

# INSTALLATION INSTRUCTIONS

# **C8 PRESSURE SENSOR LOOM**

# DMS-00-0012 REV 004

12 APRIL 2022



PREPARED BY: EDUARDO B. DATE: 12APR22



#### **REVISION UPDATE NOTES:**

The following table indicates the changes made in this document since the previous revision. All changes will be indicated by a revision bar in the margin.

If you have any questions email us at technical@dodsonmotorsport.com

Revision	Date	Description
004	12/04/2022	Wiring review and notes on unplugging the box.
003	25/03/2022	Scaling factor selection review.
002	25/02/2022	Updated formatting and added document number. Added scaling selection feature.
001	15/12/2021	Initial Release

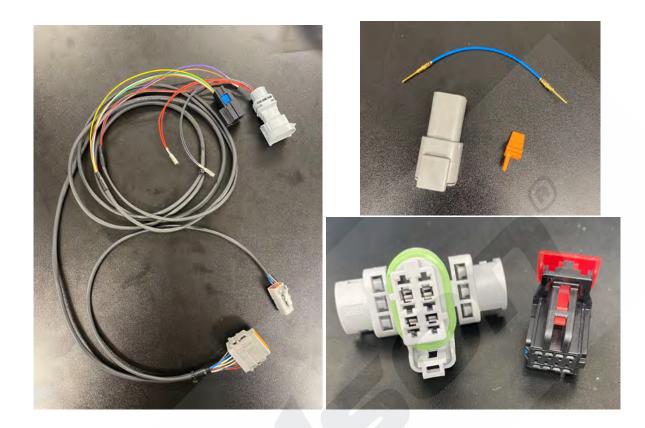
# **IMPORTANT NOTES:**

Any important steps that are often missed will be highlighted in Yellow.





# **DMS-6267 CONTENTS**



Part Number	Part Name	DMS Code	Qty
1	C8 PRESSURE SENSOR LOOM	DMS-6267	1
2	6 PIN 2.8 MM CONNECTOR	DMS-6292	1
3	8 PIN 1.2 MM CONNECTOR	DMS-6285	1
4	DTM 4 PIN CONNECTOR	DMS-6315	1



# PREPARATION

Tool List

- Torque wrench set to 140 lb ft
- 22 mm Socket for wheel nuts
- Impact driver or spanner
- 7 mm hex socket
- 10 mm hex socket
- T15 Torx bit
- Plastic trim clip removal tool (or thin screwdriver)
- Electric terminal removal tool (Recommended Aptiv 12094429)
- Cable ties

#### Vehicle Preparation

With the vehicle on the lift (hoist), open the front and rear compartments and **<u>disconnect the</u> <u>battery</u>**.

Lift the vehicle, and remove the rear right wheel and the wheel liner, so the TCM is accessible. You will need a 22 mm socket for the wheel (around 140 lb ft torque), a T15 Torx, a 7 mm socket and a plastic clip removal tool (or screwdriver).





<image>

Remove the 4 screws that hold the TCM into its frame using a 7 mm socket.

Disconnect the two TCM connectors. Put the TCM aside.





Remove the 3 bolts that hold the TCM frame to the chassis using a 10 mm socket. Then detach the two plastic clips that hold the loom behind it and put the frame aside.





# **TERMINAL REMOVAL**

TCM Connector B (58 pin)

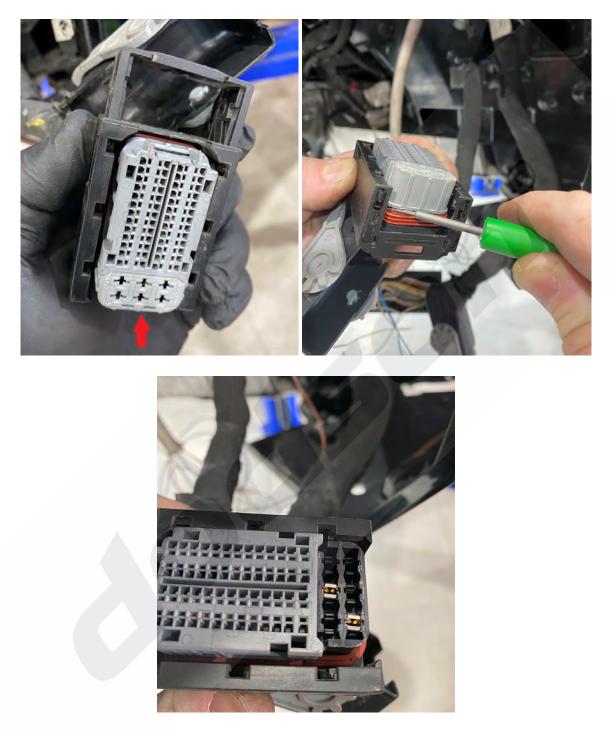
Remove the top cover and the terminal lock.





