

Steer Ready Kit Installation Guide

Kit: EDX-SR-CATMTT, P/N 911-3005-000

Fits Caterpillar Challenger MT Track Tractor Models:

	745	755	765	
835	845	855	865	875
	745B	755B	765B	
835B	845B	855B	865B	875B



Read and Follow Safety Messages

- In these instructions, you will see the heading **WARNING** and the safety alert symbol . They indicate a hazardous situation that, if not avoided, could result in death or serious injury. The safety messages provide information to identify a hazard associated with potential injury.
- Before installing, operating, or performing maintenance or service on any part of the system:
 - Read and understand this installation guide
 - Read and understand the Steer Ready User Guide
- Do not allow anyone to operate without instruction
- Keep these instructions and all related safety information with the manual for your machine and other implements.

If you have any questions or need assistance, contact your local dealer or distributor.

Overview

A specific kit has been developed to work in conjunction with your steer ready system. For the machine models listed above, the kit contains the components for the electronic control unit (ECU) installation.

The items in the kit are detailed in the table that follows the safety warnings below. After the kit table there are step-by-step installation instructions for the kit.

After the step-by-step installation instructions there is a short section on setting up your Tractor Management Center (TMC).

Please read this manual thoroughly before beginning the installation.

⚠ WARNING:

To avoid serious injury or death during machine operation, install the appropriate kit for your machine make and model.

Machine Preparation

⚠ WARNING:

Inspect the machine and perform any needed maintenance (for example, contaminated hydraulic fluid) before installing the Steer Ready Installation Kit. This kit cannot perform as intended on a machine that is not maintained properly. Errors in performance increase the risk of operator and bystander injury or death.

Failure to maintain clean hydraulic fluid and operational hydraulic components can cause loss of directional control resulting in serious injury or death.

Turn off the machine and power off all Steer Ready components when installing or performing maintenance.

Before attempting to install any of the components, park the machine on a clean level floor with adequate clearance to work all around.

Kit Contents - Electronic Control Unit

Unpack the electronic control unit kit and identify the required parts as shown. Kit items are A, B, C etc. with an E (Electronic) prefix.

REF	PART NUMBER	QTY	DESCRIPTION	PHOTOGRAPH
EA	051-0226-000#	1	ECU main cable	
EB	051-0260-000#	1	Cable, CAN steering interface, Challenger MT Track	
Note: Items EC to EF are not applicable to this installation.				
EG	054-0117-000#	1	Power switch	

Kit Contents - Electronic Control Unit (continued)

REF	PART NUMBER	QTY	DESCRIPTION	PHOTOGRAPH
EH	051-0166-000#	1	CAN-PWR cable	
EI	806-1031-000#	1	Controller (ECU)	
EJ	640-0091-000	1	ECU mount bracket	
EK	726-1093-000	1	Switch bracket	
Bag E1 of 1 contains EL and EM				
EL	675-1197-000	4	Screw, self drilling, #10-16 x 2-1/2", Hex ZP	
EM	675-1188-000	4	Screw, mach, M6 x 12mm, PPH ZP	
EN	677-2002	20	Tie strap, 7" releasable	

Installation - Electronic Control Unit (ECU)

1. Install the ECU.

Locate the ECU mounting bracket **EJ** and hardware **EL** and **EM**.

- a. Locate the ECU mounting location to the front right corner of the cab floor (Figure 1a).

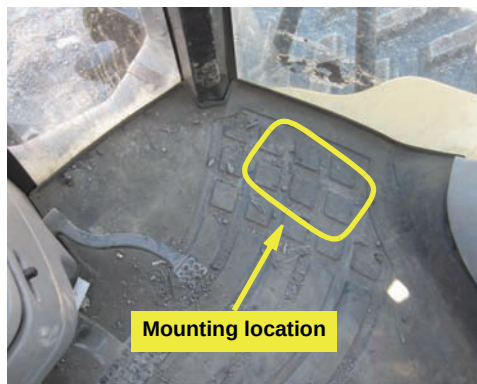


Figure 1a: ECU mounting location

- b. Position bracket **EJ** with its front and rear one-inch tabs $2\frac{1}{4}$ " and $4\frac{1}{4}$ " from the right side door respectively, and its front edge $5\frac{3}{4}$ " from the front pillar (Figure 1b).

Using the provided hardware **EL** fasten the bracket to the cab floor. Using a small level (not shown), level the bracket as close as possible.

NOTE: Do not overtighten the self-drilling screws **EL**. Overtightening could cause a fastener to fail.

