Puma 170 / 170CVX
Puma 185 / 185CVX
Puma 200 / 200CVX
Puma 215 / 215CVX
Puma 230CVX
Tractors

CALIBRATION BOOKLET

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CASE IH AGRICULTURE

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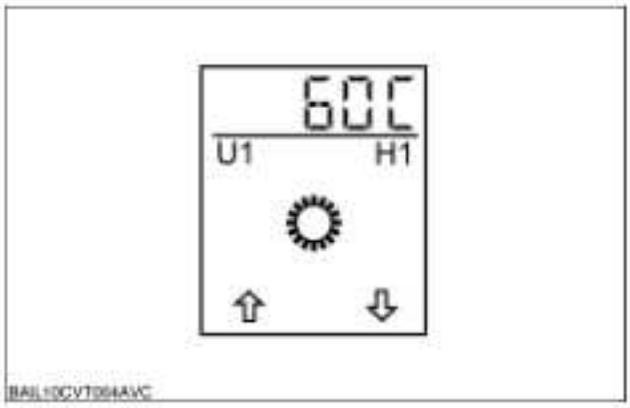
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Calibration Method

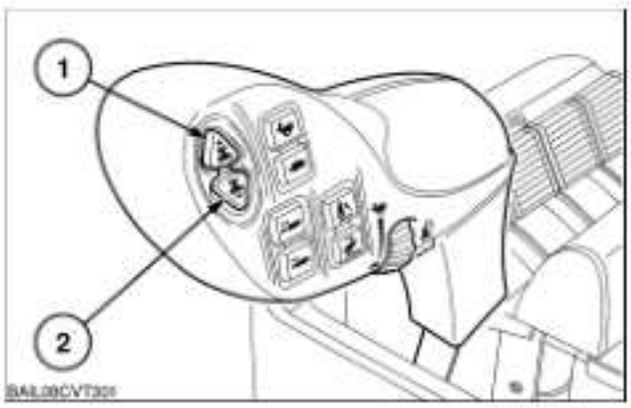
The system being calibrated will be shown on the ICU3 and the transmission oil temperature in Celcius will be shown on the upper section of the display.



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Press the clutch pedal, place the shuttle lever into forward and release the clutch pedal.

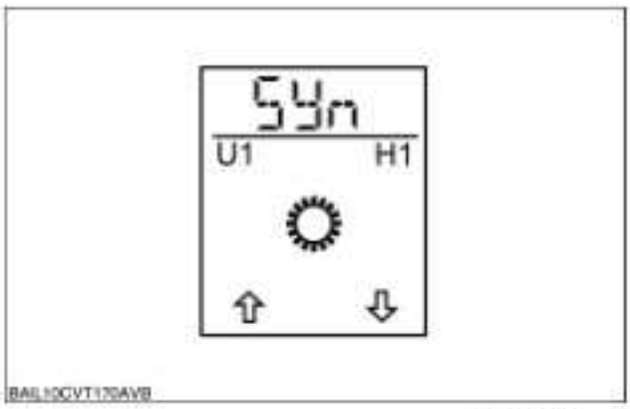
Pressing the forward **(1)**, or reverse **(2)**, button will change the display to show the transmission oil temperature. If "U19" is displayed the oil will need to be warmed before calibration can proceed. If the start up procedure was incorrect this will also cause a "U" code to be displayed and prevent the calibration from proceeding, for further information refer to **Control module - Fault code index (A.50.A)**.



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If "CL" is displayed this indicates that the oil temperature is between **10 - 60 °C**, if "CH" is displayed this indicates that the oil temperature is above **95 °C**. After a few seconds the display will return to oil temperature and the tractor may be operated to obtain the correct transmission oil temperature. If necessary it is possible to proceed with calibration at this point by pressing either the forward or reverse button while "CL" or "CH" is being displayed. The display will then show "Syn" and calibration can proceed.

