

INSTRUCTIONS

© 2019, Speedway Motors, Inc.



350-500

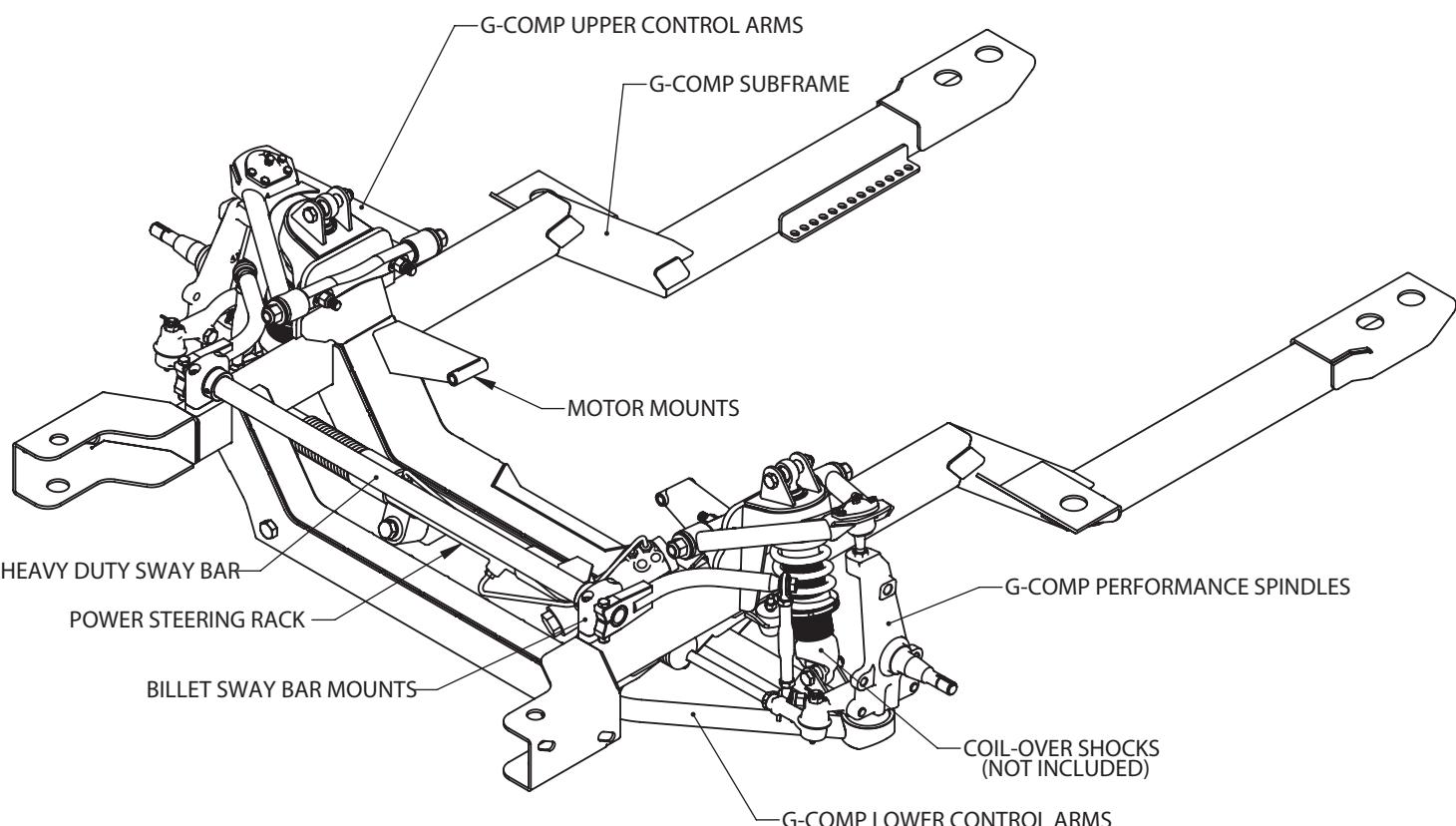
'70-81 Chevy Camaro
G-Comp Front Suspension

1. Support the car on jack stands or hoist. The front stands must be located on the main floor just behind the firewall. Do not support the car on the front sub-frame.

2. Remove the hood and inner fenders. Remove the radiator, front bumper, fenders, and core support. Disconnect all electrical components from the firewall forward. Retain all hardware to be used during reassembly. Remove the engine, transmission, and accessories. Support the subframe with a floor jack. Unbolt the subframe from the body and lower it down until the weight is supported by the front tires. The sub-frame can now be rolled out of the way.

Kit Contents:

350-100.2	G-Comp Camber Shim Kit
350-500.1	G-Comp Subframe, Camaro
350-500.2	G-Comp Sway Bar Kit, Camaro
350-500.3	Hardware Kit, G-Comp Camaro
350-503	G-Comp 34" Sway Bar
910-35000	G-Comp Spindles
910-35011	G-Comp Steering Arms
910-35341	T-Bird Power Steering Rack
910-35500	G-Comp Upper Control Arms
910-35600	G-Comp Lower Control Arms



