

**Heavy Commercial Vehicles**

| Information bulletin to be circulated to: | Service Manager | Warranty Manager | Parts Manager | Master Technician | Service Consultant | BMIS |
|-------------------------------------------|-----------------|------------------|---------------|-------------------|--------------------|------|
|                                           | ✓               | ✓                | ✓             | ✓                 | ✓                  | ✓    |

|                 |                                                                                                |
|-----------------|------------------------------------------------------------------------------------------------|
| <b>Subject</b>  | TOLL COLLECT CONNECTIONS                                                                       |
| <b>Variant</b>  | F-MAX VEHICLES ( PRODUCED AFTER 29 November 2022)                                              |
| <b>Abstract</b> | THIS DOCUMENT DESCRIBES THE CONNECTION DETAILS OF TOLL COLLECT INFRASTRUCTURE ON FMAX VEHICLES |

**Toll Collect Service application:**

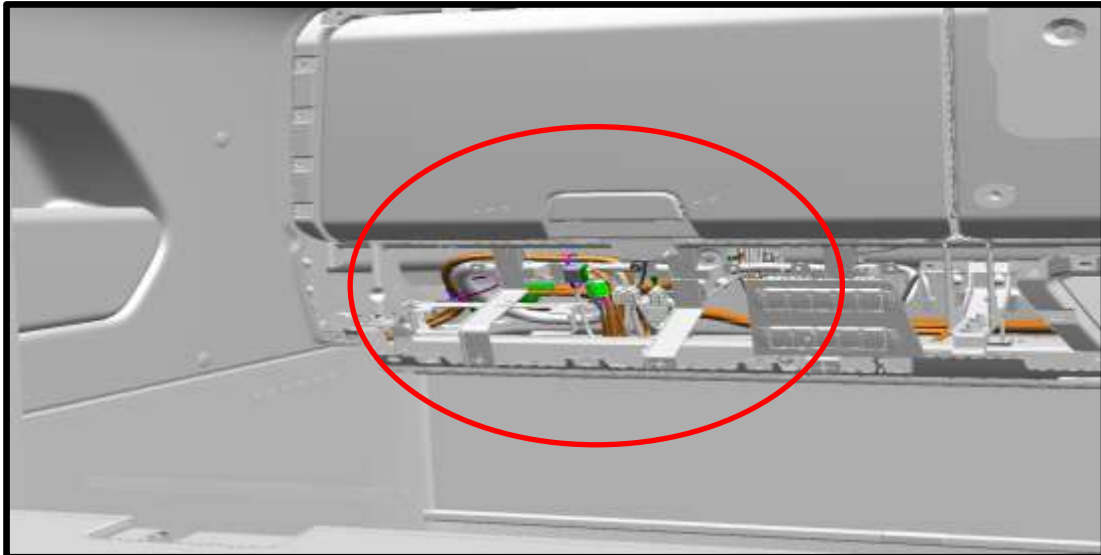
**Toll collect system have 3 parts which are main module, DSRC and antenna.**

