

PRO-X™

ASSEMBLY AND OPERATION MANUAL



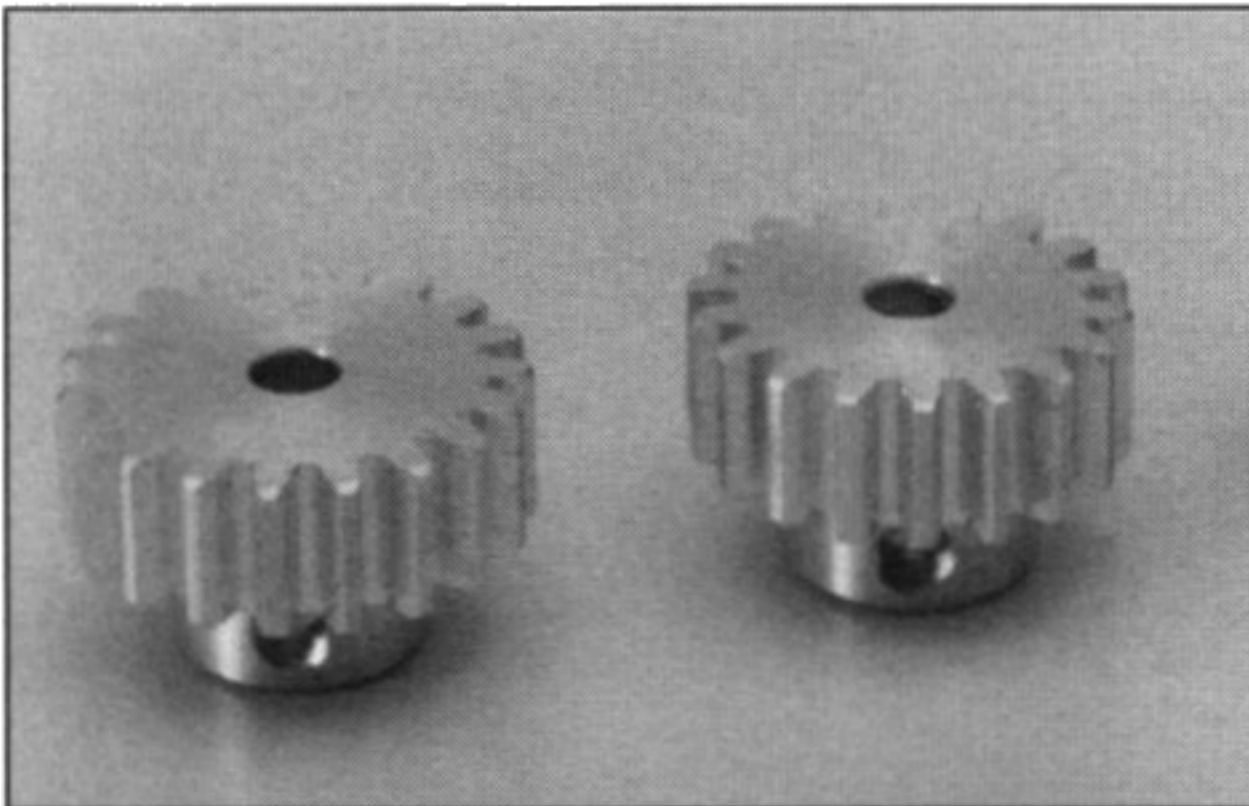
- ◇ **STATE-OF-THE-ART SUSPENSION TAMES THE TOUGHEST TRACKS.**
- ◇ **THE EXTREMELY LIGHT AND EFFICIENT SUPER SPRINT TRANSMISSION WITH 'SLIPPER' CLUTCH TRANSMITS THE POWER TO THE WHEELS, MINIMIZING POWER LOSS.**
- ◇ **EASY ACCESS ALLOWS QUICK ADJUSTMENT OF THE BALL DIFFERENTIAL AND SLIPPER.**
- ◇ **ADJUSTABLE OIL-FILLED SHOCKS ABSORB THE BUMPS, KEEPING THE BUGGY UNDER CONTROL.**

KYOSHO®

KYOC0109 No. 30333 Sport
KYOC0108 No. 30331 Team

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RECOMMENDED ACCESSORIES



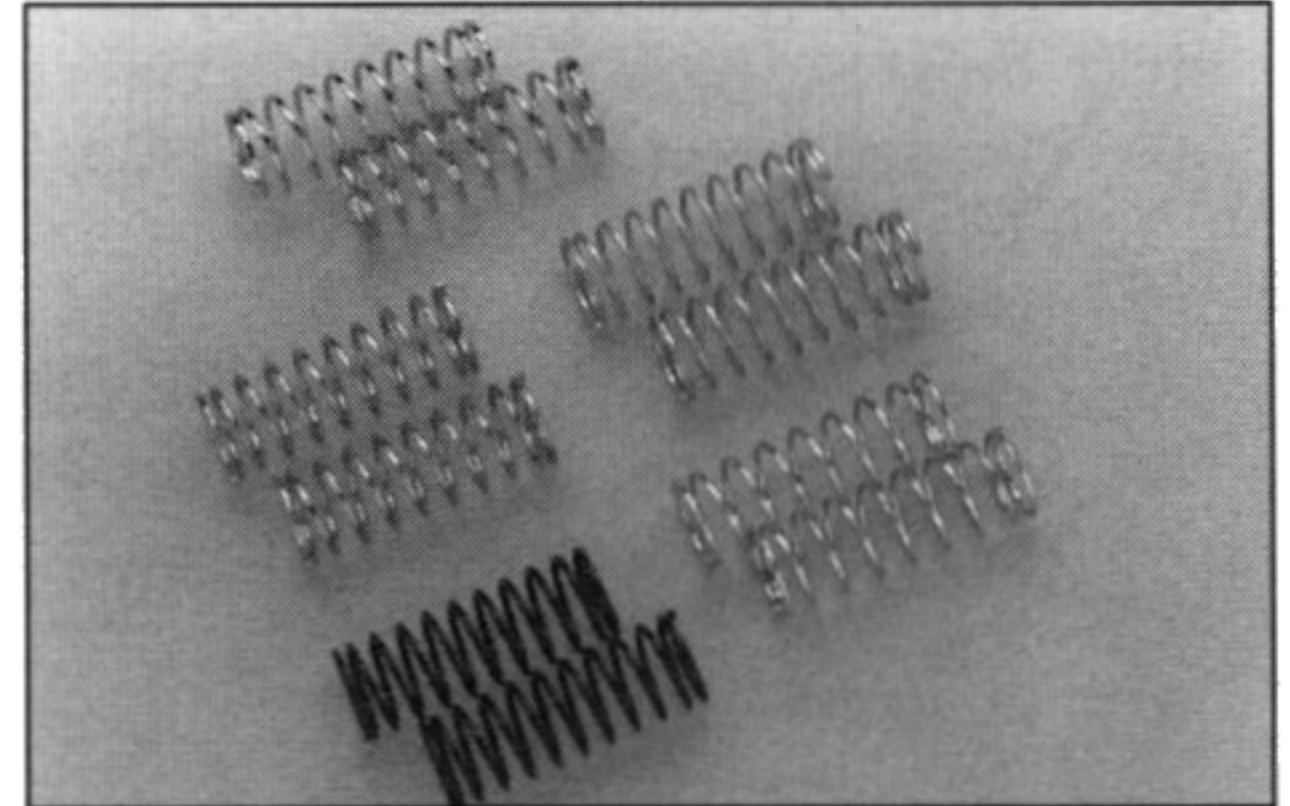
Kyosho Pinion Gears

Fine-tune performance with Kyosho 48-Pitch pinion gears, made of hardened steel for long-lasting precision. Refer to the optional parts list for stock numbers.



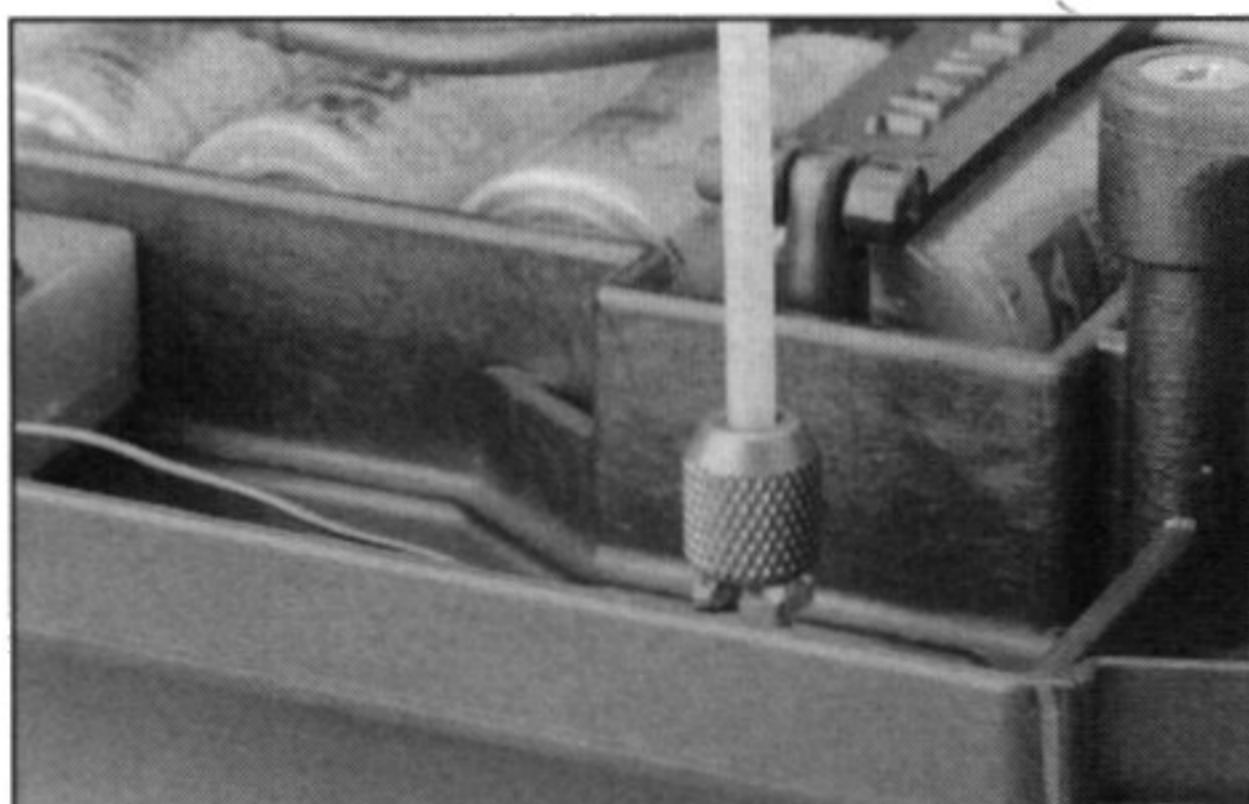
Kyosho Stainless Steel Bearings

Reduce friction and increase speed. Replace bushings with these stainless steel bearings and you're set for smoother power delivery. Refer to the optional parts list for stock numbers.



Kyosho Shock Springs

Includes 5 pair of medium springs, color-coded for easy recognition and use. Compatible with Kyosho and most other 1/10 scale off-road shocks. Refer to the optional parts list for stock numbers.



Kyosho's Special Antenna Holder

This aluminum holder mounts easily to the chassis or radio tray. It lets you remove the antenna for safe transport, and protects it during races.

KYOC2051



DuraTrax® 1500 Sport Batteries

Ideal for racing, these powerful 6 and 7-cell batteries feature high-capacity Sanyo cells. Each pack is assembled with heavy-duty silicon wire. Connectors are included. Refer to optional parts list.



DuraTrax® M5 ESC

Extend run times with this affordable, 4-10 cell, electronic speed control. Includes MEGAFET transistors, solid-state Reverse Voltage Protection, heat sink, capacitors and universal connectors.

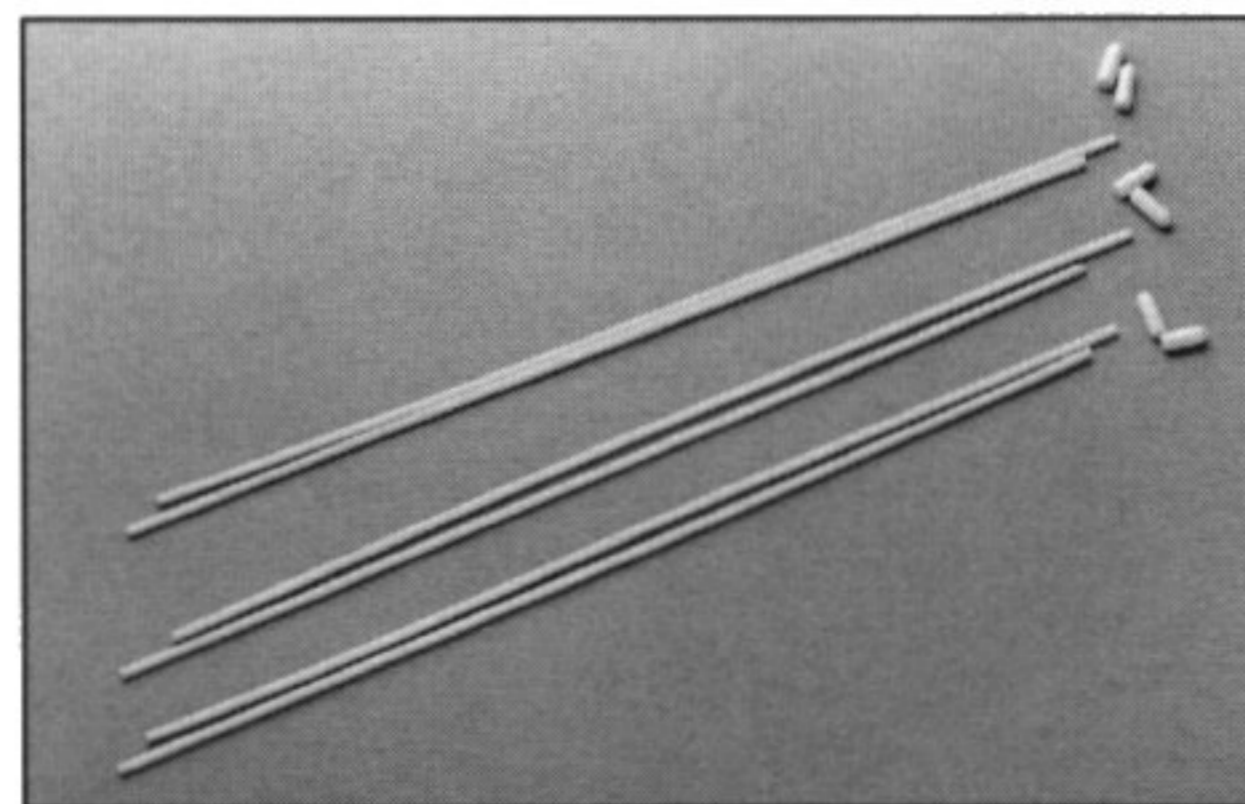
DTXM1010



Hobbico Model 920 Charger

A great value on versatile charging, the Model 920 includes adjustable current; a boost switch for charging 7-cell packs; and a highly accurate digital LCD voltage/current meter.

HCAP0190



Kyosho Antenna Tube and Cap

Match your receiver antenna to your car's color scheme with these white, pink, or yellow antenna tubes. Six tubes per package.

KYOC2506-KYOC2508



DuraTrax® Mini Receiver

This receiver weighs just 0.5 oz., measures only 1.1" x 1.28" x .53", and is factory-tuned for efficient operation. Just add a Futaba AM crystal and install.

DTXM1000

BEFORE BEGINNING TO BUILD

IMPORTANT: PLEASE READ THROUGH THE ENTIRE INSTRUCTION MANUAL BEFORE BUILDING THE PRO-X.

We want your experience of building this model to be a success. So, before you remove any parts from their packages and begin assembly:

- Read through the entire manual carefully to make sure that you are thoroughly acquainted with the model.
- This instruction manual is for both the Pro-X Sport and Team Buggies. Differences in assembly or parts will be noted as: (Team Buggy Only).
- If for any reason you think this model may not be for you, return it immediately. **Please Note:** Your hobby dealer cannot accept a model kit for return after assembly has begun.
- The Pro-X is easy to assemble, yet utilizes some of the most sophisticated designs in R/C buggy racing. If you follow the instructions closely, the Kyosho Pro-X will provide many years of exciting, competitive R/C electric buggy racing.

LOCATING BAGGED PARTS

This Kyosho instruction manual uses a cross reference system to help you locate all of the bagged parts. DO NOT open each bag and dump out the parts. Carefully remove the header card from the bag and discard the staple. Slip the header card into the bag or tape it to the outside of the bag so that the bag number shows. This will help you find parts when you need them.

**REMOVE THE
HEADER CARD**



**SLIP CARD
INTO BAG**



OR

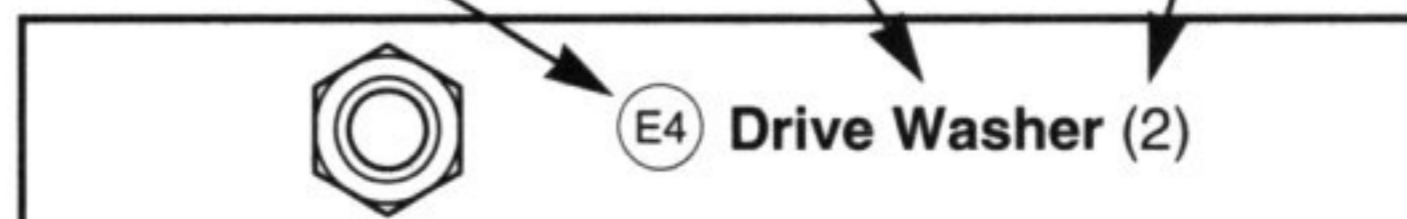
**TAPE TO
OUTSIDE**



PARTS IDENTIFICATION

On page 23-27 of this instruction manual, you will find a complete list of replacement and optional parts. If you need to replace a part, consult this guide for the manufacturer's stock number for the items needed. In the left margin of each page of instructions you will find a directory of small parts that will be used in each step. For ease of identification, these parts are shown actual size, enabling you to place the part directly on the picture to ensure you have selected the appropriate part.

Key Number Part Name Quantity Used

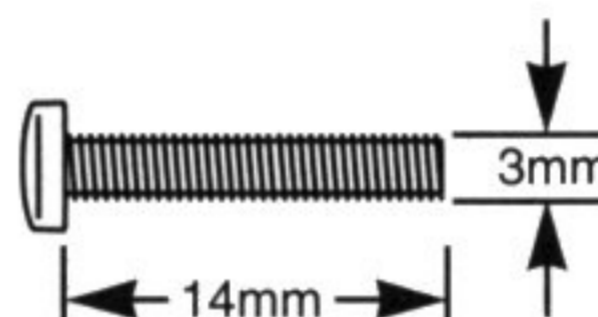


Note: Some parts are identified with a key number (E4). The 'E' stands for parts tree 'E'. The 4 is the part number on the tree.

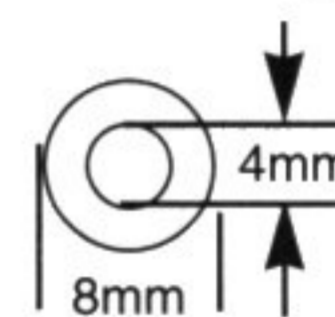
METRIC SCREW IDENTIFICATION

All nuts and bolts used throughout this kit are metric size. Therefore, some of the notations may not be familiar to you. An M3 nut is a 3 millimeter (3mm) nut. An M3 x 14 screw is 3mm in diameter and 14mm long. Some round parts may be labeled as an "M3 Washer" (a washer with a 3mm inside diameter) or an "M4 x 8 Bushing" (a bushing with a 4mm inside diameter and an 8mm outside diameter). A few different types of screws are used in the construction of your model. Here are some examples and how they will be indicated in the instructions. On page 22 inch and millimeter rulers are provided.

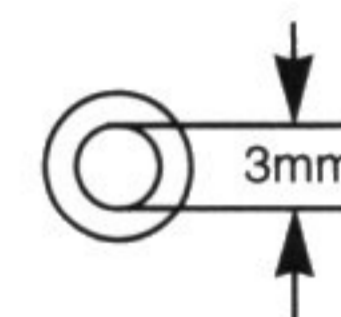
M3x14 Screw

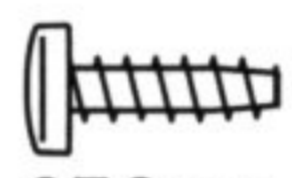
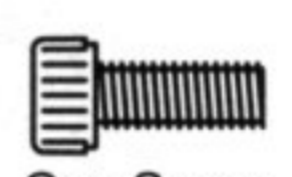
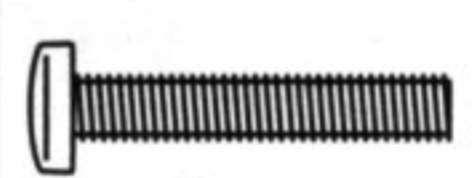




Bushing



M3 Washer

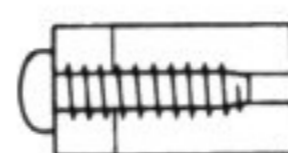


 S/T Screw	A self tapping (S/T) screw has a coarse thread and is used to thread into plastic. Be careful not to tighten the screw too much. This may strip the plastic.
 Cap Screw	A cap screw is used where two pieces of metal are to be joined. The hex head allows a hex wrench to be used, providing more torque for tightening.
 Screw	Screws have a fine thread and are used with nuts most of the time. They are for high stress joints where strength is required.
 F/H Screw	Flat head (F/H) screws have a fine thread and a tapered head. This allows the head of the screw to be flush with the part it is holding so that the screw head does not catch on anything.
 Set Screw	Set Screws have a hex head that requires a hex wrench. These are for joining parts where the head of a screw may interfere with other parts.

IMPORTANT SCREW INFORMATION:

Do not use excessive force when tightening self-tapping screws into plastic. Over tightening will cause the threaded portion of the plastic to strip. It is recommended to stop tightening when some resistance is felt as the head of the screw contacts the part. Avoid using power screwdrivers when assembling your kit. They tend to over tighten screws. Do not use screw cement (thread lock compound) on self-tapping screws. The screw cement may damage the plastic. Use screw cement (thread lock compound) only on screws that are fastened with a nut or threaded into a metal surface. Vibration may cause these screws to vibrate loose without screw cement.

CORRECT



INCORRECT



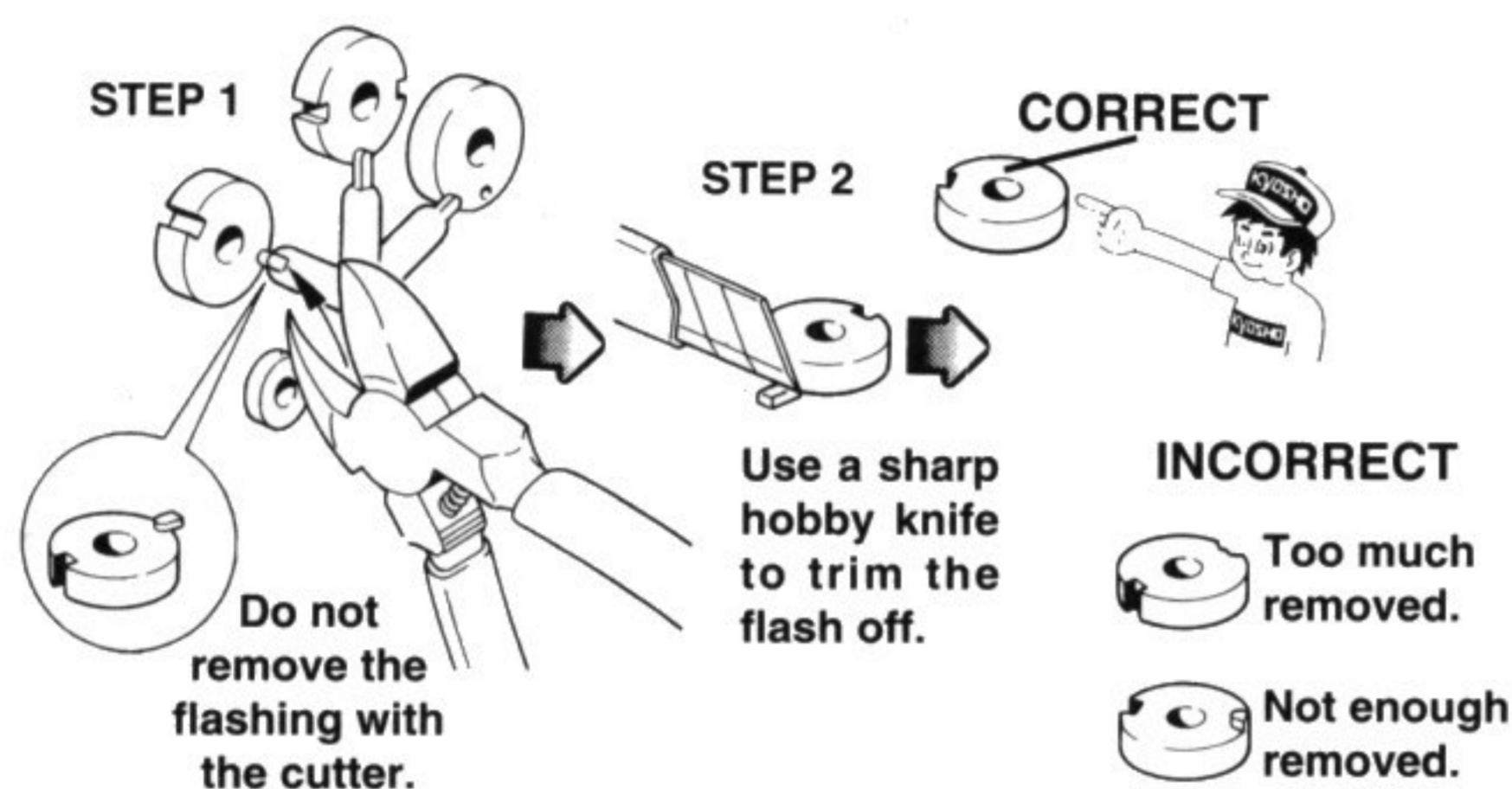
POWER SCREWDRIVER



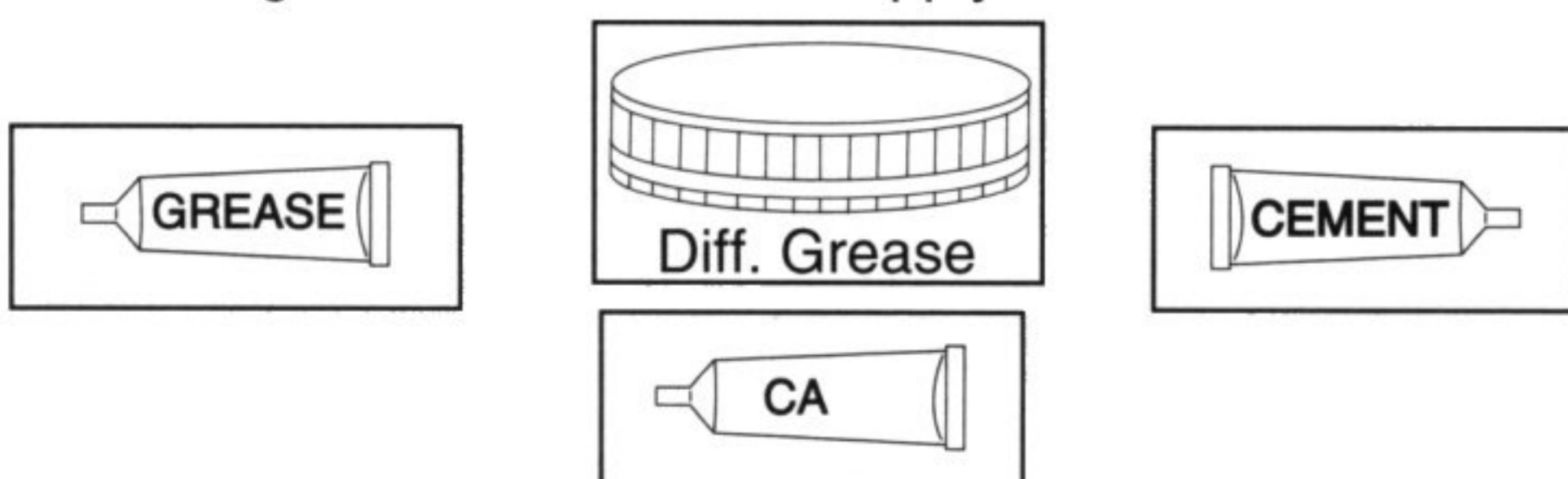
HELPFUL HINTS

Some precautions need to be observed when building your Pro-X to avoid problems:

- 1) Take your time and read the instruction manual thoroughly.
- 2) Try to avoid working over a deep pile carpet. In the event that a small part or screw should fall onto the carpet, it would be difficult to find.
- 3) Place a mat or towel on the work surface where you will be building the kit. This will prevent parts from rolling off and will protect the work surface at the same time.
- 4) Avoid getting products like motor cleaner or screw cement on the plastic parts. They can melt the plastic, which will damage the model.
- 5) Avoid running the model in very cold temperatures. Both plastic and metal parts become brittle at low temperatures. In addition, grease and oil become thick, causing premature wear and poor performance.
- 6) Remove all flashing from parts before assembly as shown in the example below.



- 7) Trial fit all parts to ensure proper fit before attaching them permanently.
- 8) **IMPORTANT!** Note the Grease, Differential Grease, Screw Cement and Instant Glue (CA) symbols used throughout the manual and apply where shown.

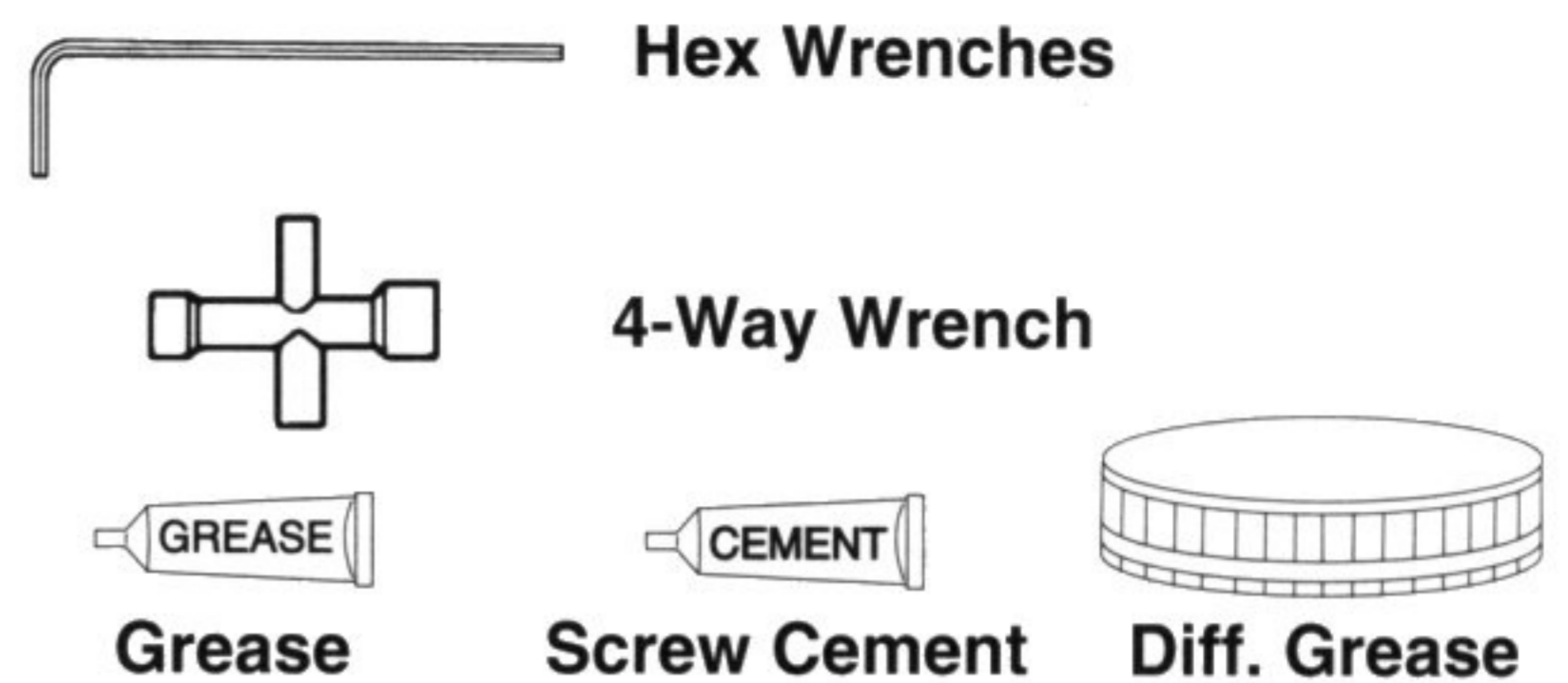


RECYCLE

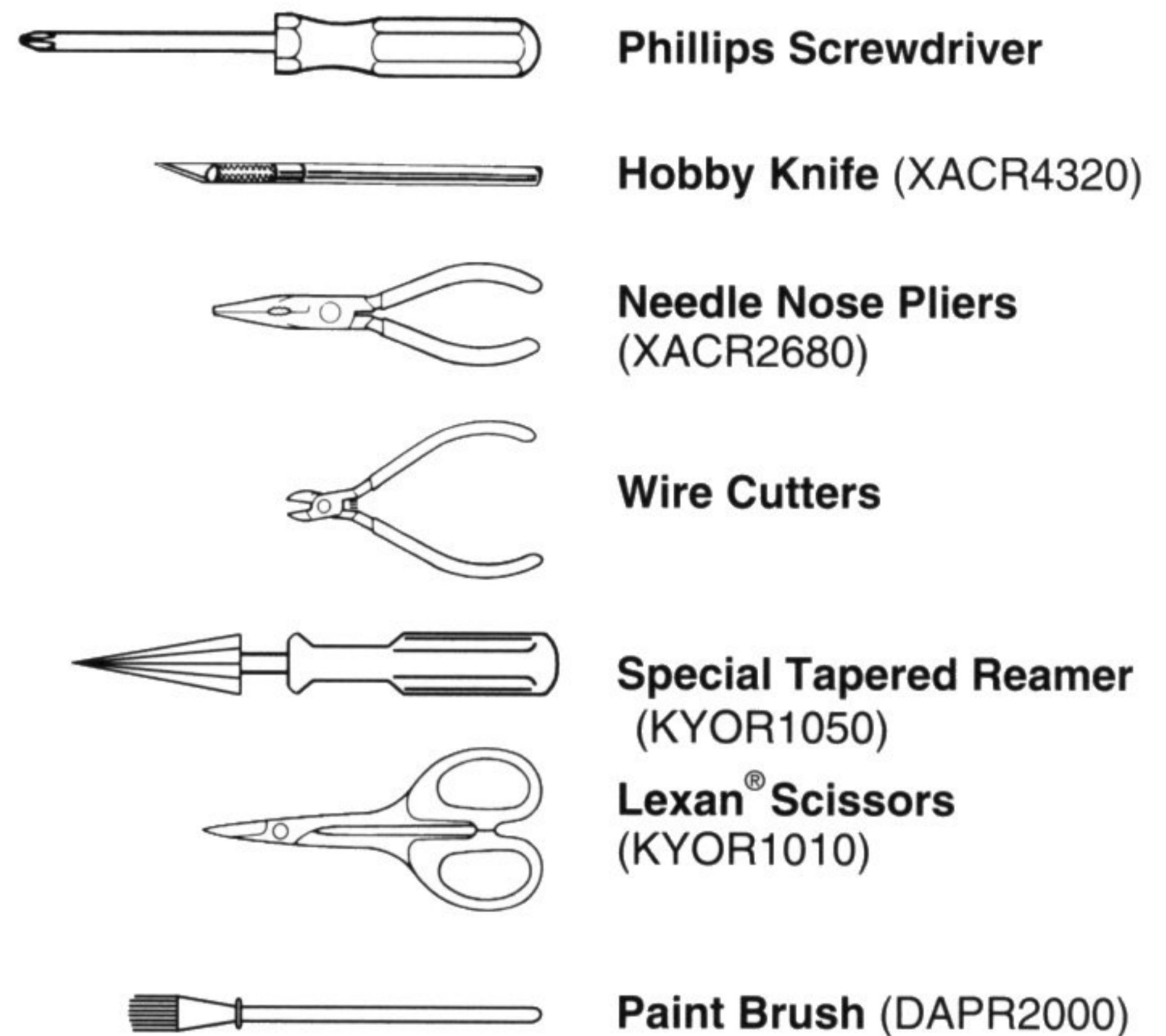
ATTENTION: The product you have purchased is powered by a rechargeable battery. The battery is recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Check with your local solid waste officials for details in your area for recycling options or proper disposal.

REQUIRED TOOLS

THESE ARE INCLUDED IN THE KIT.



THESE ARE NOT INCLUDED IN THE KIT.



Cyanoacrylate Glue (Such as Top Flite® Supreme™ CA)

Paint (Ask your hobby dealer for polycarbonate paint)

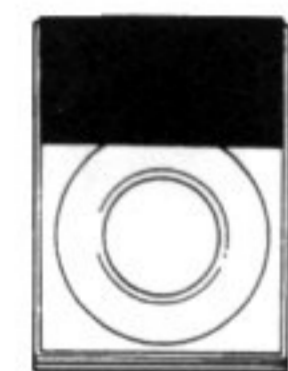
Striping Tape (Such as Kyosho® Micron Line Tape)



(TOPR1002)



(KYOR2000 series of paints)



(KYOQ1100 .4mm Black)
(KYOQ1101 .7mm Black)

THESE ITEMS ARE REQUIRED TO RUN THE Pro-X

- 2-Channel Radio
- Batteries for the radio system (8 AA Batteries)
- 7.2V NiCd Battery
- Battery Charger (Hobbico® 905 AC/DC Multi-charger HCAP0150)
- Electronic Speed Control (DuraTrax M5 DTXM1010)
- LeMans Stock 05 motor (KYO1922) is recommended for the sport buggy. An 18 x 2 motor is recommended for the team buggy.

WARRANTY INFORMATION

- For 90 days after you purchase your Pro-X, Kyosho will either repair or replace, at no charge, any incorrectly made part.
- Make sure you **SAVE THE RECEIPT OR INVOICE** you were given when you bought your model! It's your proof of purchase - and we must see it before we can honor the warranty.
- To send your Pro-X in for repairs covered under warranty, you should send your buggy to Kyosho's authorized U.S. repair facility:

Hobby Services
1610 Interstate Drive
Champaign, Illinois 61821
Attn. Service Department
Phone: (217) 398-0007 9:00 A.M. - 5:00 P.M. Central Time M-F

- For details on your return, be sure to follow steps 1-4 under the "Repair Services Available Anytime" section.

Limit of our Liability:

Our liability under this warranty is limited to the repair or replacement by Hobby Services of defective parts and does not include cost of shipping to us. Hobby Services does pay the shipping expense to return warranty items to you.

Exclusion and/or Voidance of Warranty:

This warranty does not apply to damage or defects resulting from misuse, abnormal service, damage in shipment, damage resulting from a crash, or damage to the buggy caused by the batteries. The warranty is voided if the model is modified, altered, or repaired by anyone other than Hobby Services. This warranty gives you specific legal rights, and you may have other rights that vary from state to state within the U.S. We are sorry, but we cannot be responsible for crash damage and/or resulting loss of kits, motors, radios, accessories, etc.

REPAIR SERVICE

Repair Services Available Anytime:

- After the 90-day warranty has expired, you can still have your Pro-X repaired for a small charge by the experts at Kyosho's authorized U.S. repair facility, Hobby Services, at the address listed under Warranty Information.

- To speed up the repair process, please follow the instructions listed below:

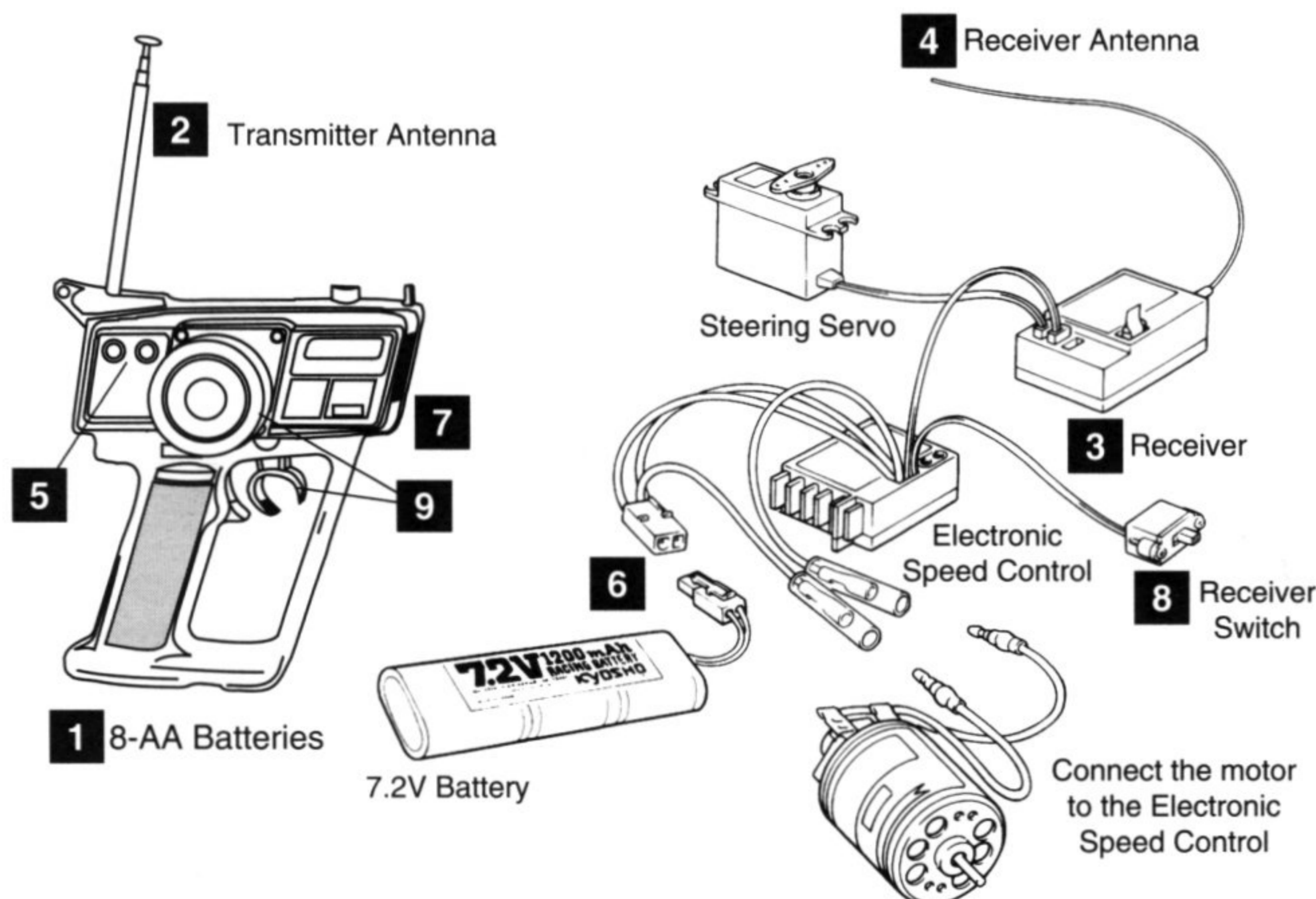
1. Under all circumstances, return the **ENTIRE** system: buggy and radio.
2. Make sure the transmitter is turned off and all batteries are disconnected.
3. Send written instructions which include: a list of all items returned, a **THOROUGH** explanation of the problem and the service needed, and your phone number where you can be reached during the day. If you expect your repair to be covered under warranty, be sure to include proof of date of purchase (your store receipt or purchase invoice).
4. Also include your full return address.

