



# MINI QUAKE™



**Length:** 9.5" [240mm]  
**Width:** 7.4" [185mm]  
**Height:** 4.7" [120mm]  
**Weight:** 25 oz [725g]  
**Ground Clearance:** 1.25" [32mm]  
**Radio:** 2-Channel

#### **Technical Support Information**

For technical assistance, contact:  
DuraTrax Product Support  
3002 N. Apollo Drive, Suite 1  
Champaign, IL 61822  
(217) 398-8970, Ext. 5  
carsupport@duratrax.com

## **ASSEMBLY AND OPERATION MANUAL**

### **Warranty**

- DuraTrax will warranty this kit for 90 days after the purchase date from defects in materials or workmanship. DuraTrax will either repair or replace, at no charge, the incorrectly made part.
- Make sure you save the receipt or invoice you were given when you purchased your model. It is your proof of purchase and we must see it before we can honor the warranty.
- To return your Mini Quake for repairs covered under warranty you should send your model 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](mailto:hobbyservices@hobbico.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.**

**READ THROUGH THIS MANUAL BEFORE STARTING CONSTRUCTION. IT CONTAINS IMPORTANT INSTRUCTIONS AND WARNINGS CONCERNING THE ASSEMBLY AND USE OF THIS MODEL.**

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## INTRODUCTION

Thank you for purchasing the DuraTrax Mini Quake. This manual contains the instruction you need to build, operate and maintain your new electric R/C vehicle. Read over this manual thoroughly before building or operating the Mini Quake.

## SAFETY PRECAUTIONS

When the safety precautions are followed, the Mini Quake will provide years of enjoyment. Use care and good sense at all times when operating this radio controlled vehicle. 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 operate the Mini Quake near people. Spectators should be behind the driver or at a safe distance away from the vehicle.
- Make sure to read the instructions before charging the battery.
- Do not leave the charger unattended during charging. If the battery or charger become hot at any time, disconnect the battery from the charger immediately! Failure to do so may cause permanent damage to the charger and battery and may cause bodily harm.
- Do not cover the charger during charging. This may cause the charger to overheat.

- Do not allow the electronic speed control (ESC) or radio equipment to come into contact with moisture. Water can cause the electronics to short out and cause permanent damage.
- Always turn on the transmitter before turning on the electronic speed control.
- Before turning on your radio, check to make sure that no one else is running on the same frequency as your Mini Quake.

## HELPFUL HINTS

- Avoid working over a deep pile carpet. If you drop a small part or screw, it will be difficult to find.
- Place a mat or towel over your work surface. This will prevent parts from rolling off and will protect the work surface.
- Test fit all parts before attaching them permanently.

## STRESS-TECH™ PARTS GUARANTEE

We have engineered the Mini Quake 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 vehicle. Just send in the part to us and we will send you a FREE replacement. Please see the Mini Quake 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 on the front cover of this manual.

- 1. The broken part must be included.
- 2. The part number and description of the broken part.
- 3. Dated copy of your 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 Mini Quake repaired for a small charge by the experts at DuraTrax's authorized repair facility, Hobby Services, at the address listed on the front cover of this manual.
- To speed up the repair process, please follow the instruction listed below.

❑ 1. Under most circumstances return the ENTIRE system: vehicle and radio. The exception would be sending in a Stress-Tech part. See the instruction 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).

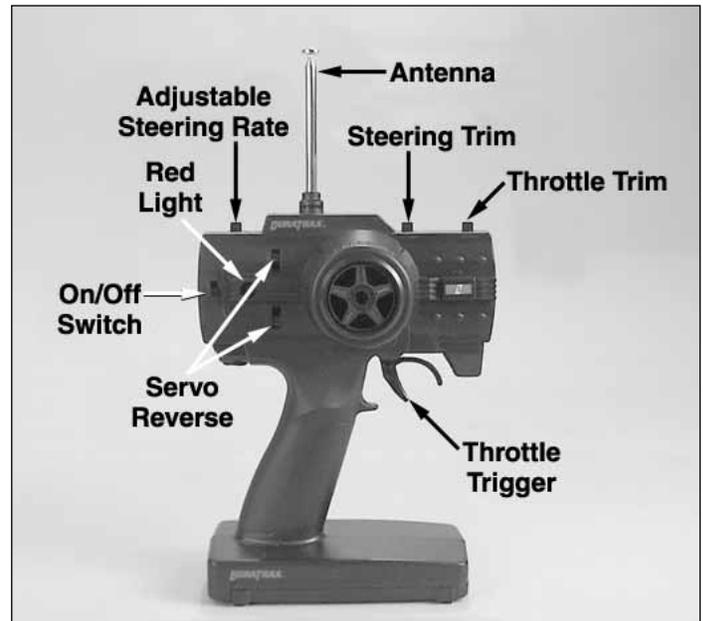
❑ 4. Also be sure to include your full return address.

## SPECIFICATION & 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.

## FINISHING THE MINI QUAKE

❑ 1. Charge the included 6-cell battery on the included wall charger. Connect the 6-cell NiCd battery to the connector on the wall charger. Plug the wall charger into a standard household 110V power outlet. Check to make sure that the red LED on the wall charger is lit. If the LED does not light, check to make sure the battery is properly connected to the charger. The battery should not be left on the charger longer than 3 hours when fully discharged. If at any time during the charge the battery becomes warm to the touch, it should be removed immediately to prevent damage to either the battery or the charger.

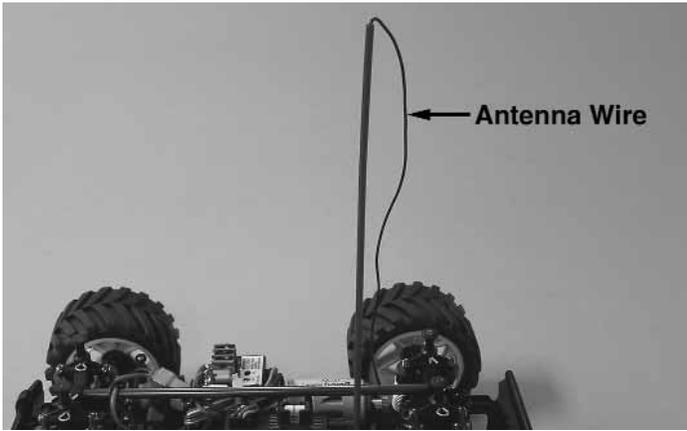


❑ 2. Install the transmitter antenna by screwing it into the hole on the top of the transmitter. Give the top of the antenna a light tug to make sure that it is properly secured to the transmitter.

