

LINGENFELTER

PERFORMANCE ENGINEERING

2013 Lingenfelter Tactical, Armored & Protective Services Vehicles Product List



Lingenfelter Performance Engineering
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Thank you for your interest in Lingenfelter Performance Engineering (LPE) products. For over 30 years, Lingenfelter has been synonymous with world-class performance, taking great cars and trucks and reinventing them with legendary precision.

For customer service or technical help questions, please call (260) 724-2552, Monday–Friday, 8:00 a.m. – 5:00 p.m. (EST), Saturday 8:00 a.m. – 12:00 p.m. (EST). Emails can be submitted at any time by contacting sales@lingenfelter.com or by emailing your particular sales person.

Orders can be placed via phone, fax, email or online via the LPE web store.

International orders are welcome. Payment for purchases exported outside of the USA will be via money wire transfer or Paypal® with authorized address only. No credit cards will be accepted without prior authorization and address verification.



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Summary - Primary 2007-2013 2500 Suburban Products

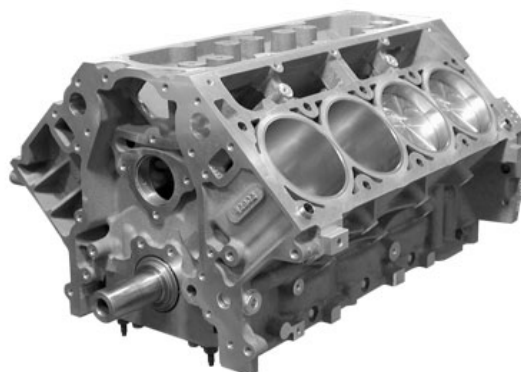
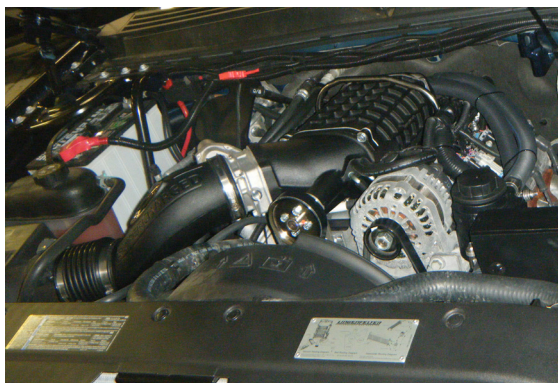


DESCRIPTION	PART NUMBER
Low boost TVS1900 supercharger system for armored 2007-2013 2500 Suburbans. Includes high output ECM controlled auxiliary fans & 160 amp alternator.	L250140607
2000-2013 2500 Suburban 2WD & 4WD, anti-sway bar, 38mm solid, front, 6.0L & 8.1L	HW8396
2000-2013 2500 Suburban 2WD & 4WD, anti-sway bar, 32mm solid, rear, 6.0L	HW8397
2007-2013 Suburban auxiliary fan kit, standard fans w/ AC based control (no ECM programming, stock alternator)	L300080607
2007-2013 Suburban auxiliary fan kit, ECM control (requires ECM programming, does not work with OEM electric fan equipped vehicles)	L300090607
2007-2013 Suburban high output fan kit, ECM control (requires ECM programming and high output alternator, does not work with vehicles equipped with OEM electric fans) - same as included with supercharger systems.	L300130607
2007 2500 series Suburban and Yukon XL high flow fuel pump upgrade kit. Required for 2007 model year Suburban and Yukon XL vehicles when installing supercharger systems or other engine upgrades. Module not included.	L710050607

The LPE low boost supercharger systems for the 2007-2013 2500 Suburban and Yukon XL are designed to provide fully loaded vehicle performance that matches or exceeds the performance of the no longer available 8.1L equipped Suburbans and are designed for use with a minimum fuel octane rating of 91 octane (rated using the standard US [R+M]/2 method) although 93 octane is recommended. The systems are designed with a focus on maintaining the critical reliability and durability that this market demands. In order to achieve this level of durability the supercharger systems operate at a lower boost level and include numerous components not normally used in the civilian versions of these kits including new spark plugs, throttle body and 160 amp alternator. The calibrations are also unique to these vehicles and have been tested at load levels exceeding 10,500 lbs vehicle weight as well as failure tested for loss of accessory drive belts and use of incorrect octane fuel. The systems also include two electric fans that are packaged in the vehicle to provide supplemental airflow across the AC condenser to improve AC performance under stopped and low vehicle speed conditions. The auxiliary twin fan system is also available as a stand alone kit for installation on vehicles that are not getting the supercharger system.

