WSM

WORKSHOP MANUAL

TRACTOR

M7-132,M7-152, M7-172

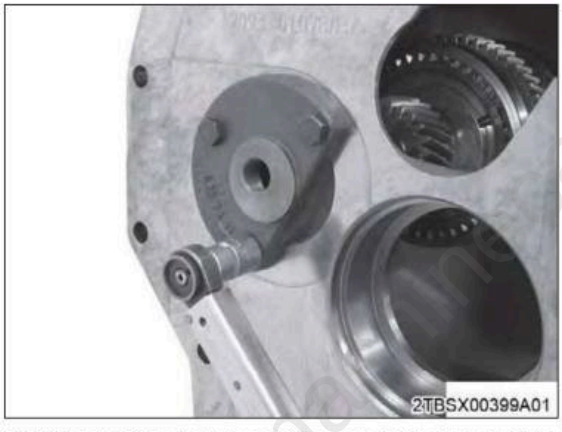
Kubota

KiSC issued 09, 2020 A

10. Insert determined shim, e. g.: 1.85 mm (0.0728 in.).

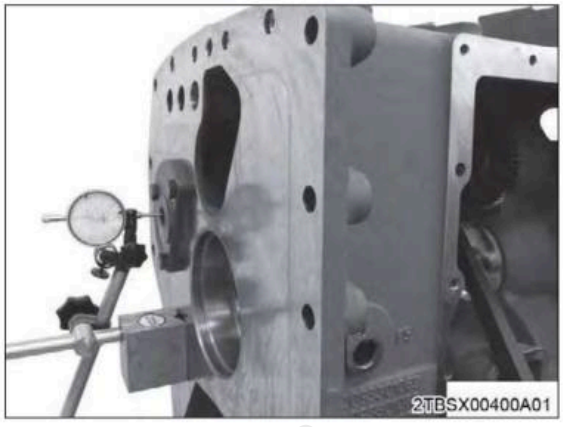
11. Fit cover.
12. Turn in hexagon screws and tighten them.

Tightening torque	Hexagon screws	46 N·m 4.7 kgf·m 34 lbf·ft



13. Check axial clearance with assembly lever and dial gauge.
(S) Assembly lever W710000231

■ **NOTE**
- **Correct deviations with a corresponding shim.**

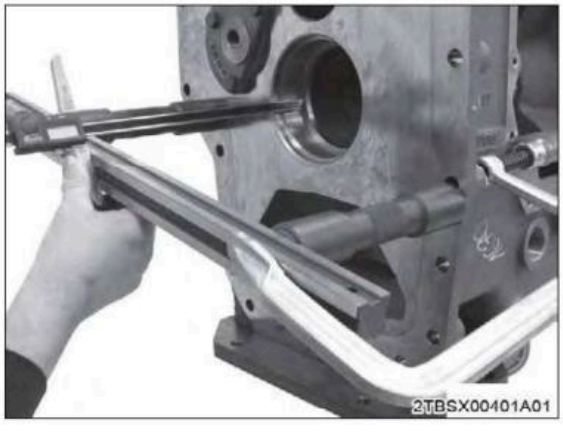


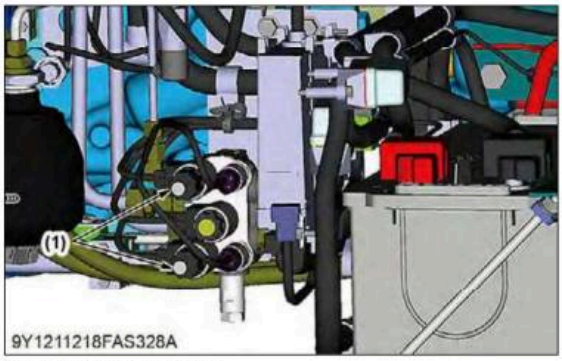
1.7.2.3 Installing main shaft

Calculating shim (Contact pattern)

1. Arrange measurement setup with measuring support and straightedge as illustrated.
(S) Measuring support W71TL0014
(S) Straightedge W71TL0015
2. Measure distance "A" from front face of mounting face to hole bottom.
Distance "A", e. g.: 41.65 mm (1.640 in.)

■ **NOTE**
- **Measure at several points and calculate the average.**





(1) Relief pressure screw

1. Release oil pressure from the front suspension circuit by tightening the relief pressure screw.
2. Loosen the relief pressure screw and set to the original position.
3. Remove the cap and loosen the plug by 1/4 turn.
4. Set the pressure measurement tool to the accumulator.

5. Loosen the spindle knob until the gauge indicates the nitrogen gas pressure.
6. If the pressure is not as shown in the table, charge a nitrogen gas.