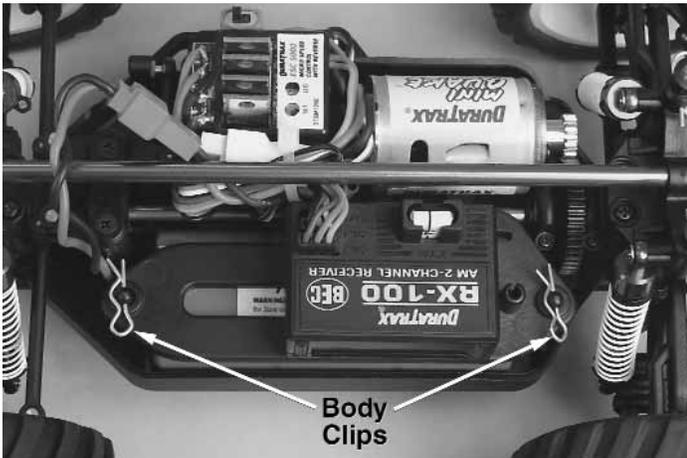
❑ 3. Slide the battery door on the bottom of the transmitter open. Install eight (8) "AA" batteries into the transmitter in the configuration molded into the plastic on the battery holder. Re-install the battery door.



❑ 4. Turn on the transmitter using the on/off switch (see step #3). The red light on the transmitter should light up. If there is no light on, turn the transmitter off and check to ensure that the batteries are making contact with the metal contacts in the battery holder. Make sure the batteries are installed correctly. Turn the transmitter on and check for the red light. If the red light appears, turn off the transmitter. If the red light blinks, the batteries are low and should be replaced.



❑ 5. Straighten the receiver antenna. Run the receiver antenna wire through the included antenna tube. **DO NOT CUT OR COIL THE ANTENNA WIRE.** Press fit the antenna tube into the antenna mount hole. **TIP:** Run the antenna wire through your finger to straighten out the kinks before running through the antenna tube. Also applying a small amount of soap and water to the antenna wire will help lubricate the wire for threading into the antenna tube.



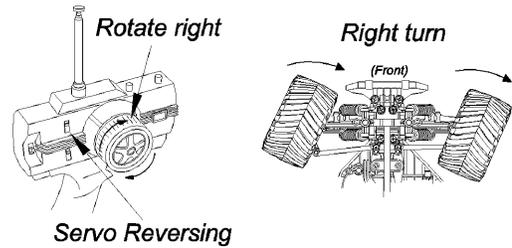
❑ 6. Remove the body clips from the battery holder and insert the charged 6-cell battery pack into the chassis.

❑ 7. Re-install the battery clips onto the battery holder.

❑ 8. The transmitter features an adjustable steering rate knob labeled “D/R” on the top of the transmitter. Turning it fully clockwise will give you the greatest amount of steering travel. Turning it counter clockwise will reduce the amount of steering travel.

❑ 9. The servo reversing switches are pre-set at the factory, but should be double-checked before running your Mini Quake.

❑ A. Turn the transmitter on, then the receiver. **NOTE: Always turn your transmitter on first.** Gently pull back on the throttle trigger, the Mini Quake should slowly move forward. If the Mini Quake goes in reverse, move the throttle reversing switch on the transmitter to the opposite position (refer to page 3 for location of the reversing switches). After doing this, the throttle trim knob may need to be adjusted to find the throttle’s neutral point.



❑ B. Now, check that the steering reversing switch is set properly. With the transmitter wheel facing you and the truck facing away from you, turn the transmitter steering wheel to the right. The wheels of the truck should turn so that when the truck moves it will turn to the right. If it turns to the left, the steering reversing switch needs to be moved to the opposite position. After reversing the steering, the steering trim on the transmitter may need to be adjusted to enter the steering of the truck.

❑ 10. Decal the body as desired and install it onto the chassis, securing it in place with the four included body clips.

❑ 11. Congratulations! You are ready to race!

## ELECTRONIC SPEED CONTROL SET UP



Center the trim knobs on the transmitter.

❑ 1. Connect the battery pack to the ESC, turn on the Tx, then the ESC.

❑ 2. Press and hold the “set” button until both LEDs are flashing, then release the button.

❑ 3. NEUTRAL POINT: Leave the throttle trigger in the neutral position. Press the setup button once; the green LED will flash.

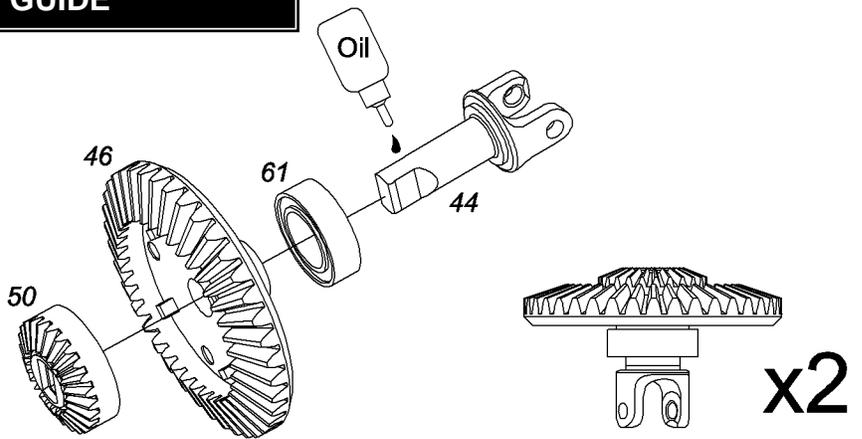
❑ 4. FULL THROTTLE: Move the throttle trigger to full throttle and press the button once until the red LED illuminates (motor will not operate in set up mode).

