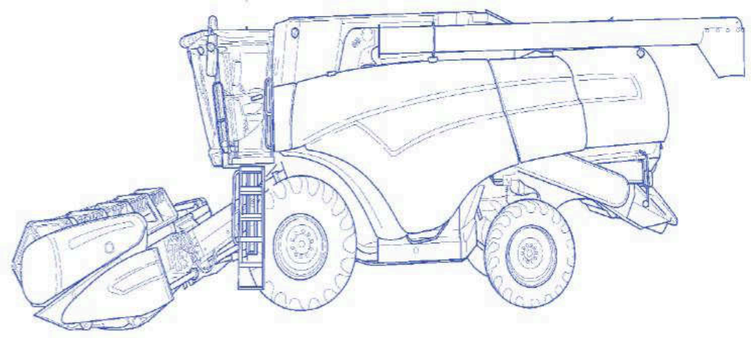


NEW HOLLAND

CX8070
CX8080
CX8090

REPAIR MANUAL

NEW HOLLAND

SERVICE

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B. If **7.3 - 9.0 volts** reading cannot be generated erase the fault code and continue operation.

Wiring harness - Electrical schematic frame 09 (A.30.A.88-C.20.E.09)

Wiring harness - Electrical schematic frame 27 (A.30.A.88-C.20.E.27)

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E0657-04-CSW Reel Speed Set Shorted to Low Source

Cause:
The Right Hand Module (RHM) has detected that the Console Switch (CSW) Reel Speed Set circuit voltage is <**0.500 volts** .

Possible failure modes:

1. The CSW Reel Speed Set circuit is shorted to ground.
2. RHM internal failure.

Solution:

1. Verify the fault is present. Enter the IntelliView™ II monitor - "Diagnose info" screen, "Console" sub menu. Select "CSW Reel Speed Set" and observe the voltage.
   The normal operating range for the CSW Reel Speed Set circuit is **0.5 - 12.0 volts** .
   Note that the IntelliView™ II monitor is limited to **0.0 - 5.0 volts** .

   A. If the voltage reading is <**0.500 volts** , continue with Step **2**.

   B. If the voltage reading is within the proper limits, the wire may not be shorted at this time. Continue troubleshooting at Step **4**.

2. Verify the RHM is good. Turn off the ignition switch. Disconnect the Right Console Harness connector **X029** . Using the proper tool, remove pin 2 wire 332 yellow from **X029** . With the wire removed from the connector, reconnect **X029** . Turn the ignition back on and recheck the CSW Reel Speed Set voltage.

   A. If the voltage now reads >**0.500 volts** , the RHM is good. Continue troubleshooting at Step **3**.

   B. If the voltage is still <**0.500 volts** , then the fault is in the RHM. Reinstall the wire removed for troubleshooting. Reload the system software to see if the fault code clears. If the fault is still present after reloading the software, replace the RHM. Continue troubleshooting at Step **4**.

3. Verify circuit 332 yellow is good. Inspect for a short to ground between Right Console connector **X029** pin 2 and Reel Speed Mode switch S-08 connector **X040** pin 3.

   A. If the circuit checks good, continue troubleshooting at Step **4**.

   B. Locate the short. Repair the shorted wiring. Continue troubleshooting at Step **4**.

4. Visually inspect the harness and connectors for damage, bent or dislocated pins, broken or pinched wires.

   A. Repair any damage found during visual inspection.

   B. If no damage is found, erase the fault code and continue operation.

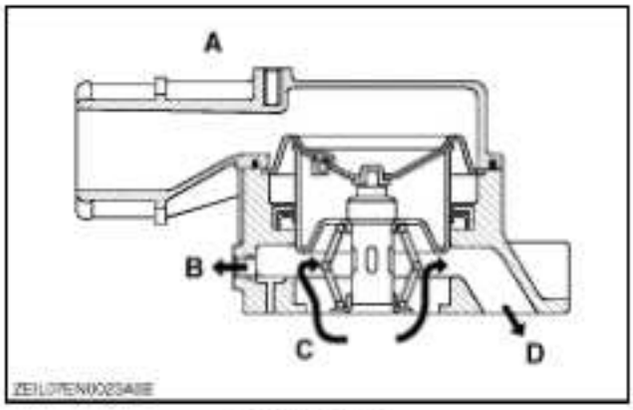
Wiring harness - Electrical schematic frame 11 (A.30.A.88-C.20.E.11)