Repair charges and postage may be prepaid or billed C.O.D. All repairs shipped outside the United States must be prepaid in U.S. funds only.

Specification and Description Changes

All pictures, descriptions and specifications found in this instruction manual are subject to change without notice. Kyosho maintains no responsibility for inadvertent errors in this manual.

PREPARING THE RADIO SYSTEM



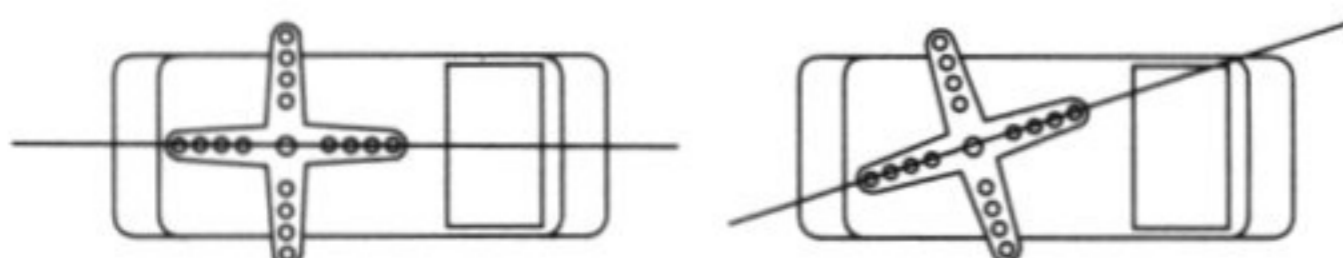
Set up the radio system and electronic speed control following the manufacturer's instructions and as explained below.

1. Install the batteries in the transmitter.
2. Extend the transmitter antenna.
3. Connect the steering servo, and electronic speed control to the receiver. Connect the motor to the electronic speed control.
4. Extend the receiver antenna.
5. Adjust the steering servo trim to the neutral position.
6. Connect the 7.2V battery to the speed control.
7. Turn the transmitter on.
8. Turn the receiver on.
9. Operate the steering and throttle control. Make sure the steering servo arm moves in proportion to the movement of the steering wheel and the motor operates in proportion to the throttle trigger. (Refer to the speed control instructions for proper adjustment).
10. Check that the steering servo is in the neutral position. See diagram at left.
11. Turn the receiver off, then the transmitter.

- 10** If the servo arm is not in the neutral position, remove the screw holding it, lift up on the servo arm, and reinstall it in the correct position.

CORRECT

INCORRECT



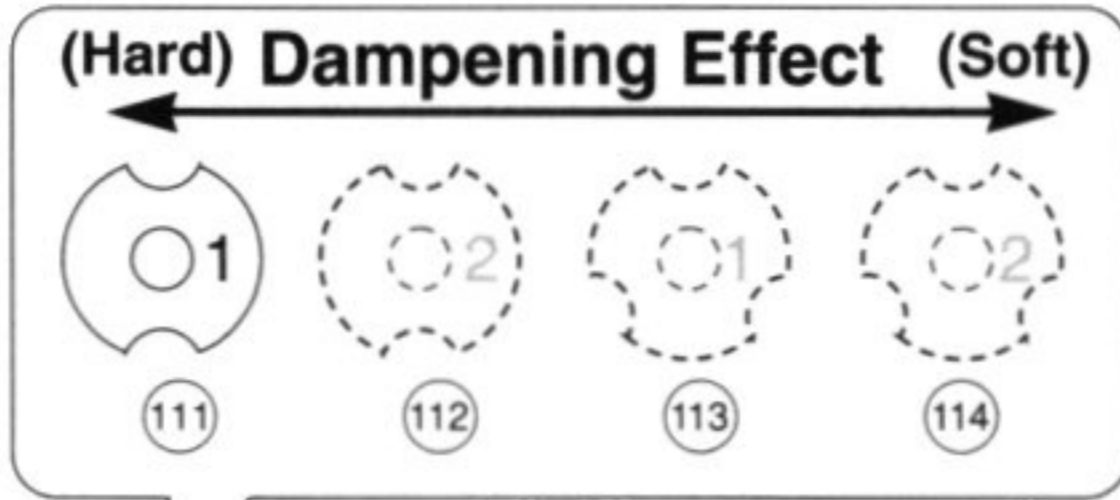
1 ASSEMBLE THE SHOCKS

Use parts from bag #1 and blister pack.

Assemble two front shocks (Medium) and two rear shocks (Long).

- ② E2.5 E-Ring (8)
- ⑦ O-Ring (blue) (8) (Team Buggy Only)
- ⑪⑤ M3 x 6 x 2 Collar (4) (Team Buggy Only)
- ⑪⑥ M3 x 7 x 1 Collar (4) (Team Buggy Only)
- ⑩ C-Ring (4) (Team Buggy Only)

Important: Make sure to trim the flashing from the shock pistons.

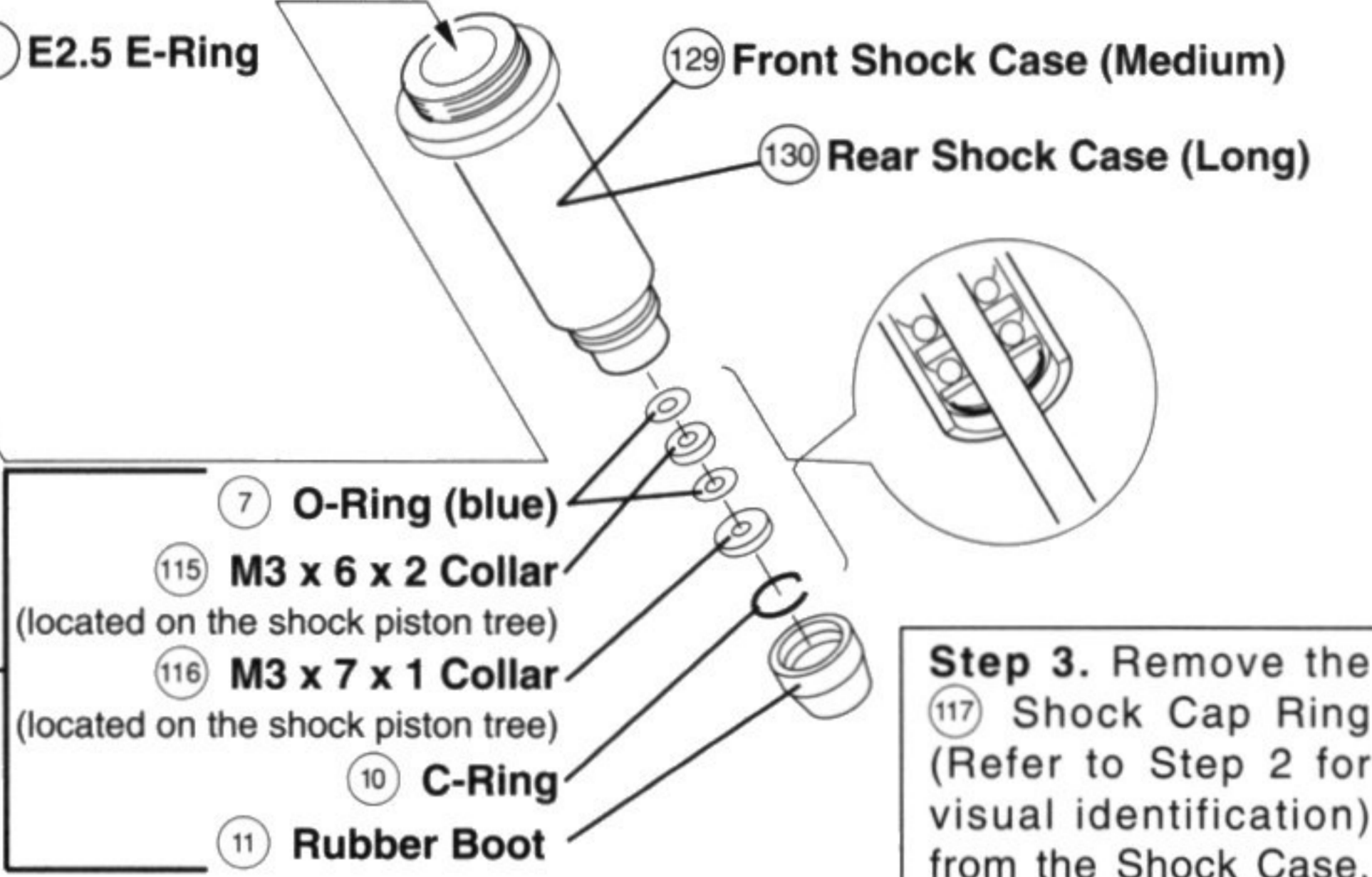


By using different shock pistons and weights of shock oil, the dampening effect of the shocks can be adjusted for the different types of tracks. We recommend starting with the hard piston and the shock oil that is included in this kit.

- ⑪① Shock Piston (Hard)
- ③ Front Shock Shaft (Medium)
- ④ Rear Shock Shaft (Long)

Step 1. Use needle nose pliers to snap the ② E2.5 E-Ring into the bottom groove of the Shock Shaft. Slide the ⑪① Shock Piston onto the Shock Shaft, then install the top ② E2.5 E-Ring.

Step 2. (Team Buggy Only) To help the O-rings and collars slide in easier, apply a light coat of shock oil to the collars and O-rings before installing.



Note: Use needle nose pliers to install the ⑩ C-ring into the groove inside the Shock Case.

Step 3. Remove the ⑪⑦ Shock Cap Ring (Refer to Step 2 for visual identification) from the Shock Case. Apply a light coat of oil to the Shock Shaft before installing the shock shaft into the shock case.

Team Buggy Only

2 FILL THE SHOCKS WITH OIL

Use parts from bag #1.

Use the chart below to determine what shock oil is required to produce different dampening effects. The shaded block is the oil included in this kit.

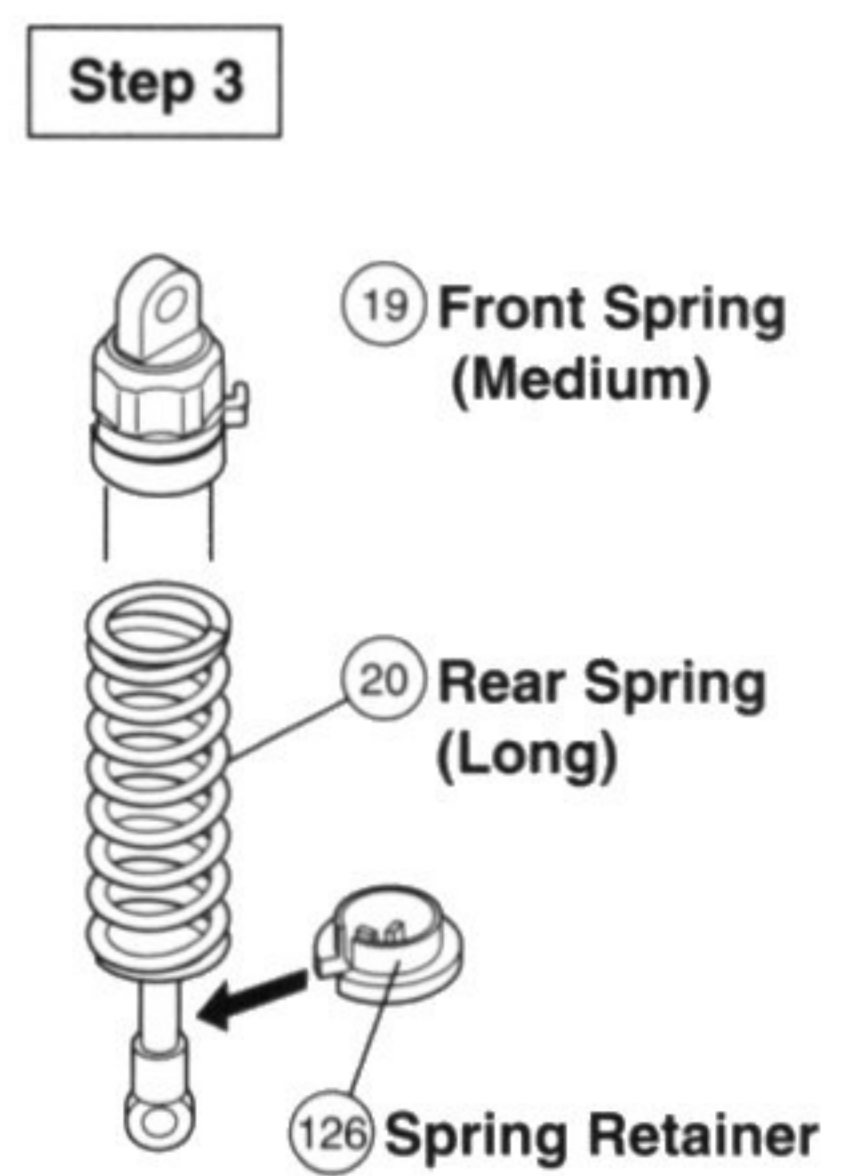
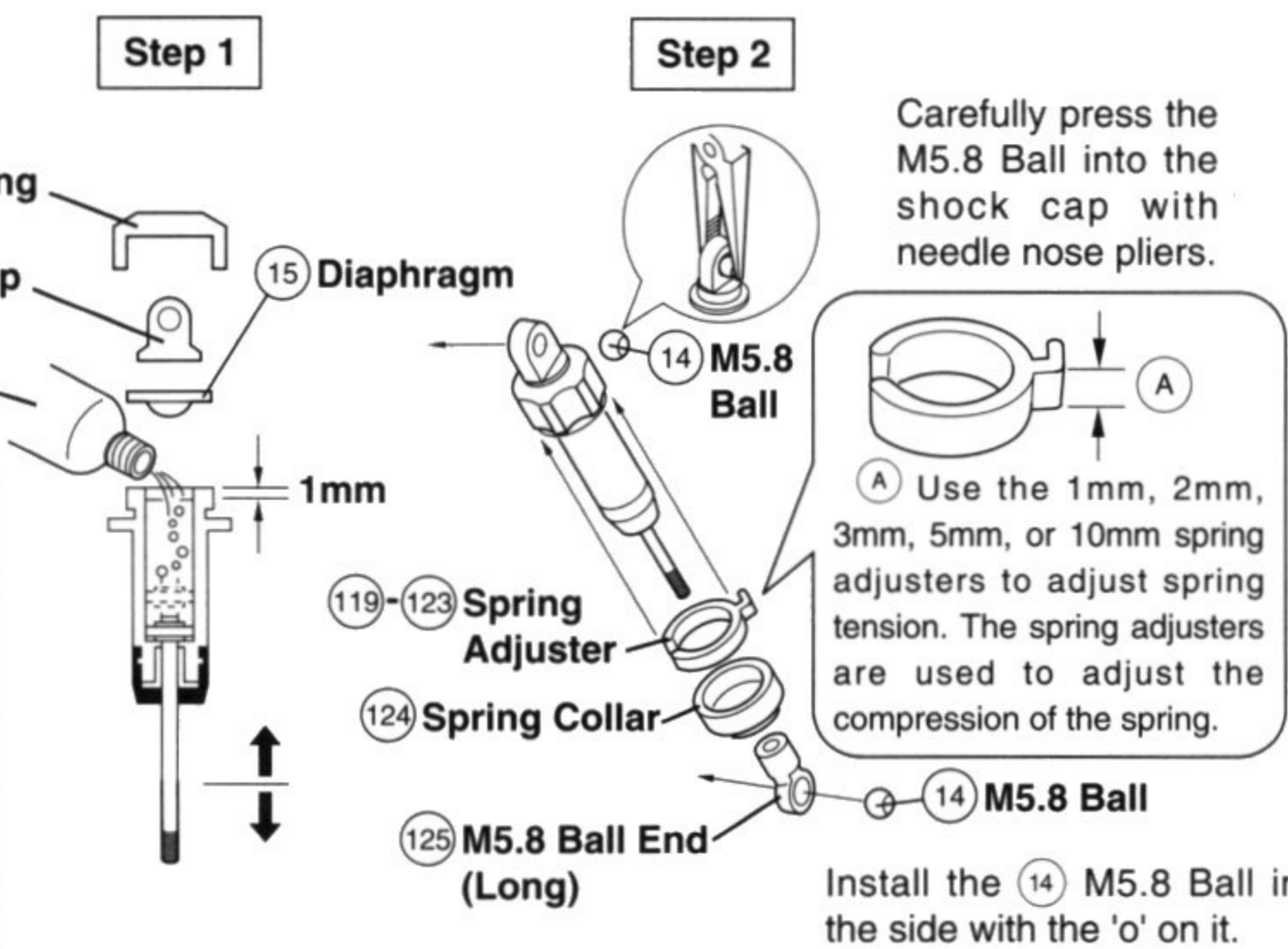
Relative viscosity of Kyosho shock oils.

Kyosho Oil Sets	Thick ←				→ Thin				
#1953 Silicone Oil (soft)							200sc		100sc
#1954 Silicone Oil (med)			400sc		300sc				
#1955 Silicone Oil (hard)	600sc	500sc							
#1957 Silicone Oil Set					350sc		250sc		150sc

- ⑫④ M5.8 Ball (8)
- ⑫⑤ M5.8 Ball End (L) (4)

Assemble two front and two rear shocks.

Step 1. Pull the piston all the way down and gradually pour the shock oil in while moving the shock piston up and down to remove air bubbles. Fill the shock to within 1mm of being full. Place the ⑫⑤ Diaphragm on top of the shock case. Insert the ⑫⑧ Shock Cap into the ⑫⑦ Shock Cap Ring. Screw the shock cap ring on the shock case, allowing the excess shock oil to escape.



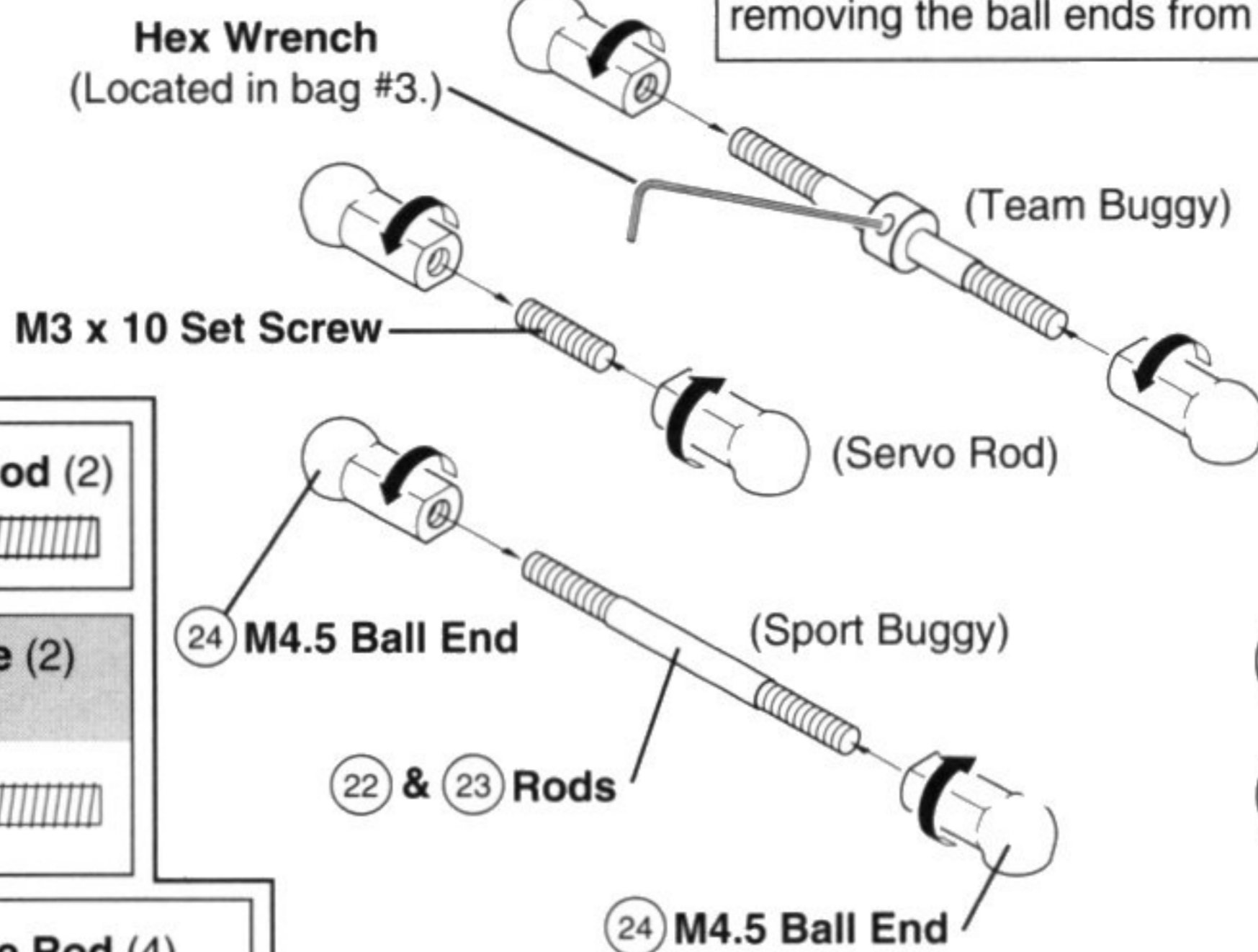
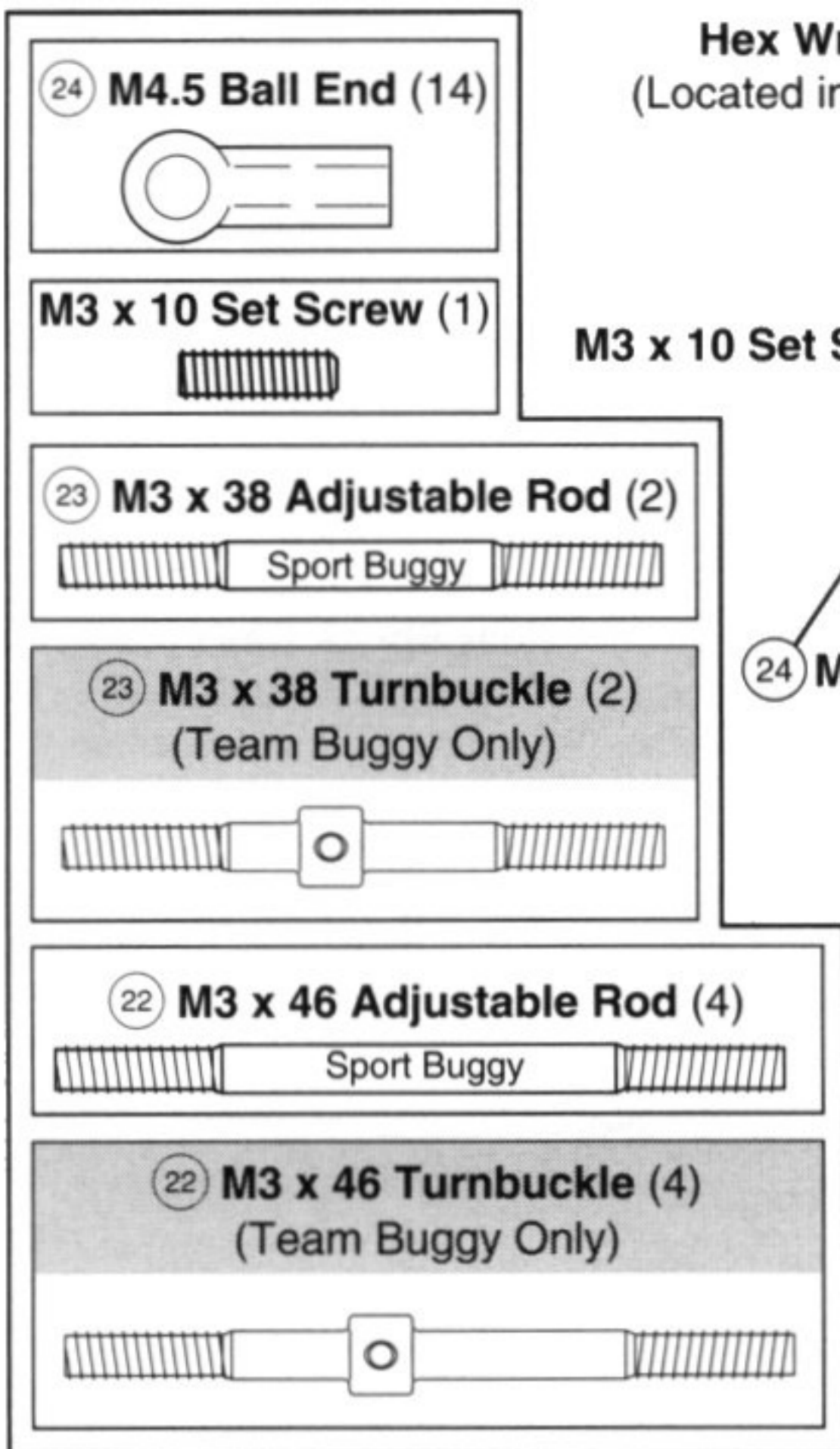
Step 2. Wrap a cloth or paper towel around the Shock Shaft to prevent scratches from the needle nose pliers. Hold the Shock Shaft with needle nose pliers while threading the ⑫⑤ M5.8 Ball End onto the shock shaft. Slide the spring adjuster, then the ⑫④ Spring Collar, onto the shock case. Press the ⑫④ M5.8 Ball into the ⑫⑧ Shock Cap and ⑫⑤ Ball End.

Step 3. Slide the shock spring over the shock case. Compress the shock spring and slide the ⑫⑥ Spring Retainer on the shock shaft.

3

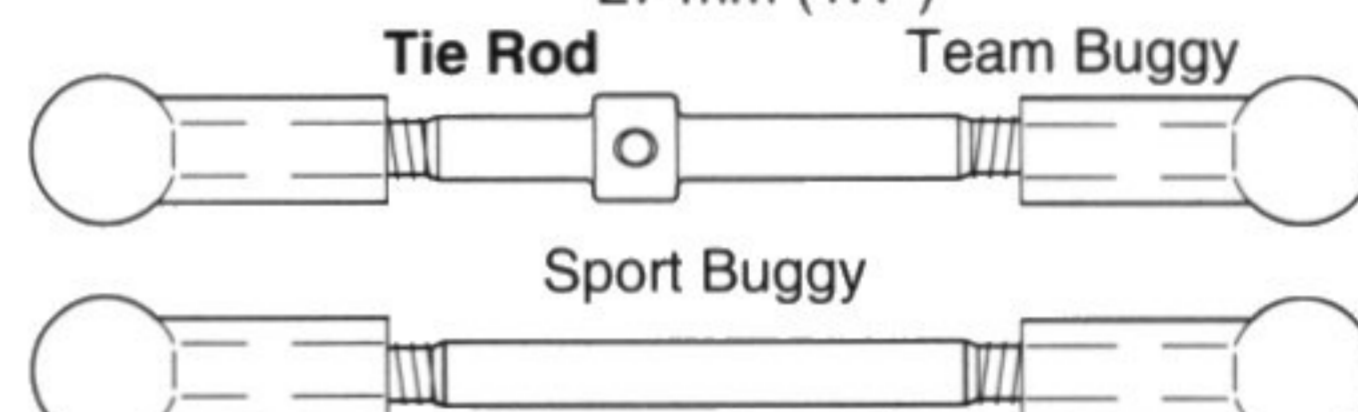
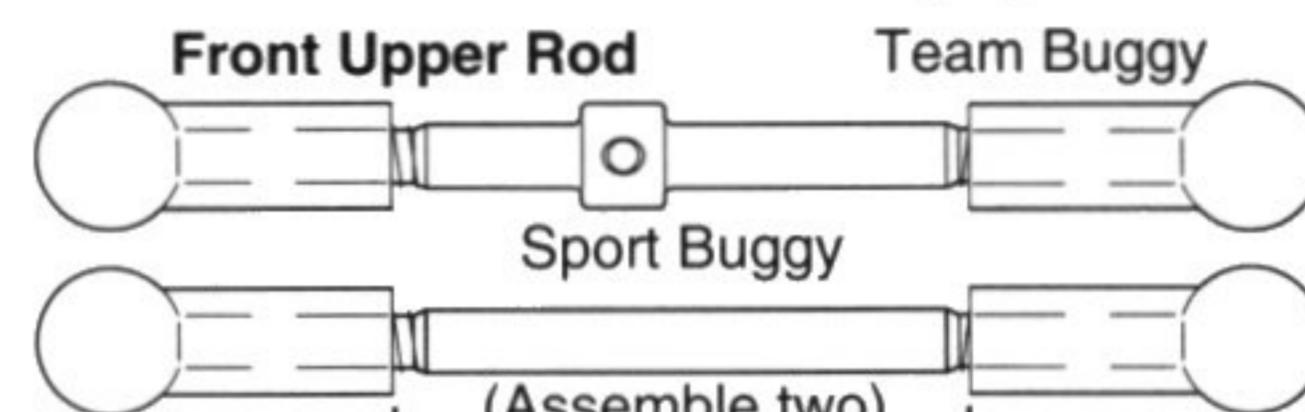
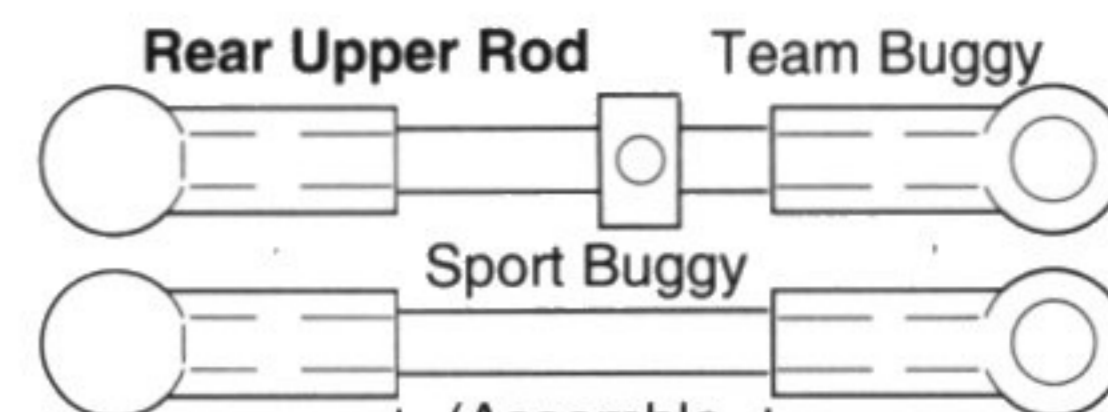
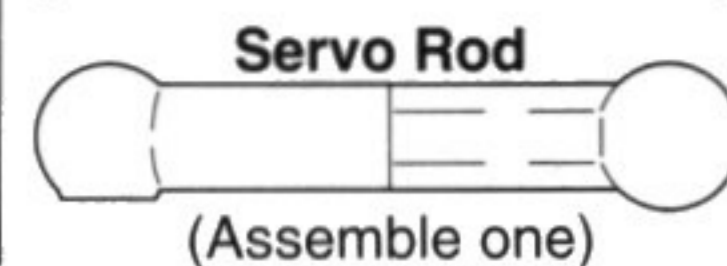
ASSEMBLE THE RODS

Use parts from bag #2.



(Team Buggy Only)
The 22 and 23 Turnbuckles have a reverse thread on one end. This allows the rod length to be adjusted without removing the ball ends from the pivot balls.

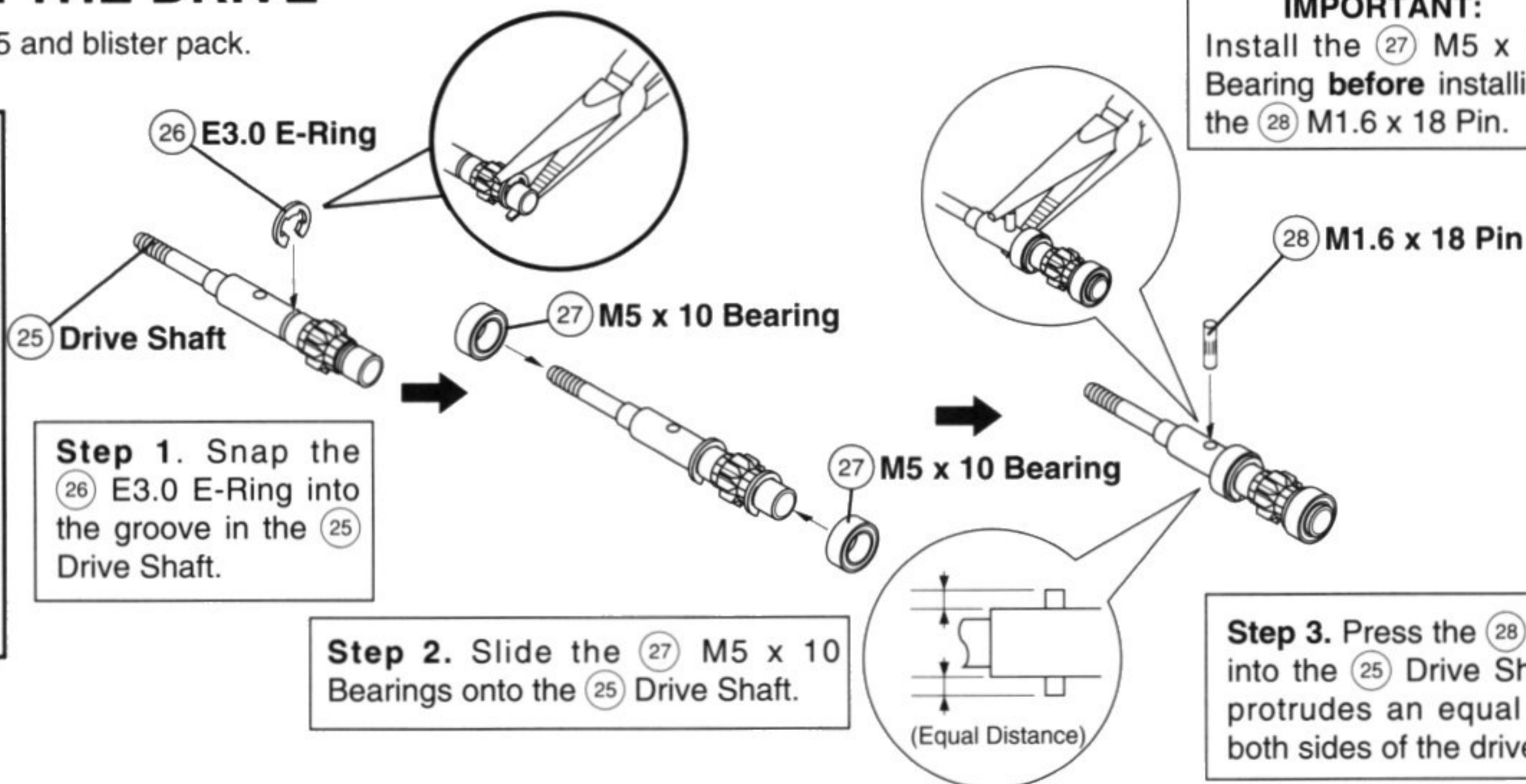
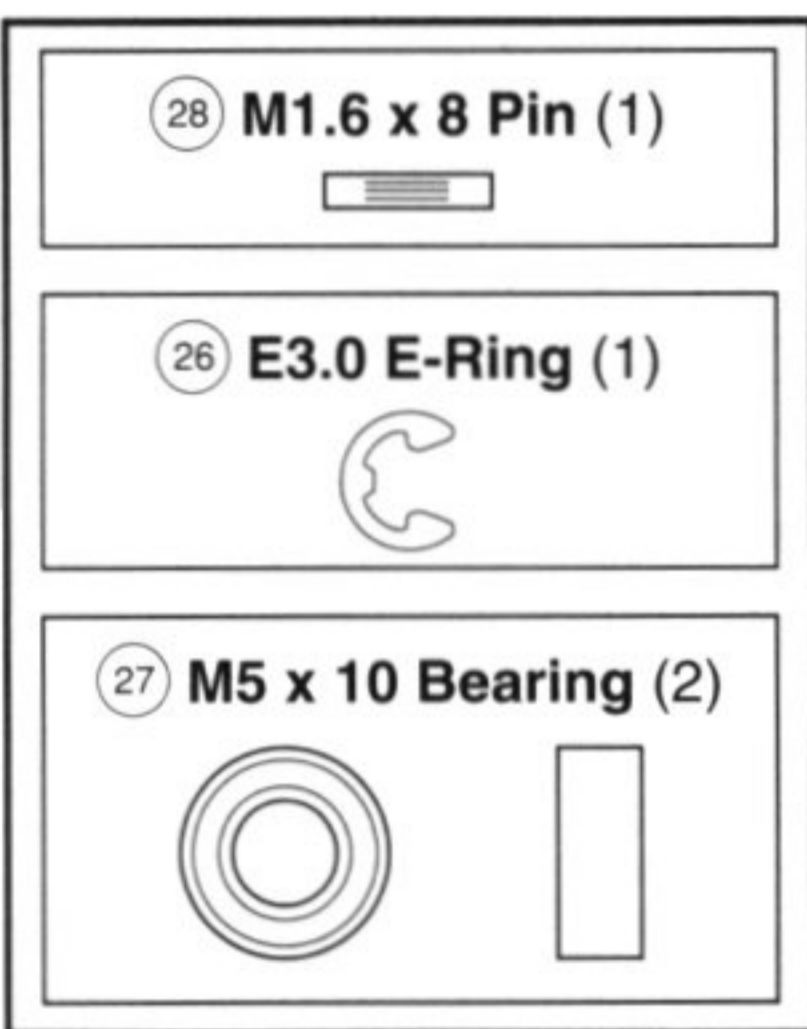
(Rods shown actual size)



4

ASSEMBLE THE DRIVE

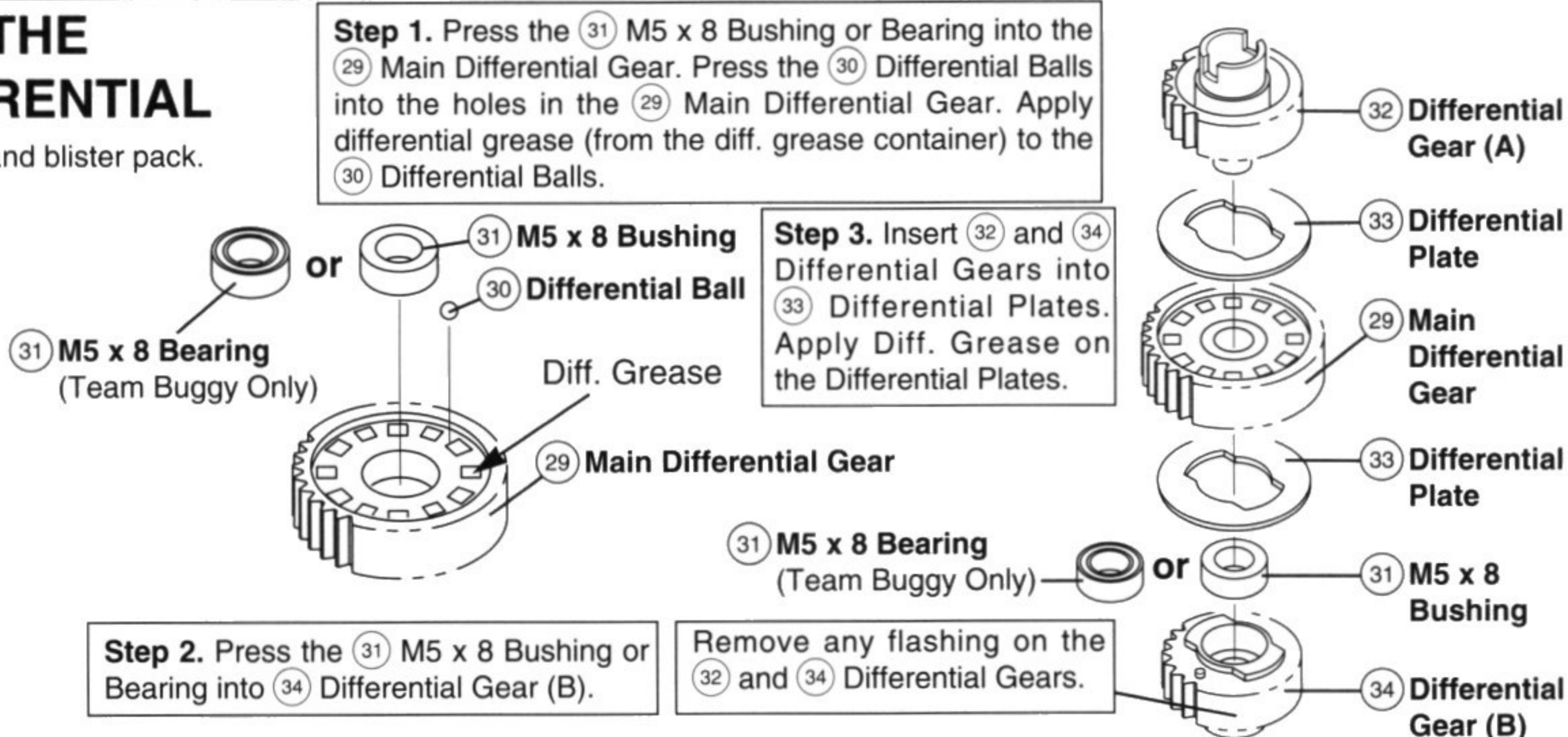
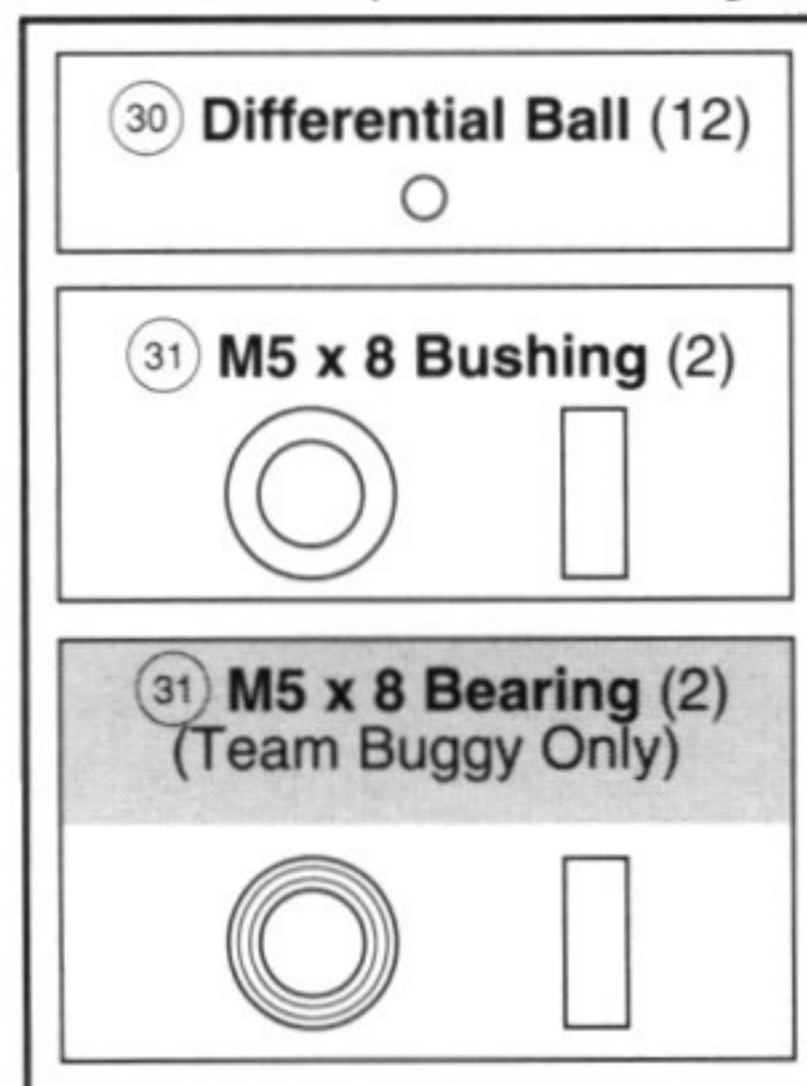
Use parts from bag #5 and blister pack.



