

HUFF AND PUFF

SAM FROM SAM'S PERFORMANCE TOLD US THAT A CUSTOMER OF HIS HAD JUST DELIVERED A HSV GTS TO HAVE A HARROP SUPERCHARGER INSTALLED. WE HEADED OVER TO SAM'S HQ TO DOCUMENT THE WHOLE PROCESS

STORY BY LIAM QUIRK PICS BY ANDREW BROADLEY

This month we follow the installation of a Harrop LS112 supercharger as it is mounted to a HSV GTS by Sam of Sam's Performance. Who better to watch fit a performance part like the Harrop blower than a man who knows his way around an LS engine better than most of us know the back of our hands? A big thanks to Sam for letting us sit in on the install.



01. Take one fully functional, expensive HSV and lift the bonnet, like so. This should greet you. Unbolt your engine covers

02. This was in our way, so off it came. We undid the bolts, but marked its position on the body before so that we could be sure it was installed in the correct position

03. Loosen the hose clamps at both the throttle body and the air box, and remove the intake piping. Disconnect the fuel line, rocker vent and brake-boost line from the manifold

04. This plastic dealio has to come off. Pop the push clips out and gently remove it. Still at the front of the car, disconnect the throttle cable and the throttle-position sensor

HARROP SUPERCHARGER INSTALL



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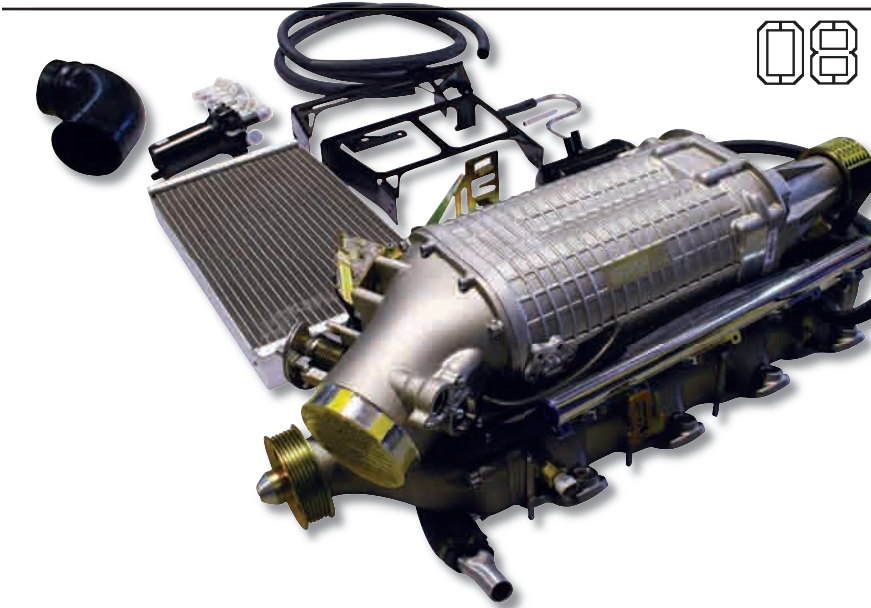
05. Unbolt the intake manifold. If the intake manifold will come free, then lift it. However, it probably won't go far with all of the breather hoses, PCV hoses and electrical wiring attached, so disconnect them. Lift the manifold completely clear of the block. Have you considered flogging it on our online forum?

06. Tidy up your cylinder heads, or the rubbish congregated there now will come back to haunt you. If nothing else, it's not the best way to run in your new blower, so wipe it all out with a cloth

07. Unbolt the power-steering reservoir from its location and move it out of the way

08. This little beauty is your Harrop blower kit. It contains everything you need to get it onto your LS engine, straight out of the box

09. Start undoing your front bar. Once it is all but off, get a mate to help you remove it so that you don't chip, scratch, dent or crack it



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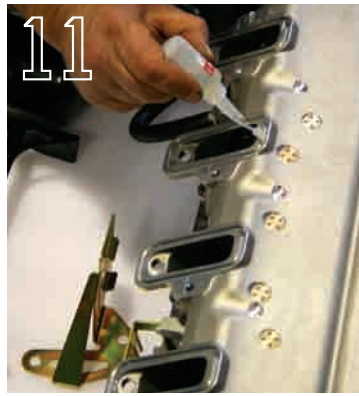
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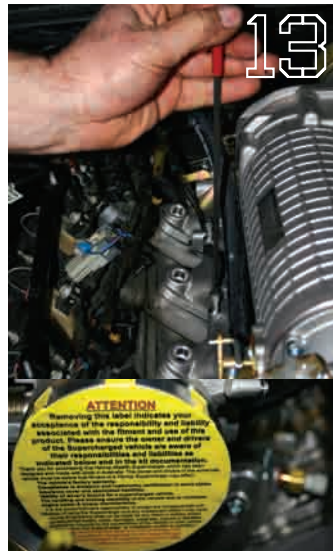
10. The factory coolant bleed tube can't be used, so it has been replaced with a Harrop item. You can see where the electrics were taped down out of the way of the blower

11. Coat the ports in this magic little solution

12. With the engine now looking like this, rope in the mate that helped with the front bar (or another if you don't trust them with a blower) and gently place the Harrop charger between the heads. If hoses or looms are in the way, obviously, move them



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13. Do the bolts up loosely with a hand tool. Don't use air or power tools for fear of over tightening them and destroying the seal between the heads and the blower. Once tight with a hand tool, double-check with a ratchet

14. Grease up the injectors and attach them to the fuel rail. With four on each rail, pop them into place and secure the fuel rail. Attach the fuel feed lines and electrics



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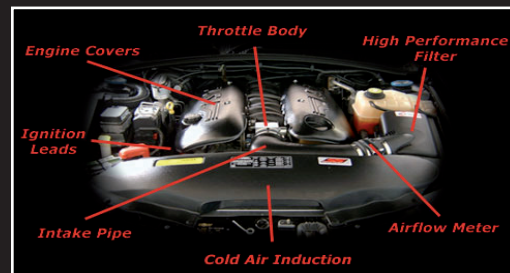
15. Line up where you want your intercooler to sit, and drill some holes by which to mount it. Bolts just won't do for some people, and rivets were the order of the day for Sam.

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HARROP SUPERCHARGER INSTALL



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16. This is your Harrop intercooler reservoir, and it is mounted in the rear right of the bay

17. With the intercooler attached to the brackets, mount the brackets to the body, and voila! Front-mount goodness



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18. This pic shows the difference between the air boxes. The standard air box is on the left, with the new, less restrictive air box on the right. Turf the old and bolt in the new

19. Connect your intake piping, tightening the hose clamps to the intake of the supercharger and to the air box. Remember that you should remove that pesky label from the blower intake

20. Of course, we're going to need a throttle cable, so back on that goes. With it all installed, check that it doesn't stick. With your new powerhouse, that would be bad indeed

21. Loop the belt around this pulley, and then adjust until tight

22. Remove all of the necessary sensors on the old manifold and place them on the new. These new sensors will include the throttle-position sensor, the idle-adjustment control and a host of other integral items. Check that your fuel lines, electrics and breather hoses are all hooked up



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Double check that all of the hardware is in firmly, and that all of the ancillaries are hooked up properly. There should be no stray wires in the bay, or sensors going plug-less. If necessary, tie up these loose ends. That is how we instantly boost the performance of the LS engines with one simple mod. It really is quite a basic procedure, and if you're more than half-capable with a spanner it's an easy mod that yields fun results. For more information on the Harrop products go to www.harrop.com.au, or for info on Sam's services check out www.samsperformance.com.au. *SC*

