SERVICE MANUAL

T9.390 / T9.450 / T9.505 / T9.560 / T9.615 / T9.670 Tier 4

Tractor

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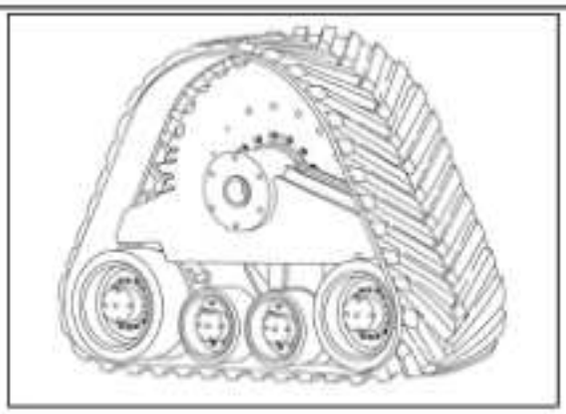
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Track frame and driving wheels - Capacities – SmartTrax

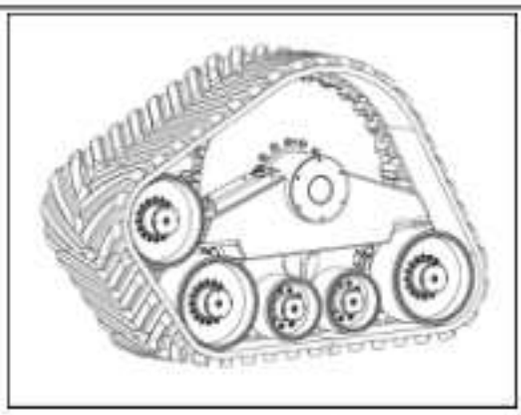
T9.615 NA, T9.670 NA

Lubrication capacities				
Ambient temperature range	Lubrication system	Method of lubrication	Type of lubrication	Capacity
-6.7 - 37.8 °C (20 - 100 °F)	Hydraulic System	Reservoir	NEW HOLLAND AMBRA MULTI G 134™ HYDRAULIC TRANSMISSION OIL	1.9 l (0.5 US gal)
	Drive Spindle Bearings	Grease Packed	Mobilith SHC 220	2 kg (4.4 lb)
	Idler Hubs	Oil Bath	NEW HOLLAND AMBRA MASTERGOLD™ HSP ENGINE OIL SAE 15W-40	547 ml (18.5 US fl oz)
	Bogie Hubs	Oil Bath	NEW HOLLAND AMBRA MASTERGOLD™ HSP ENGINE OIL SAE 15W-40	325 ml (11.0 US fl oz)



RAIL12TR00303AA 1

Standard Module



RAIL12TR00511AA 2

High Idler Module

	Standard Module	High Idler Module
Track Module Load Capacity, Ag	17045 kg (37577.8 lb)	17045 kg (37577.8 lb)
Track Module Weight w/Ag Belt	2555 kg (5632.8 lb)	3354 kg (7394.3 lb)
Track Module Height	1701 mm (67.0 in)	1701 mm (67.0 in)
Track Module Length	2184 mm (86.0 in)	2540 mm (100.0 in)
Track Module Width	914 mm (36.0 in)	914 mm (36.0 in)
Belt Width	914 mm (36.0 in)	914 mm (36.0 in)
Rolling Circumference	4521 mm (178.0 in)	4521 mm (178.0 in)

The standard module and the high idler module use all of the same parts with a few exceptions. The mainframe, belt, hydraulic hose, idler pivot pin, and pivot pin retaining hardware are different.

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19146-Dosing valve (electrical) - short circuit to ground - P2048 reductant injector - circuit low

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Possible failure modes:

1. Dosing valve harness short to ground.
2. Denox module/supply module is faulty

Solution:

1. Disconnect the dosing valve connector C196.

   Measure for short to ground at both harness connector pins 1 and 2.

   Expected reading is no continuity.

   A. Continuity found. Locate and repair short to ground in dosing circuit harness, and return unit to field operation.

   B. Continuity not found. Continue to step **2**.
2. Check the dosing valve resistance.

   Disconnect dosing valve connector C196.

   Measure resistance through the dosing valve.

   Expected resistance is less than **5 Ω**.

   A. Resistance is correct. Continue to step **3**.

   B. Resistance is not correct. Replace the dosing valve, and return unit to field operation.
3. Verify error is still active.

