

RIPSHIFT

AUSTRALIA'S FASTEST SHIFTER

WWW.RIPSHIFT.COM.AU

Fellow car enthusiasts,

Thank you for purchasing GM Motorsports Ripshift for your Holden VE / Pontiac G8/ Chev or Vauxhall 6 speed transmission.

The GM Motorsport Ripshift design and quality is of the highest standard and is sure to set new boundaries in the Motorsport Industry. (Australian Design Reg 154581)

GM Motorsport started life in the racing circle of Commodore Cup and progressed to the Premier Australian Motorsport Category of V8 Supercars.

Our experience & design we gained in Motorsport Racing has carried over into our street design products. The Ripshift now available for your car provides what our customers have been quoting "a transformation in the way their 6 speed feels". The solid biss –alloy stick design eliminates the flexi rubber mushy feeling the Holden 6 speed comes with. (Holden adapted this rubber stick as a patch up to dampen transmission vibes through the shifter).

The stock Holden rubber & bridge design delivers the precision of a sledgehammer. Ripshifts direct drive system allows for ultra fast 2nd to 3rd shifts and allow you to rip/bash through gears with accuracy and positive feel. Positive stops will help you when flat changing from overextending shifts that cause syncro breakage.

Under Normal Street operating RPM (below 2800RPM) your Ripshift will be whisper quiet. (Minimum vibration) is felt at very high extended RPMS. GM Motorsport feels we have provided a shifter that is positive sharp and will enhance your high-performance vehicle.

GM Motorsport is committed to supplying high performance parts to our customers and we personally test our products on our own vehicles to ensure they are up to our high standard.

