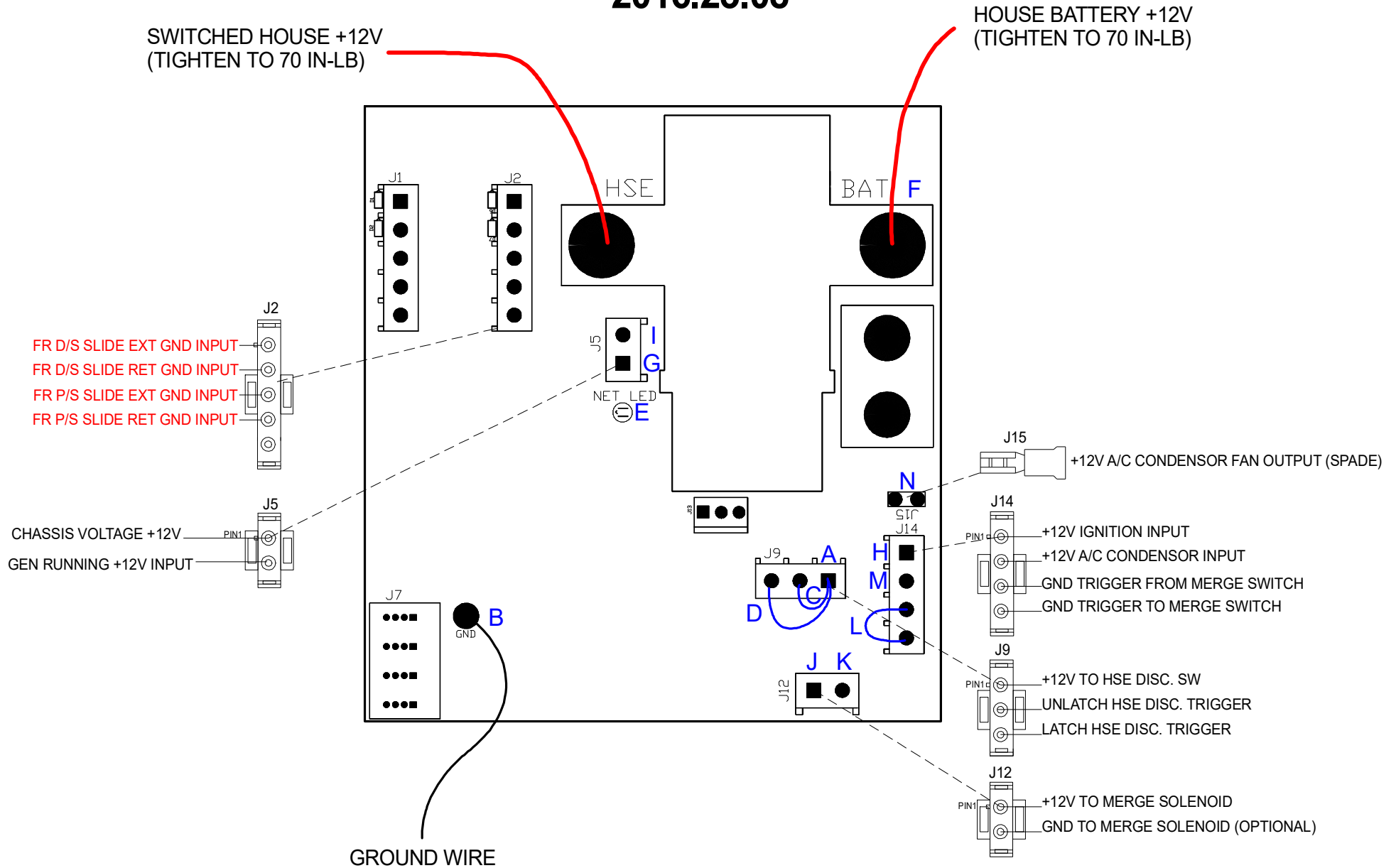


Tiffin Battery Merge Spec – 08.16.2016

- **Battery Merge Triggers**
 - Case 1 – Chassis charging: Ignition signal present for 30 seconds and chassis voltage is above 13.3V (charging) and the house voltage is below 12.4V (low battery voltage)
 - Overview - Merge for one hour or until chassis voltage drops below 12.6V for 30 seconds or ignition signal is removed or generator starts
 - Case 2 – House charging: House voltage is above **12.5V** (charging) and the chassis voltage is below 12.4V (low battery voltage) for 30 seconds
 - Overview - Merge for one hour or until house voltage drops below **12.2V** (house charger stops) for 30 seconds
- **Battery Un-merge Triggers**
 - Case 1 only - Generator starts – unmerge and lockout all merge functionality until the generator running signal is removed (or until the ignition signal is removed)
 - Case 1 only - Ignition signal is removed
 - Case 1 only - While the ignition signal is present, if chassis voltage drops below 12.6V for more than 30 seconds, unmerge until the ignition signal is cycled
 - Case 2 only – House voltage drops below **12.2V** for more than 30 seconds
 - Case 1 or 2 - Timed battery merge period expires (60 minutes)
- **Inputs**
 - Ignition input – J14 pin 1
 - Chassis mobility status: 1FFF4h - byte 5 bits 0&1 - 00 off, 01 on
 - Generator run input – J5 pin 2
 - Generator Status 1: 1FFDCh - byte 0 – 00 stopped, 03 running
 - Chassis voltage input – J5 pin 1
 - DC Source Instance 2: 1FFFDh
 - Manual merge input – J14 pin 3 (If House batteries are completely dead, ignition signal must be present for the manual merge to work.)
- **General Notes**
 - Battery merge/unmerge instance: DC Load #7
 - Switched House & House Battery Nut Torque Setting: 70 in-lb

Tiffin Motorhomes Power Management Module 2016.23.08



NOTE: CONNECTORS ARE SHOWN HERE IN THE LOADED (REAR) VIEW.