WSM

WORKSHOP MANUAL
TRACTOR

B2301,B2601

Kubota

KiSC issued 11, 2014 A

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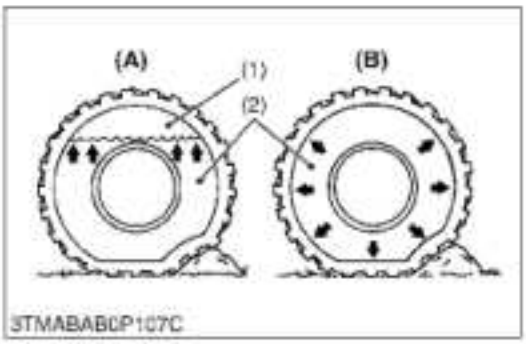
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Rear Ballast

Add weight to rear wheels if needed to improve traction or for stability. The amount of rear ballast should be matched to job and the ballast should be removed when it is not needed.

The weight should be added to the tractor in the form of liquid ballast.

■ Liquid Ballast in Rear Tires

Water and calcium chloride solution provides safe economical ballast. Used properly, it will not damage tires, tubes or rims. The addition of calcium chloride is recommended to prevent the water from freezing. Use of this method of weighting the wheels has the full approval of the tire companies.

Liquid weight per tire (75 Percent filled)

Tire sizes	9.5-16	11.2-16
Slush free at −10 °C (14 °F) Solid at −30 °C (−22 °F) [Approx. 1 kg (2 lbs) $CaCl_2$ per 4 L (1 gal) of water]	54 kg (120 lbs)	70 kg (150 lbs)
Slush free at −24 °C (−11 °F) Solid at −47 °C (−53 °F) [Approx. 1.5 kg (3.3 lbs) $CaCl_2$ per 4 L (1 gal) of water]	57 kg (130 lbs)	74 kg (160 lbs)
Slush free at −47 °C (−53 °F) Solid at −52 °C (−62 °F) [Approx. 2.25 kg (4.96 lbs) $CaCl_2$ per 4 L (1 gal) of water]	60 kg (130 lbs)	78 kg (170 lbs)

■ IMPORTANT

- **Do not fill tires with water or solution more than 75 % of full capacity (to the level of valve stem at 12 o'clock position).**

(1) Air
(2) Water

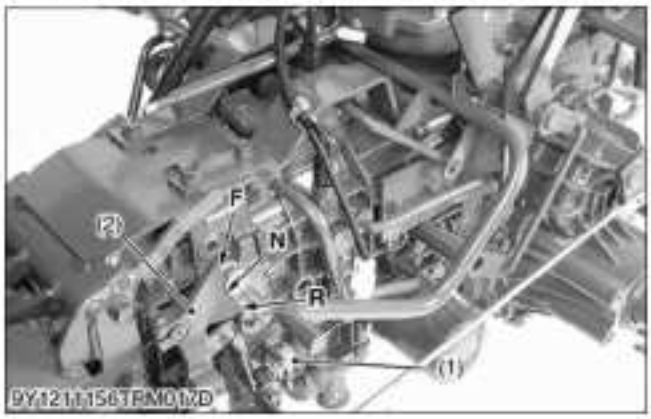
(A) Correct: 75 % Full
Air compresses like a cushion
(B) Incorrect: 100 % Full
Water can not be compressed

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(3) HST Pedal Switch (HST Model)



HST Pedal Switch

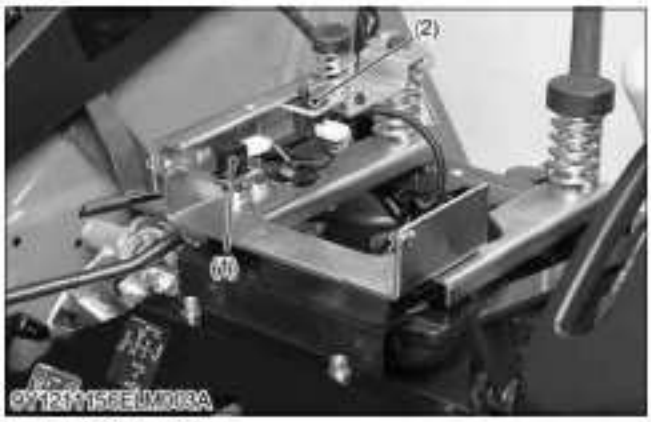
This switch located at the neutral switch stay.
This switch is a push type.
This switch detects the position of the HST pedal.
When HST pedal is at **"NEUTRAL"** position, this switch is turned to **"ON"**.
When HST pedal is at **"FORWARD"** or **"REVERSE"** position, this switch is turned to **"OFF"**.

(1) HST Pedal Switch
(2) Neutral Holder

F: FORWARD
N: NEUTRAL
R: REVERSE

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(4) Seat Switch



Seat Switch and Seat Tilt Switch

These switches are located under the seat. When sitting on the seat, the seat switch (2) is pushed in and electrical circuit is closed. When the seat is vacant, this switch is not pushed and electric circuit is opened. Other seat tilt switch (1) is to detect tilting the seat. When tilting the seat forward as shown in the figure, the seat tilt switch (1) is pushed in and electrical circuit is closed.

