WSM

WORKSHOP MANUAL
TRACTOR

M6060,M7060

Kubota

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No.	Implement	Remarks	M6060	M7060
			4WD	4WD
13	Front Loader*1, *2	Max. Lifting Capacity	1328 kg (2928 lbs)	
		Max. Oil Pressure	19.8 MPa (202 kgf/cm^2, 2870 psi)	
14	Box Blade	Max. Cutting Width	1820 mm (72 in.)	2130 mm (84 in.)
		Max. Weight	450 kg (1000 lbs)	550 kg (1200 lbs)
15	Back Hoe*2	Max. Digging Depth	2530 mm (100 in.)	
		Max. Weight	900 kg (2000 lbs)	
16	Snow Blade	Max. Width	1820 mm (72 in.)	2130 mm (84 in.)
		Max. Weight	450 kg (1000 lbs)	550 kg (1200 lbs)

■ **NOTE**

- **Implement size may vary depending on soil operating conditions.**

***1 Must remove front weight with this implement.**

***2 Need subframe.**

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1. TROUBLESHOOTING

Symptom	Probable Cause	Solution	Reference Page
Implement Does Not Raise (Not Noise)	Control linkage improperly assembled or damaged	Repair or replace	7-S21
	Control valve malfunctioning (unload valve, spool, check valve, poppet valve)	Repair or replace	7-S25
	Control valve broken	Replace	7-S25
	Control valve improperly adjusted	Adjust	7-S25
	Relief valve spring damaged	Replace	7-S28
	Cylinder damaged	Replace	7-S26
	Safety valve damaged	Replace	7-S28
Implement Does Not Raise (Noise)	Transmission fluid improper or insufficient	Change or fill	G-13
	Oil filter clogged	Replace	G-34
	Relief valve setting pressure too low	Adjust	7-S28
	Relief valve spring weak or damaged	Replace	7-S28
	Hydraulic pump malfunctioning	Repair or replace	7-S18
Implement Does Not Reach Maximum Height	Position rod and feedback rod improperly adjusted	Adjust	7-S9
	Draft rod and feedback rod improperly adjusted	Adjust	7-S11, 7-S12
Implement Does Not Lower	Control valve malfunctioning	Repair or replace	7-S25
	Spool damaged	Replace	7-S25
	Lowering speed adjusting valve closed	Open	7-S30
Implement Drops by Weight	Hydraulic cylinder worn or damaged	Replace	7-S26
	Safety valve damaged	Replace	7-S28
	Lowering speed adjusting valve damaged	Replace	7-S30
	Control valve malfunctioning (check valve seat surface, check valve O-ring, poppet valve seat surface and poppet valve O-ring damaged)	Replace	7-S25
Implement Hunts (Moves Up and Down)	Poppet valve, poppet seat surface damaged	Replace	7-S26
	Check valve, check valve seat surface damaged	Replace	7-S26
	Control valve O-ring worn or damaged	Replace	7-S25
Draft Control Malfunctioning	Draft control linkage improperly adjusted	Adjust	7-S12
	Torsion bar weak or broken	Replace	7-S29

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GAUGES

Symptom	Probable Cause	Solution	Reference Page
Fuel Gauge Does Not Function	Fuel level sensor damaged	Replace	8-S37
	Wiring harness disconnected or improperly connected (between meter panel and fuel unit)	Repair or replace	–
	Circuit in meter panel damaged	Replace	8-M28
Coolant Temperature Gauge Does Not Function	Coolant temperature gauge damaged	Replace	8-M28
	Coolant temperature sensor damaged	Replace	8-S40
	Wiring harness disconnected or improperly connected (between meter panel and coolant temperature sensor)	Repair or replace	–
	Circuit in meter panel damaged	Replace	8-M28

