XXX-S

OWNER'S MANUAL

- **Carefully read through all instructions to familiarize yourself with the parts, construction techniques, and tuning tips outlined in this manual. Being able to grasp the overall design of your new XXX-S touring car before beginning the construction process will ensure a smooth assembly.**

- **Take your time and pay close attention to detail. Keep this manual for future reference.**

TEAM LOSI

Always Racing Towards The Future.

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BLU

Welcome Team Losi XXX-S Owner!

Thank you for selecting Team Losi and the XXX-S as your new racing sedan. As you will see, we have made every effort to design and produce a kit that is not only the most competitve, but easy to build and maintain. The simple bag-by-bag assembly sequence and unmatched easily followed instructions, combined with Team Losi's world famous quality-fitting parts, should make building your new XXX-S a most enjoyable project.

Before you open the first bag or start any assembly, please take a few moments to read completely through the following instructions. This will familiarize you with the various parts as well as the tools you will need. Taking an extra moment before starting can save you a good deal of time and assure proper assembly.

Once again, thank you for choosing Team Losi.

Good luck and good racing!

1. INTRODUCTION

XXX-S COMPLETED KIT DIMENSIONS

Overall Length: 16-5/8"	Front Width: 7-7/16"	Rear Width: 7-15/32"	Height: 4-3/4"
Wheelbase: 10-1/8"	All dimensions at ride height.	Weight will vary depending on accessories.	

NOTES & SYMBOLS USED

Figure 1

This is a common figure number found at the beginning of each new illustration throughout the manual.

❑ Step 1. Each step throughout the entire manual has a check box to the left of it. As you complete each step, mark the box with a check. If you need to take a break and return to building at a later time you will be able to locate the exact step where you left off.

This is a common note. It is used to call attention to specific details of a certain step in the assembly.

IMPORTANT NOTE: Even if you are familiar with Team Losi kits, be sure and pay attention to these notes. They point out very important details during the assembly process. Do not ignore these notes!

In illustrations where it is important to note which direction parts are facing, a helmet like this one will be included in the illustration. The helmet will always face the front of the car. Any reference to the right of left side will relate to the direction of the helmet.

KIT/MANUAL ORGANIZATION

The kit is composed of different bags marked A through H. Each bag contains all of the parts necessary to complete a particular section of the *XXX-S*. Some of these bags have subassembly bags within them. ***It is essential that you open only one bag at a time and follow the correct assembly sequence, otherwise you may face difficulties in finding the correct part.*** It is helpful to read through the instructions for an entire bag prior to beginning assembly. Key numbers (in parenthesis) have been assigned to each part and remain the same thoughout the manual. In some illustrations, parts which have already been installed are not shown so that the current steps can be illustrated more clearly.

For your convenience, an actual-size hardware identification guide is included with each step. To check a part, hold it against the silhouette until the correct part is identified. In some cases extra hardware has been supplied for parts that may be easy to lose.

The molded parts in the *XXX-S* are manufactured so that they interlock. ***When screws are tightened to the point of being snug, the parts are held firmly in place.*** For this reason it is very important that screws not be overtightened in any of the plastic parts.

To ensure that parts are not lost during construction, it is recommended that you work over a towel or mat to prevent parts from rolling away.

IMPORTANT SAFETY NOTES

1. Select an area for assembly that is away from the reach of small children. ***Some parts in this kit are small and can be swallowed by children, causing choking and possible internal injury.***

2. The shock fluid and greases supplied should be kept out of childrens' reach. ***They are not intended for human consumption!***

3. ***Exercise care*** when using *any* hand tools, sharp instruments, or power tools during construction.

4. ***Carefully read all manufacturers' warnings and cautions*** for any glues, chemicals, or paints that may be used for assembly and operating purposes. ***When you are using glues, chemicals, and paints you should always wear eye protection and a mask.***

TOOLS REQUIRED

Team Losi has supplied all necessary allen wrenches and a special assembly wrench that is needed for assembly and turnbuckle adjustments. The following common tools will also be required: Needle-nose pliers, regular pliers, medium grit sandpapper, hobby knife, scissors, and body cutting/trimming tools. A soldering iron may be necessary for electrical installation. 3/16", 1/4", and 11/32" nut drivers are optional.

RADIO/ELECTRICAL

A suggested radio layout is provided in this manual. Your high-performance R/C center should be consulted regarding specific questions pertaining to radio/electrical equipment.

HARDWARE IDENTIFICATION

When in question, use the hardware identification guide in each step. For screws, the prefix number designates the screw size and number of threads per inch (i.e. 4-40 is #4 screw with 40 threads per inch). The second number or fraction designates the length of the screw. For cap head and button head screws, this number refers to the length of the threaded portion of the screw. For flat head screws, this number refers to the overall length of the screw. Bearings and bushings are referenced by the inside diameter **x** outside diameter. Shafts and pins are referred to by diameter **x** length. Washers are described by inside diameter or the screw size that will pass through the inside diameter. E-clips are sized by the shaft diameter that they attach to.

MOTORS AND GEARING

The XXX-S includes an 88-tooth, 48-pitch spur gear. The internal drive ratio of the XXX-S is 1.83. The pinion gear that is used will determine the final drive ratio. To calculate the final drive ratio, first divide the spur gear size by the pinion gear size. For example, if you are using a 20-tooth pinion gear, you would divide 88 (spur gear size) by 20 (pinion gear size). 88/20 = 4.40. This tells you that 4.40 is the external drive ratio. Next, multiply the internal drive ratio (1.83) by the external drive ratio (in this case 4.40). 1.83 x 4.40 = 8.052. This means that by using a 20-tooth pinion gear with the standard 88-tooth spur gear, the final drive ratio is 8.052:1.

Consult you high-performance shop for recommendations to suit your racing style and class. The chart below lists some of the more common motor types and recommended initial gearing for that motor. Ratios can be adjusted depending on the various track layouts, tire sizes, and battery types.

RECOMMENDED INITIAL GEARING FOR COMMON MOTORS

TYPE OF MOTOR	PINION	SPUR
24º Stock	26	88
8-Turn Modified	16	88
9-Turn Modified	17	88
10-Turn Modified	18	88
11-Turn Modified	19	88
12-Turn Modified	20	88
13-Turn Modified	21	88
14-Turn Modified	21	88
15-Turn Modified	22	88

TABLE OF CONTENTS

Team Losi is continually changing and improving designs; therefore, the actual part may appear slightly different than the illustrated part. Illustrations of parts and assemblies may be slightly distorted to enhance pertinent details.

BAG A

STOP! There are two, complete differential assemblies in the XXX-S kit. Both differentials are identical front and rear. Proceed through the Bag A instructions twice - once for the front differential, and once for the rear differential. The XXX-S kit was designed using the stock 42T drive pulleys in the front and rear of the car. There is an optional 41T pulley included in Bag H of this kit, This feature can be used to apply under-drive or over-drive in the vehicle. See set-up tips at the end of this manual.

Figure 1

❑ Step 1. Insert a 4-40 mini lock nut (1) into the hex area of the diff nut carrier (2). The thread-locking portion (plastic) of the nut (1) should face the outside.

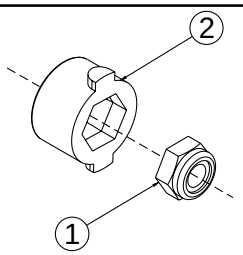


Figure 1

Figure 2

q Step 2. Locate the 1/16" Allen wrench (5) supplied with the kit. Place the diff nut carrier (2), nut side first, over the Allen wrench (5) towards the "L-end."

❑ Step 3. Stack the six 1/8" Belleville washers (3) over the wrench (5), up against the diff nut carrier (2). The washers (3) should all point the same direction and open away from the diff nut carrier (2) as shown in Figure 2A.

Figure 2

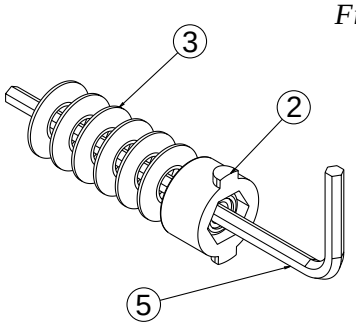


Figure 2A

Figure 3

❑ Step 4. Insert all of the parts that are stacked on the wrench (5) into the male outdrive/ diff half (7) (the one with the post). Line up the tabs on the diff nut carrier (2) with the slots in the outdrive (7). Press the parts all the way into the outdrive (7).

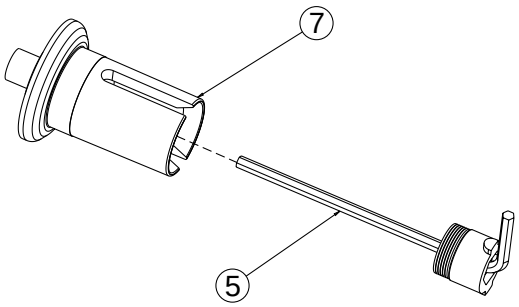


Figure 3

Figure 4

❑ Step 5. Apply a small amount of clear diff grease (8) to the outside ring of the male outdrive (7). Attach a diff drive ring (10) to the outdrive (7) by lining up the flat section of the ring (10) with the flat section on the outdrive (7).

**NOTE: Only a small amount of grease is needed. It is only used to hold the drive ring in place.*

⚠ **IMPORTANT NOTE:** Do not glue the drive rings to the outdrive/ diff halves. Doing so may not allow the washers to mount flat.

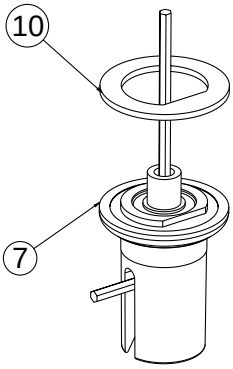
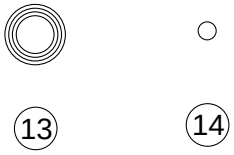


Figure 4

BAG A (Continued)

Figure 5



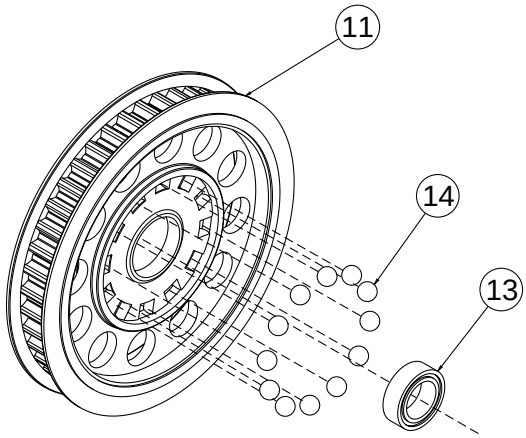
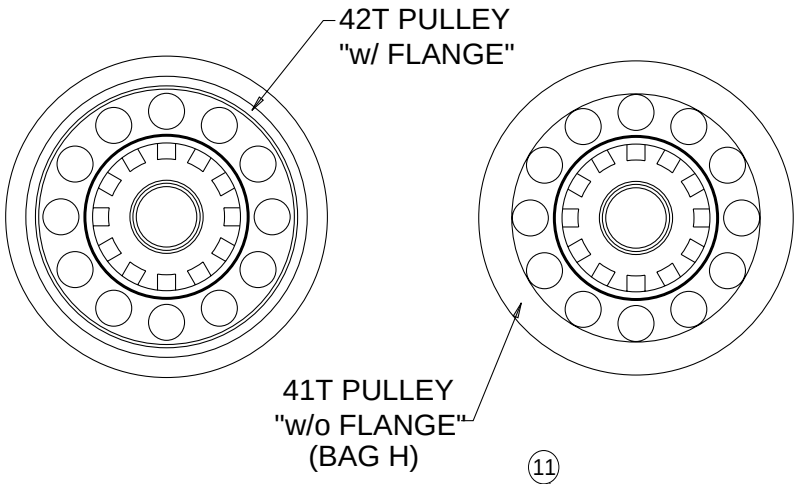


Figure 5

❑ Step 6. Insert a 5mm x 8mm Bearing (13) into the center of the 42T diff pulley (11).

❑ Step 7. Press a 3/32" diff ball (14) into each of the small holes in the diff pulley (11) as indicated in Figure 5.

Figure 6



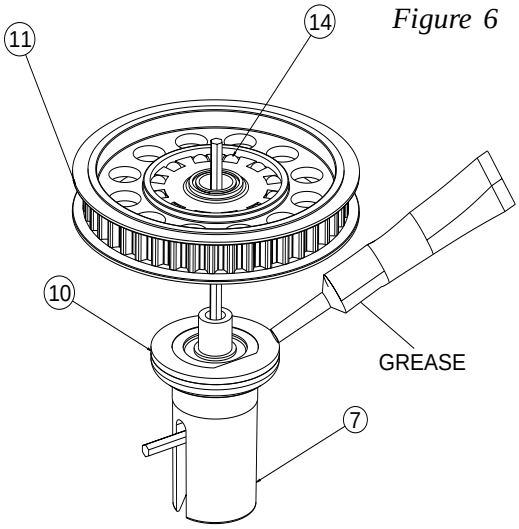


Figure 6

❑ Step 8. Apply a heavy coat of clear diff grease (8) to the exposed side of the diff ring (10) that is already attached to the outdrive (7).

❑ Step 9. Carefully place the diff pulley (11) over the post on the outdrive (7) so that the diff balls (14) and diff pulley (11) rest against the greased drive ring (10). Leave the assembly with the 1/16" Allen wrench (5) standing as shown in Figure 6.

BAG A (Continued)

Figure 7

13

❑ Step 10. Press a 5mm x 8mm bearing (13) into the center area of the female plastic outdrive/ diff half (15) as indicated. The edge of the bearing (13) should be flush with the front of the outdrive (15).

❑ Step 11. Apply a small amount of clear diff grease (8) to the outer ring of the outdrive (15). Install the second drive ring(10), again aligning the flat sections of the outdrive (15) and the drive ring (10).

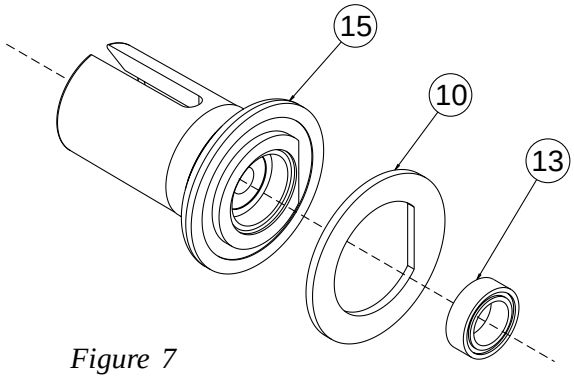


Figure 7

Figure 8

16 18 19

❑ Step 12. Place the foam thrust bearing seal (17) over the shoulder of the diff adjusting screw (16).

❑ Step 13. Place one of the 1/8" x 5/16" thrust bearing washers (18) over the diff screw (16).

❑ Step 14. Using the red MIP grease (78), apply a fairly heavy coat of grease to the thrust washer (18) and position the 5/64" thrust balls (19) in a circular pattern around the diff screw (16). Apply another coat of red MIP grease (78) over the thrust balls (19) and place the second thrust bearing washer (18) over the screw (16), against the thrust balls (19).

❑ Step 15. Insert the diff screw (16) into the female outdrive (15). Pull the threaded end of the screw (16) until the thrust assembly rests against the inside of the outdrive (15).

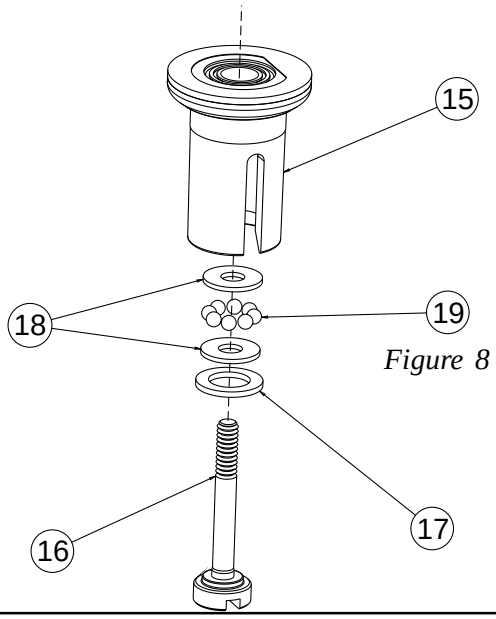


Figure 8

Figure 9

❑ Step 16. Carefully replace the Allen wrench (5) with a pen or pencil from the male outdrive (7) and place it in the slot of the female outdrive (15) containing the diff screw (16). The pen will be used to hold the diff nut carrier (2) assembly in the bottom side.

❑ Step 17. Apply a fairly heavy coat of clear grease (8) to the exposed side of the drive/ diff ring (10) on the female outdrive (15).

❑ Step 18. While holding the female outdrive (15) with Allen wrench (5) inserted, carefully assemble it to the male half (7).

❑ Step 19. Make sure that the slot in the diff screw (16) is lined up with the slot in the female half (15) while holding the male half (7) slowly turn the female outdrive (15) until the threads of the diff screw (16) engage on the threads of the 4-40 mini nut (1). Remove the pencil from the male half (7) and thread the two outdrives (7),(15) together until the screw (16) just starts to snug up.

❑ Step 20. Tighten the diff until the pulley (11) cannot be turned while both of the outdrives (7), (15) are being held firmly. Final diff adjustment should be made after completion of the XXX-S. *When tightening the diff, tighten the screw a little and then "work" the diff a little. Then tighten the screw a little more and "work" the diff again. Continue this until the diff doesn't slip. This ensures that the parts in the diff are properly seated. Refer to tech tips for final adjustment. "Working" the diff is done by rotating the outdrives in opposite directions.*

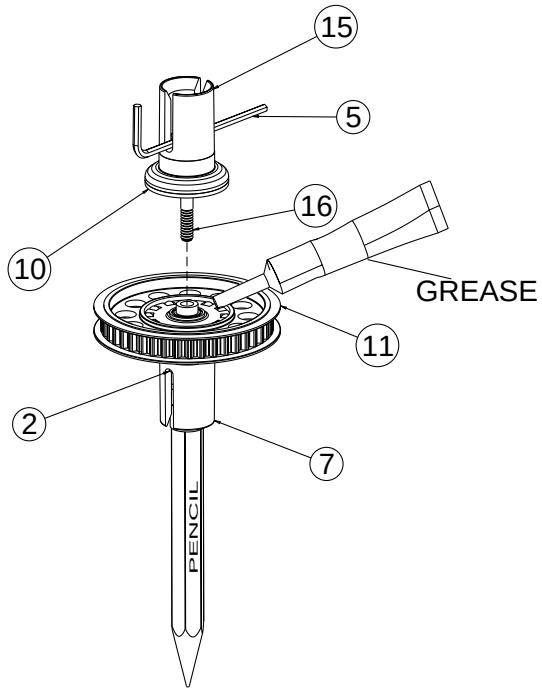
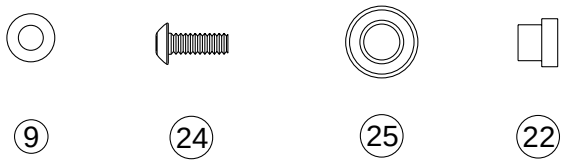


Figure 9

BAG B

NEVER PINCH THE BELT
NEVER OVER TIGHTEN THE SCREWS IN THE CHASSIS - Team Losi has designed interlocking features into the XXX-S chassis when screws are to the point of being snug the parts are held firmly in place.

Figure 10



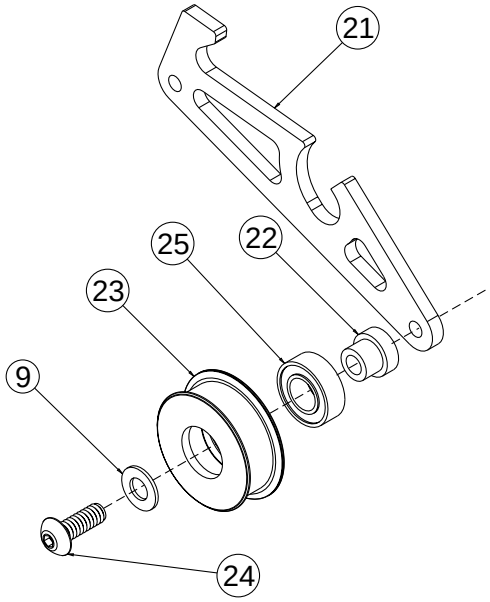


Figure 10

❑ Step 1. Snap a 3/16" x 3/8" bearing (25) into the right side of the idler pulley (23). The bearing will snap past the ridge and stop.

❑ Step 2. Place the idler pulley shaft (22) through the idler pulley (23) from the bearing side.

❑ Step 3. Slide a #4 x .020 washer (9) over the 4-40 x 5/16" button head screw (24).

❑ Step 4. Insert the 4-40 x 5/16" button head screw (24) through the idler pulley (23) and secure it to the belt tensioner arm (21).