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Thermostat - Static description

CX8090

Water circulation in the engine

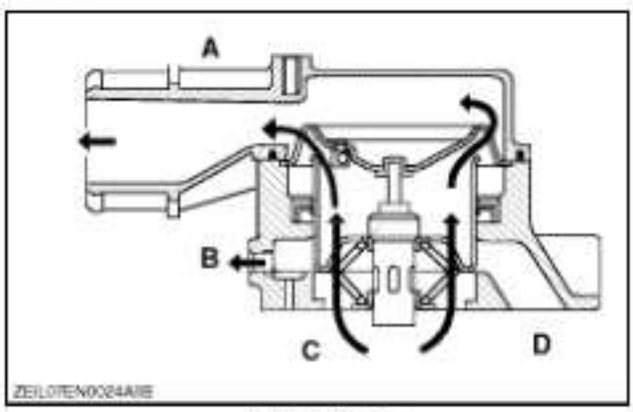


ZEILOTEN0023AGB 1

Water circulation in the engine

A Water circulation towards the radiator
B Circulation towards the bypass
C Water circulation from the engine
D Circulation towards the expansion tank

Water leaving the thermostat



ZEILOTEN0024AGB 2

Water leaving the thermostat

A Water circulation towards the radiator
B Circulation towards the bypass
C Water circulation from the engine
D Water circulation towards the expansion tank

NOTE: *Check that the thermostat works properly, replace the thermostat when in doubt.*

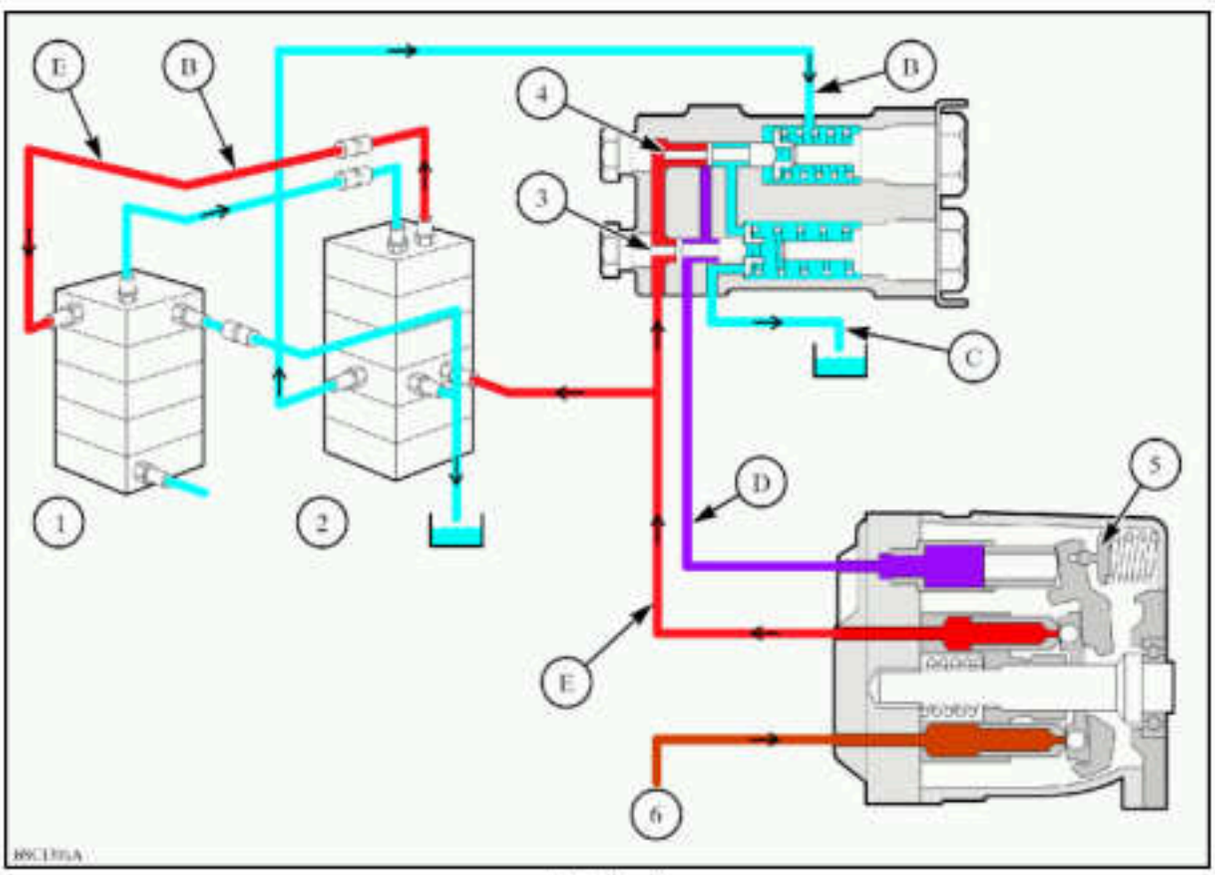
Start of travel temperature:	**82 - 86 °C (179.6 - 186.8 °F)**
Minimum travel at **92 - 96 °C (197.6 - 204.8 °F)**	**15 mm (0.6 in)**

