VOLVO CAR SERVICE AND PARTS BUSINESS



# **Technical Journal**

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Software Download Guide								
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TJ 20278.6.12 Technical Service United States and Canada								
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3 US 7	′510 Volvo Car USA	2016-09-10	2016-09-13					
FUNC GROUP:	FUNC DESC:							
1700	Service and maintenance	Page <sup>-</sup>	1 of 17					

#### "Right first time in Time"

#### Attachment

File Name	File Size
P1_Customer_Settings.pdf	0.0143 MB
P2_Customer_Settings.pdf	0.0101 MB
P3_Non_Sensus_Customer_Settings.pdf	0.0178 MB
P3_Sensus_Customer_Settings.pdf	0.0173 MB
P5_SPA_Customer_Settings.pdf	0.0163 MB
P5_SPA_SW_Guide.pdf	1.2629 MB

#### **Vehicle Type**

Туре	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
124							2013-9999		-	0-0
134							2013-9999		-	0-0
136							2013-9999		-	0-0
137							2016-9999		-	0-0
138							2016-9999		-	0-0
155							2013-9999		-	0-0
156							2013-9999		-	0-0
157							2015-9999		-	0-0
234							2017-9999		-	0-0
256							2016-9999		-	0-0
275							2013-9999		-	0-0
533							2013-9999		-	0-0
542							2013-9999		-	0-0

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## Technical Journal 20278.6.12



#### **CSC** Customer Symptom Codes

Code	Description
2V	Technician information/Software/Vehicle communication/Not for warranty use

#### **VST** Operation Number

#### DTC Diagnostic Trouble Codes

Rows beginning with \* are modified

Note! If using a printed copy of this Technical Journal, first check for the latest online version.

#### Text

#### **DESCRIPTION:**

This Journal is a guide for performing Software Downloads.

#### **SERVICE:**

See attached guide for relevant P5/SPA Software Download information. P5\_SPA\_SW\_Guide.pdf

See VIDA Software tab for all other vehicles.

The attached checklists can be used for restoring customer settings, where applicable.

Where necessary, please refer to CPI 19-2016 and SMB SMB 00-424 for warranty claiming information when handling repairs which require lengthy diagnostics and/or difficult software downloads.

#### **VEHICLE REPORT:**

N/A

To view TJ attachments continue to next page. This TJ has six attachments.

## P1 - C30, C70, S40, V50 (2004 - )

#### Main Menu

- Radio mode 1 FM (or AM) 2 HD radio
- 3 Clock adjust
- 4 Climate settings
- 5 Car settings

- When in other mode 1 Sirius or CD/AUX/USB/Phone 2 Clock adjust 3 Climate settings
- 4 Car settings

### IMPORTANT NOTE: Not all vehicles will have all of these features as some are optional!!

#### An "X" in a box indicates "on/selected" a "blank" box indicate "off/not selected"

		I		
AM Menu	1 Audio Settings	1 Equalizer front		60 200 1K 3K 12K
		2 Equalizer rear		61 200 1K 3K 12K
		3 Auto volume control		1 Low
				2 Medium 🗌
				3 High
		4 Reset all		
AM Preset stations	Record customer AM radio stat			
Am Treset stations				
	AM 1 Presets			
	1			
	3			
	1			
		4		
	5			
6	6			
	7			
8	3			
(				
		4		
	)			
FM menu	1 Radio text			
Finimenu				
	2 Audio settings	1 Equalizer front		60 200 1K 3K 12K
		2 Equalizer rear		61 200 1K 3K 12K
		3 Auto volume control		1 Low
				2 Medium 🗌
				3 High
		4 Reset all		
FM Preset stations	Record customer FM radio stat	ion propoto		
FINI Fresel Stations				
	FM 1 Presets			FM 2 Presets
	1		1	
	2		2	
	3		3	
	1		4	
		1	- -	
	5	4	5	
6	5		6	
-	7	1	7	
		4	1	
8	3	]	8	
	9	]	9	
	0	1	0	
· · · · · · · · · · · · · · · · · · ·				

