

INSTRUCTIONS

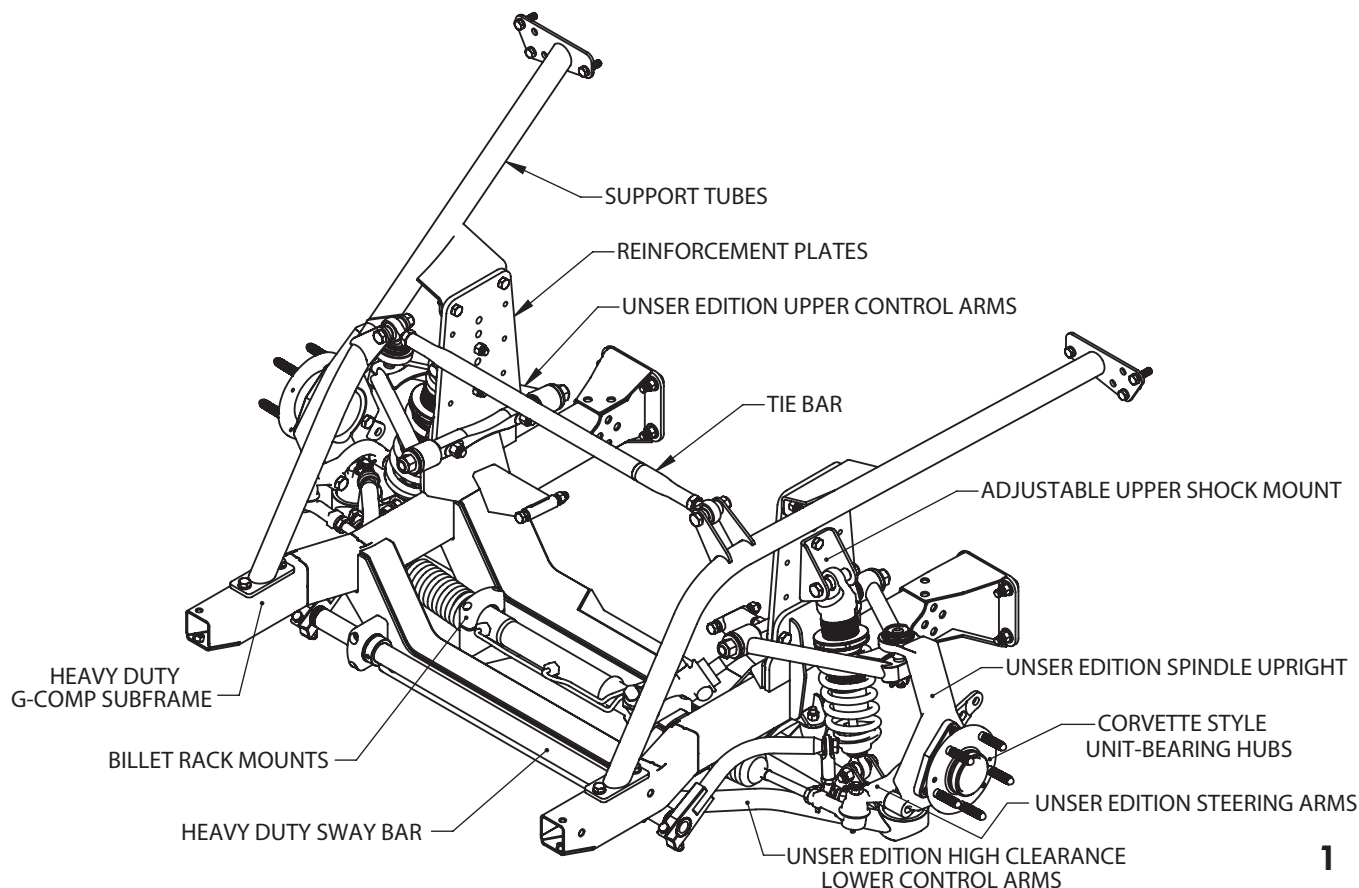
© 2019, Speedway Motors, Inc.

