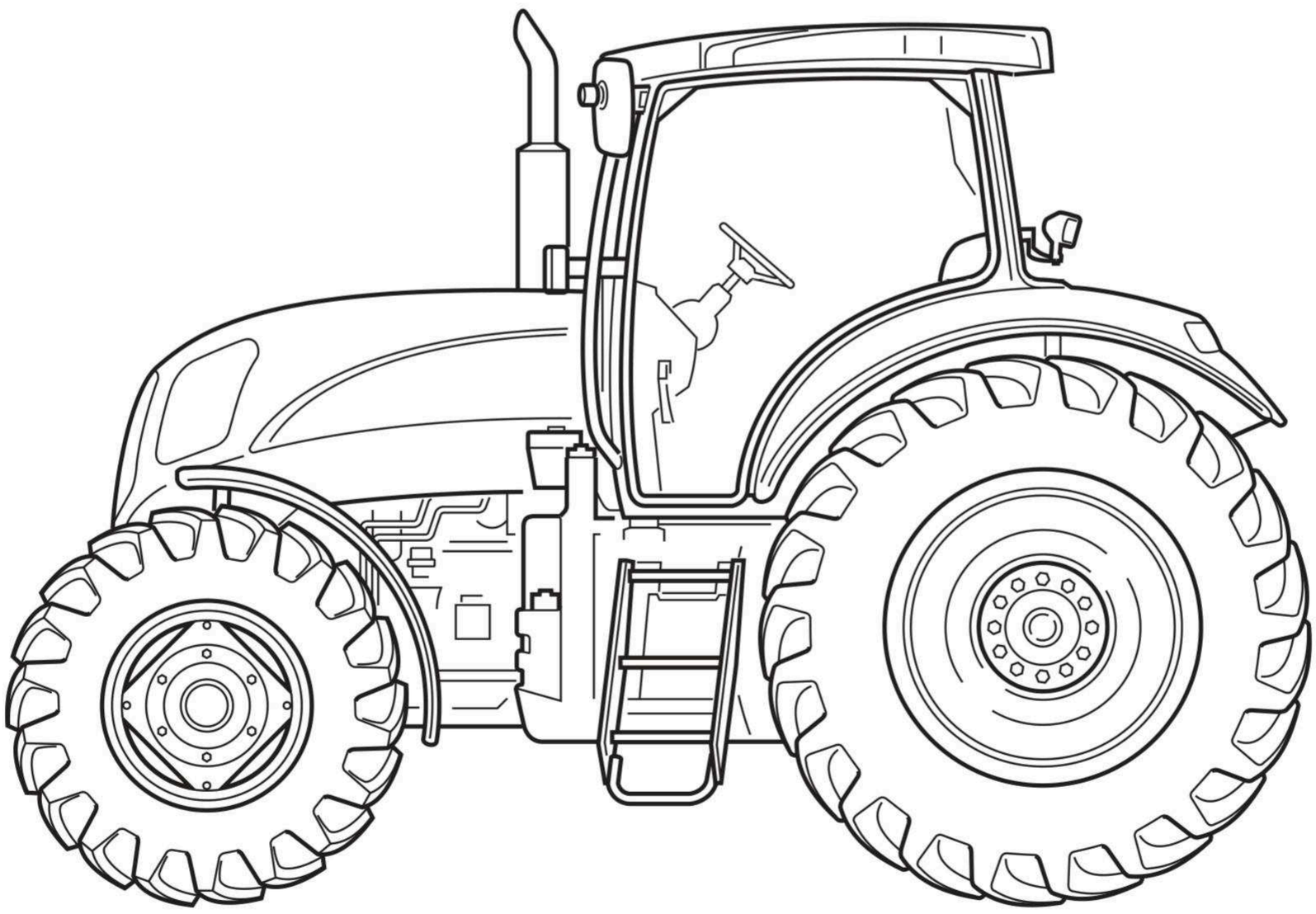
CALIBRATION BOOKLET

T7.220 / T7.235 / T7.250 / T7.260

Power Command Tractors

T7.220 / T7.235 / T7.250
T7.260 / T7.270

Auto Command Tractors



Part Number 84511252
1st edition English
November 2011

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NEW HOLLAND AGRICULTURE

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Control module - Fault code index

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Full Power Shift Transmission (FPS) Calibration 'U' Error Codes

