LS4 Swap Discussion

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Agenda

- Build Goal
- Research
- Implementing Build Plans
- Build Sheet
- Prep
- Installation
- Finishing
- Preferred Vendors & POCs
- Questions

Build Goal

- Keep in mind
 - Not a bolt on / off the shelf project
 - Little Decisions have Big Impacts
 - LS4's are great, but not the only option
- Budget & Ability
 - What can you budget towards the build?
 - What aspects of the build can you do yourself?
 - Expectation Management
- Build Details
 - What is the end goal?
 - Specific Components
 - Performance
 - Comfort & Drivability
 - Aesthetics



Research

- Informational Sources
 - FieroGuru's build thread(s)
 - Pennocks
 - LS1 Tech
 - Facebook / GM Forums
- Things to Keep in Mind
 - Auto / Manual transmission
 - 24x vs 58x Engines
 - Harness Design is Dependent on Specific Components
 - Decide on AC First

Implementing Build Plans

Now that you know what you want the car to do and have done some research on what that will entail, how do you start building?

- Engine & Transmission
 - Rebuild?
 - Upgrades & Modifications
 - Performance Considerations
- Mounts / Brackets / Accessories
- Electronics & Tuning
 - Gauges
 - Harness / ECU



Implementing Build Plans

Now that you know what you want the car to do and have done some research on what that will entail, how do you start building?

- Axles / Suspension / Brakes
- Coolant System
 - Filling & Servicing
 - Routing
 - Heater Core
 - Mechanical vs Electric Pump
- Exhaust
 - Manifolds
 - Front half
 - Muffler & Tips
- Fuel System

Build Sheet

- Planning & Budgeting
 - Identify parts required
 - Identify vendors
 - Budget Tracking
 - Leadtime Tracking
- Planning in Phases
 - Phase 1 Engine and Transmission (Re)Build
 - Phase 2 Engine Cradle Build-up
 - Phase 3 Installation

	LS4 Engine							
2007 58x LS4 LS2/7 Throttle Body / silver Camshaft Kit Valley Cover / Gen DoD delete	BTR Stage ICT Billet		600 300 600 40	614-001	Need outer CVs and long shaft Need inner CVs only AutoZone (each)	Axles Fiero Manual Axles G6 Axles CV Boots		100 250 18.99
Oil distribution block LS7 Lifters / Trays	Fieroguru BTR		65 120	MIKKUPPA 121070	Amazon (pkg 8) AutoZone	Boot Clamps Mobile 1 Synthetic Grease		9.47 8.99
LS Rebuild Kit Arp Head studs Fuel Injectors Intake Manifold	Seals/rings/bearing LS2 BTR	S	340 300 300 799		Respline	Moser Engineering	Total	190 577.45
Maf flange LS2 style MAF Engine / Trans Mounts Upper Alt Mount	Needed with AC		20 100 500 300		2006/2007 F40 Flywheel / Stage 3+ clutch Fieroguru Fieroguru	40 6 Speed SPEC F40 Cables/Bracket Clutch line adapter		700 902 370 45
Belt w/AC Gates Timing Belt Pulley	AutoZone Amazon T	otal	22.99 51.52 4458.51		Amazon Fieroguru Fieroguru Rock Auto	Dorman Bleeder adapter Reverse lockout Starter bracket F40 Intermediate Shaft	Total	63.78 45 95 130 2350.78
	Turbo						Total	2330.78
Turbo / On 3 Performance Turbo flange Headers BOV	7675 Billet Wheel LS Turbo Headers Tial		980 45 360 260	HAR-1063	Stand alone 58X LS2 / T56 w/ LS3 throttle pedal (DBW) DBW Pedal Pedal Plate adapter	Misc PSI Conversions Corvette 2Ps		700 100 40
Waste Gate Heat exchanger Intercooler piping Sleeve Kit Turbo oil supply line Turbo oil drain line	Tial CX Racing CX Racing		300 600 400 120 118 85		Water pump mod w/offset tensioner Coolant filler AC Lines / Fittings Paint	2Ps 2Ps 2Ps		300 175 100 300
	т	otal	3268				Total	1715
Exha 2.5 inch exhaust kit Muffler Tips	ust Components Magna flow Your Choice		300 160 220 Estimate				iotai	1/15
Hangars / Flex joint / hardware	т	otal	180 860			Paint based on quote fro	m Earl	TBD