SPEEDWAY
motors®

350-200

G-Comp Unser Front Suspension
62-67 Nova Edition

Kit Contents	
350022	G-Comp Billet Rack Mount Kit
350100.2	G-Comp Camber Shim Kit
350201	G-Comp Unser Edition Subframe
350202	G-Comp Unser Edition Support Tubes
350203	G-Comp Unser Edition Upper Control Arms
350204	G-Comp Unser Edition Lower Control Arms
350206	G-Comp Unser Edition Shock Mount Kit
350207	Unser Edition Hub Bolt Kit
350350	Unser Edition Front Hubs
3501100	Unser Edition Spindle Upright
91035010	G-Comp Steering Arms
91035200	G-Comp Heavy Duty Sway Bar
91035250	G-Comp Front Sway Bar Arms
91035340	Narrow Power Steering Rack for G-Comp
91035702	G-Comp Subframe Hardware Kit
91035900	G-Comp Sway Bar Mount Kit



INSTRUCTIONS

© 2019, Speedway Motors, Inc.



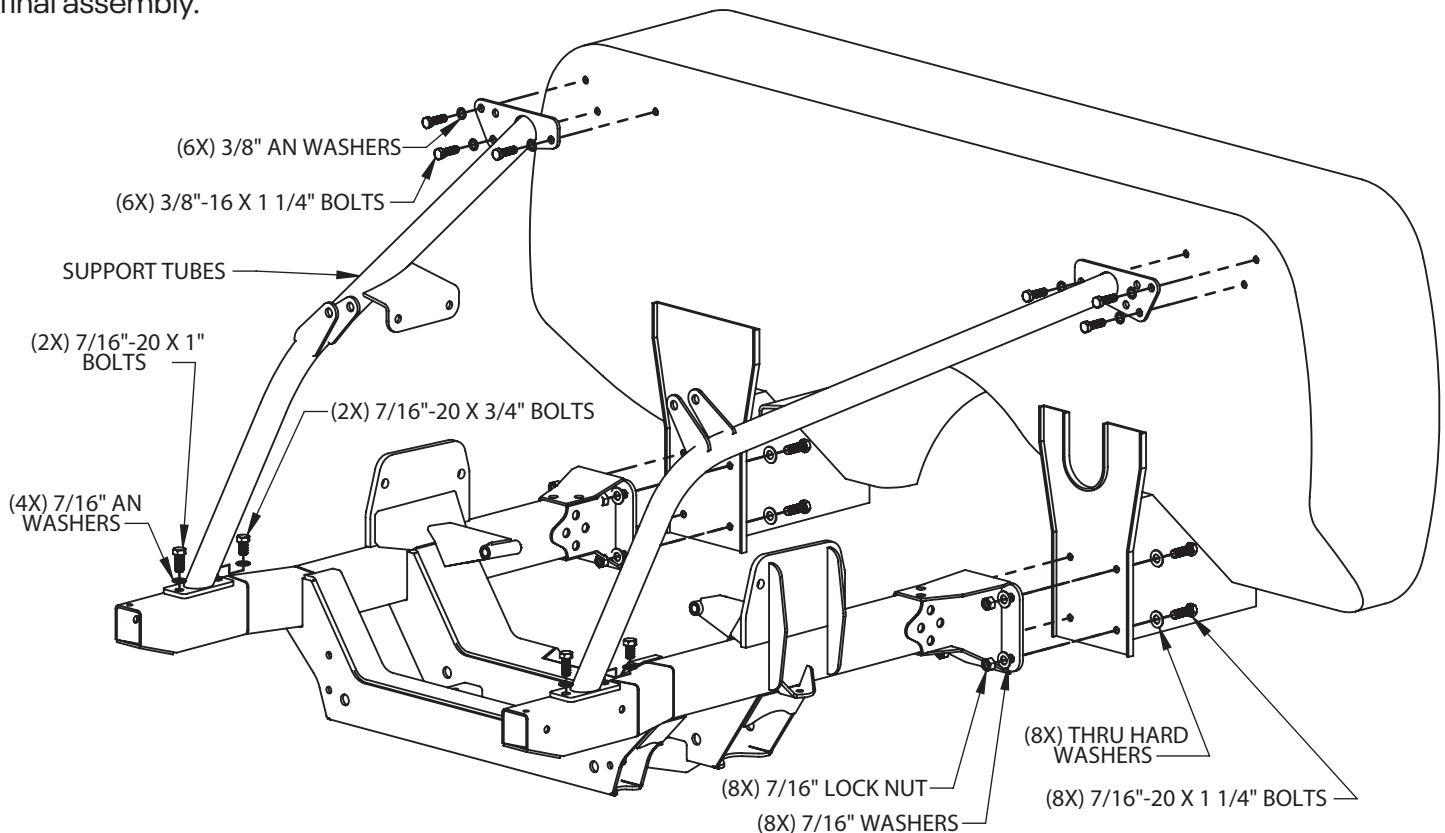
350-200

G-Comp Unser Front Suspension
62-67 Nova Edition

1. Support the car on jack stands or a 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, hinges, and front fenders. Disconnect all electrical components from the firewall forward. Remove the front bumper, brackets, grill, and lights. Retain all hardware to be used during re-assembly. Remove the core support and radiator. The lower section of the core support is riveted to the sub-frame. Drill out the rivets and remove the core support. Remove the engine, transmission, and accessories. Remove the OEM steering column. Support the subframe with a floor jack. Unbolt the subframe from the firewall and lower it down until the weight is supported by the front tires. The sub-frame with the inner fenders can now be rolled out of the way.

3. Install the G-Comp subframe. Using a floor jack, raise the new G-Comp sub-frame into position, lining up the holes in the sub-frame with the holes in the firewall. Bolt the sub-frame to the firewall using the eight supplied 7/16"-20 x 1-1/4" bolts, washers, and lock nuts. Note: The bolts and washers will need to be installed from the back side of the fire wall. Do not fully tighten these bolts at this time. Support the front of the sub-frame with jack stands and remove the floor jack. Install the support tubes to the sub-frame using two 7/16"-20 x 1" and two 7/16"-20 x 3/4" bolts and four AN washers. Use the shorter (3/4" long) bolts behind the support tubes and the longer (1" long) bolts on the front side. Do not fully tighten. Install the support tube to the fire wall with the six 3/8"-16 x 1-1/4" bolts and AN washers. You can now fully tighten the sub-frame and support tube bolts. Note: upper support firewall shims can be used to set your fender gaps after final assembly.



INSTRUCTIONS

© 2019, Speedway Motors, Inc.

