836D
836D AWD
856D
856D AWD
Motor Grader

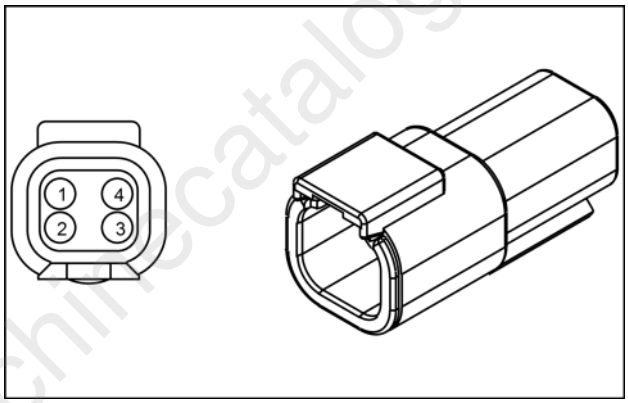
SERVICE MANUAL

Part number 92806064
English
March 2026

CASE CONSTRUCTION

Pin	From	Wire	Description	Color-Size	Frame
1	SP-006-P-X	MC-032	PWR 1	OR - 2.0	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
2	SP-032-P-PIN1	MC-042	GND 1	BL - 2.0	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
3	**X-016. pin 28** -	MC-171	RS232 TX	YE - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
4	**X-016. pin 10** -	MC-125	SIGNAL 2	LB - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
5	**X-008B (Plug) pin 1** - ANTENNA ETHERNET [A-004] (47965725)	MC-165	ANTENNA	GN-BK - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
6	**X-008B (Plug) pin 2** - ANTENNA ETHERNET [A-004] (47965725)	MC-166	ANTENNA	GN - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
7	**X-008B (Plug) pin 4** - ANTENNA ETHERNET [A-004] (47965725)	MC-168	ANTENNA	OR - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
8	**X-008B (Plug) pin 3** - ANTENNA ETHERNET [A-004] (47965725)	MC-167	ANTENNA	OR-BK - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
9	**X-016. pin 12** -	MC-135	SIGNAL	GN - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
10	**X-016. pin 19** -	MC-173	RS232 RX	TN - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**
11			Not Used		
12	SP-005-P-X	MC-024	SW PWR	OR - 0.75	**SHEET 36 SH36-MACHINE CONTROL DISPLAY**

X-008A_LS - LEFT SWITCH (47965726) (Receptacle)



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Pin	From	Wire	Description	Color-Size	Frame
1	SP-001_LS-P-PIN1	LS-208B	SW GND	BL - 0.75	**SHEET 38 SH38-MACHINE CONTROL LEICA READY**
2	**X-016_LS (Receptacle) pin 4** - TO MC CAB (84147382)	LS-205	LEFT OFF	GN - 0.75	**SHEET 38 SH38-MACHINE CONTROL LEICA READY**
3	**X-016_LS (Receptacle) pin 2** - TO MC CAB (84147382)	LS-203	LEFT AUTO	RD - 0.75	**SHEET 38 SH38-MACHINE CONTROL LEICA READY**
4	**X-016_LS (Receptacle) pin 1** - TO MC CAB (84147382)	LS-210	SHIFT LEFT	YE - 0.75	**SHEET 38 SH38-MACHINE CONTROL LEICA READY**

520332-09 - Timeout of first cycling TCU message - Abnormal update rate

Control Module: UCM

Fault Description:
UCM **A-157** received an invalid message from TCU EC4 via CAN.

Cause:
UCM **A-157** detects a time out for messages from TCU EC4 via CAN.

Possible failure modes:

1. Wiring faulty.
2. Connectors faulty.
3. CAN1 resistors faulty.
4. CAN1 network faulty.
5. UCM **A-157** faulty.
6. TCU EC4 faulty.

Solution:

1. Verify fault is present and in active state.

   Use the Electronic Service Tool (EST) to check the status of this fault.

