



# BMC01 Drive Mode Adapter for Smart Box

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**XFORCE RECOMMENDS AN AUTHORISED PROFESSIONAL TO INSTALL ALL PRODUCTS**

**WARNING:** When working on any vehicle exercise extreme caution. Please allow the vehicles exhaust system to be cool enough to touch before removal. Failing to do so may result in severe burns. If working without a hoist refer to the vehicles manual to check correct lifting specifications. Always wear safety glasses, protective gloves and ensure your working in a safe area. Serious injury or death can occur if the correct safety measures are not followed.

**Attention:** Please read the instructions carefully. XFORCE will only warrant manufacturing faults. This does not extend to damage or breakage due to incorrect fitment.

## Whats included in BMC01

1. BMC01 Drive Mode Adapter Cable
2. Single A5 page on details to access BMC01 Installation Guide.



# How to install BMC01 Drive Mode Adapter

If you haven't not already installed your VAREX Smartbox, please install your VAREX Smartbox first

<https://www.xforce.com.au/guides/varexsmartboxinstall.pdf>

## Step 1:

Locate the OEM exhaust actuator wiring connector, generally found in-between the rear exhaust exit and exhaust tip area

Once factory wiring plug is located, confirm the connector is clean from any dirt or debris.

Plug in the BMC01 Drive Mode Adapter cable (male) into the vehicle's OEM 3 pin connector (female)

Secure the connectors and/or wiring to the body of the car and away from hot exhaust or other hazard(s)



# How to install BMC01 Drive Mode Adapter

## Step 2:

Locate a way to run the BMC01 Drive Mode Adapter cable into the cabin of the vehicle via pre-existing routes.



*If your vehicle does not have any suitable pre-existing methods to route your BMC01 cable into the cabin of the vehicle, make sure when you run the wiring that it's via rubber grommet(s) to protect the vehicle and the new wiring.*

Once BMC01 cable is plugged into the factory 3pin plug and the new wiring is inside the cabin, proceed to Step 3.

# How to install BMC01 Drive Mode Adapter

## Step 3:

Run the BMC01 cable inside to your VAREX Smartbox.

Connect the BMC01 cable to “Keyfob” port on your VAREX Smartbox. Now your BMC01 should be installed

Proceed to Step 4.





# How to setup BMC01 Drive Mode Adapter

## Step 4:

Now its time to configure your VAREX Smartbox for Drive Mode.

Access your XFORCE App in your Apple iOS or Android device.