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Low Pressure Standby

With Reference to image **2**

Low pressure standby is the system pressure **21 - 24 bar** (**305 - 348 psi**) maintained by the hydraulic pump when high pressure hydraulic circuits are not being operated.
During engine start up, standby pressure has not been generated and both the flow and pressure compensating valves are held to the left by spring pressure.
While the spools are held to the left oil pressure generated by the pump cannot be applied to the swash plate servo piston. The swash plate consequently remains in the maximum flow position until the pump has developed sufficient flow to produce pressure at low pressure standby.
As pump output pressure increases to **21 - 24 bar** (**305 - 348 psi**), this pressure is sensed in gallery **(E)**, and applied to the flow compensating spool. The spool gradually moves against the spring allowing oil flow from gallery **(E)**, to gallery **(D)**.
The controlled pressure rise in gallery **(D)**, operates the swash plate servo piston, changing the angle of the swash plate in relation to the pumping head. The change in angle reduces the operating stroke of the pistons and output of the pump.
As pump output decreases and the pressure in gallery **(D)**, reduces to less than **24 bar** (**348 psi**), the flow compensating valve gradually moves under spring pressure to the left bleeding gallery **(D)**, to sump through gallery **(C)**. This reduces the control pressure applied to the servo piston, allowing the servo piston to retract at a controlled rate under pressure from the swash plate return spring and re-adjust the angle of the swash plate to increase pump output.
This control process continues maintaining pump output pressure at **21 - 24 bar** (**305 - 348 psi**) (low pressure standby) until a high pressure circuit is operated and pump system pressure needs to be increased to operate the service.



