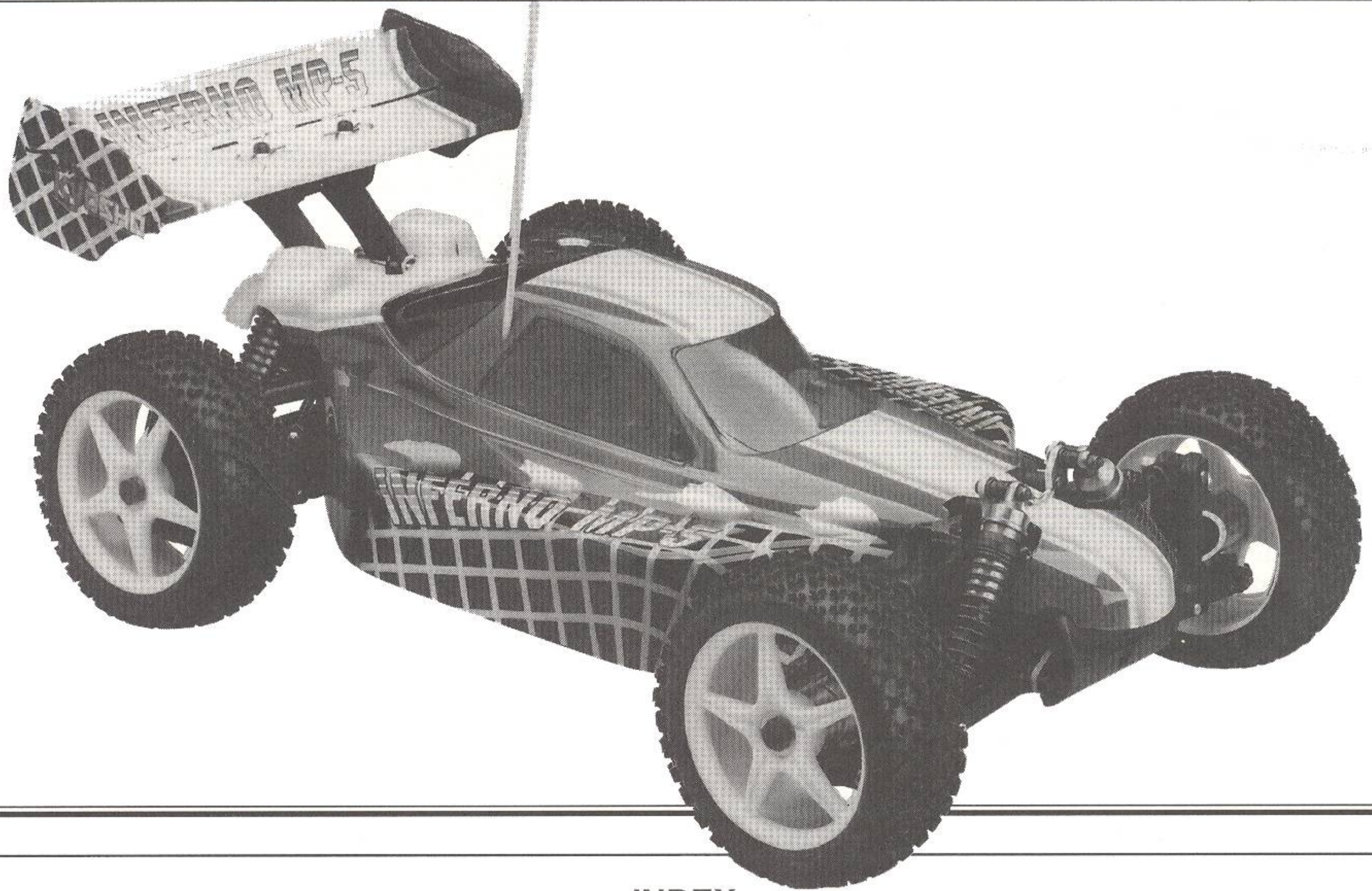


# INFERNO MP-5™

1/8 Scale, Radio-Controlled, .21 Engine-Powered, 4WD Race Car

## ASSEMBLY AND OPERATION MANUAL



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BEFORE BEGINNING TO BUILD .....	2
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**KYOSHO**®

KYOZ7611 No. 31551

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## BEFORE BEGINNING TO BUILD

**IMPORTANT:** PLEASE READ THROUGH THE ENTIRE INSTRUCTION MANUAL BEFORE BUILDING THE INFERNO MP-5.

We want your experience in 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.
- 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 Kyosho Inferno MP-5 is a sophisticated, high performance, engine-powered 4WD Race Car. Engine-powered R/C cars are no more difficult to build and operate than electric R/C cars. They do require a few different building procedures than electrics. If you follow the directions closely, the Kyosho Inferno MP-5 will provide many years of competitive R/C 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



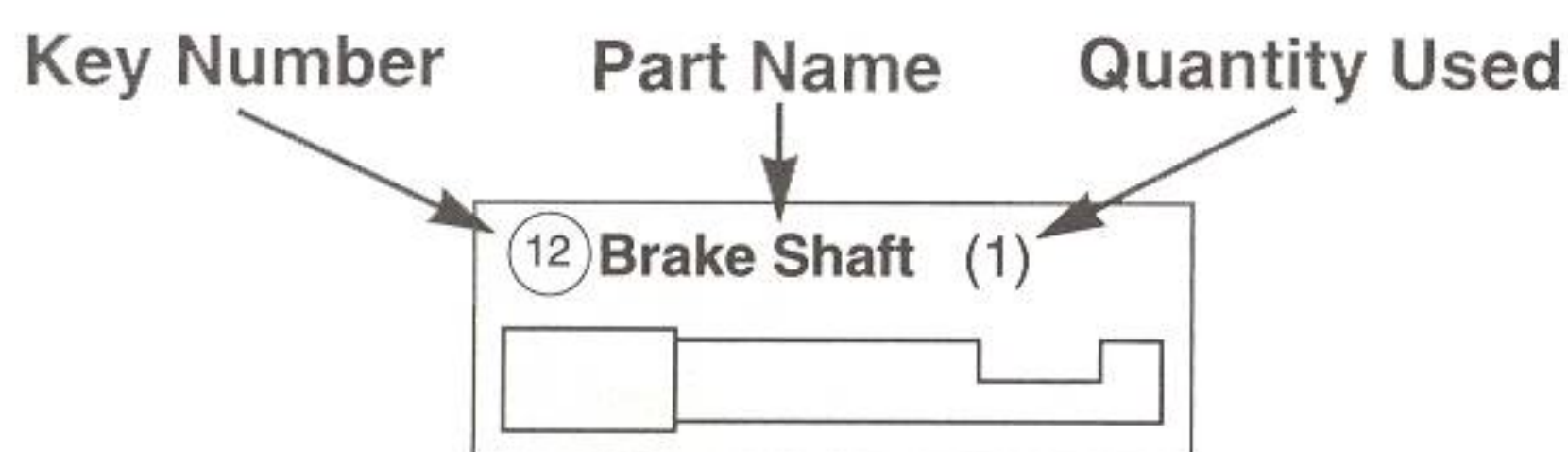
OR

### TAPE TO OUTSIDE



## PARTS IDENTIFICATION

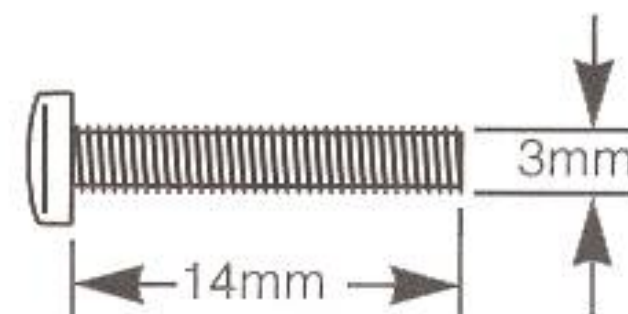
A complete list of replacement and optional parts starts on page 33 of this manual. If you need to replace a part, consult this guide for the manufacturer's stock number for the item needed. In the left margin of each page of instructions you will find a directory of small parts that will be used in 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.



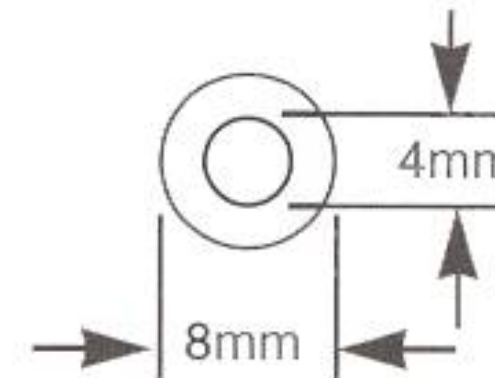
## METRIC SCREW IDENTIFICATION

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.

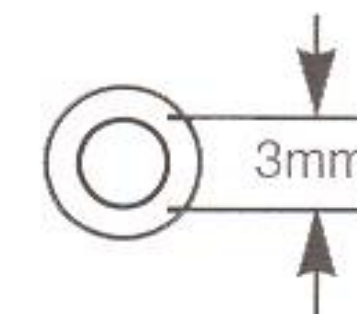
### M3x14 Screw



### Bushing



### M3 Washer

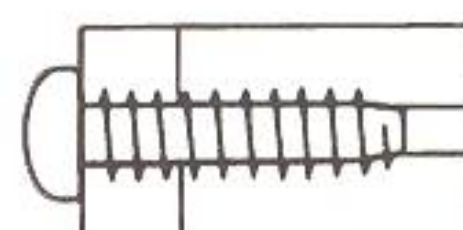


	A <b>self-tapping (S/T) screw</b> has a coarse thread and is used to thread into plastic. Be careful not to tighten the screw too much. This may strip the plastic.
	A <b>cap screw</b> is used where two pieces of metal are to be joined. The hex head allows a hex wrench to be used, providing more torque for tightening.
	<b>Screws</b> have a fine thread and are used with nuts most of the time. They are for high stress joints where strength is required.
	<b>Flat head (F/H) screws</b> 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.
	<b>Set Screws</b> 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.

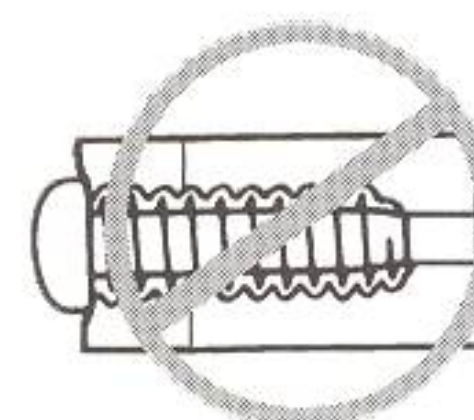
### IMPORTANT SCREW INFORMATION:

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 thread lock compound on self-tapping screws. The thread locking compound may damage the plastic. Use thread lock compound only on screws that are fastened with a nut or threaded into a metal surface. Vibration from the engine will cause these screws to vibrate loose without thread lock.

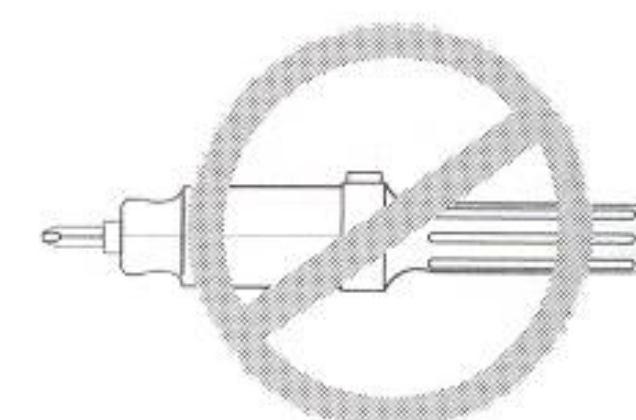
### Correct



### Incorrect



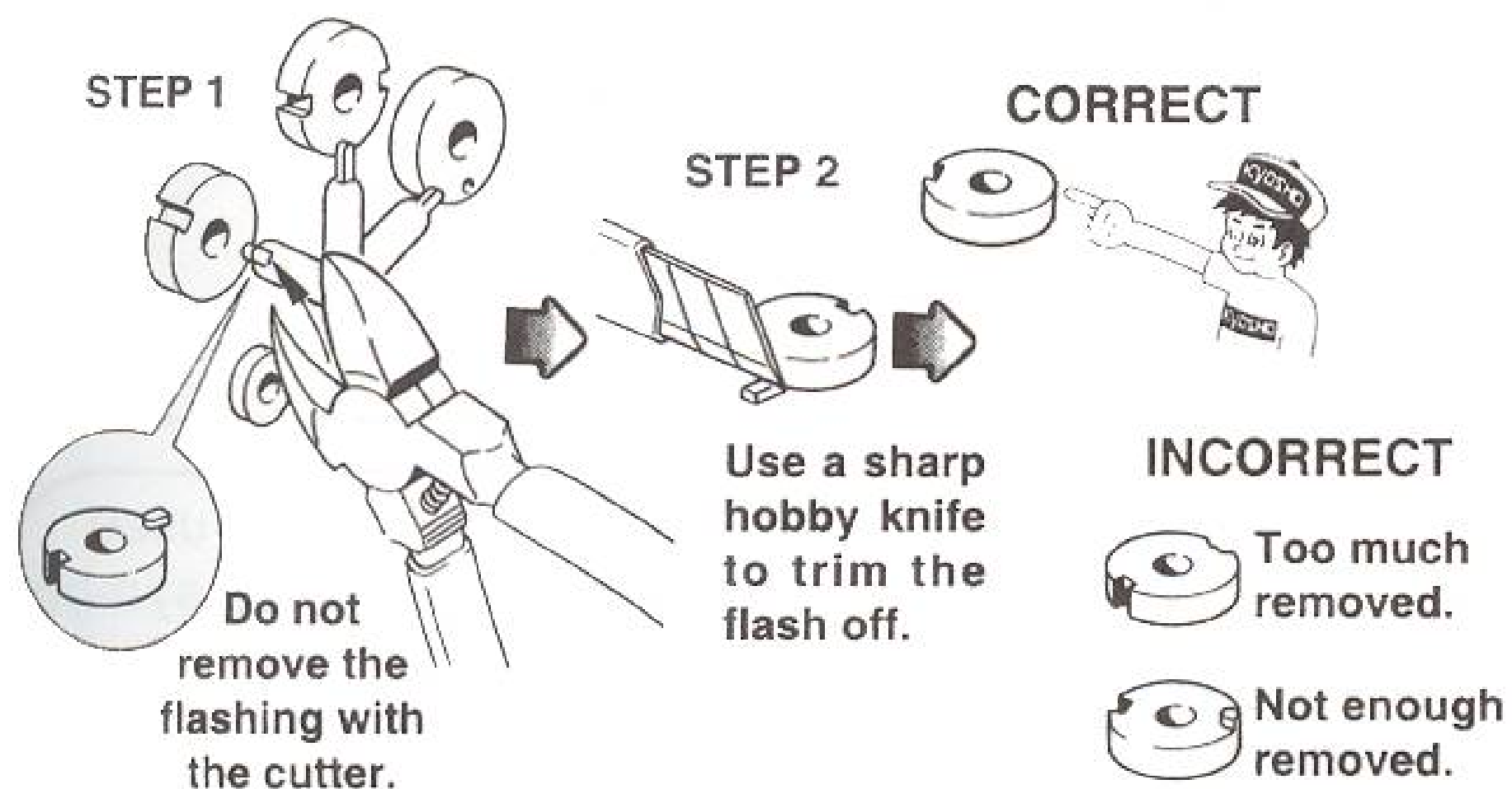
### Power Screwdriver



## HELPFUL HINTS

Some precautions need to be observed when building your Kyosho kit to avoid problems:

- 1) Take time to 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 running the car 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.
- 5) Trial fit all parts to ensure proper fit before attaching them permanently.
- 6) Remove all flashing from parts before assembly, as shown in the example below.



- 7) **Important:** Throughout the instruction manual symbols are used to alert you to perform certain procedures. A symbol guide is provided at the bottom of each page to assist you.

## RECYCLE



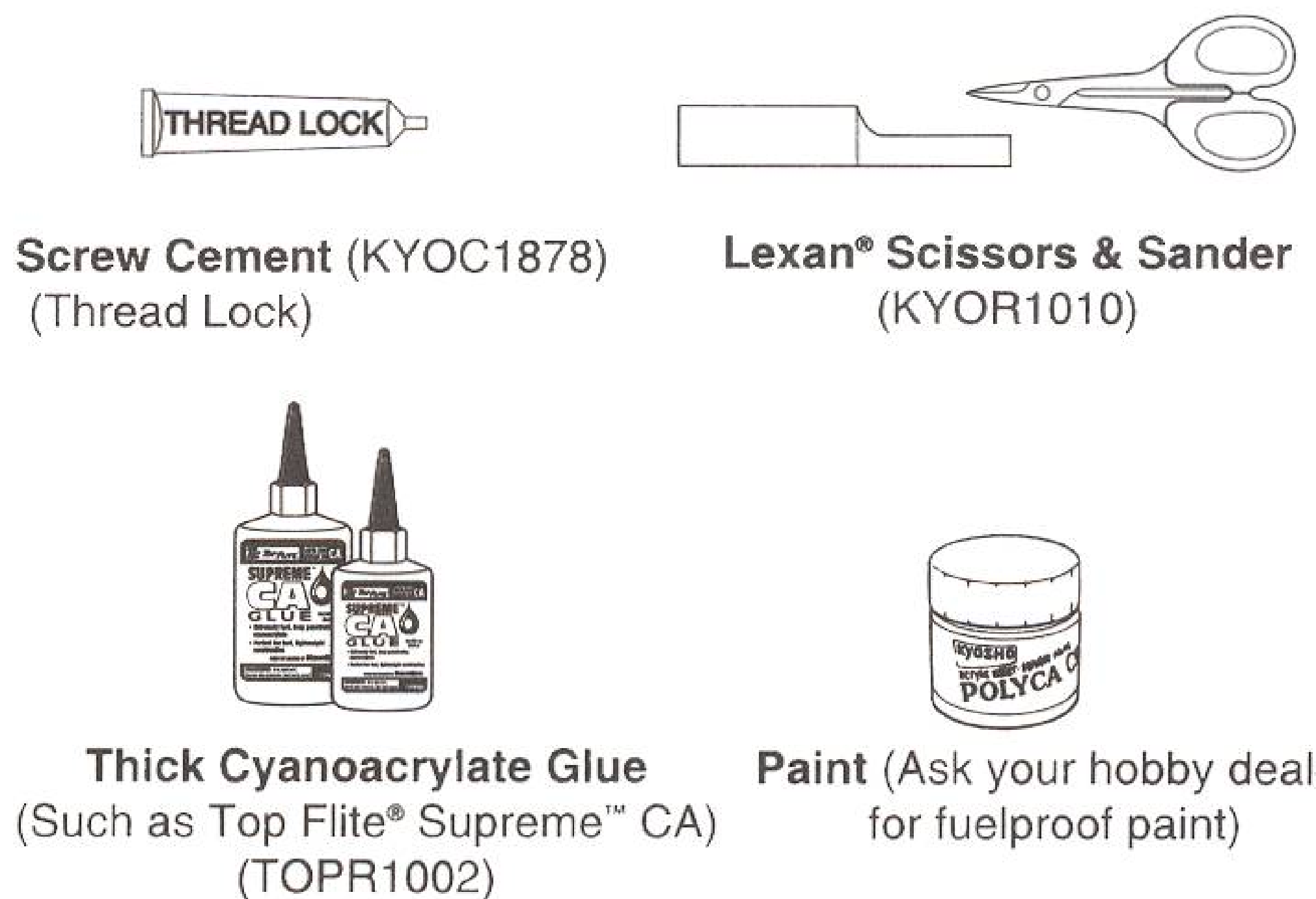
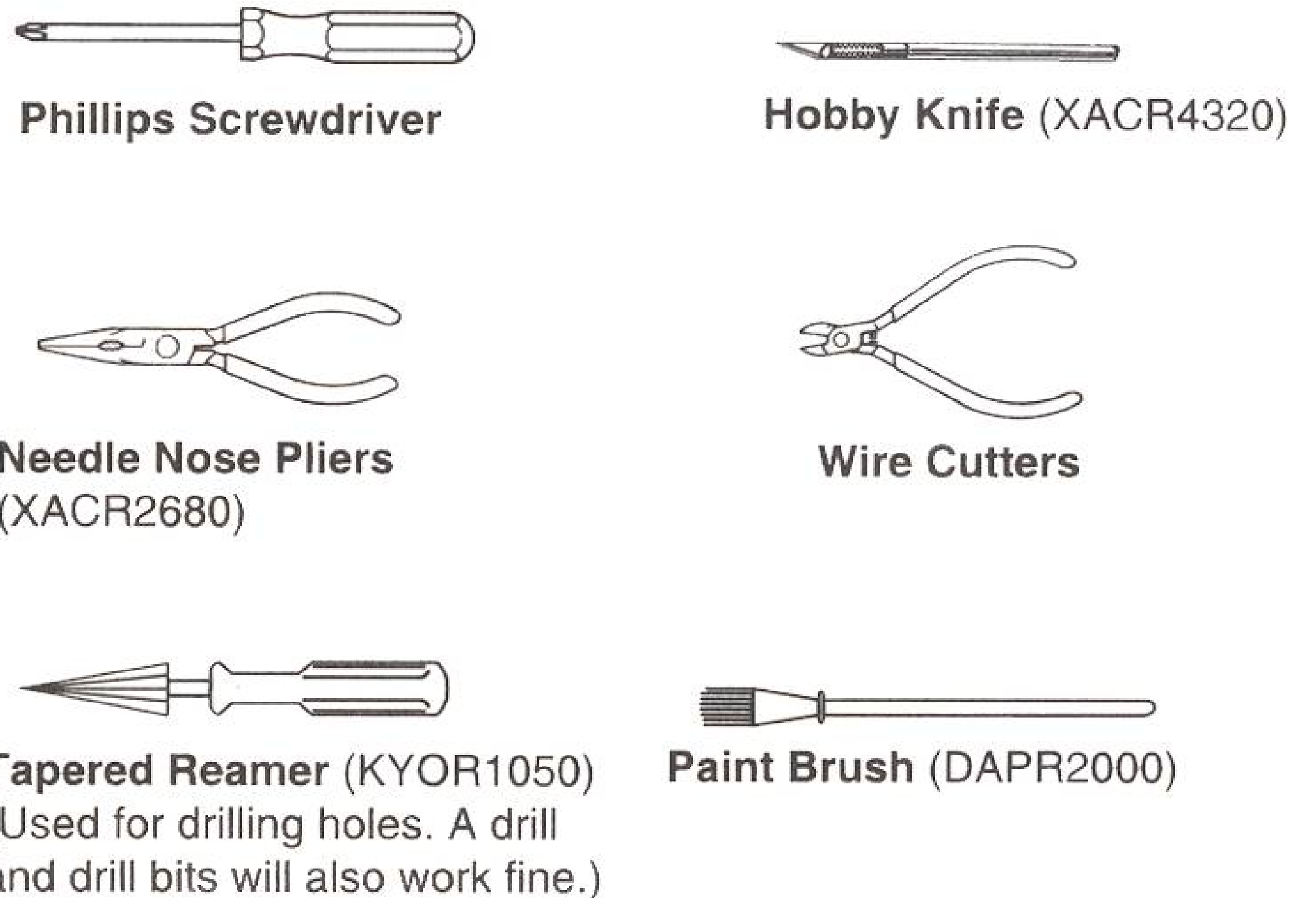
If you use Nickel Cadmium Batteries in the radio system, the batteries are recyclable. At the end of their useful life, under various state and local laws, it may be illegal to dispose of these batteries into the municipal waste system. Check with your local solid-waste officials for details concerning recycling options or proper disposal in your area.

## REQUIRED TOOLS

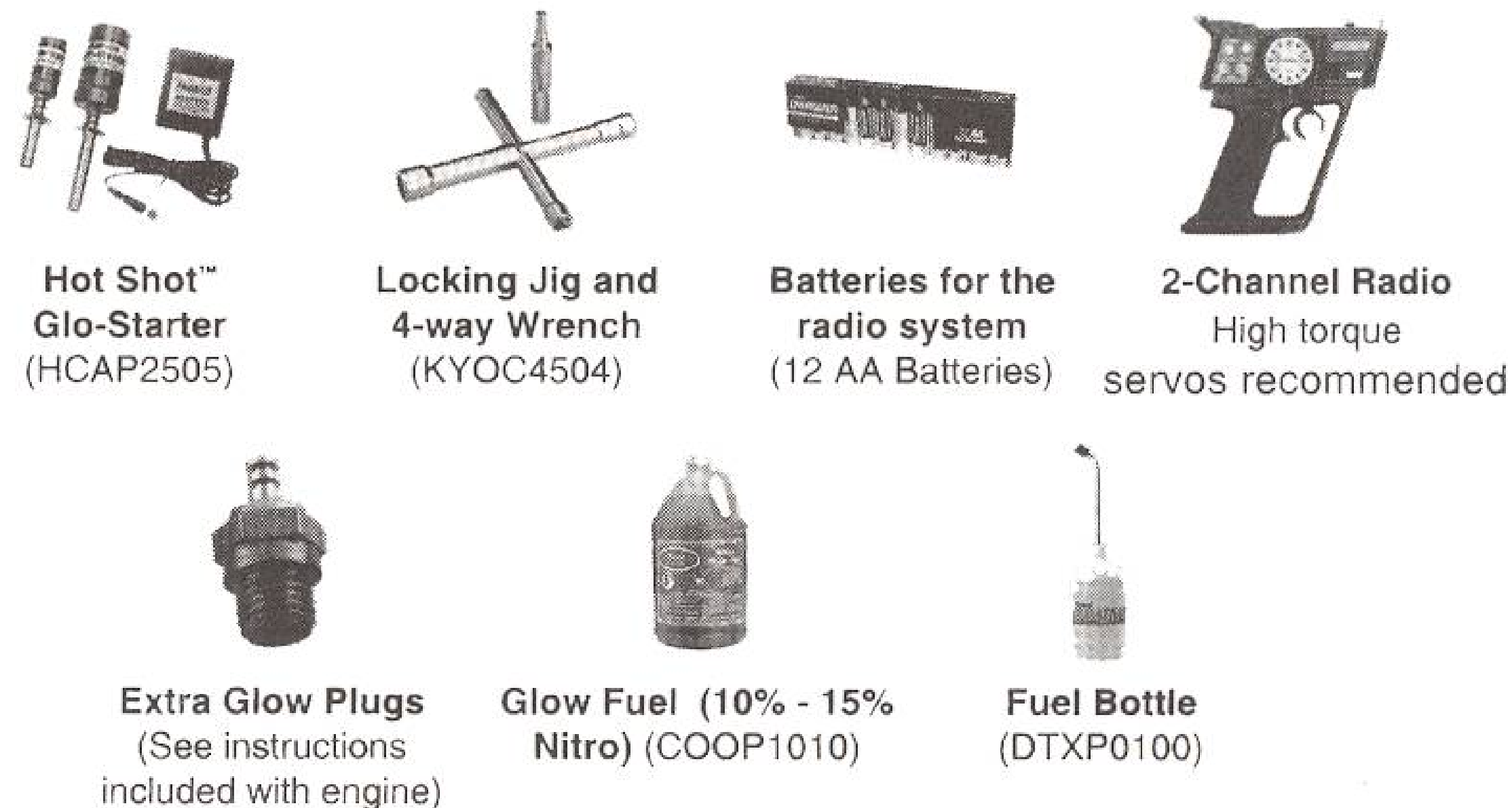
THESE ARE INCLUDED IN THE KIT.



THESE ARE NOT INCLUDED IN THE KIT.



THESE ITEMS ARE REQUIRED TO RUN THE INFERNO MP-5



## SAMPLE STEP

To help you get acquainted with how to use this manual, a **sample step** is shown below. Take a few minutes to study this step so that you understand what some of the symbols mean. Below the sample step you will find a symbol guide. A similar symbol guide will be shown at the bottom of each page of assembly steps.

**(Do not actually perform this step)**

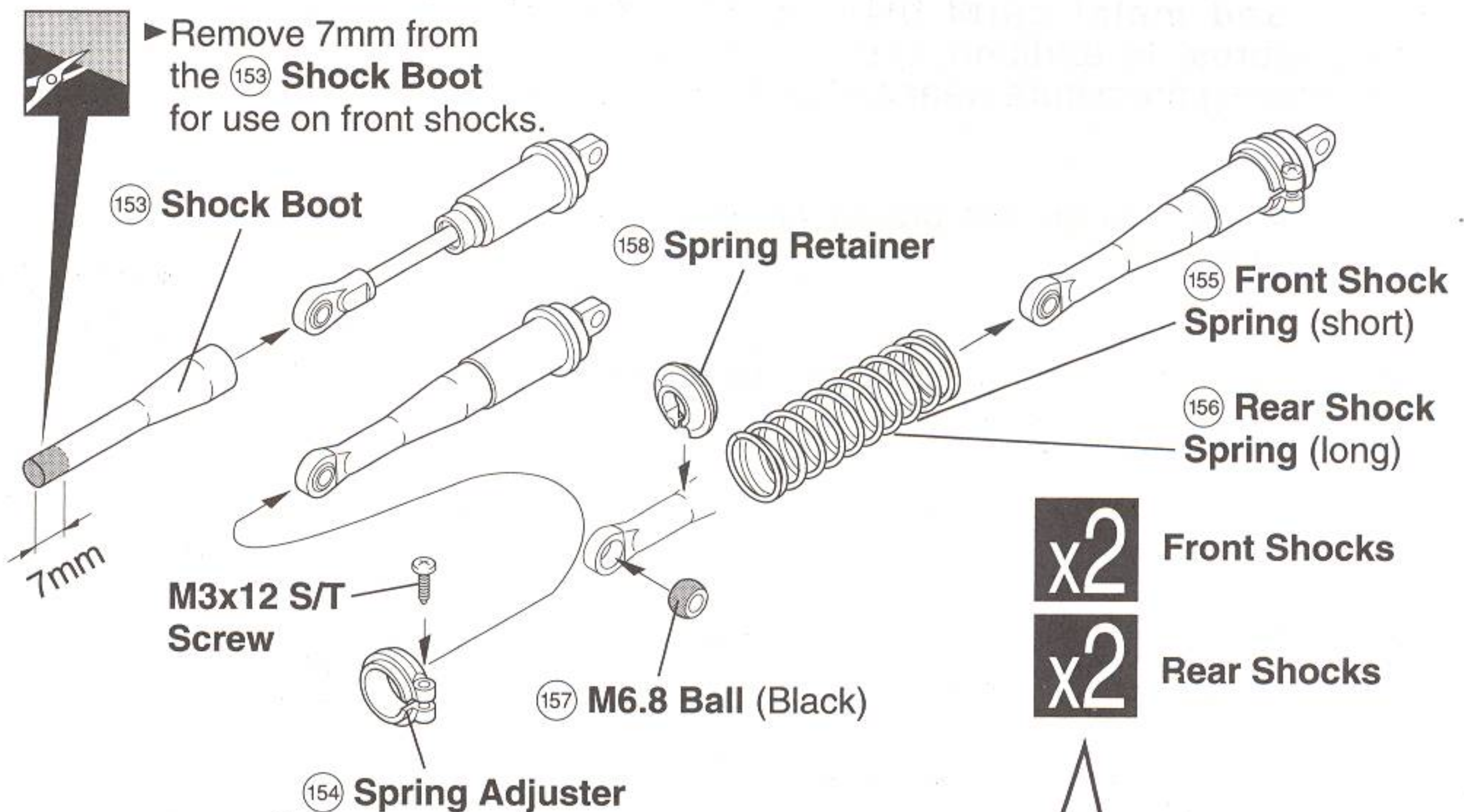
The bag symbol with the number inside it shows what bag contains the parts required for this step. This symbol shows that the part is in bag 1.

### 42 COMPLETE SHOCK ASSEMBLY



- (157) M6.8 Ball (Black) .....(4)
- M3x12 S/T Screw .....(4)

The parts located in this box are shown full size. Also shown are the part names and the quantities required for this step.



All parts except screws, washers and nuts are identified with a **key number**. If a replacement part is required in the future, find the key number of the part needed in the replacement part list starting on page 33. Refer to the Stock# and Mfg# when ordering replacement parts.

Many symbols may be used in each step. Check the symbol guide at the bottom of each page for explanations of the symbols used on that page.

### SYMBOL GUIDE

- |  |   |  |
|--|---|--|
| This symbol means to pay special attention to the instructions given.  | This symbol means that the parts are not included and must be purchased separately.   | This symbol requires that a hole be drilled to a specific size. This sample would require a 2mm (1/16") hole.        |
| This symbol requires that grease be applied to the part.   | The number inside this symbol shows what bag contains the parts for that step.  | This symbol requires that the parts be assembled in a specific order.  |
| This symbol requires that the procedure be performed as many times as shown. This sample shows to perform the procedure twice. | This symbol requires that thick cyanoacrylate glue (CA) be used to attach the parts. Be very careful with CA—it will bond almost anything including your fingers. | This symbol requires that the part is to be installed temporarily and will be permanently installed in a later step. |
| This symbol requires you to assemble a left and a right side.  | This symbol requires that the shaded area shown be removed from the part.   | This symbol requires that the part be able to move freely without binding.   |

## WARRANTY INFORMATION

- For 90 days after you purchase your Inferno MP-5, 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 Inferno MP-5 in for repairs covered under warranty, you should send your car 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 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 the car, engine, radio, accessories, etc.

## REPAIR SERVICE

### Repair Services Available Anytime:

- After the 90-day warranty has expired, you can still have your Inferno MP-5 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:

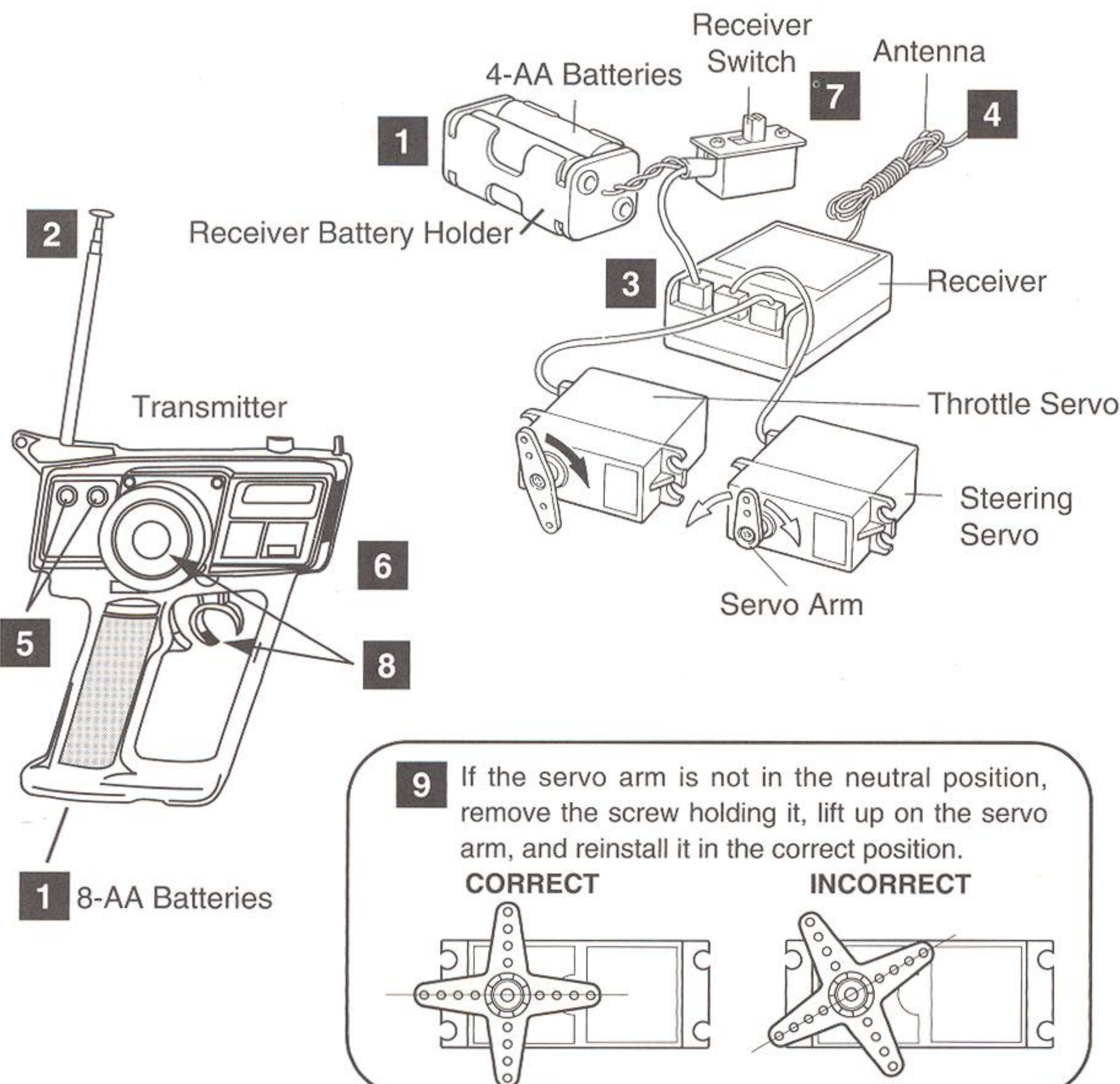
1. Under all circumstances, return the **ENTIRE** system: car and radio.
2. Make sure the transmitter is turned off and all batteries are disconnected, and all fuel is drained from the fuel tank.
3. Send written instructions which include: a list of all items returned, a **THOROUGH** explanation of the 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



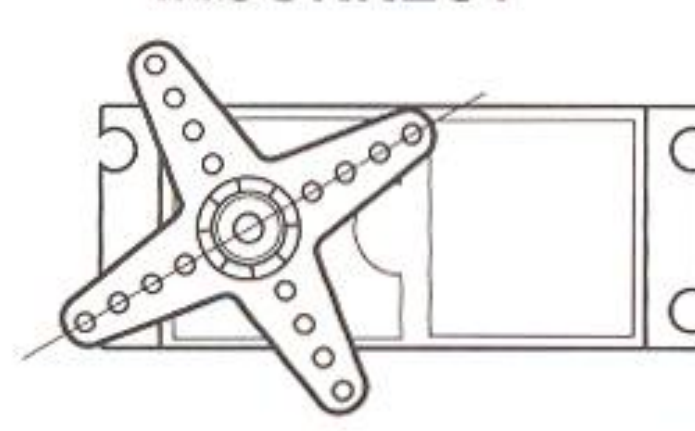
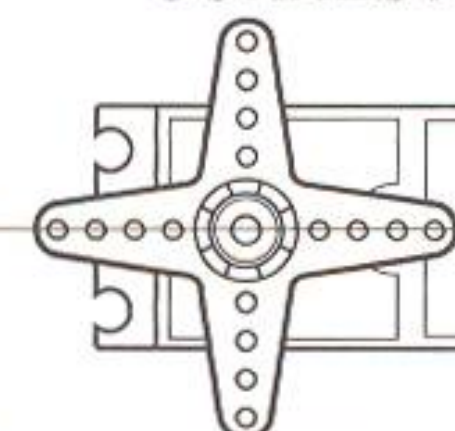
Set up the radio system following the manufacturer's instructions and as explained below.

1. Install the batteries in the transmitter and the receiver battery holders.
2. Extend the transmitter antenna.
3. Connect the steering servo, throttle servo and receiver battery to the receiver.
4. Extend the receiver antenna.
5. Adjust the servo trims to neutral position.
6. Switch on the transmitter.
7. Switch on the receiver.
8. Operate the steering and throttle control. Make sure the servo arms move in proportion to the movement of the steering wheel and throttle trigger.
9. Check that the steering and throttle servos are in the neutral position. See diagram at left.
10. Switch off the receiver, then the transmitter.

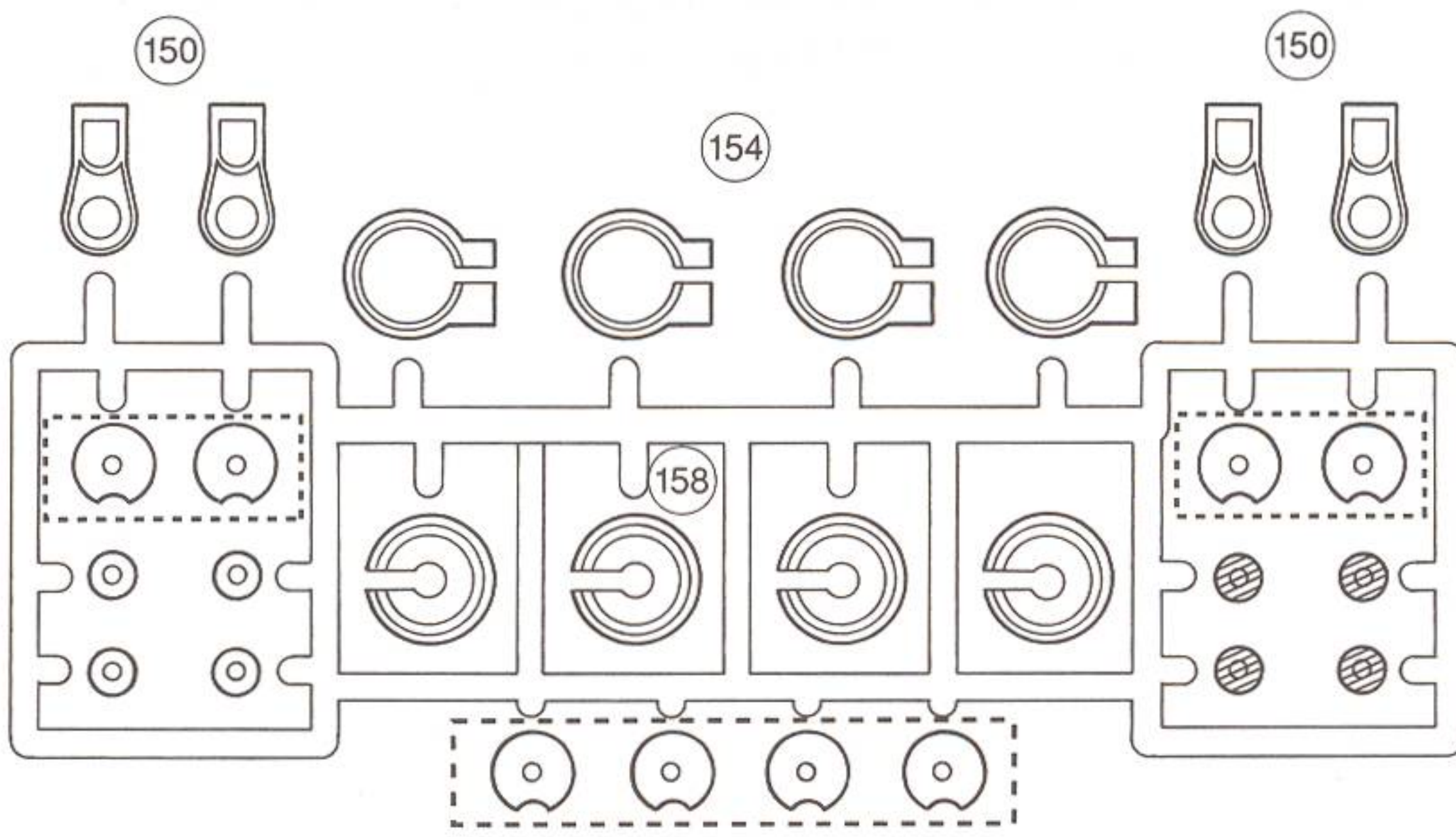
- 9 If the servo arm is not in the neutral position, remove the screw holding it, lift up on the servo arm, and reinstall it in the correct position.