*The instructions are shown on an iOS but should be similar on a Android device*



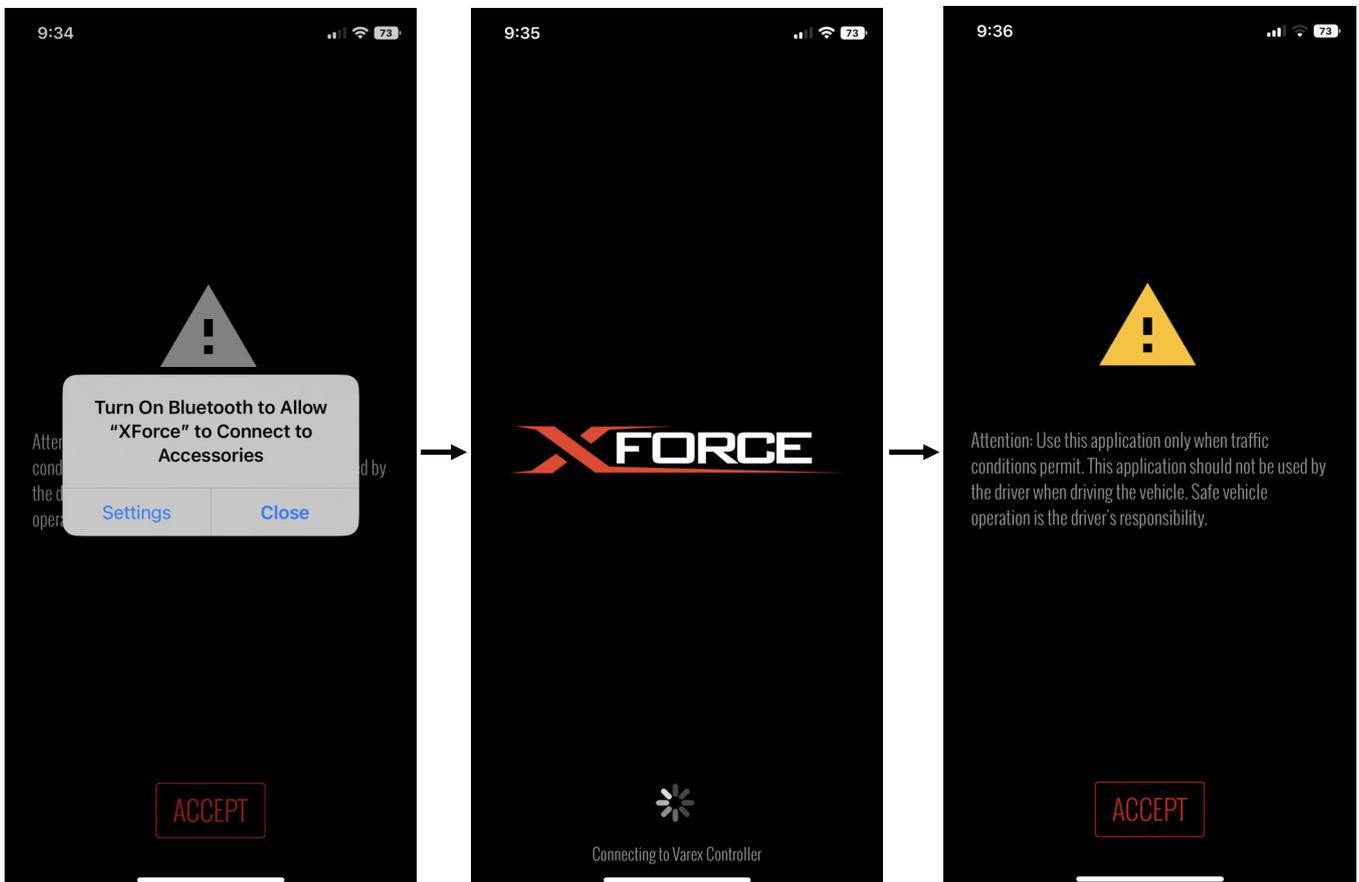


# How to setup BMC01 Drive Mode Adapter

## Step 5:

Follow the screenshots provided

1. Turn on Bluetooth on your device (*skip if already turned on*)
