WSM

WORKSHOP MANUAL
TRACTOR

B1830,B2230,B2530,B3030

Kubota

KiSC issued 03, 2007 A

MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication 9Y111-00031

Order the manual at mid-west-tech.com >

GENERAL

CONTENTS

1. TRACTOR IDENTIFICATION G-1
2. GENERAL PRECAUTIONS G-2
3. HANDLING PRECAUTIONS FOR ELECTRICAL PARTS AND WIRING .. G-3
   [1] WIRING G-3
   [2] BATTERY G-5
   [3] FUSE G-5
   [4] CONNECTOR G-5
   [5] HANDLING OF CIRCUIT TESTER G-6
4. LUBRICANTS FUEL AND COOLANT G-7
5. TIGHTENING TORQUES G-8
   [1] GENERAL USE SCREWS, BOLTS AND NUTS G-8
   [2] STUD BOLTS G-8
6. MAINTENANCE CHECK LIST G-9
7. CHECK AND MAINTENANCE G-11
   [1] DAILY CHECK G-11
   [2] CHECK POINTS OF INITIAL 50 HOURS G-13
   [3] CHECK POINTS OF EVERY 50 HOURS G-17
   [4] CHECK POINTS OF EVERY 100 HOURS G-19
   [5] CHECK POINTS OF EVERY 200 HOURS G-26
   [6] CHECK POINTS OF EVERY 300 HOURS G-29
   [7] CHECK POINTS OF EVERY 400 HOURS G-31
   [8] CHECK POINT OF EVERY 800 HOURS G-32
   [9] CHECK POINT OF EVERY 1500 HOURS G-34
   [10] CHECK POINT OF EVERY 1 YEAR G-35
   [11] CHECK POINTS OF EVERY 2 YEARS G-37
   [12] OTHERS G-41
8. SPECIAL TOOLS G-47
   [1] SPECIAL TOOLS FOR ENGINE G-47
   [2] SPECIAL TOOLS FOR TRACTOR G-53
   [3] SPECIAL TOOLS FOR CABIN G-56
9. TIRES G-58
   [1] TIRE PRESSURE G-58
   [2] TREAD G-59
      (1) Front Wheels G-60
      (2) Rear Wheels G-61
   [3] TIRE LIQUID INJECTION AND BALLAST G-63
10. IMPLEMENT LIMITATIONS G-66

KiSC issued 03, 2007 A

MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication... Order the manual at mid-west-tech.com >

The pump and the motor are joined in a closed hydraulic circuit. Most of oil circulates with in the main oil circuit. A little oil lubricates and oozes out from the clearance between the moving parts in the case. Then oil in the main oil circuit of the HST needs to be supplied a want.

So all of oil fed from hydraulic pump flow to hydraulic transmission for charging and cooling.

The charge oil aids smooth operation of pistons for pump and motor. The charge oil passed to charge relief valve port. The rest of oil passed through the charge relief valve into the HST housing. And overflow oil from HST housing return to the transmission case.

MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication... Order the manual at mid-west-tech.com >

1. TROUBLESHOOTING

HYDROSTATIC TRANSMISSION SECTION

Symptom	Probable Cause	Solution	Reference Page
System Will Not Operate in Either Direction	Oil level is low	Check oil level or fill oil to proper level	G-15, 3-S14
	Speed control pedal linkage defective	Repair linkage	3-S12
	Charge pressure is too low	Solution order 1. Replace oil filter cartridge	G-14, 3-S14
		2. Check charge pressure	3-S8
		3. Inspect or flush charge relief valve	3-S46
	Check and high pressure relief valve does not move smoothly	Inspect or replace check and high pressure relief valve	3-S9, S10, S47
	Neutral valve defective	Inspect or replace neutral valve	3-S48
	Component parts defective	Replace hydrostatic transmission assembly	3-S44 to S53
Vibration and Noise	Oil level is too low	Check oil level or fill oil to proper level	G-15, 3-S14
	Speed control pedal linkage defective	Repair linkage	3-S12
	Charge pressure is too low	Solution order 1. Replace oil filter cartridge	G-14, 3-S14
		2. Check charge pressure	3-S8
		3. Inspect or flush charge relief valve	3-S46
	Check and high pressure relief valve does not move smoothly	Inspect or replace check and high pressure relief valve	3-S9, S10, S47
	Neutral valve is defective	Inspect or replace neutral valve	3-S48
	Component parts defective	Replace hydrostatic transmission assembly	3-S44 to S53