**CORRECT**

**INCORRECT**



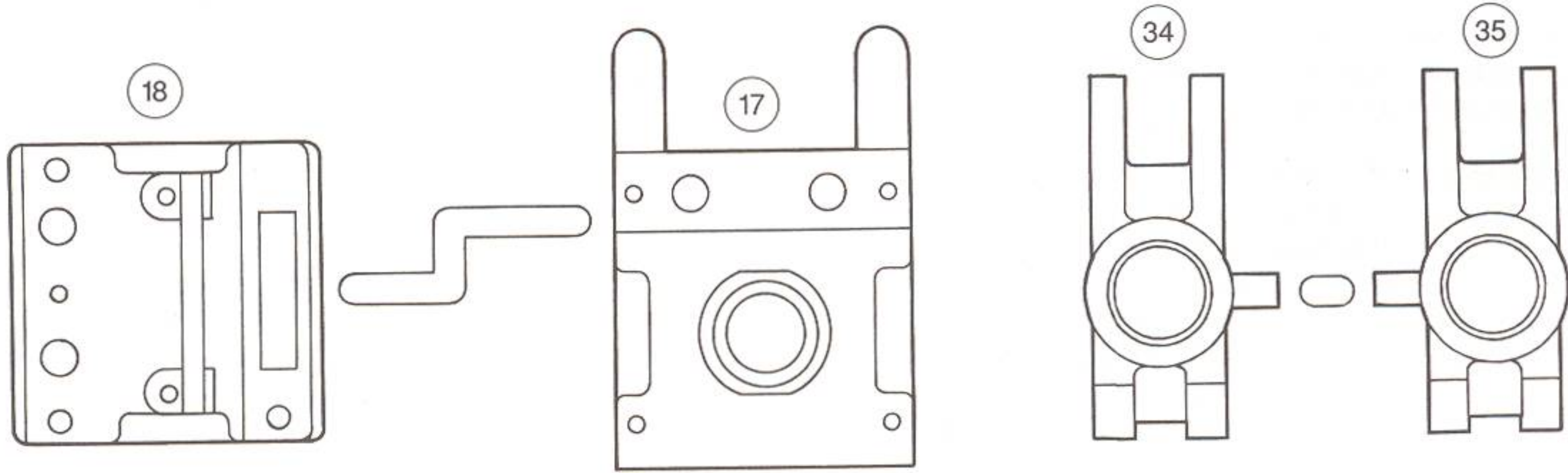
1



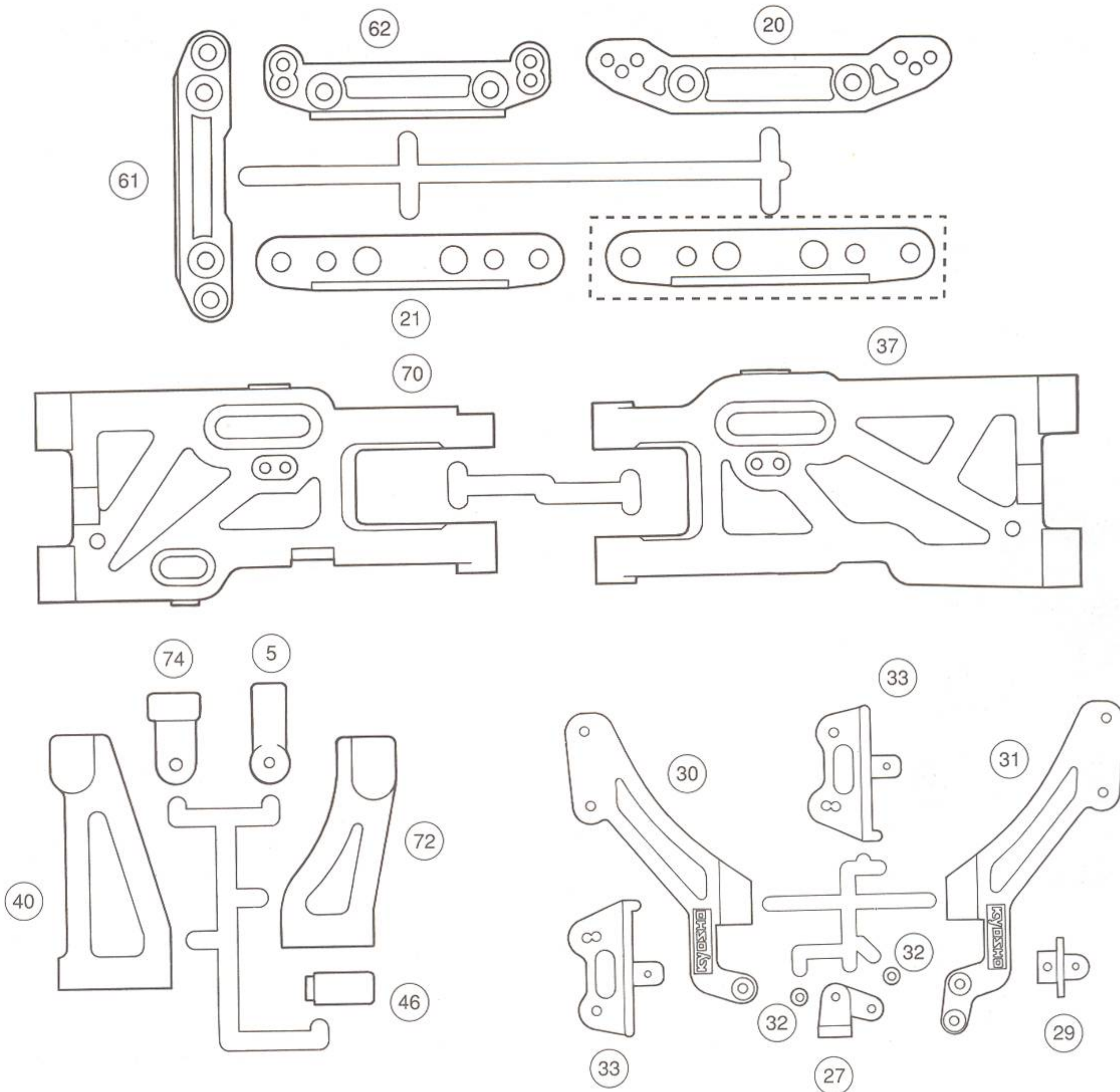
● SHADED ITEMS ARE NOT USED

● PARTS WITHIN DOTTED LINES ARE TUNING OPTIONS

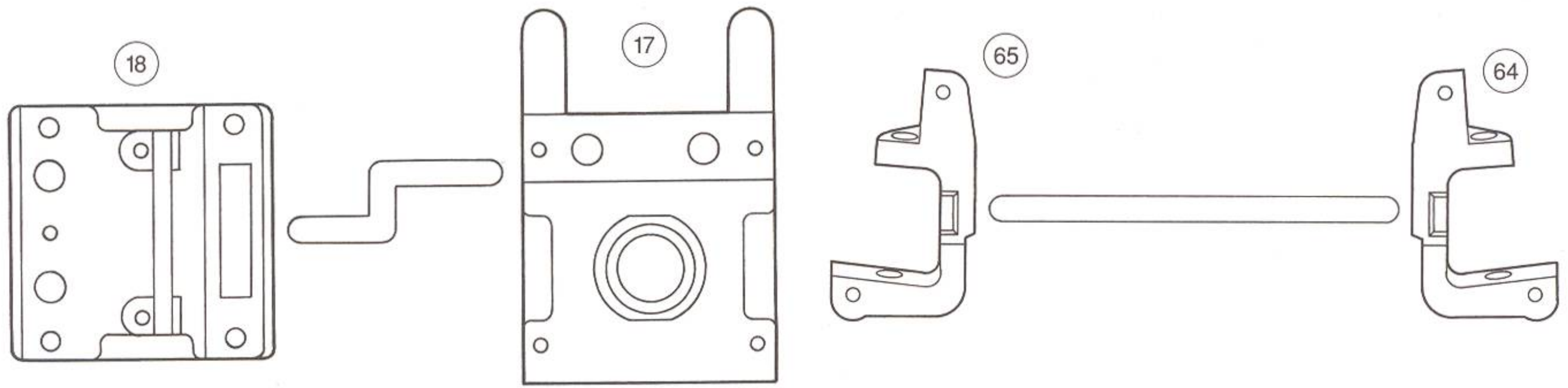
4



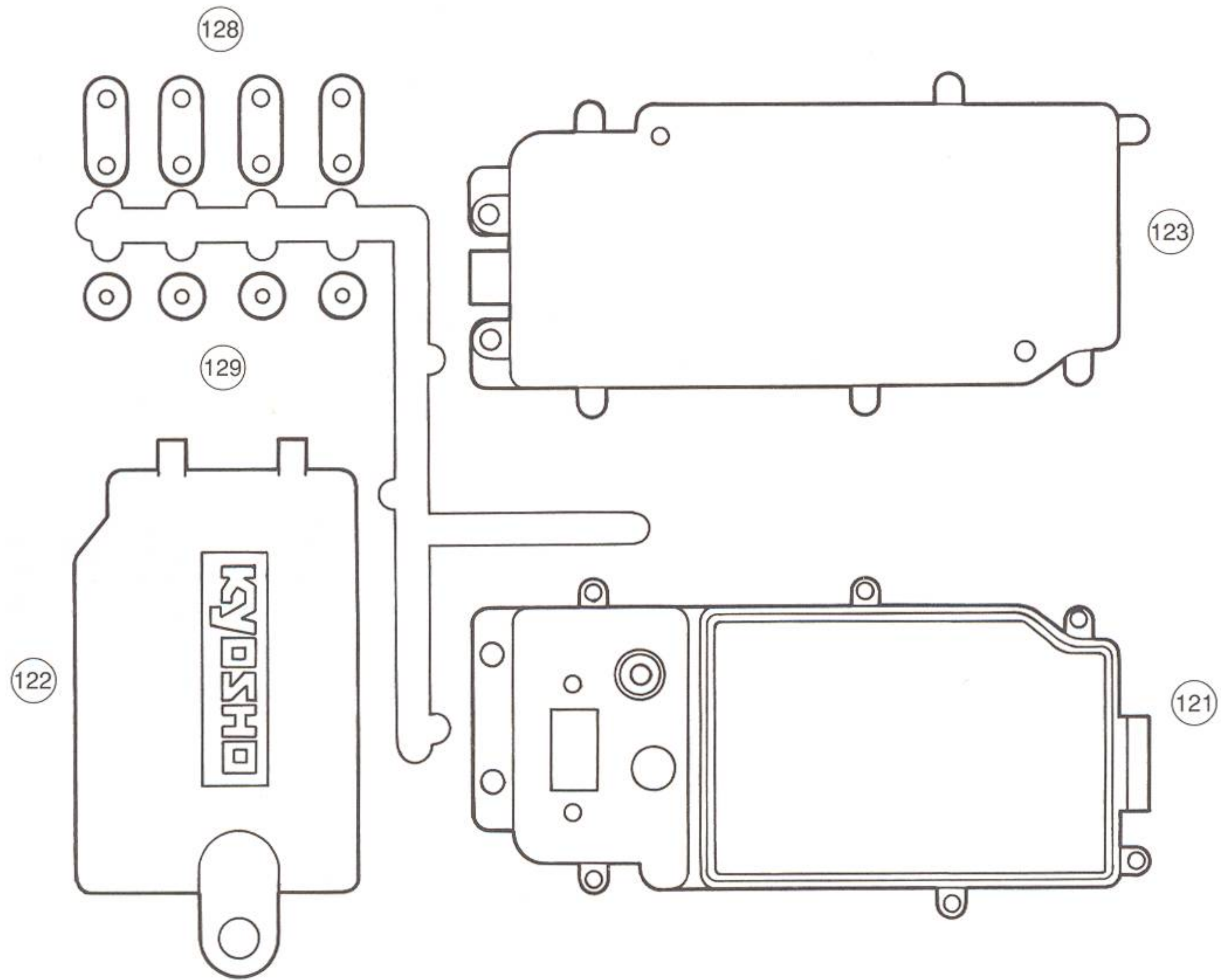
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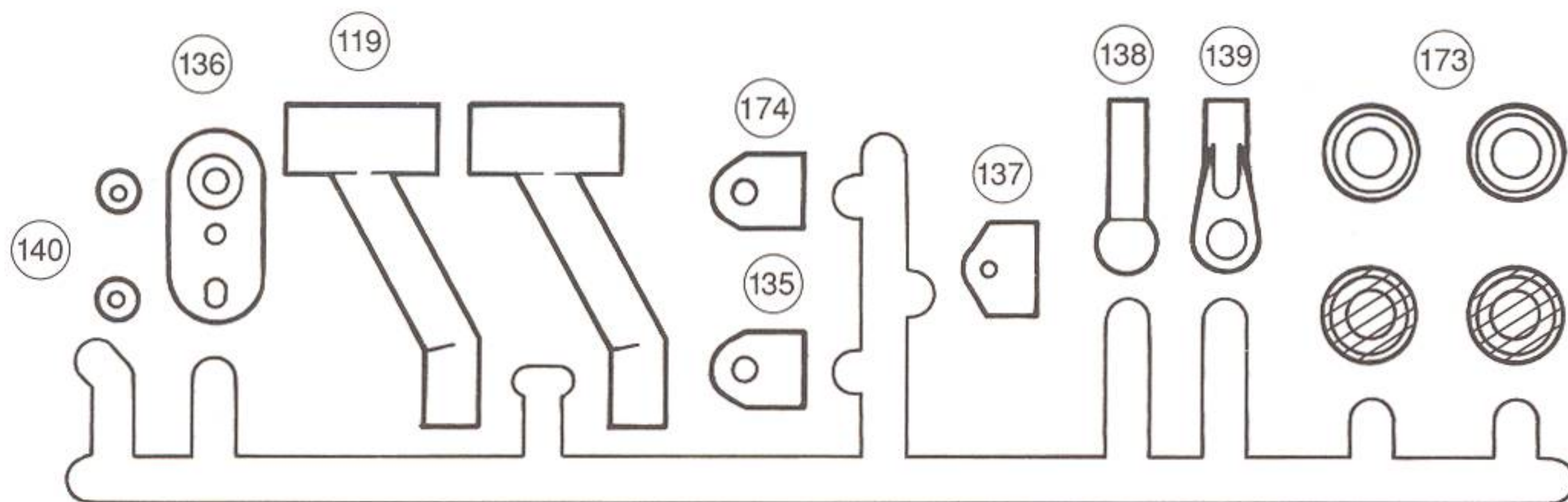
6



9



● SHADED ITEMS ARE NOT USED



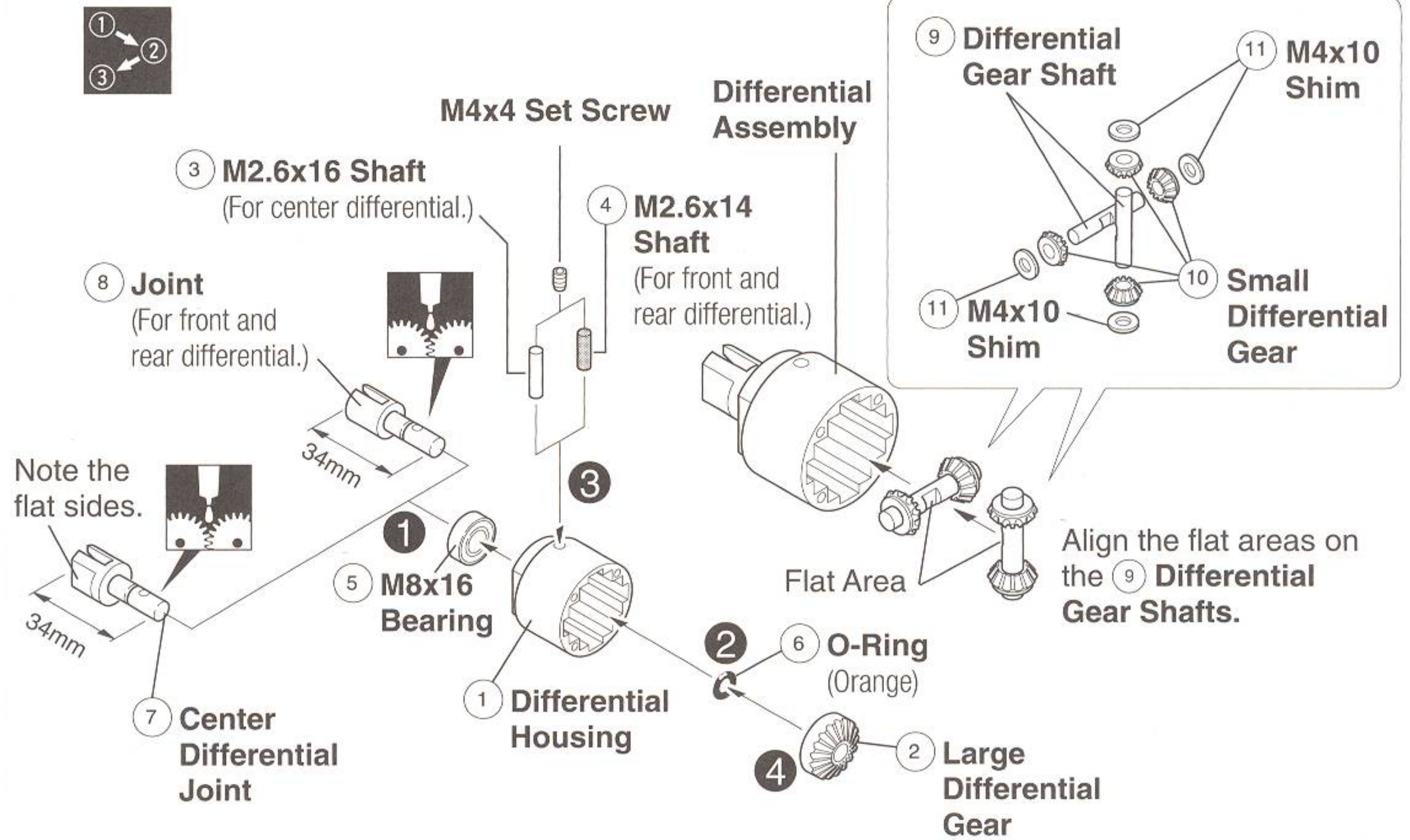
# 1 INSTALL INTERNAL GEARS



Assemble one front, one rear and one center differential.

## M4x4 Set Screw

- .....(3)
- .....(11)
- .....(12)
- .....(6)
- .....(3)
- .....(2)
- .....(1)
- .....(5)
- .....(3)



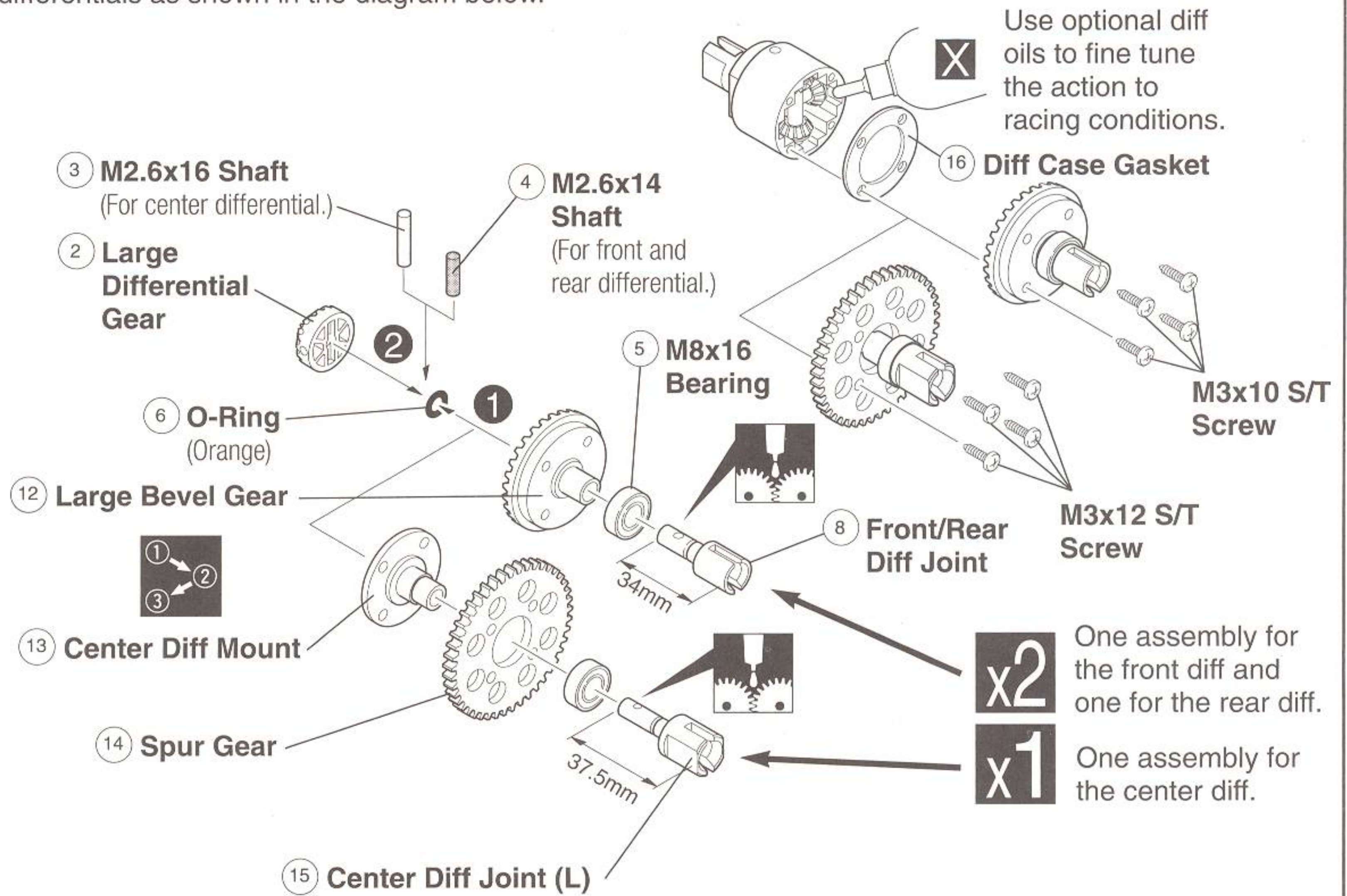
# 2 ASSEMBLE DIFFERENTIALS



Complete the assembly of the front, rear and center differentials as shown in the diagram below.

## M3x10 S/T Screw

- .....(8)
- .....(4)
- .....(6)
- .....(3)
- .....(2)
- .....(1)
- .....(5)
- .....(3)



## SYMBOL GUIDE

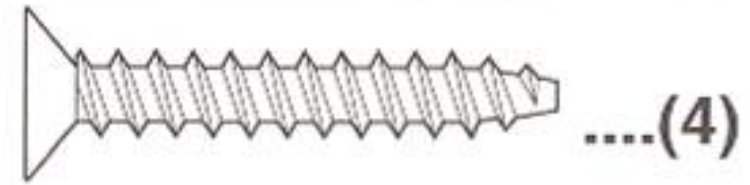
- Apply grease.
- Not included.

- Assemble in this order.
- Repeat this process as many times as specified.

### 3 INSTALL REAR DIFFERENTIAL

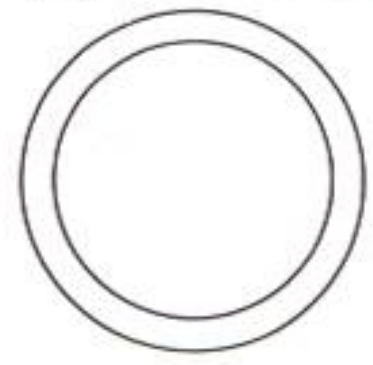


**M4x25 S/T F/H Screw**

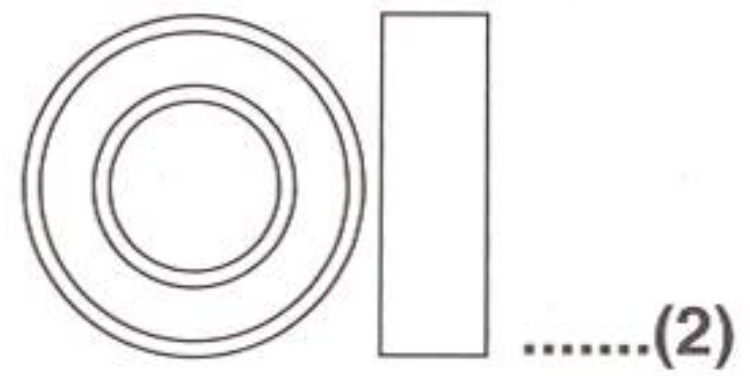


**22 M13x16 Shim (Thick)**

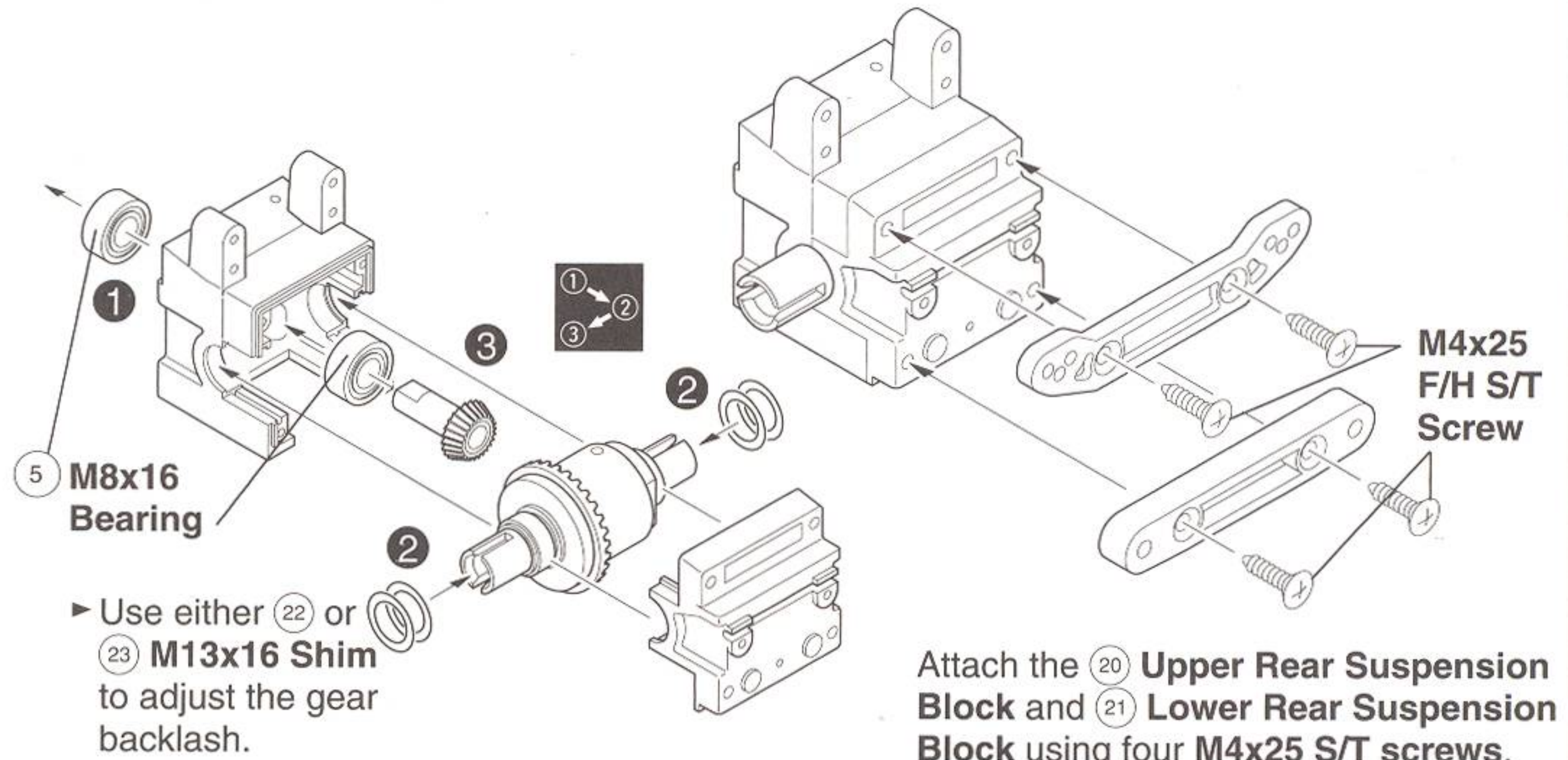
**23 M13x16 Shim (Thin)**



**5 M8x16 Bearing**



Install the rear differential in the gearbox housing as shown in the diagram below.

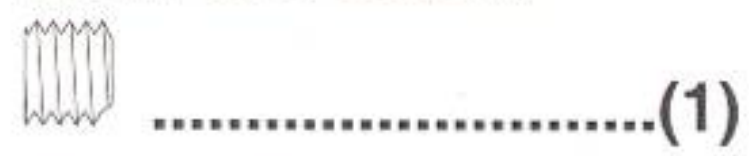


Attach the 20 **Upper Rear Suspension Block** and 21 **Lower Rear Suspension Block** using four **M4x25 S/T screws**.

### 4 INSTALL SUSPENSION PLATES



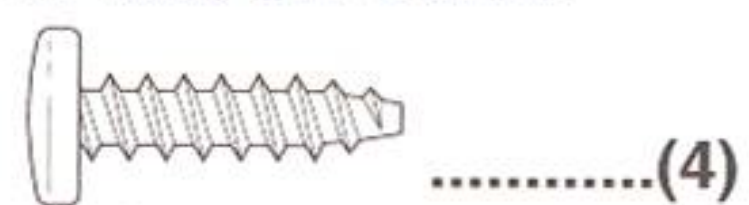
**M5x4 Set Screw**



**M4x10 Screw**

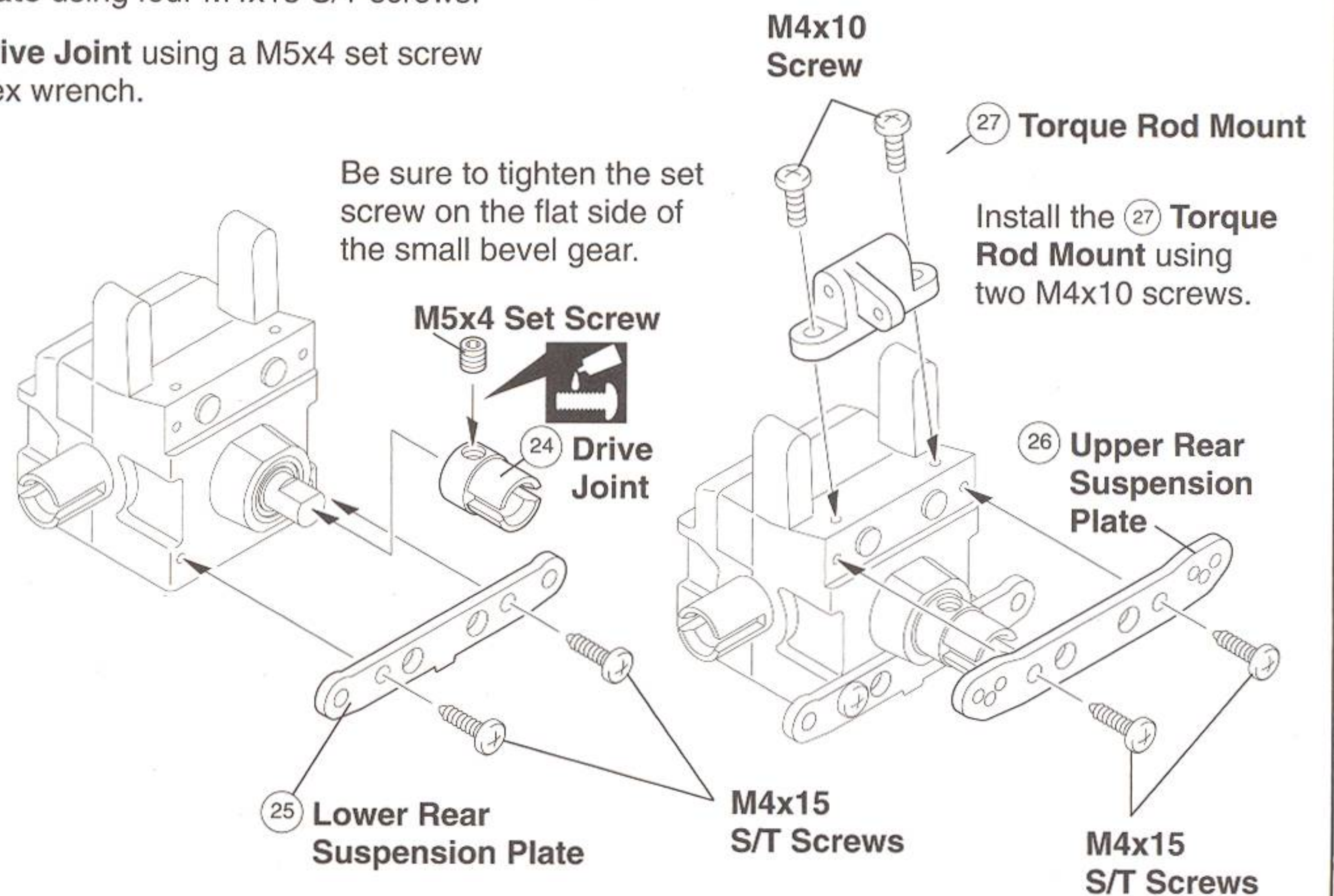


**M4x15 S/T Screw**



Install the 25 **Suspension Plate** and 26 **Upper Rear Suspension Plate** using four **M4x15 S/T screws**.

Install the 24 **Drive Joint** using a **M5x4 set screw** and a **2.5mm hex wrench**.



#### SYMBOL GUIDE

Assemble in this order.

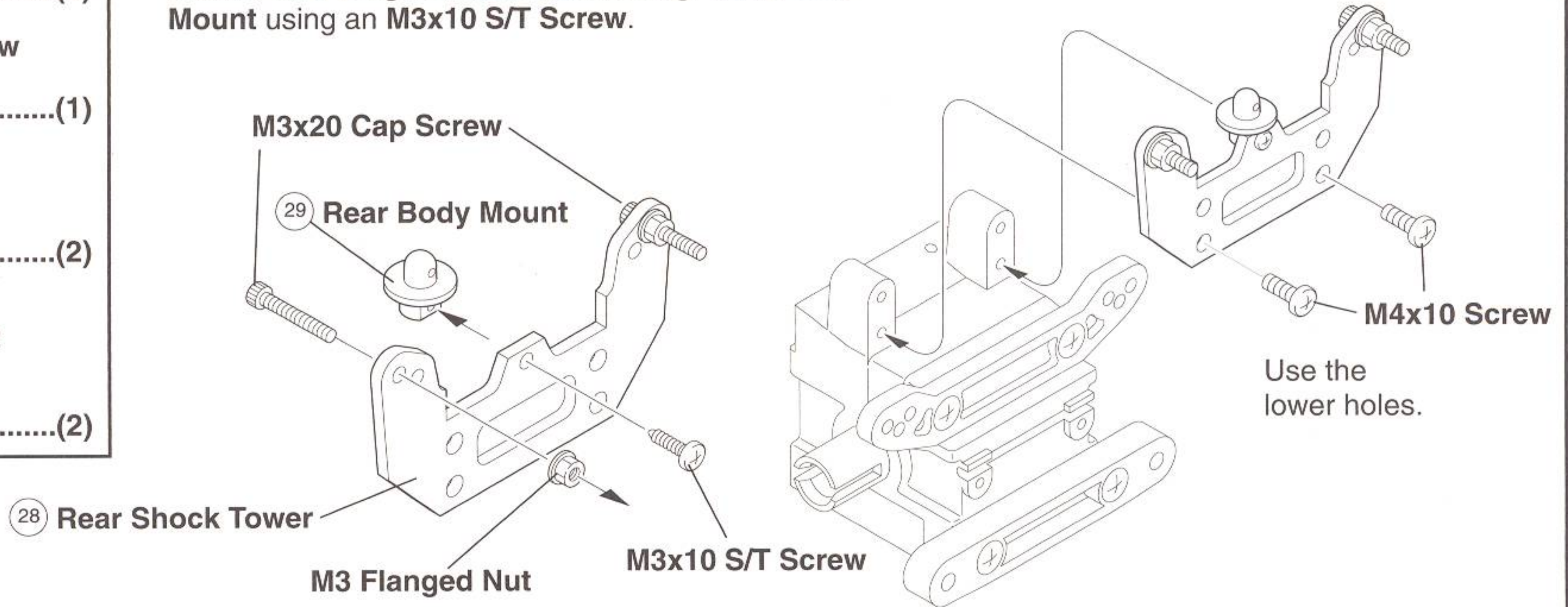
Apply thread lock.

# 5 INSTALL REAR SHOCK TOWER



- M3x20 Cap Screw**  
 .....(2)
- M3x10 S/T Screw**  
 .....(1)
- M4x10 Screw**  
 .....(2)
- M3 Flanged Nut**  
 .....(2)

Insert the two **M3x20 Cap Screws** through the outermost holes in the **(28) Shock Tower**. Secure the screws using the two **M3 Flanged Nuts**. Attach the **(29) Rear Body Mount** using an **M3x10 S/T Screw**.



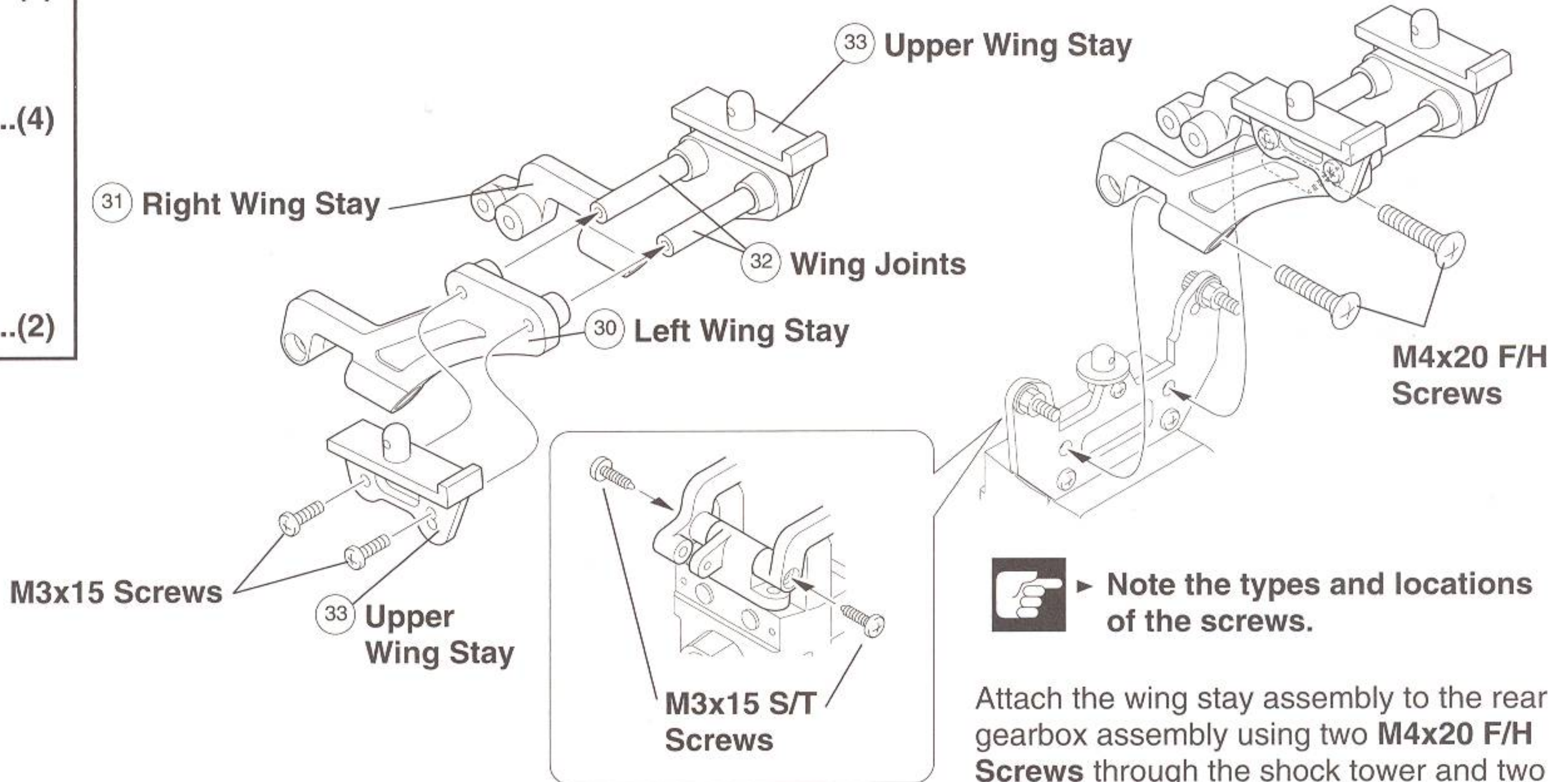
Attach the **(28) Shock Tower** to the **Rear Gearbox Assembly** using two **M4x10 Screws**.

# 6 INSTALL WING STAY



- M3x15 S/T Screw**  
 .....(2)
- M3x15 Screw**  
 .....(4)
- M4x20 F/H Screw**  
 .....(2)

Plug the **(32) Wing Joints** into the **(30) Left** and **(31) Right Wing Stays**. Insert the **M3x15 Screws** through the **(33) Upper Wing Stays**, using the **Upper** hole in the rear. Secure the upper wing stays to the wing stays by tightening the **M3x15 Screws** into the wing joints.



**Note the types and locations of the screws.**

Attach the wing stay assembly to the rear gearbox assembly using two **M4x20 F/H Screws** through the shock tower and two **M3x15 S/T Screws** through the torque rod mount.

## SYMBOL GUIDE

Important information.

# 7 ASSEMBLE REAR LOWER ARMS

4 5

## Step 1

Press the (5) M8x16 Bearings into the (34) Right and (35) Left Rear Hub Carriers.

### M4x12 Set Screw



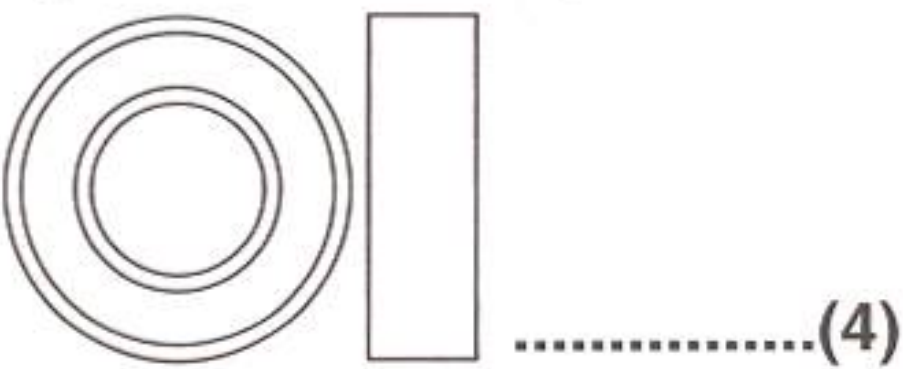
### (39) E3.0 E-Ring (Silver)



### (38) M3x44 Shaft (Black)...(2)

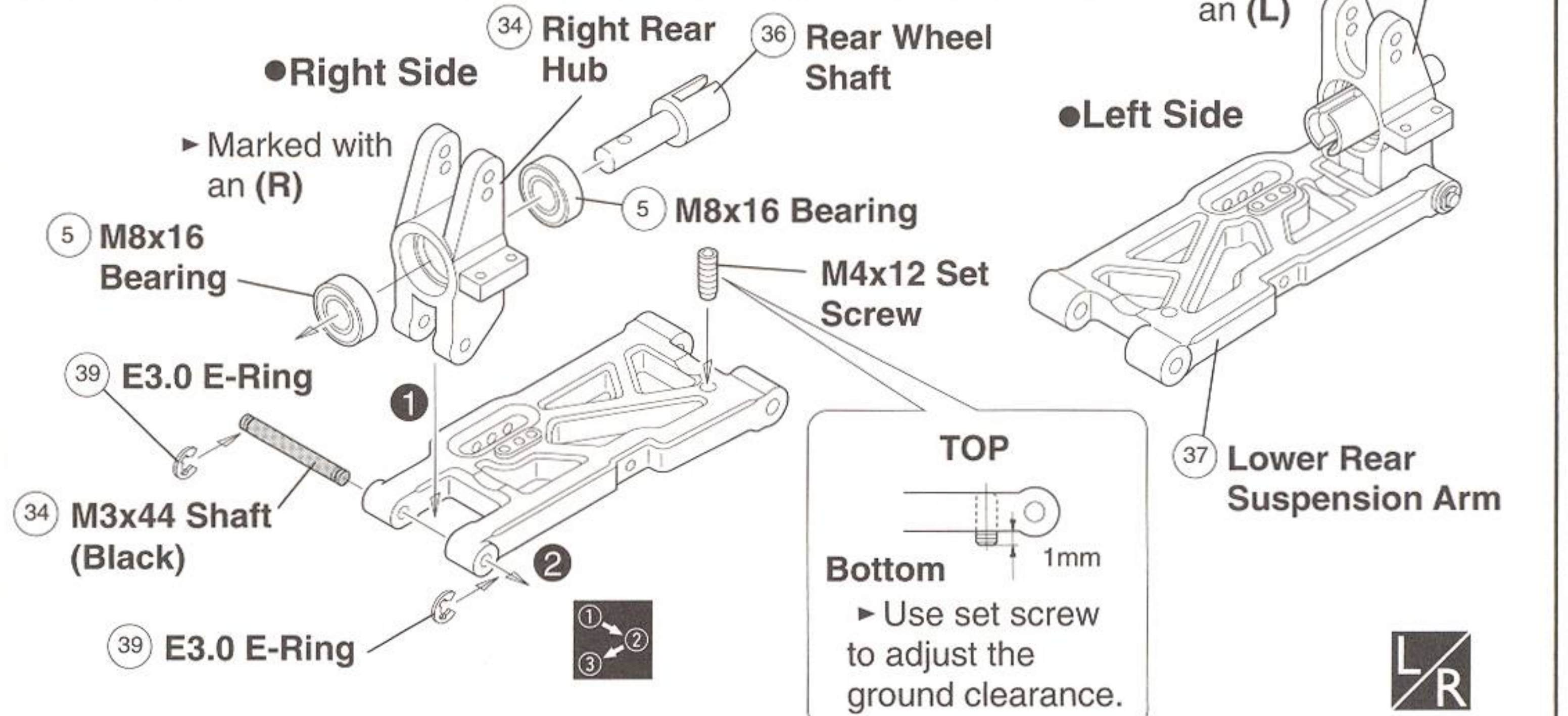


### (5) M8x16 Bearings



## Step 2

Slide the (38) M3x44 Shaft through the (37) Suspension Arm and hub carriers and secure them using the (39) E3.0 E-Rings (Silver).



## Step 3

Install the M4x12 Set Screw according to the diagram, using a 2.0mm hex wrench.

## Step 4

Slide the (36) Rear Wheel Shaft through the bearings in the Rear Hub Carriers.

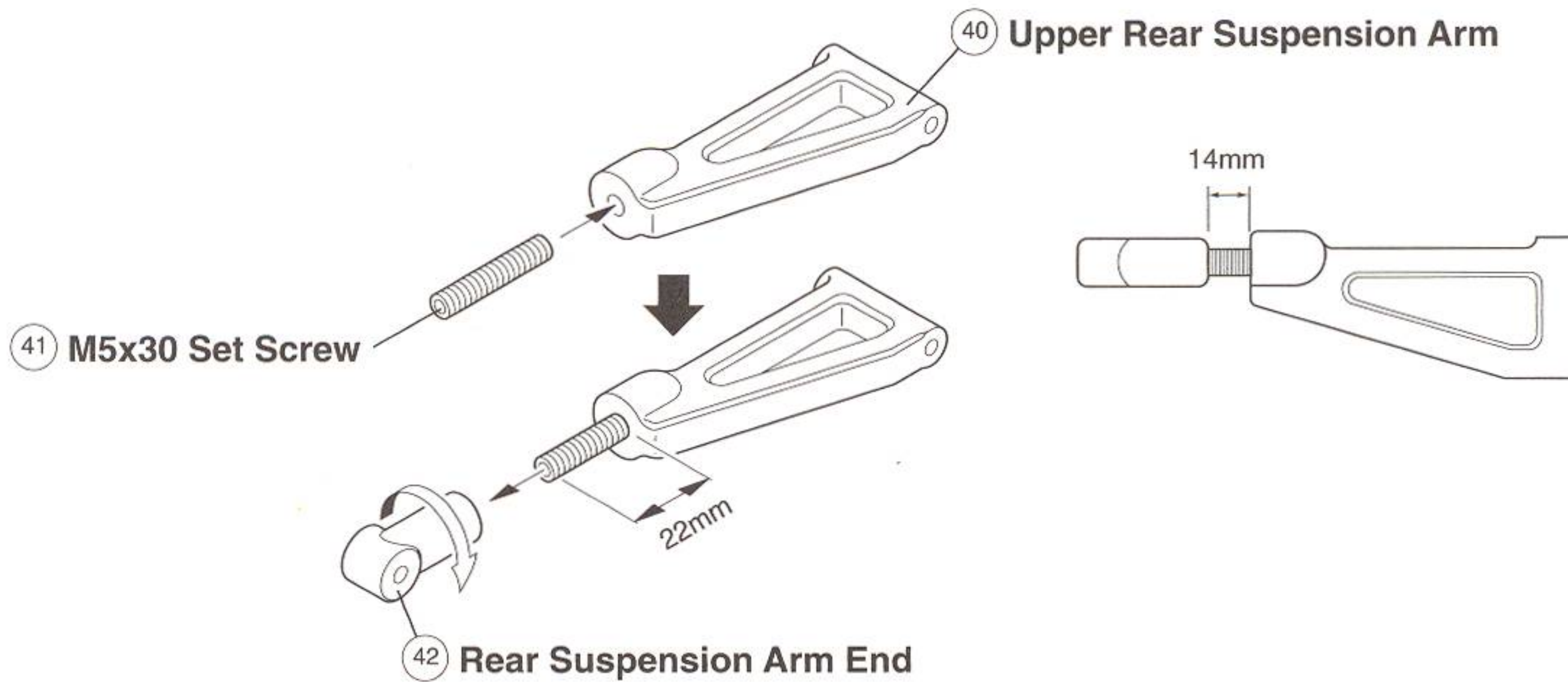
# 8 ASSEMBLE REAR UPPER ARMS

5

### (41) M5x30 Set Screw



Screw the (41) M5x30 Set Screw into the (40) Upper Rear Suspension Arm so that 22mm of the set screw is exposed. Use a 2.5mm hex wrench for this step.