   A. Error is still active. Replace the denox module/supply module, and return unit to field operation.

   B. Error is no longer active. Return unit to field operation, and monitor for recurring fault.

Wire harnesses - Electrical schematic frame 23 (55.100.DP-C.20.E.23)
Wire harnesses - Electrical schematic frame 23 (55.100.DP-C.20.E.23)
Wire harnesses - Electrical schematic frame 23 (55.100.DP-C.20.E.23)

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3999- The Engine Control Unit (ECU) fault not converted in CNH module. See the ECU fault codes with the EASY Tool.

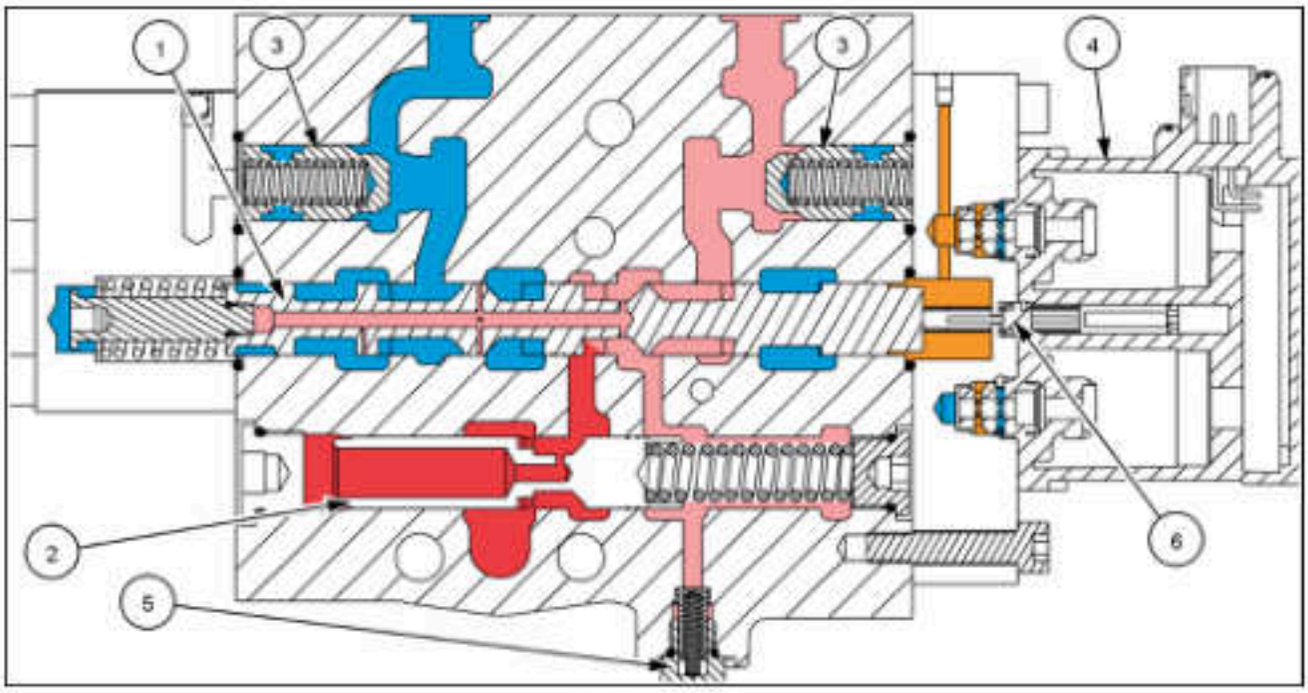
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Context:
This fault code has been logged by the Engine Control Unit (ECU) but cannot be converted by the machine module. Retrieve the fault code(s) using the EASY engine software.

Solution:

1. Check for other Selective Catalytic Reduction (SCR) related fault code(s).
   A. Other SCR related fault codes are present. Resolve these fault codes.
   B. Other SCR fault codes are not present. Use the EASY tool, record all the data regarding the fault code. Submit a concern to ASIST.

