

9 January 2024

INSTALLATION INSTRUCTIONS (R2)

MY22 FTR with EBS: TRAILER CONTROL VALVE KIT WITH HARNESS IAL Part No: 92958961

FTR 150-260 AUTO



NOTE: To be read with latest version of Isuzu Dealer Portal Bulletin 118/23 ENG

CAUTION:

This EBS trailer brake control system kit is designed and developed between Isuzu Japan, Isuzu Australia, and Bartlett Towing Solutions specifically for ISUZU MY22 FTR 150-260 (unmodified) vehicles. Installation must be carried out by qualified IAL/Dealer approved technicians, programmed using the G-IDSS service tool, then tested, and certified by an Approved Vehicle Examiner (AVE) to meet the installation and performance requirements of VSB6 Section G2, Installation of Trailer Braking Controls.



Caution

Authorised Vehicle
Examiner (AVE)
assessment required

CROSS-REFERENCE: IAL Part Number 92958961 = BARTLETT KIT TZ7550-10_01



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Trailer Air Brake Kit Installation

PARTS CHECKLIST -

FTR EBSTRAILER BRAKING SYSTEM UPGRADE KIT (R1)

Bartlett Part No. TZ7550-10_01

ITEM	QTY	PART NUMBER	DESCRIPTION	MASS
1	4	BTU-0125	CABLE HANGER BRACKET	0.018 kg
2	1	BTU-0130	PLATE, PBR TYPE COUPLING MOUNTING	0.177 kg
3	2	BTU-0133	MOUNTING PLATE FOR CONNECTORS VARIOUS	0.171 kg
4	1	BTU-0572	BRACKET FOR ISUZU RELAY VALVE	0.794 kg
5	1	BTU-0573	BRACKET TRAILER CONTROL MODULE	2.294 kg
6	1	BTU-0619	7 PIN TRAILER SOCKET HARNESS	0.168 kg
7	1	BTU-0645	EBS 24 V WIRING HARNESS	1.658 kg
8	1	BTU-0760-01	TUBE IDENTIFICATION TAPE - ORANGE	0.005 kg
9	1	BTU-0760-02	TUBE IDENTIFICATION TAPE - GREEN	0.001 kg
10	1	BTU-0760-03	TUBE IDENTIFICATION TAPE - LIGHT BLUE	0.001 kg
11	1	BTU-0760-04	TUBE IDENTIFICATION TAPE - RED	0.001 kg
12	1	BTU-0911	RELAY RWD VALVE SUB ASSY	1.186 kg
13	1	BTU-0912	REGULATION VALVE SUB ASSY - STRAIGHT AND ELBOW CONNECTORS	0.592 kg
14	1	BTU-0914	EBS TRAILER CONTROL MODULE SUB ASSY	3.050 kg
15	1	BTU-0915	ASM CHECK VALVE SUB ASSY	0.272 kg
16	1	BTU-0916	AIR CHECK VALVE SUB ASSY	0.274 kg
17	1	BTU-0917	BAYONET AIR BRAKE COUPLING ASSY	1.025 kg
18	1	BTU-1007	Ø12x9 NYLON AIRBRAKE TUBING - BLACK 7120 LONG	0.418 kg
19	1	BTU-1014	Ø8x6 NYLON AIRBRAKE TUBING - BLACK 2500 LONG	0.067 kg
22	60	UCN100108	CABLE TIE 300 x 4.8 mm BLACK	0.003 kg
23	4	UCN100209	WASHER, FLAT ROUND BRIGHT STEEL 5/16 x 1 X 16G, ZINC PLATED	0.006 kg
25	2	UCN100379	PUSH-TO-CONNECT TEE 8 mm	0.052 kg
26	1	UCN100430	ASM ELEC BRACKET	0.438 kg
27	1	UCN100433	INFORMATION MODULE	0.105 kg
28	1	UCN100434	3 WAY AIR UNION	0.216 kg
29	1	UCN100435	HTR & A/C RELAY	0.034 kg
30	2	UCN100436	PTO CONT RELAY	0.017 kg
31	5	UCN100437	HEX HEAD FLANGED SCREW M6x16 LONG	0.006 kg
32	2	UCN100438	HEX FLANGED NUT M6	0.004 kg
33	30	UCN100439	NUT (HEX FLANGED NUT M8)	0.006 kg
34	20	UCN100440	HEX HEAD FLANGED SCREW M8 x 25 LONG	0.014 kg
35	10	UCN100441	HEX FLANGE HEAD SCREW M8 x 35 LONG	0.017 kg

INSTALLATION PRECAUTIONS

Follow all standard workshop and occupational health and safety practices during the installation

GENERAL INFORMATION

Before starting this installation, thoroughly read through these installation instructions and then follow the fitting sequence as described.

Check and note any existing marks or damage to the vehicle interior and exterior.

Check that the kit is complete and there are no damaged components

Take all possible precautions to avoid damage to the vehicle during fitting.

Ensure all torque specifications are followed.

Observe all safety precautions for mechanical loading bodies such as tippers and hooklifts

ABBREVIATIONS

- LHS - Left Hand Side
- RHS - Right Hand Side
- TCM - Trailer Control Module
- RV—Relay Valve

TOOLS REQUIRED

Installation should be achievable in dealership workshops using standard issue tools.

ISUZU G-IDSS Programming will be required to complete the conversion.

KIT REVISION NOTES

First Release

Trailer Air Brake Kit Installation

Mount Trailer Information Module (TIM)

Parts Required:

ITEM 26 ASM ELEC BRACKET (1)

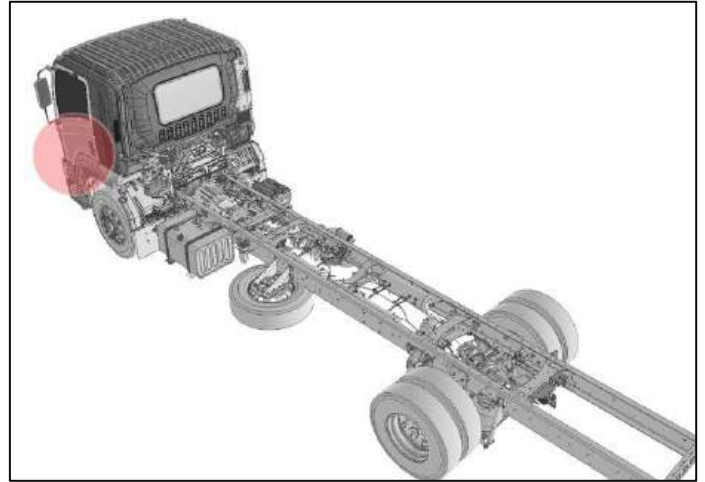
ITEM 27 TRAILER INFORMATION MODULE (TIM) (1)

ITEM 31 HEX HEAD FLANGED SCREW M6x16 (5)

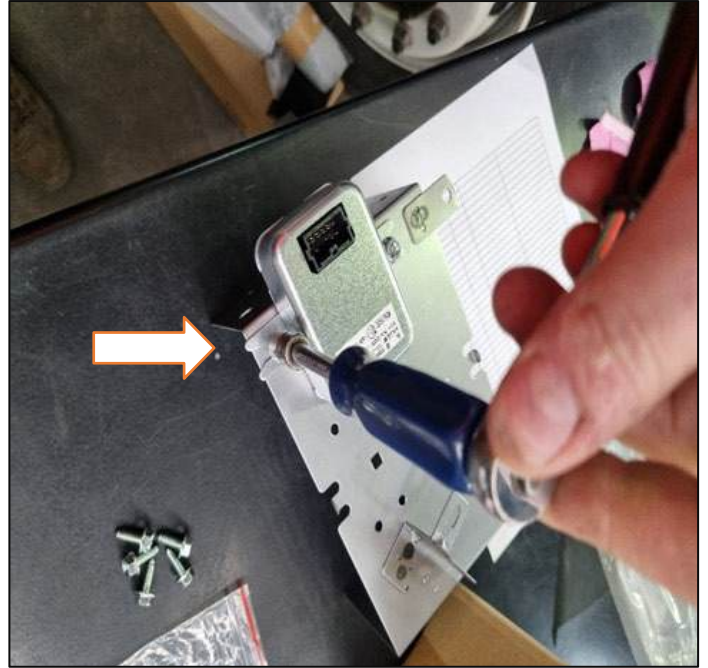
ITEM 32 HEX FLANGED NUT M6 (2)

Left Hand Interior

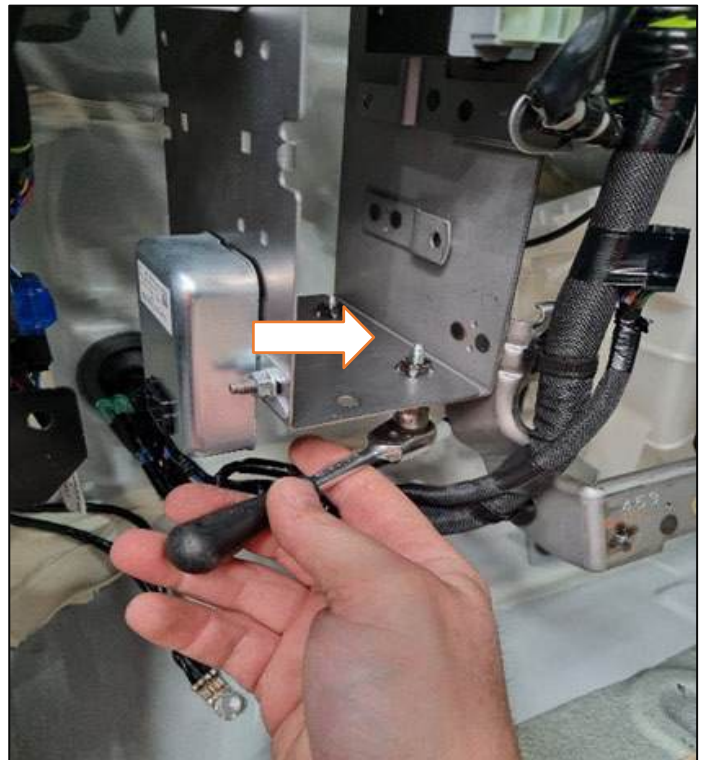
- 1 Remove plastic dash covers LHS exposing dash components



2 Bolt TIM to mounting bracket using 6mm nuts (2). Items 26, 27, 32.



3 Install bracket to dashboard as pictured using items 31.



Trailer Air Brake Kit Installation

- 4 Locate TIM Harness RHS taped to dash loom, remove tape to separate.



- 5 Plug connector into TIM, secure existing loom with cable ties.

Reinstall dash plastics.



Install Relays

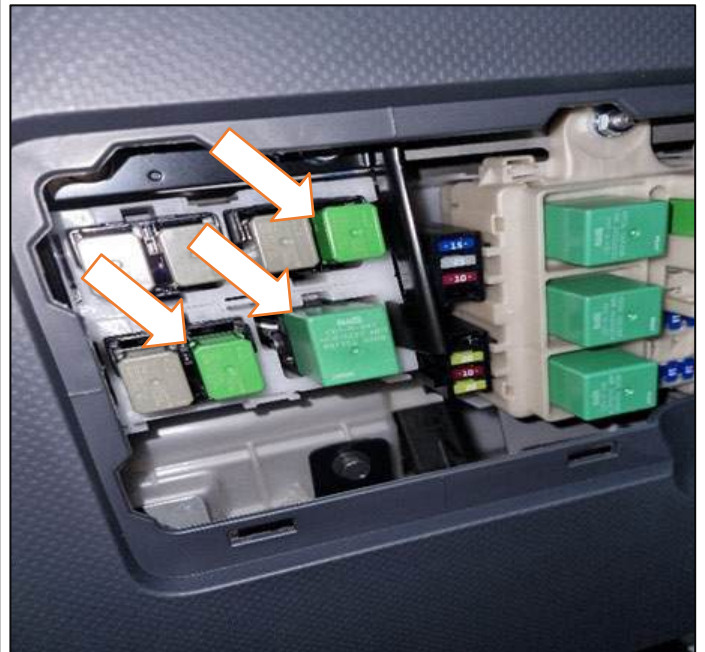
Parts Required:

ITEM 29 HTR & A/C RELAY (1)

ITEM 30 PTO CONT RELAY (2)

Left Hand Interior

- 1 Remove dash fuse box cover
- 2 Install supplied relays to the relay section LHS of the fuse box as pictured.