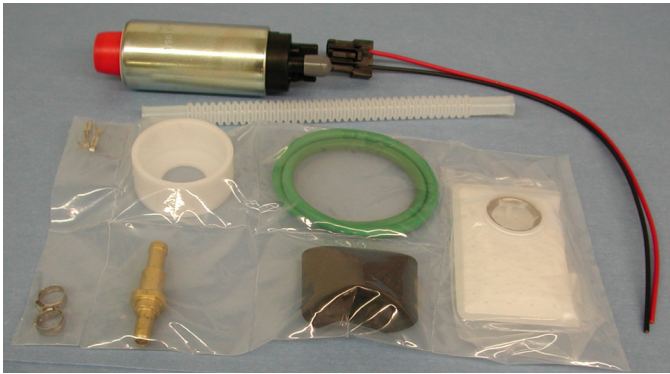
See page 16 for comparison graphs of the engine and vehicle performance.

Engine Components



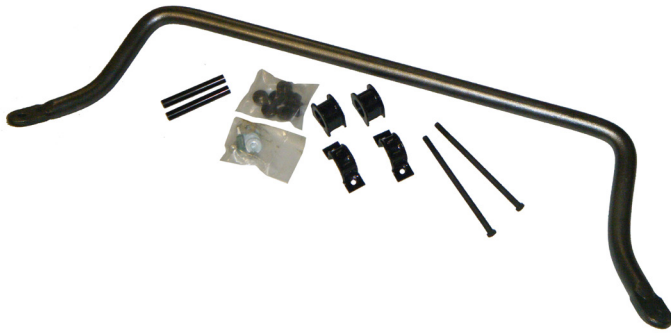
DESCRIPTION	PART NUMBER
Supercharger kits - higher output versions on special requests	
Low boost TVS1900 supercharger system for armored 2007-2013 2500 Suburbans. Includes high output ECM controlled auxiliary fans & 160 amp alternator.	L250140607
Low boost TVS1900 supercharger system with standalone supercharger belt drive for armored 2007-2013 2500 Suburbans. Includes high output ECM controlled auxiliary fans & 160 amp alternator.	L250160607
Low boost TVS1900 supercharger system for armored 2007-2013 GM 1500 series CK trucks including Tahoe, Yukon and Suburban	Contact LPE for details
Low boost TVS1900 supercharger system for armored 2007-2013 2500/3500 GM Express & Savana van applications	Coming soon!
Short blocks	
403 CID short block, long block or complete engine; iron block; fits all 6.0L equipped vehicles, including vans; can be done on exchange program with stock 6.0L truck short blocks or engines	Contact LPE for details
417 CID short block, long block or complete engine; iron block; fits all 6.2L equipped vehicles, including vans; can be done on exchange program with stock 6.2L truck short blocks or engines	Contact LPE for details
427 CID short block, long block or complete engine; aluminum block	Contact LPE for details
427 CID short block, long block or complete engine; iron block	Contact LPE for details
Other engine related components	
0.075" 6.0/6.2L multi-layer head gasket (for reduced compression in poor fuel octane locations - reduces compression by roughly 0.5:1 on 6.0L engine)	H2462SPP075S
LSA cylinder head upgrade (allows for the use of regular unleaded fuel, 87 octane AKI, with supercharger systems)	Contact LPE for details

Fuel System Related Products



DESCRIPTION	PART NUMBER
2007 2500 series Suburban and Yukon XL high flow fuel pump upgrade kit. Required for 2007 model year Suburban and Yukon XL vehicles when installing supercharger systems or other engine upgrades. Module not included.	L710050607
2007 2500 series Suburban and Yukon XL high flow fuel pump module. Required for 2007 model year Suburban and Yukon XL vehicles when installing supercharger systems or other engine upgrades.	L710060607
SSR & Trailblazer high flow fuel pump kit, 2005-2009 (module not included)	L710111005
SSR & Trailblazer high flow fuel pump module, 2005-2007 MY	L710091005
Trailblazer high flow fuel pump module, 2008-2009 MY	L710101108
46mm E85 and PWM compatible Bosch pump, 350 lph, hose barb outlet fitting w check valve	L760070000
Walbro inline pump, 255L/hr, 10 mm female inlet/outlet	TI-GSL392
Walbro GSS340 pump, 255 lph high volume/high pressure pump	TI-GSS340
Walbro GSS341 pump, 255 lph high volume/high pressure pump	TI-GSS341
Walbro GSS342 pump, 255 lph high volume/high pressure pump	TI-GSS342
Walbro GM CK truck and other vehicle replacement pump kit, 1985-1992 and more	TI-GCA758-2