Code	Description	Possible Failure
U16	ERPM dropped too soon during clutch calibration	1) Engine lugged down too soon. Possible PWM valve faulty or a mechanical fault within the transmission
U17	Seat switch not activated	1) Operator not in seat 2) Open circuit for the seat switch input to the transmission module 3) Faulty seat switch 4) Switched 12v supply fuse blown Note: Use the H5 switch diagnostics to detect if the seat switch is connected
U19	Oil temperature below **10 °C**	1) Open circuit for the temperature sensor input to module 2) Faulty temperature sensor Note: Use the H9 in the transmission module to see if the temperature sensor input is OK
U20	Handbrake is not set	1) Open circuit for the handbrake feed into the transmission module 2) Faulty handbrake switch 3) Switched 12v supply fuse blown Note: Use the H5 switch diagnostics to detect if the handbrake is connected
U21	ERPM is below 1100, increase throttle	1) Operator has not set the correct engine speed Open circuit for the engine speed sensor going to the cluster - Mech engines only 2) Instrument cluster is not powered 3) Broken CAN Note: Use the H9 in the transmission module to see if the engine speed is being detected
U22	ERPM is above 1300, reduce throttle	1) Operator has not set the correct engine speed
U23	Shuttle lever is in neutral, shift it to forward	1) Operator has not selected forward on the shuttle lever 2) Open circuit between the shuttle lever and the transmission module 3) Switched 12v supply fuse blown Note: Use the H5 switch diagnostics to detect if the switch is connected
U26	Clutch pedal is not up, release clutch pedal	1) Operator has not released the clutch pedal 2) The clutch potentiometer / linkage is sticking or broken Note: Use the H9 in the transmission module to see if the clutch input is OK
U31	Wheel speed sensed - tractor moving	1) Handbrake not applied 2) Brakes not working Note: If the brakes are OK move the vehicle forward slightly and repeat calibration
U36	Max allowed clutch calibration value exceeded	1) Current value exceeded without lugging the engine down. Possible PWM valve faulty or a low hydraulic pressure fault
U51	Engine speed error	1) Engine speed must be between 850 and 950 rpm 2) CAN bus error
U55	PTO started	1) The PTO was started during the PTO twist sensor calibration, ensure the PTO is turned off
U58	PTO sensor open circuit	Wiring or connectors to PTO twist sensor
U59	PTO sensor short circuit to ground	Wiring or connectors to PTO twist sensor
U68	Creeper not engaged	1).
U69	Creeper stuck	1)
U75	Quick fill calibration value too high	1) Wiring problem (on clutch solenoid) 2) Clutch solenoid damaged 3) Clutch mechanical problem

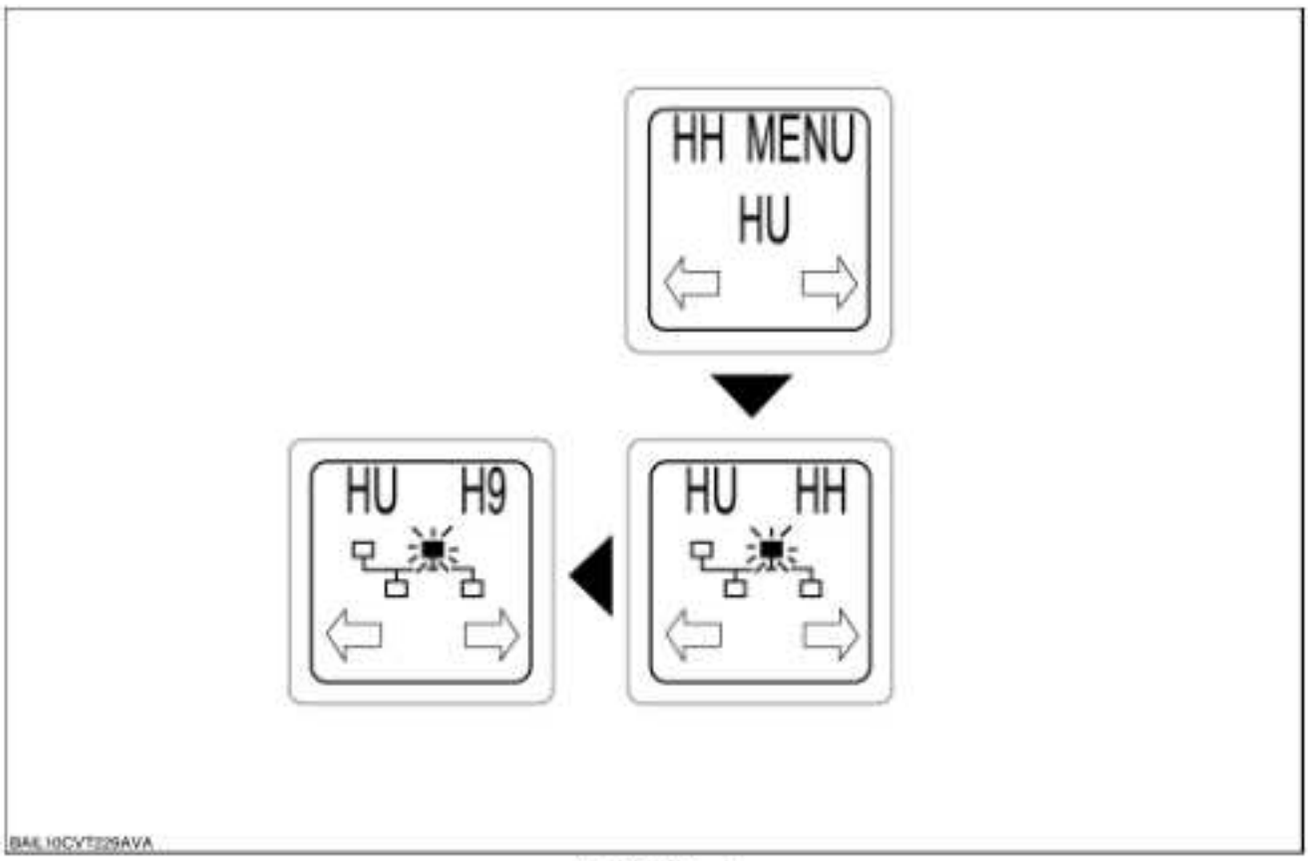
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Control module Instrument controller - H9 - Voltmeter diagnostic