2. Access the XForce App
3. Tap Accept

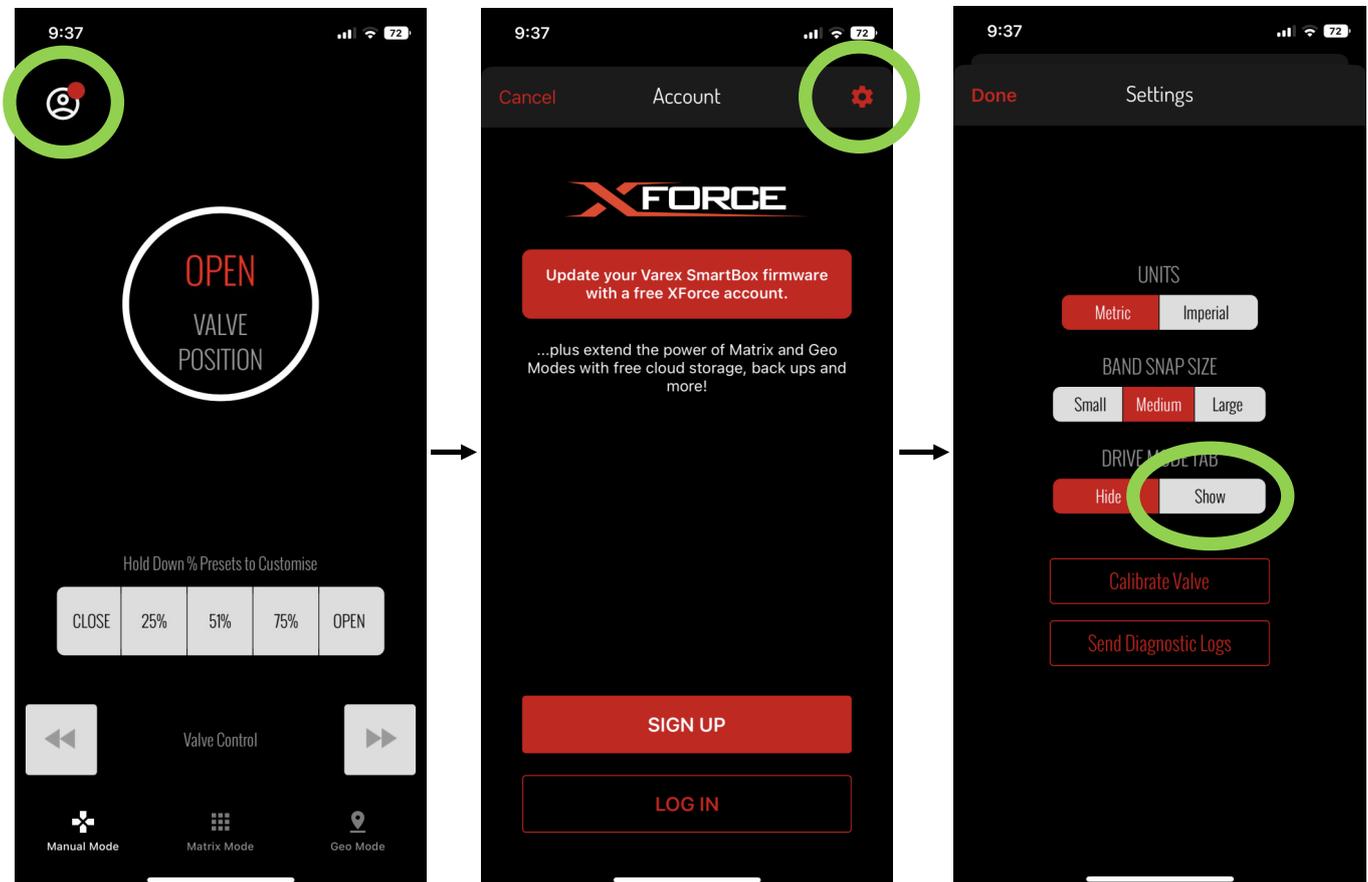


# How to setup BMC01 Drive Mode Adapter

## Step 6:

Follow the screenshots provided

1. Tap on Top Left Menu
2. Tap on Settings Menu
3. Tap on "Show" Drive Mode

