



Volvo Chassis - Service Bulletin Trucks 900 001 - Remote Start / Stop - Model VAH, VHD (Equipped With An I-Shift Transmission)



> Internal Content

For more information refer to Service Bulletin Trucks - 900 001 Remote Start/Stop - for models VAH and VHD (equipped with an I-Shift transmission). This information can be found in the Trucks Dealer Portal - in eMedia Center Volvo under the Service Tab or click [here](#).



Tags

[k41363387](#)

[volvo](#)

Related links and attachments

No links or attachments available



Feedback

[Give feedback](#)

to help improve the content of this article

Remote Start/Stop
VAH**Introduction**

This information provides design and function, specification and procedure details for remote start and stop for Volvo vehicles.

Note: We have attempted to cover as much information as possible. However, this information does not cover all the unique variations that a vehicle chassis may present. Note that illustrations are typical but may not reflect all the variations of assembly.

All data provided is based on information that was current at time of release. However, **this information is subject to change without notice.**

Please note that no part of this information may be reproduced, stored, or transmitted by any means without the express written permission of Volvo Trucks North America, Inc.

Contents:

- "Remote Start and Stop", page 2`
- "Connector/Mating Part Information", page 3
- "BodyBuilder Module 2016", page 7
- "Parameters", page 6

Remote Start and Stop

A remote start/stop feature has been released for the VAH and VHD models equipped with an I-Shift transmission. This feature must be specified at the time the vehicle ordered. No retrofits are possible. The remote start/stop feature enables the operator to start or stop the vehicle's engine from outside of the cab for the purpose of reduced idling while the vehicle is in a standby mode such as offloading vehicles from a transport trailer.

For the remote start/stop to function the following preconditions must be met:

- The key switch (ignition switch) must be in position II
- The transmission must be in neutral
- The hood must be closed

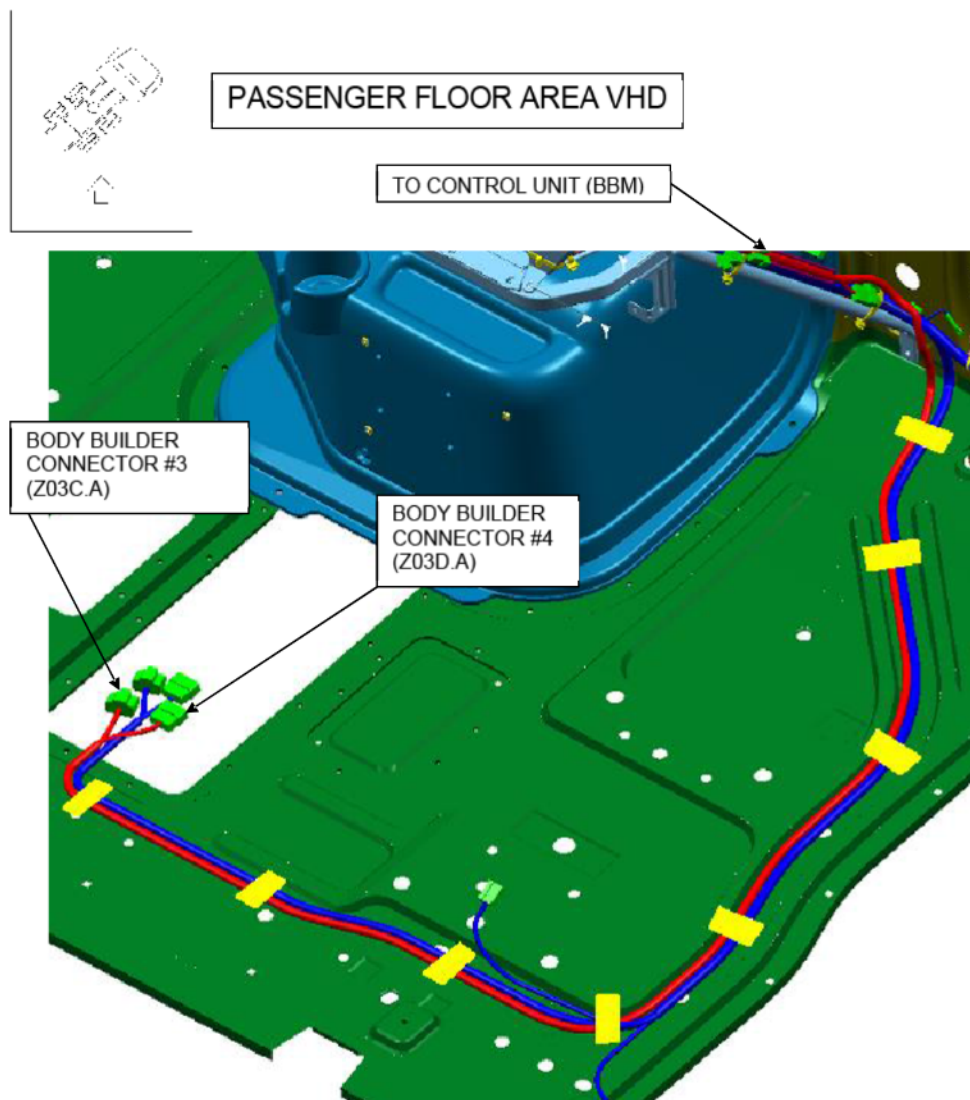
PTO (Power Take-Off)

PTO (Power Take-Off) and idle shutdown settings have two effects on the behavior of the remote start feature.

