Pass Thru Assistant

Capabilities & Cost

Disclaimer: When using **Pass Thru Assistant**, completely disconnect any aftermarket accessories including radios, alarms, sound systems, starters, etc. from the vehicle communication bus; failure to do so may cause programming failures and void our service guarantee. Please note that this program does not support programming used or salvage modules for most makes. Be sure to plug in **PTA** kit and turn tablet on 30 minutes prior to **PTA** session to ensure any available software updates are completed.

Repair Guidance Technical Support **Page 3**

Remote Programming Capabilities (by OEM)

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$ 50.00 VIN-Issue for 2 weeks of Support
** OE Application fees may apply if used

Repair Guidance

Live Technical Support

Repair Guidance Technical Support:

Brand Centric Knowledge & Experience when you need it

- Improve diagnostic efficiency and increase shop profitability
- Shorten the job time to customer
- Keep your shop's hands on that vehicle and reduce outsourcing
- Accept more jobs with confidence

Repair Guidance Technicians:

- Factory Trained
- Dealer Experienced
- Brand Centric
- Expert in their brand subsystems
- Have access to OEM applications

Audi / Volkswagen
BMW / Mini
Buick / Cadillac / Chevrolet / GMC/ Hummer / Oldsmobile / Pontiac / Saturn
Chrysler / Jeep / Dodge / RAM / Plymouth
Fiat / Alfa Romeo
Ford / Lincoln / Mercury
Honda / Acura
Hyundai / Kia / Genesis
Jaguar / Land Rover
Mazda
Mercedes / Smart / Sprinter
Nissan / Infinity
Porsche
Subaru
Tesla
Toyota / Lexus / Scion
Volvo

Repair Guidance High Voltage Vehicle Support Note:

- A hybrid training certificate (level 1 or 2) on file for the technician working on the car is required.
- On-line training can be obtained at ASE XEV courses (**https://www.ase.com/ev**)

PTA Programming Capabilities & Cost

Programming $ 199.00 / ea

Cal Check * $ 50.00 / ea

* Service to ID current software level and update availability

** Cal Check may be applied to Programming fee for same module

BMW

- 2002 and newer, all Emission module (ECM/TCM/PCM) updating & replacement
- 2002 and newer, all Body and Chassis module updating & replacement (Exceptions Below)
- J2534 module programming, updating, coding
- Module calibration check

BMW PTA Special Cable needs by Chassis

BMW Series	7-8 Jumper Adapter required
3er	E36, E46
5er	E34, E39
7er	E32, E38
X	E83-X3, E53-X5
Mini	R50, R52 & R53
Z	E36-Z3, E85-Z4, E86-Z4 & E52-Z8

**** DoIP Cable required for F25 Chassis (only)**

DoIP Module may require the following cable:

Snap-on P/N: EAX0068L42A DoIP Kit

Opus P/N: BMW-CBL-Kit

Chassis	Notes
F39	F39 no module programming or coding
G05, G07, G14, G15, G20	Can code some (call to confirm)
All	All infotainment ECUs(SAT NAV / RADIO / AMPLIFIER / CD / DVD) Coding Only (Replacement Needs Coding). Module updating not possible. Replacement possible with stipulations. ***NOTE After a hard drive-base head unit (CIC, NBT, etc.) replacement, an enabling code for the navigation system is needed along with the navigation software and we cannot provide it. DVD-Based Head units (CCC) need a voice-enabling code imported after replacement of the head unit, we cannot provide it.
All	All Bluetooth/Telephone ECUs. Coding Only (Replacement Needs Coding. No module updating.)
All	CAS(Car Access System) Coding Only (Replacement Needs Coding. No module updating.)
All	JBE(Junction Box Electronics) Coding Only (Replacement Needs Coding. No module updating.)
All	All Engine ECUs (MEV1722/MEVD1726). Updating only. No replacements
E46, E83	MS43, MS45.1 Programming risk per TSB SIB 12 24 06. *** NOTE EGS and DSC should be disconnected before programming is performed.
E6x Non Motorsport Cars	Sequential Manual Gearbox Module. No module updating. No Module Coding. No replacements.
E83, E85, E86, E9x	MSV80 DME(Digital Motor Electronics) No updating. (Replacement requires programming)
All	Instrument Cluster Coding only (Replacement requires only Coding). ** Some G Chassis require cluster programming.
All	FEM(Front Electronic Module) Coding only (no programming).
All	BDC(Body Domin Controller) No programming or coding
All	Hybrid or Electric No Support