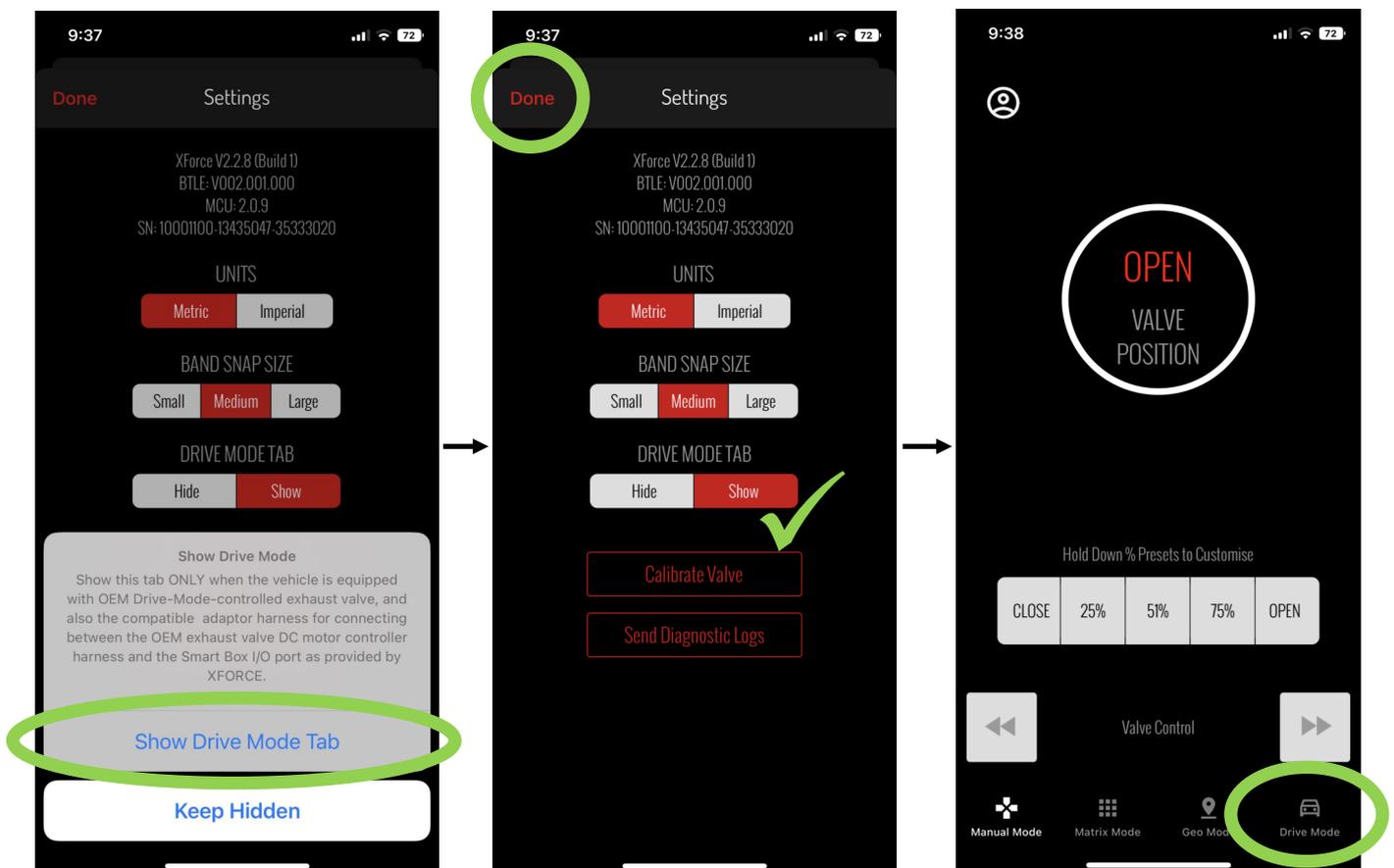


# How to setup BMC01 Drive Mode Adapter

## Step 7:

Follow the screenshots provided

1. Show Drive Mode warning is display. Tap on Show Drive Mode Tab
2. Tap on Done
3. Now on the Main Screen, you will see Drive Mode option visible