Suspension/Brake Components



DESCRIPTION	PART NUMBER
2000-2013 2500 Suburban 2WD & 4WD, anti-sway bar, 38mm solid, front, 6.0L & 8.1L	HW8396
2000-2013 2500 Suburban 2WD & 4WD, anti-sway bar, 32mm solid, rear, 6.0L	HW8397
2000-2006 2500 Suburban 2WD & 4WD, anti-sway bar, 32mm solid, rear, 8.1L	HW7649
2007-2013 1500 Tahoe, Yukon, Escalade, Suburban, 2WD & 4WD, anti-sway bar, front, 38mm solid	HW7685
2007-2013 1500 Tahoe, Yukon, Escalade, Suburban, 2WD & 4WD, anti-sway bar, rear, 32mm solid, adjustable	HW7707
2007-2013 2500 Suburban steering stabilizer damper, 46mm	BIL33-174525
2007-2013 Tahoe/Yukon Bilstein HD shock for armored vehicle app., front	F4-BE5-G462-T0
2007-2013 Tahoe/Yukon Bilstein HD shock for armored vehicle app., rear	F4-BE5-G463-T0
Reinforced rear lower control arm, 2000-2013 1500 Tahoe, Yukon, Silverado, Sierra, Avalance, Escalade and Suburban (replaces OEM part # 15239738)	L500190600
Complete Bilstein suspension systems for armored vehicles applications including Ford Expedition/Navigator, etc.	Contact LPE for details
Alcon brake systems for armored vehicle applications	Contact LPE for details

2010-2013 Chrysler 300 & Related Vehicle Products



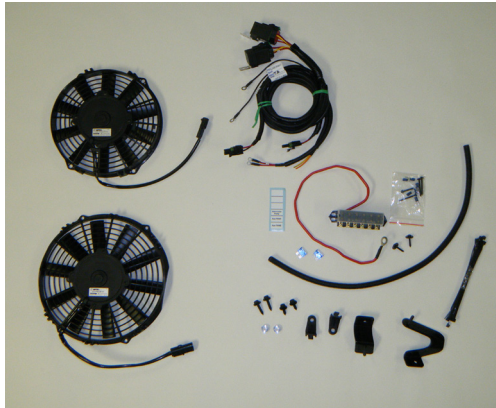
DESCRIPTION	PART NUMBER
2011-2013 Chrysler 300, Dodge Charger, Dodge Challenger & Lancia Thema wheel; fits base, police and SRT Brembo brakes; accepts OEM wheel center caps and tire pressure sensors; SAE J2530 certified to 2400 lbs per wheel rated load capacity; 18x8 wheel size; 5x115 bolt circle; powder coated finish	L600011911
2011-2013 Chrysler 300, Dodge Charger, Dodge Challenger & Lancia Thema wheel; fits base, police and SRT Brembo brakes; accepts OEM wheel center caps and tire pressure sensors; SAE J2530 certified to 2400 lbs per wheel rated load capacity; 18x8 wheel size; 5x115 bolt circle; powder coated finish; machined face	L600011911M
Run flat insert for LPE Chrysler 300 18x8 wheel	18"ROD XLPB2525
Front anti-sway bar, 32mm solid	XX04862-0007
Rear anti-sway bar, 25mm solid	XX04862-0008

Toyota Land Cruiser & Hilux Products



DESCRIPTION	PART NUMBER
Land Cruiser J200 brake pad set, front	HB589P.704
Land Cruiser J200 brake pad set, rear	HB590P.682
Land Cruiser J200 brake rotor, front	DBA-42722S
Land Cruiser J200 brake rotor, rear	DBA-42723S
Hilux brake rotors	Contact LPE for details
Hilux brake pads and shoes	Contact LPE for details
Complete Bilstein suspension systems for armored Land Cruiser (B6) - includes dampers, springs, and anti-sway bar	Contact LPE for details
Complete Bilstein suspension systems for armored Land Cruiser (B7) - includes dampers, springs, and anti-sway bars	Contact LPE for details
Complete Bilstein suspension systems for armored Hilux 25/26 (B6) - includes dampers and front springs	Contact LPE for details
Alcon brake systems for armored Land Cruiser and Hilux	Contact LPE for details

