

DURATRAX[®]

VENDETTA[™] ST



ASSEMBLY AND OPERATION MANUAL

www.duratrax.com

ITEMS INCLUDED

The following items are included in the box.

Chassis
Body
Decal Sheet (Not Shown)
Transmitter
Transmitter Antenna
Transmitter Flag (Not Shown)
Receiver Antenna Tube with Antenna Cap (Not Shown)
Shock Spring Clips (Not Shown)
"AA" Batteries (Qty 8)
Exploded View/Parts Listing (Not Shown)
Extra Servo Saver Adapters for Hitec, JR (Not Shown)



YOU WILL NEED



PHILLIPS HEAD SCREWDRIVER
DTXR0124



PLIERS
DTXR0300

THINGS TO KNOW

SAFETY PRECAUTIONS

When the safety precautions are followed, the Vendetta ST will provide years of enjoyment. Use care and good sense at all times when operating this radio controlled truggy. Failure to use this vehicle in a safe, sensible manner can result in injury or damage to property. You and you alone must insure that the instructions are carefully followed and all safety precautions are obeyed.

- **Do not** use lithium polymer batteries with the stock ESC unless a voltage cut-off unit is used.
- Do not operate the Vendetta ST near people. Spectators should be behind the driver or at a safe distance away from the vehicle.
- Water can cause the electronics to short out and can cause permanent damage.
- **Always** turn on the transmitter before turning on the receiver.
- Fully extend the transmitter antenna before operating your vehicle.
- Before turning on your radio system, check to make sure that no one else is running on the same frequency.

CHARGING PRECAUTIONS

- Never leave the charger unattended during charging.
- If the battery or the charger become hot at any time, disconnect the battery from the charger immediately! Failure to do so could cause permanent damage to the charger and battery and may cause bodily harm.
- Do not allow water or moisture in contact with the charger.
- Do not place the charger on or near a flammable object during use.
- Only charge 6-cell, 2/3A-size batteries.
- Keep out of the reach of children.
- Avoid running the truggy in cold weather. The plastic and metal parts can become brittle at low temperatures. In addition, grease and oil become thick, causing premature wear and poor performance.

SPECIFICATION AND DESCRIPTION CHANGES

All pictures, descriptions and specifications found in this instruction manual are subject to change without notice. DuraTrax maintains no responsibility for inadvertent errors in this manual. Visit www.duratrax.com for the latest updates and information for your model.

WARRANTY

- DuraTrax® guarantees this kit to be free from defects in both material and workmanship at the date of purchase. DuraTrax will warranty this kit for 90 days after the purchase date. DuraTrax will repair or replace, at no charge, the incorrectly made part.
- Make sure you save the receipt or invoice you were given when you bought your model! It is your proof of purchase and we must see it before we can honor the warranty. Further, DuraTrax reserves the right to change or modify this warranty without notice.
- In that DuraTrax has no control over the final user assembly or material used for final user assembly, no liability shall be assumed nor accepted for any damage resulting from the use by the user of the final user-assembled product. By the act of using the user-assembled product, the user accepts all resulting liability.

To return your Vendetta ST for repairs covered under warranty, you should send your truggy to:

Hobby Services
3002 N. Apollo Drive Suite 1
Champaign, Illinois 61822
Attn: Service Department
Phone: (217) 398-0007 9:00 am-5:00 pm
Central Time M-F
E-mail: hobbyservices@hobbico.com
www.hobbyservices.com

If the buyer is not prepared to accept the liability associated with the use of this product, the buyer is advised to return this kit immediately in new and unused condition to the place of purchase.

STRESS-TECH™ PARTS GUARANTEE

We have engineered the Vendetta ST to take the rough and tumble abuse that makes R/C fun. We are so confident of the quality and durability of the Stress-Tech plastic parts that we will replace any Stress-Tech plastic part you break during the first 12 months you own the truggy. Just send in the part to us and we will send you a **FREE** replacement. Please see the Vendetta ST parts list for the items covered under the Stress-Tech guarantee.

To receive your free replacement part please send the following to the Hobby Services address listed under the warranty on the left.

- ☐ 1. The broken part must be included.
- ☐ 2. The part number and description of the broken part.
- ☐ 3. Copy of your dated invoice or purchase receipt.
- ☐ 4. Your name, phone number and shipping address.

REPAIR SERVICE

Repair service is available anytime.

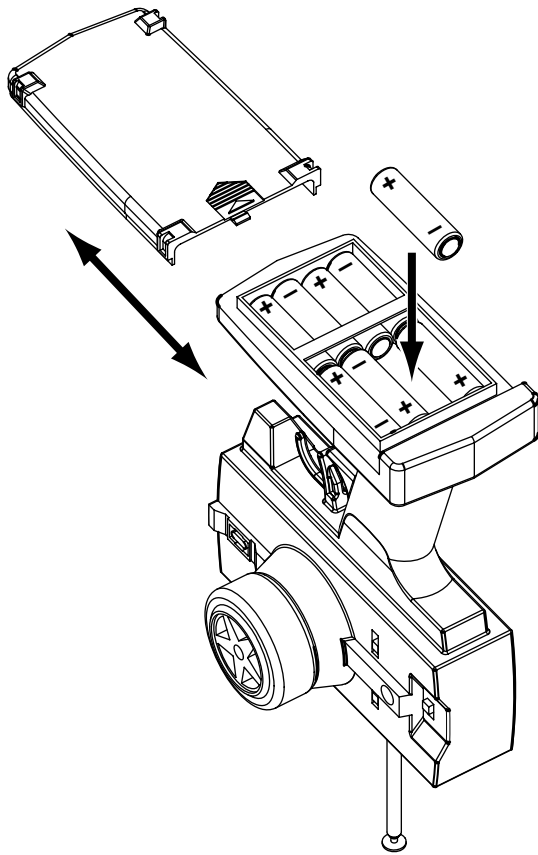
- After the 90 day warranty, you can still have your Vendetta ST repaired for a small charge by the experts at DuraTrax's authorized repair facility, Hobby Services.

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

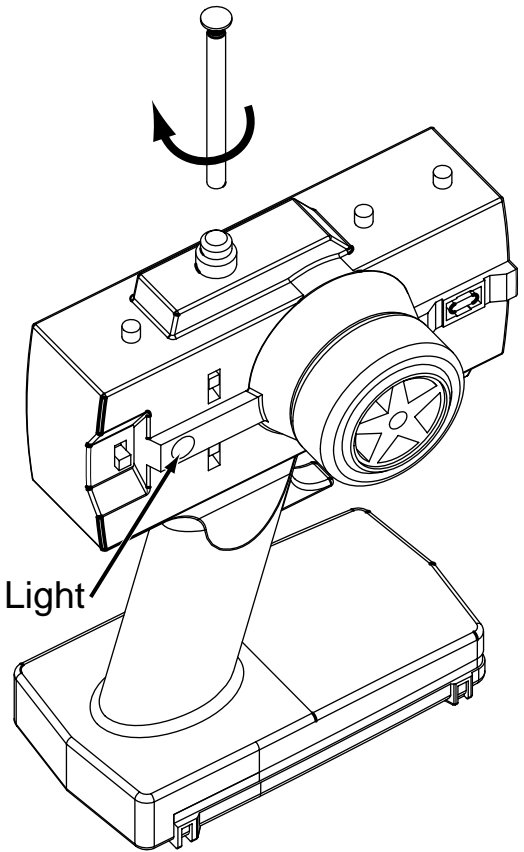
- ☐ 1. Under most circumstances return the **ENTIRE** vehicle. The exception would be sending in a Stress-Tech part. See the instructions under the Stress-Tech Guarantee.
- ☐ 2. Make sure the transmitter is turned off, and all of the batteries are removed.
- ☐ 3. Send written instructions which include: a list of all items returned, a **THOROUGH** explanation of the problem, the service needed and your phone number during the day. If you expect the repair to be covered under warranty, be sure to include a proof of date of purchase (your store receipt or purchase invoice).

FINISHING THE VENDETTA ST

TRANSMITTER PREPARATION



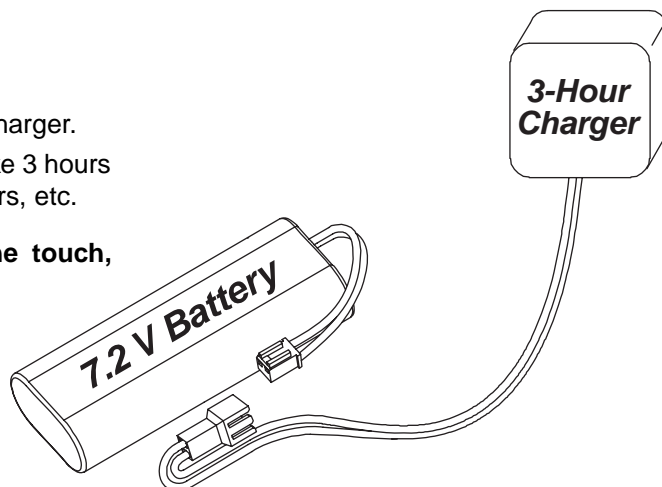
Battery Light



- Install eight “AA” batteries into transmitter, making sure the polarity is correct.
- Insert the antenna into the top of the transmitter and tighten.
- Turn the transmitter on and check the battery light. If the red light glows steady, the batteries have enough voltage. If the red light blinks, the batteries are low and should be replaced.

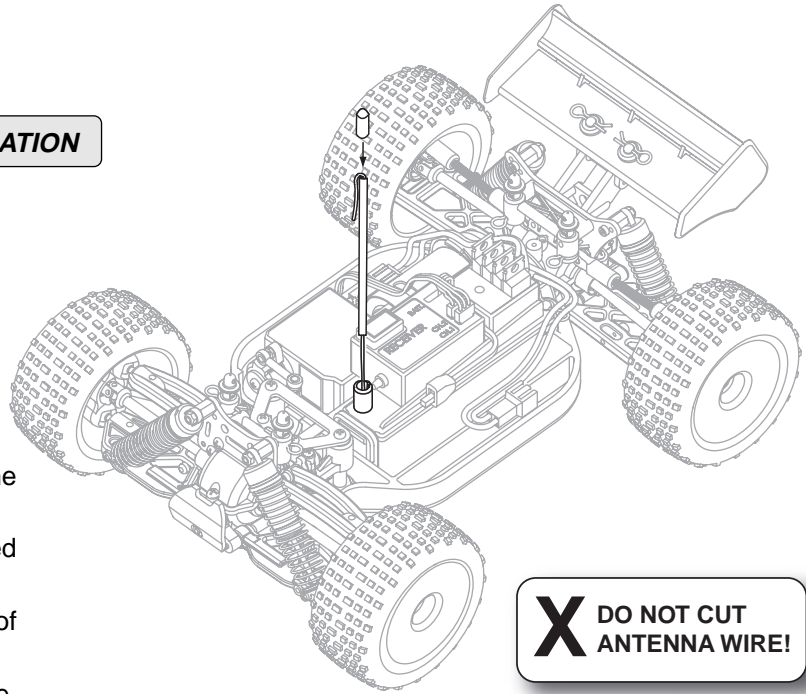
CHARGE THE BATTERY

- Plug in the included wall charger.
- Attach the included 6-cell (7.2V) battery to the charger.
- When the battery is fully discharged, it should take 3 hours to fully charge. A half-charged battery, 1-1/2 hours, etc.
- **CAUTION:** If the battery becomes hot to the touch, disconnect it from the charger.



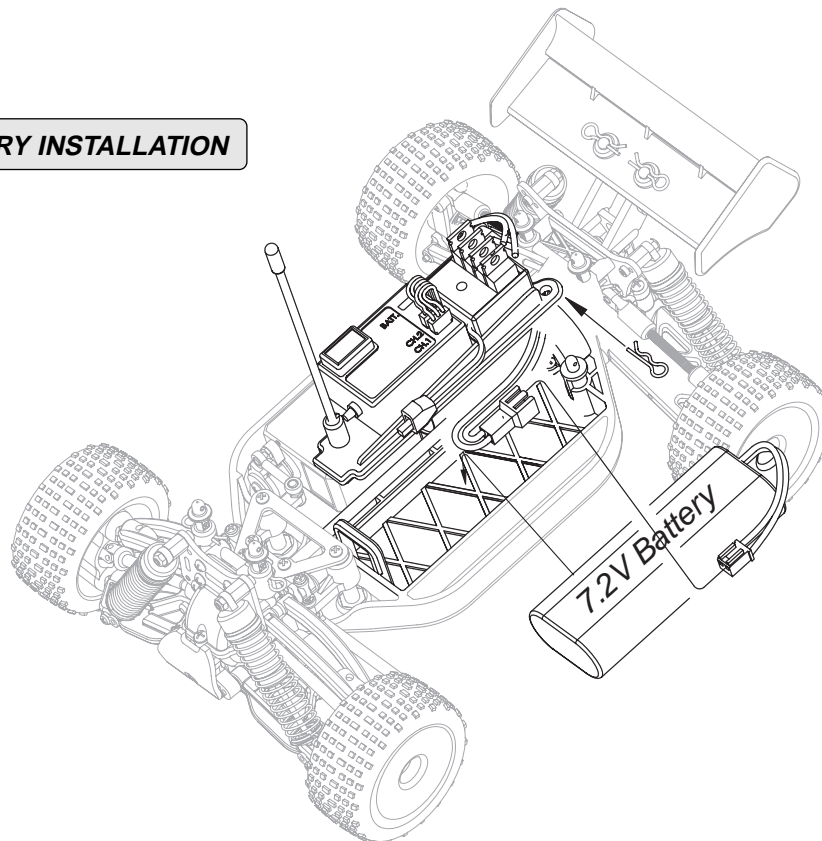
RECEIVER ANTENNA INSTALLATION

- Route the receiver antenna wire through the receiver antenna tube.
- Insert the antenna tube into the molded antenna mount on the battery strap.
- Install the antenna tube cap onto the top of the antenna tube.
- DO NOT cut or coil the receiver antenna wire.