Figure 11

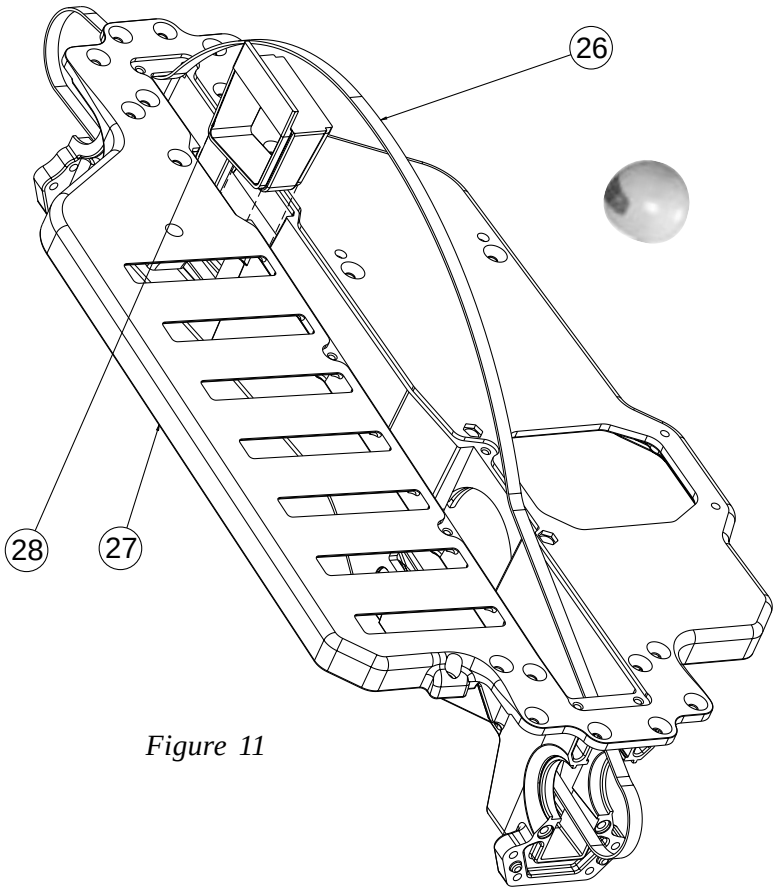


Figure 11

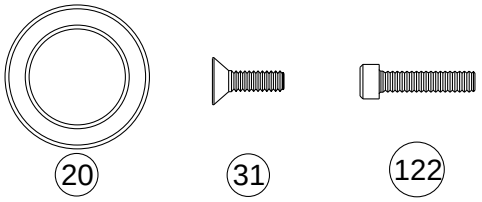
❑ Step 5. Position the chassis (27) upside-down on your work bench. Insert the belt (26) and pull it through both ends of the chassis (27).

❑ Step 6. Pull the belt (26) out, just slightly, through the bottom of the chassis (27) and insert the Steering tunnel (28), tall end forward, into the slot in the front of the chassis (27). Press into position as indicated in Figure 11.

The steering tunnel should now be located in between the belt, with the belt still slightly hanging out of both ends of the car.

BAG B (Continued)

Figure 12



❑ Step 7. Slide one 1/2" x 3/4" bearing (20) over each of the outdrive cups (7),(15).

❑ Step 8. Pull the belt (26) slightly out of the front of the chassis (27) and install a diff assembly into the slots as indicated in Figure 12. Pull the slack from the belt (26) through the rear of the chassis (27).

The diff adjustment screw should be facing the drivers left side of the chassis.

❑ Step 9. Secure the diff assembly by installing the front diff cover (29) with two 4-40 x 1/2" cap head screws (122) through the diff cover (29) into the two counter-bored holes in the chassis (27).

❑ Step 10. Flip the chassis (27) over and install the two 4-40 x 3/8" flat head screws (31) through the bottom of the chassis (27) into the front diff cover (29) as indicated in Figure 12.

There is a short thread-cutting screw included in the wrench bag. This screw can be used to tap threads in the holes in the main chassis and the bottom of the diff cover. Pre-tapping these holes makes it easier to install the screws during assembly.

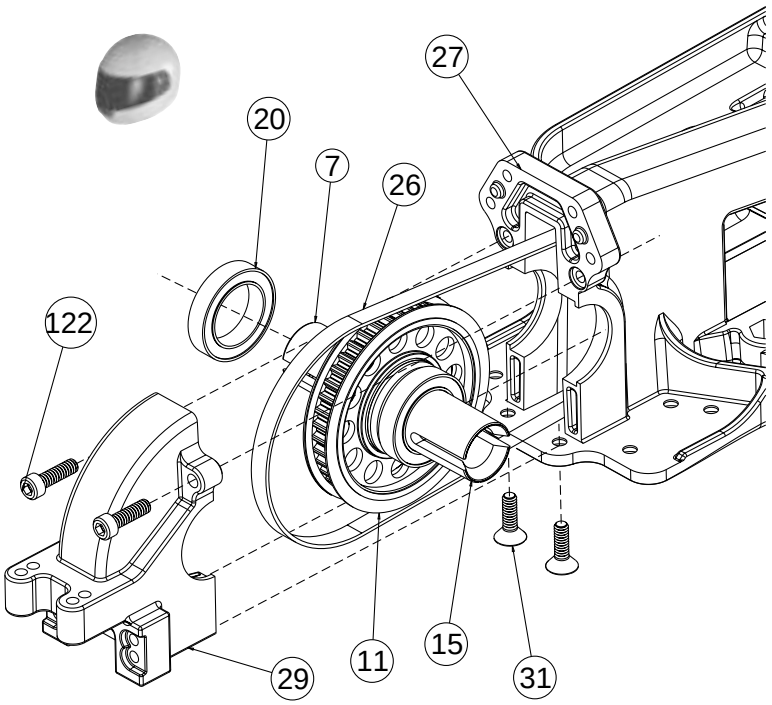
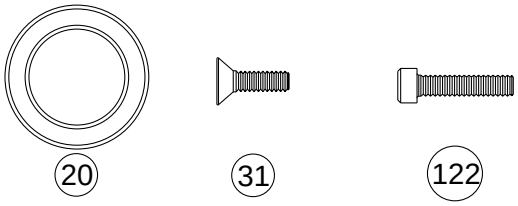


Figure 12

Figure 13



❑ Step 11. Slide one 1/2" x 3/4" bearing (20) over each of the outdrive cups (7),(15) on the remaining differential.

❑ Step 12. Spread the belt (26) apart and install the diff assembly into the slots of the chassis (27) as indicated in Figure 13. Once the diff assembly is in place, pull the slack up through the center of the chassis (27) from the top side.

Once again, the diff adjustment screw should be facing the drivers left side of the chassis.

❑ Step 13. Secure the diff assembly by installing the rear diff cover (32) with two 4-40 x 1/2" cap head screws (122) through the diff cover (32) into the counter-bored holes in the rear of the chassis (27).

❑ Step 14. Flip the chassis (27) over and install the two 4-40 x 3/8" flat head screws (31) through the bottom of the chassis (27) into the rear diff cover (32) as indicated in Figure 13.

There is a short thread-cutting screw included in the wrench bag. This screw can be used to tap threads in the holes in the main chassis and the bottom of the diff cover. Pre-tapping these holes makes it easier to install the screws during assembly.

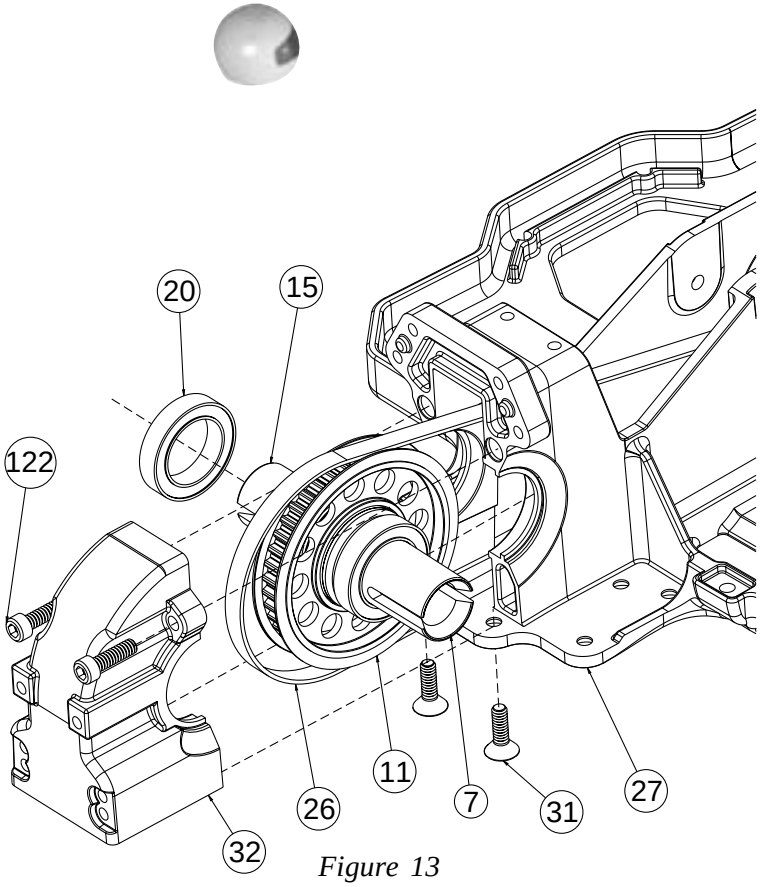
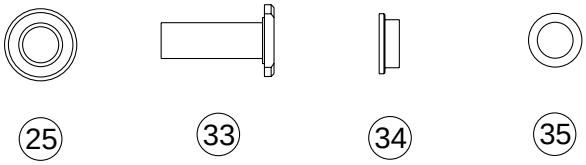


Figure 13

BAG B (Continued)

Figure 14



❑ Step 15. Press a 3/16" x 3/8" bearing (25) into the "Spur gear" side of the drive pulley (36). Slide the top shaft (33) through the bearing (25) in the drive pulley (36).

❑ Step 16. From the "Drive gear" side of the drive pulley (36) slide the top shaft spacer (35) over the top shaft (33). Place a second 3/16" x 3/8" bearing (25) over the top shaft (33) and press the bearing into the "Drive gear" side of the drive pulley (36).

If the sealed bearing has a teflon seal (colored, woven looking) in it, position the seal to the outside of the drive pulley.

❑ Step 17. Slide the belt tensioner bushing (34) over the top shaft (33) with the flanged side of the tensioner bushing (34) towards the drive pulley (36).

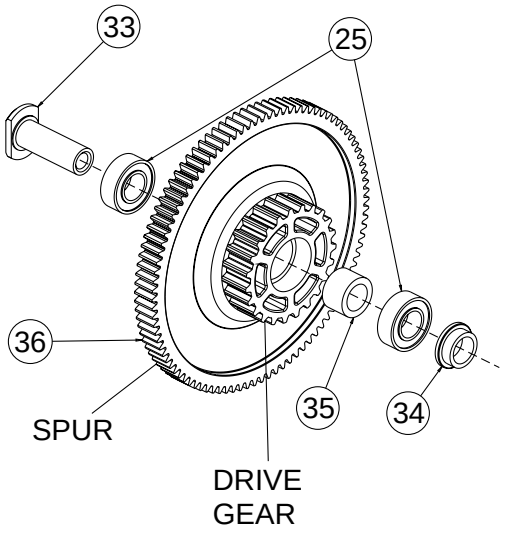


Figure 14

Figure 15

Figure 15

❑ Step 18. Holding the drive pulley assembly, with thumb and index finger, pull the belt (26) up through the chassis (27), as shown in Figure 15, and line up the top shaft (33) with the holes in the chassis (27).

❑ Step 19. Place a #4 hardened washer (37) over a 4-40 x 5/16" button head screw (24) and insert it through the left side of the chassis (27) threading it into the top shaft (33) as indicated in Figure 15.

You may need to slightly pinch the chassis to install the 4-40 x 5/16" button head screw.

❑ Step 20. Once again, place a #4 hardened washer (37) over a 4-40 x 5/16" button head screw (24) and insert it through the chassis (27) and thread it into the right side of the top shaft (33) located in the drive pulley assembly. ***Leave the right side screw a bit loose until the belt tensioner is installed.***

IMPORTANT NOTE: Never pinch the belt as it will result in a shorter life of the belt and cause your vehicle to stop running

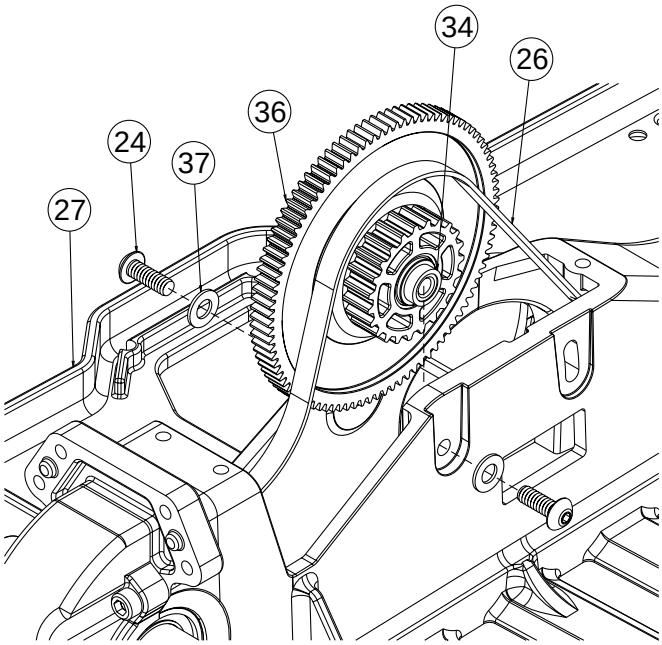


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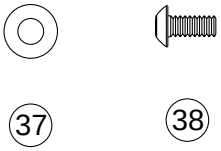
Figure 16



❑ Step 21. Slide the tensioner arm assembly down over the belt (26) and connect the slot in the tensioner arm (21) with the tensioner arm bushing (34) as indicated in Figure 16A.

❑ Step 22. Slowly start rotating the tensioner arm around the tensioner bushing (34) in a clockwise direction as shown in Figure 16B. While rotating the tensioner arm assembly, slightly pull upward to keep the tensioner arm (21) locked and rotating to the tensioner bushing (34). The belt (26) should be positioned between the drive pulley (36) and the tensioner arm (21).

❑ Step 23. Place a #4 hardened washer (37) over a 4-40 x 1/4" button head screw (38).

❑ Step 24. Once you have the belt (26) wrapped around the drive pulley (36), and belt tensioner (21) in position, as shown in Figure 16, secure the tensioner assembly by threading the 4-40 x 1/4" screw (38), with washer (37), through the chassis (27) into the tensioner arm (21). With the 4-40 x 1/4" screw about one turn loose, push down on the flat part of the tensioner (21) and set the desired belt tension, tighten the screw (38).

The belt should move 1/4" (6mm) to 3/8" (9.5mm) up and down for the ideal tension.

Figure 16A

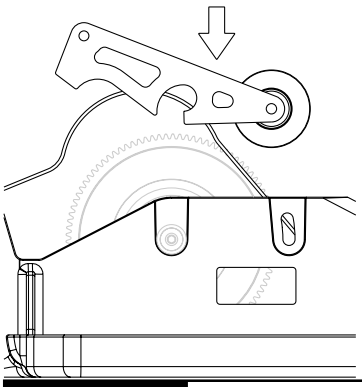


Figure 16B

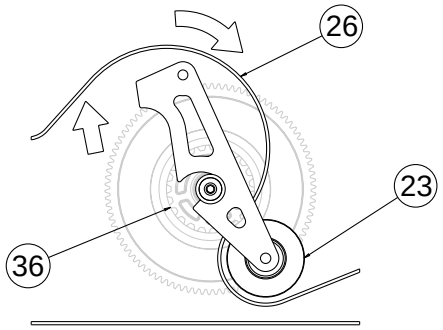


Figure 16

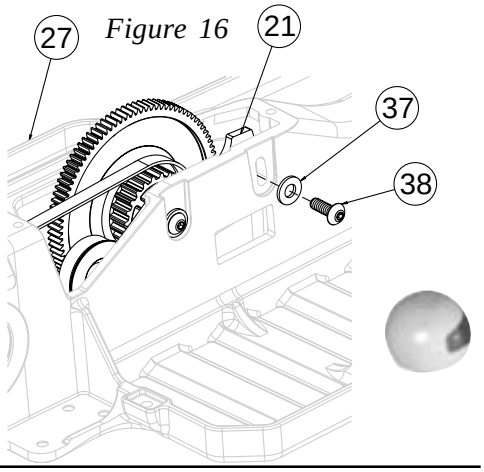


Figure 17

❑ Step 25. Seal the drive train by placing the bottom chassis cover (39) with the flat side towards the bottom of the chassis (27). Secure the bottom chassis cover (39) with seven 2-56 x 1/4" flat head screws (40).

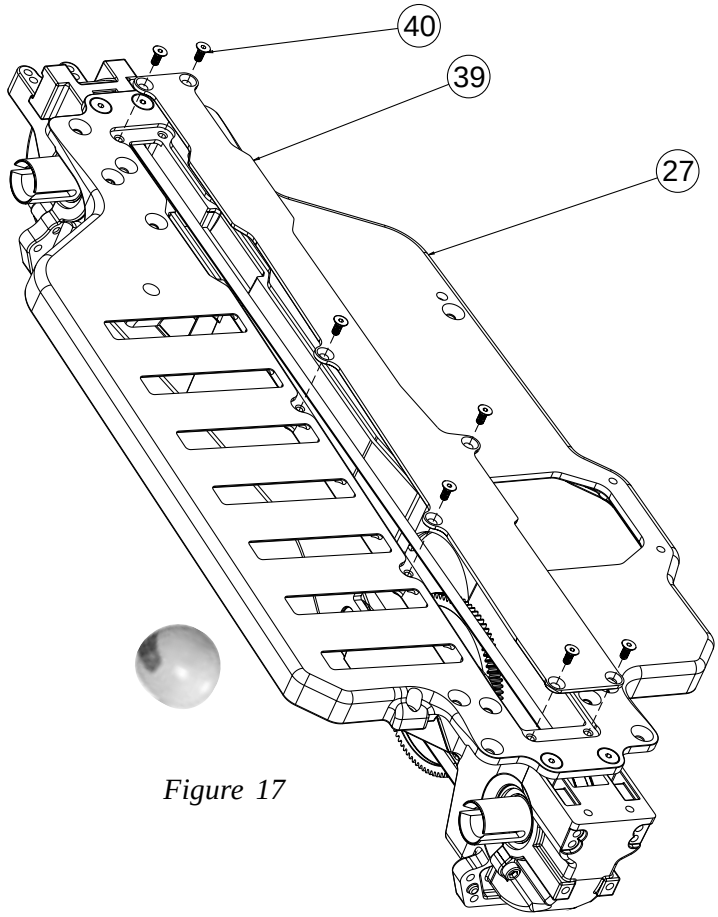
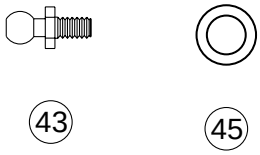


Figure 17

BAG C

Figure 18



Using a medium grade sandpapper (i.e. 500 grit) clean the excess material off the 5mm x 8mm bushings. This will ensure a free working steering assembly.

❑ Step 1. Thread a 3/16" ballstud (43), from the top side, into each of the bellcranks (41), (42) as indicated in Figure 18.

❑ Step 2. Insert a 5mm x 8mm bushing (45) into the top and bottom of the left (41) and right (42) bellcranks.

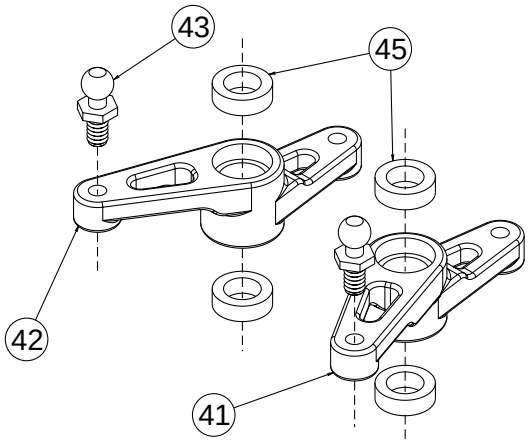


Figure 18

Figure 19

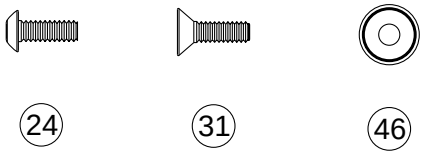
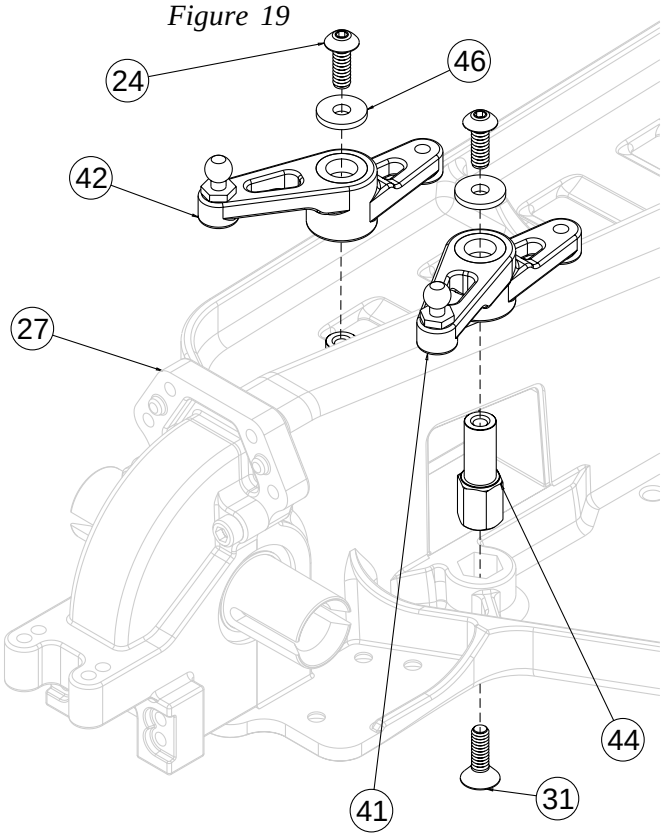


Figure 19



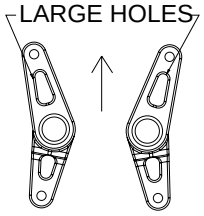
❑ Step 3. Line up the hex on the steering post (44) with the hex area on left side of the chassis (27). Press the steering post (44) to the bottom of the hex in the chassis (27). Thread a 4-40 x 3/8" flat head screw (31) through the bottom of the chassis (27) into the steering post (44) as indicated in Figure 19.