LCD MONITOR

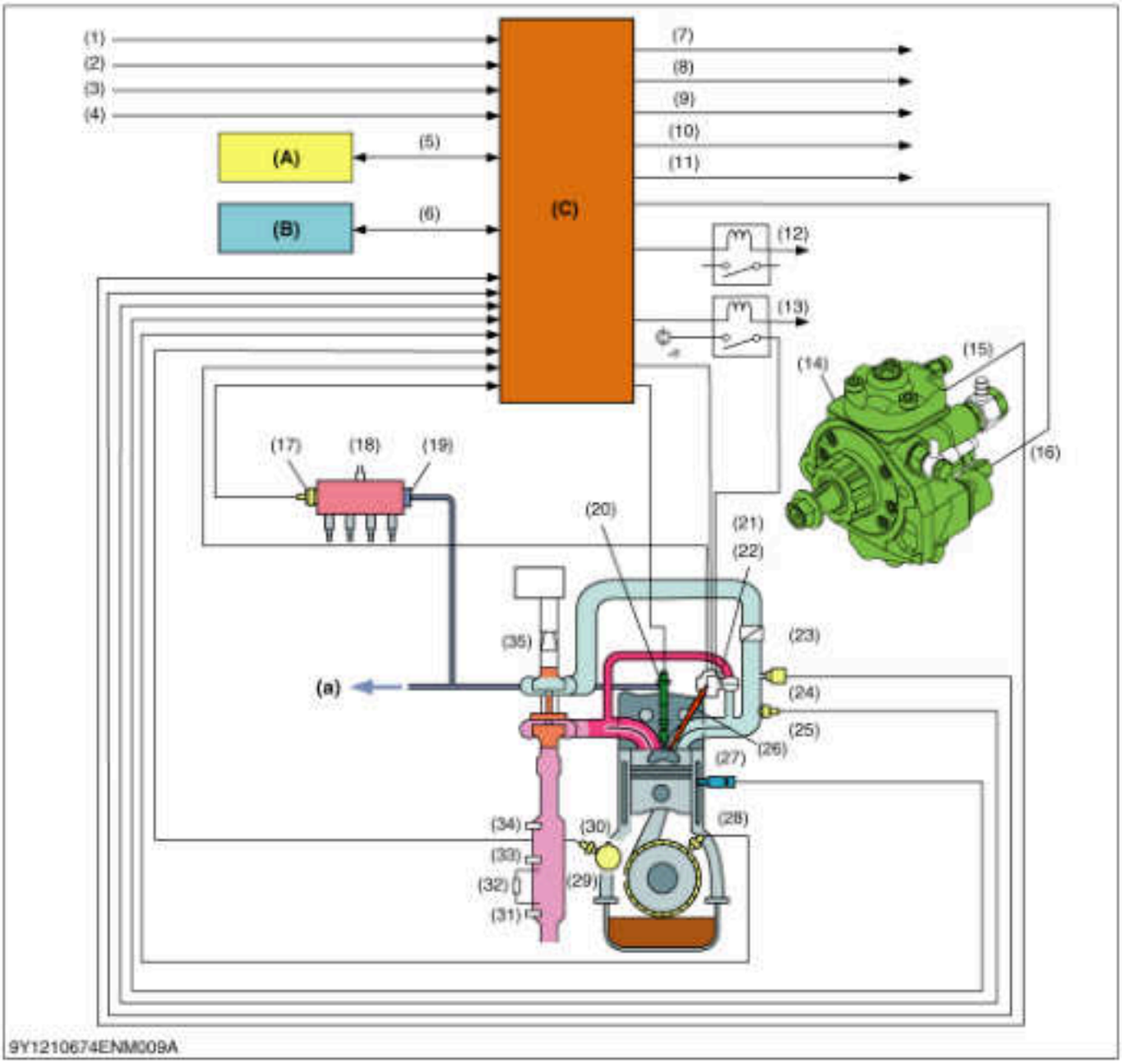
Symptom	Probable Cause	Solution	Reference Page
Nothing is Displayed in LCD	Battery discharged or damaged (Battery voltage is below 10 V)	Recharge or replace	G-25, 8-S8
	Slow blow fuse blown	Replace	8-S10, 8-S12
	Meter panel connector disconnect	Connect	8-M28
	Meter panel damaged	Replace	8-M28
Indication on LCD Does Not Change When Pushing the Display Mode Switch	Display mode select switch damaged	Replace	8-S22
	Wiring harness disconnected	Repair	–
Traveling Speed is Not Indicating	Wiring harness disconnected	Repair	–
	Traveling speed sensor damaged	Replace	8-S38
PTO Speed in Not Indicating	Wiring harness disconnected	Repair	–

