

# Tech Guide

## LS3/LS7 Hurricane Intake Manifold



Harrop Engineering develops and manufactures premium induction products for customers globally. Since 1955 Harrop have successfully designed and manufactured components for OEM's, Motorsport Teams, Car Builders and Enthusiasts. Harrop Engineering Australia and USA is certified to ISO 9001 standards with superior quality, performance and vehicle integration the foundation of Harrop Performance Products.



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### Key features:

- 8 x 60mm throttle plate diameter
- 2-piece inlet trumpets with airbox mounting provisions
- Uses Bosch EV 14 long injectors
- -8 ORB fittings both ends of fuel rails
- Carbon fibre linkage cover
- Utilises all standard vacuum fittings
- Available with Electronic Throttle Control (ETC) or cable throttle actuation
- LS3 ETC manifold P/N – 99-AMFD11198
- LS3 Cable manifold P/N – 99-AMFD11312
- LS7 ETC manifold P/N – 99-AMFD11001
- LS7 Cable manifold P/N – 99-AMFD11311

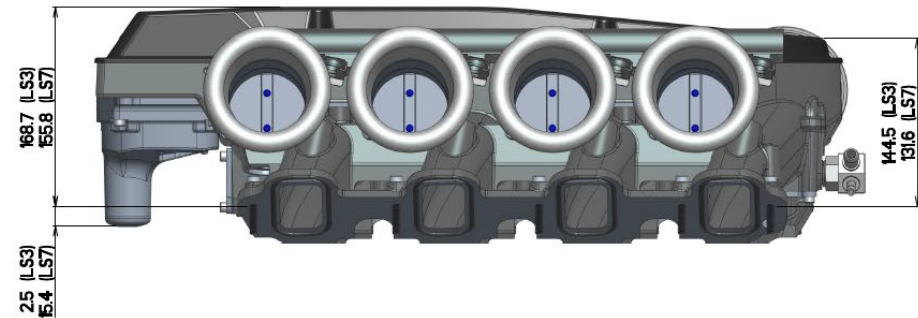
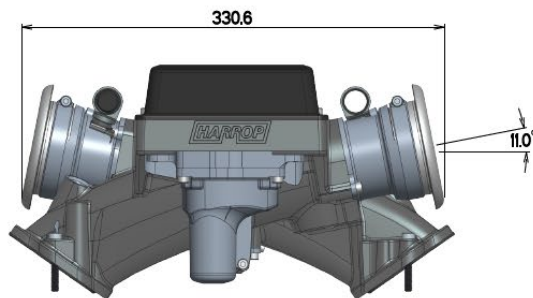
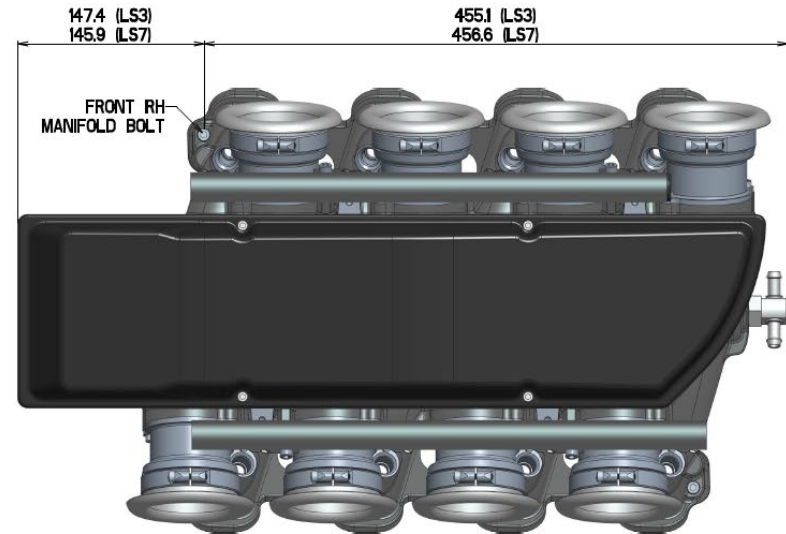
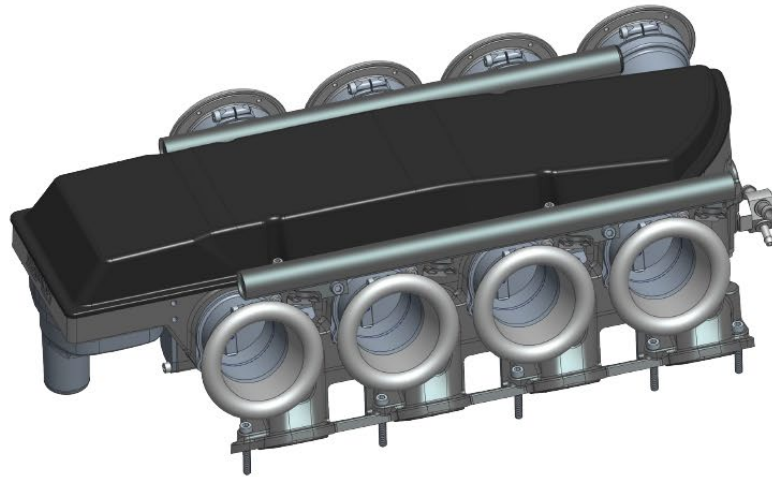


