

# 3.4L Pushrod Engine Swap



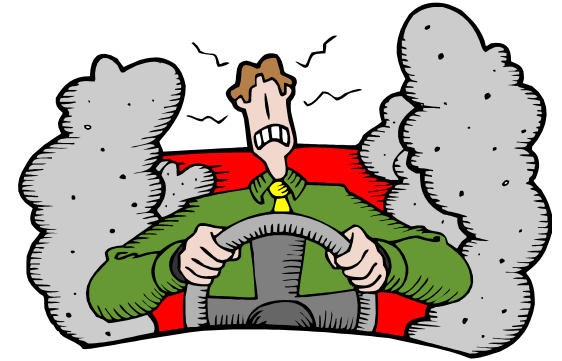
By  
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# Advantages



- A direct bolt-in swap
- Very little modifications required
- Better oil galleys and higher displacement than original 2.8L
- Low cost for basic replacement
- Keeps the engine bay looking 100% stock

# Disadvantages



- Limited aftermarket support
- High cost to for performance parts
- Cost vs. Power ratio is low
- Other engine swaps can cost less and attain more power.

# 3.4L typical installation



# Where to locate an engine

- Engine required is a 3.4L pushrod engine with the cast iron heads
  - Used from 1993 until 1995 in F-body GM cars. (Firebirds and Camaros)
  - GM Performance Parts 3.4HT Crate Engine
  - Price: \$1,865.95
- Part # GM - 12363230

# Modifications Required

- Starter Relocation



Drill Guide Jig

[www.rodneydickman.com](http://www.rodneydickman.com)

# Modifications Required

- Oil Pressure Sensor and Gauge Adapter\*



\* Only required on A/C equipped cars

# Modifications Required

- This bracket is used when you install a Camaro / Firebird 3.4 V6 in an 88 Fiero. It allows you to retain the Fiero 88 V6 AC compressor bracket. In the past you would have had to install a 85-87 cast iron bracket from a 2.8 V6, and then weld in a stud. You would also have had to replace the 88 AC compressor bracket with an 85-87 compressor bracket to make it all work together. This bracket allows you to retain all of the stock 88 air conditioner parts when installing a 3.4.





# Modifications Required

- Automatic Transaxle clearance.



# Additional Parts Required

- 1988 Flywheel/Flex-Plate
- 1985-1987 Modified Flywheel/Flex-Plate



# Parts Swapped from Original 2.8L

- Entire intake manifold
- Valve/Rocker covers
- Exhaust manifolds
- All brackets and mounts
- All sensors and wire harness'
- Complete ignition system
- Fuel rail (3.4L fuel injectors are retained.)
- Oil Pan and Timing Cover/waterpump
- Harmonic Balancer

# Performance Upgrades

- Camshafts and Valve train
- Intakes
- Exhaust
- Misc.



# Camshafts and Valve Train



- Crane H260 and H272
- Rocker Arms 1.5 vs. 1.6 ratio's
- Full Rockers
- Cam Sensor Mod
- Stainless Valves



# Intake Manifolds

- Why more air?
- Stock Intake Bored and Ported
- Trueleo Intake
- Edelbrock Intake

# Stock Intake Bored and Ported

- Bored from 52mm to 57mm
- Darrell Morse Contact: [morse86@aol.com](mailto:morse86@aol.com)



# Trueleo Intake

- Better Flow
- 2 Styles and options
- Injector sizes
- Website:  
<http://www.trueleo.com/intake1.htm>





# Edelbrock Torker II

- All aluminum
- 2-bbl with EGR
- 4-bbl without EGR
- Holley Carbs



#3789



#3785



# Exhaust Manifolds

- Stock Exhaust Manifolds
- Sprint Exhaust Manifolds
- West Coast Fiero Systems



# Other Performance Items

- MSD or Crane Fireball Ignition Systems
- Cloyes Double-roller Timing Chain
- GM Hi-Vol Oil Pump GM P/N 10051104
- Holley Adjustable FPR P/N HLY-512-501
- Accel Injectors
- Forced Induction

# Questions and Answers