Trailer Air Brake Kit Installation

Mount Regulation Valve

Parts Required:

ITEM 13 REGULATION VALVE SUB-ASSY (1)

ITEM 35 BOLT HEX FLANGE HEAD SCREW M8 x 35 LONG (2)

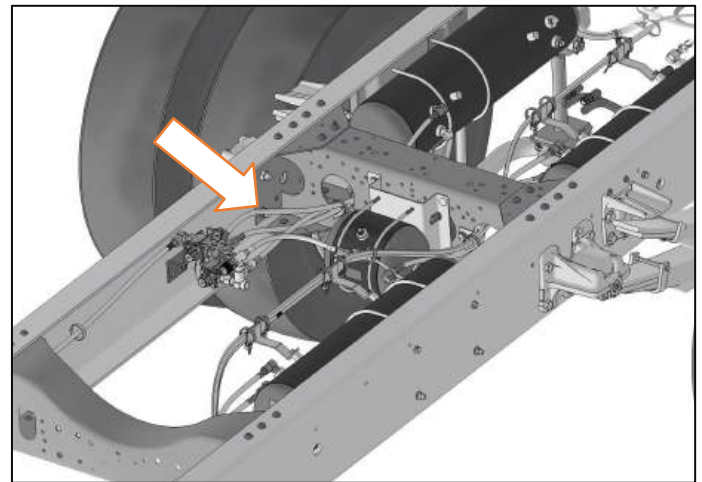
ITEM 30 M8 NUTS

ITEM 8 TUBE IDENTIFICATION TAPE - ORANGE

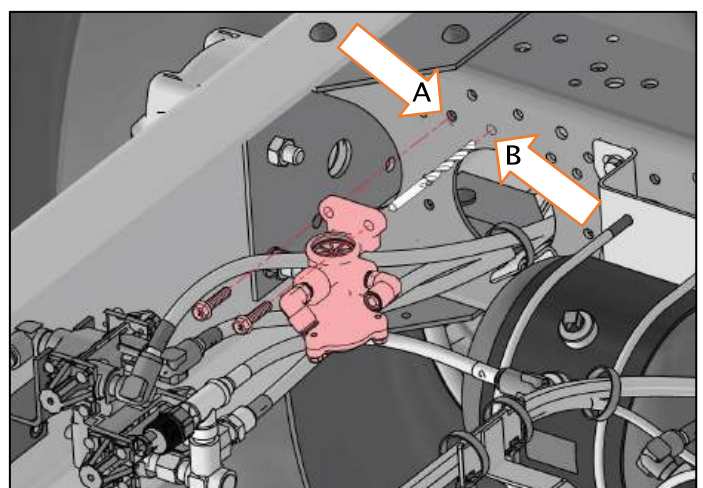


Rear Suspension—Forward Crossmember RHS

- 1 Identify Park Brake Tank supply line proximal to front suspension frame cross member RHS. Drain Park Brake Tank prior to works to depressurise lines.

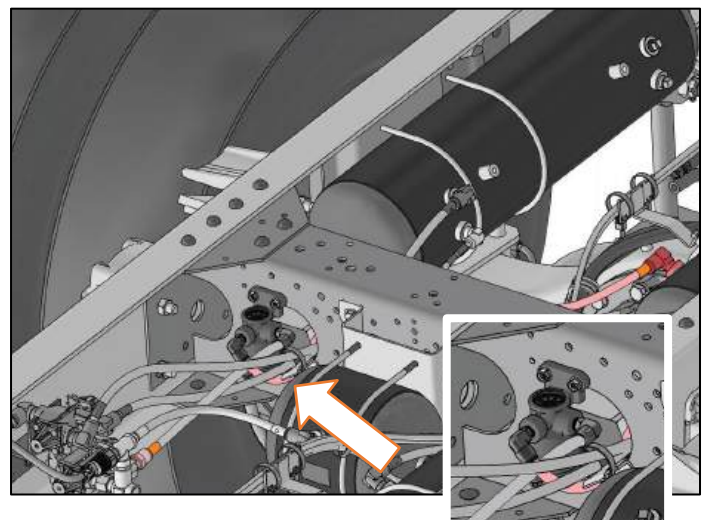
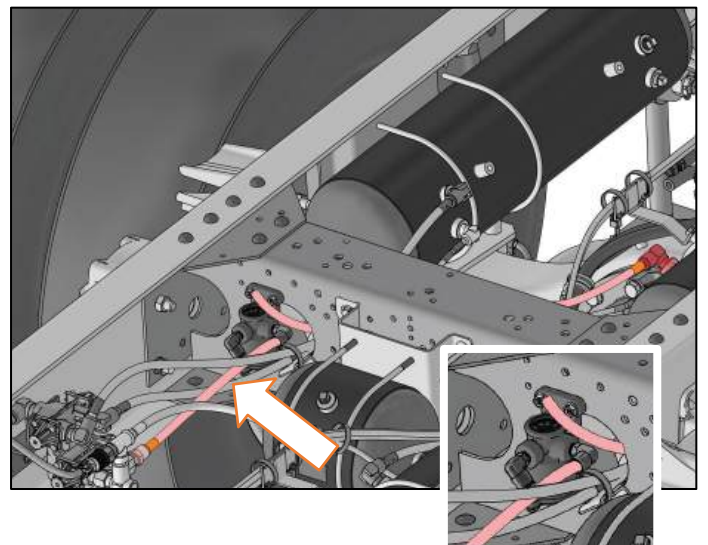
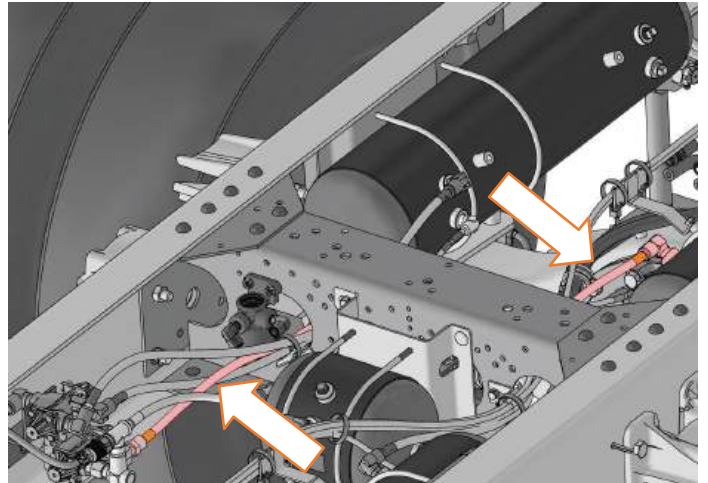


- 2 Mount regulation valve to crossmember
 - A Use existing hole
 - B Mark and drill 9 mm hole as shown
 Bolt to crossmember using M8 X 35 bolts



Mount Regulation Valve Cont.

- 3 Identify 12mm Park Brake Tank Supply Line shown pink and indicated by arrows. This line has a single orange tape indicator at both ends.
- 4 Cut Park Brake Supply line adjacent to Regulation Valve, connect forward supply end of tubing into rear most elbow of the Regulation Valve assembly as shown.
- 5 Connect the rear cut end of the Park Brake Supply line into the forward most elbow as shown



Trailer Air Brake Kit Installation

Install Park Brake Check Valve and TCM Supply.

Parts Required:

ITEM 16 AIR CHECK VALVE SUBASSEMBLY

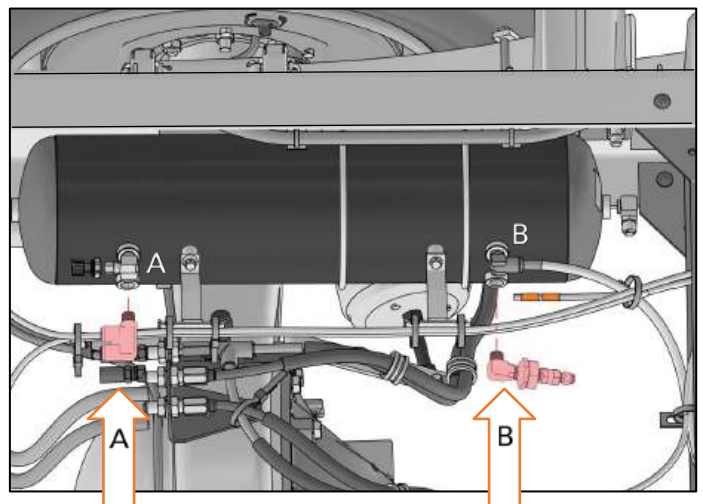
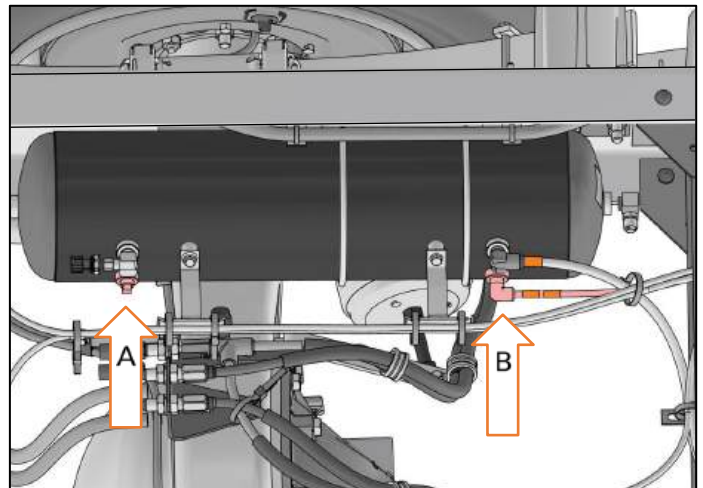
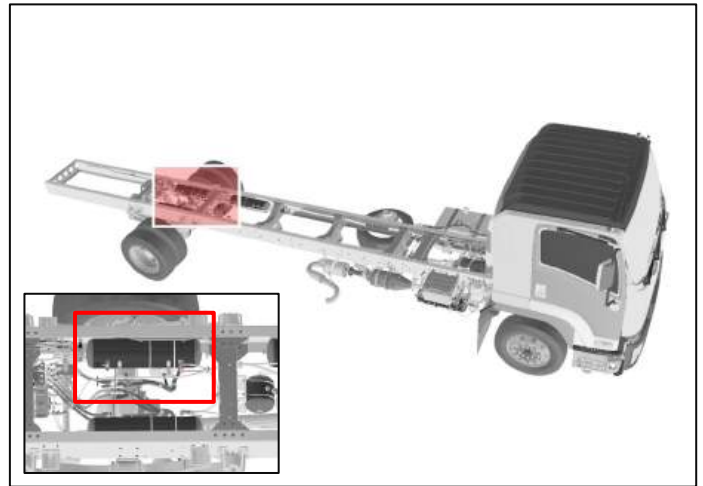
ITEM 28 3 WAY AIR UNION

Rear Suspension—Forward Crossmember LHS

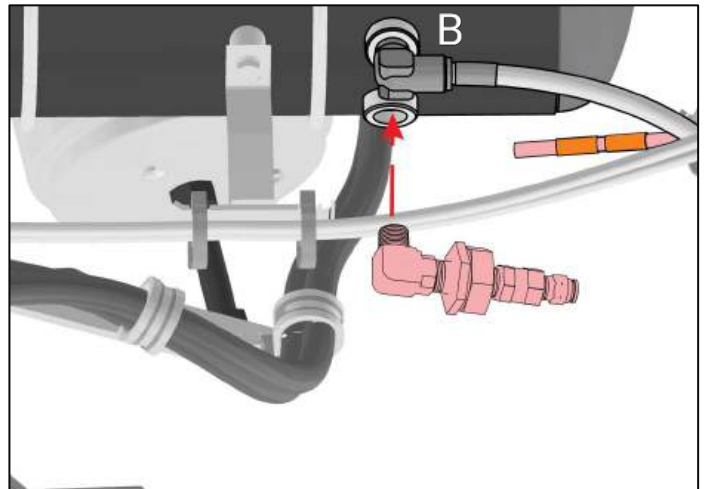
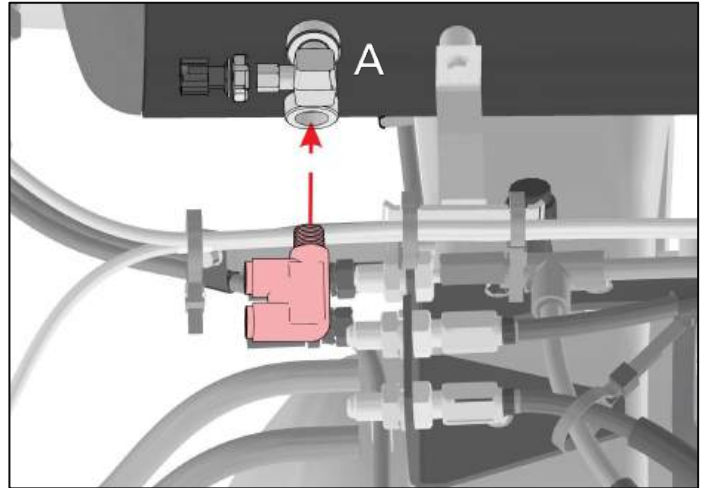
- 1 Locate Park Brake Tank.