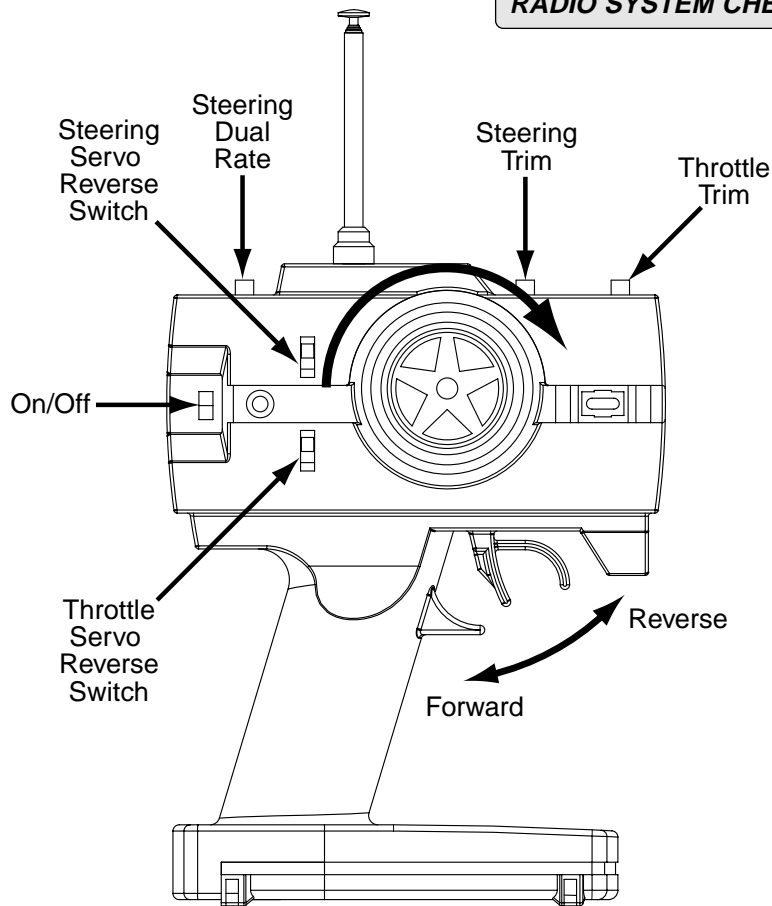


6-CELL BATTERY INSTALLATION

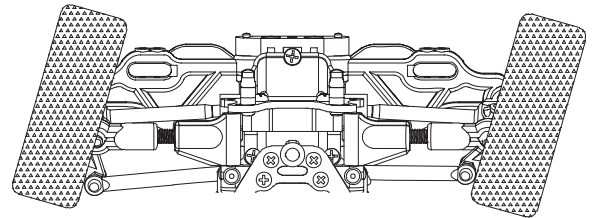
- Remove the body clip from the battery strap post.
- Remove the battery strap.
- Install the included 7.2V battery into the chassis.
- Reinstall the battery strap and secure it in place with the body clip.
- Check that the ESC is "OFF," and then plug the battery into the ESC.



RADIO SYSTEM CHECK



**! CHECK THE RADIO SYSTEM
FOR PROPER FUNCTION
BEFORE EACH RUN**



WHEELS TURN RIGHT

- Turn the transmitter on. Then turn the receiver on.
- Turn the transmitter wheel to the right—the front wheels should turn to the right. If not, move the steering servo reverse switch.
- When running, adjust the steering trim so the truggy tracks straight.
- Gently pull back on the throttle trigger. The Vendetta ST should slowly move forward. If the truggy goes in reverse, move the throttle reversing switch on the transmitter. The throttle trim knob may also need to be adjusted to find neutral.

ESC SETUP

- The Vendetta ST ESC is an auto-set ESC.
- You must lift the chassis off the ground during the ESC setup.
- Center the throttle trim knob on the transmitter.
- Connect the battery pack to the ESC, turn on the Tx, then the ESC.
- The LED will flash, then pull the trigger to full throttle for 2 seconds, then go to full reverse for 2 seconds.
- The ESC is now set up.
- You must set the ESC every time you change the battery.



BODY INSTALLATION

- Decal the body to your liking. Use the photos on the box as a reference.
- Install the body onto the chassis using two body clips.



MAINTENANCE TIPS

BEFORE EACH RUN

- **IMPORTANT:** Check to make sure that all screws are tight. Always use threadlock (DTXR2010) on screws going into metal.
- Before running always check the condition of your radio system batteries and replace/recharge if necessary.
- Check to make sure that all of the moving parts of the Vendetta ST move freely and do not bind.
- Before running, turn on the radio and make sure the servos move easily and in the proper direction.
- Check for broken or damaged parts. Replace any broken or damaged parts before running the Vendetta ST. Running of the Vendetta ST with broken or damaged parts could result in damage to other parts.



- Check to make sure that all wires are properly connected.
- Check that the ESC and receiver are properly secured to the chassis.

AFTER EACH RUN

- Clean any large globs of dirt or debris from the chassis and moving parts.
- Check for any broken or damaged parts. This way parts may be replaced before the next run.
- Disconnect and remove the battery from the chassis.

AFTER EVERY 10 RUNS

- Check to make sure that the bearings are free of dirt and debris, and roll smoothly.
- Check the shocks for oil leakage. Inspect the shaft and O-rings for wear and damage. Replace if necessary. (A shock shaft with scratches you can feel with a fingernail should be replaced.)
- Check the tires to make sure they are still properly glued to the wheels.

TUNING GUIDE

When tuning the Vendetta ST make sure that you have equal lengths from one side to the other on the shocks and upper rods. Also, make sure to have the shock pre-load adjusters at the same setting from left to right. They do not have to be the same front to rear.

RIDE HEIGHT ADJUSTMENT

The ride height of the Vendetta ST is easily adjusted by using the included pre-load spacers. To increase the ride height of the Vendetta ST, install a pre-load spacer onto each of the shock bodies between the spring and the shock cap. The more pre-load clips you install, the more ride height you will achieve. Make sure you install the same amount of pre-load clips from side to side. To lower the ride height of the Vendetta ST, remove the desired amount of pre-load spacers from the shocks. **TIP:** Rough, rocky surfaces require higher ride height; flat, smooth surfaces allow a lower ride height.

FRONT SHOCK ADJUSTMENT

Moving the tops of the shocks out will increase steering, resulting in quicker reaction. Moving the tops of the shocks in will result in slower steering reaction, but will be smoother over bumps. Mounting the bottoms of the shocks in the inside hole will give more slow-speed steering but will take away some high-speed steering.

REAR SHOCK ADJUSTMENT

Moving the tops of the shocks in will result in more traction in the corners and smoother handling over bumps. Moving the tops of the shocks out will give the truggy more steering and better ability to handle the large jumps.

SHOCK SPRINGS

DuraTrax offers two different optional shock springs: Heavy (green) and Extra Firm (blue), the Vendetta ST comes stock with Medium springs (yellow). For rutted tracks with small jumps, a soft spring should be used. For tracks with large jumps, a heavy spring should be used to help prevent chassis slap.

SHOCK OIL

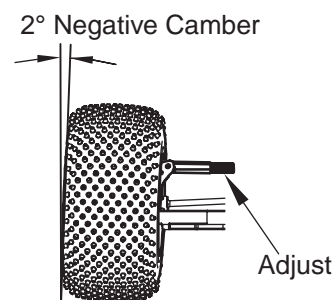
The Vendetta ST comes stock with 25 weight oil in the shocks. The handling of the truggy can be tuned by changing the shock oil to either heavier (bigger number) or lighter (lower number.) By putting heavier oil in the shocks, the truggy will have less chassis roll and become less responsive. Putting lighter oil in the shocks will cause the truggy to be more responsive and have more chassis roll. For smooth, flat surfaces, a thicker oil would be best. For surfaces that are rough or have jumps, a lighter oil would be best.

PINIONS

The Vendetta ST comes stock with the 13 tooth pinion. To obtain higher top speeds you can install a larger pinion gear onto the motor. This will, however, decrease your acceleration and run time. **TIP:** Smaller pinion equals more torque, less top speed. Larger pinion equals more top speed, less torque.

CAMBER

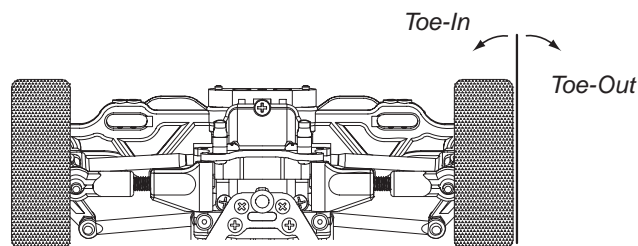
Camber refers to the angle at which the tire and wheel ride in relation to the ground when viewed from the front or rear. Negative camber is when the wheels lean inward and positive camber is when the wheels lean outward. Usually adding a small amount of negative camber (0° to -2°) will increase traction. However, adding too much camber will decrease traction. The objective is to keep as much of the tire as possible in contact with the running surface. Never put in positive camber. Make sure that both sides are equal.



Use the DuraTrax Pit Tech™ Camber Gauge (DTXR1145) to accurately set up your Vendetta ST.



TOE-IN AND TOE-OUT



Toe-in is when the fronts of the tires point towards each other. Toe-out is when the fronts of the tires point away from each other. Toe-in increases stability during acceleration and high speed. However, toe-in also decreases steering when entering a corner. Toe-out will increase steering into corners, but will decrease the overall stability during acceleration. The front typically is set-up with 0° to -2° of toe-in. For adjustable toe-in, install the optional steering turnbuckle set (DTXC9592).

CASTER

The Vendetta ST has adjustable caster. Caster refers to the angle of suspension vertically. By placing the adjuster clip behind the front upper arm, you decrease caster angle. This will give more initial turn-in but decrease on power steering and straight line stability.

Placing the adjuster clip in front of the front upper arm increases the caster. This will increase on power steering and straight line stability, but reduce initial turn-in.

MAINTENANCE GUIDE

The following section is provided to help you with maintenance and repairs to your Vendetta ST. Pay extra attention to the notes and tips for proper assembly.

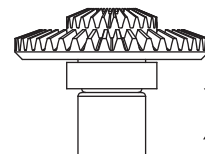
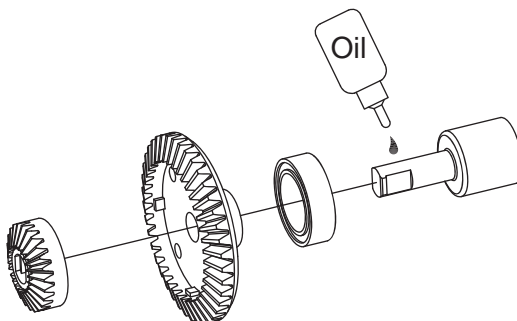
1

Gear Differential
For Front and Rear



...2

8x12mm Ball Bearing



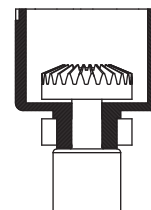
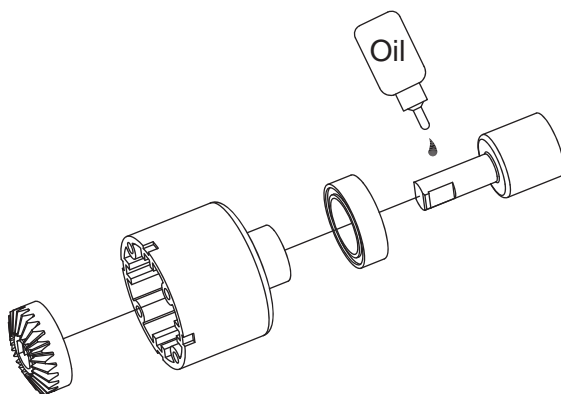
x2

2



...2

8x12mm Ball Bearing



x2

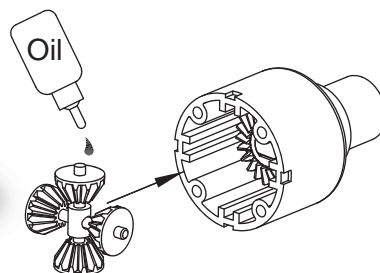
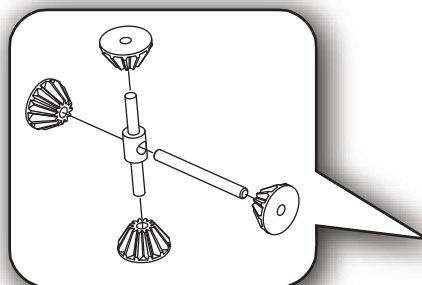
3

...2

Differential Cross Pin A

...2

Differential Cross Pin B

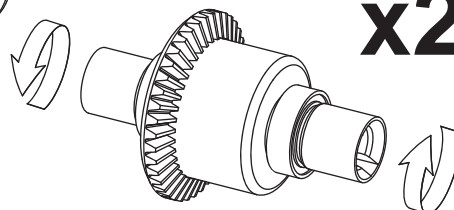
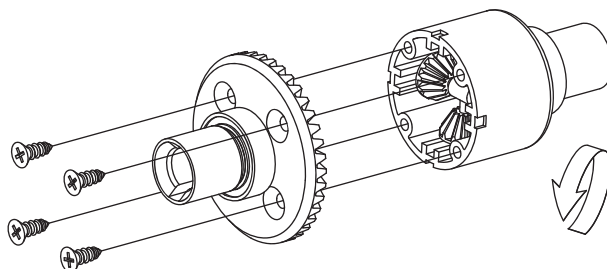


x2

4

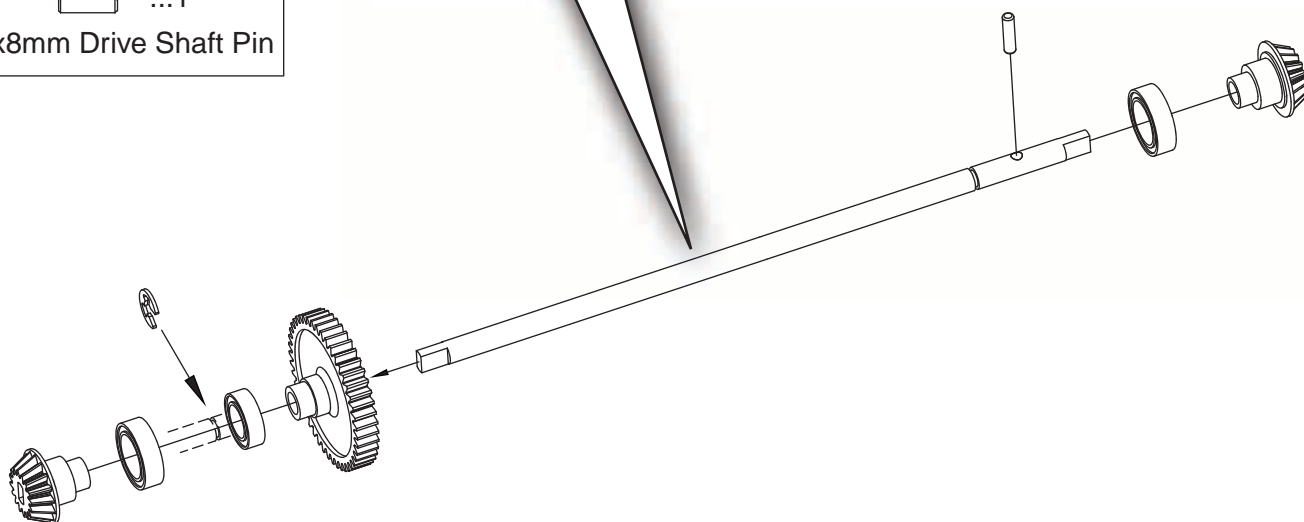
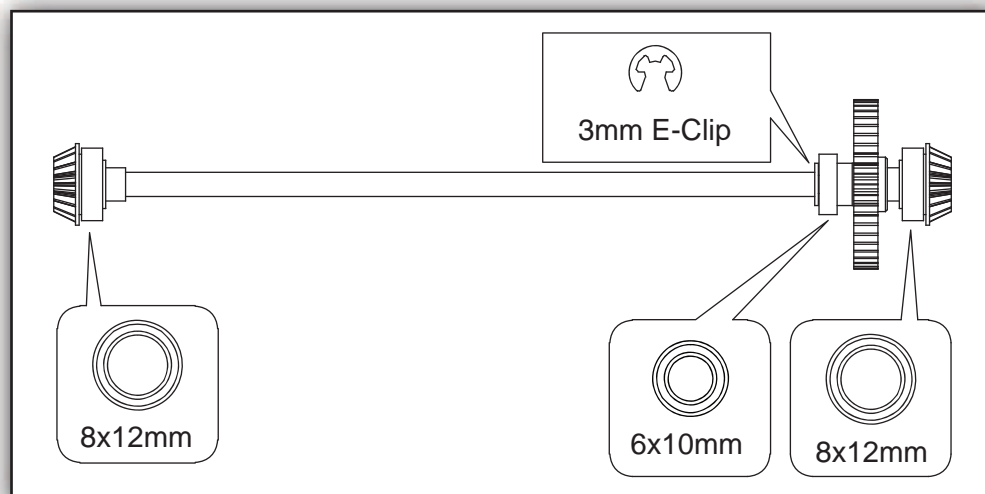
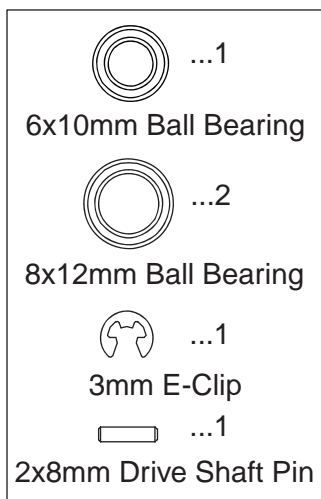
...8