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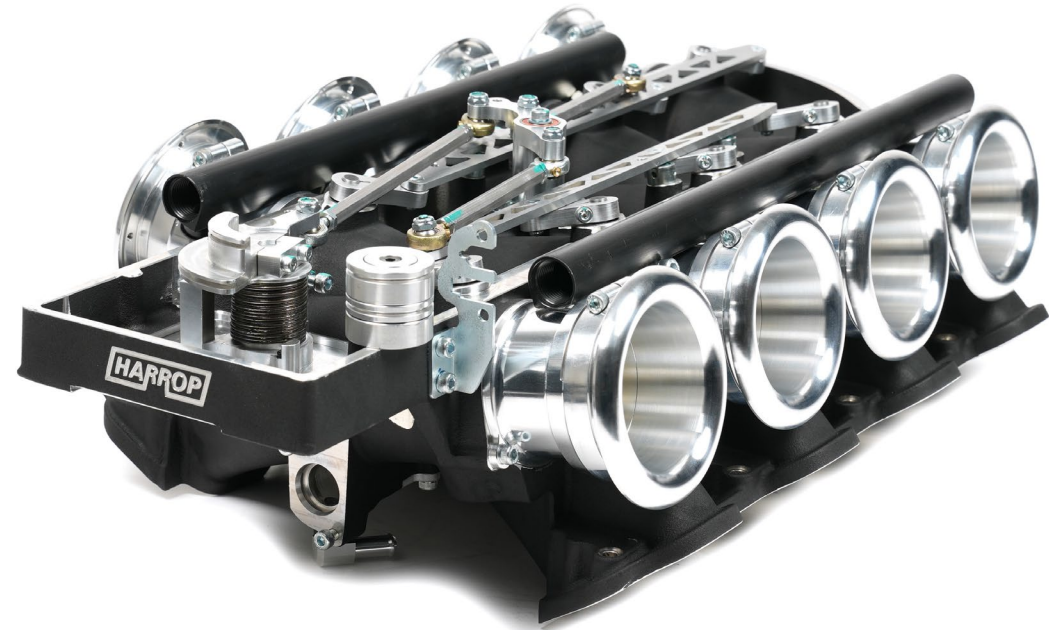
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### Hurricane ETC/DBW



