SERVICE MANUAL

T5.90 / T5.100 / T5.110 / T5.120
Tier 4B (final)
Tractor

PIN HLRT5120AJLE00620 and above

Part number 51543579
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NEW HOLLAND AGRICULTURE

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Master clutch housing - General specification - Power Shuttle transmission

Number of driving plates in each clutch	Nb 5
Drive Disc Thickness	**1.95 – 2.05 mm** (1)
Drive Disc Thickness	**2.15 – 2.25 mm** (1)
Driving plate material	sintered
Number of driven plates in each clutch	Nb 5
Driven palete thickness	**2.52 – 3.00 mm (0.10 – 0.12 in)**(1)
Driven plate material	Steel
Thickness of multi-plate clutch under a load of **1600 N (359.7 lb)**	**21.80 – 22.00 mm (0.86 – 0.87 in)**(1)
Hydraulic distributor	Mounted on the outer left-hand side of the clutch casing
Power-Shuttle and services transmission working pressure	**17.50 – 18.50 Kg/cm² (248.91 – 263.13 psi)**
Filtro	Paper cartridge
Position	Fixed to the pump body on the suction side
Pump	The same as used for the hydrostatic steering circuit

(1) Value to be obtained by varying the thickness of the driving plates.

Master clutch housing - Special tools

NOTICE: *The operations described in this section must only be carried out with the ESSENTIAL tools indicated below by an "X".*
To work safely and efficiently and obtain the best results, it is also necessary to use the recommended specific tools listed below and certain other tools which are to be made according to the drawings included in this manual.

List of special tools required for the various operations described in this section.

380000227	Clutch casing lift hook
380000301	Jack stand for overhaul

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Wiring harnesses - Electrical schematic sheet 41 SH-038_ACOUSTIC_DEVICES

T5.100 With cab, with Dual Command™ transmission [HLRT5100CJLE03039 -]
T5.110 With cab, with Dual Command™ transmission [HLRT5110CJLE04173 -]
T5.120 With cab, with Dual Command™ transmission [HLRT5120AJLE00620 -]
T5.90 With cab, with Dual Command™ transmission [HLRT5090AJLE03730 -]

Type	Component	Connector / Link
ECU	**A-001** - XCM (ECU)	**X-210** - XCM CN1B [A-001] (82028495) **X-230** - XCM CN3A [A-001] (82016219) **X-200** - XCM CN1A [A-001] (82028493) **X-220** - XCM - CN2 [A-001] (87694552)
Lamp	**E-009** - REVERSE LIGHT 1 (Lamp)	**X-556** - REVERSE LIGHT [E-009] (82012083)
Speaker	**H-001** - Horn (Speaker)	**X-016** - HORN NEGATIVE [H-001] (87702238) **X-015** - HORN POSITIVE [H-001] (87702238)
Speaker	**H-002** - Rev gear Buzzer (Speaker)	**X-555** - REVERSE GEAR BUZZER [H-002] (82012083)
Relay	**K-012*** - REVERSE ALARM RELAY (Relay)	
Relay	**K-019** - Japan relay (Relay)	
Switch	**S-022** - Lights control switch (Switch)	**X-091** - LIGHTS LEVER SW [S-022] (87747425)
Connector	X-001A	**X-001A** - CAB - ENGINE 1 INLINE (84142902)
Connector	X-001B	**X-001B** - Engine-cab inline (84142903)
Connector	X-015	**X-015** - HORN POSITIVE [H-001] (87702238)
Connector	X-016	**X-016** - HORN NEGATIVE [H-001] (87702238)
Connector	X-025A	**X-025A** - ENGINE 1 - HOOD INLINE (87691968)
Connector	X-025B	**X-025B** - HOOD-ENGINE 1 INLINE (87710588)
Connector	X-091	**X-091** - LIGHTS LEVER SW [S-022] (87747425)
Connector	X-120	**X-120** - MODULE RELAYS R9-R16 + FUSES F37 [K-010] (87314762)
Connector	X-140	**X-140** - FUSE RELAY MODULE R17-R24 - F41 [F-044] (87314762)
Connector	X-220	**X-220** - XCM - CN2 [A-001] (87694552)
Connector	X-389A	**X-389A** - CAB - REVERSE inline (84062580)
Connector	X-389B	**X-389B** - REVERSE - CAB inline (87680689)
Connector	X-390A	**X-390A** - Main - Japan connector (84062580)
Connector	X-390B	**X-390B** - MAIN - Japan connector (87680689)
Connector	X-555	**X-555** - REVERSE GEAR BUZZER [H-002] (82012083)
Connector	X-556	**X-556** - REVERSE LIGHT [E-009] (82012083)

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2036 - Engine rpm low

Control Module: Analog Digital Instrument Cluster (ADIC)

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

Cause:
The measured ERPM average is 0.

