USE SECTION 1 OF THE INSTRUCTION

| Model | VIN (Electric Fan Drive Vehicles) |
| :---: | :---: |
| H345 Coaches. <br> Model Year : 2019+ | 2PCH33493KC710185 and up. |
| H345 VIP. <br> Model Year : 2019+ | 2PCV33496KC710295 and up. |
| X-Series Vehicles. <br> Model Year : 2017+ | Canada built vehicles: 2PCCS349XHC736160 and up. |
|  | US built vehicles : 4RKG33491H9737417 and up. |

USE SECTION 2 OF THE INSTRUCTION

| Model | VIN (Without Electric Fan Drive Vehicles) |
| :---: | :---: |
| H345 Coaches. <br> Model Year : 2019- | Before 2PCH33493KC710185. |
| H345 VIP. <br> Model Year : 2019- | Before 2PCV33496KC710295. |
| X-Series Vehicles. <br> Model Year : 2017- | Canada built vehicles: Before 2PCCS349XHC736160. |
|  | US built vehicles : Before 4RKG33491H9737417. |

## MATERIAL

Kit \#IS21072 includes the following parts:

| Part No. | Description | Qty |
| :---: | :--- | :---: |
| 564502 | SOCKET MINI MATE N LOCK PRE-TIN | 2 |
| 561479 | TERM MOLEX .062 PIN 24-18AWG | 1 |
| 560587 | TERM,RING,ST,16-14,1/4,INS | 1 |
| 562935 | BUTT-SPLICE,22-18,INS | 1 |
| 560784 | SHRINK .250po .125po BLK -55C, +135C D/W | 1 ft |
| 562587 | WIRE, 18 AWG, TXL, BLK, 125 DEG | 6 ft |
| IS-21072 | INSTRUCTION SHEET (EN) | 1 |
| FI-21072 | INSTRUCTION SHEET (FR) | 1 |

Other parts that may be required:

| Part No. | Description | Qty |
| :---: | :--- | :---: |
| 681485 | EXTRACTOR, 11-03-002 | 1 |
| 564099 | CLOTH TAPE, PROTECT. $150^{\circ} \mathrm{C}-$ BLACK | As req. |

## NOTE

Material can be obtained through regular channels.

## PROCEDURE

## DANGER

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button. On Commuter type vehicles, set the battery master switch (master cut-out) to the OFF position.
Lock out \& Tag out (LOTO) must be performed during set-up, maintenance or repair activities. Refer to your local procedure for detailed information regarding the control of hazardous energy.

## SECTION 1 (EFD VEHICLES)

1. Prepare the 2 lengths of $18 A W G$ wires required for this modification.

- Cut 36" of the supplied 562587 black wire and crimp a 564502 terminal at one end and a 561479 terminal at the other end.
- Take 30" of the remaining 562587 black wire and crimp a 564502 terminal at one end and a 560587 ring terminal at the other end.

2. Under the dash, locate the A103 connector (left side of the steering column). Disconnect A103.



| 7. Using extractor tool 681485, remove the terminals located at PIN 2 (A55RJ1.18 wire) from the A139 module connector. |  |
| :---: | :---: |
| 8. Cut the terminal from the end of the extracted wire and add a length of supplied shrink tubing to protect the end. |  |
| 9. Route the previously prepared 36 " black wire from connector A139 to connector A103 (pass through the dash near the steering column). |  |
| 10. Insert one end of the 36 " black wire in connector A139 PIN 10 and the other end of the wire in A103 PIN 4. | A139 <br> 10 <br> A103 |

11. Connect the previously prepared 30"
black wire to connector A139 PIN 2.

| 12. Route the other end of the 30" wire (ring |
| :--- |
| terminal) inside the vehicle front junction |
| box (FJB). |

13. Connect the ring terminal of the wire to
one of the front junction box ground
studs.
14. Reconnect A139 and A103 connectors
and power-on the vehicle to confirm that
all the steering wheel buttons are working
properly.
15. Secure all loose wires under the dashboard, front junction box and under the steering wheel.
Put back the dashboard cover to finish the installation.


## Wiring diagram with EFD (before modification)



Wiring diagram with EFD (after modification)


## SECTION 2 (VEHICLES WITHOUT EFD)


19. Cut the terminal and cover the end of the
wire with a length of the supplied 560784
shrink tubing.
20. Remove the vehicle dashboard cover.
21. Locate the Gateway module located on
the left side of the dashboard (close to the
side window).
Disconnect the module (A139 connector).
22. Route the previously prepared 36 " black
wire from connector A139 to connector
A103 (pass through the dash near the
steering column).
23. Insert the end of the 36 " black wire in
connector A139 PIN 10 and the other end
of the wire in A103 PIN 4.
24. Reconnect A 139 and A 103 connectors
and power-on the vehicle to confirm that
all the steering wheel buttons are working
properly.
25. Secure all loose wires under the dash-
board and under the steering wheel.
Put back the dashboard cover to finish
the installation.


Wiring diagram without EFD (after modification)


## PARTS / WASTE DISPOSAL

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)