5

ASSEMBLE THE BALL DIFFERENTIAL






Use parts from bag #5 and blister pack.



6

INSTALL THE DIFFERENTIAL NUT AND CAP SCREW

Use parts in bag # 5 and blister pack.

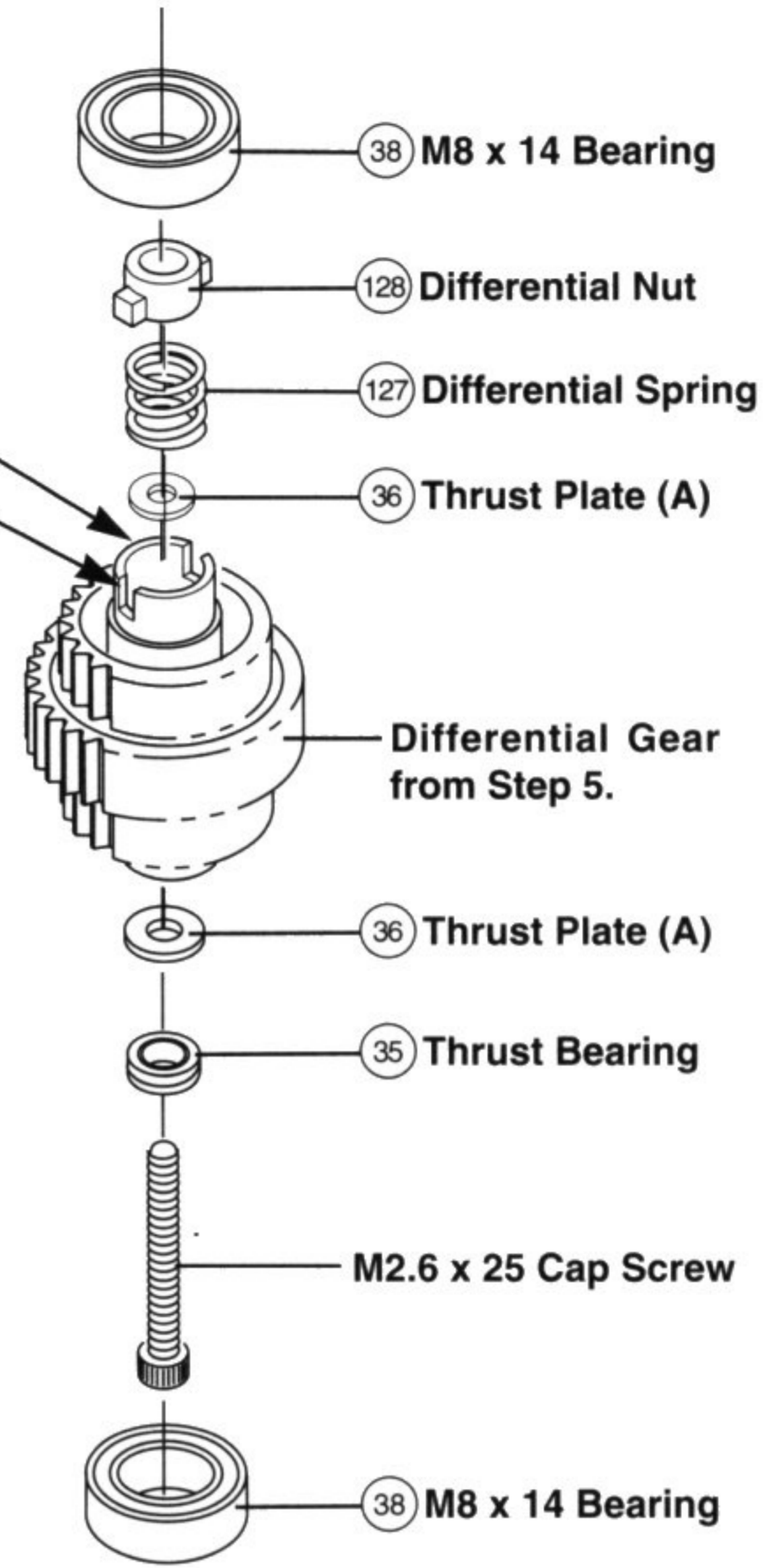
<p>35 Thrust Bearing (1)</p> 
<p>36 Thrust Plate (A) (2)</p> 
<p>127 Differential Spring (1)</p> 
<p>M2.6 x 25 Cap Screw (1)</p> 
<p>38 M8 x 14 Bearing (2)</p> 

Check that the tabs on the 128 Differential Nut are flush with the side of 32 Differential Gear (A). If not, file the tabs even with the side of the gear so that the 38 M8 x 14 Bearing slides on.

Slot for tabs on differential nut.

Ball Differential Adjustment

After the Ball Differential is assembled, thread the M2.6 x 25 Cap Screw into the 128 Differential Nut until the 127 Differential Spring is completely compressed. Do not overtighten the M2.6 x 25 Cap Screw. The Differential Spring will take a set (it will be about 2mm shorter than its original length when the tension is released). Loosen the M2.6 x 25 Cap Screw to release the tension on the Differential Spring, then retighten the M2.6 x 25 Cap Screw to completely compress the Differential Spring again. Loosen the M2.6 x 25 Cap Screw 1/2 turn to adjust the ball differential for high traction surfaces. If the track you will be racing on is slick, loosen the ball differential 1/8 turn more. Do not loosen the M2.6 x 25 Cap Screw more than one turn from its tight position or the ball differential will slip and possibly damage the gears.



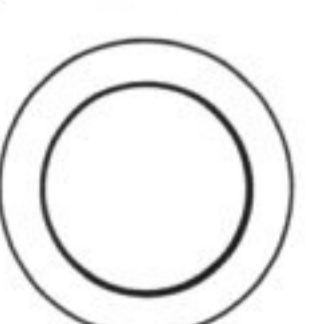

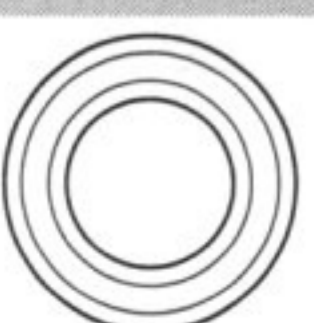


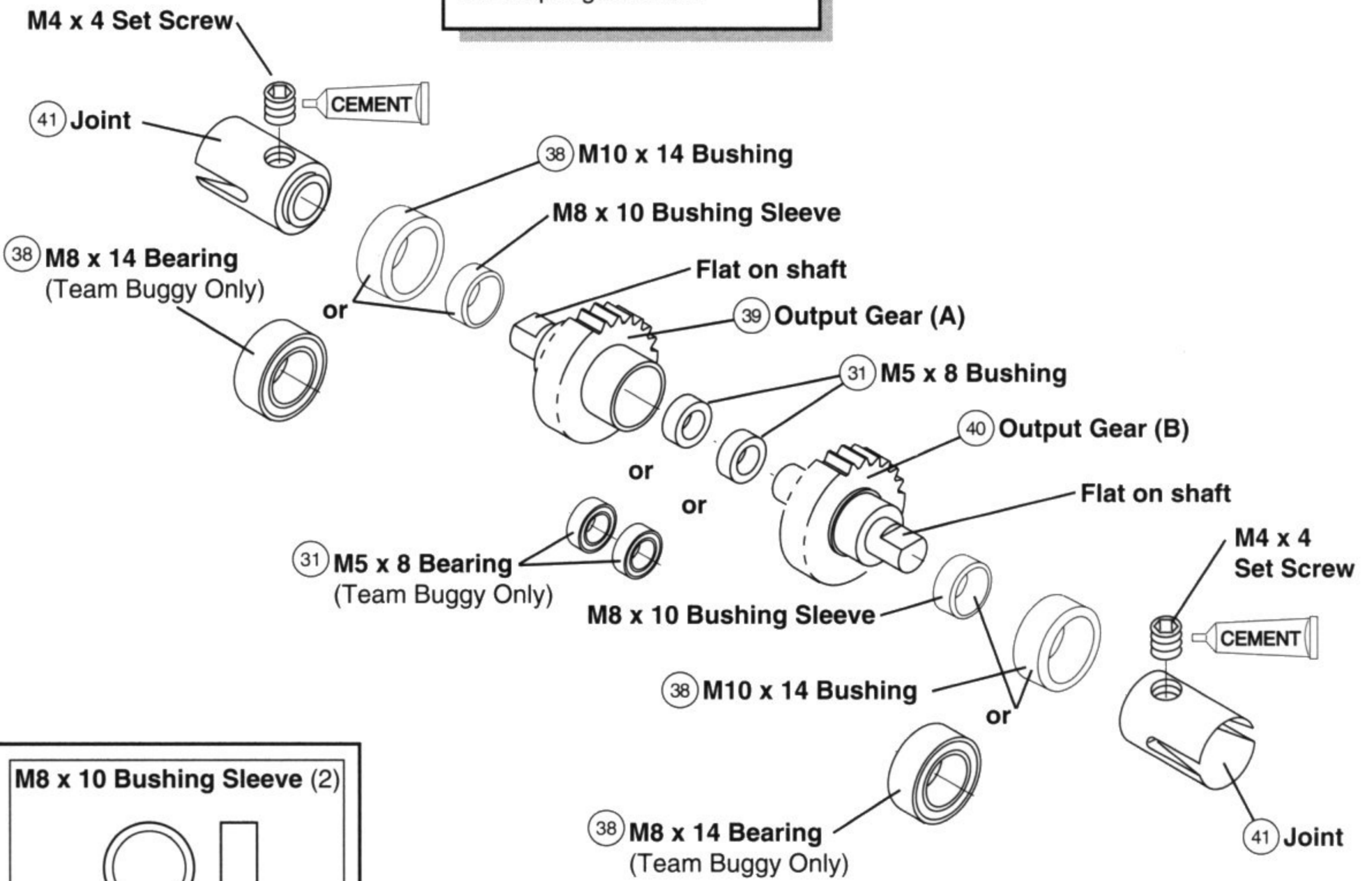
7

ASSEMBLE THE OUTPUT GEAR

Use parts in bag #5 and blister pack.

Important: Tighten the M4 x 4 set screw down on the flat of the output gear shaft.

<p>M4 x 4 Set Screw (2)</p> 
<p>31 M5 x 8 Bushing (2)</p> 
<p>38 M10 x 14 Bushing (2)</p> 
<p>31 M5 x 8 Bearing (2) (Team Buggy Only)</p> 
<p>38 M8 x 14 Bearing (2) (Team Buggy Only)</p> 

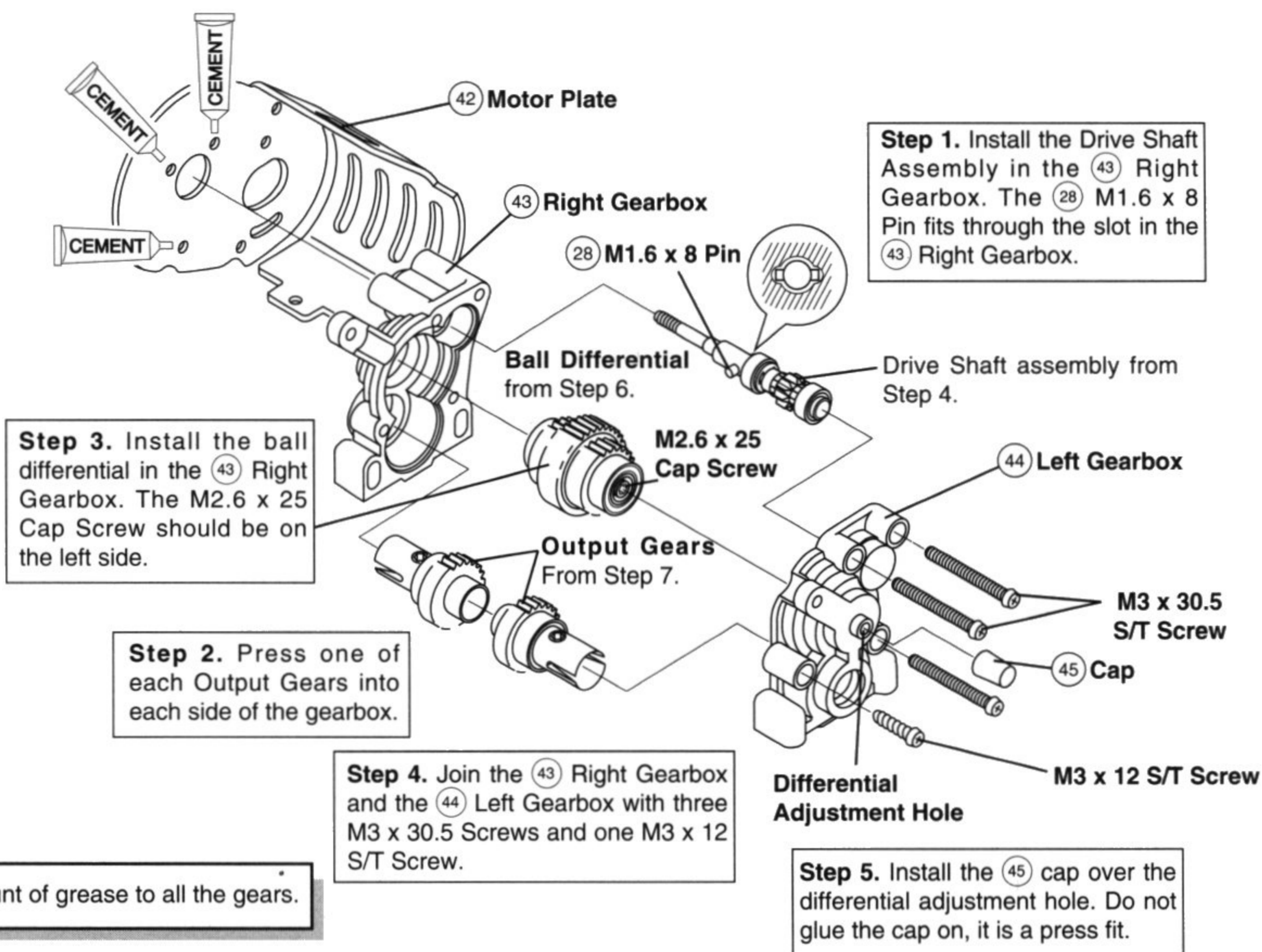


8

ASSEMBLE THE GEARBOX

Use parts from bag #5.

- M3 x 12 S/T Screw (1)
- M3 x 30.5 Screw (3)
- Cap (1)

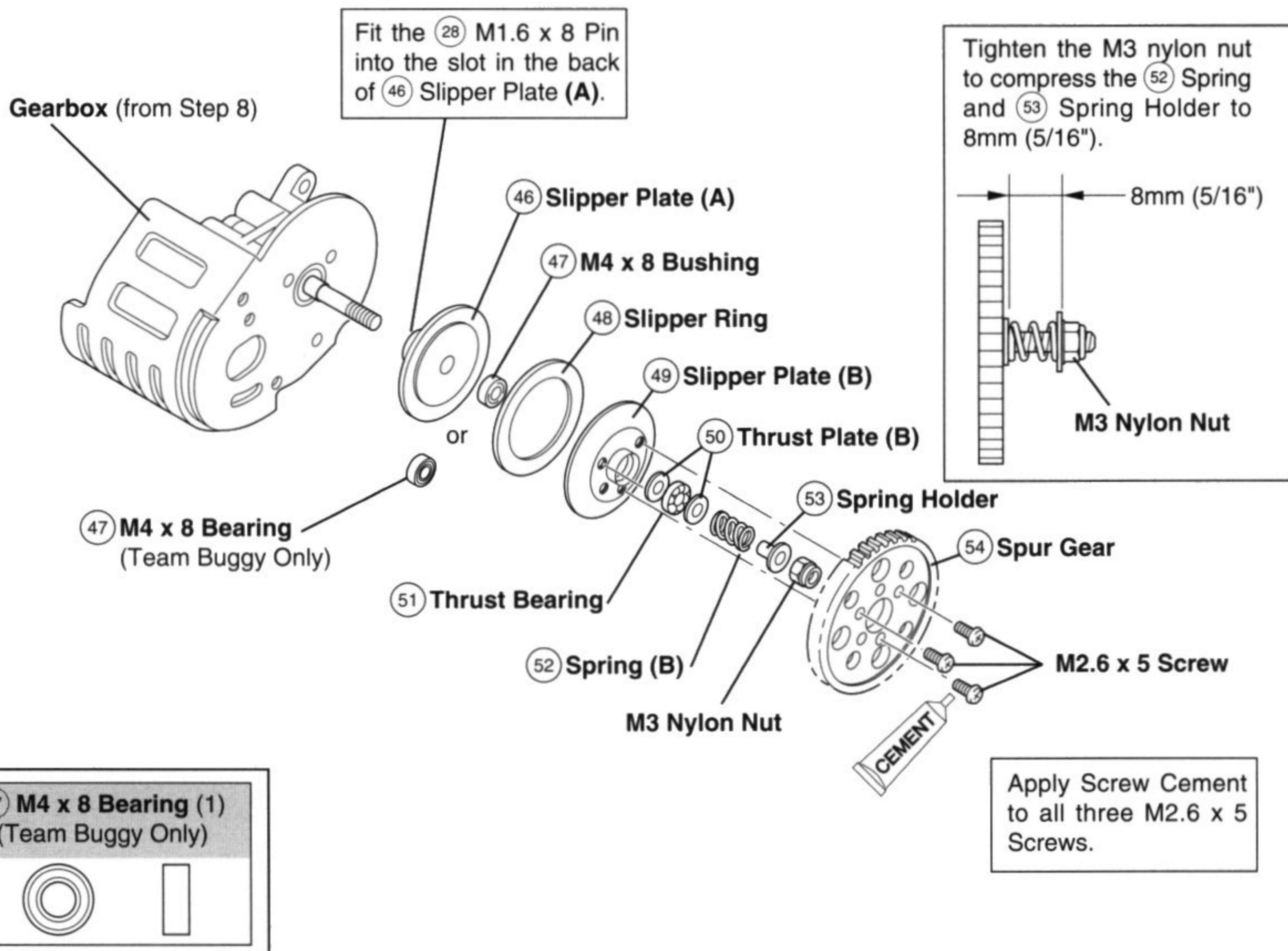


9

INSTALL THE LIMITED SLIPPER

Use bag #5 and blister pack.

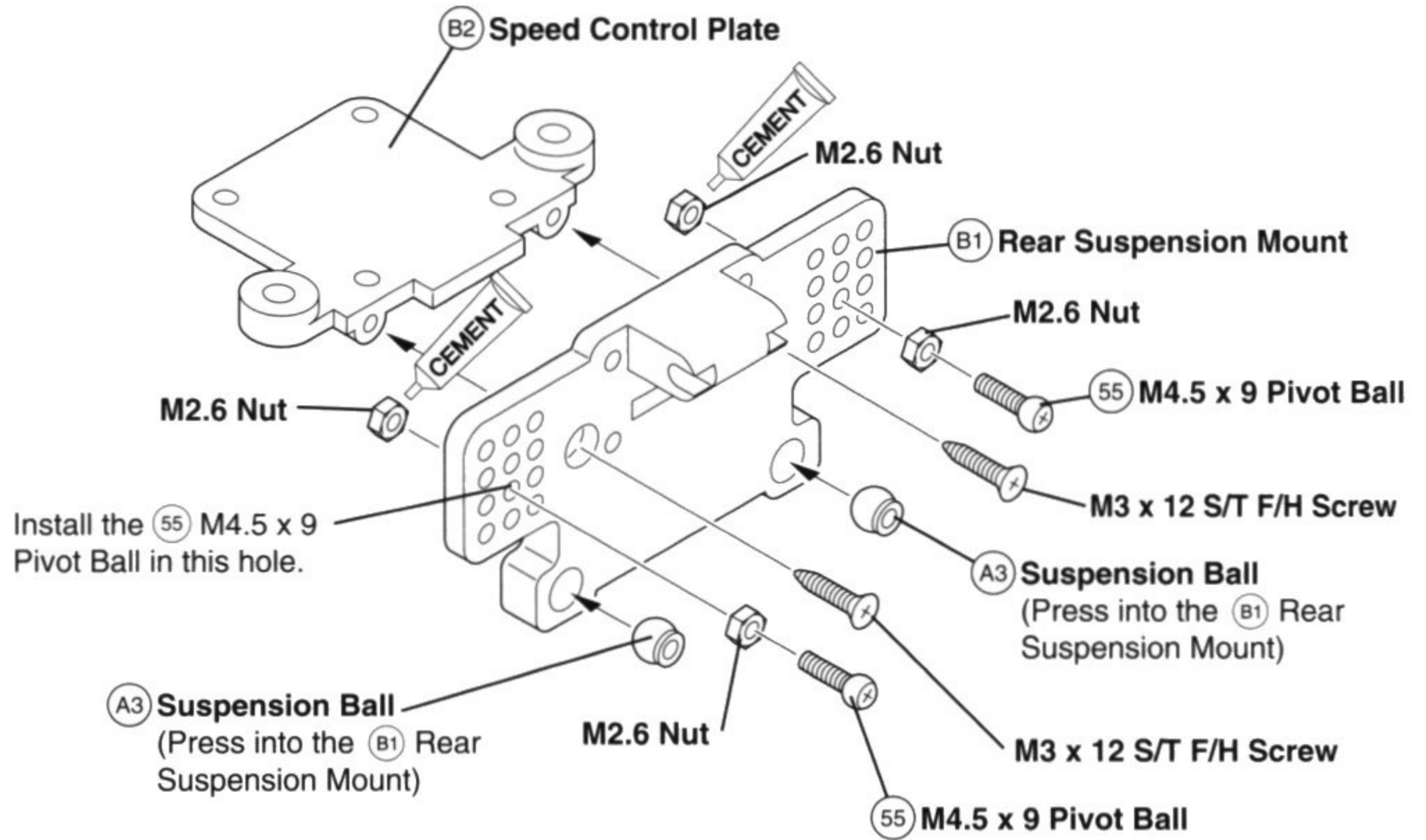
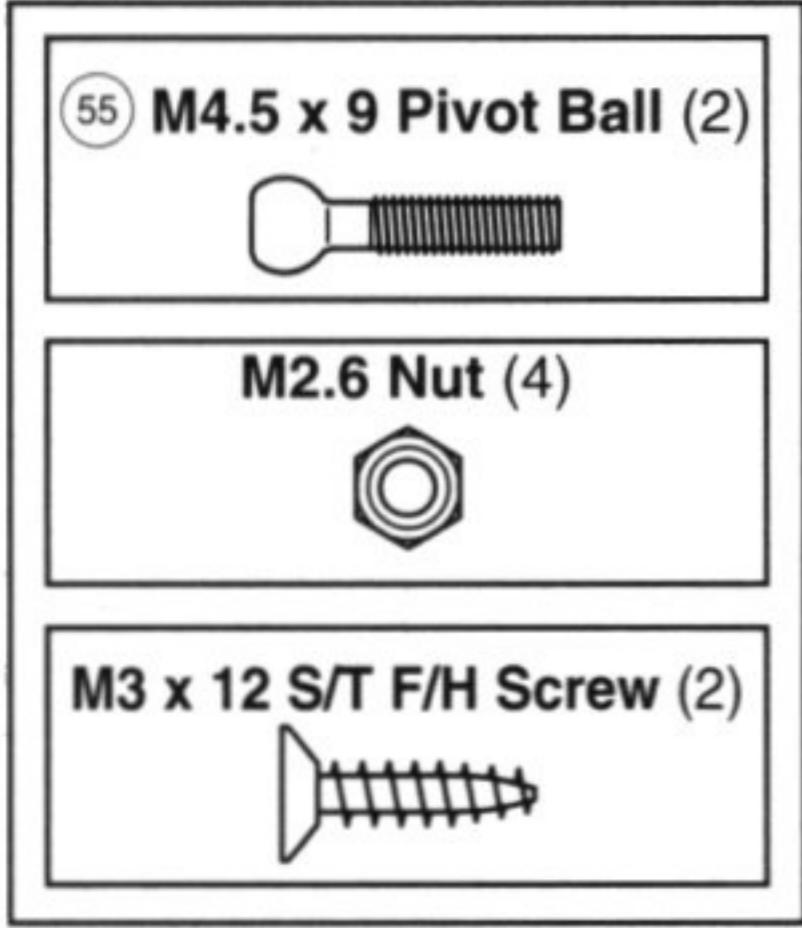
- M2.6 x 5 Screw (3)
- M3 Nylon Nut (1)
- (47) M4 x 8 Bushing (1)
- (50) Thrust Plate (B) (2)
- (51) Thrust Bearing (1)
- (52) Spring (B) (1)
- (53) Spring Holder (1)
- (47) M4 x 8 Bearing (1) (Team Buggy Only)



10

INSTALL THE SPEED CONTROL PLATE

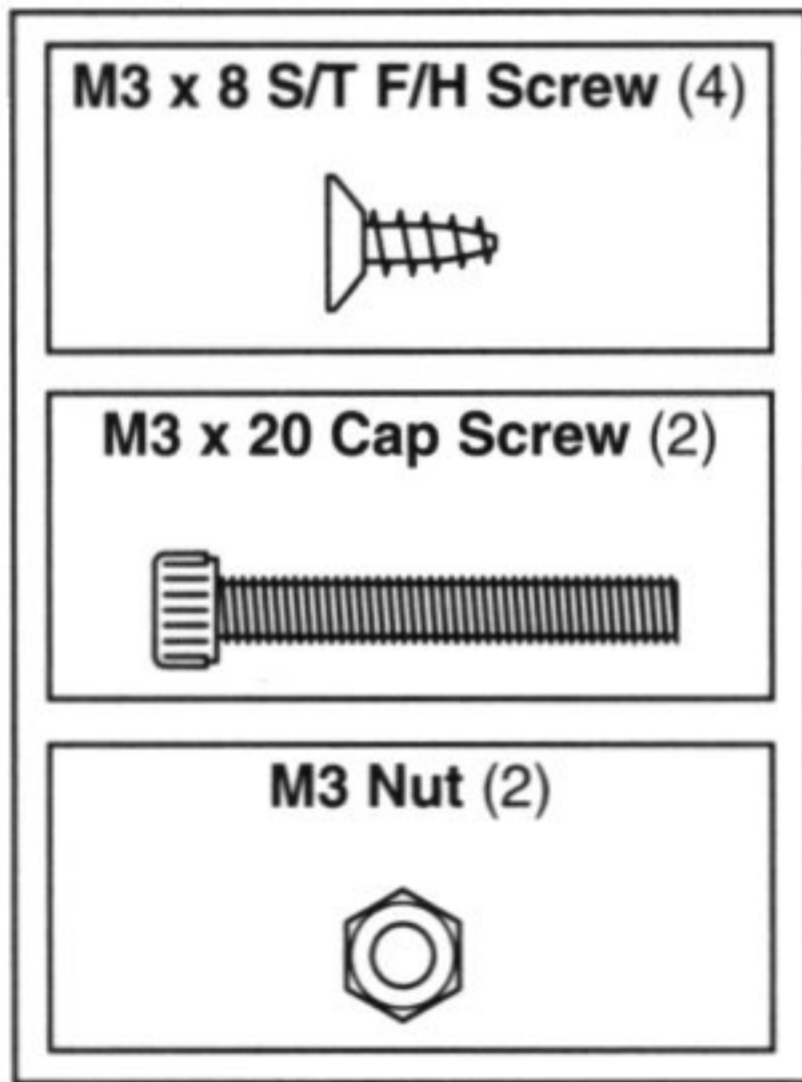
Use parts from bag #6.



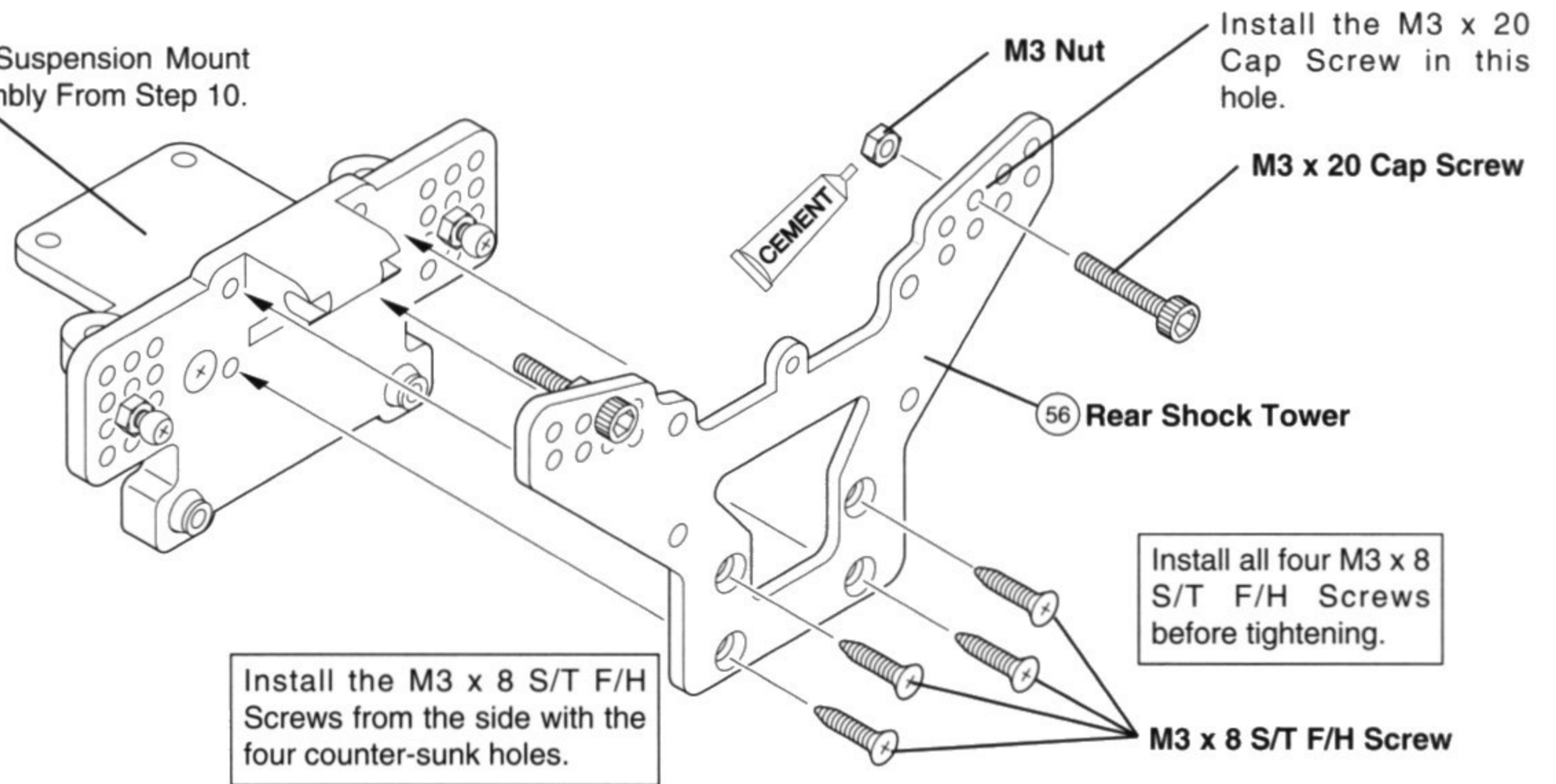
11

INSTALL THE REAR SHOCK TOWER

Use parts from bag #6.



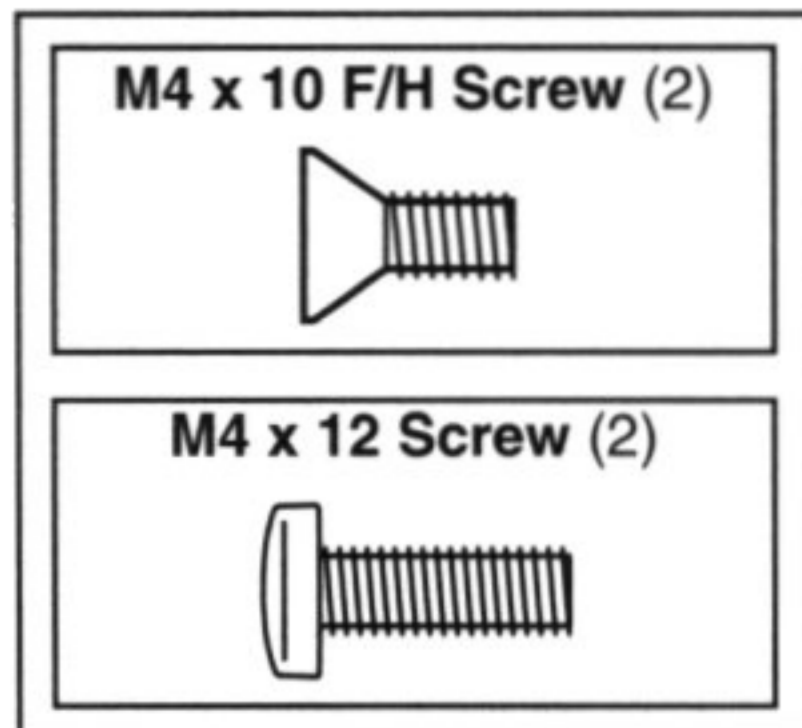
Rear Suspension Mount Assembly From Step 10.



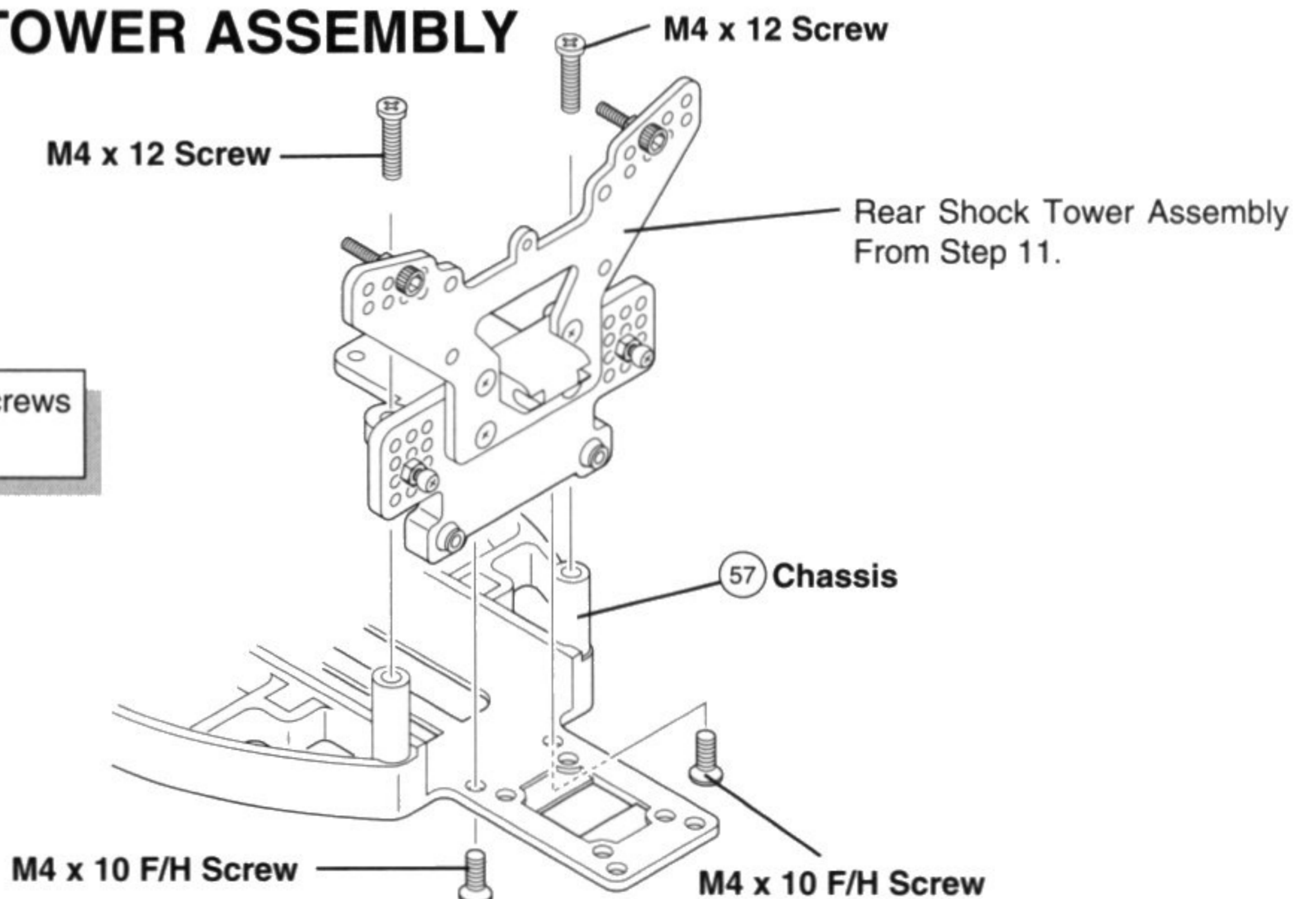
12

INSTALL THE REAR SHOCK TOWER ASSEMBLY

Use parts from bag #4 and #6.



Note: Install all four screws before tightening.



13

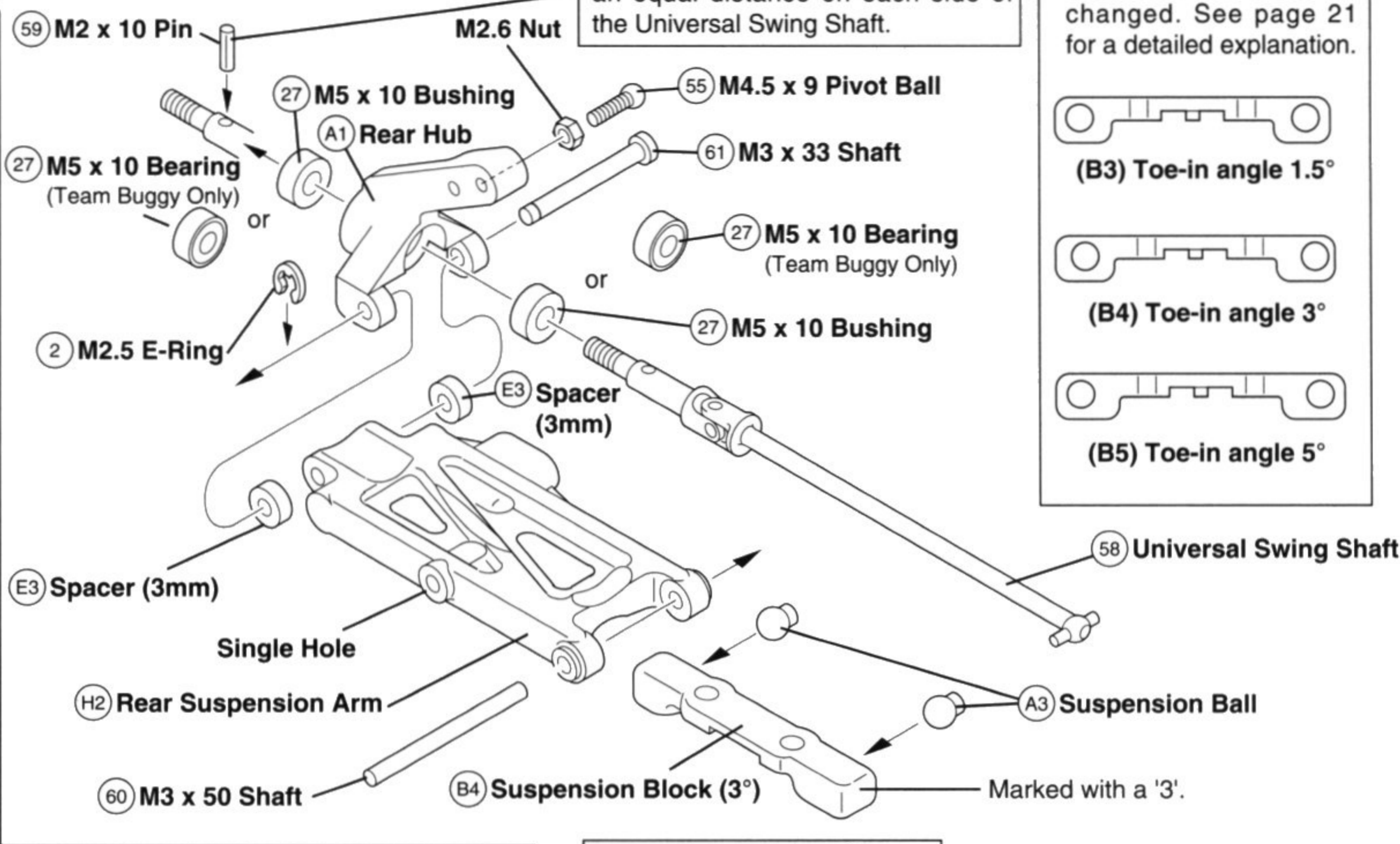
ASSEMBLE THE REAR SUSPENSION ARMS

Use parts from bag #2, #6 and the blister pack.