INSTRUCTIONS

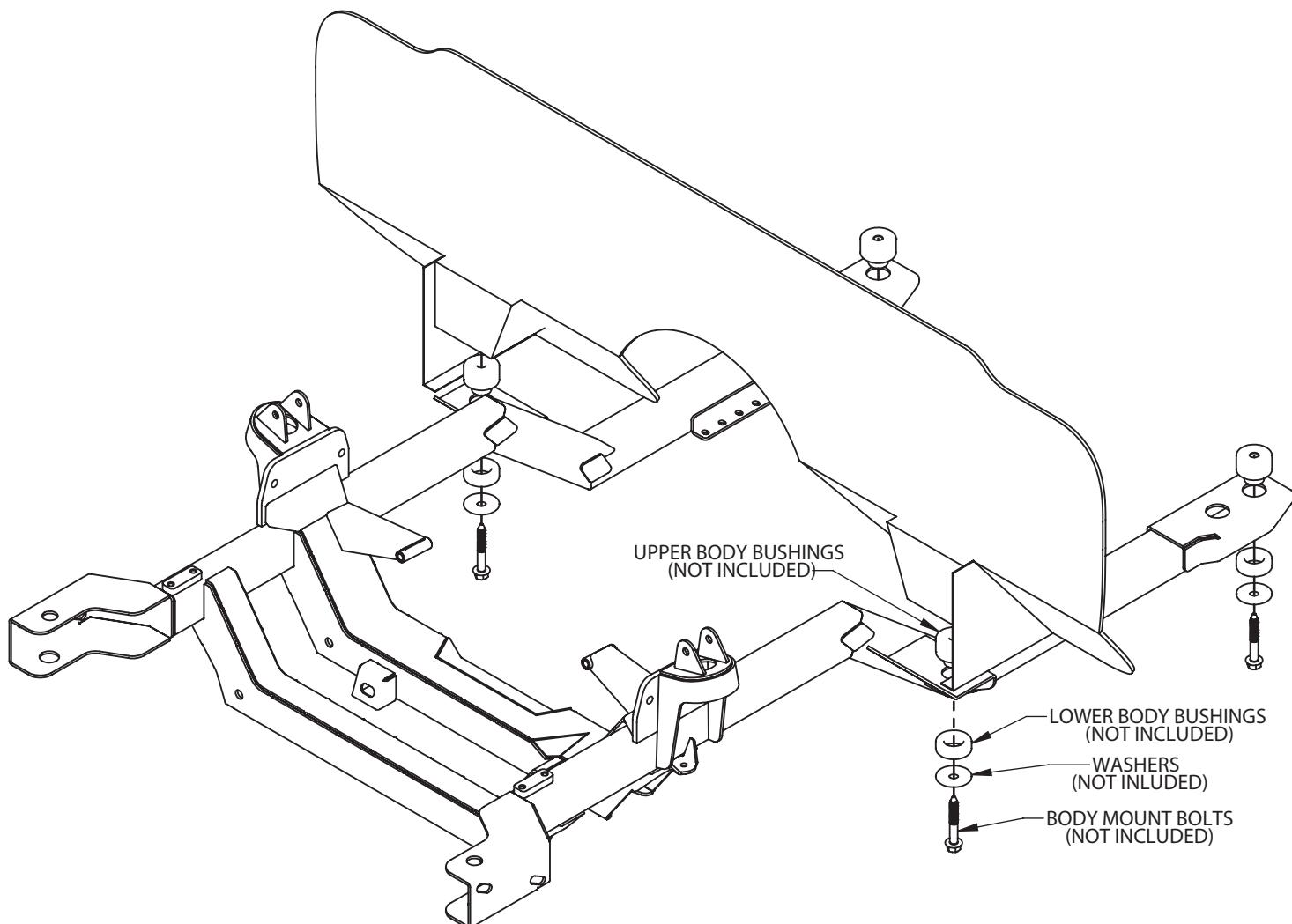
© 2019, Speedway Motors, Inc.



350-500

'70-81 Chevy Camaro
G-Comp Front Suspension

3. Install the G-Comp subframe. Now is a good time to replace your old worn out body mount bushings. Place the new upper bushing halves into their locations on the subframe. The rear portion of the subframe includes body mount locations for both early and later style Camaros. Be sure to install the bushings into the appropriate locations for your car. Using a floor jack, raise the new G-Comp sub-frame into position while lining up the holes in the sub-frame with the body. Install new or re-use your OEM body mount bolts along with the lower body mount bushings and washers. Note: Start all of the body bolts before tightening any of them completely. Once all of the bolts have been started, make sure the subframe is aligned with the car, and tighten the bolts. With the subframe in place, you can now move the jack stands to the front crossmember. This will make the vehicle more stable while installing the rest of the kit.



