







SERVICE CALL: Adjusting the engine on Voltage







DANGER

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury.

Many of the hazards identified in the Operator's Manual are also safety hazards when maintenance and repair procedures are performed.

DO NOT PERFORM MAINTENANCE UNLESS:

 \checkmark You are trained and qualified to perform maintenance on this machine.

- \checkmark You read, understand and obey:
 - manufacturer's instructions and safety rules
 - employer's safety rules and worksite regulations
 - applicable governmental regulations

 \checkmark You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this Tech Tip is a supplement to the Service Manual. Consult the appropriate Service Manual of your machine for safety rules and hazards.



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Check K1 Volts



|Unlock chassis controller |Machine Settings





Adjust voltage.



INTRODUCTION

Units with smaller chassis equipped with multiple lights required to be on at the same time could cause a voltage drop on the chassis batteries. If the battery voltage is low enough it could affect the Engine On voltage that is shown on the Ignition IN, causing the PTO not to come on. This tech tip demonstrates the adjustment.

This tech tip applies to units with Software Version 2.6.3 and newer. If needed contact Technical Support to get assistance in updating the software.

STEP 1

Turn ON all the buttons on the Canview 4 screen while the truck is running. This includes setting the parking brake and engaging the PTO. This will show the voltage drop on the ignition circuit. Steps 2 and 3 will go through the process of checking voltage.

STEP 2 - Multimeter

Check the voltage on the Ignition In input on the controller. K1 is part of the ignition IN input on the J1 connector shown below.



FIGURE 1 - Ignition IN (K1 Com)

Place the black lead of the multimeter on the ground lug at the bottom of the controller.



FIGURE 2 - Ground

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Place the red lead on Ignition IN.



FIGURE 3 - Ignition IN

With the multimeter set to DC verify the voltage.



FIGURE 4

Note the voltage shown at Ignition IN. Figure 5 and Figure 6.



FIGURE 5





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STEP 3 - Diagnostic Screen

Using the Canview control, press the middle (home) button (**Figure 7**) until the Diagnose button is available. **Figure 8** Press the input button to scroll to the next screen and K1 volts will be visible. **Figure 9**



FIGURE 7





FIGURE 8

FIGURE 9

STEP 4

Once the voltage drop on the chassis has been determined, follow Tech Tip 143 to unlock the chassis controller.

STEP 5

Once the controller is unlocked, go to the setting page by pressing the home button until settings is visible.



FIGURE 10

STEP 6

Once in settings, verify the Machine Settings are highlighted and press select.

STEP 7

Scroll to the bottom of the Machine Settings page, then highlight Engine ON volts.



FIGURE 11



FIGURE 12

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STEP 8

Press select and adjust the voltage to below the voltage rate from Step 2. Set the voltage to .1 V less than Step 2 and adjust lower if necessary.

Press Select to save the setting. Then press the home (middle) button to go back to the setting page. Example below shows the setting is 12.8 V DC.

Note: Pictures are used as examples only and are not meant to indicate specific voltages.

Note: Do not adjust the Engine ON rate to match chassis battery when the engine is off. This could have adverse effect on PTO functionality.



FIGURE 13





FOR FURTHER ASSISTANCE, CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM PHONE: 1-844-TEREX4U (1-844-837-3948) | EMAIL: <u>UTILITIES.SERVICE@TEREX.COM</u>