Screw the (42) Rear Suspension Arm End onto the (41) M5x30 Set Screw until only 14mm of the set screw is exposed.

## SYMBOL GUIDE

Assemble in this order.

Apply procedure to both left and right side.

Repeat this process as many times as specified.



# 11 INSTALL SWAY BAR

4

## Step 1

Secure the (50) **Sway Bar** to the rear gear box using two **M3x6 S/T Screws**. Attach one (52) **M5.8 Ball End (L)** and one (51) **M5.8 Ball End (S)** together using a **M3x10 Set Screw**. Make two of these assemblies and install the balls as shown below.

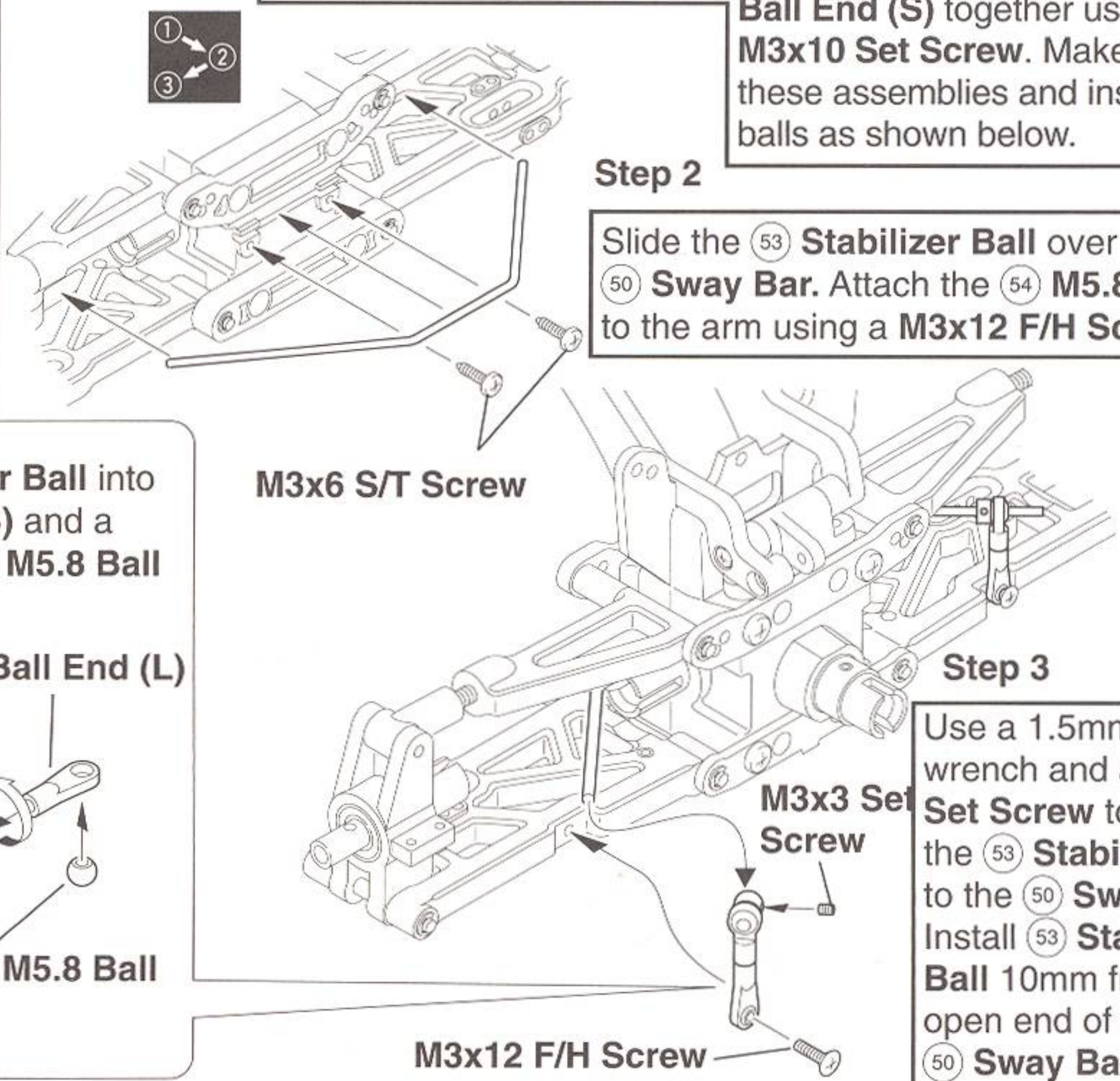
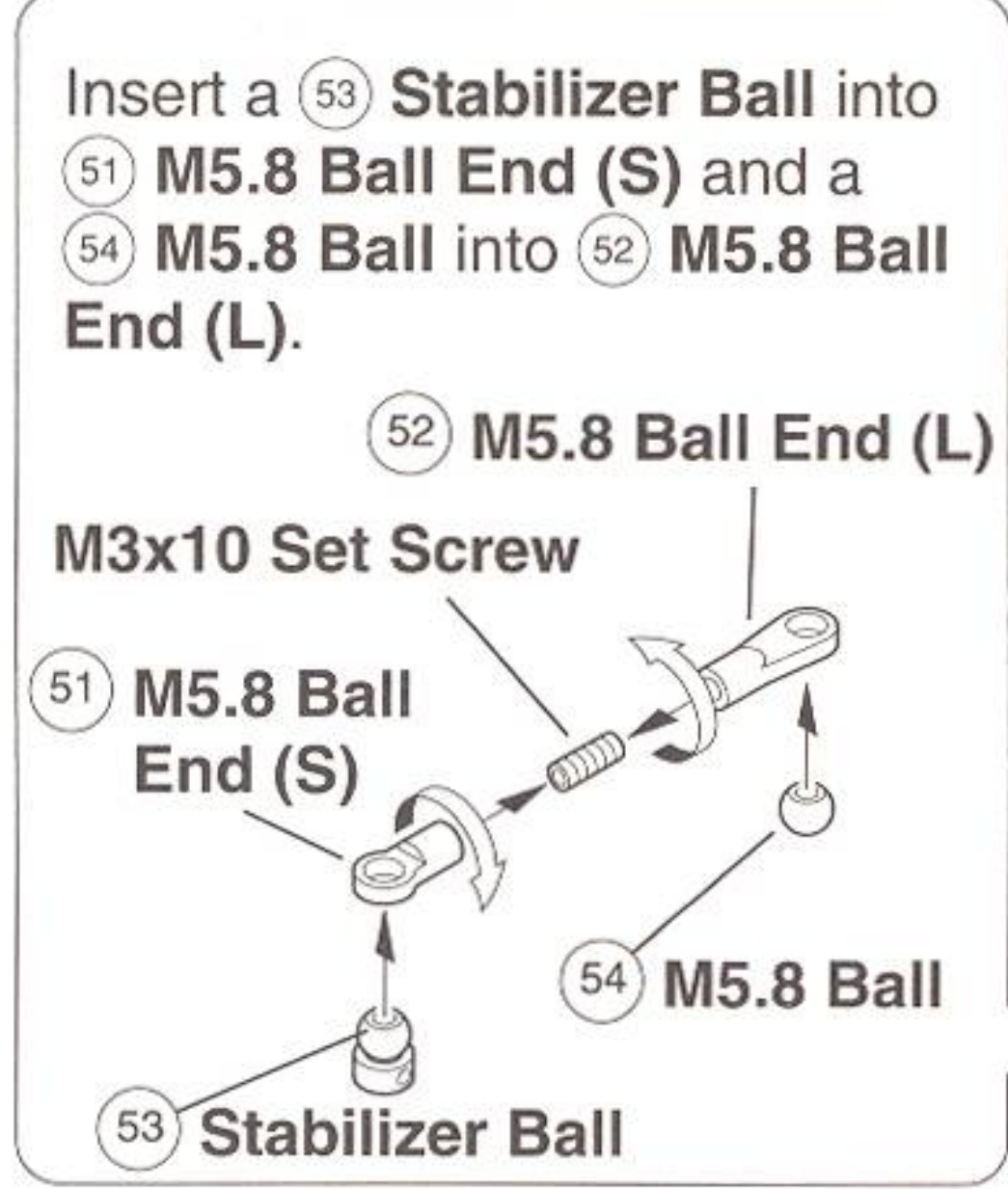
## Step 2

Slide the (53) **Stabilizer Ball** over the (50) **Sway Bar**. Attach the (54) **M5.8 Ball** to the arm using a **M3x12 F/H Screw**.

## Step 3

Use a 1.5mm hex wrench and a **M3x3 Set Screw** to attach the (53) **Stabilizer Ball** to the (50) **Sway Bar**. Install (53) **Stabilizer Ball** 10mm from the open end of the (50) **Sway Bar**.

- M3x3 Set Screw .....(2)
- M3x12 F/H Screw .....(2)
- M3x6 S/T Screw .....(2)
- M3x10 Set Screw .....(2)
- (54) M5.8 Ball .....(2)
- (53) Stabilizer Ball .....(2)
- (52) M5.8 Ball End (L) .....(2)
- (51) M5.8 Ball End (S) .....(2)



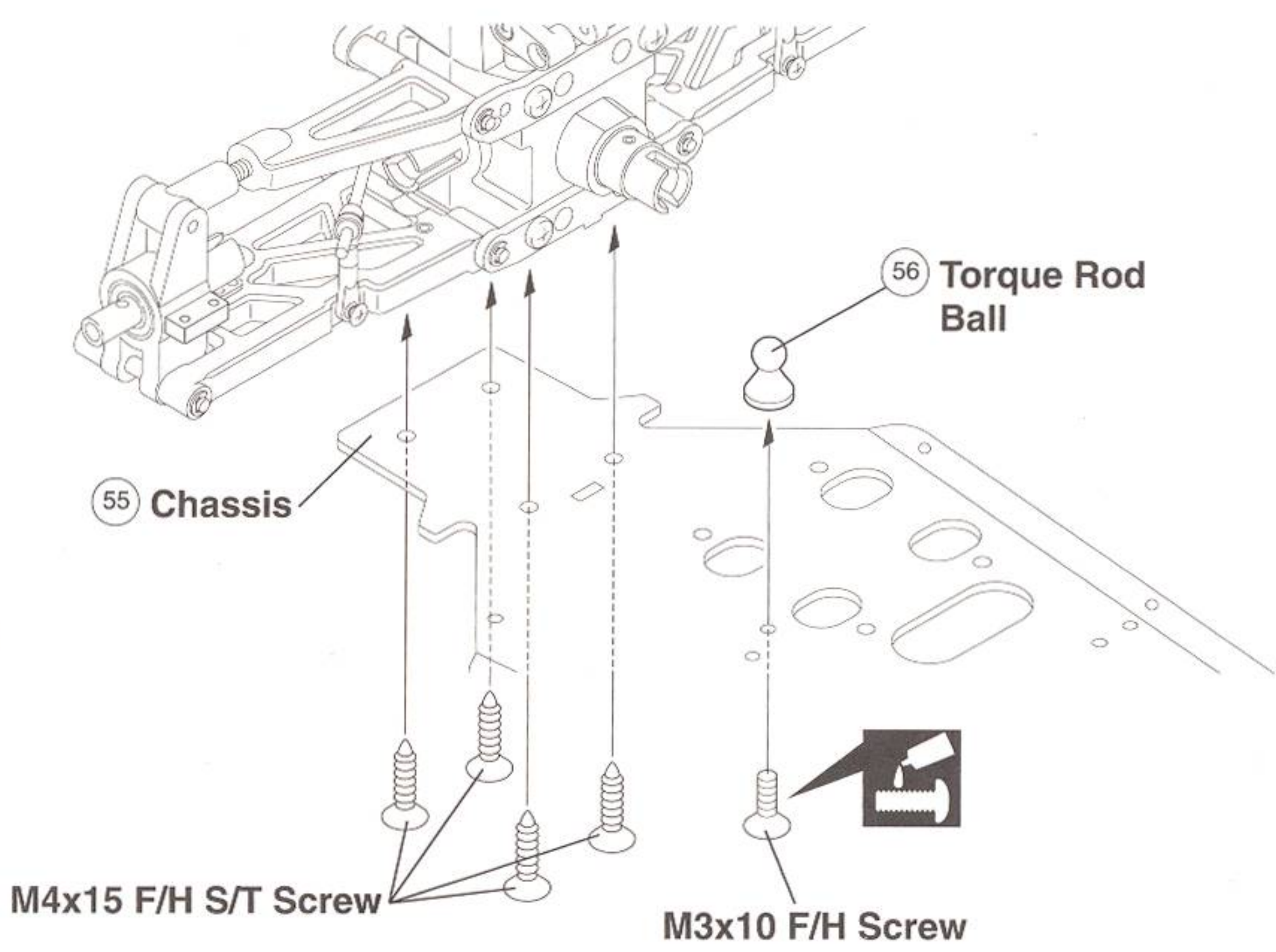
# 12 INSTALL REAR GEARBOX

9

- M3x10 F/H Screw .....(1)
- M4x15 F/H S/T Screw .....(4)
- (56) Torque Rod Ball .....(1)

Attach the (56) **Torque Rod Ball** using a **M3x10 F/H Screw**.

Attach the rear gearbox assembly to the (55) **Chassis** using four **M4x15 F/H S/T Screws**.



## SYMBOL GUIDE

Apply procedure to both left and right side.

Apply thread lock.

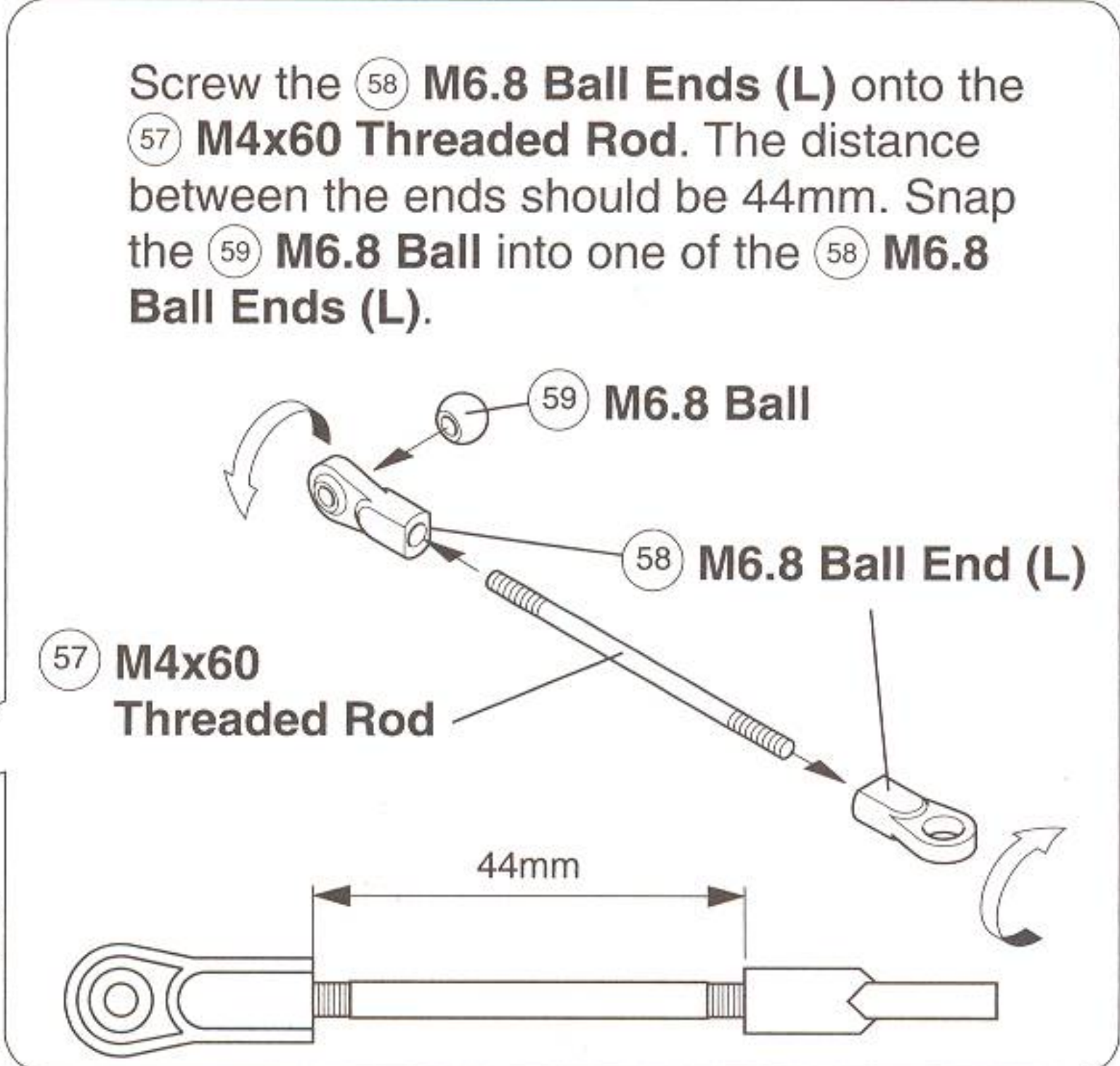
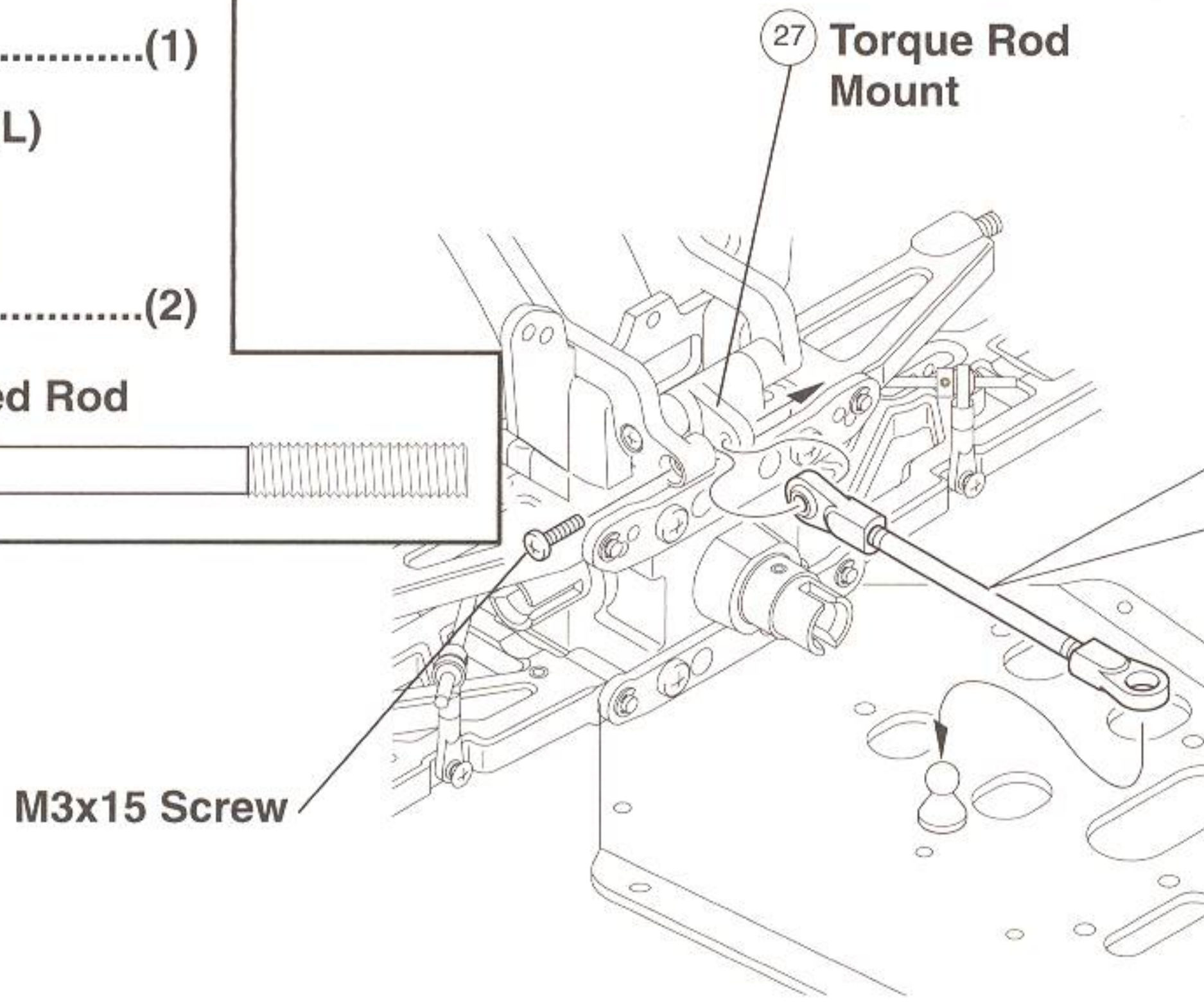
Assemble in this order.

# 13 INSTALL REAR SUPPORT

4

- M3x15 Screw .....(1)
- 59 M6.8 Ball .....(1)
- 58 M6.8 Ball End (L) .....(2)
- 57 M4x60 Threaded Rod

Attach the torque rod assembly by snapping one end onto the **Torque Rod Ball**. Secure the other end using a **M3x15 Screw** to the **Torque Rod Mount**.



# 14 INSTALL FRONT DIFFERENTIAL

2

6

- M4x20 S/T Screw .....(4)
- 5 M8x16 Bearing .....(2)
- 22 M13x16 Shim (Thick)
- 23 M13x16 Shim (Thin)

### Step 2

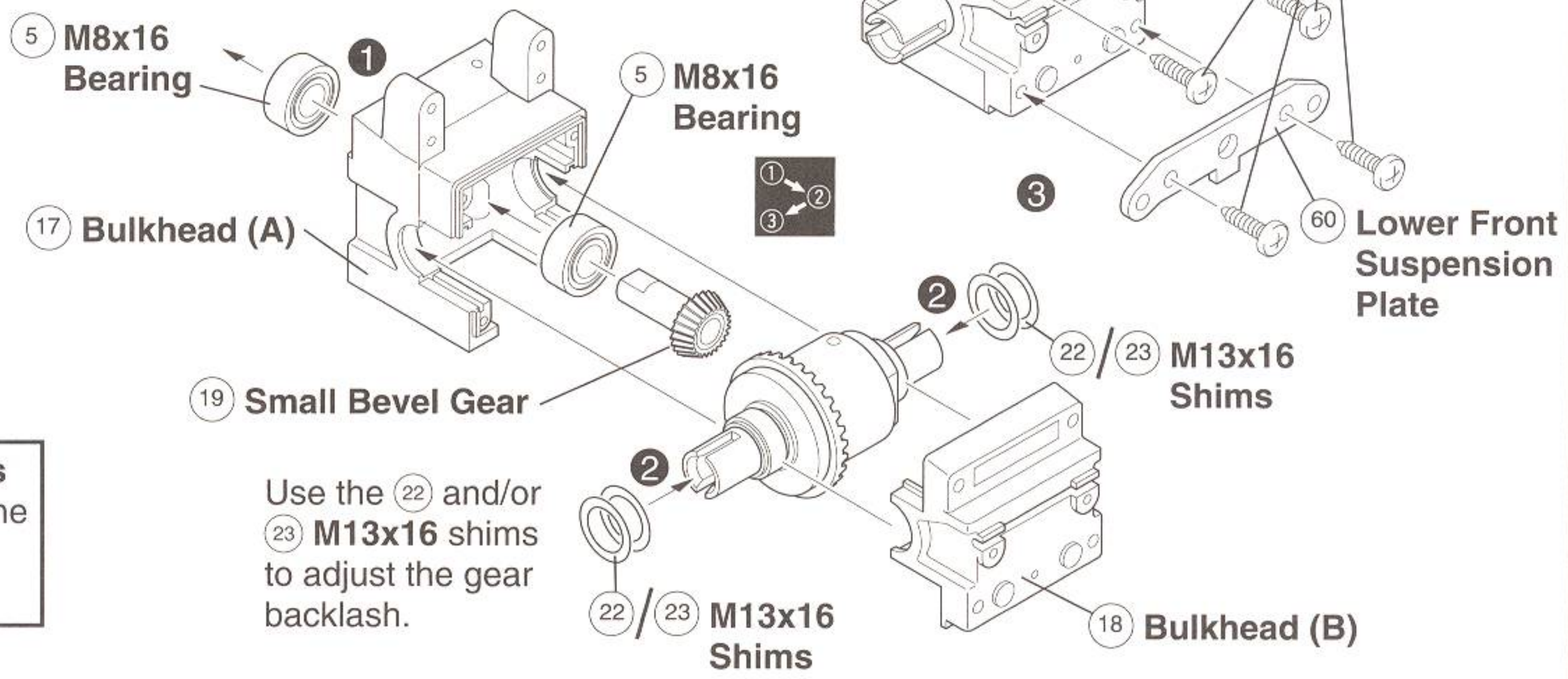
Install the front differential assembly into the **Bulkhead (A)**. Note the direction of the gear on the assembly. Use the **shims** to adjust the backlash of the gears. Slide the **Bulkhead (B)** into the **Bulkhead (A)**.

### Step 3

Attach the **Lower Front Suspension Plate** using two **M4x20 S/T Screws**. Secure the bulkheads together using two **M4x20 S/T Screws**.

### Step 1

Press two **M8x16 Bearings** into **Bulkhead (A)**. Install the **Small Bevel Gear** into the bearings from the inside.



Use the **shims** to adjust the gear backlash.

## SYMBOL GUIDE

Assemble in this order.

# 15 INSTALL SUSPENSION BLOCKS

5

6

M5x4 Set Screw



M4/15 F/H S/T Screw

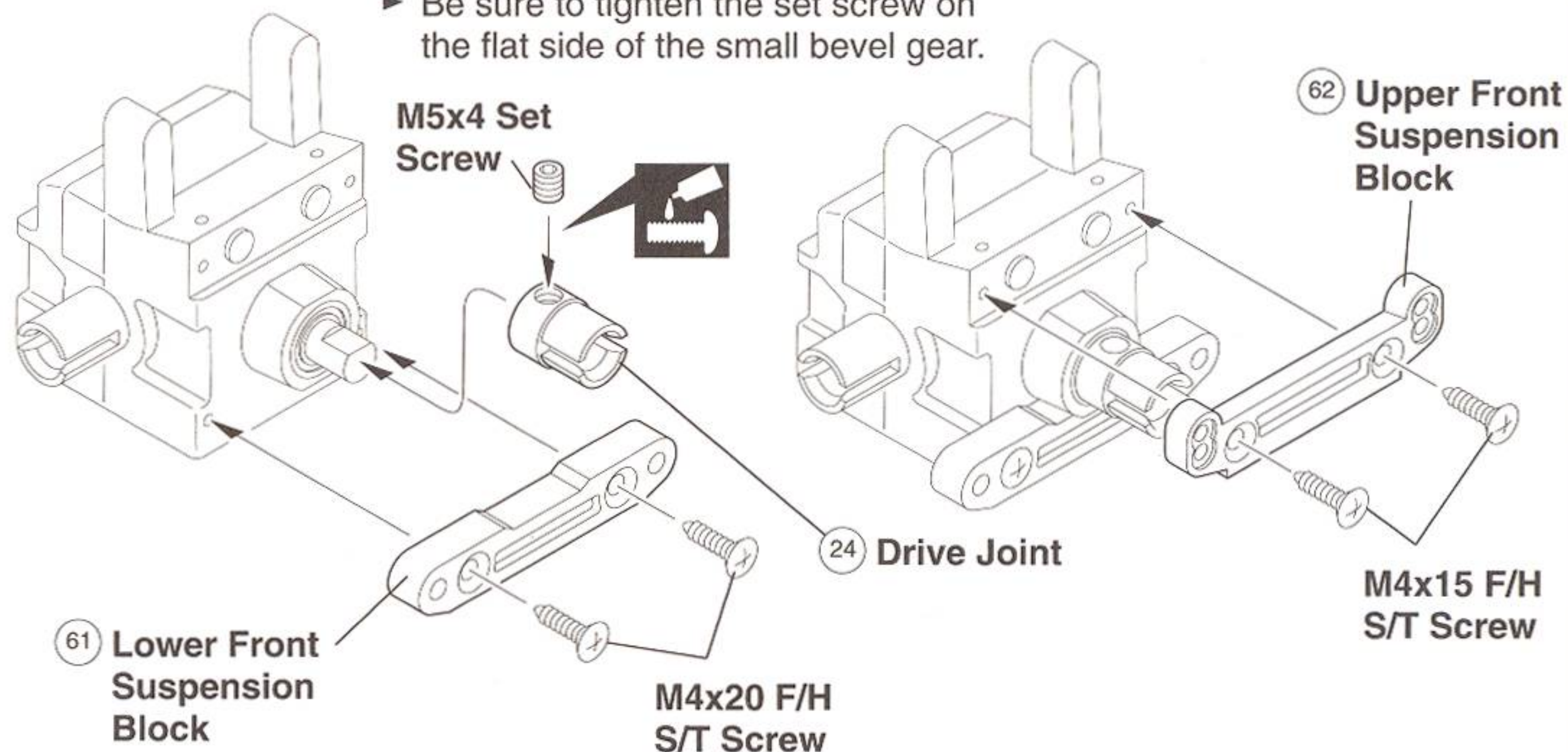


M4x20 F/H S/T Screw



Install the 61 Lower Front Suspension Block using two M4x20 F/H S/T Screws. Install the 24 Drive Joint using a M5x4 Set Screw and a 2.5mm hex wrench. Install the 62 Upper Front Suspension Block using two M4x15 F/H S/T Screws.

► Be sure to tighten the set screw on the flat side of the small bevel gear.



# 16 INSTALL FRONT SHOCK TOWER

6

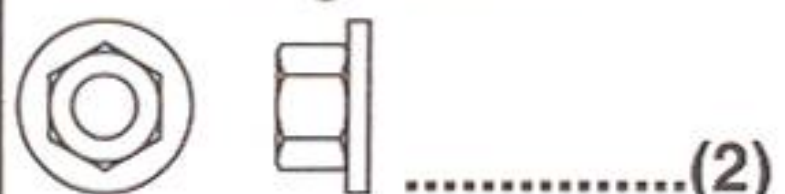
M3x20 Cap Screw



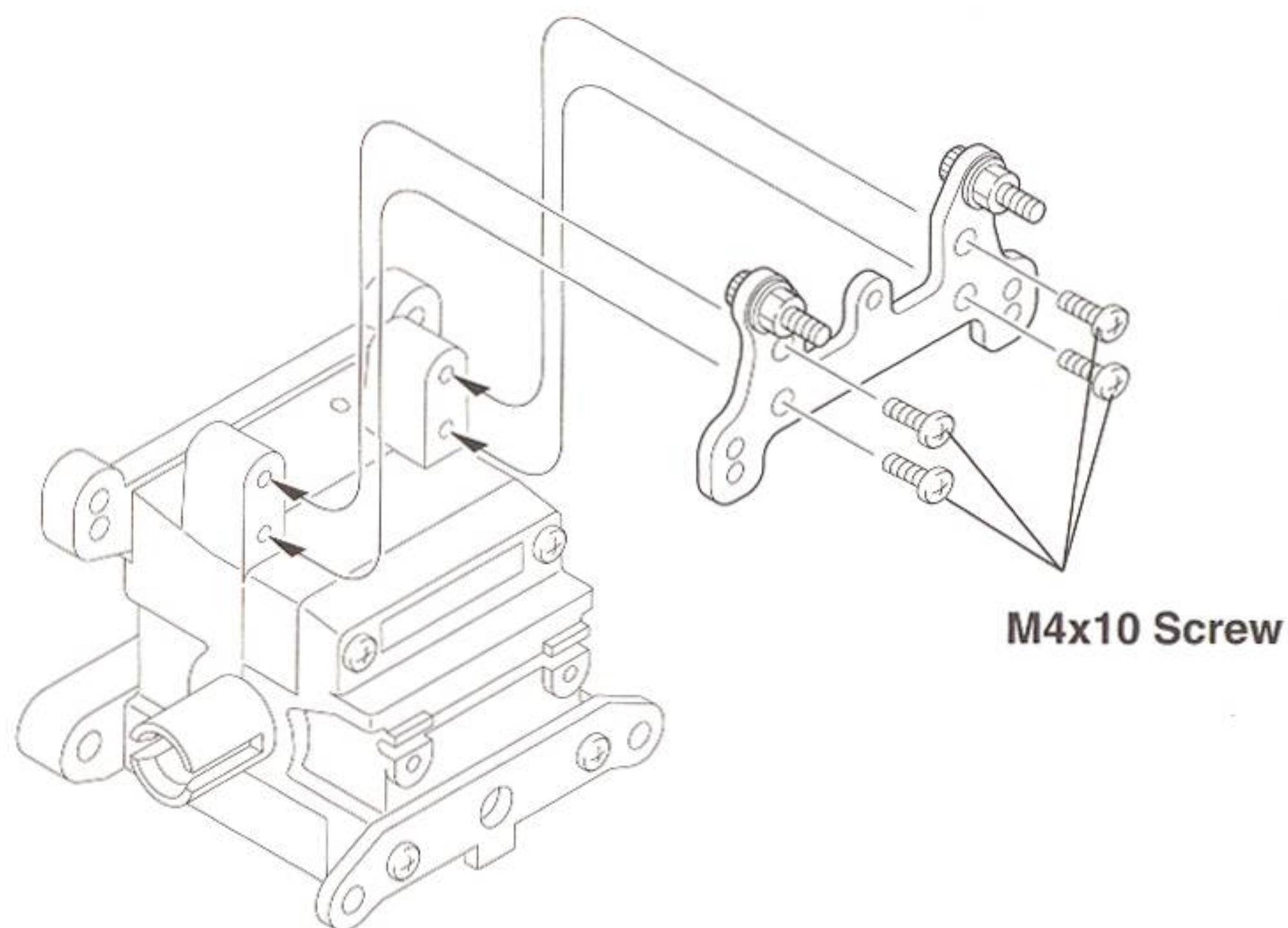
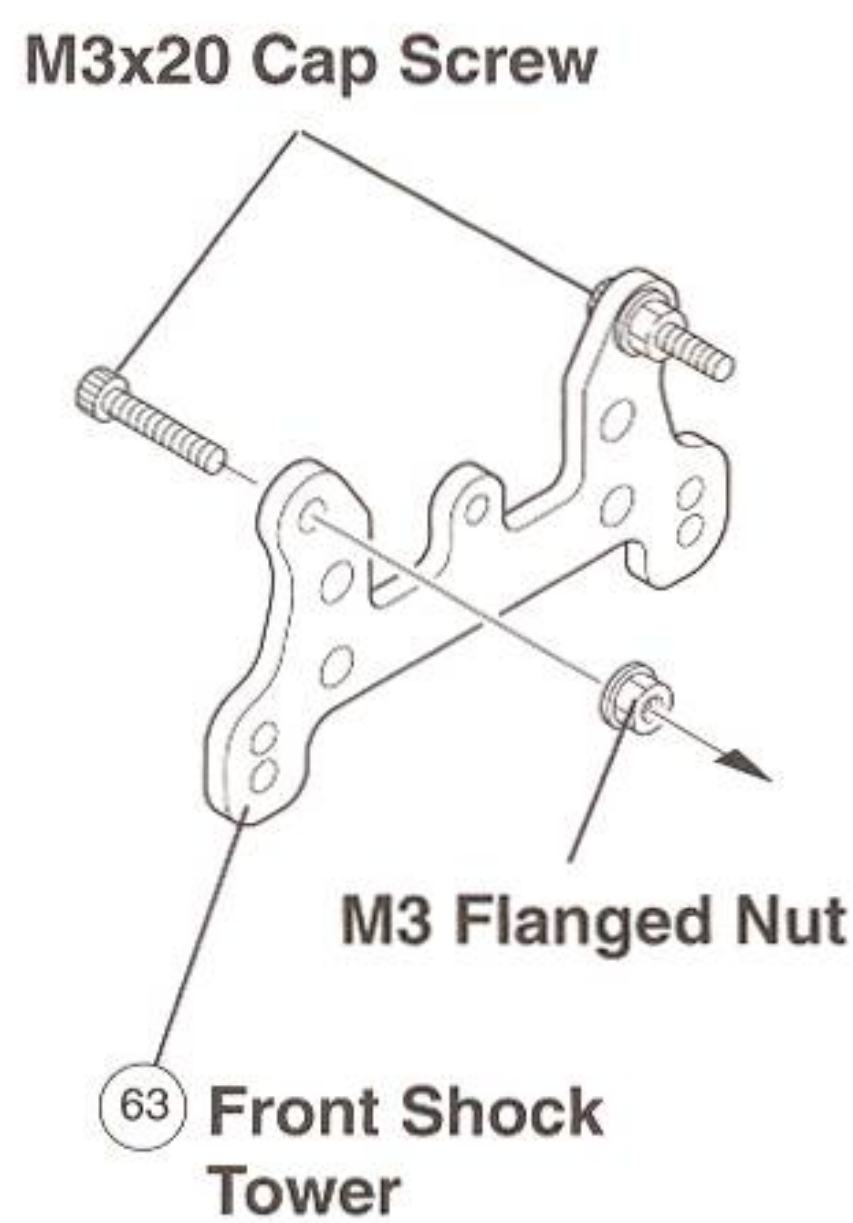
M4x10 Screw



M3 Flanged Nut



Install the two M3x20 Cap Screws through the 63 Front Shock Tower. Secure the screws using two M3 Flanged Nuts.



Attach the 63 Front Shock Tower to the front gear box assembly using four M4x10 Screws.

## SYMBOL GUIDE



Apply thread lock.

# 17 ASSEMBLE FRONT HUBS



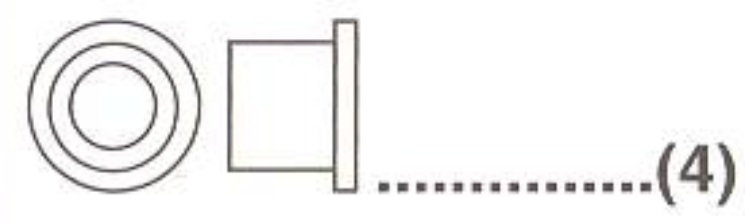
## Step 1

Install the four (5) **M8x16 Bearings** into the (66) and (67) **Knuckle Arms**. Insert the (68) **Universal Swing Shaft** through the M8x16 Bearings.

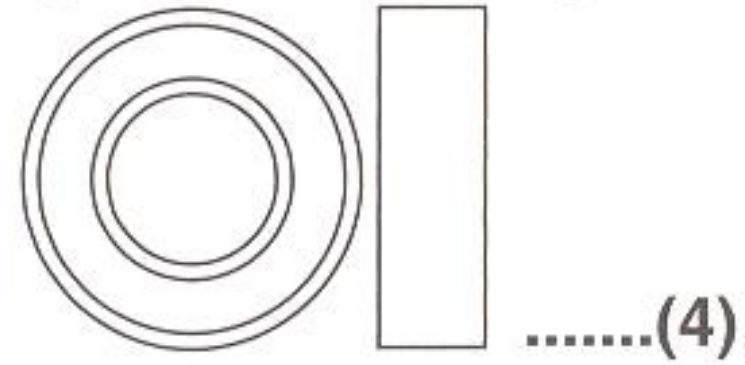
### M4x10 Cap Screw



### (69) Knuckle Arm Bushing

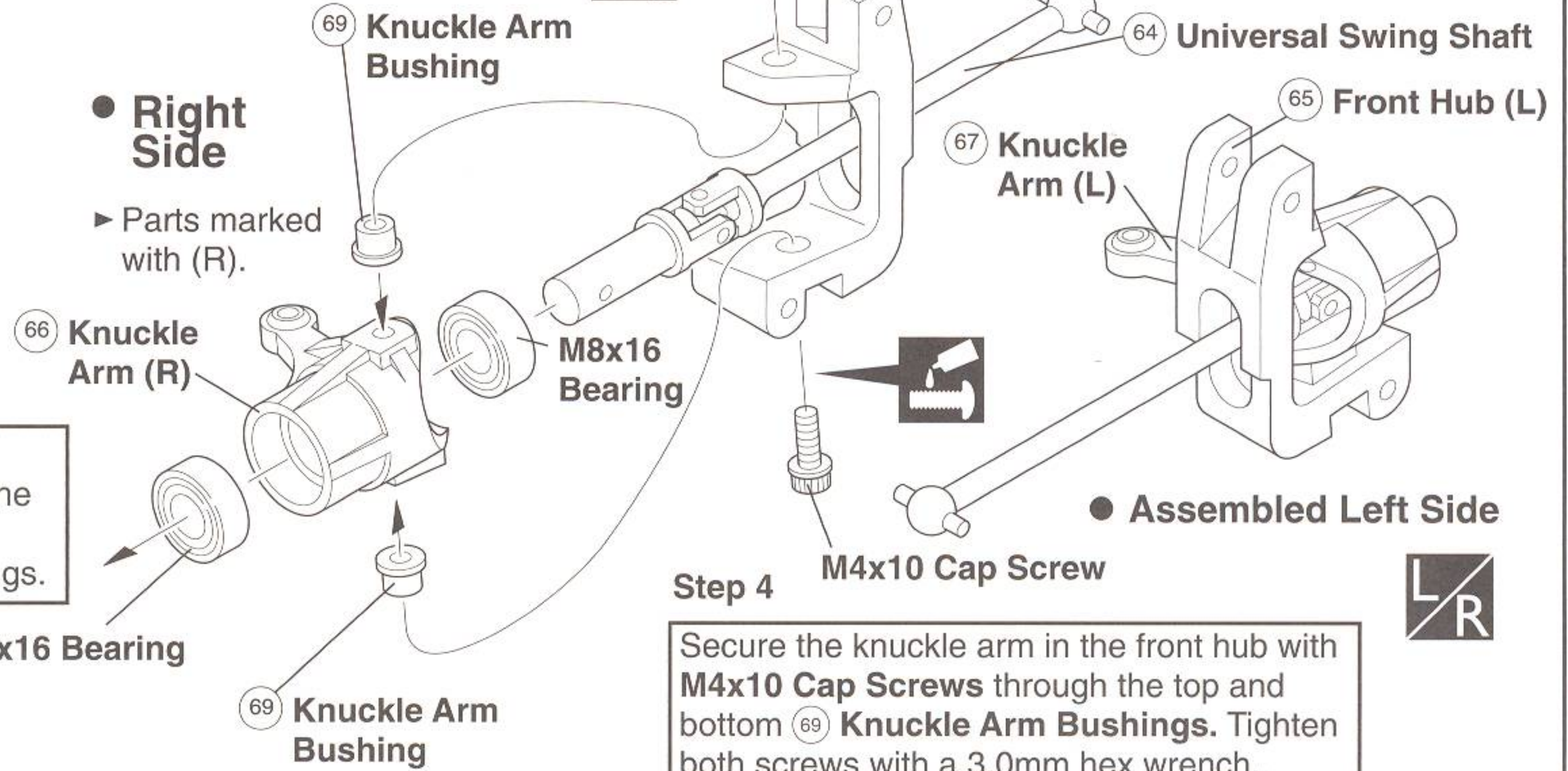


### (5) M8x16 Bearing



## Step 2

Insert the four (69) **Knuckle Arm Bushings** into the (64)/(65) **Front Hubs**.



## Step 3

Slide the (68) **Universal Swing Shaft** into the front hubs. Slide the knuckle arms into the front hubs between the knuckle arm bushings.

## Step 4

Secure the knuckle arm in the front hub with **M4x10 Cap Screws** through the top and bottom (69) **Knuckle Arm Bushings**. Tighten both screws with a 3.0mm hex wrench.



# 18 INSTALL FRONT ARMS



## Step 1

Attach a (39) **E3.0 E-Ring** to one end of a (71) **M3x38 Shaft**. Slide the shaft through the (70) **Front Suspension Arm** and the front hub assembly from the rear. Secure the (71) **M3x38 Shaft** using another (39) **E3.0 E-Ring**.