INSTRUCTIONS

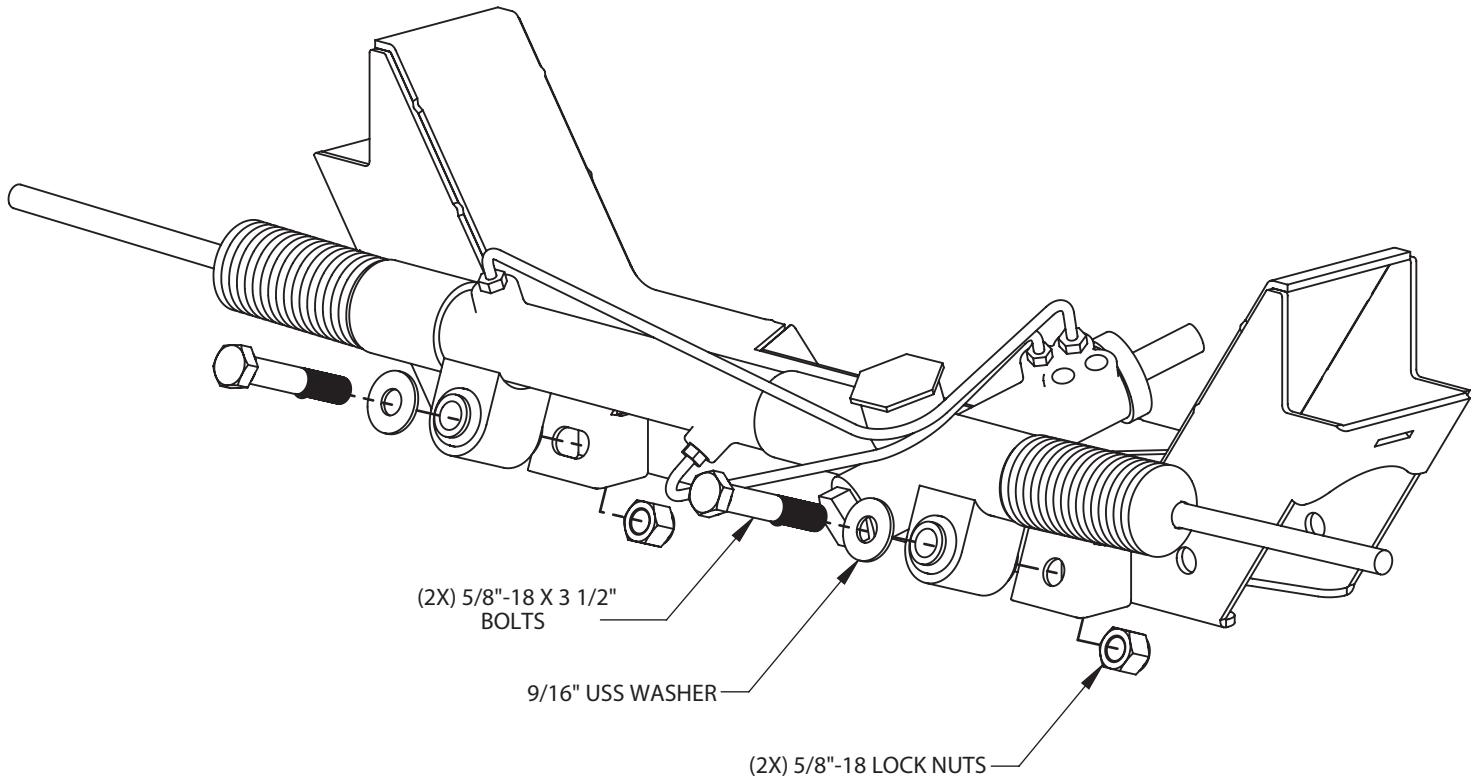
© 2019, Speedway Motors, Inc.



350-500

'70-81 Chevy Camaro
G-Comp Front Suspension

- 4.** Steering Rack. This G-comp front suspension kit is designed to use a thunderbird style power steering rack. Install the steering rack as shown, using the two 5/8"-18 x 3 1/2" bolts, washers and lock nuts.



INSTRUCTIONS

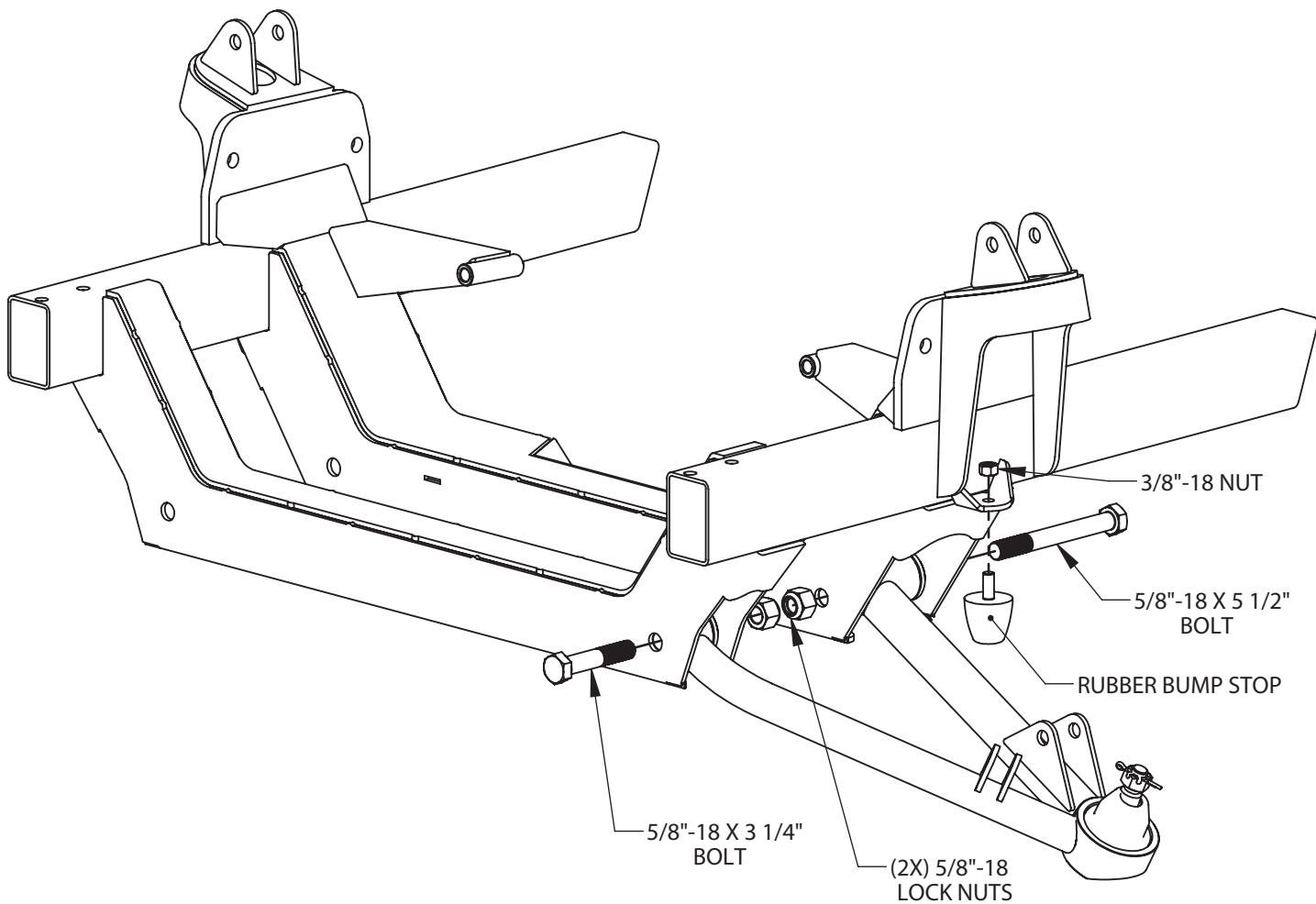
© 2019, Speedway Motors, Inc.