**Main Module has a 4 plug**

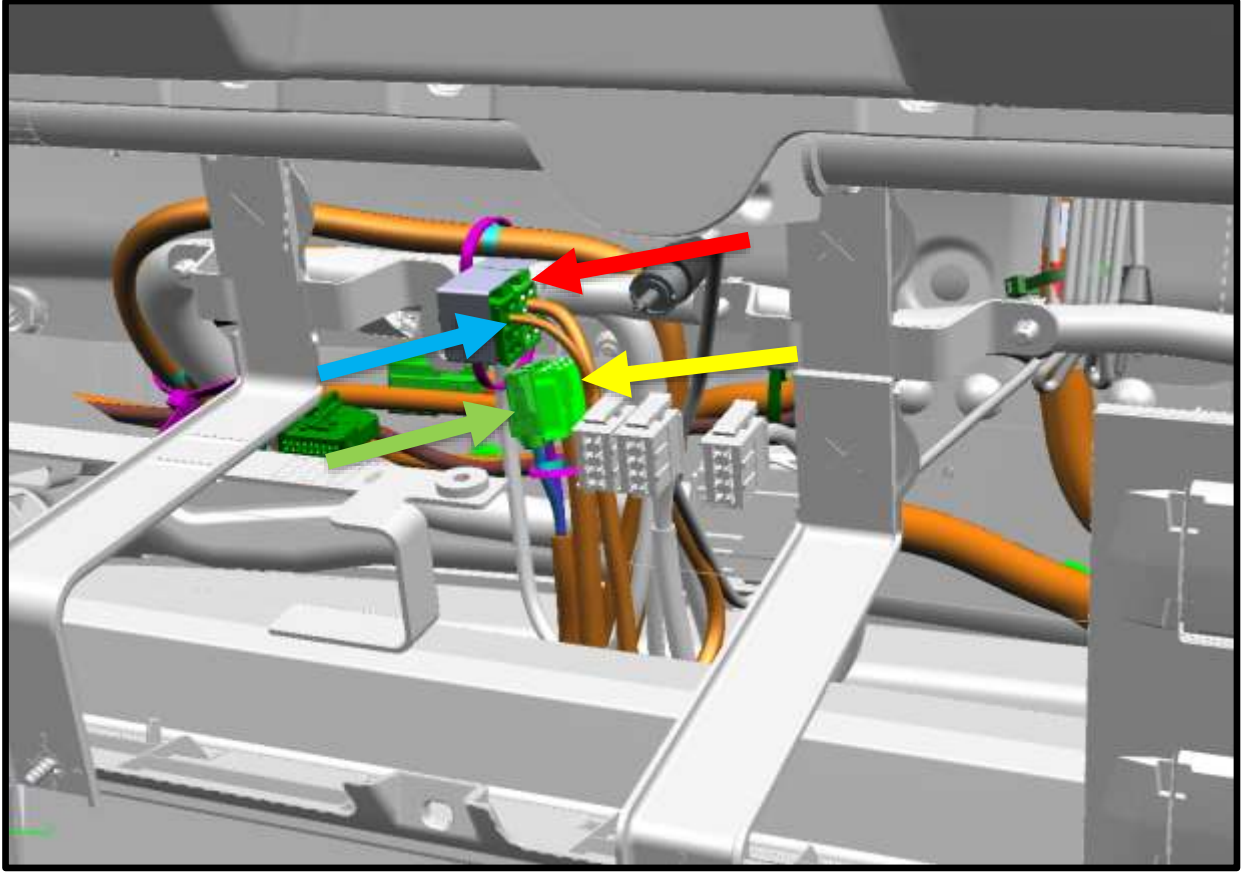
- **A plug power connection**
- **B plug tachograph signal connection**
- **C plug DSRC module connection**
- **Antennas plug**

**DSRC module has a 2 plug**

- **Toll Collect C plug connection**
- **Antenna plug**



**Toll Connect plug is located on top left hand side**



- Red arrow shows that A plug (power connection)
- Blue arrow shows that B plug (tachograph signal connection)
- Yellow arrow shows that C plug (DSRC module connection)
- Green arrow shows that Antennas plug (DSRC module antennas connection)

