

# TORQUE CONVERTER LOCK UP MANUAL CONTROL KIT SUITABLE FOR:

**TOYOTA HILUX 25 SERIES  
5 SPEED AUTO (A750F )  
V6 PETROL 1GR-FE - 04/2005 TO 06/2015  
D4D 1KD-FTV - 11/2013 TO 06/2015**



**Wholesale**  
**AUTOMATIC TRANSMISSIONS**  
**03-9762 8004**

**Please read all instructions before commencing work. If you feel instructions are not clear, STOP and call for advice on 03 9762 8004**

**A750FG LOOM**

# 1KD-FTV Turbo Diesel Wiring Diagram

Transmission ECU is located behind glove box.

You will need to locate:

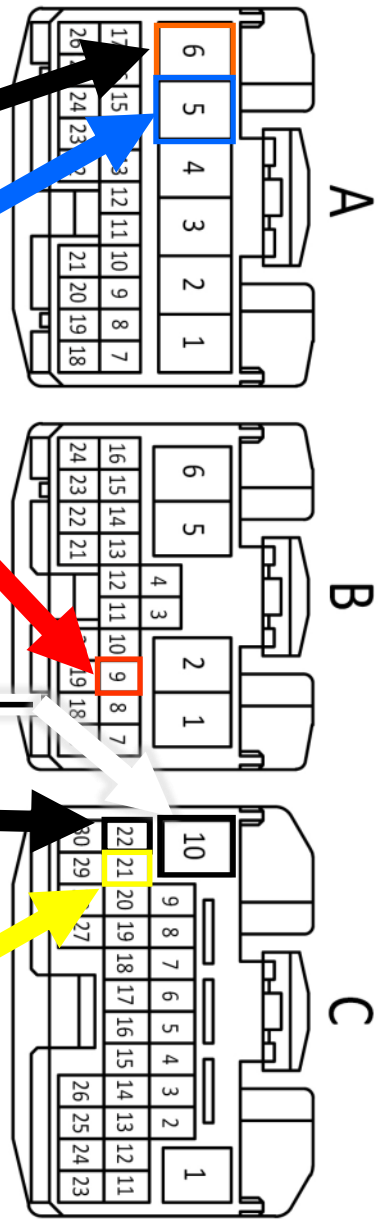
- PIN C21 — Solenoid Ground — Solid Yellow Wire
- PIN C22 — Solenoid Positive — Solid Black Wire
- PIN B9 — Reverse Signal — Red/Yellow Stripe Wire
- PIN A6 — Ignition Switched 12V+ — Black/Orange Stripe Wire
- PIN A5 — Constant 12V+ — Solid Blue Wire
- PIN C10 — Earth/Ground — White/Black Stripe Wire

Transmission Wiring Loom

5 AMP FUSE

CUT

CUT



- Yellow wire to Transmission side of Cut
- Green wire to ECU side of Cut
- White wire to Transmission side of Cut
- Brown wire to ECU side of Cut
- Red wire to joins to Constant 12V Power  
DO NOT CUT FACTORY WIRE
- Blue wire joins to 12V Ign. Switched  
DO NOT CUT FACTORY WIRE
- Purple wire joins Reverse Signal  
DO NOT CUT FACTORY WIRE
- Black wire joins to Earth/Ground  
DO NOT CUT FACTORY WIRE



MAIN RESISTOR  
This MUST be mounted to a Metal Surface due to heat

From Lockup Multi Pin Plug

# 1GR-FE V6 Petrol - Variation 1

Transmission ECU is located behind glove box.

You will need to locate:

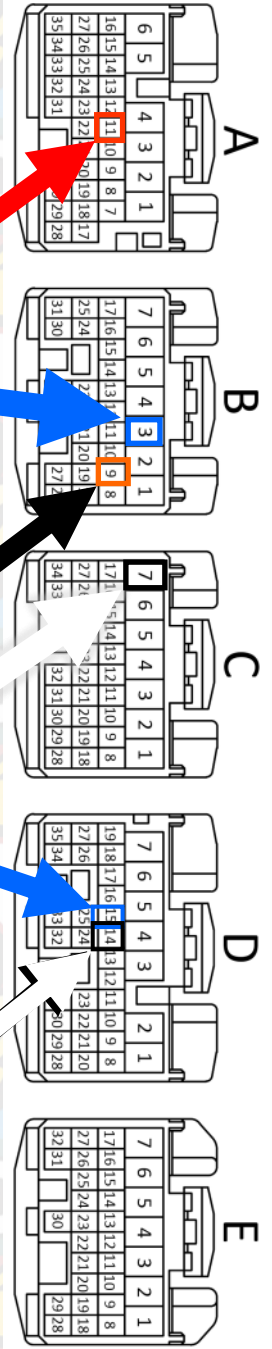
- PIN D15 — Solenoid Positive — Solid Blue Wire
- PIN D14 — Solenoid Ground — Solid White Wire
- PIN A11 — Reverse Signal — Red/Yellow Stripe Wire
- PIN B9 — Ignition Switched 12V+ — Black/Orange Stripe Wire
- PIN B3 — Constant 12V+ — Solid Blue Wire
- PIN C7 — Earth/Ground — White/Black Stripe Wire