Page 1

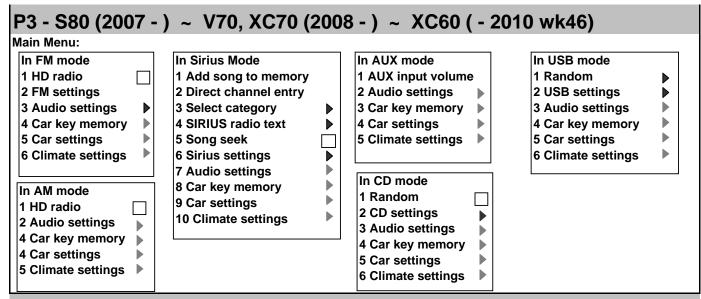
P1 - C30, C70, S	40, V50 (2004 - )		Page 2
CD Menu	1 Random ☐ 2 Disc text ☐ 3 Audio settings ►	<ol> <li>1 Equalizer front</li> <li>2 Equalizer rear</li> <li>3 Auto volume control ►</li> <li>4 Reset all</li> </ol>	60 200 1K 3K 12K 61 200 1K 3K 12K 1 Low 2 Medium 3 High
AUX Menu	1 Aux input volume 2 Audio settings   ▶	Volume bar 1 Equalizer front 2 Equalizer rear 3 Auto volume control 4 Reset all	60 200 1K 3K 12K 61 200 1K 3K 12K 1 Low 2 Medium 3 High
USB Menu	1 Playlist 2 Random ► 3 Track Information 2 Audio settings ►	1 Off ☐ 2 Folder ☐ 3 All ☐ 1 Equalizer front 2 Equalizer rear 3 Auto volume control ► 4 Reset all	60 200 1K 3K 12K 61 200 1K 3K 12K 1 Low 2 Medium 3 High
SIRIUS Menu	<ol> <li>Add song to memory</li> <li>Direct channel</li> <li>Select Category</li> <li>Sirius Radio Text</li> <li>Song seek □</li> <li>Advanced Sirius settings</li> <li>7 Audio settings</li> </ol>	1 Program title       □         2 Artist       □         3 Composer       □         4 Off       □         1 Song memory       2 Skip Options         3 Lock Options       3 Lock Options         4 Sirius ID       1 Equalizer front         2 Equalizer rear       3 Auto volume control         4 Reset all       ●	60 200 1K 3K 12K 61 200 1K 3K 12K 1 Low 2 Medium 3 High
Clock Adjust	Settings clock menu		
Climate settings	<ol> <li>Auto fan adjust</li> <li>P</li> <li>Recirculation timer</li> <li>Reset all</li> </ol>	1 Low 2 Normal 3 High □	

P1 - C30, C70, S	40, V50 (2004 - )		Page 3
Car settings	1 Light Settings	1 Lock confirm light	
		3 Approach light duration	30 🗌 60 🔲 90 🔲
		4 Home Safe light duration 🕨	30 🗌 60 🔲 90 🔲
	2 Lock Settings	1 Doors auto lock  □ 2 Doors unlock  ▶	1 All doors
		Keyless entry	1 All doors       Image: Constraint of the second sec
	3 Auto open all windows Mirror fold on locking (BLIS only)		

## Example of P1 block offsets

The following settings are accomplished with VIDA/Vehicle communication/Node XXX/advanced					
CEM	Value				
Programming of global opening of windows (market dependent)					
Programming of rear window wiper when reversing					
Setting clock deviation					
DIM					
Unit for temperature					
Trip computer unit					
12 or 24 hour display on the clock					
Parking brake warning On/Off					
Audible acknowledgement signal, seat belt reminder On/Off.					
Programming seatbelt reminder in backseat					
Programming of triggering conditions for audible signal, seatbelt reminder					
Instrument lighting at unlocking Activated/Not activated					
ССМ					
Programming the seat temperature					
PSL					
Seat memory on/off					

P2 - S80 (1999 ·	- 2006), S60 (2001 - 2009	) V70, XC70 (2001 - 2007)
AM Preset stations	Record customer AM radio station p AM 1 Presets	resets
	2	
	3	
	5	
	6	
	8	
	9	
	0	
FM Preset stations	Record customer FM radio station p FM 1 Presets	FM 2 Presets
	12	1
	3	3
	4	4
	5	56
	7	7
	8	8
	9	9
	0	0
P2 block offsets		
	are accomplished with VIDA/Vehic	le communication/Node XXX/advanced
CEM		Value
1. Home safe light		
2. Daytime running lamps		
3. Tailgate wiper (5 door n		
4. Time delay, locking the		
5. Warning for low beam p 6.Programming of 3 flash		
	50 YUGII0E	
UEM		
1. Length of time for court		
2. Amount of dimmer for in	nner rear-view mirror.	
DDM		
Programming the remote	control setting (seat memory off/on)	
ССМ		
Afterblow		
Floor and defroster air dis	tribution, residual heat.	
Setting seat heater temp.		
PSM	#/op	
seat and mirror memory o	IT/ON	



IMPORTANT NOTE: Not all vehicles will have all of these features as some are optional!!