Cooling System Related Products



DESCRIPTION	PART NUMBER
2007-2013 Suburban auxiliary fan kit, standard fans w/ AC based control (no ECM programming, stock alternator)	L300080607
2007-2013 Suburban auxiliary fan kit, ECM control (requires ECM programming, does not work with OEM electric fan equipped vehicles)	L300090607
2007-2013 Suburban high output fan kit, ECM control (requires ECM programming and high output alternator, does not work with vehicles equipped with OEM electric fans)	L300130607
2007-2013 Suburban high output fan kit, no ECM programming required, works with mechanical or electric fan equipped vehicles, high output alternator required	Coming soon
Thermostat, 160 degree, 4.8/5.3/6.0L V8, CK truck (Tahoe, Yukon, Suburban, Sierra, Silverado, Escalade), 1997-2003	L310045297
Thermostat, 180 degree, 4.8/5.3/6.0L V8, CK truck (Tahoe, Yukon, Suburban, Sierra, Silverado, Escalade), 1997-2003	L310035297
Thermostat, 160 degree, 4.8/5.3/6.0L V8, CK truck (Tahoe, Yukon, Suburban, Sierra, Silverado, Escalade), 2004-2006	L310015204
Thermostat, 180 degree, 4.8/5.3/6.0L V8, CK truck (Tahoe, Yukon, Suburban, Sierra, Silverado, Escalade), 2004-2006	L310055204
Thermostat, 160 degree, 4.8/5.3/6.0/6.2L V8, CK truck (Tahoe, Yukon, Suburban, Sierra, Silverado, Escalade), 2007-2013	L310065307
Thermostat, 172 degree, 4.8/5.3/6.0/6.2L V8, CK truck (Tahoe, Yukon, Suburban, Sierra, Silverado, Escalade), 2007-2013	Coming soon
Spal 225 mm fan with WeatherPak connector	SPAL-30100381li
Spal 225 mm fan, AP7 high output motor with WeatherPak connector	SPAL-30100585li
Spal 255 mm fan with WeatherPak connector	SPAL-30100374li
Spal 255 mm fan, AP7 high output motor with WeatherPak connector	SPAL-30100320li
Bosch electric water pump, PCA, 1150 lph @ 0.3 bar	BOS0392-022-002
Bosch intercooler fluid pump, bracket and harness kit	L330010000
VariMax intercooler pump (upgrade for the Bosch intercooler pump - can be used for fluid circulation / retained cabin heat)	TAFX410110
VariMax to Bosch intercooler pump adapter harness	XX05102-0015
EMP high flow/high pressure intercooler circulation pump	1030002107

Cooling System Related Products (continued)