Transmission Wiring Loom

5 AMP FUSE

CUT

CUT



Confirm Wire Colors and Pin Locations before you start



**MAIN RESISTOR**  
This MUST be mounted to a Metal Surface due to heat

- Yellow wire to Transmission side of Cut
- Green wire to ECU side of Cut
- White wire to Transmission side of Cut
- Brown wire to ECU side of Cut
- Red wire to joins to Constant 12V Power. DO NOT CUT FACTORY WIRE
- Blue wire joins to 12V Ign. Switched. DO NOT CUT FACTORY WIRE
- Purple wire joins Reverse Signal. DO NOT CUT FACTORY WIRE
- Purple wire joins Reverse Signal. DO NOT CUT FACTORY WIRE

From Lockup Multi Pin Plug

# 1GR-FE V6 Petrol - Variation 2

Transmission ECU is located behind glove box.  
 You will need to locate:

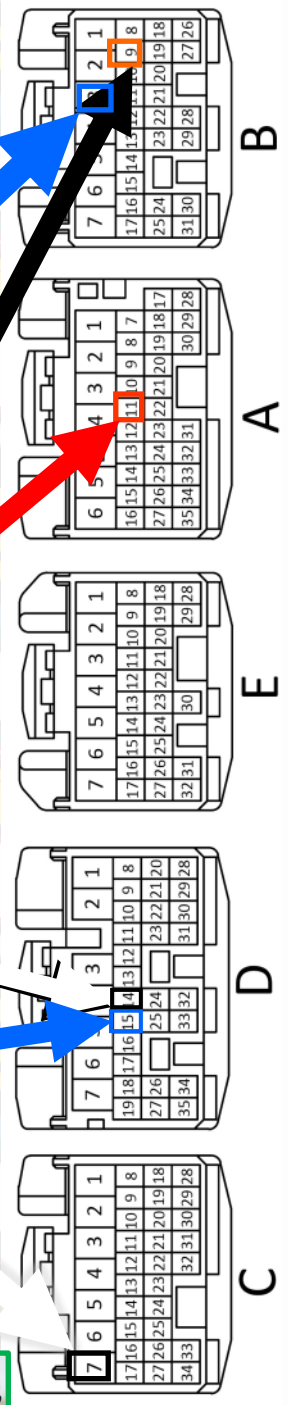
- PIN D15 — Solenoid Positive — Solid Blue Wire
- PIN D14 — Solenoid Ground — Solid White Wire
- PIN A11 — Reverse Signal — Red/Yellow Stripe Wire
- PIN B9 — Ignition Switched 12V+ — Black/Orange Stripe Wire
- PIN B3 — Constant 12V+ — Solid Blue Wire
- PIN C7 — Earth/Ground — White/Black Stripe Wire

Transmission Wiring Loom

5 AMP FUSE

CUT

CUT

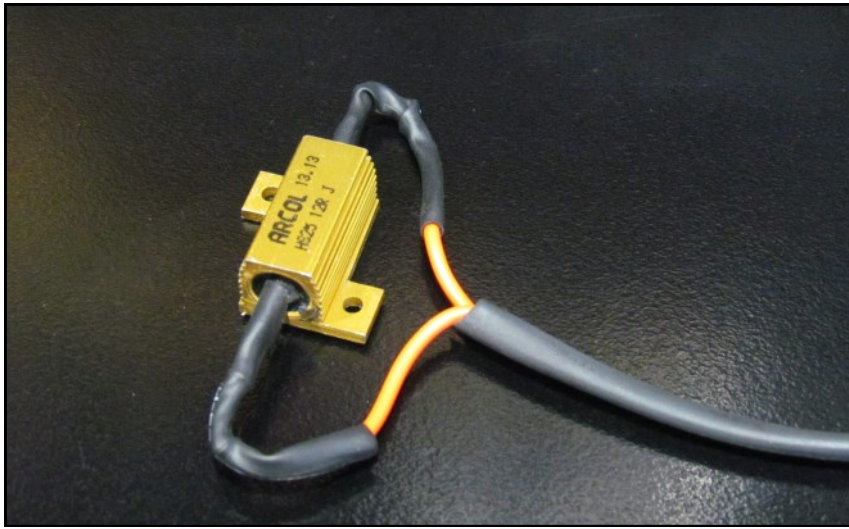


Confirm Wire Colors and Pin Locations before you start



MAIN RESISTOR  
 This MUST be mounted to a Metal Surface due to heat

From Lockup Multi Pin Plug



**This resistor gets hot. Be sure to mount on a metal surface and be sure to mount in a location that isn't in contact with plastic or wiring**