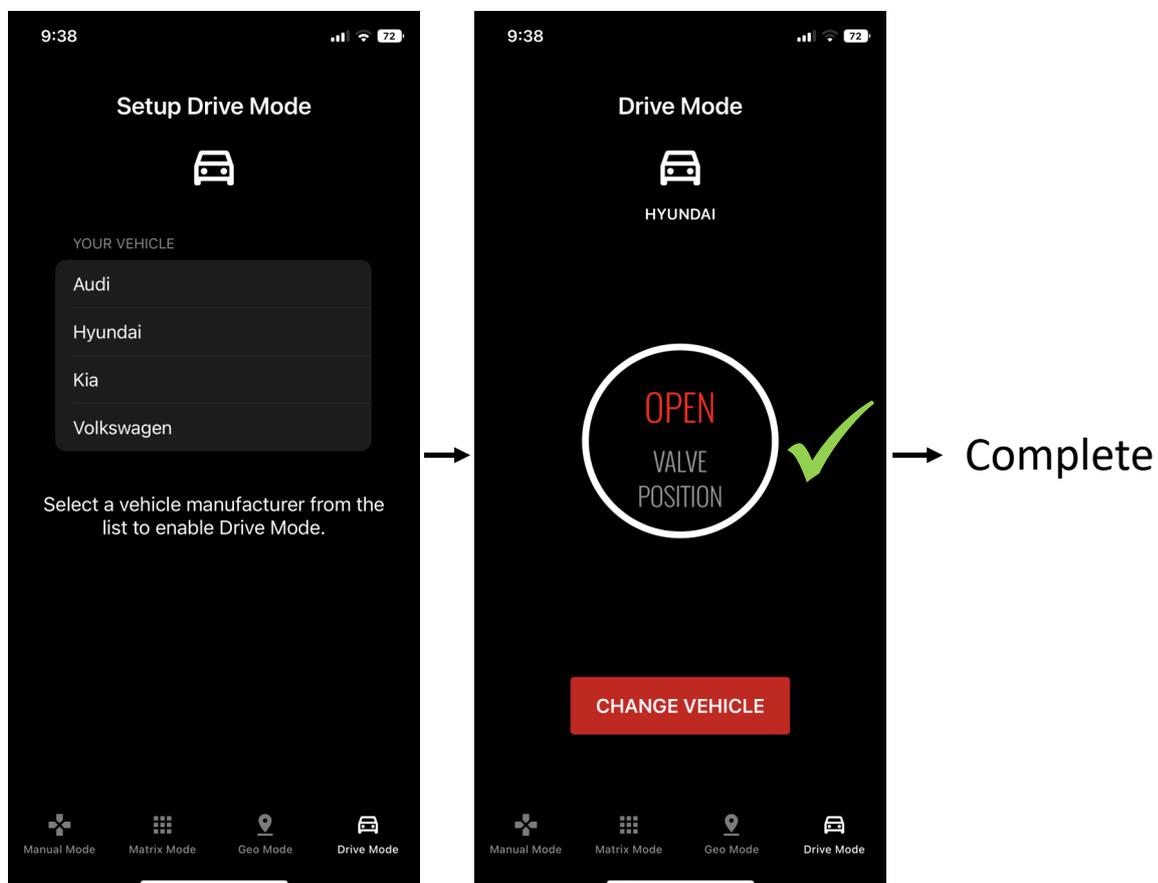
# How to setup BMC01 Drive Mode Adapter

## Step 8:

Follow the screenshots provided

1. Select a vehicle manufacturer to enable Smartbox Drive Mode
2. This will display the VAREX valve position in real time
3. The setup is now complete.

Now use the OEM Drive Mode control/buttons in your vehicle and test and review.





# How to troubleshoot BMC01 Drive Mode Adapter

## FAQ

### Frequently Asked Questions

How do I know if the vehicle uses PWM or LIN BUS, I'm not an electrician?

A quick test is by disconnecting the factory exhaust actuator motor and having no errors displayed after engine start and driving, it is high probability that the vehicle operates the factory exhaust actuator using PWM.

Smartbox Drive Mode should be compatible

I tried disconnecting the factory exhaust actuator and after engine start and driving, now I have warning errors whilst the factory exhaust actuator is disconnected?

It is a high probability that your vehicle operates the factory exhaust actuator motor uses LIN BUS communication. LIN BUS is like CAN BUS but operates at a lower communication speed to vehicle electric modules that are not critical to the main vehicle's operation.

LIN BUS can detect if the factory exhaust actuator motor is disconnected or faulty and not operating within factory spec.

Some vehicles can apply a limp mode, speed limitation or reduced engine torque when the exhaust actuator is not connected or faulty.

