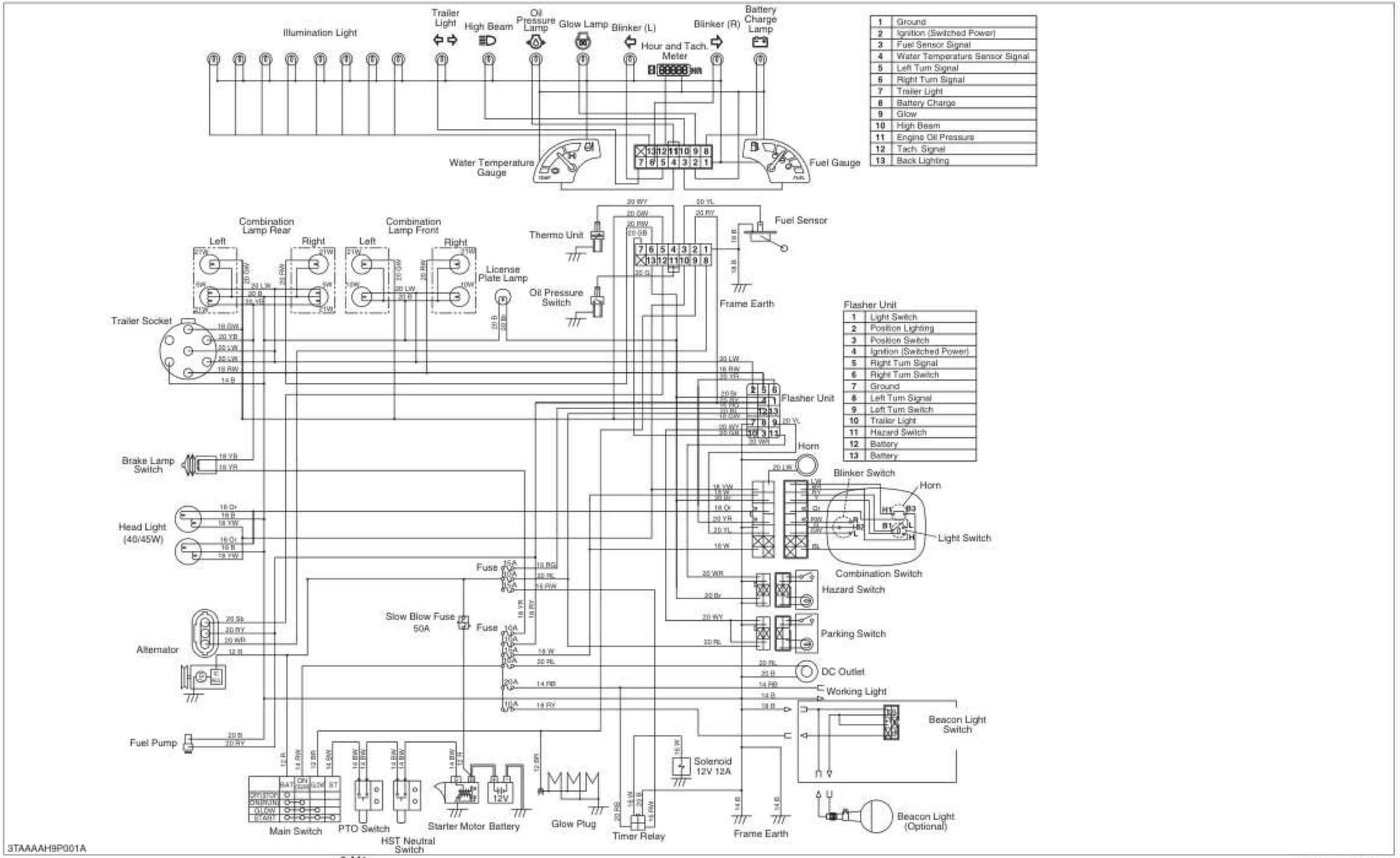
(1) Range Gear Shift Lever
(2) Front Wheel Drive
(3) Speed Control Pedal
(4) Neutral Adjust Lever
(5) Locking Screw
(6) Screw Driver

(A) 4WD "OFF" Position
(B) "HI" Position
(C) FORWARD
(D) REVERSE

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1. WIRING DIAGRAM



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