



TECHNICAL SERVICE BULLETIN

ISSUE DATE:	04/12/2023
SERVICE BULLETIN SUBJECT:	ZX5.A01 Telemetry Diode
VINs or MODELS AFFECTED:	Service Specified Buses
COMPLETE BY:	Next Service Opportunity
SERVICE BULLETIN #:	SC-23-042
LABOR OPERATION CODE:	EE49J

NOTICE! It is expected that this process may require up to 1 hour per bus. Please schedule appropriately to minimize vehicle downtime.

ZX5.A01 Telemetry Diode

Description:

The procedure describes the process of reworking the CSMN harness to add a diode and make wiring changes to interact properly with current telemetry unit.

Tools/Parts Required:

Tools and Supplies Required:

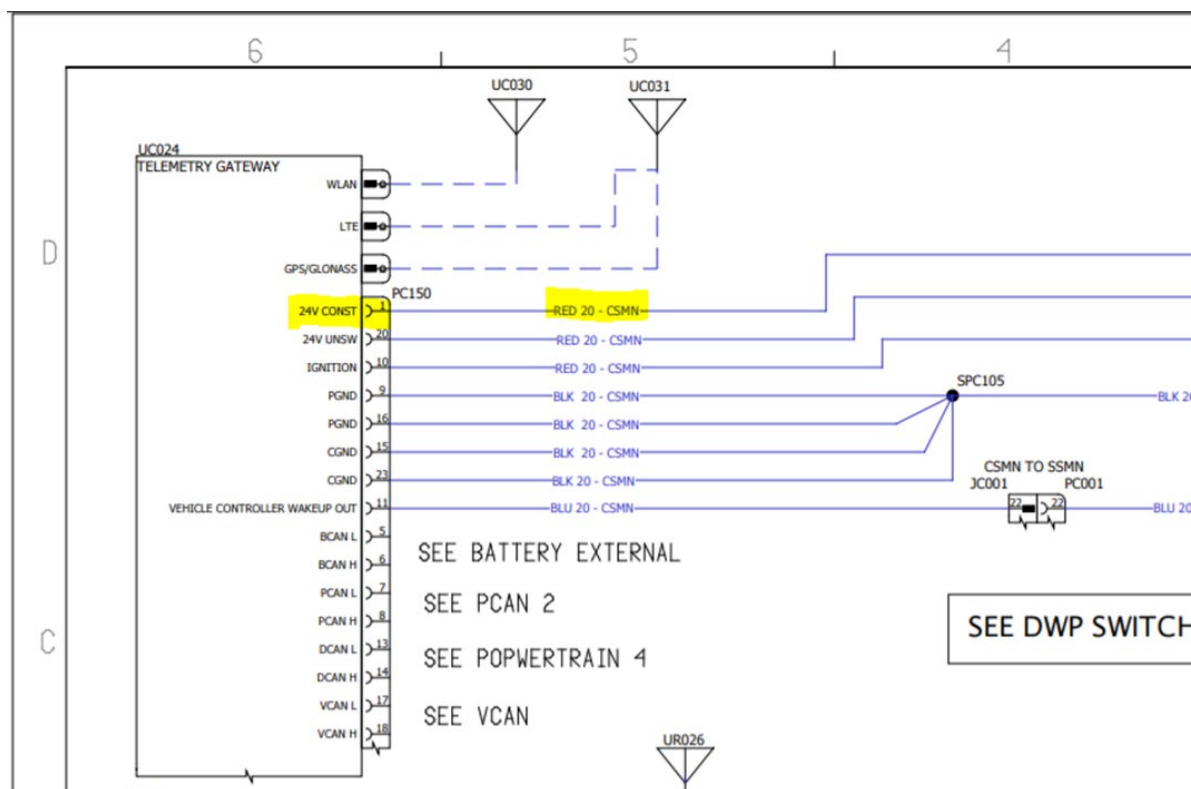
- Wire Cutters

Kit Parts Required:

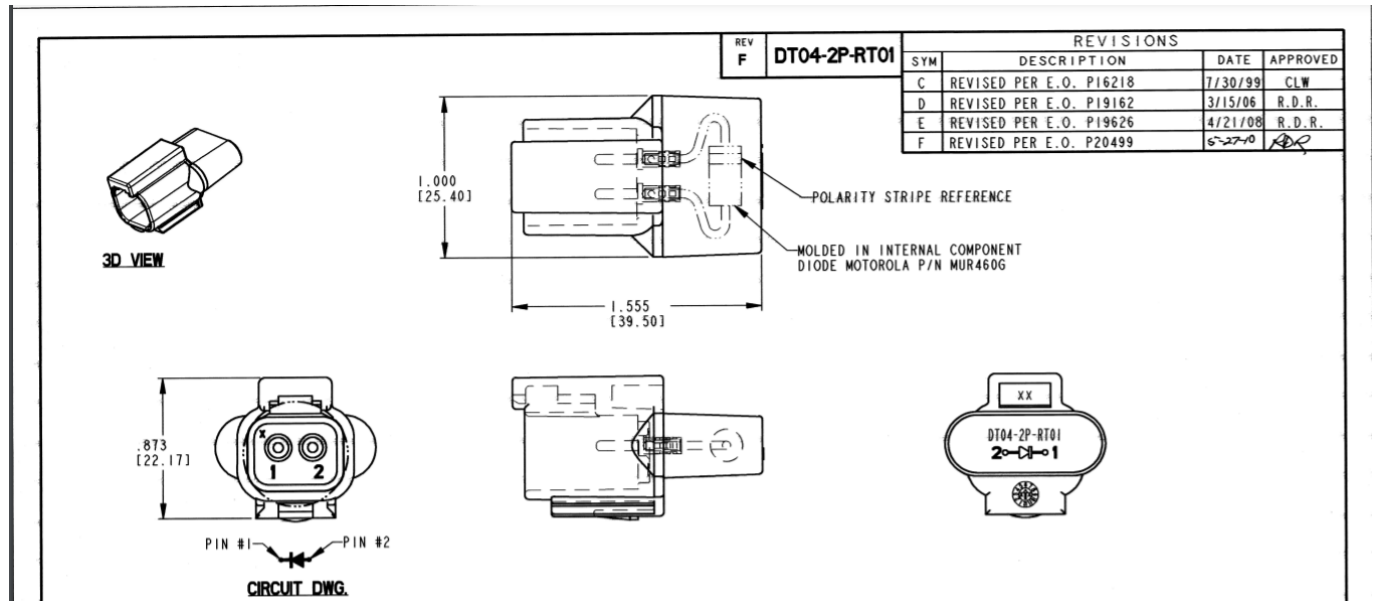
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|------------|--|-------|
| • 001298 | CONTACT, PIN, SOLID, SIZE 16, 16-20 AWG | 2 EA |
| • 001259 | CONNECTOR, PLUG, 2 POSITION, DEUTSCH | 1 EA |
| • 017082 | DT RECP ASM - DT04-2P-RT01 | 1 EA |
| • 128-2954 | HEAT SHRINK , 3M EPS300-3/4,BLK - 2.75in | 1 EA |
| • 001260 | LOCK,WDG,DT,2 WAY,PLUG | 1 EA |
| • 001301 | SCKT,SOLID,SZ 16, 16-20 AWG, NCKL | 2 EA |
| • 015712 | SPLICE, BUTT, NON INSULATED, 16-14 AWG | 1 EA |
| • 017416 | 20 TXL RED BC 60V 125C OD=1.78 | 55 mm |

Procedure:

1. Use the Proterra approved Lockout/Tagout procedure to make the bus safe for work.
2. Find CSMN harness. CSMN harness changes part number between builds. See either PN: 147-7981 or 147-3583.
3. Find connector JC208 on the CSMN harness. Find SPC064-13JC208 (yellow wire) and relocate from cavity 13 to cavity 7. Find SPC065-14JC208 (green wire) and relocate from cavity 14 to cavity 8.
4. Find connector JM023 on the CSMN harness. Find 16JM023-29PC040 (red wire) and remove from cavity 16. Remove the current terminal from the wire and install the new terminal (PN: 001298) on the red wire. Terminate 16JM023-29PC040 (red wire) into cavity 36 on the connector.



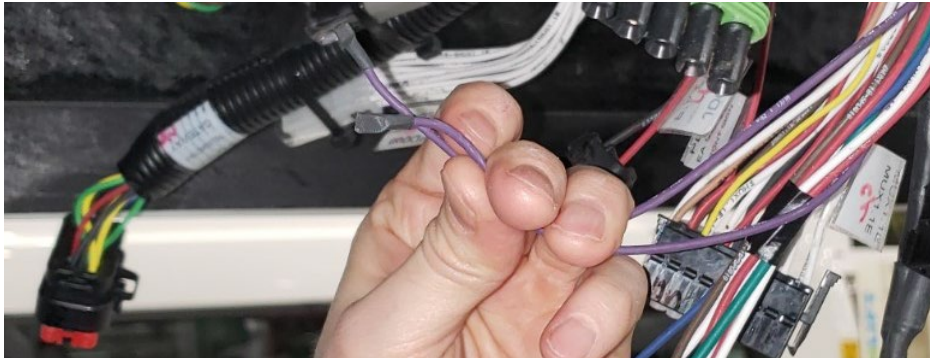
5. Find Connector PC150 on the CSMN harness (Terminated into the Telemetry Gateway). Locate Pin 1 on the PC150 connector (red wire). Cut the red wire 3 inches away from the PC150 connector.
6. Cut 2 inches of 20-gauge TXL red wire (PN: 017416). Splice the 2 inches of 20-gauge wire onto the connector side wire that was previously cut using a butt splice (PN: 015712). Heat shrink the wires and butt splice.



- Next, take the spliced wire (connector side) and add it to pin 1 of the of the diode connector (PN: 017082) (Diode polarity shown above). Take the other end of the wire (harness side) and add it to pin 2 of the diode connector. Apply terminal (PN: 001301) and wedge lock (PN: 001260). Zip tie diode back to harness (shown below).



8. On connector PC150, remove pins from cavities 17 and 18. Cut flush and heat shrink each wire separately (shown below) and secure to the harness bundle.



9. Remove the Lockout/Tagout devices and return the bus to service.