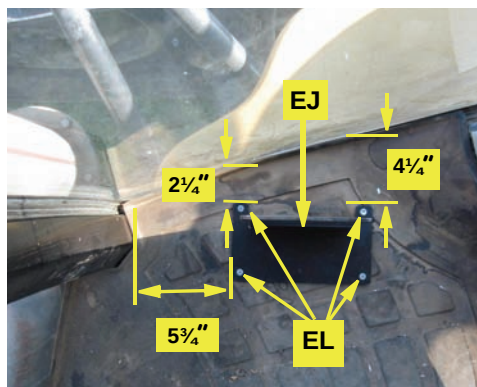


Figure 1b: ECU bracket installation

- c. Using hardware **EM**, attach ECU **EI** (its cable connectors rearwards) to the inside face of bracket **EJ** (Figure 1c with inset).

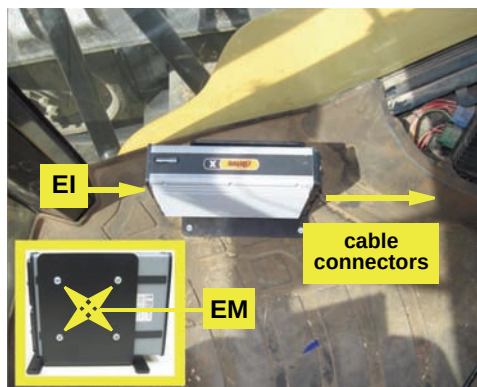


Figure 1c: Installed ECU (with inset)

2. Assemble and install the cables.

On a clean surface lay out all the cables and become familiar with the connections and where they are to be placed. See Appendix A.

- a. Connect main cable **EA** to **EI** using an Allen wrench to secure the cable. The **EA** connector only connects with the **EI** socket that is in line with the power and communications indicators at the opposite end of the ECU - the lower socket in this installation (Figure 2a).

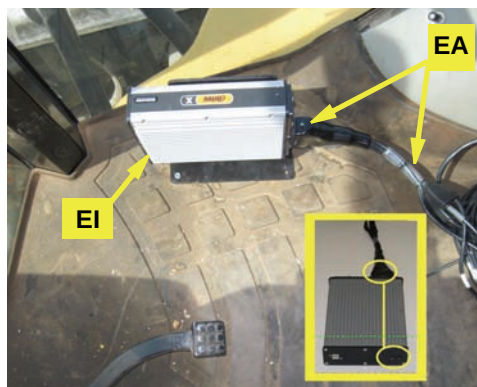


Figure 2a: ECU main cable connected (with inset)

2. **Assemble and install the cables (continued).**

- b. Locate the plastic panel to the right of the seat and against the window and remove by twisting the two fasteners (Figure 2b).

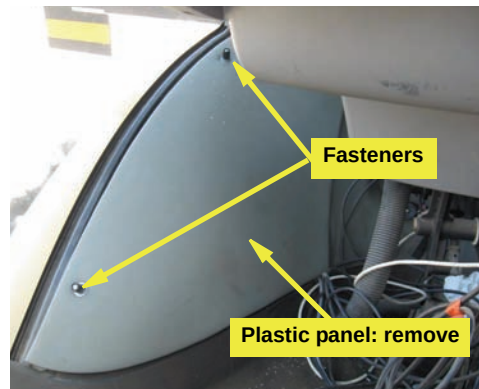


Figure 2b: Plastic panel and fasteners

- c. Locate the 4-pin Deutsch wire connector towards the lower right side of the opened area. Carefully disconnect the wire connector and connect the male and female ends of the CAN steering interface cable **EB** to the corresponding male and female connections (Figures 2c-i and 2c-ii).
- d. Refit the plastic paneling, routing cable **EB** out between the panel and the floor mat.

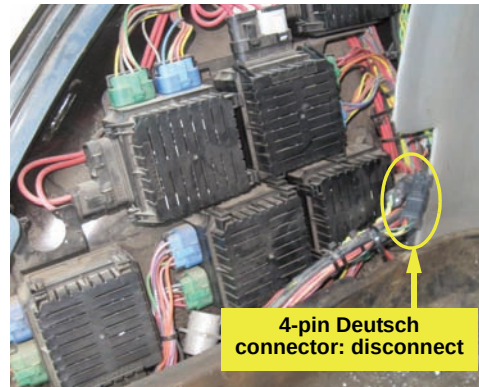


Figure 2c-i: Location of 4-pin connector

- e. Connect the open end of **EB** to **EA**'s connector labeled 'STEERING CONTROLLER'.
- f. Attach power switch **EG** to cable **EA**'s connector labeled 'SWITCH'. Some machines are equipped with pop out tabs that you can remove and replace with switch **EG**. If no tab is available, you can use bracket **EK** mounting it in the cab at the operator's preferred location. Route the cable in the cab so it is clear from any machine operation controls.