❑ 5. FULL REVERSE: Move the throttle trigger to full reverse and press the button once – the red LED will stop flashing. Release the throttle trigger; the ESC is now ready to operate with your system. If the motor operates in reverse when applying forward throttle, the throttle reversing switch on the Tx must be moved to the opposite position.

# ASSEMBLY GUIDE

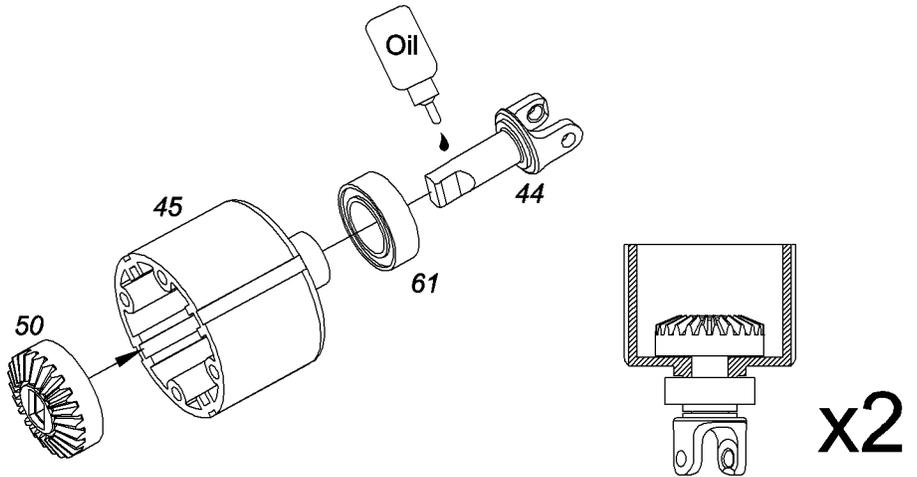
1

2 (61)  
6x10mm Ball Bearing



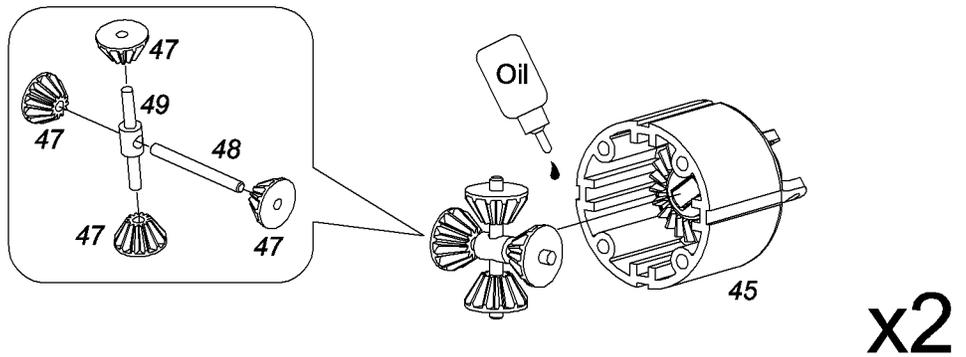
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2 (61)  
6x10mm Ball Bearing



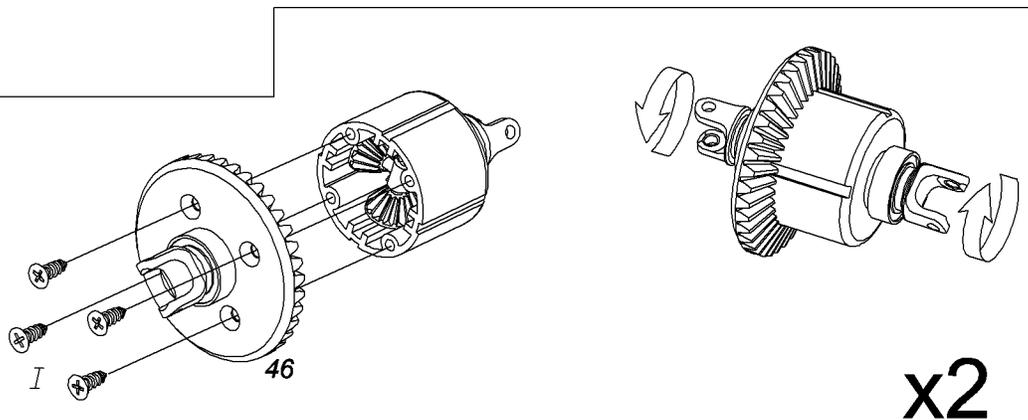
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2 (48)  
1.5x16mm Pin  
2 (49)  
1.5x16mm Shaft