Press the Pin in so that it protrudes an equal distance on each side of the Universal Swing Shaft.

By installing different suspension blocks, the rear toe-in can be changed. See page 21 for a detailed explanation.

- 59 2mm x 10mm Pin (2)
- 2 E2.5 E-Ring (2)
- 55 M4.5 x 9 Pivot Ball (2)
- M2.6 Nut (2)
- 27 M5 x 10 Bushing (4)
- 27 M5 x 10 Bearing (4) (Team Buggy Only)
- 60 M3 x 50 Shaft (2)
- 61 M3 x 33 Shaft (2)



Note: The flat side of (A1) and (A2) Rear Hubs are on the same side as the single hole in the Suspension Arm.

Assemble the right Suspension Arm the same as the left.

14

INSTALL THE GEARBOX

Use parts from bag #5 and #6.

Assemble both sides the same

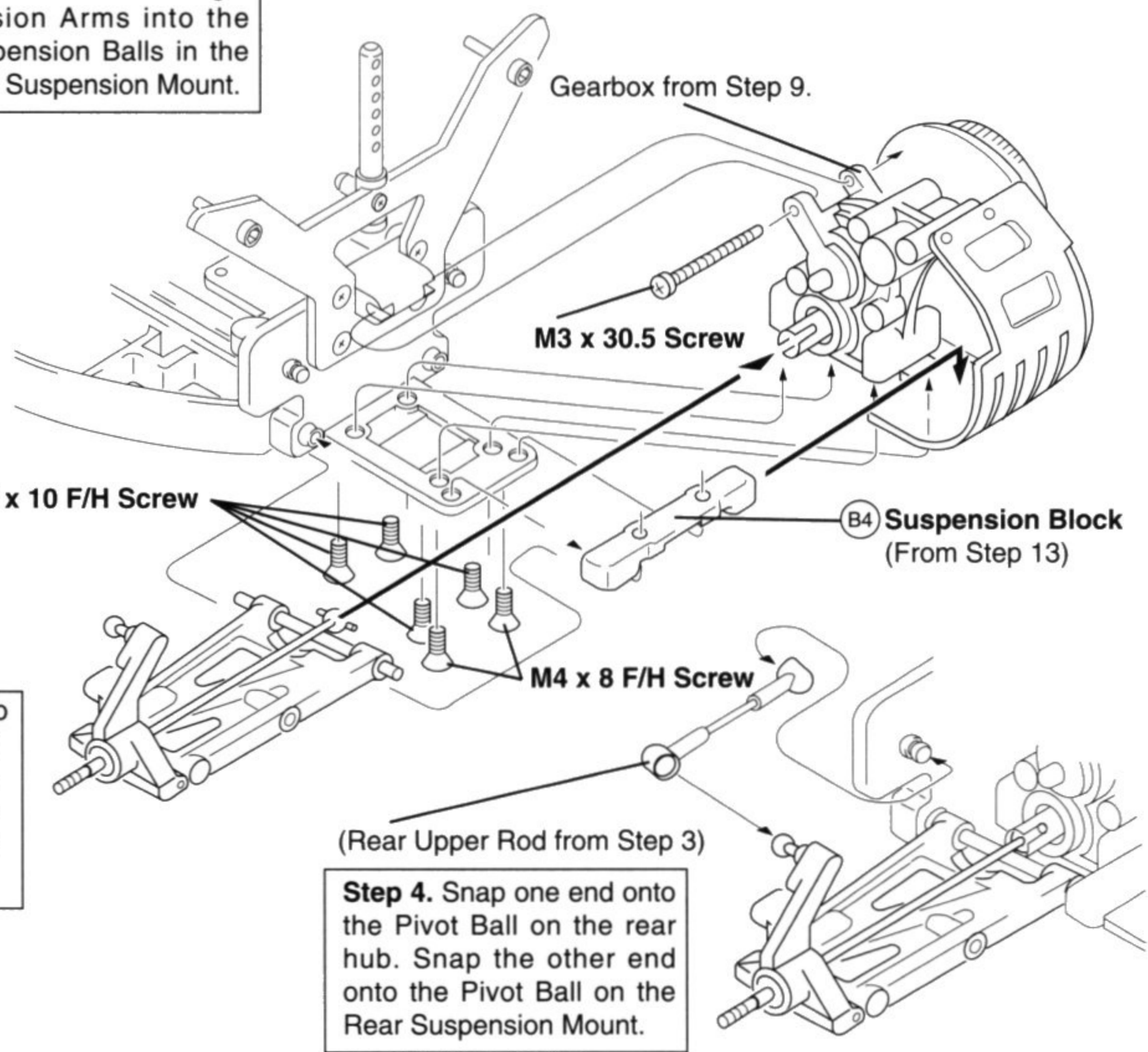
Step 2. Install the (B4) Suspension Block on the (42) Motor Plate so that the pin on the Suspension Block is in the hole in the Motor Plate.

- M4 x 8 F/H Screw (2)
- M4 X 10 Screw (4)
- M3 x 30.5 Screw (1)

Step 1. Slide the left and right Suspension Arms into the (A3) Suspension Balls in the (B1) Rear Suspension Mount.

IMPORTANT: Apply a bead of grease around the opening in the bottom of the gearbox to prevent dust from entering the gearbox.

Step 3. Slide the Gearbox assembly onto the chassis. The Rear Suspension Arms are inserted into the (A3) Suspension Balls in the (B4) Suspension Block. Secure the Gearbox and Suspension Block with the six Flat Head Screws before tightening.



Step 4. Snap one end onto the Pivot Ball on the rear hub. Snap the other end onto the Pivot Ball on the Rear Suspension Mount.

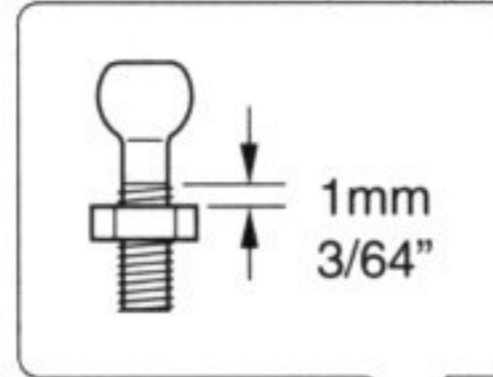
15

ASSEMBLE THE FRONT HUB

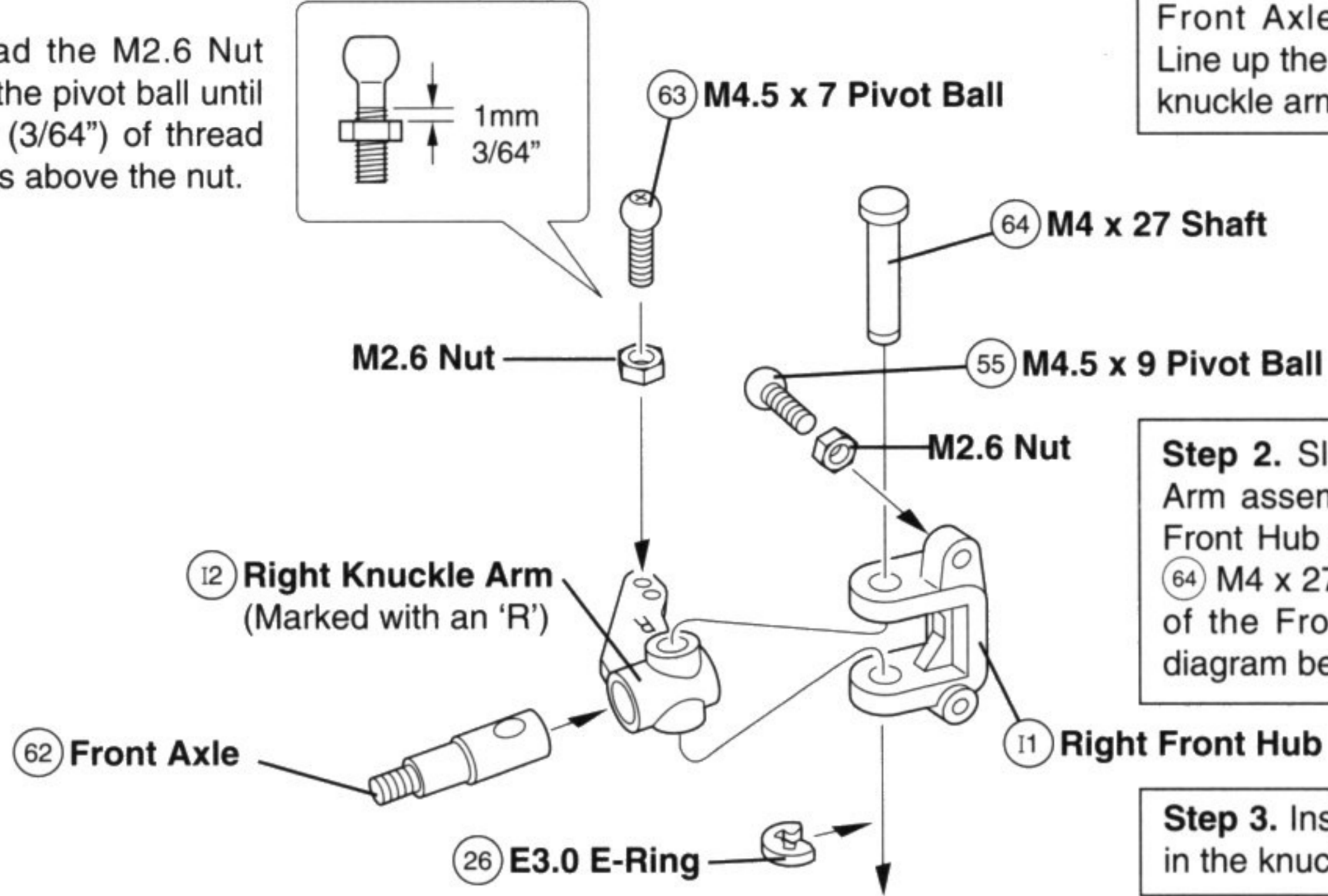
Use parts from bag #2 and blister pack.

- 63 M4.5 x 7 Pivot Ball (2)
- 55 M4.5 x 9 Pivot Ball (2)
- 26 E3.0 E-Ring (2)
- 64 M4 x 27 Shaft (2)
- M2.6 Nut (4)

Thread the M2.6 Nut onto the pivot ball until 1mm (3/64") of thread shows above the nut.



Right Knuckle Arm



Step 1. Install the 62 Front Axle in the 12 Right Knuckle Arm. The hole through the Front Axle is drilled off-set. Line up the hole in the axle and knuckle arm.

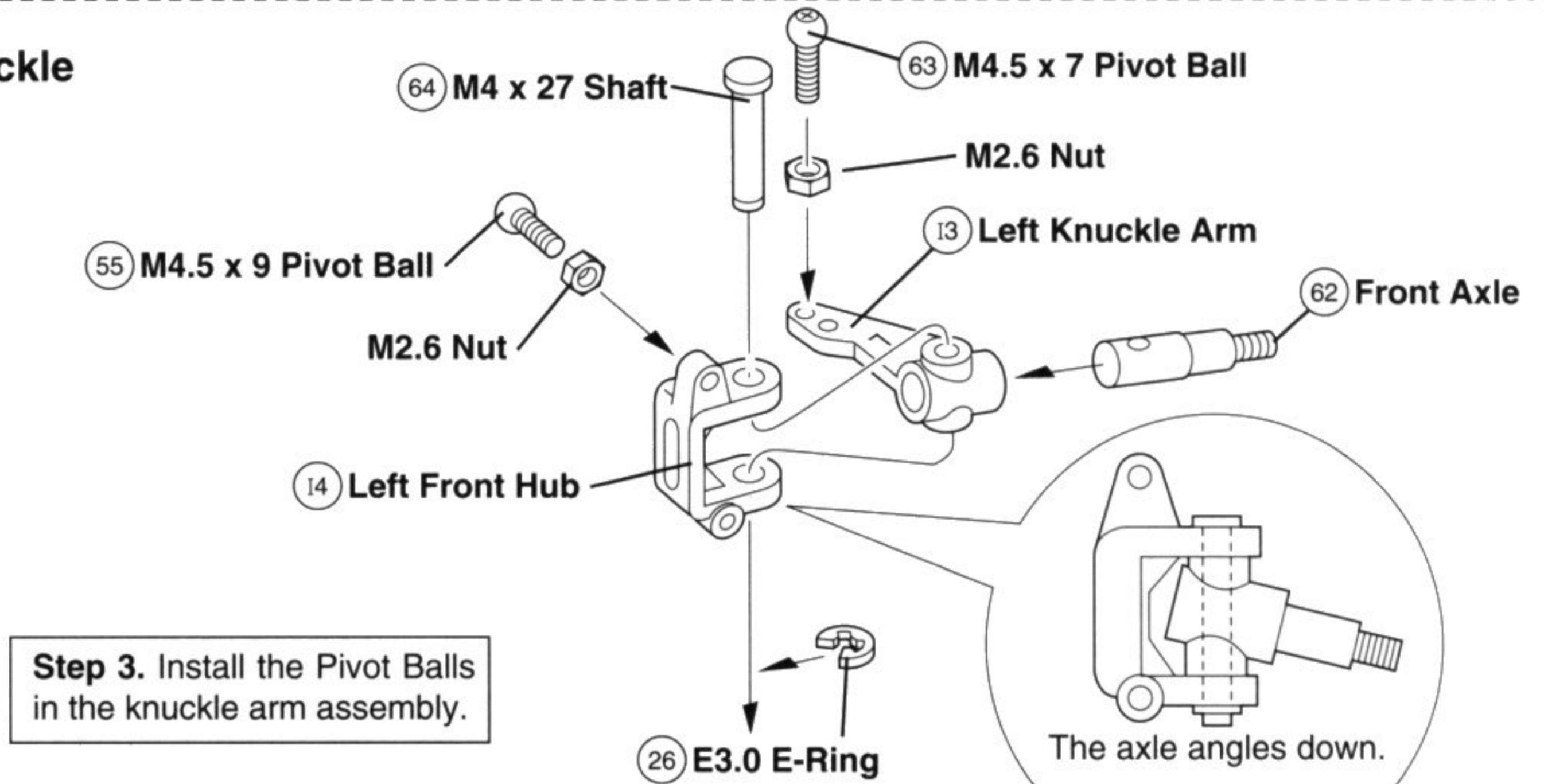
Step 2. Slide the Right Knuckle Arm assembly into the 11 Right Front Hub and secure it with the 64 M4 x 27 Shaft. Note the angle of the Front Axle shown in the diagram below.

Step 3. Install the Pivot Balls in the knuckle arm assembly.

Step 1. Install the 62 Front Axle in the 13 Left Knuckle Arm.

Step 2. Slide the left Knuckle Arm assembly into the 14 Left Front Hub and secure it with the 64 M4 x 27 Shaft. Note the angle of the Front Axle shown in the diagram at the right.

Left Knuckle Arm



Step 3. Install the Pivot Balls in the knuckle arm assembly.

The axle angles down.

16

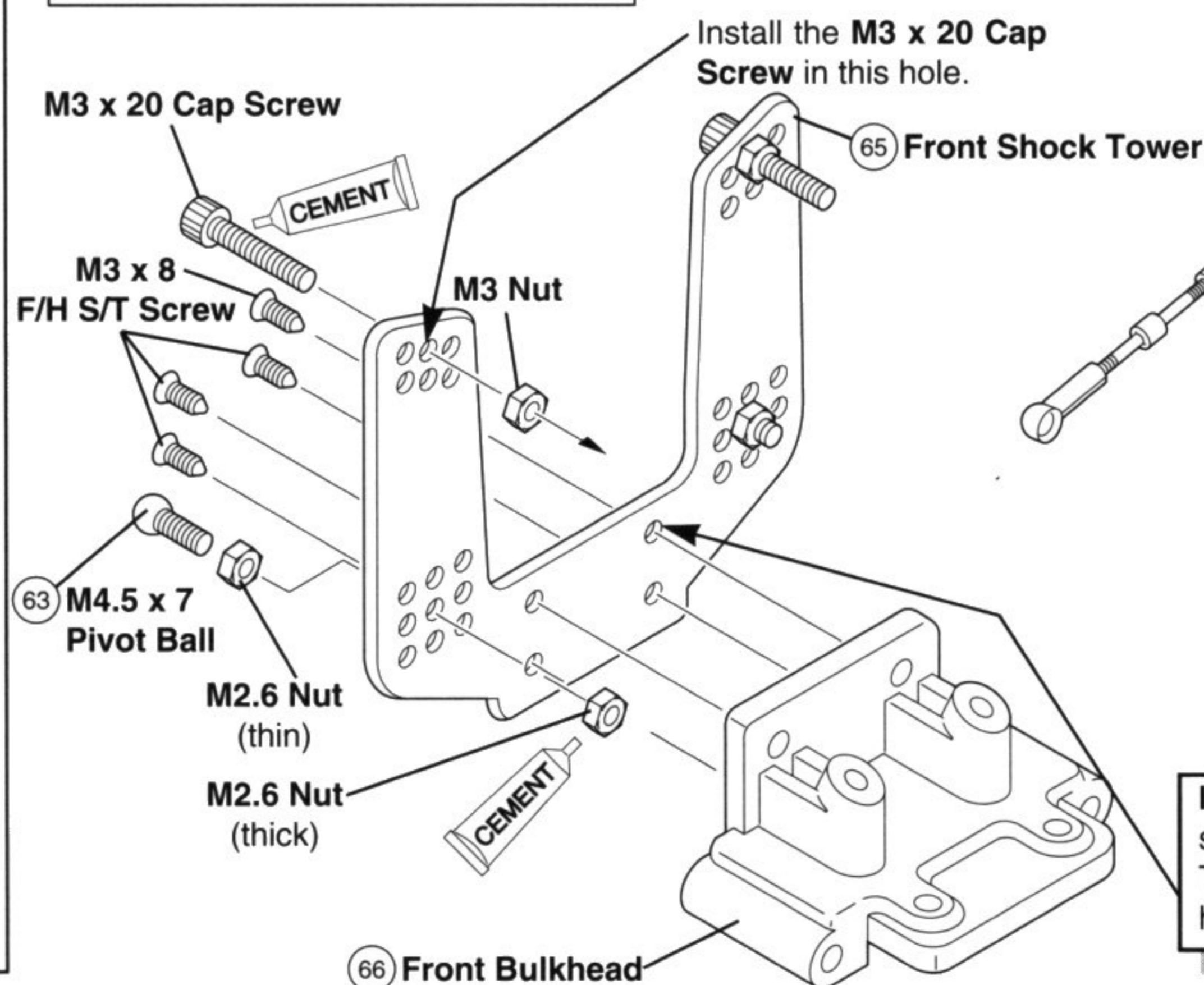
INSTALL THE FRONT SHOCK TOWER

Use parts from bag #2.

Step 1. Install all four M3 x 8 F/H S/T screws before tightening them down.

Snap the front upper rods, from Step 3, onto the M4.5 x 7 pivot balls.

- 63 M4.5 x 7 Pivot Ball (2)
- M3 x 20 Cap Screw (2)
- M3 x 8 F/H S/T Screw (4)
- M2.6 Nut (thin) (2)
- M2.6 Nut (thick) (2)
- M3 Nut (2)



Step 2. Install the M3 x 20 cap screws and the 63 M4.5 x 7 Pivot Balls.

Important: Install the M3 x 8 F/H S/T screws from the side of the 65 Shock Tower with the countersink for the head of the screw to set in.

17

INSTALL THE FRONT ARMS

Use parts from bag #2.

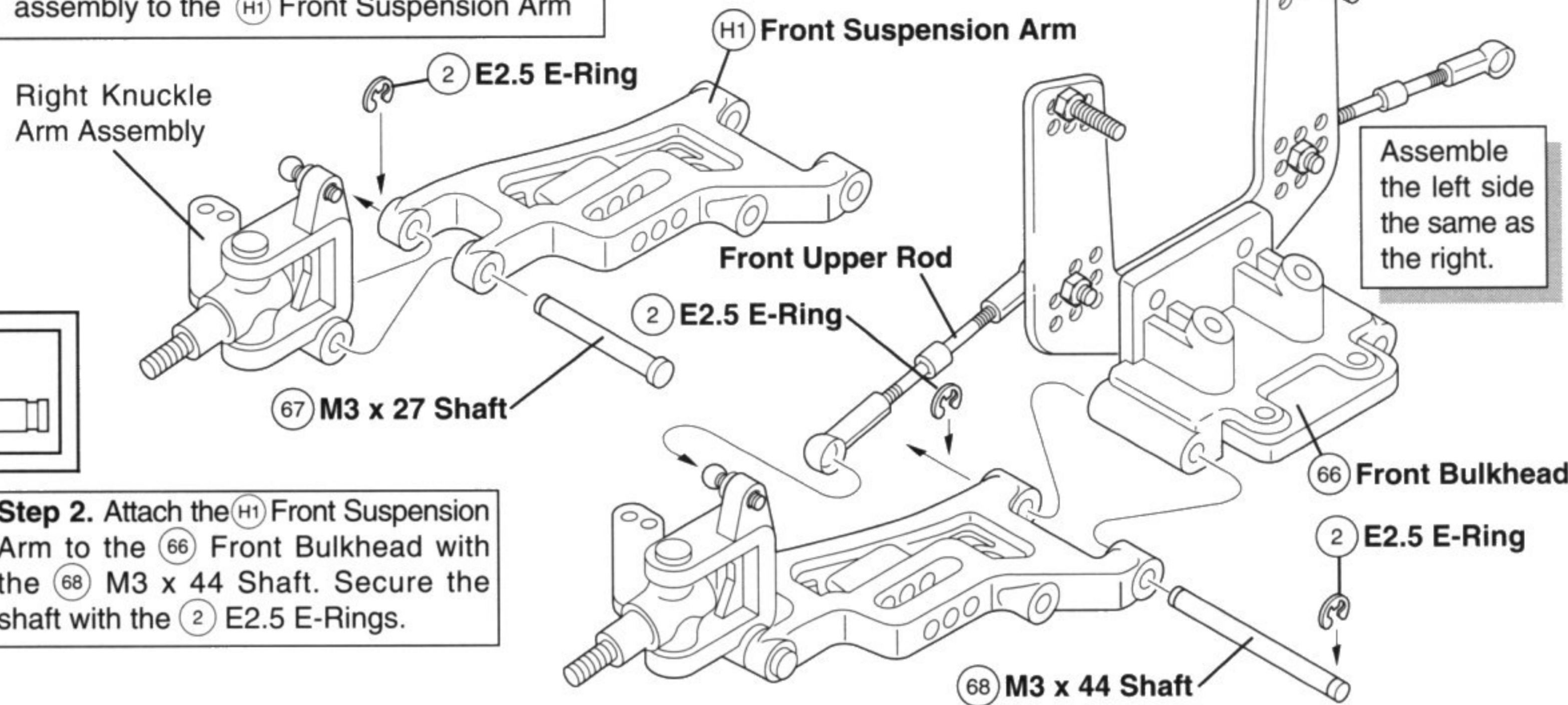
Step 1. Attach the right knuckle arm assembly to the (H1) Front Suspension Arm

Step 3. Snap the front upper rods onto the pivot ball on the knuckle arm assembly.

- (2) E2.5 E-Ring (6)
- (67) M3 x 27 Shaft (2)
- (68) M3 x 44 Shaft (2)

Note: Check that the suspension arms move freely. If they do not, locate where they are binding and lightly trim the area.

Step 2. Attach the (H1) Front Suspension Arm to the (66) Front Bulkhead with the (68) M3 x 44 Shaft. Secure the shaft with the (2) E2.5 E-Rings.



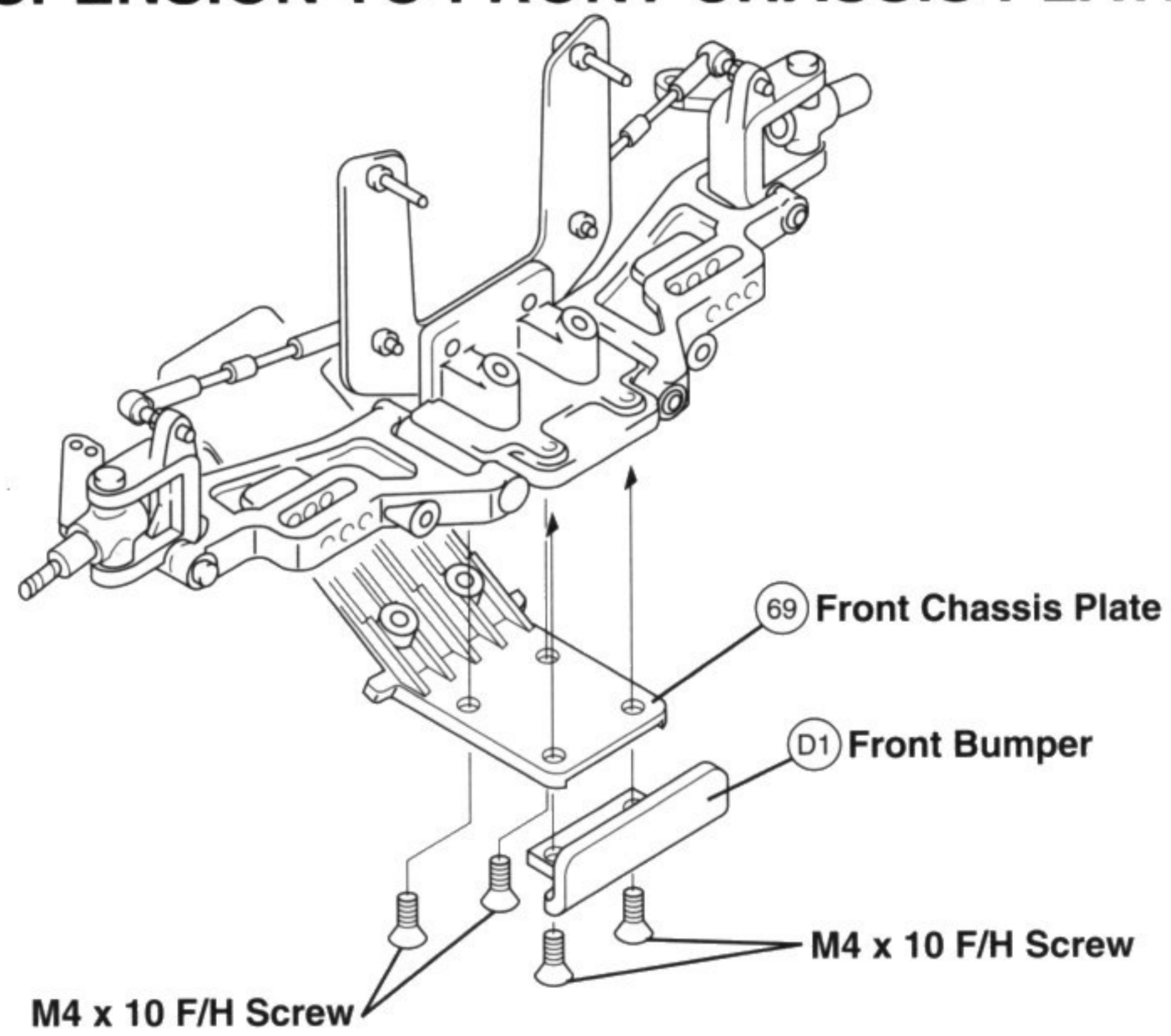
18

INSTALL THE FRONT SUSPENSION TO FRONT CHASSIS PLATE

Use parts from bag #2.

- M4 x 10 F/H Screw (4)

Note: Install all four M4 x 10 F/H screws before tightening them.



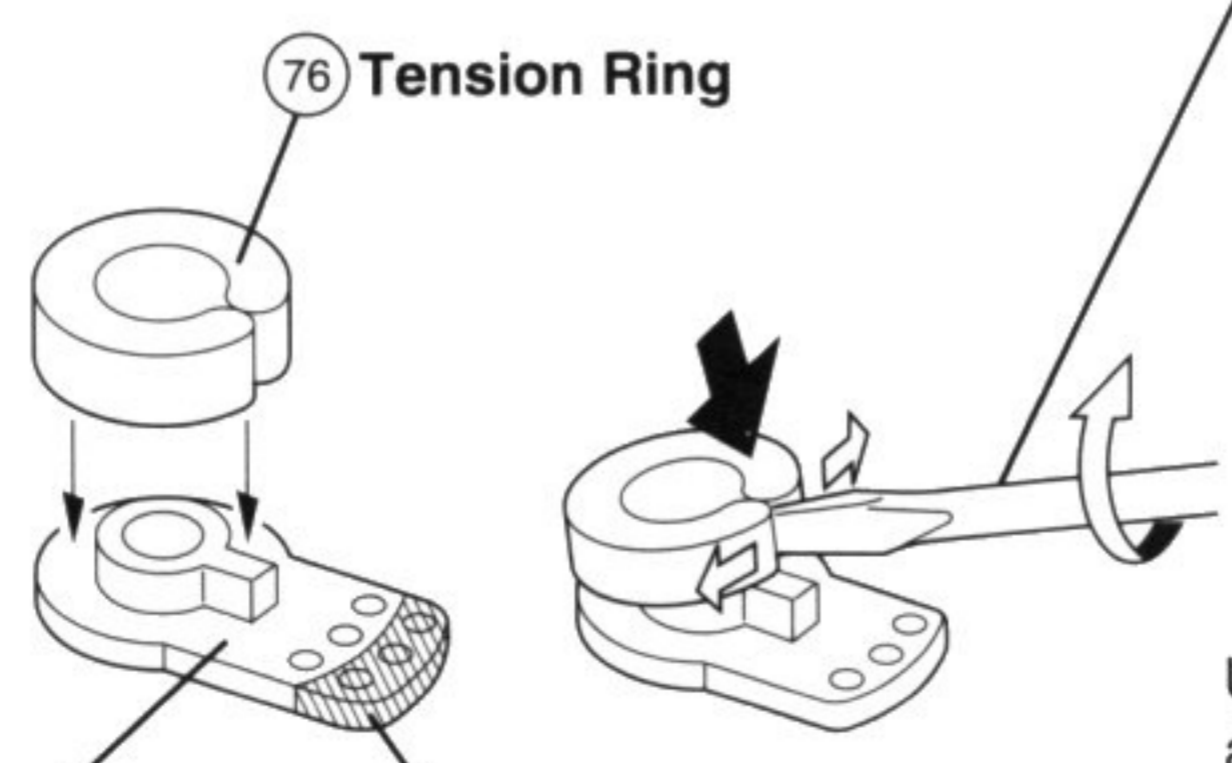
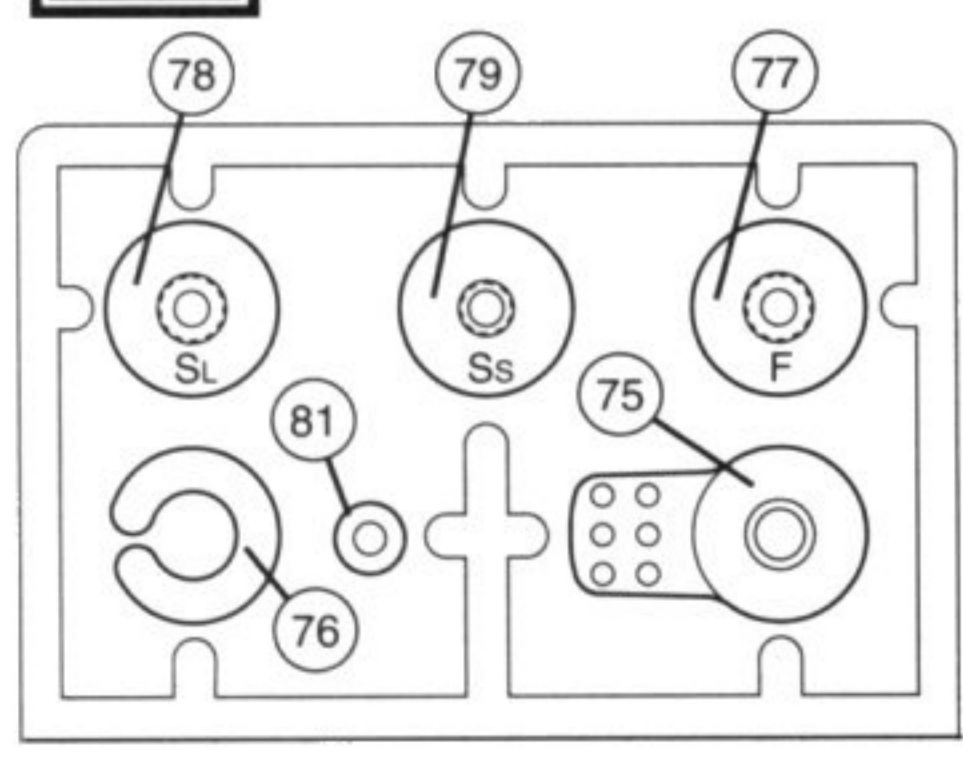
19

ASSEMBLE THE SERVO SAVER

Use parts from bag #3.

Use a flat bladed screwdriver to pry open (76) Tension Ring during assembly.

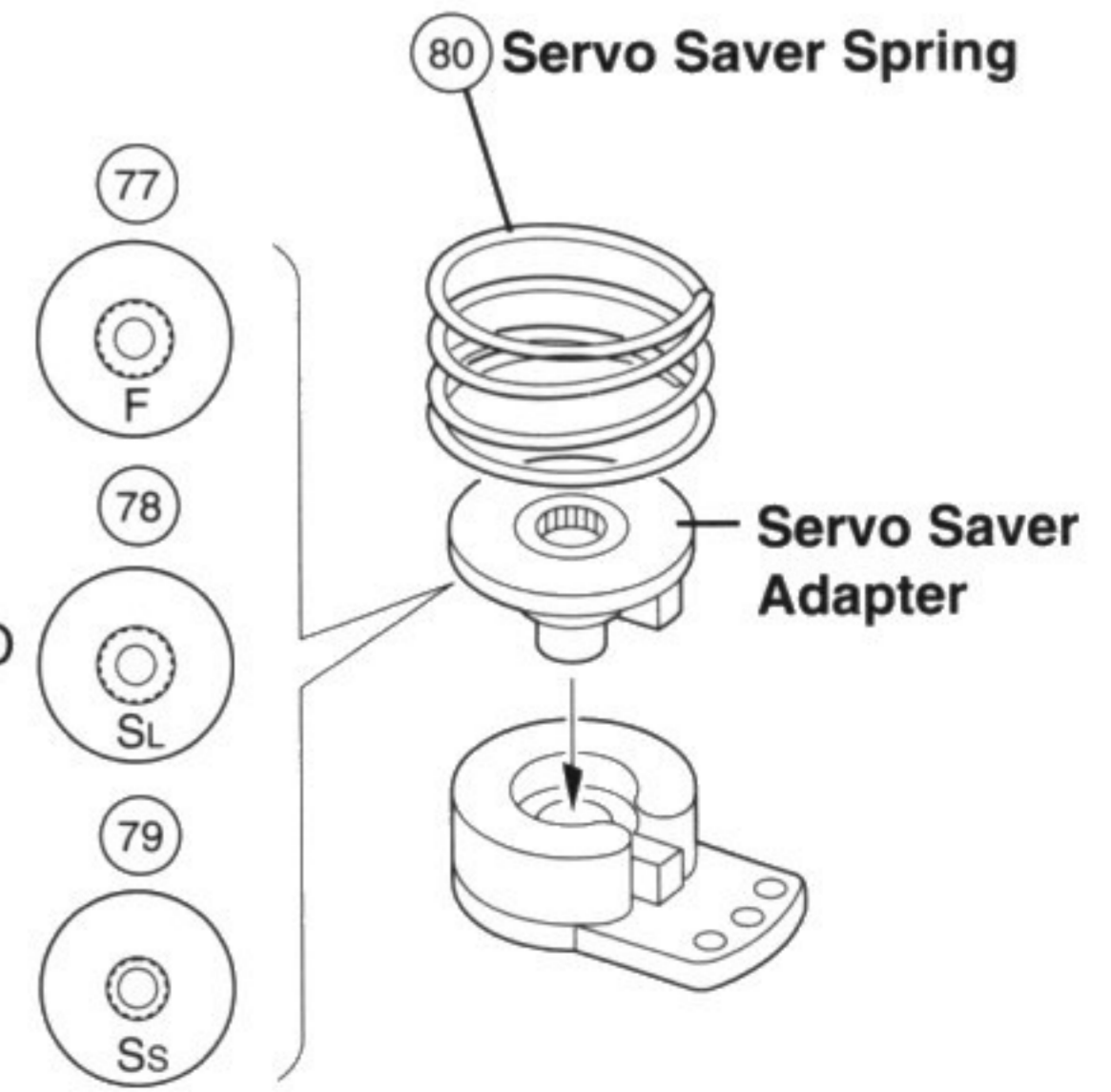
Slide the (80) Servo Saver Spring over the servo saver assembly after installing servo saver adapter.



Use (77) for all Futaba servos.

Use (78) for Airtronics, KO and JR standard servos.

Use (79) for Airtronics and KO mini servos.

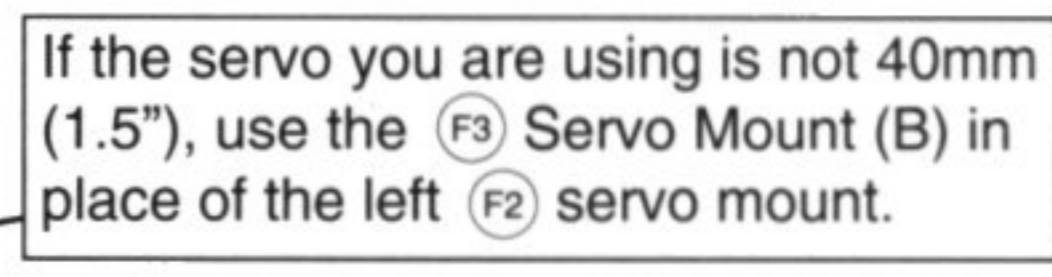
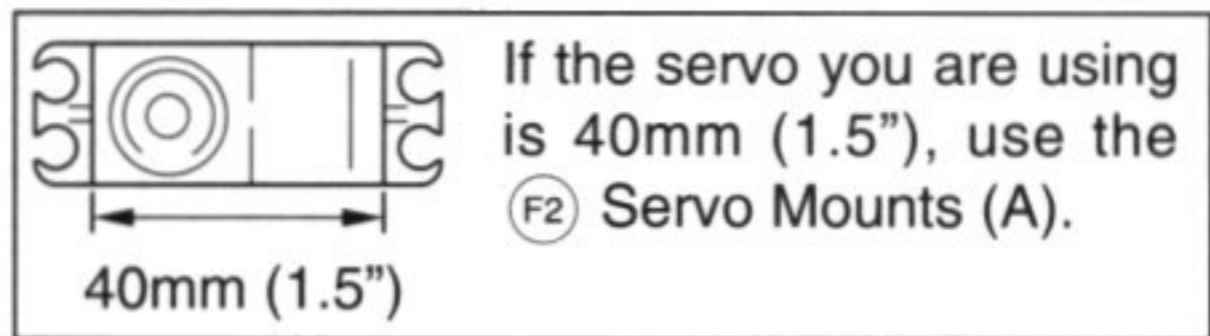


20

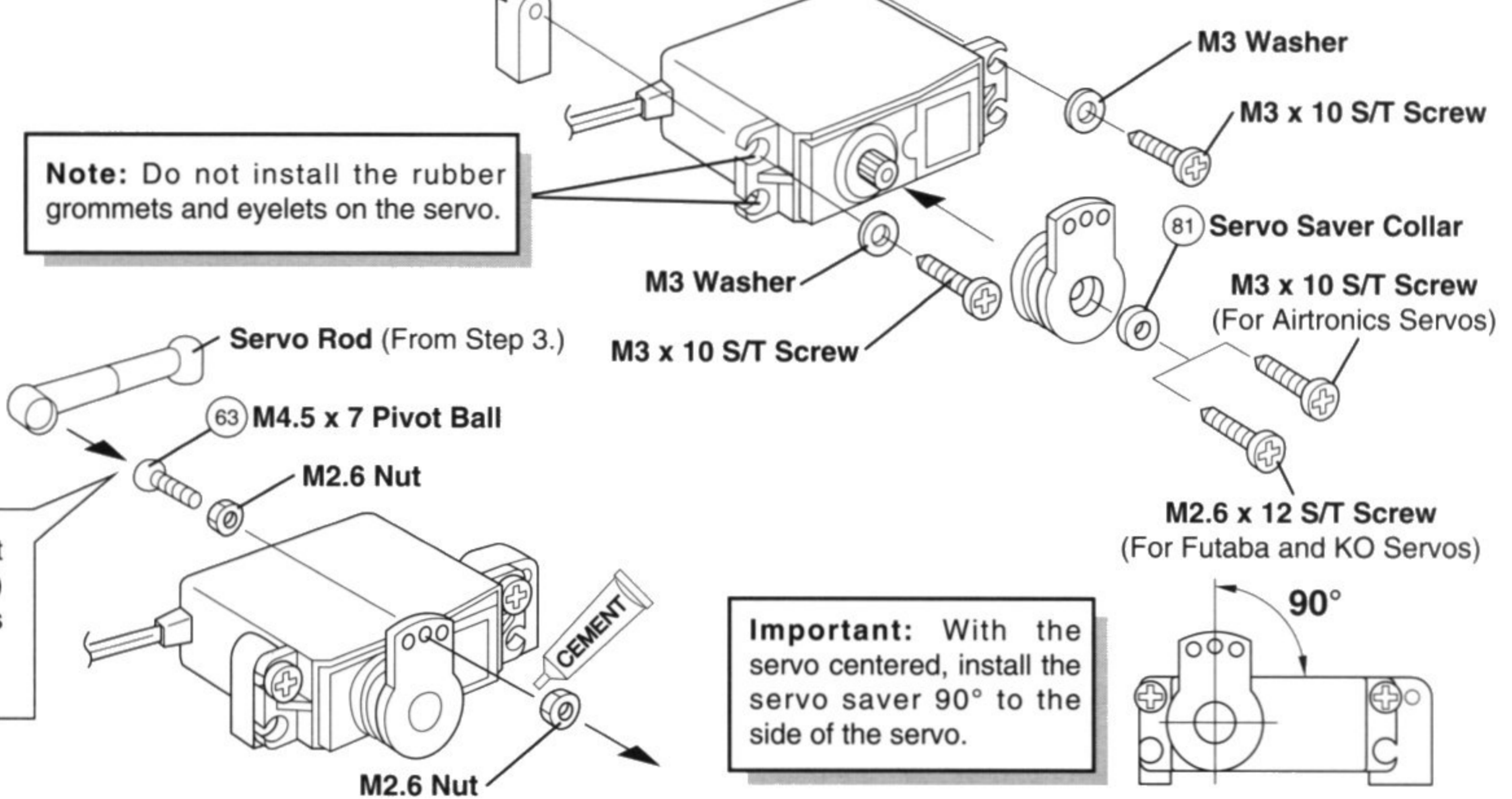
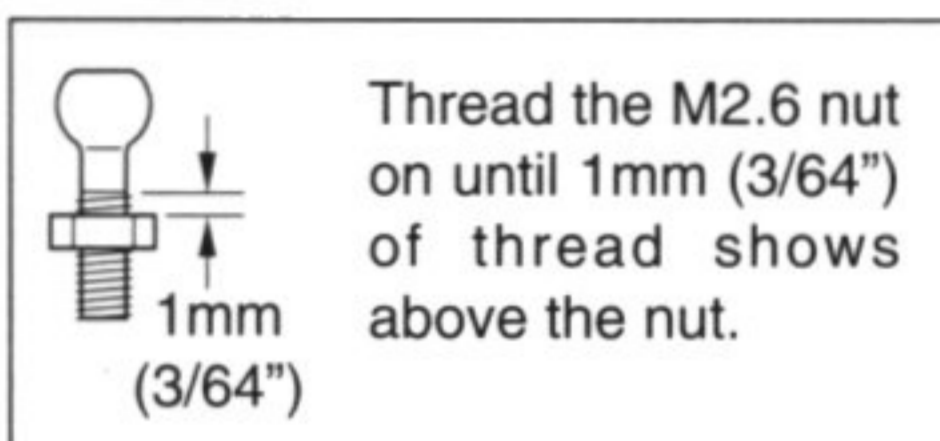
INSTALL THE SERVO SAVER AND MOUNTS ON THE SERVO

Use parts from bag #3.