- 2 Remove plug from lower inlet port indicated by Arrow A
- 3 Remove lower elbow fitting and tube (marked with two orange tape markers) see arrow B. Disconnect the fitting from the tubing to enable re-use of the tube.

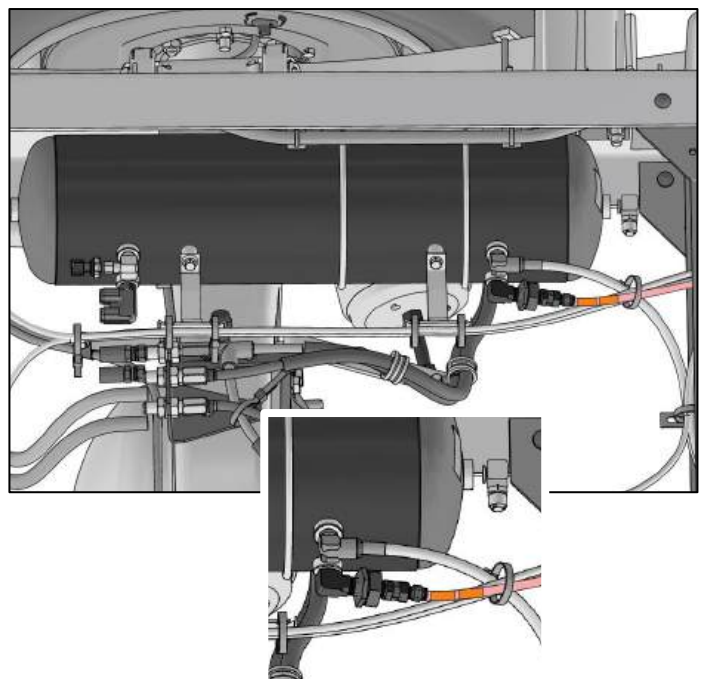
- 4 Install Item 28, 3 Way Air Union as shown (A), use Isuzu recommended thread sealant.
- 5 Install Item 16 Air Check Valve Assembly as shown (B), use Isuzu recommended thread sealant.



Zoomed in views



- 2 Note final mounting directions of fittings
- 3 Reconnect 8 mm tube into Check Valve Assembly as shown.



Trailer Air Brake Kit Installation

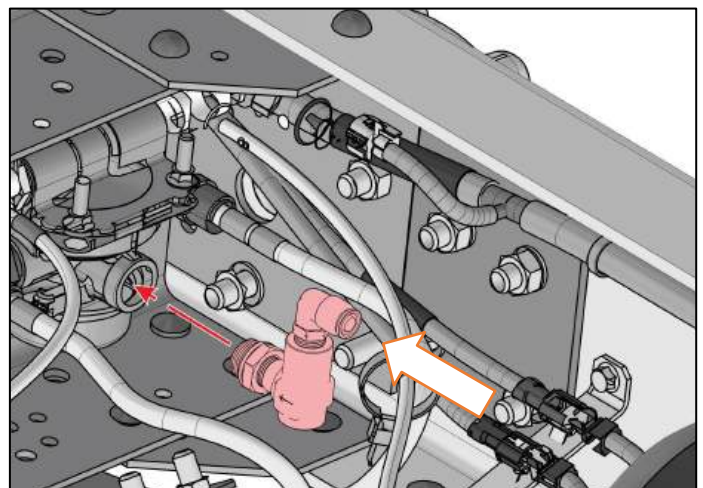
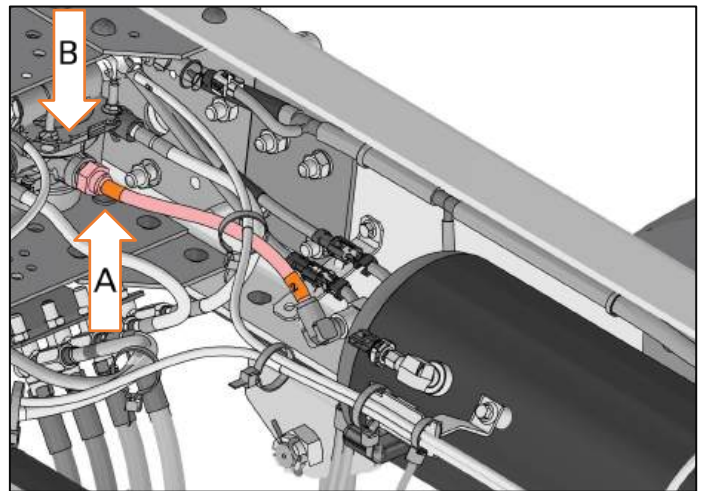
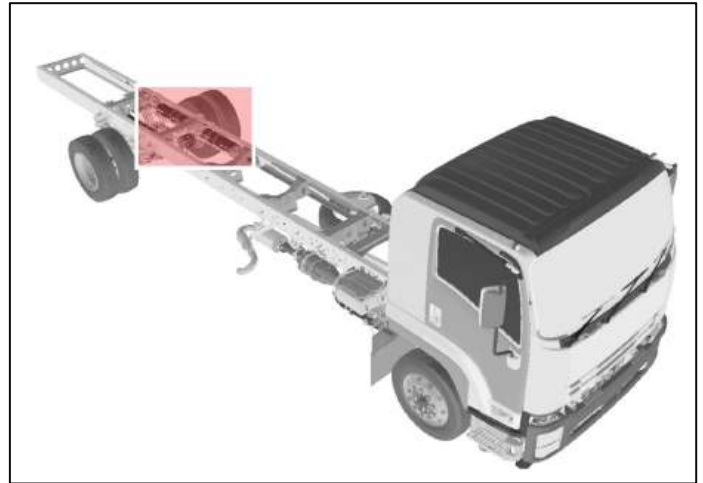
Install ASM Check Valve Park Brake

Parts Required:

ITEM 15 ASM CHECK VALVE ASSEMBLY

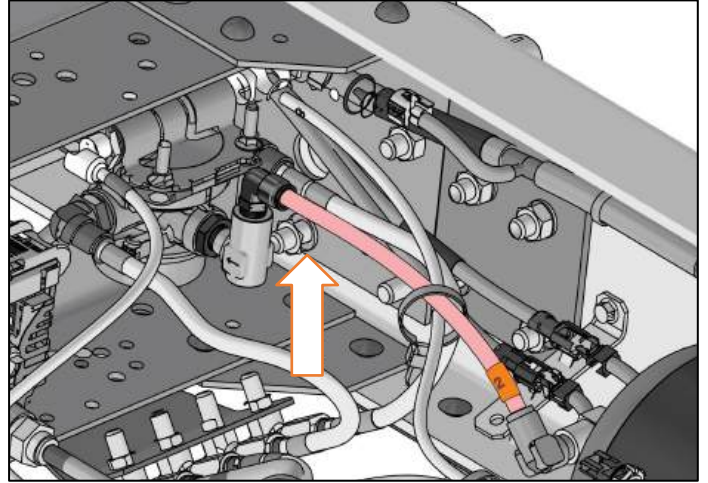
Rear Suspension—Forward Crossmember LHS

- 1 Locate Park Brake Relay Valve indicated by arrow B
- 2 Disconnect 12 mm supply tubing and fitting from relay valve as indicated arrow A . Discard fitting.
- 3 Install ASM Check Valve Assembly as shown, use Isuzu recommended thread sealant.



Trailer Air Brake Kit Installation

- 2 Connect free end of the 12 mm supply tubing to the ASM check valve assembly as shown.



Trailer Air Brake Kit Installation

Install TCM and Relay Valve

Parts Required:

ITEM 4 BRACKET FOR ISUZU RELAY VALVE (RV)

ITEM 5 BRACKET TRAILER CONTROL MODULE (TCM)

ITEM 12 RELAY RWD VALVE ASSEMBLY (RV)

ITEM 14 EBS TRAILER CONTROL MODULE SUB ASSY (TCM)

ITEM 35 BOLT M8 X 35

ITEM 33 NUT M8

ITEM 34 BOLT M8 X 25

Rear Suspension— Rear Crossmember

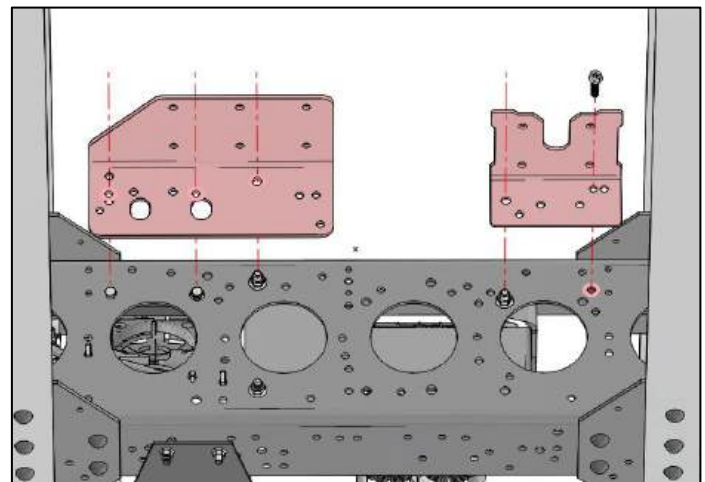
Viewed from below.

- 1 Install brackets for TCM and RV.

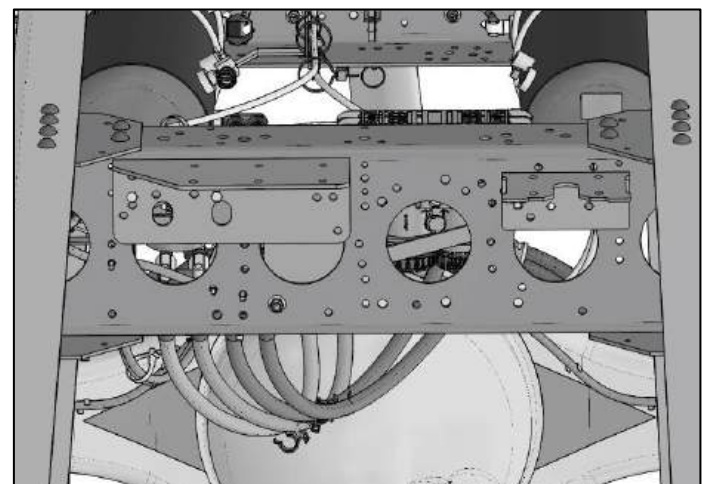
TCM Bracket—use existing crossmember fasteners and M8 Bolts

RV Bracket—use 1 X existing crossmember fastener and 1 X M8 bolt and nut assembly

Ensure all fasteners are re-tightened.

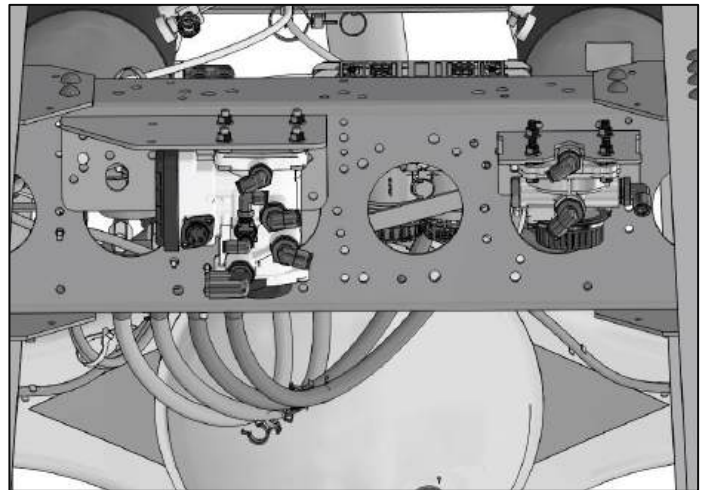
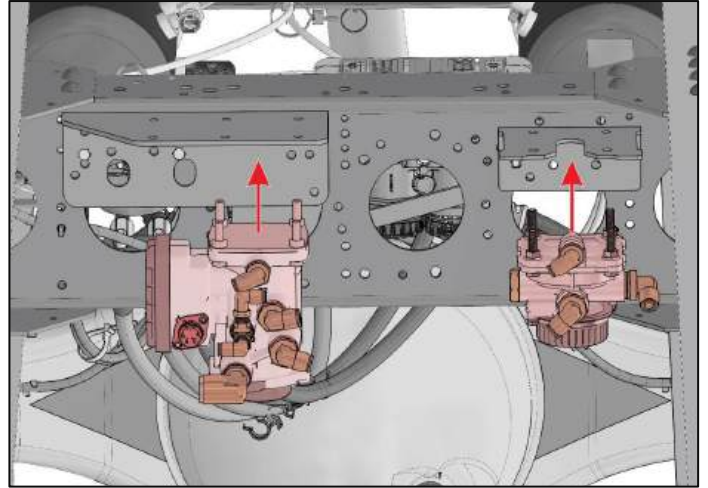


Assembled view from above



Trailer Air Brake Kit Installation

- 2 Install TCM and RV assemblies using M8 nuts.
- 3 Ensure TCM is installed in holes indicated in diagram.