(1) Seat Tilt Switch
(2) Seat Switch

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GAUGES

Symptom	Probable Cause and Checking Procedure	Solution	Reference Page
Fuel Gauge Does Not Function	1. Fuel gauge damaged	Replace fuel gauge	8-S22
	2. Fuel level sensor damaged	Replace fuel level sensor	8-S22
	3. Wiring harness disconnected or improperly connected (between panel board and fuel level sensor)	Repair or replace connector and wire harness	8-M1
	4. Circuit in panel board damaged	Replace meter panel	8-S20
Coolant Temperature Gauge Does Not Function	1. Coolant temperature gauge damaged	Replace coolant temperature gauge	8-S21
	2. Coolant temperature sensor damaged	Replace coolant temperature sensor	8-S21
	3. Wiring harness disconnected or improperly connected (between panel board and coolant temperature sensor)	Repair or replace connector and wire harness	8-M1
	4. Circuit in panel board damaged	Replace meter panel	8-S20

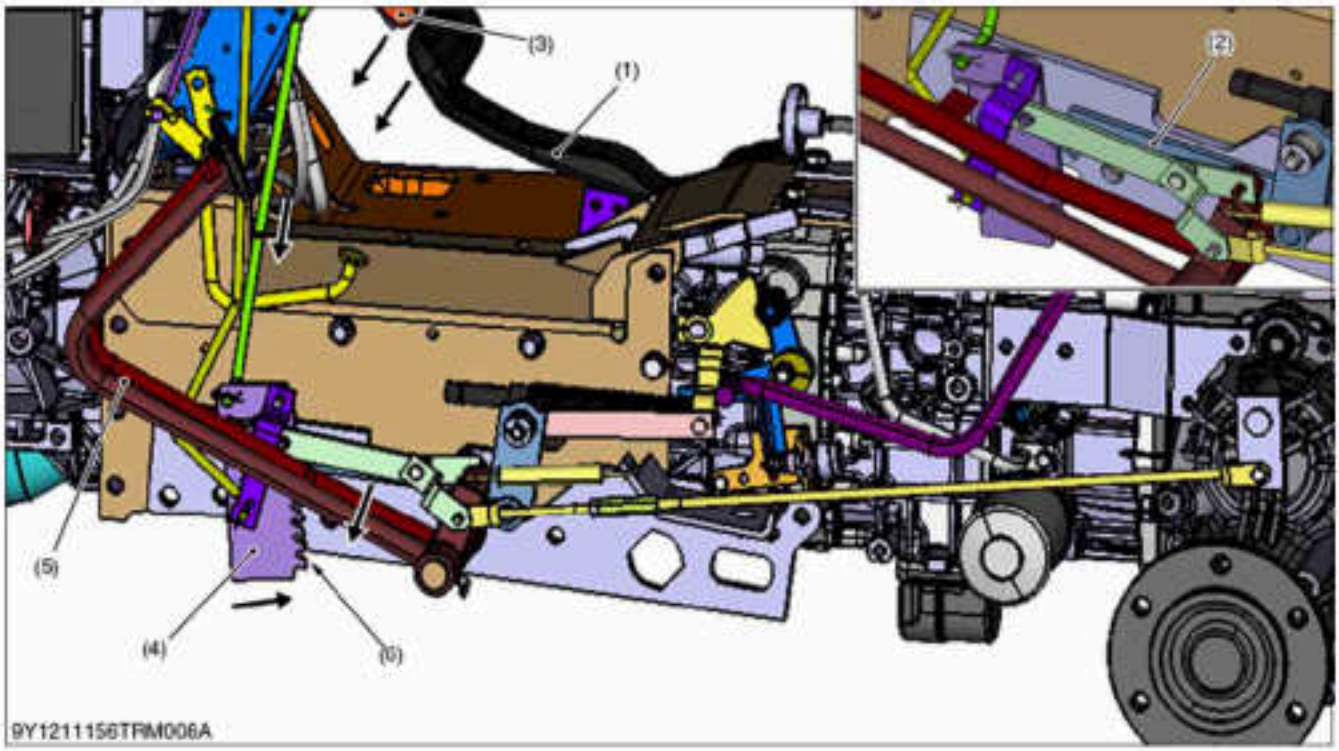
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4. SPEED SET DEVICE