### M4x12 Set Screw



### (39) E3.0 E-Ring (Silver)



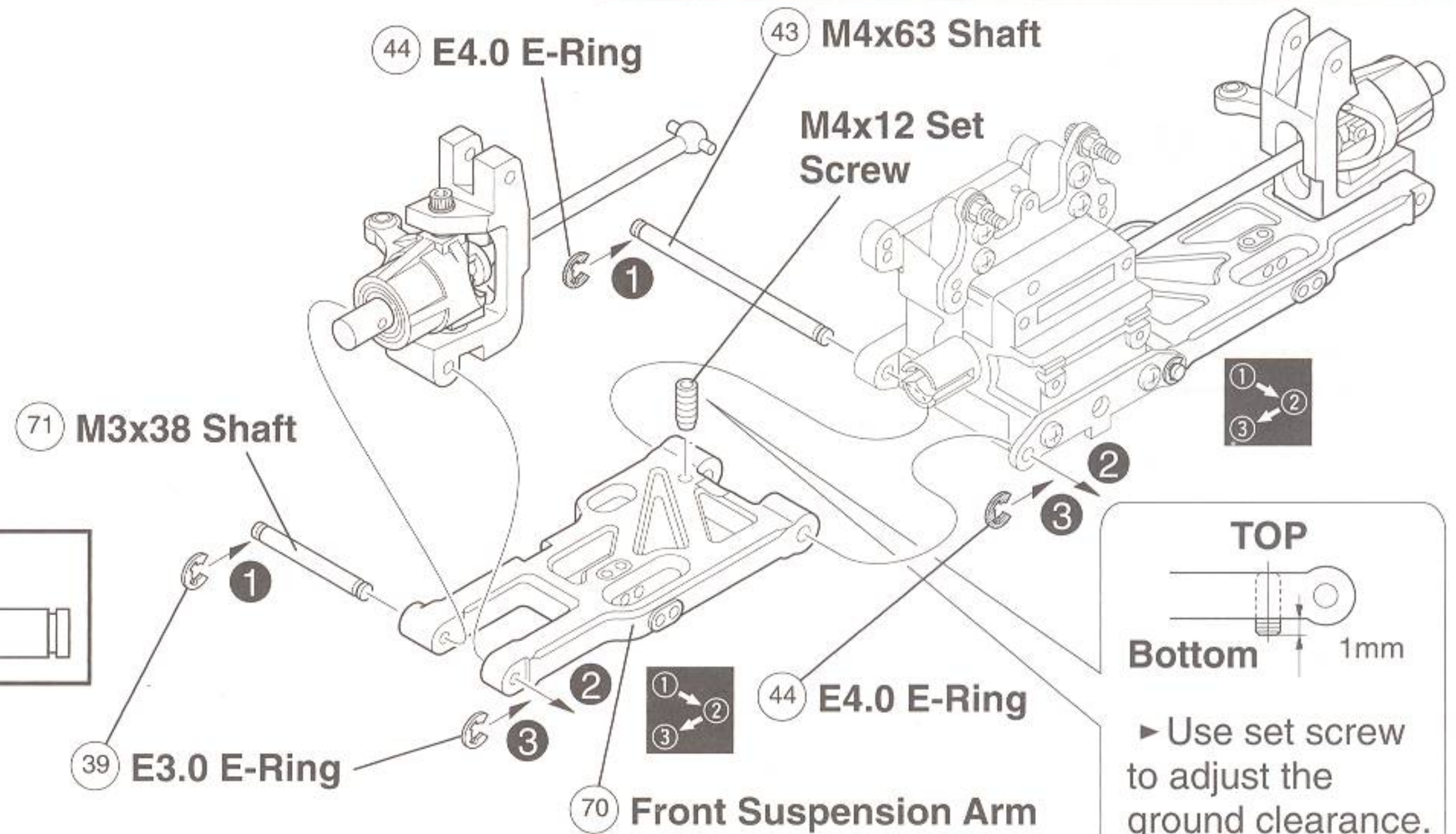
### (44) E4.0 E-Ring (Black)



### (71) M3x38 Shaft



### (43) M4x63 Shaft



## Step 2

Attach a (44) **E4.0 E-Ring (Black)** to one end of a (43) **M4x63 Shaft**. Slide the shaft through the suspension blocks and the front arm assembly. Secure the (43) **M4x63 Shaft** using another (44) **E4.0 E-Ring (Black)**.

## SYMBOL GUIDE



Apply thread lock.



Assemble in this order.

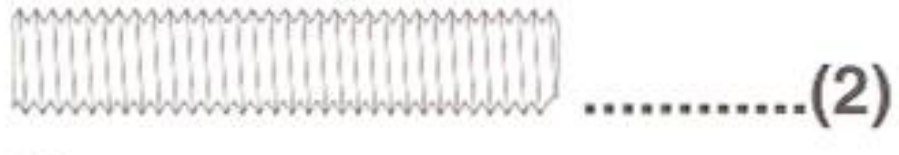


Apply procedure to both left and right side.

# 19 ASSEMBLE FRONT SUSPENSION

5 6

## M5x25 Set Screw



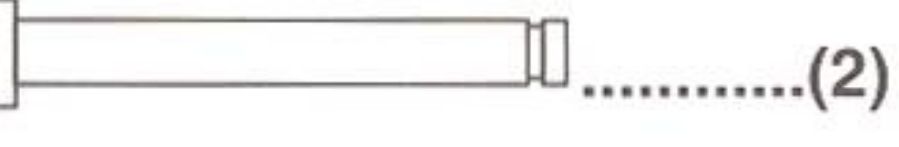
## 39 E3.0 E-Ring



## 75 M3x34 Shaft (Black)



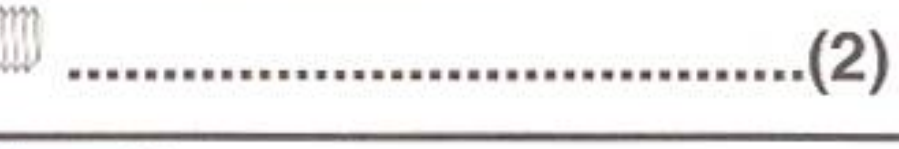
## 48 M3x27 Shaft



## 49 M3 Stopper

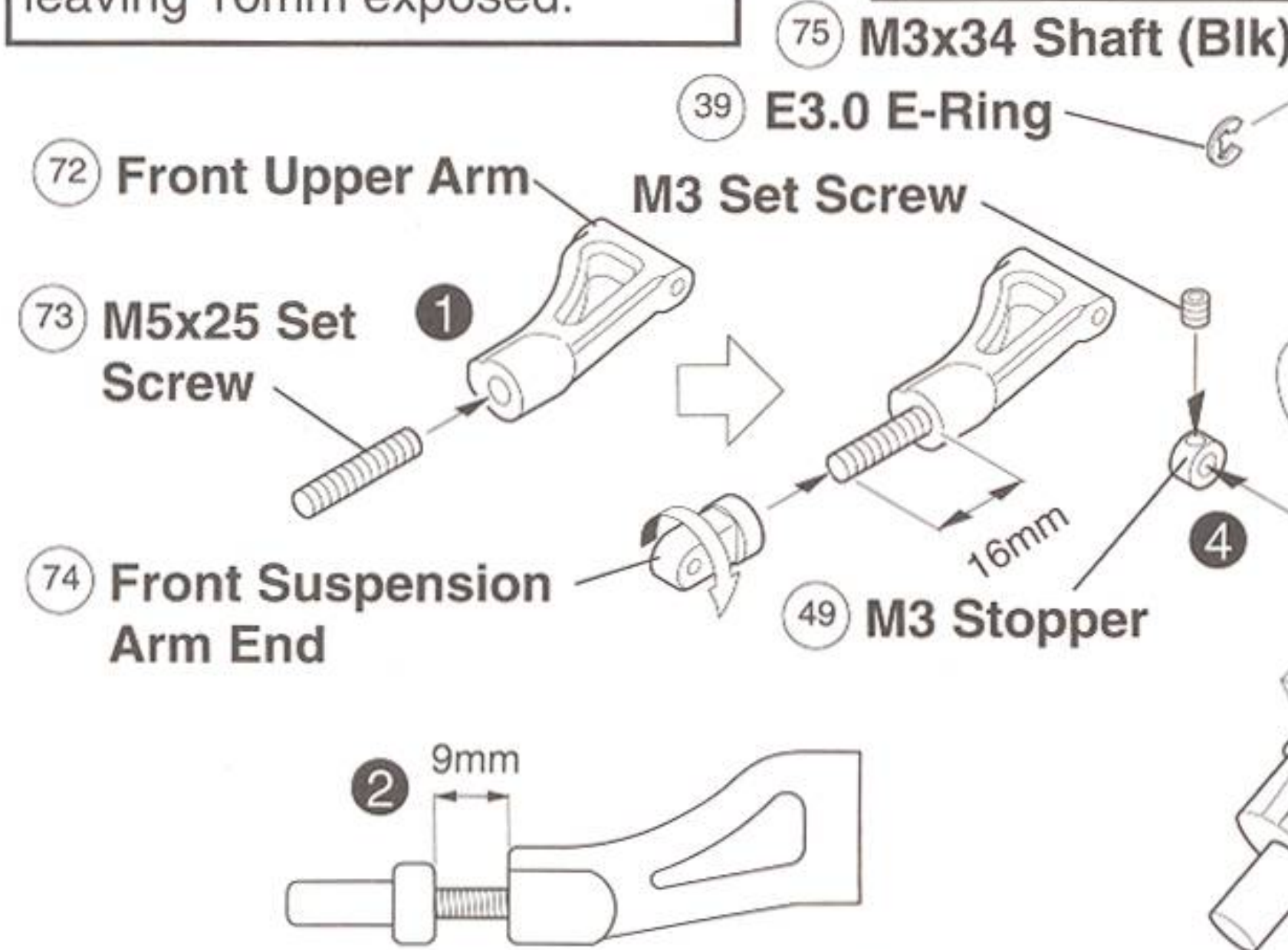


## M3x3 Set Screw



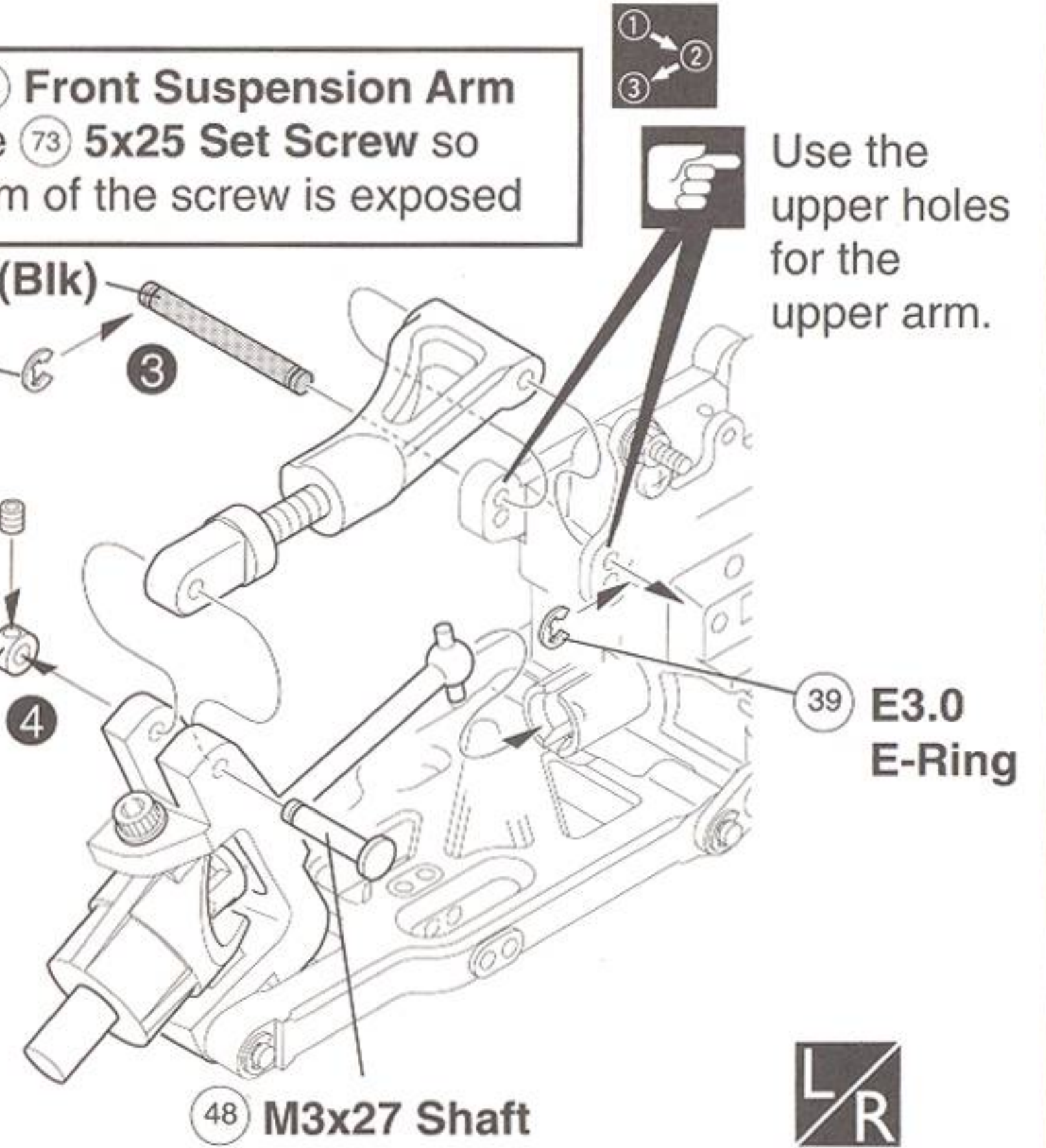
### Step 1

Using a 2.5mm hex wrench, screw the 73 M5x25 Set Screw into the 72 Front Upper Arm, leaving 16mm exposed.



### Step 2

Screw the 74 Front Suspension Arm End onto the 73 M5x25 Set Screw so that only 9mm of the screw is exposed



### Step 3

Attach the 39 E3.0 E-Ring to one end of a 75 M3x34 Shaft (Black). Slide the shaft through the upper blocks and the upper arm assembly from the rear. Secure the shaft using another 39 E3.0 E-Ring.

### Step 4

Insert the universal swing shaft into the differential joint. Attach the upper arm assembly to the front hub carrier using a 48 M3x27 Shaft. Secure the shaft using a 49 M3 Stopper and a M3x3 Set Screw. Tighten the set screw using a 1.5mm hex wrench.

# 20 INSTALL FRONT GEARBOX

6

## M3x10 S/T Screw



## M4x15 F/H S/T Screw

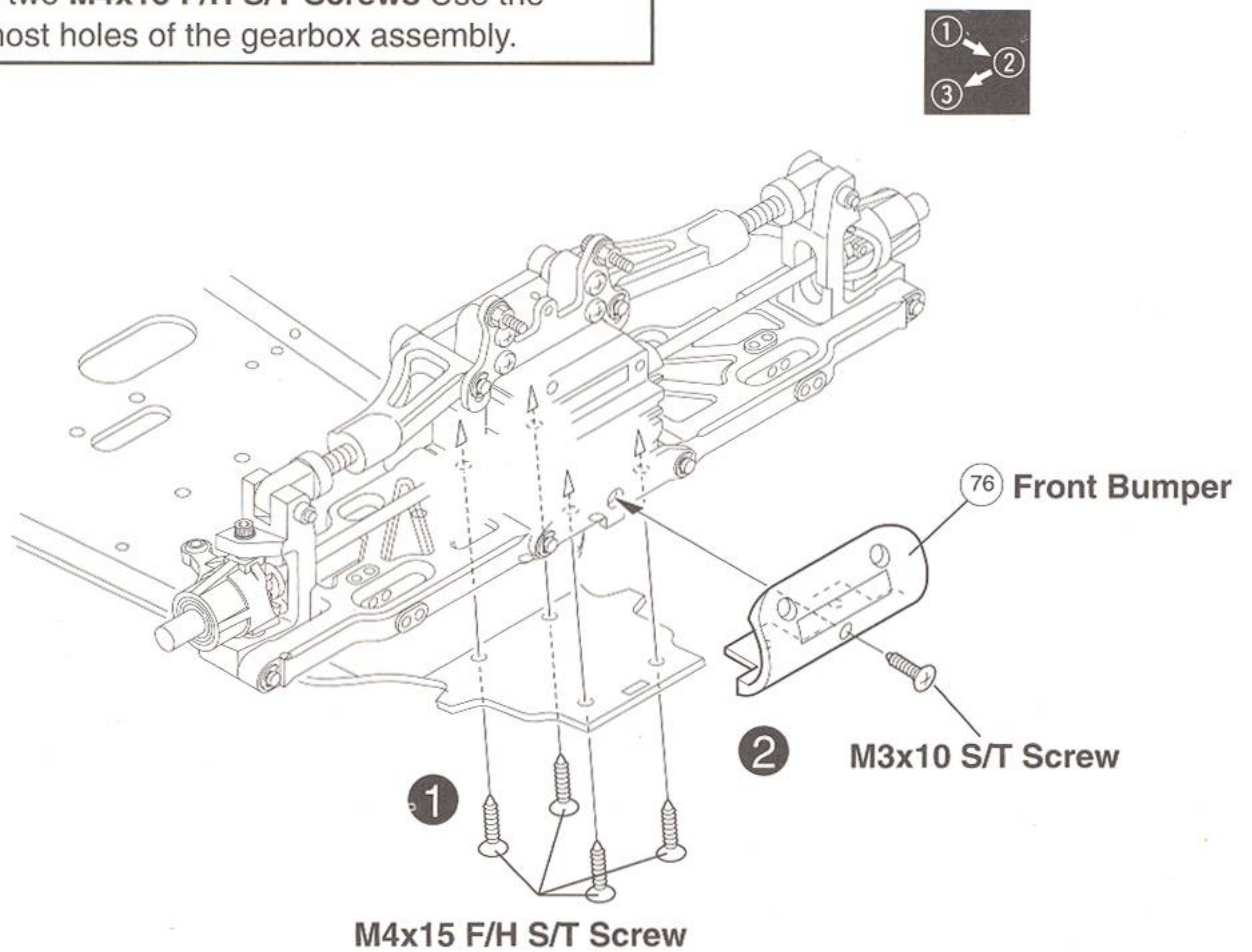


### Step 1

Attach the front gearbox assembly to the chassis using two M4x15 F/H S/T Screws. Use the rearmost holes of the gearbox assembly.

### Step 2

Slide the 76 Front Bumper under the front gearbox assembly and install the other two M4x15 F/H S/T Screws. Install the M3x10 S/T Screw through the 76 Front Bumper.



## SYMBOL GUIDE

Important information.

Apply procedure to both left and right side.

Assemble in this order.

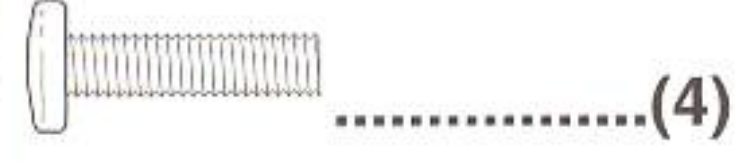
# 21 ASSEMBLE CENTER GEARBOX

8

## Step 1

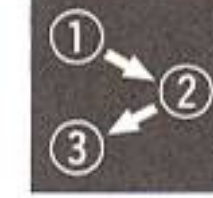
Glue the (80) **Brake Liners** to the (79) **Brake Disk** using CA glue.

M3x12 Screw



## Step 2

Place the (77) **Center Differential Mounts** on the center differential assembly.



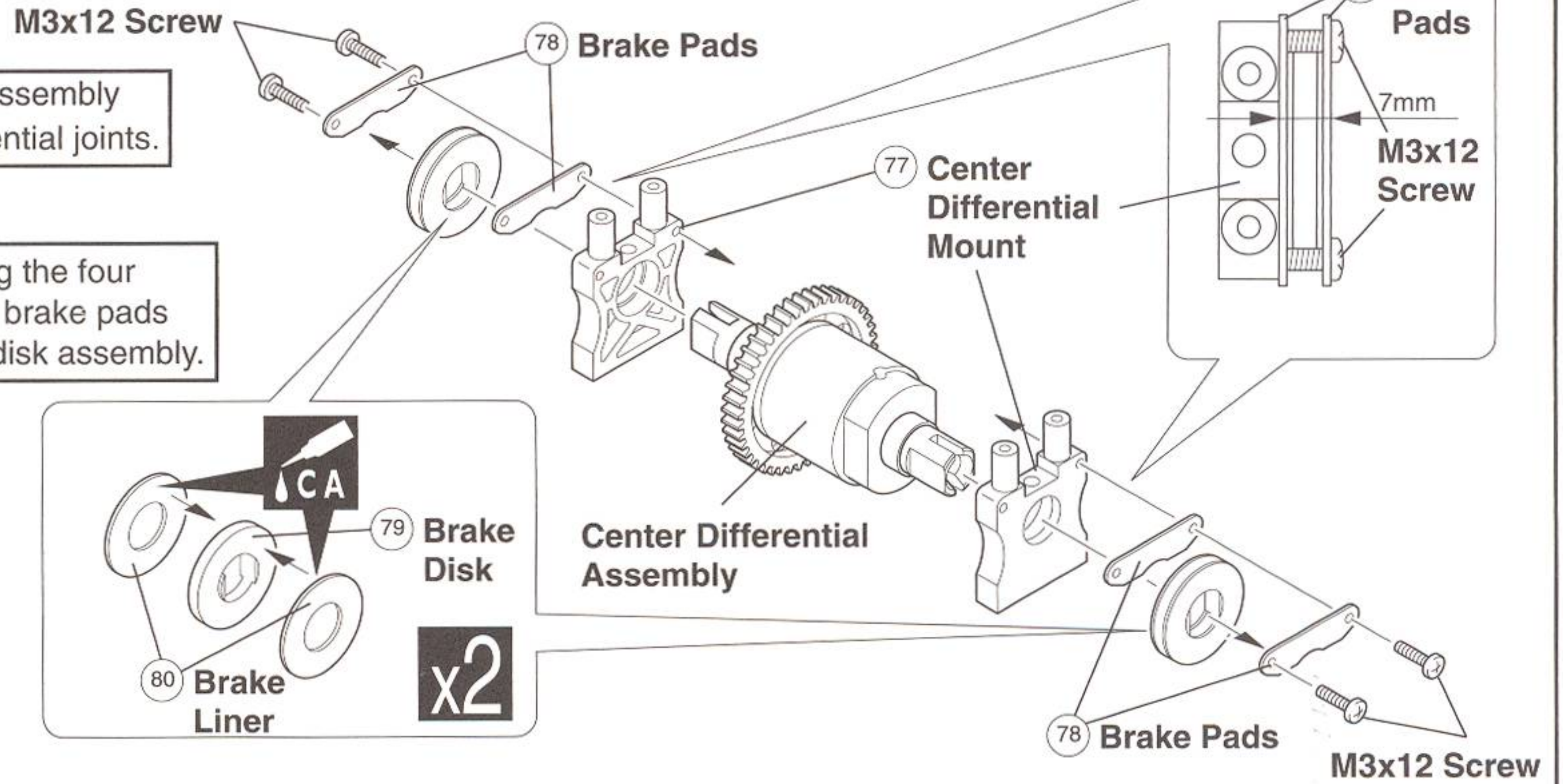
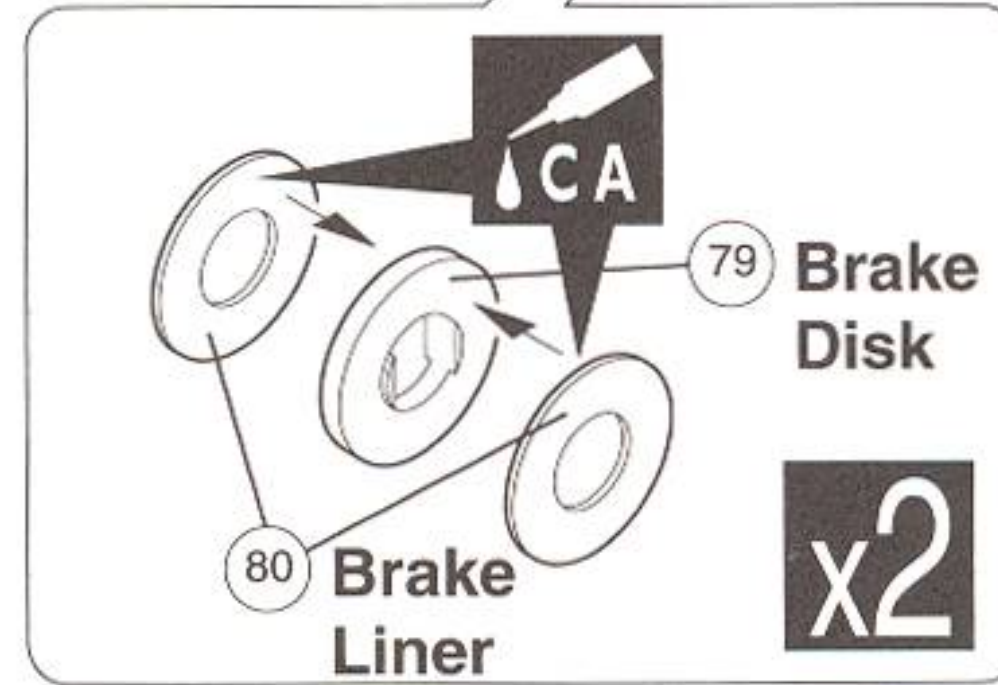
The outside measurement of the (78) **Brake Pads** should be 7mm.

## Step 3

Slide the brake disk assembly onto the center differential joints.

## Step 4

Attach the (78) **Brake Pads** using the four **M3x12 Screws**. Make sure the brake pads are on either side of the brake disk assembly.



# 22 INSTALL CENTER DIFFERENTIAL

6

## Step 1

Place the two (81) **M4 O-Rings (Black)** into the front center differential joint.



M4x15 F/H S/T Screw



(81) **M4 O-Ring (Black)**



## Step 2

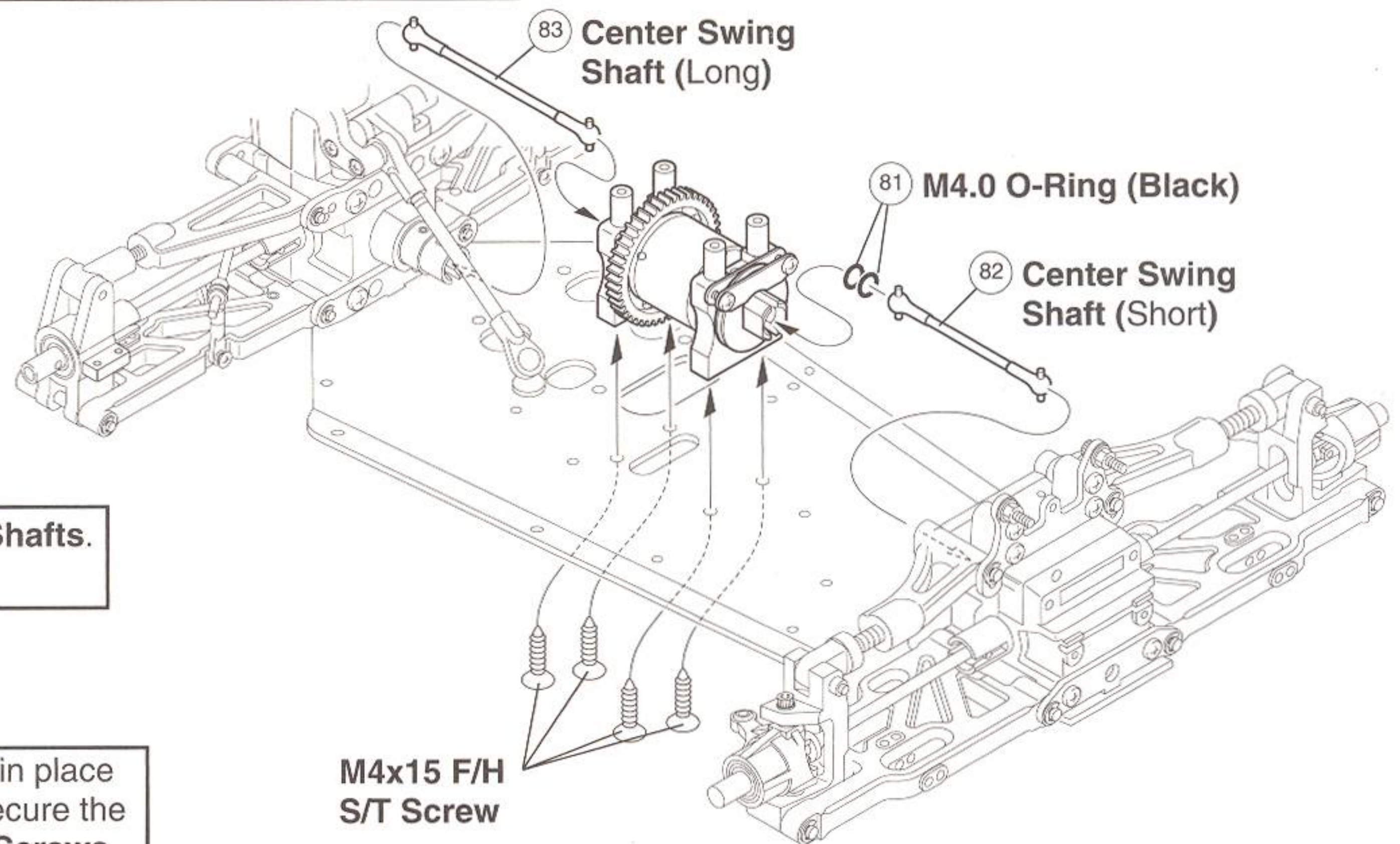
Place the center differential on the chassis in its proper location.

## Step 3

Install the (82) and (83) **Center Swing Shafts**. Note the short shaft is in the front.

## Step 4

Hold the center differential assembly in place and turn the chassis upside down. Secure the assembly using four **M4x15 F/H S/T Screws**.



## SYMBOL GUIDE



Apply CA.



Repeat this process as many times as specified.



Assemble in this order.

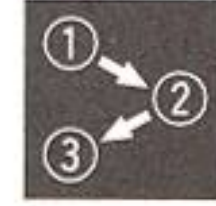
# 23 INSTALL BRAKE LEVERS

8 9

## Step 1

- M3x3 Set Screw .....(2)
- M3x10 S/T Screw .....(4)

Install the (84) and (85) **Brake Cams** in the center diff mounts, as shown in the diagram below. Install the front (86) **Brake Lever**, but don't use a set screw yet. Slip the (173) **Brake Cam Bushings** over the brake cams with the flange down.

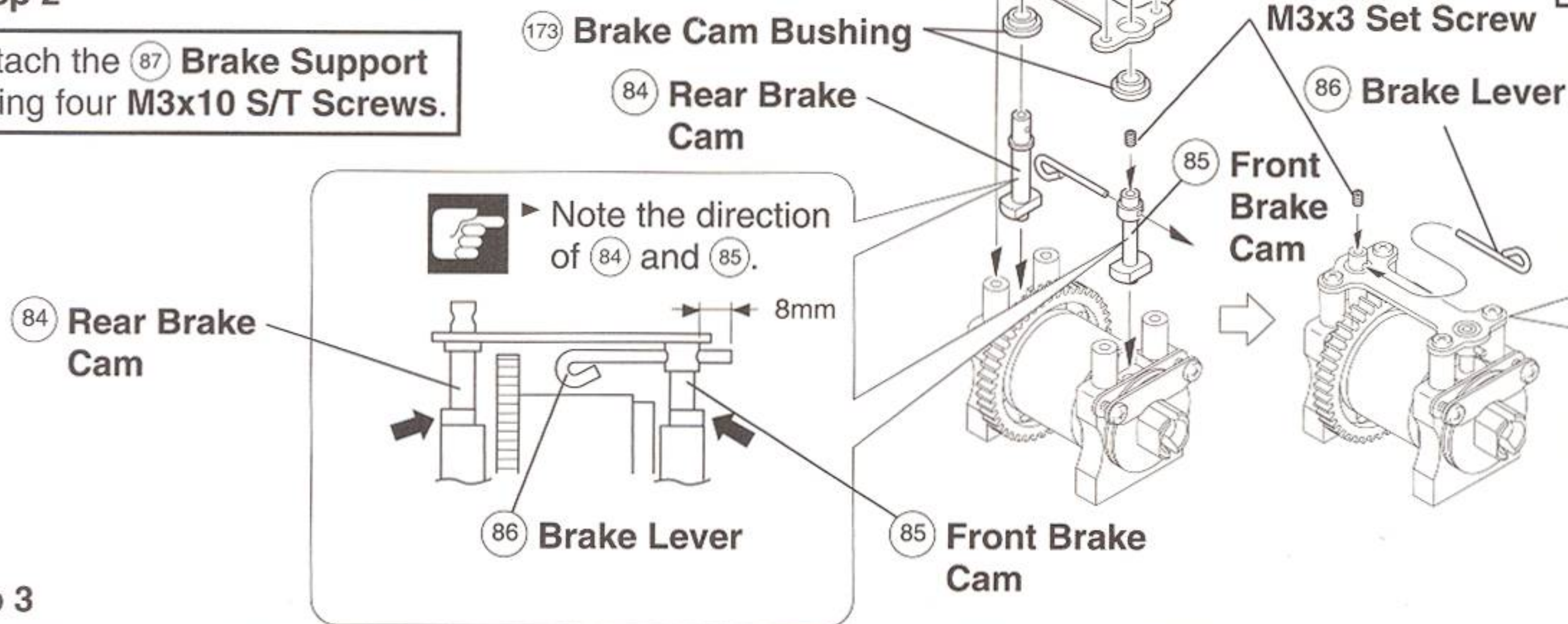


## Step 4

Insert the rear (86) **Brake Lever** so 2mm are exposed past the (85) **Brake Cam**. Use a **M3x3 Set Screw** and a 1.5mm hex wrench to secure the (86) **Brake Lever**.

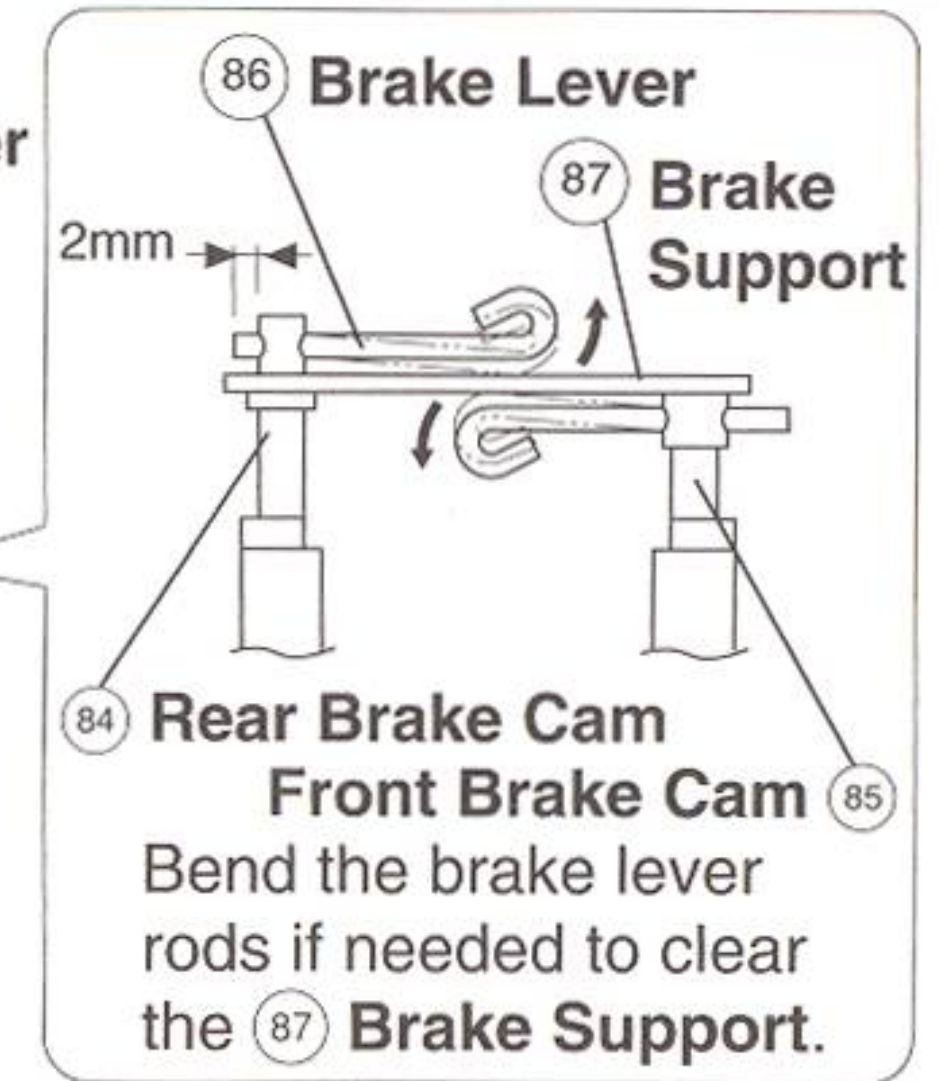
## Step 2

Attach the (87) **Brake Support** using four **M3x10 S/T Screws**.



## Step 3

Insert the front (86) **Brake Lever** so 8mm is exposed past the (85) **Brake Cam**. Use a **M3x3 Set Screw** and a 1.5mm hex wrench to secure the (86) **Brake Lever**.

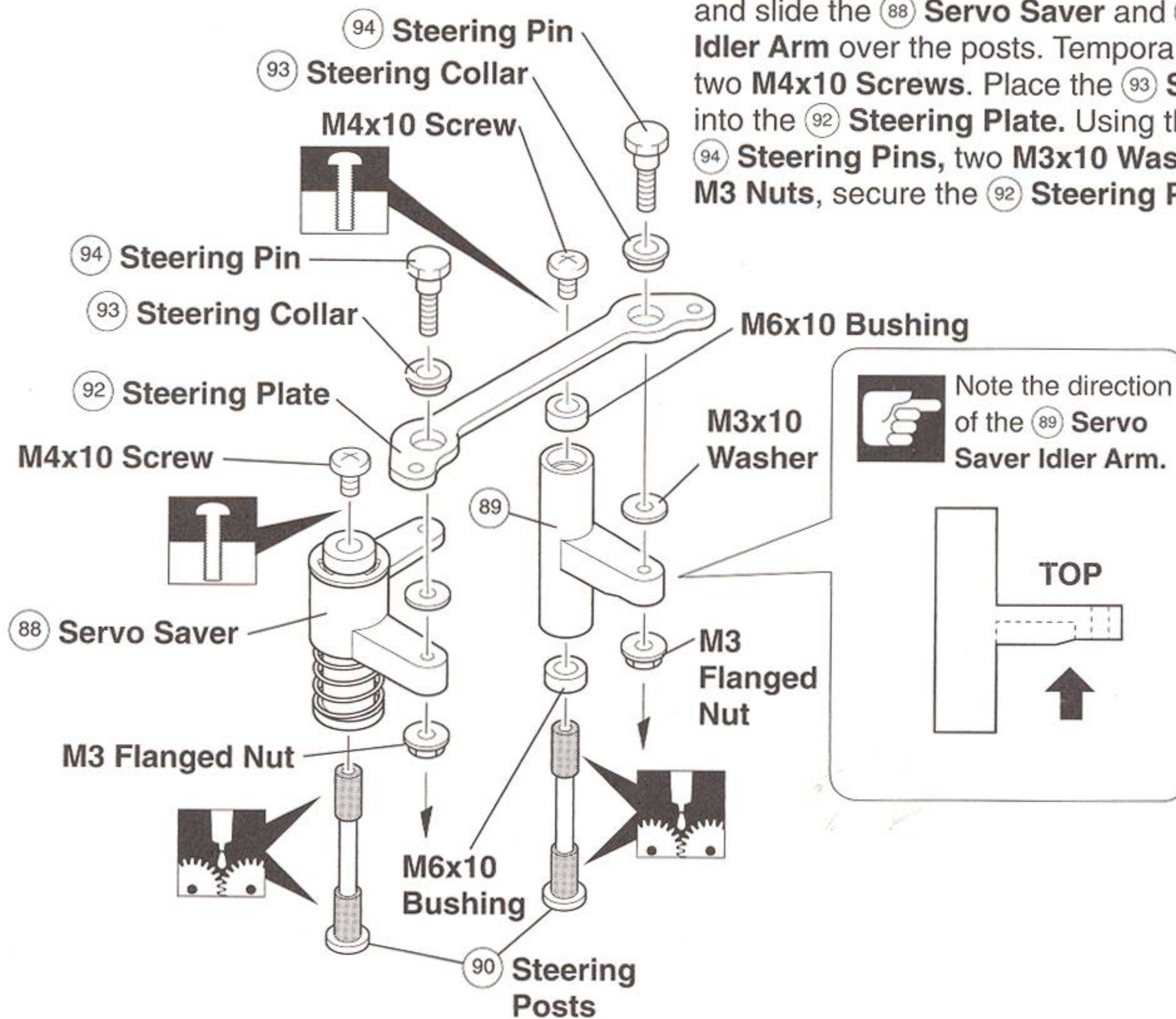


# 24 ASSEMBLE SERVO SAVER

7

Install the **M6x10 Metal Bushing** in the (89) **Servo Saver Idler Arm**. Grease the (90) **Steering Posts** and slide the (88) **Servo Saver** and (89) **Servo Saver Idler Arm** over the posts. Temporarily install the two **M4x10 Screws**. Place the (93) **Steering Collars** into the (92) **Steering Plate**. Using the two (94) **Steering Pins**, two **M3x10 Washers** and two **M3 Nuts**, secure the (92) **Steering Plate** as shown.

- M4x10 Screw .....(2)
- M3x10 Washer .....(2)
- M3 Flanged Nut .....(2)
- (94) Steering Pin .....(2)
- (93) Steering Collar .....(2)
- (91) M6x10 Metal Bushing .....(2)



## SYMBOL GUIDE



Important information.



Apply grease.



Assemble in this order.



Install temporarily.

# 25 INSTALL STEERING ASSEMBLY

7

Attach the steering bellcrank assembly to the chassis using **M4x10 F/H Screws**.

**M4x10 Screw** .....(2)

**M4x10 F/H Screw** .....(2)

**M3x15 F/H Screw** .....(4)

**M3 Nut** .....(2)

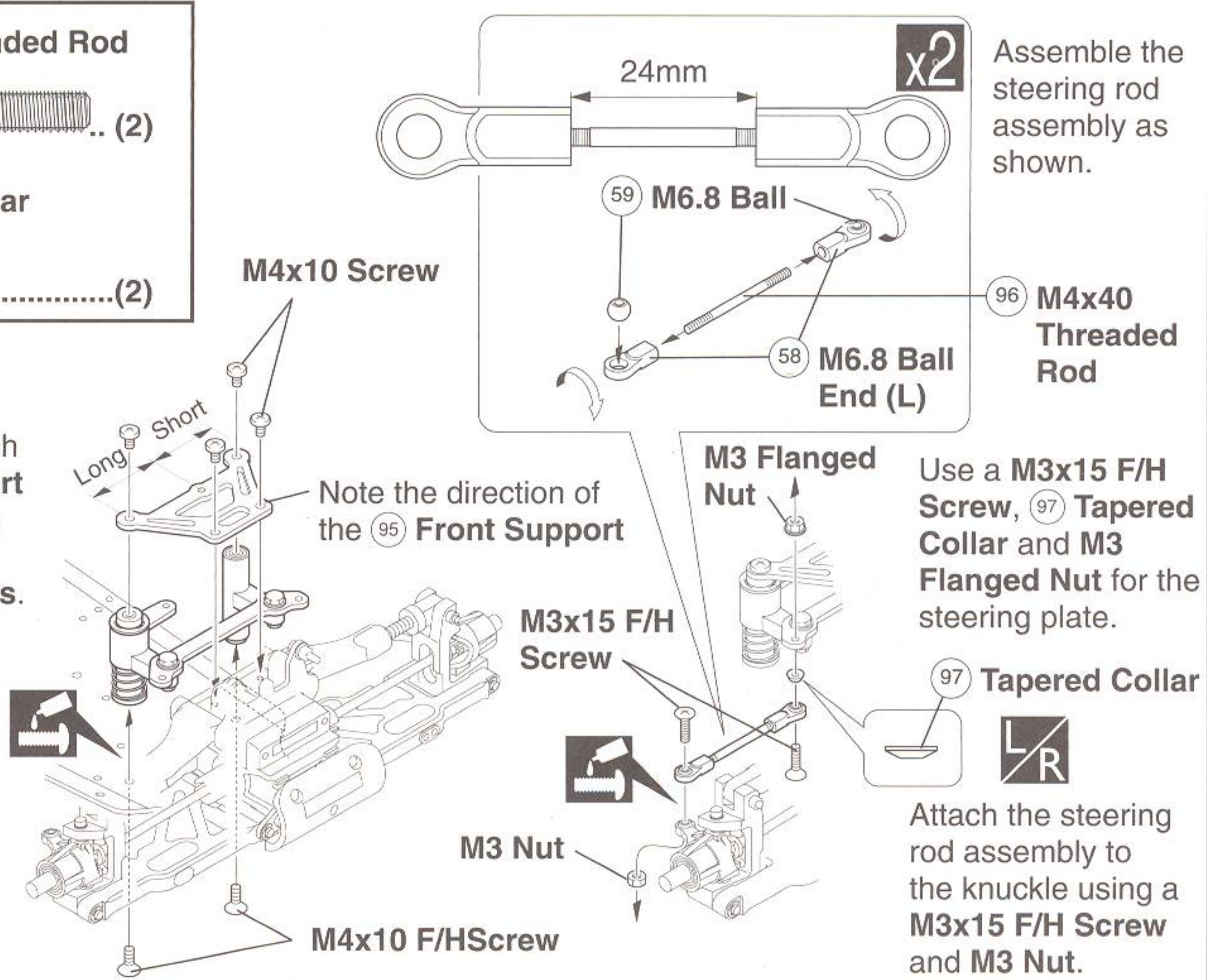
**M3 Flanged Nut** .....(2)

**59 M6.8 Ball** .....(4)

**96 M4x40 Threaded Rod** ..... (2)

**97 Tapered Collar** .....(2)

Remove the **M4x10 Screws** from the steering posts. Attach the **95 Front Support** to the steering posts and front gear box using **M4x10 Screws**.