**A plug Pin lay-out:**

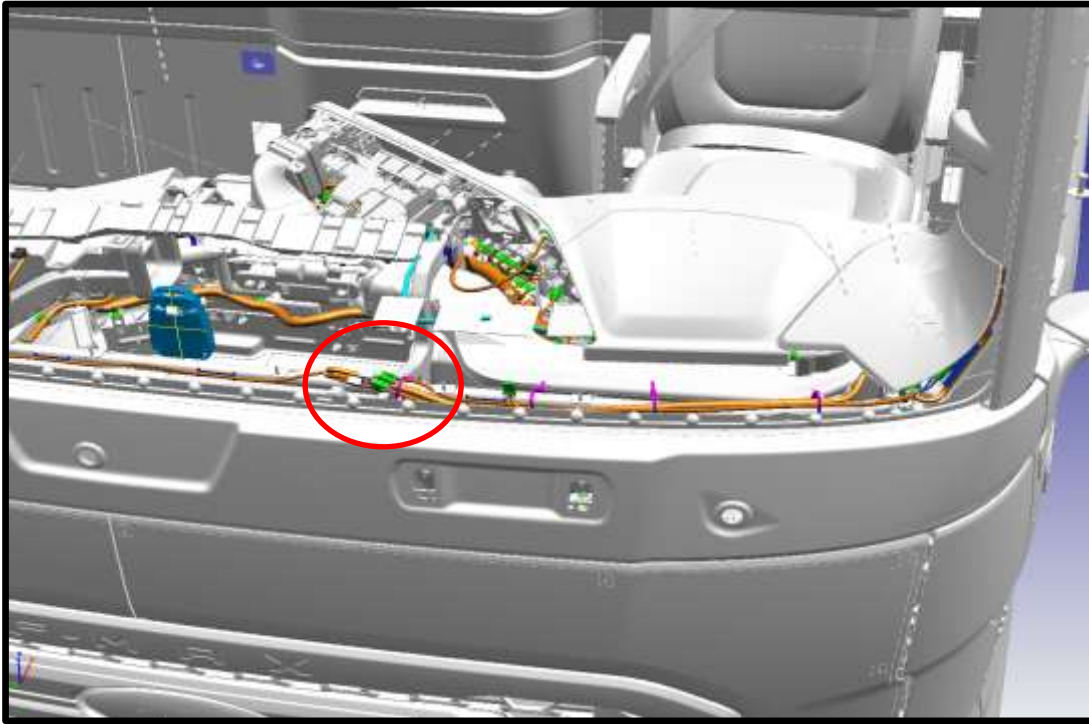
| PIN LAYOUT OF CONNECTOR A |                            |       |                      |              |
|---------------------------|----------------------------|-------|----------------------|--------------|
| PIN NO ON OBU-SIDE        | DESCRIPTION                | TYPE  | CABLE SIZE           | CABLE COLOUR |
| A1                        | Contionus Positive (KL 30) | INPUT | 1 mm <sup>2</sup>    | Brown&Red    |
| A2                        | Diming Light               | INPUT | 0,75 mm <sup>2</sup> | Blue&Brown   |
| A3                        | Ignition (KL 15)           | INPUT | 0,75 mm <sup>2</sup> | Purple&Grey  |
| A4                        | -                          | -     | -                    | -            |
| A5                        | Ground                     | INPUT | 1 mm <sup>2</sup>    | Black&Blue   |
| A6                        | -                          | -     | -                    | -            |
| A7                        | -                          | -     | -                    | -            |
| A8                        | -                          | -     | -                    | -            |