- Some vehicles will need to be scanned using the OEM software to determine whether an update is available or not. This process may take 15 - 20 minutes prior to the programming service.
- Some vehicles may take up to four (4) hours to complete programming.

Module/System Examples:

Digital Motor Electronics **Instrument Cluster Module** **Car Access System**

Junction Box Electronics **Sequential Manual Gearbox** **Front Electronic Module**

Footwell Module

Programming $ 218.00 / ea FCA Prog Charge included

*Cal Check $ 80.00 / ea FCA Prog Charge included
** Cal Check may be applied to Programming fee for same module
* Service to ID current software level and update availability

Chrysler/Jeep/Dodge/RAM/Plymouth

- **Hard-wired internet connection is REQUIRED.**
  - **If you need an Ethernet cable and a USB to Ethernet adapter, have your Serial Number available and contact Snap-on Diagnostics @ 833-4SNAPON (833-476-2766)**
- **All Models: Replacement modules must be new or properly re-manufactured.**
  - 1996 – 2003: ECM/PCM/TCM updating only. No module replacements.
  - 2008 and newer: All module updates and replacements.
- **Pacifica/Viper**
  - 1996 – 2006: ECM/PCM/TCM updating only. No module replacements.
  - 2007 and newer: All module updates and replacements.
- **Caravan/Voyager/Town & Country/Liberty/PT Cruiser**
  - 1996 – 2007: ECM/PCM/TCM updating only. No module replacements.
  - 2008 and newer: All module updates and replacements.
- **2500/3500/4500/5500**
  - 1996 – 2009: ECM/PCM/TCM updating only. No module replacements.
  - NO support for 5.9L Cummins equipped vehicles.
- **Sprinter Van:** See Mercedes.
- **Crossfire:** See Mercedes.

Module/System Examples:

Powertrain Control Module	**Occupant Restraint Control Module**	**Wireless Control Module**
Transmission Control Module	**Wireless Ignition Node**	**Radio Frequency Hub**

Security-Related Notes:

- Stand-alone key programming is available for 2006 - 2013 MY vehicles.
  - Key programming for security module replacement for 2014 and newer will require NASTF credentials
  - 2 keys may be required for security related module programming.
- **Security Pin**: Many 2014 vehicles will require a Chrysler (FCA) security PIN.
  - Security PINs can be obtained from a FCA Dealer (charges may apply)

    Or we can obtain them for you ($30 charge).
- **NASTF LSID / VSP credentials** may be required to perform security related services
  - If you do not have NASTF LSID / VSP credentials, you may use NASTF Air program. NASTF Air program will cost $45, payable to NASTF.
  - If you are interested in obtaining your NASTF LSID / VSP credentials, read **THIS GUIDE**.

Programming $ 174.00 / ea
Cal Check * $ 75.00 / ea
* Service to ID current software level and update availability
** Cal Check may be applied to Programming fee for same module

Ford Motor Company

- 1996 and newer module updating & replacement programming
- Vehicles 2003 and older: The old module must be installed and communicating at start of appointment
- Diesel FICM module replacement and programming
- No support for Low Cab Forward (LCF) vehicles.
- Used Modules: We can attempt to program used modules. The module programming fee will apply, whether or not the programming attempt is successful.
- Hybrid Transmission module replacement may have special procedures, please call

Module/System Examples:

Powertrain Control Module	**Fuel Injection Control Module**	**Instrument Cluster**
Transmission Control Module	**Restraint Control Module**	**Passive Anti Theft System**

Security-Related Notes:

- Stand-alone key programming service is available for 2013 and earlier vehicles
  - No "stand alone" key programming is available for 2014 and newer
- Key programming for security module replacement for 2014 and newer will require NASTF credentials
  - PATS related modules starting in MY 2013 require coded security access instead of the ten (10) minute timed security access.
- 2 keys may be required for security related module programming.
- NASTF LSID / VSP credentials may be required to perform security related services
  - If you do not have NASTF LSID / VSP credentials, you may use NASTF Air program. NASTF Air program will cost $45, payable to NASTF.
  - If you are interested in obtaining your NASTF LSID / VSP credentials, read **THIS GUIDE**.

Programming $ 174.00 / ea
Cal Check * $ 75.00 / ea

* Service to ID current software level and update availability
** Cal Check may be applied to Programming fee for same module

General Motors

- **2001 and newer (some exceptions) updating & replacement**
- **2001 and newer updating & security functions that are supported by the GM Service Programming System**
- **Global A & B platform vehicles do not support used or salvage modules**
- **Used Modules: We can attempt to program used modules. The module programming fee will apply, whether or not the programming attempt is successful.**

Module/System Examples:

Powertrain Control Module	Body Control Module	Human Machine Interface Module
Transmission Control Module	Trailer Brake Control Module	Theft Deterrent Module

- **J2534 module programming, key programming and associated configuration, setup and security functions.**
  - **Note for programming *used* modules: The module programming fee will apply, whether or not the programming attempt is successful.**

- Module configuration, setup, and security functions for all modules supported by GM Tech2Win
- Module configuration, setup, and security functions for all modules supported by GM GDS2

Security-Related Notes:

- Stand Alone Key programming for security module replacement for 2001 - 2024 vehilcle
  - 2 keys may be required for security related module programming.
- NASTF LSID / VSP credentials may be required to perform security related services
  - If you do not have NASTF LSID / VSP credentials, you may use NASTF Air program. NASTF Air program will cost $45, payable to NASTF.
  - If you are interested in obtaining your NASTF LSID / VSP credentials, read **THIS GUIDE**.

Programming $ 194.00 / ea (includes "programming fee")

Cal Check * $ 95.00 / ea

* Service to ID current software level and update availability

** Cal Check may be applied to Programming fee for same module

Honda/Acura

- 2007 and newer existing module updating only
- An ✖ in the table below denotes the module is reprogrammable if an update is available:

Honda	2001	2002	2003	2004	2005	2006	2007 and Newer
Accord			✖	✖	✖	✖	All Models All Modules
Accord Hybrid					✖	✖	
Civic	✖	✖	✖	✖	✖	✖	
Civic Hybrid			✖	✖	✖	✖	
CR-V		✖	✖	✖	✖	✖	
Element			✖	✖	✖	✖	
Fit							
Insight	✖	✖	✖	✖	✖	✖	
Odyssey					✖	✖	
Pilot					✖	✖	
Ridgeline							
S2000						✖	

Acura	2001	2002	2003	2004	2005	2006	2007 and Newer
MDX			✖	✖	✖	✖	All Models All Modules
RDX							
RL					✖	✖	
RSX		✖	✖	✖	✖	✖	
TL				✖	✖	✖	
TSX				✖	✖	✖	

Module/System Examples:

Programable Module Fuel Injection (PGM-FI)

Automatic Transmission

Supplemental Restraint System

Anti-Lock Brake System

Programming $ 149.00 / ea
Cal Check * $ 50.00 / ea

* Service to ID current software level and update availability
** Cal Check may be applied to Programming fee for same module

Hyundai

- **2005 and Newer: ECM/TCM Updates Only**
  - TCM: Call for availability
- **Module calibration check is also available.**