W1022927

MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication... Order the manual at mid-west-tech.com >

Item		Factory Specification	Allowable Limit
Hydraulic Cylinder	I.D.	70.05 to 70.10 mm 2.7579 to 2.7598 in.	70.15 mm 2.7618 in.
Hydraulic Arm Shaft to Bushing	Clearance	0.020 to 0.110 mm 0.0008 to 0.0043 in.	0.30 mm 0.0118 in.
Hydraulic Arm Shaft (RH)	O.D.	37.925 to 37.950 mm 1.4931 to 1.4941 in.	–
Hydraulic Arm Shaft (LH)	O.D.	33.925 to 33.950 mm 1.3356 to 1.3366 in.	–
Hydraulic Cylinder Bushing (RH)	I.D.	37.970 to 38.035 mm 1.4949 to 1.4974 in.	–
Hydraulic Cylinder Bushing (LH)	I.D.	33.970 to 34.035 mm 1.3374 to 1.3400 in.	–

W1013874

MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication... Order the manual at mid-west-tech.com >











Bonnet, Front Grille, Side Covers and ROPS

1. Open the bonnet.
2. Remove the pin (3) and the plain washer (2).
3. Remove the wiring harness from the bonnet.
4. Remove the hood.
5. Remove the front grille and the side covers.
6. Remove the ROPS (4).

(When reassembling)

1. Install the bush (1) to the bonnet securely.
2. Install the hood.
3. Don't damage the bonnet when installing it.

Tightening torque	ROPS mounting bolt (for middle and lower frames, 9/16-18 UNF)	124 to 147 N·m 12.6 to 15.0 kgf·m 91.2 to 108 lbf·ft
	ROPS mounting bolt (M12)	90 to 95 N·m 9.2 to 9.7 kgf·m 66.4 to 70.1 lbf·ft

(1) Bush
(2) Plain Washer
(3) Pin
(4) ROPS

W1099886

Battery

1. Disconnect the battery negative cable first.
2. Disconnect the battery positive cable second.
3. Remove the battery (1).
4. Remove the front hitch.

(When reassembling)

- Connect the battery positive cable first.
- Connect the battery negative cable second.

(1) Battery

[A] Manual Transmission Model
[B] HST Model

W1014971

MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication... Order the manual at mid-west-tech.com >











Bonnet, Front Grille, Side Covers and ROPS

1. Open the bonnet.
2. Remove the pin (3) and the plain washer (2).
3. Remove the wiring harness from the bonnet.
4. Remove the hood.
5. Remove the front grille and the side covers.
6. Remove the ROPS (4).

(When reassembling)

1. Install the bush (1) to the bonnet securely.
2. Install the hood.
3. Don't damage the bonnet when installing it.

Tightening torque	ROPS mounting bolt (for middle and lower frames, 9/16-18 UNF)	124 to 147 N·m 12.6 to 15.0 kgf·m 91.2 to 108 lbf·ft
	ROPS mounting bolt (M12)	90 to 95 N·m 9.2 to 9.7 kgf·m 66.4 to 70.1 lbf·ft

(1) Bush
(2) Plain Washer
(3) Pin
(4) ROPS

W1039829

Battery

1. Disconnect the battery negative cable first.
2. Disconnect the battery positive cable second.
3. Remove the battery (1).
4. Remove the front hitch.

(When reassembling)

- Connect the battery positive cable first.
- Connect the battery negative cable second.

