



Technical Service Bulletin

SUBJECT: Procedure to upgrade to new rotary foot switch TIG31066 on Navistar chassis

Products Affected: All Navistar vehicles MY2008 and newer with hydraulic brakes

Effective Date: 20oct15

Telma is committed to a philosophy of continuous improvement as a way of enhancing the end-user's experience with our product.

Refer to service bulletin [TL105091](#) for details about the change from foot switch JC120102 to the new rotary switch [TIG31066](#). Telma installations on Navistar chassis used Diamond Logic programming to control the input to foot switch JC120102. The new rotary foot switch provides a variable voltage output which is not compatible with Diamond Logic. When converting to the new rotary switch the Telma control module TIG31062 must also be added for the system to work. Below is the procedure to upgrade to the new rotary foot switch on Navistar chassis model year 2008 and newer with J1939 CanBus. For Navistar vehicles with hydraulic brakes older than MY 2008 contact Telma technical support for additional instructions to install this conversion kit and connect to transmission module for speed signal and ABS module for ABS control.

1) ORDER KIT NUMBER TIK11209

Description	PART NUMBER	Qty
Navistar rotary switch bracket	TIB01039	1
TRCM bracket	TIB03100	1
TRCM cab harness OBD2 design 2	TID31002	1
HCS 1/4 - 28 x 1.25 grade 8 yellow zinc	TIF01064	2
Nylon Insert Locknut ZP 1/4 - 28 UNF	TIF01066	2
M4-0.7 x 20mm DIN 933 Class 8.8 Zinc Cap Screw	TIF01067	1
M4 DIN 137 Zinc Wave Washer	TIF01068	1
7/16-14 x 1" Grade 5 Zinc Hex Head Flange Screw	TIF01069	2
7/16-14 Hex Flanged Locknut Grade 8	TIF07003	2
Telma Control Module (TRCM)	TIG31062	1
Rotary Foot Switch	TIG31066	1