# 26 FLYWHEEL INSTALLATION TYPE (A)

3

**M3x10 Cap Screw** .....(4)

**105 M5x20 Shim** .....(1)

**44 E4.0 E-Ring** .....(1)

**100 Tapered Collet** .....(1)

**102 Pilot Shaft** .....(1)

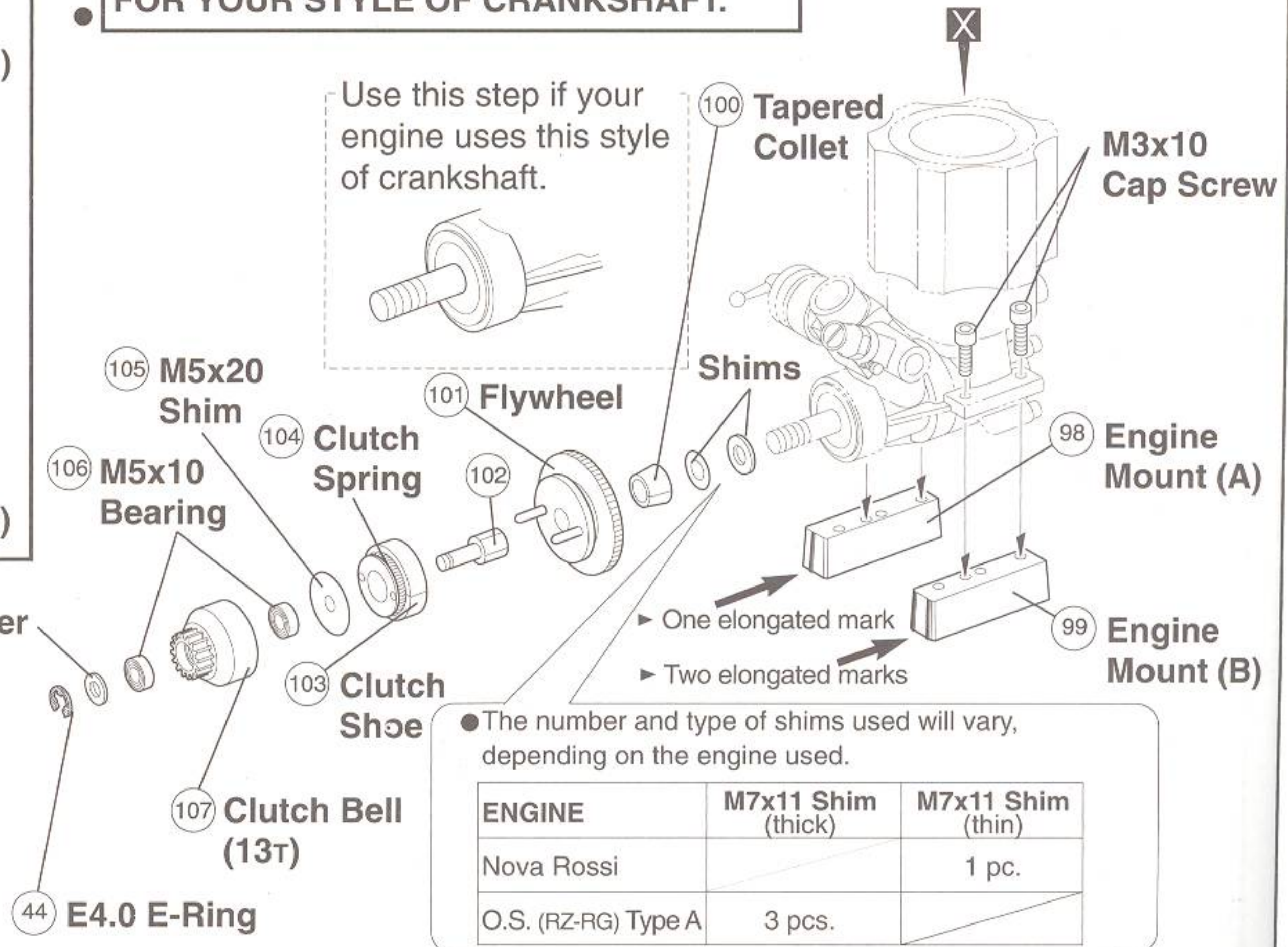
**M5x10 Washer** .....(1)

**M7x11 Shim (Thin)** .....(1)

**M7x11 Shim (Thick)** .....(1)

**106 M5x10 Bearing** .....(2)

USE THE INSTALLATION TYPE SHOWN FOR YOUR STYLE OF CRANKSHAFT.



## SYMBOL GUIDE

- Apply procedure to both left and right side.
- Apply thread lock.
- Not included.
- Repeat the process as many times as specified.

# 27 FLYWHEEL INSTALLATION TYPE (B)

3

M3x10 Cap Screw .....(4)	109 Clutch Bell Guide .....(1)
M3x8 Cap Screw .....(1)	M2x12 Screw .....(1)
105 M5x20 Shim .....(1)	M2 Nut .....(1)
M7x11 Shim (Thin) M7x11 Shim (Thick) .....(1)	100 Tapered Collet .....(1)
M5x10 Washer .....(1)	M5x10 Washer .....(1)
106 M5x10 Bearing .....(2)	108 Pilot Nut .....(1)

Use this step if your engine uses this style of crankshaft.

Use for Picco engines

110 Throttle Arm Standoff

M2 Nut M2x12 Screw

M3x10 Cap Screw

98 Engine Mount (A)

99 Engine Mount (B)

Shims

100 Tapered Collet

105 M5x20 Shim

106 M5x10 Bearing

107 Clutch Bell (13T)

108 Pilot Nut

109 Clutch Bell Guide

101 Flywheel

103 Clutch Shoe

M3x8 Cap Screw

M5x10 Washer

One elongated mark

Two elongated marks

● The number and type of shims used will vary, depending on the engine used.

ENGINE	M5x10	M7x11 Shim (thick)	M7x11 Shim (thin)
OPS		1 pc.	1 pc.
Nova Rossi	3 pcs.		
Picco		2 pcs.	1 pc.
O.S. (RZ-RG) Type B	2 pcs.	1 pc.	

# 28 ENGINE INSTALLATION

3

M4x6 F/H Screw .....(4)
M4x10 Flanged Cap Screw .....(4)

Install the 111 Engine Mount Plates on the chassis using four M4x6 F/H Screws. Attach the engine to the engine mount plates using four M4x10 Flanged Cap Screws. Tighten these screws after the gear backlash is set.

► Insert a piece of paper to set the proper gear backlash.

M4x6 F/H Screw

M4x10 Flanged Cap Screw

Note the direction of 111 Engine Mount Plates.

O.S. (RZ-RG) Type A  
Picco

Beveled edge towards rear.

Front

O.S. (RZ-RG) Type B  
Nova Rossi  
OPS

Rounded edge towards rear.

Front

M4x10 Flanged Cap Screw

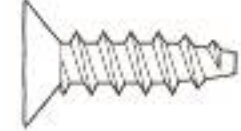
## SYMBOL GUIDE

Not included.

# 29 AIR CLEANER ASSEMBLY

3

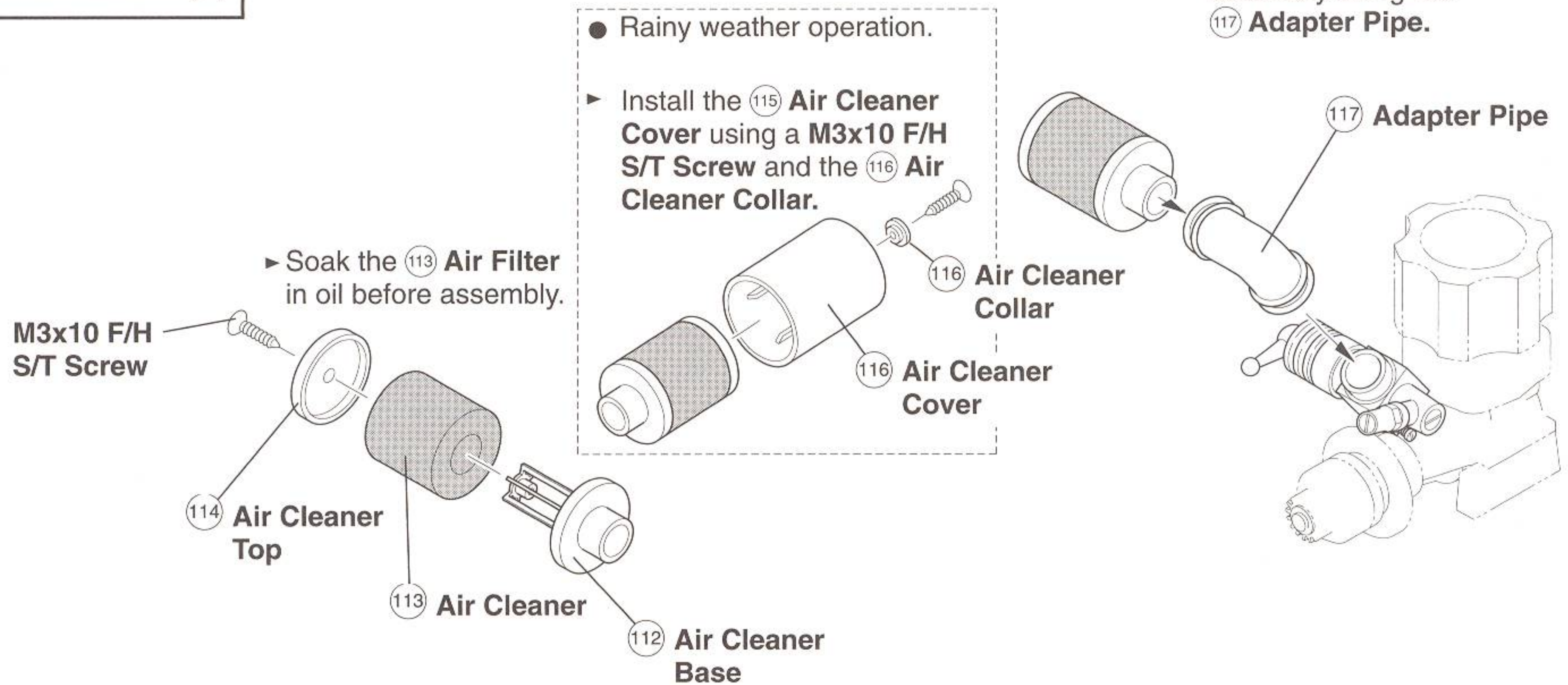
M3x10 F/H S/T Screw



.....(1)

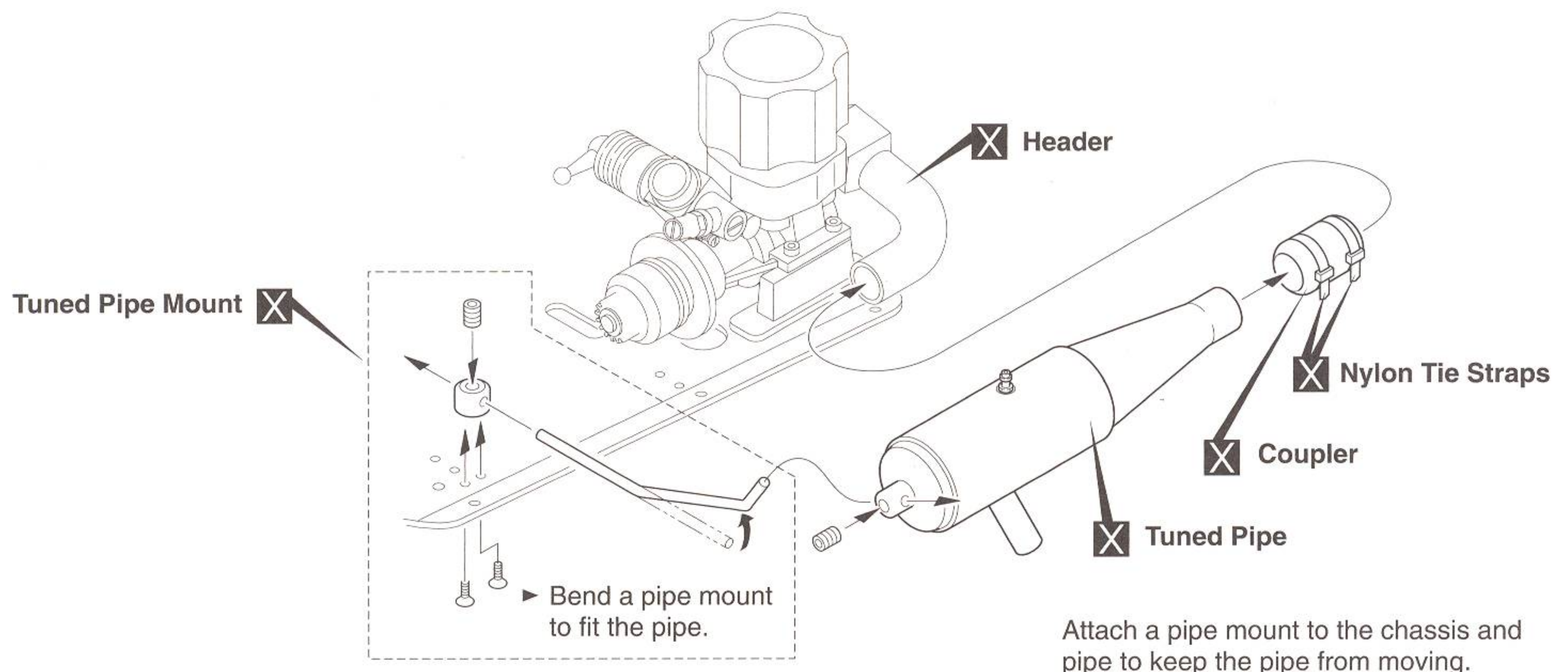
Assemble the air cleaner and secure the assembly using a **M3x10 F/H S/T Screw**.

Attach the air cleaner assembly using the **(117) Adapter Pipe**.



# 30 TUNED PIPE INSTALLATION

Install the header and pipe assemblies as shown below. Use **nylon tie straps** to secure the coupler to the header and tuned pipe.



## SYMBOL GUIDE



Not included.

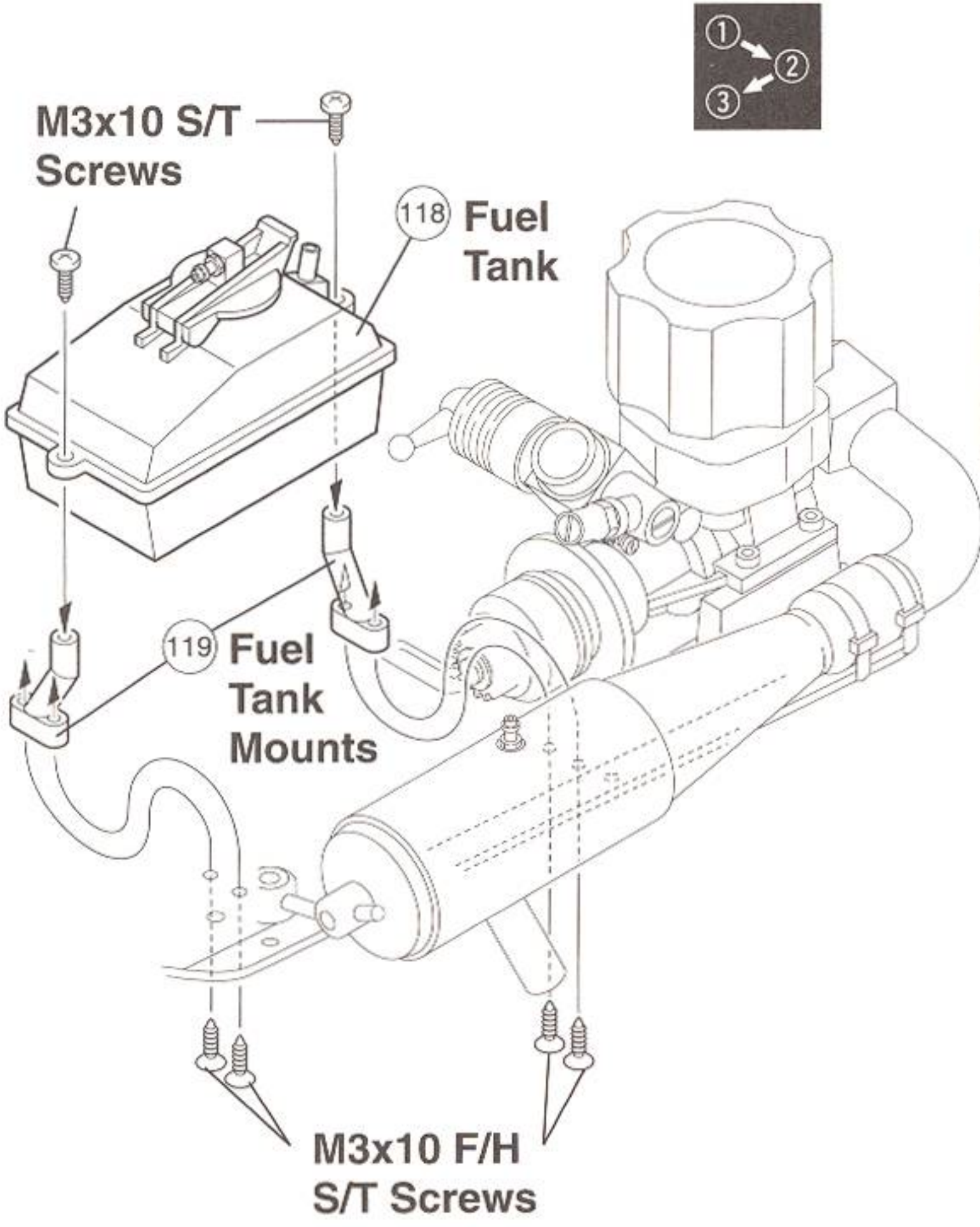
# 31 INSTALL FUEL TANK

9

- M3x10 S/T Screw .....(2)
- M3x10 F/H S/T Screw .....(4)

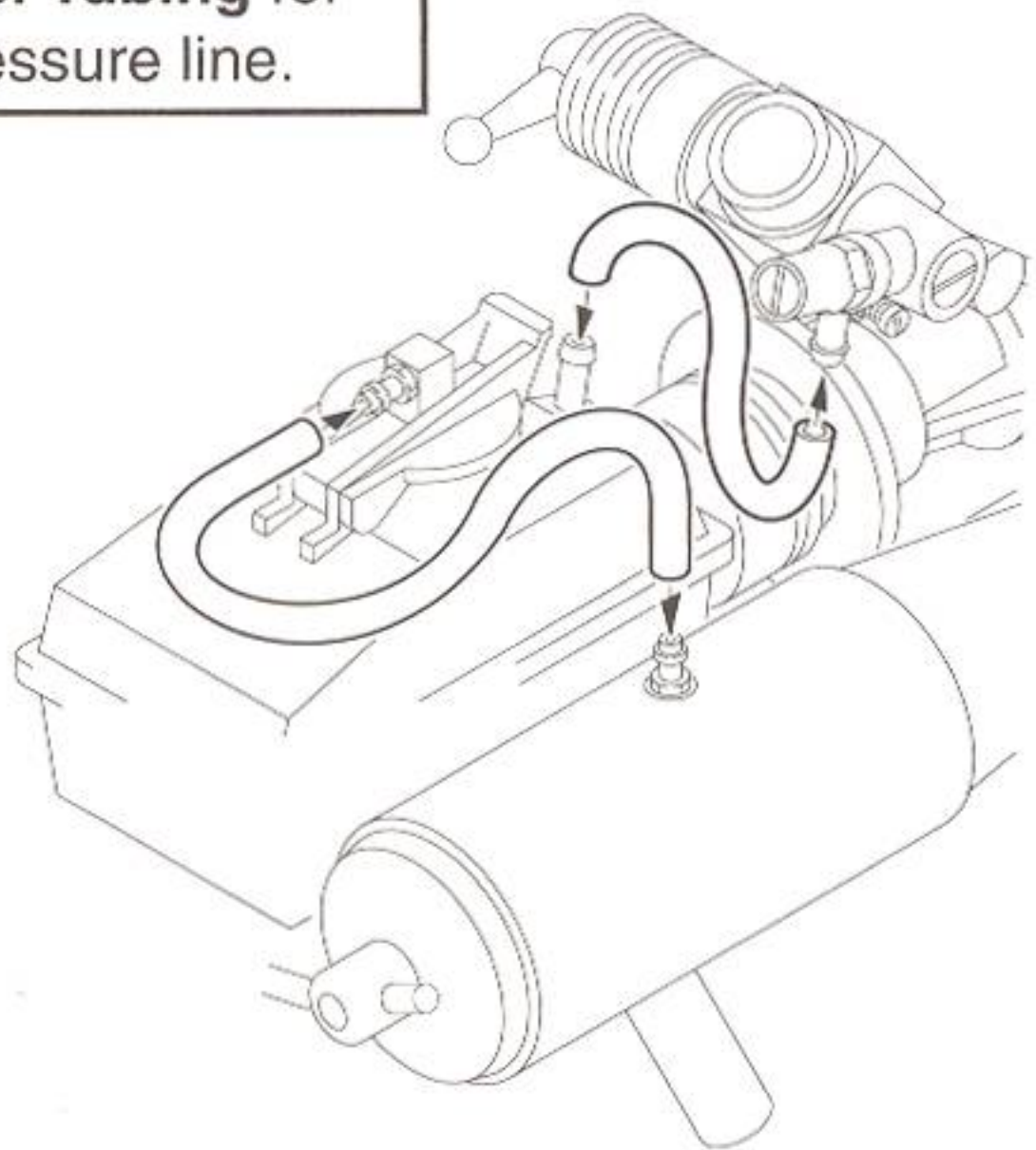
**Step 1**  
Attach the (119) Fuel Tank Mounts to the chassis using four M3x10 F/H S/T Screws. Note the direction of the fuel tank mounts.

**Step 2**  
Attach the (118) Fuel Tank to the (119) Fuel Tank Mounts using two M3x10 S/T Screws.



**Step 4**  
Cut a 75mm piece of (120) Fuel Tubing for the pressure line.

**Step 3**  
Cut a 75mm piece of (120) Fuel Tubing for the fuel line.



# 32 ASSEMBLE RADIO BOX

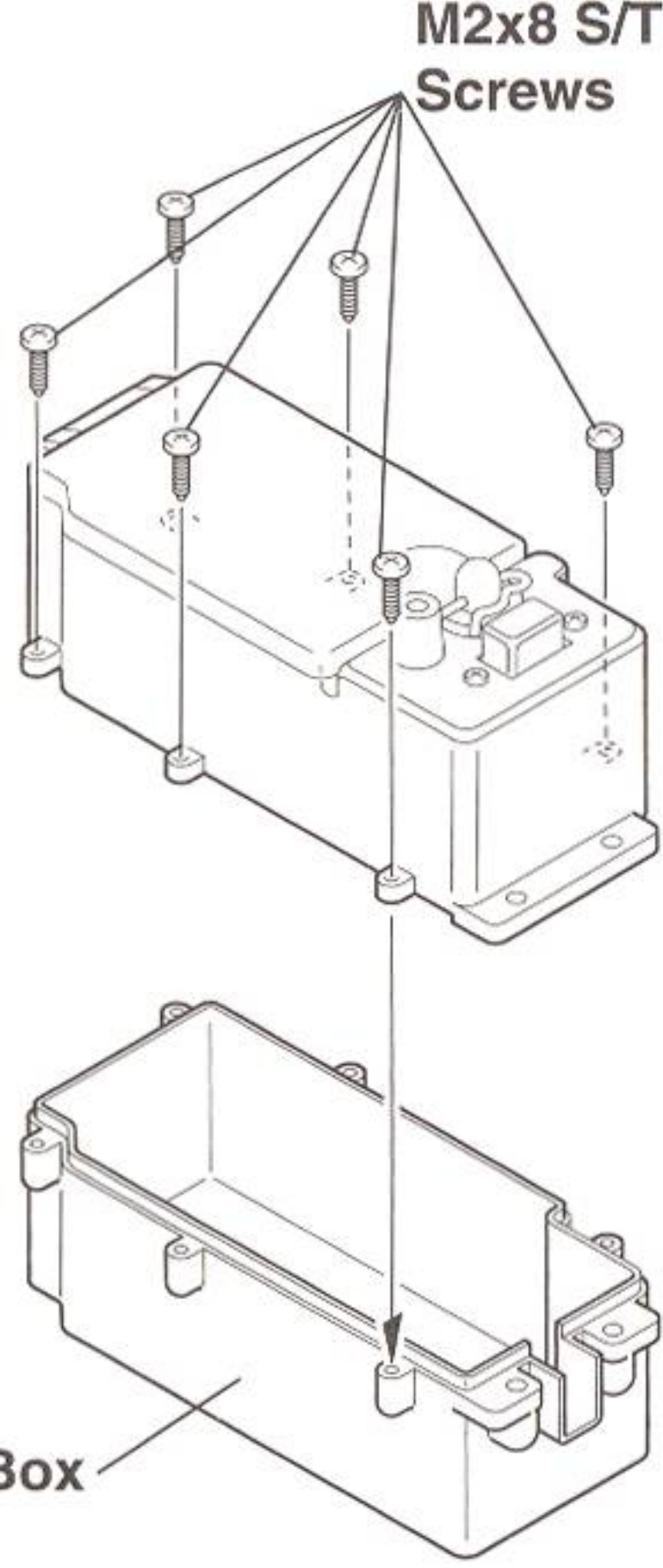
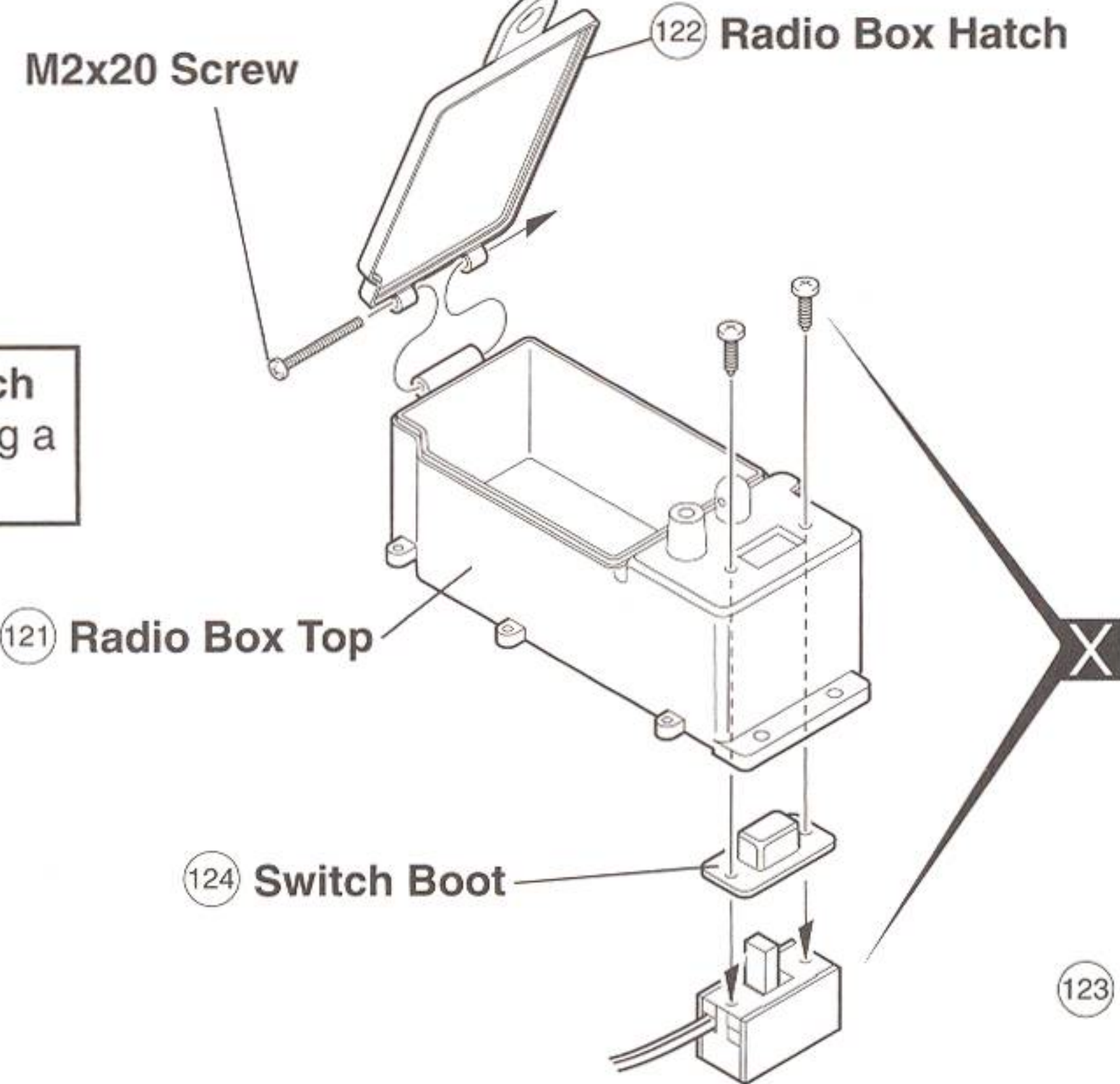
9

- M2x8 S/T Screw .....(6)
- M2x20 Screw .....(1)

**Step 1**  
Attach the (122) Radio Box Hatch to the (121) Radio Box Top using a M2x20 Screw.

**Step 2**  
Install the switch harness and (124) Switch Boot using the screws included with the switch harness.

**Step 3**  
Attach the radio box top assembly to the (123) Radio Box Bottom using six M2x8 S/T Screws.



**SYMBOL GUIDE**

Not included.

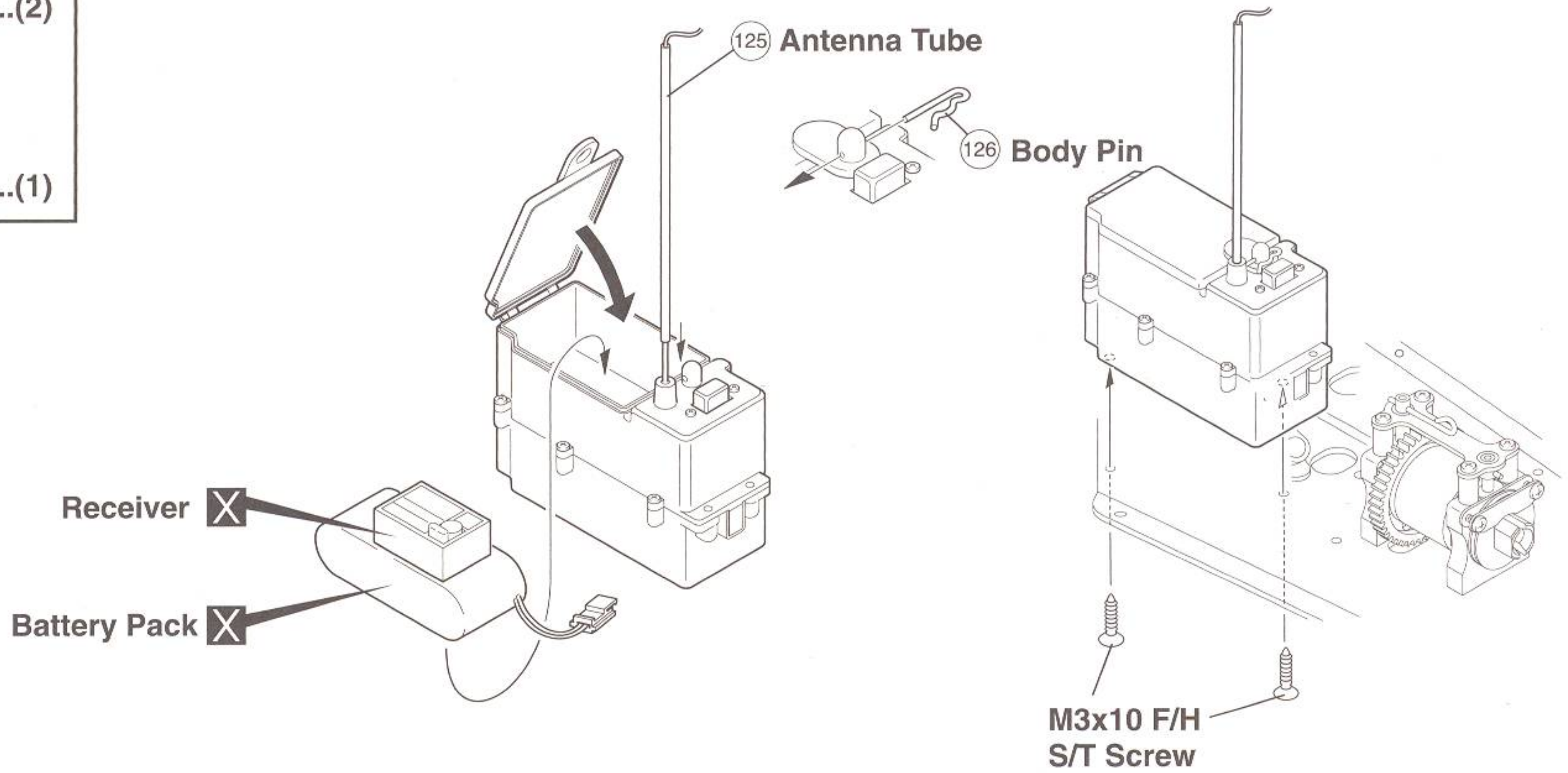
Assemble in this order.

# 33 INSTALL RECEIVER

9

Install the receiver and battery pack in the radio box. Route the antenna through the radio box and antenna tube. Secure the hatch using a (126) **Body Pin**. Attach the radio box to the chassis using two **M3x10 F/H S/T Screws**.

- M3x10 F/H S/T Screw .....(2)
- (126) Body Pin (S) .....(1)



# 34 INSTALL SERVOS

9

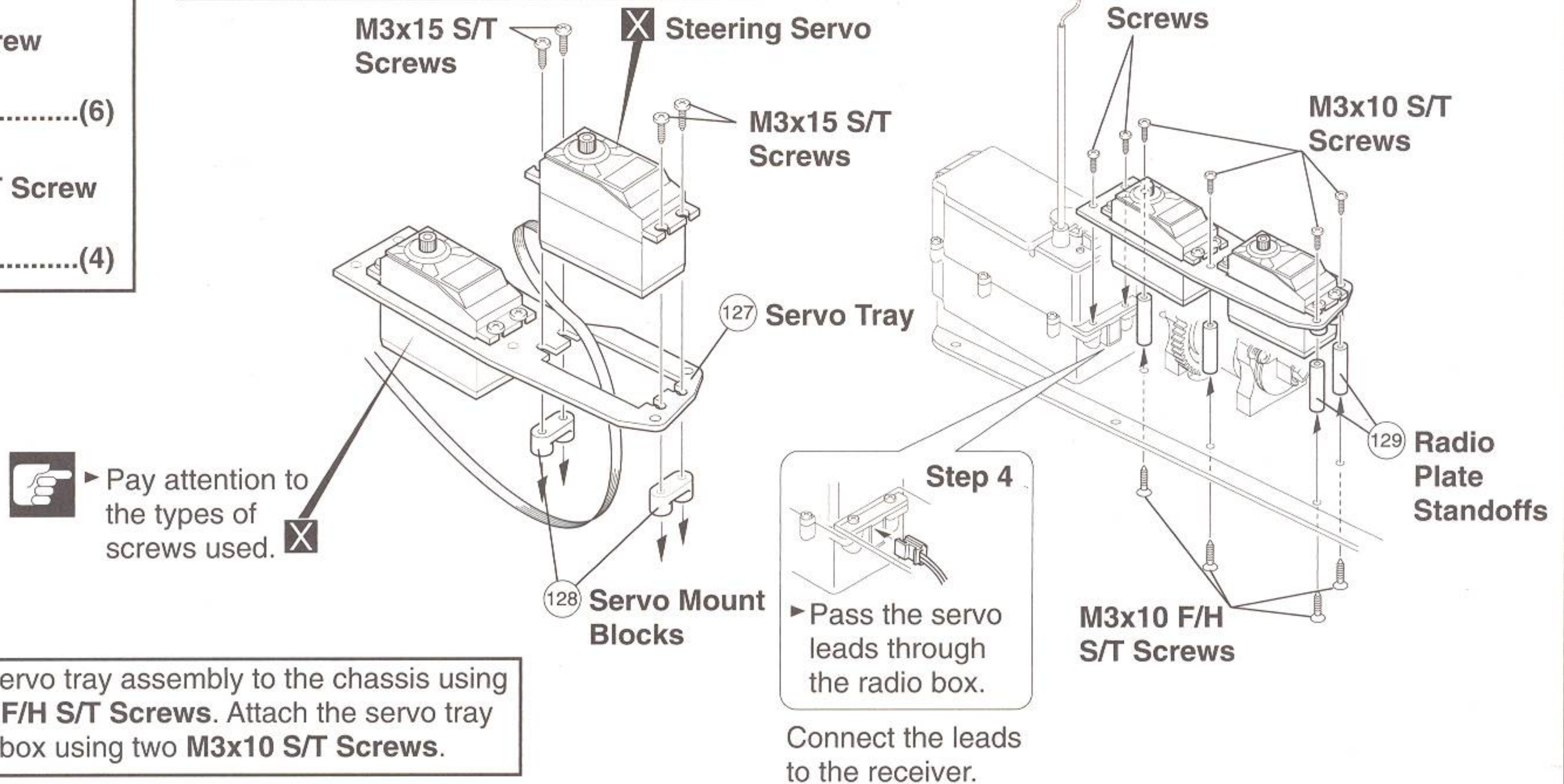
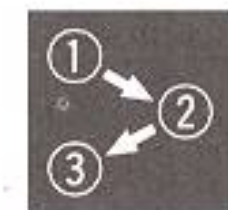
Step 1

Install the servos in the servo tray using eight **M3x15 S/T Screws** and four (128) **Servo Mount Blocks**.

- M3x15 S/T Screw .....(8)
- M3x10 S/T Screw .....(6)
- M3x10 F/H S/T Screw .....(4)

Step 2

Attach the (129) **Radio Plate Standoffs** to the servo tray using four **M3x10 S/T Screws**.



Step 3

Attach the servo tray assembly to the chassis using four **M3x10 F/H S/T Screws**. Attach the servo tray to the radio box using two **M3x10 S/T Screws**.

Step 4  
 Pass the servo leads through the radio box.  
 Connect the leads to the receiver.

## SYMBOL GUIDE



Important information.



Not included.



Assemble in this order.

# 35 INSTALL STEERING LINKAGE

4 9

M3x12 F/H Screw



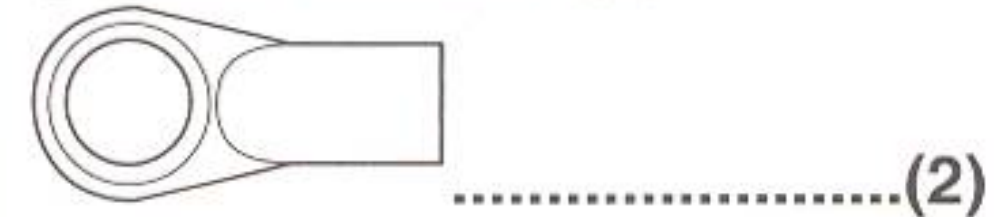
M3 Flanged Nut



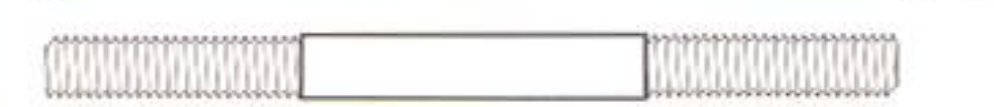
54 M5.8 Ball



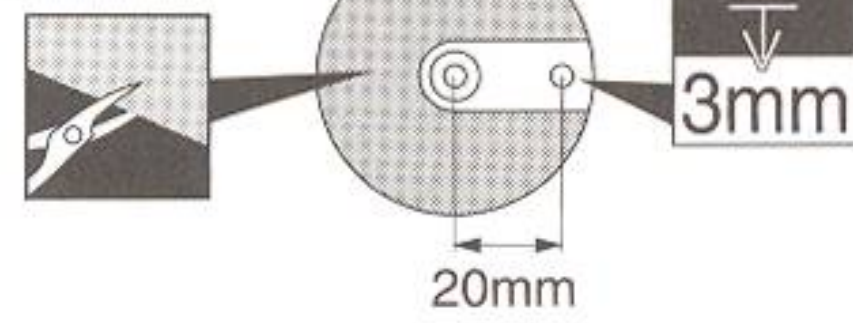
52 M5.8 Ball End (L)



130 M3x40 Threaded Rod .....(1)



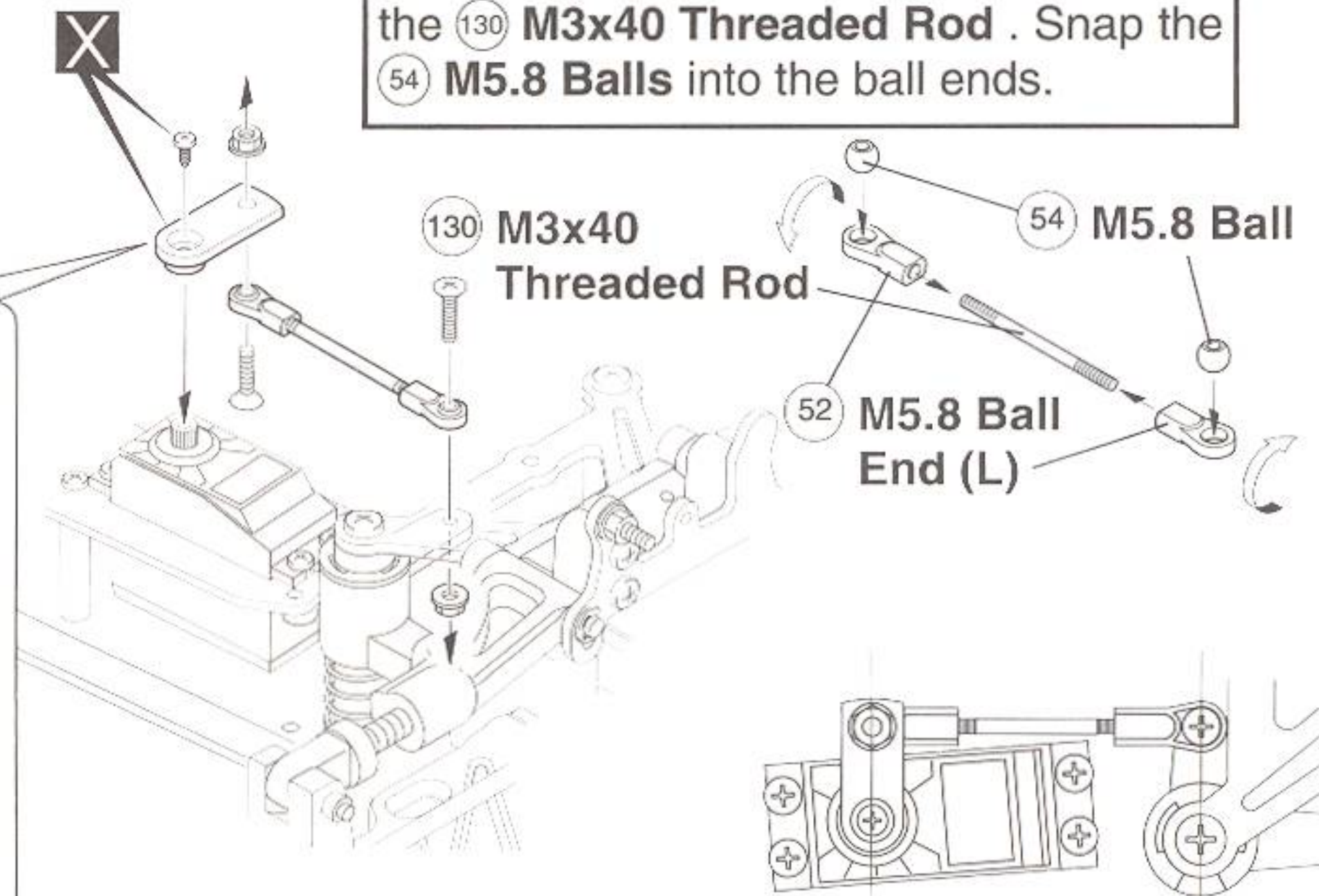
Step 1



Trim a round servo horn (included with the radio system) to match the diagram above. Drill a 3mm hole, 20mm from the center of the arm. Secure the arm parallel to the steering bellcrank.

Step 2

Screw the 52 M5.8 Ball Ends (L) onto the 130 M3x40 Threaded Rod. Snap the 54 M5.8 Balls into the ball ends.



Step 3

Attach the steering rod assembly to the steering bellcrank using a M3x12 F/H Screw and a M3 Flanged Nut. With the radio system switched on, adjust the rod so the steering bellcrank is parallel to the servo horn. Secure the rod to the servo horn using a M3x12 F/H Screw and a M3 Flanged Nut.

# 36 ASSEMBLE THROTTLE LINKAGE

9

132 Spring



133 M2 Stopper



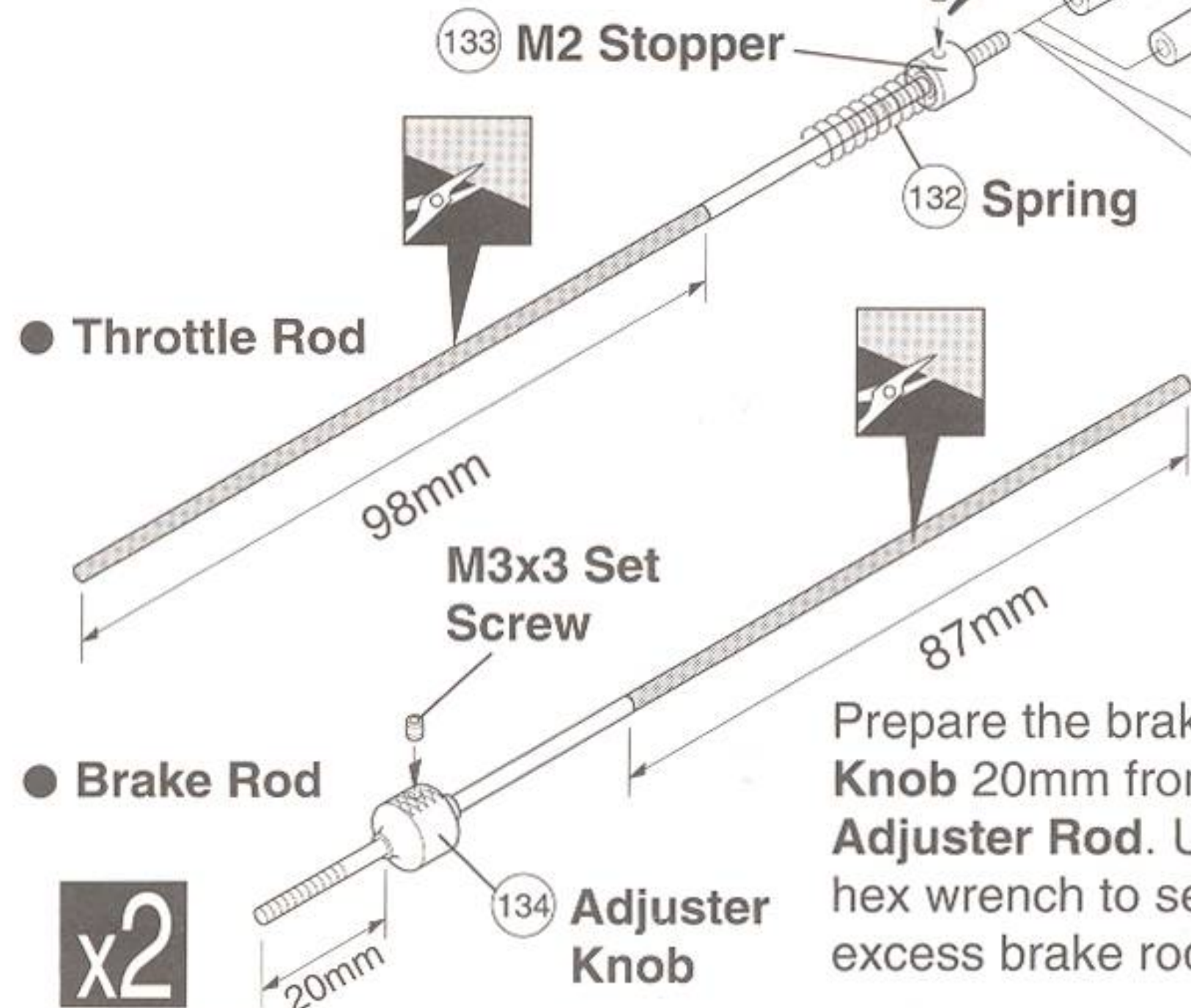
134 Adjuster Knob



M3x3 Set Screw



Slide a 132 Spring and 133 M2 Stopper over the threaded end of 131 M2x145 Adjuster Rod. Screw either 138 or 139 Throttle End onto the rod. Temporarily secure the 133 M2 stopper using a M3x3 Set Screw and 1.5mm hex wrench. Cut off the excess 98mm as shown on the diagram.