#### An "X" in a box indicates "on/selected" a "blank" box indicate "off/not selected"

AM Preset stations	Record customer AM rad AM 1 F	io station presets Presets	
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	0		
FM Preset stations	Record customer FM rad	in station presets	_
i wi i reset stations	FM 1 E	Presets	FM 2 Presets
	1	163613	1
			1
	2		2
	3		3
	4		4
	5		5
	6		6
	7		7
	8		8
	9		9
	0		0
FM settings 🕨	Radio text		
Audio settings 🕨	Sound stage	Front seat	
Ū	ç	Drivers seat	
		Rear seat	
	Equalizer front	61 200 1K 3K 12K	
		60 200 1K 3K 12K	
	Equalizer rear		
	Auto volume control	▶ Off □	
		Low	
		Medium 🗌	
		High 🗌	
	Reset all audio settings		
		•	

P3 - S80 (	(2007 -	) ~ V70, XC70 (2	200	)8-) ~ XC60(-	20	10 wk46) page 2	
Car settings		Door mirror settings	Þ	Fold mirror when locking Auto tilt left mirror Auto tilt right mirror			
		Driver Alert On					
		Collision Warning Settings	•	Collision Warning On Warning Sound Warning Distance		Long  Normal  Short	
		Light settings		Lock confirmation light Unlock confirmation light Turn signal 3-flash Daytime running light Approach light duration		Off □ 30 sec □ 60 sec □	
				Active bending light Home safe light duration	•	90 sec	
		Lock settings		Doors automatic lock Doors unlock		All doors Drivers door, then all	
				Keyless entry		All doors unlock Door by door Doors on same side Both front doors	
		Lane Departure Warning		On @ Start Up			
		Steering force level		Low 🗌 Medium 🗍 High 🗌			
		Parking Camera Settings		Parking assist lines Distance Bars System Activation		Automatic Always On Off	
		5 Unit settings		Temperature unit			
				Time format		12 hours 24 hours	
				Trip car unit ►		US std <i>(US default)</i> UK std Metric system km/l Metric system 1/100 km <i>(Canada default 1/100km)</i>	
				Reset all units			

P3 - S80 (2	007 -	) ~ V70, XC70 (	200	8 - )	~ XC60 ( - 2	2010 wk46)	page 3
Climate settings		Auto fan adjust		Low Normal High			
		Recirculation time Auto rear defroster Seat heat time out Seat heat off @ start Reset climate settings		' iigii			
Sirius radio text	•	Program title Artist Composer Off					
Sirius settings	•	Song memory Skip options Lock option Sirius ID					
CD settings ▶		Track information					

Example of P3 (non-Sensus) block offsets The following settings are accomplished with VIDA/Vehicle communication/Node XXX/advanced

jjjjjjjjjjjj	
"block offsets"	Value (on/off)
Climate Control	
Seat heating.	
Seat ventilation.	
Time setting seat heating	

P3 - Sensus Vehicles S60, XC60 (2010wk46 - )					
"My Car" Menu:					
My S60 1 DSTC 2 City Safety 3 Driver Alert 4 Collision Warning 5 Active Bending Lights					
IMPORTANT NOTE: I	Not all vehicles will hav	ve a	II of these features as	5 SO	me are optional!!
An "X" in a box indic	ates "on/selected" a "k I	olan	lk" box indicate "off/n I	ot s	selected"
Settings	Car settings		Car Key Memory		
	Lock Settings		Auto Door Locking Doors Unlock	•	All  Driver Door then All
			Keyless	•	All Doors Unlock
	Side Mirror Settings		Fold Mirrors (at Lock) Tilt Left Mirror (Reverse) Tilt Right Mirror (Reverse)		
	Light Settings		Door lock Confirm Light Door Unlock Confirm Light		
			Approach Light Duration		off
			Homesafe Light Duration		off 30 Sec 60 Sec 90 Sec
			Trip Indicator Daytime Running Lights Active Bending lights		
	Steering Wheel Force		Low Medium High		