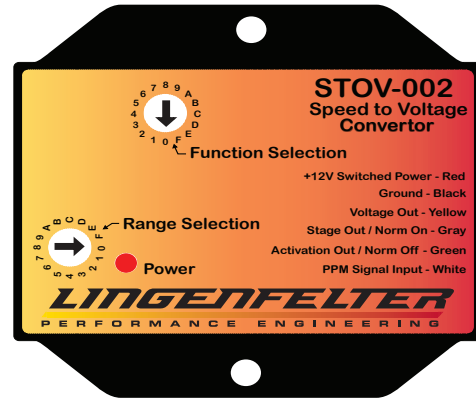
DESCRIPTION	PART NUMBER
Setrab M22 to -10 AN FITTING	SET22-M22AN10SE
Setrab M22 to -12 AN FITTING	SET22-M22AN12SE
Setrab M22 to 3/4 pushlock barb fitting, straight	SET22-M22PL1200
Setrab M22 to 3/4 pushlock barb fitting, 45 degree	SET22-M22PL1245
Setrab M22 to 3/4 pushlock barb fitting, 90 degree	SET22-M22PL1290
Setrab M22 to 3/8 pushlock barb fitting, straight	SET22M22PL06-00
Setrab M22 to 3/8 pushlock barb fitting, 90 degree	SET22M22PL06-90
Setrab sensor or gauge adapter fitting, -6AN male/female, 1/8 port	SET22AN06AN06NP18
Setrab 172 heat exchanger, 72 row, 6.4x22.1x1.83	SET50-172-7612
Setrab 634 heat exchanger, 34 row, 11.1x10.4x1.83	SET50-634-7612
Setrab 640 heat exchanger, 40 row, 11.1x12.2x1.83	SET50-640-7612
Setrab 650 heat exchanger, 50 row, 11.1x15.3x1.83	SET50-650-7612
Setrab 660 heat exchanger, 60 row, 11.1x18.3x1.83	SET50-660-7612
Setrab 910 heat exchanger, 10 row, 14.1x3.0x1.83	SET50-910-7612
Setrab 34 row 6 series 11.375x10.25 heat exchanger with fan	SETFP634M22i
LS series engine oil cooler adapter block, for -10 AN lines	L300025297
LS series engine turbocharger/supercharger oil feed block or aux oil temperature sensor gauge block	L300015297
oil cooler thermostat, -10 lines in/out, hi-temp, 200 deg F	MOC-10ANHT
oil cooler thermostat, -10 lines in/out, 180 deg F	MOC-10AN
oil cooler thermostat, -8 lines in/out, 180 deg F	MOC-8AN
oil scavenge & circulation pump, 2gpm, 12 vdc	TWX-200M-12V
oil scavenge & circulation pump, 3gpm, 12 vdc	TWX-300-12V

Miscellaneous Products



DESCRIPTION	PART NUMBER
9.5" IRS differential (see page 14 for more details)	L3800x1410
Differential vent bladder kit	L380180000
6L80/6L90 torque converter, 15% looser than OEM truck torque converter	L370010106
6L80/6L90 torque converter, 45% looser than OEM truck torque converter	L370020106
Starter heat shield	L800010000
O2 sensor bung, stainless, curved for 2.5"-3" tubing	L400010000
O2 sensor plug	L400020000
O2 sensor bung and plug kit with crush washer	L400030000
High temperature Inconel exhaust valve for LS3, L92, LSA, LS9, etc., each	12612427
CK and ST driver-side idler pulley and bracket (for applications that currently have belt movement / wear issues)	L220611003
Oil-air separator	L200010000

Electronic Products



DESCRIPTION	PART NUMBER
160 amp alternator, 2007-2013 Tahoe, Yukon, and Suburban	25877026
260 amp alternator, 2007-2013 Tahoe, Yukon, and Suburban	APS-07RVC
M16x1.5x10.8mm alternator pulley nut, for GM OEM type alternators	METRO85-82013
8 rib 2.9" OD aux alternator pulley for Electrodyne G250-24	XX04102-0019
High current sealed relay kit, 40 amp, SPDT	L450100000
Hella solid state relay, 20 amps continuous (provides faster switching times, increased durability, and reduced vibration sensitivity over mechanical relays)	H41773001
0-15 psi pressure sensor	L480250015
0-150 psi pressure sensor	L480260150
0-2000 psi pressure sensor, nitrous pressure	L480272000
Sealed fuse holder kit	L450130000
6 gang fuse panel (65 amp max capacity)	DC-73897
TVS diode (eliminates voltage spikes created by opening or closing solenoids, coils, or other electrical devices)	L450080000
OBD II diagnostic link connector (DLC) port cover kit	L450110095
CAN2-001 CAN-to-analog gauge and relay output module (see page 12)	L460230704 Coming 2nd QTR 2013
TBRC-001 Temperature-Based Relay Controller (see page 13)	L460220000 NEW!
STOV-002 vehicle speed sensor (VSS) controlled switch, used to enable or disable devices based on vehicle speed	L460050000
Handheld vehicle programmer with calibration. Locked to each vehicle.	EFIAUTOCAL
Vehicle programming & diagnostic tool, includes licenses for reprogramming two vehicles (tool for facilities performing multiple installs)	EFIFS2-GM
VIN license for vehicle programming tool EFIFS2-GM (required for reprogramming each vehicle after the first two vehicles). Not required for EFIAUTOCAL.	EFIFS2-VIN

CAN2-001 CAN to Analog Gauge and Relay Output Module



Part Number: L460230704

Applications:

- Most 2006 and newer GM vehicles that are equipped with GMLAN, including:
 - 2010-2013 Camaro
 - 2005-2013 Corvette
 - 2007-2013 C/K truck
- GMPP crate engines
- Heavy trucks and buses equipped with SAE J1939

Description:

The CAN2-001 module is capable of controlling up to 4 outputs on GMLAN and J1939 equipped vehicles without having to add sensors. These outputs can be used to control analog gauges or , via relays, to control higher current draw devices including fans, warning lights, reverse lights, or other devices looking for an analog activation signal.