Trailer Air Brake Kit Installation

Plumbing Rear Tap-In

Parts Required:

ITEM 25 PUSH-TO-CONNECT TEE 8 mm (X2)

ITEM 19 Ø8x6 NYLON AIRBRAKE TUBING

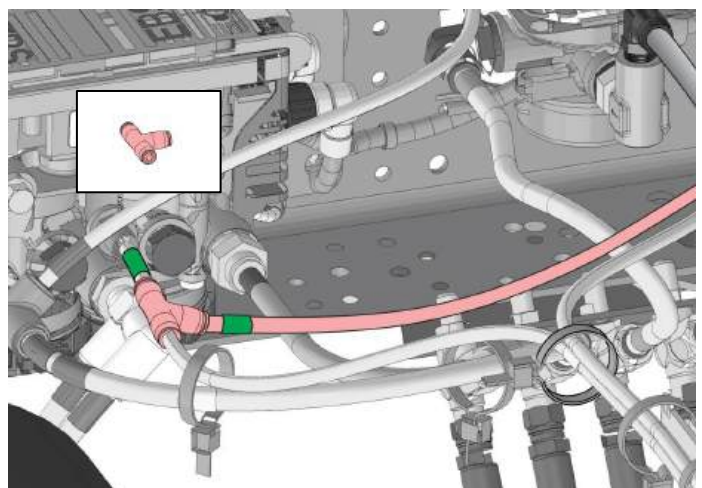
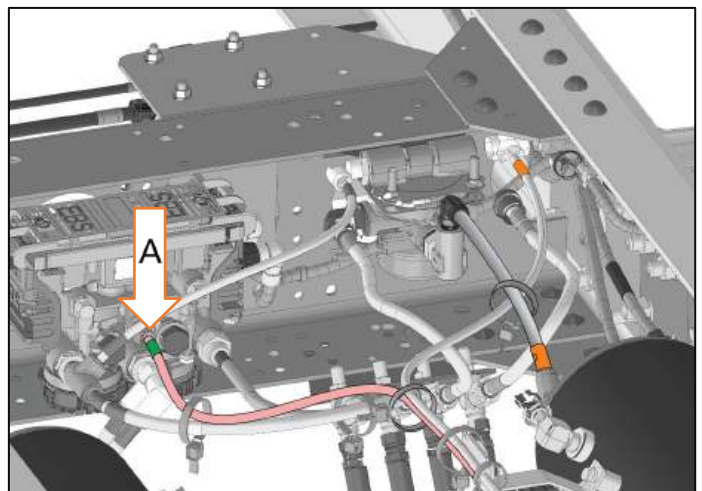
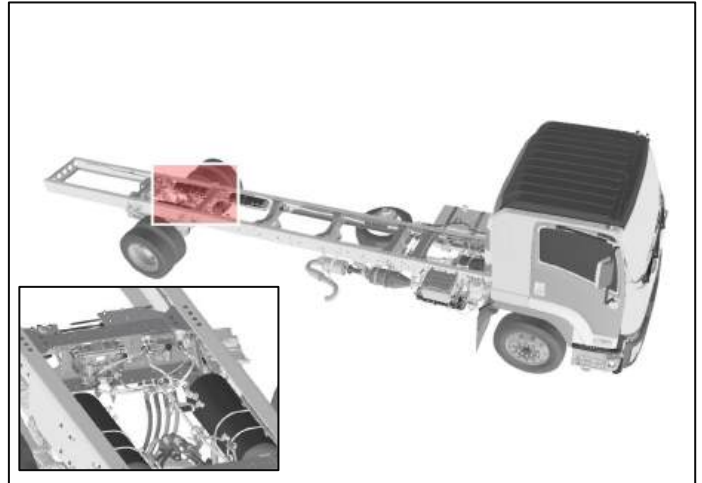
ITEM 9 TUBE IDENTIFICATION TAPE - GREEN

ITEM 10 TUBE IDENTIFICATION TAPE - ORANGE

TCM Signal Line Tap – In

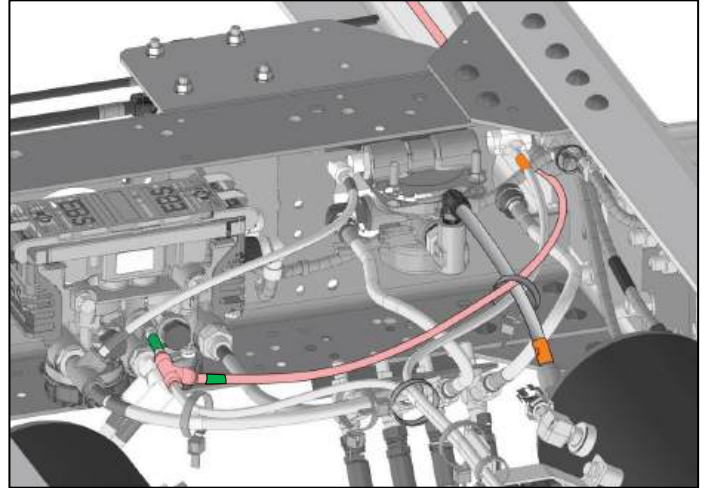
- 1 Locate Modulator Rear Circuit Valve and Rear Signal Line marked with a single green band of tape indicated arrow A.

- 2 Cut Rear Signal Line tube behind green band, install 8 mm push to connect tee as shown. Connect 8 mm air line to free leg of tee and run across to the LHS down the inside of the chassis towards the TCM at rear of vehicle. Apply Green identification tape to end of tube proximal to tee joint.

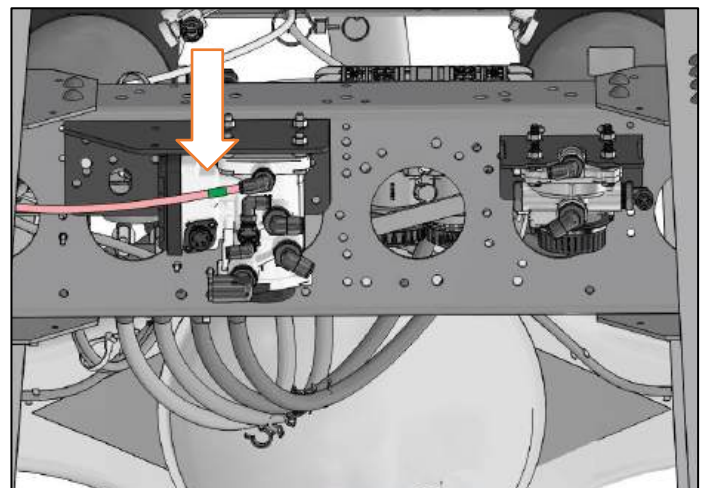
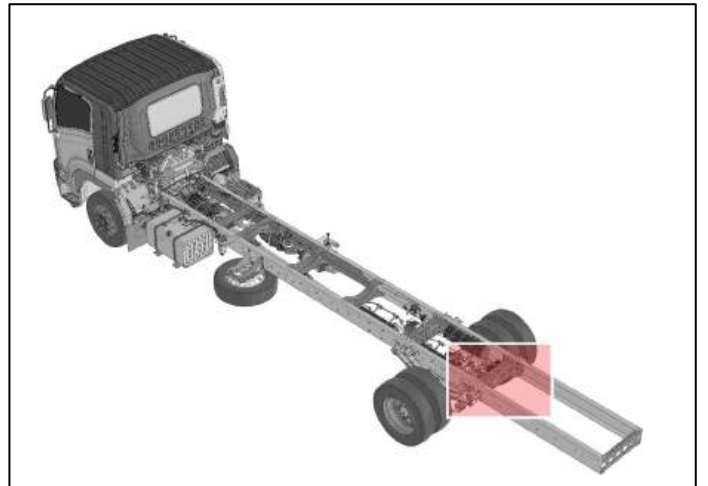


Trailer Air Brake Kit Installation

- 3 Tie off TCM Signal Line to adjoining lines at regular intervals using cable ties.



- 4 Connect TCM Signal Line to the push to connect elbow installed in TCM port 42. Apply single band of Green indication tape close to the elbow.



Trailer Air Brake Kit Installation

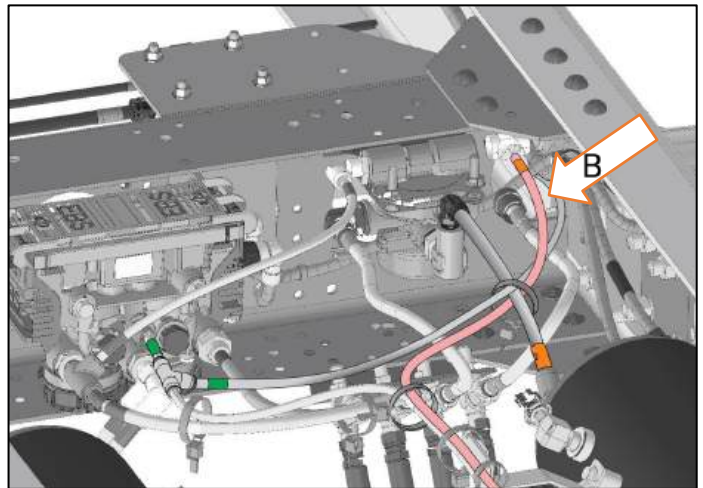
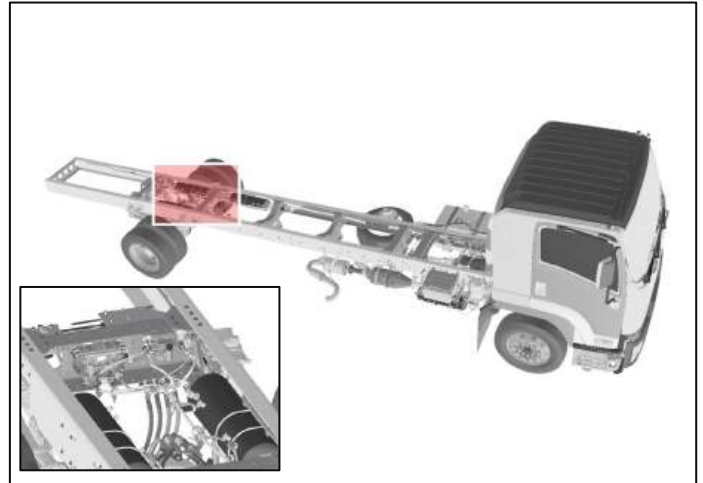
Park Brake Signal Tap-In

Parts Required:

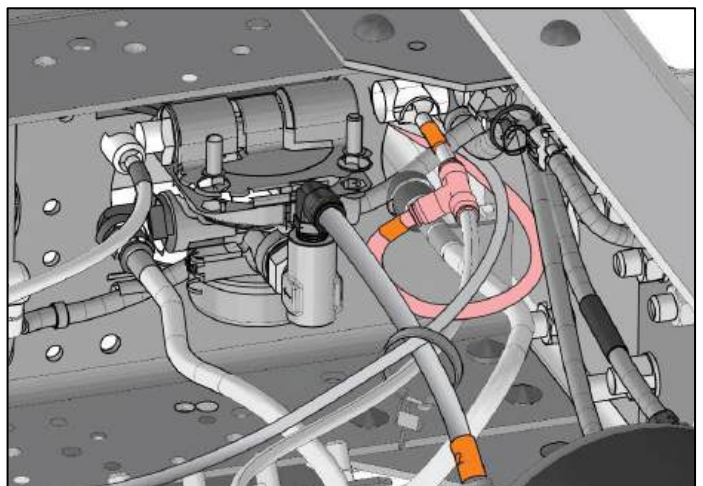
ITEM 25 PUSH-TO-CONNECT TEE 8 mm

ITEM 19 Ø8x6 NYLON AIRBRAKE TUBING

- 1 Locate Hand Brake Signal Line at Park Brake Relay Valve, marked with single Orange tape. Cut this Hand Brake line in position indicated by arrow B.