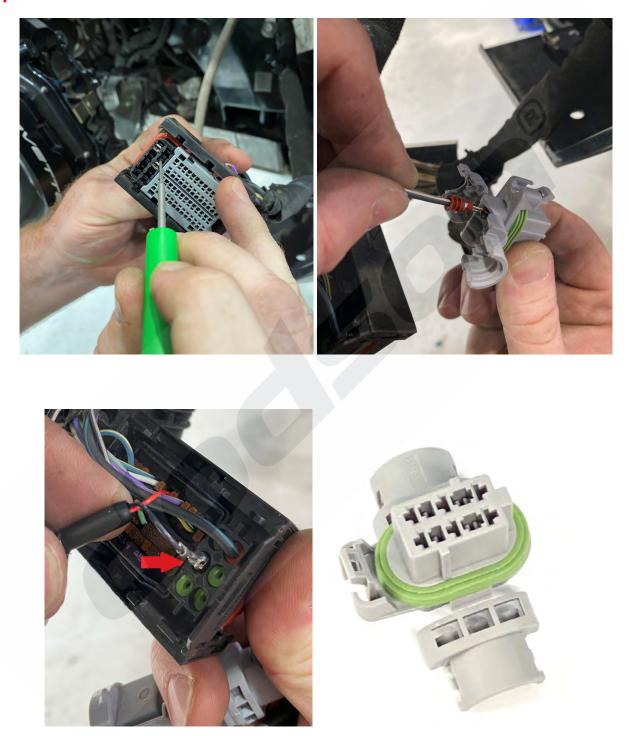


Remove the auxiliary lock.

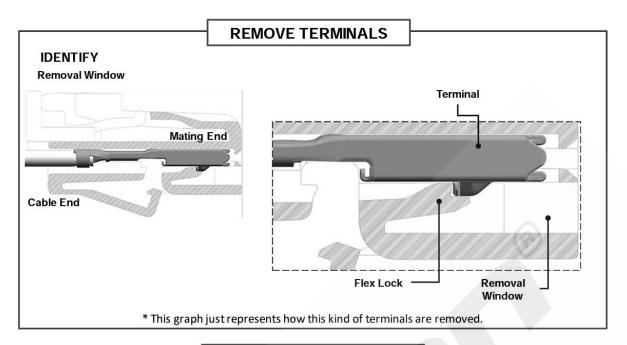




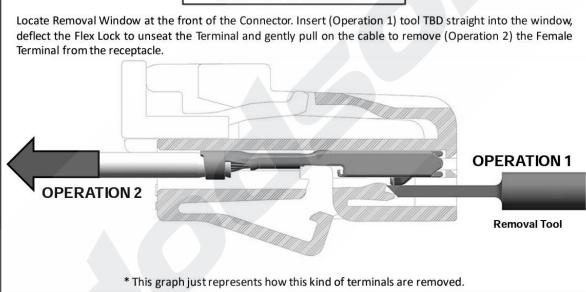
Using the removal tool, and following the procedure below, remove the pins 1 (Black/Blue wire, 12V) and 4 (Black/White wire, GND) and insert the flying leads with the same terminals crimped to connector B into the same cavities. Insert the pins removed from the OE TCM into the 6 pin plug provided (Black/Blue wire to pin 2, and Black/White wire to pin 1).