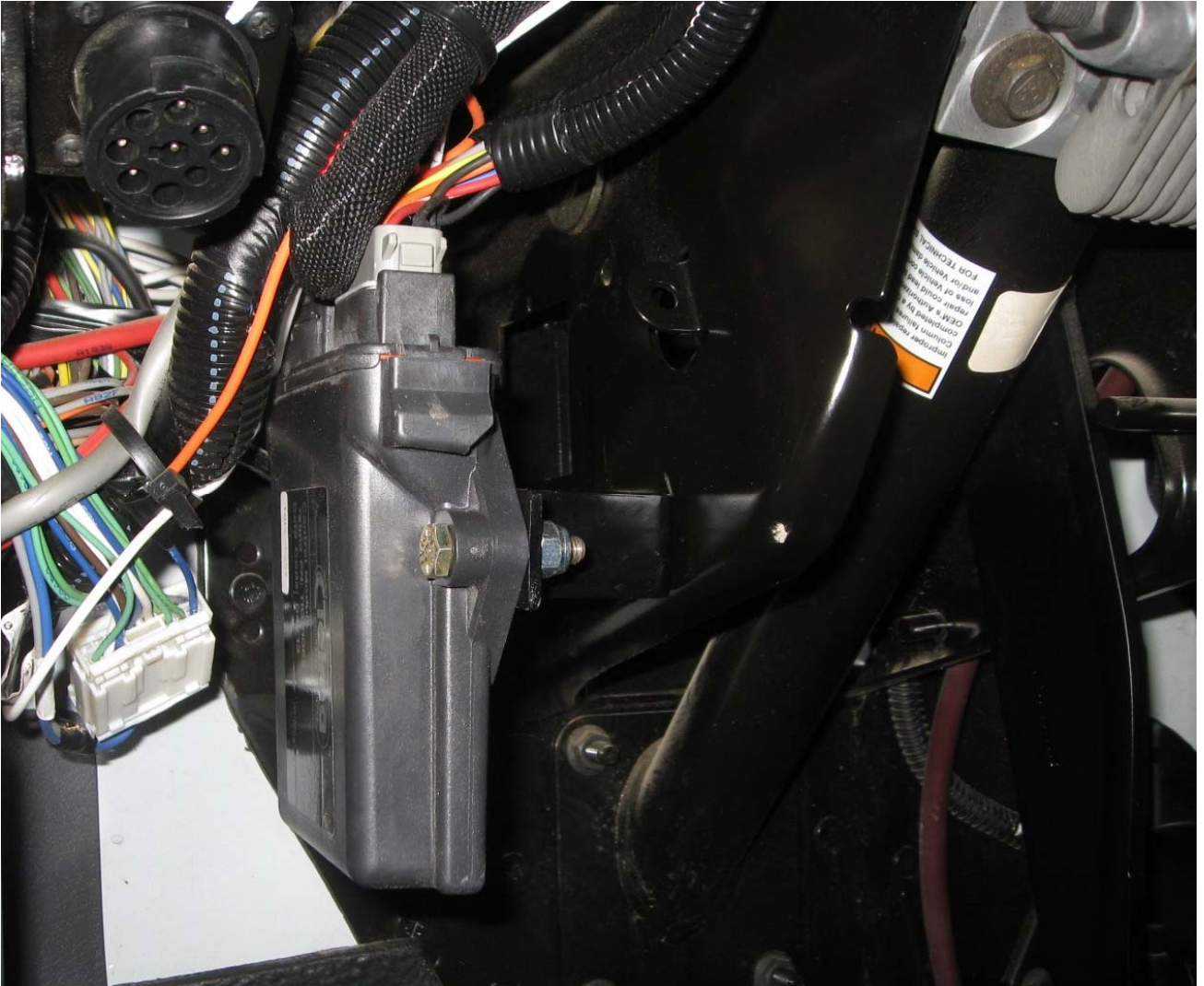
2) REMOVE OLD FOOT SWITCH AND BRACKETS

Remove foot switch JC120102, the brackets mounted to the pedal, the bracket that mounts the old foot switch JC120102, and the relay connected to the Diamond Logic module.