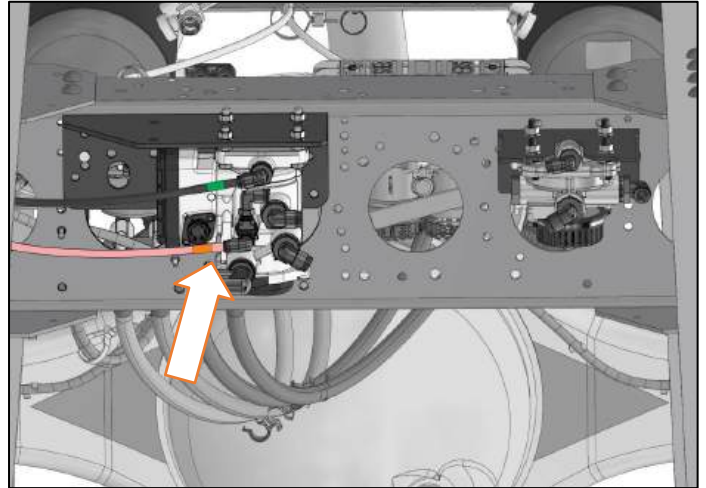


- 2 Install 8 mm push to connect tee as shown. Connect 8 mm air line to free leg of tee and run across to the LHS down the inside of the chassis towards the TCM at rear of vehicle. Apply Orange identification tape to end of tube proximal to tee joint.

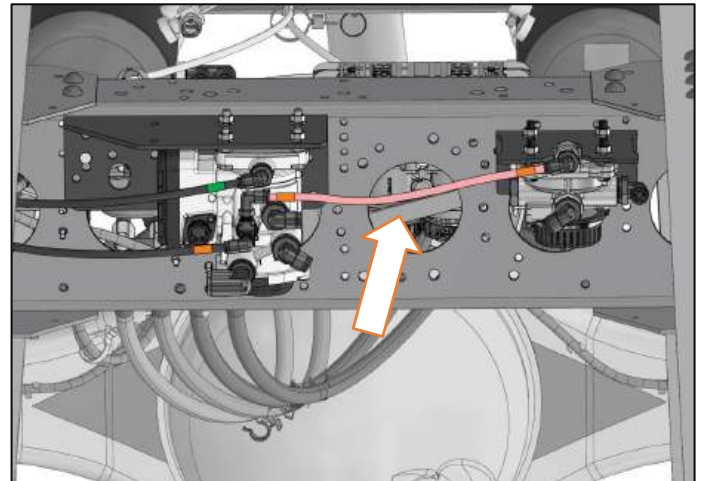


Run Park Brake Signal to TCM

- 1 Run 8mm Park Brake Signal Line along inside of LHS chassis frame to TCM. Connect to elbow at TCM Port 43.
- 2 Apply single orange identification tape to end of tube proximal to elbow. Cable tie Park Brake Signal Line at regular intervals along chassis.

**TCM to Relay Valve (RV) Supply**

Using a short length of 8 mm tube, connect upper elbow at TCM Port 43 to the RV Port 4 as pictured. Apply single band of Orange tape at both ends of the run.



Trailer Air Brake Kit Installation

Main TCM Supply

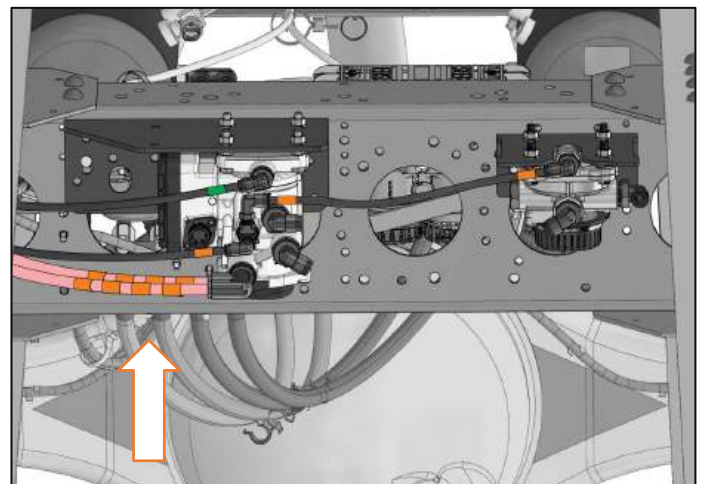
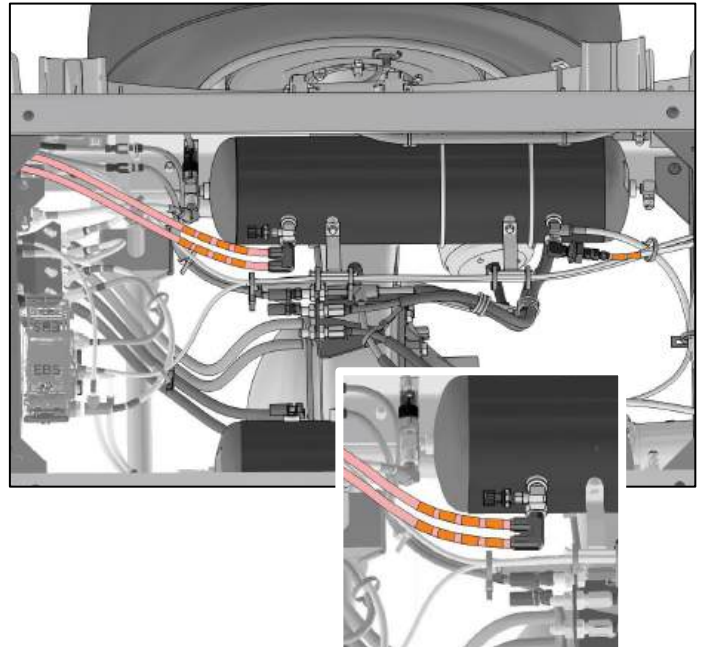
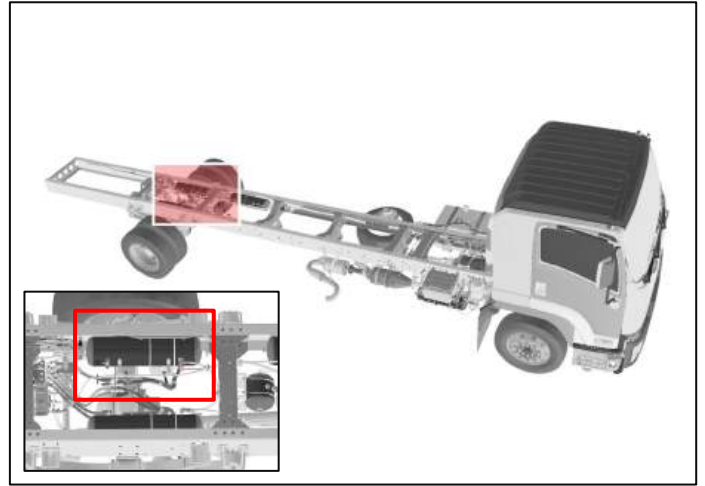
Parts Required:

ITEM 18 Ø12x9 NYLON AIRBRAKE TUBING

ITEM 8 TUBE IDENTIFICATION TAPE - ORANGE

Rear Suspension— Air Tank LHS

- 1 Run two lengths of Ø12 mm tubing from the 3 way union installed page 10-11 to the TCM, cutting both lengths proximal to TCM. Connect both hoses into the two free legs of the 3 way union.
- 2 Apply 4 strips of Orange identification tape to both tubes.
- 3 Connect the two lengths of Ø12 mm tubing from the 3 way union to the 3 way union installed in TCM Port 1 as shown. Apply 4 strips of Orange identification tape to both tubes.



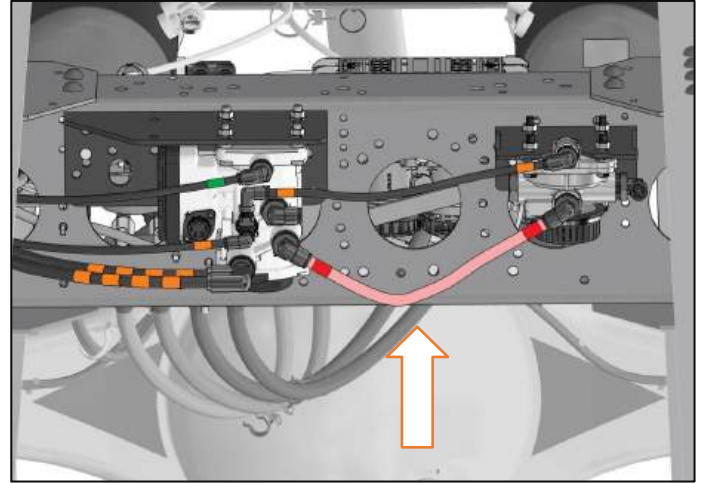
Connect TCM to Relay Valve

Parts Required:

ITEM 18 Ø12x9 NYLON AIRBRAKE TUBING

ITEM 11 TUBE IDENTIFICATION TAPE RED

Use short length of 12 mm tubing to connect elbow at TCM port 21 to elbow at relay Valve port 1.



Install Control and Supply Lines

Parts Required:

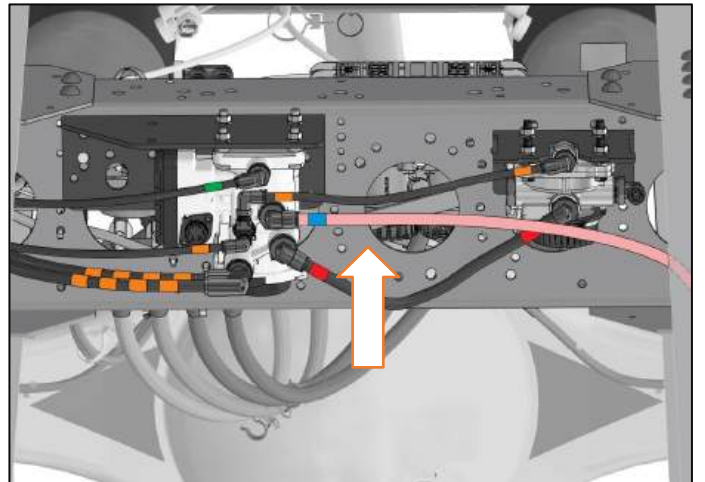
ITEM 18 Ø12x9 NYLON AIRBRAKE TUBING

ITEM 17 BAYONET AIR BRAKE COUPLING ASSEMBLY

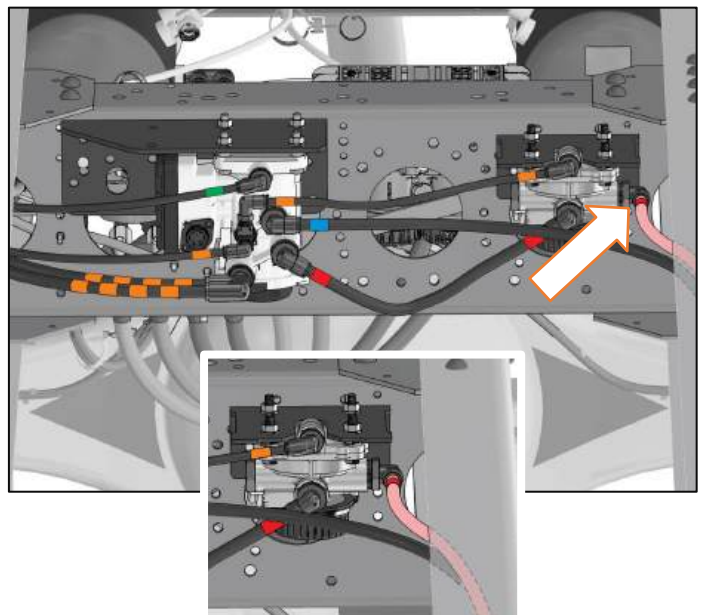
ITEM 10 TUBE IDENTIFICATION TAPE BLUE

ITEM 11 TUBE IDENTIFICATION TAPE RED

1 Install length of 12 mm tube in elbow fitted at TCM Port 21. Tubing should have sufficient length to reach the intended trailer air brake coupling position proximal to the towbar and trailer coupling. Apply Blue indication tape to each end of the tube and connect free end of tube to the Male bayonet coupling.



2 Install length of 12 mm tube in elbow fitted at Relay Valve port 2. Tubing should have sufficient length to reach the intended trailer air brake coupling position proximal to the towbar and trailer coupling. Apply Red indication tape to each end of the tube and connect free end of the tubing to the Female bayonet coupling.



Trailer Air Brake Kit Installation

Install Control and Supply Lines Continued.