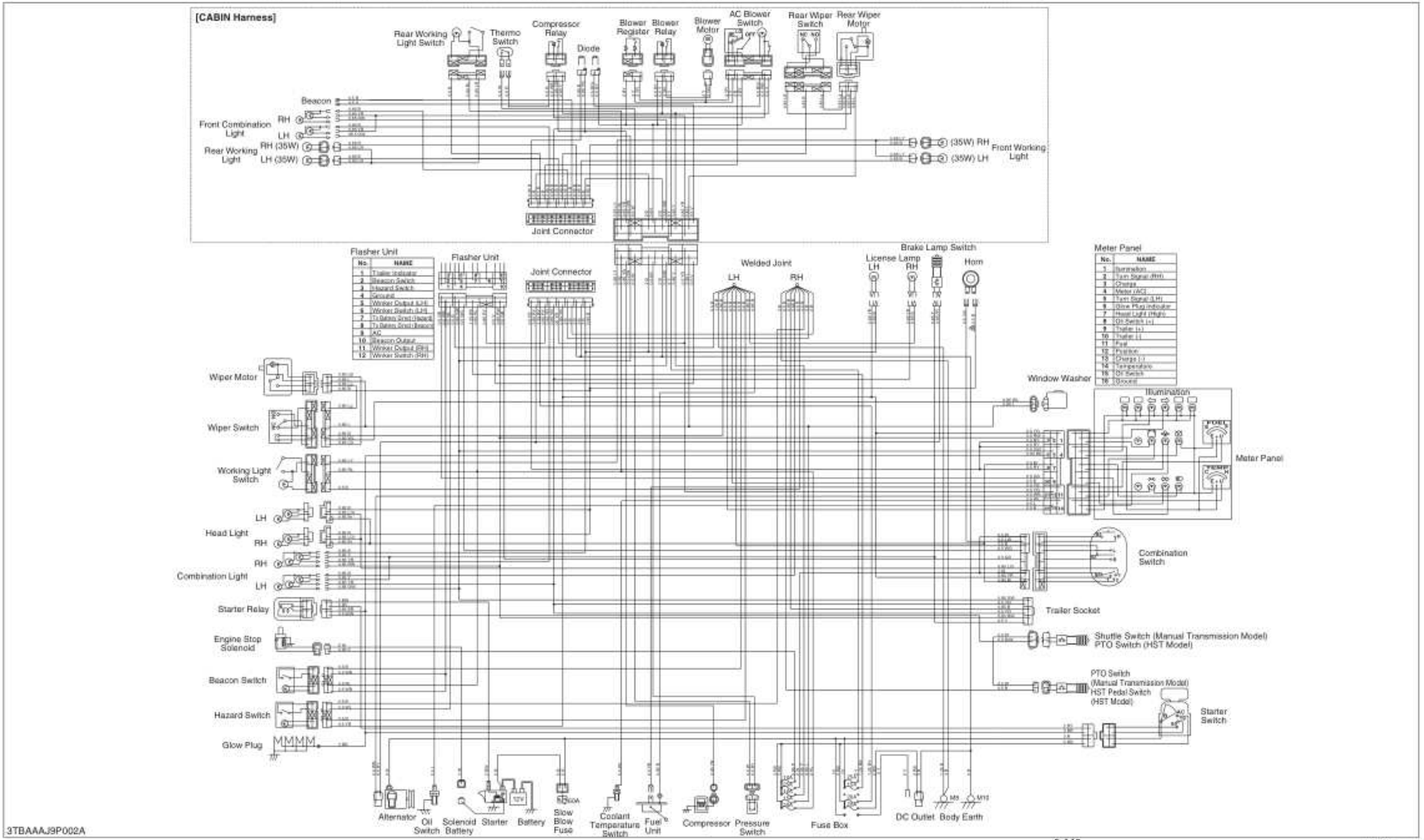
(1) Battery

[A] Manual Transmission Model
[B] HST Model

W1014971

MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication... Order the manual at mid-west-tech.com >

[2] CABIN



MidWestTech | Kubota B1830, B2230, B2530, B3030 Tractor Service Manual | Publication 9Y111-00031
Order the manual at mid-west-tech.com >