❑ Step 4. Slide the left bellcrank (41) over the steering post (44) on the left side of the chassis (27).

❑ Step 5. Place a steering cap (46) over a 4-40 x 5/16" button head screw (24) with the flat end of the steering cap (46) towards the head of the screw (24). Thread the button head screw (24) through the left bellcrank (41) into the steering post (44).

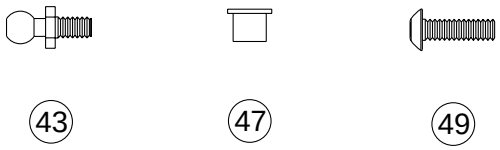
The bellcrank should rotate freely.

❑ Step 6. Repeat Steps 3 through 5 for the right bellcrank (42).



BAG C (Continued)

Figure 20



❑ Step 7. Thread a 3/16" ballstud (43) into the small hole of the draglink (48) as indicated in Figure 20.

❑ Step 8. Insert a carrier/ steering bushing (47), into the larger holes, from the bottom side of the draglink (48). With the steering bushings (47) in place, slide the draglink (48) through the steering tunnel (28) and rest it on the left and right bellcranks (41), (42).

❑ Step 9. Thread a 4-40 x 3/8" button head screw (49) through the steering bushing (47) into the left bellcrank (41). Repeat for the right bellcrank (42).

The steering assembly should rotate freely. Be sure that the screws are not too loose but, not too tight.

Figure 20

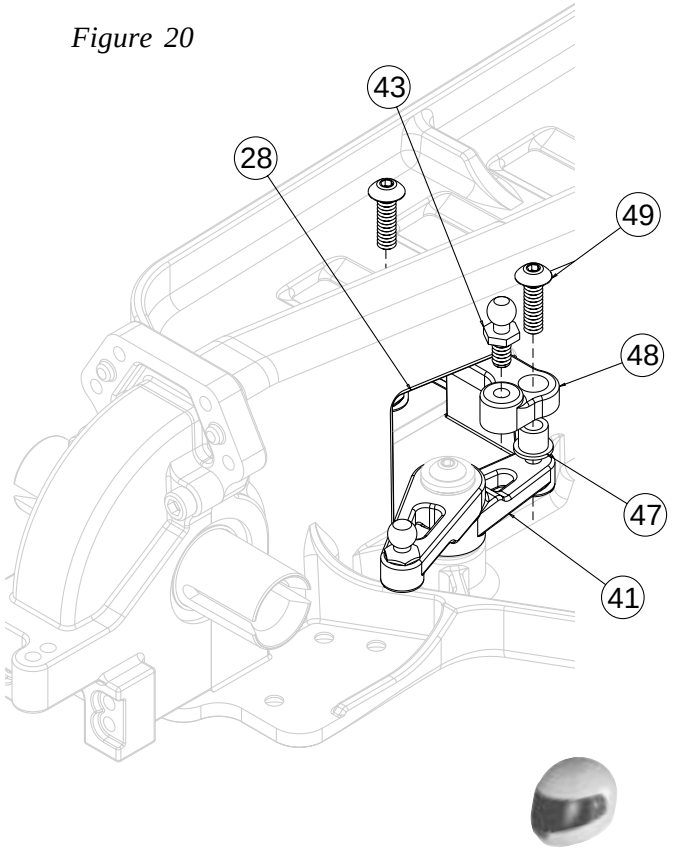


Figure 21

All standard servos should use only one silver spring and one gold spring. All hi-torque & high-speed servos will use all three springs.

❑ Step 10. Using Table 21B (on the following page), determine which servo saver base (50) is required for your servo. If your particular servo is not listed, try using the arm recommended for another servo made by the same manufacturer.

❑ Step 11. Thread a 3/16" ball stud (43) into the outer servo saver arm (53) from the front side as indicated in Figure 21.

❑ Step 12. Plug the servo into the radio system's receiver (*not included*). Make sure that there is power to the receiver, and turn the transmitter on followed by the receiver. Be sure that the trim settings for the steering on your transmitter are set to the center. With the radio system still turned on, attach the servo arm (50) to the output shaft so that the arm is vertical as shown in Figure 21.

❑ Step 13. Turn off your radio, slide one of the two "silver" servo saver springs (4) over the servo arm which is connected to the servo. Fit the second of the "silver" springs (4) over the first spring followed by the "gold" spring (6). The springs should all be pressed against the back of the servo saver base (50).

❑ Step 14. Press the outer servo arm (53) into the servo saver base (50). Insert the servo saver washer (54) into the outer servo saver arm (53). Secure the assembly to the servo with the servo arm screw supplied with the servo.

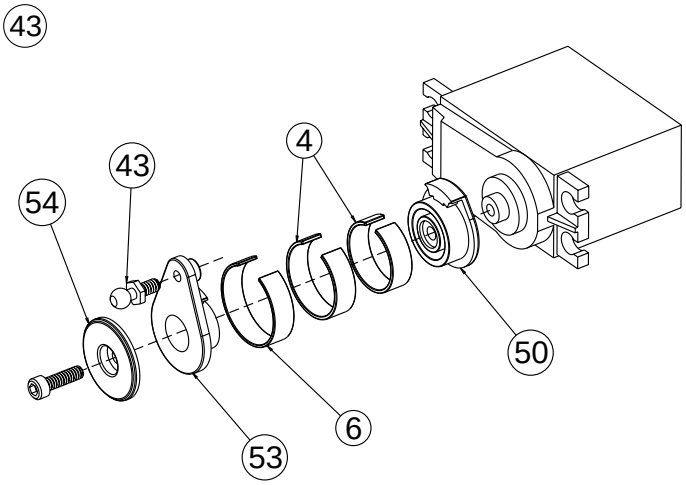


Figure 21

BAG C (Continued)

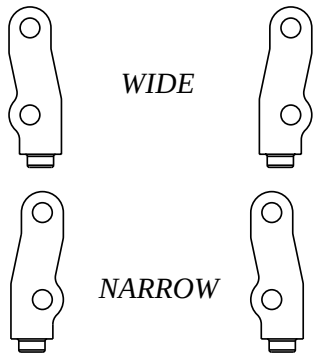
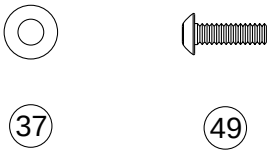


Table 21A

SERVO TYPE	OFFSET	REQUIRED SERVO BASE
Airtronics All	NARROW	23
Futaba S131, S131SH, S148, S3001, S3003, S5101, S9101, S9201, S9301, S9304, S9401, S9403	WIDE	25
Futaba S3401, S9402, S9404, S9450	NARROW	25
HiTech All	NARROW	24
JR NES-507, NES-513, NES-517, NES901, NES-4000, NES-4131, NES-4721, NES-4735, NES-9021, DS-8231	NARROW	23
KO PS-702, PS-703, PS-1001, PS-1003	WIDE	23
KO PS-901BH, PS-902	NARROW	23
Multiplex All	NARROW	23

Table 21B

Figure 22



❑ Step 15. Use Tables 21A and 21B to determine how the servo mounting posts (55), (56) should be attached to the servo *(not included)* in the Wide or Narrow position.

❑ Step 16. Place a #4 washer (37) over each of the four 4-40 x 3/8" button head screws (49) and attach the servo posts (55), (56) to the servo by threading a screw (49) through the servo mounting ears into the upper and lower holes in each post (55), (56). ***Do not tighten the screws (49) yet!*** Just snug them up so that the posts are held in place, but can still be moved from side to side with a little resistance.

❑ Step 17. As shown in Figure 22, you will use the chassis to determine the exact spacing needed for your brand servo. With the scerws (49) still loose, push the pins on the servo mounts (55), (56) into the holes in the bottom of the chassis (27). Slide the mounts until the screws (49) are centered on the servo, and tighten as indicated in Figure 22.

The servo should be as close to centered between the two posts as possible.

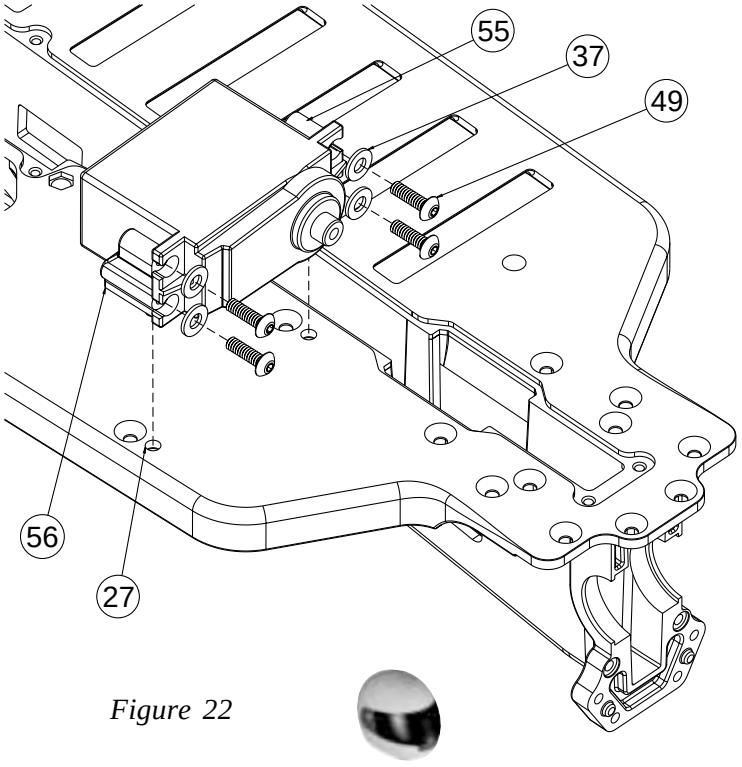


Figure 22

BAG C (Continued)

Figure 23

(31)

❑ Step 18. Install the servo into the chassis (27) as shown in Figure 23. The pins from both servo mounting posts (55), (56) should fit into the holes and sit flat against the chassis (27).

❑ Step 19. Secure the servo to the chassis (27) with two 4-40 x 3/8" flat head screws (31).

Figure 23

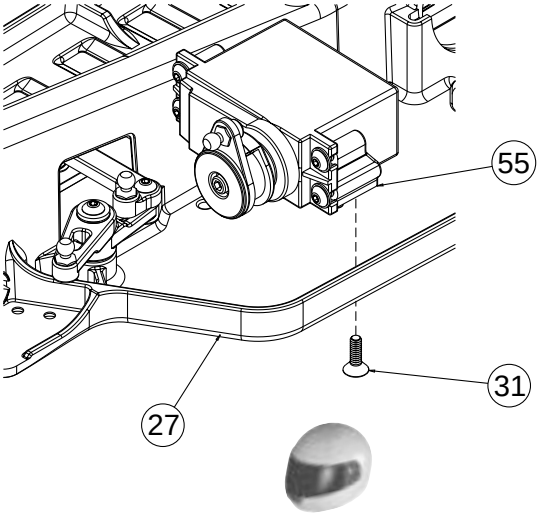
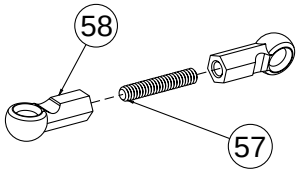


Figure 24

(57) (58)

❑ Step 20. Thread a short plastic rod end (58) onto each end of the 4-40 x 5/8" threaded rod (57). Tighten both sides equally until the rod is the same length as the one shown in Figure 24A.

Figure 24



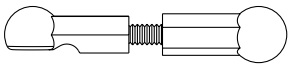
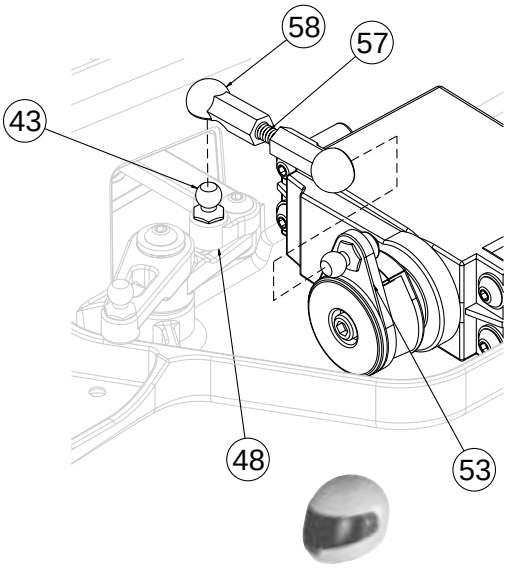


Figure 24A

Figure 25

❑ Step 21. Attach the rod end (58) to the ball stud (43) in the servo saver arm (53) and the other to the ball stud (43) in the drag link (48) as indicated in Figure 25.

Figure 25



BAG D

Figure 26

31

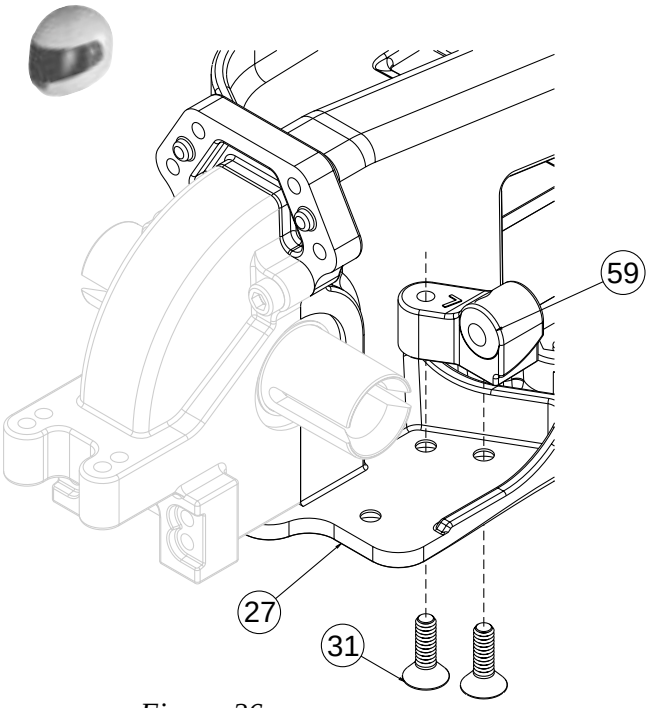
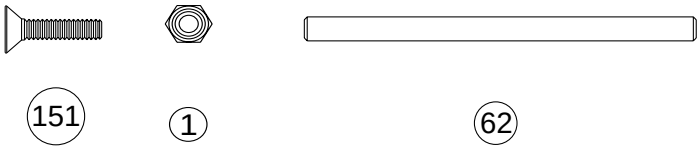


Figure 26

❑ Step 1. Install the front left inner pivot block (59) by threading two 4-40 x 3/8" flat head screws (31) through the bottom of the chassis (27) into the pivot block (59) as indicated in Figure 26. Repeat for the right front inner pivot block (60).

The left & right inner pivots are marked with "L" & "R".

Figure 27



151 1 62

Figure 27

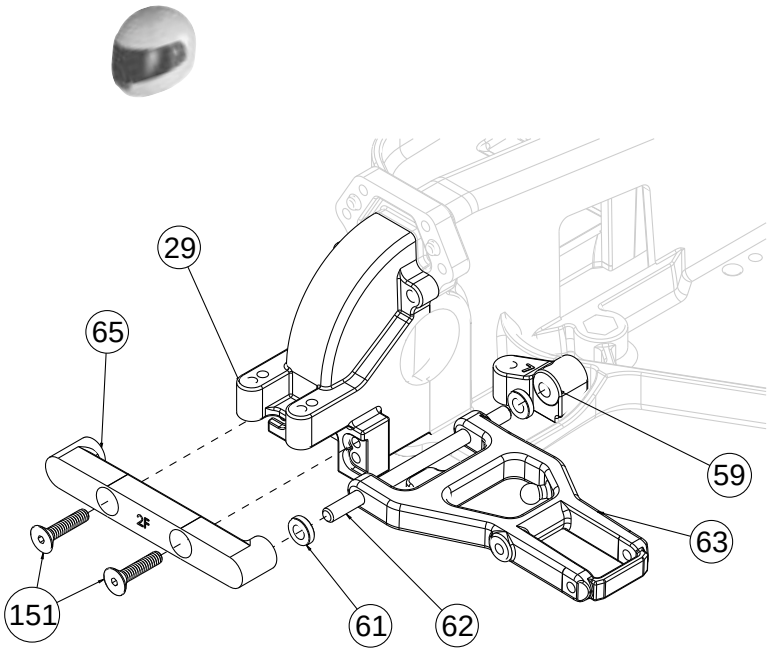
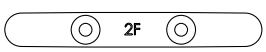


Figure 27A

❑ Step 2. Slide an 1/8" inner hinge pin (62) through the larger holes of each of the two front arms (63).

❑ Step 3. Position the arm (63) so that the shock mount hole faces the front of the chassis (27). Slide a .060" spacer (61) over each side of the pin as indicated in Figure 27. Insert the arm (63) into the inner front pivot block (59), (60). Capture the front arms (63) by placing the front main block (65) marked with "2F" onto the inner hinge pins (62) as shown in the illustration in Figure 27A. Secure the front main block (65) by threading two 4-40 x 1/2" flat head screws (151) through the main block (65) into the upper holes in the front diff cover (29).

Before you tighten the main block it may be necessary to slightly loosen the screws in the inner pivots about 1 full turn. Once this is done, tighten the main block, followed by tightening the inner pivots. This will ensure you get the correct pin angle in the arms.



ASSEMBLE MAIN BLOCK
IN THIS DIRECTION

BAG D (Continued)

Figure 28

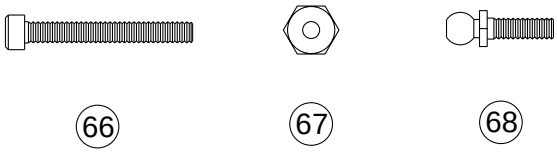
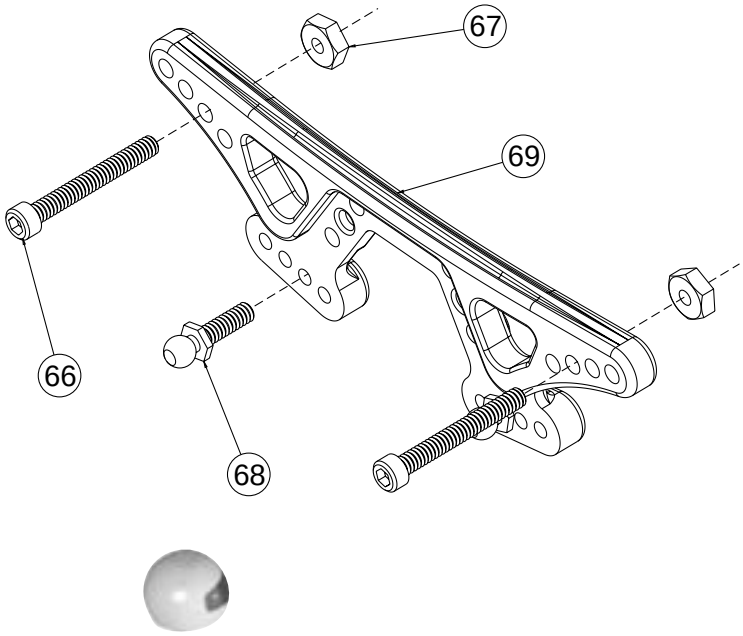


Figure 28



❑ Step 4. Insert a 4-40 x 7/8" cap head screw (66) on either side of the shock tower (69) through the second hole out from the middle on the top of the shock tower (69). Secure the screws (66) to the tower (69) by threading a 4-40 zinc nut (67) over each screw (66) and tightening.

The screws should extend away from the recessed area in the front shock tower.

❑ Step 5. Thread a short head ball stud (68) into the second hole out on the lower four holes on either side of the shock tower (69).

Figure 29

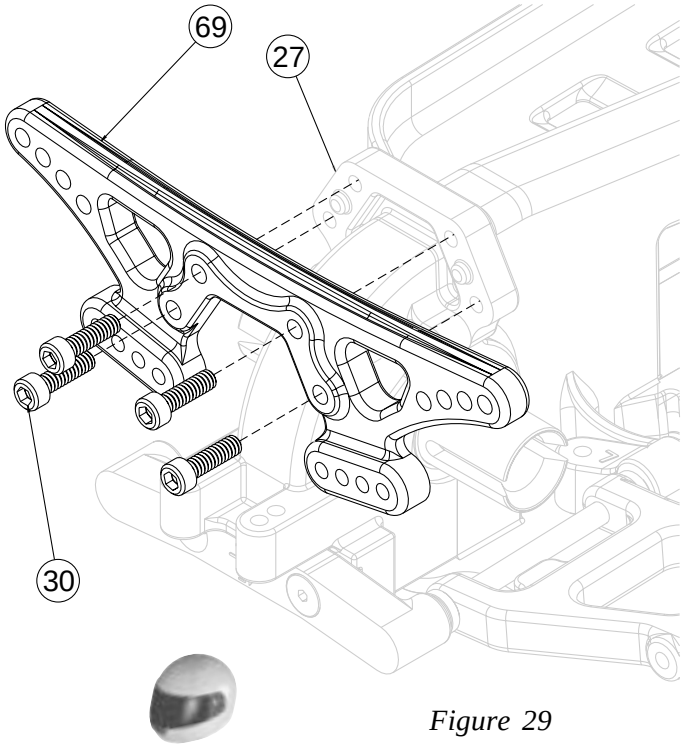


Figure 29

❑ Step 6. Attach the front shock tower (69) to the front of the chassis (27) with four 4-40 x 3/8" cap head screws (30). The screws (30) thread into the top-most and bottom-most holes, surrounding the posts, which stick out of the front of the chassis (27). The shock tower (69) should interlock with the posts on the chassis (27).