- 63 M4.5 x 7 Pivot Ball (1)
- M2.6 Nut (2)
- M2.6 x 12 S/T Screw (1)
- M3 x 10 S/T Screw (2) or (3)
- M3 Washer (2)



Note: Do not install the rubber grommets and eyelets on the servo.



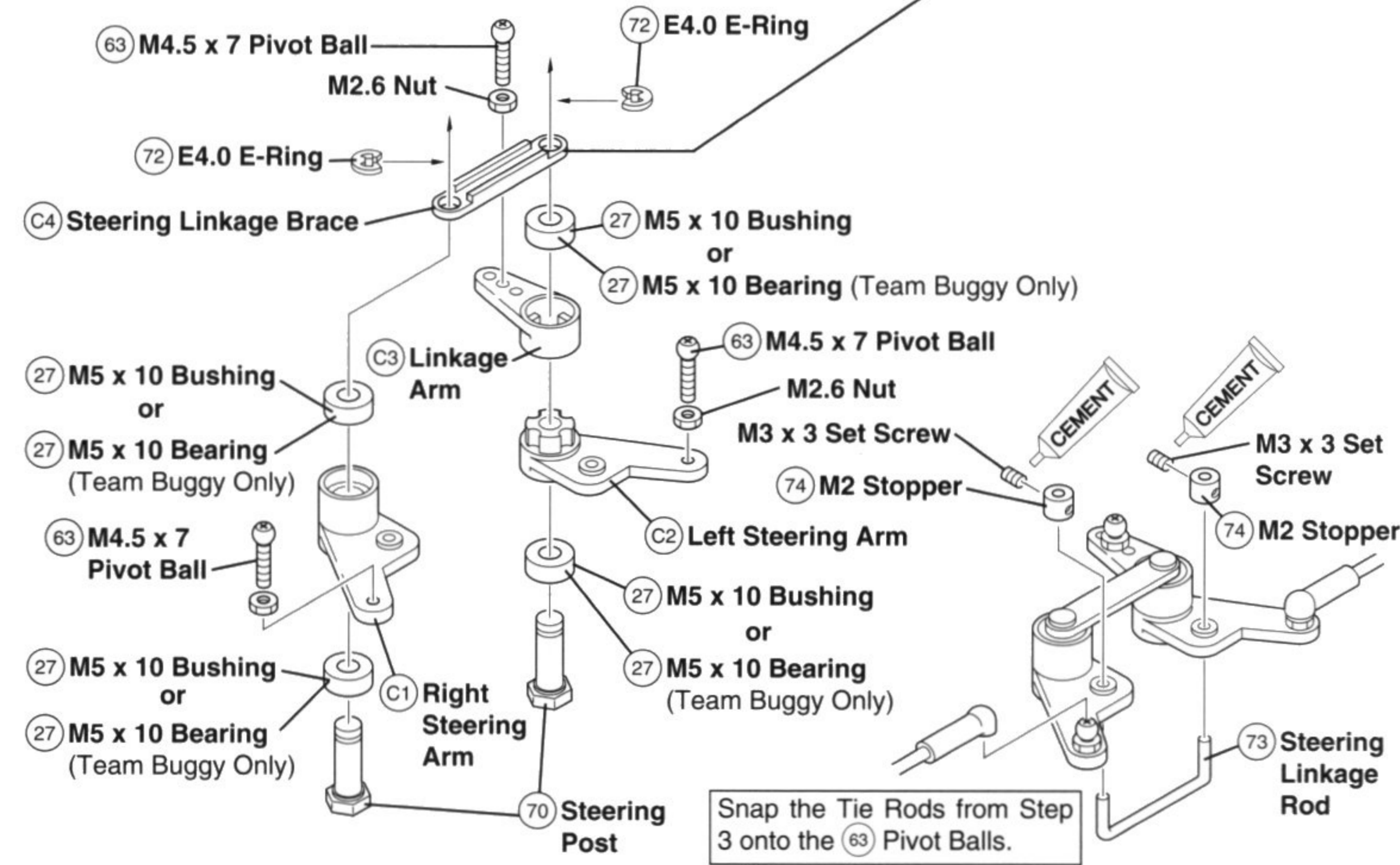
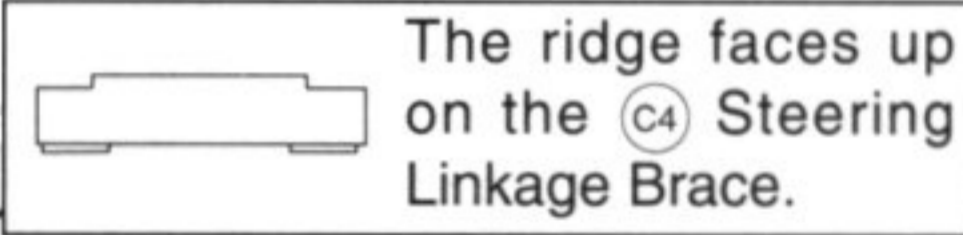
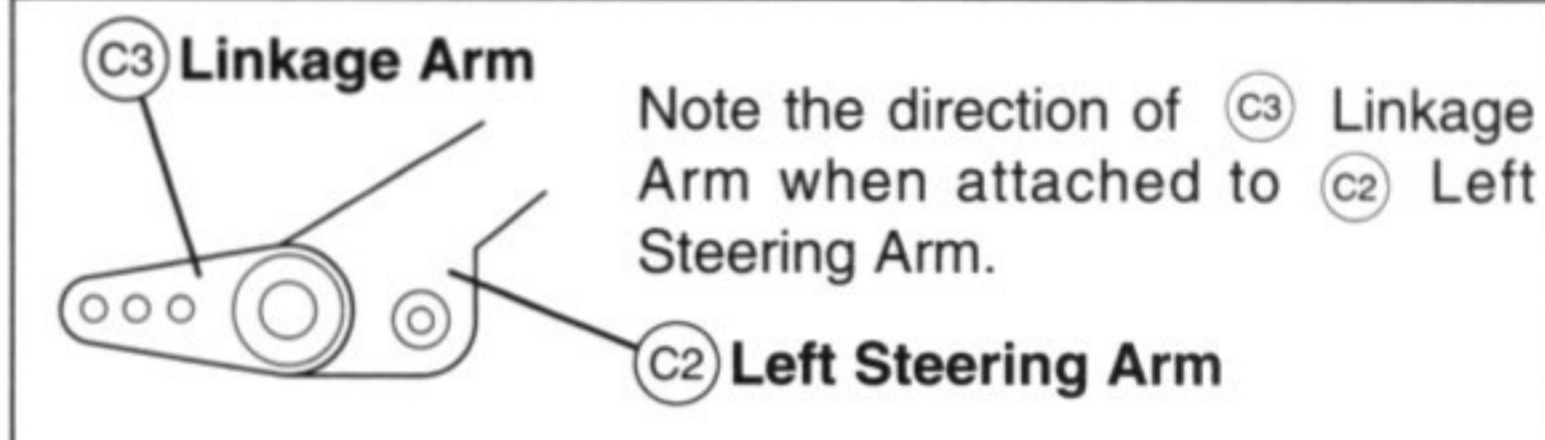
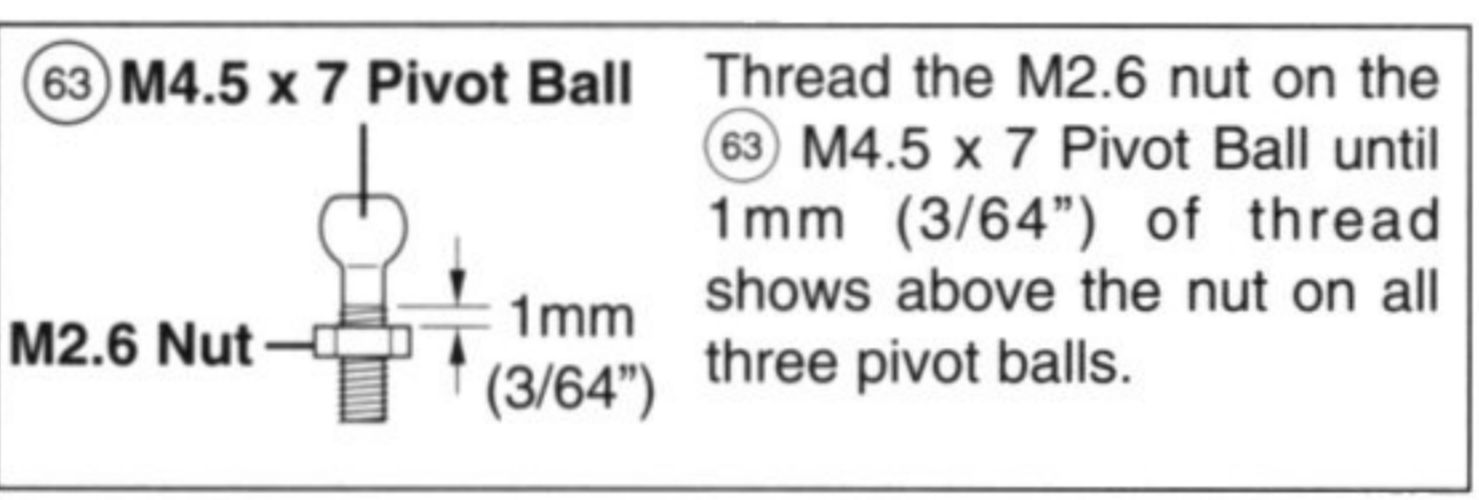
Important: With the servo centered, install the servo saver 90° to the side of the servo.

21

ASSEMBLE THE STEERING LINKAGE

Use parts from bag #3 and blister pack.

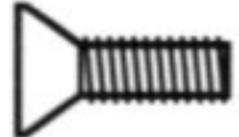

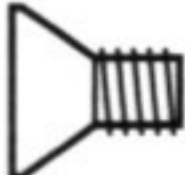
- 63 M 4.5 x 7 Pivot Ball (3)
- M 2.6 Nut (3)
- 72 E4.0 E-Ring (2)
- 74 M2 Stopper (2)
- M3 x 3 Set Screw (2)
- 27 M5 x 10 Bushing (4)
- 27 M5 x 10 Bearing (4) (Team Buggy Only)



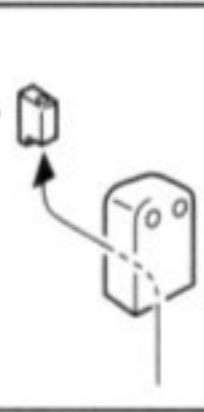
Snap the Tie Rods from Step 3 onto the 63 Pivot Balls.

22 INSTALL THE FRONT SUSPENSION ASSEMBLY ON THE MAIN CHASSIS

Use parts from bag #3.

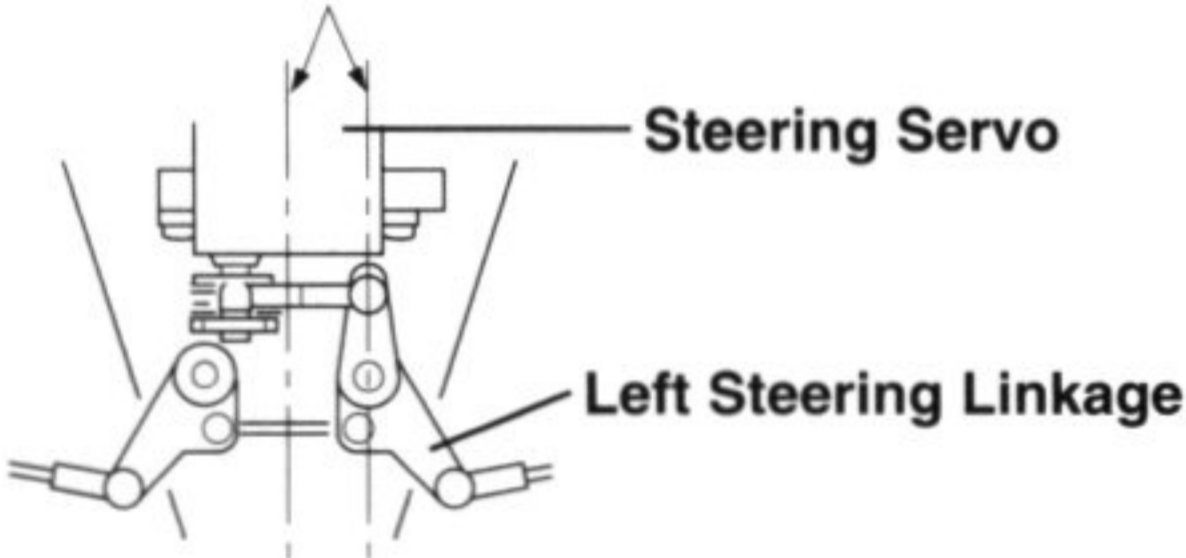
- M3 x 10 F/H Screw (2)**

- M3 x 14 F/H S/T Screw (2)**

- M4 x 8 F/H Screw (2)**


F4 Hold-Down
If using **F3 Servo Mount**, install the **F4 Hold-Down** in the back of **F3**.

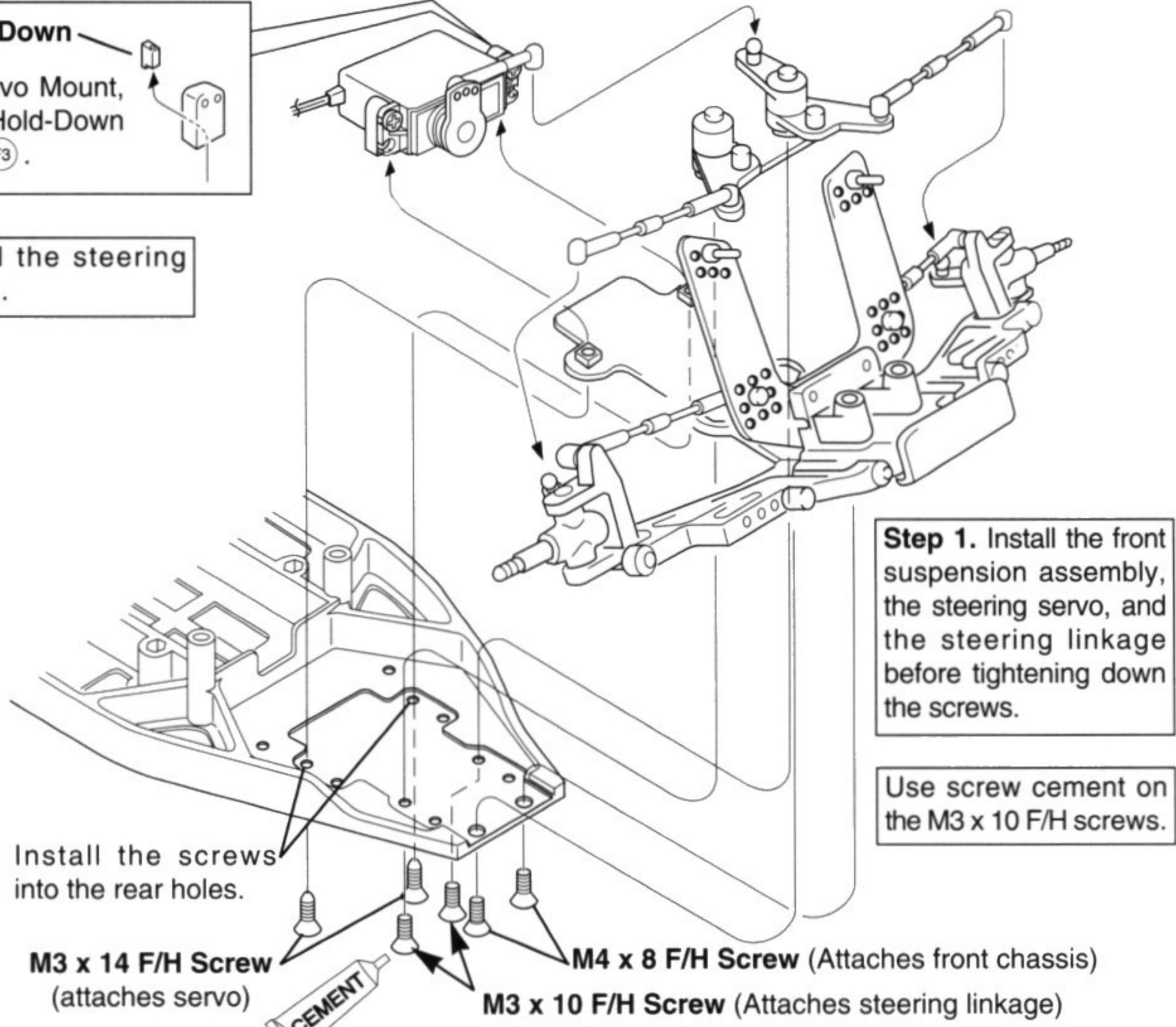


Step 2. Install the steering servo as shown.

Make sure the centerline of the steering servo and the centerline of the left steering linkage are parallel.

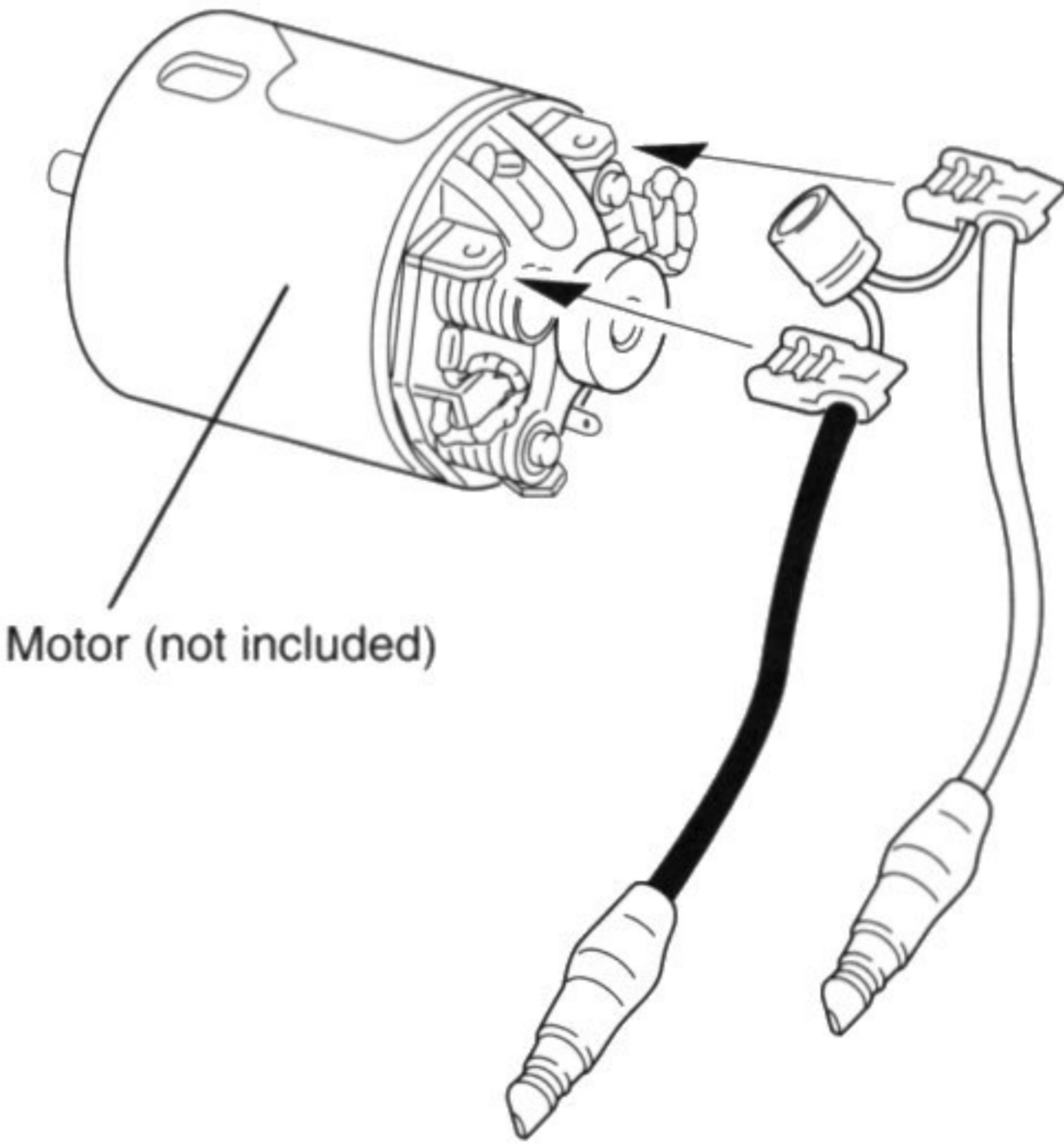
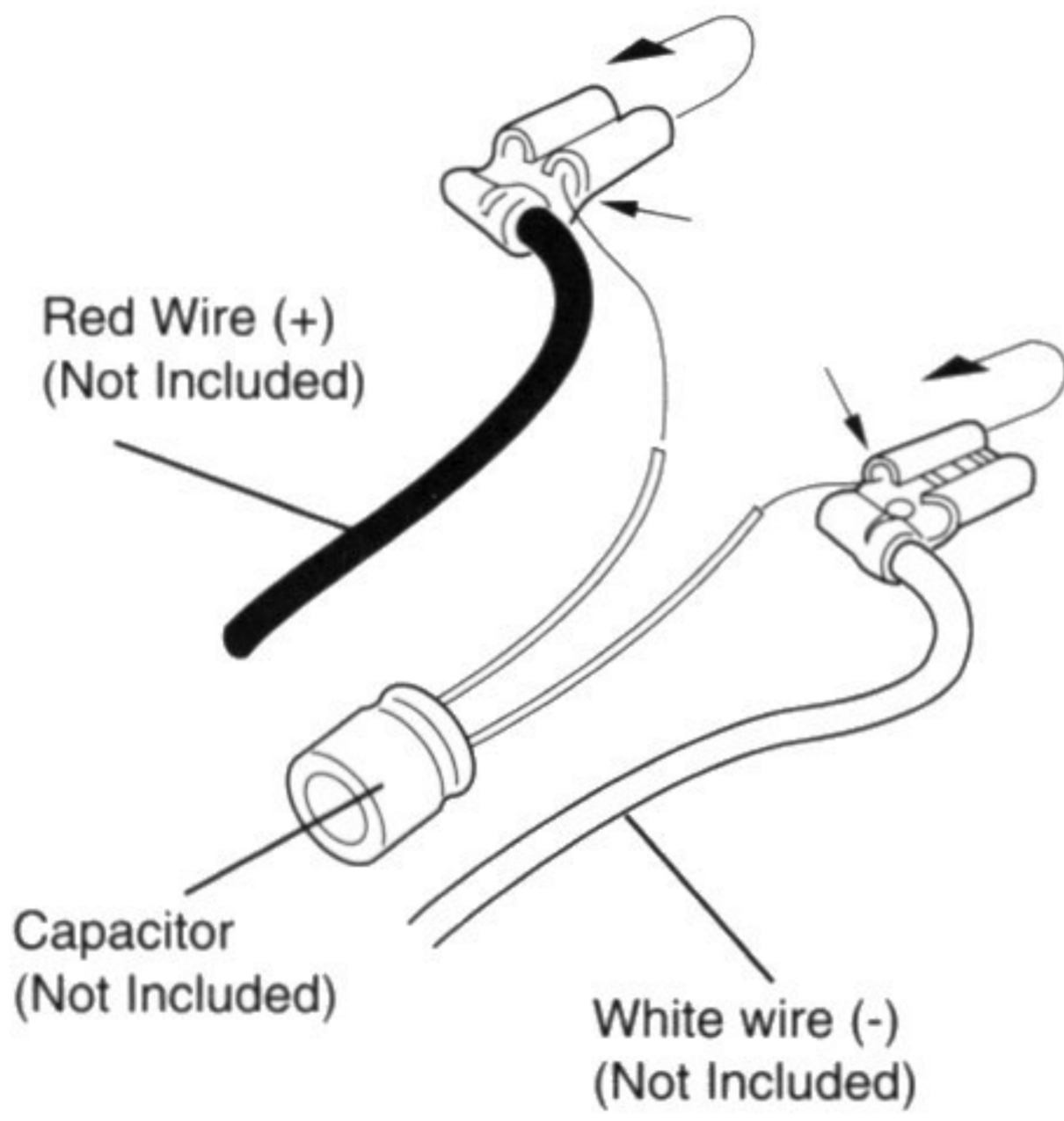


Steering Servo
Left Steering Linkage



23 ATTACH THE WIRES TO THE MOTOR

Important: Follow the instructions that came with your electronic speed control. Most have specific instructions concerning type and installation of motor capacitors.

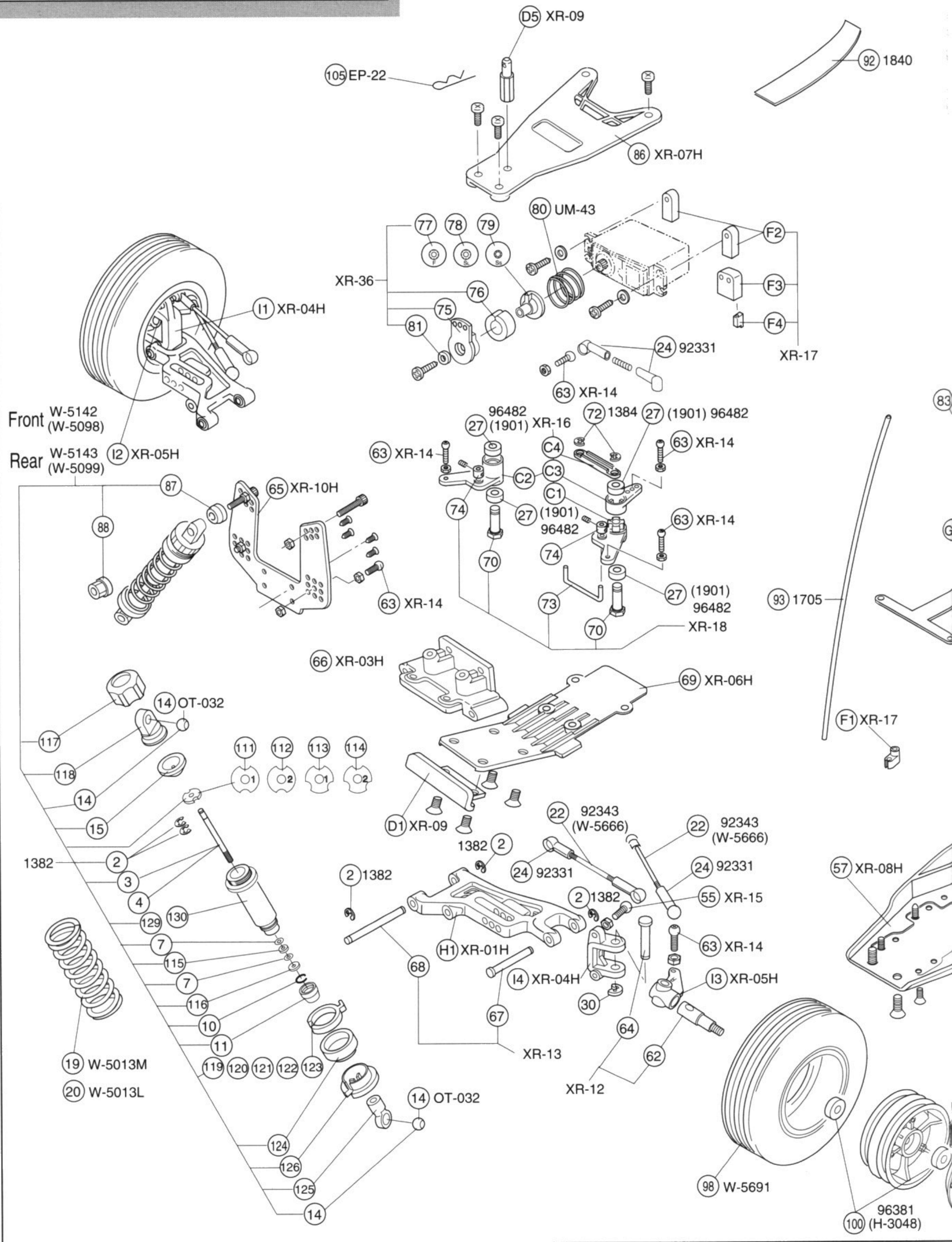


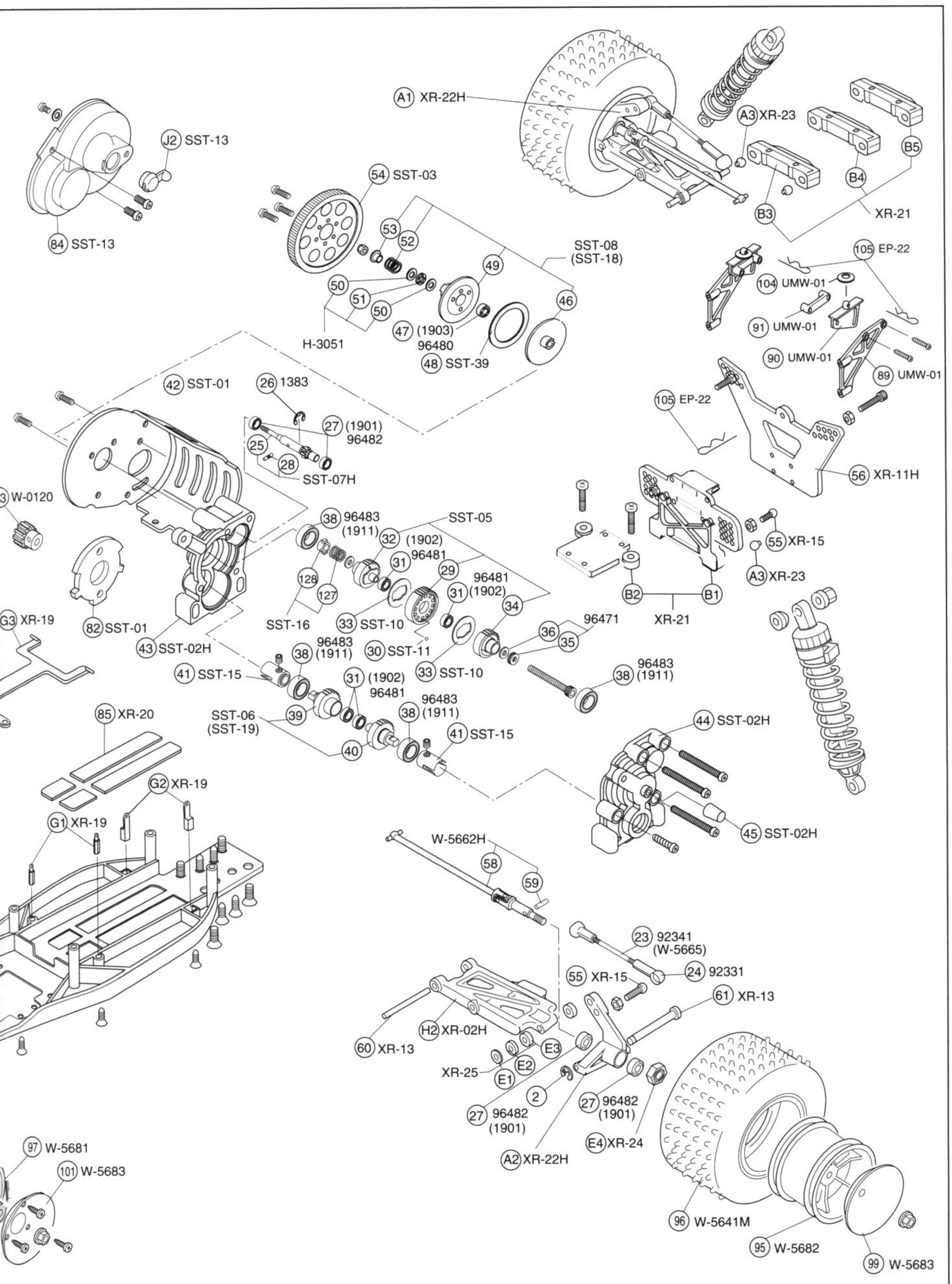
ORDERING PARTS

You can easily purchase replacement parts for your kit. All of the parts identified by key numbers are usually not available individually, but offered in convenient parts packs. To determine which parts pack you need, find the key number for the part within the manual, then consult the guide below. When referring to the part you need, always use the stock number and the mfg. number. For instance, if you need a key #43, ask for stock #KYOC4038, pack # SST-02H.

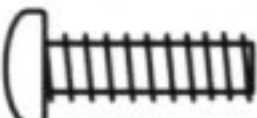




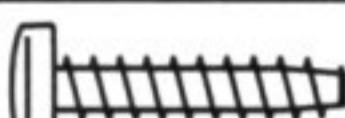
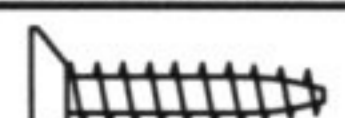
Stock #	Pack#	Description	Contents				
KYOC5844	W-5098	Ultimate Shock (Med)	3,10,11,15 87,88,111,112,113,114,115,116,117,118,119,120,121 122,123,124,125,126,129 x 2 Pcs. 2,7,14 x 4 Pcs.	KYOC3648	XR-06H	Front Chassis	69 x 1 Pc.
KYOC9882	1382	E2.5 E-Ring	2 x 10 Pcs.	KYOC5992	XR-18	Steering Post Set	73 x 1 Pc. 70,74 x 2 Pcs.
KYOC2167	OT-032	M5.8 Ball	14 x 10 Pcs.	KYOC9884	1384	E4.0 E-Ring	72 x 10 Pcs.
KYOC5864	W-5013M	Front Spring Set	19 x 2 Pcs.	KYOC5640	XR-36	Servo Saver Set	75,76,77,78 79,81 x 1 Pc.
KYOC5845	W-5099	Ultimate Shock (Long)	4,10,11,15,87 88,111,112,113,114,115,116,117,118,119,120,121 122,123,124,125,126,130 x 2 Pcs. 7,14 x 4 Pcs.	KYOC5636	UM-43	Servo Saver Ring	80 x 1 Pc.
KYOC5865	W-5013L	Rear Spring Set (Long)	20 x 2 Pcs.	KYOC4772	W-0120	Pinion Gear (20 T)	83 x 1 Pc.
KYOC5841	W-5142	Sport Shock (Med)	3,15,87,88 111,112,113,114,117,118,119,120,121,122,123 124,125,126,129 x 2 Pcs. 2,14 x 4 Pcs.	KYOC4127	SST-13	Gear Cover	84, J2 x 1 Pc.
KYOC5842	W-5143	Sport Shock (Long)	4,15,87,88 111,112,113,114,117,118,119,120,121 122,123,124,125,126,130 x 2 Pcs. 2,14 x 4 Pcs.	KYOC3126	XR-20	Foam Tape	85 x 1 Pc.
KYOC6198	W-5666	Turnbuckle (Medium)	22 x 2 Pcs.	KYOC6291	XR-07H	Upper Deck	86 x 1 Pc.
KYOC5423	92343	Tie Rod (Medium)	22 x 2 Pcs.	KYOC2258	UMW-01	Wing Stay	89,90, 91 x 2 Pcs. 104 x 4 Pcs.
KYOC6197	W-5665	Turnbuckle (Short)	23 x 2 Pcs.	KYOC6141	1840	Double Sided Tape	92 x 1 Pc.
KYOC5422	92341	Tie Rod (Short)	23 x 2 Pcs.	KYOC2056	1705	Antenna Tube	93 x 6 Pcs.
KYOC2248	92331	M4.5 Ball Ends	24 x 16 Pcs.	KYOC6025	EF-037	Tie Strap (Small)	94 x 6 Pcs.
KYOC3326	SST-07H	Drive Shaft	25,28 x 1 Pc.	KYOC5291	W-5682	Rear Wheel	95 x 2 Pcs.
KYOC9883	1383	E3.0 E-Ring	26 x 10 Pcs.	KYOC5251	W-5641M	Rear Tire (H-Pin)	96 x 2 Pcs.
KYOC2197	1901	M5 x 10 Bearing	27 x 2 Pcs.	KYOC3910	W-5681	Front Wheel	97 x 2 Pcs.
KYOC2764	96482	M5 x 10 Bushing	27 x 4 Pcs.	KYOC3884	W-5691	Front Tire (Ribbed)	98 x 2 Pcs.
KYOC3298	SST-05	Differential Gear Set	29,32, 34 x 1 Pc.	KYOC6312	W-5683	Wheel Cap	99,101 x 2 Pcs.
KYOC3282	SST-11	Differential Ball	30 x 14 Pcs.	KYOE3110	H-3048	M6x10 Bearing	100 x 2 Pcs. (Team)
KYOC2204	1902	M5 x 8 Bearing	31 x 2 Pcs.	KYOC2763	96381	M6x10 Bushing	100 x 4 Pcs.
KYOC2761	96481	M5 x 8 Bushing	31 x 4 Pcs.	KYOC2401	XR-26	Body	102 x 1 Pc.
KYOC3291	SST-10	Differential Plate	33 x 2 Pcs.	KYOC4626	39371W	Wing (White)	103 x 1 Pc.
KYOC6166	96471	Thrust Bearing	35,36 x 1 Pc.	KYOC2520	EP-22	Body Pin	105 x 5 Pcs.
KYOC2217	1911	M8 x 14 Bearing	38 x 2 Pcs.	KYOC3280	SST-16	Differential Tension Set	127,128, M2.6 x 25 Cap Screw 1 Pc.
KYOC2762	96483	M8 x 14 Bushing	38 x 4 Pcs.	KYOC3311	39314	Differential Grease	131 x 1 Pc.
KYOC3522	SST-19	Final Gear (Hard)	39,40 x 2 Pcs.	KYOC3276	XR-27	Decal	132 x 1 Pc.
KYOC3514	SST-06	Final Gear Set	39,40 x 2 Pcs.	KYOC5451	1878	Screw Cement	133 x 2 Pcs.
KYOC4325	SST-15	Joint	41 x 2 Pcs.	KYOC6395	1943	4-Way Wrench	134 x 1 Pc.
KYOC4616	SST-01	Motor Plate	42,82 x 1 Pc.	KYOC4963	XR-22H	Rear Hub Right	A1, A2 x 1 Pc.
KYOC4038	SST-02H	Gearbox	43,44 45 x 1 Pc.	KYOC6044	XR-23	Suspension Ball	A3 x 8 Pcs.
KYOC3325	SST-18	Drive Hub (Hard)	46,49,52 53 x 1 Pcs.	KYOC4961	XR-21	Rear Bulkhead	B1,B2,B3 B4,B5 x 1 Pc.
KYOC3318	SST-08	Drive Hub Set	46,49,52, 53 x 1 Pcs.	KYOC5991	XR-16	Right Steering Arm	C1,C2,C3 C4 x 1 Pc.
KYOC2207	1903	M4 x 8 Bearing	47 x 2 Pcs.	KYOC2558	XR-09	Body Mount Set	D1, D5, x 1 Pc.
KYOC2760	96480	M4 x 8 Bushing	47 x 4 Pcs.	KYOC5819	XR-25	Spacer	E1, E2 x 4 Pcs. E3 x 8 Pcs.
KYOC5839	SST-09	Slipper Plate (Teflon®)	48 x 1 Pc.	KYOC3335	XR-24	Drive Washer	E4 x 4 Pcs.
KYOC5837	SST-39	Slipper Plate	48 x 1 Pc.	KYOC5575	XR-17	Servo Mount	F1, F3, F4 x 1 Pc. F2 x 2 Pcs.
KYOE3140	H-3051	Thrust Bearing	51 x 2 Pcs. 50 x 4 Pcs.	KYOC2276	XR-19	Battery Holder	G3 x 1 Pc. G1, G2 x 2 Pcs.
KYOC5911	SST-03	Spur Gear (82T)	54 x 1 Pc.	KYOC3784	XR-01H	Front Suspension Arm	H1 x 2 Pcs.
KYOC2241	XR-15	M4.5 x 9 Pivot Ball	55 x 10 Pc.	KYOC5192	XR-02H	Rear Suspension Arm	H2 x 2 Pcs.
KYOC4977	XR-11H	Rear Shock Tower	56 x 1 Pc.	KYOC3705	XR-04H	Right Front Hub	I1, I4 x 1 Pc.
KYOC4511	XR-08H	Chassis	57 x 1 Pc.	KYOC4396	XR-05H	Right Knuckle Arm	I2, I3 x 1 Pc.
KYOC6102	W-5662H	Universal Swing Shaft	58,59 x 2 Pcs.				
KYOC6045	XR-13	Suspension Shaft Set	60,61,67 68 x 2 Pcs.				
KYOC3896	XR-12	Front Wheel Shaft	62,64 x 2 Pcs.				
KYOC2240	XR-14	M4.5 x 7 Pivot Ball	63 x 10 Pcs.				
KYOC3743	XR-10H	Front Shock Tower	65 x 1 Pc.				
KYOC3642	XR-03H	Front Bulkhead	66 x 1 Pc.				

