



IMPORTANT
NOT RECOMMENDED
FOR OFF-ROAD USE
OR GOLF CARS THAT
EXCEED 19m.p.h.

INSTALLATION INSTRUCTIONS

LONGTRAVEL A-ARM FRONT SUSPENSION FOR CLUB CAR

1980—2003 Model

C-7-06

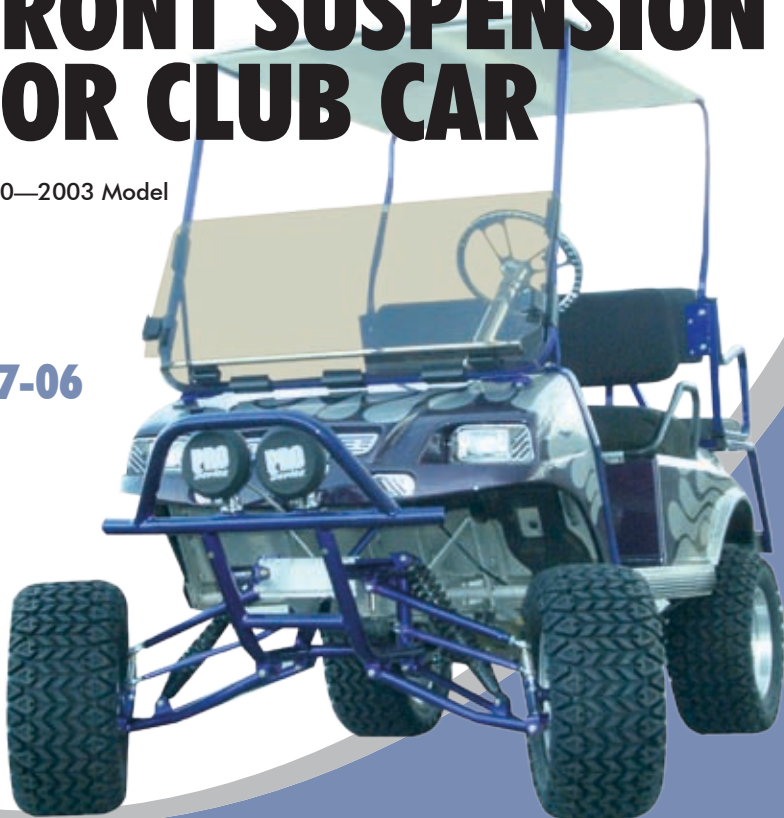


TABLE OF CONTENTS

Progressive Suspension Kit.....	2
Kit Contents	3-6
Disassembly	7-17
Assembly	18-29
UPDATE Rack & Pinion Stiffener Assembly Contents....	30
UPDATE Reinforcing Rack & Pinion	31-32
Assembly Continued.....	33-36
Finishing Touches	37-38



PROGRESSIVE SUSPENSION KIT

AA



BB



CC

ID	Qty	Product #	Description
AA	2	MS-7-51	Coil Over Dual Rate Shock 16"
BB	1	MS-7-51A	Spanner Wrench
CC	8	MS-7-01-2	Lower Eye Mount Washers

KIT CONTENTS



ID	Qty	Product #	Description
A	1	AFC-910	Sub Frame
B	1	AFE-920	Lower A-Arm Passenger Side
C	1	AFE-925	Lower A-Arm Driver Side
D	1	AFC-920	Brushguard
E	2	C-7-04-4	3/4" Shaft King Pin
F	2	AFE-930	Upper J Arm
G	1	AFC-960	Steering Shaft
H	2	C-7-04-1	3/8" Tie Rod
I	1	AFC-950	Pinch Plate
J	1	MS-7-19	Passenger Side Spindle
K	1	MS-7-18	Driver Side Spindle
L	2	MS-7-16	1/2"-20 Male Heim Joint
M	2	MS-7-30	3/8"-24 Male Heim Joint (2pc)
N	1	AFE-411	Universal Joint
O	1	AFC-935	Rack And Pinion Assembly
P	2	SR-8-02	1" x .090 x 2" Round Tube