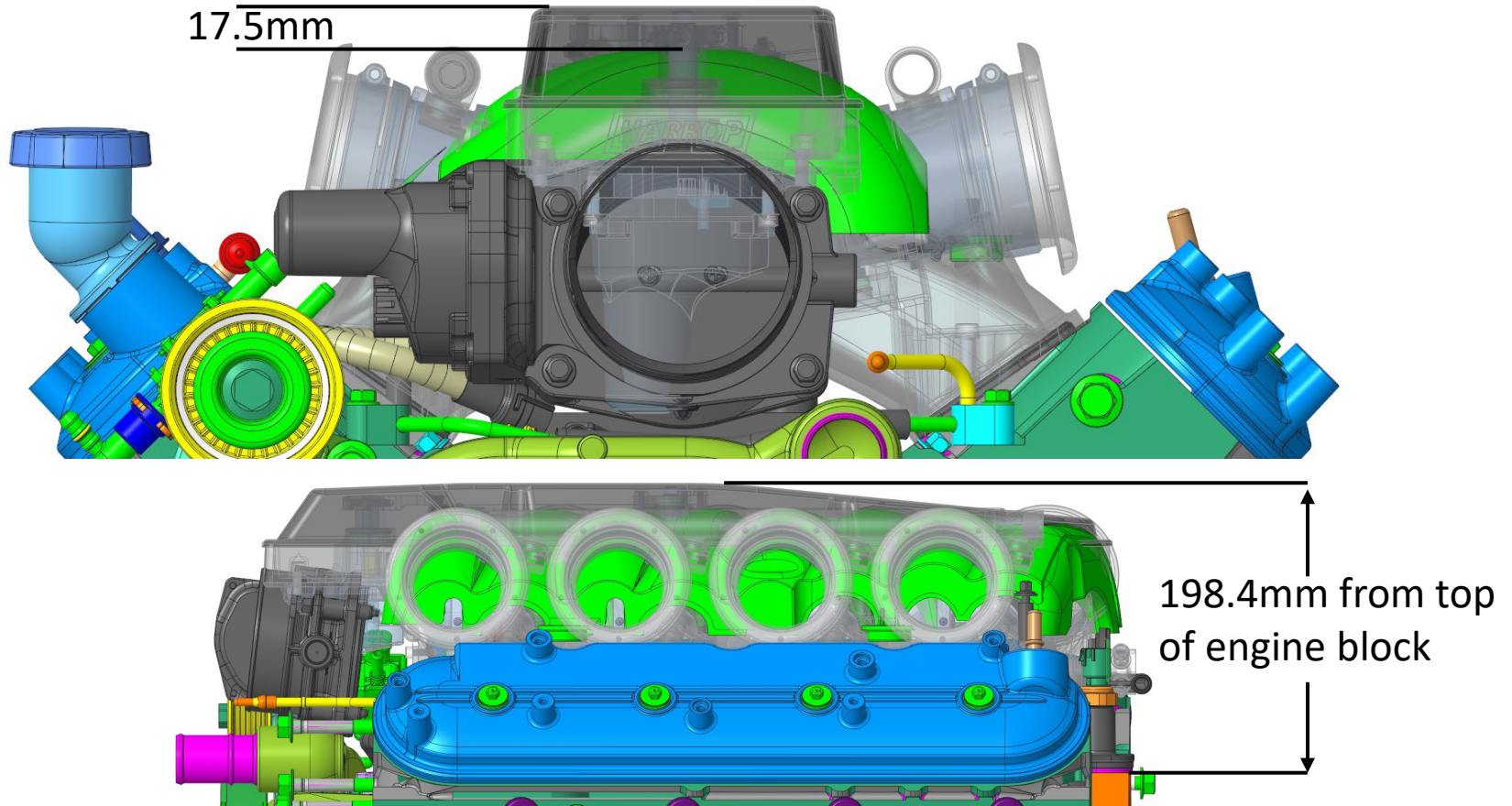
### Hurricane Cable



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### Harrop Hurricane vs OEM intake manifold