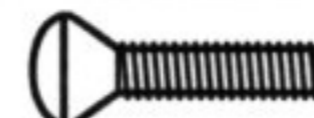








PRO-X™





ORDERING SCREWS

Stock #	Mfg #	Size	Length	Qty
 Round Head Screw				
KYOC9701	1101	2mm	x6, x8, x10, x15	5 Ea
KYOC9702	1102	2.6mm	x8, x10, x12, x14	5 Ea
KYOC9703	1103	3mm	x4, x6, x8, x10, x12	5 Ea
KYOC9704	1104	3mm	x14, x16, x18, x20	5 Ea
KYOC9705	1105	4mm	x6, x8, x10, x12	5 Ea
KYOC9706	1106	3mm	x22, x24, x26, x28	5 Ea
 Screw				
KYOC9710	1110	2.6mm	x4, x6, x8, x12	5 Ea
KYOC9711	1111	3mm	x4, x6, x8, x10, x12	5 Ea
KYOC9712	1112	3mm	x14, x16, x18, x20	5 Ea
KYOC9713	1113	4mm	x6, x8, x10, x12	5 Ea
KYOC9714	1114	3mm	x22, x25, x28, x30	5 Ea
KYOC9715	1115	4mm	x15, x18, x20, x22	5 Ea
 Flat Head Screw				
KYOC9718	1118	2.6mm	x8, x10, x12, x14	5 Ea
KYOC9719	1119	3mm	x6, x8, x10, x12	5 Ea
KYOC9720	1120	3mm	x14, x16, x18, x20	5 Ea
KYOC9721	1121	4mm	x8, x10, x15, x20	5 Ea
KYOC9722	1122	3mm	x22, x24, x26, x28	5 Ea
KYOC9723	1123	3mm	x30, x32, x34, x35	5 Ea
 Cap Screw				
KYOC9724	1124	2mm	x8, x10, x12, x14	2 Ea
KYOC9725	1125	2.6mm	x8, x10, x12, x14	2 Ea
KYOC9726	1126	3mm	x8, x10, x12, x14	2 Ea
KYOC9727	1127	3mm	x15, x16, x18, x20	2 Ea
KYOC9728	1128	3mm	x25, x30, x35, x40	2 Ea
KYOC9729	1129	4mm	x10, x15, x20	2 Ea
KYOC9730	1130	4mm	x25, x28, x30	2 Ea
KYOC9731	1131	4mm	x35, x40, x45	2 Ea
 Round Head Self-Tapping Screw				
KYOC9732	1132	2mm	x4, x6, x8, x10	5 Ea
KYOC9733	1133	2.6mm	x6, x8, x10, x12	5 Ea
KYOC9734	1134	3mm	x6, x8, x10, x12, x14	5 Ea
KYOC9735	1135	3mm	x15, x16, x18, x20	5 Ea
KYOC9736	1136	3mm	x25, x30, x35	5 Ea
KYOC9737	1137	2.6mm	x14, x15, x16, x18	5 Ea
 Self-Tapping Screw				
KYOC9740	1140	2.6mm	x6, x8, x10, x12	5 Ea
KYOC9741	1141	3mm	x6, x8, x10, x12, x14	5 Ea
KYOC9742	1142	3mm	x15, x16, x18, x20	5 Ea
KYOC9743	1143	4mm	x10, x15, x18	5 Ea
 Flat Head Self-Tapping Screw				
KYOC9747	1147	2.6mm	x6, x8, x10, x12	5 Ea
KYOC9748	1148	3mm	x6, x8, x10, x12, x14	5 Ea
KYOC9749	1149	3mm	x15, x16, x18, x20	5 Ea
KYOC9750	1150	4mm	x15, x20, x25	5 Ea

Stock #	Mfg #	Size	Length	Qty
 Oval Head Screw				
KYOC9757	1157	2mm	x8, x10	10 Ea
 Set Screw				
KYOC9760	1160	3mm	x6, x12, x14 x16	3 Ea
KYOC9761	1161	3mm	x3, x4, x5, x10	3 Ea
KYOC9762	1162	4mm	x4, x5, x8, x12	3 Ea
KYOC9763	1163	5mm	x4, x5, x6	3 Ea
KYOC9764	1164	5mm	x30, x40	3 Ea
 Nut				
KYOC9771	1171	2mm, 2.6mm		10 Ea
KYOC9772	1172	3mm, 4mm		10 Ea
 Flanged Nut				
KYOC9774	1174	3mm		10 Ea
KYOC9775	1175	4mm		10 Ea
 Nylon Nut				
KYOC9777	1177	2.6mm		5 Ea
KYOC9778	1178	3mm		5 Ea
KYOC9779	1179	4mm		5 Ea
 Flanged Nylon Nut				
KYOC9780	1180	4mm		5 Ea
 Washer				
KYOC9785	1185	2mm, 2.6mm, 3mm		10 Ea
KYOC9786	1186	4mm, 5mm		10 Ea
 E-Clip				
KYOC9880	1380	E 1.5		10 Ea
KYOC9881	1381	E 2.0		10 Ea
KYOC9882	1382	E 2.5		10 Ea
KYOC9883	1383	E 3.0		10 Ea
KYOC9884	1384	E 4.0		10 Ea
KYOC9885	1385	E 5.0		10 Ea
KYOC9886	1386	E 6.0		10 Ea
KYOC9887	1387	E 7.0		6 Ea
KYOC9890	1390	E 10.0		6 Ea
 Flanged Cap Screw				
KYOC9753	1153	3mm	x6, x8, x10	2 Ea
KYOC9754	1154	4mm	x8, x10, x12	2 Ea

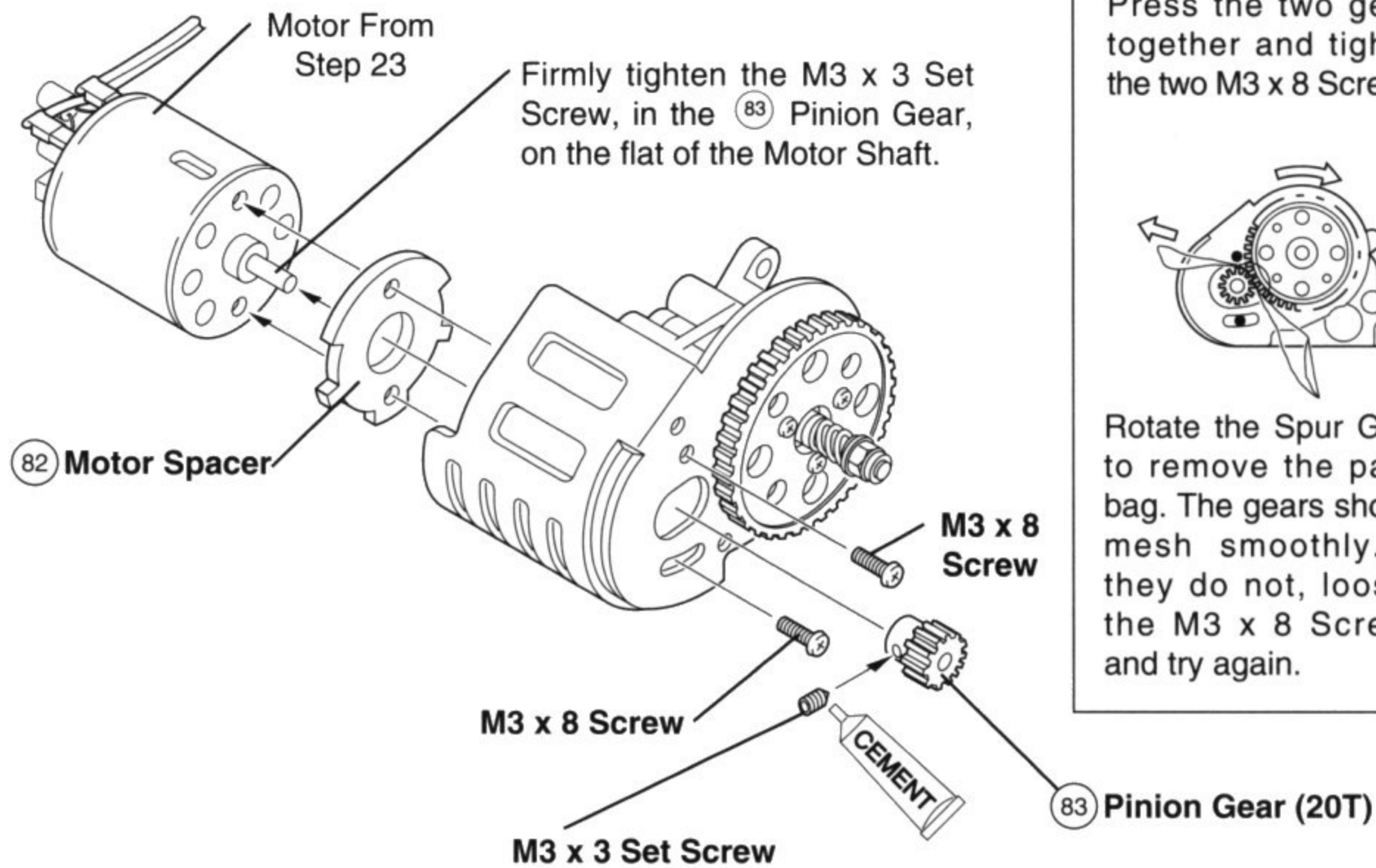


24 INSTALL THE MOTOR

Use parts from bag #5.

- M3 x 3 Set Screw (1)
- M3 x 8 Screw (2)

By installing different pinion gears the gear ratio can be changed. A gear ratio of 14.16:1 will provide plenty of torque for short winding tracks. A gear ratio 9.63:1 will provide more speed for tracks with long straights and large corners.



SETTING THE PROPER GEAR MESH

Clear Parts Bag

M3 x 8 Screw

Insert one of the small parts bags between the 83 Pinion Gear and the 54 Spur Gear. Press the two gears together and tighten the two M3 x 8 Screws.

Rotate the Spur Gear to remove the parts bag. The gears should mesh smoothly. If they do not, loosen the M3 x 8 Screws and try again.

GEAR RATIO CHART

Pinion Gear (Number of Teeth)	17	18	19	20*	21	22	23	24	25
Spur Gear (Gear Ratio)	14.16:1	13.38:1	12.67:1	12.04:1	11.47:1	10.95:1	10.47:1	10.03:1	9.63:1

* Included in kit

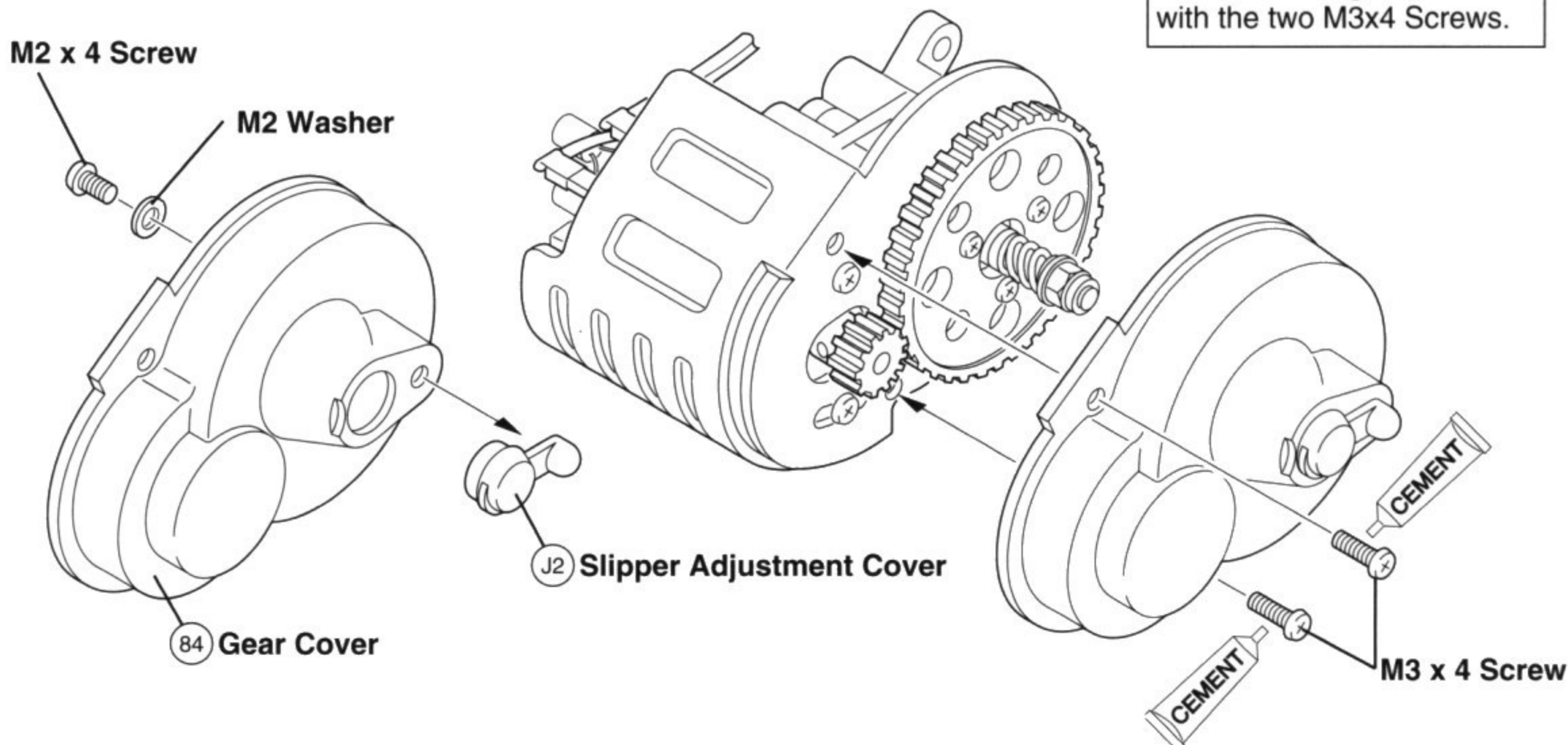
25 INSTALL THE GEAR COVER

Use parts from bag #5.

- M2 x 4 Screw (1)
- M2 Washer (1)
- M3 x 4 Screw (2)

Step 1. Install the J2 Slipper Adjustment Cover on the 84 Gear Cover with the M2 x 4 Screw and M2 Washer.

Step 2. Install the 84 Gear Cover on the 42 Motor Plate with the two M3x4 Screws.



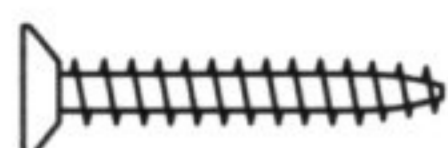
26 INSTALL THE BATTERY HOLDER

Use parts from bag #3, #4.

M3 x 10 S/T F/H Screw (3)



M3 x 20 S/T F/H Screw (2)

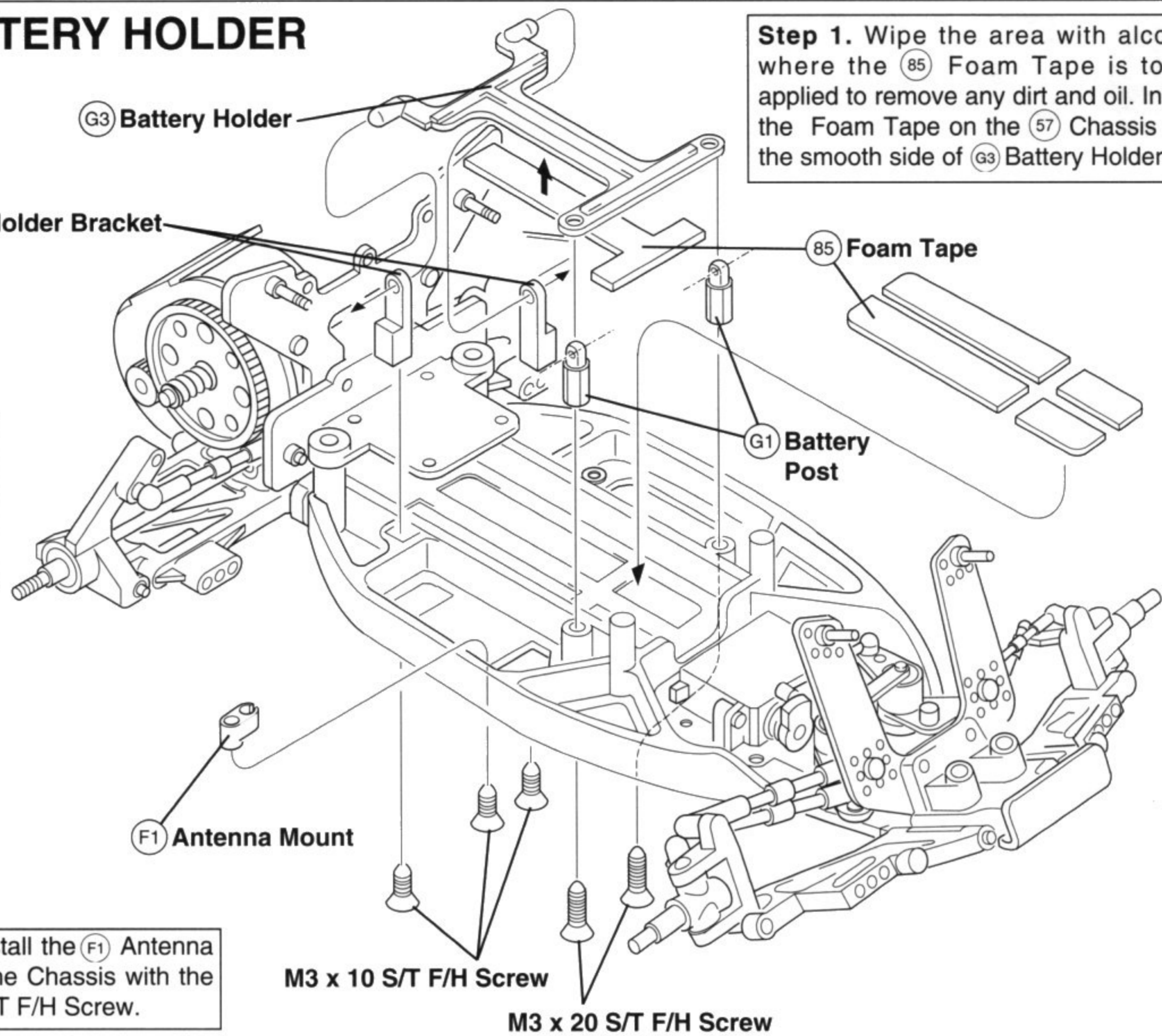


Step 2. Attach the (G1) Battery Posts to the chassis with M3x20 S/T F/H Screws. Make sure the holes through the post face each other.

Step 3. Install the (G2) Battery Holder Brackets and secure them to the chassis with the M3 x 10 S/T F/H Screws. Install one arm of the (G3) Battery Holder in the Battery Holder Bracket. Slightly bend the Battery Holder and insert the other arm in the other Battery Holder Bracket.

Step 4. Install the (F1) Antenna Mount to the Chassis with the M3 x 10 S/T F/H Screw.

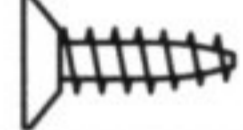
Step 1. Wipe the area with alcohol where the (85) Foam Tape is to be applied to remove any dirt and oil. Install the Foam Tape on the (57) Chassis and the smooth side of (G3) Battery Holder.



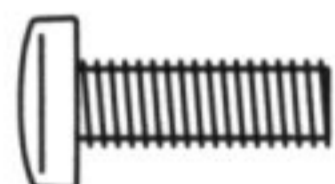
27 INSTALL THE TOP PLATE

Use parts from bag #2.

M3 x10 S/T F/H Screw (1)

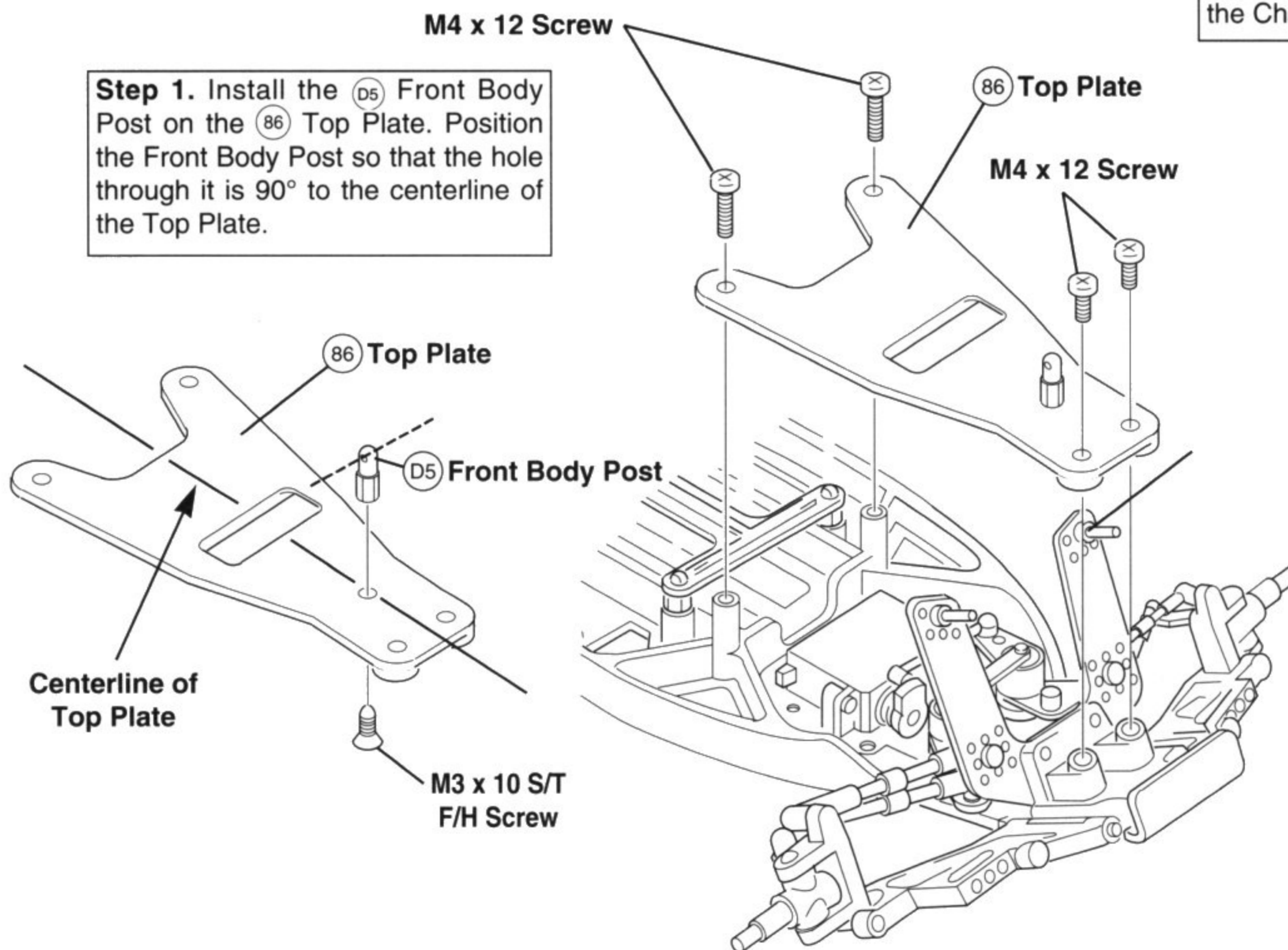


M4 x12 Screw (4)



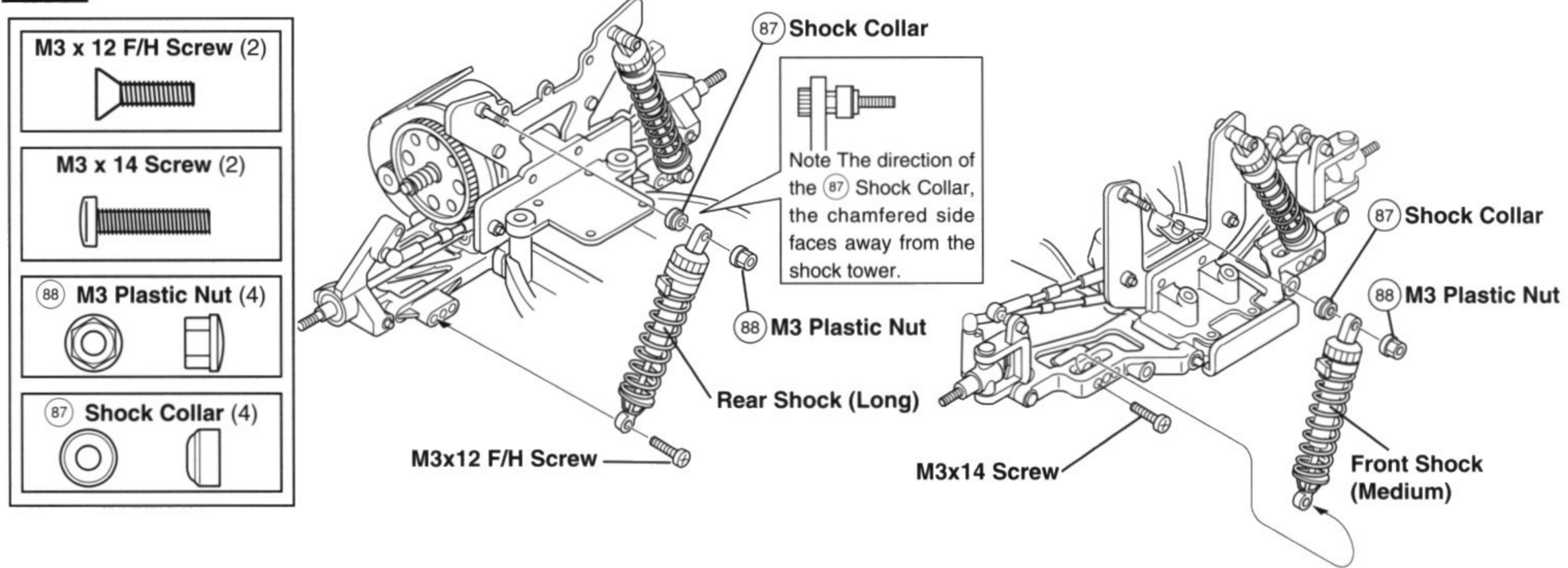
Step 1. Install the (D5) Front Body Post on the (86) Top Plate. Position the Front Body Post so that the hole through it is 90° to the centerline of the Top Plate.

Step 2. Install the (86) Top Plate on the Chassis.



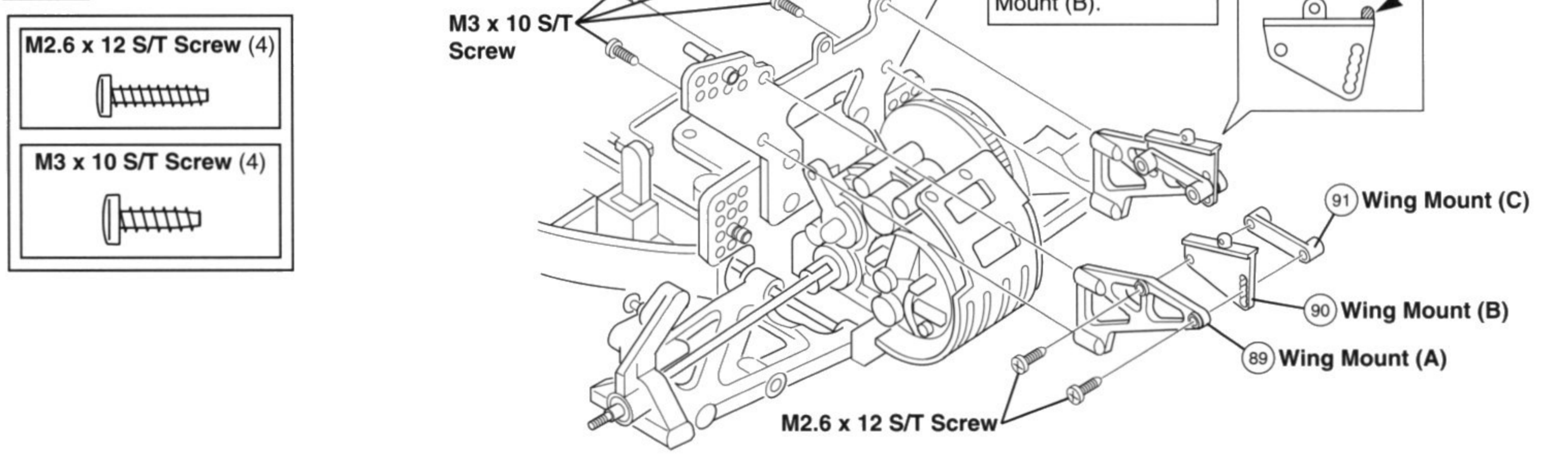
28 INSTALL THE FRONT AND REAR SHOCKS

Use parts from bag #1.



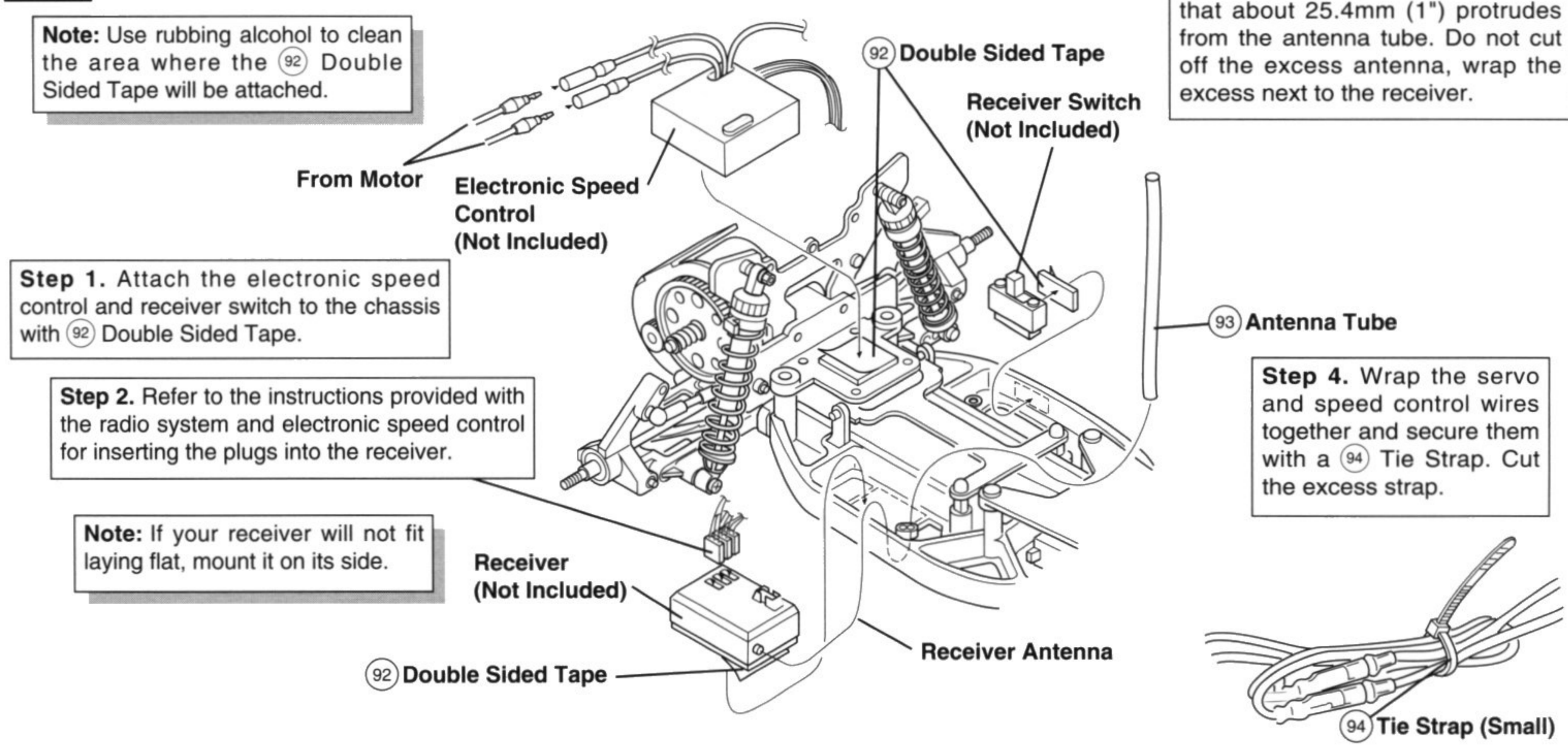
29 INSTALL THE WING MOUNT

Use parts from bag #6.



30 INSTALL THE RECEIVER AND SPEED CONTROL

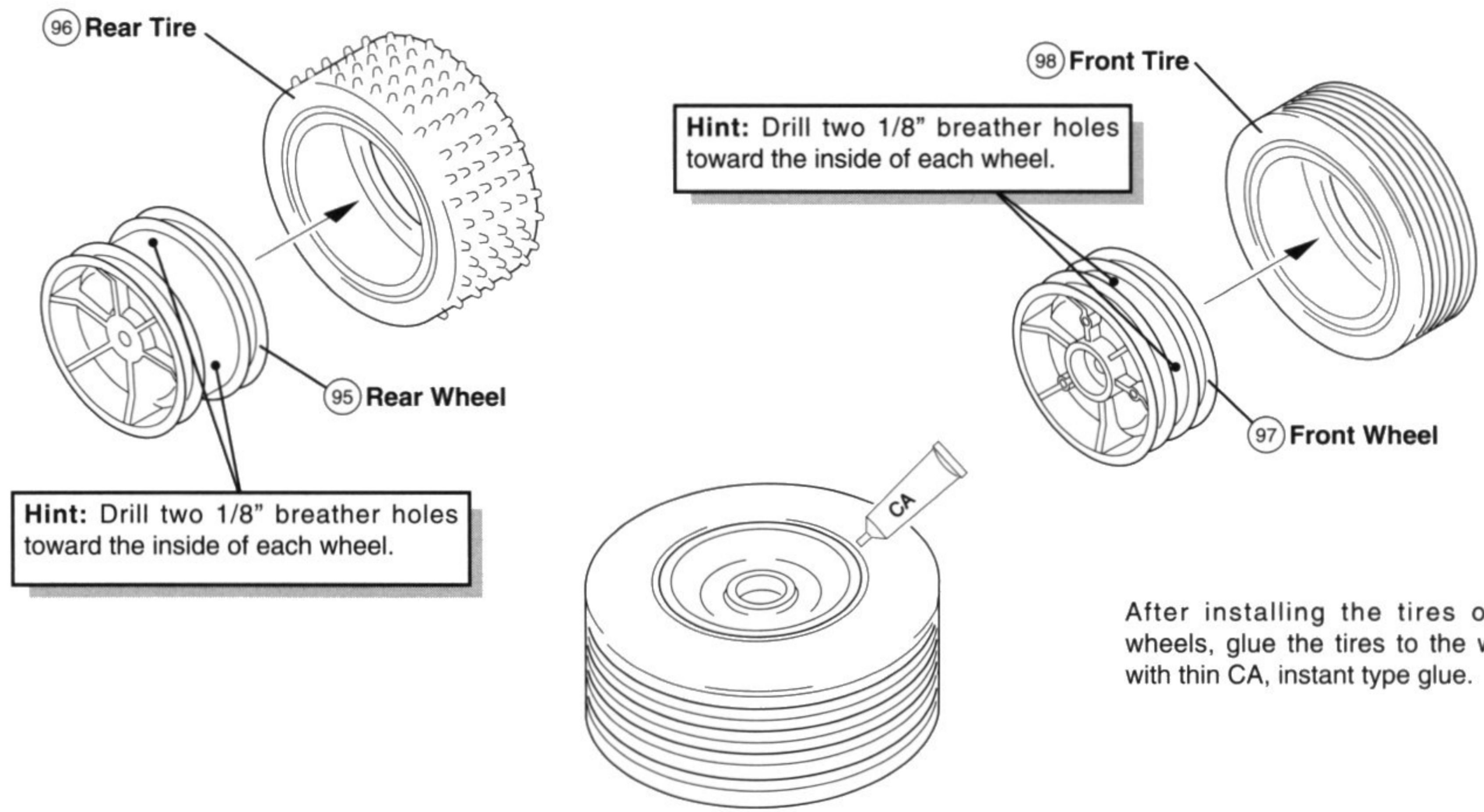
Use parts from bag #4.



31 ASSEMBLE THE WHEELS

The wheels are under the Lexan® body in the box.

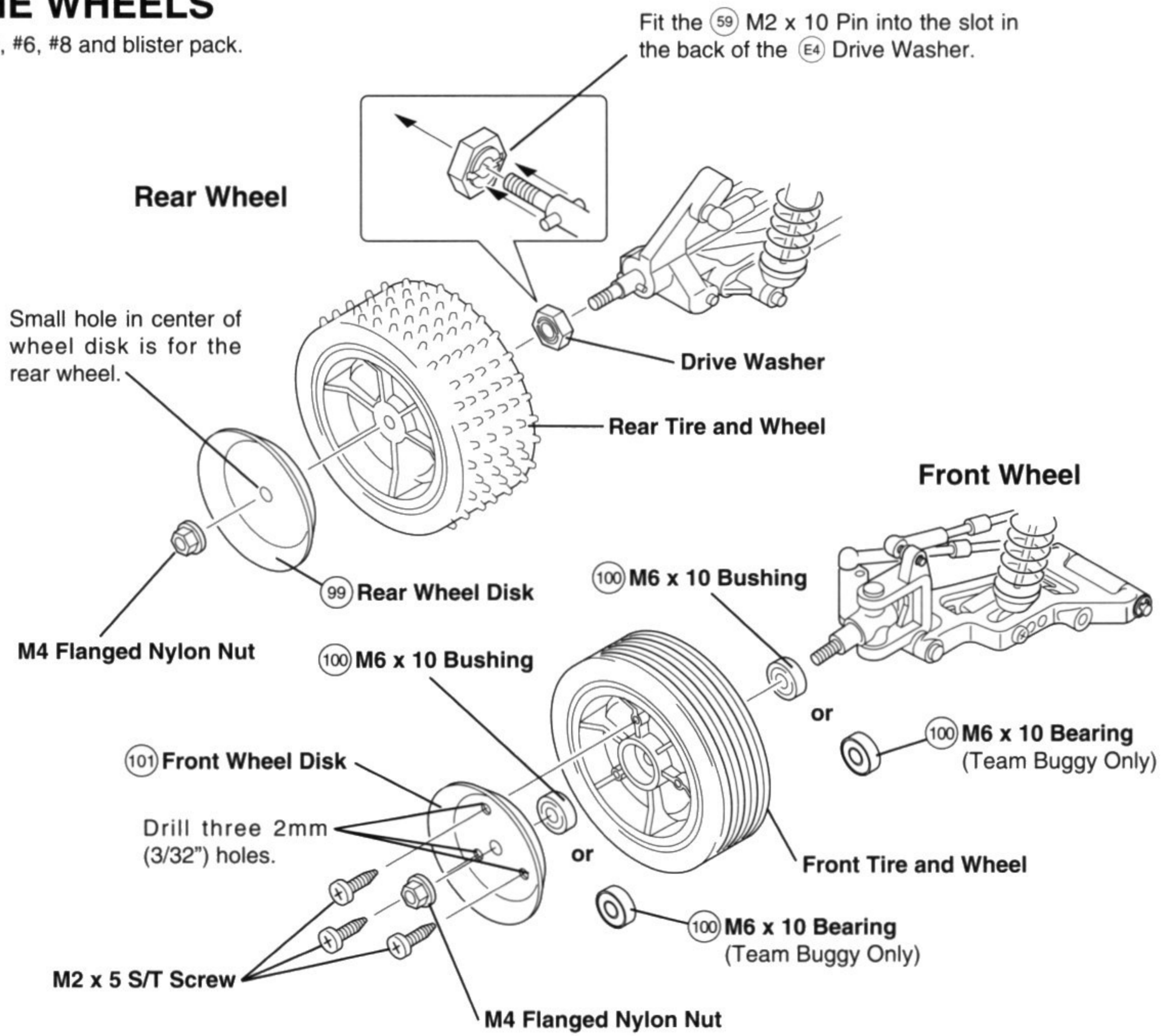
Assemble two front and two rear wheels.