SPEEDWAY
motors®

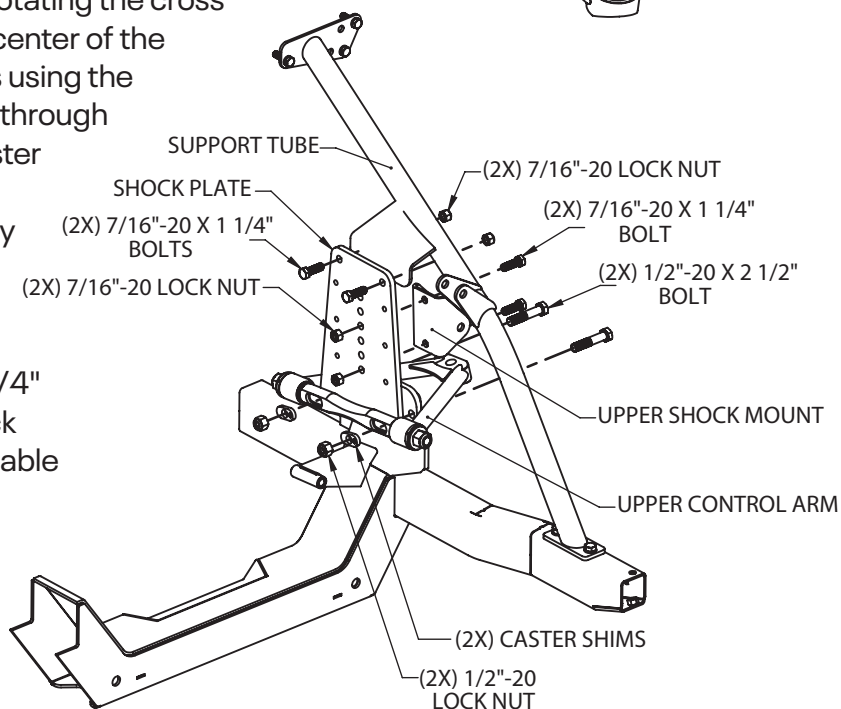
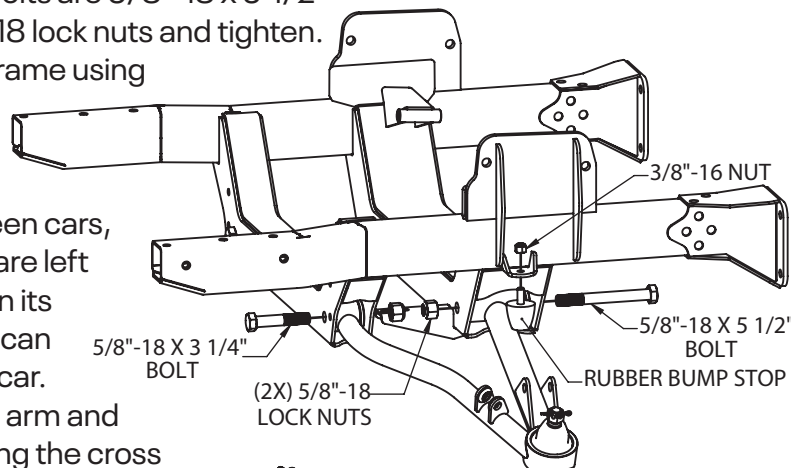
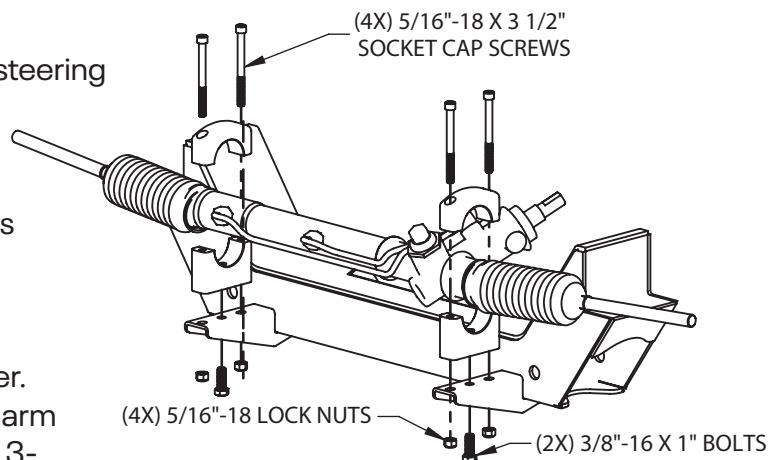
350-200

G-Comp Unser Front Suspension
62-67 Nova Edition

4. Steering Rack. Install the lower halves of the billet steering rack mounts to the cross member using the 3/8"-16 x 1" bolts supplied with the kit. Do not fully tighten at this time. Install the upper halves of the Billet rack mounts using the 5/16"-18 x 3-1/2" socket cap screws and lock nuts. Make sure the rack is centered before fully tightening the bolts.

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"-18 x 3-1/4", are to be installed from the front side. The rear bolts are 5/8"-18 x 5-1/2" and are to be installed from the rear. Install the 5/8"-18 lock nuts and tighten. Install the lower control arm bump stops to the sub-frame using the supplied 3/8" lock nuts as shown.

6. Install the upper control arms and shock plates. Due to loose factory tolerances and variations between cars, the top shock plate mount holes in the support tube are left undrilled. It is necessary to mock up the shock plate in its exact position to locate these holes. The shock plate can be used as a jig to drill the holes while installed in the car. To do this, place the shock plate between the control arm and sub-frame and install the upper control arm by rotating the cross shaft so the caster shim pockets are facing the center of the vehicle as shown. Mount the upper control arms using the 1/2"-20 x 3" bolts and lock nuts. Install the bolts through the sub-frame, shock plate, cross shaft, and caster shims. Secure with 1/2"-20 lock nuts. Once the shock plate is tightly fastened, drill the necessary holes using a 15/32" drill bit. A clamp can be used to securely hold the shock plate and support tube together while drilling. After the holes have been drilled, install the 7/16"-20 x 1-1/4" bolts and lock nuts into the top holes of the shock plate to secure it to the support tube. The adjustable upper shock mount can now be installed as shown. Use the remaining 7/16"-20 x 1-1/4" bolts and lock nuts.



