



**Toyota GR Yaris
Cat-Back System
Installation Guide**



XFORCE RECOMMENDS AN AUTHORISED PROFESSIONAL TO INSTALL ALL PRODUCTS

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<https://xforce.com.au/find-a-dealer/>

WARNING: When working on any vehicle exercise extreme caution!

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Serious injury or death can occur if the correct safety measure ARE NOT FOLLOWED!!

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<https://xforce.com.au/warranty/>



Parts List

- ESTY21VKCS (3" VAREX Cat-Back System)
 - 1x ES-TY21-C1 – Cat Connecting Pipe
 - 1x ES-TY21-C2 – Flex Pipe w/ Resonator
 - 1x ES-TY21-F1 – Centre Section w/ J-Pipe & Resonator
 - 1x ES-TY21-VMKR – VAREX Muffler w/ VAREX Motor attached
 - 2x TS-AW4SJ-135-63 – 4" Polished Tips
 - 3x Gaskets
 - 6x Bolts & Nuts
 - 1x 3" Slip-Joint Clamp
 - 1x VAREX Control Box
 - 1x VAREX Single Muffler Wiring Kit
 - 2x VAREX Remotes
- ESTY21CS (3" Cat-Back System)
 - 1x ES-TY21-C1 – Cat Connecting Pipe
 - 1x ES-TY21-C2 – Flex Pipe
 - 1x ES-TY21-F1 – Centre Section w/ J-Pipe
 - 1x ES-TY21-R – Rear Section w/ Round Mufflers
 - 2x TS-AW4SJ-135-63 – 4" Polished Tips
 - 3x Gaskets
 - 6x Bolts & Nuts
 - 1x 3" Slip-Joint Clamp

Tools & Equipment Required

1. Spanners & Sockets
 - 10mm, 12mm, 13mm, 14mm, 15mm & 16mm
2. 3/8" Ratchet
3. ½" Tension Wrench w/ 14 mm Deep Socket
 - Set to 80 Foot Pounds
4. Extension Bar
5. Pry Bar or Exhaust Hanger Removal Pliers
6. Can of Spray Lubricant
7. O2 Sensor Safe Sealant (Permatex recommended)
8. Rags for Excess Sealant
9. Safety Glasses or Goggles
10. Protective Gloves
11. Safety Boots

READ NOTES ON PAGE 11 FOR TIPS TO INSTALL THE SYSTEM!!



Important Step:

If installing an XFORCE downpipe as well as our XFORCE Cat Back System (See instruction manual on our website), we would recommend installing the Headers & Cats first then installing the Cat-Back System before tightening everything from rear to the front of the vehicle.

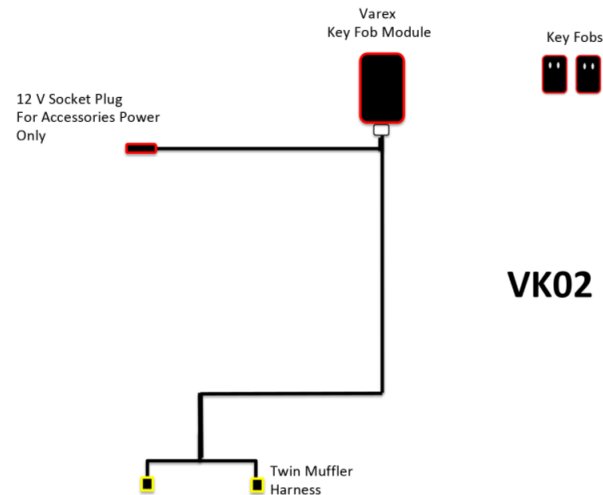


Go to page 12 for installation notes.



Important Step (Varex Only!)

Loosely run the wiring for the control box from inside the vehicle to the outside through an open door. Plug the wiring harness into the 12v socket & then into the mufflers and control box, power on the vehicle to test system. Check the operation of all electronics and Varex muffler valve before installation.



Go to page 13 for Varex installation instruction.