KIT CONTENTS



A



B



C



D



E



F



G



H



I



J



T



K



L



M



N



O



P



Q



R



S

ID	Qty	Product #	Description
A	16	AFH-210	Urethane Bushing
B	2	HW-138	Round Tubing Plug
C	20	HW38-36	3/8"—16 Nylock Nut/Grade 8
D	4	HW38-43	3/8"—24 Jam Nuts
E	1	HW-23	LOCTITE® Threadlocker
F	2	HW12-64	1/2"—20 Jam Nut
G	16	HW38-47	3/8" Flat Washer USS
H	2	HW12-65	1/2"—20 SAE Washer/Grade 8
I	2	HW38-74	3/8"—24 Nylon Insert Lock Nut
J	4	HW516-17	5/16"—18 Nylon Lock Nut Zinc
K	2	HW38-03	3/8" x 16 x 1-1/2" H.H.C.S./Grade 2 Zinc
L	6	HW38-34	3/8"—16 x 3-1/2" H.H.C.S./Grade 8
M	2	HW38-35	3/8"—16 x 5" Hex Bolt/Grade 8
N	4	HW38-41	3/8"—16 x 2" Bolts/Grade 8
O	4	HW38-42	3/8"—16 x 4-1/2" Bolts/Grade 8
P	2	HW38-45	3/8" x 16 x 1-1/2" H.H.C.S./Grade 8
Q	2	HW516-05	5/16" x 2" H.H.C.S./Grade 2 Zinc
R	2	HW516-52	5/16" x 18 x 2" Bolt/Grade 8
S	2	HW8MM-14	8mm x 1.25 Bolt
T	2	HW-30	Cotter Pins

DO NOT USE PNEUMATIC TOOLS WHEN TIGHTING NUTS & BOLTS

DISASSEMBLY



STEP 1:
Remove top supports.



STEP 2:
Loosen the six pinch screws. They are located on the inside around the cowl trim. Then lift cowl trim.

DISASSEMBLY



STEP 3:
Remove front bumper and cowl fastening rivets.



STEP 4:
Remove front cowl.

DISASSEMBLY



STEP 5:
Raise golf car
and place jack
stands under
frame for
support.



STEP 6:
Remove wheels.

DISASSEMBLY



STEP 7:
Locate the
wheel hub then
remove dust
cover.

STEP 8:
Remove
cotter pin.



STEP 9:
Remove
castle nut.

DISASSEMBLY



STEP 10:
Remove hub
then repeat
steps 7 - 10 on
other side.



STEP 11:
Remove cotter
pins and castle
nuts on tie
rod ends and
steering drag
link.



DISASSEMBLY

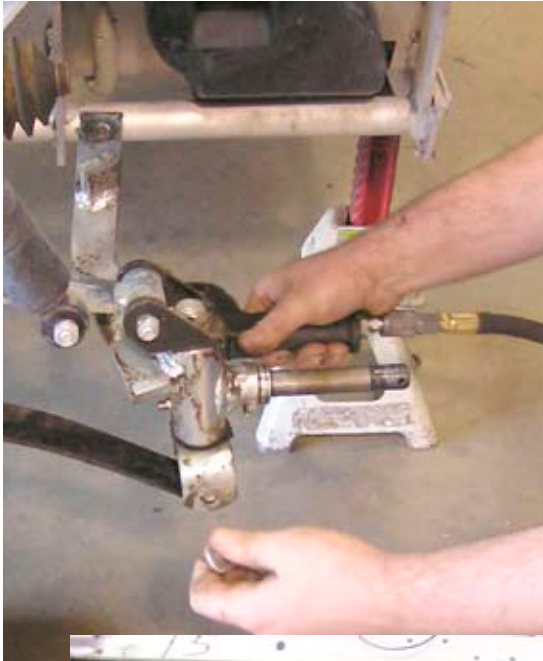


STEP 12:
Using a pickle
fork remove
steering drag
link . . .



and tie rod end.