INSTRUCTIONS

© 2019, Speedway Motors, Inc.

SPEEDWAY
motors®

350-200

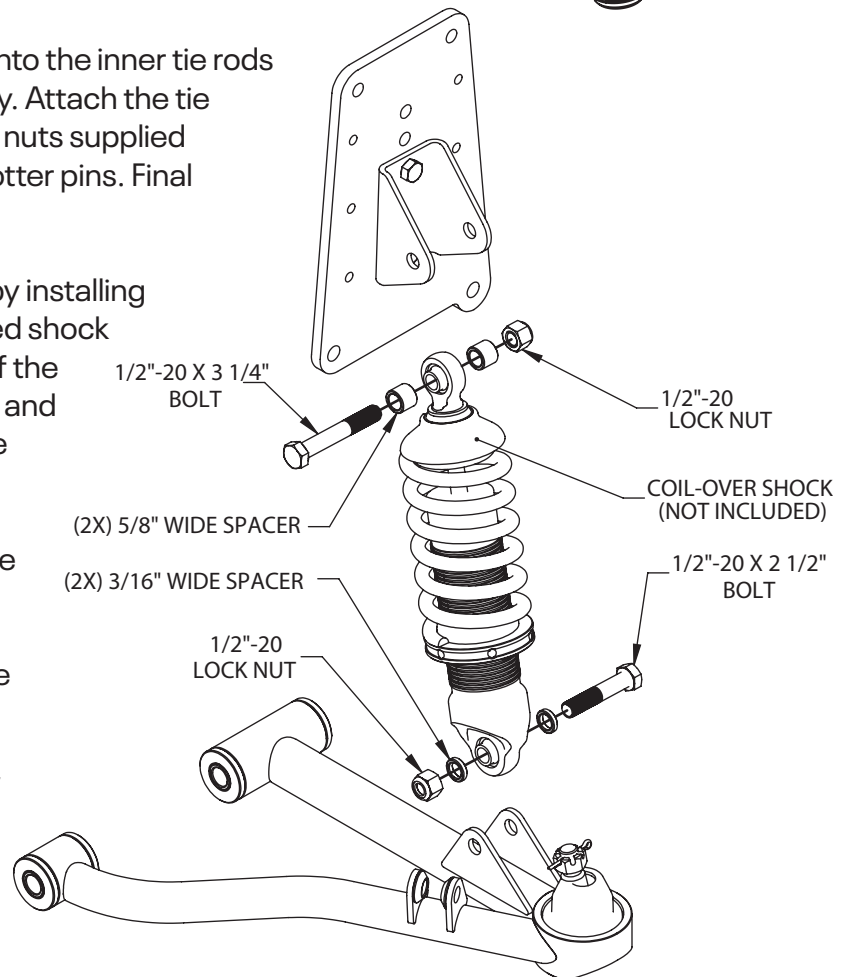
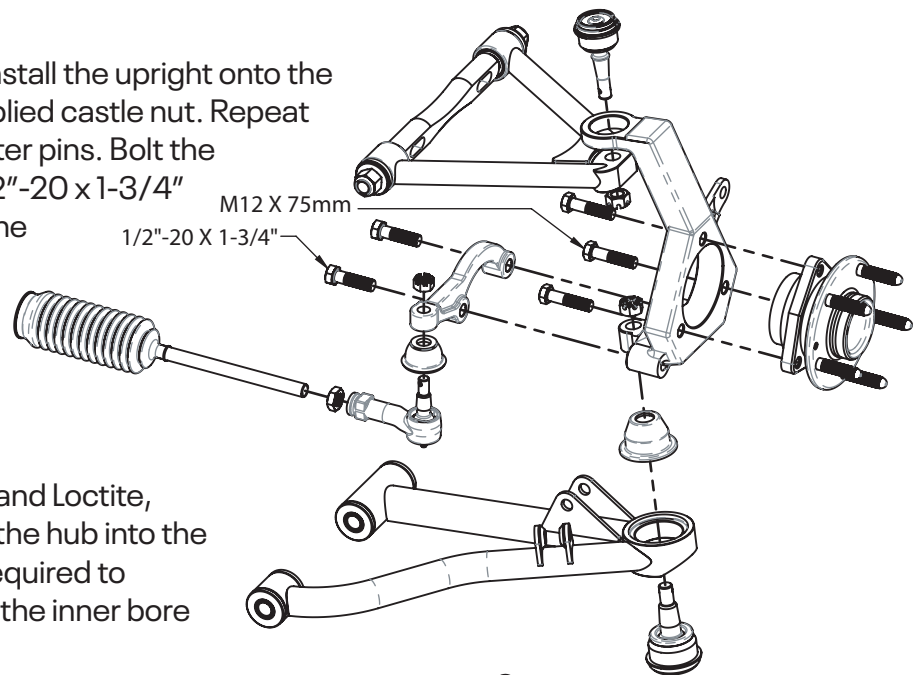
G-Comp Unser Front Suspension
62-67 Nova Edition

