No. 293

Release Date:
September 07, 2023

Technical Service Bulletin

MODEL(S) AFFECTED: **T12 / T16 / T17 / M17 / S16 / 6200**

SUBJECT: Threaded power connections can loosen over time, causing voltage drops and potential damage to electrical components.

PURPOSE: Machine vibration and other environmental factors can cause threaded power connections to loosen. All threaded power connections must be regularly retorqued to ensure connections are secure after the initial 50 hours of machine operation, and then retorqued again every 200 hours after the initial first 50 hours.

NOTES: **WARNING: Always disconnect battery cable from machine before working on electrical components.**

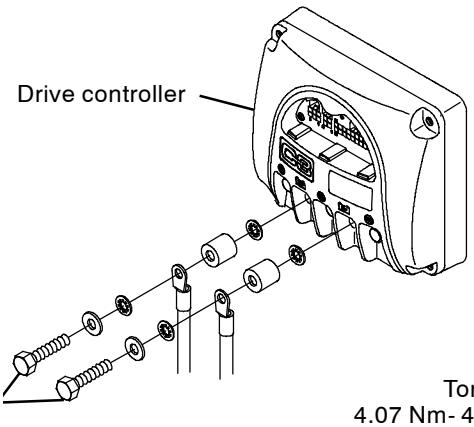
If there are loose connections, inspect components for possible damage due to excessive heat caused by loose/disconnected cable connection. Replace damaged components.

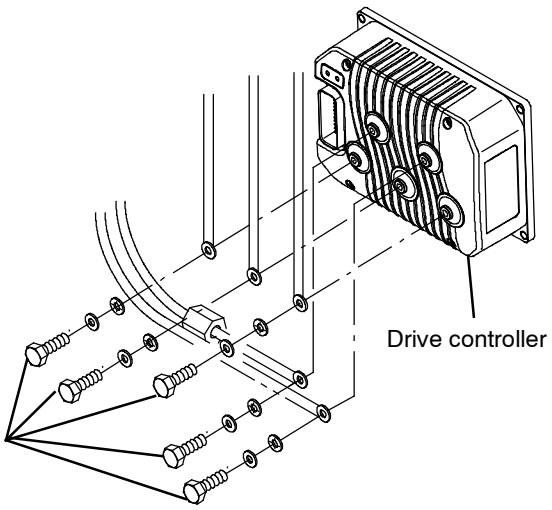
All ring connectors should be flat, tight with no gaps between the stacked connectors/hardware. The ring connectors must not be bent. A bent connector could possibly break. Replace the cable if the ring connector is bent.

Questions, contact the Tennant Customer Service Department at (800) 553-8033/
TNV contact 0031 (0) 413241242.

Warranty Information: Standard warranty terms apply.

Drive Controller*

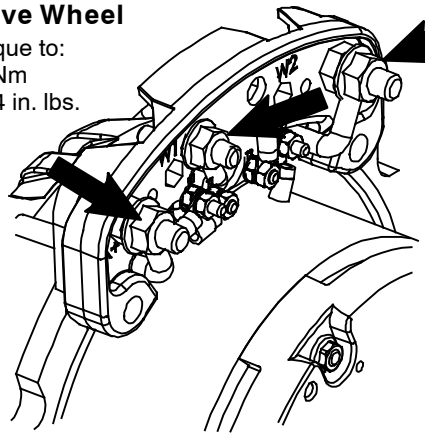




**NOTE: Drive controller is located at various locations depending on machine model. There are also two drive controllers available, depending on age of machine. Refer to applicable parts manual(s) for drive controller model and location*

Drive Wheel

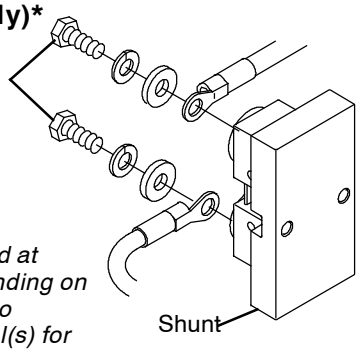
Torque to:
11 Nm
97.4 in. lbs.



NOTE: Should only be one flange hex nut on any drive wheel power terminal. See TSB 294 for more information

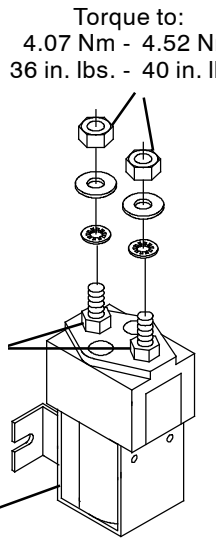
Shunt (machines equipped with telemetry option only)*

Torque to:
4.07 Nm- 4.52 Nm
36 in. lbs.- 40 in. lbs.