NOTE: Set the switch to **OFF** before connecting **EA** to the battery at step h below.

- g. Connect CAN-PWR cable **EH** to **EA**'s open connection labeled 'TERMINAL/RECEIVER'. Route the cable in the cab so that it is clear of any machine operation controls. Connect the opposite end of cable **EH** to the guidance terminal.
- h. Route the power cable part of cable **EA** to the tractor's battery and connect it.

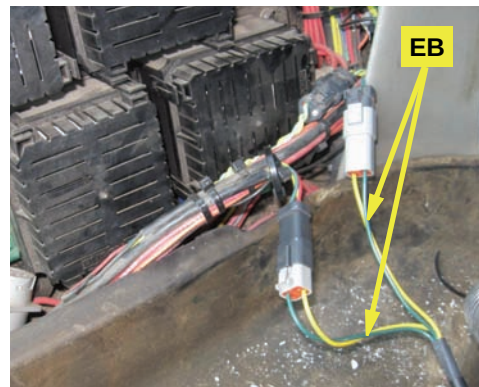


Figure 2c-ii: Connected CAN steering interface cable

Setup - Tractor Management Center (TMC)

1. Tractor Management Center (TMC) setup.

a. Locate the TMC (Figure 1a) then start the tractor.



Figure 1a: Tractor Management Center

b. Using the TMC selector, select the setup mode (M/E) (Figure 1b). The Setup screen appears (Figure 1c).

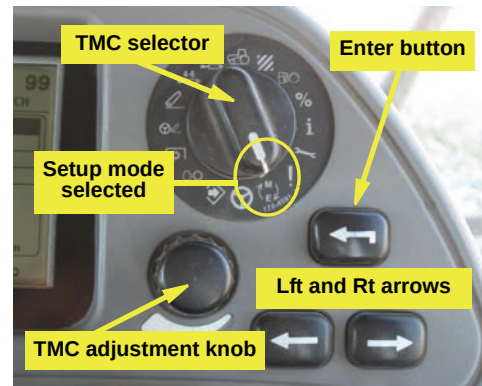


Figure 1b: TMC controls. Setup mode (M/E) selected

c. In page 1 (P1) of the Setup screen, use the TMC adjustment knob to select P3 (Figures 1c and 1d).

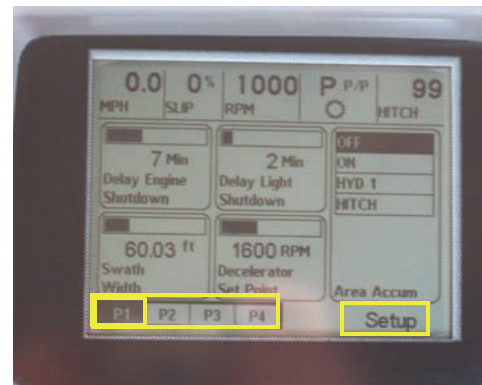


Figure 1c: Setup screen - page 1 (P1)

d. In page 3 (P3) of the setup screen, use the left and right arrow buttons to select the Class 3 Enable box (with DISABLE selected) (Figure 1d).

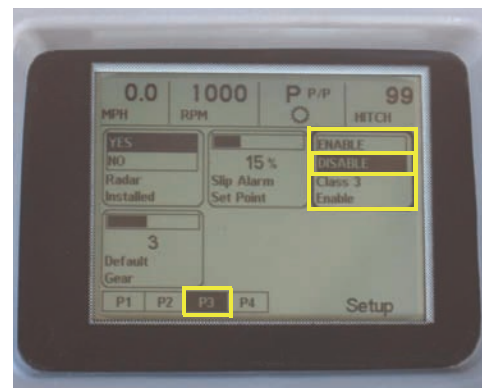


Figure 1d: Setup screen - page 3 (P3). Class 3 Enable box with DISABLE selected.

1. **Tractor Management Center (TMC) setup (continued).**
- e. Using the TMC adjustment knob, highlight the **ENABLE** option in the **Class 3 Enable** box. Press the Enter button to enable the Class 3 function (Figure 1e). An alert/acknowledgment screen appears (Figure 1f).



Figure 1e: Setup screen - Class 3 Enable box with ENABLE selected

- f. As directed by the message, press Enter to acknowledge that ISO 11783 Class 3 is enabled (Figure 1f).



Figure 1f: Alert/acknowledgment message

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Appendix A - ECU Cables and Connections