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[5] ENGINE CONTROL SYSTEM



(1) Key Switch ON Signal
(2) Starter Switch Signal
(3) Emergency Stop Switch
(4) Oil Pressure Switch
(5) CAN Communication for Tractor (Accelerator Position Signal*, Neutral Switch*, Machine Travel Speed Signal*)
(6) CAN Communication for Service
(7) Engine Warning Light Signal
(8) Stop Lamp Signal
(9) Oil Pressure Warning Lamp Signal
(10) Overheat Lamp Signal
(11) Glow (Air Heater) Lamp Signal
(12) Starter Relay
(13) Glow Relay
(14) Supply Pump
(15) Fuel Temperature Sensor
(16) SCV (Suction Control Valve)
(17) Rail Pressure Sensor
(18) Rail
(19) Pressure Limiter
(20) Injector
(21) EGR DC Motor
(22) EGR Lift Sensor
(23) Intake Throttle Valve
(24) Intake Air Pressure Sensor
(25) Intake Air Temperature Sensor
(26) Glow Plug
(27) Coolant Temperature Sensor
(28) Crankshaft Position Sensor
(29) Diesel Particulate Filter (Hereinafter Referred To As The "DPF") Muffler
(30) Camshaft Position Sensor
(31) Temperature Sensor (DPF Outlet Exhaust Temperature) (T_2)
(32) Differential Pressure Sensor (DPF Differential Pressure) (ΔP)
(33) Temperature Sensor (DPF Inlet Exhaust Temperature) (T_1)
(34) Temperature Sensor (DOC Inlet Exhaust Temperature) (T_0)
(35) Air Flow Sensor

(A) CAN2 Connector (For Tractor)
(B) CAN1 Connector (For Service)
(C) Engine ECU
(a) To Fuel Tank

■ **NOTE**

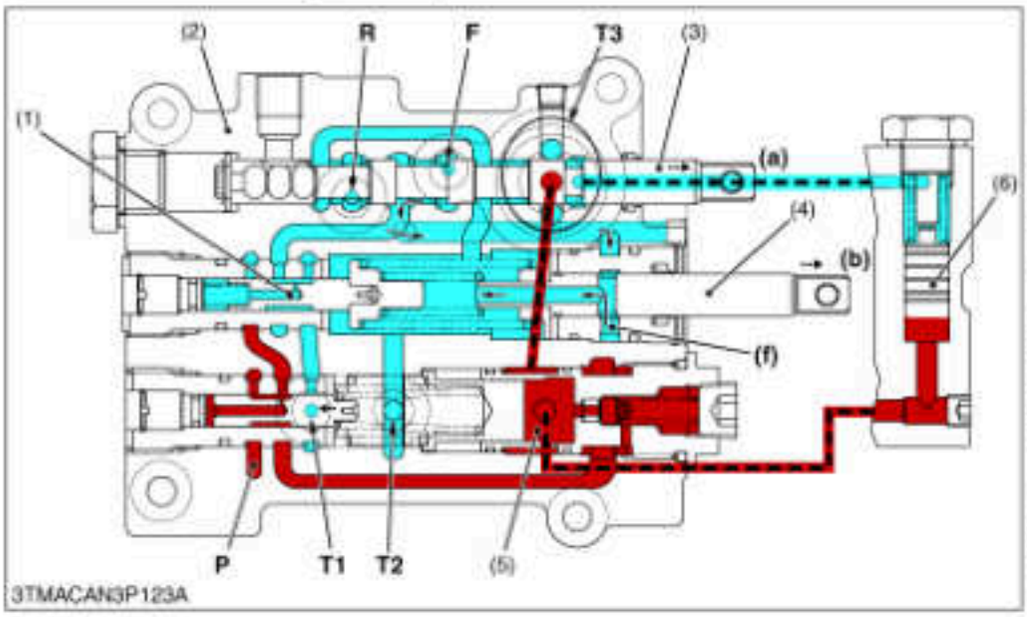
- **The signals marked with * are CAN communication.**