This menu is used to verify the operation of various potentiometers, voltage supplies, and solenoid current circuits. If an intermittent fault is detected within a circuit, a 'wiggle' test can be performed on the related wiring while watching the display for sudden changes in values, to help locate the area where the fault exists.

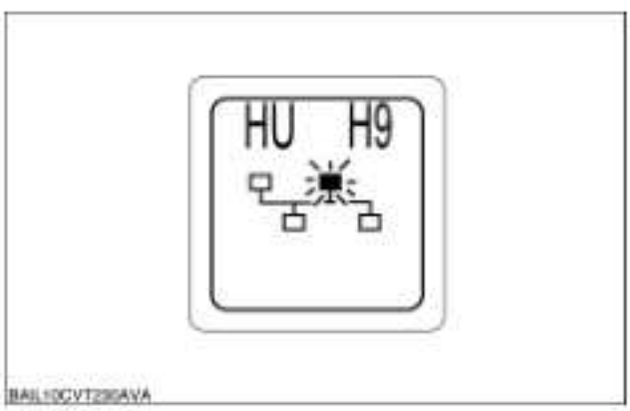
NOTE: *The vehicle may be driven while in this menu.*

H9 Menu Screen Select Diagram



BAIL10CVT229AVA 1

Select the H9 menu by depressing the "dimming" button.



BAIL10CVT230AVA 2

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Channel Number	Connector	Pin Number	Description	Typical Reading
Ch 111	**X955** (CN3B)	33	Creeper solenoid current	0 - Solenoid off 750 - Solenoid on
Ch 121	**X951** (CN1B)	29	EDC raise solenoid current	0 - Solenoid off 1800 to 3000 - Solenoid on
Ch 122	**X951** (CN1B)	33	EDC lower solenoid current	0 - Solenoid off 2250 - Solenoid on
Ch 123	**X955** (CN3B)	10	Rear PTO solenoid current	0 - Solenoid off 580 - Solenoid on
Ch 124	**X954** (CN3A)	08	Front PTO solenoid current	0 - Solenoid off 1800 - Solenoid on
Ch 125	**X954** (CN3A)	25	Front suspension upper lockout current	0 - Solenoid off 700 - Solenoid on
Ch 126	**X952** (CN2A)	19	Front suspension lower lockout current	0 - Solenoid off 700 - Solenoid on
Ch 153	**X950** (CN1A)	18	Rear PTO speed sensor	3360 - Engine not running
Ch 154	**X950** (CN1A)	15	Flywheel speed sensor	3360 - Engine not running
Ch 157	**X951** (CN1B)	18	Transmission output speed sensor	3360 - Engine not running
Ch 158	**X951** (CN1B)	02	PTO torque sensor	3360 - Engine not running
Ch 159	**X951** (CN1B)	11	Mid speed sensor	3360 - Engine not running
Ch 200	**X950** (CN1A)	20	12VPS (unswitched)	12000
Ch 201	**X950** (CN1A)	14	12VA	12000
Ch 202	**X950** (CN1A)	26	12VB	12000
Ch 203	**X953** (CN2B)	03/04	12VD	12000
Ch 204	**X951** (CN1B)	26/27	12VF1	12000
Ch 205	**X956** (CN4A)	01/08	12VF2	0 - Transmission in N 1200 - Transmission not in N
Ch 206	**X953** (CN2B)	09/17	12VF3	12000
Ch 207	**X952**(CN2A)	07/13	12VH	12000
Ch 208	**X952** (CN2A)	02/03	12VH1	12000
Ch 209	**X951** (CN1B)	31/32	12VM	12000
Ch 210	**X957** (CN4B)	02	12VR	12000
Ch 211	**X955** (CN3B)	08/09	12VS1	12000
Ch 212	**X955** (CN3B)	03	12VS2	12000
Ch 213	**X954** (CN3A)	07/13	12VT1	12000
Ch 214	**X954** (CN3A)	21	12VU1	12000
Ch 215	**X954** (CN3A)	02/03	12VU2	12000
Ch 216	**X950** (CN1A)	06	8V5REF	8500
Ch 217	**X950** (CN1A)	08	5VREF1	5000
Ch 218	**X950** (CN1A)	03	5VREF2	5000
Ch 219	**X950** (CN1A)	09	5VREF3	5000
Ch 220	-	-	5VREF1IN	5000
Ch 221	-	-	2V5REF	2500
Ch 222	-	-	1VREF	1000

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