350-500

'70-81 Chevy Camaro
G-Comp Front Suspension

5. Install the lower control arms into the cross member. Align the control arm bushings with the lower control arm holes in the cross-member. The front bolts, $5/8\text{"-}18 \times 3\text{-}1/4"$, are to be installed from the front side. The rear bolts are $5/8\text{"-}18 \times 5\text{-}1/2"$ and are to be installed from the rear. Install the $5/8\text{"-}18$ lock nuts and tighten. Install the lower control arm bump stops to the sub-frame using the supplied $3/8\text{"}$ nuts as shown.



INSTRUCTIONS

© 2019, Speedway Motors, Inc.

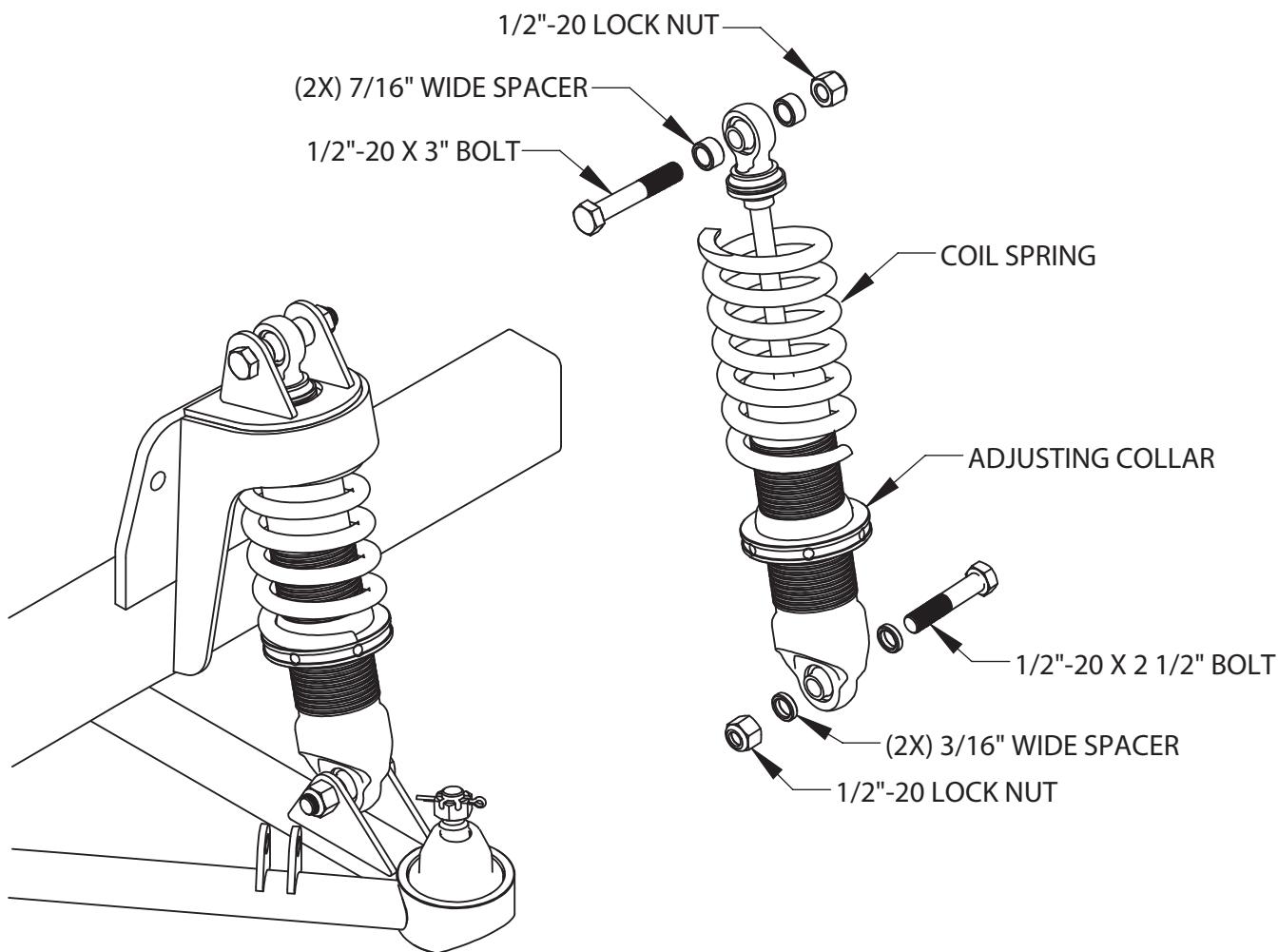


350-500

'70-81 Chevy Camaro
G-Comp Front Suspension

6. Install the shocks. This procedure may vary slightly depending on the shocks used. Spin the adjusting collar onto the threaded shock body. Adjust the collar all the way to the bottom of the threads. Install the spring over the shock body. **NOTE:** The G-Comp sub-frame