Features:

- Four programmable outputs
- Can control most analog gauges including temperature and pressure type
- Provides programmable relay activation output
- Relay outputs can control a low oil pressure warning light, fan, or other device based on a combination of multiple engine/vehicle parameters, for example turn fans on when coolant temperature above 190 degrees and speed below 50 mph
- Multiple units can be used at once for additional outputs

Benefits:

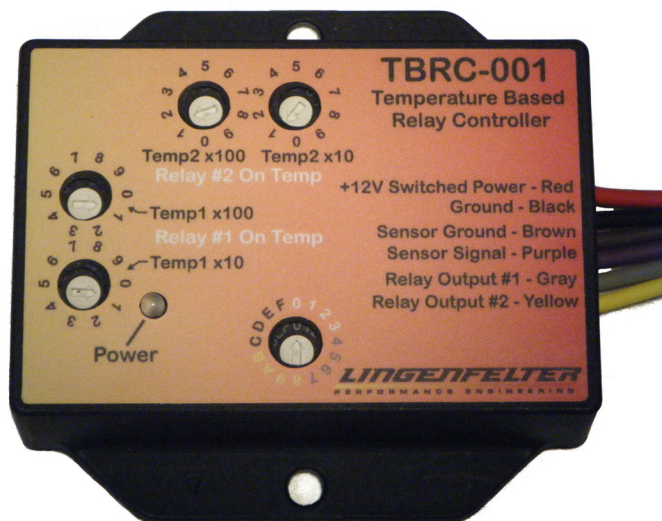
- Can be used to display almost any data on the vehicle data network.
- Works on most newer GM vehicles and crate engines
- Simplifies wiring
- Reduces need for duplicate sensors
- Activate devices based on normally not accessible ECM or TCM data, for example activate reverse lights when T43 transmission is in reverse in powertrain swaps

Specifications:

- High temperature glass filled Nylon enclosure
- USB port behind rear cover

Release date: 2nd quarter 2013

TBRC-001 Temperature Based Relay Controller



Part Number: L460220000

Applications:

- Auxiliary temperature-based engine cooling fan control
- Temperature-based intercooler fan control
- Temperature-based water injection pump control
- Temperature-based differential circulation pump control
- Temperature-based EGT warning indicator light or enrichment control

Description:

The TBRC-001 is designed to control two relays based on temperature sensor readings. This module can be used to independently activate two relays to control fans, pumps, or other devices. This module is used in the LPE intercooler radiator kits to control the two fans at high and low speeds, and also in the LPE differential cooler kits to control the fan and pump. The TBRC-001 can also be used to activate intercooler water spray based on air temperature or alcohol injection based on intercooler temperature.

Features:

- Two separate temperature controlled relay outputs
- Works with OEM and aftermarket IAT, ECT, EGT, TFT sensors, including:
 - GM IAT (12160244/12614717), ECT (12608814/12636612), TFT (12458118), and oil temperature sensors (15326388)
 - AEM 30-2012 and other similar fluid temperature sensors
 - AEM 20-3050, GM 12636612, and AC Delco 213-4695 EGT sensors
- Built-in auto pump cycle mode for circulating hot fluid past the sensor in applications where the temperature sensor has to be installed in the fluid lines. Multiple cycle rate and duration settings.
- Adjustable hysteresis values of 5, 10, 15, or 25 degrees F

Benefits:

- Used to control two fans or a fan and a circulation pump.
- Reduces noise, increases component life in aux cooling systems

Specifications:

- 0-350 degrees F in 10 degree increments for IAT, ECT, TFT
- 0-1990 degrees F in 10 degree increments for EGT sensor (on output #2)

9.5" Independent Rear Suspension (IRS) Differential Assembly



The Lingenfelter 9.5" (241 mm) IRS heavy duty differential assembly is cast from 356 aluminum alloy for strength while reducing weight. It is designed around the OEM GM 9.5" 14 bolt ring and pinion, the same ring and pinion set used in many GM trucks. This provides for a wide range of available OEM gear ratios that are durable and quiet while also offering the option of using a broad range of aftermarket gear sets in an even wider ratio range.

