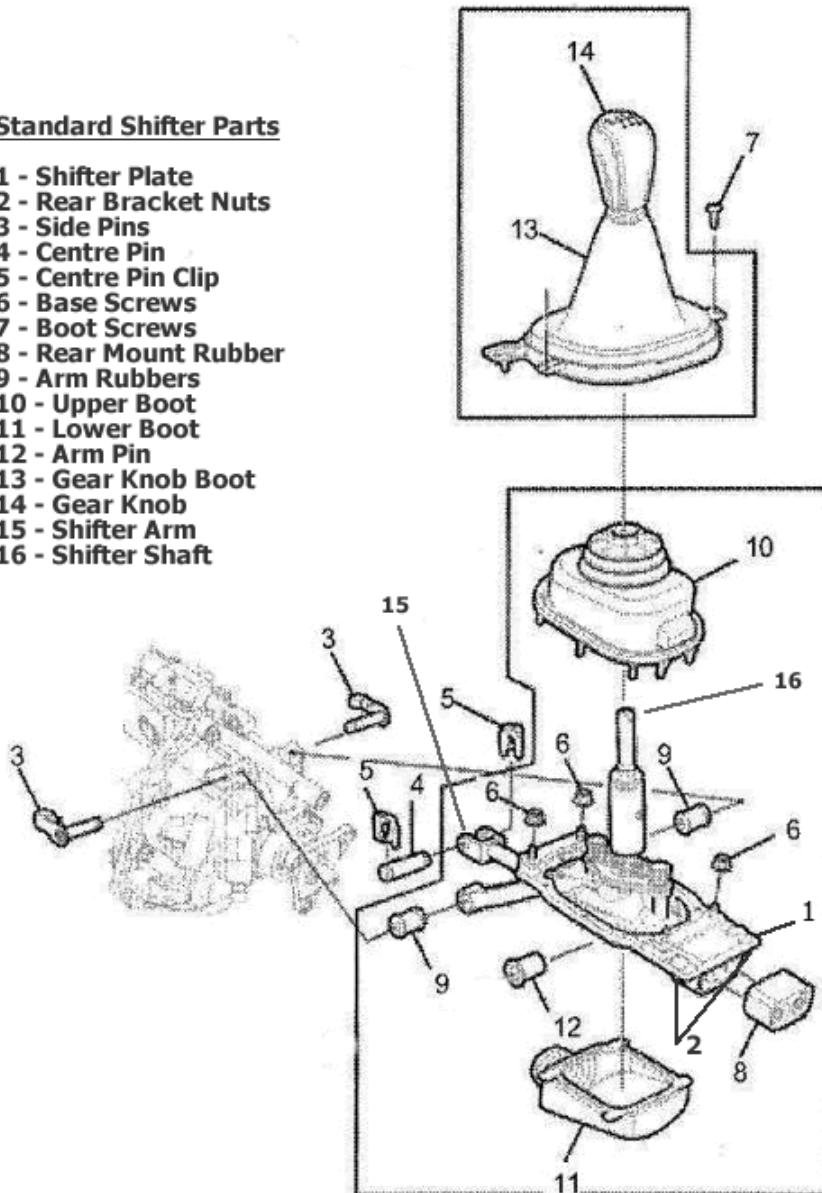


Holden VE – Pontiac G8 – Vauxhall VXR8 & Chevrolet Lumina - Ripshift Installation Instructions

VE 6 Speed Shifter - Ripshift Install

Standard Shifter Parts

- 1 - Shifter Plate
- 2 - Rear Bracket Nuts
- 3 - Side Pins
- 4 - Centre Pin
- 5 - Centre Pin Clip
- 6 - Base Screws
- 7 - Boot Screws
- 8 - Rear Mount Rubber
- 9 - Arm Rubbers
- 10 - Upper Boot
- 11 - Lower Boot
- 12 - Arm Pin
- 13 - Gear Knob Boot
- 14 - Gear Knob
- 15 - Shifter Arm
- 16 - Shifter Shaft