[1] SPEED SET LINKAGE

(1) Speed Set



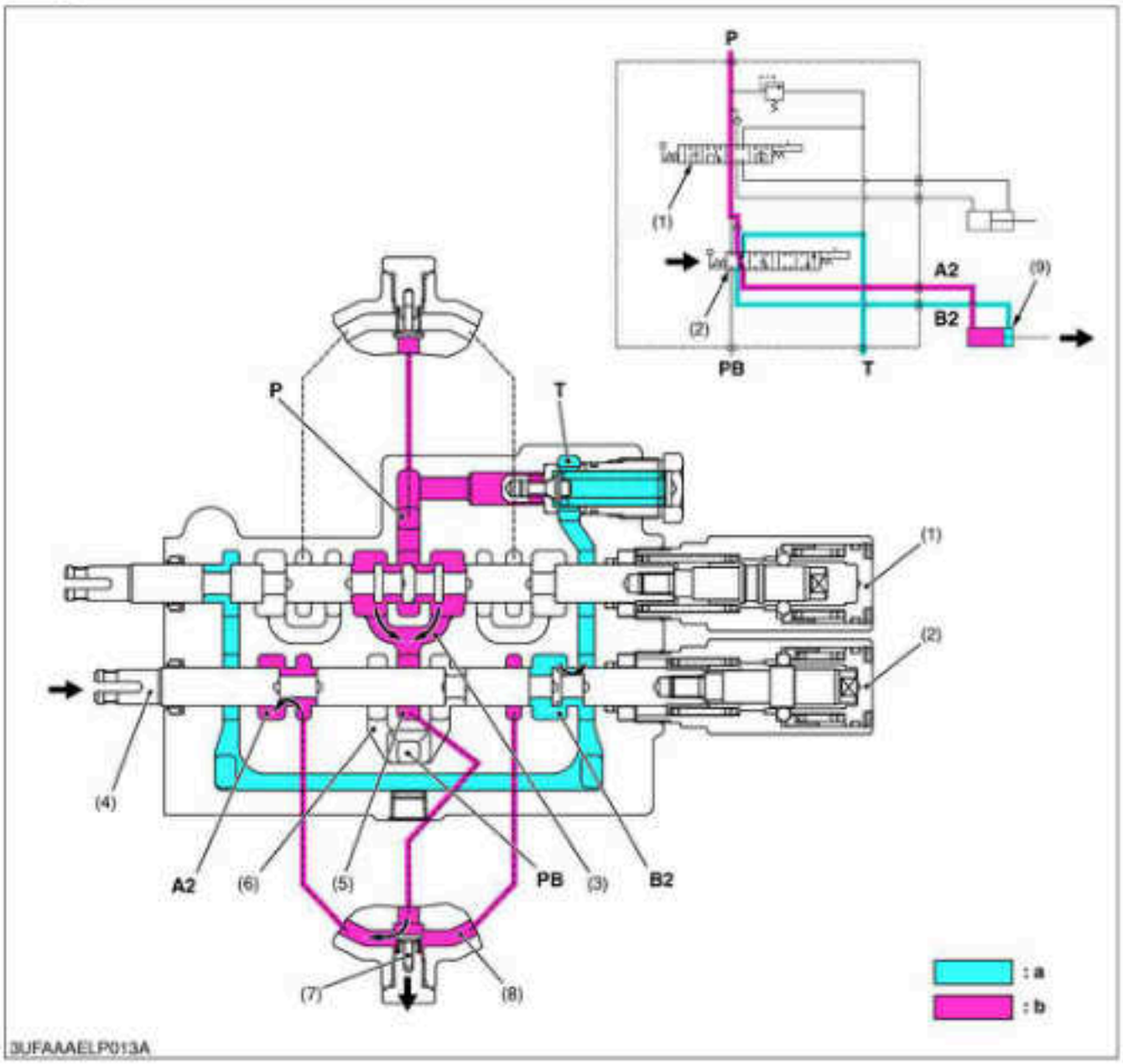
(1) HST pedal
(2) Lever
(3) Speed Set Lever
(4) Speed Set Holder
(5) Brake Pedal
(6) Tooth

The speed set device mainly consists of HST pedal holding section and HST pedal releasing section.
When the HST pedal (1) is see to the desired position, the lever (2) turns counter clockwise.
The speed set lever (3) to the **"ON"** position.
The speed set holder (4) turns counter clockwise.
On the other hand, sine lever engage with tooth (6) of speed set holder (4), the HST pedal (1) is held at the desired set position until the brake pedals (5) will be depressed by an operator.

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Dump 2



(1) Boom Control Section
(2) Bucket Control Section
(3) **PB** Passage 1
(4) Spool
(5) Neutral Passage 2
(6) **PB** Passage 2
(7) Load Check Valve
(8) Passage 2
(9) Bucket Cylinder

P: **P Port**
T: **T Port**
PB: **PB Port**

A2: **A2 Port (To Bucket Cylinder)**
B2: **B2 Port (From Bucket Cylinder)**
a: **Low Pressure**
b: **High Pressure**

1. When the hydraulic control lever is set to the **"DUMP 2"** position, the spool (4) of the bucket control section (2) moves to the right of the bucket control section (2) moves further to the right from the **"DUMP 1"** position, which forms oil passages between passage 2 (8) and **A2** port, and between **B2** port and **T** port.
2. The pressure-fed oil from the **P** port flows to the neutral passage 2 (5) through the boom control section (1) and **PB** passage 1 (3). As the oil passage from the neutral passage 2 (5) to the **PB** passage 2 (6) is closed by the spool (4), this oil opens the load check valve (7) and flows through the notched section of the spool (4) and **B2** port to extend the bucket cylinder (9).
3. Return oil from the bucket cylinder (9) flows to the transmission case through the **B2** port and **T** port.

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