Tie Off Supply Air Lines

Parts Required:

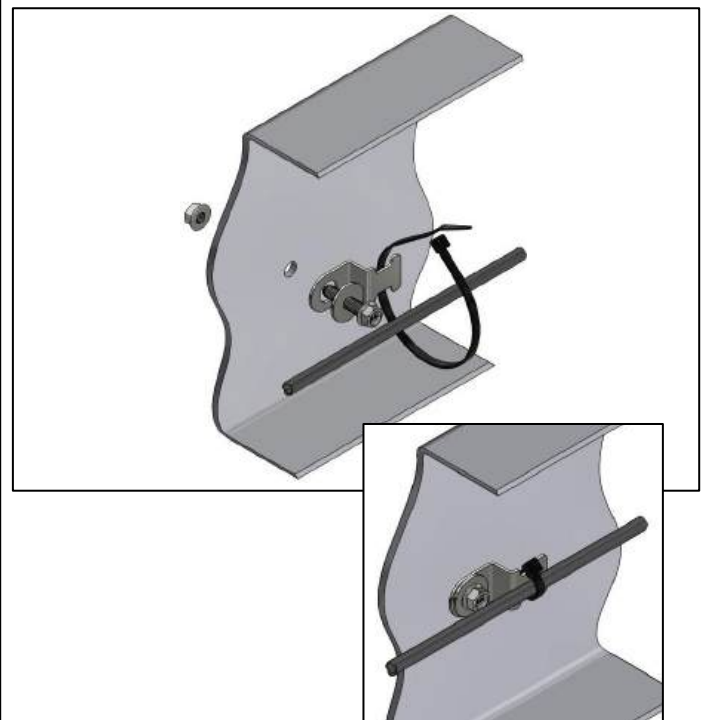
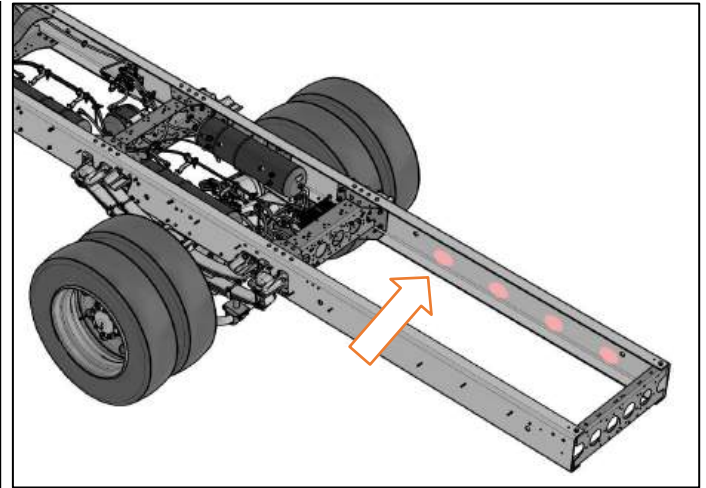
ITEM 1 CABLE HANGER BRACKET

ITEM 24 WASHER, 5/16 x 1 X 16G

ITEM 35 BOLT M8 x 35 LONG

ITEM 33 M8 FLANGE NUT

Locate parts listed above, bolt the cable hanger brackets to chassis. Use factory holes on the inside RHS chassis rails where available, or drill \varnothing 9mm holes as required, cable tie airlines to clips as pictured.



Use cable ties to tie air brake coupling assembly to rear crossmember.



Install Electrical Harnesses

Parts Required:

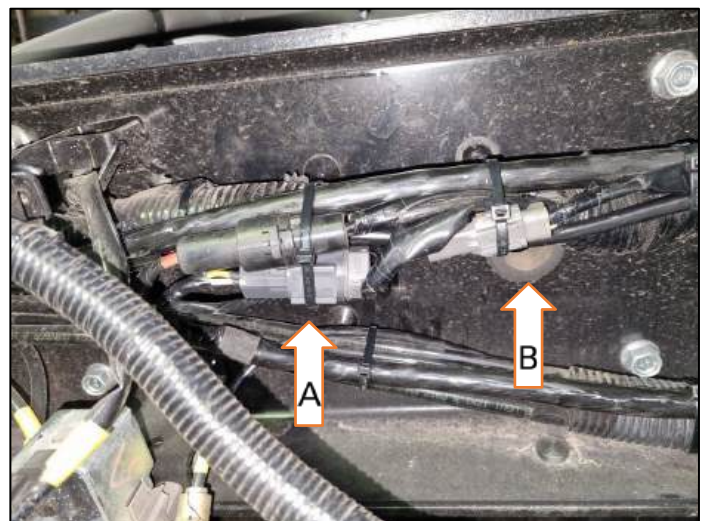
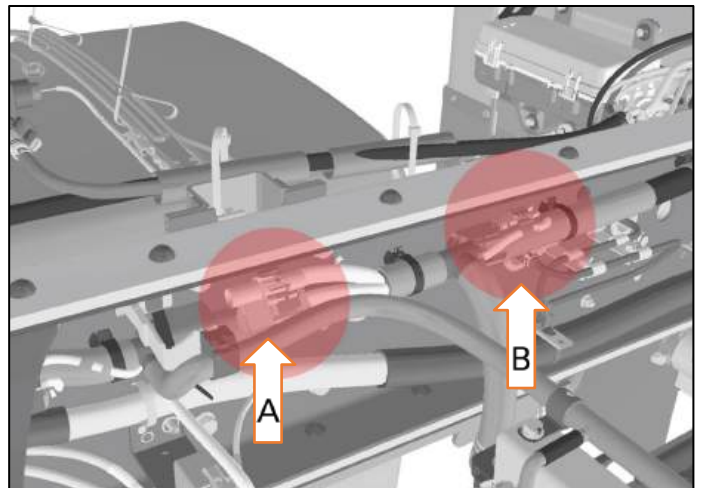
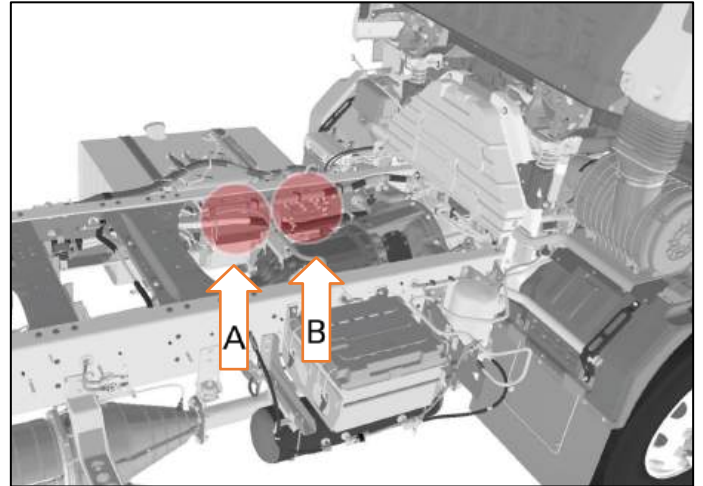
ITEM 7 EBS 24 V WIRING HARNESS

ISUZU PART TRAILER CONTROL MODULE HARNESS (Supplied in cabin)

Refer vehicle position LHS of chassis approximately 800 mm behind cabin.

Install EBS Harness

- 1 Identify Trailer EBS Connector shown arrow A
- 2 Identify CAN connector shown arrow B, roughly 150 mm in front of EBS Connector.
- 3 Un-tape from loom and release connectors, remove blanks from connectors and discard the blanks.
- 4 Install EBS Harness
- 5 Cable tie new connections back to loom and run the the EBS Harness down the LHS of chassis to the rear of the vehicle, secure harness along chassis with cable ties.
- 6 If a towbar is not fitted to the truck, cable tie the Trailer EBS socket to the crossmember closest to the intended towbar position.
- 7 Secure and tie up any excess harness looped adjacent to the EBS Socket location.



Trailer Air Brake Kit Installation

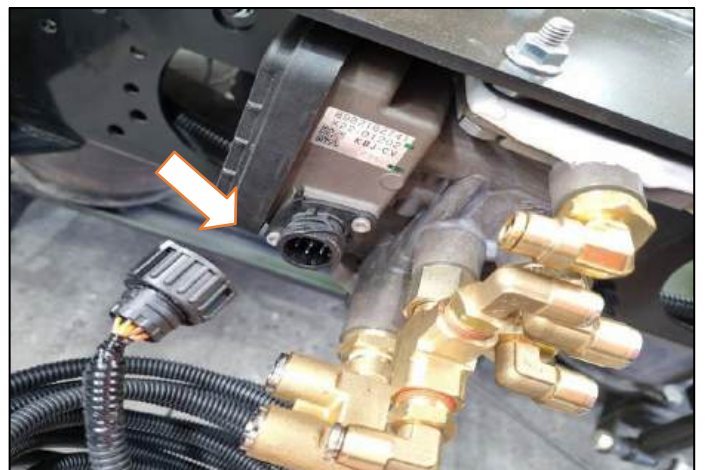
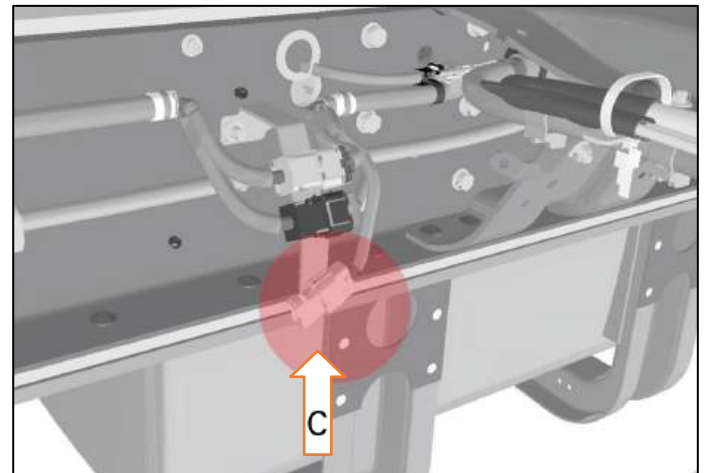
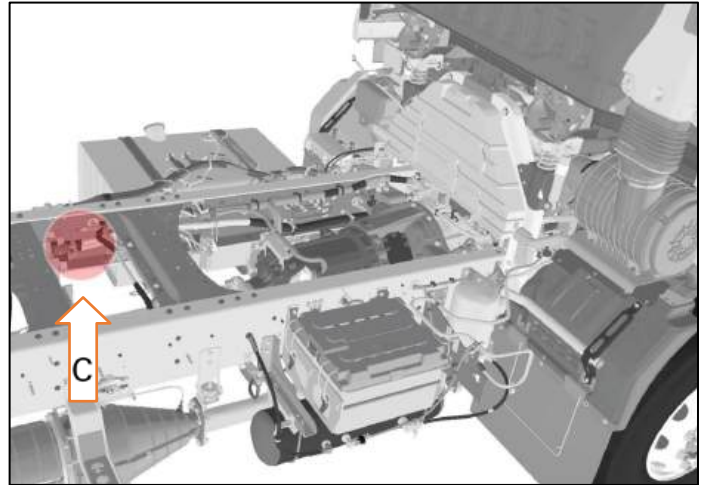
Install Electrical Harnesses Cont.

Parts Required:

ISUZU PART TRAILER CONTROL MODULE
HARNESS

Locate Isuzu factory TCM harness Part Number 8977988370 supplied coiled up in cabin of each new F-Series truck.

- 1 Un-wrap TCM Harness and connect to TCM connector in chassis shown arrow C.
- 2 Run harness down the inside of LHS chassis rail to the TCM.
- 3 Connect to the TCM as shown,
- 4 Tie up harness with cable ties along chassis and also tie up any excess proximal to the TCM.



Install Electrical Harnesses Cont.

Parts Required:

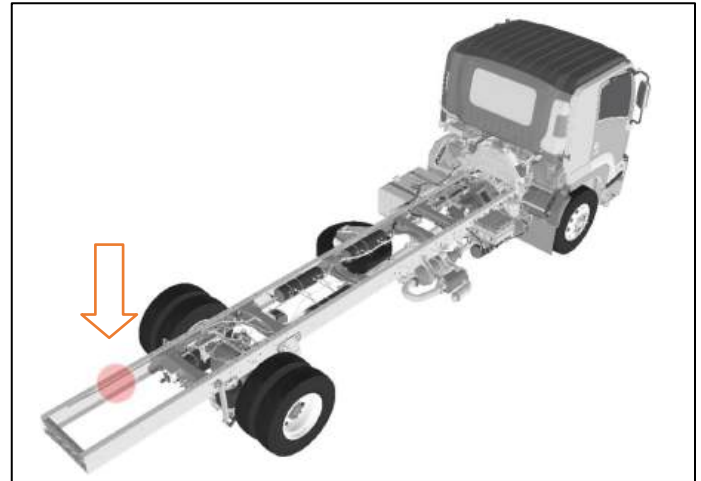
ITEM 6 7 PIN TRAILER SOCKET HARNESS

- 1 Identify trailer harness connector taped to rear lighting loom
- 2 Un-tape the connector, unplug the blanking plug and plug in the corresponding connector of the 7 Pin Trailer Socket Harness. Use blanking plug to the new harness where spare leg is present.
- 3 Run the harness along chassis, cable tie to lighting harness and cable tie the socket proximal to the intended towbar position, tie up any excess harness and tie off.
- 4 Ensure sockets and couplings are secured to rear of chassis proximal to the intended towbar position.