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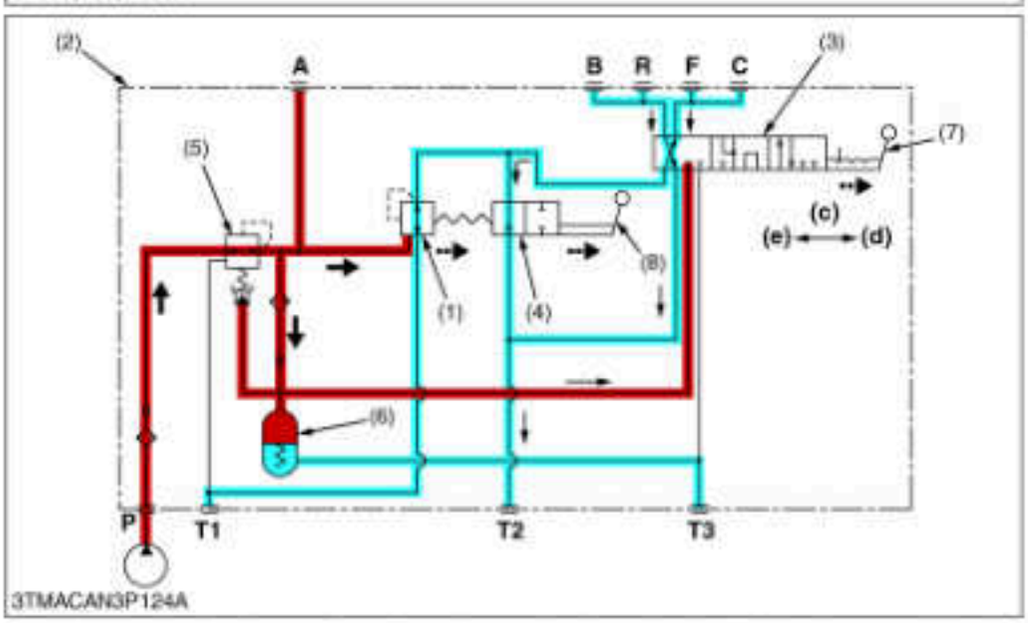
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When Clutch Pedal is Depressed (with Shuttle Lever at Reverse or Forward Position)



3TMACAN3P123A



3TMACAN3P124A

(1) Proportionally Reducing Valve
(2) Shuttle Valve
(3) Shuttle Shift Spool (Forward, Reverse)
(4) Inching Valve
(5) Modulating Valve
(6) Accumulate Valve
(7) Shuttle Lever
(8) Clutch Pedal

A: Check Port (Modulation)
B: Check Port (Reverse)
C: Check Port (Forward)
P: P Port (Pump)
T1 to T3: To Transmission Case
(a) Connect to Shuttle Lever
(b) Connect to Clutch Pedal
(c) Neutral
(d) Forward
(e) Reverse
(f) Passage f

With the shuttle lever at **R** or **F** position, when the clutch pedal is depressed, the inching valve (4) is moved to the right. And connect the passage 1 **(f)** to **T2** port. As the proportionally reducing valve (1) is moved to the right by pressure difference, **R** port (or **F** port) and **T2** port are connected.

The oil in the shuttle clutch returns into the transmission case via **R** port (or **F** port) through the proportionally reducing valve (1) and **T2** port. This cause the shuttle clutch to be set to off.