<http://www.ripshift.com>

Thank you for purchasing a GM Motorsport RIPSHIFT – Some of the feature of your new shifter are

1. Adjustable stick height, tailor your own height in 1mm increments to suit your driving style.
2. 2nd to 3rd Centralisation springs gives the VE Ripshift the straight gate feature, push up when in 2nd to select 3rd.
3. Optional size springs for hardcore racers.
4. Polyurethane rear mounting bush insert, provides less flex in shift action.
5. Shorter throws than standard shifter.
6. Positive stop bolts, help prevent over shifts.
7. Developed and road tested for over a year in numerous test cars and GMM 's own dedicated product evaluation vehicle.
8. Has been fitted to 10 and 12 second VE cars.
9. Made in Australia using the finest materials such as 7075 aircraft series alloy

[1] Inside Car

- a) Remove plastic shifter surround – pull upwards to remove, being careful to disconnect 2 electrical plugs as your removing it
- b) Remove 4 phillips head screws [7]securing the gear knob boot
- c) Remove gear knob and boot [13 + 14] – pull hard upwards to remove
- d) Remove 4 Allen key base screws [6] holding shifter plate [1] to transmission tunnel

[2] Under Car

- a) Remove rectangular body plate – 4 x 15mm bolts
- b) Remove 2 x 15mm bolts from Left hand rear muffler to exhaust – leave muffler hanging
- c) remove 2 x 15mm bolts from Right hand rear muffler to exhaust – leave muffler hanging
- d) Remove 1 x 15mm nut from rear exhaust rubbers / diff mount bracket
- e) Unplug both O2 sensors – “leave screwed into exhaust”
- f) Remove 2 x 15mm nuts from Right hand side catalytic converter
- g) Remove 2 x 15mm nuts from Left hand side catalytic converter
- h) Spray lubricant onto the 4 exhaust hanger rubbers
- i) Remove exhaust by sliding the complete system backwards – “2 people needed”

- j) Remove heat shield under tail shaft – 2 x 10mm bolts
- k) Remove Transmission Cross member – 4 x 15mm nuts – “trans will drop approximately 60mm”

[3] Removing Shifter Under Car

- a) Remove centre pin [4] from shifter to gear box - there is a clip [5] on either side, remove 1 and slide pin out
- b) Disconnect 2 side pin clips [3] holding shifter base arms – using a flat head screw driver pry the clip outwards and they will swing back – they will stay connected to transmission, remove the pins [3] from both arms
- c) The shifter is now free to remove, pulling down on the tail shaft will create enough room to slide the complete shifter unit out between the tail shaft and trans tunnel

[4] Striping The Stock Shifter Body

- a) Remove 2 x 10mm nuts [2] from rear of shifter body and remove the rear bracket
- b) Remove shifter plate [1] and upper boot rubber [10]
- c) Remove bottom boot rubber [11]
- d) Remove bottom arm [15] by removing pin holding it to the shifter [12] - Mark the bottom and front of arm [15] before you remove it, so that it can be replaced correctly – “it will not work if put on backwards or upside down”
- e) Remove 2 x 10mm bolts holding shifter shaft into body
- f) Remove shifter shaft [16] from body by pushing down on the shifter shaft from the top
- g) Remove plastic bush from shifter arm – “this is to be reused”
 - a. The shifter is now striped and ready

[5] Install Ripshift to Shifter Body

- a) Using the tap supplied, tap thread into the 2 existing holes on top of stock shifter base – tap down until the tap stops – Check that the 2 supplied allen key bolts screw into holes
- b) Remove the positive stop thread and nuts from new Ripshift
- c) Using the 2 allen key bolts supplied screw Ripshift to stock shifter base, use Loctite 262 on these screws
- d) Once Ripshift is screwed tight onto base, cut cable tie holding springs to Ripshift
- e) Remove nut from new Ripshift arm – this will be reinstall once shifter is in car
- f) Install stock plastic bush & gasket onto new Ripshift shaft
- g) Insert new Ripshift shaft through bottom of the stock shifter base making sure gasket and plastic bush seat neatly into shifter base
- h) Refit 2 x 10mm bolts that hold shifter arm into shifter base, use Loctite 262 on these screws