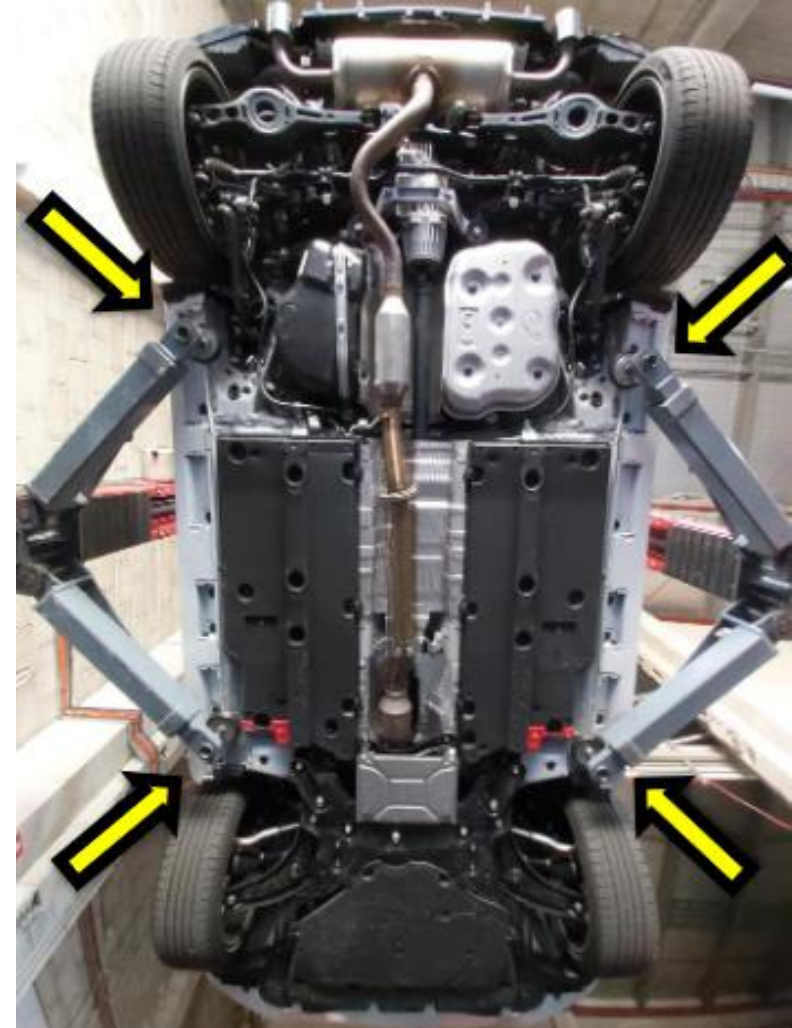
Step 1:

XFORCE Recommends using a hoist for installation of our systems.

We also recommend at least 2 people to remove & install.

Raise vehicle on a 2/4 post hoist making sure the hoist arms are in the correct lifting positions (as per the owner's manual) and that yourself or any other persons are underneath the vehicle while the hoist is in motion.

Once the vehicle is at a workable height, engage the hoist safety locks!





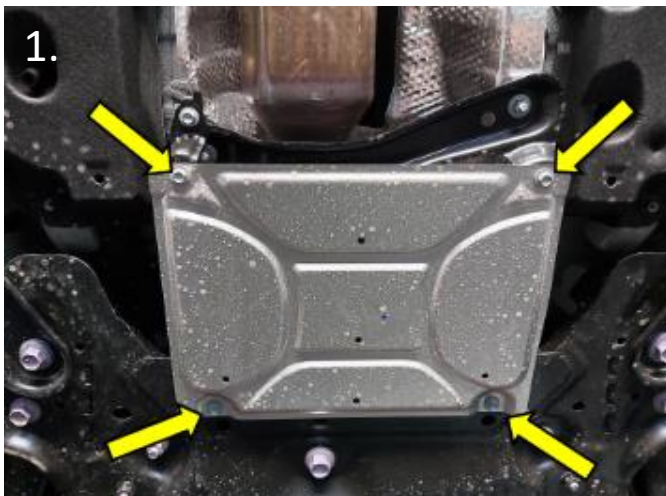
Step 2:

Disconnect battery!

Unbolt bolt the 4x 10mm bolts holding the steel cover then remove (1).

Unbolt O2 Sensor from the factory front pipe then unplug & remove (2).

Unbolt 2x 14mm bolts on the factory ball flare flange from the factory downpipe. Remove factory ball flare gasket from downpipe (this will not be reused)(3).