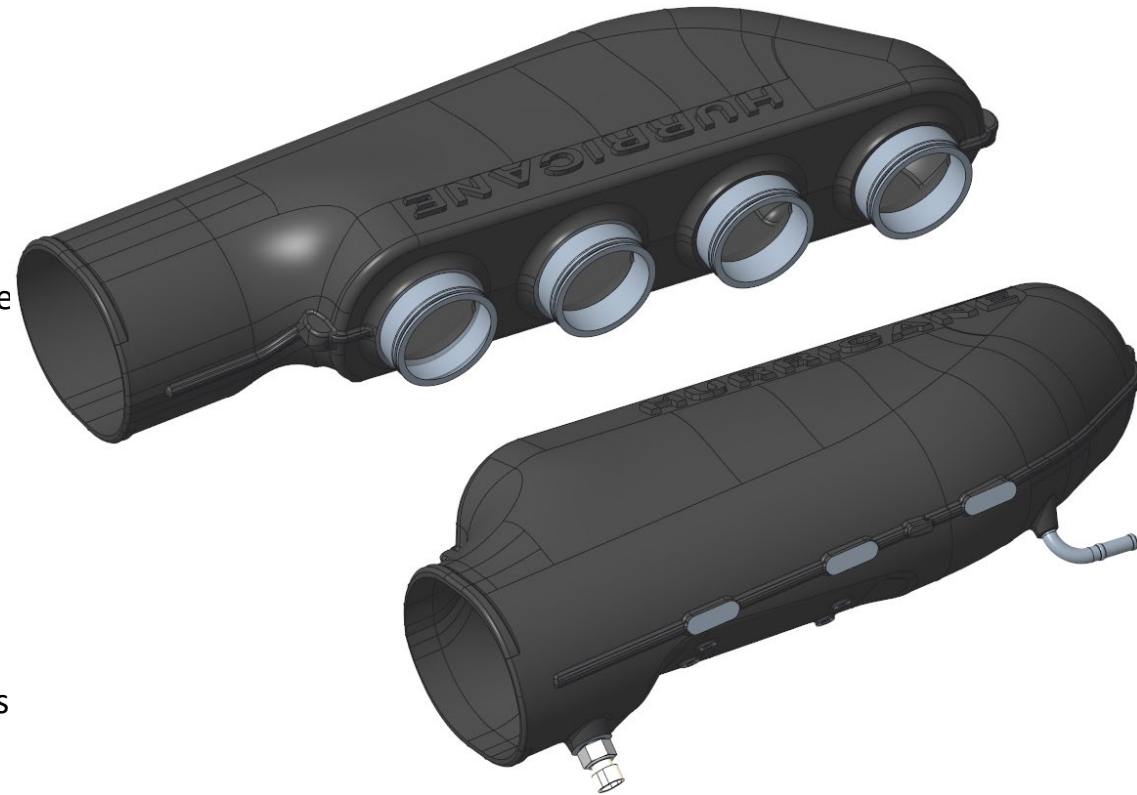


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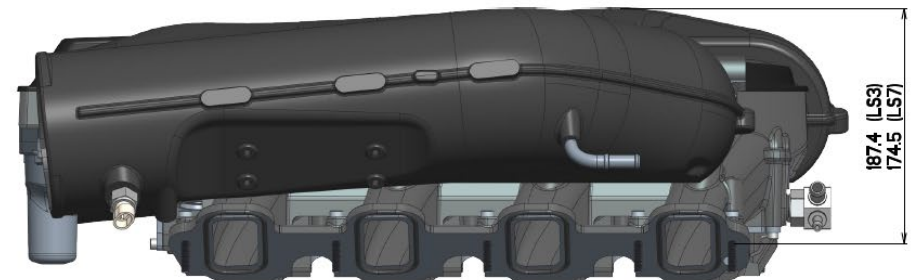
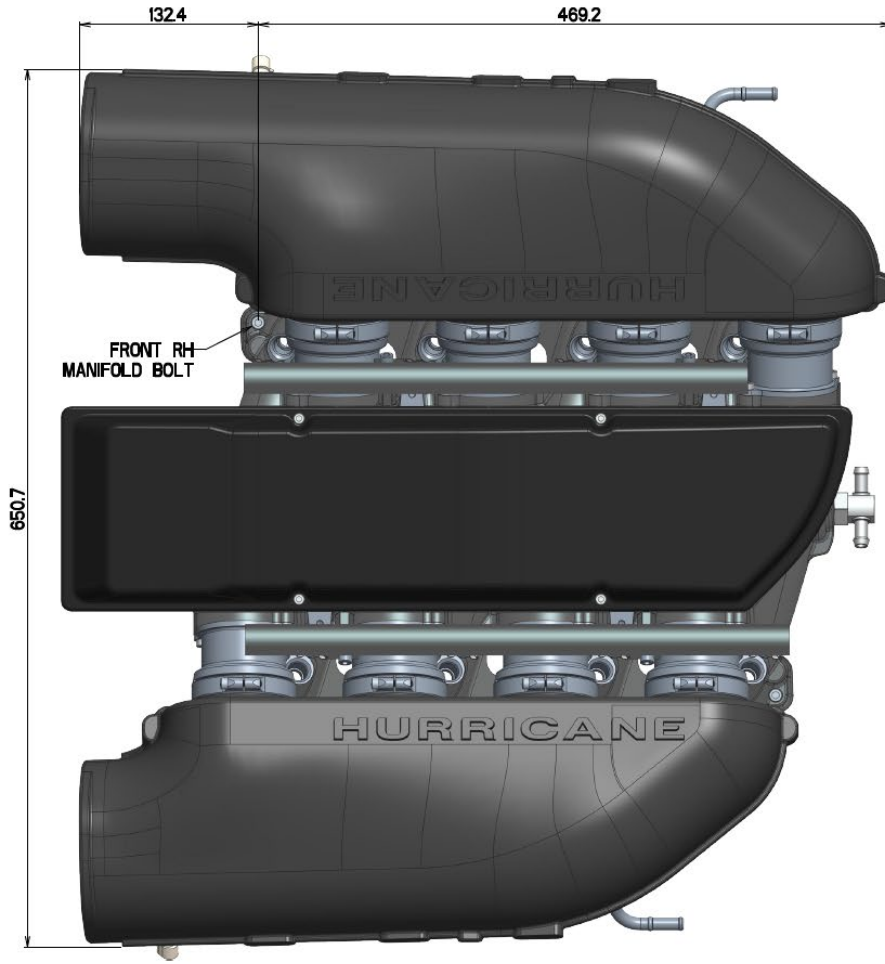
### Airboxes