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RCSL08CCH015GAE 6

PFC pump pressure	Return to tank pressure
Remote valve operating pressure	Trapped oil
Pilot pressure	
1. Main valve spool	4. Extend/retract solenoid valve assembly with micro processor
2. Flow control spool	5. Signal check
3. Lock check	6. Spool position sensor

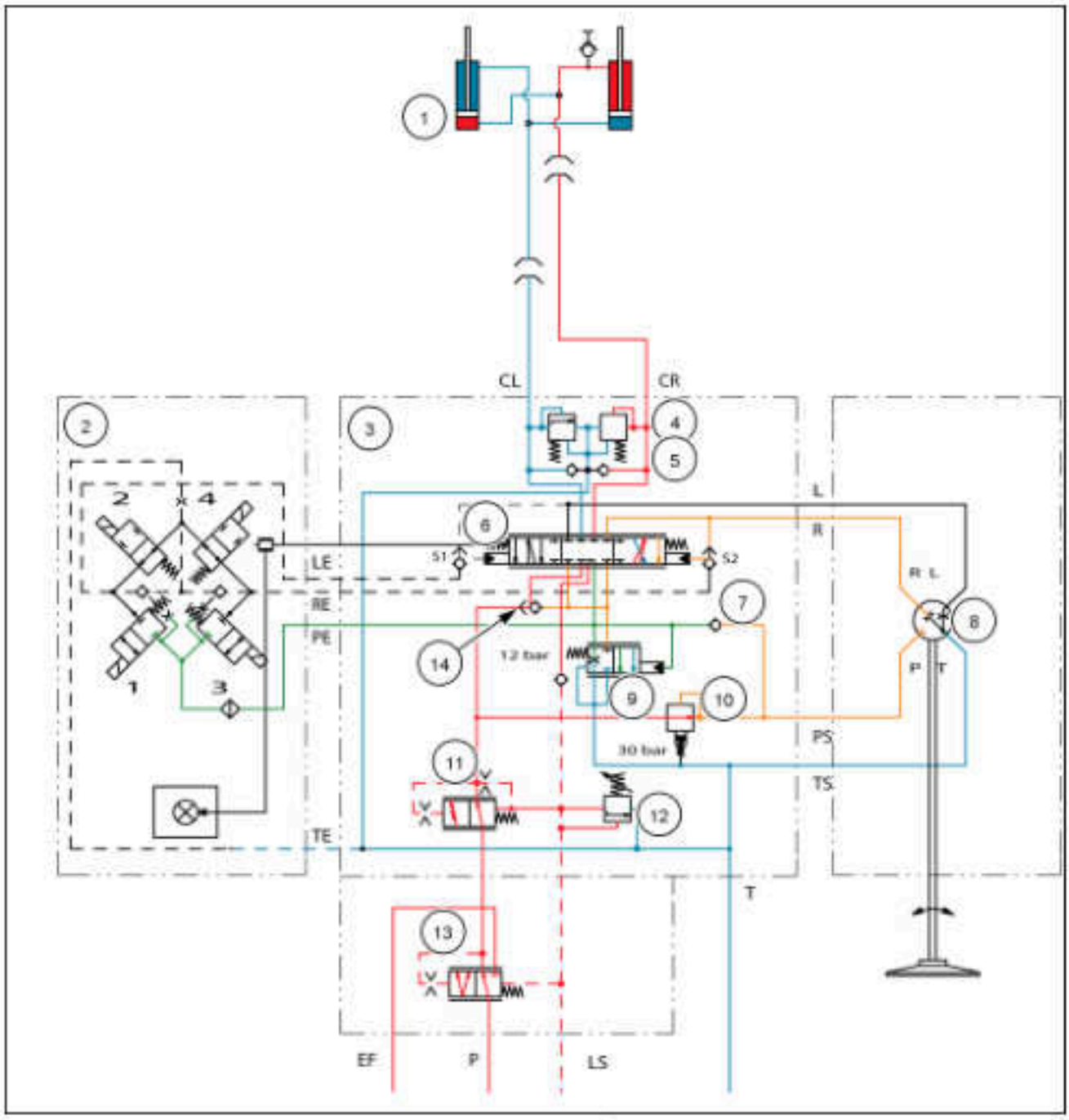
Retract position

When the remote control lever is moved to the retract position, the main valve spool shifts to the right a fixed distance by supply pressure from the retract solenoid valve. The main spool position is based on input from armrest controller, spool position sensor and the extend/retract valve solenoid assembly with micro processor. The position of the main valve spool determines the flow rate to the retract port.

At the same time, work pressure is communicated to the signal check through the center drilled passage in the main valve spool. The signal check is forced off the seat and signal pressure is directed to the pump compensator to increase pump flow.

