

NOTE

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Kit Contents

- 1 - installation sheet
- 1- HD-100
- 1- Hydra Cable DTY20686
- 1- Device Cable DTY20683

Tools Required

- 1- roll electrical tape
- 1- wire cutter/stripper
- 1- Crimpers
- 1- #2 Phillips head
- 1- #12 Torx bit driver

Volvo, HD 100 “Hydra Cable” Installation Guide

To install HD 100: First, Insure ignition is in the off position, lift fuse relay panel cover, top center of the dash. To lift fuse relay panel cover, remove the two screws behind cup holder just below panel cover.

1. Find desired location on dash to Install HD 100. NOTE; cable wiring, remove one of the “dummy” or unused rocker switches to route cable to Fuse Relay panel.
2. Inside the fuse relay panel all of the connection points needed will be at hand.
3. To install the “**DTY20686**” Hydra cable: In the fuse relay panel upper right corner (nearest windshield) there is a connector block that includes power, ground and ignition. As seen in following page illustrations. Plug spider cable connectors into vehicle, respective locations.
4. J1939 connection is shown with terminating resistor. Remove resistor and connect to “Y” cable mating connector, connect second “Y” cable connector where resistor was removed. J1939 connection complete.
5. Connect J1708/J1587 connector to vehicle wiring.
6. Insert power and ground connectors in connector block.
7. Connect DTY20686 Hydra cable to DTY20683 Device cable route device cable to HD-100.
8. Refer to Figure 5 locate correct fuse locations. Insert correct fuses 10 amp power.
9. After all connections have been completed, turn ignition to “on position “insure HD 100 powers-up, then insure J1939 JBus and J1708 are active.
10. Start truck, do a complete functionality test of HD 100. Replace fuse relay cover.