Once the factory exhaust actuator is reconnected and operating correctly, the errors should clear on the next engine start/driving event and generally speaking do not require a OBD2 scan tool to clear the error.

Smartbox Drive Mode is currently not compatible as on 22/12/2022.

Will there be any support for VAREX Smartbox Drive Mode for vehicles using LIN BUS?

Our R&D team is actively exploring LIN BUS communication. Our aim is also to provide VAREX Smartbox Drive Mode to be compatible with vehicles using LIN BUS communication

Does the new VAREX Smartbox Drive Mode only work with brand new purchased VAREX Smartboxes or is it also compatible with customers with older versions of Smartbox?

Yes it is compatible with all second generation VAREX Smartbox's. Just ensure your XFORCE app is the latest version via the Google Play or Apple App Store. If your VAREX Smartbox firmware requires updating, it will prompt you on the main screen "New Firmware Update", just follow the steps provided on screen.



# How to troubleshoot BMC01 Drive Mode Adapter

## FAQ

### Frequently Asked Questions

I've purchased BMC01 Drive Mode Adapter and I cannot see the Drive Mode functionality on my app?

By default, the XFORCE app does not display the Drive Mode.

Please goto Page 6 of this guide and follow the “How to setup BMC01 Drive Mode Adapter”

If you experience further issues, please contact us for further support

Email: [inquiry@xforce.com.au](mailto:inquiry@xforce.com.au)

Phone +61 2 9773 0812 and select option 2

I've purchased BMC01 Drive Mode Adapter and followed the installation guide and did everything correct but the vehicle's OEM Drive Mode's control/button are not being recognised by the VAREX Smartbox

Please check all the connections:

- a) Inside where the BMC01 Adapter cable and the Smartbox are located and connected.
- b) Outside the vehicle where the BMC01 Adapter cable is connected to the factory exhaust actuator wiring connector, double check for dirt, debris or corrosion. A bad connection in between the vehicle and VAREX Smartbox will cause the Smartbox and to not respond vehicle Drive Mode control(s)/button(s).

I've installed everything I believe it may be a compatibility issue in between my vehicle and the Smartbox Drive Mode functionality?

Whilst Smartbox is the cutting edge of exhaust technology our R&D department have performed vigorous testing of the new functionality across various popular makes and models, It is a possibility there may be isolated cases of make and model vehicles that have teething issues.

Please send us a diagnostic log with your information via the XForce App and we will contact you with further support.

Alternatively please feel free to contact us for further support

Email: [inquiry@xforce.com.au](mailto:inquiry@xforce.com.au)

Phone: +61 2 9773 0812 and select option 2



# How to troubleshoot BMC01 Drive Mode Adapter

## FAQ

### Frequently Asked Questions

Is my vehicle's Drive Mode compatible with VAREX Smartbox Drive Mode?

Our R&D department are continuously working on Smartbox development and testing the new Smartbox Drive Mode feature and adding new makes and models with future updates.

Here is a small list of make and models that have Kuster branded PWM exhaust actuator motor that we have identified should work or have tested with VAREX Smartbox Drive Mode.