P3 - Sensus Vehicles S60, XC60 (2010wk46 - ) page 2					
	Driver Support Settings	Collision Warning Warning Distance Warning Sound	<ul> <li>□</li> <li>■</li> </ul>	Long Normal Short	
		Lane Departure Warning DSTC City Safety BLIS Distance Alert Driver Alert		Lane Departure Warning Departure Warning Departure Warning Departure Warning Departure Sensitivity Department	
	System Options	Time (Clock Set) Time Format Screensaver		12h 🗌 24h 🗍	
		Language note here Show Help text	e e		
		Temperature Unit		MPG (US)	
	NOTE position of scale ->	Volume Levels		Voice Output Volume Front Part Assist Volume Rear Part Assist Volume Phone Ringing Volume	
Audio settings 🕨					
	Record customer AM radio static AM 1 Presets	on presets			

P3 - Sensus	Veł	nicles S60, XC	60 (20	)10wk46 - )		page 3	
FM Preset stations	1 2 3 4 5 6 7 8 9 0	Record customer FM r FM	adio statio 1 Presets		1 2 3 4 5 6 7 8 9 0		FM 2 Presets
		Sound stage Equalizer front Equalizer rear Volume Compensation		Front seat Drivers seat Rear seat 61 200 1K 3K 12K 60 200 1K 3K 12K Off Low Medium High			
Climate Settings		Automatic Blower Adju Recirculation Timer Automatic Rear Defros Interior Air Quality Sys	st 🗌	Normal High Low			
Favorites		Radio		AM Favorites FM Favorites Sirius Favorites		No Function Scan Show Presets Equalizer No Function Scan Show Presets Equalizer No Function Scan Show Add Songs Song Seek Equalizer	

P3 - Sensus Ver	nicles S60,	XC60 (20	)10wk46 - )		page 4	
	Media	•	Audio CD Favorites	•	No Function Random Scan Equalizer	
			Data CD/DVD Favorite	es 🕨	No Function Random Repeat Folder Change Subtitle Change Audio Track Scan Equalizer	
			Video DVD Favorites	•	No Function Play/Pause/Continue Subtitles Audio Tracks Equalizer	
			iPod Favorites	•	No Function Random Scan Equalizer	
			USB Favorites		No Function Random Repeat Folder Change Subtitle Change Audio Track Scan Equalizer	
			Bluetooth Favorites	•	No Function Random Scan Equalizer	
			Aux Favorites		No Function Equalizer	
	Nav	•	No Function Repeat Voice Guidanc Pause/Resume Guidar Next Destination Current Position			

### XC90

#### Main Menu: In FM mode In Sirius Mode In AUX mode In USB mode 1 AUX input volume 1 Radio text 1 Add song 1 Playlist 2 Audio settings 2 HD radio 2 Direct ch entry 2 Random ▶ 3 Audio settings ▶ 3 Radio text 3 Track info 5 Song seek 4 Audio Settings ▶ Ò 6 Adv. settings 7 Audio settings In AM mode 1 HD radio 2 Audio settings ►

#### IMPORTANT NOTE: Not all vehicles will have all of these features as some are optional!!

#### An "X" in a box indicates "on/selected" a "blank" box indicate "off/not selected"

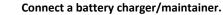
AM Menu	1 Audio Settings	<ol> <li>1 Equalizer front</li> <li>2 Equalizer rear</li> <li>3 Auto volume control</li> <li>▲</li> <li>4 Reset all</li> </ol>	60 200 1K 3K 12K 61 200 1K 3K 12K 1 Low 2 Medium 3 High
AM Preset stations	Record customer AM radio stat AM 1 Presets	ion presets	
FM menu	1 Radio text 2 Audio settings	1 Equalizer front 2 Equalizer rear 3 Auto volume control ▲ Reset all	60 200 1K 3K 12K 61 200 1K 3K 12K 1 Low 2 Medium 3 High
FM Preset stations	Record customer FM radio stat FM 1 Presets		FM 2 Presets 1 2 3 4 5 6 7 8 9 0