2x6mm F/H S/T Screw

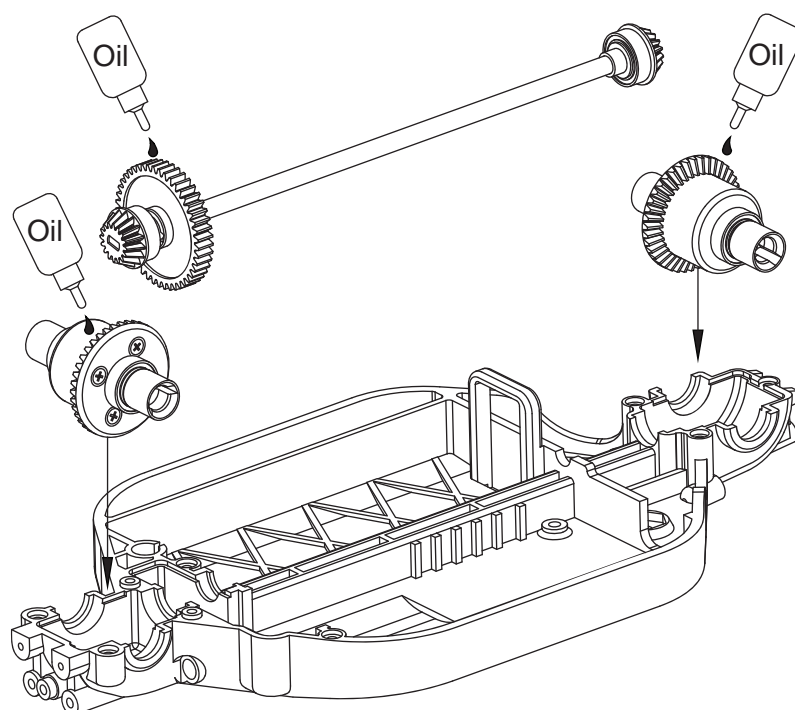


x2

5



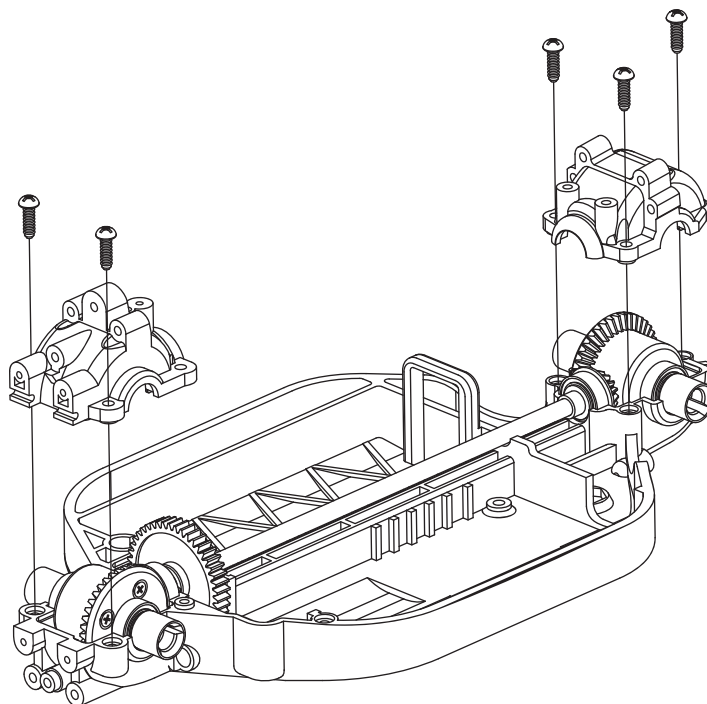
6



7



...5
2.6x8mm S/T Screw



8



...2
2.6x6mm Screw

When using optional pinion gear set,
adjust motor position.

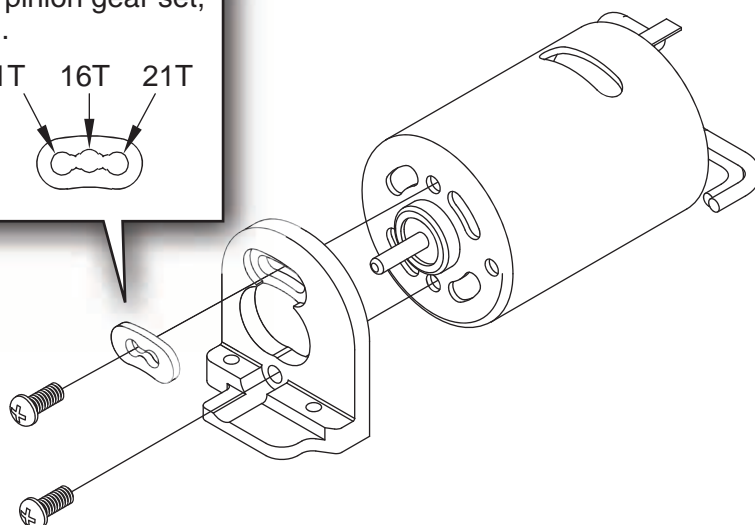
13T

19T

11T

16T

21T



9

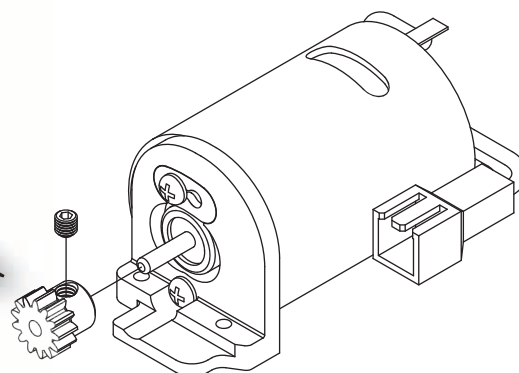
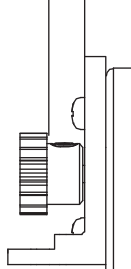