Regards,

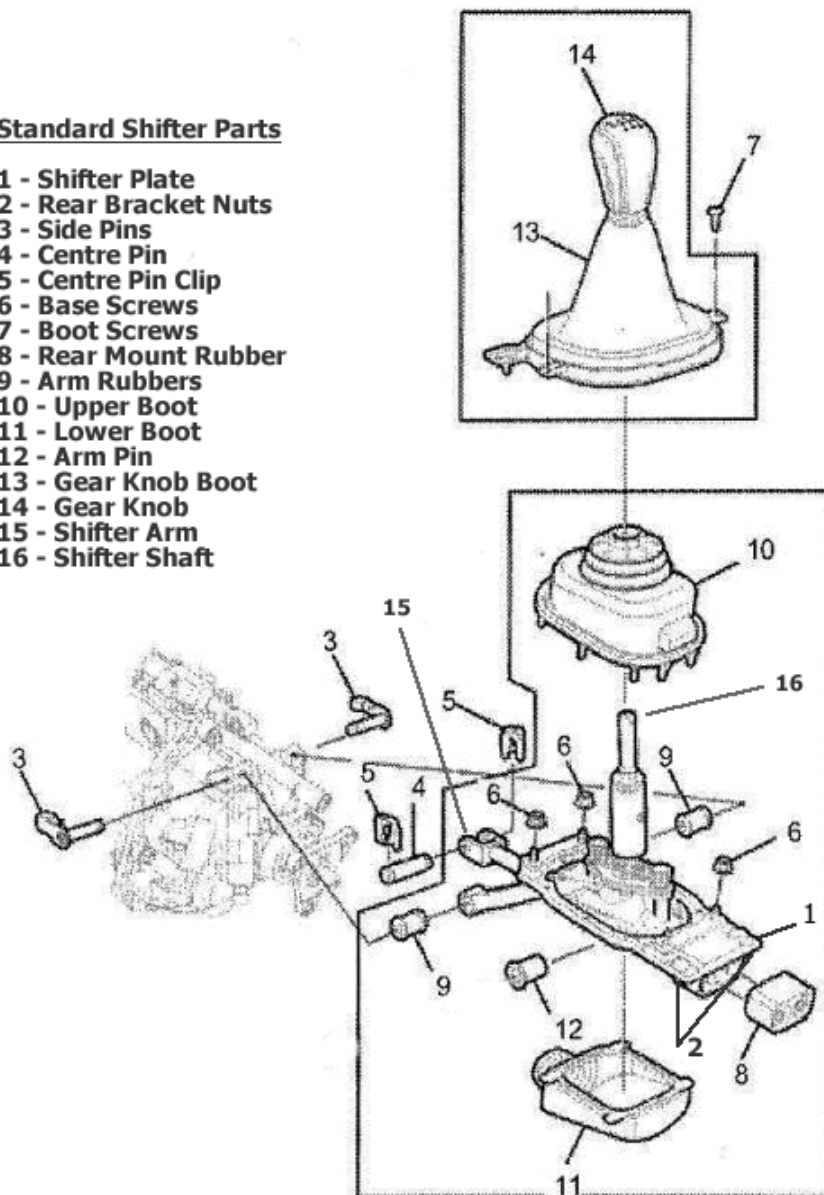
Phonsy Mullan
GM Motorsport

VE 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>

Inside Car

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

Under Car

1. Remove rectangular body plate – 4 x 15mm bolts
2. Remove 2 x 15mm bolts from Left hand rear muffler to exhaust – leave muffler hanging
3. remove 2 x 15mm bolts from Right hand rear muffler to exhaust – leave muffler hanging
4. Remove 1 x 15mm nut from rear exhaust rubbers / diff mount bracket
5. Unplug both O2 sensors – “leave screwed into exhaust”
6. Remove 2 x 15mm nuts from Right hand side catalytic converter
7. Remove 2 x 15mm nuts from Left hand side catalytic converter
8. Spray lubricant onto the 4 exhaust hanger rubbers
9. Remove exhaust by sliding the complete system backwards – “2 people needed”
10. Remove heat shield under tail shaft – 2 x 10mm bolts
11. Remove Transmission Cross member – 4 x 15mm nuts – “trans will drop approximately 60mm”

Removing Shifter under Car

1. Remove centre pin [4] from shifter to gear box - there is a clip [5] on either side, remove 1 and slide pin out
2. 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
3. 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

Stripping the Stock Shifter Body

1. Remove 2 x 10mm nuts [2] from rear of shifter body and remove the rear bracket
 2. Remove shifter plate [1] and upper boot rubber [10]
 3. Remove bottom boot rubber [11]
 4. 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”
 5. Remove 2 x 10mm bolts holding shifter shaft into body
 6. Remove shifter shaft [16] from body by pushing down on the shifter shaft from the top
 7. Remove plastic bush from shifter arm – “this is to be reused”
- The shifter is now striped and ready

Install Ripshift to Shifter Body

1. 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
2. Remove the positive stop thread and nuts from new Ripshift
3. Using the 2 allen key bolts supplied screw Ripshift to stock shifter base, use Loctite 262 on these screws
4. Once Ripshift is screwed tight onto base, cut cable tie holding springs to Ripshift
5. Remove nut from new Ripshift arm – this will be reinstalling once shifter is in car
6. Install stock plastic bush & gasket onto new Ripshift shaft
7. Insert new Ripshift shaft through bottom of the stock shifter base making sure gasket and plastic bush seat neatly into shifter base
8. Replace 2 x 10mm bolts that hold shifter arm into shifter base – “Loctite these screws”
9. Swivel shifter arm 90 degrees
10. Reinstall the positive stop thread and nuts back into Ripshift body
11. Reinstall the bottom arm using stock pin and clips – “remembering to replace it with bottom to bottom and front to front”
12. Insert blue rubber into rear mount bracket, it will slide into the stock black rubber [8]
13. Reinstall rear mount rubber [8] onto shifter body using the 2 x 10mm stock nuts [2]
14. Reinstall 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

Replacing Shifter - Under Car

1. Replace shifter into car pulling down on tail shaft to create room between tail shaft and trans tunnel
2. Replace 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

Adjusting Shifter Stops - Inside Car

1. Inside the car replace the 4 allen key base screws [6] that hold shifter plate to transmission tunnel
2. Adjust positive stops, when the Ripshift is in 3rd and 4th gears and you are applying slight pressure leave approximately 2mm between the shifter shaft and the positive stop, once this is done tighten the nuts locking the stops in place. Use Loctite 262 on stop bolts.
3. Installing red Ripshift shaft, screw supplied nut onto arm then screw red shaft onto Ripshift shaft, set height and lock bottom nut. Use Sikaflex/silicone or Loctite on thread.
4. 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
5. Slide top rubber boot over shifter – we will reconnect this to shifter plate under the car

Under Car

1. Using pointy nose pliers pull top rubber boot tags through the shifter plate
2. Reinstall heat shield 2 x 10mm bolts
3. Reinstall exhaust – slide onto rubber mounts
4. Reconnect O2 sensors
5. Reconnect exhaust to catalytic converters 4 x 15mm nuts
6. Reconnect rear mufflers to exhaust and replace 1 x 15mm nut on rear exhaust bracket

Inside Car

1. Reinstall the 4 allen key base screws [6] holding shifter plate to transmission tunnel
2. Make sure the rubber boot [10] sits neatly into the red Ripshift shaft
3. Reinstall stock shifter boot [13] and gear knob (Use Sikaflex or silicone) [14] onto red shaft
4. Reinstall plastic shifter surround remembering to connect electrical plugs

Tools Needed

1. Loctite – preferably Loctite 262
2. Socket wrench
3. 10mm socket
4. 15mm socket
5. Phillip head screwdriver
6. Long flat head screwdriver
7. 15mm ring spanner
8. Tap wrench or shifter
9. Allen key
10. Sikaflex/Silicone

Parts Supplied

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

Checkout our online store for all the latest LSX gear www.gmmotorsport.com.au

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