The custom cast aluminum differential housing is available as an empty case or assembled with an American Axle TracRite® GT helical gear limited slip carrier assembly and your choice of OEM ring & pinion set. Other ring and pinion ratios and differential types may be available on a special order basis. A differential cooler kit is also available from LPE.

The LPE 9.5" differential assembly weighs 108 lbs with limited slip and ring and pinion but with no fluids.

The differential assembly is available in the following standard ratios: 3.42, 3.73, 4.10, & 4.56 and is available with or without pre-load on the limited slip differential.

Description

9.5" differential, empty case

9.5" differential, 3.42 ratio, with preload

9.5" differential, 3.42 ratio, no preload

9.5" differential, 3.73 ratio, with preload

9.5" differential, 3.73 ratio, no preload

9.5" differential, 4.10 ratio, with preload

9.5" differential, 4.10 ratio, no preload

9.5" differential, 4.56 ratio, with preload

9.5" differential, 4.56 ratio, no preload

Part

L380051410

L380061410

L380071410

L380081410

L380091410

L380101410

L380111410

L380121410

L380131410

Universal Differential and Transmission Vent Bladder Kit



Part Number:L380180000

Applications:

- Off-road vehicles whose differential and/or transmission may become submerged in water
- High performance vehicles that are required to have a closed differential system by their governing body
- Any vehicle that expels differential or transmission fluid out of the vent

Description:

The universal vent bladder kit can be easily connected to a transmission or differential to eliminate fluid overflow related problems. The design of this vent bladder allows it to be used in either an open or sealed configuration.

Features:

- Works with most automotive differentials and transmissions
- Easy to install
- Cost effective

Benefits:

- Eliminates differential and transmission fluid leaks from the vent fitting.
- Allows for sealed systems needed for submerged applications and by some sanctioning bodies.

Specifications:

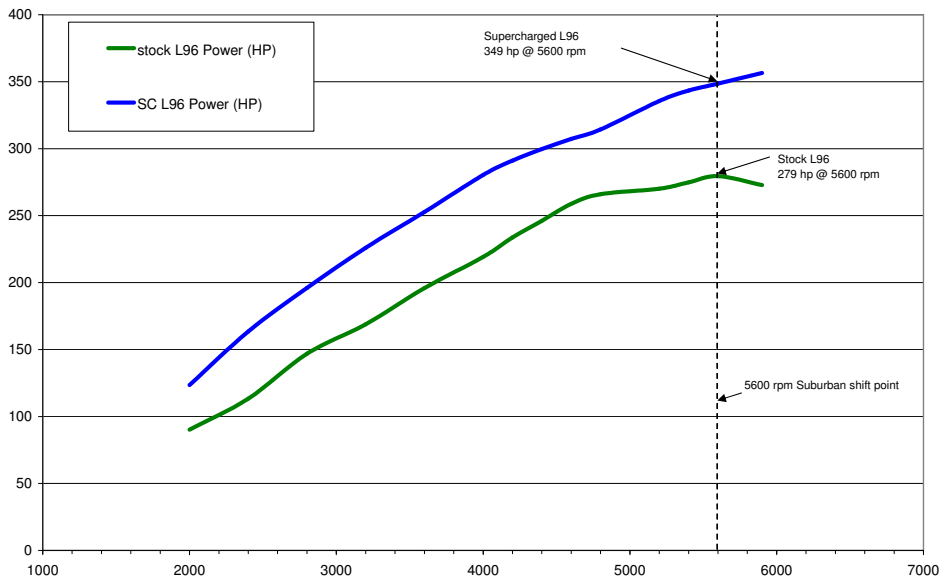
- Fluid volume capacity of the vent bladder is 2.25 liters, enough to account for the thermal expansion in most light to medium duty differentials.