...1
3x3mm Set Screw



...1
13T Pinion

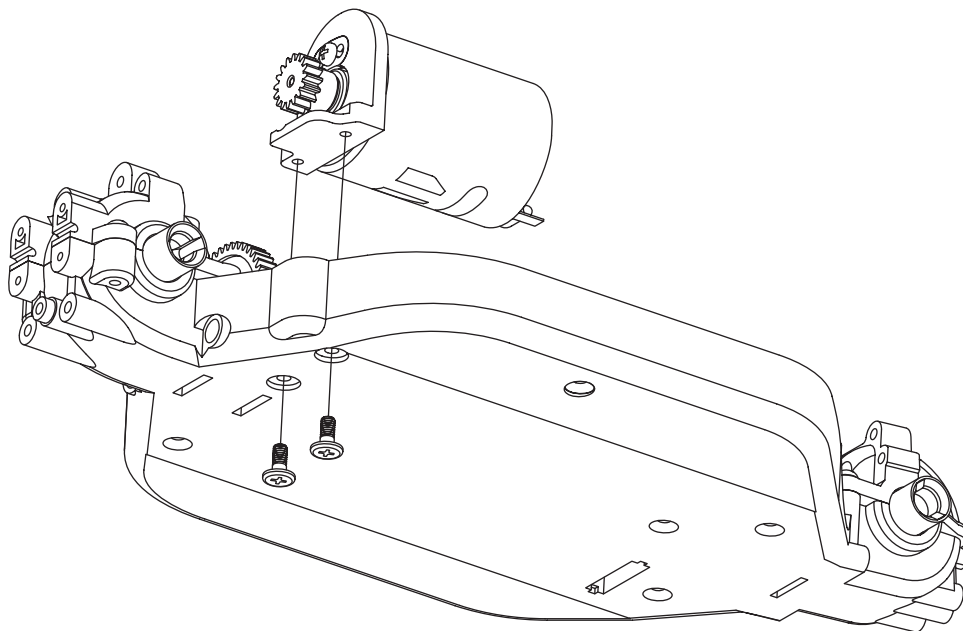
4.7mm



10



...2
2.6x6mm Motor
Mount Screw



11



2.6x12mm



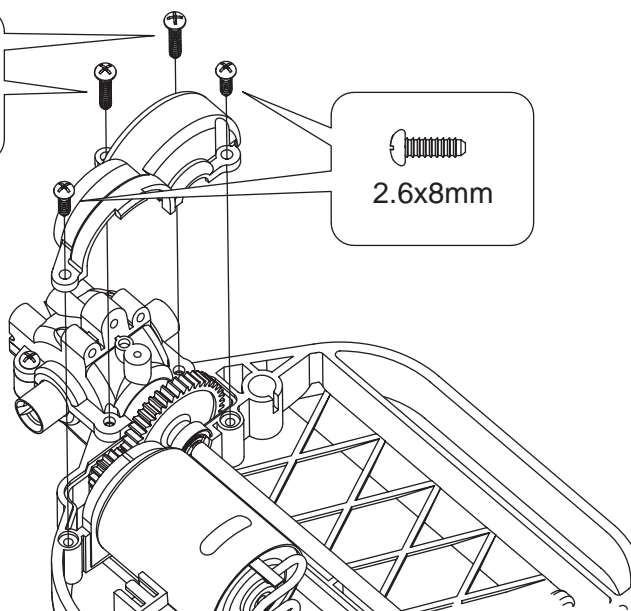
2.6x8mm



...2
2.6x8mm S/T Screw



...2
2.6x12mm S/T Screw



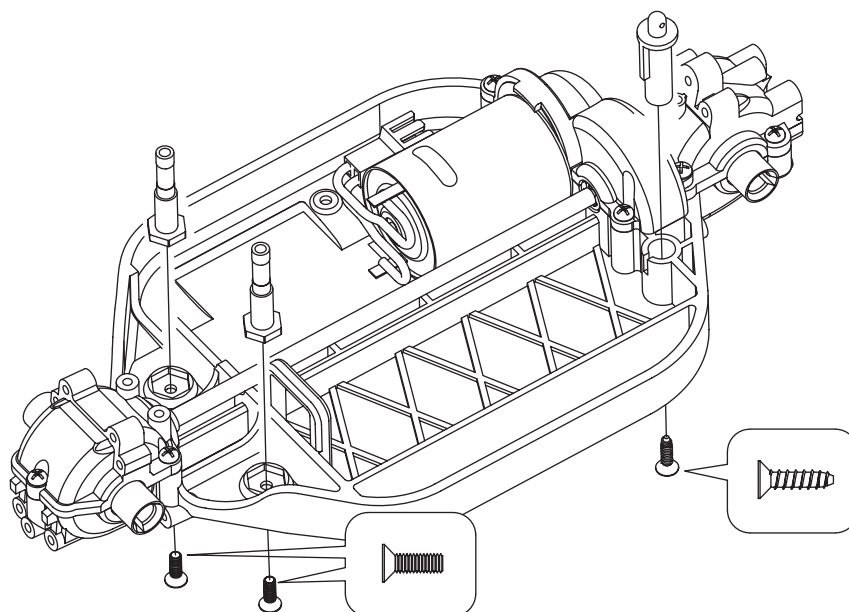
12



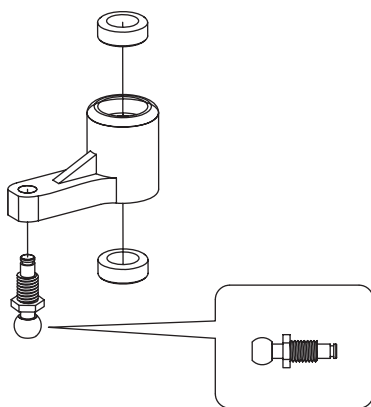
...1
2.6x10mm F/H S/T Screw



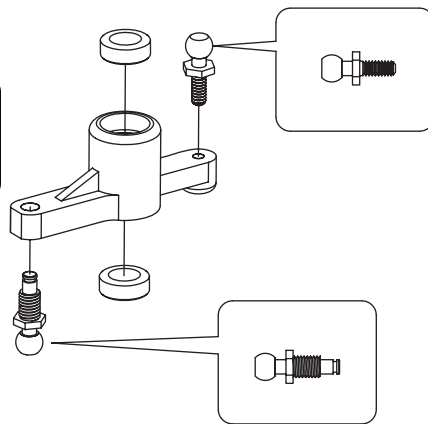
...2
2.6x8mm F/H Screw



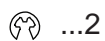
13



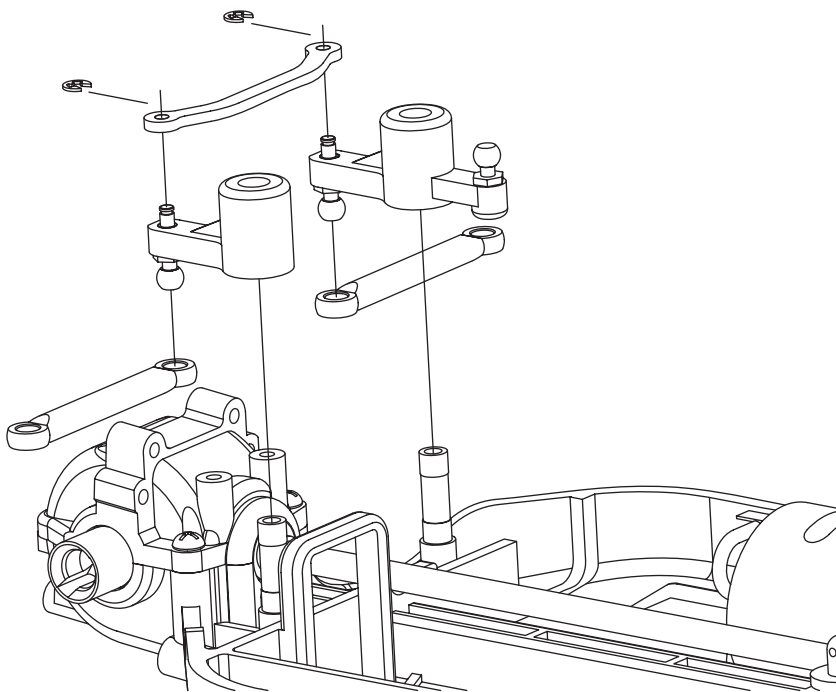
14



15



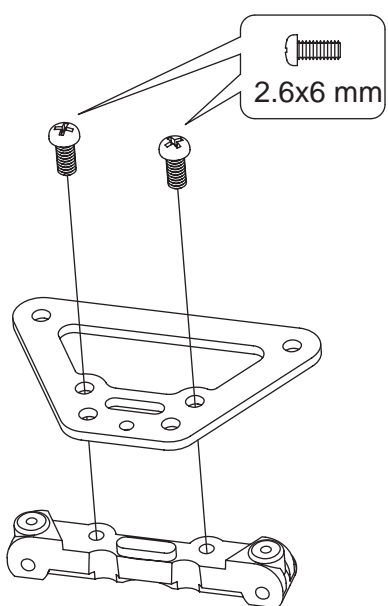
...2
1.5 mm E-Clip



16



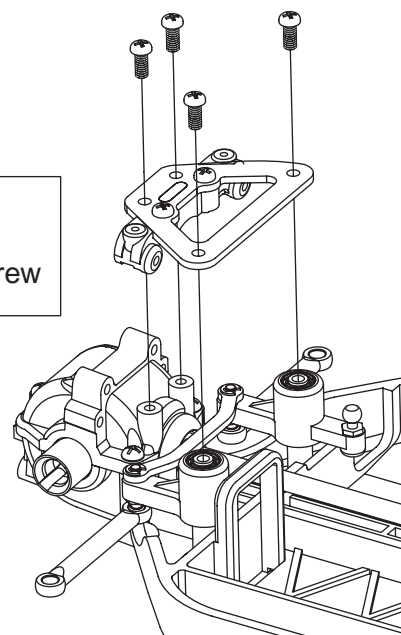
...2
2.6x6 mm Screw



17



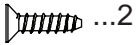
...4
2.6x6 mm Screw



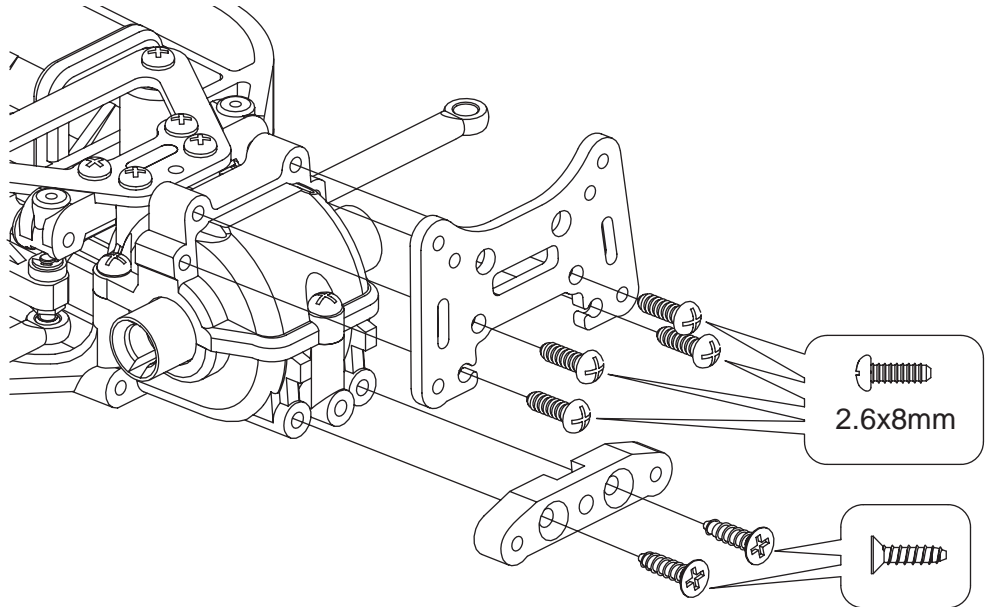
18



2.6x8mm S/T Screw



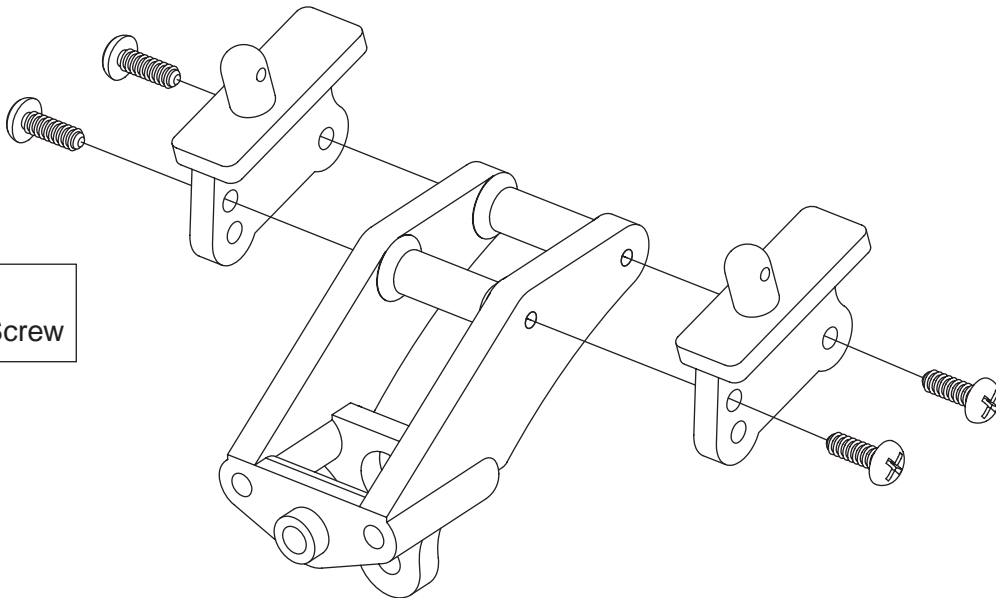
2.6x10mm F/H S/T Screw



19



2x6 mm S/T Screw



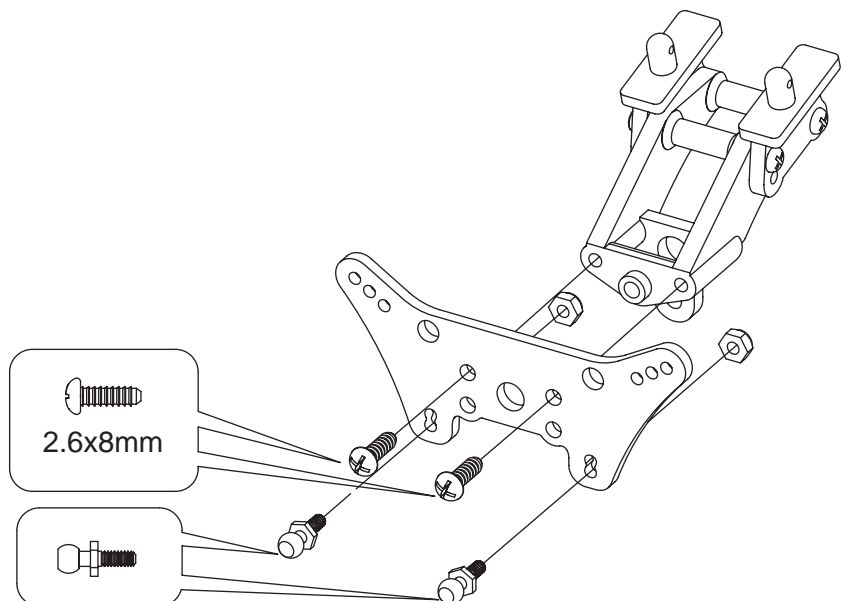
20



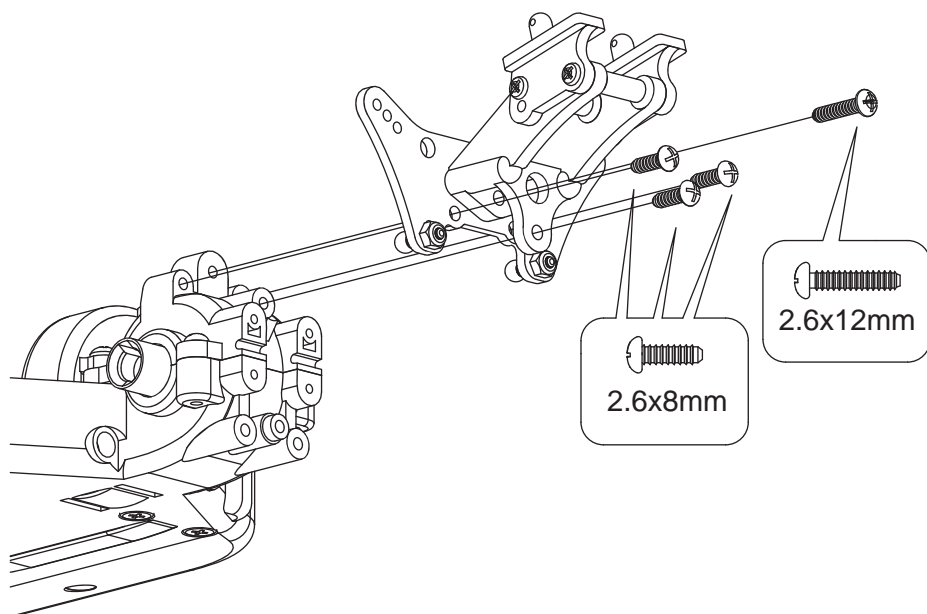
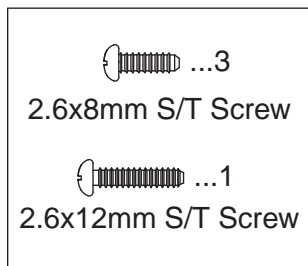
Flange Locknut



2.6x8mm S/T Screw



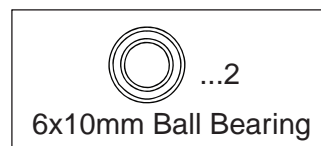
21



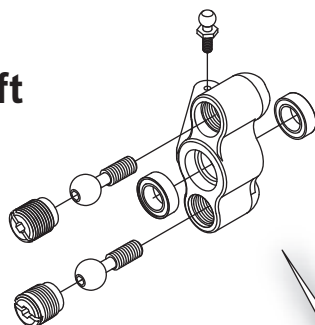
22



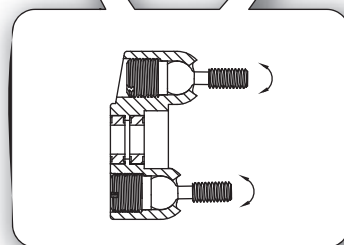
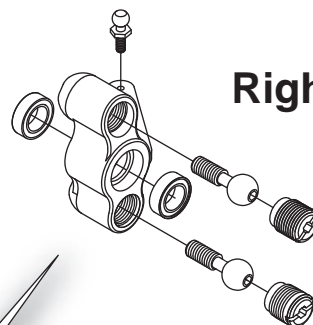
23



Left

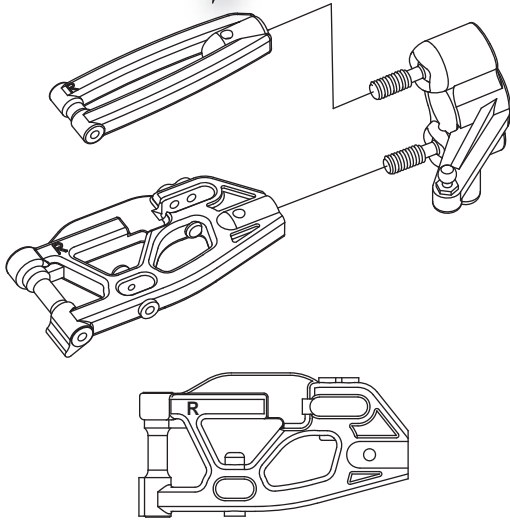
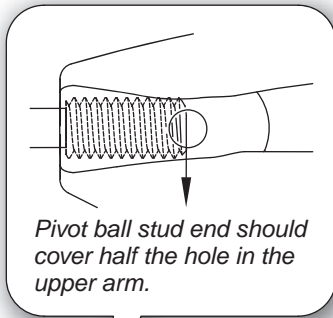


Right



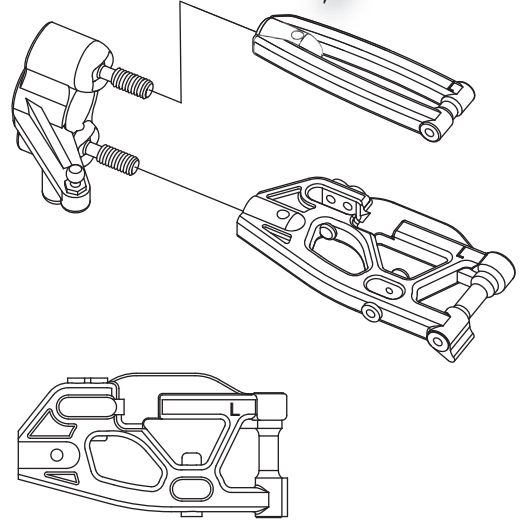
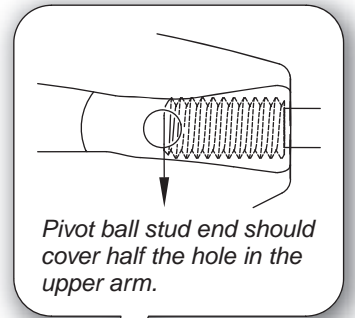
24