XC90			page 2
CD settings ▶ 1 Random 2 Disc text			
3 Audio settings ►	1. CD Surround		1 Pro Logic II 2 3-channel 3 Off
	2. Front Equalizer 3 Rear Equalizer 4 Reset all		60 200 1K 3K 12K 60 200 1K 3K 12K
Sirius settings			
1 Add song 2 Direct ch entry			
3 Radio text	1 Program title		
	2 Artist		
	3 Composer		
4 Song seek			
5 Adv. Settings	1 Song memory 2 Skip options		(lists past songs played) 1 Ch ship list
			2 Unskip all ch
			3 Temp unskip all
	3 Lock options		1 Ch lock list
			2 Unlock all 3 Temp unlock all
			4 Change code
	4 Sirius ID		
6 Audio settings	1 Sirius surround		1 Pro Logic II
			3 Off
	2 Front Equalizer		60 200 1K 3K 12K
	3 Rear Equalizer 4 Reset all		60 200 1K 3K 12K
AUX settings			
-	(sliding scale from mid w	ith	
1 AUX input volume 2 Audio settings	adjust to high or low) 1 AUX Surround	•	1 Dolby Brol ogia II
2 Audio settings			1 Dolby ProLogic II 2 3 channel 3 Off
	2 Front Equalizer		60 200 1K 3K 12K
	3 Rear Equalizer 4 Reset all		60 200 1K 3K 12K
USB Settings			
1 Playlist	4.0#	_	
2 Random	1 Off 2 Folder	님	
	3 All		
3 Track info			
4 Audio settings	1 USB Surround		1 Dolby ProLogic II 2 3 channel 2 3 Off 2 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	2 Front Equalizer		60 200 1K 3K 12K
	3 Rear Equalizer 4 Reset all		60 200 1K 3K 12K
Automatic Locking	4 NESEL dII	(cha	nged by customer using "READ" button)
Follow me home light			(changed by retailer with software)
	30 seconds		
	60 seconds 90 seconds		

## XC90 block offsets

The following settings are accomplished with VIDA/Vehicle communication/Node XXX/advanced				
СЕМ	Value			
1. Home safe light				
2. Daytime running lamps				
3. Tailgate wiper (5 door models)				
4. Time delay, locking the fuel tank filler cover				
5. Warning for low beam position (Bi-Xenon).				
6.Programming of 3 flash sequence				
UEM				
1. Length of time for courtesy lighting				
2. Amount of dimmer for inner rear-view mirror.				
DDM				
Programming the remote control setting (seat memory off/on)				
ССМ				
Afterblow				
Floor and defroster air distribution, residual heat.				
Setting seat heater temp.				
PSM				
seat and mirror memory off/on				

#### P5 / SPA Software Download Guide

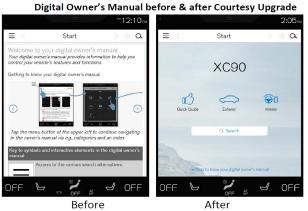


Check that the battery State Of Charge (SoC) is at least 70%.

#### VIDA can not monitor the battery voltage during a download because the control units are in programming mode.

Monitor the battery voltage with a volt meter during the download.

Car	Software Product Name	Software Product Number	Description
	Courtesy Upgrade 1		For XC90 prior to structure week 2015w46. Must be performed according to TJ 30991 before downloading <b>any</b> other software including PDS. This only needs to be performed once. Check the Digital Owners Manual to see if it has already been performed (picture below). Courtesy Upgrade Step 2 software is no longer necessary, as it has the same content as the Total Upgrade.
XC90	PDS		Perform at New Car Customer Delivery.
AC90	Total Upgrade	31483292 - Identical Content	Perform at every service visit during the warranty period.
	Service 2.0	31438124	Perform at every service visit after the warranty period
	Slam Lock removal	31472233	XC90 vehicles built before structure week 201536 have a function called 'Slam Lock' which allows the driver to lock the vehicle by opening the driver's door, pressing the lock button on the interior door panel, then closing the door. This function may be useful is some situations, for example, when the driver is leaving the vehicle with their hands full and wishes to close and lock the vehicle with their foot. The function however allows the possibility to accidentally lock the key(s) in the vehicle. When the Slam Lock function is removed using the software below, pressing the lock button with the door open will not lock the vehicle.
	PDS	31654152	Perform at New Car Customer Delivery.
S90	Total Upgrade	31654144 - Identical Content	Perform at every service visit during the warranty period.
	Service 2.0	31654143	Perform at every service visit after the warranty period.



After diagnosing any customer symptoms and checking for matching Technical Journals, ensure that all systems in the car have latest Software status.

1. Perform PDS, Total Upgrade or Serv ce2.0.

Perform any remaining Upgrades visible in VIDA Upgrade list.
 Check vehicle functionality, perform any missing Calibrations (Sunroof, ASDM, SUM,)

4. Install or Update Map & Voice files according to SPJ 29181 if applicable.

5. Install and/or Update Apps in the Download Center.

Note 1: These DTCs may be present after the Upgrade and can be ignored: - IHU-U130B87 (LIN BUS #19) - CEM-U133346, FMDM

Note 2: Some vehicle functions, such as the climate system, may not resume normal operation until the car has been locked for 15 minutes.