- i) Swivel shifter arm 90 degree
- j) Refit the positive stop threads and nuts back into Ripshift body
- k) Refit the bottom arm using stock pin and clips – “remembering to replace it with bottom to bottom and front to front”
- l) Insert blue rubber into rear mount bracket , it will slide into the stock black rear mount rubber [8]
- m) Refit rear mount rubber [8] onto shifter body using the 2 x 10mm stock nuts [2]
- n) Refit shifter plate [1]and bottom rubber boot [11] onto shifter body – Note: Do not replace top boot [10] as shifter needs to be adjusted once in car” top boot [10] will be replaced later

[6] Replacing Shifter - Under Car

- a) Refit shifter into car pulling down on tail shaft to create room between tail shaft and trans tunnel
- b) Refit transmission cross member using the 4 stock 15mm bolts - Note: be careful doing bolts up making sure the Ripshift is in transmission tunnel hole and not fouling on the floor

[7] Adjusting Shifter Stops - Inside Car

- a) Inside the car replace the 4 allen key base screws [6]that hold shifter plate to transmission tunnel
- b) Adjust positive stops, when the Ripshift is in 3rd and 4th gears and you are applying slight pressure leave approximately 1.2mm between the shifter shaft and the positive stop, once this is done tighten the nuts locking the stops in place
- c) Installing red Ripshift shaft, screw supplied nut onto arm then screw red shaft onto Ripshift shaft, set height and lock bottom nut
- d) Once again remove the 4 allen key base screws [6] holding the shifter plate to transmission tunnel – Note: this needs to be loose to re connect the rubber boot [10]from under car
- e) Slide top rubber boot over shifter – we will reconnect this to shifter plate under the car

[8] Under Car

- a) Using pointy nose pliers pull top rubber boot tags through the shifter plate
- b) Reinstall heat shield 2 x 10mm bolts
- c) Reinstall exhaust – slide onto rubber mounts
- d) Reconnect O2 sensors
- e) Reconnect exhaust to catalytic converters 4 x 15mm nuts
- f) Reconnect rear mufflers to exhaust and replace 1 x 15mm nut on rear exhaust bracket

[9] Inside Car

- a) Refit the 4 allen key base screws [6] holding shifter plate to transmission tunnel
- b) Make sure the rubber boot [10] sits neatly into the slot in the red Ripshift shaft
- c) Refit stock shifter boot [13] and gear knob [14] onto red shaft "before fitting the gear knob you may have to spray the shaft with CRC as the new shaft is a tighter fit. [If shaft is not a real tight fit do not use CRC, use Sikaflex to glue gear knob on, this helps with noisy gear knobs].
- d) Push hard down on the gear knob and give it a sharp crack with your hand or a soft hammer. Do not twist the gear knob when it is nearly all the way on as you could break the locating tag.
- e) Refit plastic console shifter surround remembering to connect electrical plugs
- f) Enjoy your Ripshift

Tools Needed

1. Loctite – preferably Loctite 262
2. Socket wrench
3. 10mm socket
4. 15mm socket
5. Phillips head screw driver
6. Long flat head screw driver
7. 15mm ring spanner
8. Tap wrench or adjustable shifter
9. Allen key
10. Sikaflex
11. CRC

Parts Supplied

1. Ripshift Shaft
2. Red Ripshift shaft extension
3. Ripshift body with 2 springs
4. Tap
5. 2 x allen key bolts

Other Details

- ❖ Replace clutch fluid with high temp race fluid, normal fluid will boil under heavy driving.
- ❖ This product is protected by Australian Design Registration Number 154581.
- ❖ You can download these instructions and view detailed install pictures from our website www.ripshift.com

Once again thank you for purchasing the GM Motorsport RIPSHIFT.

GM Motorsport - Ripshift

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