has the upper spring retainer built into the subframe so the upper coil-over shock spring retainer is not used. Using the 1/2"-20 x 2-1/2" bolt and two 3/16" wide spacers, install the shock into the lower mount on the control arm. Secure it with a 1/2"-20 lock nut. Fully extend the shock and raise the lower arm so the upper shock mount and spring align with the shock mount and spring pocket on the sub-frame. Install the 1/2"- 20 x 3" upper shock bolts and 7/16" wide spacers. Secure it with a 1/2"-20 lock nut.

NOTE: This kit is designed to use shocks with a compressed length of 10" and an extended length of 14". Shock ends should be 1/2" bearings with a mounting width of 1". For recommended part numbers please visit our website or contact one of our tech experts.



INSTRUCTIONS

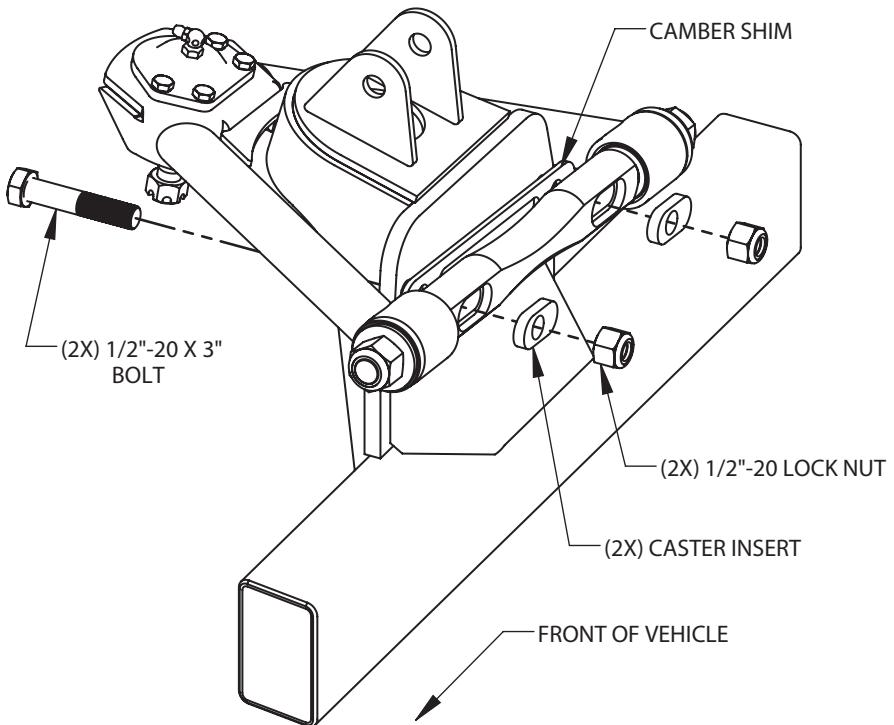
© 2019, Speedway Motors, Inc.



350-500

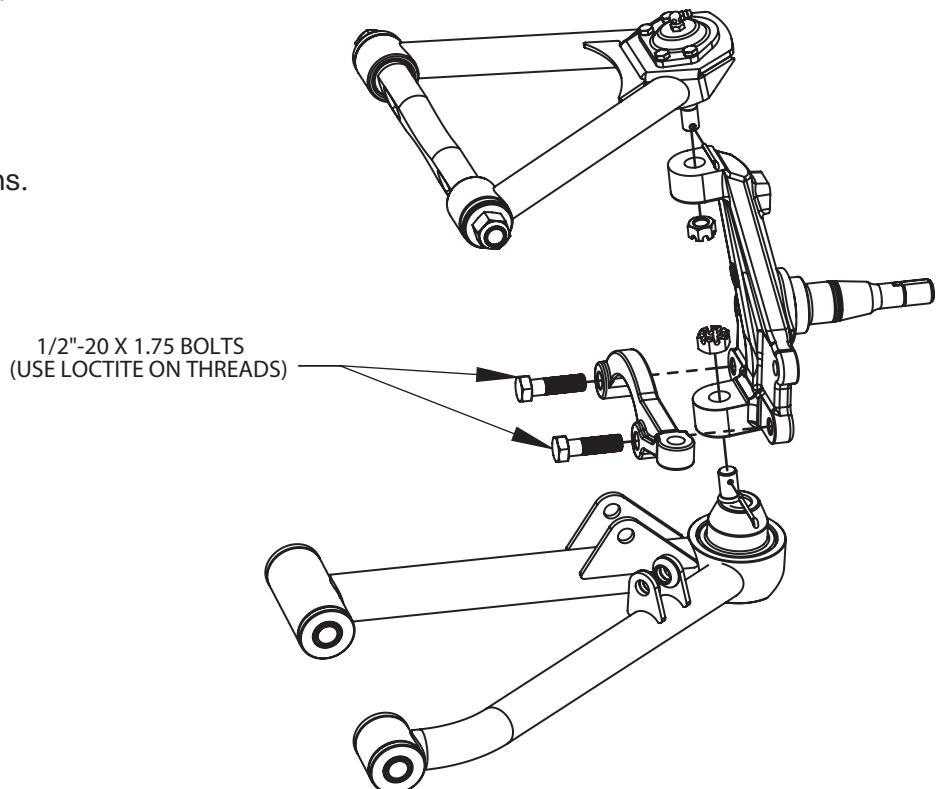
'70-81 Chevy Camaro
G-Comp Front Suspension