M3x3 Set Screw

138 O.S. Throttle End

Use with O.S. and Nova Rossi engines.

139 Use with Picco engines

► For OPS engines: Use the hardware included with the engine. Do not use 131, 138 and 139.

Prepare the brake rod by attaching the 134 Adjuster Knob 20mm from the threaded end of 131 M2x145 Adjuster Rod. Use a M3x3 Set Screw and a 1.5mm hex wrench to secure the knob. Cut off the 87mm excess brake rod as shown on the diagram.

131 M2x145 Adjuster Rod.....(4)

## SYMBOL GUIDE



Remove shaded portion.



Install temporarily.



Not included.



Drill hole to the specified diameter.



Repeat this process as many times as specified.



Assemble in this order.

# 37 PREPARE SERVO HORN

9

Attach the (136) **Servo Horn Extender** to the servo horn using two **M2x8 S/T Screws** in the location shown.

**M2x8 S/T Screw**



**M2x6 Cap Screw**



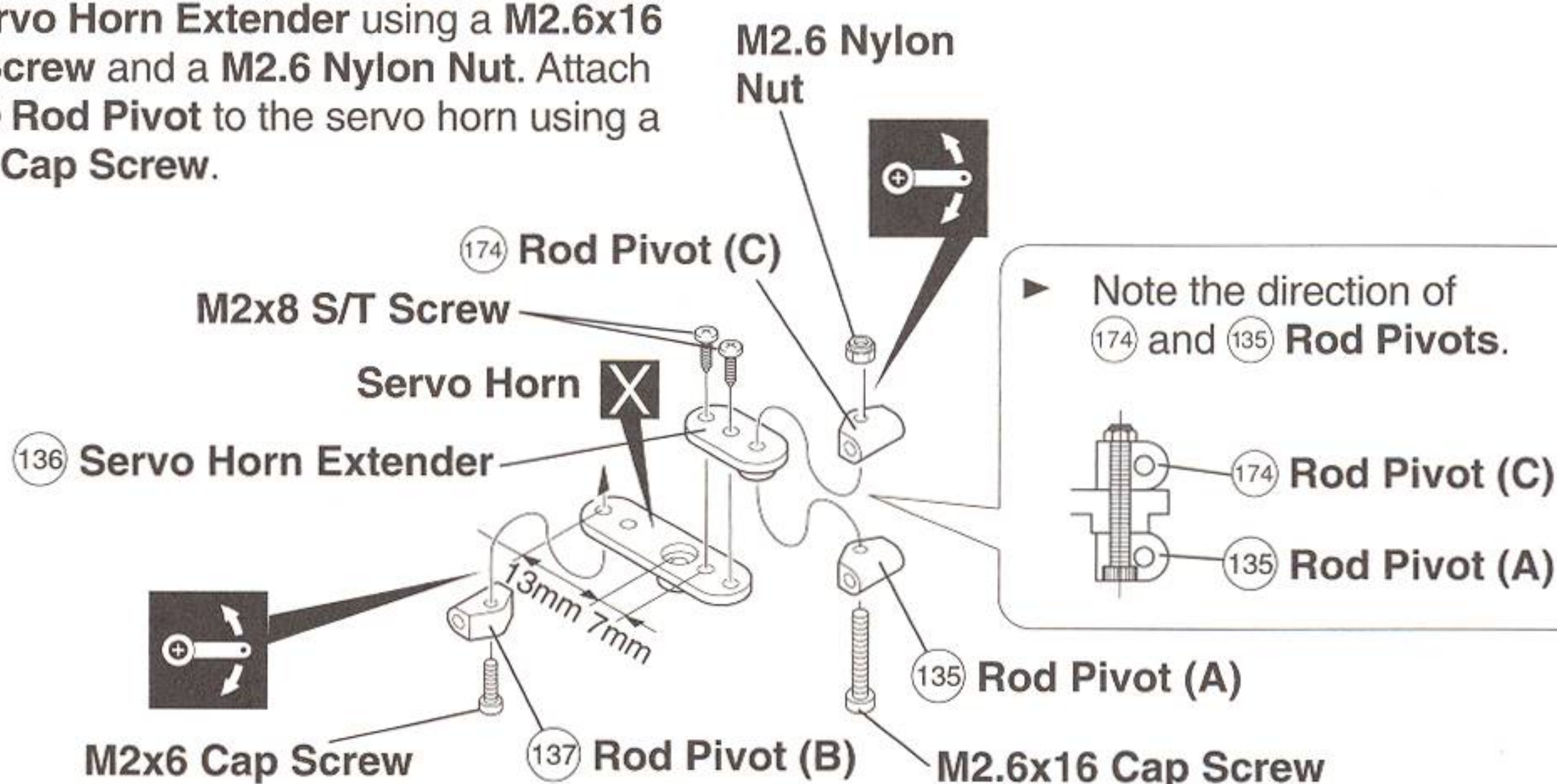
**M2.6 Nylon Nut**



**M2.6x16 Cap Screw**



Attach the (174) and (135) **Rod Pivots** to the (136) **Servo Horn Extender** using a **M2.6x16 Cap Screw** and a **M2.6 Nylon Nut**. Attach the (137) **Rod Pivot** to the servo horn using a **M2x6 Cap Screw**.



# 38 INSTALL THROTTLE LINKAGE

9

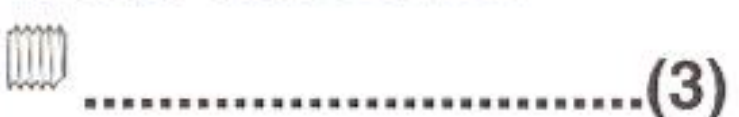
Step 1

Thread the brake rods into the rod pivots until they are fully seated.

(133) **2mm Stopper**

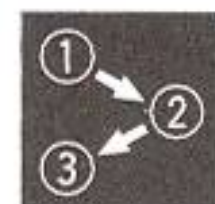


**M3x3 Set Screw**



Step 2

Slide the throttle rod into its proper rod pivot and temporarily attach a (133) **2mm Stopper** with a **M3x3 Set Screw** and a 1.5mm hex wrench.



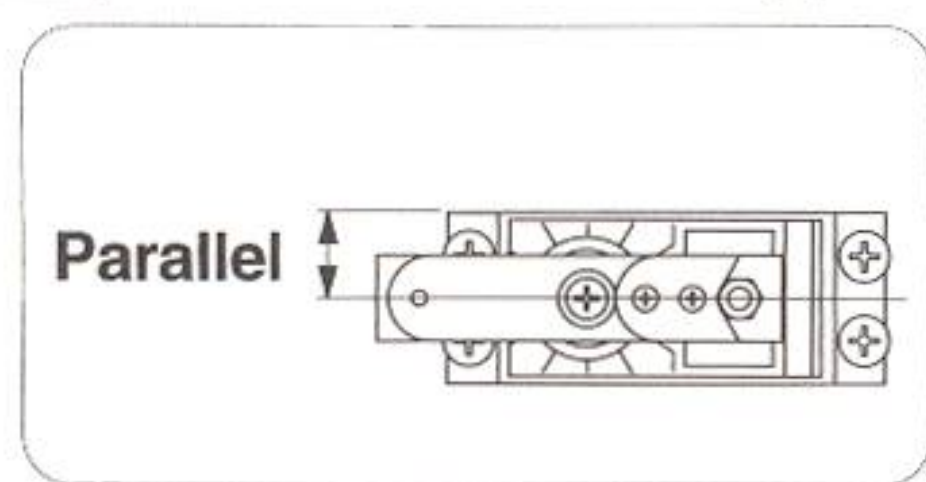
Note the direction of the (140) **Nylon Tapered Collar**.



Step 3

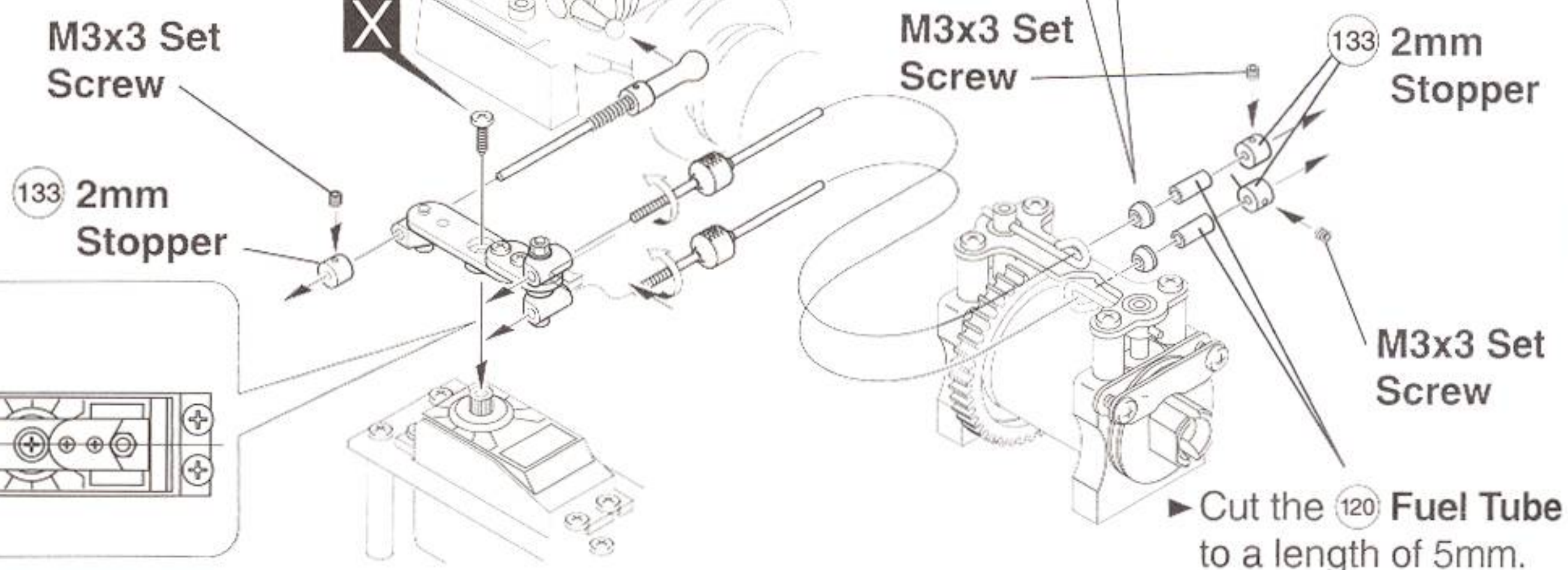
Slide the brake rods through the brake levers and attach the horn parallel to the servo.

Parallel



Step 4

Slide the (140) **Nylon Tapered Collars** onto the brake rods. Cut 5mm of fuel tubing and slide it over the brake rods. Slide the (133) **2mm Stopper** over the brake rods and secure them with a **M3x3 Set Screw**.



## SYMBOL GUIDE



Part must move freely without binding.



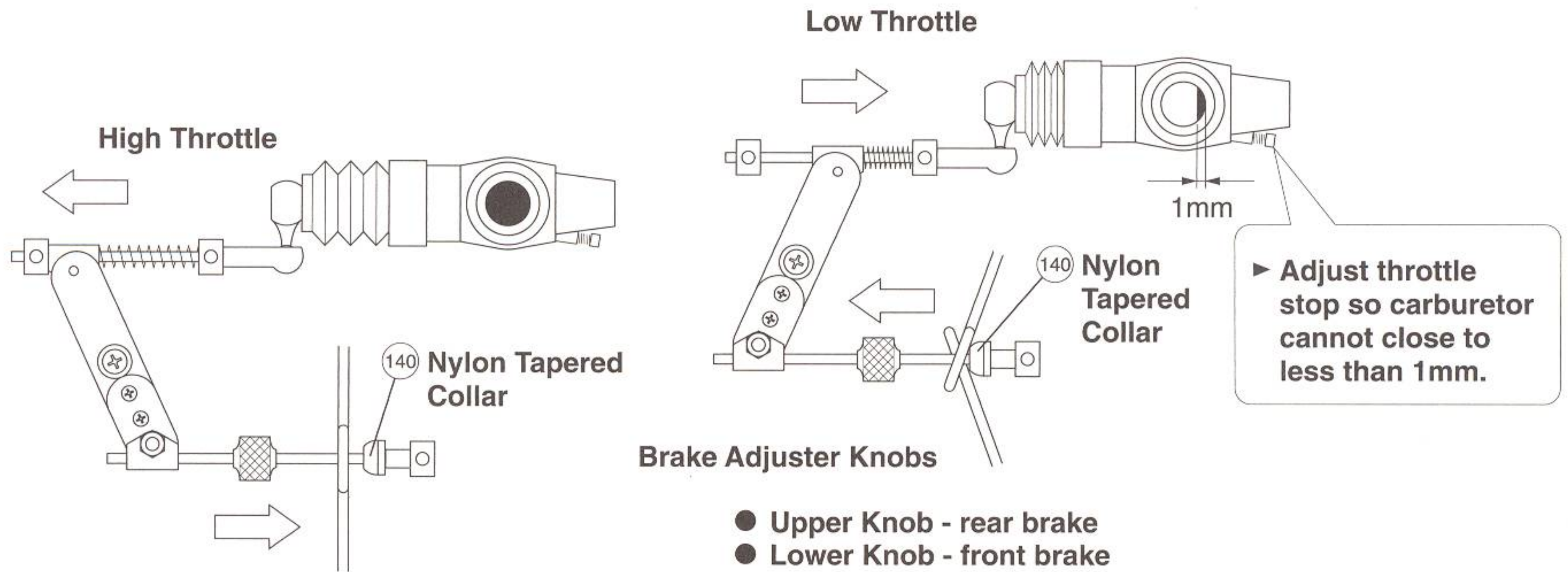
Not included.



Assemble in this order.

# 39 ADJUST THROTTLE AND BRAKE LINKAGES

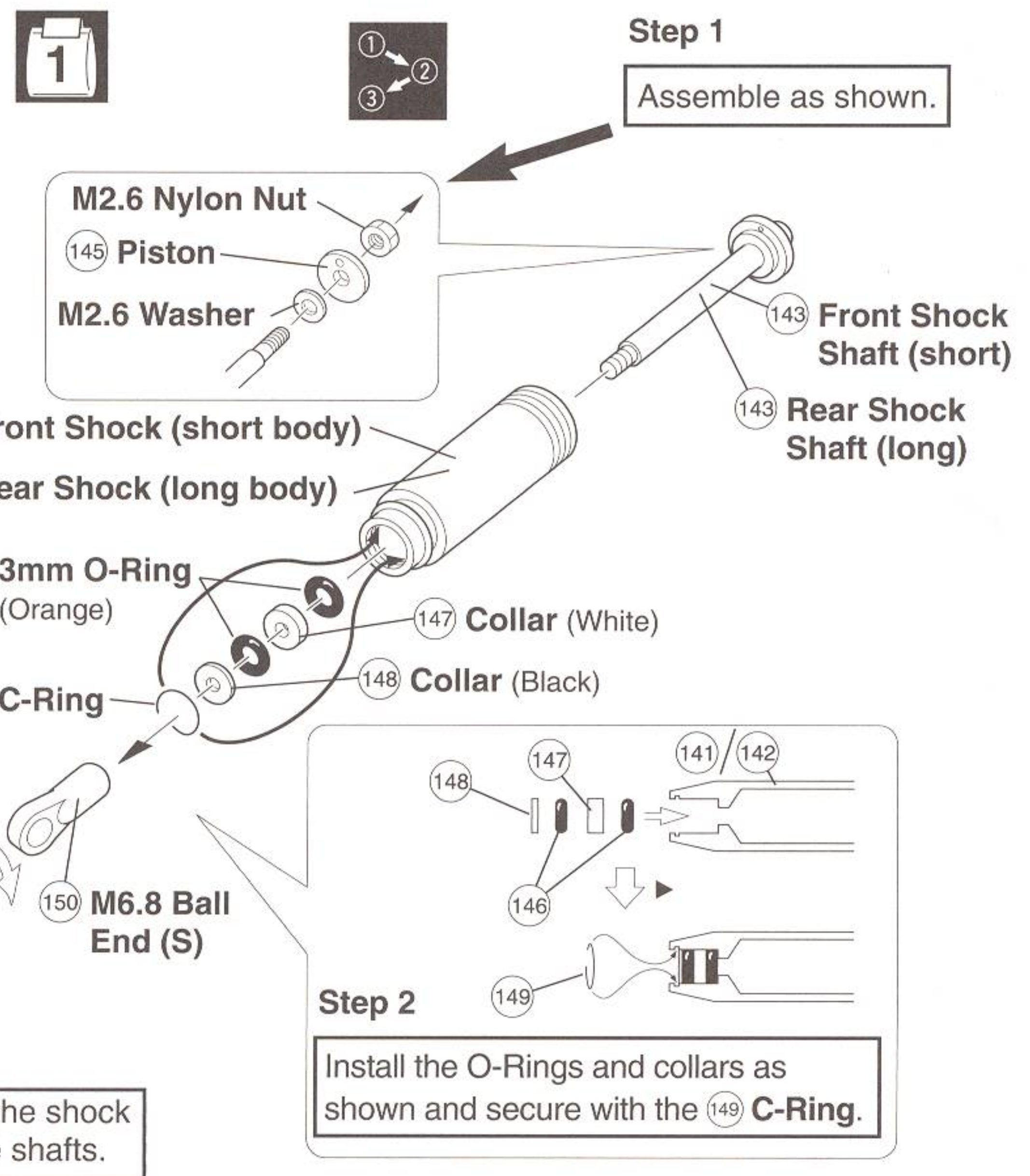
Use the brake adjusters to assure free movement of brakes at neutral throttle.



# 40 ASSEMBLE SHOCKS

- M2.6 Nylon Nut (2)
- M2.6 Washer (2)
- 146 3mm O-Ring (Orange) (8)
- 149 C-Ring (4)
- 145 Piston (White) (4)
- 147 Collar (White) (4)
- 148 Collar (Black) (4)
- 150 M6.8 Ball Ends (S) (4)

**x2** Front Shocks  
**x2** Rear Shocks



**Step 3**  
Lightly oil the O-Rings and slide the shaft assembly into the shock bodies. Screw the 150 M6.8 Ball End (S) onto each of the shafts.

## SYMBOL GUIDE

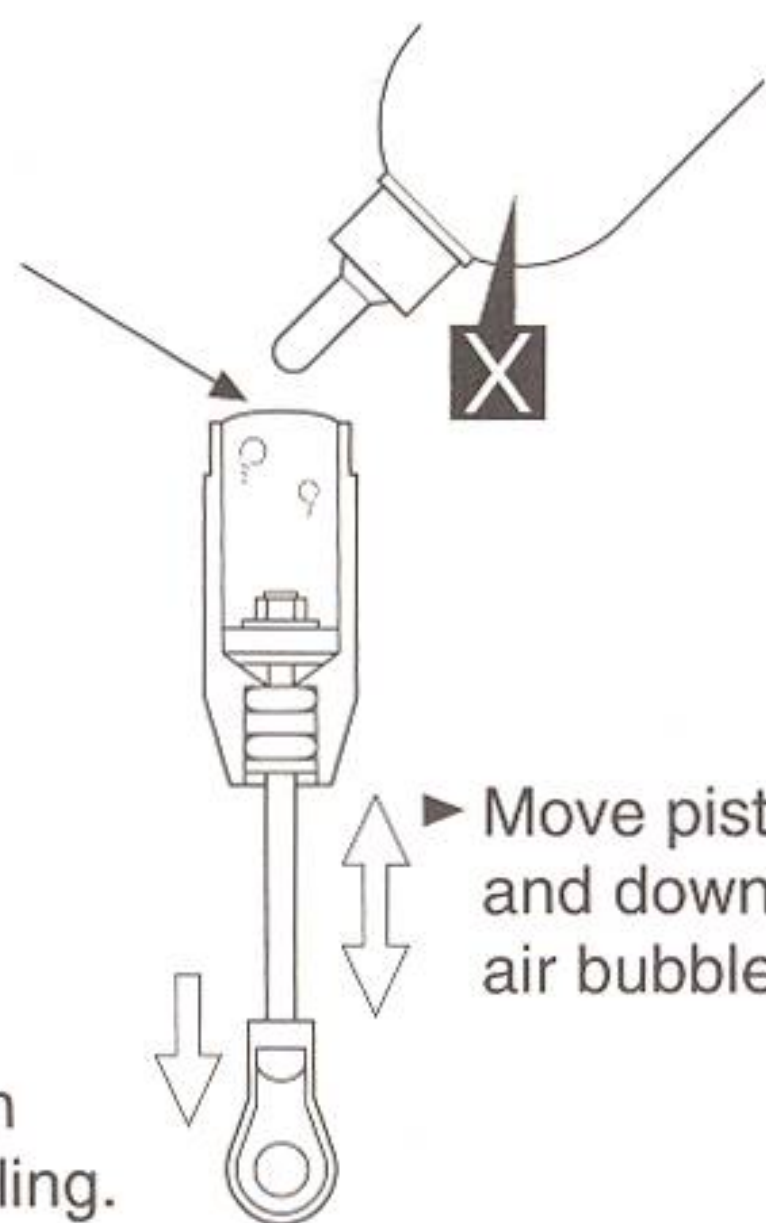
**x2** Repeat this process as many times as specified.

**1 2 3** Assemble in this order.

# 41 FILL SHOCKS

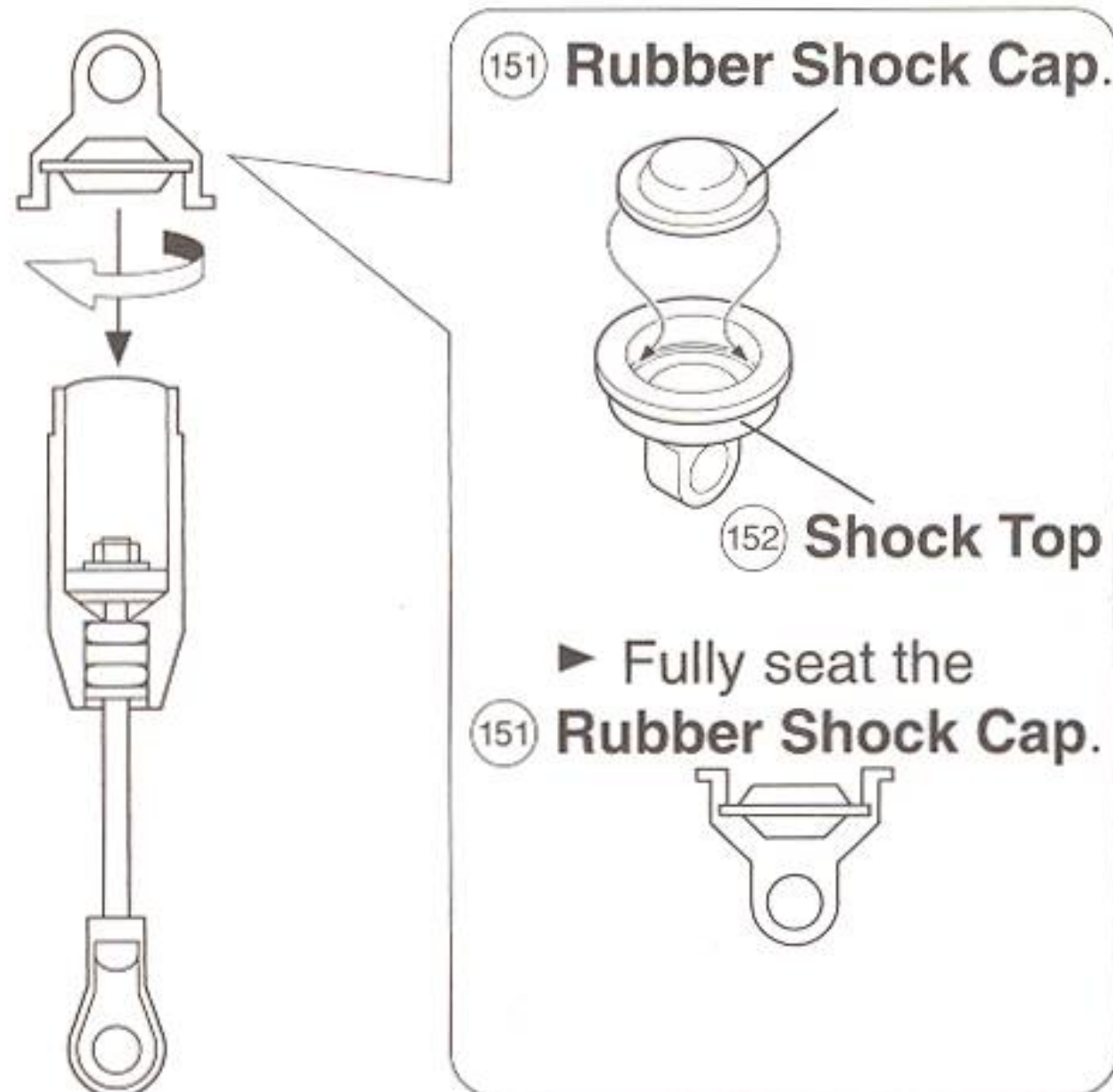


► Fill completely with oil.



► Pull the piston down while filling.

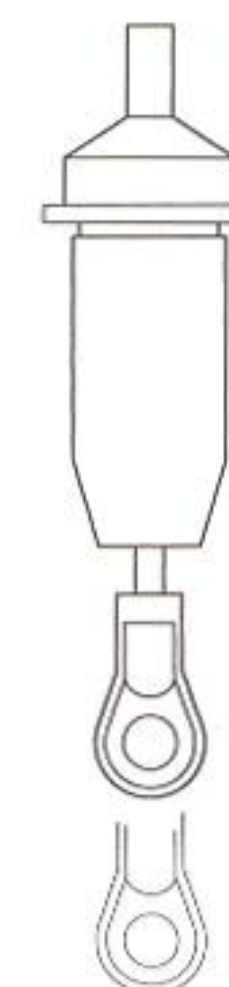
► Move piston gently up and down to remove air bubbles.



151 Rubber Shock Cap.

152 Shock Top

► Fully seat the Rubber Shock Cap.



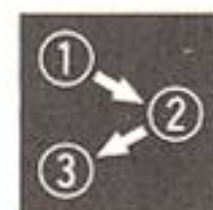
► Check to see if piston moves smoothly up and down.

x4

# 42 COMPLETE SHOCK ASSEMBLY



- 157 M6.8 Ball (Black) .....(4)
- M3x12 S/T Screw .....(4)



## Step 1

Slide the 153 Shock Boot over the shaft. It should stretch from the shock end up onto the shock body as shown.

## Step 2

Slide the 154 Spring Adjuster onto the shock body. Screw a M3x12 S/T Screw into the spring adjuster.

## Step 3

Slide the 155/156 Shock Spring onto the shock body.

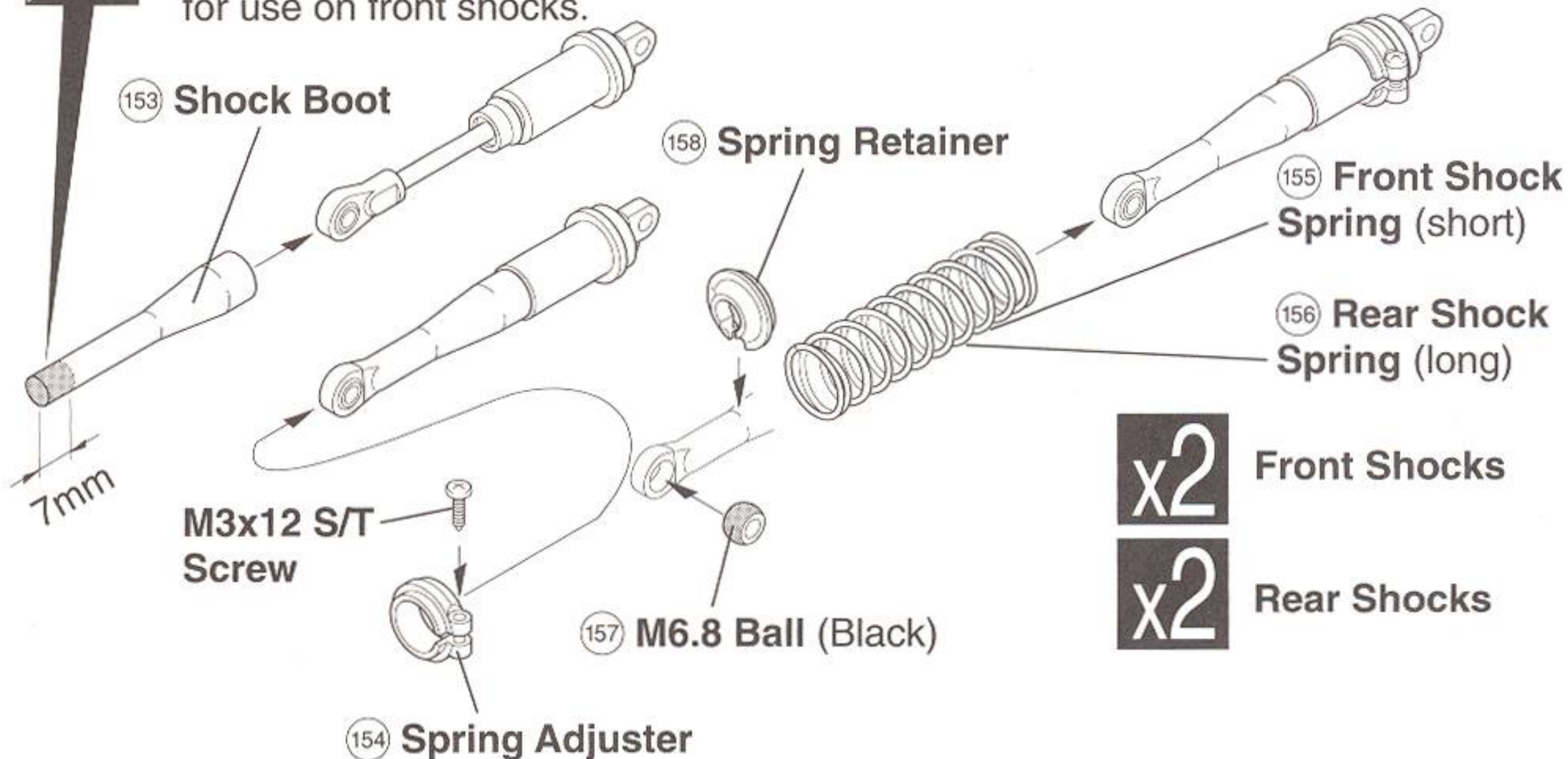
## Step 4

Slide the 158 Spring Retainer on so that it secures the 153 Shock Boot to the M6.8 Ball End (S).

## Step 5

Snap the 157 M6.8 Ball (Black) into the M6.8 Ball End (S).

Remove 7mm from the 153 Shock Boot for use on front shocks.



x2 Front Shocks  
x2 Rear Shocks

## SYMBOL GUIDE

x2 Repeat this process as many times as specified.

Remove shaded portion.

X Not included.

Assemble in this order.

# 43 INSTALL SHOCKS




## Step 1

Slide the **159 Shock Bushing** over the **M3x20 Cap Screw**. Slide the upper end of a shock over the shock bushing. Secure the shock using a **M3 Nylon Nut**.


**M3x5 Set Screw (Silver)**

 .....(4)

**M3 Nylon Nut**

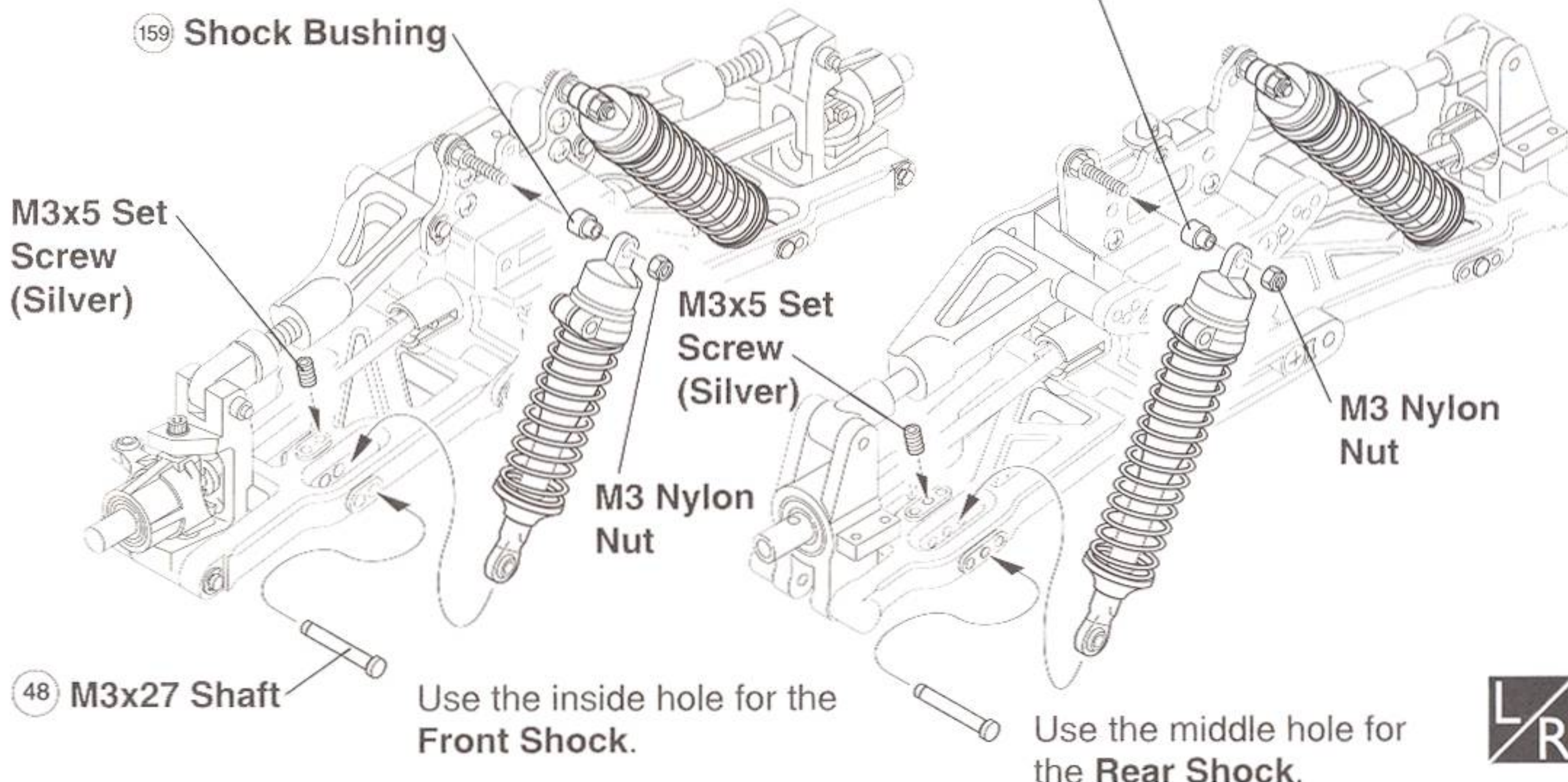
 .....(4)

**33 M3x27 Shaft**

 ..(4)

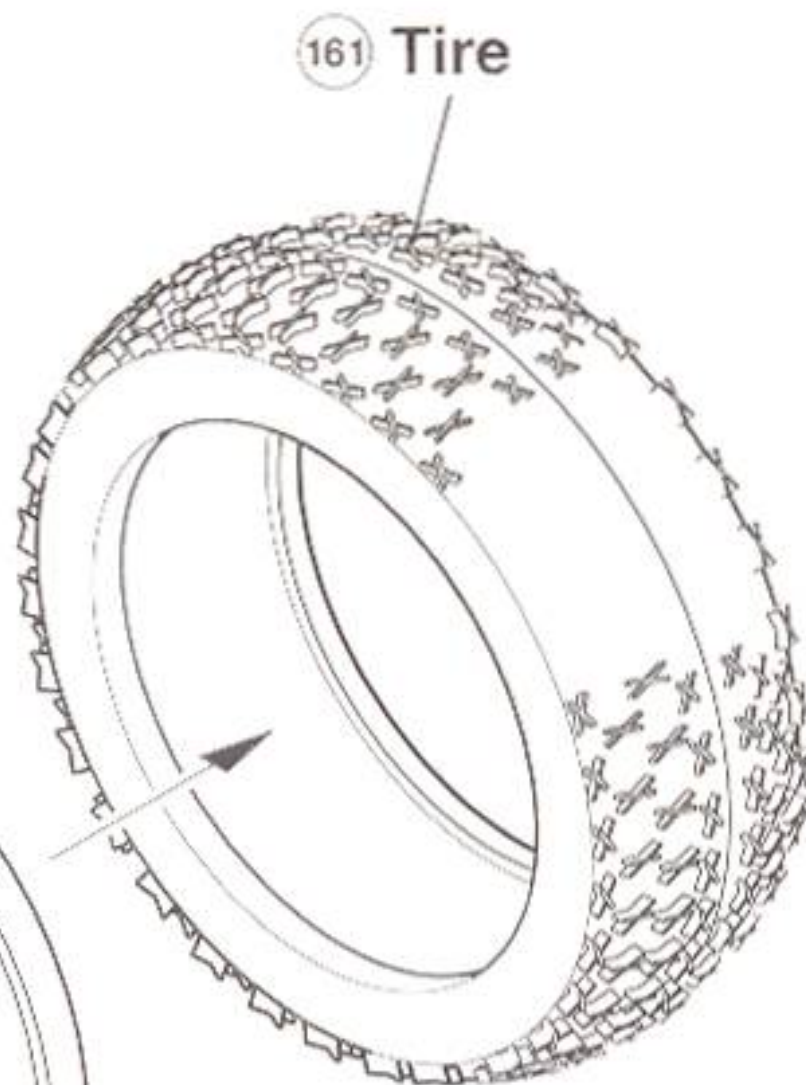
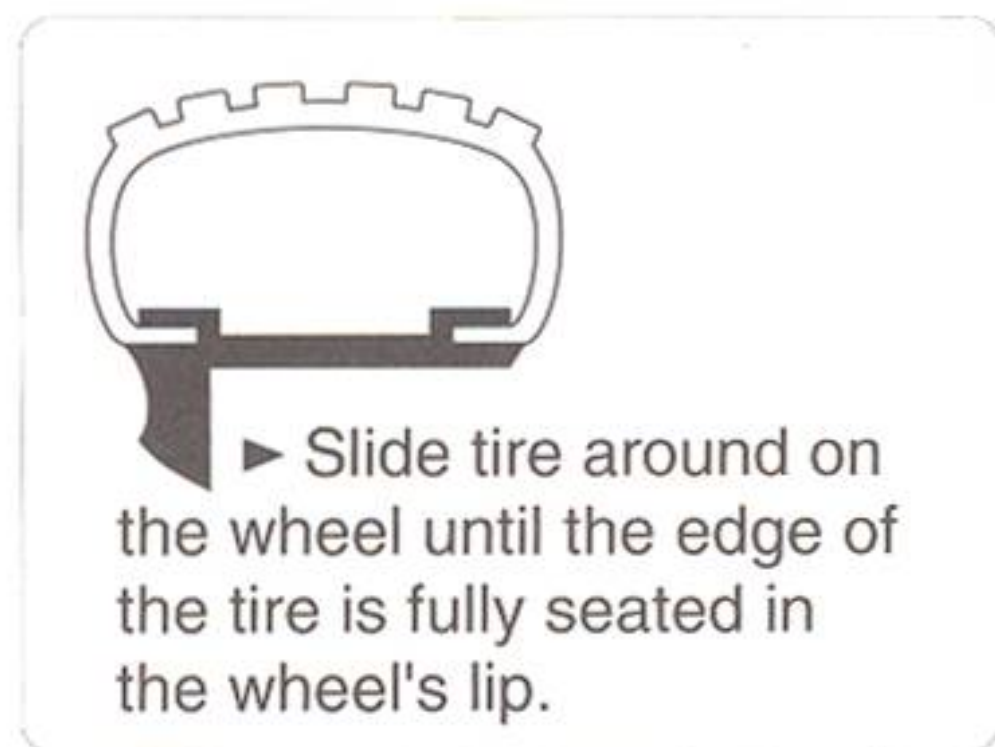
## Step 2

Slide the **48 M3x27 Shaft** through the arm and shock. Secure the shaft using a **M3x5 Set Screw** and a 1.5mm hex wrench.



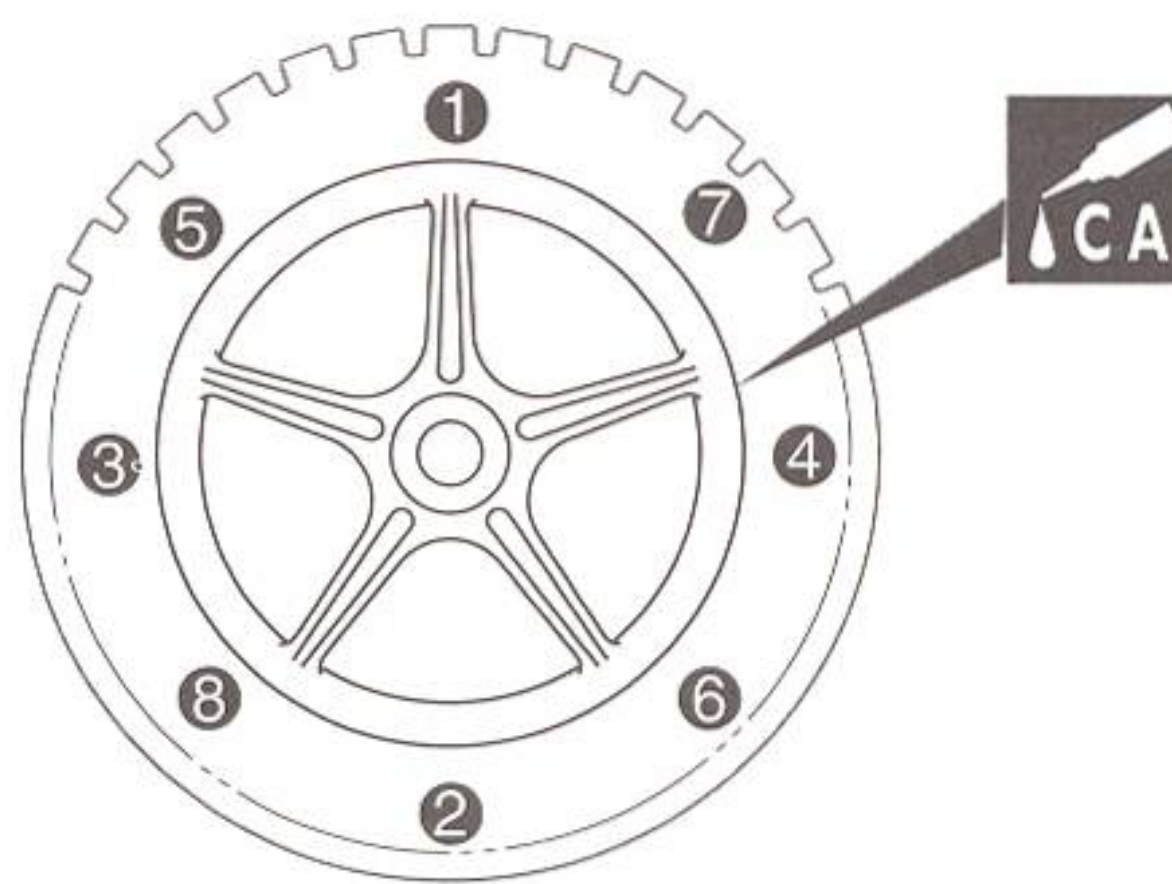
# 44 INSTALL TIRES

Fit the tires to the wheels and use thin CA to attach the tires.





Use foam liners inside the tire to increase traction.

Apply the CA in order according to the diagram below.




## SYMBOL GUIDE

 Repeat this process as many times as specified.

 Apply procedure to both left and right side.

 Apply thin CA.

 Assemble in this order.

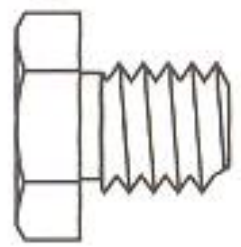
# 45 INSTALL WHEELS

4 5

## Step 1

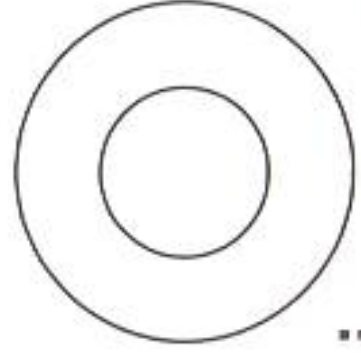
Slide the (3) **M2.6x16 Shaft** through the wheel shaft. Place a (163) **O-Ring** on the (162) **Drive Washer** and place them on the wheel shaft.

