54.02.400 Specifications

Specifications

For an isometric view of the Chassis Module, see Fig. 1 .

For a side view of the Chassis Module with pinout assignments, see Fig. 2 .

For forward chassis harness pinouts at connector C1, see Table 1 .

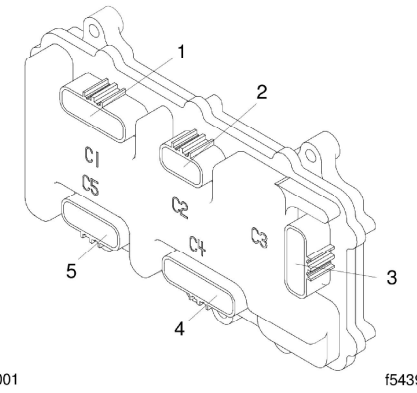
For forward chassis harness pinouts at connector C2, see Table 2 .

For forward chassis harness pinouts at connector C3, see Table 3 .

For forward chassis harness pinouts at connector C4, see Table 4 .

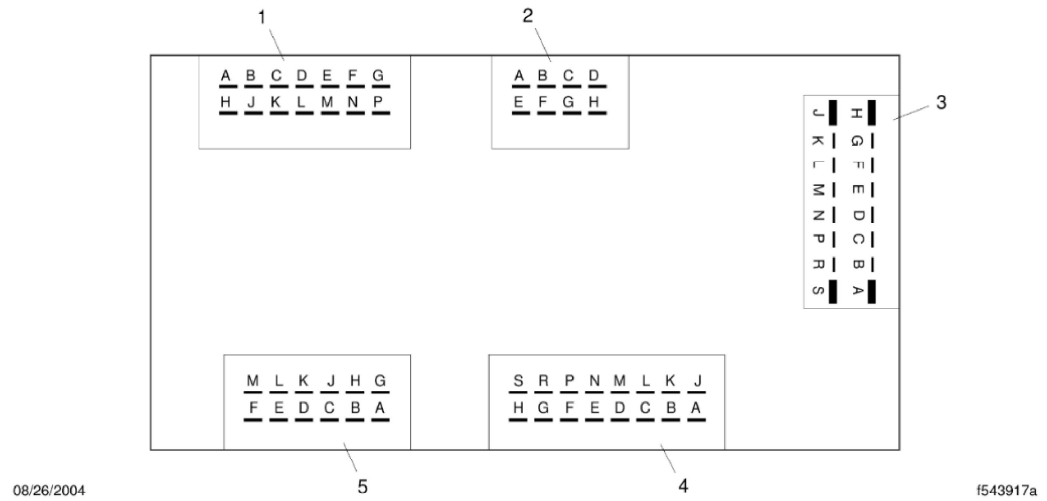
For forward chassis harness pinouts at connector C5, see Table 5 .

For power supply fuses and associated outputs for the Chassis Module, see Table 6 .



1. Connection C1, Forward Chassis Harness
2. Connection C2, Forward Chassis Harness
3. Connection C3, Forward Chassis Harness
4. Connection C4, Forward Chassis Harness
5. Connection C5, Forward Chassis Harness

Fig. 1, Chassis Module (isometric view)



1. Connection C1, Forward Chassis Harness
2. Connection C2, Forward Chassis Harness
3. Connection C3, Forward Chassis Harness
4. Connection C4, Forward Chassis Harness
5. Connection C5, Forward Chassis Harness

Fig. 2, Chassis Module With Pinout Assignments

Forward Chassis Harness Pinouts at Connector C1			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C1-A	—	—	See C1-H
C1-B	—	—	—
C1-C	—	—	—
C1-D	—	—	—
C1-E	—	—	—
C1-F	—	—	—
C1-G	—	—	See C3-N
C1-H	Reverse Light—Right Side Upper	Digital Output	120E
C1-J	—	—	See C1-H
C1-K	—	—	—
C1-L	Right Upper Brake Light	Digital Output	36K
C1-M	—	—	—

Forward Chassis Harness Pinouts at Connector C1			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C1-N	Left Upper Brake Light	Digital Output	36J
C1-P	—	—	See C3-R

Table 1, Forward Chassis Harness Pinouts at Connector C1

Forward Chassis Harness Pinouts at Connector C2			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C2-A	Dash Fan 1—High-Speed Relay	Digital Output	40H
C2-B	—	—	—
C2-C	—	—	—
C2-D	—	—	—
C2-E	—	—	See C3-R
C2-F	License Plate Lamp	Digital Output	23C
C2-G	—	—	—
C2-H	—	—	See C3-N

Table 2, Forward Chassis Harness Pinouts at Connector C2

Forward Chassis Harness Pinouts at Connector C3			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C3-A	Fuel/Water Separator Heater	Digital Output	196
C3-B	J1587– Data Bus	Data Bus	1587–
C3-C	—	—	See C3-D
C3-D	Reverse Light—Left Side Upper	Digital Output	120D
C3-E	Spare Input CAS1—Low Air	Digital Input (Active Low)	18