7. Mount the upper control arms to the sub-frame using the 1/2"-20 x 3" bolts and lock nuts. Rotate the cross shafts so the caster shim pockets are facing toward the center of the vehicle. Install the bolts through the caster shims, cross shafts, and the sub-frame as shown. Then secure with the 1/2"-20 lock nuts.



8. Install the spindles and steering arms. Place the ball joint boots over the ball joints and install the spindle onto the lower ball joint. Install and tighten the supplied castle nut. Repeat with the upper ball joints and install the cotter pins. Bolt the steering arms to the spindles using the 1/2"-20 x 1-3/4" bolts.

NOTE: Make sure to use Loctite on the threads.



INSTRUCTIONS

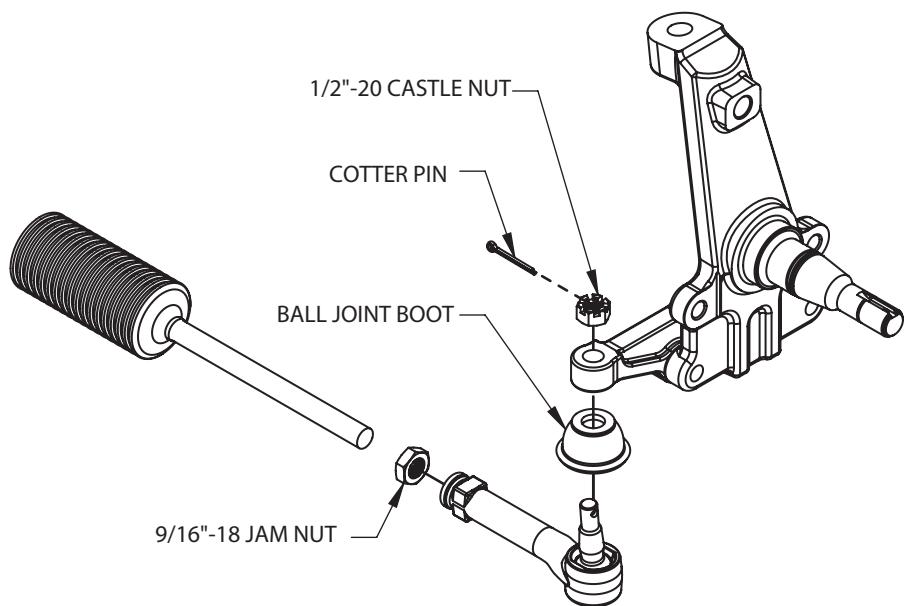
© 2019, Speedway Motors, Inc.



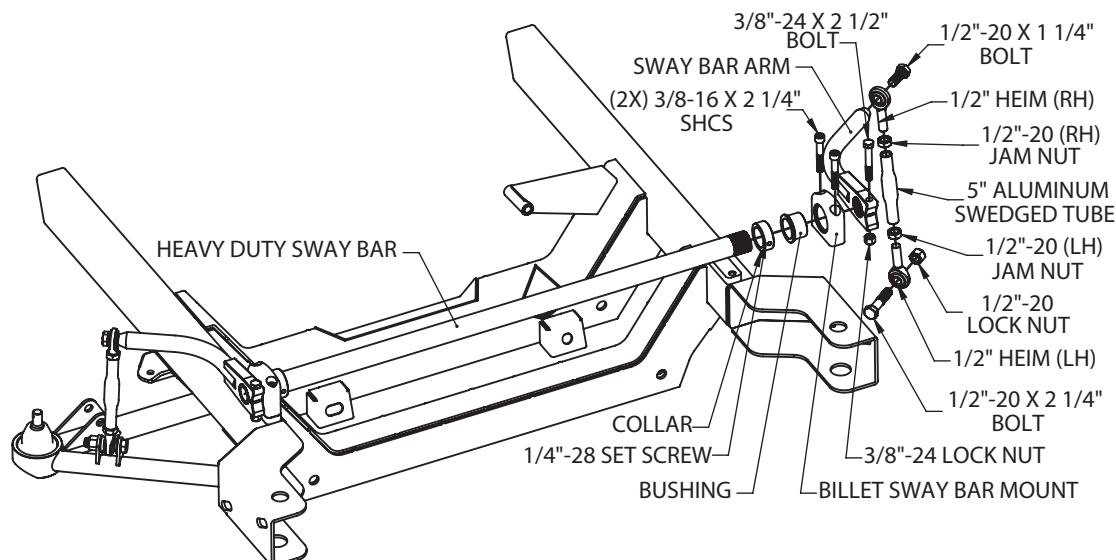
350-500

'70-81 Chevy Camaro G-Comp Front Suspension

- 9.** Install the outer tie rod ends and jam nuts onto the inner tie rods of the rack. Thread both tie rod ends on equally. Attach the tie rod ends to the steering arms using the castle nuts supplied with the tie rod ends. Tighten and install the cotter pins. Final alignment to be done at a later time.