There is a short thread-cutting screw included in the wrench bag. This screw can be used to tap threads in the holes in the main chassis. Pre-tapping these holes makes it easier to install the screws during assembly.

BAG D (Continued)

Figure 30

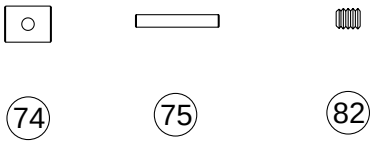


Figure 30

❑ Step 7. Apply a thin coat of red MIP thrust bearing/ assembly grease (78), in the white tube, to the outside of the CVD coupling (74). Insert the greased CVD coupling (74) into the large hole in the CVD Axle (72) so that the cross-hole in the coupling (74) can be seen through the slots in the axle (72).

❑ Step 8. Place the CVD dogbone (73) over the CVD axle (72). Align the holes in the CVD dogbone (73) with the hole in the CVD coupling (74). Secure all three parts by inserting a 1/16" x 7/16" (solid) pin (75) through the holes in the CVD dogbone (73), the slots in the CVD axle (72), and the hole in the CVD coupling (74).

❑ Step 9. Apply a small amount of Thread-lock compound (79), in the black tube, to the set screw (82) before installing it.Center the pin (75) in the CVD dogbone (73) and secure it by threading a 4-40 x 1/8" set screw (82) into the end of the CVD coupling (74).

❑ Step 10. Repeat Steps 7-9 for the second CVD assembly.

Apply the enclosed Thread-lock to the set screw before threading it into the CVD coupling. If Thread-lock is not used, the set screw will loosen during operation. This will cause your car to stop running.

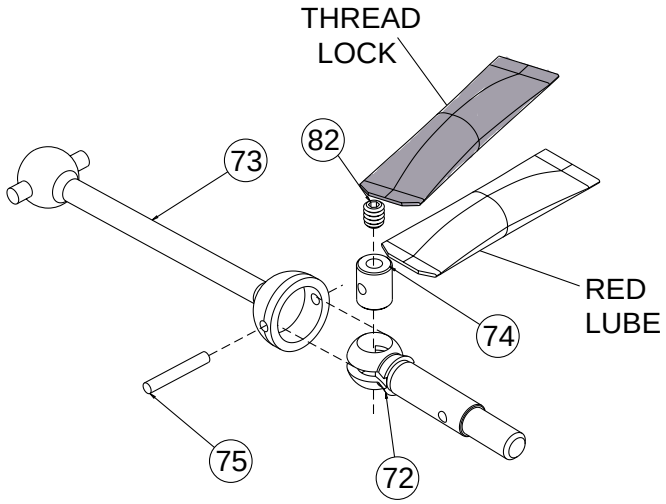
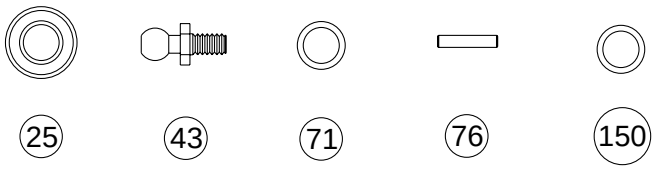


Figure 31



❑ Step 11. Thread a 3/16" ball stud (43) into the top side of the left spindle arm (70) as shown in Figure 31A.

❑ Step 12. Press a 3/16" x 3/8" bearing (25) into the outside of the spindle (70).

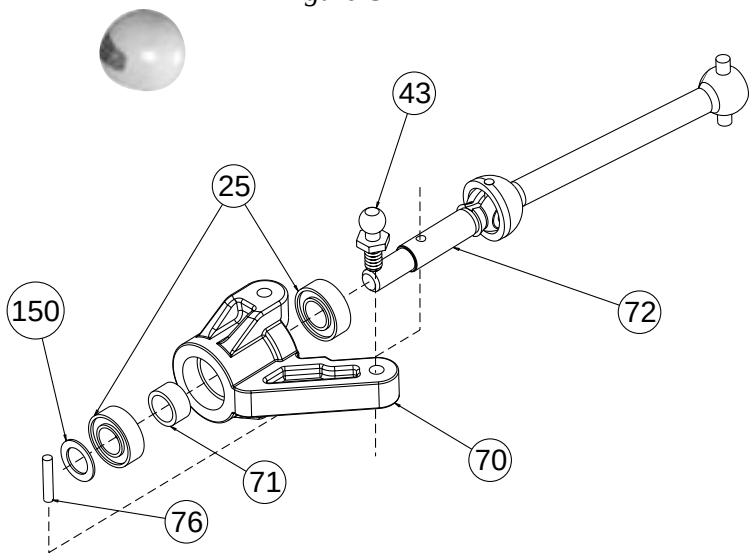
❑ Step 13. Slide a 3/16" x 3/8" bearing (25)over the axle (72). Next, slide an axle spacer (71) over the CVD axle (72) against the bearing (25).

❑ Step 14. Press the axle (72) with bearing (25) into the spindle (70) from the inside through the bearing (25) in the outside of the spindle (70).

❑ Step 15. Secure the CVD axle (72) and the spacer (150) by inserting a 1/16" x 5/16" (spirol) pin (76) through the small cross hole in the axle (72). The pin should be centered in the axle.

❑ Step 16. Repeat Steps 11-15 for the right spindle.

Figure 31



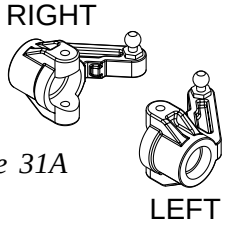
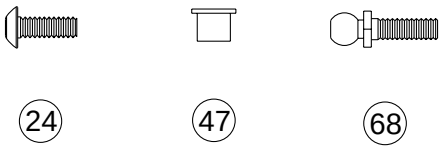


Figure 31A

BAG D (Continued)

Figure 32



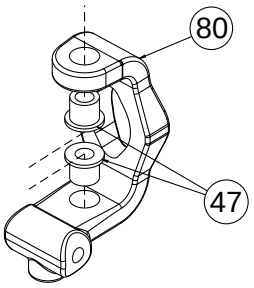


Figure 32A

❑ Step 17. Insert two carrier/steering bushings (47) into the upper and lower holes in the spindle carrier (80) from the inside as shown in Figure 32A.

❑ Step 18. Attach the spindle (70) to the spindle carrier (80) by sliding the CVD dogbone (73) through the spindle carrier (80) as illustrated in Figure 32B. Line up the holes in the spindle (70) and the spindle carrier (80). Thread a short head ball stud (68) through the carrier bushing (47) into the spindle (70) from the top of the spindle carrier (80). Thread a 4-40 x 5/16" button head screw (24) through the carrier bushing (47) into the spindle (70) from the bottom of the spindle carrier (80).

❑ Step 19. Repeat Steps 17-18 for the right spindle and carrier assembly.

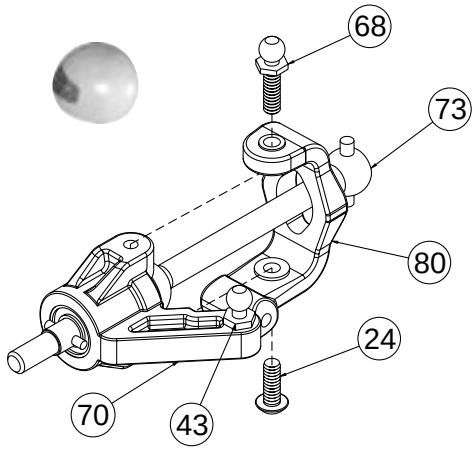


Figure 32B

Figure 33

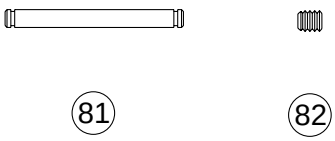
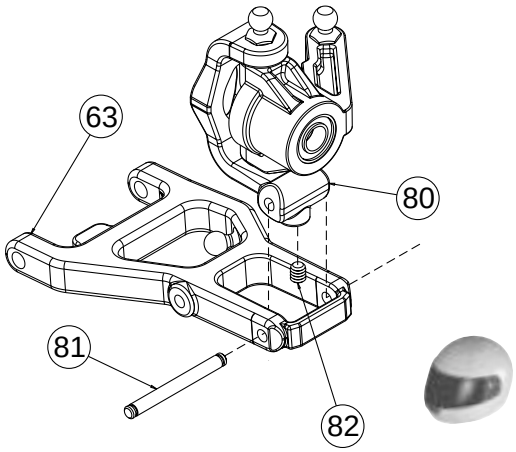


Figure 33

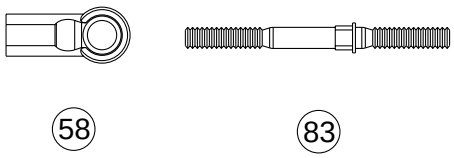


❑ Step 20. Attach the left spindle and carrier assembly to the left front arm (63) by aligning the holes in the spindle carrier (80) with the holes in the front arm (63). Insert a 3/32" x .930" hinge pin (81) through the arm (63) and the spindle carrier (80).

❑ Step 21. Make sure the hinge pin (81) is centered between the ends of the arm. Secure the hinge pin (81) by threading a 5-40 x 1/8" (82) set screw into the bottom of the spindle carrier (80).

❑ Step 22. Repeat Steps 20-21 for the right arm assembly

Figure 34



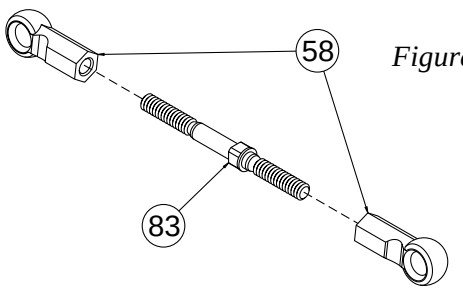


Figure 34

❑ Step 23. Thread a plastic rod end (58) onto each end of a 1.375" turnbuckle (83). Tighten both rod ends (58) equally until the rod is the same length as the rod in Figure 34A. Make two of these tie rod assemblies.

Each end of the turnbuckle is threaded opposite. The end closest to the square shoulder has right-hand threads, the other has left-hand threads. This allows the length of the rods, once installed, to be adjusted without removing them.

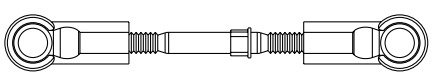
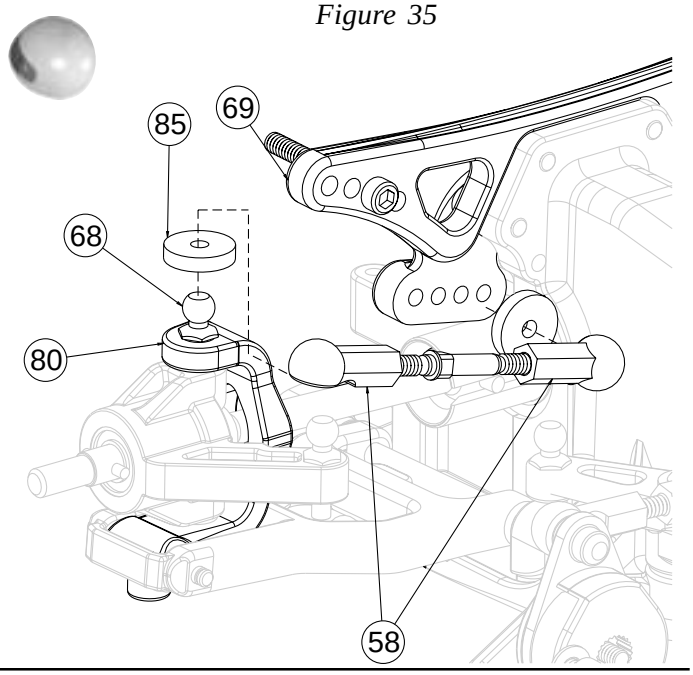


Figure 34A

BAG D (Continued)

Figure 35

Figure 35

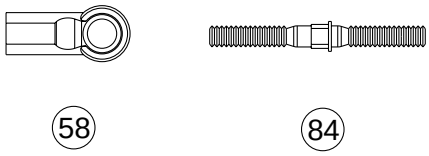


❑ Step 24. Place a "foam thing" (85) over the ball stud (68) located in the top of the spindle carrier (80). Place a second "foam thing" (85) over the ball stud (68) located in the shocktower (69).

❑ Step 25. Snap the end, closest to the shoulder, of the turnbuckle assembly to the ball stud (68) in the spindle carrier (80). Snap the other end to the ball stud (68) in the shock tower (69). Repeat Steps 24-25 to attach the other turnbuckle assembly to the right spindle assembly.

Assure that the shoulder of the turnbuckle is located towards the outside of the chassis for easier adjustment later.

Figure 36



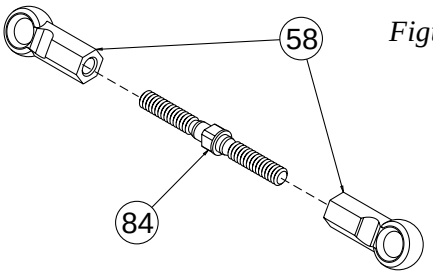


Figure 36

❑ Step 26. Thread a plastic rod end (58) onto each end of a 1.125" turnbuckle (84). Tighten both rod ends (58) equally until the rod is the same length as the assembled rod in Figure 36A. Make two of these assemblies.

Each end of the turnbuckle is threaded opposite. The end closest to the square shoulder has right-hand threads, the other has left-hand threads. This allows the length of the rods, once installed, to be adjusted without removing them.

Figure 36A

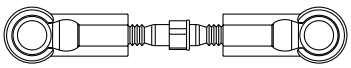


Figure 37

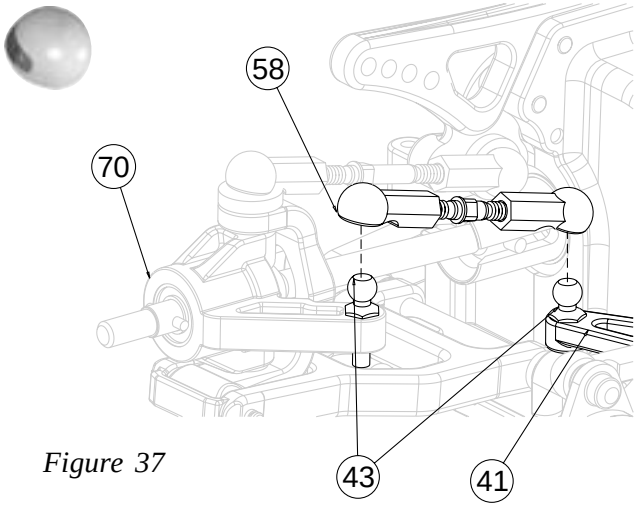


Figure 37

❑ Step 27. Snap the end, closest to the shoulder, of the turnbuckle assembly to the ball stud (43) in the left spindle (70). Snap the other end to the ball stud (43) in the left bellcrank (41). Attach the other turnbuckle assembly to the right bellcrank (42) and the right spindle (70).

B A G E

Figure 38

31

❑ Step 1. Install a rear inner pivot block (91) by threading two 4-40 x 3/8" flat head screws (31) through the bottom of the chassis (27) into the pivot block (91) as indicated in Figure 38. Repeat for the right rear inner pivot block (91). The inner blocks are interchangeble from left to right.

Figure 38

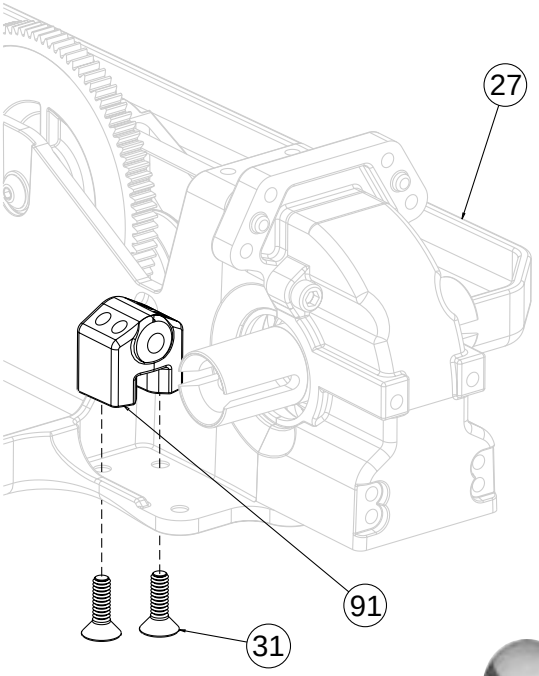
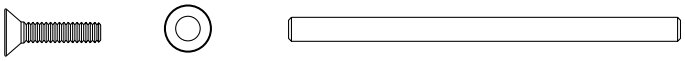


Figure 39



151 61 62

❑ Step 2. Slide an inner hinge pin (62) through each of the two rear arms (92) farthest away from the shock mounting hole.

Before you tighten the main block it may be necessary to slightly loosen the screws in the inner pivots about 1 full turn. Once this is done, tighten the main block, followed by tightening the inner pivots. This will ensure you get the correct pin angle in the arms

❑ Step 3. Position the arm (92) so that the shock mount hole faces the back of the chassis (27). Slide a .060" spacer (61) over each side of inner pins as indicated in Figure 39. Insert the arms (92) into the inner rear pivot block (91). Capture the rear arms (92) by placing the rear main block (93) onto the inner hinge pins (62) as shown in the illustration in Figure 39A. Secure the rear main block (93) by threading two 4-40 x 1/2" flat head screws (31) through the main block (93) into the upper holes in the rear diff cover (32).

Figure 39

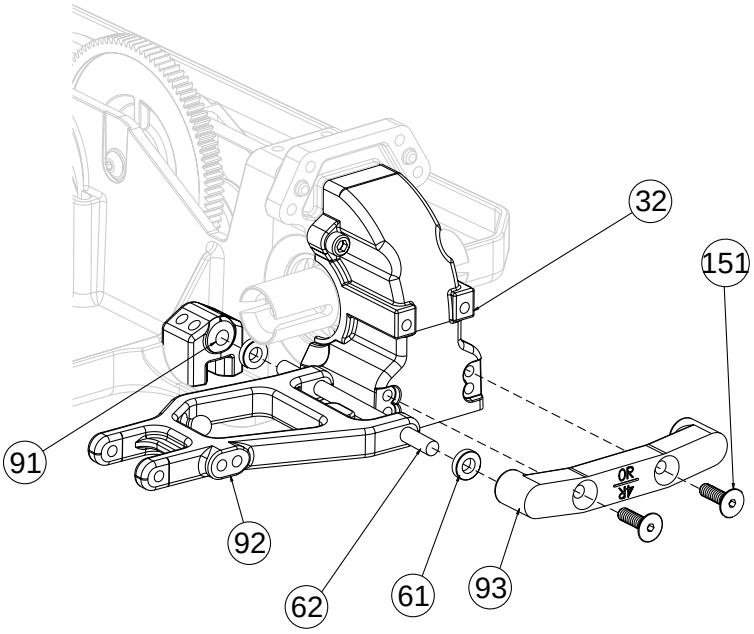
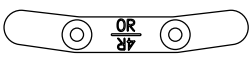


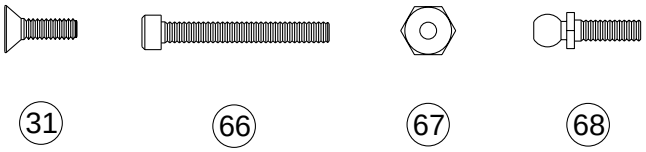
Figure 39A



ASSEMBLE MAIN BLOCK IN THIS DIRECTION

BAG E (Continued)

Figure 40



❑ Step 4. Thread a short head ball stud (68) on each side of the shock tower into the closest hole to the middle of the lowest set of holes.

❑ Step 5. Insert a 4-40 x 7/8" cap head screw (66) one on either side of the shock tower (95) -in the upper set of four holes, into the second hole out from the middle. Secure the screws (66) to the tower (95) by threading a 4-40 zinc nut (67) over each screw (66) and tightening.

The screws should extend away from the recessed area in the rear tower and face towards the back of the chassis.

❑ Step 6. Install the rear body mounts (96) by interlocking the post on the body mount (96) with the blind hole in the shock tower (95) and lining up the through holes. Secure the body mounts (96) by threading a 4-40 x 3/8" flat head screw (31) through the body mount (96) into the rear shock tower (95) as indicated in Figure 40.