Also as the main spool begins to shift, any pressure trapped on the spring end of both lock checks is drained to tank. The flow exiting the retract port is now in a free flow condition shifting the lock check and out the retract port: Return oil from the extend coupler is directed into the extend port, shifting lock check to right, continuing past the spool and returning to tank.

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RCPH19FWD015HAG 4

Engine running, turning right

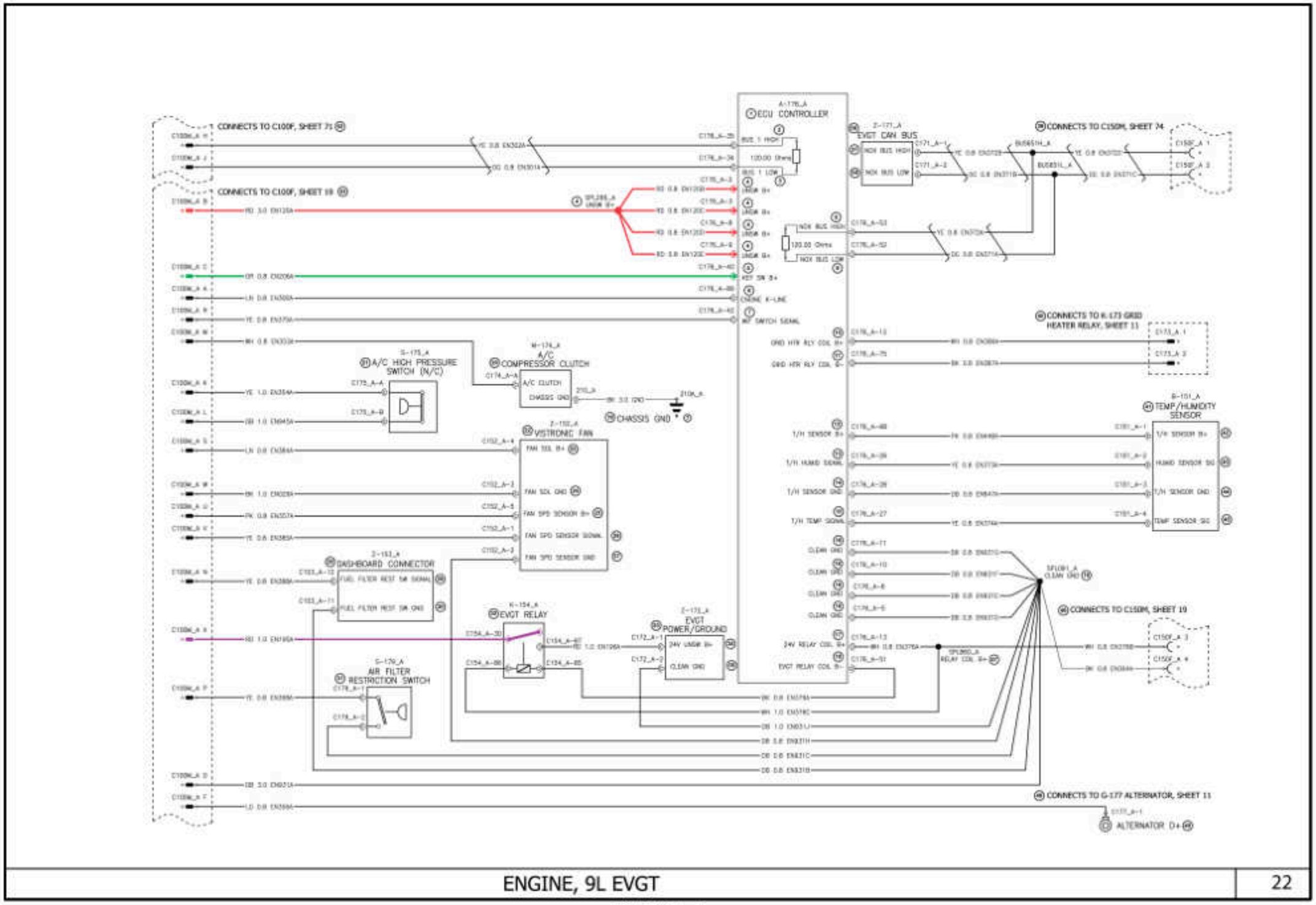
Pressure/flow compensating supply pressure

Steering hand pump **30 bar** (**435 psi**) supply

Electrical actuation module (PVE) **12 bar** (**174 psi**) supply

Return to tank

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ENGINE, 9L EVGT | 22

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