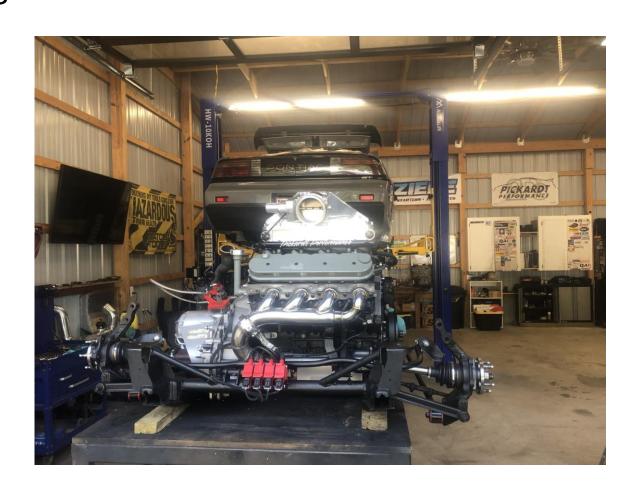
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Prep

- Engine Removal
 - Remove Stock Fiero Engine Bay Components
- Engine Bay Modifications
 - Passenger Decklid Hinge Box
 - Battery Tray
 - Dog-Bone Mount
 - TEST FIT ENGINE PACKAGE
- Paint & Finishing Touches
 - Rust & Damage Correction
 - Protecting Exposed Components & Surfaces
 - Prime & Paint

Installation

- Battery Relocation & Cable Routing
 - Location, Connections, and Routing
 - Prep for Grounds
- Fuel Tank / Pump Conversion
 - Dropping the Fuel Tank
 - Upgraded Fuel Pump
 - Fuel Filter / Line Installation



Installation

- Interior Prep
 - Upgraded Electronics
 - Center Console Prep
 - PCM Mounting Tray
 - Relay and Fuse block Location
- Engine Package Install
 - Install Engine & Cradle
 - Harness Routing / Layout
 - Brakes / Suspension / Axles
 - Fuel / Coolant / AC / Transmission Lines
 - PREP FOR START

Finishing

- What we forgot to Account for
 - Oil / Coolant / Fluids
 - Ignition / Spark
 - Filters
- Exhaust
 - Heat Shields
 - Muffler
 - Proper Alignment
- Parking Brake (if used)



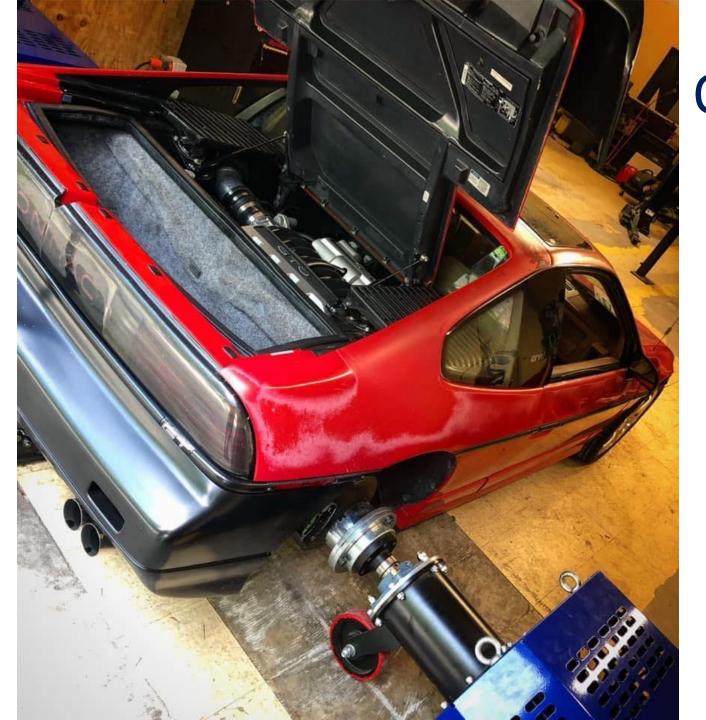
Finishing

- Clearances & Heat Management
 - Heat Wrap / Shields
 - Fuel Lines & Wiring
- Checks
 - Electrical
 - Fuel System
 - Double Checks
 - Wiring
 - Components Torqued & Secure
 - Exhaust Leaks & Clamps
- First Start
- Diagnostics and Troubleshooting

Preferred Vendors & POCs

- FieroGuru Performance
- Rodney Dickman
- Fiero Store
- Pickardt Performance
- G3 Fieros
- Sinister Performance

- Holley Performance
- Meziere Enterprises
- Moroso
- 2 Feet In Fabrication
- LSC Performance
- SPEC Clutch



Questions?

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