Figure 40

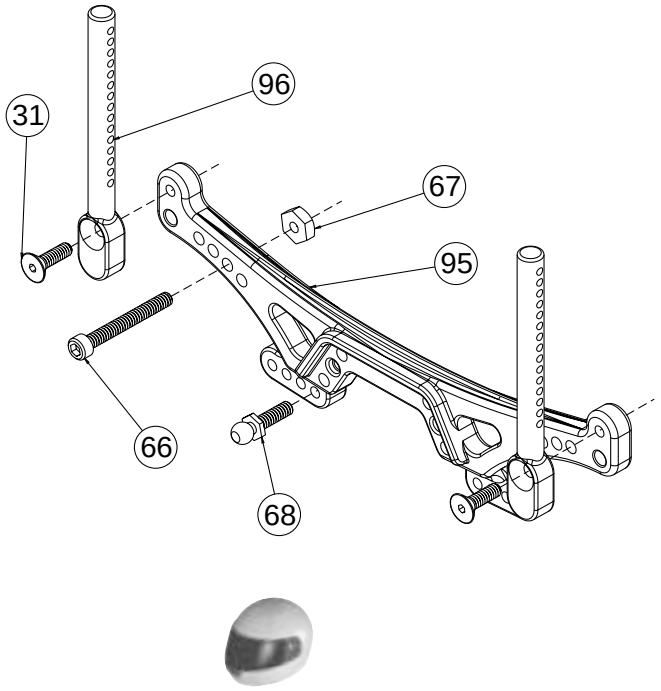


Figure 41

❑ Step 7. Attach the rear shock tower (95) to the rear of the chassis (27) with four 4-40 x 3/8" cap head screws (30). The screws (30) thread into the top-most and bottom-most holes surrounding the posts, which stick out of the rear of the chassis (27). The shock tower (95) should interlock with the posts on the chassis (27).

There is a short thread-cutting screw included in the wrench bag. This screw can be used to tap threads in the holes in the main chassis. Pre-tapping these holes makes it easier to install the screws during assembly.

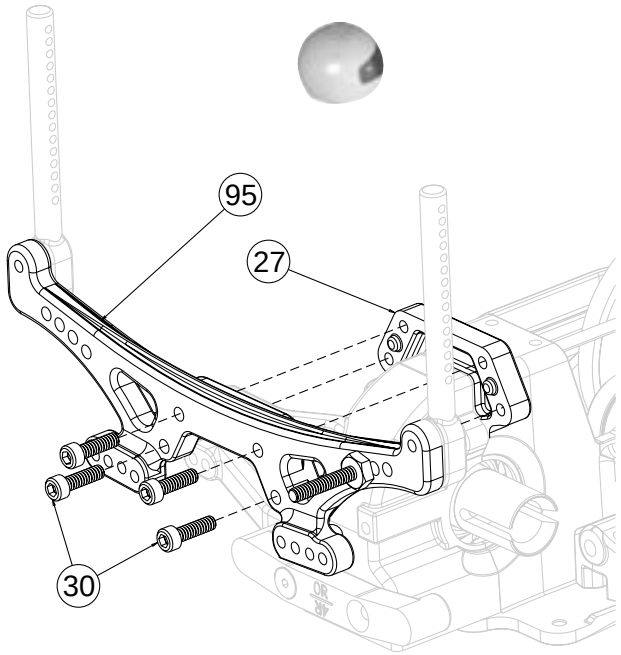
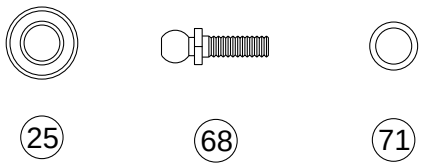


Figure 41

BAG E (Continued)

Figure 42



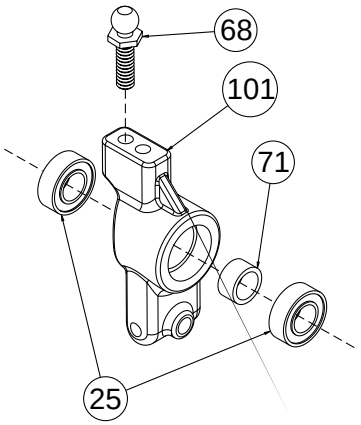


Figure 42

❑ Step 8. Thread a short head ball stud (68) into the top of the rear hub (101) as indicated in Figure 42.

❑ Step 9. Insert a 3/16" x 3/8" bearing (25) into the back-side of the hub carrier(101). From the front-side, insert a bearing spacer (71) as illustrated in Figure 42. Capture the spacer with a 3/16" x 3/8" bearing (25), from the front side of the hub (101). Make two of these assemblies.

Figure 43

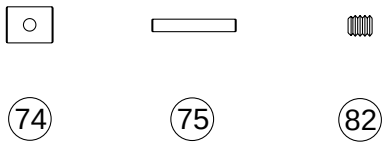
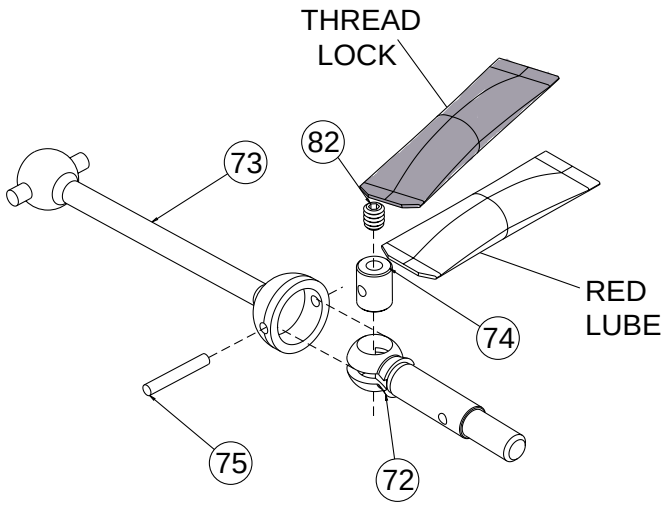


Figure 43



❑ Step 10. Apply a thin coat of red MIP thrust bearing/ assembly grease (78) to the outside of the CVD coupling (74). Insert the greased CVD coupling (74) into the large hole in the CVD Axle (72) so that the cross-hole in the coupling (74) can be seen through the slots in the axle (72).

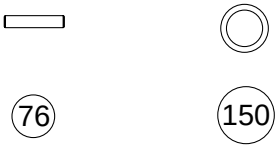
❑ Step 11. Place the CVD dogbone (73) over the CVD axle (72). Align the holes in the CVD dogbone (73) with the hole in the CVD coupling (74). Secure all three parts by inserting a 1/16" x 7/16" (solid) pin (75) through the holes in the CVD dogbone (73), the slots in the CVD axle (72), and the hole in the CVD coupling (74).

❑ Step 12. Apply a small amount of MIP Thread-lock compound (79) to the set screw (82) before installing it. Center the pin (75) in the CVD dogbone (73) and secure it by threading a 4-40 x 1/8" set screw (82) into the end of the CVD coupling (74).

❑ Step 13. Repeat Steps 7-9 for the second CVD assembly.

Apply the enclosed Thread-lock to the set screw before threading it into the CVD coupling. If Thread-lock is not used, the set screw will loosen during operation. This will cause your car to stop running.

Figure 44



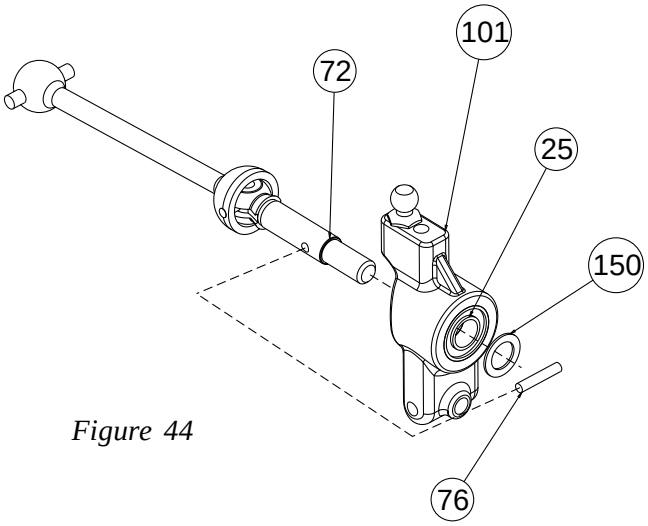


Figure 44

❑ Step 14. Insert the CVD throught the 3/16" x 3/8" bearing (25) from the inside of the hub (101) until the shoulder of the axle (72) stops at the bearing (25). Slide a 3/16" x .015" shim (150) over the axle (72) against the outside bearing (25). Secure the axle (72) and shim (150) with a 1/16" x 5/16" (spirol) pin (76) through the cross hole in the axle (72). The pin should be centered in the axle (72). Repeat for the other rear hub assembly.

BAG E (Continued)

Figure 45

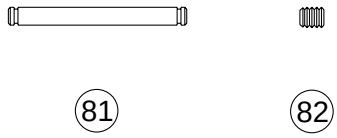
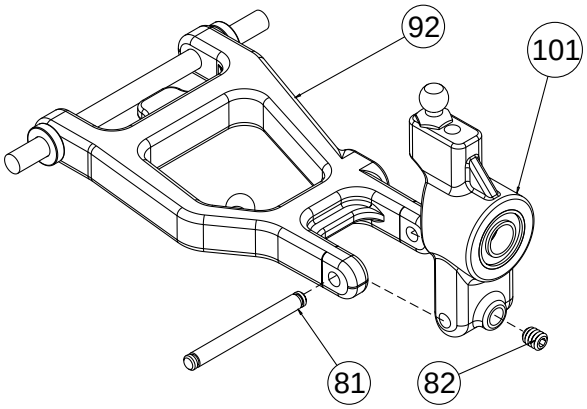


Figure 45



❑ Step 15. Attach the rear hub assembly to the rear arm (92) by aligning the holes in the rear hub (101) with the holes in the rear arm (92). Insert a 3/32" x .930" hinge pin (81) through the arm (92) into the hub (101) as indicated in Figure 45.

❑ Step 16. Make sure the hinge pin (81) is centered between the ends of the arm (92). Secure the hinge pin (81) by threading a 5-40 x 1/8" set screw (82) into the outside of the rear hub (101).

❑ Step 17. Repeat Steps 15-16 for the remaining rear hub assembly.

Figure 46

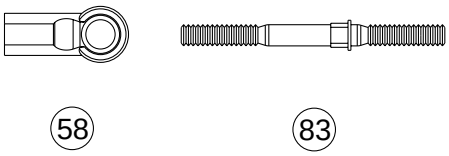
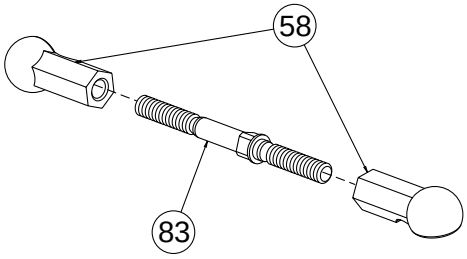


Figure 46



❑ Step 18. Thread a plastic rod end onto each end of a 1.375" turnbuckle (83). Tighten both rod ends (58) equally until the rod is the same length as the rod in Figure 46A. Make two of these tie rod assemblies.

Each end of the turnbuckle is threaded opposite. The end closest to the square shoulder has right-hand threads, the other has left-hand threads. This allows the length of the rods, once installed, to be adjusted without removing them.

Figure 46A

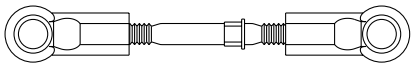
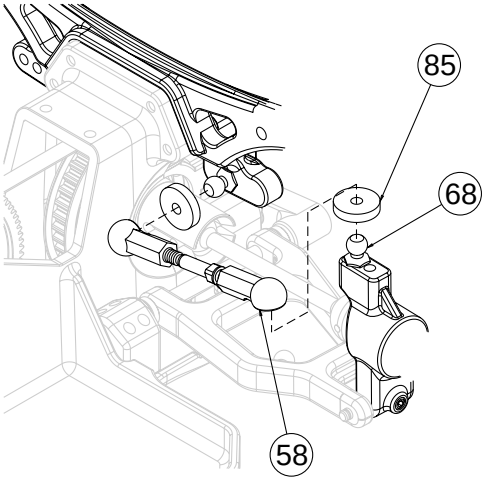


Figure 47

Figure 47



❑ Step 19. Place a "foam thing" (85) over the ball stud (68) in the rear hub (101). Place a second "foam thing" (85) over the ball stud in the rear shock tower (95).

❑ Step 20. Snap the end closest to the shoulder of the turnbuckle assembly to the ball stud in the left rear hub (101). Snap the other end to the ball stud (68) in the rear shock tower (95). Repeat Steps 19-20 to attach the other tunbuckle assembly to the right rear arm (92) assembly.

Assure that the shoulder of the turnbuckle is located towards the outside of the chassis for easier adjustment later.

BAG E (Continued)

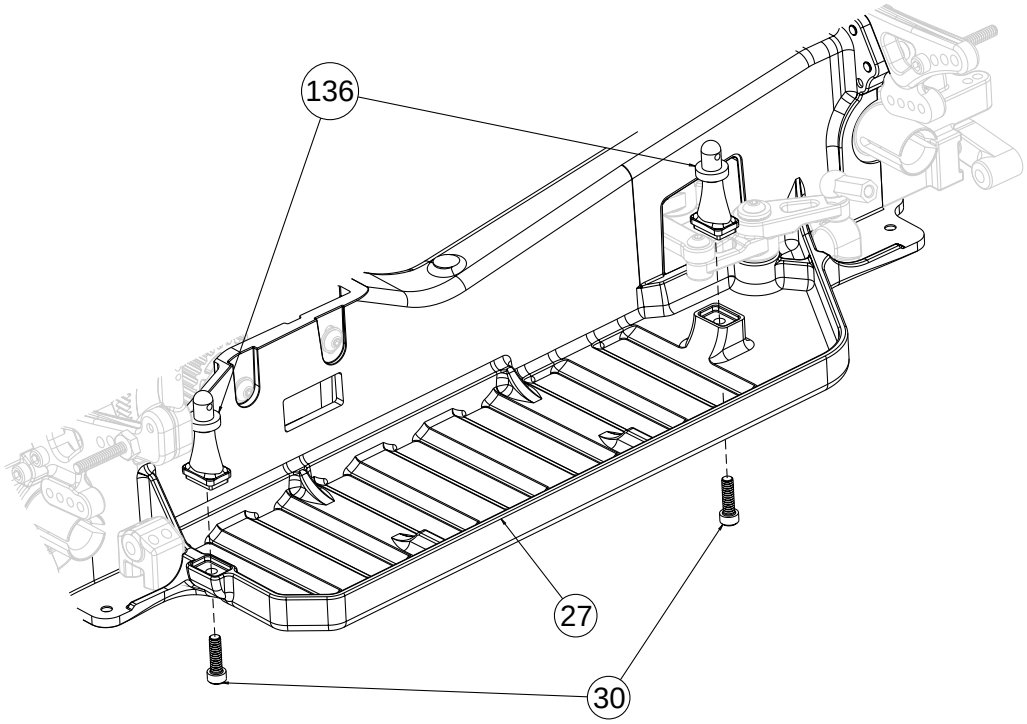
Figure 48

30

❑ Step 21. Install the battery mount posts (136) to the chassis (27), as shown, by placing the square base of the post (136) in the countersunk pockets on the drivers right side of the chassis (27).

❑ Step 22. Thread a 4-40 x 3/8" cap head screw (30) through the bottom of the chassis (30) into each of the battery mounting posts (136) and tighten.

Figure 48



BAG F

Figure 49

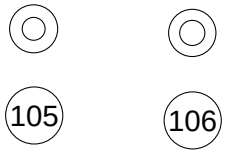
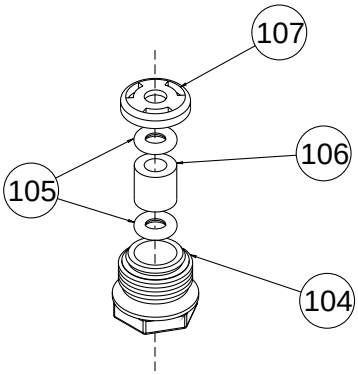


Figure 49



❑ Step 1. Place one shock O-ring (105) into the cartridge body (104), making sure that the O-ring (105) sits flat in the bottom of the cartridge body (104).

❑ Step 2. Insert the cartridge spacer (106) into the cartridge body (104) followed by a second O-ring (105).

❑ Step 3. Once the second O-ring (105) is inserted, and is flush with the top of the cartridge body (104), press the cartridge cap (107) onto the cartridge body (104).

❑ Step 4. Make four cartridge assemblies.

Cartridges in some kits may be pre-assembled at the factory.

Figure 50

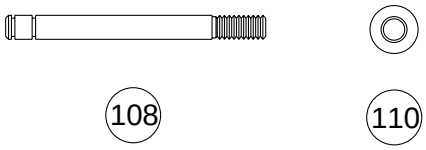
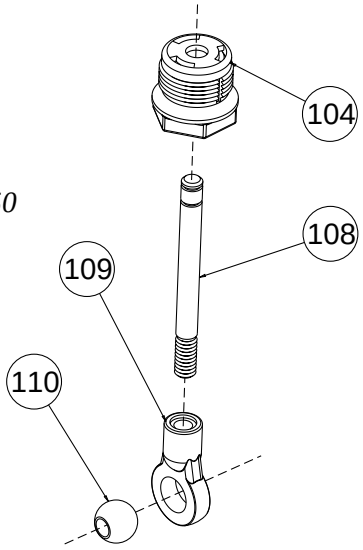


Figure 50



❑ Step 5. Place a drop of shock fluid (115) on the grooved end of each shock shaft (108) and slide a cartridge , hex end first, down the shock shaft towards the threads as shown in Figure 50 on all four shafts (108).

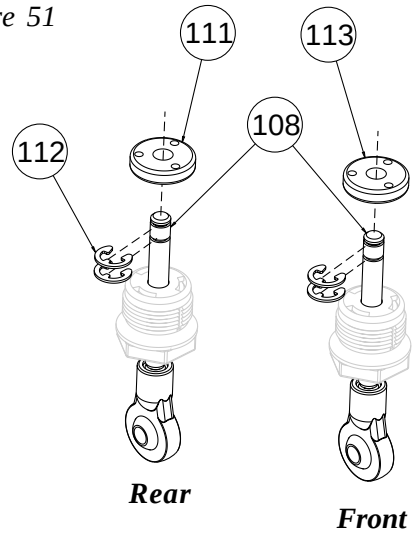
❑ Step 6. Using pliers or small vise grips, grasp the shock shaft (108) between the grooves and thread a shock end (109) all the way onto the shaft (108) until the threads stop.

❑ Step 7. Repeat Step 5-6 on all four shock shafts (108).

❑ Step 8. Carefully snap a 1/4" shock mount ball (110) into each of the shock ends (109) on each of the four shock shafts (108).

Figure 51

Figure 51



❑ Step 9. Snap a 1/8" E-clip (112) into the groove closest to the cartridge on both front and rear shock shafts (108).

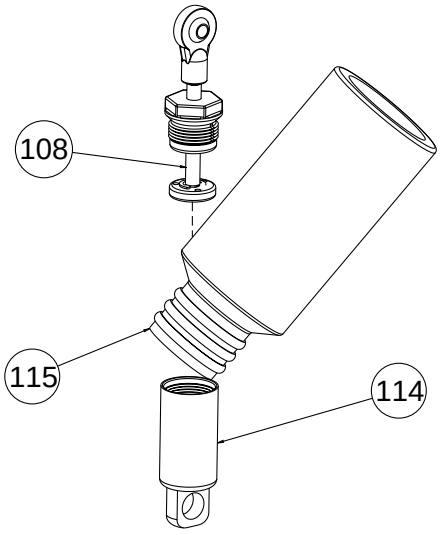
❑ Step 10. Slide a "red", #56 shock piston (113) onto two shock shafts (108) until the piston (113) rests against the E-clip (112). Secure the pistons (113) to the shafts (108) with a second E-clip (112). These will be used on the front.

❑ Step 11. Slide an "orange" #55 shock piston (111) onto each of the rear shock shafts (108) until the piston rests against the E-clip (112). Secure the pistons (111) to the shafts (108) with a second E-clip (112). These will be the rear shocks.

BAG F (Continued)

Figure 52

Figure 52



❑ Step 12. Match the front shock assemblies and the rear shock shaft assemblies. Fill the shock body (114) with shock fluid (115) up to the bottom of the threads inside the shock body (114).

❑ Step 13. Insert the front shaft assembly with the cartridge against the shock piston (111). Slowly tighten the cartridge about two full turns only. With the cartridge still slightly loose, slowly push the shock shaft assembly into the shock body (114). This will bleed the excess fluid out of the shock. Once the shaft assembly is all the way down, tighten the shock cartridge the rest of the way. Repeat this for the remaining front shock assembly and the two rear shock assemblies.

Be sure to keep the front and rear shock assemblies separated until they are assembled to the chassis.

❑ Step 14. Now, with the shaft assembly still all the way in, secure the cartridge by tightening with pliers or a 7/16" wrench approximately 1/8 of a turn. There should be no air in the shocks as you move the shaft (108) in and out. If there is you need more fluid. If the shock does not compress all the way, the shock has too much fluid. Repeat for the remaining shock assemblies.

If leaking persists around the outside, tighten the cartridge.

