SERVICE MANUAL

Workmaster™ 55 / Workmaster™ 65
Workmaster™ 75

Tractor

Part number 51625050
English
April 2019

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Battery - General specification

SPECIFICATIONS	BATTERY TYPES
Voltage (V)	12
Capacity (Ah)	100 (840CCA)
Ground Terminal	Negative

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B. If you do not find damage and the display indicates only normal readings, then erase the fault code and continue operation.

Wiring harnesses - Electrical schematic sheet 01 ENGINE_1_S8000 (55.100.DP-C.20.E.01)

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14901 - Engine controller missing

Control Module: ADIC

NOTE: *When the cause of the error code has been rectified, clear the error code and test the system for normal operation*

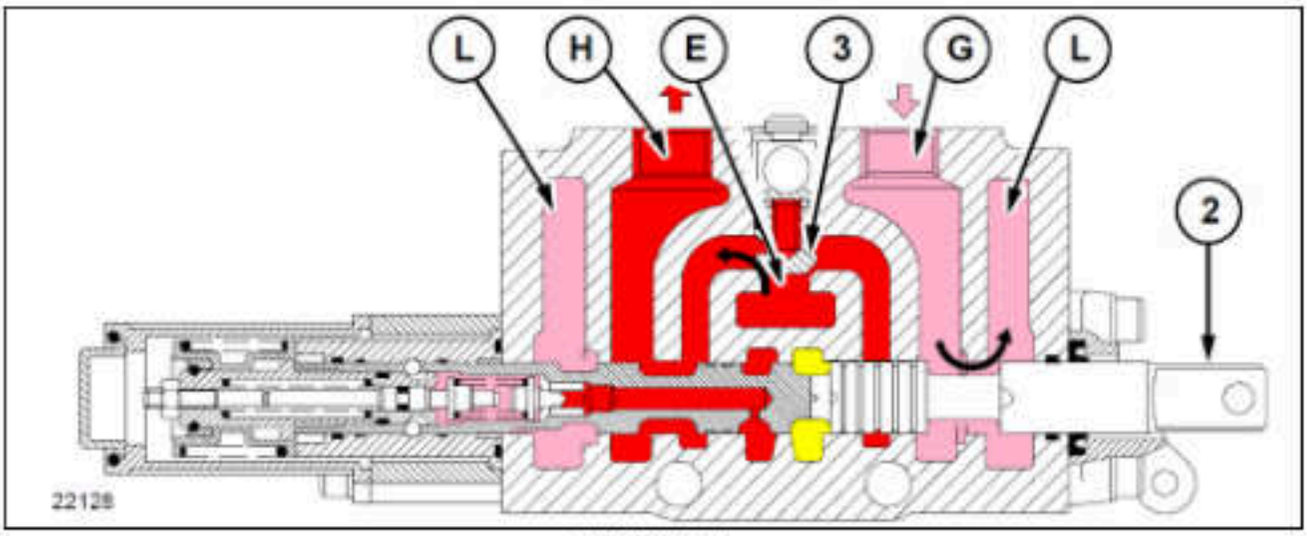
Possible failure modes:

1. Faulty connectors
2. Faulty wiring
3. Engine control unit (ECU) fault

Solution:

1. Before proceeding clear the error code with the approved diagnostic equipment. Run the tractor under normal conditions and retest.
   A. If the error code is not indicated, check that the system is operating correctly.
   B. If the error code is indicated, continue to step **2**
2. Check for other error codes displayed.
   A. If other error codes are indicated, continue to test for these errors.
   B. If no other error codes are displayed, continue to step **3**
3. Check the connector of the instrument cluster unit (ADIC) X-011 and the connector of the engine control unit (ECU) A-010 .
   A. Ensure the connectors are connected and not damaged, that the pins are in the correct position and the fit is tight.
   If no fault is indicated, Repair or replace as necessary.
   B. If the connectors are okay, Continue to step **4**
4. Check all power supplies and grounds to the engine control unit (ECU).
   A. If a fault is indicated, repair or replace the harness as required.
   B. If no faults are indicated, continue to step **5**
5. Check for an open circuit on the CAN BUS.
   A. Disconnect the connector (ADIC) X-011 and the connector (ECU) A-010. Check between:
   A-010 (CAN_H) pin 24, wire 0.75 (YE/RD) and X-011 (CAN_H) pin 15, wire 0.75 (YE)
   A-010 (CAN_L) pin 25, wire 0.75 (GN) and X-011 (CAN_L) pin 1, wire 0.75 (GN)
   If an open circuit is indicated, repair or replace the wiring as necessary.
   B. If the harness is okay, download the correct level software. If the error is repeated, remove and replace the engine control unit (ECU).