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Fuse panels for 12V power

J1708 Connector

J1939 Connector

Power, Ignition and Ground Connections

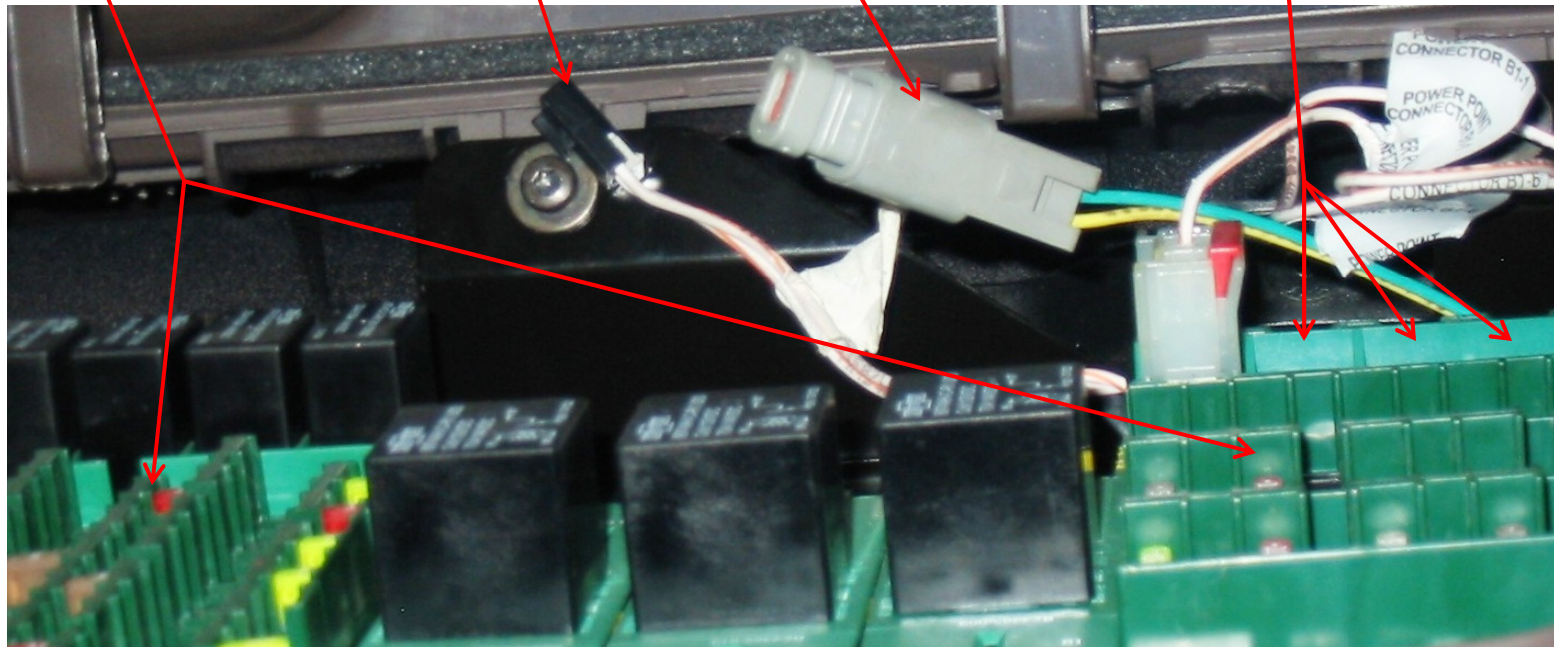


Figure 1

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J1939 Terminating Resistor

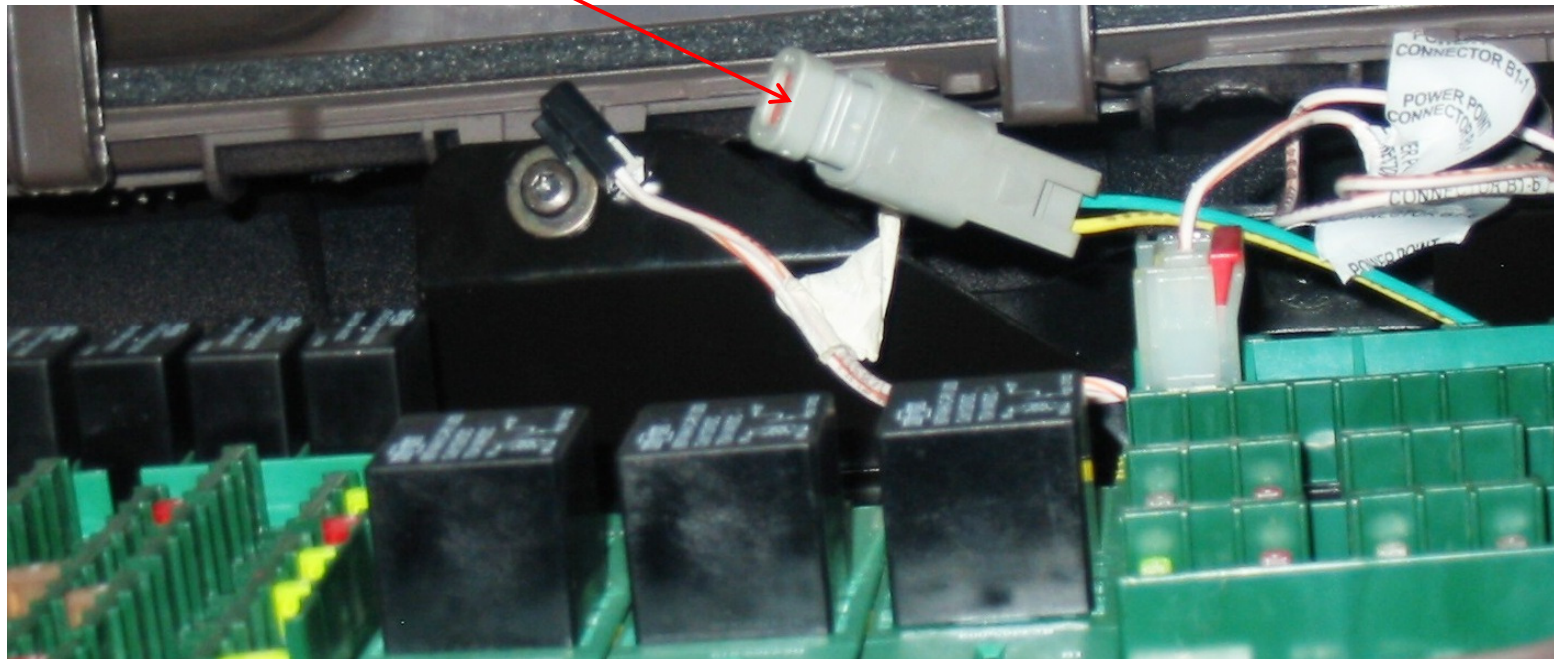


Figure 2

The J1939 connector is equipped with the Terminating Resistor. **To install cable DTU 20600 the resistor must be removed and re-installed in the female “Y” connector of DTY 20600.