Right



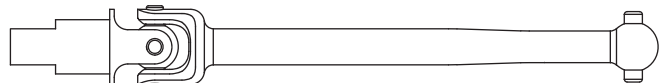
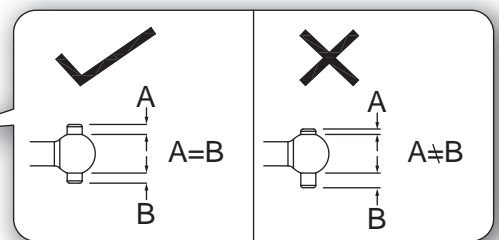
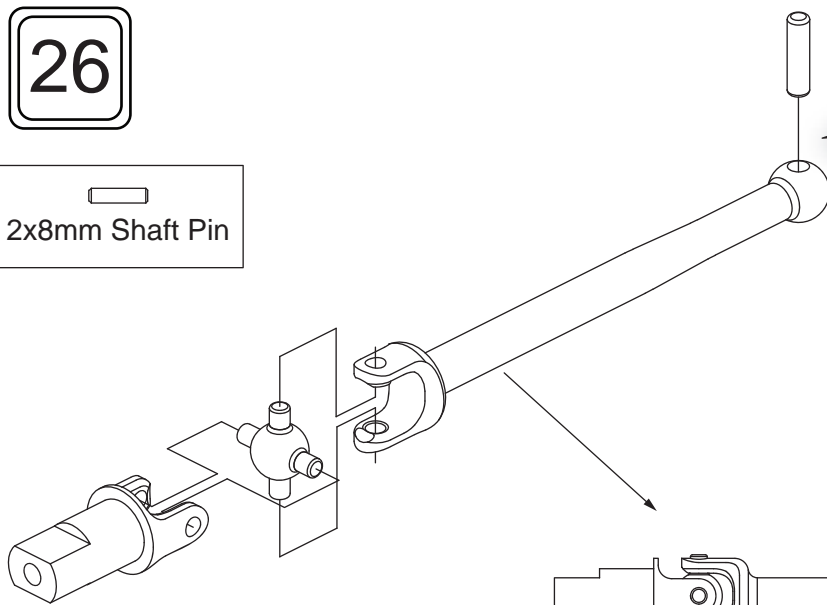
25

Left



26

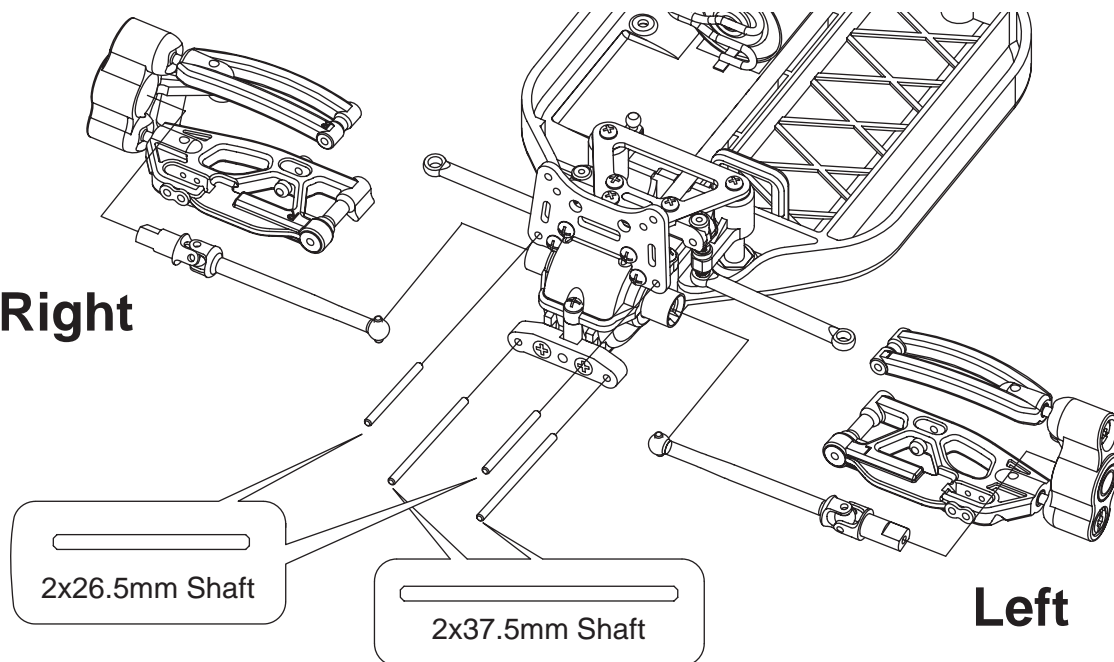
2x8mm Shaft Pin



x4

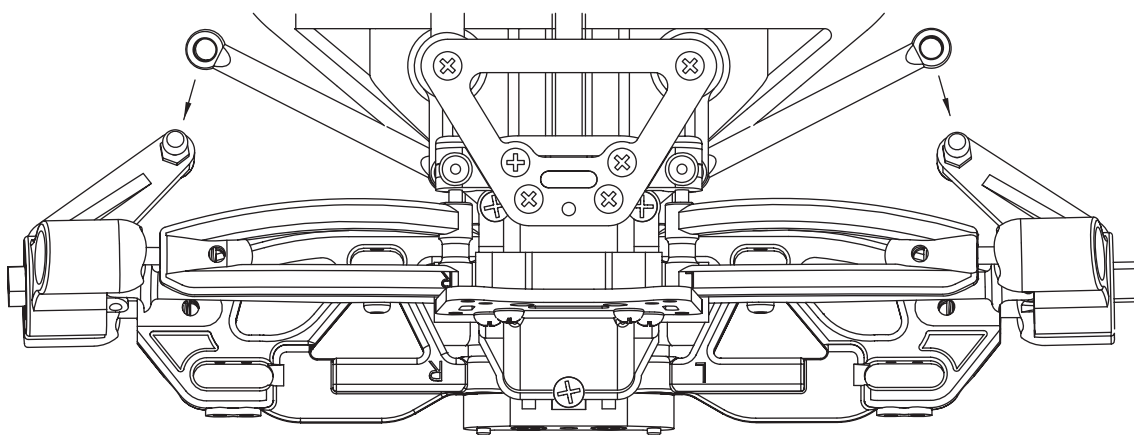
27

Right

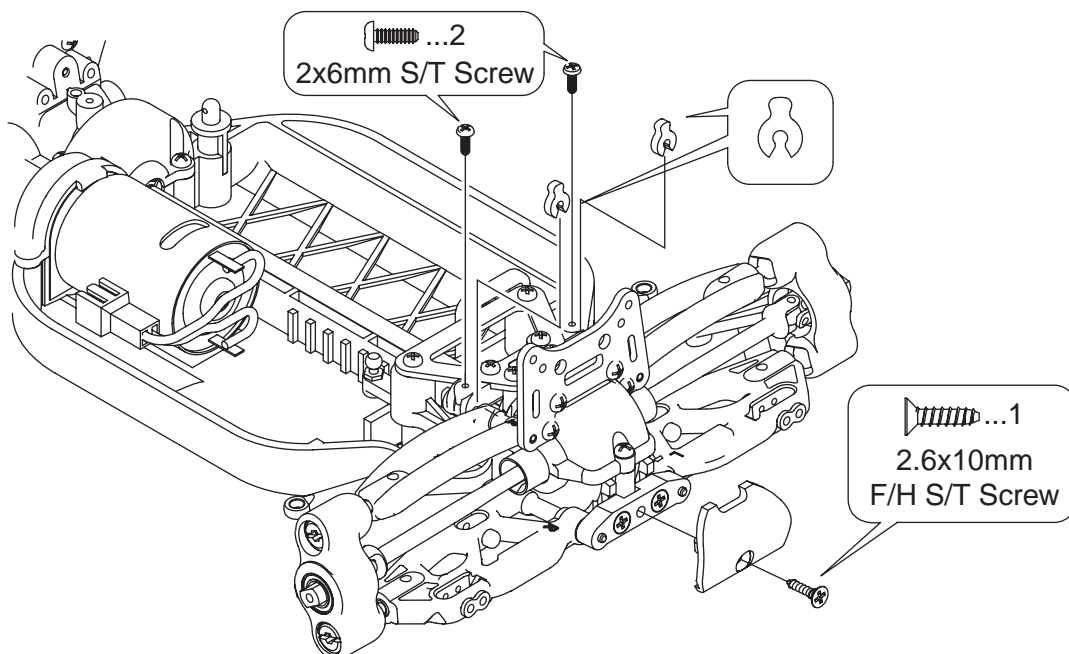


Left

28

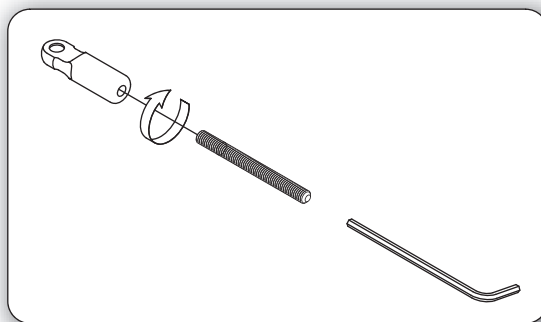


29



30

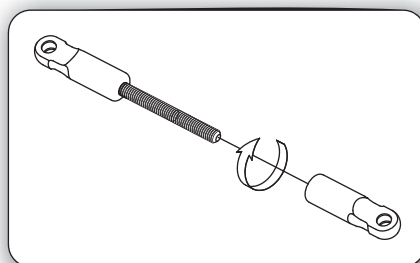
3x30mm Threaded
Shaft



25.5-26mm

x2

31



21-21.5mm

x2

32



2x12mm Screw



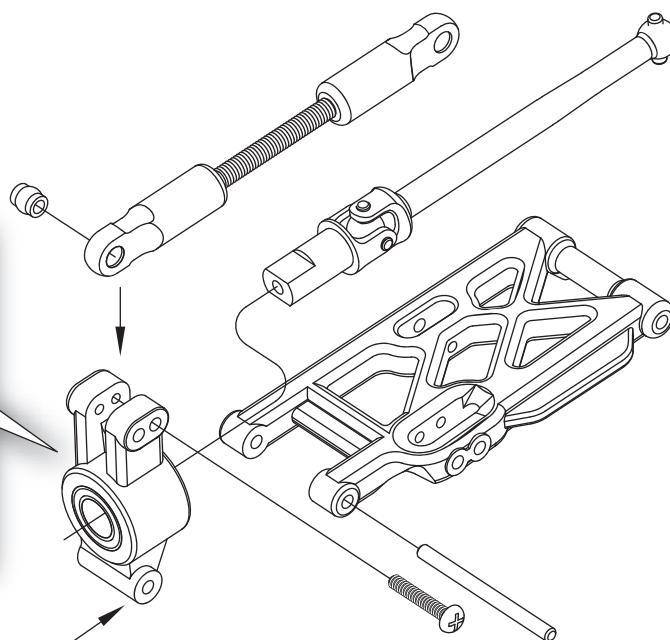
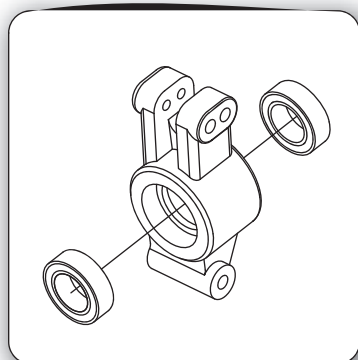
6x10mm Ball Bearing