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3) TRCM INSTALLATION

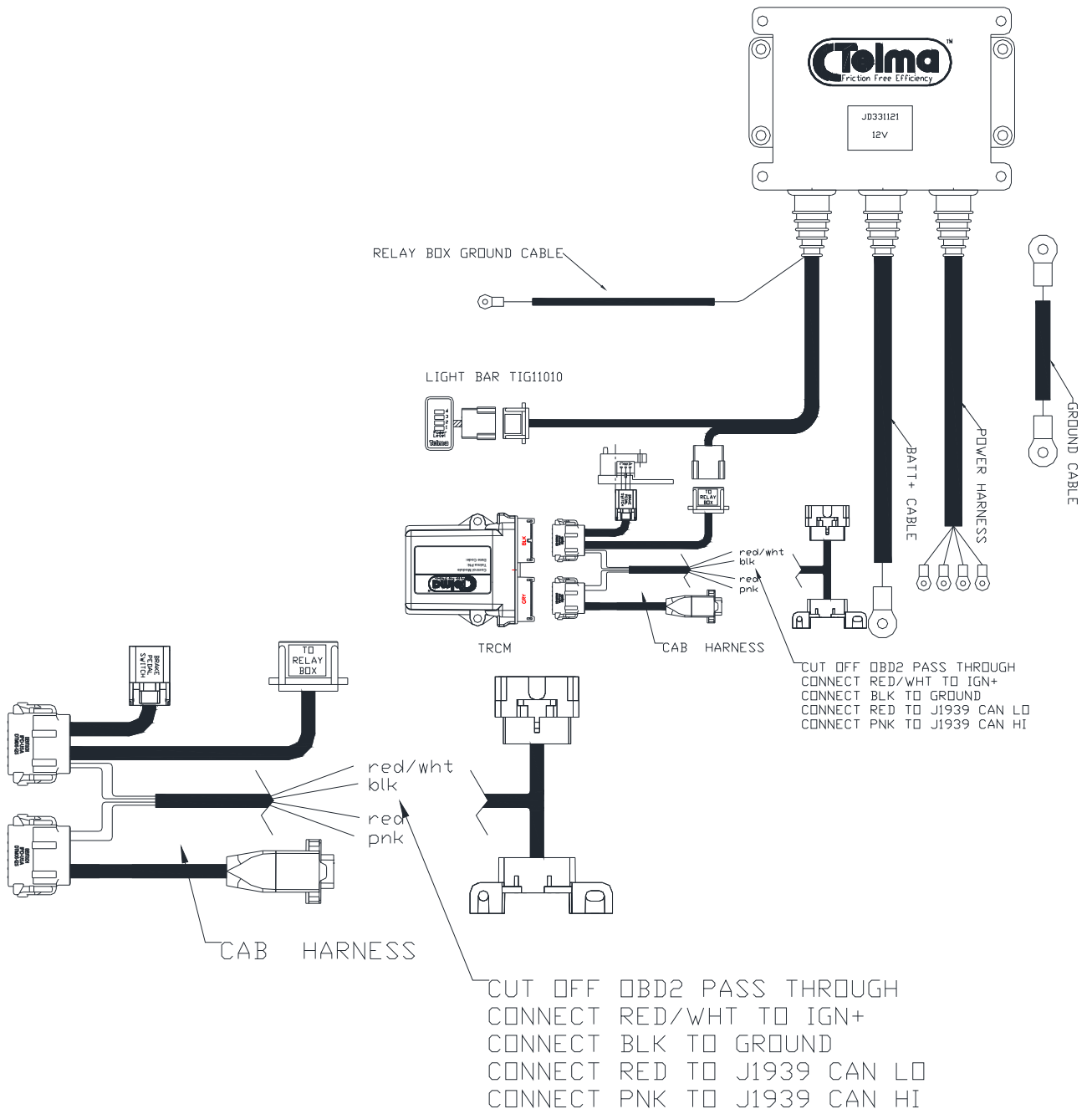
Mount the TRCM to the left side of the steering column using an existing hole and bracket TIB03100 high enough and wiring oriented to be away from driver interference.