DISASSEMBLY



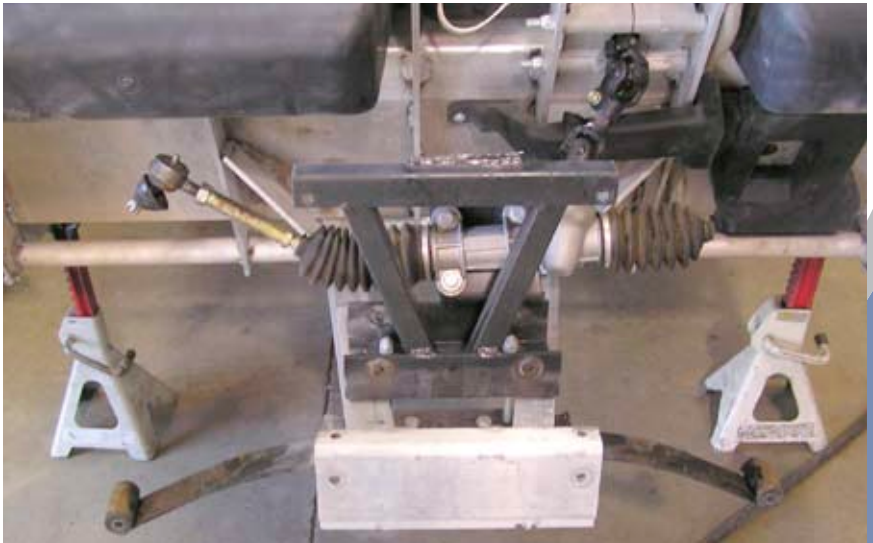
STEP 13:
Remove existing spindle, and the bolt in top of each shock. The spindle is bolted to the front leaf spring and the control arm.



DISASSEMBLY



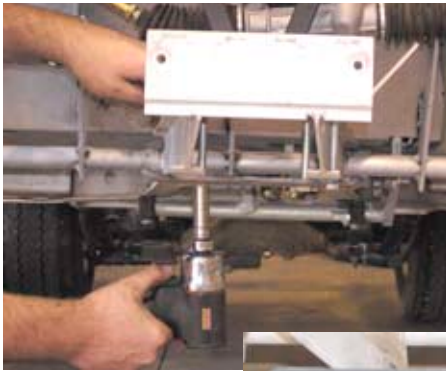
STEP 14:
Remove control arms. Each control arm is attached with two bolts.



DISASSEMBLY



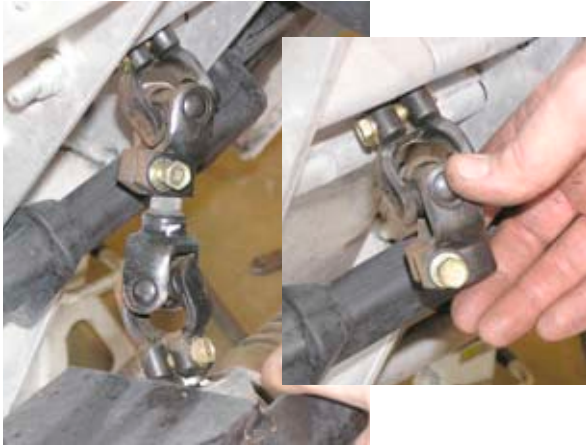
STEP 15:
Remove leaf
spring.



STEP 16:
Remove pinch
plate.



DISASSEMBLY



STEP 17:

Remove rack and pinion steering chasis. Loosen upper U joint at lower pinch. Make sure to keep this bolt. Once you do this the frame that the rack and pinion is mounted to should be able to be removed.



STEP 18:

Remove passenger side glove box. This is held on with three rivets and one screw. One rivet is located on the top middle. The screw is located on the top left side of the glove box and is covered by a plastic cap. Simply drill out the three rivets and unscrew the screw to remove the glove box.