# **REMOVE TERMINALS**

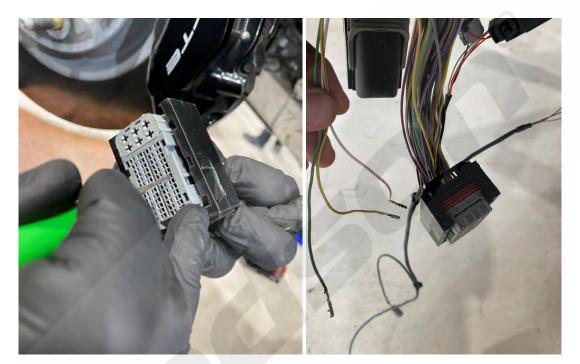




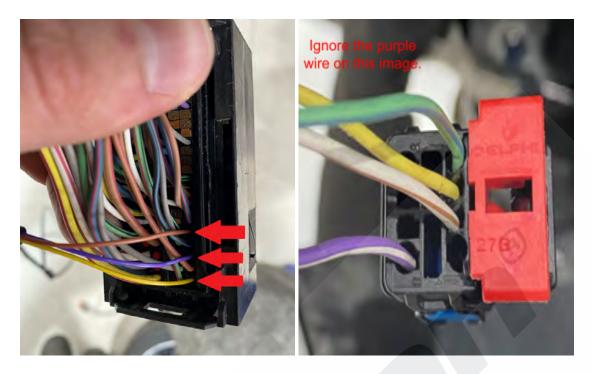
#### TCM Connector A (96 pin)

Remove the top cover and the terminal lock.

Using the removal tool, and following the procedure below, remove the pins 1 (Green/Blue wire), 3 (Yellow/Black wire) and 5 (White/Brown wire) and insert the flying leads with the same terminals into the same cavities (DTM 12 Pin 1 to TCM Pin 1, DTM 12 Pin 2 to TCM Pin 3 and DTM 12 Pin 3 to TCM Pin 5). Insert the pins removed from the OE TCM into the 8 pin plug provided (Green/Blue wire to pin 1, Yellow/Black wire to pin 2 and White/Brown wire to pin 3).



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Reinstall the covers and locks on both connectors.

Plug the mating connectors together.

Route the loom through the suspension openings, alongside the body loom, using cable ties to secure it. The end position for connector A should be on the right side of the boot compartment.

Revert the preparation procedure to complete the installation.

Plug the Pressure Sensor Box to the DTM 12 Pin connector.

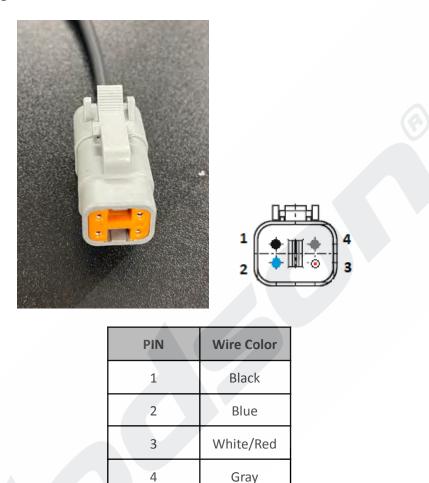
Reconnect the battery.

After the installation of this box, it's <u>not recommended</u> to do the learning procedure, as it can affect the gearbox performance. It is recommended doing the clutch learning <u>before</u> the installation of the sensor box.



# **SCALING FACTOR SELECTION**

The scaling of the sensor box can be selected by connecting one of three possible pins on the DTM 4 pin connector to ground.



Pin 1 on the DTM connector is a GND and can be connected to any of the other 3 pins.

If none of the pins is connected to pin 1, the scaling factor will be 1, so the pressure will be exactly the same as stock.

If pin 2 is connected to pin 1, the clutch pressure will increase 10%.

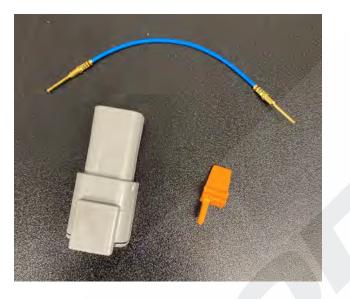
If pin 3 is connected to pin 1, the clutch pressure will increase between 10% and 15% (linear ramp depending on the current clutch pressure).

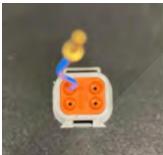
If pin 4 is connected to pin 1, the clutch pressure will increase 15%.



If more than one pin is connected to pin 1, the priority is the highest scaling factor.

To select the desired scaling factor, use the provided jumper wire and connect pin 1 to one of the other three pins on the DTM connector supplied, according to your selection choice.





Pin 1 inserted.



Pin 1 connected to Pin 2 - 10% scaling.





Pin 1 connected to Pin 3 - 10% to 15% scaling.



Pin 1 connected to Pin 4 - 15% scaling.

After inserting the jumper and the wedgelock, plug the connector to the mating part on the loom.

#### Note:

If the scaling box needs to be unplugged from its loom, only do it<u>after disconnecting the vehicle's</u> <u>battery.</u>

Disconnecting the box while the vehicle is still on, even if it looks like it's off, may cause the TCM to go into fault mode. Usually the faults go away by resetting the battery and making sure the box is properly plugged in before reconnecting the battery.