**NOTE: The use of scotch locks, quick connects or other wire connection devices MUST NOT BE USED.**

**All wire connections must be soldered and protected with tape or heat shrink.**

## **Control Module Installation and Diagnostics** Ver 2.5i

**INSTALL CONTROL MODULE AND RESISTOR INSIDE CABIN OF VEHICLE DO NOT USE A TEST LIGHT ON THE LOOM WHILE PLUGGED IN AND POWERED.**

On the Control Module there is a group of lights. Below is a table of their meanings.

Light	With Lock-Up Switch On	With Lock-Up Switch Off
	Control Module is Engaged	No Light
	Reverse Solenoid Control is Engaged	Reverse Solenoid Control is Engaged
	System Ready to Operate	System Ready to Operate

## **Switch Installation and Diagnostics**

**THESE SWITCHES ARE CUSTOM BUILT FOR OUR GENII LOCKUP SYSTEM. DO NOT USE STANDARD SWITCHES. PLEASE CHECK THE GREEN SWITCH PLUG IS INSERTED CORRECT WAY UP BY LINING UP THE GUIDES AS SHOWN**



The switch has two lights: one red (LOCK UP) and one green (TCC) that replicate the red and the green lights on the control module. The green light (TCC) will flash twice on start up to indicate system checks are complete and no fault found. The red light (LOCK UP) will only light up when the GENII Lockup System is engaged.

If the switch has been left on or has been activated accidentally before vehicle is started, the green light (TCC) on the switch and the module will flash indicating that it is in safety mode and will not engage the torque converter until the switch is turned off. You may then continue to use the lockup system as usual.



**Please take care when installing this unit as incorrect wiring may result in damage to the micro processor controller. Incorrect installation is not covered under warranty.**

**The Wiring looms are Vehicle Specific, if there are discrepancies DO NOT Install, call for Advice on 03 9762 8004**



# Torque Converter Lock-Up Manual Control Kit - Recommended Use

## On Road:

- For Towing Only, If you are not towing then you will simply not need to use the Lock-Up Manual Control.
- Perfect for Towing where you cannot maintain enough speed for the factory lock-up to stay engaged or the extra weight has a side effect of blocking the lock-up function completely.
- The Lock-Up Manual Control can be used as an aid to improve engine braking down steep descent's while changing down through the gears manually. This can be used when towing also.

## Off Road:

- The Lock-Up Manual Control can be used to gain 100% engine braking, eliminating all torque converter runaway for steep downhill descent's in "both" low and high range.
- The Lock-Up Manual Control can also be used for beach work where the sand is firm and you are not going fast enough to have reached a speed that the factory lock-up would normally work. This would aid in keeping your transmissions temperature low and also may help with fuel economy.
- Perfect for the never-ending corrugated roads where once again you cannot maintain enough speed for the factory lock-up to be maintained. Using your Lock-Up Manual Control under these circumstances would once again prove to be the best way of keeping your transmission temperature down and aid in improving your fuel economy.

## DO NOT's

- Do not use the Lock-Up Control for crawling over rough terrain
- Do not use the Lock-Up Control for uphill climbs or overtaking
- Do not use the Lock-Up Control with more than 50% throttle
- Do not use the Lock-Up Control on soft sand or mud

The use of the Lock-Up Control under these applications prevents the Torque Converter from doing it's job of multiplying the torque of the engine and from absorbing the shock from the drive train under heavy throttle.

Please remember that if you have the Lock-Up Control engaged and you come to a complete stop, the vehicle could stall. Always remember to disengage the Lock-Up Control as you are coming to a stop.

## Please Contact Us:

As every situation is unique we cannot account for every circumstance you may come up with without obtaining more information from you. If you have any inquiries or wish to discuss specific circumstances the lock-up kit maybe useful for, please do not hesitate to contact Wholesale Automatics on 03- 97628004.

## Factory Vehicle Warranty:

If you have any questions about how this kit will impact any factory warranty you may have please contact the vehicle manufacturer.

## **Wholesale Automatic Transmissions Pty Ltd**

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