Figure 53

30

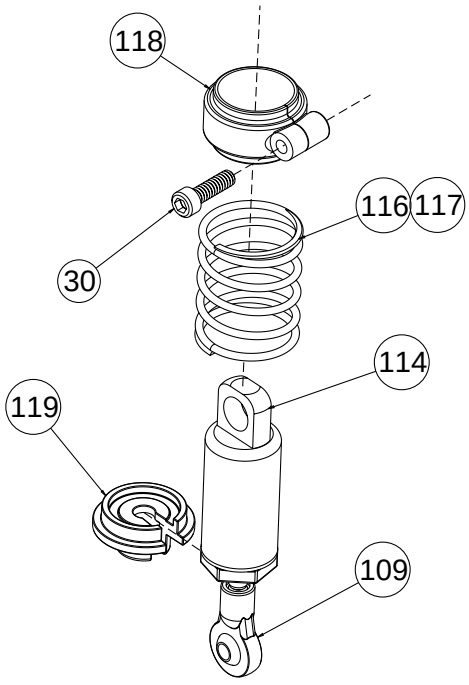


Figure 53

❑ Step 15. Snap a shock spring cup (119) onto each of the four shock shafts (108) and push down onto the shock end (109) until it stops.

❑ Step 16. Slide a 1" purple spring (117) down over each of the two front shock assemblies so that it rests against the shock cup (119).

❑ Step 17. Slide a 1" silver spring (116) down over each of the two rear shock assemblies so that it rests against the shock cup (119).

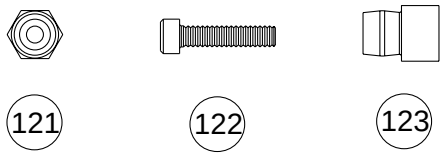
❑ Step 18. Insert a 4-40 x 3/8" cap head screw (30) into the larger hole of each the four shock collars (118) and thread it into the smaller hole.

❑ Step 19. With the collar (118) loose, slide it down over the top of each shock body (114) and against the shock spring (116), (117). Tighten the collar (118) to hold it in place.

Do not overtighten!

BAG F (Continued)

Figure 54



❑ Step 20. Position the bottom of an assembled rear shock in front of the shock mounting area on the left rear suspension arm (92) as shown in Figure 54. Align the hole in the shock mount ball (110) with the outside hole in the arm (92).

❑ Step 21. Attach the shock to the rear arm (92) by threading a 4-40 x 1/2" cap head screw (122) through the shock mount ball (110) and all the way into the outside hole of the suspension arm (92).

❑ Step 22. Slide a "long" shock mount bushing (123), large side first, over the screw (66) on the left side of the tower.

❑ Step 23. Place the top of the shock body (114) over the shock mount bushing (123). Secure the shock to the tower by threading a 4-40 locknut (121) onto the shock mount screw (66).

Before attaching the top of the shock, make sure that the dogbone is in place in the outdrive.

❑ Step 24. Repeat Steps 20-23 for the right rear shock assembly.

Figure 54

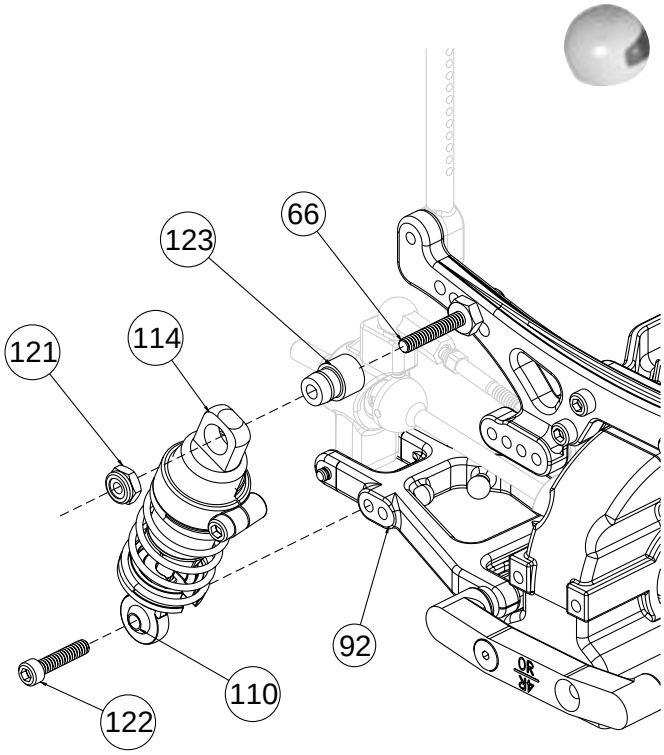
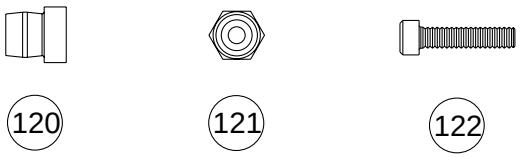


Figure 55



❑ Step 25. Position the bottom of an assembled front shock in front of the shock mounting area on the left front suspension arm (63) as shown in Figure 55. Align the hole in the shock mount ball (110) with the middle hole in the arm (63).

❑ Step 26. Secure the shock to the arm (63) by threading a 4-40 x 1/2" cap head screw (122) all the way into the arm (63) from the front.

❑ Step 27. Slide a "short" shock bushing (120), large side first, over the screw (66) on the left side of the front shock tower.

❑ Step 28. Place the top of the front shock body (114) over the shock mount bushing (120) on the tower. Secure the shock assembly to the tower by threading a 4-40 locknut (121) onto the shock mount screw (66).

❑ Step 29. Repeat Steps 25-28 for the right shock assembly.

Once again, before attaching the top of the shock, make sure that the dogbone is in place in the outdrive.

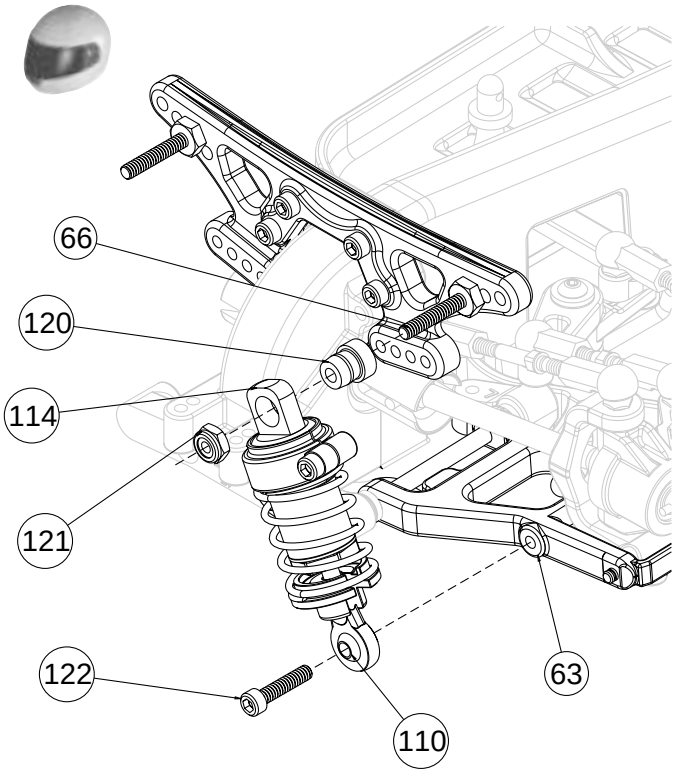


Figure 55

B A G G

Figure 55

❑ Step 1. Inspect the inside of the tires (125) for any excess material. If present, trim the excess rubber to ensure proper seating of the tire on the wheel (124).

Do not set the tires on furniture as they may leave permanent stains!

❑ Step 2. Locate the four molded tire inserts (126). The length of each of the four foam strips should be 6-7/8" (17.5cm). If any of the strips are excessively long, trim them to 6-7/8" (17.5cm) before continuing.

It is very important that the edges of the insert be trimmed as straight as possible. Straight cuts will make it much easier to glue the inserts into rings.

❑ Step 3. Using a high-quality contact cement, glue the tire inserts (126) into rings. The narrow side of the insert must be to the inside of the ring when complete.

IMPORTANT NOTE: ***Always wear eye protection, a mask, and always read and follow the manufacturer's safety warnings regarding the use of any adhesives.***

❑ Step 4. Once the contact cement has completely dried, install the tire inserts (126) into the tires (125). Pull the tire (125) over the wheel (124) and squeeze the tire (125) to properly seat it into the grooves of the wheel (124). Make certain that the tire insert (126) is not pinched between the tire (125) and the wheel (124).

IMPORTANT NOTE:The tires included with the XXX-S are directional. You must install two tires to the wheels in one direction, and the remaining two tires in the other direction when mounting them to the wheels. When installed correctly, the tread on all four tires will face the same direction when mounted onto the car.

❑ Step 5. The tires (125) should now be glued to the wheels (124). This can be done by using a fast-curing superglue or cyanoacrylate glue available at your local hobby shop. Allow the glue to dry thoroughly before continuing. Team Losi Tread Lock (A-7880) is the best glue available for gluing R/C car tires. This glue was produced specifically for this purpose.

❑ Step 6. Slide the four "smaller" hex adapters (142), slot-side first, over each of the axles (72) line up the pin (75) with the slot in the hex adapter (142) and press the adapter (142) over the pin (75) against the spacer (150).

❑ Step 7. Attach a wheel to the left rear axle (72) by lining up the hex in the wheel (124) with the hex adapter (142). The wheel (124) should be installed so the when looking at the tire (125) from the top, the tread should form an arrow that points towards the front of the car.

❑ Step 8. Secure the rear wheel (124) by threading an 8-32 locknut (144), *(supplied with your CVD kit),* onto the rear axle (72) and tighten.

❑ Step 9. Repeat Steps 7-8 for the remaining tire assemblies.

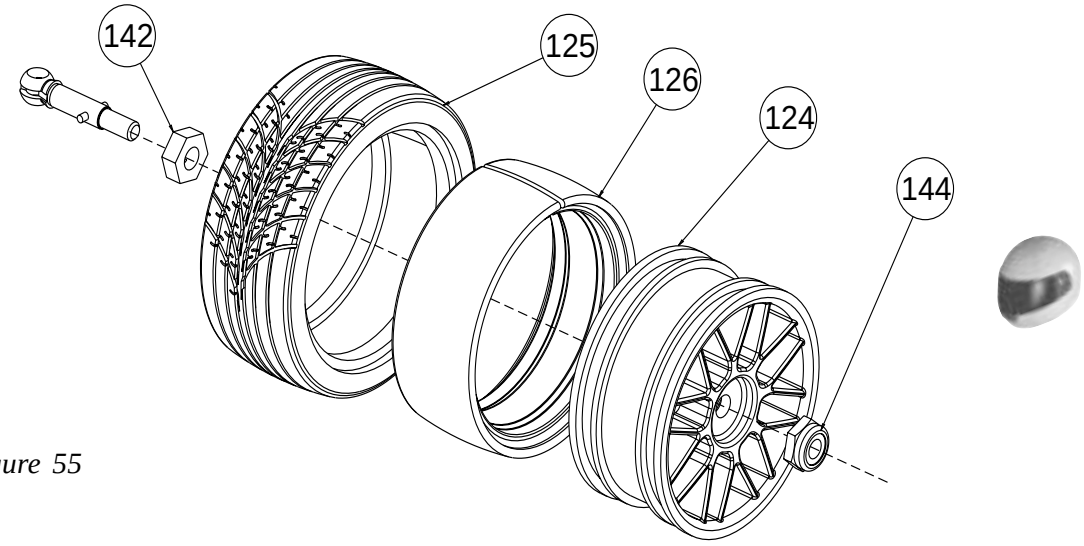


Figure 55

BAG H

Figure 56

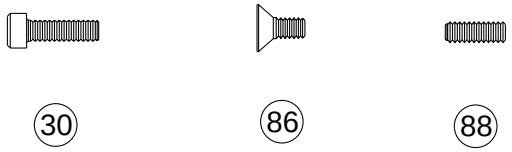
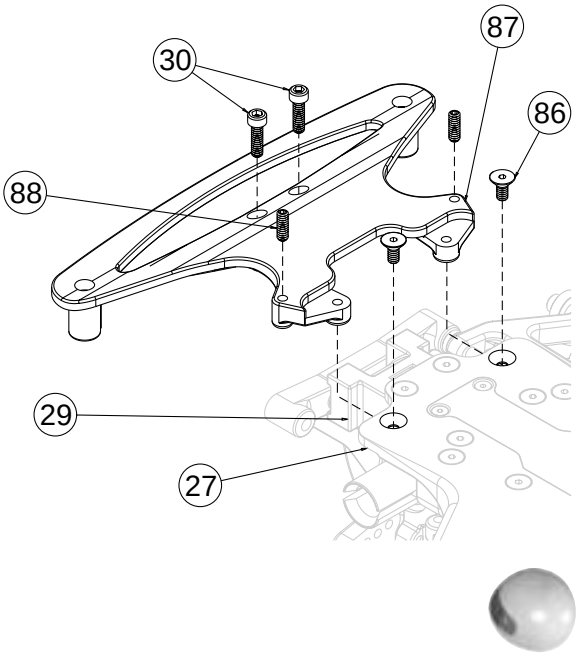


Figure 56



❑ Step 1. Holding the car upside-down install the front bumper (87) by lining up the holes in the fork of the front bumper (87) with the holes in the chassis (27). It should rest on the front diff cover (29). Secure the front bumper by threading two 4-40 x 1/4" flat head screws (86) through the chassis (27) into the two holes in the back of the front bumper (87) as indicated in Figure 56.

❑ Step 2. Thread two 4-40 x 3/8" cap head screws (30) through the front bumper (87) into the front diff cover (29).

❑ Step 3. Thread the two 4-40 x 5/16" droop limiter set screws (88) into the front bumper (87), until the hex of the screw (88) is positioned half-way into the bottom of the bumper, as indicated in Figure 56.

You want to make sure that the droop limiter screws are even on both sides of the car. The droop screws limit the down travel for the arms. Refer to Tips from the Team in the back of the manual for more information on Droop Screws!

Figure 57

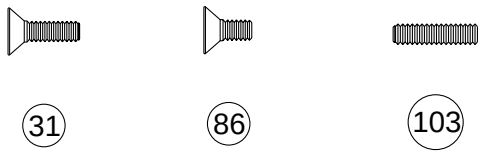
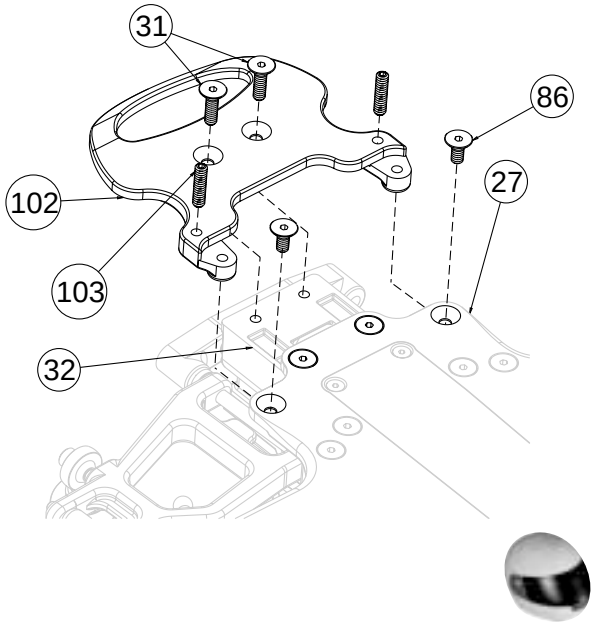


Figure 57



❑ Step 4. Install the rear bumper (102) by lining up the holes in the fork of the rear bumper (102) with the holes in the back of the chassis (27). Thread two 4-40 x 1/4" flat head screws (86) through the chassis into the holes in the bumper as indicated in Figure 57 and tighten.

❑ Step 5. Thread two 4-40 x 3/8" flat head screws (31) through the bumper (102) into the rear diff cover (32) and tighten.

❑ Step 6. Thread the two 4-40 x 7/16" droop limiter screws (103) through the rear bumper (102), until the hex of the screw (103), is positioned half-way into the bottom of the rear bumper (102) as indicated in Figure 57.

Once again, you want to make sure that the droop limiter screws are even on both sides of the car. The droop screws limit the down travel for the arms. Refer to Tips from the Team in the back of this manual for more information on Droop Screws!

BAG H (Continued)

Figure 58

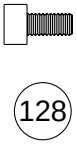
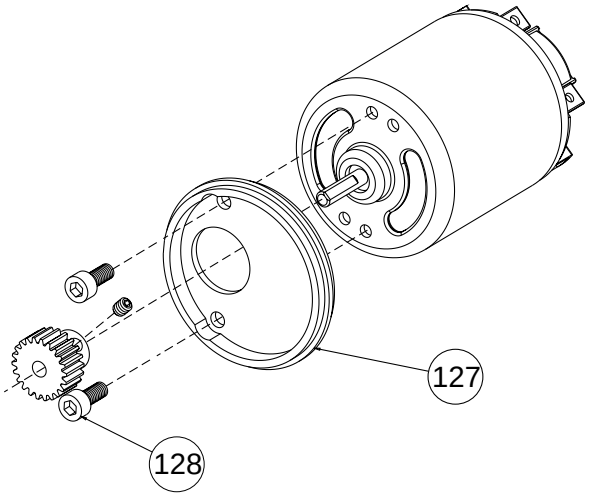


Figure 58



❑ Step 7. Place the motor plate (127) against the motor *(not included)* so that the shaft on the motor is centered in the large hole in the motor plate (127) and the flat surface of the motor plate rests against the motor as shown in Figure 58. Align the holes in the motor plate (127) with the holes in the motor as indicated in Figure 58.

❑ Step 8. Secure the motor plate (127) to the motor by threading the screws (128) through the two holes in the motor plate (127), and tightening..

If there are two sets of holes in the motor, thread the screws into the set of holes that will allow the power tabs to face the speed control (ESC) with the motor in its lowest position in the chassis. This is the optimal location for your vehicle.

❑ Step 9. Attach the pinion gear (not included) to the motor shaft with the tooth section of the gear away from the motor as shown.

Figure 59

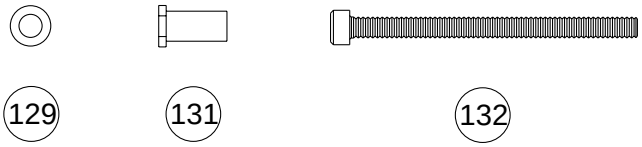
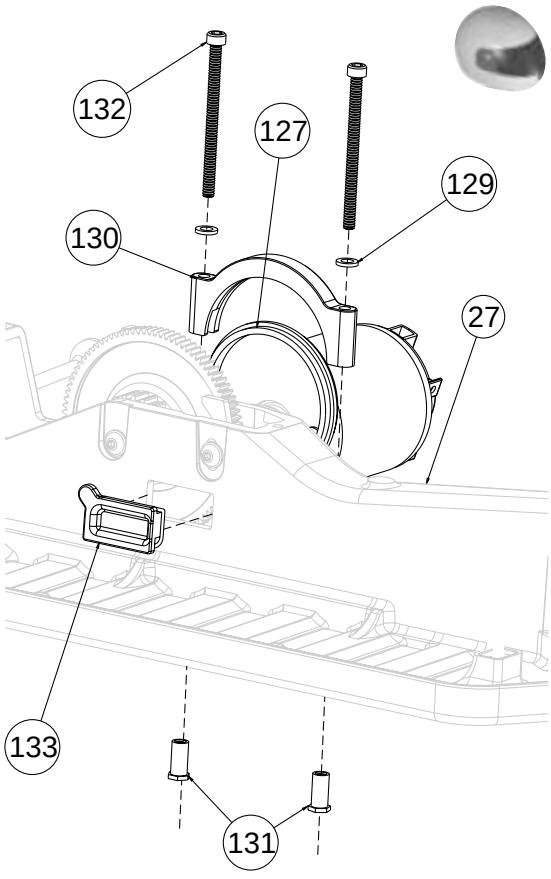


Figure 59



❑ Step 10. Press two threaded inserts (131) into the bottom of the chassis (27) in the holes with the hex. Be sure that you line up the hex on the insert (131) with the hex in the bottom of the chassis (27). The inserts (131) should be installed in the direction shown in Figure 59.

❑ Step 11. Install the motor plate (127), with the motor attached, in the groove on the left side of the chassis (27). Check alignment of the pinion gear with the spur gear (36). If the two gears don't align properly, remove the motor and adjust the position of the pinion gear. Check again for proper alignment.

❑ Step 12. Once the pinion gear is properly aligned with the spur gear (36), place the motor clamp (130) over the motor plate as shown. Slide a ball stud washer (129) over each of the 4-40 x 1.5" cap head screws (132). Thread a 4-40 x 1.5" cap head screw (132) through the two holes in the motor clamp (130) into the threaded inserts (131) in the chassis (27), but **don't tighten** the screws (132) yet. Check the gear mesh through the opening in the right side of the chassis (27). To adjust the gear mesh, rotate the motor - clockwise to loosen the gear mesh; and counter-clockwise to tighten the gear mesh. Once the gear mesh has been adjusted, tighten the motor clamp screws (132).

❑ Step 13. Insert the rectangular, gear mesh access plug (133), bevelled side first, in the opening on the right side of the chassis (27).

The gears need a small amount of backlash in order to function properly.