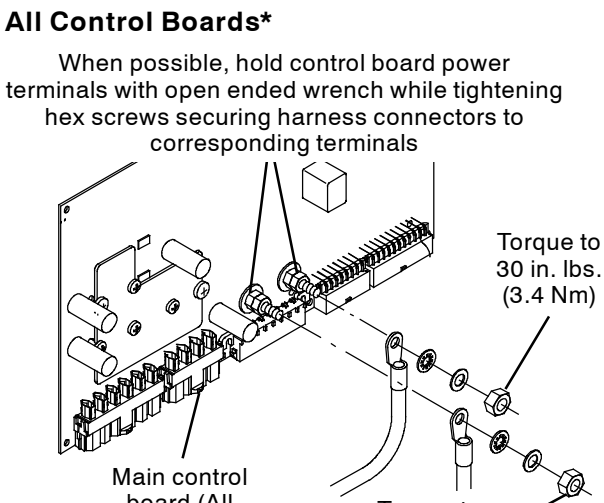
**NOTE: Shunt is located at various locations depending on machine model. Refer to applicable parts manual(s) for shunt location*

Primary Contactors/ SecondaryContactors*



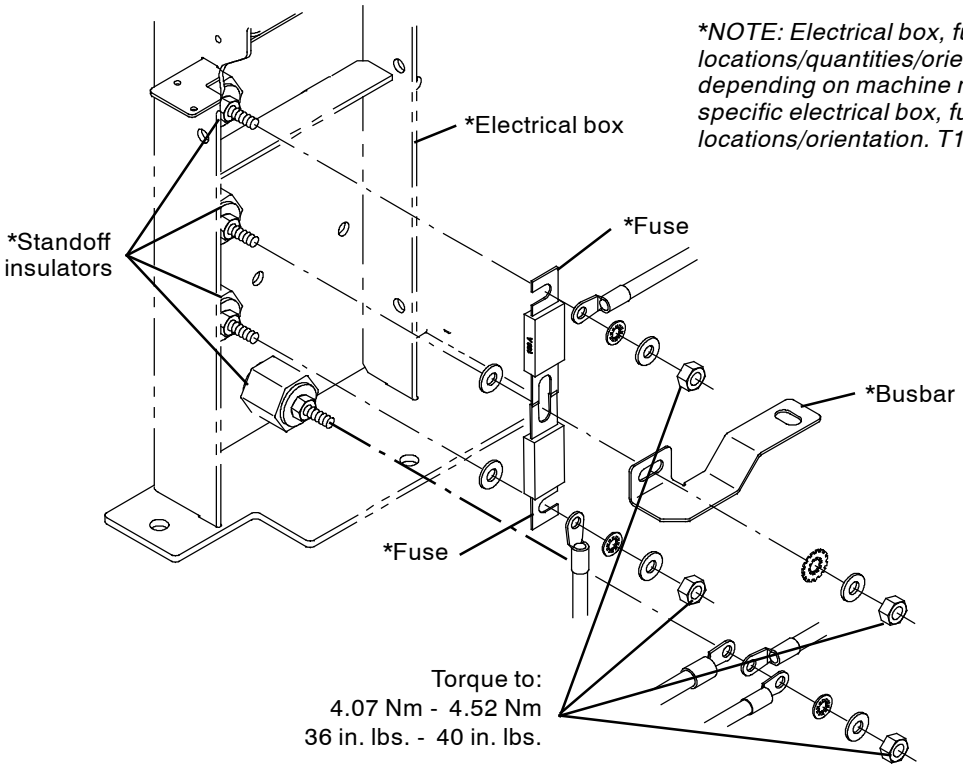
**NOTE: Machines are all equipped with a main contactor, and in several cases, secondary contactors. Refer to applicable parts manual(s) for main contactor/secondary contactor locations*

All Control Boards*



**NOTE: Control board design/location/orientation may be different, depending on machine model. Refer to the parts manual(s) for specific machine for control board design/location/orientation*

Electrical Box Group*



**NOTE: Electrical box, fuse, busbar, standoff insulator locations/quantities/orientation may be different, depending on machine model. Refer to parts manual(s) for specific electrical box, fuse, busbar, and standoff insulator locations/orientation. T16 electrical box group shown*