

# DRIVER REVIVER

STORY AND PICS BY BEN HOSKING

IT'S AMAZING HOW MUCH OF AN IMPACT A FEW BITS OF RUBBER CAN HAVE ON YOUR COMMODORE'S SUSPENSION. THIS MONTH WE REBUILD XXX AND SHOW YOU HOW

**A**fter more than 200,000km on the atrocious Australian roads and almost 14 years since rolling gracefully off the Elizabeth, SA assembly plant production line, Project XXX's suspension bushings were far past their used-by date and you could feel it. Irrespective of the fact that the low-profile rubber helped driver and passengers feel every crack, pothole or crater in the road surface, the fact that many of the suspension components were rubbing metal to metal meant that all those surface irregularities felt doubly or trebly worse than they should have. The only fix for such a problem is to replace the worn factory rubber bushings with new items of either similar compound or up-rated materials.

Our Series-1 1992 VP sedan uses a MacPherson strut front-end assembly and a live axle rear with trailing arms and Panhard bar, just like the hundreds of thousands that preceded it (IRS became more common in the Series-2 models). Between these two major assemblies are around 20 different joints that utilise bushings and they all incur various degrees of wear. There are many areas for things to become tired and worn, with some being easier to replace than others.

In this issue we'll follow along as Network Automotive tears the VP apart and replaces all the bugged bushes with a plethora of new Lovells gear, along with Lovells adjustable Panhard bar, adjustable strut caps and new lowered coil springs.



## STEP 1

Here's the rear end as it came into Network Automotive. It already had Pedders shocks, springs and adjustable Panhard bar, but Lovells thought blue would be a nicer colour for the VP.



## STEP 2

Start by jacking up the rear of the car and use chassis stands to ensure you don't get squished. It only takes two nuts to remove the Panhard bar, and once you've got this off, loosen the two bolts holding the bottom of the rear shocks. To get the shocks completely out, you'll find the nuts for the top hiding under little caps in the boot.



**STEP 8**

Here are the new upper rear control arms that Lovells also remanufactures, negating the need for a hydraulic press to get the old bushes out and the new ones in. Again, be sure to coat the centre pins and bushes with the installation grease lest you live with incessant squeaking.



**STEP 9**

There's a total of eight bushings in the rear swaybar link assemblies that require replacement. The most outer ones are a pain to get to, but the procedure is simple enough. Tighten the new bushes to a level where they appear compressed without any edges of the bushes squeezed over the edge of the washers.



**STEP 10**

With the rear end all tightened up as much as possible (no torque levels here – as tight as she'll go), we move onto the front end. Disassemble the strut assemblies and remove the front struts. Remember your chassis stands!



**STEP 11**

If you don't buy Lovells remanufactured front control arms, you will probably require some form of hydraulic press to force out the old bushes. Even with this, you may require some heat to get them out. Then it's a case of out with the old, in with the new.



**STEP 12**

Also replaced were the radius rod bushes. These too were a pain to remove, requiring some tweaking with a pry bar. With the old ones out, slip in the new ones, paying attention not to forget any washers along the way.



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### STEP 3

You'll now find that the springs will lift right out. The rear end of the car is much easier to disassemble than the front, so enjoy the ease of rebuilding the rear while you can.



### STEP 4

Here the lower control arms are being removed. The most rearward rubbers were not replaced as they displayed minimal deterioration and Network claims that is the case for most live-axle Commodores.



### STEP 5

You can see the stuffed bushings in the rear swaybar links here. This kind of wear is indicative of the wear found throughout the car after so many kays. You'll need to disassemble the swaybar links, too. This is a pain in the rear (excuse the pun) due to the location of the uppermost nuts.



### STEP 6

Lovells remanufactures lower control arms with its polyurethane bushings fitted prior to purchase, making the whole job a lot easier. They come repainted in black and not only look better, but work better too. As you can see from the inset, you need to apply a decent coating of grease during fitment to prevent squeaks and prolong service life.



### STEP 7

Here are the new springs going in. It's a straightforward affair, but you have to be sure they're located properly in the lower spring seats. When lowering the car back to terra firma, you may need to hold the coils in place to ensure they sit properly in the upper mounts.



# Terra Charger

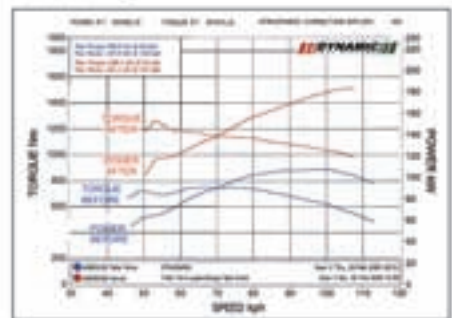
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## TECH STUFF

### STEP 13

Lovells manufactures what it calls a 'Z Bar' as a direct replacement for the front swaybar links. These work well to correct misalignment in lowered Commodores, keeping the angles true for longer service life of the link bushings.



### STEP 14

Perhaps the trickiest piece in the Lovells puzzle are its adjustable strut caps that allow tweaking of the camber and castor angles of the front end. The different sizes in the coil of the front springs are to prevent them falling out when the car is raised.



### STEP 15

Once the front end is all tight and you've double-checked both ends for loose fasteners, it's onto alignment and dialling everything in. Peter from Road and Race Performance in Rydalmere set the car up with around 1.5° negative camber and 4° castor on both sides for better cornering and straight-line stability.



## WHATSITCOST?

Part No.	Item.	Price \$
HFL-22XSL (x2)	Rear springs	\$151
HRL-26SL (x2)	Rear springs	\$151
N52490	Fr control arm bush	\$60.60
N81004	Fr radius rod bush (Fr)	\$46.91
N81099	Fr radius rod bush (R)	\$35.17
X44005	Xtreme adj strut tops	\$628.15
31207	Fr swaybar link bush kit	\$25.30
N23000	Z-link fr swaybar links	\$54.60
N21014	R swaybar link kit	\$22.52
RA112	Exchange upper rear trailing arm	\$151.44 set
RA113	Exchange lower control arm	\$129.29 set
N81715	Adj Panhard bar	\$250

\*All prices +GST

## CONTACT:

LOVELLS SUSPENSION AT [WWW.LOVELLS.COM.AU](http://WWW.LOVELLS.COM.AU)  
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## CONCLUSION

The difference in ride quality and handling was immediate with the new bushings, springs and Panhard bar. Only the day prior to the install, XXX scored its new XHP 19in Shift rims and yet once the suspension was rebuilt, the ride was a little softer than when it had the 17in rims on it.

Body roll was also reduced by the new swaybar link bushings. As the old rubber items continued to perish, the body roll continued to proliferate, but the car now corners much flatter than before and overall the car seems to have less road noise in the cabin while also feeling tighter and newer. **SC**