Possible failure modes:

1. Faulty connector
2. Faulty crankshaft speed sensor
3. Mechanical fault

Solution:

1. Check for other fault codes being 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 **2**
2. Check the crankshaft speed sensor connector **X-176** or **X-177**, the engine control unit connector (ECU) **X-939** and the engine control unit intermediate connection connector (ECU) - engine components **X-941A** e **X-941B** .
   A. Ensure the connectors are connected and not damaged, that the pins are in the correct position and the fit is tight.
   If there are any faults, Repair or replace the unit as needed.
   B. If the connectors are okay, pass on to point **3**
3. Check the crankshaft speed sensor (**B-022**)
   A. If it is installed incorrectly, loose or damaged, reinstall correctly or replace as required.
   B. If the sensor is installed correctly, remove and replace the crankshaft speed sensor.
   If fault is still present, there may be a fault with the speed sensor inductive ring, Repair or replace as needed.

Wiring harnesses - Electrical schematic sheet 36 (55.100)
Wiring harnesses - Electrical schematic sheet 32 (55.100)

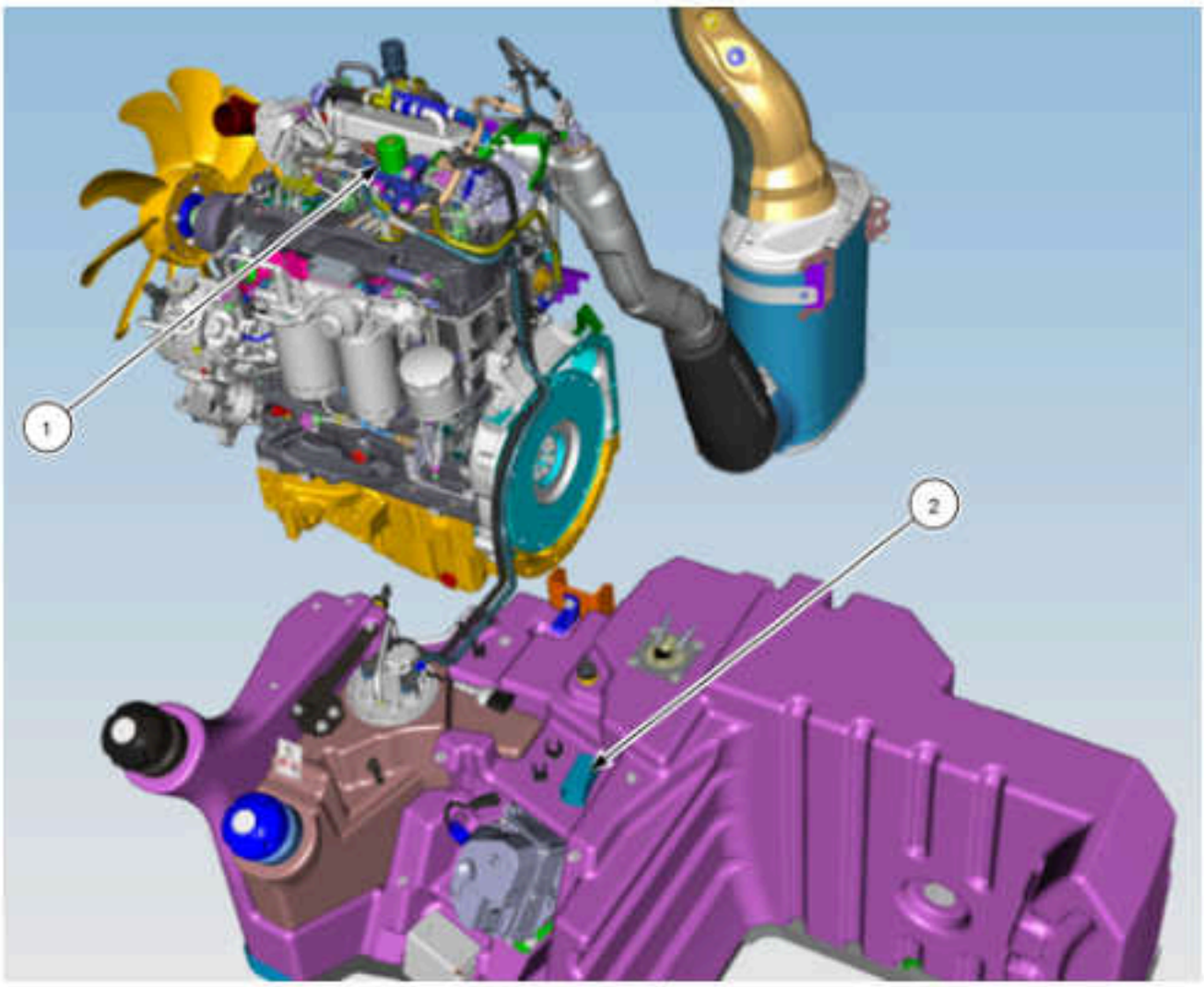
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Selective Catalytic Reduction (SCR) exhaust treatment - Overview AdBlue heater control