Forward Chassis Harness Pinouts at Connector C3			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C3-F	Spare Input CAS0—Park Brake	Digital Input (Active Low)	125S
C3-G	Service Brake	Digital Input (Active Low)	36
C3-H	Ground	Power Ground	GND
C3-J	Main Battery Power (VBAT2)	Power	14G
C3-K	Turn Lights—Front Right	Digital Output	38R
C3-L	Right Low Beam	Digital Output	21L
C3-M	Ignition	Digital Input (Active High)	376C
C3-N	Turn Lights—Left Side, Fender	Digital Output	38E
C3-P	—	—	—
C3-R	Turn Lights—Right Side, Fender	Digital Output	38F
C3-S	J1587+ Data Bus	Data Bus	1587+

Table 3, Forward Chassis Harness Pinouts at Connector C3

Forward Chassis Harness Pinouts at Connector C4			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C4-A	Module Wake-Up Signal	Digital Input/Output	—
C4-B	Address Identification A	Analog Input	481
C4-C	Left Park Lamp	Digital Output	102A
C4-D	Left Marker Lamp	Digital Output	46E
C4-E	Address Identification C	Analog Input	481
C4-F	Turn Lights—Front Left	Digital Output	38L

Forward Chassis Harness Pinouts at Connector C4			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C4-G	J1939+ Data Bus	Data Bus	1939+
C4-H	Ground (Address Identification D)	Signal Ground	—
C4-J	Main Battery Power (VBAT3)	Power	14G
C4-K	Right High Beam	Digital Output	21H
C4-L	Right Park Lamp	Digital Output	102B
C4-M	Right Marker Lamp	Digital Output	46F
C4-N	Address Identification B	Analog Input	—
C4-P	Main Battery Power (VBAT1)	Power	14G
C4-R	J1939– Data Bus	Data Bus	1939–
C4-S	Ground	Power Ground	GND

Table 4, Forward Chassis Harness Pinouts at Connector C4

Forward Chassis Harness Pinouts at Connector C5			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C5-A	Driver-Side Emergency Door Latch	Digital Input (Active Low) Analog Input	489V
C5-B	Rear Emergency Door Vandalock	Digital Input (Active Low) Analog Input	489P
C5-C	—	—	—
C5-D	—	—	—
C5-E	—	—	—
C5-F	Vandalock Input—Passenger-Side Emergency Door/Lift Door	Digital Input	489J

Forward Chassis Harness Pinouts at Connector C5			
Connector Pin	**Signal Name**	**Signal Type**	**Circuit Number**
C5-G	Passenger-Side Emergency Door Latch	Digital Input	489W
C5-H	Stop Arm Relay	Digital Output	489A
C5-J	Backup Alarm	Digital Output	122A
C5-K	—	—	—
C5-L	Dash Fan 1—Low-Speed Relay	Digital Output	40G
C5-M	Crossing Arm Relay	Digital Output	489B

Table 5, Forward Chassis Harness Pinouts at Connector C5

Power Supply Fuses and Associated Outputs for the Chassis Module				
CHM Power Input	**CHM Power Input Pin**	**Fuse Supplying CHM Power Input**	**CHM Outputs Supplied**	**CHM Output Pin**
Power In			**Power Out**	
VBAT1	C4.P	Fuse 19 (30A)	Right Low Beam	C3.L
			Turn Lights—Right Side, Fender	C3.R
			Turn Lights—Right Side, Fender	C1.P
			Right Upper Brake Light	C1.L
			Left Upper Brake Light	C1.N
			Turn Lights—Front Right	C3.K
			Reverse Light—Left Side Upper	C3.D
			Turn Lights—Right Side, Fender	C2.E
VBAT2	C3.J	Fuse 17 (30A)	Left Park Lamp	C4.C
			Right Park Lamp	C4.L

Power Supply Fuses and Associated Outputs for the Chassis Module				
CHM Power Input	**CHM Power Input Pin**	**Fuse Supplying CHM Power Input**	**CHM Outputs Supplied**	**CHM Output Pin**
Power In			**Power Out**	
			Left Marker Lamp	C4.D
			Right Marker Lamp	C4.M
			Trailer Marker Relay	C2.F
			Right High Beam	C4.K
			Reverse Light—Right Side Upper	C1.H
			Turn Lights—Left Side, Fender	C3.N
			Turn Lights—Front Left	C4.F
VBAT3	C4.J	Fuse 13 (30A)	Fuel Water Separator Heater	C3.A
			Stop Arm Relay	C5.H
			Backup Alarm	C5.J
			Dash Fan 1—Low-Speed Relay	C5.L
			Crossing Arm Relay	C5.M

Table 6, Power Supply Fuses and Associated Outputs for the Chassis Module

NOTE: The power supply to the Bulkhead Module microprocessor is supplied from any of the five VBAT inputs (VBAT1, VBAT2, VBAT3, VBAT4, or VBAT5) through an internal diode network. The same is true for the Chassis Module with its input VBAT1, VBAT2, or VBAT3. In theory, if any one of the module's VBAT inputs is supplying power, the module will be functional.