2x26.5mm Shaft



3.8mm Pivot Ball



Left

1.5mm 1.5mm

33

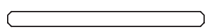


2x12mm Screw



...2

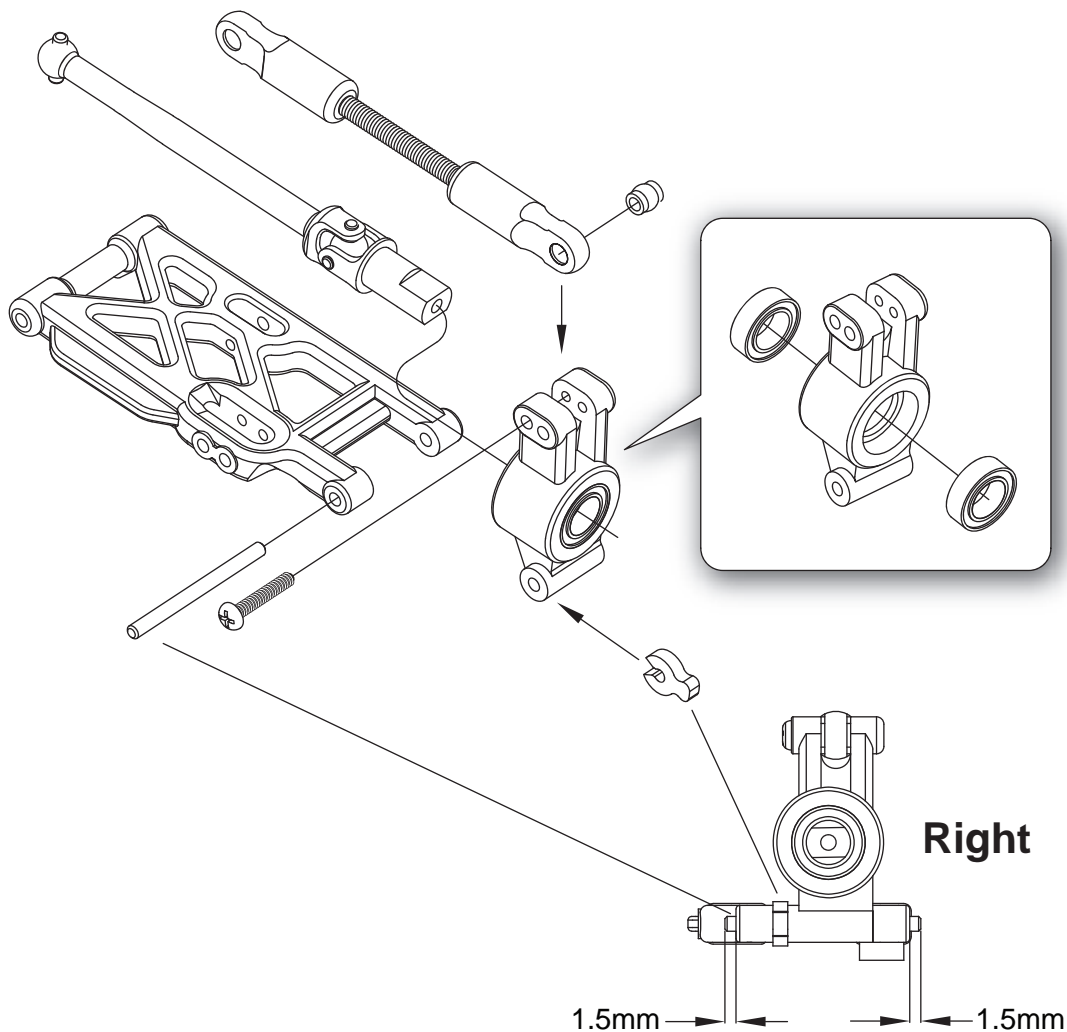
6x10mm Ball Bearing



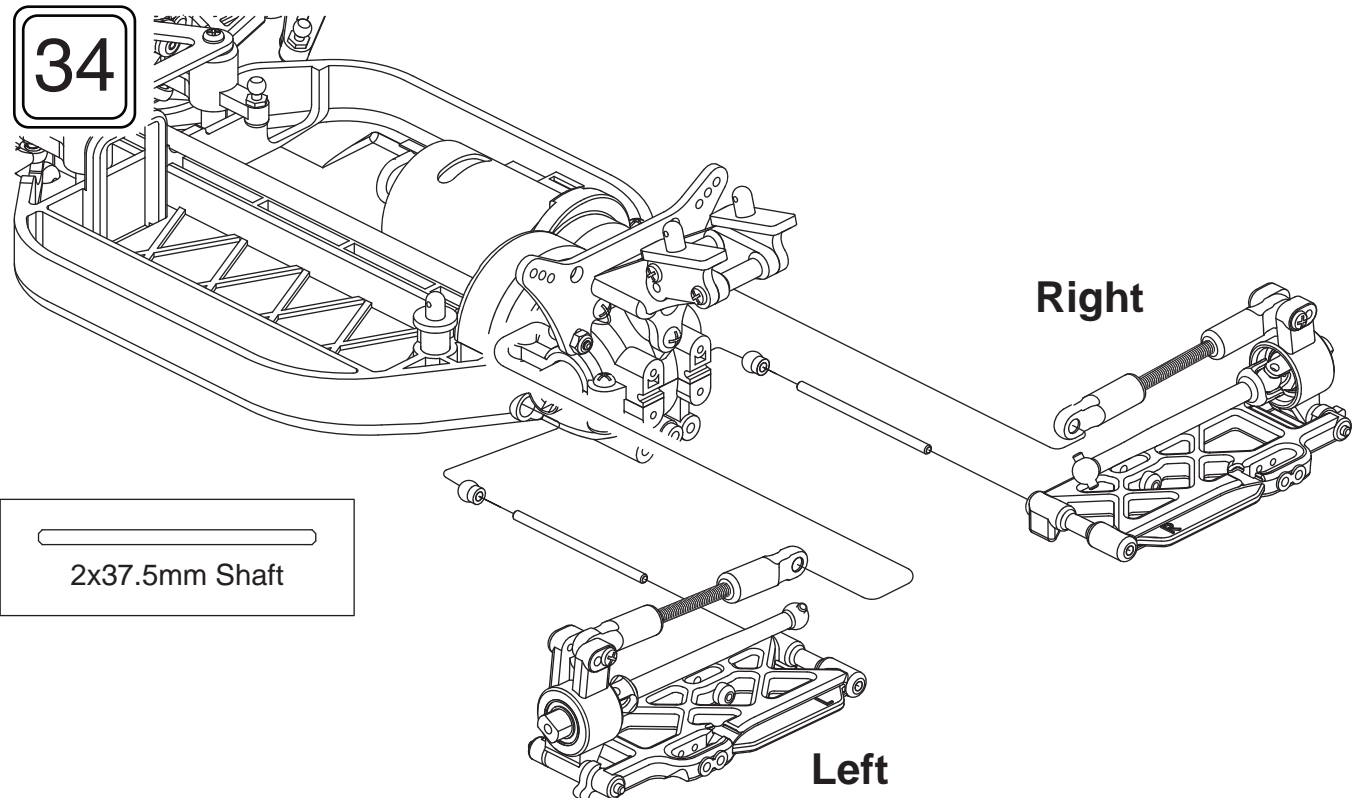
2x26.5mm Shaft



Rear Hinge Pin
Pivot Ball

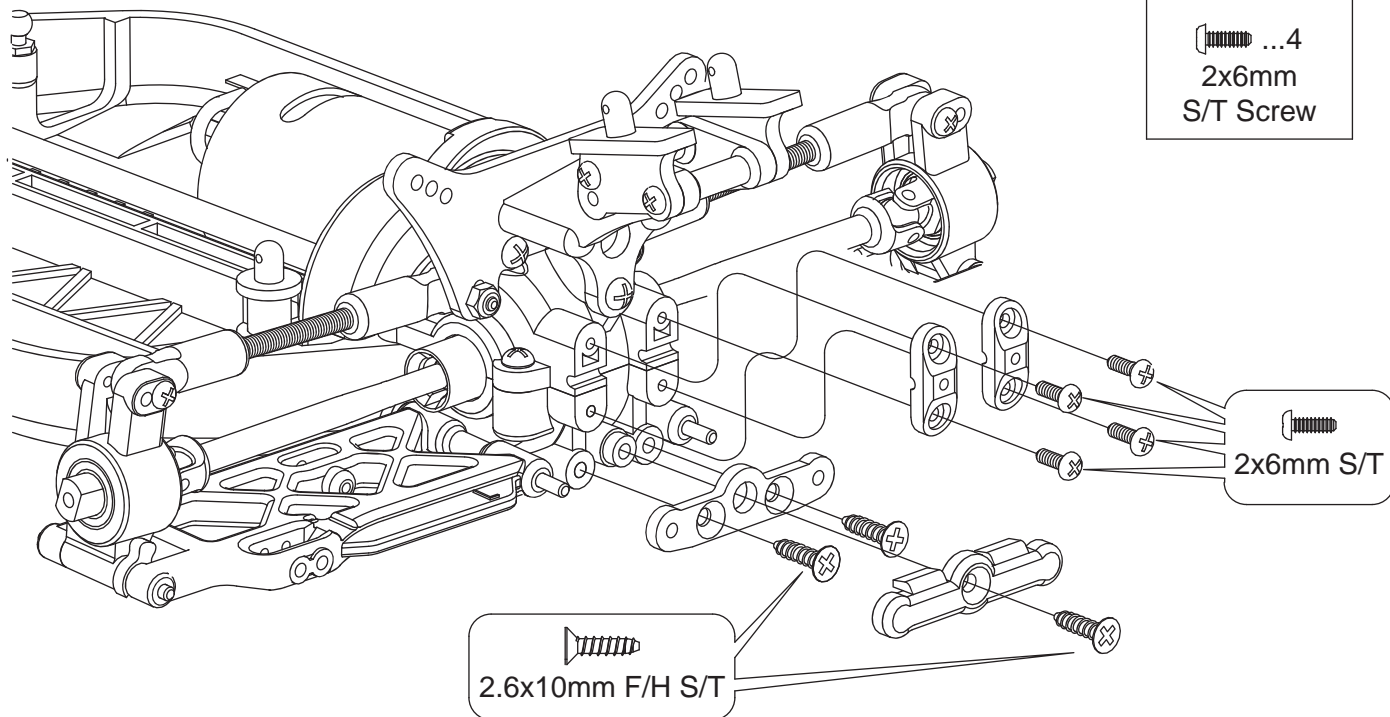


34



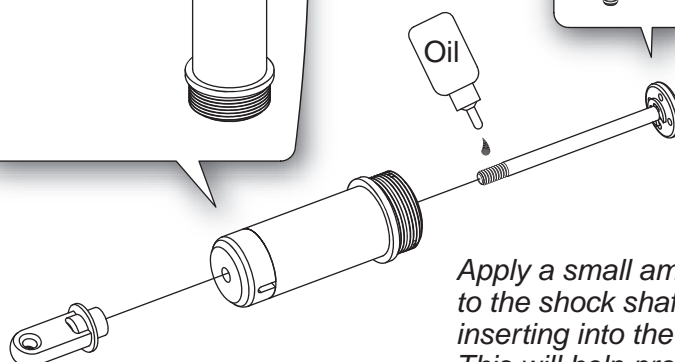
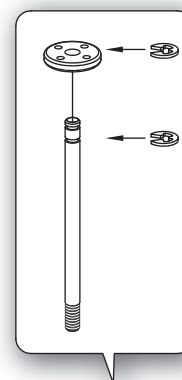
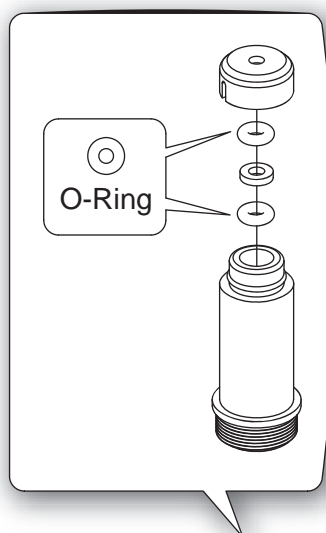
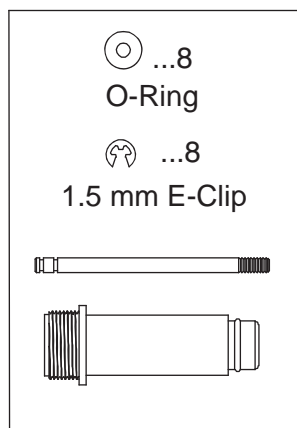
2x37.5mm Shaft

35



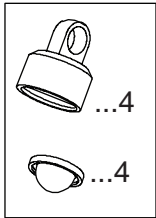
36

Front & Rear Shocks x4

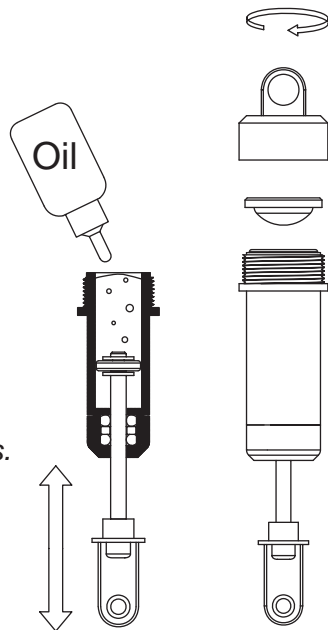


Apply a small amount of oil to the shock shaft before inserting into the shock assembly. This will help prevent the shock shaft from tearing the O-rings.

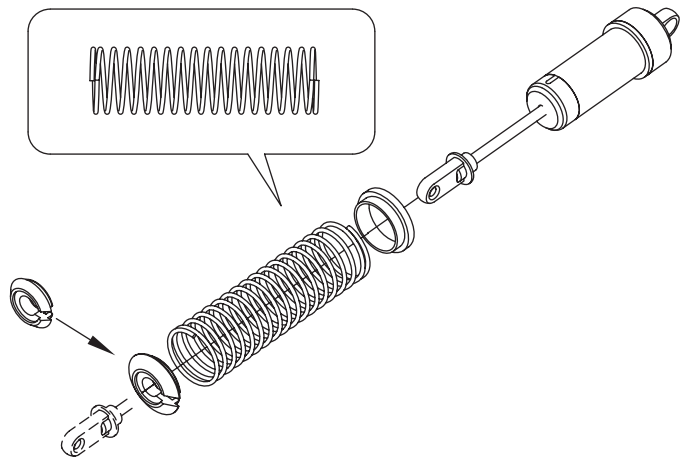
37



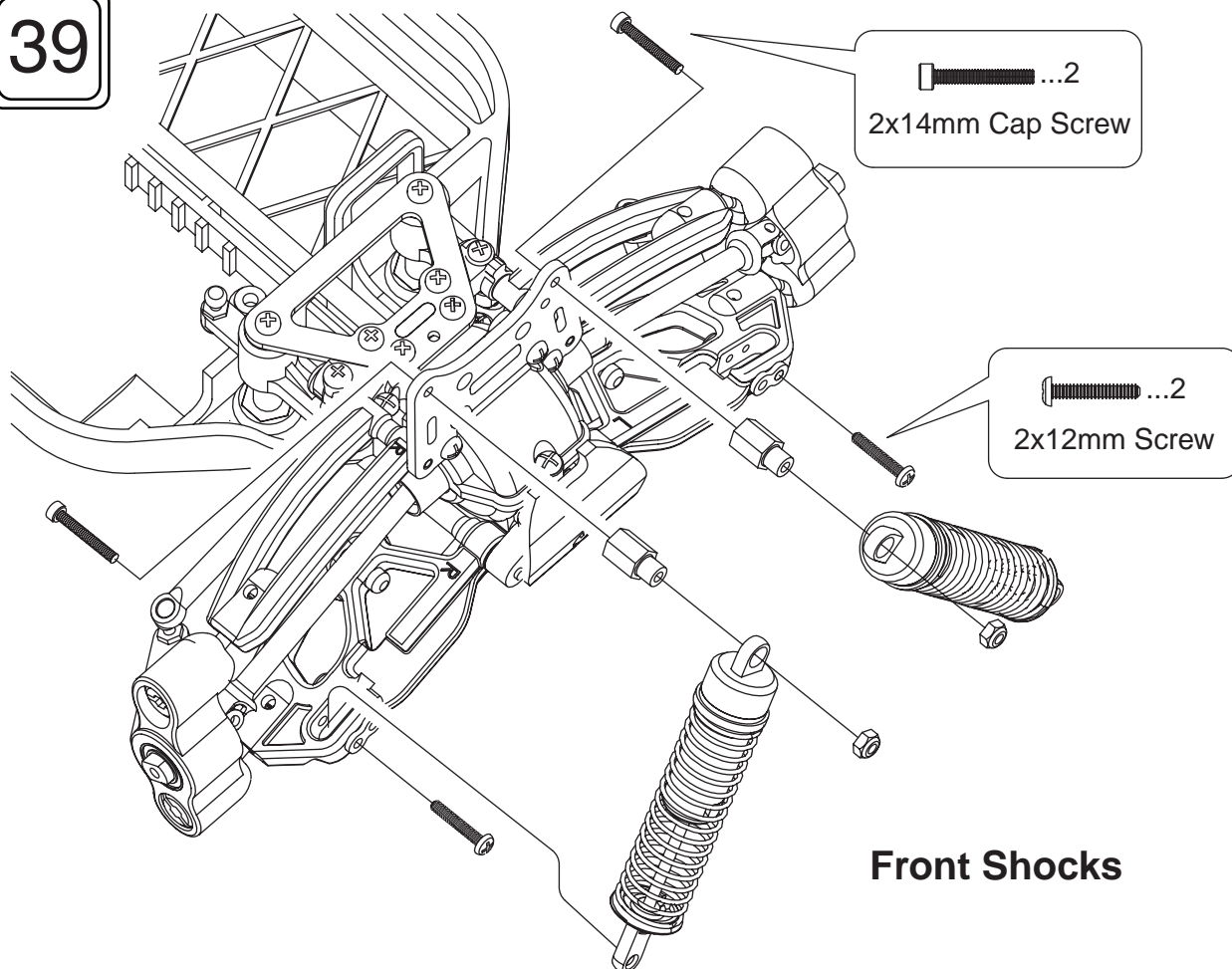
Completely fill the shock body with shock oil. Slowly work the piston up and down to remove air bubbles. Do not push the piston out of the shock oil. Slowly tighten the shock cap onto the shock body to allow the remaining air bubbles to escape.