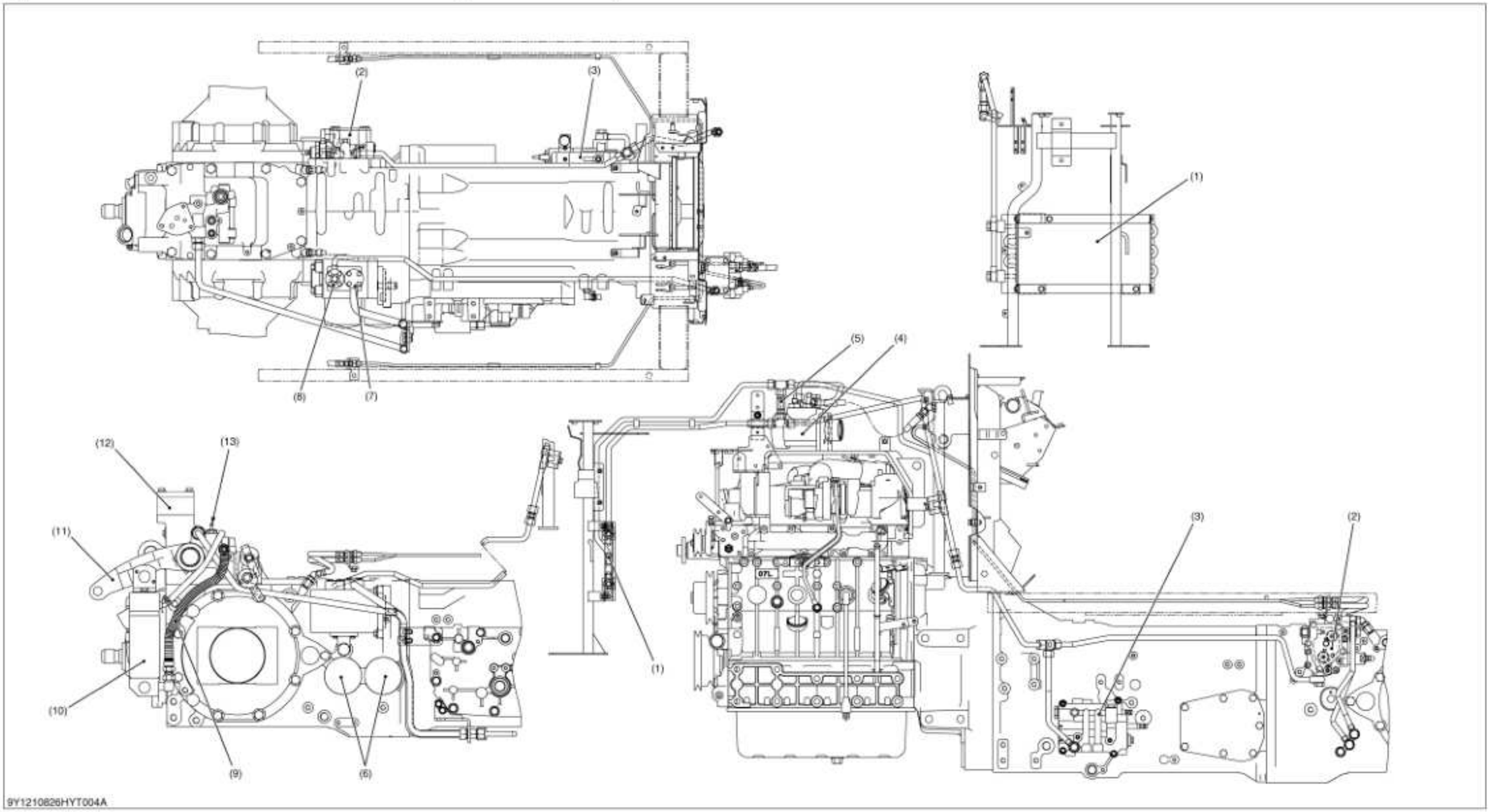
As a result, even when the proportionally reducing valve (1) does not move, the oil passage from **R** port (or **F** side) to **T2** port is secured.

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[2] F18/R18 SPEED TRANSMISSION MODEL (CABIN MODEL)



(1) Oil Cooler
(2) Solenoid Valve Assembly (PTO, 4WD)
(3) Shuttle Valve
(4) Power Steering Controller
(5) Oil Cooler Check Valve
(6) Oil Filter
(7) Hydraulic Pump (3-point Hitch)
(8) Hydraulic Pump (Power Steering, Shuttle, PTO Clutch and 4WD Clutch)
(9) Hydraulic Hose
(10) Hydraulic Cylinder
(11) Lift Arm
(12) Auxiliary Control Valve
(13) Lowering Speed Adjustment Valve

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