Make	Model	Submodel	Engine & Transmission	Body & Trim	Year	Tested & Verified
Audi	S3	8V	2.0L L4 - Gas	Premium Plus, Prestige	2015-2020	Yes
Cupra	Formentor	VZ	2.0L Turbo AWD		2020-on	Yes
Hyundai	I30 N / I30 Fastback N	PDe	2.0L Turbo		04/06/2018-on	Yes
Hyundai	Kona N	OS	2.0L Turbo		07/2021-on	Yes
Hyundai	Veloster N	JS	2.0L Turbo		2019-on	Yes
Volkswagen	Golf VII R Facelift	AU (MK7.5)	2.0L Turbo Gen3	4Motion	2019-2020	Yes
Volkswagen	Tiguan 235 TSI R	5N	2.0L Turbo AWD		12/2021-on	Yes
Audi	A3	8V	2.0L L4 - Gas	Premium, Premium Plus, Prestige	2016-2020	No
Audi	A3 Quattro	8V	2.0L L4 - Gas	Premium, Premium Plus, Prestige	2015-2019	No
Audi	A6	4G	2.0L L4 - Gas	Premium, Premium Plus, Sport	2016-2018	No
Audi	A6 Quattro	4G	2.0L L4 - Gas	Premium Plus, Sport	2016-2018	No
Audi	A8 Quattro	4H	4.0L V8 - Gas	Base, L	2013-2014	No
Audi	A8 Quattro	4H	3.0L V6 - Gas, 4.0L V8 - Gas	L, L Sport	2016-2018	No
Audi	Q5	8R	2.0L L4 - Electric/Gas	Hybrid Prestige	2013-2016	No
Audi	RS7	4G	4.0L V8 - Gas	Base, Performance	2014-2018	No
Audi	S6	4G	4.0L V8 - Gas	Premium Plus, Prestige	2013-2018	No
Audi	S7	4G	4.0L V8 - Gas	Premium Plus, Prestige	2013-2018	No
Audi	S8	4H	4.0L V8 - Electric/Gas	L	2020	No
Audi	S8	4H	4.0L V8 - Gas	Plus	2013-2018	No
Audi	SQ8	F1	4.0L V8 - Electric/Gas	Premium Plus, Prestige	2020	No
Audi	TT Quattro	FV	2.0L L4 - Gas	Base, S	2016-2018	No
Audi	TTS Quattro	FV	2.0L L4 - Gas	Base	2016-2018	No
Chrysler	300	S	5.7L Hemi V8		2022	No
Chrysler	300	S	5.7L Hemi V8 AWD		2022	No
Chrysler	300	S, touring, touring I	3.6L V6		2022	No
Chrysler	300	S, touring, touring I	3.6L V6 AWD		2022	No
Chrysler	300	Srt core, srt premium	6.4L Hemi SRT V8		2015	No
Dodge	Challenger	Base, gt, premium, sxt	3.6L V6 Auto		2015	No
Dodge	Challenger	Base, premium	5.7L Hemi V8 Auto & Manual		2015	No
Dodge	Challenger	Gt, sxt	3.6L V6 Auto AWD		2022	No
Dodge	Challenger	R/t	5.7L Hemi V8 Auto & Manual		2016-2022	No