The heating control system contains a complex heating strategy module:

- To ensure defrosting of the DNOx system components.
- To heat the system after defrosting was completed.
- To avoid the system is freezing again during driving.

Given that the aqueous urea solution generally used as AD Blue freezes at **-11 °C**, it is necessary to provide a heating device to liquefy the solution in order to be able to inject it into the exhaust line in the event of starting or use in freezing conditions.

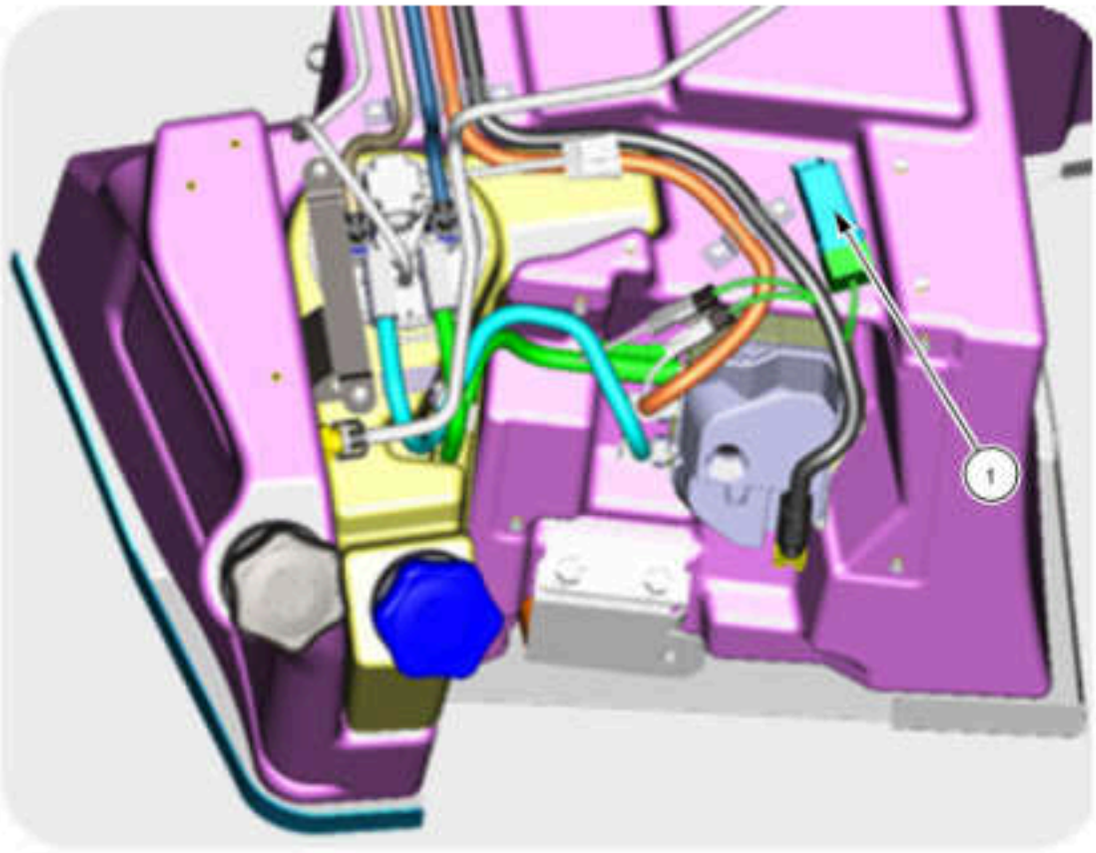


MOLTTR020503A 1

1	Coolant control valve
2	Heater control unit