Hyundai Models Supported by PTA

Model	Year
Accent	2005 - 2023
Azera	2006 – 2017
Elantra	2005 – 2024
Entourage	2007 – 2009
Equus	2011 – 2016
Sante Fe	2005 – 2024
Sonata	2005 – 2024
Tiburon	2005 – 2008
Tuscon	2006 – 2024
Veloster	2012 – 2022
Verecruz	2007 – 2012
XG350	2005

Module/System Examples:

Powertrain Control Module

Transmission Control Module (call for availablity)

Programming $ 149.00 / ea
Cal Check * $ 50.00 / ea
* Service to ID current software level and update availability
** Cal Check may be applied to Programming fee for same module

Kia

- **2005 and Newer: ECM/TCM Updates Only**
  - **TCM Call for availibility**
- **Module calibration check is also available.**

Kia Models Supported by PTA

Model	Year
Amanti	2007 – 2009
Borrego	2009
Cadenza	2014 – 2021
Forte	2010 – 2024
Forte5	2014 – 2024
K900	2015 – 2021
Niro	2017 – 2023
Optima	2007 – 2024
Rio	2006 - 2023
Rondo	2007 - 2010
Sedona	2005 – 2012
	2014 – 2024
Sorento	2007 – 2024
Soul	2010 – 2024
Spectra	2005 – 2009
Sportage	2007 – 2024
Stinger	2024

Module/System Examples:

Transmission Control Module (call for availability)

Powertrain Control Module

Programming $ 149.00 / ea
Cal Check * $ 50.00 / ea
* Service to ID current software level and update availability
** Cal Check may be applied to Programming fee for same module

Mazda Motor Corporation

- 1997 and newer module updating & replacement and associated configuration as supported by:

Mazda 124:	For 2017 and earlier vehicles (emissions modules only)
MSDFSA 124:	For 2018 and newer models Mazda3, Mazda6, MX5, CX-3, CX-5 & CX-9
MDARS:	For 2019+ Mazda3 and 2020+ CX-3

- Module calibration check service is available
- Key programming is available
- Used Modules: We can attempt to program used modules. The module programming fee will apply, whether or not the programming attempt is successful.
- Vehicles 2006 and older: The old module must be installed and communicating at start of appointment

Module/System Examples:

Powertrain Control Module	**Fuel Injection Control Module**	**Instrument Cluster**
Transmission Control Module	**Restraint Control Module**	**Passive Anti Theft System**

Security-Related Notes:

- PATS related modules starting in MY 2013 require coded (In/Out Code) security access.
  - 2 keys may be required for security related module programming.

Programming $ 206.00 / ea
Cal Check * $ 50.00 / ea
* Service to ID current software level and update availability
** Cal Check may be applied to Programming fee for same module

Nissan/Infiniti

MY 2018+: All module programming, configuring & re-programming
- exceptions:
  Direct Adapted Steering modules
  Titan diesel power-train modules

Updated TCM Support!
- **RE0F08B (JF009E)** CVT1 module updating and replacement
- **RE0F10A (JF011E)** CVT2 module updating and replacement
- **RE0F10B (JF011E)** CVT2 **(Turbo)** module updating and replacement
- **RE0F09B (JF010E)** CVT3 module updating and replacement
- **RE0F11A (JF015E)** CVT7 module updating and replacement
- **RE0F10 (JF011)** CVT8 module updating and replacement

- 2004 and newer powertrain **(ECM TCM)** module updating
- 2005 and newer powertrain **(ECM/TCM)** module replacement
- 2005 and newer rear-wheel drive **(RWD)** valve body programming
- Nissan Valve Body/Transmission Programming

Module/System Examples:

Engine Control Module **Transmission Module** **ABS Module (Replacement)** **Airbag module PSCM**

Notes

- Nissan Valve Body/Transmission Programming:
  - Due to the time required for these services, scheduling this service must be done prior to 3:30pm EST.
  - **Call to schedule earlier in the day to ensure same-day service!**

Programming $ 174.00 / ea
Cal Check * $ 75.00 / ea

* Service to ID current software level and update availability
** Cal Check may be applied to Programming fee for same module

Toyota/Lexus/Scion

2001 and newer

- New module programming. Used and re-manufactured modules not permitted at this time
- Existing module updates

Module/System Examples:

Engine Control Module	Electronic Transmission Module
Traction Control Module	Main Body Control Module

- J2534 module updating, programming & RWD valve body is available.
- Module calibration check is also available.