DISASSEMBLY



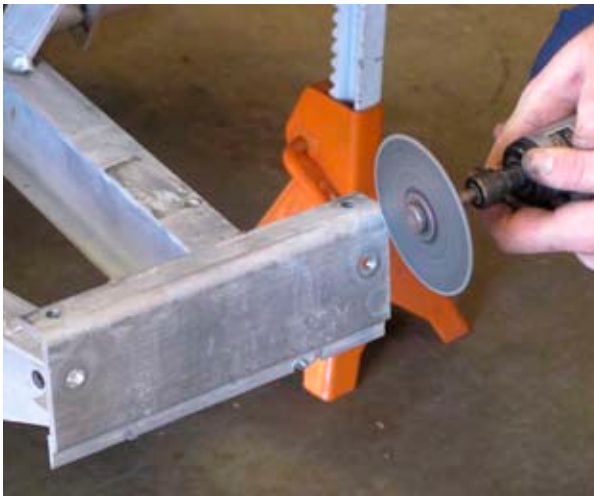
You are now ready to begin with the assembly of the Longtravel Suspension Kit.

ASSEMBLY

NOTE: THE FIRST FEW STEPS ARE THE MOST IMPORTANT, SO PAY ATTENTION! IT IS IMPORTANT THAT YOU MAKE SURE THAT THE SUSPENSION KIT SUB FRAME MOUNTS SQUARE ON THE CLUB CAR CHASIS. IF YOU IGNORE DOING THIS THEN THE ENTIRE KIT WILL SIT COCKEYED.



STEP 1:
Ream the two holes on the front mounting plate. Use a 1/2" drill bit.



STEP 2:
Cut off 1/16" to 1/8" on either side of the front mounting plate. This step may or may not be required. You may want to try step three first. If you are unable to accomplish step three come back to this step.

ASSEMBLY



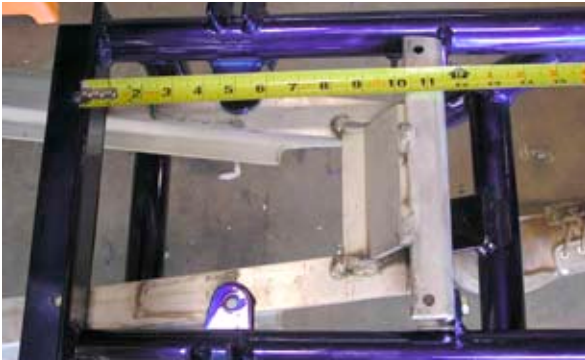
STEP 3:
Place the suspension sub frame on the club car chassis. It works best to start at an angle and then straighten out.



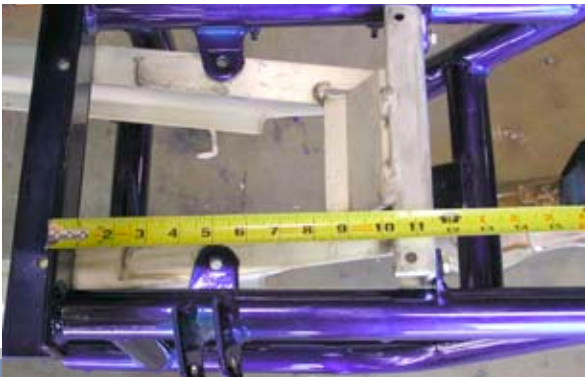
ASSEMBLY



STEP 4:
Place two 3/8" x 1-1/2" grade 8 bolts in the front of the sub frame into the chasis front mounting plate. This will hold the frame in place while you take some measurements.



STEP 5:
Measure from the back of the sub frame to the front of the chasis mounting plate. **The distance should be equal on the left and the right side.**



ASSEMBLY



STEP 6:
Once it looks square place a 3/8" washer and 3/8"-16 Nylock nut on the front bolts. Snug these then measure again to make sure that you are still square.