Accumulator for cylinder head side	Reference value	3.5 MPa 35 kgf/cm^2 510 psi
Accumulator for cylinder rod side		4.5 MPa 45 kgf/cm^2 653 psi

7. Tighten the spindle knob.
8. Open the release valve slowly to release the pressure from the gauge.

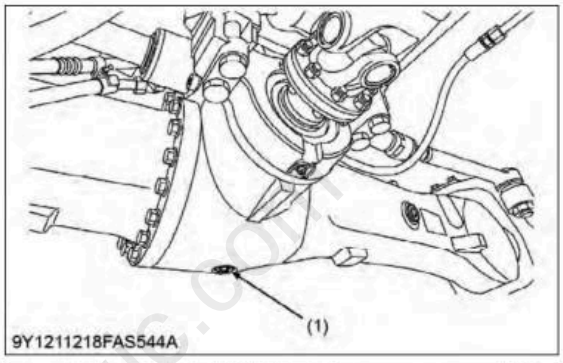
5. Preparation

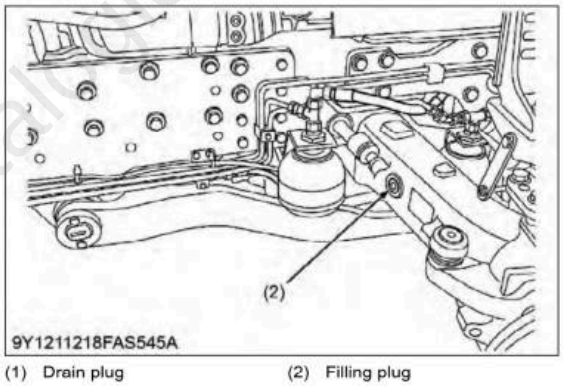
5.1 Draining lubricants

5.1.1 Heavy duty front axle

5.1.1.1 Draining front differential case oil

1. To drain the used oil, remove the drain plug (1) and filling plug (2) at the front differential case and drain the oil completely into the oil pan.





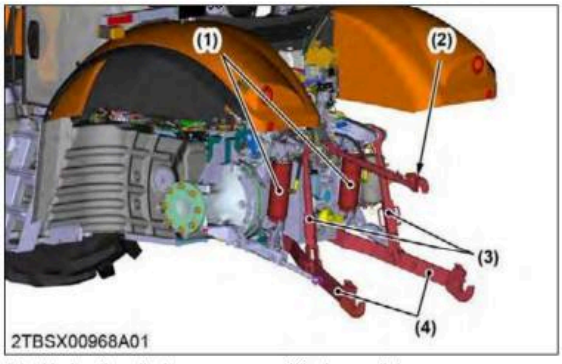
(1) Drain plug (2) Filling plug

2. After draining, reinstall the drain plug (1).
3. Fill with the new oil up to the lower rim of filling plug port.

Front differential case oil	Capacity	8.5 L 9.0 U.S.qts 7.5 Imp.qts

4. After filling, reinstall the filing plug (2).

4. Remove the hydraulic cylinders (1).



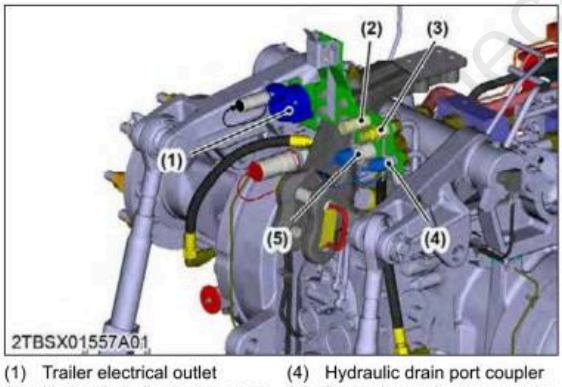
(1) Hydraulic cylinder
(2) Top link
(3) Lift rod
(4) Lower link

(When reassembling)

- Apply molybdenum grease to the hydraulic cylinder pins when replacing them with new ones.

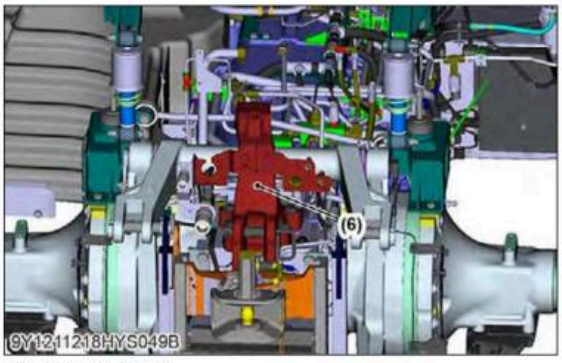
1.4.4.4 Removing top link bracket

1. Remove the auxiliary control valves.
2. Remove the trailer electrical outlet (1).
3. Remove the hydraulic trailer brake green coupler (2) and orange coupler (3).
4. Remove the power beyond return coupler (5) and the hydraulic drain port coupler (4).