38



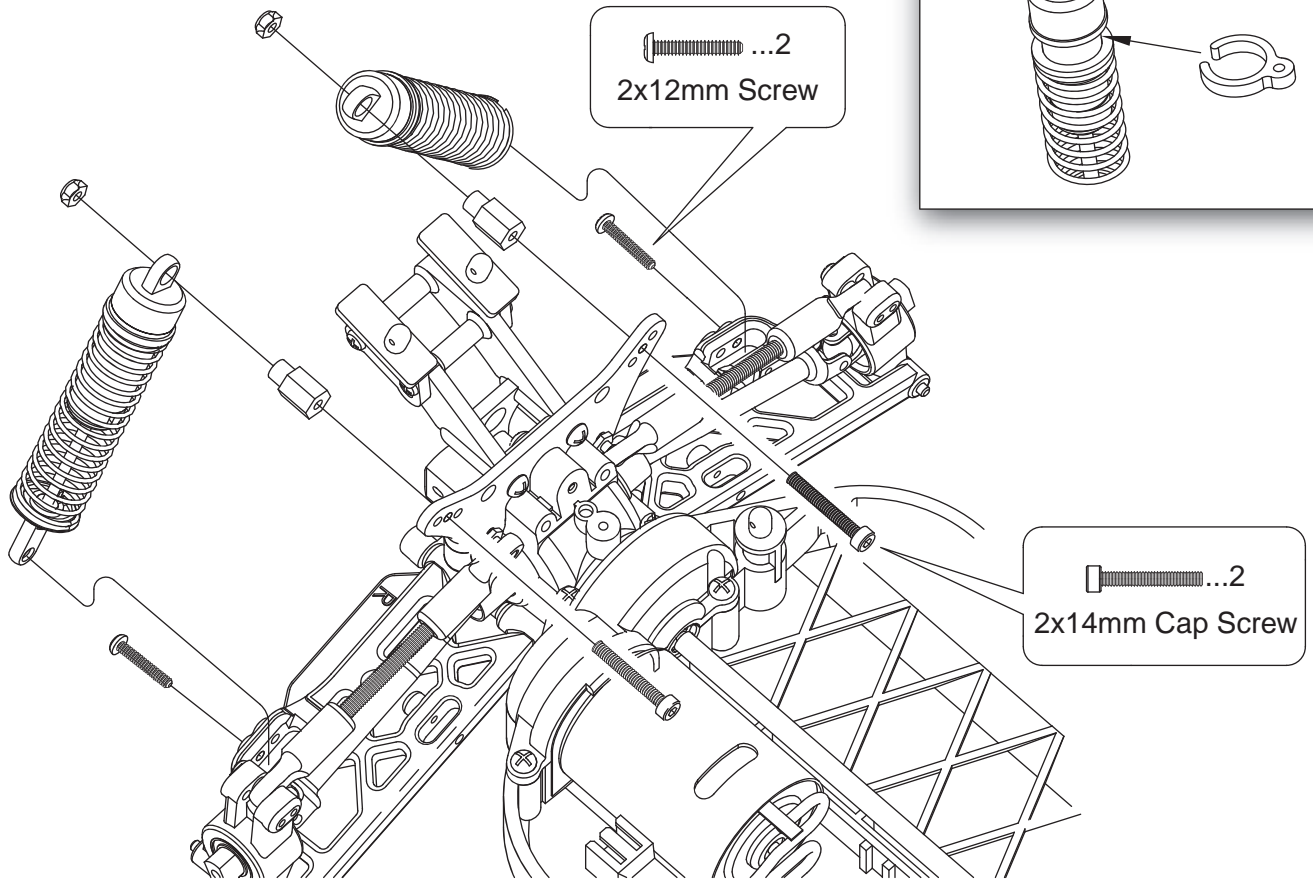
39



Front Shocks

40

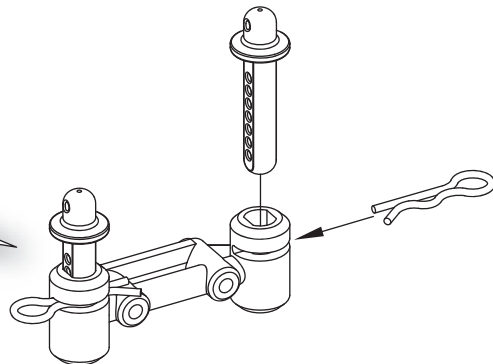
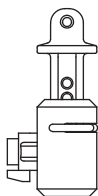
Rear Shocks



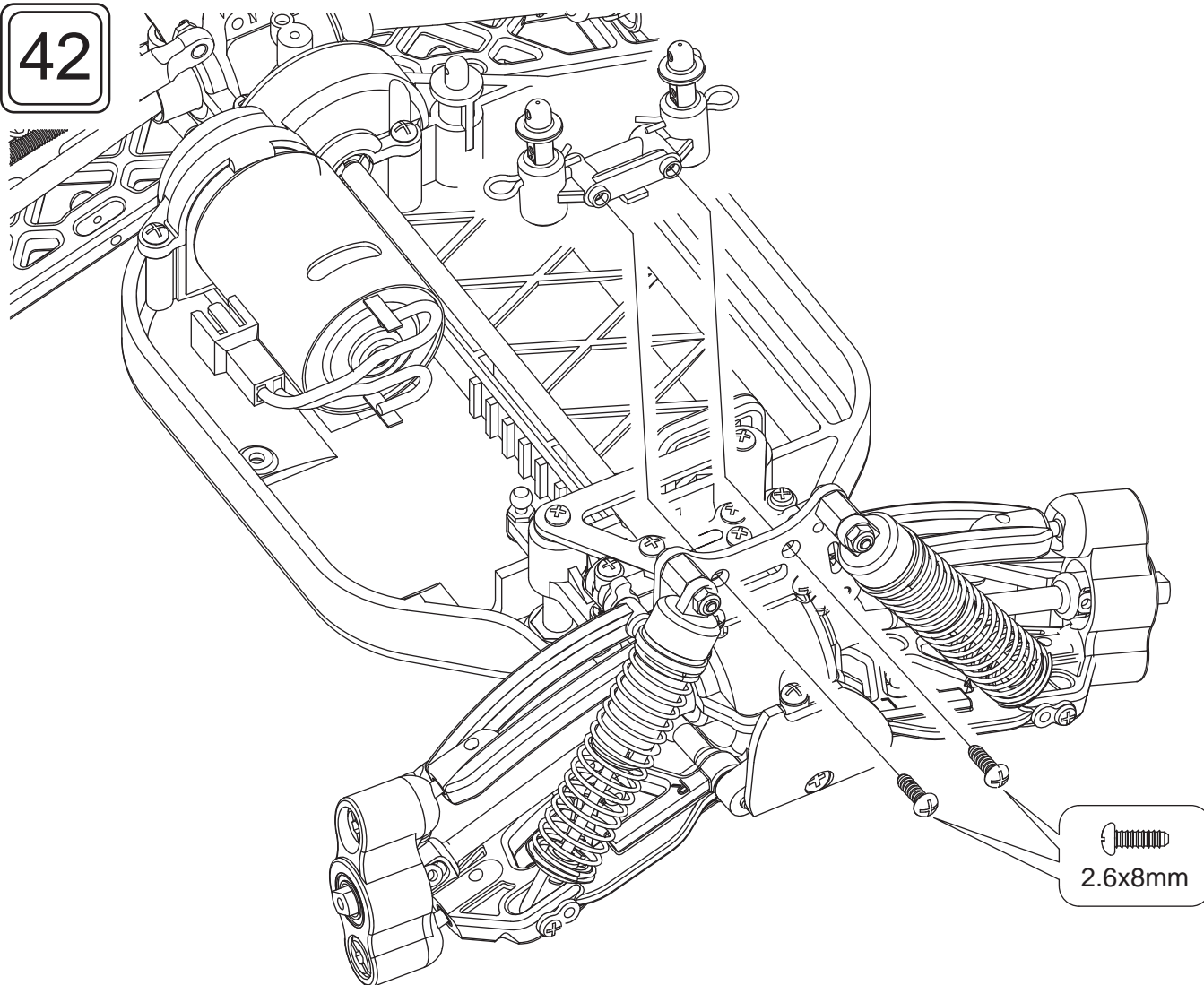
41

...2

The body posts will need to be trimmed to mount most bodies.



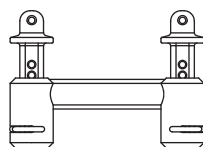
42



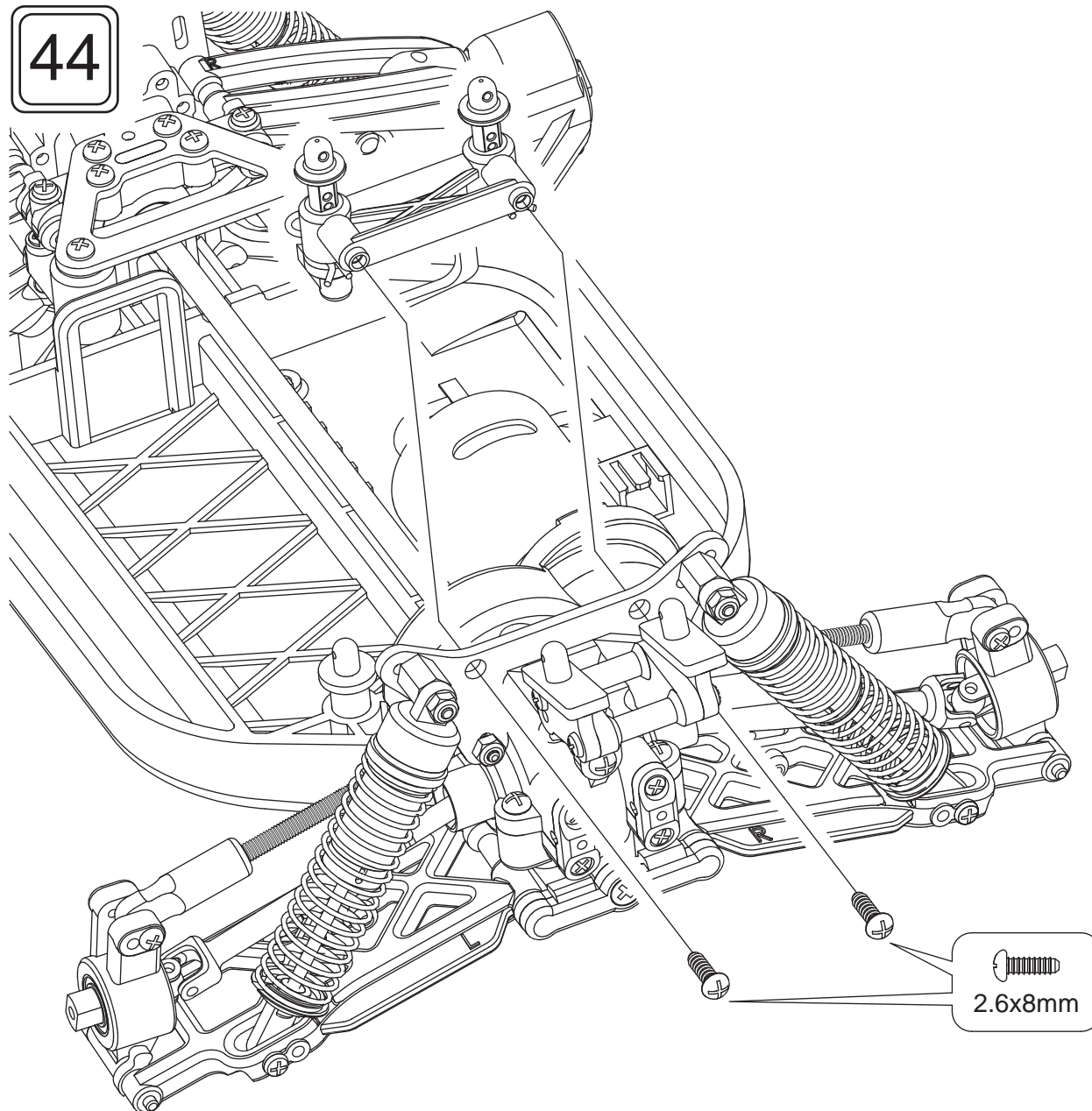
43

...2

The body posts
will need to be
trimmed to mount
most bodies.



44

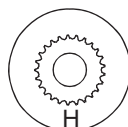
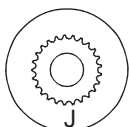
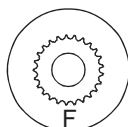
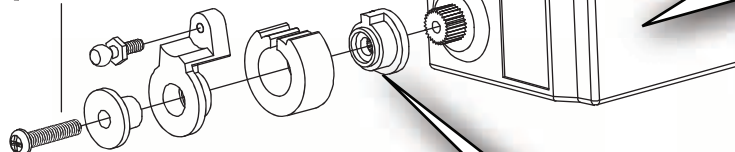
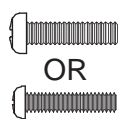


2.6x8mm

45

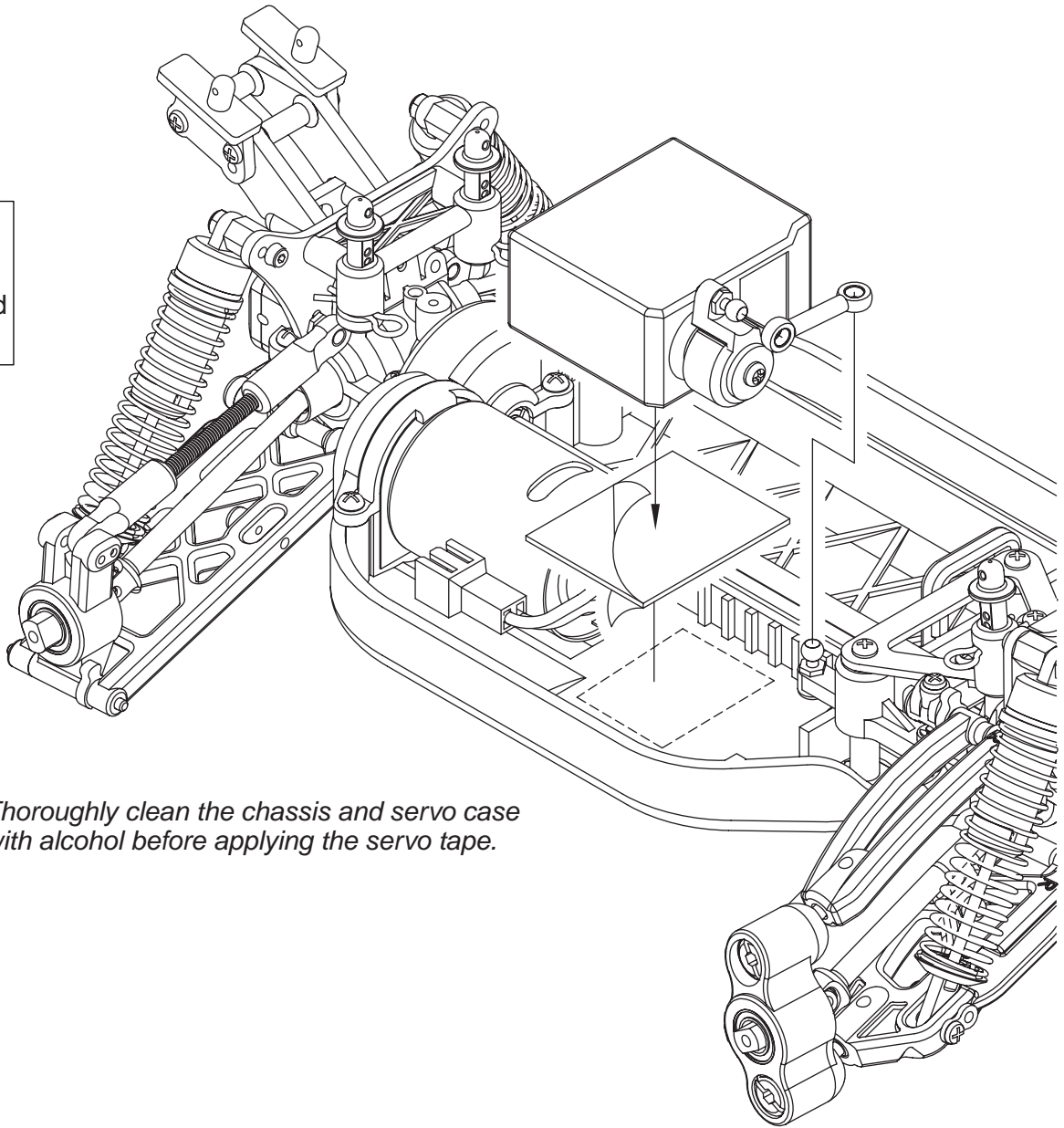
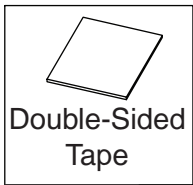
3x12mm Screw