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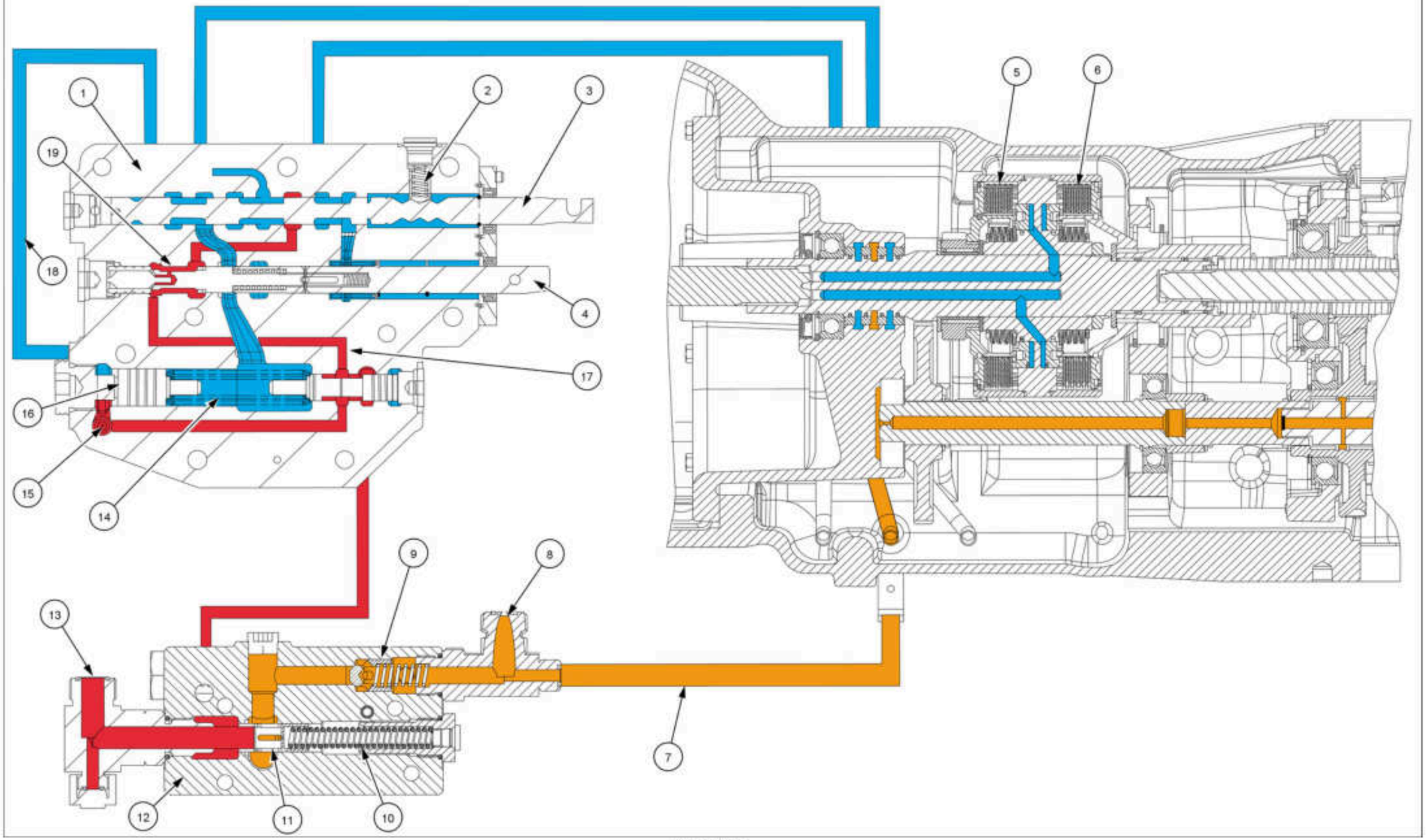
Diesel Exhaust Fluid (DEF)/AdBlue®/ARLA heater control unit - Static description



MDIL177RD1759FA 1

- Supply module and Ad Blue lines (Pressure, suction, backflow) heating is controlled and monitored by the Heater Control Unit **(1)**
- HCU-PC contains a CAN interface for communication with engine control unit (ECU)
- The power stages inside HCU-PC are activated based on command from engine control unit (ECU)
- HCU-PC provides information about diagnostic, currents and voltages via CAN interface to the engine control unit

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