1. If PTO mode is enabled via the cab dash switch AND idle shutdown is configured to be OFF in PTO mode, then remote start will always work provided the safety conditions are fulfilled.
2. If PTO mode is enabled via the cab dash switch AND idle shutdown is configured to be ON in PTO mode, then an idle timer will begin. If the idle timer runs out, the ECU will deactivate the fuel pump and fuel injectors, shutting the vehicle down. If this occurs, the key must be cycled before the ECU will permit a remote start.

Connector/Mating Part Information

Connector/Item	Supplied on vehicle	Mate required to plug into vehicle
Connector #3	Connector #3 Packard 150–GT series (unsealed), 16–way; Female housing & Terminals Packard 150–GT series (unsealed), 16–way; Male housing & terminals	Packard 150–GT series (unsealed), 16–way; Male housing & terminals
Housing Assembly	Packard PN 15332177 Volvo PN 20481359	Packard PN 15332182 Volvo PN 20481361
Terminals	Packard 12191812 (0.75–1.00 mm ²)	Packard 15304702 (0.75 –1.00 mm ²) Packard 15304701 (0.35 — 0.50 mm ²)
Connector #4	Packard 150–GT series (unsealed), 16–way; Male housing & terminals	Packard 150–GT series (unsealed), 16–way; Female housing & terminals
Housing Assembly	Packard PN 15332182 Volvo PN 20481361	Packard PN 15332177 Volvo PN 20481359
Terminals	Packard 15304702 (0.75 — 1.00 mm ²)	Packard 12191812 (0.75 — 1.00 mm ²) Packard 12191811 (0.35 — 0.50 mm ²)



Connector # 3 Pinouts

Pin	Circuit	Description	Notes
A	X03EA21	Ground return for all BBM-connected inputs.	
B	MB5A1	+V Power for BBM-connected switches	Limit to ~10 switches per +V output
C	MB19A1	+V Power for BBM-connected switches	Limit to ~10 switches per +V output
D	MA18A1	PTO2 Input/Enable	All PTO inputs are Active High; See VECU (ELCE-PK) for PTO1 Input/Enable
E	MA19A1	PTO3 Input/Enable	
F	MA20A1	PTO4 Input/Enable	
G	MA4A1	PTO1 Mode Input	Active High Inputs
H	MB21A1	PTO2 Mode Input	
J	MA3A1	PTO3 Mode Input	
K	MA5A1	PTO4 Mode Input	
L	MB2A1	PTO2 Output	Active Low Outputs; limit to 1 Amp per output. See VECU (ELCE-PK) for PTO1 Input/Enable
M	MB3A1	PTO3 Output	
N	MB4A1	PTO4 Output	
P	MA1A1	Remote PTO engine speed Decrement	Active High Inputs; act on PTO2–4 only
R	MA2A1	Remote PTO engine speed Increment	
S	MA6A1–0.8	Remote Start Input	Active High

Connector # 4 Pinouts

Pin	Circuit	Description	Notes
A	MA6A1	Engine Shutdown #1 Input (See Note 1)	Normally Open (N.O.) Switch to +V
B	MA27A1	Engine Shutdown #2 Input (See Note 1)	Normally Closed (N.C.) Switch to Ground
C	MA7A1	Forced Idle/Throttle Interlock Input	Active High Input
D	MA17A1	Engine Speed Limit Input	Active High Input
E	MA25A1	Engine Torque Limit Input	Active Low Input
F	MA26A1	Road Speed Limit Input	Active Low Input
G	MA24A1	PTO Neutral Interlock Input	Active Low Input
H	MA28A1	PTO Low Split Gear Interlock Input	Active Low Input
J	MA29A1	Split Shaft PTO Input	Active High Input
K	MB12A1	Remote Throttle Enable Input	Active Low Input; See Note 2 and 3
L	MB10A1	Remote Throttle V-Ref (5V) Output	See Note 2, Note 3. Use twisted-trio wiring for these three circuits
M	MB9A1	Remote Throttle Sensor/Signal Input	
N	MB22A1	Remote Throttle Ground Reference	
P	MB28A1	Road Speed Output ("C3" Output)	Active High Output
R	MB16A1	System Warning Output	Active Low Output
S	MB18A1	Databus Triggered Output	Active Low Output

Parameters

BBM parameters	CUK EV ENG STOP FR CHASS SIGN, 1
	CUM ENG STOP DEM FILTER TIME, 1
	CUN ENG STP DEM VEHL SPD COND, 5
	FNN EN EMS CONTR EXT START, 0
	IHM PARK BRAKE FOR REMOTE ENG, 1
	IHN VEHICLE SPEED SHUTDOWN, 0
	IL ENABLE SHUTDOWN INPUT, 0
	ZA PTO OUT 2 MOUNTED, 2
	ZU ENG REMOTE START P BRAKE, 1
	ZV ENG REMOTE START NEUTRAL, 1
ECM Parameters	P1 HUM PTO Switch Override, 1
VECU parameters	AM IDLE SHUTDOWN TIME, 120
	FND LEAVE OVERRIDE OPTION, 2
	FPJ IDS ENABLE PTO1 OVERRIDE, 0
	FPK IDS ENABLE PTO2 OVERRIDE, 1

Wiring Diagram: BM