2.6x12mm Screw



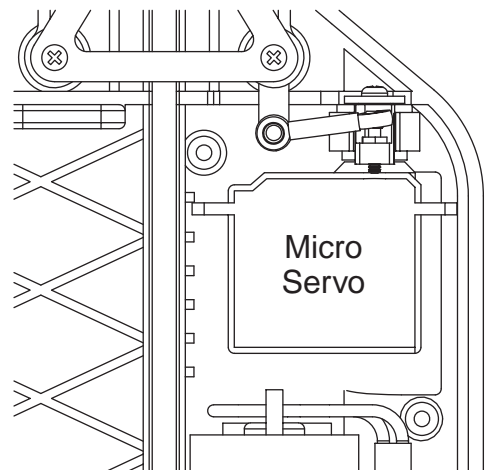
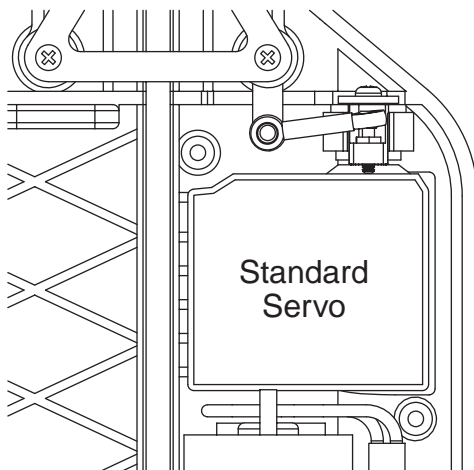
For standard size servos, the mounting tabs will have to be trimmed off to fit in the chassis. Use a sharp hobby knife or a pair of Lexan scissors. Be careful not to damage the servo case.

46

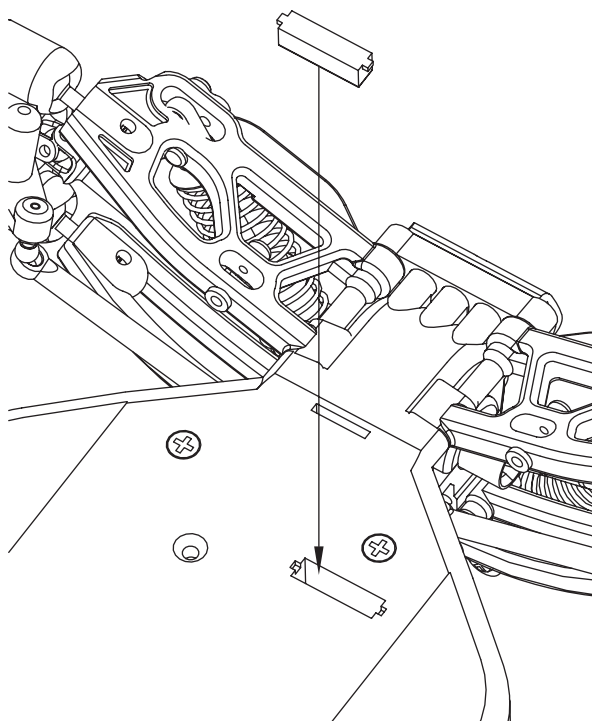


Thoroughly clean the chassis and servo case with alcohol before applying the servo tape.

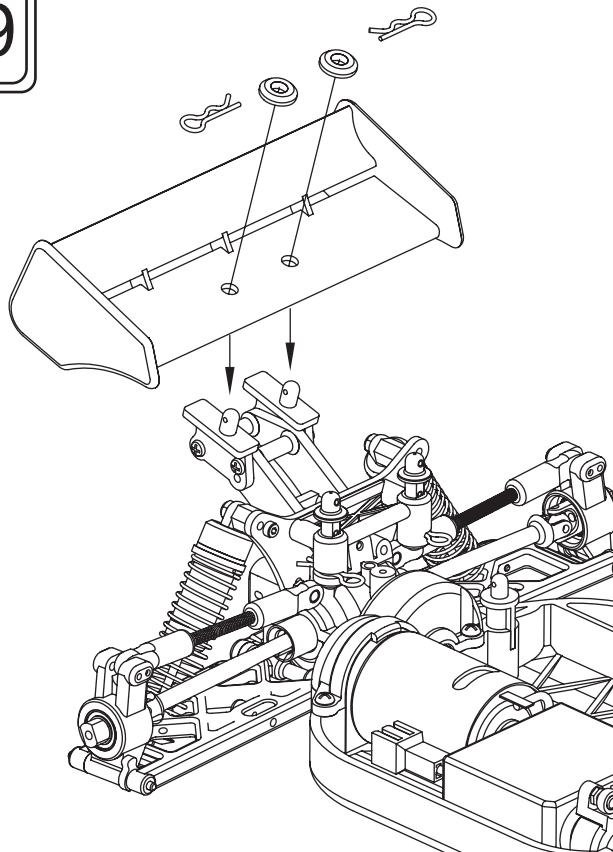
47



48



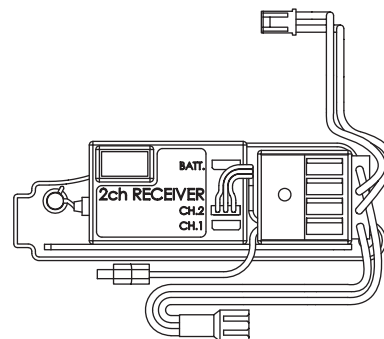
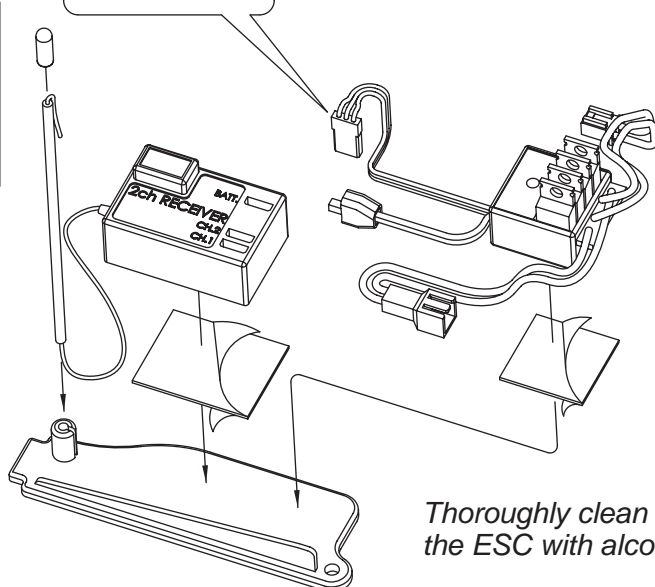
49



50

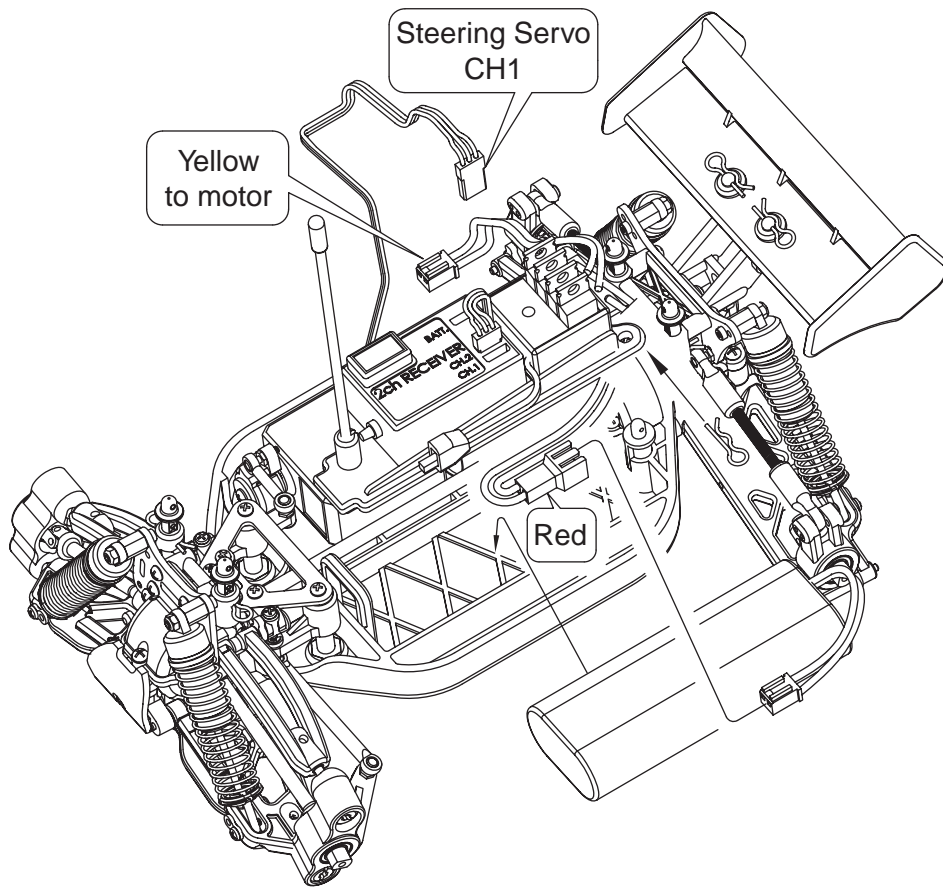
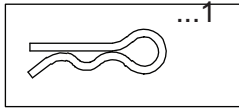
Double-Sided
Tape

Speed Control
CH2

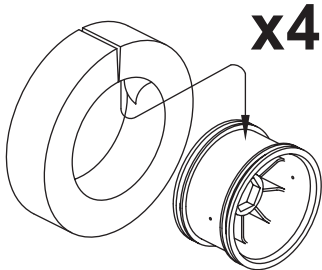


Thoroughly clean the battery strap, receiver and the ESC with alcohol before applying the servo tape.


51



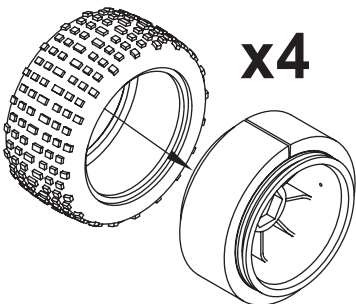
52



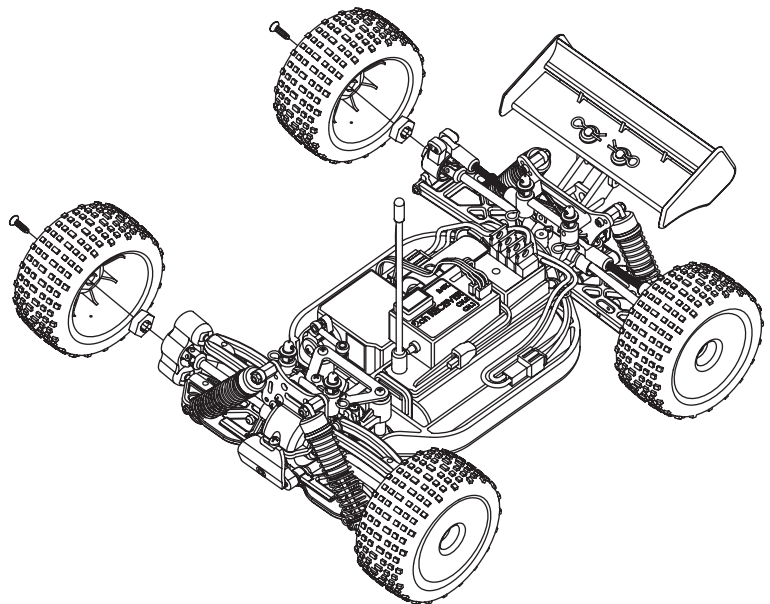
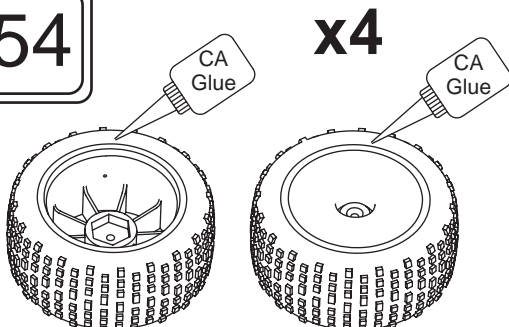
55

 ...4
2.6x10mm F/H S/T Screw

53



54





Graphite Battery Strap
DTXC6311



Graphite Rear Hub
DTXC8006



Graphite Diff Cover
DTXC7442



Graphite Diff Case
DTXC7443



Graphite Chassis
DTXC6996



Graphite Center Driveshaft
DTXC7482



Graphite Steering
Servo Hold-Down
DTXC8813



Graphite Front Brace
DTXC6599



Graphite Steering Drag Link
DTXC7489

Other Accessories Available From DuraTrax



Pit Tech™ Mini Car Stand
DTXC2361, DTXC2362
DTXC2363, DTXC2364



Pit Tech™ Camber Gauge
DTXR1145



AC/DC Piranha™ Digital Charger
DTXP4005



6-cell NIMH Battery
DTXC2195



Long Nose Pliers
DTXR0300

Ultimate Driver Set
DTXR0183



TX NiCad Conversion Kit
(For use with DuraTrax & Futaba Systems)
DTXP4010



1/18th Micro Vehicle
Carry Bag
DTXP2028



Power Shot
Motor Cleaner 12oz
DTXC2459

For more optional parts and accessories, contact your hobby dealer or www.duratrax.com