(1) Trailer electrical outlet
(2) Hydraulic trailer brake green coupler
(3) Hydraulic trailer brake orange coupler
(4) Hydraulic drain port coupler
(5) Power beyond return coupler

5. Remove the top link bracket (6).



(6) Top link bracket

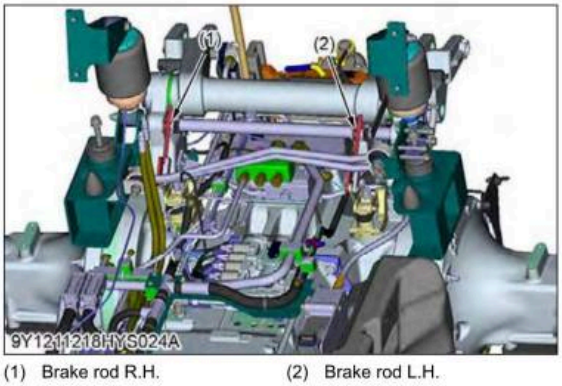
(When reassembling)

Tightening torque	Mounting bolt of top link bracket	343.2 to 402.1 N·m 35.00 to 41.00 kgf·m 253.2 to 296.5 lbf·ft
	Hydraulic trailer brake green coupler lock nut	45.0 to 49.5 N·m 4.59 to 5.04 kgf·m 33.2 to 36.5 lbf·ft
	Hydraulic trailer brake orange coupler lock nut	60.0 to 66.0 N·m 6.12 to 6.73 kgf·m 44.3 to 48.6 lbf·ft

RELATED PAGE
1.4.3 Auxiliary control valves on page 10-60

1.4.4.5 Removing parking brake rods and return spring

1. Loosen the lock nut of the brake rod R.H. (1) and L.H. (2).



(1) Brake rod R.H.
(2) Brake rod L.H.

6. (Reference) Check the signal status by K-OBD.

K-OBD item

xCU	Item	
TCU-PST IO testing	Digital outputs	Rod selection valve 2 (X1) AD6

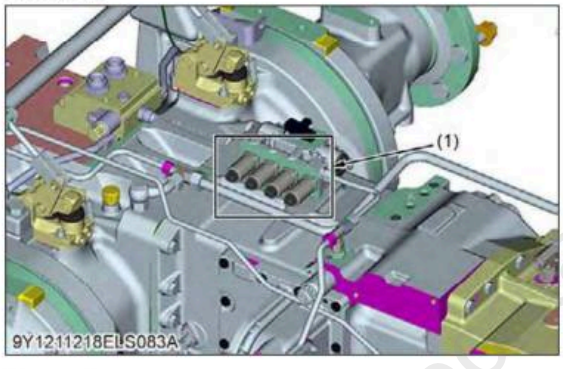
Reference value

Rod selection valve 2 (X1) AD6	When shifting range D → E	ON

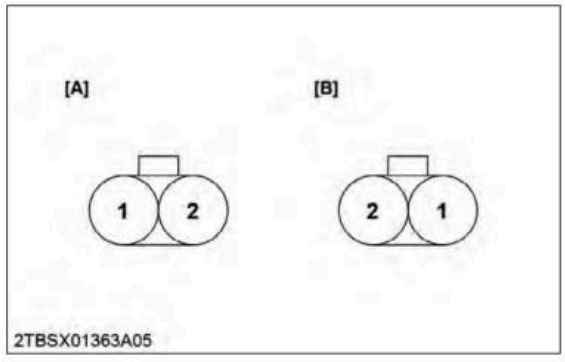
5.13.29 Checking solenoid valve (Range shift Y1) (Y20)

1. Disconnect the connector.

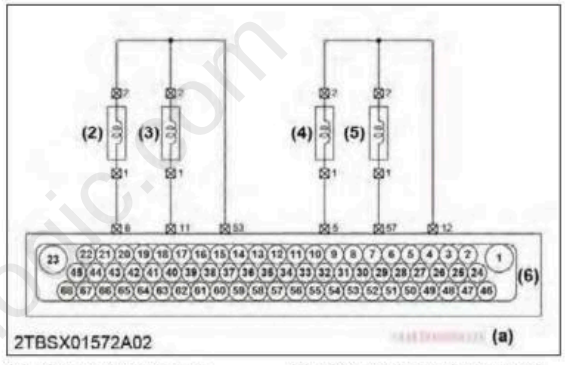
Location



Connector



Related circuit



(1) Solenoid valve block
(2) Solenoid valve (Range shift X1) (Y18)
(3) Solenoid valve (Range shift X2) (Y19)
(4) Solenoid valve (Range shift Y1) (Y20)
(5) Solenoid valve (Range shift Y2) (Y21)
(6) TCU (XA82)
[A] Connector (Harness side)
[B] Connector (Valve side)
(a) Supply from control unit

Pin	Color of wiring	Info
1	BR	GND
2	O	Supply

2. Turn the main key switch to *"ON"* position.
3. Measure the voltage across the terminals (harness side) with a voltmeter.

Voltage	Terminal 2 - 1	Approx. 12 V

Voltage	Terminal 1 - 2	During the following shifting Range A → B Range C → D Range D → E Range E → D	Voltage pulse detected

4. Measure the resistance value between the terminals (valve side) with an ohmmeter.

Full Version Available

Kubota M7-132 Tractor Workshop Manual

This is a short preview. The complete manual contains all chapters, wiring diagrams, torque specifications and full service procedures.