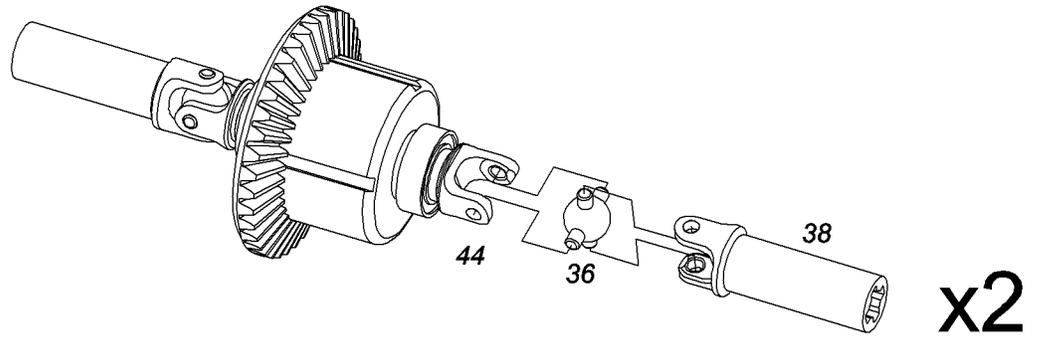


4

8 (I)  
2x6mm ST Screw

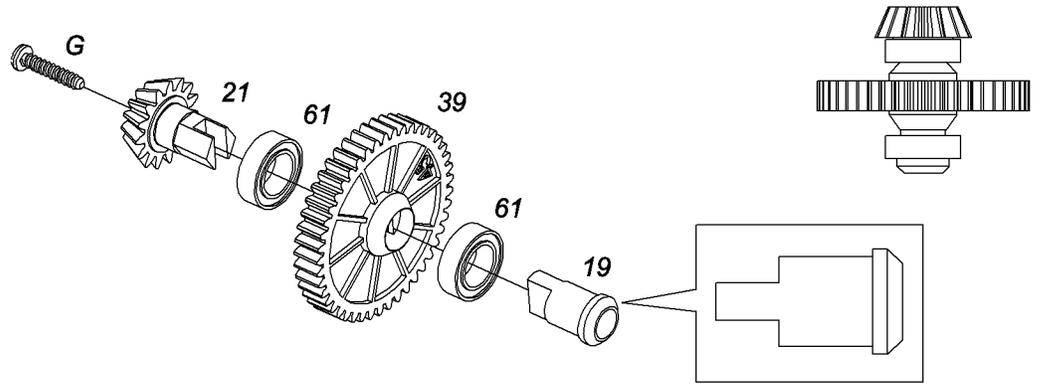


5



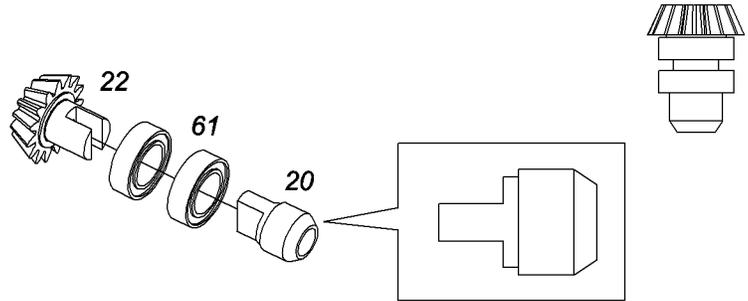
6

-  2 (61)  
6x10mm Ball Bearing
-  1 (G)  
2x10mm ST Screw

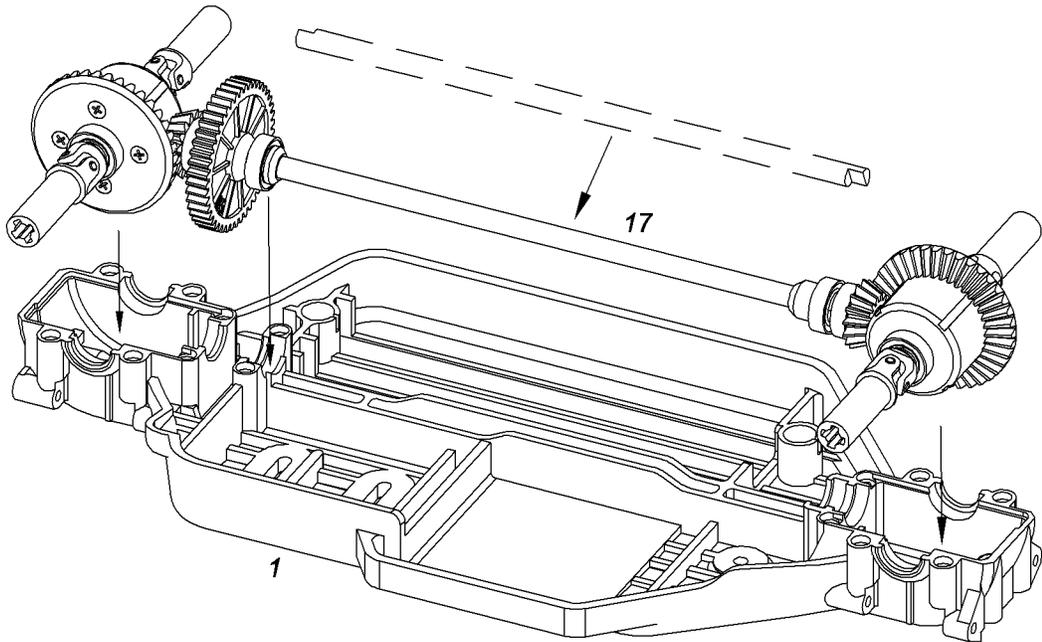


7

-  2 (61)  
6x10mm Ball Bearing

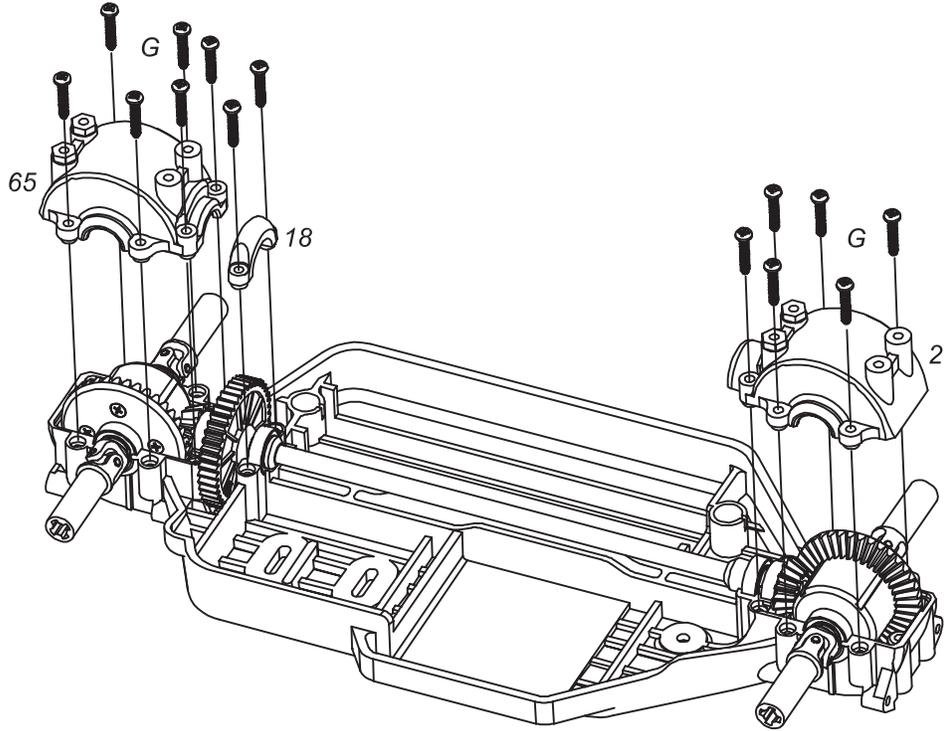


8



# 9

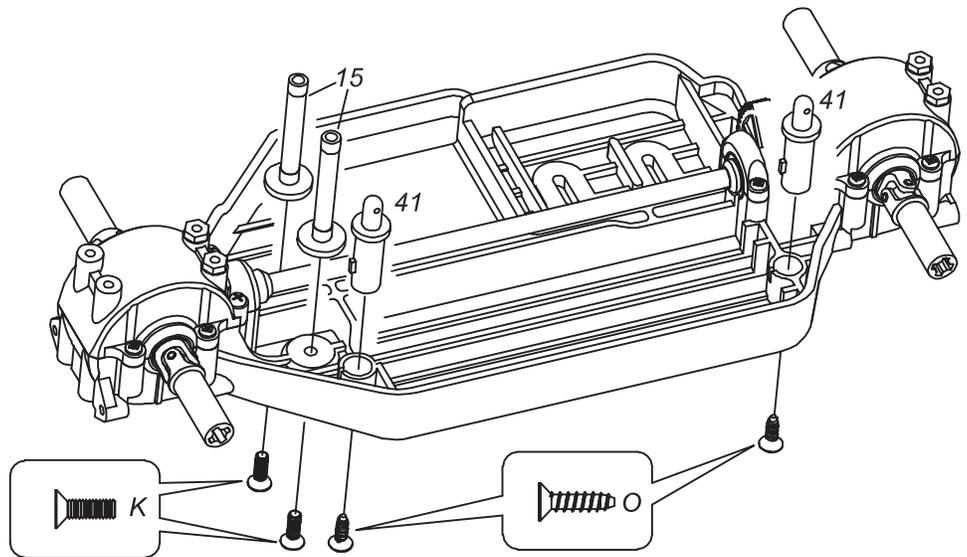