- 10.** Sway bar assembly: Press the bushings into the aluminum pillow-blocks and install the pillow-blocks to the front crossmember with the bushing shoulder to the inside. Use the four 3/8"-16 x 2-1/4" socket head cap screws to secure the pillow block to the subframe. Before fully tightening the bolts, slide the sway bar through the bushings, installing the two clamp collars to the inside of both pillow blocks. Now, tighten the 3/8" socket cap screws, use loctite. Center the sway bar between the pillow blocks. Slide one clamp collar up against the bushing shoulder in the pillow block and tighten the set screw. Slide the second clamp collar up to the opposite bushing in the pillow block leaving about .075" of side clearance between the clamp collar and the bushing. Tighten the set screw. **NOTE:** A nickel is about .075" thick and can be used as a spacer between the clamp collar and the bushing to provide the proper side clearance. Slide the sway bar arms onto the splined ends of the sway bar aligning them flush with the end of the bar. Make sure they are parallel or "clocked" to one another then tighten the 3/8"-24 x 2-1/2" pinch bolts and lock nuts. Assemble the sway bar links as shown, leaving roughly $\frac{1}{4}$ " of threads showing on either heim joint. Use the 1/2"-20 x 1-1/4" bolts to secure the sway bar link to the sway bar arm. Mount one of the lower links into the bracket on the lower control arm using a 1/2"-20 x 2-1/4" bolt and secure it with the 1/2"-20 lock nut. Leave the bolt out of the lower link on one side at this time. The second bolt/nut will be installed after the ride height is set and the car is setting on level ground. This will ensure that there is no preload on the sway bar at ride height.



INSTRUCTIONS

© 2019, Speedway Motors, Inc.



350-500

'70-81 Chevy Camaro
G-Comp Front Suspension

11. Install the brake kit: to the spindle per the instructions included with your brake kit. **NOTE:** For recommended part numbers please visit our website or contact one of our tech experts.

12. Align the subframe: Before installing the front sheet metal, you must first make sure the subframe is aligned with the body. Start by setting the toe to zero and making sure the tires are perfectly straight. **NOTE:** This is easily accomplished with the tires removed and a 2'-3' long piece of angle iron clamped to the brake rotor. Measure the distance between two pieces, both in the front, and in the rear. Adjust the tie rod length until the distance is the same. Now measure the wheel base on both sides of the car. If they are different, you must loosen the body bolts and slightly adjust the subframe as needed.

13. Install the engine and transmission. The G-Comp sub-frame was designed to use stock type GM motor mounts (910-18012) or Speedway's Prothane mounts (910-18015).

14. Install the core support, radiator, grill, and fenders. All accessories and other components can now be installed.

15. Alignment: The lower control arms should be level, with all the weight on the car. To adjust the ride height, take the weight off the suspension and turn the threaded adjusters on the bottom of the coil over shocks. Turning the adjusters clockwise will raise the ride height. Once the ride height has been set, place the car back down on level ground. Adjust the free heim end on the sway bar link so that it lines up with the bracket in the lower control arm. Keep adjusting the heim end until the remaining 1/2"-20 x 2-1/4" bolt will slide through easily and secure it with the 1/2"-20 lock nut.

Set the alignment to the following initial settings:

Caster = 5°

Camber = negative .25°-.5°

Toe In = 0" - 1/8" Toe Out

16. Caster adjustments are made by changing the caster inserts. The caster inserts are identified with numbers indicating the distance of the hole from the center of the insert in 1/8" increments.

#1=1/8" #2=1/4" #3=3/8"

The inserts can be reversed to move the hole in front of or behind center for a total range of 3/4".

17. Camber is adjusted using the included A-arm shim plates. Additional shim plates can be purchased separately if desired under Speedway Part # 917-21005. These are available in thicknesses ranging from 1/8" to 1/2".

IMPORTANT

DISCLAIMER In an effort to offer our customers low prices, quick service and great value, Speedway Motors reserves the right to change suppliers, specifications, colors, prices, materials without notice. Prices and policies that were current and in effect at the time of printing are also subject to change without notice. Quantities are limited on some items. Any unauthorized use of this catalog including words, photos or drawings is prohibited. Speedway is not responsible for any typographical errors, printing errors or misinterpretations.