Kit includes:

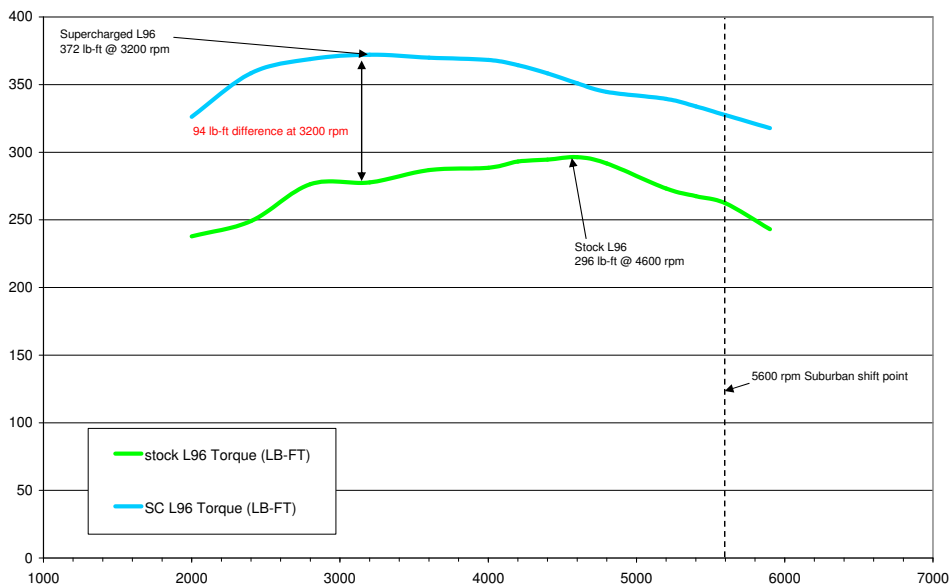
- Expansion bladder
- Stainless steel adapter fitting
- ¼" fluid rated hose

Supercharged Suburban performance graphs

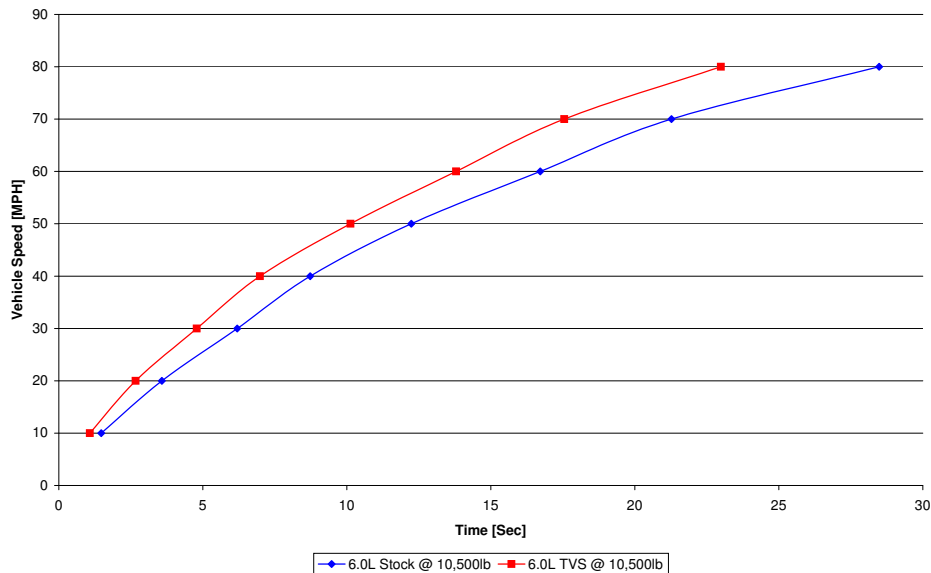
Chassis dynamometer rear wheel power graph
2500 Suburban stock L96 engine versus supercharged L96 engine performance



Chassis dynamometer rear wheel torque graph
2500 Suburban stock L96 engine versus supercharged L96 engine performance



6.0L - Stock vs 6.0L w/TVS1900 (3.6" Pulley) Loaded at 10,500lbs
Time Required to Achieve a Specific MPH



LINGENFELTER

PERFORMANCE ENGINEERING



COMING SOON: 2014 CK Truck Packages

LPE is also an Authorized Distributor for:

- Alcon
- American Axle Manufacturing (AAM)
- ATI
- Bilstein
- Brembo
- Bosch
- Edelbrock
- Hellwig
- Magnuson
- Setrab
- Spal
- TI Automotive / Walbro
- and many others

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