 14 (G)  
2x10mm ST Screw



# 10

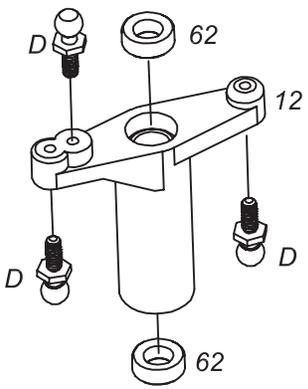
 2 (O)  
2.6x10mm ST Screw

 2 (K)  
2.6x8mm Screw



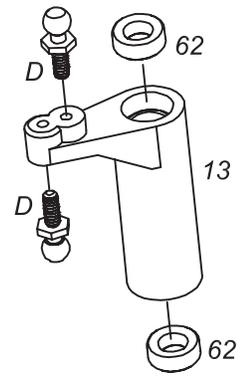
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 3 (D)  
3.8mm Ball



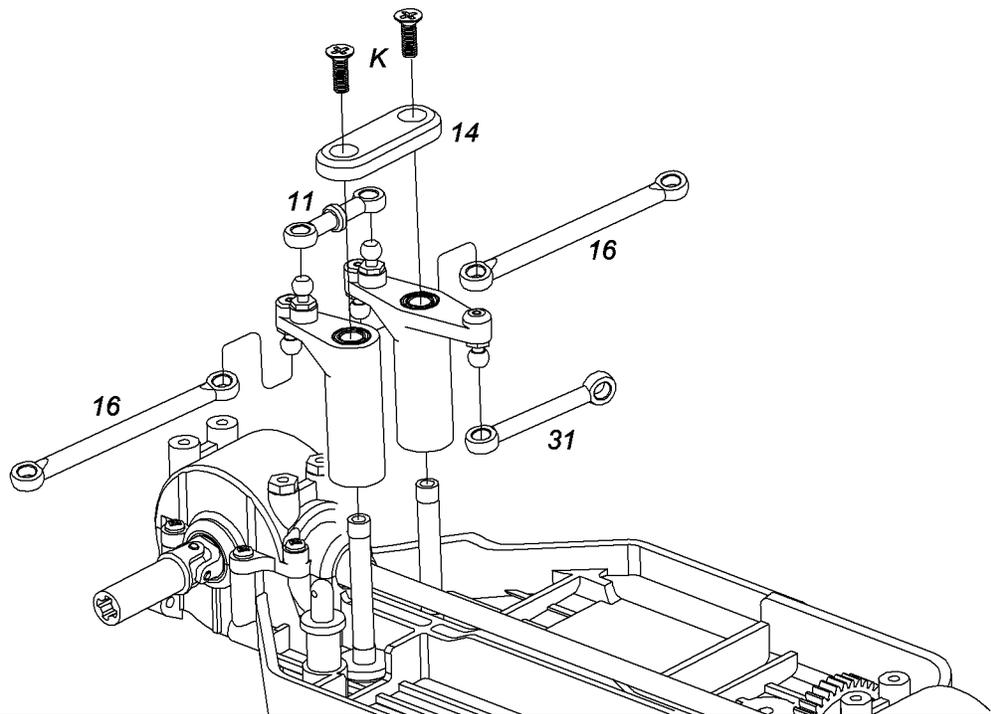
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 2 (D)  
3.8mm Ball