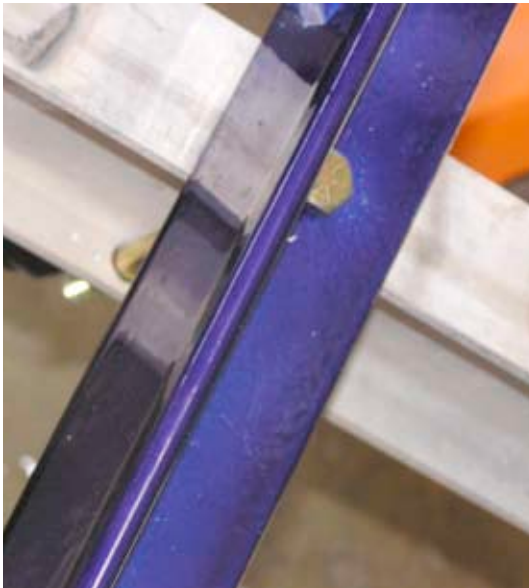
STEP 7:
Making sure that you are still square you will now use the sub frame as a template for drilling two 3/8" holes into the chasis. The holes are the two rear most holes on the sub frame.

ASSEMBLY



STEP 8:

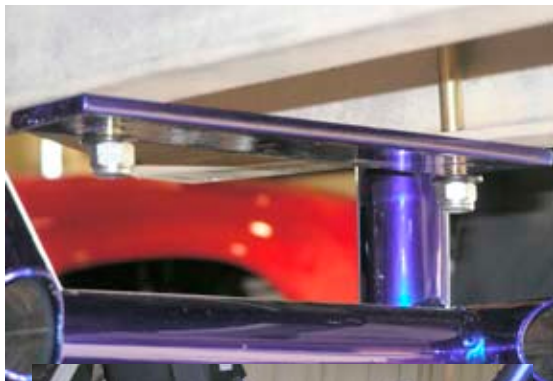
Once you have the hole drilled in the top of the I beam remove the sub frame from the chasis. Once removed use the top hole as your template for drilling a bottom hole. It is important to drill straight up and down. You will be putting a pinch plate on the bottom holes.



STEP 9:

Place the sub frame back on and make sure you are square again. Once you are square place your front bolts back in and tighten. Make sure you are still square. Then take two $\frac{3}{8}$ " x $4\text{-}1\frac{1}{2}$ "-16 grade 8 bolts and place them in the back holes you just drilled. If they do not fit straight up and down you may need to fix the holes you drilled.

ASSEMBLY

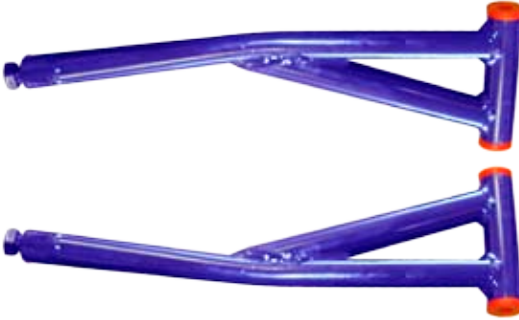


STEP 10: Place pinch plate on bottom rear where the two bolts. If everything was drilled straight you should be able to slip it on over the bolts. Then using a 3/8"-16 nylock nut and 3/8" washers on each bolt tighten the pinch plate. Check for square again.



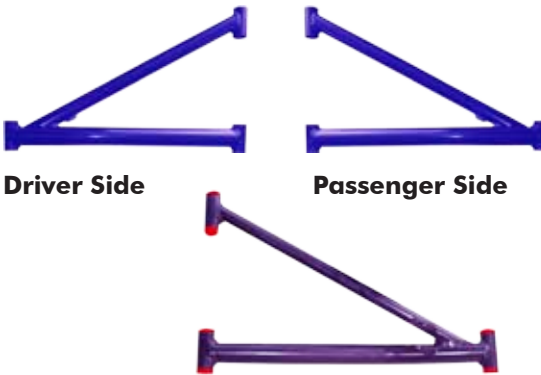
STEP 11: Find the middle mounting tabs on the sub frame. Then using two 3/8" x 4-1/2"-16 grade 8 bolts and 3/8"-16 Nylock nuts fasten the frame to the chassis. Do not tighten too tight or the I beam may begin to twist. You may have to reem holes in the I beam.

ASSEMBLY



STEP 12:

Insert two urethane bushings into each of the upper J arms and six into each of the lower A arms.