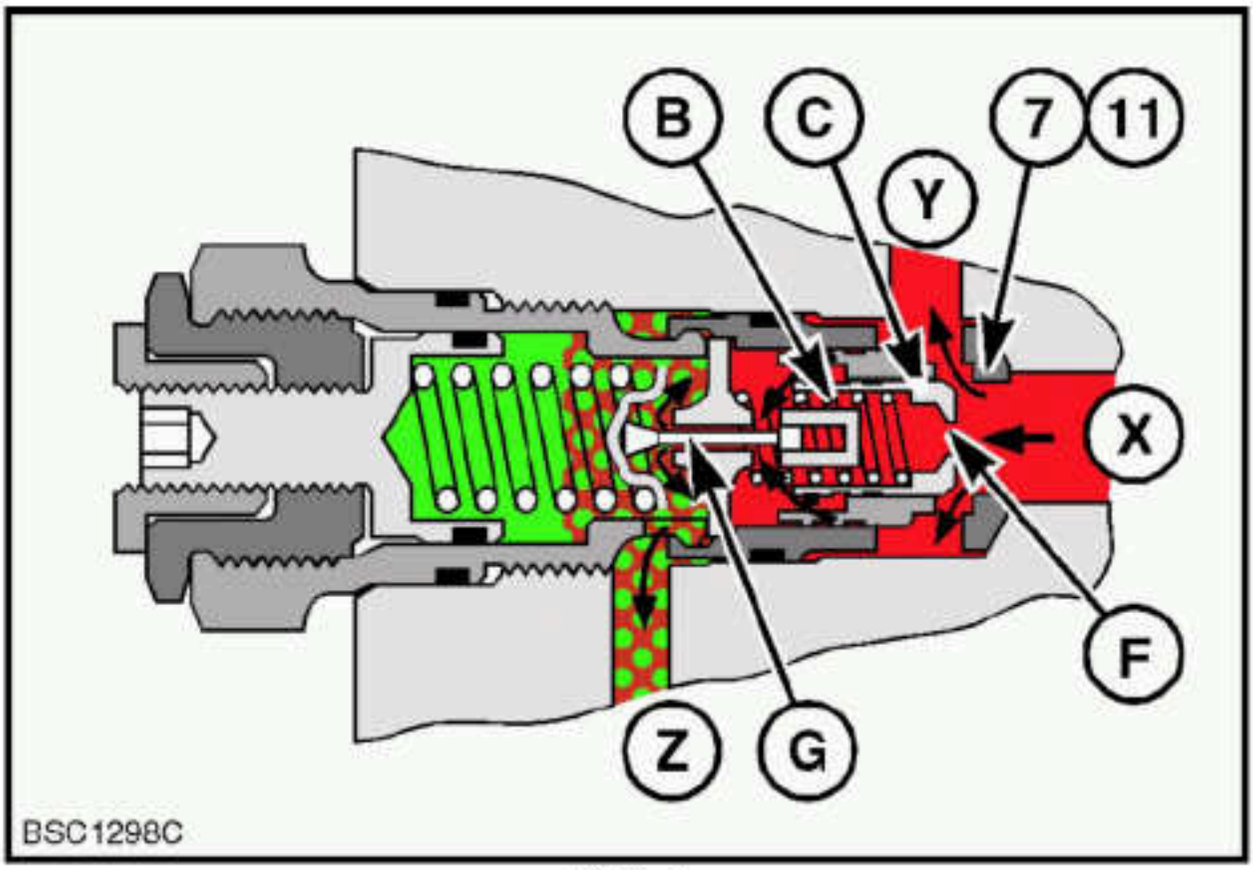
Standby Pressure @ **21 - 24 bar** (**305 - 348 psi**)

Return to Reservoir

Control Pressure

Charge Pressure

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BSC1298C 5

Bypass Valve 8d-9d

When the bypass actuator **(H)**, is turned 31/2 turns counterclockwise the force on poppet **(J)**, is reduced. This sets the pressure limiter valve at near zero setting. When the pump is not turning but pressure is generated in the high pressure lines by the motor (motor acting as a pump), poppet **(J)**, moves to the left, oil flows from port **(X)**, through opening **(G)**, to port **(Z)**. Plunger **(C)**, will also move easily to the left allowing the pressurized oil from port **(X)**, to flow to port **(Y)**. As pressure increases to the valve which equals spring **(B)**, plunger **(C)**, will move to the left and allowing oil to flow directly from port **(X)**, to port **(Y)**, (oil keeps flowing from port **(X)**, to port **(Z)**).

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