** The male end of the “Y” connector will reconnect into the connector from where the terminating resistor was removed. This completes the J1939 data link connection. J1708 will also plug directly into the vehicle connectors.

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Fuse Panels

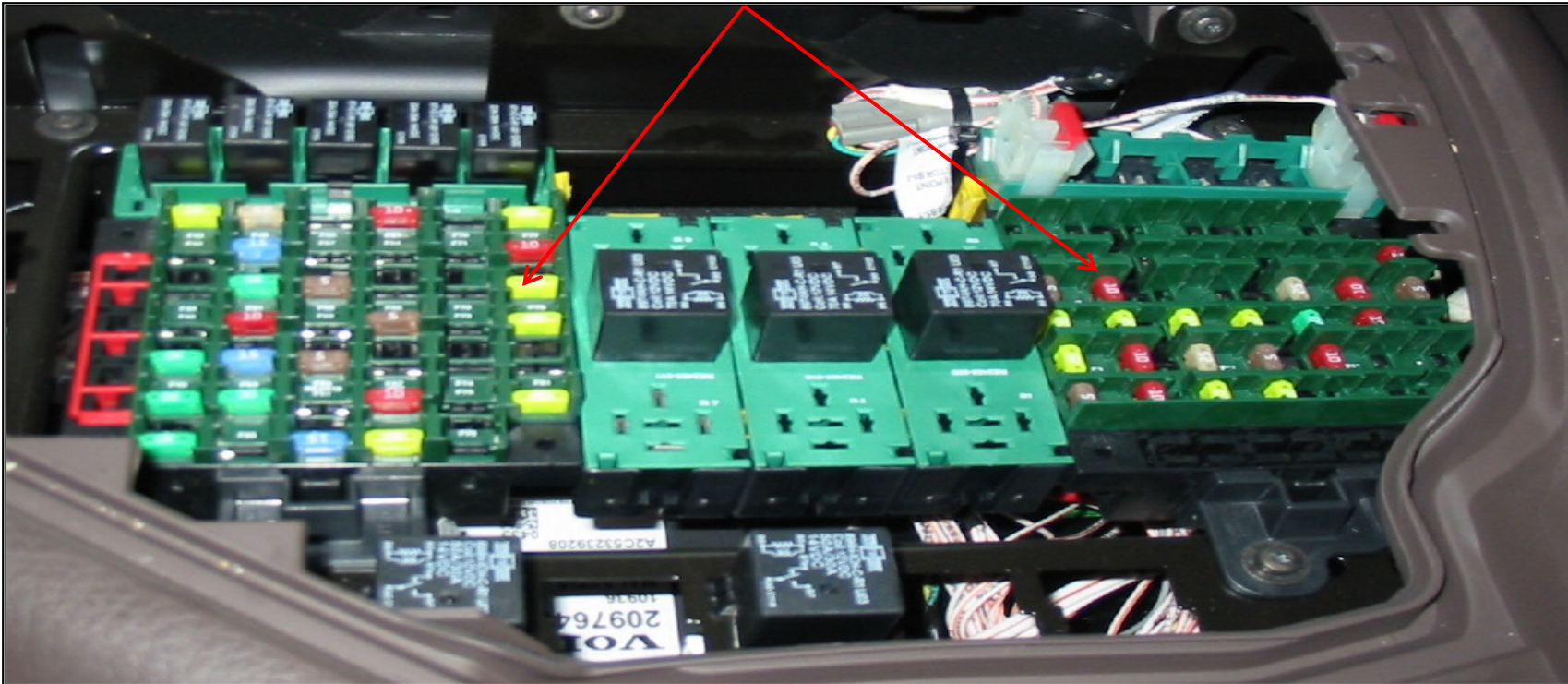


Figure 3

To select the correct fuse locations refer to (Figure 4).
The auxiliary connection ports are un-fused.