7. Install the uprights and steering arms. Install the upright onto the lower ball joint. Install and tighten the supplied castle nut. Repeat with the upper ball joint 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.

8. Install the hubs. The Corvette style hubs included with this kit use metric hardware, including metric lug nuts. Using the supplied M12 metric bolts and Loctite, secure the hubs to the uprights. The fit of the hub into the upright is a close tolerance fit. It may be required to remove any paint or powder coating from the inner bore of the upright before assembly.

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 will be done at a later time.

10. Install the shocks. Assemble the coil over by installing the threaded adjusting collar onto the threaded shock body. Adjust the collar all the way to the end of the threads. Place the spring over the shock body and install the spring cup onto the shock. Using the 1/2"-20 x 2-1/2" bolts and two 3/16" wide spacers, install the shock into the lower mount on the control arm as shown and secure with a 1/2"-20 lock nut. Install the 1/2"-20 x 3-1/4" upper shock bolts and 5/8" wide spacers, placing one spacer on each side of the shock bearing. Secure with a 1/2"-20 lock nut. **Note:** This kit is design to use shocks with a 4" stroke and compressed length of 10" or a 5" stroke with a compressed length of 12". 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

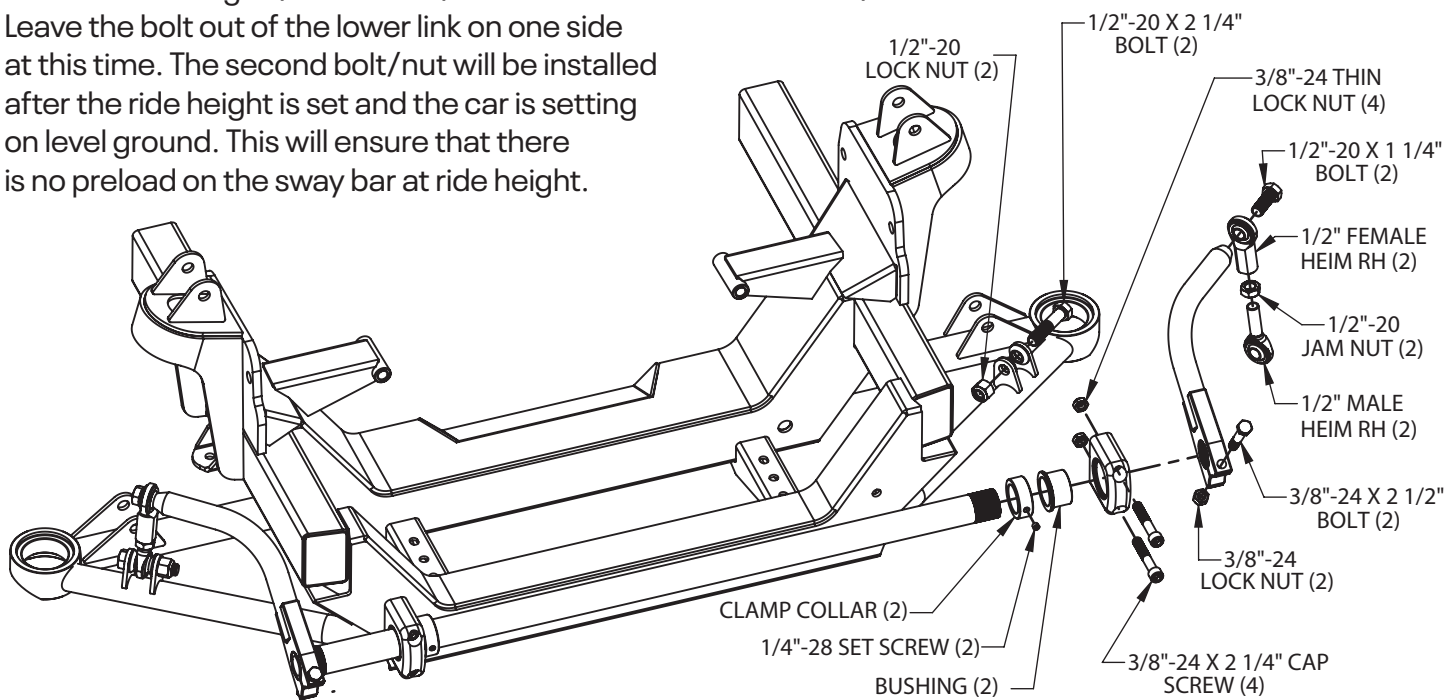
© 2019, Speedway Motors, Inc.

SPEEDWAY
motors®

350-200

G-Comp Unser Front Suspension
62-67 Nova Edition

11. Sway bar assembly: Press the bushings into the aluminum pillow-blocks and install the pillow-blocks to the front cross member with the bushing shoulder to the inside. Use the four 3/8"-24 x 2-1/4" socket head cap screws and secure them with the 3/8"-24 thin lock nuts. Slide the sway bar through the bushings, installing the two clamp collars to the inside of both pillow blocks. Tighten the 3/8" cap screws. 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. 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. Assemble the sway bar links as shown, leaving roughly 1/4" of threads showing. 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. Slide the 1/2"-20 x 1-1/4" bolts through the female heim joints and thread them into either end of the sway bar arms making sure to use Loctite on the threads and torque to 64 ft-lbs. 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.