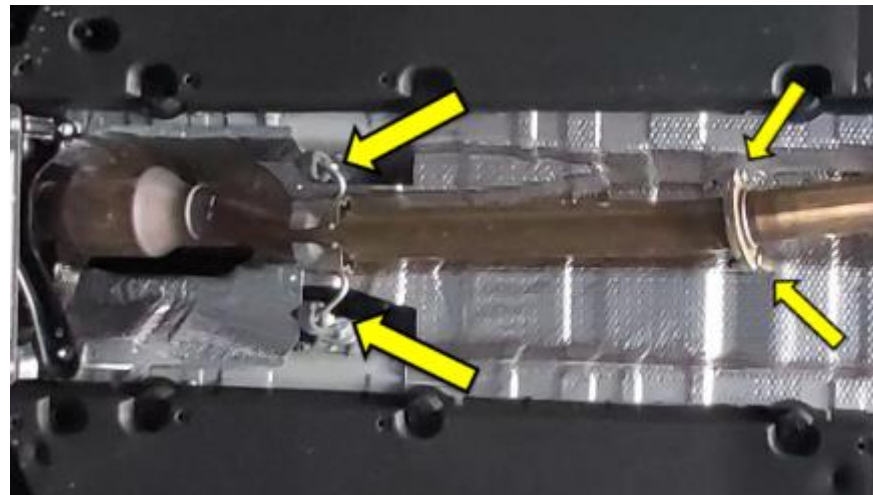
Step 3:

Lubricate the centre and rear exhaust hanger rubbers.

Unbolt 2x 14mm bolts from the center flange then slide rubbers off to remove factory center section from vehicle.

Now slide the rear muffler hangers off the factory muffler and remove from vehicle.

For safe removal, use a hoist stand underneath the muffler to stabilize before removing the rubber exhaust hangers.





Step 4:

In the following order, leave firm but DO NOT TIGHTEN!

1. On a bench, bolt together the Cat Connecting Pipe (ES-TY21-C1) to the Flex Pipe (ES-TY21-C2) using the slip joint clamp provided in the kit then bolt the factory O2 Sensor into the bung provided on the connecting pipe.
2. Now bolt the assembled section to the factory downpipe using the 2-Bolt gasket provided. Slide the hanger onto the factory exhaust hanger rubber & plug in O2 Sensor wiring.
3. Bolt the Centre Section (ES-TY21-F1) to the Flex Pipe using a 2-Bolt gasket provided & making sure the orientation reflects the photo below. Slide hanger onto the factory exhaust hanger rubber.
4. Slide the Varex Muffler (ES-TY21-VMKR) onto the factory muffler hanger rubbers then bolt the muffler to the center section using a 2-bolt gasket provided (Hoist stand can be used for easier install).
5. Install 2x tips (TS-AW4SJ-135-63) to the tailpipes.

XFORCE recommends using O2 Safe Sealant on all gaskets & slip on surfaces!

Centre Section



Varex Muffler



Connecting Pipes





Step 5:

Check positioning of exhaust & make sure it doesn't hit anywhere that may cause damage or rattle against any part of the vehicle. Also, check tip alignment with the bumper.

TIP: If the muffler hanger is sitting too close to the chassis hanger, you will need to adjust the slip-joint at the front and push the whole system towards the front of the vehicle.

Once you are satisfied with positioning, tighten from the rear mufflers forward making sure the alignment is consistent. Remove any hoist stands if used.

Re-install steel cover using the factory 14mm bolts. Reconnect battery!

Start your car, check for any leaks & enjoy your new XFORCE Performance Exhaust!





Step 6:

Drive vehicle for 10-15mins, testing the Varex valve control (if installed). Return to step 4, retention all nut & bolts and enjoy the driving experience your new XForce System provides.



GO TO PAGE 13 for Varex Installation



NOTES:

- When you first start your vehicle after install of your new XFORCE Performance Exhaust System, they may be some smoke or fumes coming from the system. This is a protective oil-based coating used in the manufacturing of the system. This is not a problem & will disappear within a very short period after the exhaust has reached normal operating temperature.
- When trying to install gaskets with flanges, install one bolt on the flange & hang the gasket on the bolt then feed the other part on.
- When placing slip on clamps into the system, make sure you can access the 14mm nuts to tighten the clamp.
- Muffler hangers do have some adjustment when installing, make sure you are happy with tip placement before tightening bolts up.
 - Use lubricant to make removing & installing rubber on the hangers easier.
 - **Do not use power tools to tighten slip-joint clamps!!**