Identify the following Items from the kit.

- ITEM 2** PLATE, PBR TYPE COUPLING MOUNTING (1)
- ITEM 3** MOUNTING PLATE FOR CONNECTORS VARIOUS (2)
- ITEM 34** HEX SCREW M8 x 25 LONG(4)
- ITEM 33** NUT (HEX FLANGED NUT M8)

Attach the mounting plates to the sockets and couplings using fasteners supplied, or store safely in the cabin.



Trailer Air Brake Kit Installation

ISUZU G-IDSS Programming

Isuzu EBS Trailer Brake Control System Programming (Knorr-Bremse) (FTR,FVR,FVD,FVM,FVL,FVZ,FVY)

When a Trailer Control Valve is to be fitted to the above titled EBS Braking System Isuzu vehicles, an EBS Trailer Control Valve Kit will need to be used and once installed, the EBS Trailer Brake Control Valve will need to be programmed into the Knorr-Bremse EBS Braking Module using the GIDSS Diagnostic unit.

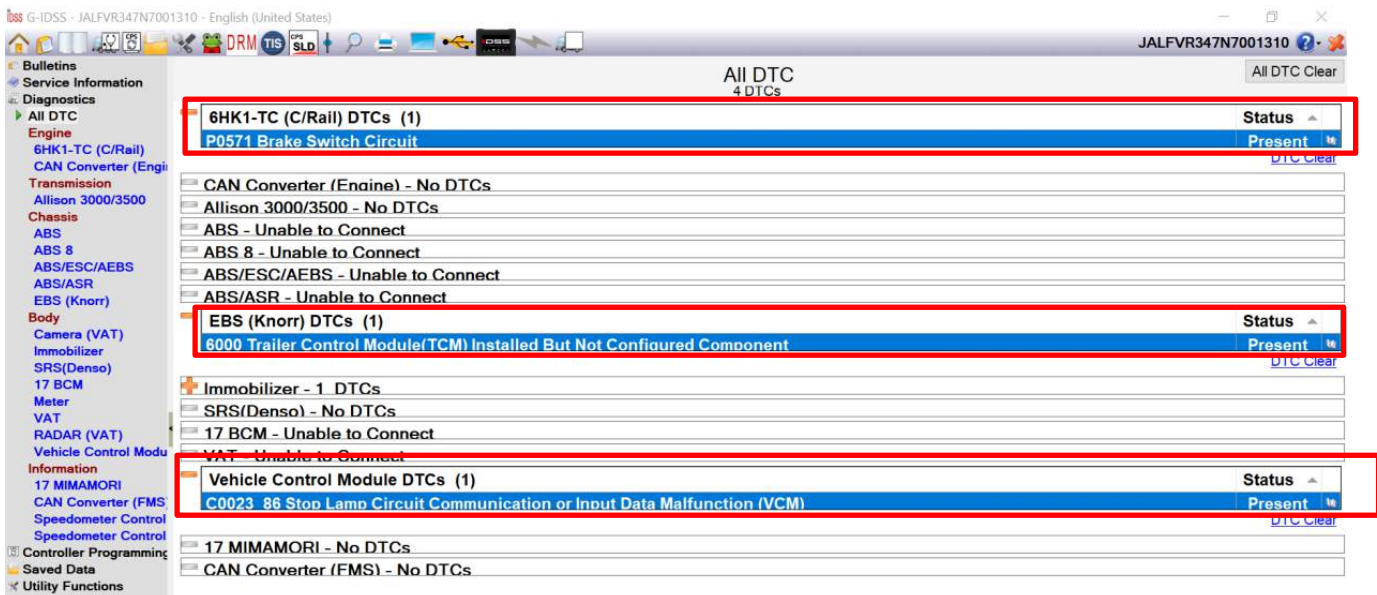
Note: GIDSS will require a 24hr Password to access

the Knorr-Bremse EBS Programming Section.

Please contact the Isuzu TAS line or your Zone Technical Manager for support.

Note 2: Once the EBS Trailer Control Valve kit has been installed to the vehicle (Not Programmed) the vehicle will log a series of DTC fault codes, once the programming procedure has been completed there will be a EBS Recovery Procedure to be performed and the DTC checked and cleared to complete the programming process. Example of typical DTC's below.

Step 1



An All DTC Check will likely show the above Diagnostic Trouble Codes as Present. These DTC's will change status to Not Present after the programming is completed. At the conclusion of the programming procedure, clear all DTC's and perform an All DTC Check



The Vehicle will likely have the above Warning Lamps Illuminated.

G-IDSS Programming Cont.

Step 2 Select the following Menu Selections from GIDSS to access the EBS (Knorr) Programming



Select EBS (Knorr) from the Diagnostic Menu, then Select Programming.

Trailer Air Brake Kit Installation

G-IDSS Programming Cont.

Step 3 Select the Upload Vehicle Configuration Data section.

G-IDSS - JALFVR347N7001310 - English (United States)



The screenshot shows the G-IDSS software interface. The top navigation bar includes icons for home, documents, a printer, a search icon, and a truck icon. The main menu on the left lists various vehicle systems: Bulletins, Service Information, Diagnostics, All DTC, Engine (6HK1-TC (C/Rail), CAN Converter (Engi)), Transmission (Allison 3000/3500), Chassis (ABS, ABS 8, ABS/ESC/AEBS, ABS/ASR, EBS (Knorr), DTC, Data Display, Programming, Special Function, Module Information), Body (Camera (VAT), Immobilizer, SRS(Denso), 17 BCM, Meter, VAT, RADAR (VAT), Vehicle Control Modu), Information (17 MIMAMORI, CAN Converter (FMS), Speedometer Control, Speedometer Control), Controller Programming, Saved Data, and Utility Functions. The 'Programming' menu item is highlighted in blue. To the right of the menu, the 'Programming' section is expanded, showing three options: 'Upload Vehicle Configuration Data' (highlighted with a red box), 'Download Vehicle Configuration Data', and 'Vehicle Configuration Data Setting'.

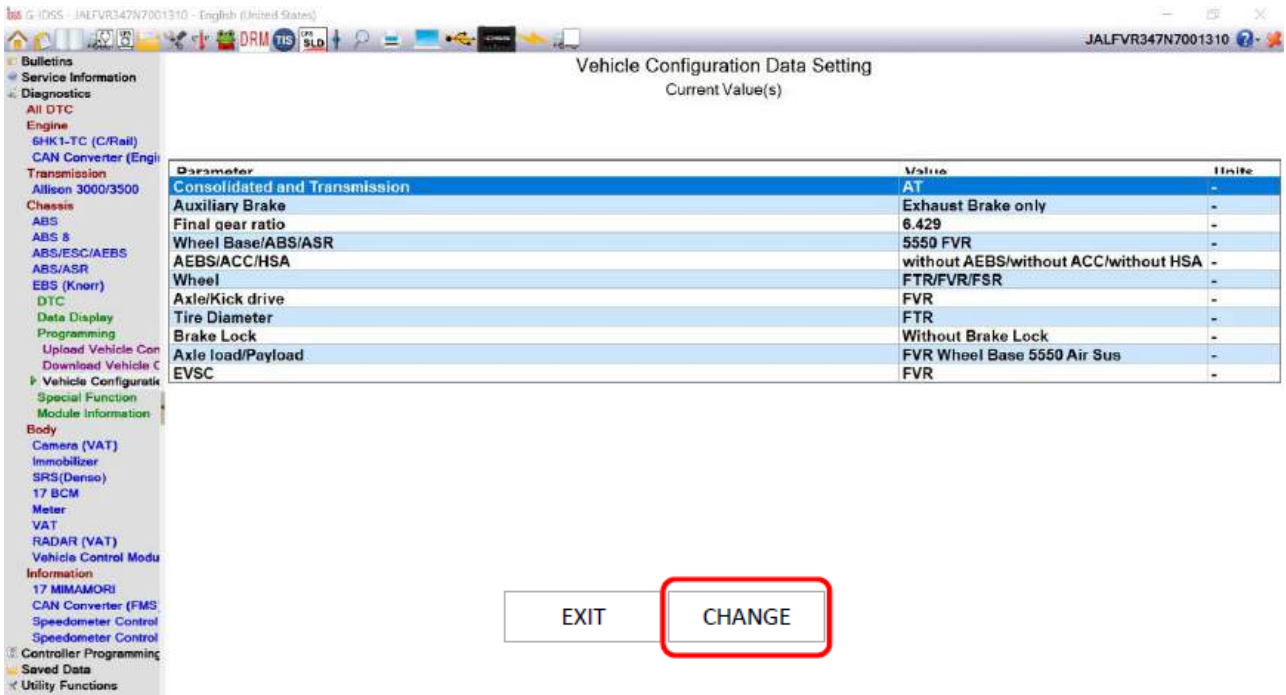
Programming

- [Upload Vehicle Configuration Data](#)
- [Download Vehicle Configuration Data](#)
- [Vehicle Configuration Data Setting](#)

Select Vehicle Configuration Data Setting

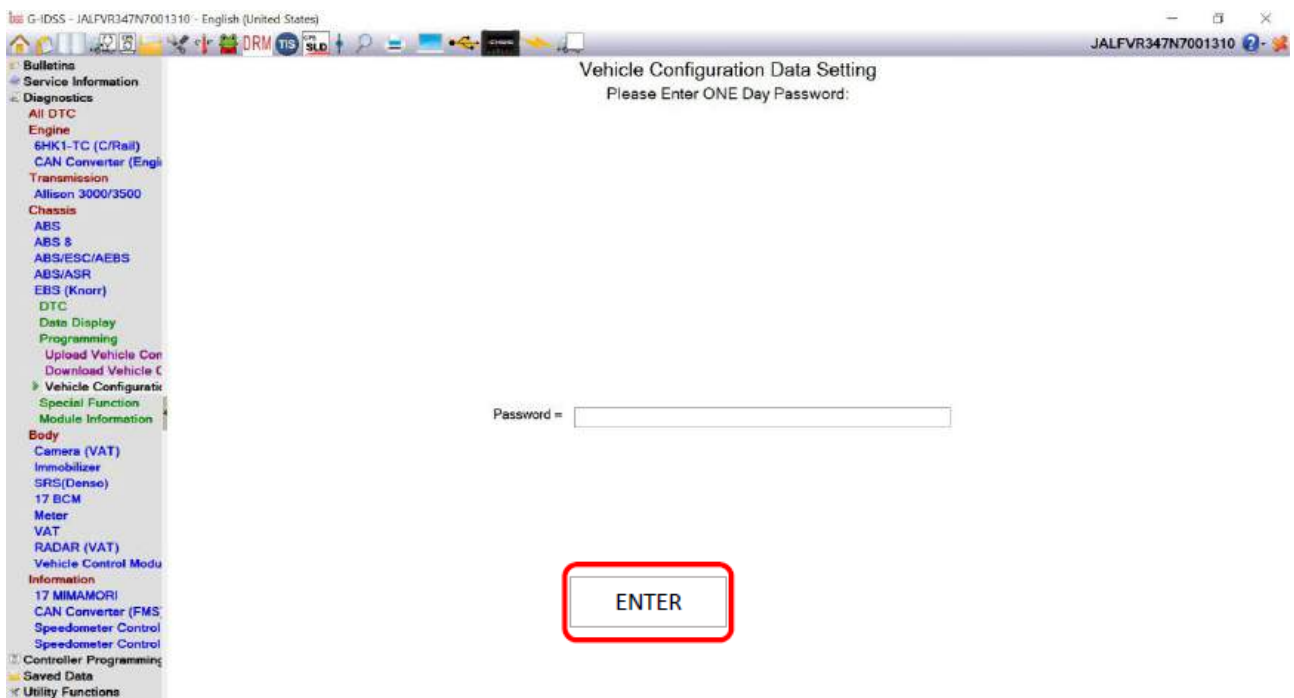
G-IDSS Programming Cont.