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FUSES		FUSE AND RELAY CENTER															
F1	5	DCP POWER/POWER MIRRORS/VOLVO LINK															
F2	10	RADIO IGN															
F2	25	RADIO IGN WITH AMPLIFIER															
F3	20	DRIVER WINDOW/HEATED MIRROR															
F4	20	PASSENGER WINDOW															
F5		NOT USED															
F6		NOT USED															
F7		NOT USED															
F8	20	LIGHT CONTROL MODULE 1															
F9	10	CITY HORN/ARB HORN															
F10	25	LIGHT CONTROL MODULE 2															
F11	15	BATTERY EXPANSION (B1-1)															
F11	5	SECONDARY INSTRUMENT CLUSTER (B1-1)															
F12	10	ROAD RELAY DIAGNOSTIC TOOL (B1-2)															
F13	5	VOLVO LINK															
F14	10	ELECTRONIC CONTROL SUSPENSION															
F14	15	BEACON LAMPS															
F15	20	KEY SWITCH BATTERY															
F16	20	LIGHT CONTROL MODULE 3															
F17	20	LIGHT CONTROL MODULE 6															
F18	20	LIGHT CONTROL MODULE 5															
F19	30	I-SHIFT															
F20	10	RADIO/CLUSTER BATTERY															
F21	5	CLIMBING ENGINE DIRECT IGNITION															
F22	5	EFRC IGNITION															
F23	10	CLIMATE CONTROL IGNITION															
F24		NOT USED															
F25	20	HEATED SEATS															
F26	25	WINDSHIELD WIPER															
F27	10	INTER AXLE/INTER WHEEL DIFFERENTIAL LOCK															
F28	5	SUPPLEMENTAL RESTRAINT SYSTEM															
F29	15	CAMERA PREP/VIDEO BUILDER IGN-Z															
F30	15	SNOW PLOW LAMPS LH															
F31	10	TOUCH LOCK/HEATED WINDSHIELD (B1-4)															
F32	15	SNOW PLOW LAMPS RH															
F33		NOT USED															
F34	5	POWER TAKE OFF/DUAL POWER TAKE OFF															
F35	10	TRANSMISSION GEAR BOX IGNITION															
F36		NOT USED															
F37		NOT USED															
F38		NOT USED															
F39		NOT USED															
F40		NOT USED															
F41		NOT USED															
F42	20	12V SOCKET COOLER SLEEPER															
F43	10	ROOF SIGN (B1-3)															
F43	30	BODY BUILDER (B1-3)															
F44		NOT USED															
F45	15	ALX SW 3															
F45	30	ALX SW 3 AND 4															
F46	30	ALX SW 3 AND 4															
F47	30	LECM 1 (FB1-FB2-FB7) SLEEPER LIGHTING															
F48	30	LECM 4 (FB3-FB6-FB9-FB10) SLEEPER FUNCTIONS															
F49	25	LECM 3 HVAC FAN															
F50	15	LIGHT CONTROL MODULE 4															
F50	15	LECM 2 (FB5-FB8)															
F51	30	CLIMATE CONTROL/AC BLOWER BATT															
F52	10	LVD SENSE/QUAL/COMM															
F52	15	MOBILE MAX 2															
F53	15	CENTRAL LOCKS BATTERY															
F54	30	ANTILOCK BRAKE SYSTEM 1 (ABS 1)															
F55		NOT USED															
F56		NOT USED															
F57		NOT USED															
F58	5	LCM/LCP IGNITION/CENTRAL LOCKS IGNITION															
F59	5	DUAL/COMM IGN/MOBILE MAX 2															
F60	5	LIVING ENVIRONMENT CONTROL MODULE IGN															
F61	5	ROAD RELAY IGNITION (B1-5)															
F62	15	BACKUP LAMPS															
F63	10	CHASSIS SOLENOIDS															
F64	15	BODY BUILDER IGN-Y															