### (165) Wheel Stopper Screw



.....(4)

### (164) M8x16x1.5 Washer (Aluminum)



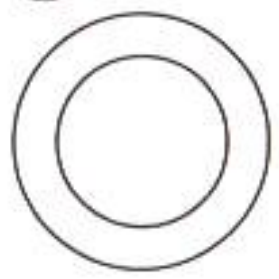
.....(4)

### (163) O-Ring (Large)



.....(4)

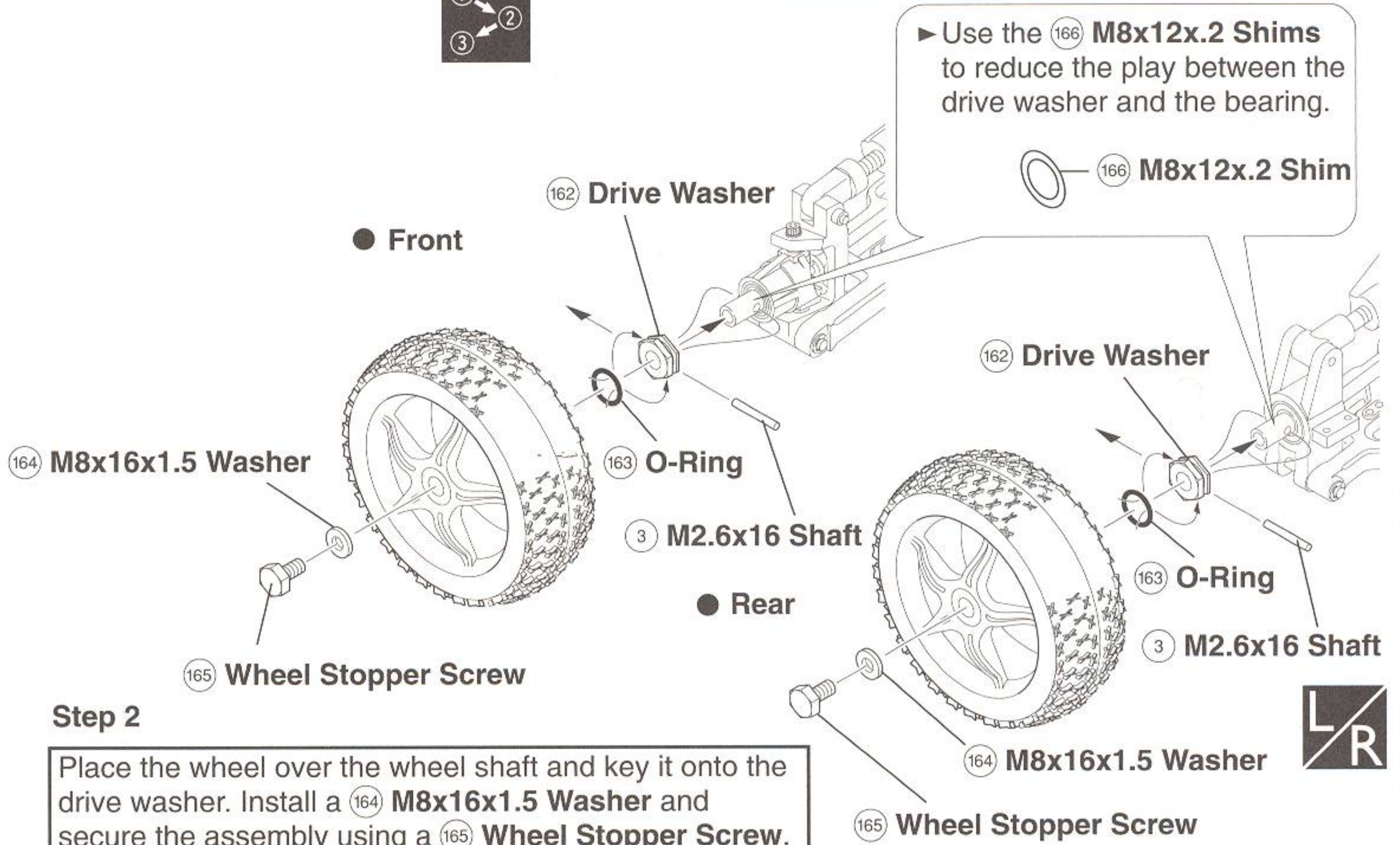
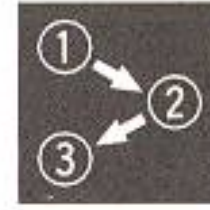
### (166) M8x12x.2 Shim



### (3) M2.6x16 Shaft



.....(4)



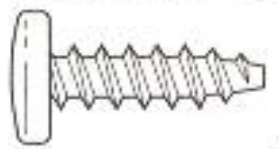
## Step 2

Place the wheel over the wheel shaft and key it onto the drive washer. Install a (164) **M8x16x1.5 Washer** and secure the assembly using a (165) **Wheel Stopper Screw**.

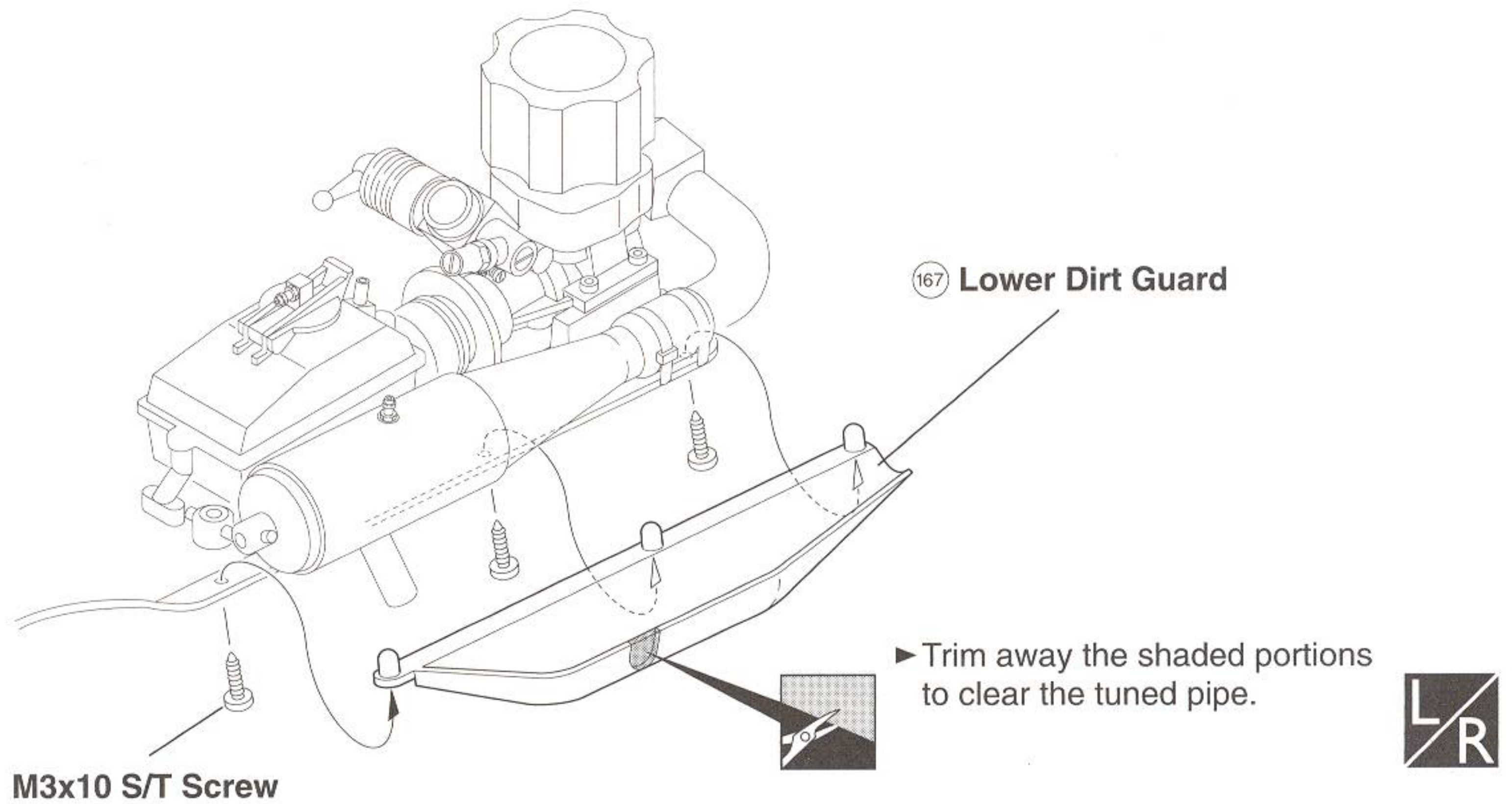
# 46 INSTALL SIDE GUARDS

Attach the (167)/(168) **Lower Dirt Guards** using the six **M3x10 S/T Screws**.

### M3x10 S/T Screw



.....(6)



## SYMBOL GUIDE



Apply procedure to both left and right side.

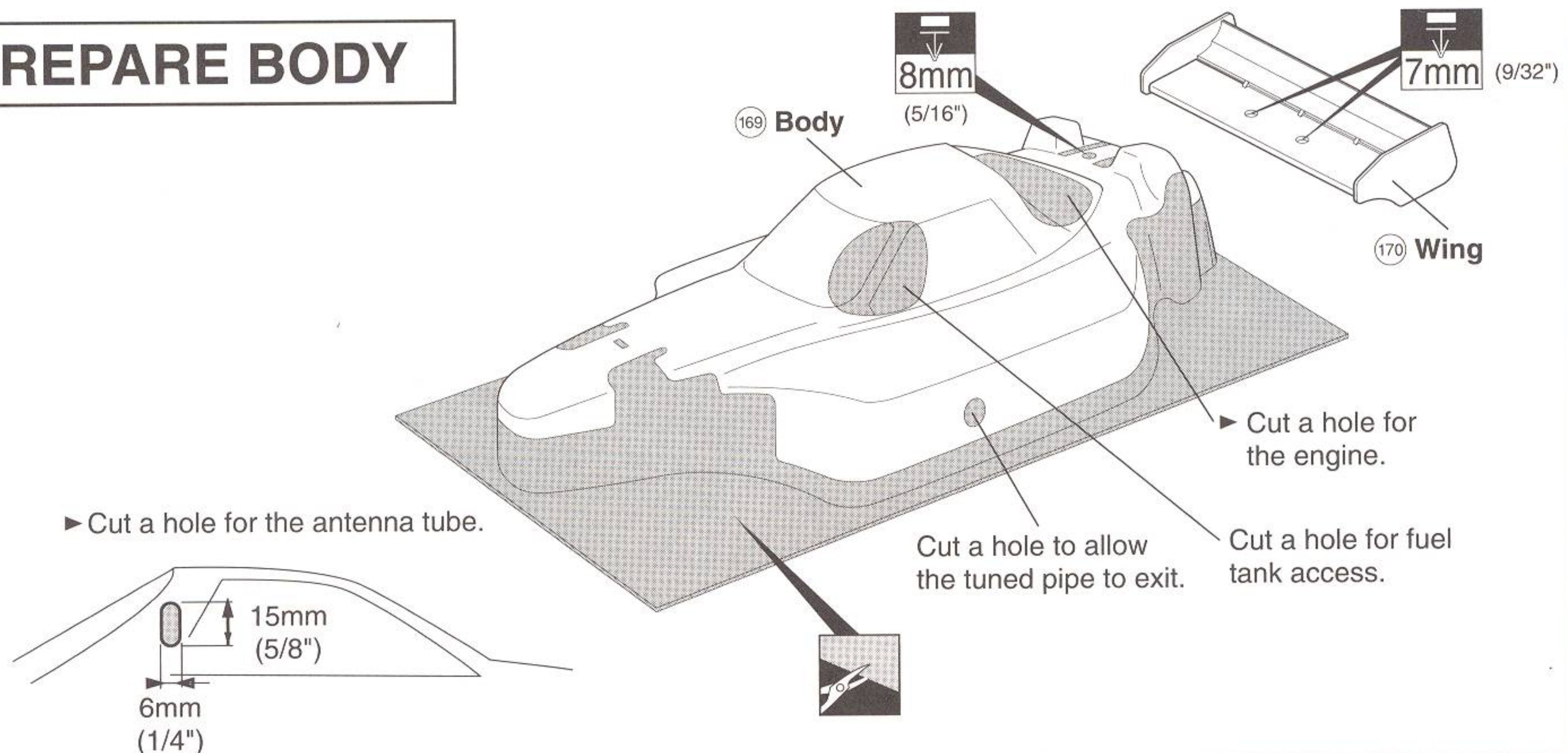


Remove shaded portion.



Assemble in this order.

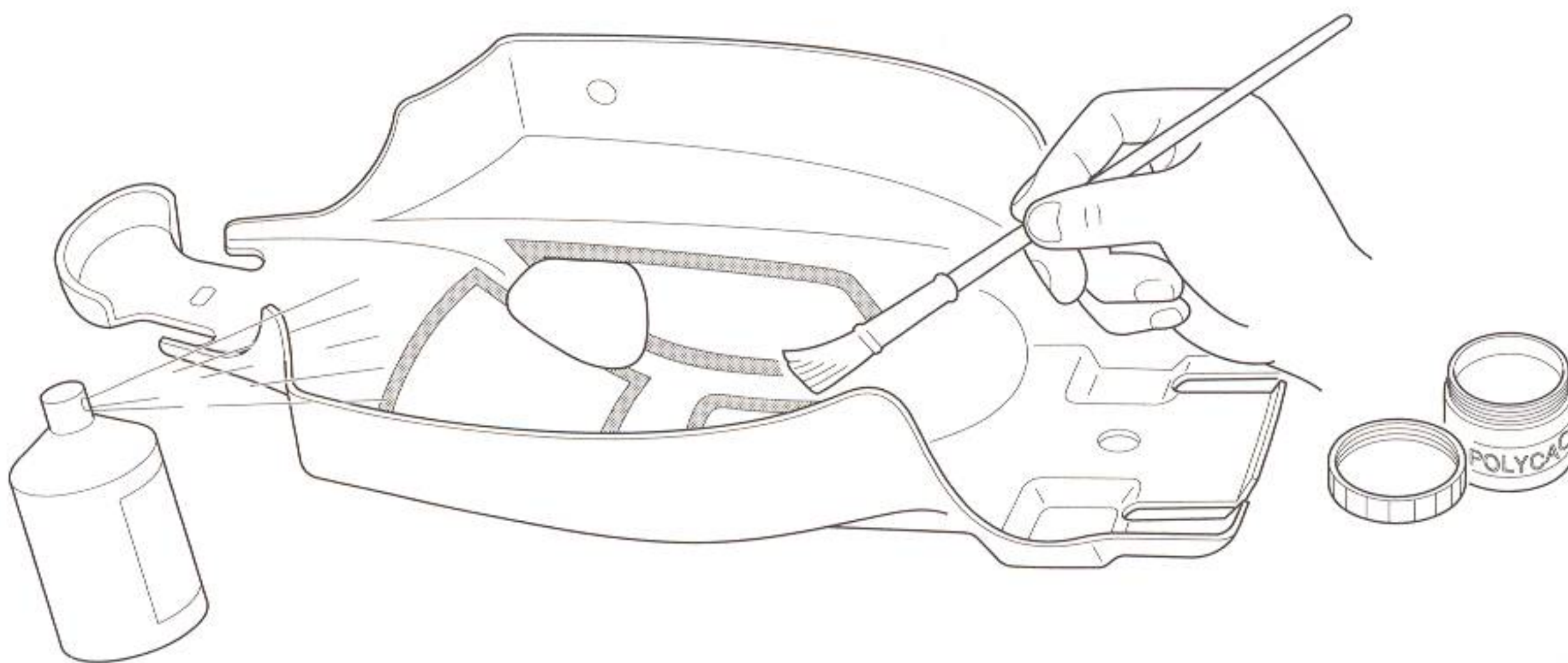
# 47 PREPARE BODY



# 48 PAINTING BODY

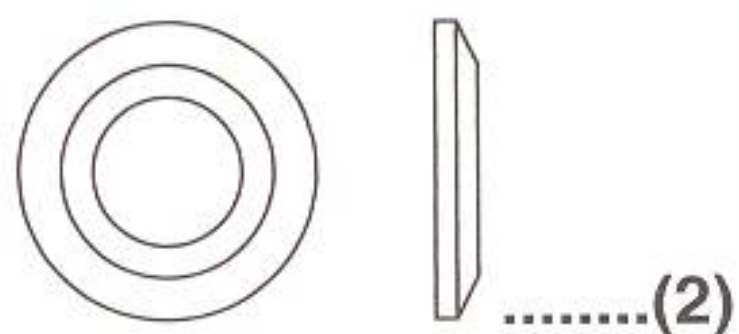
Wash the body with a mild soap and water to remove grease and oil before painting.

Apply decals to the body wherever you prefer.

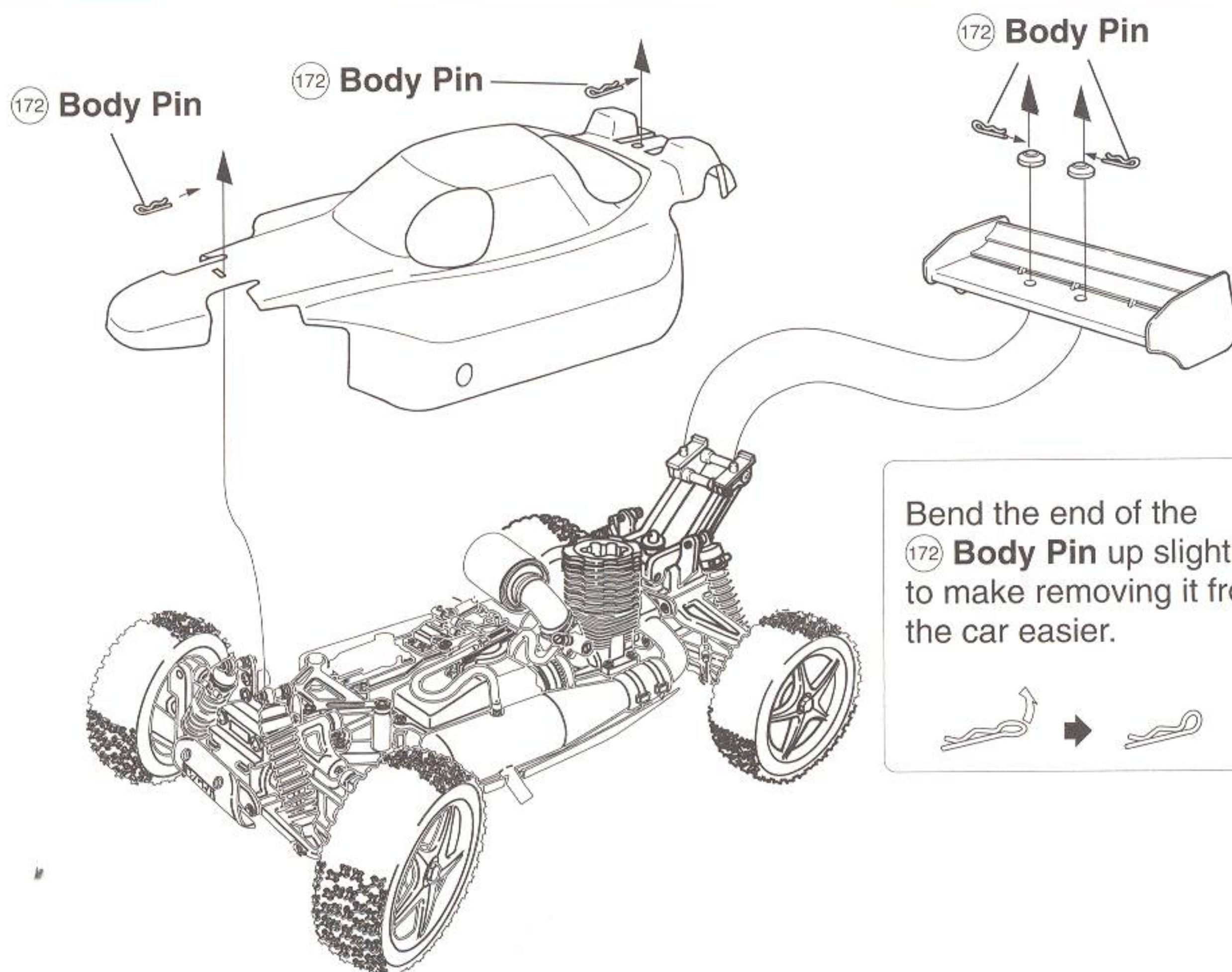
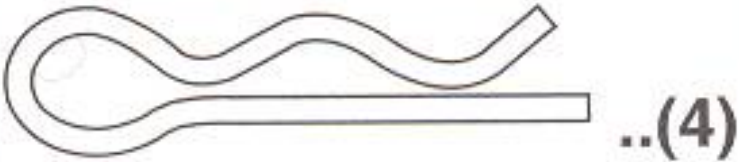


# 49 INSTALL BODY

(171) Plastic Wing Washer



(172) Body Pin (L)



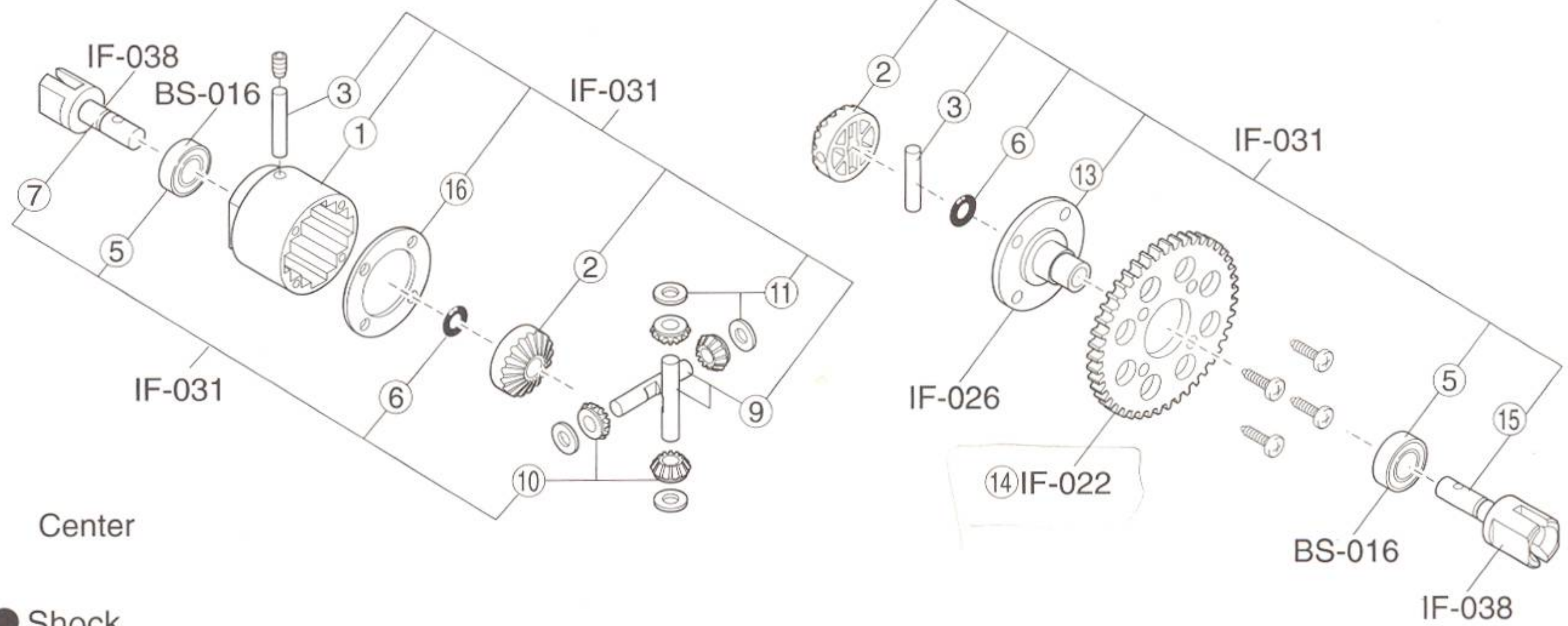
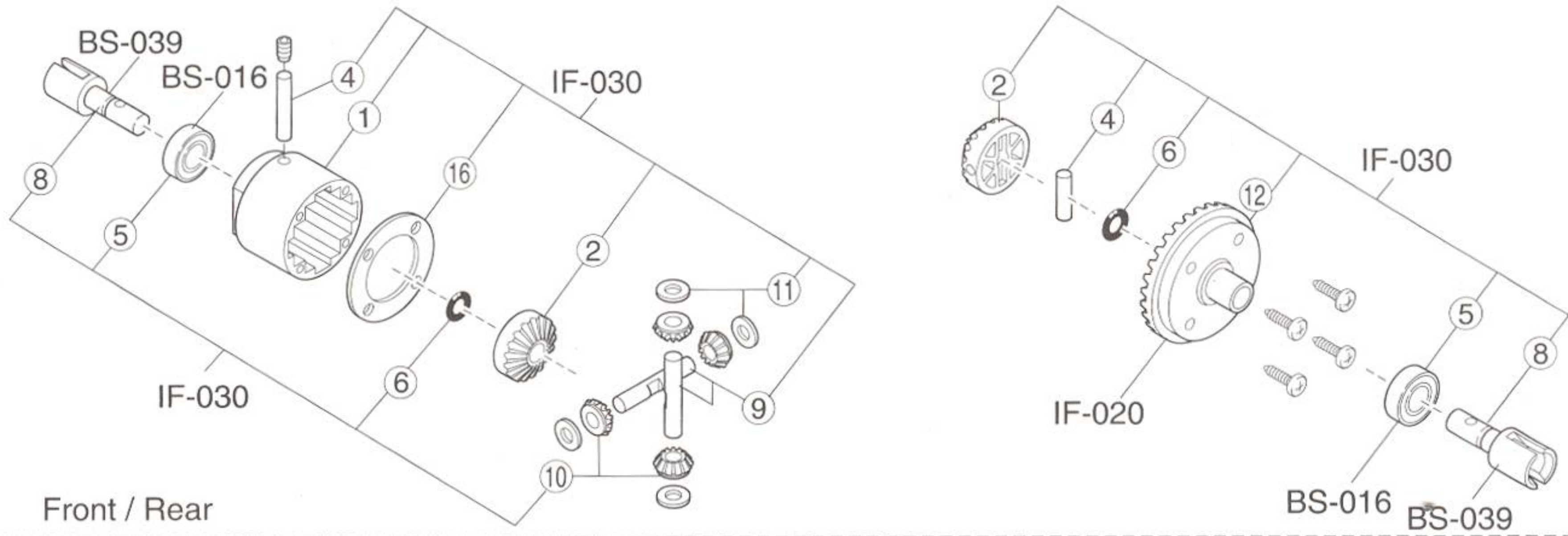
## SYMBOL GUIDE

Drill hole to the specified diameter.

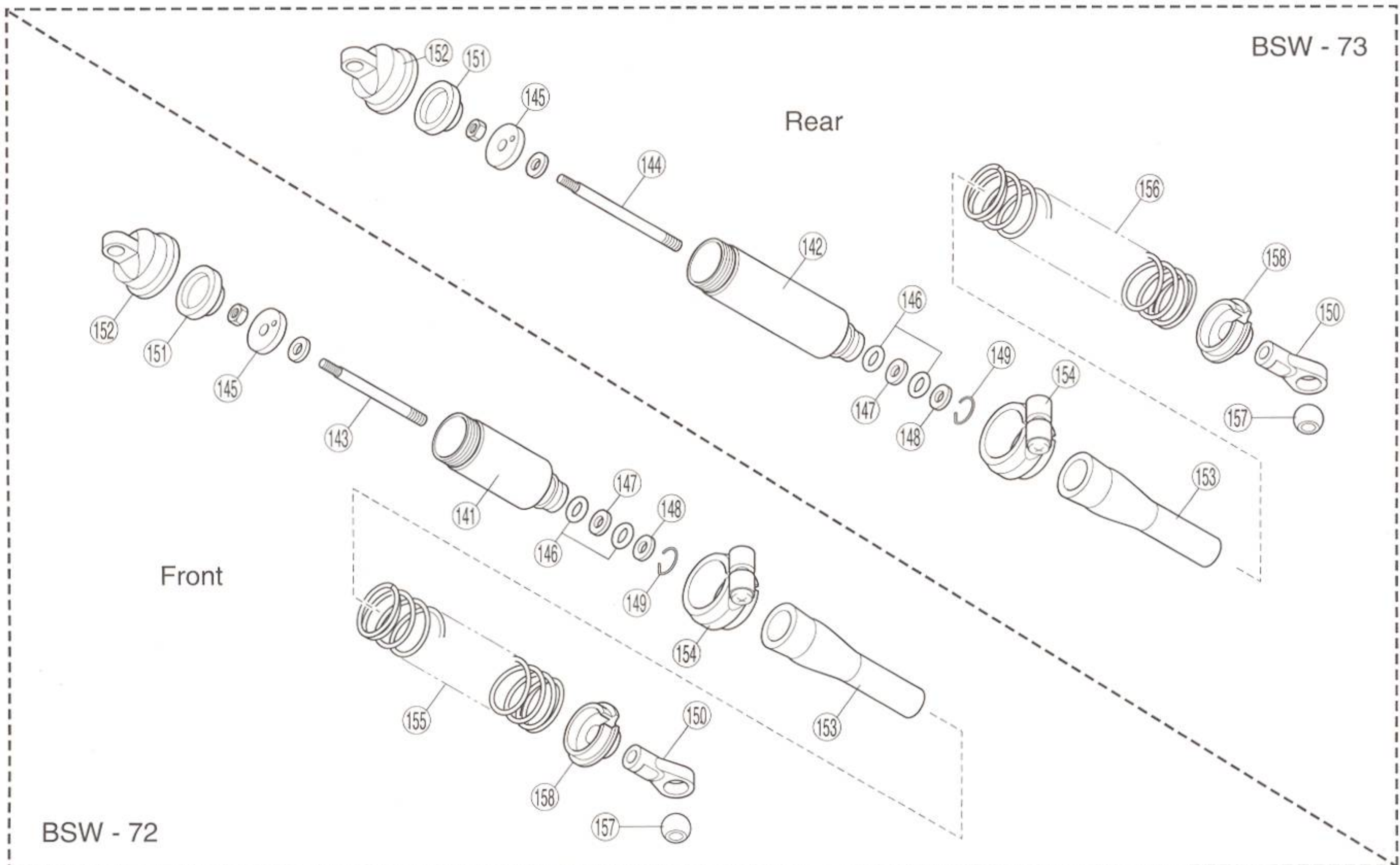
Remove shaded portion.

# < EXPLODED VIEW (1) >

## ● Gear Differential

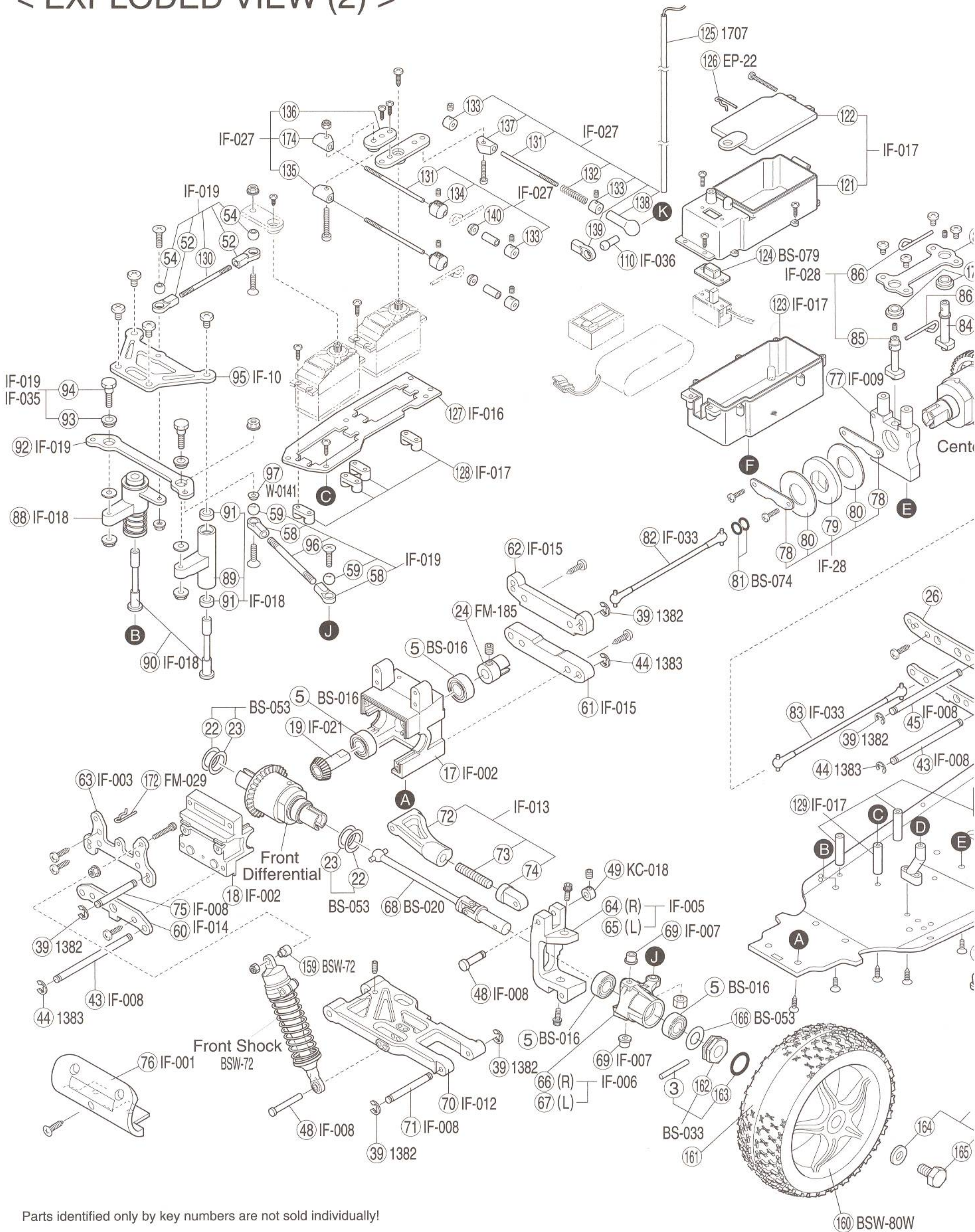


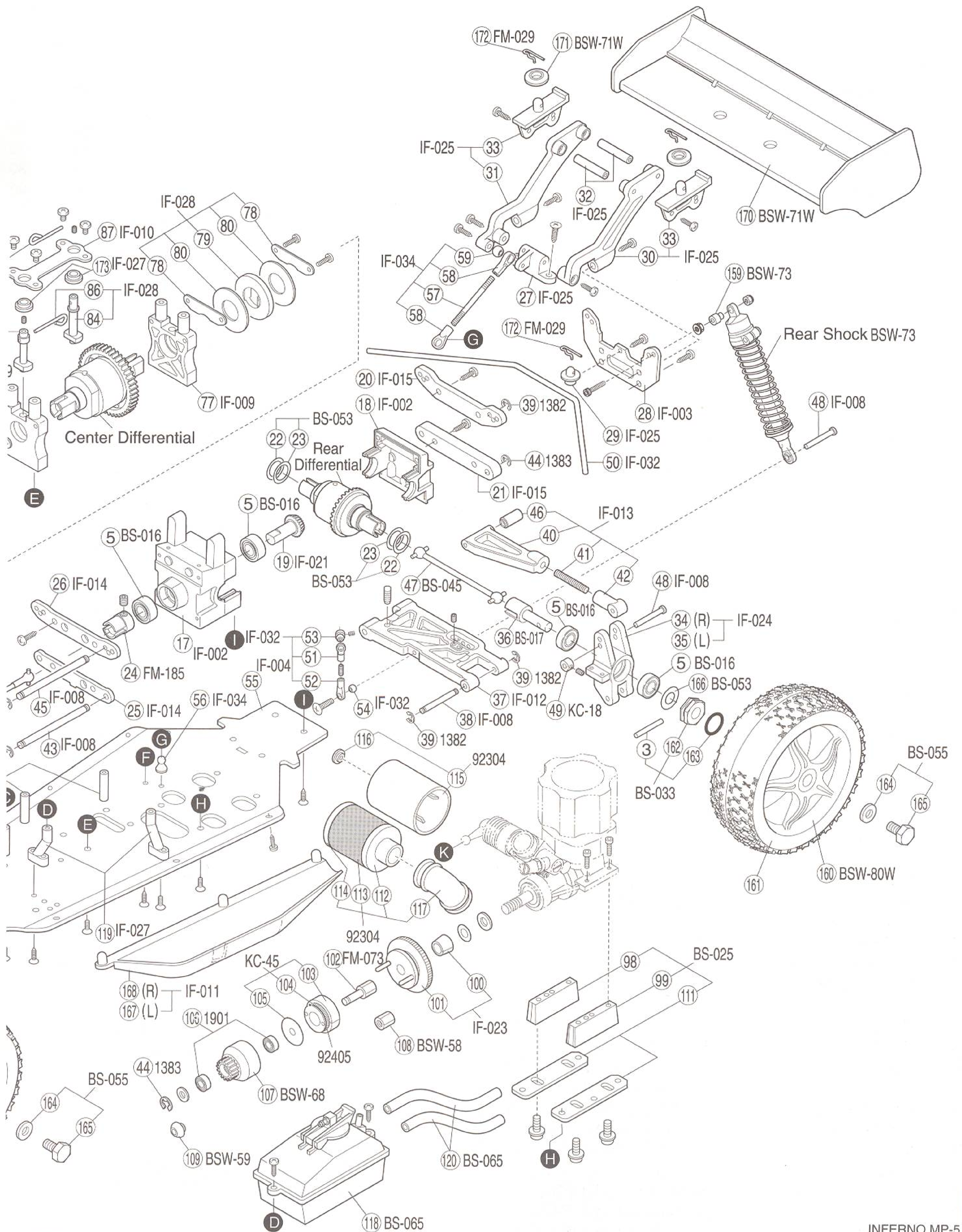
## ● Shock



Key #	Description	Contents	Stock #	Mfg. #
	<b>Differential Gear Set</b>	<b>1,12,16</b> x 1pc <b>2,4,5,6,8,9</b> x2pcs <b>10,11</b> x 4pcs .....	KYOC3290	IF-030
1	Differential Housing	(Included in bag # IF-030)		
2	Large Differential Gear	<b>2</b> x 2pcs .....	KYOC3278	BS-036
4	M2.6x14 Shaft (Black)	(Included in bag # IF-030)		
5	M8x16 Bearing	<b>5</b> x 2pcs .....	KYOC2218	BS-016
6	M6 O-Ring (Orange)	<b>6</b> x 10pcs .....	KYOC3309	BSW-63
8	Frnt/Rear Differential Joint	(Included in bag # IF-030)		
9	Differential Gear Shaft	(Included in bag # IF-030)		
10	Small Differential Gear	<b>10,11</b> x 2pcs .....	KYOC3279	BS-037
11	M4x10 Shim	(Included in bag # BS-037 Key #10)		
12	Large Bevel Gear	(Included in bag # IF-030)		
16	Differential Case Gasket	(Included in bag # IF-030)		
	<b>Center Differential Set</b>	<b>1,7,13,14,15,16</b> x 1pc <b>2,3,5,6,9</b> x 2pcs <b>10,11</b> x 4pcs .....	KYOC2814	IF-031
1	Differential Housing	(Included in bag # IF-031)		
2	Large Differential Gear	<b>2</b> x 2pcs .....	KYOC3278	BS-036
3	M2.6x16 Shaft	(Included in bag # IF-031)		
5	M8x16 Bearing	<b>5</b> x 2pcs .....	KYOC2218	BS-016
6	M6 O-Ring (Orange)	<b>6</b> x 10pcs .....	KYOC3309	BSW-63
7	Center Differential Joint	(Included in bag # IF-031)		
9	Differential Gear Shaft	(Included in bag # IF-031)		
10	Small Differential Gear	<b>10,11</b> x 4pcs .....	KYOC3279	BS-037
11	M4x10 Shim	(Included in bag # BS-037 Key #10)		
13	Center Diff Gear Mount	<b>13</b> x 1pc.....	KYOC4551	IF-026
14	Spur Gear	<b>14</b> x 1pc.....	KYOC4562	IF-022
15	Center Differential Joint (L)	<b>7,15</b> x 1pc.....	KYOC2813	IF-038
16	Differential Case Gasket	(Included in bag # IF-031)		
	<b>Turbo Shock (M)</b>	<b>141,143,145,147,148,149,150,151,152,153,154,156,157,158</b> x 2pcs ...	KYOC6276	BSW-72
		<b>146,159</b> x 4pcs		
141	Front Shock Body (Short)	(Included in bag # BSW-72)		
143	Front Shock Shaft (Short)	<b>143</b> x 2pcs .....	KYOC5772	BSW-74
145	Piston (White)	<b>145</b> x 2pcs .....	KYOC6150	BSW-84
146	3mm O-Ring	(Included in bag # BSW-72)		
147	Collar (White)	(Included in bag # BSW-72)		
148	Collar (Black)	(Included in bag # BSW-72)		
149	C-Ring	(Included in bag # BSW-72)		
150	M6.8 Ball Ends (S)	<b>150,154,157,158,159</b> x 4pcs .....	KYOC4842	BSW-31
151	Rubber Shock Cap	<b>151</b> x 10pcs .....	KYOC3307	BSW-32
152	Shock Top	<b>152</b> x 2pcs .....	KYOC5661	BSW-85
153	Shock Boot	<b>153</b> x 4pcs .....	KYOC5689	BSW-78
154	Spring Adjuster	(Included in bag # BSW-31, Key #150)		
155	Front Shock Spring (Short)	<b>155</b> x 2pcs .....	KYOC5850	BSW-65
157	M6.8 Ball (Black)	(Included in bag # BSW-31, Key #150)		
158	Spring Retainer	(Included in bag # BSW-31, Key #150)		
159	Shock Bushing	(Included in bag # BSW-31, Key #150)		
	<b>Turbo Shock (L)</b>	<b>142,144,145,147,148,149,150,151,152,153,154,156,157,158</b> x 2pcs ...	KYOC6277	BSW-73
		<b>146,159</b> x 4pcs		
142	Rear Shock Body (Long)	(Included in bag # BSW-73)		
144	Rear Shock Shaft (Long)	<b>144</b> x 2pcs .....	KYOC5773	BSW-75
145	Piston (White)	<b>145</b> x 2pcs .....	KYOC6150	BSW-84
146	3mm O-Ring	(Included in bag # BSW-73)		
147	Collar (White)	(Included in bag # BSW-73)		
148	Collar (Black)	(Included in bag # BSW-73)		
149	C-Ring	(Included in bag # BSW-73)		
150	M6.8 Ball Ends (S)	<b>150,154,157,158,159</b> x 4pcs .....	KYOC4842	BSW-31
151	Rubber Shock Cap	<b>151</b> x 10pcs .....	KYOC3307	BSW-32
152	Shock Top	<b>152</b> x 2pcs .....	KYOC5661	BSW-85
153	Shock Boot	<b>153</b> x 4pcs .....	KYOC5689	BSW-78
154	Spring Adjuster	(Included in bag # BSW-31, Key #150)		
156	Rear Shock Spring (Long)	<b>156</b> x 2pcs .....	KYOC5120	BSW-76
157	M6.8 Ball (Black)	(Included in bag # BSW-31, Key #150)		
158	Spring Retainer	(Included in bag # BSW-31, Key #150)		
159	Shock Bushing	(Included in bag # BSW-31, Key #150)		

# < EXPLODED VIEW (2) >





## 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 are 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 # 12, ask for stock # KYOC3337, pack # IF-020.