**B plug pin lay-out:**

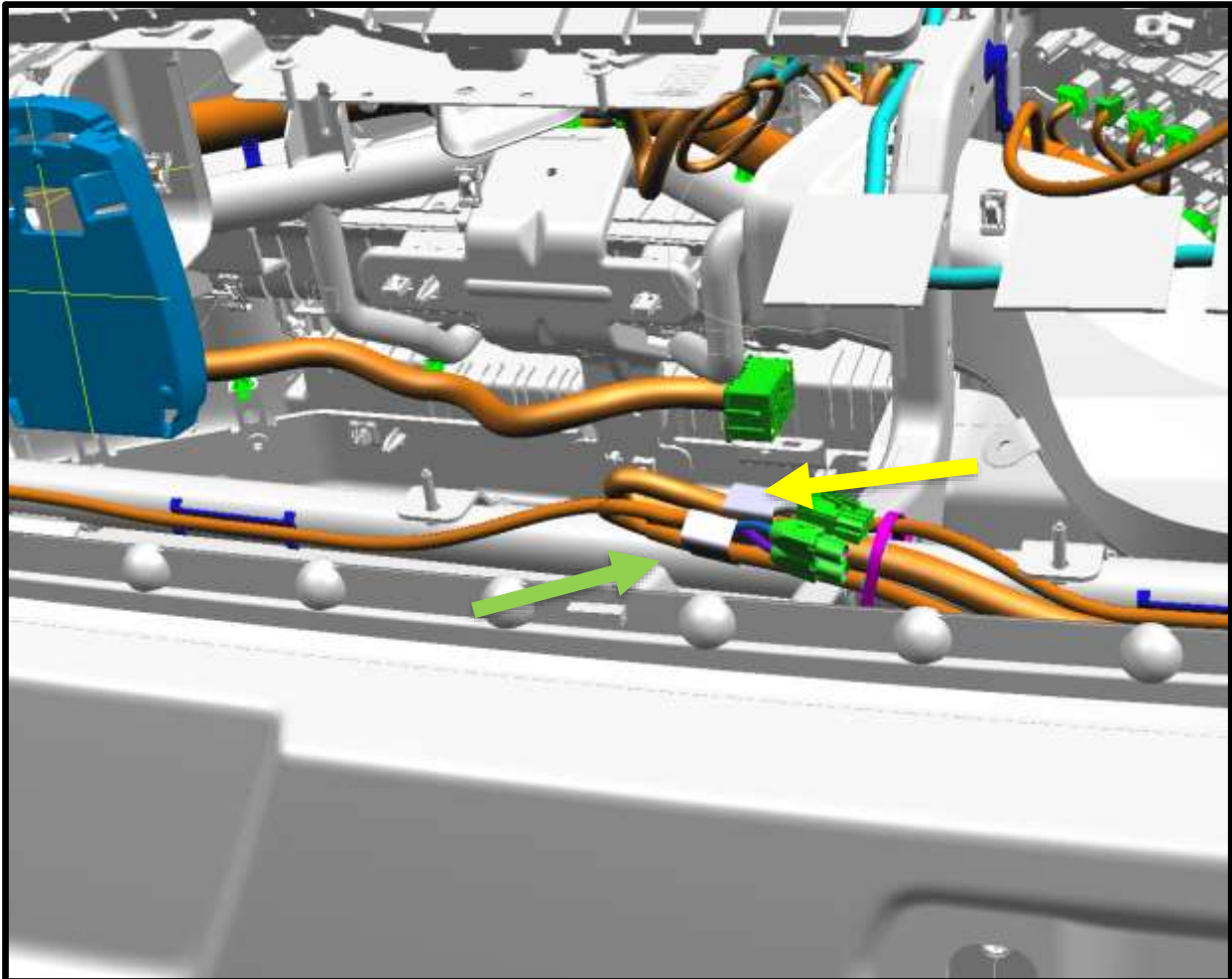
| PIN LAYOUT OF CONNECTOR B |                           |       |                      |              |
|---------------------------|---------------------------|-------|----------------------|--------------|
| PIN NO ON OBU-SIDE        | DESCRIPTION               | TYPE  | CABLE SIZE           | CABLE COLOUR |
| B1                        | -                         | -     | -                    | -            |
| B2                        | -                         | -     | -                    | -            |
| B3                        | Speed Pulse Output Signal | INPUT | 0,75 mm <sup>2</sup> | Blue         |
| B4                        | -                         | -     | -                    | -            |
| B5                        | -                         | -     | -                    | -            |
| B6                        | -                         | -     | -                    | -            |
| B7                        | -                         | -     | -                    | -            |
| B8                        | -                         | -     | -                    | -            |

**C plug Pin lay-out:**

| PIN LAYOUT OF CONNECTOR C |                     |             |          |                      |              |
|---------------------------|---------------------|-------------|----------|----------------------|--------------|
| PIN NO ON OBU-SIDE        | PIN NO ON DSRC-SIDE | DESCRIPTION | TYPE     | CABLE SIZE           | CABLE COLOUR |
| C1                        | 1                   | VCC5        | OBU→DSRC | 1 mm <sup>2</sup>    | Orange&Black |
| C2                        | 2                   | Ground      | -        | 1 mm <sup>2</sup>    | Brown&White  |
| C3                        | 3                   | -           | -        | -                    | -            |
| C4                        | 8                   | -           | -        | -                    | -            |
| C5                        | 5                   | CAN High    | OBU↔DSRC | 0,75 mm <sup>2</sup> | White&Blue   |
| C6                        | 6                   | Wake Up Ack | OBU→DSRC | 0,75 mm <sup>2</sup> | Grey         |
| C7                        | 7                   | CAN Low     | OBU→DSRC | 0,75 mm <sup>2</sup> | Black&Yellow |
| C8                        | 4                   | Wake Up Req | OBU←DSRC | 0,75 mm <sup>2</sup> | White        |



DSRC MODULE connection is located under IP console on front of the vehicle



- Yellow arrow shows that C plug (DSRC module connection)
- Green arrows shows that Antennas plug (DSRC module antennas connection)



- DSRC connections can be found on the IP like shown above. If Toll Collect connections are not in use, related wires can be placed under IP and IP hole can plugged with marked trim piece.
- The trim piece can be found in glove box compartment with user manuel package.



Best Regards,  
Ford Trucks Service Engineering