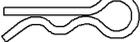


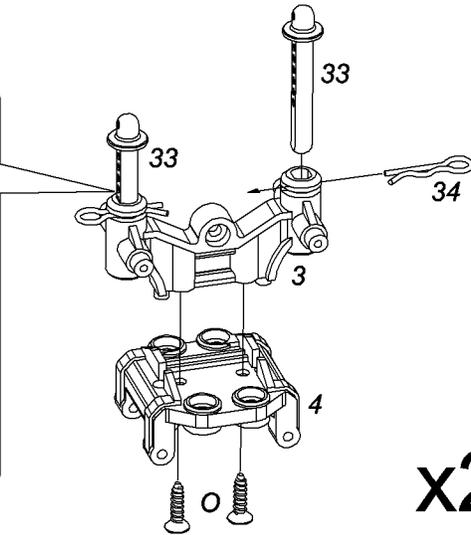
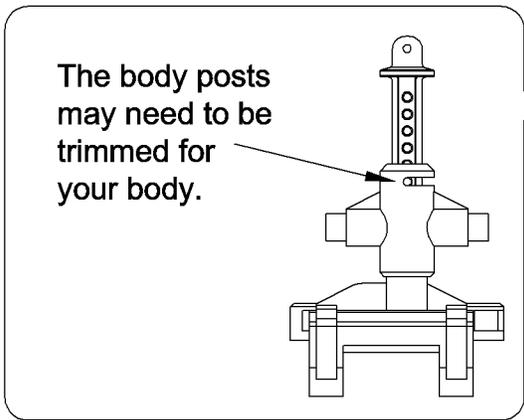
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-  2 (K)  
2.6x8mm Screw



# 14

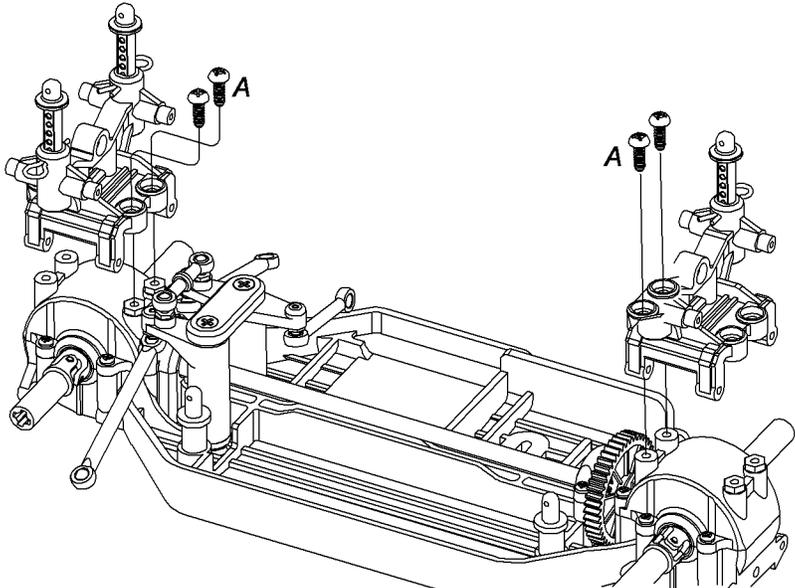
-  4 (O)  
2.6x10mm ST Screw
-  4 (34)



x2

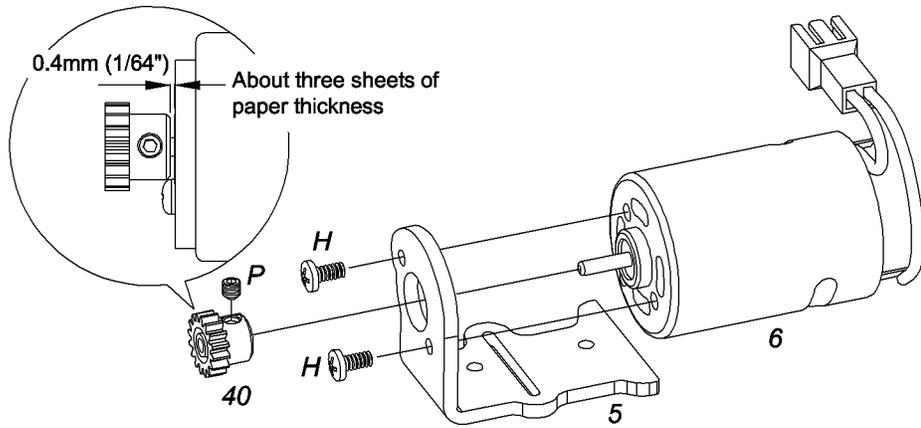
# 15

-  4 (A)  
2.6x8mm ST Screw



# 16

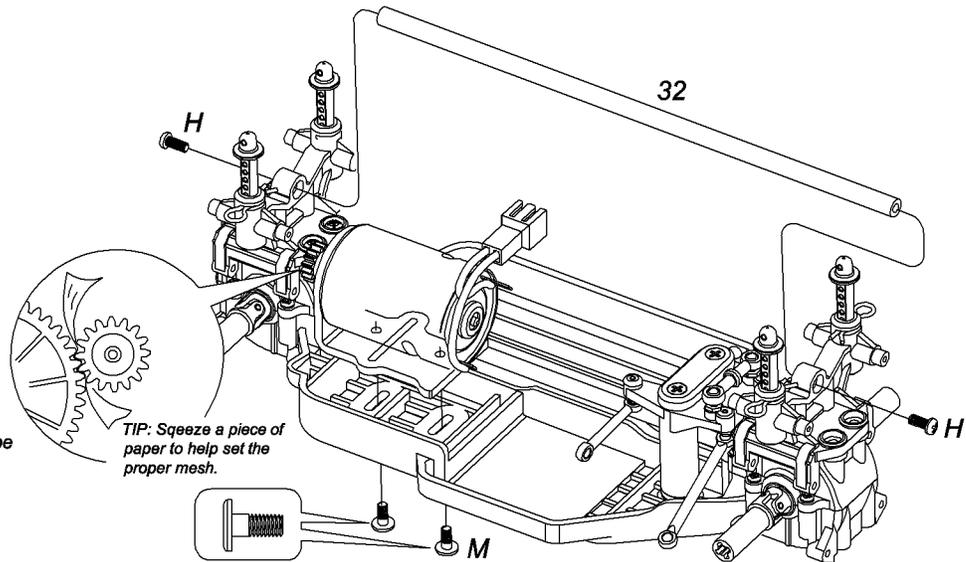
-  2 (H)
- 2.6x6mm Screw
-  1 (P)
- 3mm Set Screw