32 INSTALL THE WHEELS

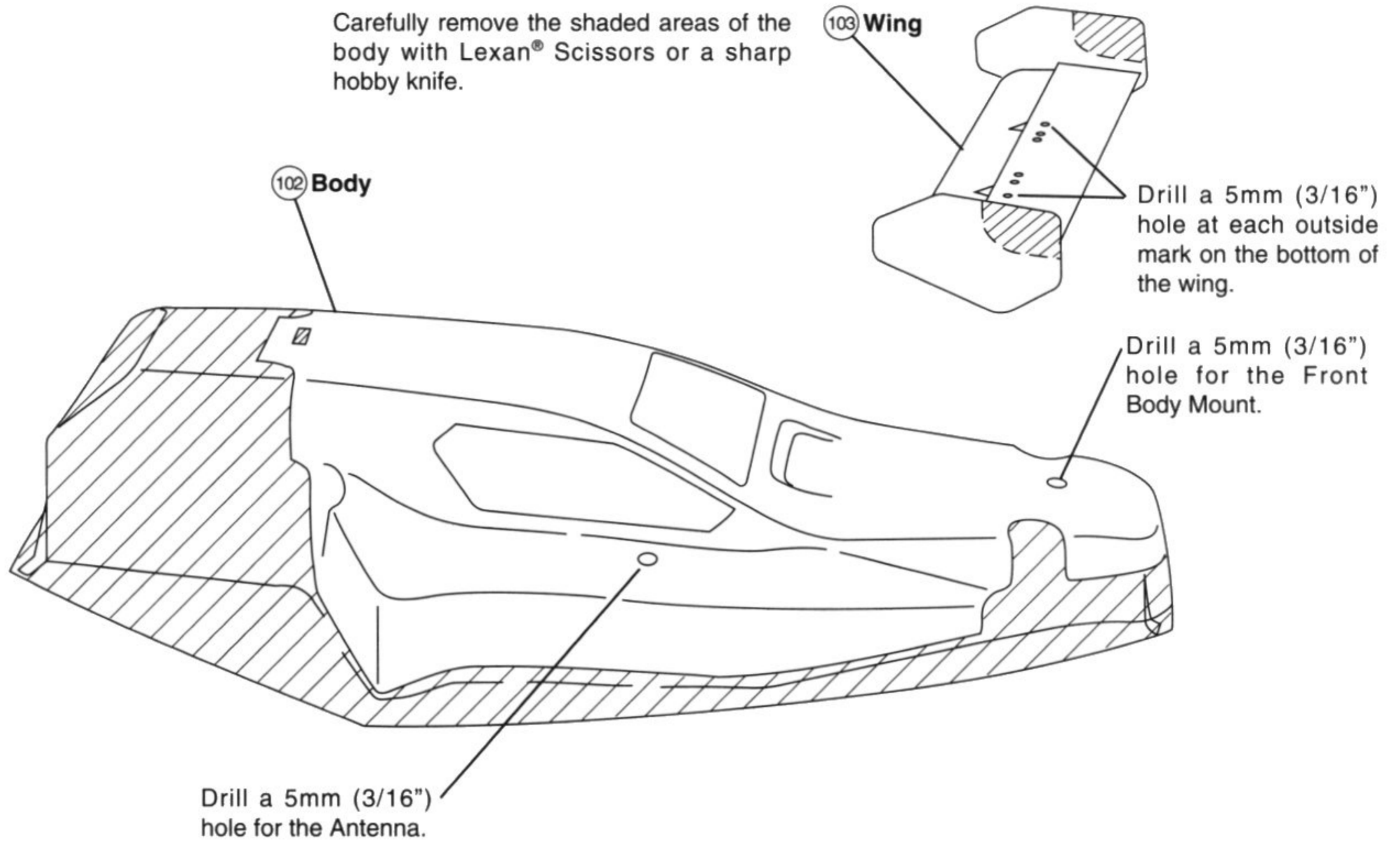
Use parts from bag #2, #6, #8 and blister pack.

- M4 Flanged Nylon Nut (4)**
- (100) M6 x 10 Bushing (4)**
- M2 x 5 S/T Screw (6)**
- (100) M6 x 10 Bearing (4) (Team Buggy Only)**



TRIMMING THE BODY

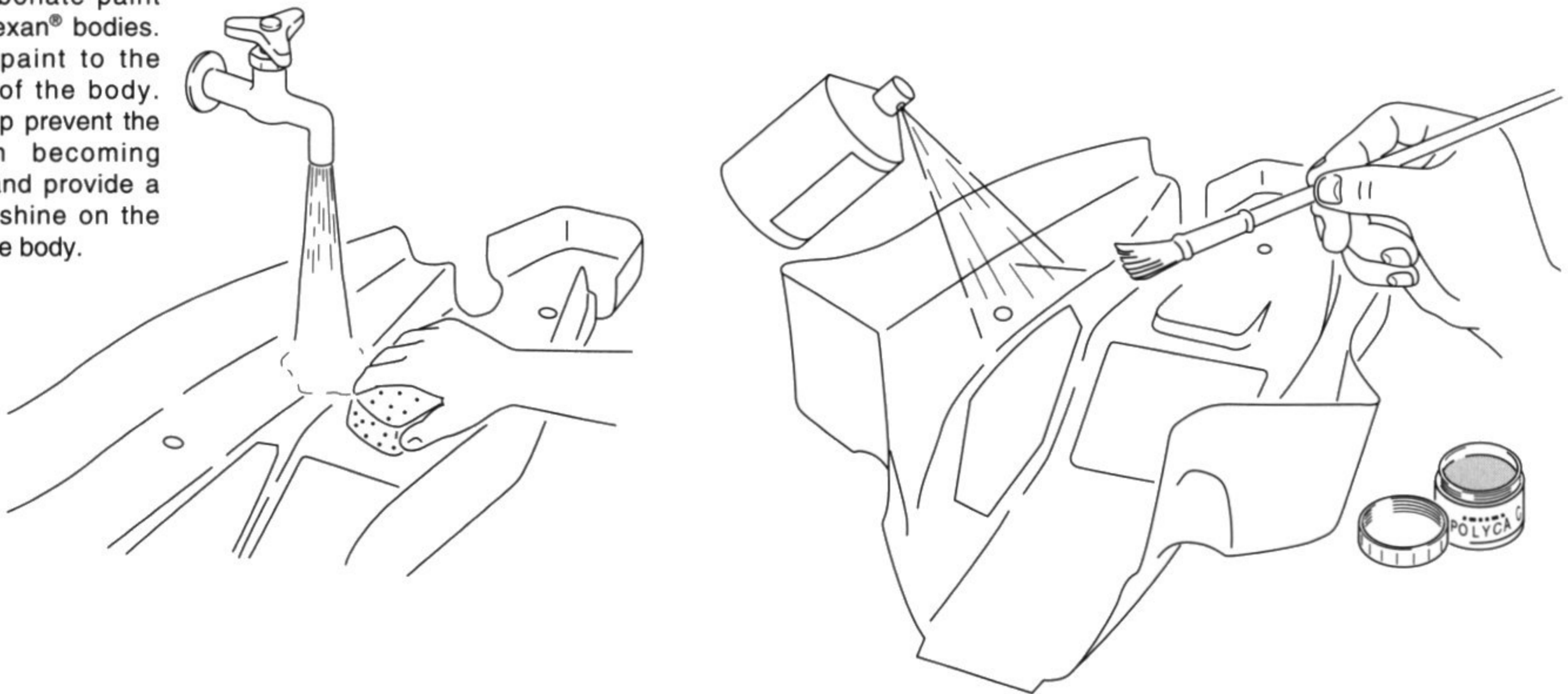
Carefully remove the shaded areas of the body with Lexan® Scissors or a sharp hobby knife.



PAINTING THE BODY

First wash the body with soap and water to remove any dirt and oil. Rinse and dry thoroughly. Ask your hobby shop dealer for polycarbonate paint made for Lexan® bodies. Apply the paint to the underside of the body. This will help prevent the paint from becoming scratched and provide a high gloss shine on the outside of the body.

If painting the body in more than one color, use masking tape or liquid mask to mask the design. Always paint the darkest color first. If you don't, the darker color may show through the light color paint. Overspray and paint runs under masking tape may be removed with paint remover made for plastic. Do not use standard paint remover. It may damage the Lexan®.

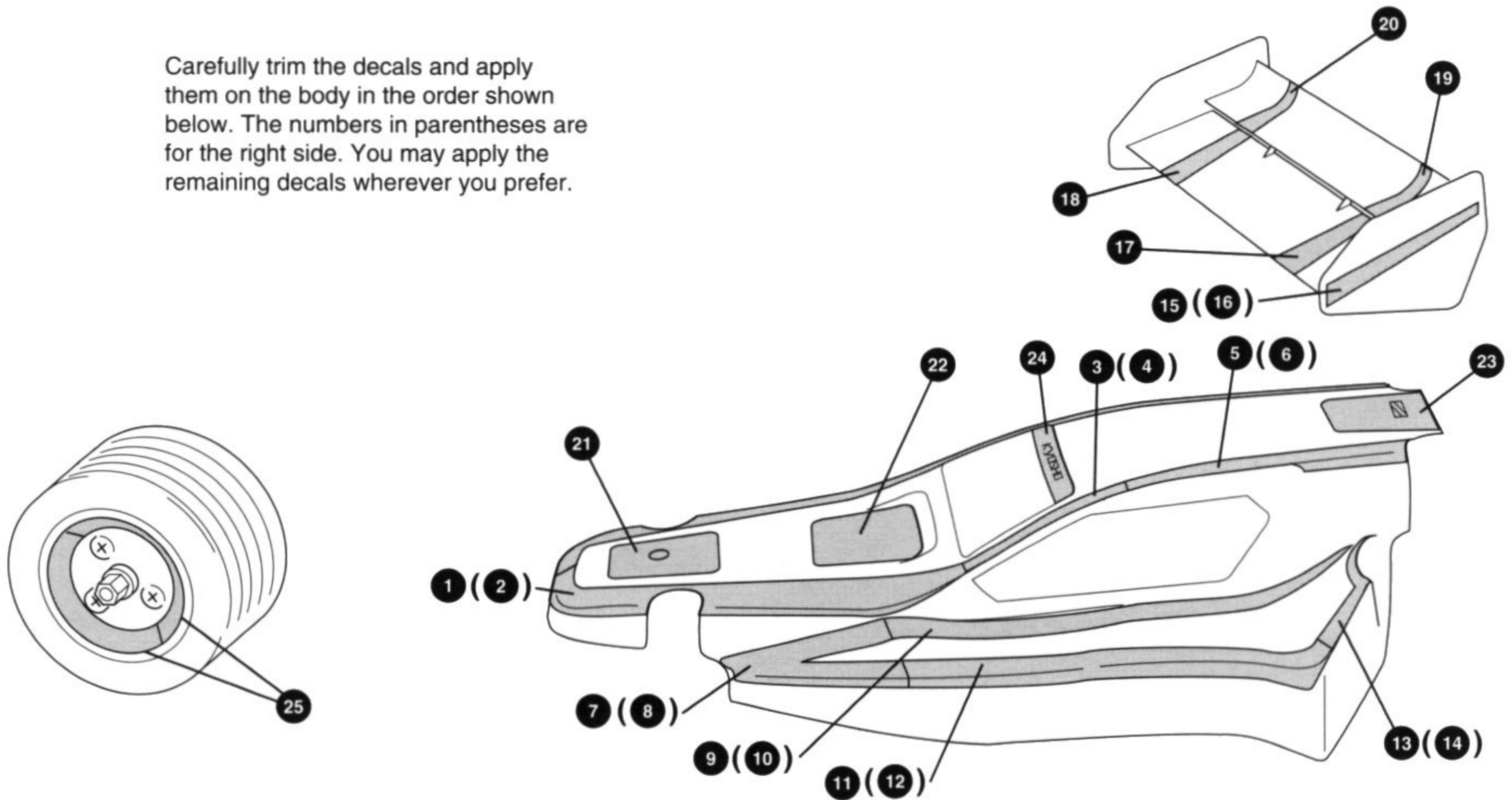


35

APPLY THE DECALS

Use Decal Bag.

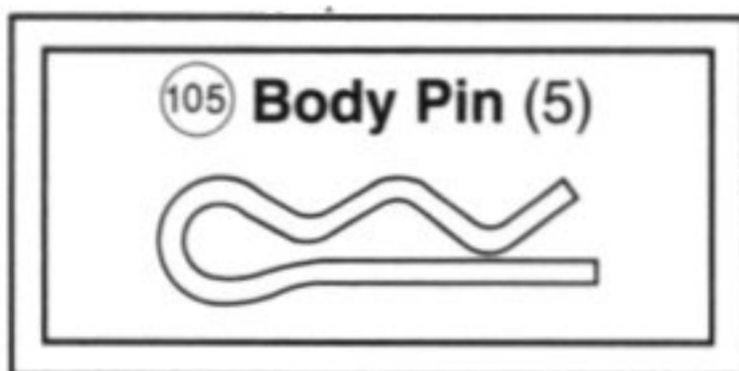
Carefully trim the decals and apply them on the body in the order shown below. The numbers in parentheses are for the right side. You may apply the remaining decals wherever you prefer.



36

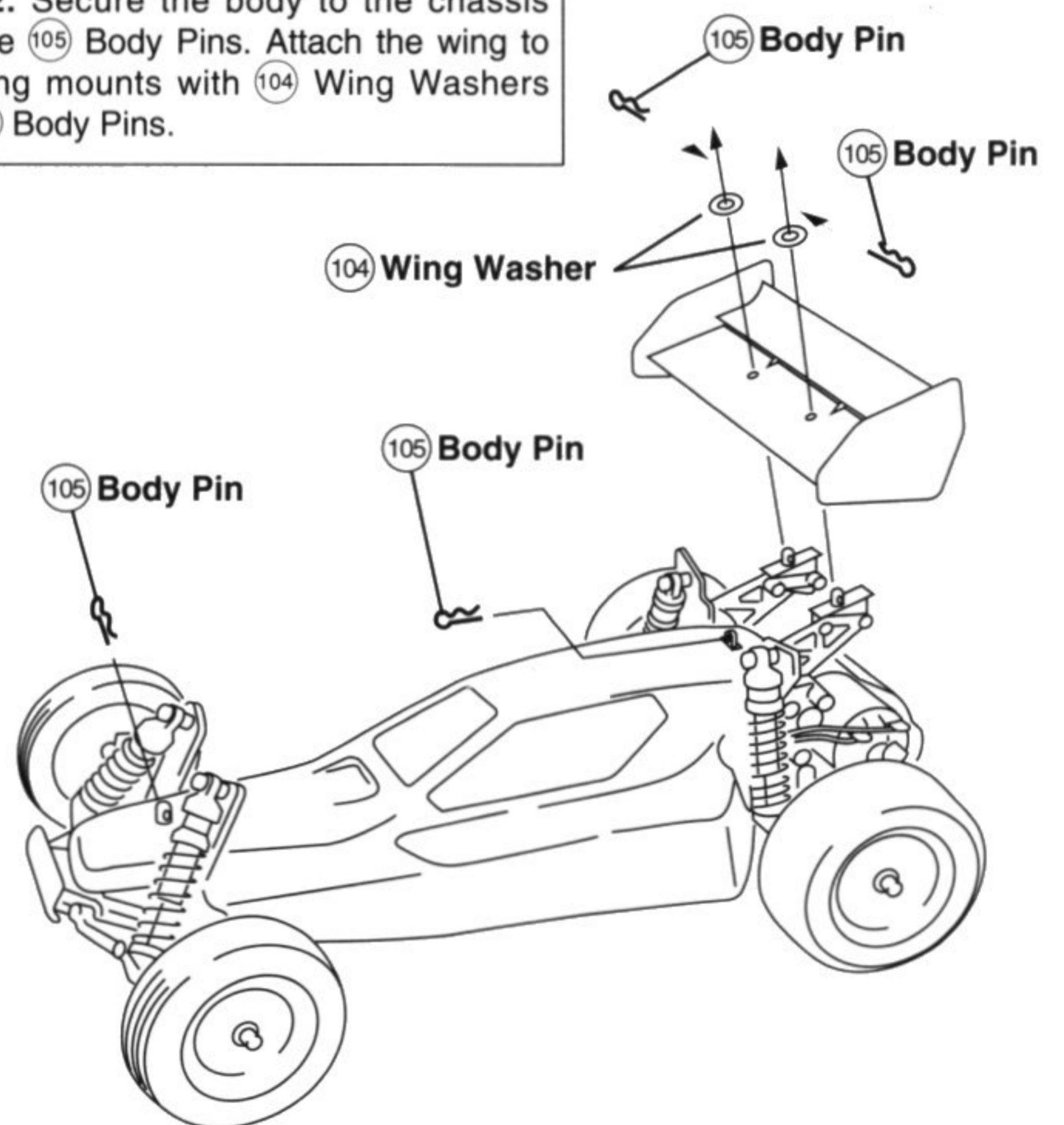
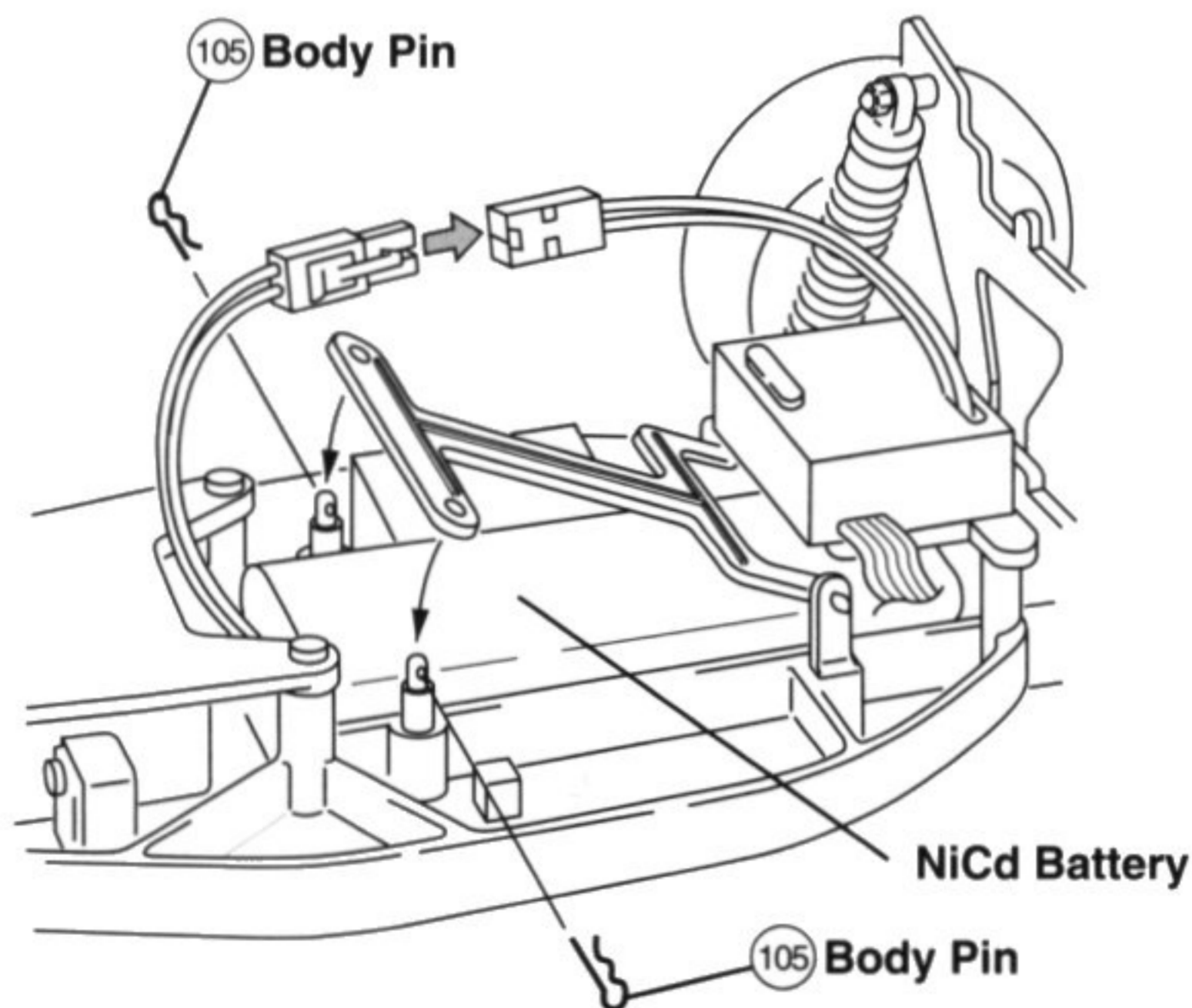
INSTALL THE BODY

Use parts from bag, #4, #6.



Step 1. Lay the NiCd battery in the chassis and secure it with the (G3) Battery Holder. When you are ready to operate the buggy, connect the battery plug to the speed control plug.

Step 2. Secure the body to the chassis with the (105) Body Pins. Attach the wing to the wing mounts with (104) Wing Washers and (105) Body Pins.



MOTOR MAINTENANCE

We recommend installing a motor cover, such as Kyosho SC-040 motor cover and OT-073 motor cleaner to keep the dirt out. After a day of racing, the motor should be removed and cleaned. While holding the motor over a garbage can, spray DuraTrax Power Shot DTXC2450 into the end bell. The end bell is the end that the wires are attached to. Spray Power Shot in until it runs out clear. Place a small drop of light machine oil such as 3-in-1 oil on the bushings or bearings, at the front and rear of the motor. Do not allow oil to get inside the motor.

BALL DIFFERENTIAL ADJUSTMENT

1. Adjust the M3 Nylon Nut on the slipper so that the spring is compressed to 7mm (9/32").

2. Hold the left wheel and spur gear tightly.

3. Rotate the right wheel. If the ball differential is set correctly, the M3 nylon nut on the slipper will rotate the same direction as the right wheel.

4. If the M3 nylon nut does not rotate, remove the red cap from the left side of the gearbox, to tighten the ball differential.

5. Insert a 2mm hex wrench into the adjustment hole that is covered by a red cap. Make sure the hex wrench fits into the M2.6 x 25 cap screw in the ball differential.

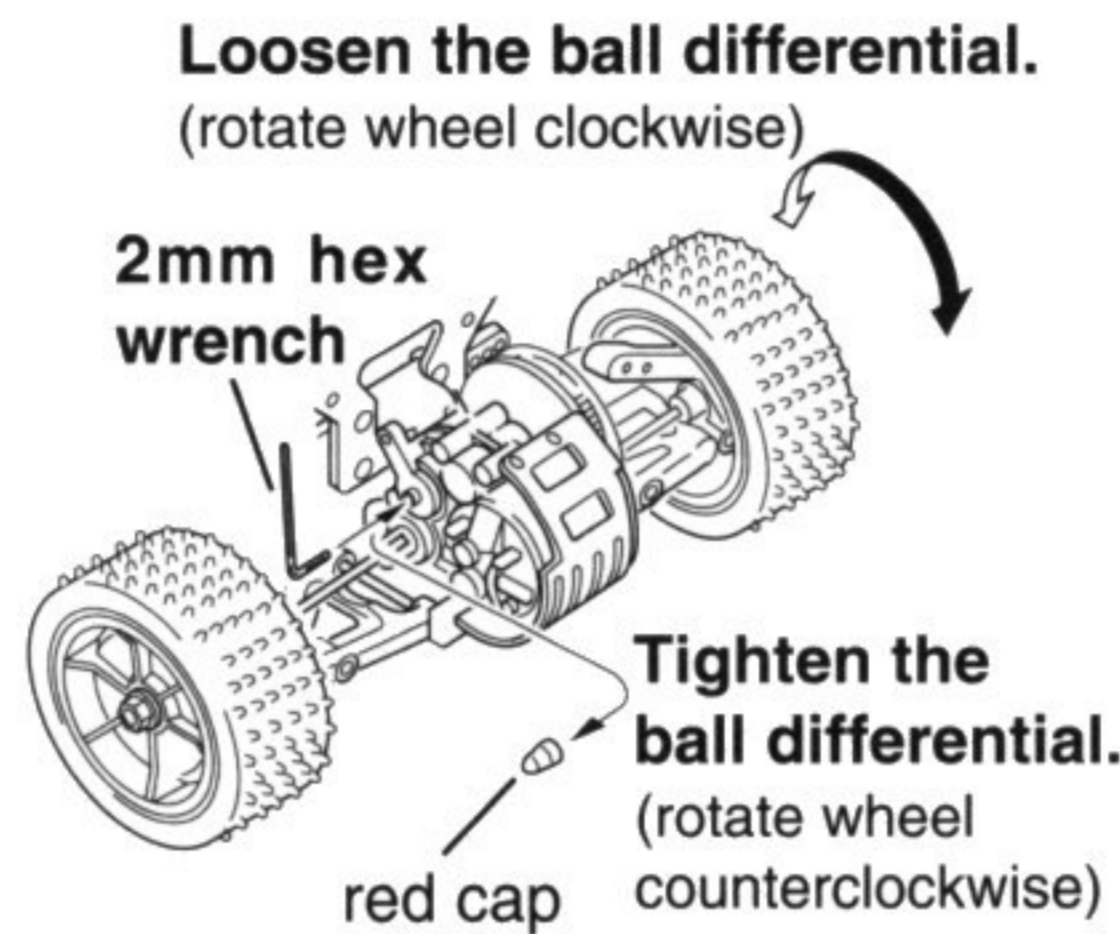
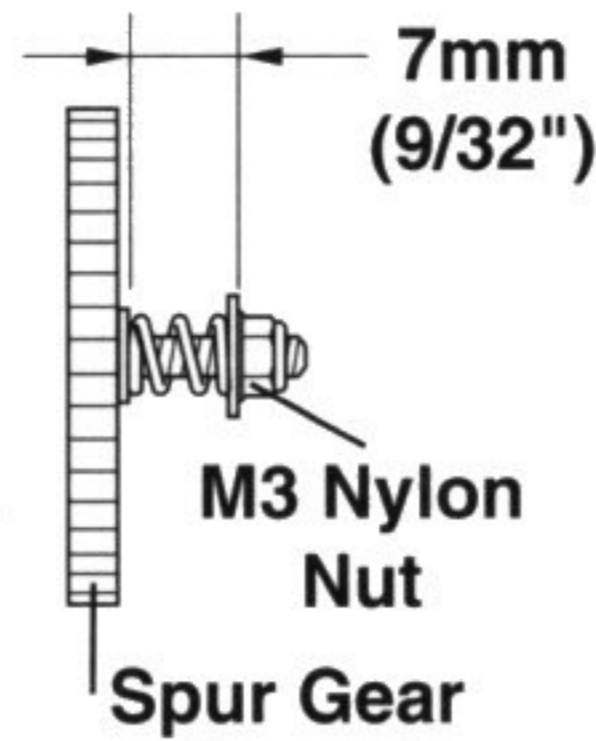
6. While holding the left rear wheel and the 2mm hex wrench, rotate the right wheel counterclockwise. This will tighten the ball differential.

7. Remove the 2mm hex wrench and repeat Steps 2 and 3. Continue adjusting the ball differential until the M3 nylon nut rotates with the right wheel. If the ball differential is set too tight, the buggy will under-steer. Under-steer (or "push" is when the buggy wants to continue going straight when the front wheels are turned. If the ball diff. is set too loose, it will slip rather than the slipper, causing excessive diff. wear.

8. After the ball differential is adjusted properly, reinstall the red cap on the gearbox.

9. Readjust the M3 nylon nut on the slipper so that the spring is compressed to 8mm (5/16").

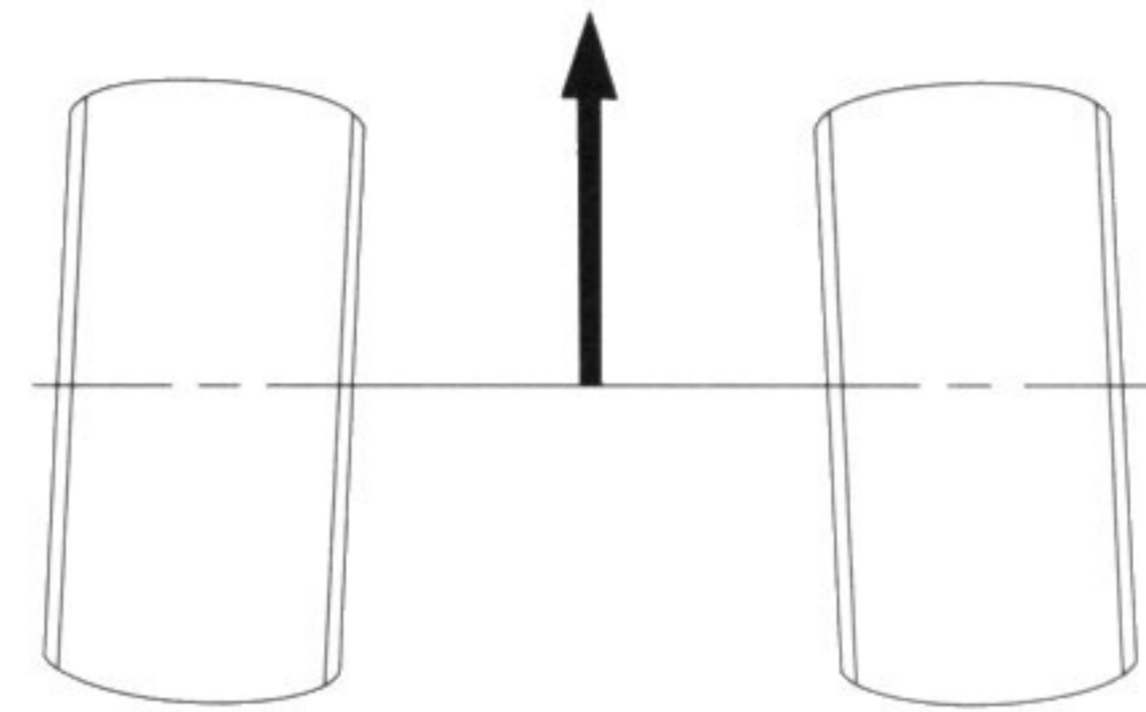
IMPORTANT: The differential may take some initial running before it is broken in and should be checked frequently during the first few battery packs. If the differential becomes loose, follow the same procedure as above. This will prevent damage to the differential gears.



TOE-IN ADJUSTMENT

Toe-in is when the front of the wheels angle toward each other, when viewed from the top. By incorporating 1° to 2° of toe-in in each wheel, the buggy will track straighter down the straightaways. The reason for this is, if there is any play in the steering linkage, the wheels will move left and right slightly without any servo arm movement. By providing toe-in, both wheels try to move outward, eliminating any play in the steering linkage. The front toe-in can be adjusted by shortening or lengthening the tie-rods.

Front of Buggy

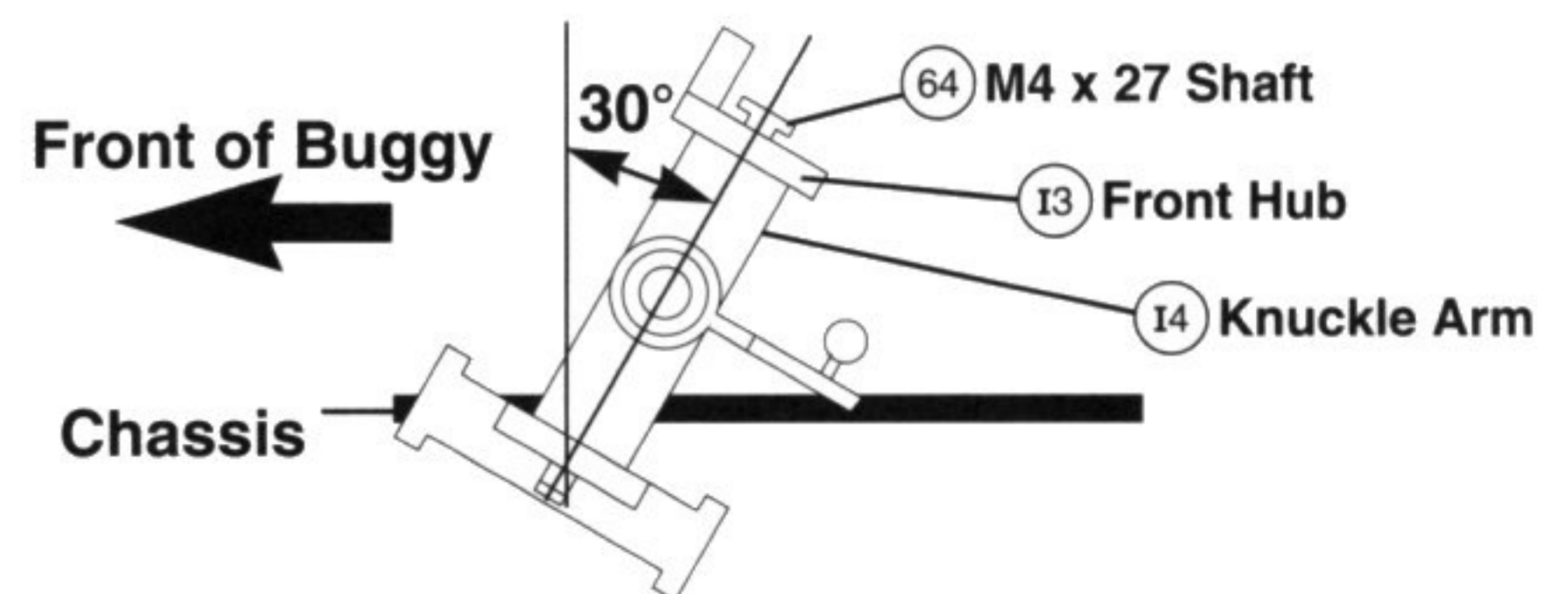


Viewed from the top (sketch is exaggerated)

To adjust the rear toe-in use the **(B5) 5°** suspension block **(B4) L3 3°** suspension block or the **(B3) 1.5°** suspension block. On most tracks the **(B4) 3°** will work well, providing good steering response with good straightaway tracking. The **(B5) 5°** should be used on tracks requiring good straightaway tracking, but less steering response. The **(B3) 1.5°** should be used on tracks with tight turns and short straightaways.

CASTER ADJUSTMENT

Caster is the angling of the front hub backwards. The stock caster angle on the Pro-X buggy is 30°. Optional front hubs are available from Kyosho. The XRW-01 (-10) will provide 20° of caster. The XRW-02 (-15) will provide 15° of caster.



Caster affects the straight line handling of the buggy. Caster causes the front wheels to return to the center when turned. Too much caster can reduce the turning response. The stock 30° front hub will work well on most tracks. If you are racing on a very tightly curved track, reducing the caster may improve the cornering, but reduce the straightaway stability.

SLIPPER ADJUSTMENT

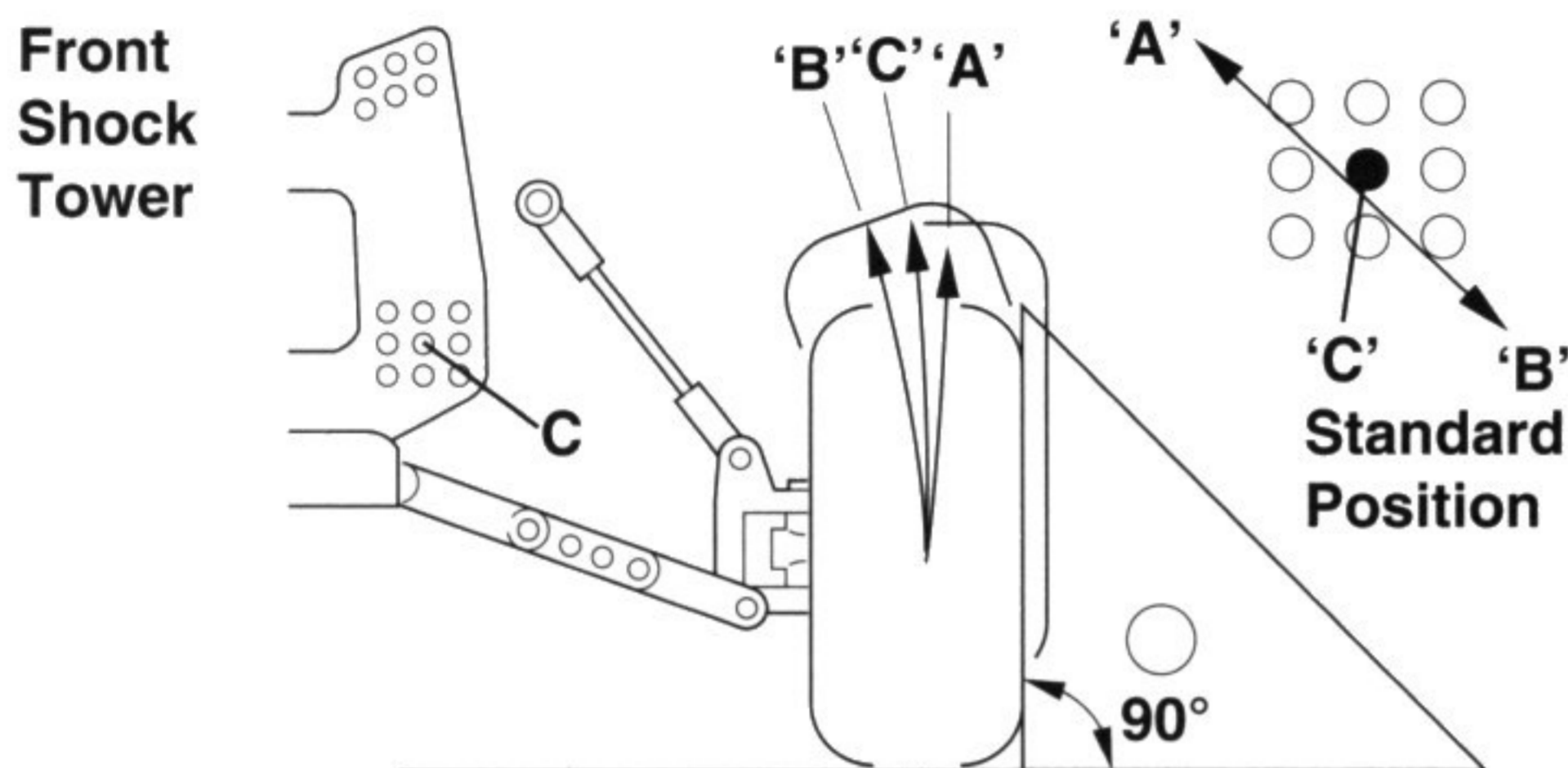
1. The slipper will need to be adjusted to match the surface on which the buggy is being run. To set the slipper, mark off a distance of 1 meter (40") on the track. Set the buggy at one end, and from a dead stop the slipper should slip for the 1 meter (40") distance on full acceleration.

2. If the ball differential and slipper are not adjusted properly, running the buggy will generate heat and damage parts.

CAMBER ADJUSTMENT

Front Camber

Camber is the angle of the wheel in relation to the chassis. Negative camber is when the top of the wheel leans in toward the chassis. Positive camber is when the top of the wheel leans away from the chassis. 0° camber is when the wheel is 90° to the chassis or ground. By attaching the upper rod towards arrow 'A', there will be less camber when the wheel is deflected upward. This is good for flat, straight tracks with wide turns. By attaching the upper rod towards arrow 'B', there will be more camber when the wheel is deflected upward. This is good for tight curved tracks. The reason is, as the buggy turns, the chassis leans toward the outside of the turn, depressing the suspension arm and raising the wheel. By having more camber, the wheel stays more perpendicular to the ground, providing better traction.

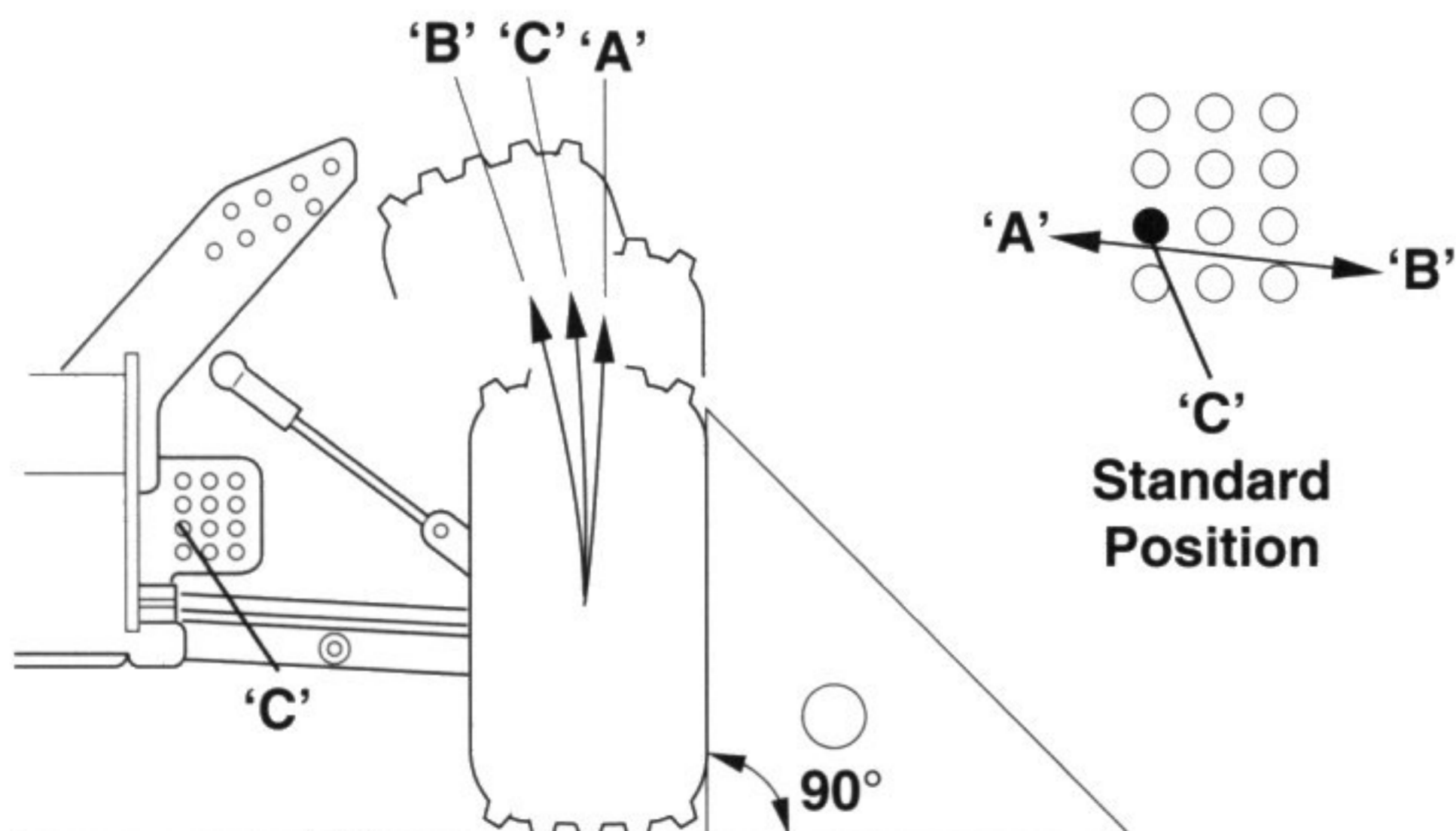


The buggy should be set up with the upper rod in position 'C' and 0° to 2° of negative camber with the chassis level. If the camber needs to be changed to match the track, make sure you adjust the upper rod length after relocating the mounting position. Set up both sides of the buggy identically.