Key #	Description	Contents	Stock #	Mfg. #
2	Large Differential Gear	2 x 2pcs	KYOC3278	BS-036
3	M2.6x16 Shaft	3,162,163 x 4pcs	KYOC6326	BS-033
5	M8x16 Bearing	5 x 2pcs	KYOC2218	BS-016
6	M6 O-Ring (Orange)	6 x 10pcs	KYOC3309	BSW-63
7	Center Diff Joint (S)	7,15 x 1pc	KYOC2822	IF-038
8	Front/Rear Diff Joint	8 x 2pcs	KYOC3303	BS-039
10	Small Differential Gear	10,11 x 2pcs	KYOC3279	BS-037
11	M4x10 Shim	(Included in bag # BS-037, Key #10)		
12	Large Bevel Gear	12 x 1pc	KYOC3337	IF-020
13	Center Diff Mount	13 x 1pc	KYOC4551	IF-026
14	Spur Gear	14 x 1pc	KYOC4562	IF-022
15	Center Diff Joint (L)	(Included in bag # IF-038, Key #7)		
17	Bulkhead (A)	17,18 x 1pc	KYOC2624	IF-002
18	Bulkhead (B)	(Included in bag # IF-002, Key #17)		
19	Small Bevel Gear	19 x 1pc	KYOC3338	IF-021
20	Upper Rear Suspns Block	20,21,61,62 x 1pc	KYOC6040	IF-015
21	Lower Rear Suspns Block	(Included in bag # IF-015, Key #20)		
22	M13x16 Shim (Thick)	22,23,166 x 4pcs	KYOC5573	BS-053
23	M13x16 Shim (Thin)	(Included in bag # BS-053, Key #22)		
24	Drive Joint	24 x 2pcs	KYOC4307	FM-185
25	Lower Rear Suspns Plate	25,26,60 x 1pc	KYOC6039	IF-014
26	Upper Rear Suspns Plate	(Included in bag # IF-014, Key #25)		
27	Torque Rod Mount	27,29,30,31 x 1pc 32,33 x 2pcs	KYOC6360	IF-025
28	Rear Shock Tower	28,63 x 1pc	KYOC5712	IF-003
29	Rear Body Mount	(Included in bag # IF-025, Key #27)		
30	Left Wing Stay	(Included in bag # IF-025, Key #27)		
31	Right Wing Stay	(Included in bag # IF-025, Key #27)		
32	Wing Joint	(Included in bag # IF-025, Key #27)		
33	Upper Wing Stay	(Included in bag # IF-025, Key #27)		
34	Right Rear Hub	34,35 x 1pc	KYOC3713	IF-024
35	Left Rear Hub	(Included in bag # IF-024, Key #34)		
36	Rear Wheel Shaft	36 x 2 pcs	KYOC6331	BS-017
37	Lower Rear Suspns Arm	37,70 x 2pcs	KYOC6037	IF-012
38	M3x44 Shaft (Black)	38,45,71,75 x 2pcs 43,48 x 4pcs	KYOC5650	IF-008
39	E3.0 E-Ring (Silver)	39 x 10pcs	KYOC9882	1382
40	Upper Rear Suspns Arm	40,41,42,46,72,73,74 x 2pcs	KYOC6038	IF-013
41	M5x30 Set Screw	(Included in bag # IF-013, Key #40)		
42	Rear Suspension Arm End	(Included in bag # IF-013, Key #40)		
43	M4x63 Shaft	(Included in bag # IF-008, Key #38)		
44	E4.0 E-Ring (Black)	44 x 10pcs	KYOC9883	1383
45	M3x54 Shaft (Black)	(Included in bag # IF-008, Key #38)		
46	Upper Arm Spacer	(Included in bag # IF-013, Key #40)		
47	Rear Swing Shaft	47 x 2pcs	KYOC6107	BS-045
48	M3x27 Shaft	(Included in bag # IF-008, Key #38)		
49	M3 Stopper	49 x 10pcs	KYOC6000	KC-18
50	Sway Bar	50 x 1pc 51,52,53,54 x 2pcs	KYOC5946	IF-032
51	M5.8 Ball End (S)	(Included in bag # IF-032, Key #50)		
52	M5.8 Ball End (L)	92,130 x 1pc 52,54,93,94,96 x 2pcs 58,59 x 4pcs	KYOC2813	IF-019
53	Stabilizer Ball	(Included in bag # IF-032, Key #50)		
54	M5.8 Ball	(Included in bag # IF-019, Key #52)		
55	Chassis	55 x 1pc	KYOC4525	IF-004
56	Torque Rod Ball	56,57,59 x 1pc 58 x 2pcs	KYOC5725	IF-034
57	M4x60 Threaded Rod	(Included in bag # IF-034, Key #56)		
58	M6.8 Ball End (L)	(Included in bag # IF-019, Key #52)		

Key #	Description	Contents	Stock #	Mfg. #
59	M6.8 Ball	(Included in bag # IF-019, Key #52)		
60	Lower Front Suspn Plate	(Included in bag # IF-014, Key #25)		
61	Lower Front Suspn Block	(Included in bag # IF-015, Key #20)		
62	Upper Front Suspn Block	(Included in bag # IF-015, Key #20)		
63	Front Shock Tower	(Included in bag # IF-003, Key #28)		
64	Front Hub (R)	<b>64,65</b> x 1pc.....	KYOC3712	IF-005
65	Front Hub (L)	(Included in bag # IF-005, Key #64)		
66	Knuckle Arm (R)	<b>66,67</b> x 1pc.....	KYOC4400	IF-006
67	Knuckle Arm (L)	(Included in bag # IF-006, Key #66)		
68	Universal Swing Shaft	<b>68</b> x 2pcs.....	KYOC6288	BS-020
69	Knuckle Arm Bushing	<b>69</b> x 4pcs.....	KYOC4410	IF-007
70	Front Suspension Arm	(Included in bag # IF-012, Key #37)		
71	M3x38 Shaft	(Included in bag # IF-008, Key #38)		
72	Front Upper Arm	(Included in bag # IF-013, Key #40)		
73	M5x25 Set Screw	(Included in bag # IF-013, Key #40)		
74	Front Suspn Arm End	(Included in bag # IF-013, Key #40)		
75	M3x34 Shaft (Black)	(Included in bag # IF-008, Key #38)		
76	Front Bumper	<b>76</b> x 1pc.....	KYOC2639	IF-001
77	Center Diff Mount	<b>77</b> x 2pcs.....	KYOC2813	IF-009
78	Brake Pads	<b>84,85</b> x 1pc <b>79,86</b> x 2pcs <b>78,80</b> x 4pcs.....	KYOC2614	IF-028
79	Brake Disk	(Included in bag # IF-028, Key #78)		
80	Brake Liner	(Included in bag # IF-028, Key #78)		
81	M4.0 O-Ring (Black)	<b>81</b> x 10pcs.....	KYOC4709	BS-074
82	Short Center Swing Shaft	<b>82,83</b> x 1pc.....	KYOC2815	IF-033
83	Long Center Swing Shaft	(Included in bag # IF-033, Key #82)		
84	Rear Brake Cam	(Included in bag # IF-028, Key #78)		
85	Front Brake Cam	(Included in bag # IF-028, Key #78)		
86	Brake Lever	(Included in bag # IF-028, Key #78)		
87	Brake Support	<b>87,95</b> x 1pc.....	KYOC4855	IF-010
88	Servo Saver	<b>88,89</b> x 1pc <b>90,91</b> x 2pcs.....	KYOC5635	IF-018
89	Servo Saver Idler Arm	(Included in bag # IF-018, Key #88)		
90	Steering Post	(Included in bag # IF-018, Key #88)		
91	M6x10 Metal Bushing	(Included in bag # IF-018, Key #88)		
92	Steering Plate	(Included in bag # IF-019, Key #52)		
93	Steering Collar	<b>93,94</b> x 2pcs.....	KYOC5977	IF-035
94	Steering Pin	(Included in bag # IF-035, Key #93)		
95	Front Support	(Included in bag # IF-010, Key #87)		
96	M4x40 Threaded Rod	(Included in bag # IF-019, Key #52)		
97	Tapered Collar	<b>97</b> x 10pcs.....	KYOC9841	W-0141
98	Engine Mount (A)	<b>98,99</b> x 1pc <b>111</b> x 2pcs.....	KYOC3458	BS-025
99	Engine Mount (B)	(Included in bag # BS-025, Key #98)		
100	Tapered Collet	<b>100,101</b> x 1pc.....	KYOC3545	IF-023
101	Flywheel	(Included in bag # IF-023, Key #101)		
102	Pilot Shaft	<b>102</b> x 1pc.....	KYOC4725	FM-073
103	Clutch Shoe	<b>104,105</b> x 1pc <b>103</b> x 2pcs.....	KYOC2990	KC-045
104	Clutch Spring	<b>104</b> x 4pcs.....	KYOC3050	92405
105	M5x20 Shim	(Included in bag # KC-045, Key #103)		
106	M5x10 Bearing	<b>106</b> x 2pcs.....	KYOC2197	1901
107	13T Clutch Bell	<b>107</b> x 1pc.....	KYOC4205	BSW-68
108	Pilot Nut	<b>108</b> x 1pc.....	KYOC3532	BSW-58
109	Clutch Bell Guide	<b>109</b> x 1pc.....	KYOC2970	BSW-59
110	Throttle Arm Standoff	<b>110</b> x 1pc.....	KYOC2780	IF-036
111	Engine Mount Plates	(Included in bag # BS-025, Key #98)		
112	Air Cleaner Base	<b>112,113,114,115,116,117</b> x 1pc.....	KYOC2033	92304
113	Air Cleaner	(Included in bag # 92304, Key #112)		
114	Air Cleaner Top	(Included in bag # 92304, Key #112)		
115	Air Cleaner Cover	(Included in bag # 92304, Key #112)		
116	Air Cleaner Collar	(Included in bag # 92304, Key #112)		
117	Adapter Pipe	<b>117</b> x 2pcs.....	KYOC2031	1789
118	Fuel Tank	<b>118,120</b> x 1pc.....	KYOC4012	BS-065

Key #	Description	Contents	Stock #	Mfg. #
119	Fuel Tank Mount	<b>132,135,136,137,138,139,174</b> x 1pc <b>119,134,140,173</b> x 2pcs ..... <b>131</b> x 3pcs <b>133</b> x 4pcs	KYOC4498	IF-027
120	Fuel Tubing	(Included in bag # BS-065, Key #118)		
121	Radio Box Top	<b>121,122,123</b> x 1pc <b>128,129</b> x 4pcs .....	KYOC5371	IF017
122	Radio Box Hatch	(Included in bag # IF-117, Key #121)		
123	Radio Box Bottom	(Included in bag # IF-117, Key #121)		
124	Switch Boot	<b>124</b> x 3pcs.....	KYOC6118	BS-079
125	Antenna Tube	<b>125</b> x 6pcs.....	KYOC2058	1707
126	Body Pin (S)	<b>126</b> x 5pcs.....	KYOC2520	EP-22
127	Servo Tray	<b>127</b> x 1pc.....	KYOC4937	IF-016
128	Servo Mounts	(Included in bag # IF-117, Key #121)		
129	Radio Posts	(Included in bag # IF-117, Key #121)		
130	M3x40 Threaded Rod	(Included in bag # IF-019, Key #52)		
131	M2x145 Adjuster Rod	(Included in bag # IF-027, Key #119)		
132	Spring	(Included in bag # IF-027, Key #119)		
133	M2 Stopper	(Included in bag # IF-027, Key #119)		
134	Adjuster Knob	(Included in bag # IF-027, Key #119)		
135	Rod Pivot (A)	(Included in bag # IF-027, Key #119)		
136	Servo Horn Extender	(Included in bag # IF-027, Key #119)		
137	Rod Pivot (B)	(Included in bag # IF-027, Key #119)		
138	O.S. Throttle End	(Included in bag # IF-027, Key #119)		
139	Picco Throttle End	(Included in bag # IF-027, Key #119)		
140	Nylon Tapered Collar	(Included in bag # IF-027, Key #119)		
160	Wheel	<b>160</b> x 2pcs.....	KYOC6524	BSW-80W
161	Tire	<b>161</b> x 2pcs.....	KYOC9788	W-5648H
162	Drive Washer	(Included in bag # BS-033, Key #3)		
163	O-Ring (Large)	(Included in bag # BS-033, Key #3)		
164	M8x16x1.5 Washer (Alumn)	<b>164,165</b> x 6pcs.....	KYOC6327	BS-055
165	Wheel Stopper Screw	(Included in bag # BS-055, Key #164)		
166	M8x12x.2 Shim	(Included in bag # BS-053, Key #22)		
167	Lower Dirt Guard (L)	<b>167,168</b> x 1pc.....	KYOC5743	IF-011
168	Lower Dirt Guard (R)	(Included in bag # IF-011, Key #167)		
169	Body	<b>169</b> x 1pc.....	KYOC2472	IF-029
170	Wing	<b>170</b> x 1pc <b>171</b> x 2pcs .....	KYOC4687	BSW-71W
171	Plastic Wings Washer	(Included in bag # BSW-71W, Key #170)		
172	Body Pin (L)	<b>172</b> x 10pcs.....	KYOC2570	FM-029
173	Brake Cam Bushings	(Included in bag # IF-027, Key #119)		
174	Rod Pivot (C)	(Included in bag # IF-027, Key #119)		
175	Decal	1pc .....	KYOC3265	IF-037

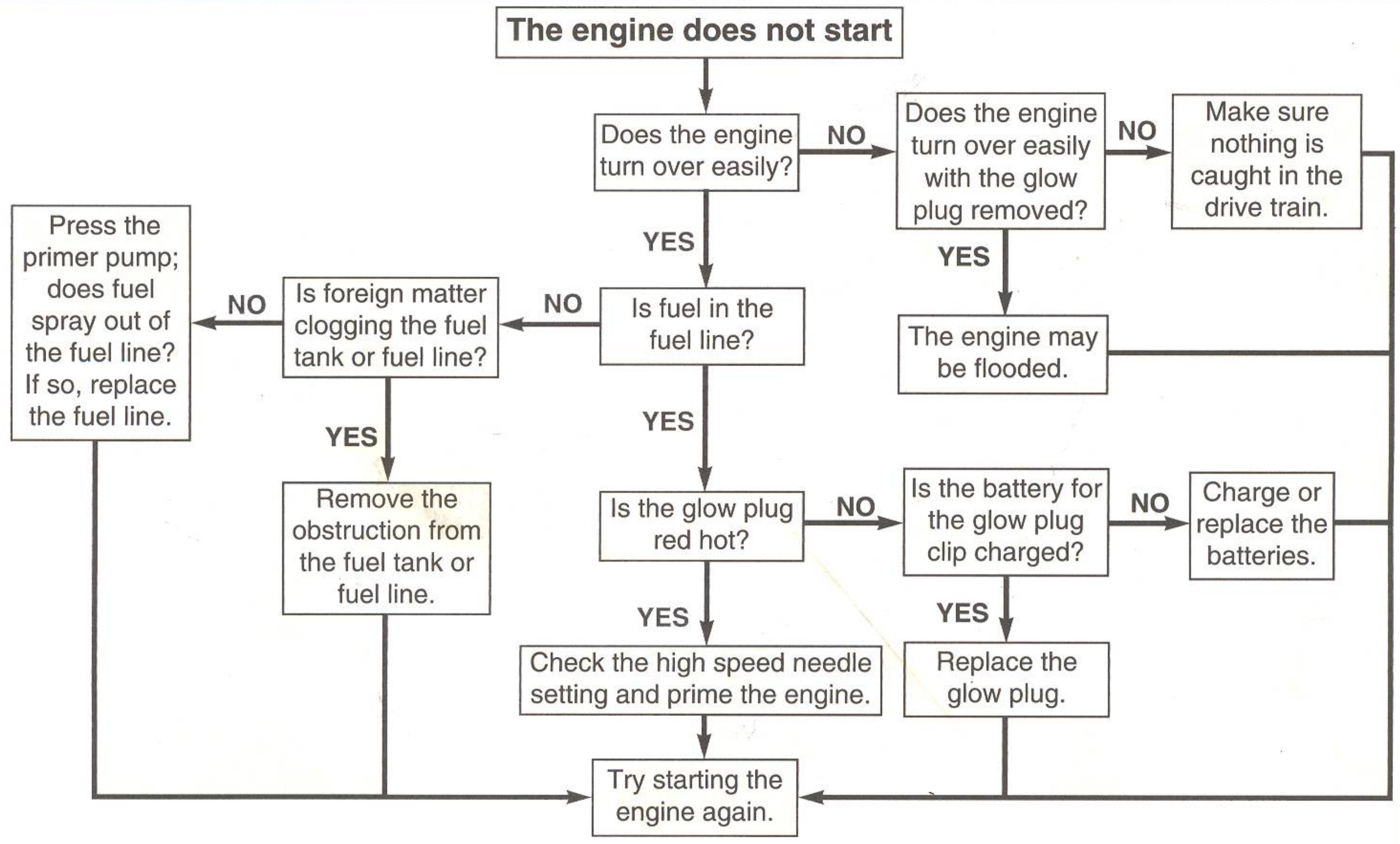
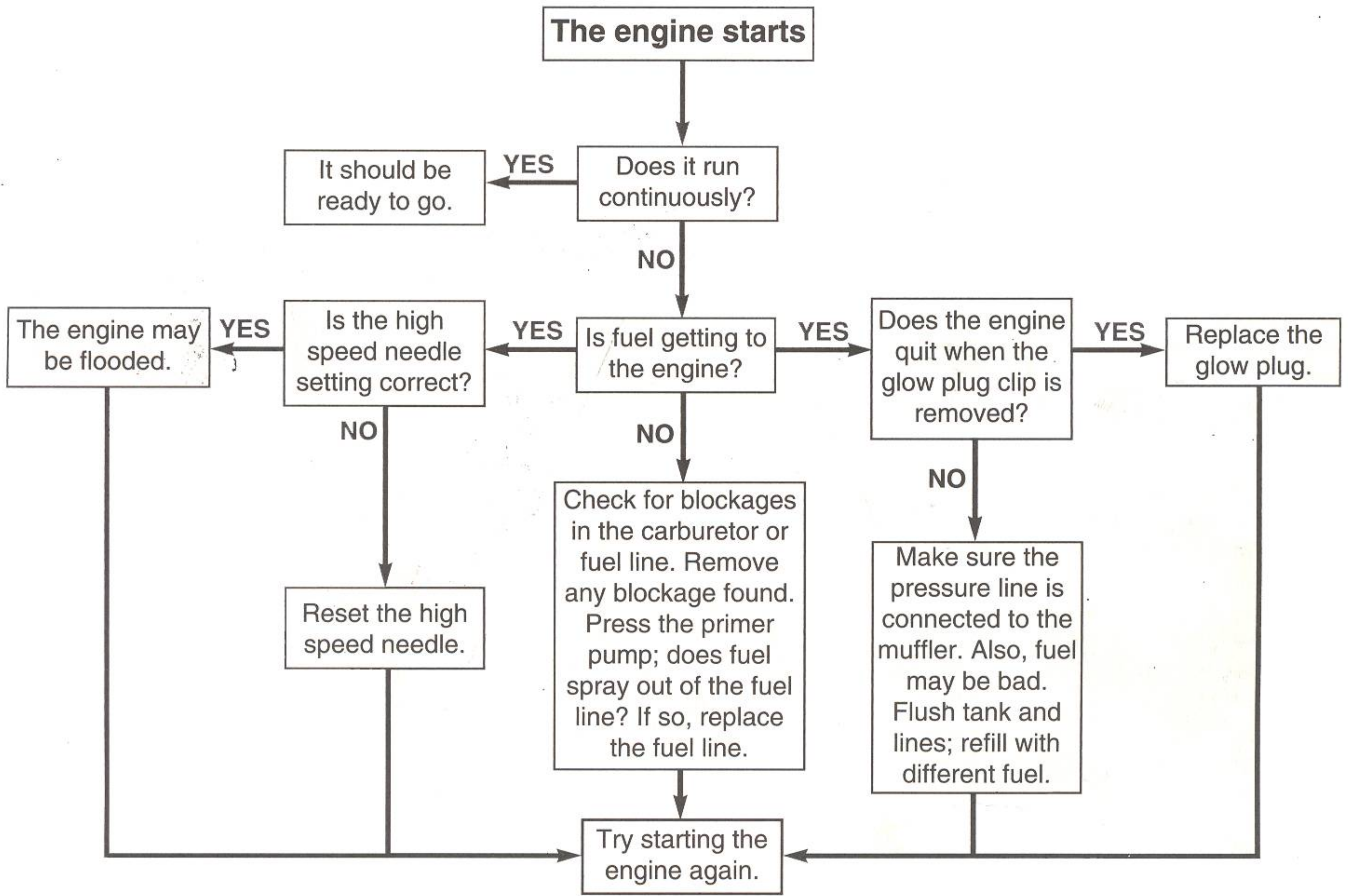
## OPTIONAL PARTS

Key #	Description	Contents	Stock #	Mfg. #
	Special Main Chassis	Replaces #55 x 1pc.....	KYOC4526	IFW-01
	Special Tie Rod Set	.....	KYOC6196	IFW-02
	Steel Main Gear (46T)	Replaces #14 x 1pc.....	KYOC4564	IFW-03
	Special Servo Saver	Replaces #88,89 x 1pc.....	KYOC5655	IFW-04
	Front Stabilizer	.....	KYOC5947	IFW-05
	Front Torque Rod	.....	KYOC3870	IFW-06
	Wing Stay Collar	Replaces #32 x 2pcs.....	KYOC6379	IFW-07
	Special Front Shock Tower	Replaces #63 x 1pc.....	KYOC3744	IFW-09
	Special Rear Shock Tower	Replaces #28 x 1pc.....	KYOC4978	IFW-10
	Double Disk Flywheel (Type A)	.....	KYOC3546	IFW-11
	Muffler Joining Pipe	2pcs (Pink) .....	KYOC3493	92408P
	Muffler Joining Pipe	2pcs (Yellow).....	KYOC3494	92408Y
	Muffler Mount	1 set .....	KYOC4650	92511
	Manifold	1 set (O.S.RZ,Picco, Nova Rossi).....	KYOC4570	31514
	Manifold Spring	Replacement for #31514 x 1pcs .....	KYOC4571	31514-1
	Manifold	1 set (OPS) .....	KYOC4572	31515
	Manifold	1 set (O.S.RG) .....	KYOC4573	31516

## OPTIONAL PARTS (Cont.)

Key #	Description	Contents	Stock #	Mfg. #
	Custom Silencer	1pc .....	KYOC6278	BSW-48
	Silicone Oil (Shocks)	100/200 wt.....	KYOC5736	1953
	Silicone Oil (Shocks)	300/400 wt.....	KYOC5737	1954
	Silicone Oil (Shocks)	500/600 wt.....	KYOC5738	1955
	Silicone Oil (Shocks)	150/250/350 wt.....	KYOC5741	1957
	Silicone Oil (Diffs)	10,000/30,000/50,000 .....	KYOC5739	1956
	Silicone Oil (Diffs)	3,000/5,000/7,000 .....	KYOC3310	1958
	Front Spring (Soft)	.....	KYOC5850	BSW-65
	Rear Spring (Soft)	.....	KYOC5120	BSW-76
	Shock Adjusting Collars	1 set .....	KYOC4865	BSW-77
	Foam Tire Liner (Large)	4pcs.....	KYOC4251	BSW-17
	Foam Tire Liner (Small)	8pcs.....	KYOC5825	BSW-39
	Foam Tire Liner (Turbo Inferno)	4pcs.....	KYOC4253	W-5039
	High Traction Tire (Angled Block)	Soft.....	KYOC6234	W-5646S
	High Traction Tire (Angled Block)	Hard .....	KYOC6235	W-5646H
	High Traction Tire (Micro Block)	Soft.....	KYOC6247	W-5647S
	High Traction Tire (Micro Block)	Hard .....	KYOC6248	W-5647H
	High Traction Tire (X-Pattern)	Soft.....	KYOC9787	W-5648S
	Turbo Wheel	Blue .....	KYOC6519	BSW-80BL
	Turbo Wheel	Neon Green.....	KYOC6520	BSW-80KG
	Turbo Wheel	Neon Orange.....	KYOC6521	BSW-80KO
	Turbo Wheel	Neon Pink.....	KYOC6522	BSW-80KP
	Turbo Wheel	Neon Yellow .....	KYOC6523	BSW-80KY
	Nylon Wing	Blue .....	KYOC4679	BSW-71BL
	Nylon Wing	Green .....	KYOC4680	BSW-71KG
	Nylon Wing	Orange .....	KYOC4681	BSW-71KO
	Nylon Wing	Pink .....	KYOC4682	BSW-71KP
	Nylon Wing	Yellow.....	KYOC4684	BSW-71KY
	Steel Shock Bushing	Replaces #159 x 4pcs.....	KYOC5675	BSW-41
	M5.8mm Hard Ball	Replaces #54 x 10pcs.....	KYOC2156	W-0136
	M6.8mm Hard Ball	Replaces #59 x 10pcs.....	KYOC2157	W-0137
	M5.8mm Hard Ball Joint	Replaces #53 x 4pcs.....	KYOC2243	92527
	Special Engine Mount	Replaces #98,99 x 1pc.....	KYOC3459	BSW-51
	Special Disk Brake Set	Replaces #79,80 x 1pc.....	KYOC2591	BSW-52
	Special Radio Post	Replaces #129 x 3pcs.....	KYOC4939	BSW-54
	Special Upper Rod (Narrow)	.....	KYOC6296	GTW-03
	Color Silicone Tube	.....	KYOE8000	1790
	Fuel Filter	.....	KYOE8076	1876
	Locking Jig w/Wrench	.....	KYOC4504	80312

# ENGINE TROUBLE-SHOOTING



※ご使用前にこの説明書を良くお読みになり十分に理解してください。  
Before use, please carefully read the explanations!



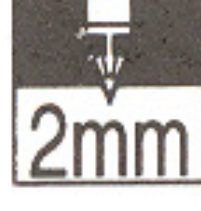


# ロングホイールベースコンバージョンセット LONG WHEEL CONVERSION SET

インファernoMP-5シリーズ用 For INFERNO MP-5



取扱説明書  
INSTRUCTION SHEET  
IFW-40

●説明書に使われているマーク Symbols used throughout this instruction sheet, comprise:

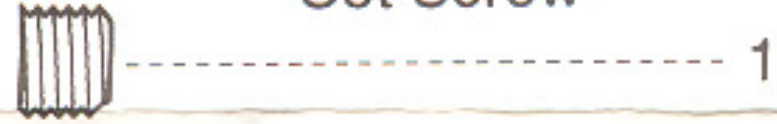
- |   |   |  |
|---|---|--|
|  別購入品<br>Must be purchased separately! |  ネジロック剤を塗る。<br>Apply threadlocker (screw cement).            |  2mmの穴をあける (例)。<br>Drill holes with the specified diameter (here: 2mm). |
|  原寸図<br>True-to-scale diagram.         |  左右同じように組立てる。<br>Assemble left and right sides the same way. |  |

## 1 シャシー Chassis

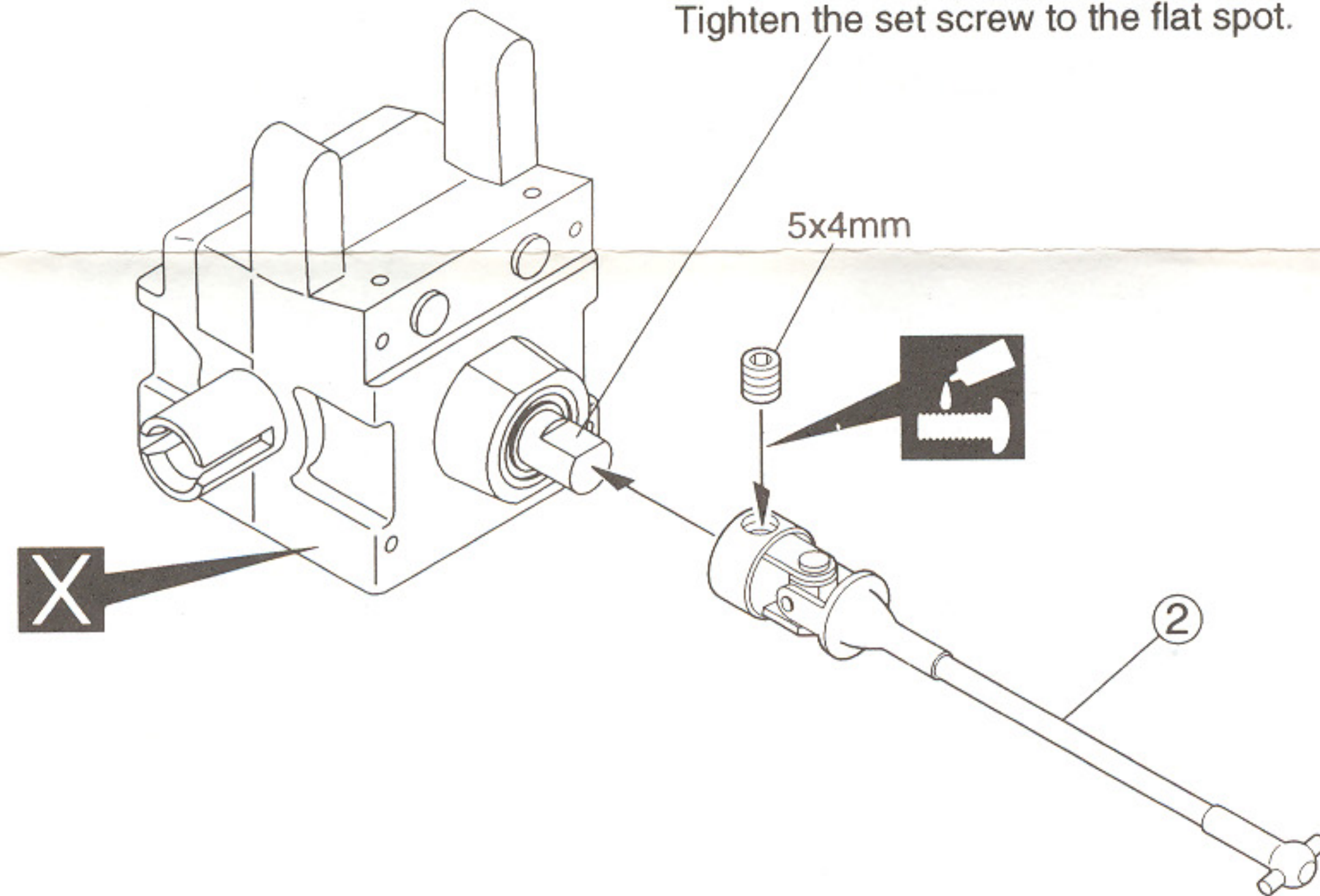
▶付属のビスを使用し、メインシャシーを交換する。  
Change main chassis. Screw are included in set.

## 2 リヤギヤボックス Rear Gear Box

5 x 4mm セットビス  
Set Screw

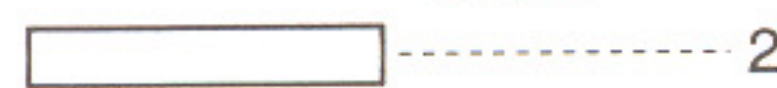


▶平らな面にセットビスを固定する。  
Tighten the set screw to the flat spot.

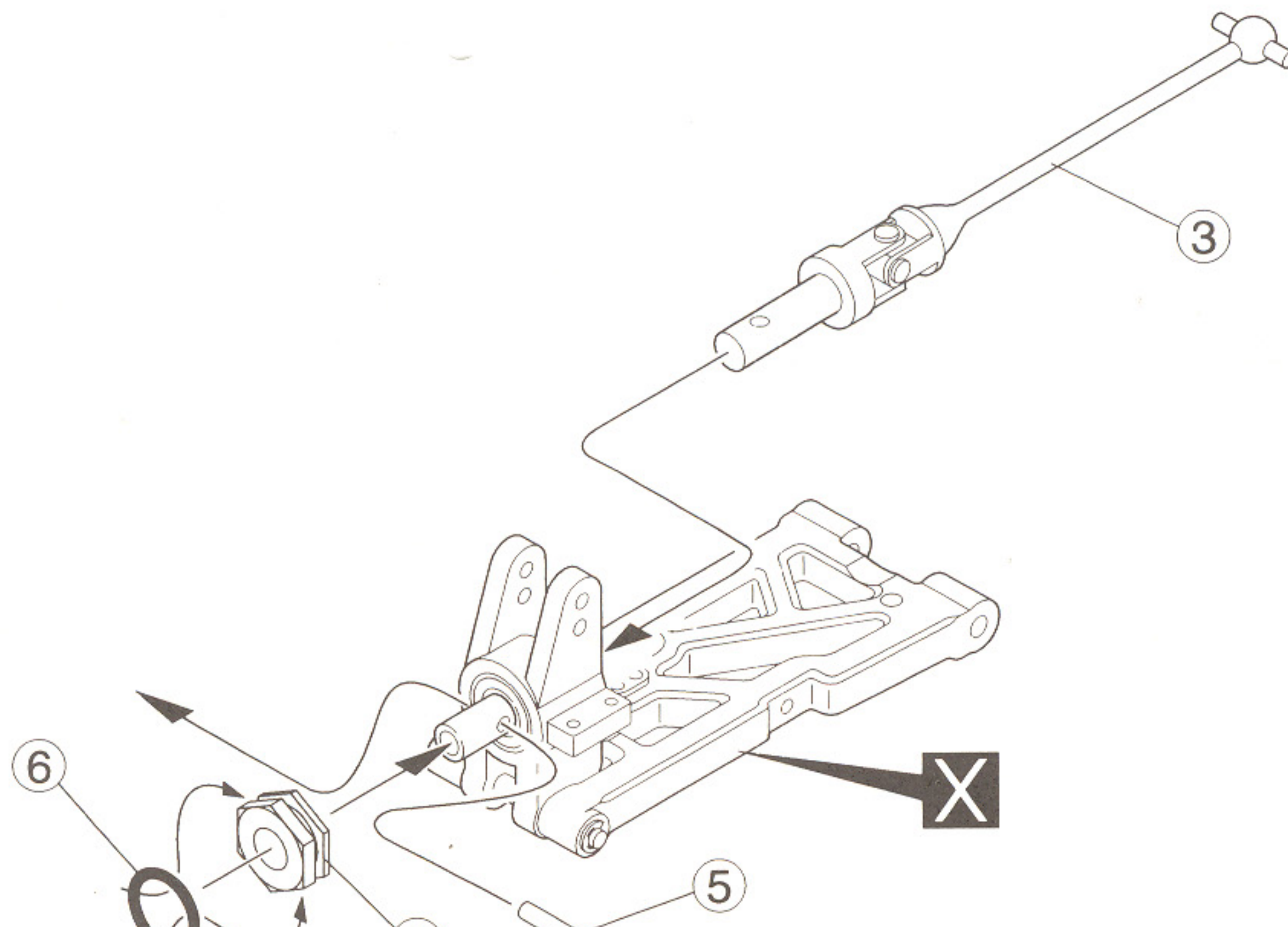
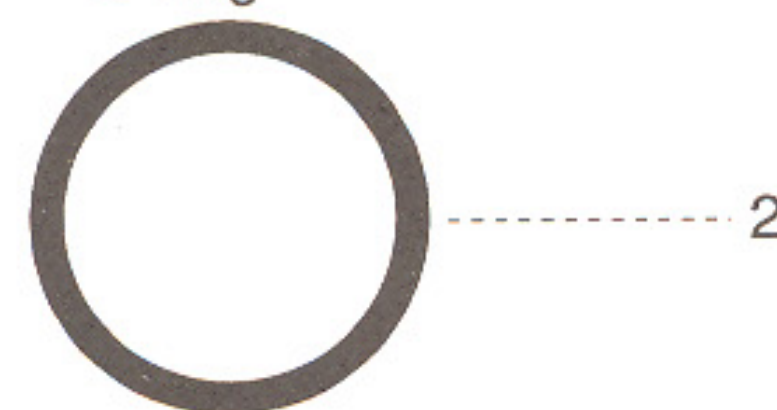


## 3 リヤサスペンション Rear Suspension

⑤ 2.6 x 16mm シャフト  
Shaft



⑥ Oリング  
O-ring



## 4 シャシー Chassis

3 x 8mm キャップビス  
Cap Screw 1

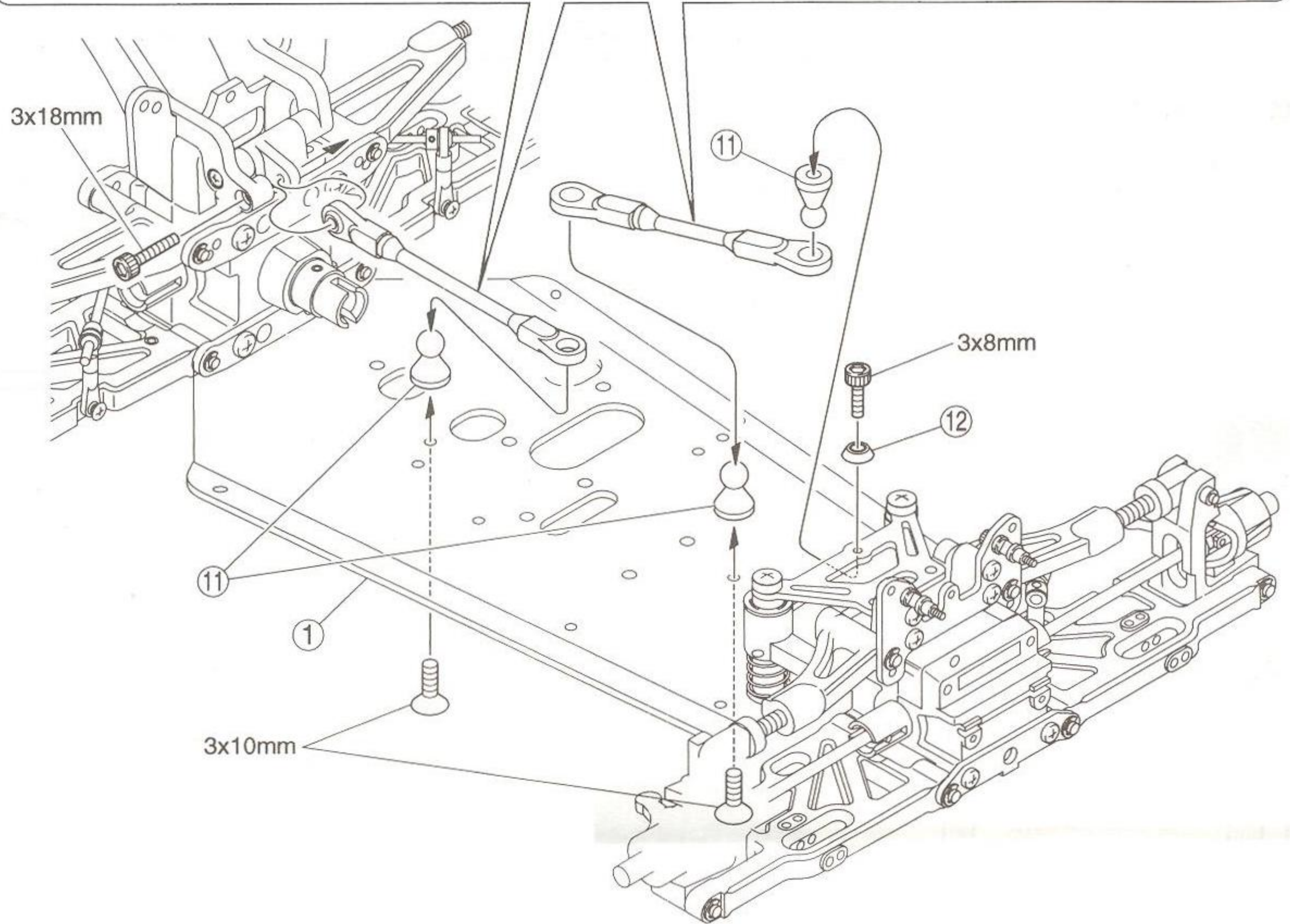
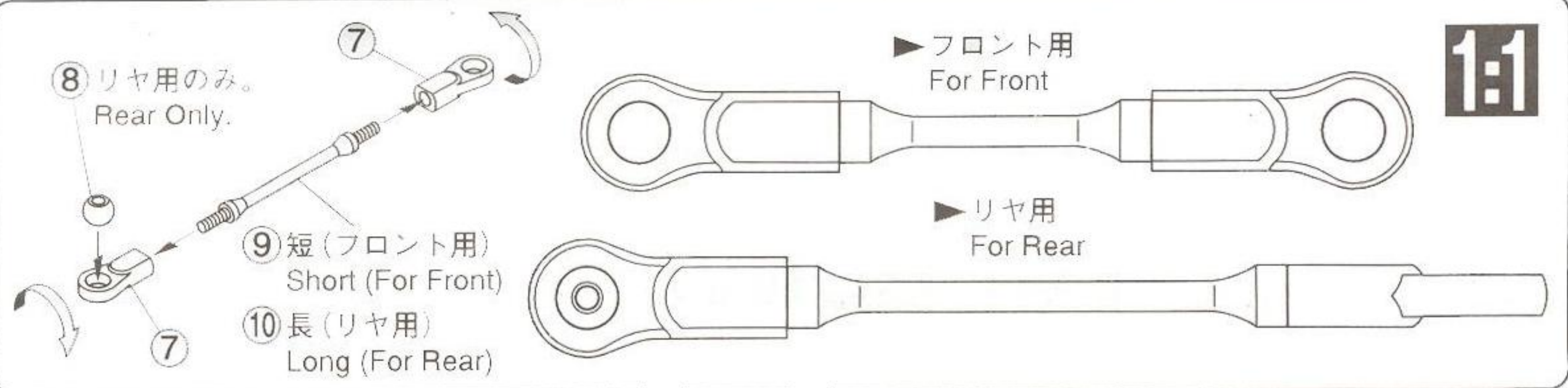
3 x 18mm キャップビス  
Cap Screw 1

3 x 10mm サラビス  
F/H Screw 2

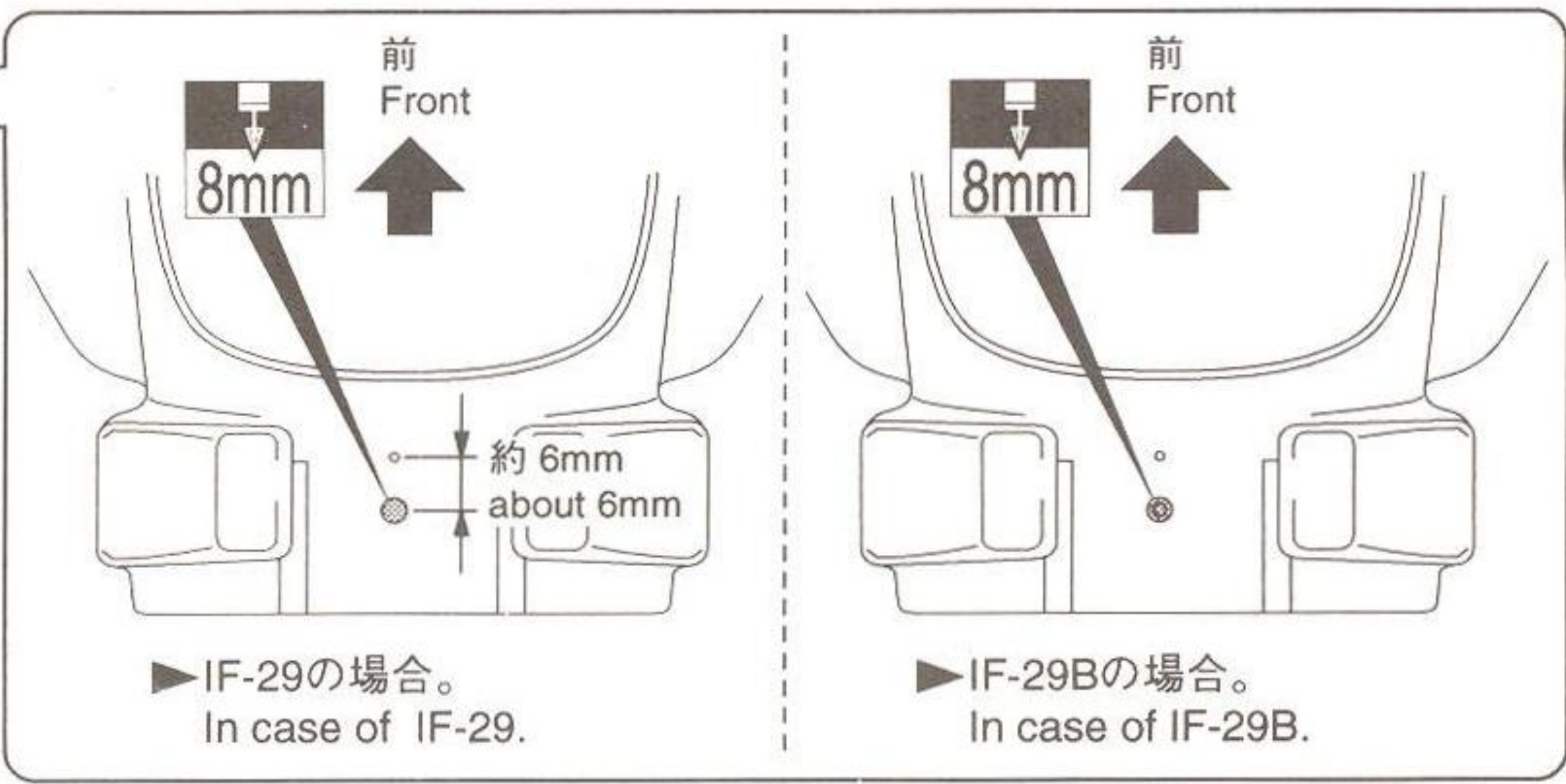
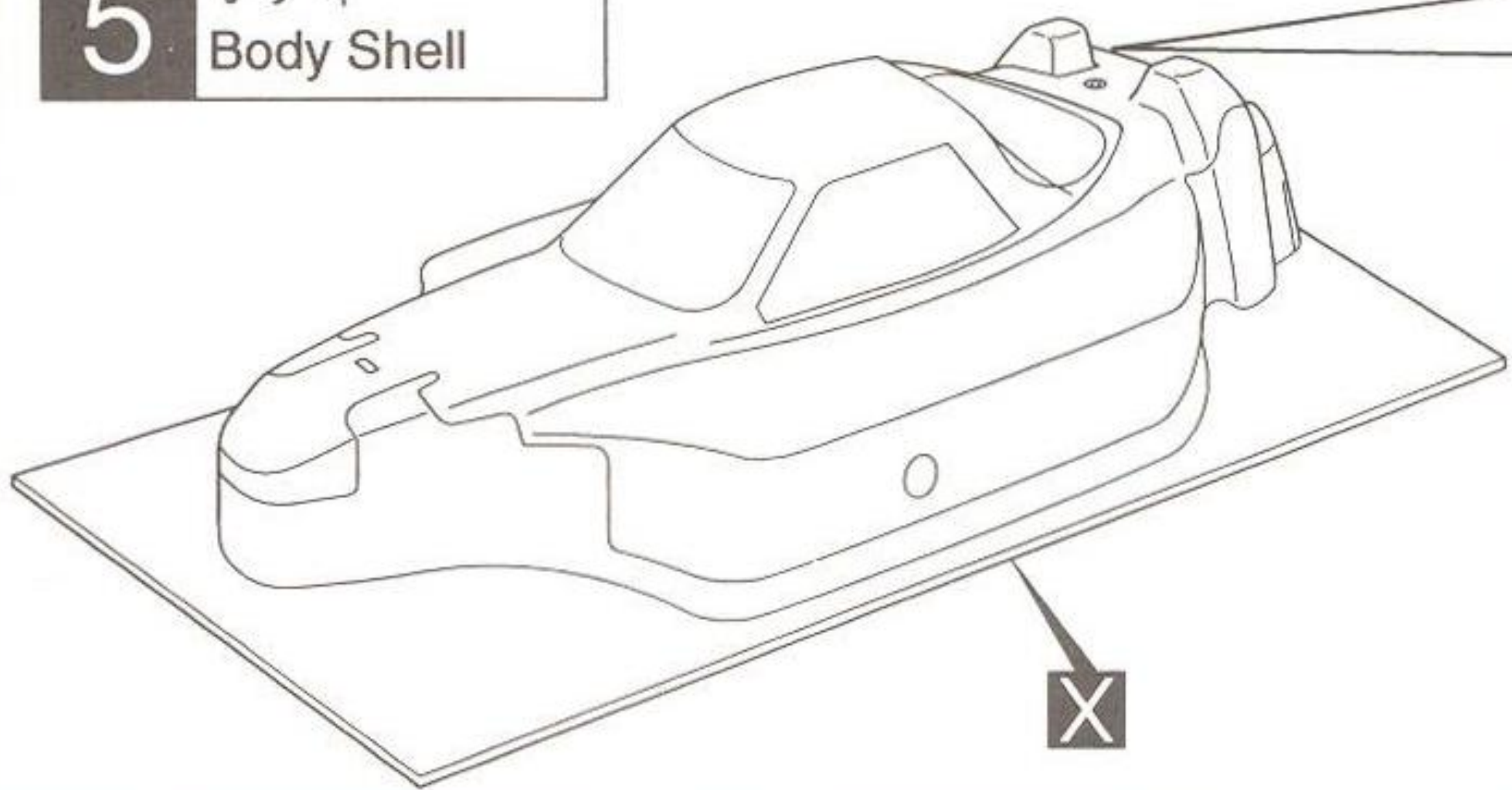
⑧ 6.8mm ボール  
Ball 1

⑫ 3mm ヘッドワッシャー  
Head Washer 1

⑪ 6.8mm ボールピボット  
Ball Pivot 3



## 5 ボディ Body Shell



## スペアパーツ SPARE PARTS

品番 No.	パーツ名 Part Names	内容 Q'ty	定価	送料
IFW-41	メインシャシー Main Chassis	① x 1	8500	TEL
IFW-42	ユニバーサルスイングシャフト Universal Swing Shaft	③ x 2	3000	130
IFW-43	トルクロッドセット Torque Rod Set	⑧⑨⑩⑫x1,⑪x3,⑦x4	1200	130
IFW-44	ワイドホイールストッパー Wide Wheel Stopper	④⑤⑥ x 2	600	130
IFW-45	ユニバーサルセンターシャフト(R) Universal Center Shaft (R)	② x 1	1800	130

## オプションパーツ OPTIONAL PARTS

品番 No.	パーツ名 Part Names	内容 Q'ty	定価	送料
IFW-34	スペシャルディスクプレート(3mm厚) Special Disk Plate (3mm)		1300	90
IFW-35	ベルガイドワッシャー(ショートタイプ) Belt Guide Washer (Short Type)		300	90
IFW-36	ディスクプレートボルト(ダブルディスク用) Disk Plate Bolt (Double Disk)		400	90
W-5648S-C	X-パターンハイトラクションタイヤ High-Traction Tire (X-Pattern)		2500	270
IF-41	エンジンマウントプレート Engine Mount Plate		800	130