BAG H (Continued)

Figure 60

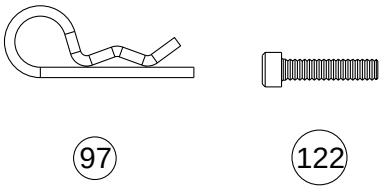
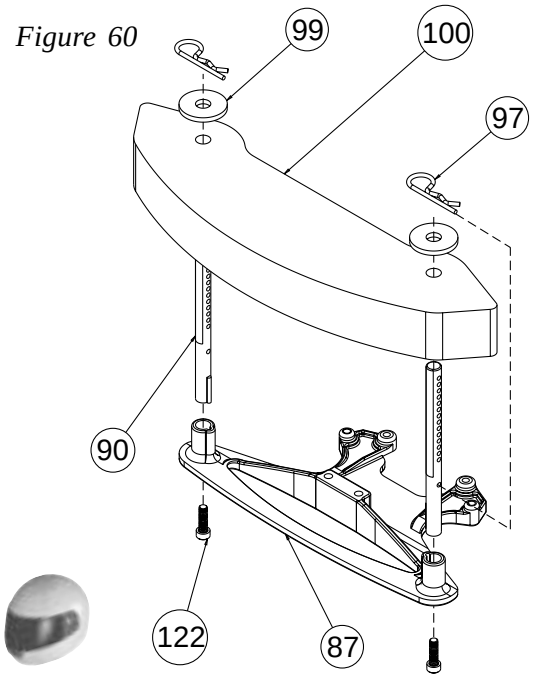


Figure 60



❑ Step 14. Install the front body mounts (90) into the two holes in the front bumper (87) by lining up the tab on the body post (90) with the slot in the bumper (87). Secure the two body mounts (90) with two 4-40 x 1/2" cap head screws (122) through the bottom of the bumper (87) into the body mounts (90).

❑ Step 15. Slide the foam bumper (100) over the two body mount posts (90) with the large curved side toward the front of the chassis. Slide one plastic washer (99) over each of the body mounts (90) until they rest on the foam bumper (100). Secure the foam bumper (100) and plastic washers (99) with a body clip (97) through the bottom-most hole in the body mount (90).

Figure 61

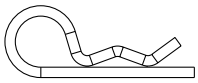
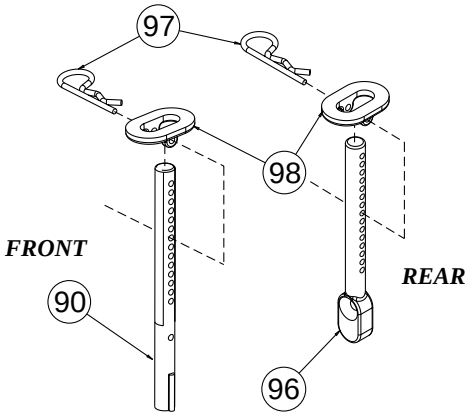


Figure 61

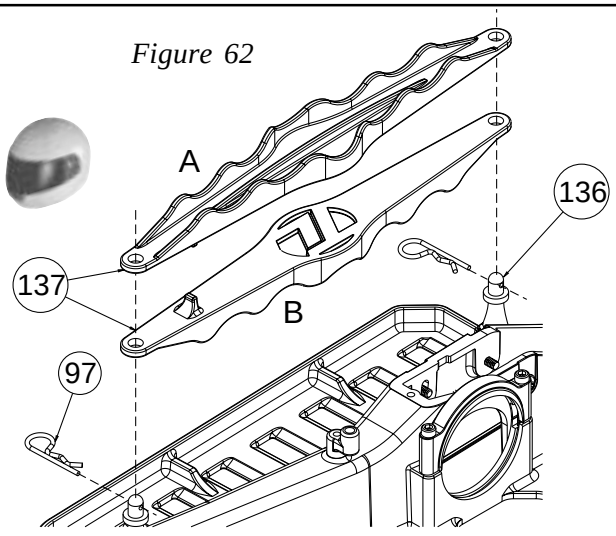


❑ Step 16. Position a body mount swivel (98) over each of the two front body mount posts (90). Align the holes in the swivel (98) with the seventh hole from the top of the front body mount (90). Secure the swivels (98) with a body clip (97) through one side of the swivel (98) and into the body mount (90) into the swivel again. Do this for both front body mounts.

❑ Step 17. Position a body mount swivel (98) over each of the two rear body mounts (96). Align the holes in the swivel (98) with the eighth hole from the top of the rear body mount (96). Secure the swivels (98) with a body clip (97) through one side of the swivel (98) into the body mount (96) into the swivel again. Do this for both rear body mounts (96).

Figure 62

Figure 62



The battery strap can be mounted in one of two ways to accommodate different styles of batteries. If you will be running matched-type cells, or individual cells laid out side-by-side, the TL logo should be facing away from the top of the chassis as shown in Figure 62 "B". If, however, you are using a pre-assembled stick pack, the TL logo should be facing down towards the top of the chassis as shown in Figure 62 "A".

❑ Step 18. Once the battery pack (not included) is installed, the plastic battery strap (137) will hold the batteries in place. The battery strap (137) slides over the two posts (136) on the right side of the chassis (27). The strap (137) is secured to the post with a body clip (97).

BAG H (Continued)

Figure 63

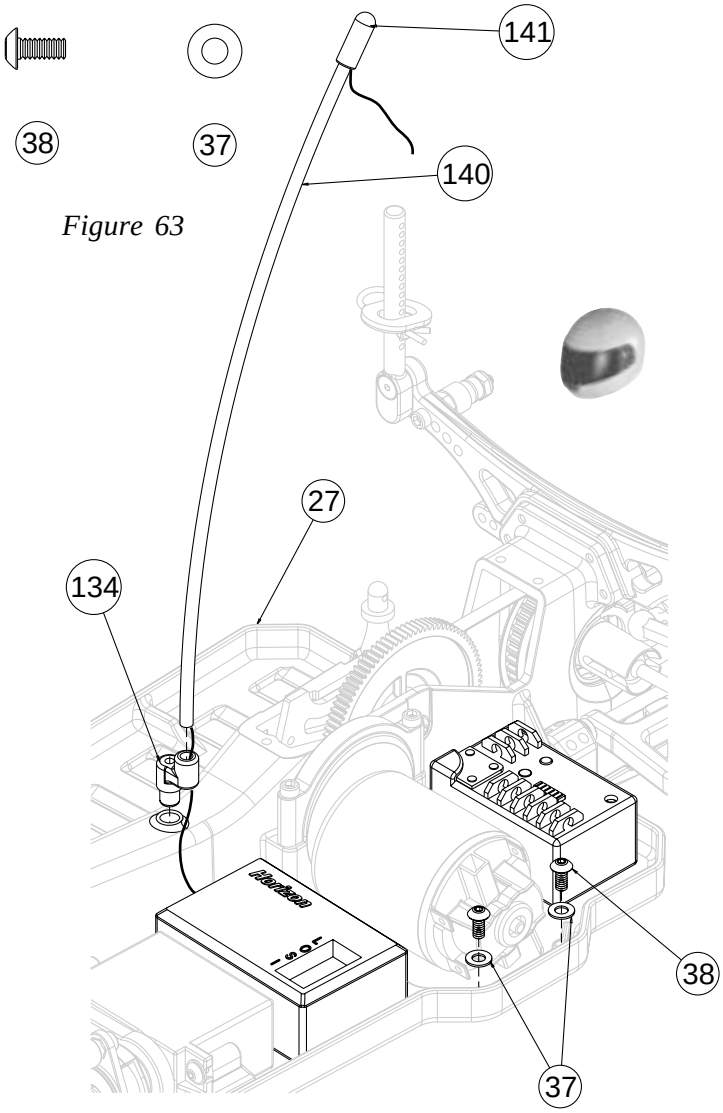


Figure 63

❑ Step 19. Cut a piece of two-sided tape (135) to the same size as the bottom of the receiver *(not included)*. Peel one side of the backing off and stick the tape (135) to the bottom of the receiver.

❑ Step 20. Make sure that the area on the chassis (27), between the motor and the servo, is clean. Wipe this area off with a clean cloth or rag.

Rubbing alcohol can be used to clean any oily residue that may be present on the chassis or receiver. Allow the alcohol to dry before applying the two-sided tape.

❑ Step 21. Peel the backing off the the two-sided tape (135) and install the receiver to the left side of the chassis (27), between the motor and servo, with the antenna wire exiting the receiver towards the center of the car as shown in Figure 63.

❑ Step 22. Run the antenna up the center rib, in the chassis (27), through the antenna mount (134) into the small hole. Press the antenna mount (134) into the hole in the top of the center rib in the chassis (27). Slide the antenna wire through the antenna tube (140) so that the wire comes out the other end of the tube (140).

❑ Step 23. While pulling the wire through the antenna tube (140), slide the antenna tube (140) down and push it firmly into the antenna mount (134) on the main chassis (27).

❑ Step 24. Fold the wire down over the antenna tube (140) and place the antenna cap (141) over the tube (140) and excess wire as shown in Figure 63.

If antenna wire is shorter than the tube, remove the tube and cut off enough of the tube so that the wire will extend about 3/4" past the end of the tube. DO NOT cut off any excess antenna wire. Doing so may cause you car to "glitch".

Figure 64

Figure 64A

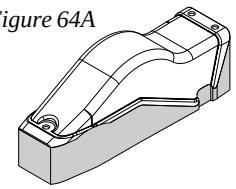
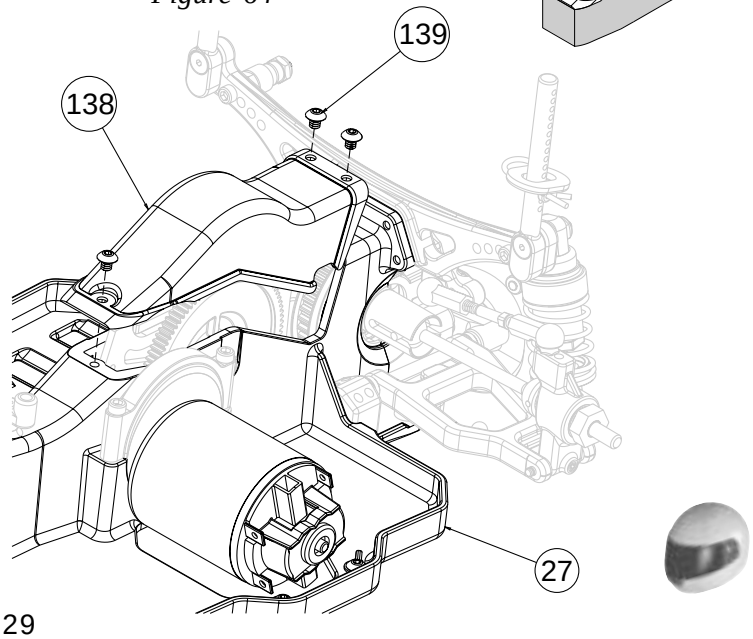


Figure 64



❑ Step 25. Locate the gear cover (138) and cut the bottom side of it along the trim line as shown in gray in Figure 64A. Drill three 1/8" mounting holes in the gear cover (138) at the three locations marked with dimples.

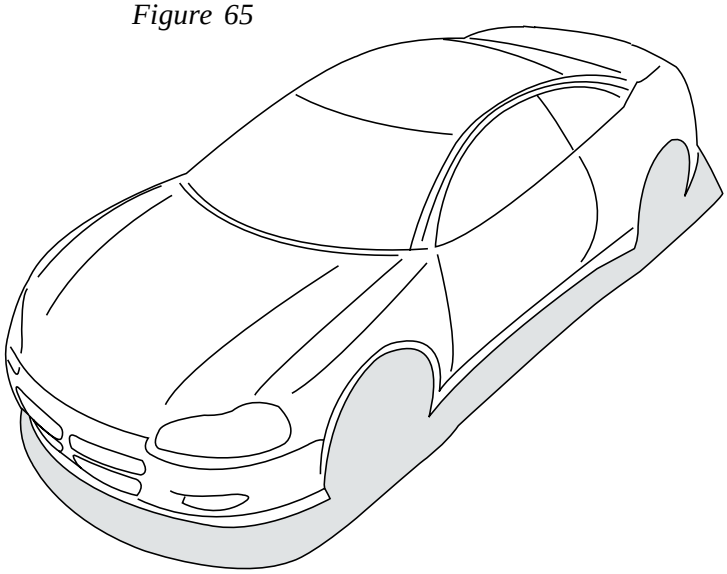
❑ Step 26. Place the trimmed gear cover (138) over the spur gear (36) and secure it with three 4-40 x 1/8" button head screws (139) through the three open holes in the top of the chassis (27).

You may opt. to run the ESC wires through the gear cover with the small cut-out on the bottom of the gear cover shown in Figure 64A. If you will be running the wires over the gear cover you should leave that material there.

BAG H (Continued)

Figure 65

Figure 65



❑ Step 27. Trim the body (149) and wing along the trim lines as shown.

❑ Step 28. Once the perimeter of the body is cut, line the body up with the tires. Front to back and right to left. Make four 3/16" diameter holes in the areas where the body mounts are touching and another where the antenna will come through. There should be dimples in the body to help guide you.

Before installing the body to the chassis use scotch tape or strapping tape and run a piece from the inside of the body over the body mount holes. Use a hobby knife or round file to open the hole back up. This will ensure your paint does not become rubbed off.

Figure 66

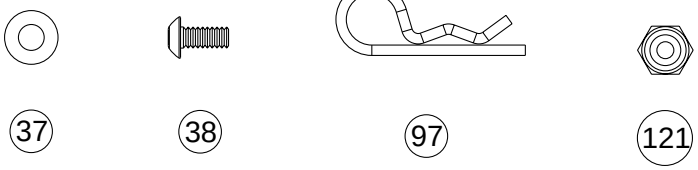
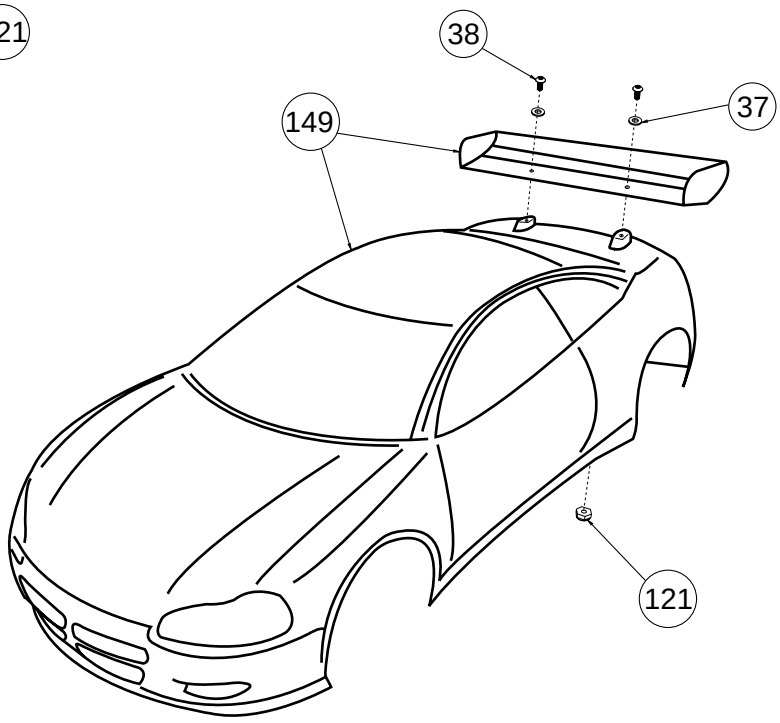


Figure 66



❑ Step 29. Make four 1/8" diameter holes: Two in the areas on the wing (149) that are marked with three dimples; and two in the areas marked with dimples on the wing mount stand-offs at the rear of the body. Use the middle holes for mounting in the wing.

❑ Step 30. Align the holes in the rear wing (149) with the holes in the wing mount stand-offs at the rear of the body. Slide a #4 washer (37) over each of the two 4-40 x 1/4" button head screws (38). Insert the 4-40 x 1/4" button head screw (38) with washer, down through the wing, and through each of the holes in the body.

❑ Step 31. Secure the wing to the body by threading a 4-40 locknut (121) onto each of the two screws (38).

❑ Step 32. Attach the body (149) to the rolling chassis and secure the body with four body clips (97): Two through the front body mount posts; and two through the rear body mounts.

FINAL CHECKLIST

BEFORE RUNNING YOUR NEW XXX-S SEDAN for the first time, you should run down the following checklist – in order – and complete the listed tasks. I'm sure you're anxious to get out and run your new *XXX-S* now that it's built, but following this simple checklist will help to make your first run with your new car much more enjoyable.

1. Adjust the differential
   While holding the chassis with only the left side tires firmly on the ground give the car about a quarter throttle for ten seconds. The right side tires should spin freely during this time. Repeat this with the right side tires held firmly to the ground allowing the left tires to spin. Feel the diff action and tighten slightly if necessary.
2. Check for free suspension movement
   All suspension arms should move freely. Any binds will cause the car to handle poorly. The steering should also operate very freely.
3. Set the ride height
   Adjust the chassis ride height to 1/4" (6mm). See the tips section for additional information on this.
4. Set the camber
   Both front and rear tires should have 1 degree of negative camber (Top of the tire leans in). It is critical that both front tires and both rear tires be adjusted the same.
5. Set the front toe-in
   Adjust the front tie rods so that, when the steering is straight on the transmitter, the front tires are both pointing straight. It is recommended that you start with the front toe-in set to zero (no toe-in or toe-out).
6. Charge a battery pack
   Charge a battery pack as per battery manufacturer's and/or charger manufacturer's instructions so that radio adjustments can be made. Never plug the battery backwards into the speed control.
7. Adjust the speed control
   Following the manufacturer's instructions, adjust your speed control, and set the throttle trim on your ESC so the the car does not creep forward when not applying throttle. Make sure that there is not too much brake being applied when the trigger/stick is in the neutral position. Some speed controls have a high/low setting for the throttle.
8. Set transmitter steering trim
   The steering trim tab on the transmitter should be adjusted so that the car rolls straight when you are not touching the steering wheel/stick. If the servo was installed correctly, as per Tables 21A and 21B, the wheels should turn equally to the left and right. If this is not the case, refer to Table 21B and ensure that the steering servo and rod were properly installed. Make sure the throttle trim is set so that the motor does not run when in the neutral position. You may wish to run one "click" of brake to be safe.

TIPS AND HINTS FROM THE TEAM

Before you start making changes on your XXX-S Sedan you need to make a few decisions. Tires and how they are set-up have a tremendous impact on overall performance. Before you start making changes on the chassis take a moment to observe a few of the fastest cars and what type of tire and inner liner they are running. Also note the wheel diameter and width as this can also effect how the tires perform. When making chassis changes you should first decide where you feel the car needs to be different. This is commonly referred to as changing the "balance". Since the XXX-S is a four-wheel drive chassis you have two ends of the car working separately yet together. First decide if the front of the car needs to be adjusted or the back. You will want to work with the rear if the car enters the turn with the front end sticking and tracking well while the rear end either does not want to follow or simply doesn't know what it wants to do. The opposite is true if the rear end seems to want to push the front end through the corners or the front dives into the corner uncontrollably. You will notice that several different adjustments have similar effects on the handling as well. You will find the best adjustment will become a personal decision based on the "feel" that each of these adjustments yield. This also reflects on the "balance" we referred to earlier. Never make more than one change at a time. If the change you made works adversely or doesn't address your need return to the stock position and try something else. Team Losi's development team has put hundreds of hours on the XXX-S to arrive at the set-up we put in the instruction manual. If you find that you have lost the "handle" go back to the kit (stock) set-up as this has proven to be reliable, consistant, and easy to drive.

Front End:

Shock Location; Leaning the shocks in (mounting them closer to the center of the tower) will give a smoother transition as you enter into turns and improve consistency but will yield less total steering and give a slower reaction. This might be helpful on high bite surfaces. Standing the shocks up (mounting them further out from the center of the tower) will increase responsiveness and generate more total steering. Forward traction is also increased, as is on-power steering. When moving he shocks to a more upright position you may find that you will have to change to a softer spring to smooth out the reaction. This might work well on shorter more technical tracks.

Toe-in/Out; is the parallel relationship of front tires to one another. Toe-in/out adjustments are made by changing the total length of the steering rods. If the front tires appear to be pointing inward to a spot in front of the car (toe-in) you can expect the car to react a little slower but have a little more steering from the middle of the turn out. The opposite is true if the front tires appear to be pointing to points in front and to either side of the car (toe-out). This (toe-out) will make the car turn into the corner better but will allow less steering from the middle of the corner out.

Camber Link; Making the camber link shorter (moving it further away from the center of the tower) tends to give more off-power steering into the turn but can also make the steering feel a bit erratic. Making the camber link longer (moving it closer to the center of the tower) will slow down the reaction of the steering but will make the chassis more forgiving.

Camber; refers to the angle of the wheels/tires in relation to the track surface when viewed from the front or back. Negative camber means that the top of the tire leans inward toward the chassis. Positive camber means the top of the tire leans out away from the chassis. You should never need to run positive camber and will always want to run at least a little negative camber. You can use any square object to check this by placing it so one edge is flat on the surface and the other is up against the outer surface of the wheel. There should always be at least a slight gap at the top of the wheel (negative camber). There should never be a gap at the bottom of the wheel (positive camber). Adding 1 degree front camber will typically increase steering but ideally the camber is adjusted to get even tire wear across the tire.

Front Kickup/Anti-dive; is the angle of the front arms in relation to the track surface. The kickup is controlled by the pivot blocks that mount the inner hinge pins of the front suspension arms to the chassis. You have three options with the included mounts, 0, 2, and 4 degrees. The front is marked with a "4F" and a "0F" at the middle of the surface facing forward. If this block is mounted with the "4F" at the top there is 4 degrees of kickup, if the "0F" is at the top there is no kickup. The other included pivot block is labeled "2F" and gives 2 degrees. The "4F" setting is best for bumpy surfaces and makes the car very forgiving. As you reduce the amount of kickup the steering will get more aggressive entering the turn. Reducing this will also improve front braking traction entering turns but will reduce the chassis' ability to handle bumpy surfaces.