F65	15	BODY BUILDER IGN-X															
F66	15	IGNITION EXPANSION (B1-6)															
F68	5	SECONDARY INSTRUMENT CLUSTER (B1-6)															
F67	15	WORLD															
F67	5	ECS/ADAPTIVE CRUISE CONTROL															
F68	10	I-SHIFT GEAR SHIFT ECU															
F69	20	I-SHIFT TRANSMISSION ECU															
F70		NOT USED															
F71		NOT USED															
F72		NOT USED															
F73		NOT USED															
F74		NOT USED															
F75		NOT USED															
F76		NOT USED															
F77	20	12V DASH POWER OUTLET															
F78	10	DOVE/DOOR LAMPS															
F79	20	CB POWER STUD															
F80	20	12V SOCKET DRIVER SIDE SLEEPER															
F81	15	AUXILIARY SWITCH 1															
F81	30	AUXILIARY SWITCHES 1 & 2															
F82	20	12V OUTLET OVERHEAD															
F83		NOT USED															
F84		NOT USED															
F85		NOT USED															
F86		NOT USED															
R16		REMOTE THROTTLE INCREMENT															
R17		REMOTE THROTTLE DECREMENT															
R18		NOT USED															
R19		NOT USED															
R20		NOT USED															
R21		NOT USED															
R22		NOT USED															
RELAYS		EXTERNAL RELAYS															
R1		R16	REMOTE THROTTLE INCREMENT														
R2		R17	REMOTE THROTTLE DECREMENT														
R3		R18	NOT USED														
R4		R19	NOT USED														
R5		R20	NOT USED														
R6		R21	NOT USED														
R7		R22	NOT USED														
R8		EXPANSION															
R9		B1-1	F11 SEC INSTR CLUSTER BATT														
R10		B1-2	F12 DIAG ROAD RELAY BATTERY														
R11		B1-3	F43 ROOF SIGN BATTERY														
R12		B1-4	F31 TOUCH LOCK IGNITION/HEATED WINDSHIELD														
R13		B1-5	F61 ROAD RELAY IGNITION														
R14		B1-6	F66 SEC INSTR CLUSTER IGN														
R15																	
ER1		ER1	ROOF SIGN/ALLISON BODY BUILDER N145A1														
ER2		ER2	ALLISON BODY BUILDER N130A1														
ER3		ER3	I-SHIFT														
ER4		ER4	NOT USED														
ER5		ER5	LCM IGNITION														
ER6		ER6	PWR WINDOW DOWN														
ER7		ER7	SNOWPLOW LCM														
ER8		ER8	PWR WINDOW UP														
ER9		ER9	RH POWER MIRROR OUT/ECS PWR SNOW PLOW LH LAMP														
ER9		ER9	RH POWER MIRROR IN/ SNOW PLOW RH LAMP														
WARNING		<table border="1"> <tr> <td>ER9</td> <td>ER10-ER14</td> <td>ER15-ER19/ ER20-ER22</td> <td>ER1-1-ER1-6</td> </tr> <tr> <td>ER8</td> <td rowspan="2">ER42-ER82</td> <td>ER9 ER6 ER3</td> <td rowspan="2">ER1-ER41</td> </tr> <tr> <td>ER7</td> <td>ER8 ER5 ER2</td> </tr> <tr> <td>ER6</td> <td></td> <td>ER7 ER4 ER1</td> <td></td> </tr> </table>		ER9	ER10-ER14	ER15-ER19/ ER20-ER22	ER1-1-ER1-6	ER8	ER42-ER82	ER9 ER6 ER3	ER1-ER41	ER7	ER8 ER5 ER2	ER6		ER7 ER4 ER1	
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ER6		ER7 ER4 ER1															
		VOLVO 82717745															

Figure 4

The above guide is located on the lid of the fuse, relay panel. Locate the appropriate power and ground connections then cross reference to install fuse in correct location.