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4) CAB HARNESS MODIFICATION AND INSTALLATION

- Cut off the OBD2 pass through part of the cab harness.
- Connect the red/wht wire in the cab harness to ign+.
- Connect the blk wire to ground.
- Connect the red wire to J1939 CAN LO (refer to the wiring diagram for details)
- Connect the pnk wire to J1939 CAN HI (refer to the the wiring diagram for details)
- Remove the org, blu, yel, and brn wires from the old JC120102 foot switch connector and plug into the new cab harness connector marked “relay box” using the terminals and white mating receptacle supplied with the new cab harness.

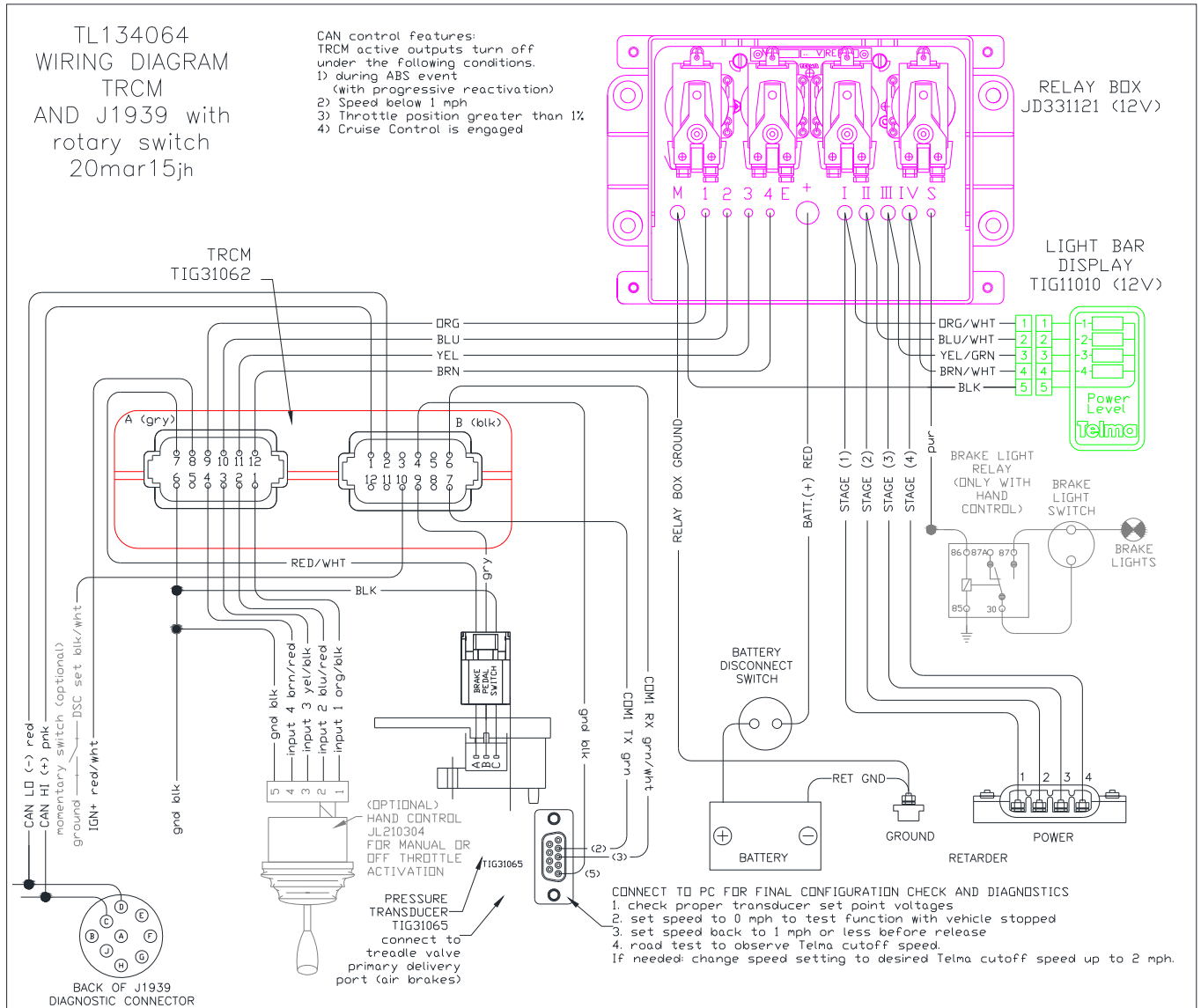


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5) WIRING DIAGRAM

TL134064
 WIRING DIAGRAM
 TRCM
 AND J1939 with
 rotary switch
 20mar15jh

CAN control features:
 TRCM active outputs turn off
 under the following conditions.
 1) during ABS event
 (with progressive reactivation)
 2) Speed below 1 mph
 3) Throttle position greater than 1%
 4) Cruise Control is engaged



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6) ROTARY FOOT SWITCH INSTALLATION

Step 1

Install rotary switch (TIG31066) to bracket (TIB01039) using TIF01067 M4x0.7x20mm hex head bolt and TIF01068 wave washer as shown below. Tighten to 12 lb-in \pm 10%.



Step 2

Locate existing OEM hole and pedal stop.



Step 3

Using the OEM hole, align the hole in the bracket and secure it with the 7/16-14UNCx1" bolt (TIF01069) and 7/16 nut (TIF07003) provided in the kit. Be sure the cut out in the bracket rests against the pedal stop when tightening the bolt.





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- a. Use the [Telma Desktop Client Software](#) to change transducer set points as specified in the installation manual for use with the new rotary switch. If you have never taken advantage of using the [Telma Desktop Client Software](#) for configuration and diagnosis of the Telma system, you will need to download this free software from our website. If you do not have a 9 pin serial port on your computer you will need to order a usb-to-serial port adapter [TIG01027](#).
 - b. The voltage set points recommended in the installation manual may need to be adjusted.
 - i. Observe the transducer voltage in the diagnostics page when the brake pedal is not being applied. 1st stage voltage setting should be above this voltage.
 - ii. Observe the transducer voltage in the diagnostics page with the engine running and the brake pedal pushed with your hand until you begin to feel resistance from the brake pedal. The last Telma stage voltage setting should be below this voltage.
- 7) Road test the vehicle to verify proper function of the Telma system with the new rotary foot switch.