



**Fellow car enthusiasts,**

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

The GM Motorsport RIPSIFT design and quality is of the highest standard and is sure to set new boundaries in the Motorsport Industry. (Australian Design Reg154581)

GM Motorsport started life in the racing circle of Commodore Cup and progressed to the Premier Australian Motorsport Category of V.8 Supercars. Our experience & design we gained in Motorsport Racing has carried over into our street design products.

The RIPSIFT now available for your Commodore 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 sledge hammer. RIPSIFTS 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 over extending shifts that cause syncro breakage. Under Normal Street operating RPM (below 2800RPM) your RIP SHIFT 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**

### **Fitment of Shifter**

Refer to Holden / Pontiac / Chev or Vauxhall service manual for removal. (Brief Instructions are attached.)

Following same procedure to install new GM Motorsport RIPSHIFT.

Or you can view and print detailed step by step instructions on our website.

Note some models vary slightly in fitment detail.

### **Notes**

You **MUST** use Loctite on the gearstick bolts or they will come LOOSE!

You can use the round rubber boot but you may have to cut the back of the boot for clearance between shifter handle and gold ring when in 2nd & 4th gear

### **Setting Stop Bolts**

Select first gear. Hold the handle and keep tension on the lever.

Adjust lock out bolt until it touches shifter handle and then back off ½ turn Set lock nut. Repeat process for 2nd gear. (.020 to 050 thou clearance with feeler gauge between stop bolt & shifter lever.) If clearance is too tight you may experience a noise increase. Better to have too much clearance than not enough.

Before fitting rubber sound boot select 1st gear with clutch pedal in, apply handbrake then start car & slowly release clutch pedal nearly all the way, push the pedal back in just before the car stalls. If the car does not jump out of gear you are ready to go.

If the car does jump out of gear back the positive stop bolt another 1/6 to 1/2 turn, and then recheck.

Repeat process for 2nd gear

WARNING: This product is protected by Australian Design

Registration. No 154581

Handy Hints for Fast Shifting

Replace clutch fluid with high temp race fluid. (Normal fluid will boil under heavy driving) available from GM Motorsport.

Change standard rubber clutch line from master cylinder to a braided steel GM Motorsport line. (This also removes the restrictor in the standard line allowing you to have full line pressure)

For fast 2nd to 3rd shifts. When in 2nd gear going to up change into 3rd we simply push the gearstick straight up, we do not pull it over towards 5th gear at all. The spring action should guide you to the 3rd gate.

**Note.** This is not recommended to everyone & should be practiced at low rpm before trying at high rpm.

### **Fitting Instructions**

1. Remove gear knob by simply pulling straight up. It will take a good yank. Do not twist as it will break off inline locater.
2. Remove leather boot by applying pressure inwards to outer circle
3. Remove front screws from front of console, this will allow you to remove the plastic power window control piece. Lift from rear, unclip power window loom.
4. Remove entire centre console. Flip lid, remove rubber mat, undo 10mm nuts, remove all other related Phillip head screws related to console. Models do vary so take a good look for all screws. There are usually some hidden screws near seats.
5. Remove old gear stick by undoing both 10mm bolts
6. Remove rubber sound boot on early models by unscrew the four 10 mm bolts (later models are removed by undoing them from underneath the car.
7. Raise car safely
8. Undo transmission cross member bolts and allow Trans to come down about 3 inches.
9. Late model cars: remove four 12mm nuts holding on the rubber sound boot.
10. Lower car
11. Back inside car .Remove white plastic cover,4 screws
12. Remove four 6 mm allen head bolts. ( Use hex ball allen key)
13. Late model cars can use the 8mm rubber sound boot holes , they nearly line up with the front shifter bolts
14. Older cars will have to persist with top or try them from bottom of car.

15. Remove old shifter
16. Fit new RIP SHIFT into position. We put front bolts (use Loctite on bolts) in holes before placing shifter into position. (Make sure shifter ball locates into trans cup.)
17. If fitting into car with early rubber boot we replace front allen bolts with normal hex head bolts so you can do them up under the car a little easier. You can use the allen bolts if you like.
18. Late model cars: tighten four main shifter bolts; use the button head supplied in driver's side rear location. ( Normal bolt will not fit )
19. Early cars, nip rear shifter bolts, then raise car to tighten front bolts, then tighten rear bolts as well.
20. Raise car and re fit cross member bolts.
21. YOU MUST USE LOCTITE ON THE FOLLOWING BOLTS OR THEY WILL COME LOOSE
22. Fit new gear stick. Supplied onto the driver's side on shifter input shaft. Fit hex head BOLT in top HOLE and hand tighten, pull gear stick towards passenger side, now fit button head bolt in bottom hole & lightly tighten. Tighten top bolt completely and fit lock nut while still holding bolt tight. Tighten bottom bolt now.
23. Setting stop bolts: Refer to Page 2 for instructions.
24. Checking Body to shifter clearance: Fit steel outer ring from rubber sound boot. (Do not fit the rubber just yet). On late model cars just push the studs through. On early cars, bolt it up from the top. Check clearance of front positive stop bolt. Check also gold shifter ring clearance to body of car from 12 to 3 o'clock position. If the clearance is less than 3-4mm use a large screwdriver or pry bar to push the body work away from the gold shifter ring.( You can lever off the gold ring to achieve clearance ) About 6-8mm is enough clearance.
25. The above is done because some vehicles have slightly smaller tunnels & some cars have mounts that are worn. The result is the worn mounts or small clearance becomes an issue when the car is under heavy braking or cornering, the gearbox moves and the shifter ring can come into contact with the body. You will know if this happens as you will more than likely hear a noise.
26. Refit rubber sound boot, Late model cars will have to fit nuts under the car
27. Refit console in the reverse order as removed.
28. Before fitting gear knob you may have to spray the shaft with C.R.C as the new shaft is a tighter fit. (If shaft is not a real tight fit do not use c.r.c, use sikaflex to glue knob on. This helps with noisy gear knobs. )
29. Push down hard on knob and give it a sharp crack with your hand or soft hammer. Do not twist the knob when it is nearly all the way on as you could break the locating tag.
30. Enjoy your RIPSIFT.

**Checkout our online store for all the latest LSX gear [www.gmmotorsport.com.au](http://www.gmmotorsport.com.au) GM Motorsport  
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