STEP 13:

Identify the lower A arms. Place the two lower A arms on the floor with the shock tab mounts toward the floor. Using the picture to the left identify which arm goes where.



STEP 14:

Bolt king pin on A arms. Use 3/8" x 3-1/2"-16 grade 8 bolt and 3/8"-16 Nylock nut and tighten to pinch point on bushings.

ASSEMBLY



STEP 15:
Place a 1/2"-20 jam nut on two 1/2"-20 spindle heims. Then, insert 1/2"-20 spindle heims into each of the upper J arms. You may need to remove bolts located in upper J arms.



STEP 16:
Attach upper J arms to the sub frame. Using a 3/8" x 5"-16 grade 8 bolt and 3/8"x16 Nylock nut tighten to pinch point on bushings. Make sure that when you attach the J arm that it bends toward the car. Also, the bolt must be inserted from the front towards the back. It is a snug fit so some patience will be required to get the bolt on.

ASSEMBLY



STEP 17:

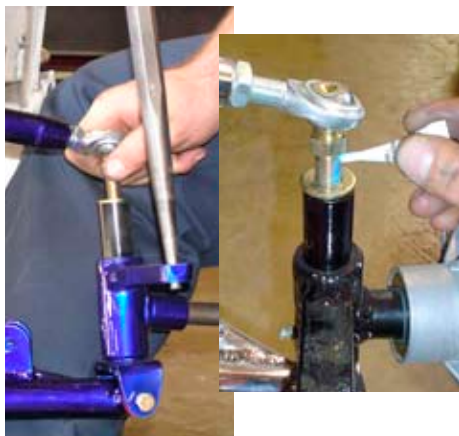
Attach the lower A arms. Use two 3/8" x 3-1/2"-16 grade 8 bolts and two 3/8"-16 Nylock nuts. Tighten to a pinch point on bushings.



ASSEMBLY



STEP 18:
Install spindle and spindle spacer. Make sure that the steering control arm points forward on both left and right side.



STEP 19:
Align upper J arm heim with lower A arm king pin and apply LOCTITE® on J arm heim threads and screw them together, be sure to use the 1/2"-20 SAE grade 8 washers. This step will require some dexterity and some muscle to make them align. You will probably want to use a pry bar to get it into position.

▲ NOTE: APPLYING LOCTITE® ON HEIM THREADS IS A VERY IMPORTANT STEP — IF NOT DONE MAY CAUSE SERIOUS DAMAGE OR INJURY.



STEP 20:
Install coil over progressive shocks. The shock attaches to lower A arm and sub frame. Make sure to use four washers and two shock sleeves for each shock. Use a 3/8" x 2"-16 grade 8 bolt and a 3/8"-16 Nylock nut on each shock eye mount.

ASSEMBLY



STEP 21:

Install one 3/8" x 24 jam nut on each of the 3/8" x 24 heims. Then, attach the two 3/8" x 24 heims to tie rods. One heim per tie rod.



STEP 22:

Take the provided rack and pinion unit. Clip the two zip ties on outer ends. Then, remove the heim joints and pop out the heim joint spacer. Discard the heim joint spacers.



Heim joint spacer.

ASSEMBLY



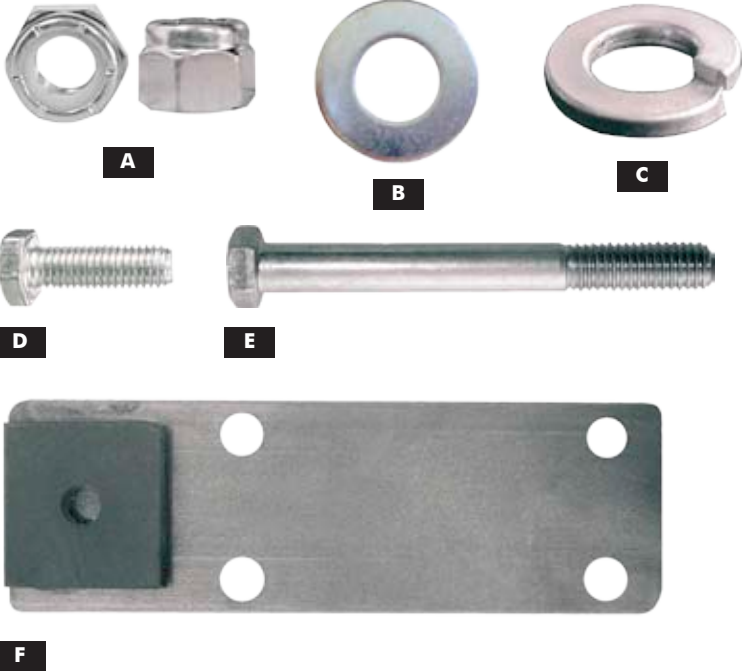
STEP 23:
Place the provided 3/8"-24 jam nuts and washer on heim joints you just removed. Then insert the heim joint back on the rack and pinion. If you desire you may also use zip ties on the ends again.