NOTE: *If an unlikely value of oil temperature is displayed eg:* ***-30 °C*** *or* ***125 °C****, this may indicate a fault with the temperature sender.*



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There are two methods of calibrating the CVT transmission. The entire sequence can be automated or each item can be calibrated manually.

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Channel Number	Connector	Pin Number	Description	Typical Reading
Ch 35	**X953** (CN2B)	20	EHR3 fender retract switch	0 - Switch depressed 12000 - Switch released
Ch 36	**X953** (CN2B)	21	EDC external raise switch	0 - Switch depressed 12000 - Switch released
Ch 37	**X953** (CN2B)	22	ESPTO speed select switch - 540E	0 - Switch not in 540E position 12000 - Switch in 540E position
Ch 38	**X953** (CN2B)	23	EHR3 fender extend switch	0 - Switch depressed 12000 - Switch released
Ch 39	**X953** (CN2B)	24	Foot throttle not idle switch	0 - Pedal released 8000 - Pedal depressed
Ch 40	**X953** (CN2B)	27	ESPTO speed select switch - 540	0 - Switch not in 540 position 12000 - Switch in 540 position
Ch 41	**X953** (CN2B)	28	Shuttle lever N switch	1540 - Button released 3400 - Button depressed
Ch 43	**X953** (CN2B)	30	Shuttle lever F or R switch	0 - Lever in rest position 3670 - Lever in F or R
Ch 47	**X954** (CN3A)	09	Front suspension axle position sensor	950 - Axle at lowest position 4000 - Axle at highest position
Ch 48	**X954** (CN3A)	10	Clutch pedal position sensor	1350 - Pedal fully depressed 3800 - Pedal released
Ch 49	**X954** (CN3A)	11	Rear PTO N/C switch	0 - Switch in on position 12000 - Switch in on position
Ch 50	**X954** (CN3A)	12	Forward clutch pressure switch	0 - Clutch not at pressure 12000 - Clutch at pressure
Ch 53	**X954** (CN3A)	17	Reverse clutch pressure switch	0 - Clutch not at pressure 12000 - Clutch at pressure
Ch 55	**X954** (CN3A)	23	ESPTO speed select switch - Neutral	0 - Switch not in neutral position 12000 - Switch in neutral position
Ch 56	**X954** (CN3A)	24	Transmission oil pressure sensor	520 - With engine running 2850 - With engine not running
Ch 57	**X955** (CN3B)	01	Crank detect input	1200 - cranking in progress
Ch 58	**X955** (CN3B)	11	High flow pump not present input	0 - High flow pump present 12000 - high flow pump not present
Ch 63	**X955** (CN3B)	16	Left brake switch	0 - Pedal depressed 12000 - Pedal released
Ch 64	**X955** (CN3B)	19	EDC external lower switch	0 - Switch released 12000 - Switch depressed
Ch 65	**X955** (CN3B)	20	ESPTO speed select switch - 1000E	0 - Switch not in 1000E position 12000 - Switch in 1000E position
Ch 66	**X955** (CN3B)	21	12V PTO sense input	12000
Ch 68	**X955** (CN3B)	23	ESPTO speed select switch - 1000	0 - Switch not in 1000 position 12000 - Switch in 1000 position
Ch 72	**X955** (CN3B)	29	Front hitch external raise switch	0 - Switch released 12000 - Switch depressed
Ch 73	**X955** (CN3B)	30	Front hitch external lower switch	0 - Switch released 12000 - Switch depressed
Ch 75	**X956** (CN4A)	22	Exhaust brake switch	0 - Exhaust brake released 12000 - Exhaust brake depressed
Ch 81	**X957** (CN4B)	13	Front hitch fender switch present input	0 - Fender switch not fitted 12000 - Fender switch fitted
Ch 82	**X957** (CN4B)	14	A/C pressure switch	0 - 12000 - A/C pressure high
Ch 83	**X957** (CN4B)	15	Front PTO N/O switch	0 - Switch in off position 12000 - Switch in on position
Ch 84	**X955** (CN4B)	16	Front PTO N/C switch	0 - Switch in on position 12000 - Switch in off position

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