Programming Call for quote (varies by module)

Cal Check * (varies by module)

Volvo

- 2004 and newer vehicle module programming

* Service to ID current software level and update availability

Example module types:

Powertrain Control Module
Body Control Module
Human Machine Interface Module
Transmission Control Module
Trailer Brake Control Module
Theft Deterrent Module

Security Notes:

- J2534 module programming, key programming and associated configuration, setup and security function service is available.
  - **Programming vehicle module programming fee will apply, whether or not the programming attempt is successful.**
- Calibration files charged extra: **Most Module & Key programing s/w is a separate charge.**

Capabilities by Year - Model - Module:

Volvo Model	Year	Requirements
C30	2007	Note 4
C30	2008 - 2013	Note 1
C70	2004 - 2007	None
C70	2008 - 2013	Note 1
S40	2004 - 2007	None
S40	2008 - 2011	Note 1
S60	2005 - 2007	None
S60	2008 - 2018	Note 1
S60	2019 - 2022	Note 2
S60 R	2007	None
S80	2007	None
S80	2008 - 2016	Note 1
V40	2004	None
V50	2005 - 2007	None
V50	2008 - 2012	Note 1
V70	2007	None
V70	2008 - 2016	Note 1
V70 R	2007	None
XC40	2016, 2020 - 2022	Note 2
XC40	2017 - 2019	Note 3
XC40 Electric	2021	Note 2
XC60	2008 - 2018	Note 1
XC60	2019 - 2022	Note 2
XC70	2005 - 2007	None
XC70	2008 - 2018	Note 1
XC90	2005 - 2007	None
XC90	2008 - 2014	Note 1
XC90	2016 - 2022	Note 2

For modules types and their acronym, please see the following page.

The following Notes may require the use of the following adapters:

Note 1: Volvo P/N: 95133060

Note 2: Snap-on P/N: EAX0068L42A DoIP Kit

Note 1	If the module is an ICM/IHU then the part number #9513060 is needed.
Note 2	SPA Platform Requires DOIP Cable/RAP/DriveCrash/CD4 Euro Cable for DrivePro. No Part USB drive needed
Note 3	Non-SPA but is DOIP Requires DOIP Cable. No Part USB drive needed
Note 4	Non-DOIP, Does Not require USB flash Do not need DOIP.

Volvo

- 2004 and newer vehicle module programming

Module Types and their acronyms:

Actual Name	Module
Audio Module	AUD
Accessory USB Unit	AUU
Brake Control Module	BCM
Bluetooth Phone Module	BPM
Climate Control Module	CCM
Driver's Door Module	DDM
Differential Control Module	DEM
Driver's Information Module (cluster)	DIM
Engine Control Module	ECM
Electrical Throttle Module	ETM
High Level Display Front	HLDF
Integrated Audio Module	IAM
Infotainment Control Module	ICM/IHU
Multimedia Module	MMM
Park Assistance Module	PAM
Park Brake Module	PBM
Passenger Door Module	PDM
Power Operated Tailgate Module	POT
Power Steering Control Module	PSCM
Power Seat Module	PSM
Remote Digital Audio Receiver	RDAR
Steering Angle Sensor Module	SAS
Steering Column Lock	SCL
Steering Wheel Module	SWM
Starter Control Module	SCU
Supplemental Restraint System Module	SRS
Subwoofer Module	SUB
Transmission Control Module	TCM
Closing Velocity Module	CVM
Headlamp Control Module	HCM
Trailer Module	TRM
Park Assistance Camera	PAC
Keyless Vehicle Module	KVM
Upper Electronic Module	UEM
Forward Sensing Module	FSM
Rear Electronic Module	REM
Suspension Module	SUM