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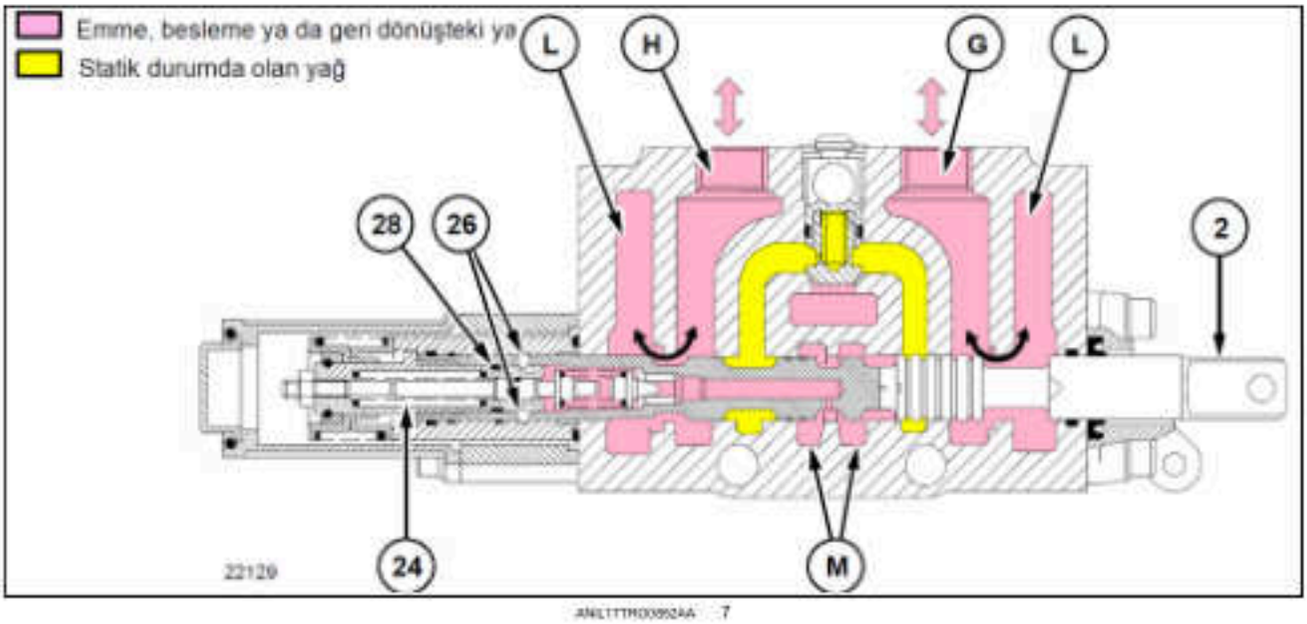


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LOWERING

Push the control lever (in the cab) to lower the agricultural equipment. The control valve handle **(2)** slides to enable the lock balls **(26)** to sit in the middle groove via the bracket **(28)** and spring **(24)**. Under these conditions, as the oil situated in the lower reservoir of the cylinder travels to the exhaust line **(L)** via the **(G)** line, the top reservoir **(H)** is connected to the feeding line **(E)** via the feeding line and the check valve **(3)**. Upon completion of the lowering operation, the lock moves to the idle position automatically as described previously.

OPERATIONAL STAGES OF AUTOMATIC KICK OUT AND FLOATING REMOTE CONTROL VALVE WITH SINGLE-ACTION CYLINDER



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FLOAT MODE

For float mode, push the control lever (in the cab). Handle **(2)** slides and balls **(26)** enter into the groove on the right, to be held in place by the bracket and the spring **(24)**. The handle **(2)** connects the following lines: two **(M)** lines that feed the entire pump flow into the lifting control valve. Also, via the **(H)** and **(G)** lines it connects two exhaust **(L)** lines with the upper and lower reservoirs of the cylinder. Under these conditions, the only force exerted on the agricultural equipment will be its own weight, which allows the equipment to follow the terrain, enabling the use of its hydraulic lifter. Since there is no pressure in the remote control valve, automatic kick out will not take place during float control.

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Steering to the right

When the steering wheel is rotated clockwise, the springs contract to enable the rotation of the valve to interact with the sleeve **(11)**.