# 17

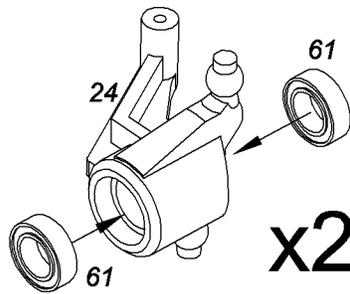
-  2 (H)
- 2.6x6mm Screw
-  2 (M)
- 2.6x6mm Screw

*With the proper mesh, you should just be able to move the gears independently. Too tight will cause drag; too loose and the gears will strip.*



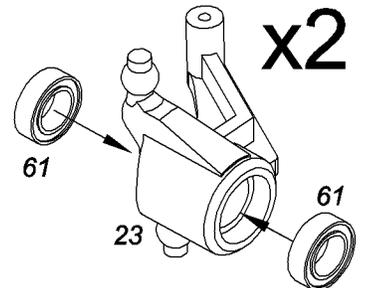
# 18

-  4 (61)
- 6x10mm Ball Bearing

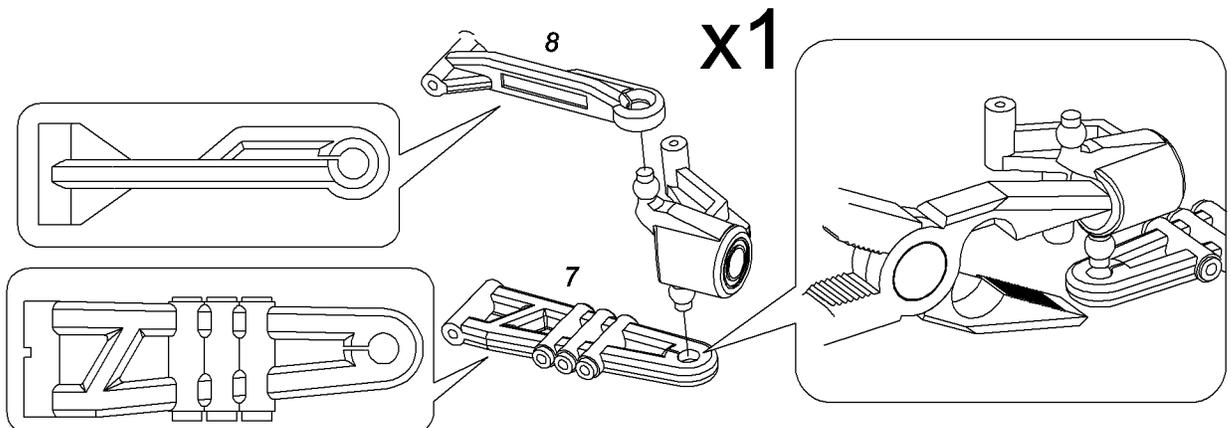


# 19

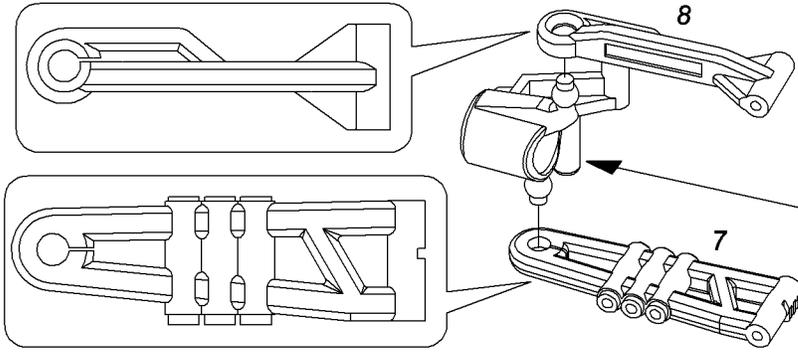
-  4 (61)
- 6x10mm Ball Bearing