12. Install the brake kit to the hub per the instructions included with your brake kit. Note: For recommended part numbers please visit our website or contact one of our tech experts.

13. Install the engine and transmission. The front jack stands can now be moved to support the front of the new sub-frame. The G-Comp sub-frame was designed to use stock type GM motor mounts (910-18012) or Speedway's Prothane mounts (910-18015). Note: The original drive train in the 62-67 Nova was offset 1/2" to the passenger side. On the G-Comp sub-frame the drive train is in the center and will require the use of a centered transmission cross-member. An OEM transmission cross member can be modified to work or use one of Speedway's transmission cross-members.

INSTRUCTIONS

© 2019, Speedway Motors, Inc.



350-200

G-Comp Unser Front Suspension
62-67 Nova Edition

- 14.** Install the tie bar using the 1/2"-20 x 2-1/2" bolts, lock nuts, and spacers provided with the kit.
- 15.** Install the core support, radiator, grill, and fenders. Check the front fender gaps at the door. It may be necessary at this time to shim the upper support tube mounts at the firewall to align the front fender gaps at the door. This kit contains two thick shims and four thin shims to adjust these gaps. Additional shims can be used if needed. The upper support tube bolts can be fully tightened once the fender gap is set. All accessories and other components can now be installed.
- 16.** 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 coil over shocks. 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. Secure it with the 1/2"-20 lock nut and tighten.

Set the alignment to the following initial settings:

Caster = 5°

Camber = Street: Negative .25°-.5° Race: Negative 1.5°-3.0°

Toe = 0" - 1/8" Toe Out

- 17.** 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 adjustment of 3/4".

- 18.** 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 contain 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