WARRANTY DISCLAIMER Purchasers understand and recognize that racing parts, specialized street rod equipment, and all other parts and services sold by Speedway Motors, Inc. are exposed to many and varied conditions due to the manner in which they are installed and used. Except for certain limited warranties, if any, set forth in Speedway Motors, Inc.'s current catalog with respect to the products and/or parts thereof identified on your invoice, each product, and each part thereof, is sold "as is", and "with all faults" and Speedway Motors, Inc. makes no warranties either expressed or implied, written or oral, with regard such products and services including, without limitation, any warranty of merchantability or fitness for a particular purpose. Without limiting the foregoing, there is no warranty expressed or implied as to whether the goods sold hereby will protect purchasers or ultimate end-users of such products and parts from injury or death. In no event shall Speedway Motors, Inc. be liable for any special, incidental or consequential damages, or any other damages whatsoever arising out of or connected with the use or misuse of the products and each part thereof. Purchasers acknowledge and agree that no person, entity or agent of Speedway Motors, Inc. has any authority to make any statement contrary to this disclaimer and that any warranty statements or representations allegedly made on behalf of Speedway Motors, Inc. by any such person, entity or agent are void. Purchasers are relying solely on their own skill and judgment to select, purchase and use suitable products and assume all responsibility and risk with regard thereto. Some local laws prohibit the use of utility jugs, funnels and barrel pumps for dispensing fuel. Please check your own state for more information, regulations or further direction in your use of the utility jugs, funnels and barrel pump described in Speedway's catalogs or on Speedway Motors websites. Some parts in this catalog are not legal for sale or use in California. Items sold in this catalog are for racing vehicles which may never be used on a highway. The use of manufacturer's names and symbols are for reference purposes only.

DAMAGE CLAIMS Please inspect all packages upon delivery and in the presence of the delivery driver when possible. The driver must note any visible damage and provide procedures for handling damage claims. To allow for a claims process, please retain original box, packing material and damaged merchandise. Contact Speedway Motors for instructions regarding damage claim within 5 days of receipt. Speedway Motors assumes no liability after this period.

SHORTAGES Please check the contents of your delivery to ensure that all parts ordered are received. Refer to your invoice to cross check all items received and inspect all packing materials for contents of small items. Retain original shipping box and packing materials. Orders may be split into multiple boxes which can be delivered on different days. Contact Speedway Motors for instructions regarding shortage claim within 5 days of receipt. Speedway Motors assumes no liability after this 5 day period.

REFUSALS All refused packages will be billed the freight to and from the destination and refused COD orders will be billed a 15% restocking charge plus freight to and from destination.

WARRANTY CLAIMS If the item is used or installed and a warranty claim request is submitted, warranty work is done by the manufacturer and may take up to 30 days for processing. Speedway Motors will be required to follow the manufacturer's warranty instructions to allow for a credit refund or exchange when specified.

Find the above info on our website:

SpeedwayMotors.com/Info/FAQ

RETURNS We want you to be satisfied with your purchase. If you are not satisfied, you may return your new, unused item within 60 days for refund or exchange.

All exchanged or returned merchandise must be in original factory condition with no modifications or alterations. Returned merchandise must include original packaging materials, warranty cards, manuals, instructions, etc. If the returned item requires repackaging, your refund / exchange will be subject to a repackaging charge. Return/Exchange transactions less than \$99 are excluded from the free shipping offer.

HOW TO RETURN AN ITEM Please re-pack the item in a sturdy box, include a copy of your invoice and completed return form. Returns must be shipped prepaid. CODs are not accepted. Shipping costs for exchanged merchandise will be charged to your credit card.

Items that are returned after 60 days are subject to a 15% restocking charges. Fiberglass items returned will be subject to a 15% restocking charge. We are unable to accept returns on electrical parts, video tapes, DVD's, books, special order or closeout merchandise.

BRAKE INSTALLATION ALERT The selection and installation of brake components should only be done by personnel experienced in the proper installation and operation of braking systems. The installer must use his/her own discretion to determine the suitability of all brake components and brake kits for every particular application. Speedway Motors, Inc. makes no warranties either expressed or implied including any warranty of merchantability or fitness for a particular purpose, other than those contained in its current catalog or website with respect to the goods identified on the face of the invoice. There is no warranty expressed or implied as to whether the goods sold hereby will protect the purchaser or ultimate user of such goods from injury or death.

EXHAUST INSTALLATION ALERT Exhaust systems and other component surface finishes are not permanent. Coatings, paint and other factory supplied cosmetic treatments are only intended to protect from surface corrosion in an unused state. No returns are allowed after the parts have been installed. Header flanges must be clean and clear of paint and surface contaminants prior to mating to exhaust gaskets. Exhaust fasteners must be re-torqued after the initial heat cycle and regularly thereafter to ensure a proper gasket seal is maintained. Should you decide to install this exhaust product at your home, be warned that pleasure car or light duty truck/van "bumper" jacks are intended for emergency use only. The use of frame contact jack stands in conjunction with a floor jack as a main support is highly recommended to minimize accidental dropping of a vehicle while the installation proceeds. We recommend the use of a shop hoist if possible. Please use caution! Speedway Motors, Inc. makes no warranties either expressed or implied including any warranty of merchantability or fitness for a particular purpose, other than those contained in its current catalog or website with respect to the goods identified on the face of the invoice. There is no warranty expressed or implied as to whether the goods sold hereby will protect the purchaser or ultimate user of such goods from injury or death.

CHECK LOCAL LAW Some parts are not legal for sale or use in California on any pollution controlled motor vehicles. These items are legal in California for racing vehicles only which may never be used upon a highway. Check local law.

© 2019, Speedway Motors, Inc.

Speedway Motors, Inc.

P.O. Box 81906 • Lincoln, NE 68501

800.979.0122 • SpeedwayMotors.com