Volkswagen & Audi **NEW** Module Replacement Service: $ 199.00

- **Module replacement service, generally for MY 2010.5 and newer**
  - Most module installation requires "coding", not programming
  - We can code, but cannot perform software update (Please call for questions)
- **Services will require an Ethernet connection to your router**
  - Service is internet latency dependent
- **Used instrument cluster installation:** No mileage correction

- **Diesel Vehicles:** We cannot perform SCR lockout/Resets through the PTA Kit
- **VW Routan Vehicles:** Are manufactured by FCA, please note this at appointment time.
- **Security Access:**
  - If you do not have NASTF LSID / VSP credentials, you may use NASTF Air program.
    - NASTF Air program will cost $45, payable to NASTF.
    - If you are interested in obtaining your NASTF LSID / VSP credentials, read **THIS GUIDE**.
  - Many modules are "Component Protected" requiring a NASTF Assisted Immobilizer reprogramming.
    - Reprogramming form needs to be submitted prior to programming service.

**** Check with the VAG team for specific questions about which modules are Component Protected ****

VW & Audi Compont Protected Modules	
A/C Heating Electronics (08)	Left Seat Belt Tensioner (8F)
ABS Module	Media Player Position 1 (0E)
Access/Start Authorization Module (05)	Media Player Position 2 (1E)
Airbag Module (15)	Media Player Position 3 (2E)
Auxiliary Heating (18)	Navigation (37)
Central Comfort Module (46)	Night Vision (84)
Central Electric/Body Control Module (09)	Radio (56)
Diagnostic Interface (19)	Right Seat Belt Tensioner (90)
Display Control Head (07)	Seat Adjustment, Drivers Side (36)
Distance Regulation (13)	Seat Adjustment, Passenger Side (06)
Distance Regulation 2 (8B)	Seat Adjustment, Rear Drivers Side (48)
Front Assist Camera (A5)	Seat Adjustment, Rear Passenger Side (5B)
Information Electronics (5F)	Sound System (47)
Information Electronics 2 (7F)	TV Tuner (57)
Instrument Cluster (17)	Voice Control (67)
Lane Change Assist (3C)	

Volkswagen & Audi **NEW** Module Replacement Service: $ 199.00

AUDI VEHICLES
Audi A3 (2010+) No Adblue Reset
Audi A4 (2010+)
Audi A5 (2010+)
Audi A6 (2009+) No Adblue Reset
Audi A7 (2013+)
Audi A8 (2011+) No Adblue Reset
Audi Q3 (2014+)
Audi Q5 (2009+) No Adblue Reset
Audi Q7 (2009+) No Tow Hitch Retrofit, No Parking Brake Basic Settings, No Adblue Reset
Audi Q8 (2019+) No Tow Hitch Retrofit
Audi R8 (2008+)
Audi TT (2010+)
Audi e-tron (2021+)
Audi Q4 e-tron (2022+)
Audi Q6 e-tron (2023 +)
Audi Q8 e-tron (2020+) No Tow Hitch Retrofits

VW Vehicles
Atlas (2018+)
Atlas Cross Sport (2020+)
Beetle (2012+) No Steering Racks
CC (2011+) No Electronic Steering Locks, No Steering Racks
EOS (2011+) No Steering Racks
Golf (2011+) No Steering Racks
ID.4 (2021+)
Jetta (2011+) No Steering Racks
Passat (2011+) No Electronic Steering Locks, No Steering Racks, No Adblue Reset
Taos (2020+)
Tiguan (2009+) No Steering Racks for 2009-2017
Touareg (2010+) No Adblue Reset, No Parking Brake Basic Settings, No Tow Hitch Retrofits