   A. If the fault is present and active, continue with Step **2**.

   B. If the fault is no longer present or is in an inactive state, the fault may be intermittent and not currently active. Continue with Step **9**.

2. Check the integrity of the harness and the connectors **X-EC4**, **X-CN1B**, **X-332A**, **X-332B**, **X-333A**, **X-333B**, **X-101A**, **X-101B**, **X-102A**, **X-102B**, **X-103A**, **X-103B**, **X-MD1-1**.

   Visually inspect the relevant harness and connector for damage, bent or dislocated pins, corroded terminals or broken wires.

   Verify that the connectors are fully installed.

   Flex the harness involved to reveal intermittent breaks or shorts in the wiring concerned.

   Operate the machine while you monitor the display.

   A. If you find damage or the display indicates other than normal display readings, then repair the damage discovered during the inspection or locate and repair the other than normal display condition and verify that the error has been resolved.

   B. If you do not find damage and the display indicates only normal readings, then continue to Step **3**.

3. Check for a CAN1 failure.

   Disconnect connector **X-123**.

   With the key switch in the “OFF” position, use a multimeter to check for resistance on the vehicle harness side:

From	To	Value
Connector **X-123** pin C	Connector **X-123** pin D	Should be approximately **60 Ω**

   A. If the resistance is not approximately **60 Ω**, continue with Step **4**.

B. If there is approximately **60 Ω**, continue with Step **6**.

4. Check for a CAN3 failure.

   Disconnect connector **X-561**.

   With the key switch in the “OFF” position, use a multimeter to check for resistance on the component side:

From	To	Value
Connector **X-561** pin A	Connector **X-561** pin B	Should be approximately **120 Ω**

   A. If the resistance is not approximately **120 Ω**, the CAN resistor **R-010** is faulty. Replace the CAN resistor **R-010**.

   B. If there is approximately **120 Ω**, continue with Step **5**.

5. Check for an open circuit.

   Disconnect connectors **X-091** and **X-CN4B**.

   With the key switch in the “OFF” position, use a multimeter to check for continuity on the vehicle harness side:

From	To	Value
Connector **X-CN4B** pin 1	Connector **X-091** pin 1	There should be continuity
Connector **X-CN4B** pin 10	Connector **X-091** pin 2	There should be continuity

   A. If there is no continuity, there is an open circuit condition. Locate and repair the broken conductor.

   B. If there is continuity, there is a short circuit on CAN3 network. Locate and repair the broken conductor.

6. Check for an open circuit.

   Disconnect connector **X-501**.

   With the key switch in the “OFF” position, use a multimeter to check for continuity on the vehicle harness side:

From	To	Value
Connector **X-501** pin 76A	Connector **X-091** pin 3	There should be continuity

   A. If there is no continuity, continue with Step **7**.

   B. If there is continuity, continue with Step **8**.

7. Check the fuse.

   Turn the key switch OFF and wait for power down.

   Verify if the fuse **F-1F4** is not blown.

   A. If the fuse **F-1F4** is blown, replace it.

   B. If the fuse **F-1F4** is not blown, there is an open circuit condition between connector **X-501** pin 76A and connector **X-091** pin 3. Locate and repair the broken conductor.

8. Turn the key switch OFF and wait for power down.

   Replace the Electro-Hydraulic Valve EHR2.

   Reconnect connectors **X-091**, **X-501**, **X-561**, and **X-CN4B**.

   Turn the key switch ON.

   Use the Electronic Service Tool (EST) to check the status of this fault.

   A. If the fault has been resolved, return the machine to service.

   B. If the fault has not been resolved, load the appropriate module software for PVED-CC #1. If the fault recurs, replace the PVED-CC #1.

Full Version Available

Case 836D, 836D AWD, 856D, 856D AWD Motor Grader Service Manual (92806064) (March 2026)

This is a short preview. The complete document contains all sections, diagrams, part numbers or specifications, and full procedures.