Toyota GR Yaris
Varex Control Module
Installation Guide





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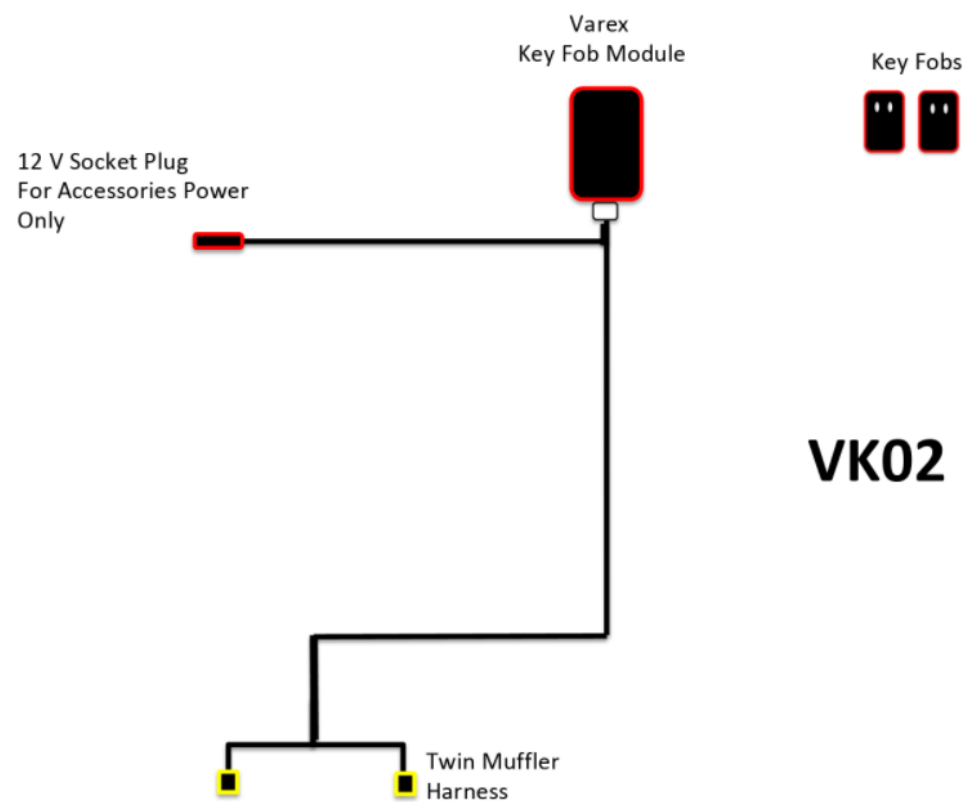
What's in the box

- 1x Varex Control Module
- 1x Wiring Harness (VK01/VK02)
 - 2x Key Fobs





Varex Wiring Diagram





Step 1:

Find a rubber grommet to allow access inside the car to the underside of the car near the Varex Mufflers.

NOTE: We would recommend using a grommet near the spare tire location.

Cut a small hole in the rubber grommet.

Once located & cut, feed both black 2-pin plugs through the rubber grommet from inside the car to the underside of the car and connect the muffler.

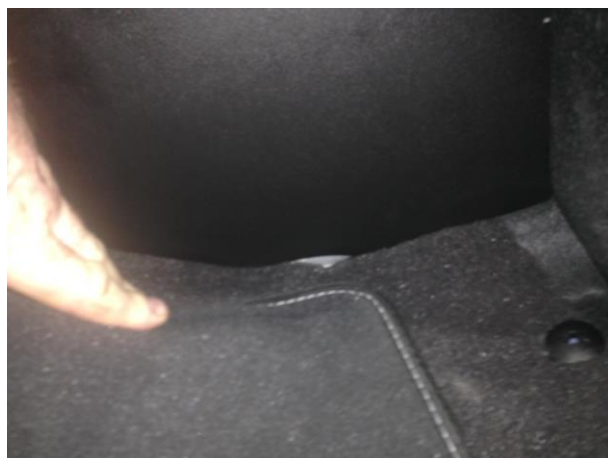




Step 2:

Feed the white 4-pin & 12v socket to the front of the car.
Making sure to tuck away wiring under the back seat &
under any plastic trim till you find a suitable place to store
the control box.

NOTE: The control box can be stored either in the glove
box, underneath the passenger seat or the center console
storage.





Step 3:

Plug the white 4-pin plug into the control box.

Now feed the 12v plug to your preferred 12v socket is lug in.

Turn on the car on & test the system using the remote (you should see an LED flash as you press the remote buttons).

Button A will close the valve & Button B will open the Varex.

Now enjoy the volume control on your new Varex System!





NOTES:

- **HARD WIRING:** We do offer a Hard Wiring Kit for your control box (VK16) which is recommended if you do decide to Hardwire your control box. By using this kit, this may bypass the Canbus power restrictor and could result in the control box failing (due to constant power supply) & could also damage electronics in your vehicle.
- XFORCE recommends using the 12v socket provided with your standard wiring kit as this will not affect any vehicle electronics.