Rear Camber

By attaching the upper rod towards arrow 'A' there will be less camber when the wheel deflects upward in turns. This will provide more maneuverability but, more likely, the buggy may spin out.

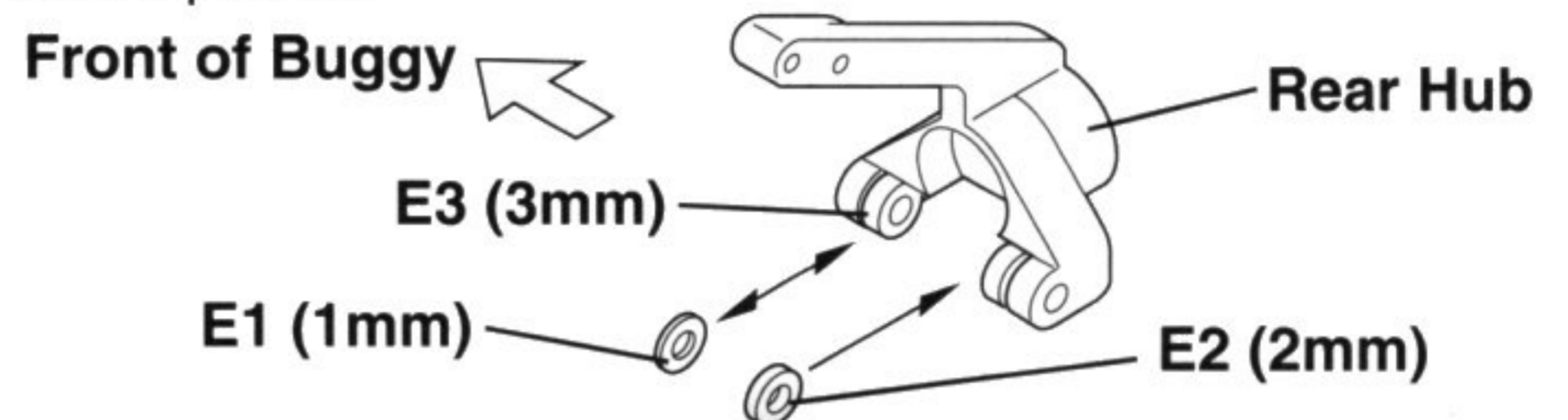
By attaching the upper rod towards arrow 'B' there will be more camber when the wheel deflects upward in turns. This will provide less maneuverability but it will be less likely that the buggy will spin out. As on the front, set the rear wheels at 0° to 2° negative camber with the chassis level.



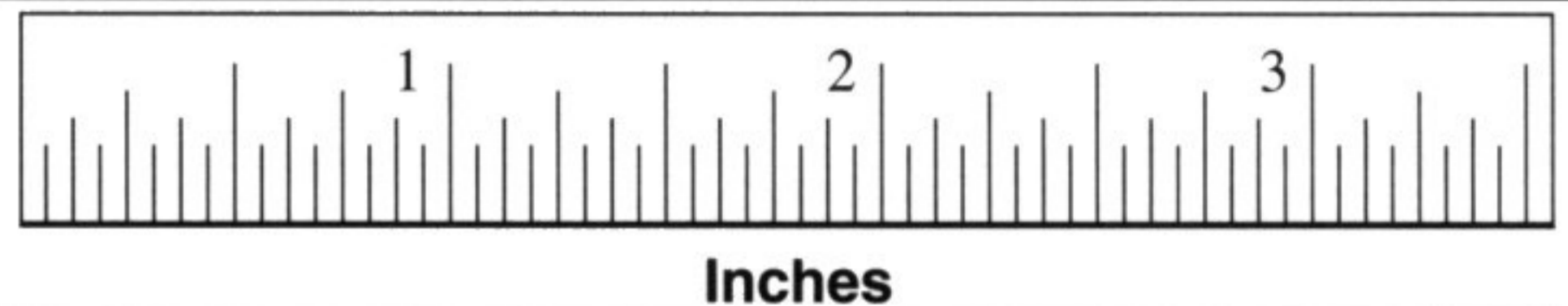
WHEEL BASE ADJUSTMENT

By inserting different spacers E1, E2, E3 into the rear hubs, 7 different wheel bases can be achieved. A shorter wheel base (the distance from the front axle to the rear axle) will provide quicker turning response, but less high speed straightaway stability. The short wheel base is good for small, tight-cornered tracks.

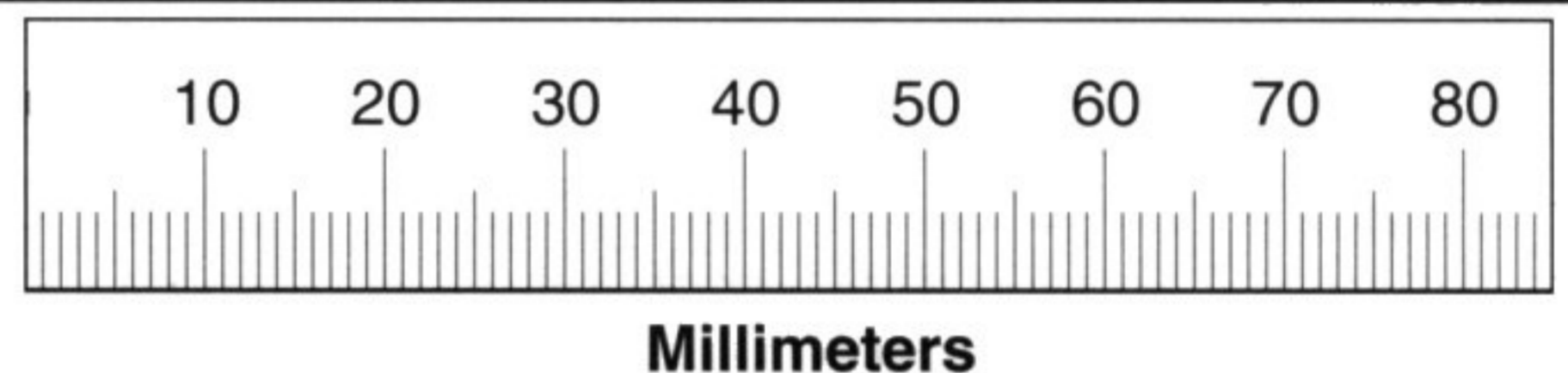
A longer wheel base provides better high speed and straightaway stability, but reduces the steering response. This setup is good for tracks with wide turns and long straightaways. This kit comes with 1mm, 2mm and 3mm spacers.



INCH RULER



MILLIMETER RULER

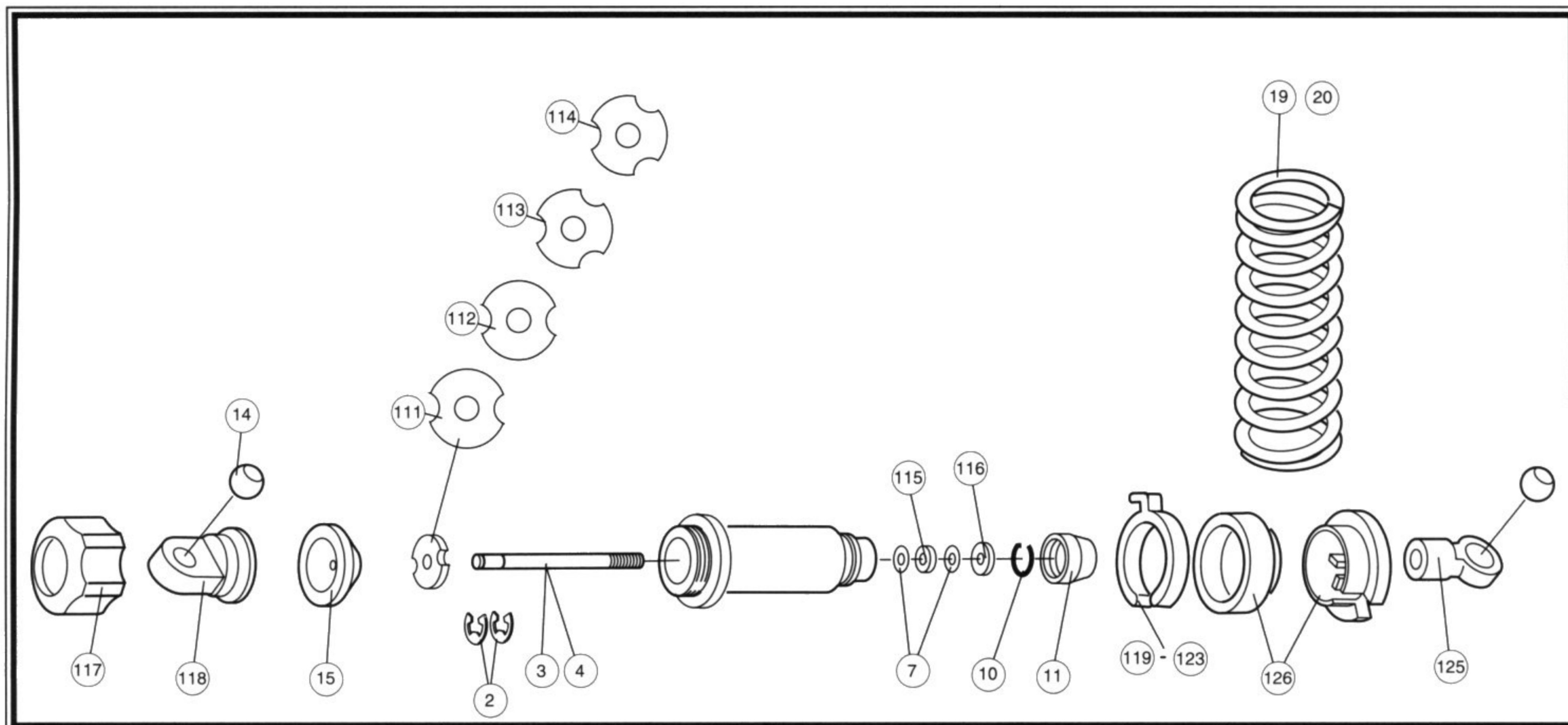


OPERATIONAL SAFETY AND MAINTENANCE

1. Always turn your transmitter on first, then your receiver. When finished running the buggy, turn your receiver off first, then your transmitter.
2. Check that no one else is on your frequency. If they are, do not turn your radio system on. Wait until they are finished running their buggies and have turned off their radio system before turning yours on.
3. After turning your radio on, check that it works properly. The servo arms should move in proportion to the trigger and steering wheel input.
4. If the buggy does not operate properly, stop the buggy, locate, and fix the problem.
5. Do not reach into the gears and drive system while the motor is running. Keep hands away from all moving parts.
6. Do not drive the buggy through water. Metal parts will rust and electrical components may short. If you inadvertently drive through water, be sure to dry everything out thoroughly, especially the radio components.
7. After running the buggy, wipe the dirt and oil. Denatured alcohol works as a good cleaner for removing residue.
8. If the buggy is run in muddy or sandy conditions, remove the bushing or bearings and clean them often. Motor cleaner such as Duratrax® Power Shot™ (DTXC2450) is great for cleaning. Always re-oil the bearings before installing them.

ORDERING PARTS

You can easily purchase replacement parts for your kit. All of the parts identified by key numbers are usually not available individually, but offered in convenient parts packs. To determine which parts pack you need, find the key number for the part within the manual, then consult the guide below. When referring to the part you need, always use the stock number and the mfg. number. For instance, if you need a key #43, ask for stock #KYOC4038, pack #SST-02H.



Key #	Description	Mfg #	Stock #	Key #	Description	Mfg #	Stock #
Ultimate Shock (Medium)				120	2mm Spring Adjuster	W-5106	KYOC3483
Ultimate Shock (Long)				121	3mm Spring Adjuster	W-5106	KYOC3483
2	E2.5 E-Ring 10 pcs.	1382	KYOC9882	122	5mm Spring Adjuster	W-5106	KYOC3483
3	Shock Shaft Medium	W-5102	KYOC3485	123	10 mm Spring Adjuster	W-5106	KYOC3483
4	Shock Shaft Long	W-5103	KYOC3486	125	M5.8 Ball End	W-5106	KYOC3483
7	O-Ring Blue	W-5107	KYOC3487	126	Spring Retainer	W-5106	KYOC3483
10	C-Ring	W-5107	KYOC3487	Sport Shock (Medium)			
11	Rubber Boot	W-5104	KYOC3478	2	E2.5 E-Ring	1382	KYOC9882
14	M5.8 Ball 10 Pcs.	OT-032	KYOC2167	3	Front Shock Shaft (Med)	(Included in bag # W-5142)	
15	Diaphragm	WPS-07	KYOC4863	14	M5.8 Ball	OT-032	KYOC2167
19	Medium Spring Set	W-5013M	KYOC5864	15	Diaphragm	(Included in bag # W-5142)	
19	Spring Med - Silver	W-5013M1	KYOC5873	19	Front Spring Set	W-5013M	KYOC5864
19	Spring Med - Black	W-5013M2	KYOC5874	87	Shock Collar	(Included in bag # W-5142)	
19	Spring Med - Copper	W-5013M3	KYOC5875	88	M3 Plastic Nut	(Included in bag # W-5142)	
19	Spring Med - Gold	W-5013M4	KYOC5876	111	Shock Piston (Hard)	(Included in bag # W-5142)	
19	Spring Med - Nickel	W-5013M5	KYOC5877	112	Shock Piston (Med Hard)	(Included in bag # W-5142)	
20	Long Spring Set	W-5013L	KYOC5865	113	Shock Piston (Med Soft)	(Included in bag # W-5142)	
20	Spring Long - Silver	W-5013L1	KYOC5880	114	Shock Piston (Soft)	(Included in bag # W-5142)	
20	Spring Long - Black	W-5013L2	KYOC5881	117	Shock Cap Ring	(Included in bag # W-5142)	
20	Spring Long - Copper	W-5013L3	KYOC5882	118	Shock Cap	(Included in bag # W-5142)	
20	Spring Long - Gold	W-5013L4	KYOC5883	119	1mm Spring Adjuster	(Included in bag # W-5142)	
20	Spring Long - Nickel	W-5013L5	KYOC5884	120	2mm Spring Adjuster	(Included in bag # W-5142)	
111	Shock Piston (Hard)	W-5108	KYOC3488	121	3mm Spring Adjuster	(Included in bag # W-5142)	
112	Shock Piston (Md Hard)	W-5108	KYOC3488	122	5mm Spring Adjuster	(Included in bag # W-5142)	
113	Shock Piston (Md Soft)	W-5108	KYOC3488	123	10mm Spring Adjuster	(Included in bag # W-5142)	
114	Shock Piston (Soft)	W-5108	KYOC3488	124	Spring Collar	(Included in bag # W-5142)	
115	M3 x 5 x 2 Collar	W-5107	KYOC3487	125	M5.8 Ball End (Long)	(Included in bag # W-5142)	
116	M3 x 7 x 1 Collar	W-5107	KYOC3487	126	Spring Retainer	(Included in bag # W-5142)	
117	Shock Cap - Black	W-5105BK	KYOC3479	129	Shock Case (Medium)	(Included in bag # W-5142)	
117	Shock Cap - Blue	W-5105BL	KYOC3480	Sport Shock (Long)			
117	Shock Cap - Purple	W-5105P	KYOC3482	2	E2.5 E-Ring	1382	KYOC9882
117	Shock Cap - Red	W-5105R	KYOC3484	4	Rear Shock Shaft (Long)	(Included in bag # W-5143)	
118	Shock End	W-5106	KYOC3483	14	M5.8 Ball	OT-032	KYOC2167
119	1mm Spring Adjuster	W-5106	KYOC3483				

Key #	Description	Mfg #	Stock #	Key #	Description	Mfg #	Stock #
15	Diaphragm	(Included in bag # W-5143)		119	1mm Spring Adjuster	(Included in bag # W-5143)	
20	Rear Spring Set	W-5013L	KYOC5865	120	2mm Spring Adjuster	(Included in bag # W-5143)	
87	Shock Collar	(Included in bag # W-5143)		121	3mm Spring Adjuster	(Included in bag # W-5143)	
88	M3 Plastic Nut	(Included in bag # W-5143)		122	5mm Spring Adjuster	(Included in bag # W-5143)	
111	Shock Piston (Hard)	(Included in bag # W-5143)		123	10mm Spring Adjuster	(Included in bag # W-5143)	
112	Shock Piston (Med Hard)	(Included in bag # W-5143)		124	Spring Collar	(Included in bag # W-5143)	
113	Shock Piston (Med Soft)	(Included in bag # W-5143)		125	M5.8 Ball End (Long)	(Included in bag # W-5143)	
114	Shock Piston (Soft)	(Included in bag # W-5143)		126	Spring Retainer	(Included in bag # W-5143)	
117	Shock Cap Ring	(Included in bag # W-5143)		130	Shock Case (Long)	(Included in bag # W-5143)	
118	Shock Cap	(Included in bag # W-5143)					

Key #	Description	Contents	Stock #	Mfg. #
Ultimate Shock (Medium)		3,10,11,15,87,88,111,112,113,114,115,116,117,118,119,120		
(Team Buggy Only)		121,122,123,124,125,126,129 x 2 Pcs. 2,7,14 x 4 Pcs.....	KYOC6285	W-5098
2	E2.5 E-Ring	2 x 10 Pcs.	KYOC9882	1382
3	Front Shock Shaft (Med)	(included in bag # W-5098, shock pkg.)		
7	O-Ring Blue	(included in bag # W-5098, shock pkg.)		
10	C-Ring	(Included in bag # W-5098, shock pkg.)		
11	Rubber Boot	(Included in bag # W-5098, shock pkg.)		
14	M5.8 Ball	14 x 10 Pcs.	KYOC2167	OT-032
15	Diaphragm	(Included in bag # W-5098, shock pkg.)		
19	Front Spring Set	19 x 2 Pcs.	KYOC5864	W-5013M
87	Shock Collar	(Included in bag # W-5098, shock pkg.)		
88	M3 Plastic Nut	(Included in bag # W-5098, shock pkg.)		
111	Shock Piston (Hard)	(Included in bag # W-5098, shock pkg.)		
112	Shock Piston (Med Hard)	(Included in bag # W-5098, shock pkg.)		
113	Shock Piston (Med Soft)	(Included in bag # W-5098, shock pkg.)		
114	Shock Piston (Soft)	(Included in bag # W-5098, shock pkg.)		
115	M3 x 5 x 2 Collar	(Included in bag # W-5098, shock pkg.)		
116	M3 x 7 x 1 Collar	(Included in bag # W-5098, shock pkg.)		
117	Shock Cap Ring	(Included in bag # W-5098, shock pkg.)		
118	Shock Cap	(Included in bag # W-5098, shock pkg.)		
119	1mm Spring Adjuster	(Included in bag # W-5098, shock pkg.)		
120	2mm Spring Adjuster	(Included in bag # W-5098, shock pkg.)		
121	3mm Spring Adjuster	(Included in bag # W-5098, shock pkg.)		
122	5mm Spring Adjuster	(Included in bag # W-5098, shock pkg.)		
123	10mm Spring Adjuster	(Included in bag # W-5098, shock pkg.)		
124	Spring Collar	(Included in bag # W-5098, shock pkg.)		
125	M5.8 Ball End (Long)	(Included in bag # W-5098, shock pkg.)		
126	Spring Retainer	(Included in bag # W-5098, shock pkg.)		
129	Shock Case (Medium)	(Included in bag # W-5098, shock pkg.)		

Key #	Description	Contents	Stock #	Mfg. #
Ultimate Shock (Long)		4,10,11,15,87,88,111,112,113,114,115,116,117,118,119,120,121		
(Team Buggy Only)		122,123,124,125,126,130 x 2 Pcs. 2,7,14 x 4 Pcs.....	KYOC5845	W-5099
2	E2.5 E-Ring	2 x 10 Pcs.	KYOC9882	1382
3	Rear Shock Shaft (Long)	(Included in bag # W-5099, shock pkg.)		
7	O-Ring Blue	(Included in bag # W-5099, shock pkg.)		
10	C-Ring	(Included in bag # W-5099, shock pkg.)		
11	Rubber Boot	(Included in bag # W-5099, shock pkg.)		
14	M5.8 Ball	14 x 10 Pcs.	KYOC2167	OT-032
15	Diaphragm	(Included in bag # W-5099, shock pkg.)		
20	Rear Spring Set (Long)	20 x 2 Pcs.	KYOC5865	W-5013L
87	Shock Collar	(Included in bag # W-5099, shock pkg.)		
88	M3 Plastic Nut	(Included in bag # W-5099, shock pkg.)		
111	Shock Piston (Hard)	(Included in bag # W-5099, shock pkg.)		
112	Shock Piston (Med Hard)	(Included in bag # W-5099, shock pkg.)		
113	Shock Piston (Med Soft)	(Included in bag # W-5099, shock pkg.)		
114	Shock Piston (Soft)	(Included in bag # W-5099, shock pkg.)		
115	M3 x 5 x 2 Collar	(Included in bag # W-5099, shock pkg.)		
116	M3 x 7 x 1 Collar	(Included in bag # W-5099, shock pkg.)		
117	Shock Cap Ring	(Included in bag # W-5099, shock pkg.)		
118	Shock Cap	(Included in bag # W-5099, shock pkg.)		
119	1mm Spring Adjuster	(Included in bag # W-5099, shock pkg.)		
120	2mm Spring Adjuster	(Included in bag # W-5099, shock pkg.)		
121	3mm Spring Adjuster	(Included in bag # W-5099, shock pkg.)		
122	5mm Spring Adjuster	(Included in bag # W-5099, shock pkg.)		
123	10mm Spring Adjuster	(Included in bag # W-5099, shock pkg.)		

Key #	Description	Contents	Stock #	Mfg. #
124	Spring Collar	(Included in bag # W-5099, shock pkg.)		
125	M5.8 Ball End (Long)	(Included in bag # W-5099, shock pkg.)		
126	Spring Retainer	(Included in bag # W-5099, shock pkg.)		
130	Shock Case (Long)	(Included in bag # W-5099, shock pkg.)		
22	M3 x 46 Turnbuckle	22 x 2 Pcs. (Team Buggy Only)	KYOC6198	W-5666
22	M3 x 46 Adjustable Rod	22 x 2 Pcs.	KYOC5423	92343
23	M3 x 38 Turnbuckle	23 x 2 Pcs. (Team Buggy Only)	KYOC6197	W-5665
23	M3 x 38 Adjustable Rod	23 x 2 Pcs.	KYOC5422	92341
24	M4.5 Ball Ends	24 x 16 Pcs.	KYOC2248	92331
25	Drive Shaft	25,28 x 1 Pc.	KYOC3326	SST-07H
26	E3.0 E-Ring	26 x 10 Pcs.	KYOC9883	1383
27	M5 x 10 Bearing	27 x 2 Pcs. (Team Buggy Only)	KYOC2197	1901
27	M5 x 10 Bushing	27 x 4 Pcs.	KYOC2764	96482
28	M1.6 x 8 Pin	(Included in Bag #SST-07H, key # 25)		
29	Main Differential Gear	29,32,34 x 1 Pc.	KYOC3298	SST-05
30	Differential Ball	30 x 14 Pcs.	KYOC3282	SST-11
31	M5 x 8 Bearing	31 x 2 Pcs. (Team Buggy Only)	KYOC2204	1902
31	M5 x 8 Bushing	31 x 4 Pcs.	KYOC2761	96481
32	Differential Gear (A)	(Included in bag # SST-05, key # 29)		
33	Differential Plate	33 x 2 Pcs.	KYOC3291	SST-10
34	Differential Gear (B)	(Included in Bag # SST-05, key # 29)		
35	Thrust Bearing	35,36 x 1 Pc.	KYOC6166	96471
36	Thrust Plate (A)	(Included in bag # 96471, key # 35)		
38	M8 x 14 Bearing	38 x 2 Pcs.	KYOC2217	1911
38	M8 x 14 Bushing	38 x 4 Pcs.	KYOC2762	96483
39	Output Gear (A)	39,40 x 2 Pcs. (Team Buggy Only)	KYOC3522	SST-19
39	Output Gear (A)	39,40 x 2 Pcs.	KYOC3514	SST-06
40	Output Gear (B)	(Included in bag # SST-19, key # 39) (Team Buggy Only)		
40	Output Gear (B)	(Included in bag # SST-06, key # 39)		
41	Joint	41 x 2 Pcs.	KYOC4325	SST-15
42	Motor Plate	42, 82 x 1 Pc.	KYOC4616	SST-01
43	Right Gearbox	43, 44, 45 x 1 Pc.	KYOC4038	SST-02H
44	Left Gearbox	(Included in bag # SST-02H, key # 43)		
45	Cap	(Included in bag # SST-02H, key # 43)		
46	Slipper Plate (A)	46,49,52,53 x 1 Pcs. (Team Buggy Only)	KYOC3325	SST-18
46	Slipper Plate (A)	46,49,52,53 x 1 Pcs.	KYOC3318	SST-08
47	M4 x 8 Bearing	47 x 2 Pcs. (Team Buggy Only)	KYOC2207	1903
47	M4 x 8 Bushing	47 x 4 Pcs.	KYOC2760	96480
48	Slipper Ring	48 x 1 Pcs. (Team Buggy Only)	KYOC5839	SST-09
48	Slipper Ring	48 x 1 Pcs.	KYOC5837	SST-39
49	Slipper Plate (B)	(Included in bag # SST-18, key # 46) (Team Buggy Only)		
49	Slipper Plate (B)	(Included in bag # SST-08, key # 46)		
50	Thrust Plate (B)	51 x 2 Pcs. 50 x 4 Pcs.	KYOE3140	H-3051
51	Thrust Bearing	(Included in bag # H-3051, key # 50)		
52	Spring (B)	(Included in bag # SST-18, key # 46) (Team Buggy Only)		
52	Spring (B)	(Included in bag # SST-08, key # 46)		
53	Spring Holder	(Included in bag # SST-18, key # 46) (Team Buggy Only)		
53	Spring Holder	(Included in bag # SST-08, key # 46)		
54	Spur Gear	54 x 1 Pc.	KYOC5911	SST-03
55	M4.5 x 9 Pivot Ball	55 x 10 Pc.	KYOC2241	XR-15
56	Rear Shock Tower	56 x 1 Pc.	KYOC4977	XR-11H
57	Chassis	57 x 1 Pc.	KYOC4511	XR-08H
58	Universal Swing Shaft	58,59 x 2 Pcs.	KYOC6102	W-5662H
59	M2 x 10 Pin	(Included in bag # W-5661H, key # 58)		
60	M3 x 50 Shaft	60,61,67,68 x 2 Pcs.	KYOC6045	XR-13
61	M3 x 33 Shaft	(Included in bag # XR-13, key # 60)		
62	Front Axle	62,64 x 2 Pcs.	KYOC3896	XR-12
63	M4.5 x 7 Pivot Ball	63 x 10 Pcs.	KYOC2240	XR-14
64	M4 x 27 Shaft	(Included in bag # XR-12, key # 62)		
65	Front Shock Tower	65 x 1 Pc.	KYOC3743	XR-10H
66	Front Bulkhead	66 x 1 Pc.	KYOC3642	XR-03H
67	M3 x 27 Shaft	(Included in bag # XR-13, key # 60)		
68	M3 x 44 Shaft	(Included in Bag # XR-13, key # 60)		
69	Front Chassis Plate	69 x 1 Pc.	KYOC3648	XR-06H
70	Steering Post	73 x 1 Pc. 70,74 x 2 Pcs.	KYOC5992	XR-18
72	E4.0 E-Ring	72 x 10 Pcs.	KYOC9884	1384
73	Steering Linkage Rod	(Included in bag # XR-18, key # 70)		

Key #	Description	Contents	Stock #	Mfg. #
74	M2 Stopper	(Included in bag # XR-18, key # 70)		
75	Servo Saver Arm	75,76,77,78,79,81 x 1 Pc.	KYOC5640	XR-36
76	Tension Ring	(Included in bag # XR-36, key # 75)		
77	Servo Saver (C) Futaba	(Included in bag # XR-36, key # 75)		
78	Servo Saver (C) Air, KO, JR	(Included in bag # XR-36, key # 75)		
79	Servo Saver (C) Air, KO Mini	(Included in bag # XR-36, key # 75)		
80	Servo Saver Spring	80 x 1 Pc.	KYOC5636	UM-43
81	Servo Saver Collar	(Included in bag # XR-36, key # 75)		
82	Motor Spacer	(Included in bag # SST-01, key # 42)		
83	Pinion Gear (20 T)	83 x 1 Pc.	KYOC4772	W-0120
84	Gear Cover	84, J2 x 1 Pc.	KYOC4127	SST-13
85	Foam Tape	85 x 1 Pc.	KYOC3126	XR-20
86	Top Plate	86 x 1 Pc.	KYOC6291	XR-07H
89	Wing Mount (A)	89,90,91 x 2 Pcs. 104 x 4 Pcs.....	KYOC2258	UMW-01
90	Wing Mount (B)	(Included in bag # UMW-01, key # 89)		
91	Wing Mount (C)	(Included in Bag # UMW-01, key # 89)		
92	Double Sided Tape	92 x 1 Pc.	KYOC6141	1840
93	Antenna Tube	93 x 6 Pcs.	KYOC2056	1705
94	Tie Strap (Small)	94 x 6 Pcs.	KYOC6025	EF-037
95	Rear Wheel	95 x 2 Pcs.	KYOC5291	W-5682
96	Rear Tire	96 x 2 Pcs.	KYOC5251	W-5641
97	Front Wheel	97 x 2 Pcs.	KYOC3910	W-5681
98	Front Tire	98 x 2 Pcs.	KYOC3884	W-5691
99	Rear Wheel Disk	99,101 x 2 Pcs.	KYOC6312	W-5683
100	M6x10 Bearing	100 x 2 Pcs. (Team Buggy Only)	KYOE3110	H-3048
100	M6x10 Bushing	100 x 4 Pcs.	KYOC2763	96381
101	Front Wheel Disk	(Included in bag # W-5683, key # 99)		
102	Body	102 x 1 Pc.	KYOC2401	XR-26
103	Wing	103 x 1 Pc.	KYOC4626	39371W
104	Wing Washer	(Included in bag # UMW-01, key # 89)		
105	Body Pin	105 x 5 Pcs.	KYOC2520	EP-22
127	Differential Spring	127,128 , M2.6 x 25 Cap SCrew 1 Pc.....	KYOC3280	SST-16
128	Differential Nut	(Included in bag # SST-16, key # 127)		
	M2.6 x 25 Cap Screw	(Included in bag # SST-16, key # 127)		
131	Differential Grease	131 x 1 Pc.	KYOC3311	39314
132	Decal	132 x 1 Pc.	KYOC3176	XR-27
133	Screw Cement	133 x 2 Pcs.	KYOC5451	1878
134	4-Way Wrench	134 x 1 Pc.	KYOC6395	1943
A1	Rear Hub Right	A1, A2 x 1 Pc.	KYOC4963	XR-22H
A2	Rear Hub Left	(Included in bag # XR-22H, key # A1)		
A3	Suspension Ball	A3 x 8 Pcs.....	KYOC6044	XR-23
B1	Rear Suspension Mount	B1,B2,B3,B4,B5 x 1 Pc.	KYOC4961	XR-21
B2	Speed Control Plate	(Included in bag # XR-21, key # B1)		
B3	Suspension Block (1.5°)	(Included in bag # XR-21, key # B1)		
B4	Suspension Block (3°)	(Included in bag # XR-21, key # B1)		
B5	Suspension Block (5°)	(Included in bag # XR-21, key # B1)		
C1	Right Steering Arm	C1,C2,C3,C4 x 1 Pc.....	KYOC5991	XR-16
C2	Left Steering Arm	(Included in bag # XR-16, key # C1)		
C3	Linkage Arm	(Included in bag # XR-16, key # C1)		
C4	Steering Linkage Brace	(Included in bag # XR-16, key # C1)		
D1	Front Bumper	D1, D5 , x 1 Pc.	KYOC2558	XR-09
D5	Front Body Post	(Included in bag # XR-09, key # D1)		
E1	Spacer (1mm)	E1, E2 x 4 Pcs. E3 x 8 Pcs.	KYOC5819	XR-25
E2	Spacer (2mm)	(Included in bag # XR-25, key # E1)		
E3	Spacer (3mm)	(Included in bag # XR-25, key # E1)		
E4	Drive Washer	E4 x 4 Pcs.	KYOC3335	XR-24
F1	Antenna Mount	F1, F3, F4 x 1 Pc. F2 x 2 Pcs.....	KYOC5575	XR-17
F2	Servo Mount (A)	(Included in bag # XR-17, key # F1)		
F3	Servo Mount (B)	(Included in bag # XR-17, key # F1)		
F4	Hold Down	(Included in bag # XR-17, key # F1)		

Key #	Description	Contents	Stock #	Mfg. #
G1	Battery Post	G3 x 1 Pc. G1, G2 x 2 Pcs.	KYOC2276	XR-19
G2	Battery Holder Bracket	(Included in bag # XR-19, key # G1)		
G3	Battery Holder	(Included in bag # XR-19, key # G1)		
H1	Front Suspension Arm	H1 x 2 Pcs.	KYOC3784	XR-01H
H2	Rear Suspension Arm	H2 x 2 Pcs.	KYOC5192	XR-02H
I1	Right Front Hub	I1, I4 x 1 Pc.	KYOC3705	XR-04H
I2	Right Knuckle Arm	I2, I3 x 1 Pc.	KYOC4396	XR-05H
I3	Knuckle Arm	(Included in bag # XR-05H, key # I2)		
I4	Front Hub	(Included in bag # XR-04H, key # I1)		
J2	Slipper Adjustment Cover	(Included in bag # SST-13, key # 89)		

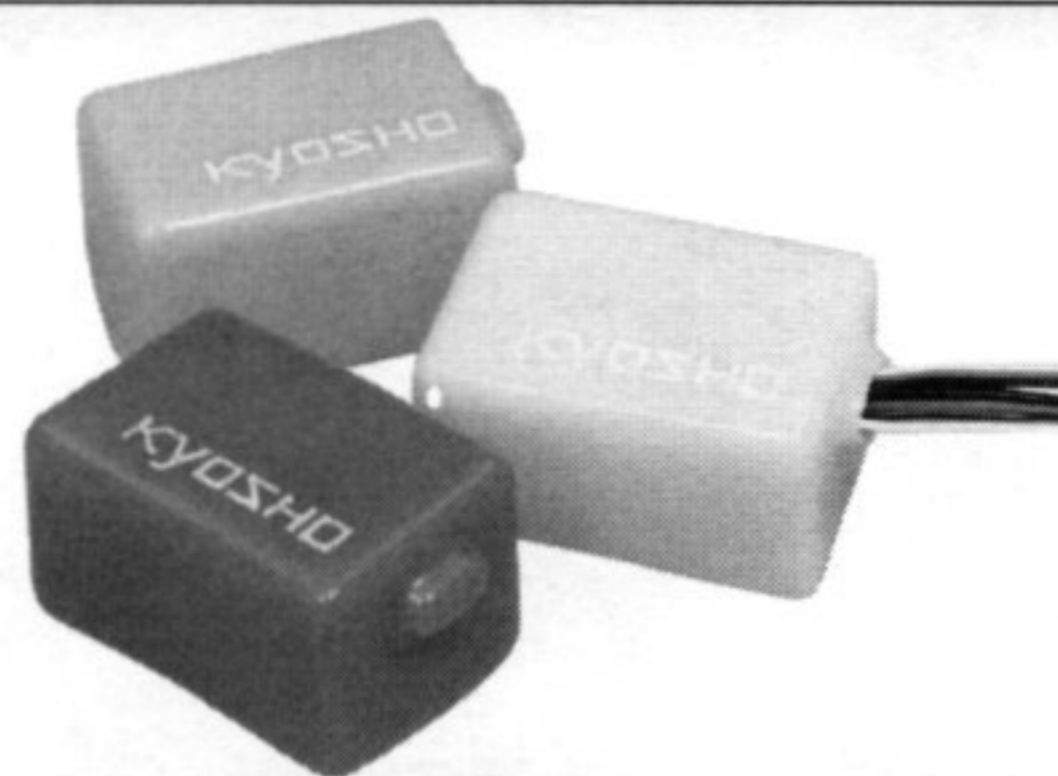
OPTIONAL PARTS

Description	Contents	Stock #	Mfg. #
Spur Gear (88T)	1 Pc.	KYOC5894	SST-04
Spur Gear (78T)	1 Pc.	KYOC5912	SST-17
Drive Hub Set (Hard)	(Replaces 46,49,52,53 Sport Buggy)	KYOC3325	SST-18
Final Gear Set (Hard)	(Replaces 39,40 Sport Buggy)	KYOC3522	SST-19
Front Hub (-10°)	2 Pcs.	KYOC3710	XRW-01H
Front Hub (-15°)	2 Pcs.	KYOC3711	XRW-02H
Rear Wing (Yellow)	1 Pc.	KYOC4625	39371Y
M4x8 Bearing	2 Pcs.	KYOC2207	1903
M5x8 Bearing	2 Pcs.	KYOC2204	1902
M8x14 Bearing	2 Pcs.	KYOC2217	1911
M6x10 Bearing	2 Pcs.	KYOE3110	H-3048
Silicone Oil (Soft)	#100, #200 x 1 Pc.	KYOC5736	1953
Silicone Oil (Medium)	#300, #400 x 1 Pc.	KYOC5737	1954
Silicone Oil (Hard)	#500, #600 x 1 Pc.	KYOC5738	1955
Silicone Oil Set	#150, #250, #350 x 1 Pc.	KYOC5741	1957
Strap (Small) Flor. Pink	18 Pcs.	KYOC6180	1700KP
Strap (Small) Flor. Yellow	18 Pcs.	KYOC6181	1700KY
Pinion 48P 17T Hard	1 Pc.	KYOC4766	W-0117
Pinion 48P 18T Hard	1 Pc.	KYOC4769	W-0118
Pinion 48P 19T Hard	1 Pc.	KYOC4771	W-0119
Pinion 48P 21T Hard	1 Pc.	KYOC4773	W-0121
Pinion 48P 22T Hard	1 Pc.	KYOC4774	W-0122
Pinion 48P 23T Hard	1 Pc.	KYOC4776	W-0123
Pinion 48P 24T Hard	1 Pc.	KYOC4778	W-0124
Pinion 48P 25T Hard	1 Pc.	KYOC4779	W-0125

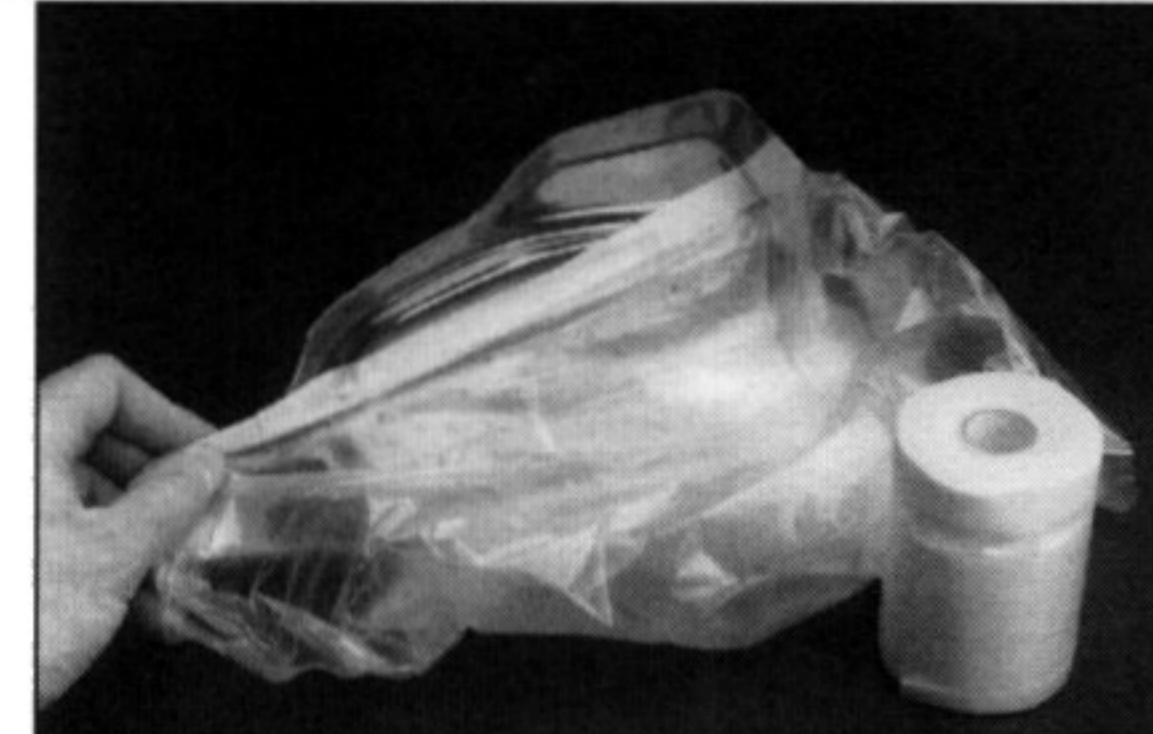
RECOMMENDED ACCESSORIES



Extra-Large Kyosho Field Bag
Red nylon field bag simplifies trips to the track by holding your model, radio, tools and more. Includes roomy interior, handy storage pockets and detachable shoulder strap.
KYOP6300



Kyosho Vinyl Receiver Covers
These covers offer protection from dirt, moisture and fuel. Available in hot pink, yellow and green. Fits Futaba, Airtronics, KO and JR receivers without trimming.
KYOC4885-4887



Kyosho Masking Cover Sheet
A self-adhesive edge holds this ultra-thin plastic film in place. Unfolds to 21.7" wide to prevent overspray mess. 114' roll. **KYOR1040**