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Dodge	Challenger	R/T 392	6.4L Hemi SRT V8 Auto & Manual		2018-2019	No
Dodge	Challenger	R/T scat pack	6.4L Hemi SRT V8 Auto & Manual		2016-2022	No
Dodge	Challenger	R/T scat pack shaker widebody	6.4L Hemi SRT V8 Auto & Manual		2021	No
Dodge	Challenger	R/T scat pack widebody	6.4L Hemi SRT V8 Auto & Manual		2019-2022	No
Dodge	Challenger	Scat pack	6.4L Hemi SRT V8 Auto		2015	No
Dodge	Challenger	SRT 392	6.4L Hemi SRT V8 Auto & Manual		2016-2018	No
Dodge	Challenger	Srt adr	6.2L SuperCharged V8 Auto		2018	No
Dodge	Challenger	Srt hellcat	6.2L SuperCharged V8 Auto & Manual		2016-2022	No
Dodge	Challenger	Srt hellcat reddyeye	6.2L SuperCharged V8 Auto		2019-2022	No
Dodge	Challenger	SRT hellcat reddyeye widebody	6.2L SuperCharged V8 Auto		2019-2022	No
Dodge	Challenger	SRT hellcat widebody	6.2L SuperCharged V8 Auto & Manual		2019-2022	No
Dodge	Challenger	SRT jailbreak	6.2L SuperCharged V8 Auto		2022	No
Dodge	Challenger	SRT premium	6.4L Hemi SRT V8 Auto & Manual		2015	No
Dodge	Challenger	SRT super stock	6.2L SuperCharged V8 Auto		2020-2022	No
Dodge	Challenger	SRT supercharged	6.2L SuperCharged V8 Auto & Manual		2015	No
Dodge	Challenger	T/a 392 widebody	6.4L Hemi SRT V8 Auto & Manual		2021	No
Dodge	Charger	GT, pursuit	3.6L V6		2022	No
Dodge	Charger	GT, pursuit	3.6L V6 AWD		2022	No
Dodge	Charger	Hellcat	6.2L SuperCharged V8		2015	No
Dodge	Charger	Pursuit	5.7L Hemi V8		2019-2022	No
Dodge	Charger	Pursuit	5.7L Hemi V8 AWD		2019-2022	No
Dodge	Charger	R/T	5.7L Hemi V8		2015-2022	No
Dodge	Charger	R/T 392	6.4L Hemi SRT V8		2017-2018	No
Dodge	Charger	Scat pack	6.4L Hemi SRT V8		2016-2022	No
Dodge	Charger	Scat pack 392 widebody	6.4L Hemi SRT V8		2020	No
Dodge	Charger	Scat pack widebody	6.4L Hemi SRT V8		2022	No
Dodge	Charger	SE	3.6L V6		2015-2016	No
Dodge	Charger	SE	3.6L V6 AWD		2015-2016	No
Dodge	Charger	SRT	6.4L Hemi SRT V8		2015-2016	No
Dodge	Charger	SRT 392	6.4L Hemi SRT V8		2017-2018	No
Dodge	Charger	SRT hellcat	6.2L SuperCharged V8		2016-2020	No



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Dodge	Charger	SRT hellcat reddyeye widebody	6.2L SuperCharged V8		2021-2022	No
Dodge	Charger	SRT hellcat widebody	6.2L SuperCharged V8		2020-2022	No
Dodge	Charger	SRT jailbreak	6.2L SuperCharged V8		2022	No
Dodge	Charger	SRT superbee	6.4L Hemi SRT V8		2015	No
Dodge	Charger	SXT	3.6L V6		2015-2022	No
Hyundai	Elantra N	CN7	2.0L Turbo		09/2021-on	No
Hyundai	I20 N	BC3	1.6L Turbo		02/2021-on	No
Hyundai	I30 N Sedan	CN7	2.0L Turbo		09/2021-on	No
Seat	Ateca	5F	2.0L Turbo	Cupra 4Drive	07/2019-on	No
Seat	Tarraco	KN	2.0L Turbo	Xcellence 4Drive	03/2019-on	No
Skoda	Kamiiq, Scala	NW	1.5L Turbo		03/2020-on	No
Skoda	Karoq	NU	2.0L Turbo	Sport Line	07/2019-on	No
Skoda	Kodiaq	NS	2.0L Turbo	Sport Line	07/2021-on	No
Skoda	Superb	NP	2.0L Turbo	Sport Line	07/2019-on	No
Volkswagen	Arteon	3H	2.0L Turbo		2017-2021	No
Volkswagen	Golf VII R	AU (MK7)	2.0L Turbo Gen3	4Motion	2017-2018	No
Volkswagen	Golf VIII R	CD (MK8)	2.0L Turbo Evo4	4Motion	11/2021-on	No
Volkswagen	Passat	3C	2.0L Turbo	4Motion	2017-2021	No
Volkswagen	Polo	AW	2.0L Turbo		2018-2021	No
Volkswagen	Tiguan Allspace	5N	2.0L Turbo Petrol		2017-2021	No
Volkswagen	Tiguan R	5N	2.0L Turbo		2017-2021	No

If you have tested VAREX Smartbox Drive Mode and it works on your vehicle that is not listed here, we would love to hear from you and provide you a free XFORCE sticker. Please email [peter@xforce.com.au](mailto:peter@xforce.com.au) or alternatively call us +61 2 97730812 and select option 4