STEP 24:
Place the provided U joint on the rack and pinion. Then, tighten with provided 8mm pinch bolt.

UPDATE

RACK & PINION STIFFENER ASSEMBLY CONTENTS



ID	Qty	Product #	Description
A	4	HW516-17	5/16" — 18 Nylon Lock Nut Zinc
B	6	HW38-13	SAE Flat Washer Stainless Steel
C	2	HW38-14	3/8" Split Lock Washer Zinc
D	2	HW516-01	5/16" x 1" H.H.C.S. Grade 2 Zinc
E	2	HW516-07	5/16" 2-1/2" H.H.C.S. Grade 2 Zinc
F	1	AFC-936	Rack & Pinion Stiffener Assembly

DO NOT USE PNEUMATIC TOOLS WHEN TIGHTING NUTS & BOLTS

UPDATE

REINFORCING RACK & PINION



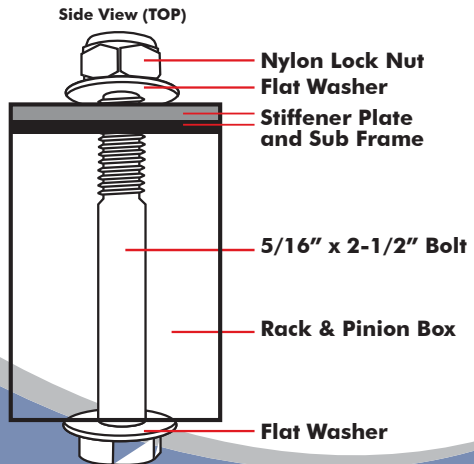
STEP 1:

Take rack and pinion stiffener plate and with rubber side down towards rack and pinion, align holes with holes in sub frame.



STEP 2:

Connect rack and pinion at front of stiffener plate with 2-5/16" x 2-1/2" bolts, 4 flat washers and 2-5/16" Nylon lock nuts. A flat washer goes on 1 bottom side of rack and pinion box and 1 goes on top of stiffener plate.



UPDATE

REINFORCING RACK & PINION



STEP 3:

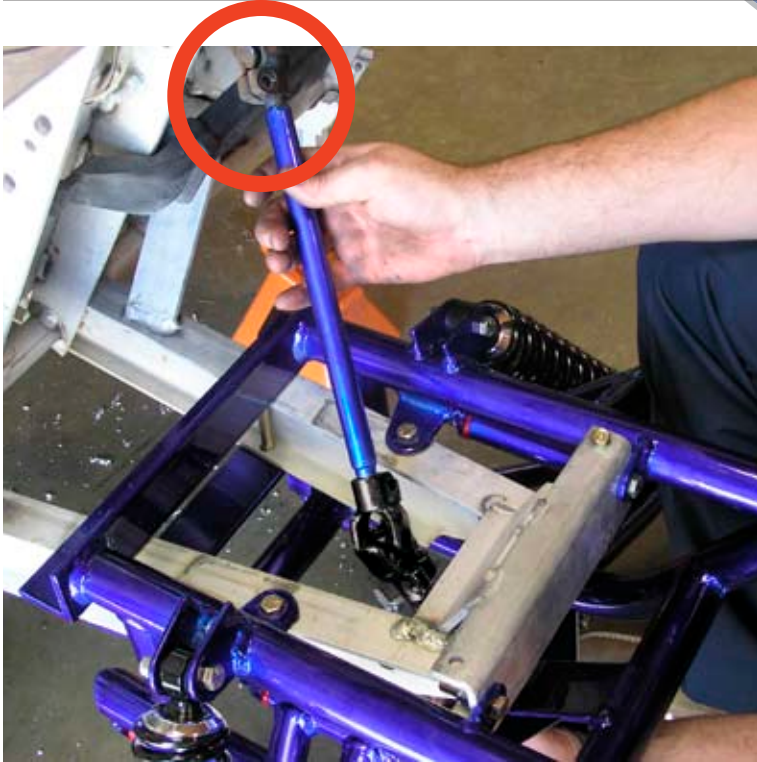
Connect back of stiffener plate with 2-5/16" x 1 bolts, 4 flat washers, 2-split lock washers and 2-5/16" nylon lock nuts to sub frame. 1-flat washer goes on sub frame side, 1-split lock washer in between sub frame and stiffener plate and 1-flat washer on stiffener plate side.



STEP 4:

Tighten nuts.

ASSEMBLY



STEP 25:
Insert the steering column into the top U joint. Make sure that the square notch faces the hole where the bolt is inserted.

ASSEMBLY



STEP 26:

Tighten the bolts that attach the rack and pinion to sub frame and install an 8mm pinch bolt on the U joint.

ASSEMBLY



STEP 27: Attach the tie rods to the heim joint on the rack and pinion using the 3/8" x 1-1/2"-16 grade 2 bolts and 3/8" x 16 nuts. DO NOT tighten yet.

ASSEMBLY



STEP 28:
Insert the tie rod heims into the spindle steering arm. Place a 3/8"-24 Nylon insert lock nut on the end but do not tighten yet.



STEP 29:
Put wheel hub back on. Slide the wheel hub onto the spindle. Place castle nut on and lock in place with cotter pin. Then, put dust cover back on.
Note: Inspect bearings repacking may be required.

STEP 30:
Mount your favorite Strech Plastics wheels back onto the car, raise it with a jack, remove jack stands, lower the car to the ground, and get ready to do some fine tuning.

FINISHING TOUCHES



STEP 1:

Align your front wheels. To align the wheels measure from the front inside of the tires and then repeat in the back inside of our tires. Toe the wheels to your desired width, 1/8" toe in is recommended. To adjust a wheel simply remove the heim in the spindle control arm, unscrew the heim from the tie rod, and reinsert the heim into the spindle control arm. Remeasure until you have your desired toe. If you prefer something other than the recommended toe it is important to leave enough of the heim screwed into the tie rod. Once aligned make sure to tighten the heims to the spindle steering arm.



STEP 2:

Now you need to time your heims. It is important to make sure that your jam nuts are still loose. The best way to time your heims is to grab the tie rod in the middle. Next, roll it back and forth until you have equal play in the spindle heim and rack and pinion heim. Once you have equal play in each direction tighten your jam nuts.

FINISHING TOUCHES



STEP 3:

Recheck all bolts that fasten A arms, J arms and all other bolts. Make sure that bolts with urethane bushings are only tightened to a pinch. Before reinstalling the cowl or installing a new cowl make sure the steering feels good and the drive is smooth.

STEP 4:

Reinstall Club Car cowl or install one of Strech Plastics custom Club Car Classic Cows with Billet Accents. After cowl is installed install the detachable brush guard using two 5/16" x 1-1/2" - 16 grade 8 bolts and two 5/16"-16 Nylock nuts.



STEP 5:

Go and enjoy your newly lifted Club Car!

Strech
Plastics, Inc.
est. 1974

Golf Car Accessories Leader



Specializing In:
Dashes • Trays
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Wheel Covers • Storage Covers • Weather Enclosures
Coolers and Brackets • Ball and Club Washers • Mirrors
Ramps • Storage Covers • Sand and Seed Bottles • And More . . .