Caster; is the angle of the kingpin from vertical when viewed from the side. You will always run zero or a few degrees of positive caster where the top of the kingpin leans back toward the rear of the car. Total caster is determined by adding the amount of kickup and the amount of kingpin inclination of the front spindle carriers. The stock spindle carriers in the kit are 0 degree, which mean the total caster is determined by the kickup. Reducing total caster will give less off power steering while giving more on power steering on exit. More caster will give greater steering into the turn but less power as you exit.

Arm Spacing; allows you to change both the wheel base and driveshaft angle slightly. By placing the spacers between the front pivot block and the front of the arm (moving the arm back) on the hinge pin, you get a quicker reaction and slightly better forward grip. This is good for shorter/technical tracks. Placing the spacers all at the rear of the arm (moving the arm forward) adds stability and slows down the initial reaction which might help on longer high speed tracks.

Front Diff; running the diff a little tighter will give less off power turn-in but increase on power steering as you exit a turn. Running it a little looser will give more initial turn-in but make the car want to "push" (lose steering) on exit.

Front Droop; is the amount of down travel the shocks allow the suspension arms to move. With standard 2.5" tall tires you will want to maintain between a 2mm and 4mm shock droop. This is easily measured by removing the front tires and setting the chassis on the droop gauge (included) so that the gauge extends across the chassis with the graduated notches to one side. Slide the gauge inward using the set screw boss on the bottom of the spindle carrier as your reference. The set screw boss should just clear the 2mm (minimum) step. Repeat this for the other side making sure that both sides are the same. Less droop makes the chassis react quicker but is not as good on bumpy tracks. More droop reduces steering into the turn and slows down the overall reaction. This will also make the chassis more stable on bumpy surfaces.

Ride Height; is the height of the chassis in relation to the track surface. Initially, set the front and rear ride height to 1/4" (6mm). This will work well on parking lot and bumpy surfaces. This will also generate more weight transfer and chassis roll, which can help on slick surfaces. Lowering the ride height will make the car change direction quicker and should be helpful on high traction surfaces and carpet.

Chassis/Drivetrain

Battery Position; Moving the battery pack forward will give more steering and less rear traction. Moving the pack to the rear will increase rear traction and diminish steering slightly. Splitting the pack leaving an empty space in the middle will have various effects depending on the traction and size of the track.

Belt Tension; can be run a little looser on long tracks and with stock motors. It is normal for the belt to skip (2 or 3 clicks) under heavy braking without doing harm to the belt. Do not run the belt too loose or it will drag on the chassis and bottom cover hurting performance.

Back End

Shock Location; leaning the shocks in (toward the center of the tower) frees up the back end of the car, allowing easier rotation in the turn. This might be helpful for fast flowing tracks where corner speed is critical. Moving the shocks out (away from the center of the tower) will give more forward traction but slows the initial reaction into the turn with a more abrupt rear rotation. This can be good for tight tracks.

Camber Link; Moving the rear camber link to the outside position (shorter) on the tower and/or the inside position of the hub, will give more traction and chassis roll but less steering and stability. This should also carry more corner speed and help on slick surfaces. Moving the camber link to the inside position (longer) will increase stability but slow down rear rotation. Moving the link to the outside position on the hub will also give more forward traction.

Rear Toe-in; There is 2 degrees of toe-in per side stock. Adding toe-in will create more forward traction and make the car freer on entering a turn. This is good for slick surfaces. Too much toe-in will make the car twitchy and hard to drive.

Camber; refers to the angle of the wheels/tires in relation to the track surface when viewed from the front or back. Negative camber means that the top of the tire leans inward toward the chassis. Positive camber means the top of the tire leans out away from the chassis. Adjust for optimum tire wear as noted for front camber.

Anti-Squat; is like the "kick-up" at the front except it works slightly different. Marked and used like the front, you can choose from 0, 2, and 4 degrees of anti-squat (pin angle). Zero anti-squat is the starting point. Adding (from 0, 2, 4 degrees) will reduce rear grip and allow easier rotation into a turn and increase the traction out of the turn. This is good for slicker track surfaces.

Rear Droop; using the same method of measuring as the front, use the rear hub as the reference to maintain 3mm to 5mm of droop. Start with 4mm, more will smooth out chassis reactions while less will make it quicker reacting and possibly a little abrupt.

Rear Arm Spacing; is much like the front. Spacing the arms forward (spacers behind the arm) will give more forward grip and initiate the entrance into turns off power. Moving the arms back (spacers at the front of the arm) will give less forward grip and slow down initial reaction into turns.

Overdrive/ Underdrive; In bag H you received a 41T pulley for you XXX-S. This allows you to over-drive (make the front tires turn faster) or underdrive (make the front tires turn slower) the car. Using the 41T pulley in the front of your car will give you overdrive. This will give the car less offpower steering and will give you more steering exiting the turn. Running the 41T pulley in the rear will underdrive the car. This will give you more steering entering the turn and less exiting the turn. If you do mix up your pulleys, you can distinguish the 41T from the 42T by looking for a ridge in the side of the flange on your 42T pulley. The 41T pulley does not have any type of marking on the flange area.

We are sure that you will find the *XXX-S Sedan* to be the most versatile and easiest car to drive fast with great consistency. We at Team Losi hope this information helps you to enjoy your *XXX-S Sedan* and racing as much as we do. For the latest in setup and accessory parts information, visit the Team Losi website at: www.TeamLosi.com and go to the "Meet the Team" tab on the left side of the page. All your questions will be answered in the order received to the best of our knowledge by our own Team Losi R&D race team.

SPARE PARTS LIST

KEY #	KIT/PART DESCRIPTION	PART NO.	SPARE PARTS DESCRIPTION
1	4-40 mini locknut	A-6306	4-40 Aluminum Mini Nuts
2	Diff nut carrier	A-2909	"Monster Diff" Adjustment Screw & Hardware
3	Heavy duty belleville washer	A-2909	"Monster Diff" Adjustment Screw & Hardware
4	Small servo saver spring	A-1542	Steering & Servo Saver Hardware XXX-S
5	Allen wrenches	N/A	N/A
6	Large servo saver spring	A-1542	Steering & Servo Saver Hardware XXX-S
7	Molded outdrive, male	A-3097	Molded Outdrive Set
8	Silicon filled tube	A-3065	Silicon Differential Compound
9	Washer, .250" x .130"	A-6350	#4 and 1/8" Hardened Washers
10	Diff rings	A-3070	Differential Drive Rings
11	42 tooth diff pulley	A-3211	Front & Rear Pulley Set XXX-S
12	41 tooth diff pulley	A-3211	Front & Rear Pulley Set XXX-S
13	5mm x 8mm x bearing	A-6907	5mm x 8mm Bearings
14	3/32" diff balls	A-6951	3/32" Carbide Diff Balls
15	Molded outdrive, female	A-3097	Molded Outdrive Set
16	Diff screw	A-3078	Diff Screw, Hardware & Seal
17	Foam diff seal	A-3078	Diff Screw, Hardware & Seal
18	Thrust washer	A-3098	Diff Thrust Bearing w/Carbide Balls
19	5/64" thrust balls	A-3099	Thrust Bearing, Full Compliment
20	1/2" x 3/4' bearing	A-6910	1/2" x 3/4" Bearings w/ Shields
21	Belt tensioner arm	A-3239	Belt Tension Arm, Post & Hardware
22	Idler pulley shaft	A-3239	Belt Tension Arm, Post & Hardware
23	Idler pulley	A-3211	Front & Rear Pulley Set XXX-S
24	4-40 x 5/16" button head	A-6245	4-40 x 5/16" Button Head Screws
25	3/16" x 3/8" bearing	A-6916	3/16" x 3/8" Bearings w/ Shields (Sedan)
26	Belt	A-3208	Main Drive Belt XXX-S
27	Chassis, XXX-S	A-4206	Main Chassis XXX-S
28	Steering tunnel	A-4212	Chassis Bottom Cover, Steering Tunnel & Hardware
29	Front diff cover	A-4213	Front & Rear Diff Cover XXX-S
30	4-40 x 3/8" cap head	A-6206	4-40 x 3/8" Caphead Screws
31	4-40 x 3/8" flat head	A-6210	4-40 x 3/8" Flat Head Screws
32	Rear diff cover	A-4213	Front & Rear Diff Cover XXX-S
33	Top shaft	A-3238	Top Shaft, Spacer & Hardware
34	Belt tensioner bushing	A-3238	Top Shaft, Spacer & Hardware
35	Compound bearing spacer	A-3238	Top Shaft, Spacer & Hardware
36	Spur gear/Drive pulley	A-3945	88T 48 pitch Drive Pulley
37	#4 x .030 washer	A-6350	#4 and 1/8" Hardened Washers
38	4-40 x 1/4' button head	A-6234	4-40 x 1/4" Button Head Screws
39	Bottom chassis cover	A-4212	Bottom Chassis Cover, Steering Tunnel & Hardware
40	2-56 x 3/16" flat head	A-4212	Bottom Chassis Cover, Steering Tunnel & Hardware
41	Left bellcrank	A-1540	Steering Bellcranks, Servo Saver & Mounts
42	Right bellcrank	A-1540	Steering Bellcranks, Servo Saver & Mounts
43	3/16" ball stud	A-6001	Studded Balls w/ Rod Ends 3/16"
44	Steering post	A-1542	Steering & Servo Saver Hardware XXX-S
45	Steering bushings	A-1540	Steering Bellcranks, Servo Saver & Mounts
46	Steering cap	A-1540	Steering Bellcranks, Servo Saver & Mounts
47	Carrier/steering bushings	A-1233	Spindle Carrier Bushings & Hardware
48	Drag link	A-1540	Steering Bellcranks, Servo Saver & Mounts
49	4-40 x 3/8" button head	A-6229	4-40 x 3/8" Button Head Screws
50	25 tooth servo base	A-1540	Steering Bellcranks, Servo Saver & Mounts
51	23 tooth servo base	A-1540	Steering Bellcranks, Servo Saver & Mounts
52	24 tooth servo base	A-1540	Steering Bellcranks, Servo Saver & Mounts
53	Outer servo saver	A-1540	Steering Bellcranks, Servo Saver & Mounts
54	Servo saver washer	A-1540	Steering Bellcranks, Servo Saver & Mounts
55	Servo mount -A-	A-1540	Steering Bellcranks, Servo Saver & Mounts
56	Servo mount -B-	A-1540	Steering Bellcranks, Servo Saver & Mounts

SPARE PARTS LIST

KEY #	KIT/PART DESCRIPTION	PART NO.	SPARE PARTS DESCRIPTION
57	4-40 x 5/8" set screw	A-1615	Short Ball Cups & Threaded Rod
58	Short rod end	A-1615	Short Ball Cups & Threaded Rod
59	Left front, inner pivot	A-1230	Front Inner Pivot Support Set 0, 2, 4 degree
60	Right front, inner pivot	A-1230	Front Inner Pivot Support Set 0, 2, 4 degree
61	Arm spacers	A-2127	'CR' Rear Hub Spacers (.060")
62	Inner hinge pin	A-2161	Inner Rear Hinge Pins 1/8" x 2.04"
63	Front arms L/R	A-1214	Front Suspension Arms XXX-S
64	0-4 degree main block	A-1230	Front Inner Pivot Support Set 0, 2, 4 degree
65	2 degree main block	A-1230	Front Inner Pivot Support Set 0, 2, 4 degree
66	4-40 x 7/8" cap head	A-6216	4-40 x 7/8" Cap Head Screw
67	4-40 zinc nut	A-6300	4-40 Hex Nuts
68	Short head ball stud	A-6007	Stud Balls "Short Neck", w/ Studs
69	Front shock tower	A-1208	Front Shock Tower XXX-S
70	Front spindle L/R	A-1224	Front Spindles & Carriers XXX-S
71	Rear hub bearing spacer	A-6365	Hub Bearing Spacer & Shim XXX-S
72	CVD axle front & rear	A-9928	MIP CVD Front & Rear XXX-S
73	CVD bone front & rear	A-9928	MIP CVD Front & Rear XXX-S
74	CVD coupling	A-9928	MIP CVD Front & Rear XXX-S
75	CVD cross pin	A-9928	MIP CVD Front & Rear XXX-S
76	CVD wheel pin	A-9928	MIP CVD Front & Rear XXX-S
77	CVD 4-40 set screw	A-9928	MIP CVD Front & Rear XXX-S
78	MIP lube	N/A	N/A
79	MIP thread lock	N/A	N/A
80	Front spindle carrier	A-1224	Front Spindles & Carriers XXX-S
81	Outer hinge pin	A-1146	Front Outer & King Pin 3/32" x .870"
82	5-40 x 1/8" set screw	A-6228	5-40 x 1/8" Hardened Set Screw
83	L/R threaded rod 1.375"	A-6034	Adjustable L/R Threaded Rod w/ Ends 1.375"
84	L/R threaded rod 1.125"	A-6032	Adjustable L/R Threaded Rod w/ Ends1.125"
85	Foam things	A-6003	Foam Things (Linkage Rings)
86	4-40 x 1/4" flat head	A-6213	4-40 x 1/4" Flat Head Screws
87	Front bumper	A-4236	Front & Rear Bumpers w/ Downstops
88	4-40 x 5/16" set screw	A-4236	Front & Rear Bumpers w/ Downstops
89	4-40 x 3/4" cap head	A-6205	4-40 x 3/4" Cap Head Screws
90	Front body mounts	A-4229	Front & Rear Body Mount Set
91	Rear inner pivots	A-2230	Rear Inner Pivot Support Set 0, 2, 4 degree
92	Rear arm	A-2221	Rear Suspension Arms XXX-S
93	0-4 degree rear main block	A-2230	Rear Inner Pivot Support Set 0, 2, 4 degree
94	2 degree rear main block	A-2230	Rear Inner Pivot Support Set 0, 2, 4 degree
95	Rear shock tower	A-2201	Rear Shock Tower XXX-S
96	Rear body mounts	A-4229	Front & Rear Body Mount Set
97	Body clip	A-8200	Spring Body Clips
98	Body Mount Swivel	A-4229	Front & Rear Body Mount Set
99	Washer, foam bumper	A-4229	Front & Rear Body Mount Set
100	Foam Bumper	A-4232	Foam Bumper XXX-S
101	Rear hub	A-2226	Rear Hub Carriers XXX-S
102	Rear Bumper	A-4236	Front & Rear Bumpers w/ Downstops
103	4-40 x 7/16" set screw	A-4236	Front & Rear Bumpers w/ Downstops
104	Shock cartridge body	A-5015	Double O-ring Shock Cartridge
105	Internal o-ring	A-5015	Double O-ring Shock Cartridge
106	Shock cartridge spacer	A-5015	Double O-ring Shock Cartridge
107	Shock cartridge cap	A-5015	Double O-ring Shock Cartridge
108	Sedan shock shaft	A-5025	.36" Shock Shaft
109	Shock end	A-5023	Spring Clamps & Cups
110	.250 ball joint	A-2006	Swivel Suspension Balls
111	Shock piston #55	A-5047	Teflon Shock Pistons #55 (Orange)
112	E-clip .125"	A-6100	E-Clips, 1/8"

SPARE PARTS LIST

KEY #	KIT/PART DESCRIPTION	PART NO.	SPARE PARTS DESCRIPTION
113	Shock piston #56	A-5046	Teflon Shock Pistons #56 (Red)
114	Sedan shock body	A-5028	.36" Shock Body Hard Anodized
115	80wt. shock oil	A-5230	Team Losi Certified Shock Fluid 80wt.
116	Silver spring	A-5123	1.15" Spring 12.6 Rate (Silver)
117	Purple spring	A-5108	1" Spring 20.0 Rate (Purple)
118	Shock collar	A-5023	Spring Cups & Clamps
119	Shock cup	A-5023	Spring Cups & Clamps
120	Short shock bushing	A-5013	Front & Rear Upper Shock Mount Bushings
121	4-40 lock nut	A-6305	4-40 Locking Nuts Low-Profile
122	4-40 x 1/2" cap head	A-6204	4-40 x 1/2" Cap Head Screws
123	Long shock bushing	A-5013	Front & Rear Upper Shock Mount Bushings
124	Sedan wheel	A-7803	Sedan Wheels, Split Spoke/ Extra Offset (White)
125	Treaded tire	A-7710Y	Treaded Tires (Yellow) w/ Inserts
126	Tire foam	A-7799	Molded (Profiled) Tire Inserts - Firm
127	Lowered motor plate	A-3226	Lowered Motor Mount w/ Screws
128	3mm x 6mm cap head	A-6201	3mm x 6mm Cap Head Screws
129	Ballstud washer	A-6215	#4 Narrow Washers
130	Motor mount strap	A-4216	Motor Mount Clamp XXX-S
131	Threaded Insert	A-4224	Threaded Chassis Inserts
132	4-40 x 1.5" cap head	A-3034	4-40 x 1.5" Cap Head Screws
133	Gear mesh window	A-3244	Clicker & Access Plug Set
134	Antenna mount	A-4243	Battery Posts & Antenna Mount XXX-S
135	Servo tape	A-4004	Servo Tape
136	Battery post	A-4243	Battery Posts & Antenna Mount XXX-S
137	Battery strap	A-4240	Droop Gauge & Battery Strap XXX-S
138	Gear Cover	A-4209	Gear Cover XXX-S
139	4-40 x 1/8" button head	A-6212	4-40 x 1/8" Button Head Screws
140	Antenna tube	A-4002	Antenna Kit
141	Antenna tip	A-4003	Antenna Caps
142	Losi hex adapters	A-3260	Wheel Hex Drives, Standard & Metric
143	Metric hex adapters	A-3260	Wheel Hex Drives, Standard & Metric
144	8-32 lock nut	A-6310	8-32 Locknuts
145	Droop gauge	A-4240	Droop Gauge & Battery Strap XXX-S
146	Assembly wrench	A-6030	Assembly Wrench (Version 2)
147	Sticker sheet	A-8332	Sticker Sheet XXX-S
148	Window mask	A-8052	"Stratus Fear" Body & Wing w/ Masks
149	Body & wing	A-8052	"Stratus Fear" Body & Wing w/ Masks
150	3/16 x .015" shim	A-6230	Shim Assortment (3/32", 3/16", 1/4", &1/2")
151	4-40 x 1/2" flat head	A-6220	4-40 x 1/2" Flat Head Screws

SETUP SHEET

Driver: _____

Date: _____

Track: _____

q Indoor
q Outdoor

q Tight / q Open

q Carpet
q Concrete
q Asphalt

q Sealed
q Smooth
q Rough

FRONT SUSPENSION

(Circle or Check the Appropriate Settings)

Droop Height: _____

Pivot Support: _____

q In
Toe q Out ____

Ride Height _____

q -
Camber q + _____

q Kickup _____

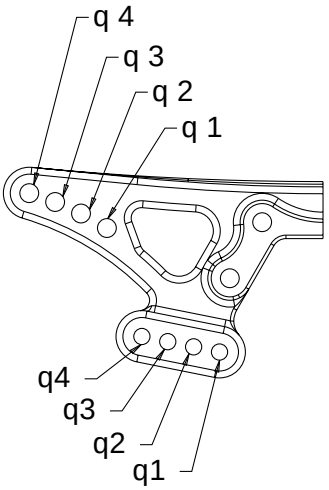
Caster q Carrier _____

q No
Sway Bar q Yes size_____

Arm Spacing
q FWD
q MDL
q BACK

Front Drive:
q Diff
q One-Way

q Standard
q Overdrive
q Underdrive



# of washers under steering/ tie-rod ball studs

Spindle ball stud:_____

Bellcrank ball stud:_____

Front Shocks
Oil: _____
Piston: _____ q Standard / q Drilled
Spring: _____
Limiters: q Inside _____ q Outside _____

NOTES: _____

REAR SUSPENSION

Droop Height: _____

Pivot Support: _____

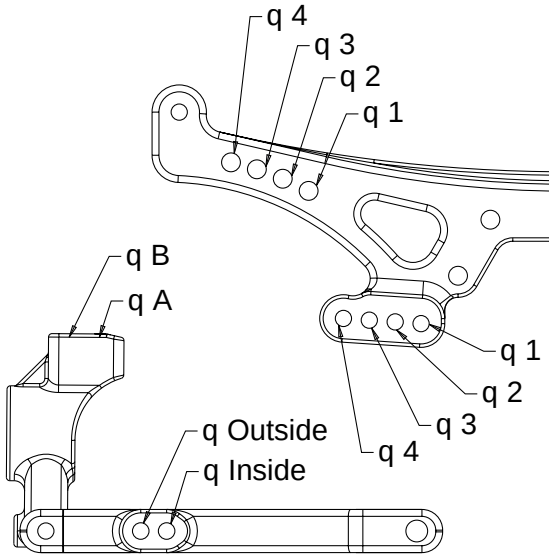
q In
Toe q Out ____

Ride Height _____

q -
Camber q + _____

q No
Sway Bar q Yes size_____

Arm Spacing
q FWD
q MDL
q BACK



Rear Shocks
Oil: _____
Piston: _____ q Standard / q Drilled
Spring: _____
Limiters: q Inside _____ q Outside _____

NOTES: _____

Tires: Compound Foam Length

Front: _____ _____ _____ _____

Rear: _____ _____ _____ _____

Battery Placement: q Back q Forward q Other: _____

Transponder Position: _____

Notes: _____

Motor:_____

Pinion:_____

Spur: _____

Tire Diameter: _____

Body: _____

Body Height: _____