Under these conditions, the following will take place:
- In the neutral position, the position where oil flow is cut with channels aligned with part number **(11)** and **(12)** will change.
- The channels align and enable oil flow from pump to steering cylinder **(2)**. This allows the wheels to be steered to the right.

Steering to the left

When the steering wheel is rotated counter-clockwise, the internal channels **(11)** and **(12)** change positions with the channel line of the output to the steering cylinder.

Manual steering to the right

If the hydrostatic pump is defective or lacking pressure, steering can be performed manually.
When the steering wheel is rotated clockwise it serves as a rotor hand pump in the hydrostatic steering valve and transfers oil to the control cylinder shaft **(2)**. This enables the wheels to rotate to the right manually.

Manual steering to the left

When the steering wheel is rotated counter-clockwise, it helps the rotor in the hydrostatic steering control valve to function, as mentioned before, like a hand pump. This helps oil sent to the cylinder piston. The wheels will be manually rotated to the left.

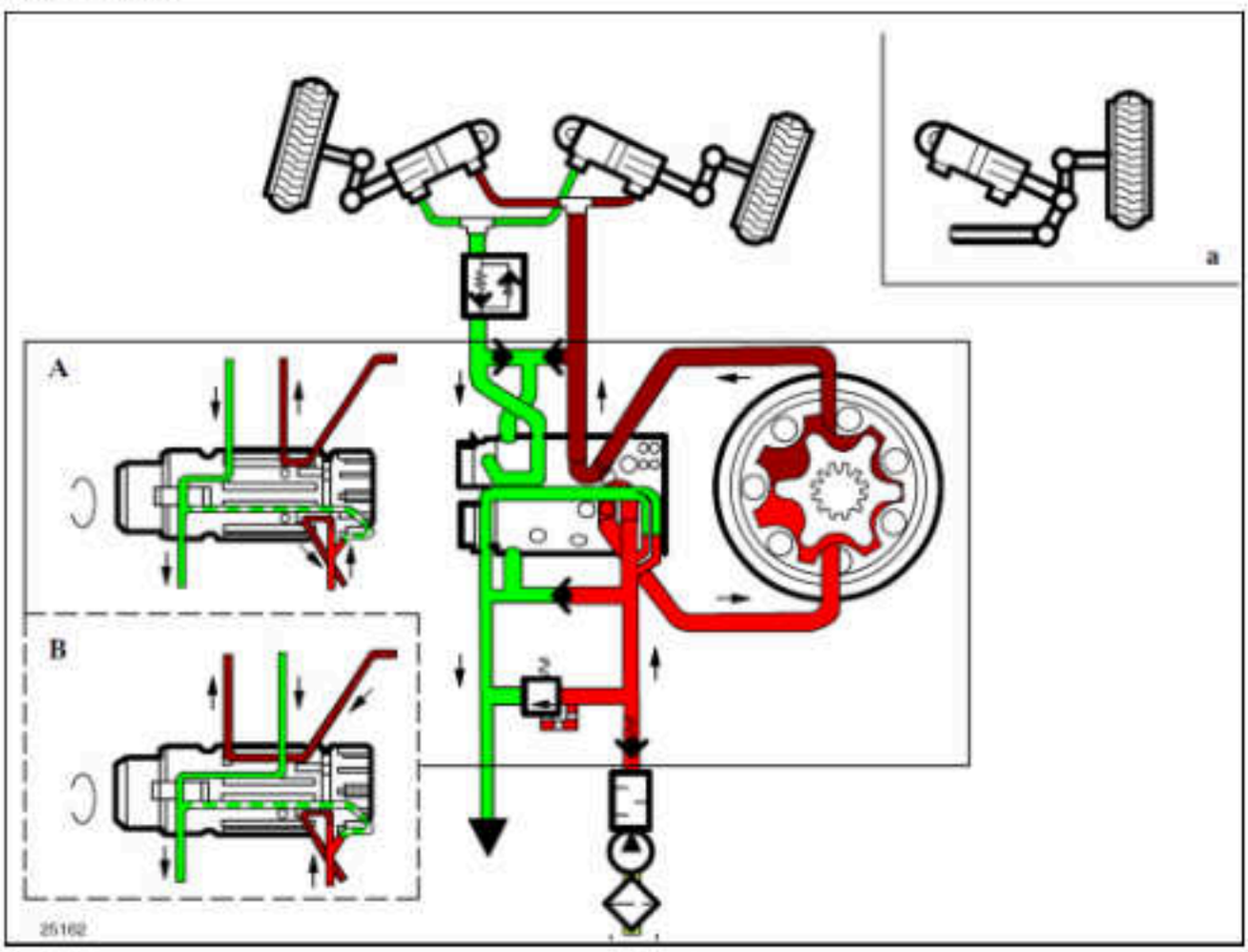
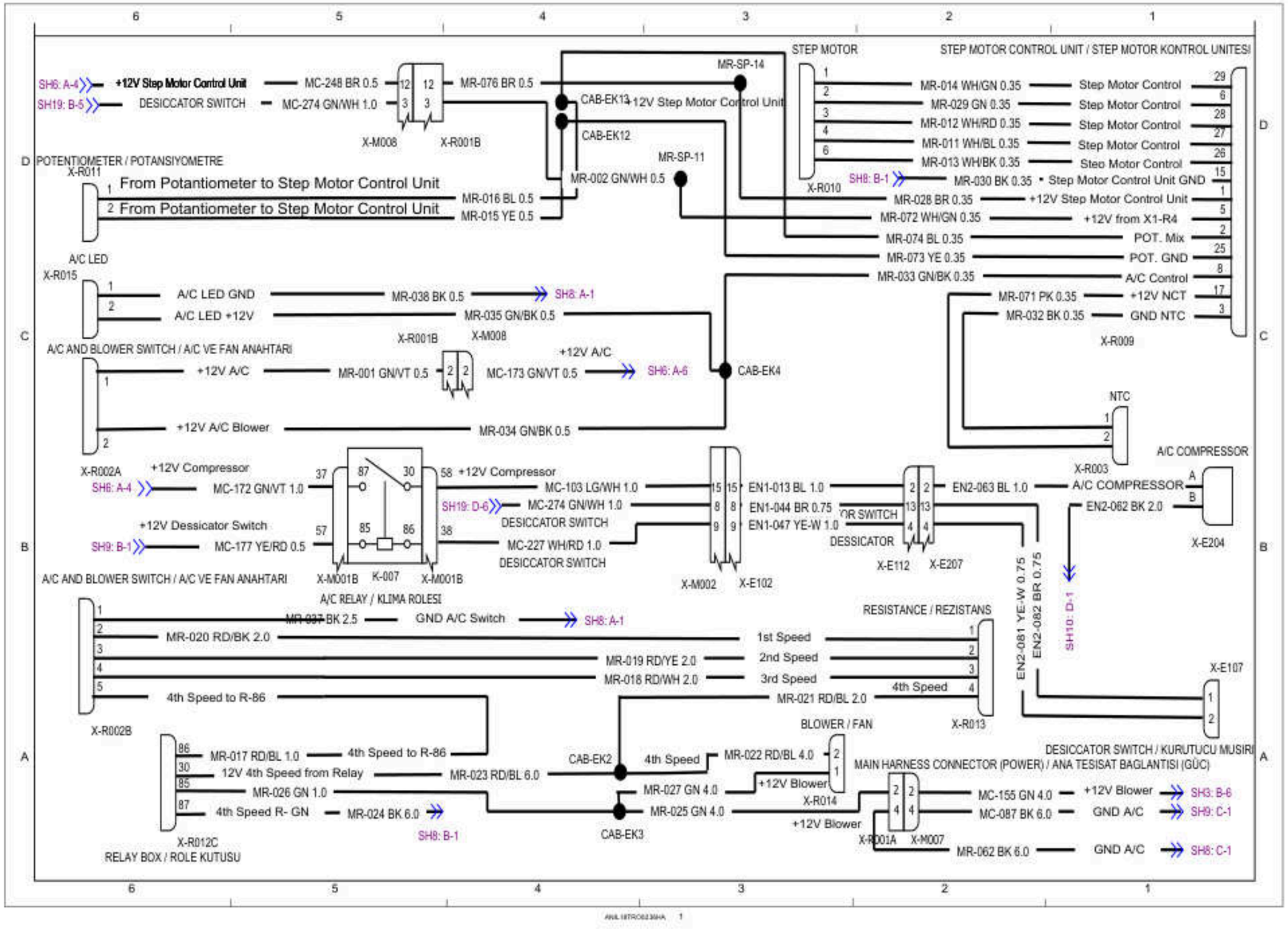


Diagram showing the operation of hydrostatic steering

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