

I-Sheet # 19301503

3.91 Performance Gear Kit # 19301504

REMOVAL & INSTALLATION INSTRUCTIONS

Thank you for choosing Chevrolet Performance as your high performance source. Chevrolet Performance is committed to providing proven, innovative performance technology that is truly... more than just power. Chevrolet Performance parts are engineered, developed and tested to exceed your expectations for fit and function. Please refer to our catalog for the Chevrolet Performance Authorized Center nearest you or visit our website at www.chevroletperformance.com.

It is not the intent of these specifications to replace the comprehensive and detailed service practices explained in the GM service manuals. For detailed installation instructions please look to the service manual for your specific vehicle.

GM service manuals are available from:

Helm Incorporated
 PO Box 07130
 Detroit, MI 48207

For information about warranty coverage, please contact your local Chevrolet Performance parts dealer.

Observe all safety precautions and warnings in the service manuals when installing a 3.91 Axle Ratio Kit in any vehicle. Wear eye protection and appropriate protective clothing. Support the vehicle securely with jack stands when working under or around it. Use only the proper tools. Exercise extreme caution when working with flammable, corrosive, and hazardous liquids and materials. Some procedures require special equipment and skills. If you do not have the appropriate training, expertise, and tools to perform any part of this conversion safely, this work should be done by a professional.

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Adding this 3.91 Performance Gear Kit requires reprogramming of the Engine Control Module (ECM). This is done with a Service Programming System at an Authorized GM Dealer. When reprogramming the ECM, the GM dealer needs to call the Techline Customer Support Center (TCSC). The TCSC will provide a Vehicle Configuration Index (VCI). The VCI is good for only one specific Vehicle Identification Number (VIN). Call TCSC (1-888-337-1010) to obtain a VCI number. You must have the vehicle's VIN that will be upgraded and the following Authorization Code:

Authc	
Code	ICI
Códlg	AQUI

This 3.91 Performance Gear Kit allows owners of Camaro SS models to upgrade their final drive ratio to 3.91. These instructions cover the removal of the differential and installation of the ring and pinion components. The kit content and quantities are listed below:

3.91 Performance Gear Kit		Quantity
19301504	3.91 Performance Gear Kit	1
22813040	Gear Kit	1
92230403	Gasket	1
92230584	Oil Seal	1
90538867	Nut	3
92138569	Bolt	3
92139104	Bolt	3
92230606	Shim Kit	1
88900330	Limited Slip Differential Oil Additive	1
19301909	Emission Certification Label	1
19301503	Instruction Sheet	1

Calibrations:

12657964	2010 and newer Automatic Transmission applications
12657965	2010 and newer Manual Transmission applications
12660300	2011 & L99 Automatic Transmission applications
12660301	2011 & LS3 Manual Transmission applications
12660302	2012 & L99 Automatic Transmission applications
12660303	2012 & LS3 Manual Transmission applications
12660304	2013 & L99 Automatic Transmission applications
12660305	2013 & LS3 Manual Transmission applications
12651900	2014 & L99 Automatic Transmission applications
12651901	2014 & LS3 Manual Transmission applications

Installation of the calibration will be done at no cost to you at your local GM dealer.

Note to Dealers: The calibration download and installation is to be charged to labor OP 0601058.

DATE	REVISION	AUTH
20FE13	Initial Release - William Duncan	N/A
06NO13	Revision - William Duncan	N/A



Ring and Pinion Replacement

Removal Procedures:

1. Raise and support the vehicle per lifting and jacking instructions.
2. Remove Drive Shaft per GM approved Service Instructions. Do not re-use nuts and bolts.
3. Remove Rear Differential per GM approved Service Instructions.

NOTE: Do not remove the coupler bolts unless replacing the coupler. If coupler bolts are removed, they must be replaced per GM Service Procedures.

4. The new Ring and Pinion kit should be installed by a trained professional per GM approved Service procedures. Do not re-use pinion seal and cover gasket.
5. Install Rear Differential per GM approved Service Instructions.
6. Fill Rear Differential per approved Service Instructions using Limited Slip Differential Additive provided.

NOTE: Use only 0.098 ml (3.3 oz).

7. Install Drive Shaft per GM Service procedures using new nuts and bolts provided.

NOTE: The speedometer reading will be incorrect until the calibration is updated per step #8.

8. Take the vehicle to your GM dealer to be updated with the appropriate calibration using the authorization code listed on the front page of this document – there may be additional charges.

Notes:

- Rear drain plug torque 33 N·m (24 lb ft)
- Rear fill plug torque 33 N·m (24 lb ft)
- Rear differential cover bolt torque 55 N·m (41 lb ft)
- Drive shaft-to-transmission bolt/nut torque 97 N·m (72 lb ft)
- Drive shaft-to-rear differential bolt/nut torque 115 N·m (85 lb ft)
- Rear Differential Oil 77W90 Synthetic Lubricant GM P/N 8890040 / Canada P/N 89021678 0.9L (1.0 Qt)

TITLE 3.91 Performance Gear Kit	REV 06NO13	PART NO. 19301503	SHEET 2 OF 2
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ALL INFORMATION WITHIN ABOVE BORDER TO BE PRINTED EXACTLY AS SHOWN ON 8 1/2 x 11 WHITE 16 POUND BOND PAPER. PRINT ON BOTH SIDES, EXCLUDING TEMPLATES. TO BE UNITIZED IN ACCORDANCE WITH GM SPECIFICATIONS.	DATE	REVISION	AUTH
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