Step 4 Select 'CHANGE'



Typical Original Vehicle Configured Settings Select CHANGE to Perform Programming

Step 5 Request 24hr password from Isuzu TAS. Enter password and select 'Enter'

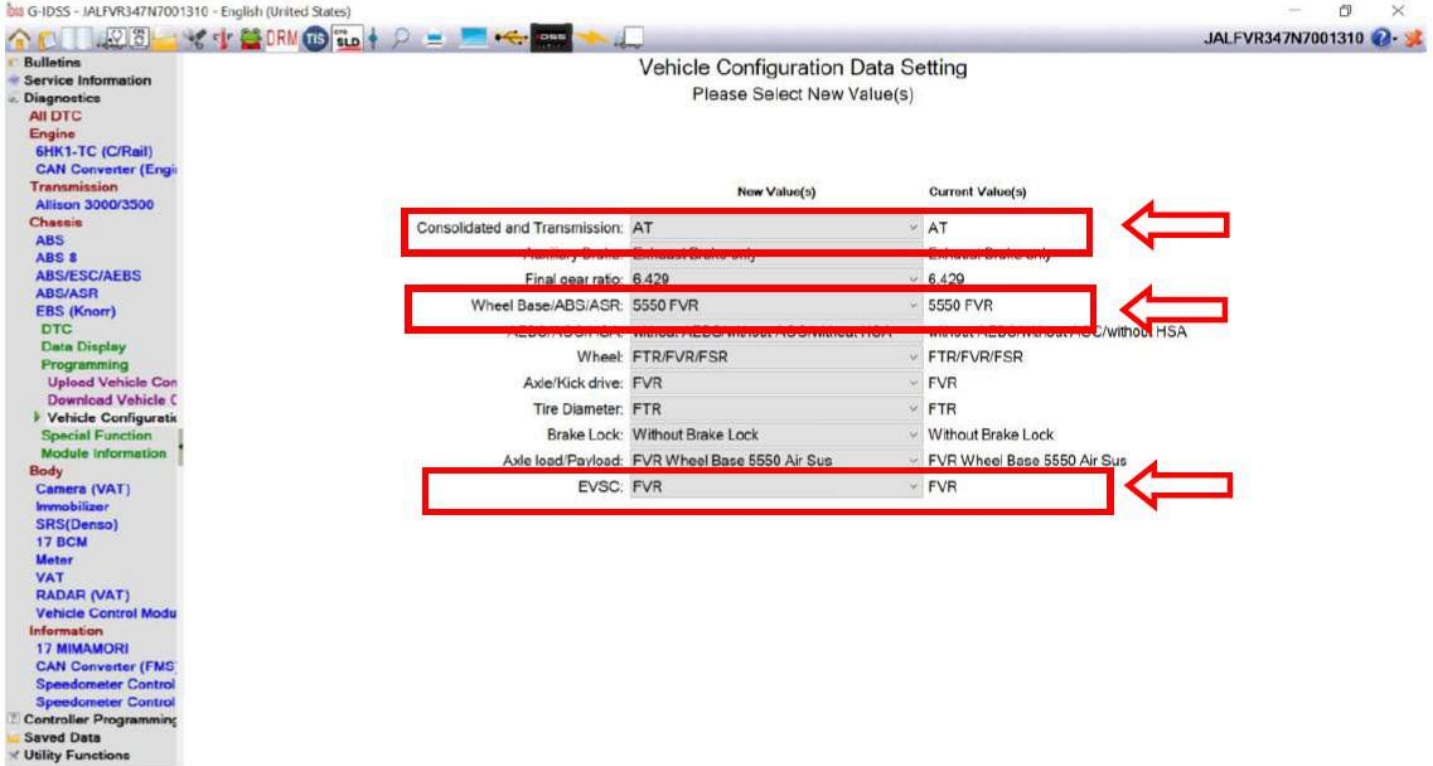


Contact Isuzu TAS to request a 24hr Password, enter your Password and Select ENTER

Trailer Air Brake Kit Installation

G-IDSS Programming Cont.

Step 6 Each section indicated below will require changing in order of appearance. Example shows FVR



Programming Step 1

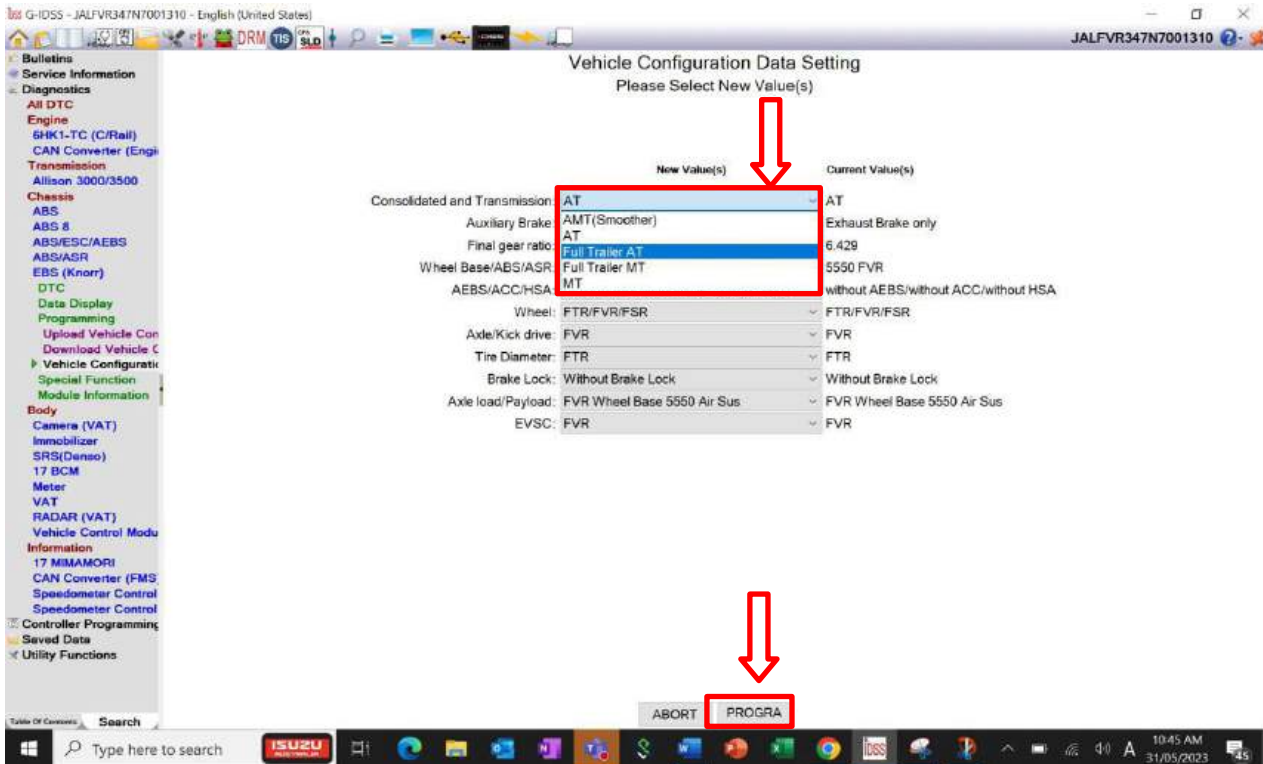


Figure 8 PROGRAM THIS SELECTION THEN PROCEED NOTE: You will need to restart the programming again and re-enter the 24hr Password to move back to be able to change the next data item.

NOTE: At times during the programming phase, GIDSS may indicate that the Programming Failed. If so re-check that data item was changed and if not reselect the programming item and try again.

Programming Step 2

Vehicle Configuration Data Setting
Please Select New Value(s)

Parameter	New Value(s)	Current Value(s)
Consolidated and Transmission:	Full Trailer AT	AT
Auxiliary Brake:	Exhaust Brake only	Exhaust Brake only
Final gear ratio:	6.429	6.429
Wheel Base/ABS/ASR:	5550 FVR Full Trailer	5550 FVR
AEBS/ACC/HSA:	without AEBS/without ACC/without HSA	without AEBS/without ACC/without HSA
Wheel:	FTR/FVR/FSR	FTR/FVR/FSR
Axle/Kick drive:	FVR	FVR
Tire Diameter:	FTR	FTR
Brake Lock:	Without Brake Lock	Without Brake Lock
Axle load/Payload:	FVR Wheel Base 5550 Air Sus	FVR Wheel Base 5550 Air Sus
EVSC:	FVR	FVR

Choose from the dropdown box the appropriate wheelbase/model with Full Trailer.
THEN SELECT THE PROGRAM BUTTON

PROGRAM THIS SELECTION THEN PROCEED

NOTE: You will need to restart the programming again and re-enter the 24hr Password to move on to change the next data item.

Programming Step 3

Vehicle Configuration Data Setting
Please Select New Value(s)

Parameter	New Value(s)	Current Value(s)
Consolidated and Transmission:	Full Trailer AT	AT
Auxiliary Brake:	Exhaust Brake only	Exhaust Brake only
Final gear ratio:	6.429	6.429
Wheel Base/ABS/ASR:	5550 FVR Full Trailer	5550 FVR
AEBS/ACC/HSA:	without AEBS/without ACC/without HSA	without AEBS/without ACC/without HSA
Wheel:	FTR/FVR/FSR	FTR/FVR/FSR
Axle/Kick drive:	FVR	FVR
Tire Diameter:	FTR	FTR
Brake Lock:	Without Brake Lock	Without Brake Lock
Axle load/Payload:	FVR Wheel Base 5550 Air Sus	FVR Wheel Base 5550 Air Sus
EVSC:	FVR Full Trailer	FVR

Choose the appropriate model with Full Trailer.
THEN SELECT THE PROGRAM BUTTON

Trailer Air Brake Kit Installation

Programming—Check Results, Save Screenshot

Vehicle Configuration Data Setting
The data has been changed.

Please perform the Key OFF / ON after returning to the main screen. Please make sure that there is no DTC code.

Parameter	Value	Unit
Consolidated and Transmission	Full Trailer AT	-
Auxiliary Brake	Exhaust Brake only	-
Final gear ratio	6.429	-
Wheel Base/ABS/ASR	5550 FVR Full Trailer	-
AEBS/ACC/HSA	without AEBS/without ACC/without HSA	-
Wheel	FTR/FVR/FSR	-
Axle/Kick drive	FVR	-
Tire Diameter	FTR	-
Brake Lock	Without Brake Lock	-
Axle load/Payload	FVR Wheel Base 5550 Air Sus	-
EVSC	FVR Full Trailer	-

After Programming has successfully completed, recheck that all the changed data values are correct for your vehicle.

NOTE: A Screen shot of this page will likely be required by the AVE Certifier for evidence that the programming on the selected VIN vehicle has been performed correctly.

Programming—Re-Check

All DTC
4 DTCs

DTC	Status
6HK1-TC (C/Rail) DTCs (1)	
P0571 Brake Switch Circuit	Not Present DTC Clear
CAN Converter (Engine) - No DTCs	
Allison 3000/3500 - No DTCs	
ABS - Unable to Connect	
ABS 8 - Unable to Connect	
ABS/ESC/AEBS - Unable to Connect	
ABS/ASR - Unable to Connect	
EBS (Knorr) DTCs (1)	
6000 Trailer Control Module(TCM) Installed But Not Configured Component	Not Present DTC Clear
Immobilizer - 1 DTCs	
SRS(Denso) - No DTCs	
17 BCM - Unable to Connect	
VAT - Unable to Connect	
Vehicle Control Module DTCs (1)	
C0023 85 Stop Lamp Circuit Communication or Input Data Malfunction (VCM)	Not Present DTC Clear
17 MIMAMORI - No DTCs	
CAN Converter (FMS) - No DTCs	

Recheck the ALL DTC's page and determine if all previous DTC's have changed their status to Not Present. Clear ALL DTC's.

NOTE: IT IS RECOMMENDED THAT A "RECOVERY WORK FROM FAILURE" procedure is performed.

Programming—Perform Recovery Work From Failure**1. Recovery work 1 from failure (Procedures by operating the brake pedal)**

- 1) With the brake pedal released, turn OFF the ignition switch for 5 seconds or more.
- 2) Keep the following conditions, then turn ON the ignition switch for 7 seconds or more.
 - The vehicle is stopped.
 - The brake pedal is released.
 - The power supply voltage to the EBS control unit is sufficient.
- 3) Depress the brake pedal to the full braking position and hold for 3 seconds.

Caution:

- Do not perform the pedal operation until 7 seconds have elapsed after the ignition switch was turned ON.

Perform Full System Check

Start the truck and air the system up to full pressure.

Check for air leaks using soap spray.

Confirm system works correctly.

Confirm all airlines and looms are secured.

Confirm all trailer lighting is operational.

Confirm EBS socket is operational and activate diagnostic light on dash cluster.

Once system check is completed Call AVE or VASS engineer for compliance check and blue plate.

System to be tested and certified by approved AVE to meet the requirements of VSB6 Section G2 Installation of Trailer Braking Controls.

Trailer Air Brake Kit Installation

PERFORM A FULL SYSTEM CHECK

- Start the truck and air the system up to full pressure.
- Check for air leaks using soap spray.
- Confirm system works correctly.
- Confirm all airlines and looms are secured.
- Confirm all trailer lighting is operational.
- Confirm EBS socket is operational and activate diagnostic light on dash cluster.
- Once system check is completed Call AVE or VASS engineer for compliance check and blue plate.

- System to be tested and certified by approved AVE to meet the requirements of VSB6 Section G2 Installation of Trailer Braking Controls.

MY22 FTR TRAILER EBS CIRCUIT