- Suits LS7 and LS3 Hurricane manifolds, both cable and ETC/DBW
- Replaces 8x bell-mouth sections of trumpet
- Suits OE rocker covers
- Harrop tall rocker covers (for use with high ratio rocker arms), and flat rocker covers (for tall heads) are optional.
- Suits K&N Pod filter #RU5147
- Fits under the bonnet/hood of VE-VF Commodore (including GTS)/Chevrolet SS & VT-VZ/GTO.
- Testing shows minor peak power gain and less than 3% peak torque loss compared to running no airboxes
- Airbox fitment will require additional installation parts depending on engine configuration – see matrix page 8



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### Airbox application matrix

	Harrop Hurricane airbox, LH & RH	Coil relocation kit	Smiths Racing coil extension loom	PCV fitting	Flat oil cap	Harrop Tall Rocker covers, LH & RH	Harrop flat rocker cover	K&N pod filter	Air temp sensor
LS3 with OE heads and OE rocker covers	Required	Required	Optional	Required	Required	Optional	N/A	Optional	Optional
LS3 with OE heads and high ratio rockers (T&D 1.8:1)	Required	Required	Optional	N/A	Optional	Optional	N/A	Optional	Optional
LS7 with OE heads and OE rocker covers	Required	Required	Optional	Optional for dry sump engines	Optional for dry sump engines	Optional	N/A	Optional	Optional
LS7 with OE heads and high ratio rockers (T&D 1.8:1)	Required	Required	Optional	N/A	N/A	Optional	N/A	Optional	Optional
LS3 with Tall heads (MAST)	Required	Required	Optional	N/A	N/A	N/A	Required	Optional	Optional
<b>Supplier part number</b>			LOOM-GM-023-LMTO						
<b>Harrop part number</b>	99-ABX12308 99-ABX12309	99-ABKT12433		99-FIT13108	99-CAP12310	99-CVR13439 99-CVR13440	99-CVR13432	65-RU-5147	65-25037388
<b>Qty required per part number</b>	1 pair	2 each	2 each	1 each	1 each	1 pair	1 pair	2 each	1 pair

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### Comparative Performance

ENGINE	COMPONENTS	POWER	TORQUE	FUEL
Stock LS7	OEM intake manifold	554 HP @ 6100 RPM	527 FT LBS @ 5050 RPM	98 RON
Stock LS7 with Hurricane	Harrop Hurricane	596 HP @ 6250 RPM	574 FT LBS @ 4400 RPM	98 RON
Built LS7 with Hurricane	Harrop Hurricane LPE GT21 camshaft LPE spring and retainer package 4 into 1 long tube 1-3/4 headers	682 HP @ 6550 RPM	612 FT LBS @ 5500 RPM	98 RON
Built LS7 with Hurricane	Harrop Hurricane with Harrop airboxes Callies Compstar forged steel crank Callies Compstar H-beam conrods Diamond forged pistons Mast Motorsport cylinder heads RHS alloy block	718 HP @ 6400 RPM	658 FT LBS @ 5100 RPM	E85

Visit HarropTV for LS7 engine dyno testing: <https://youtu.be/pLAQ-X6LCMQ>