# 20

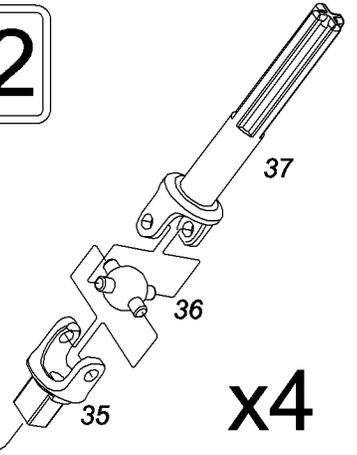


21



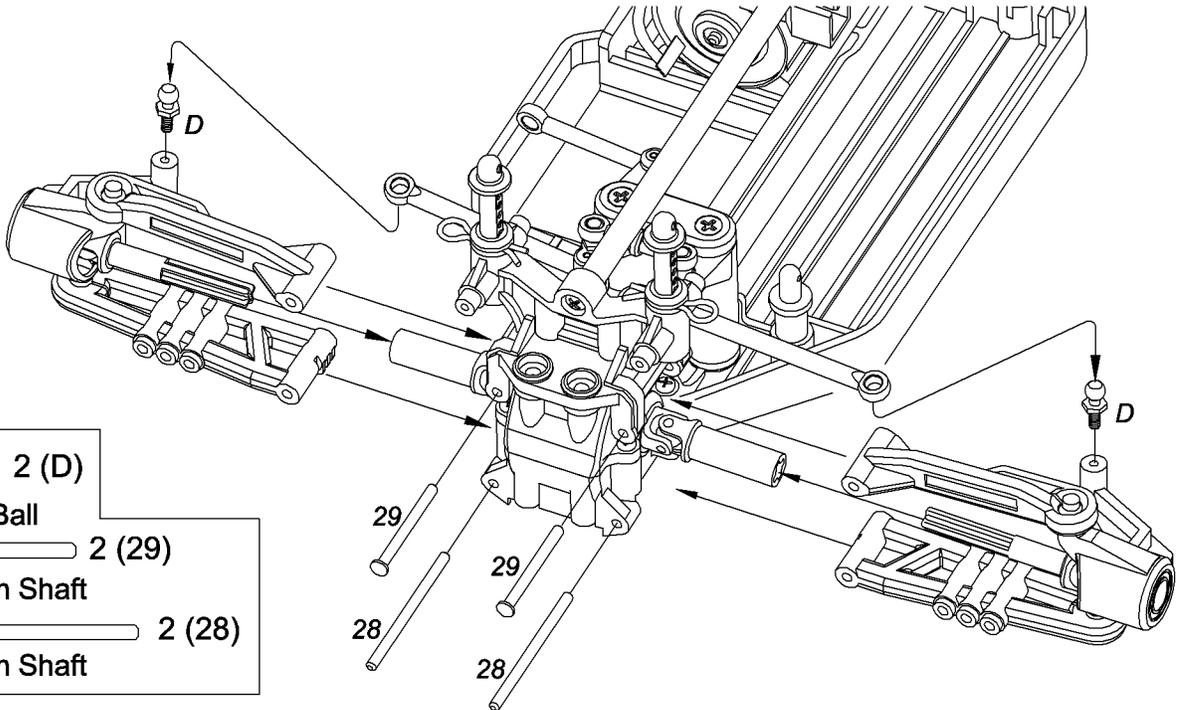
x1

22



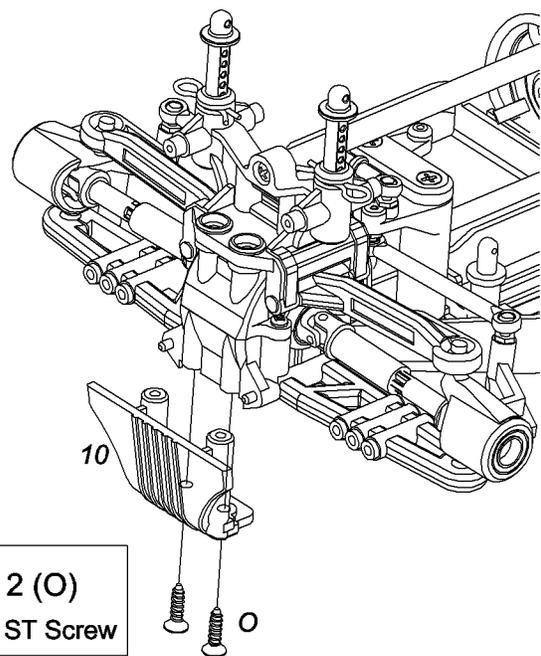
x4

23



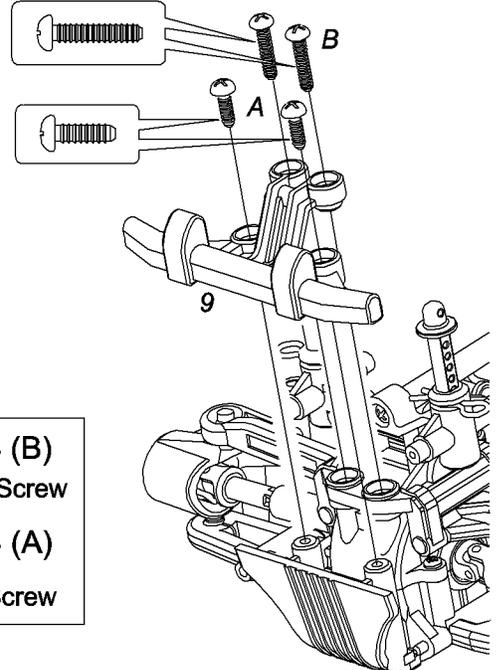
-  2 (D)
- 3.8mm Ball
-  2 (29)
- 2x23mm Shaft
-  2 (28)
- 2x32mm Shaft

24



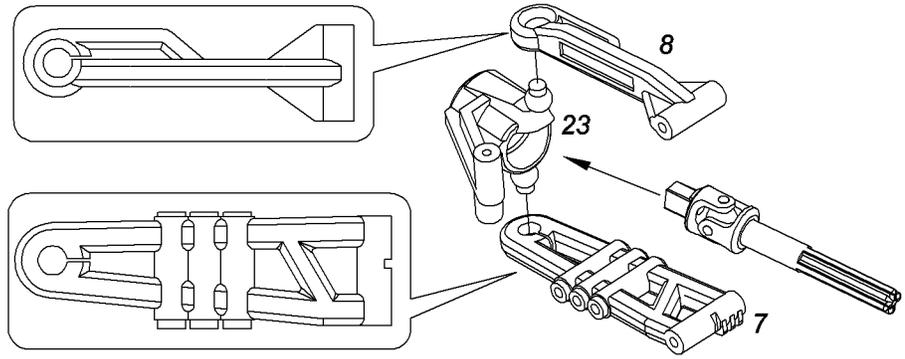
-  2 (O)
- 2.6x10mm ST Screw

25

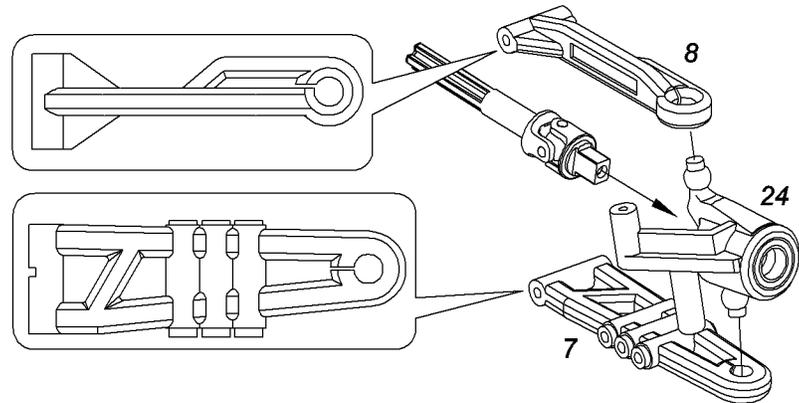


-  4 (B)
- 2.6x12mm ST Screw
-  4 (A)
- 2.6x8mm ST Screw

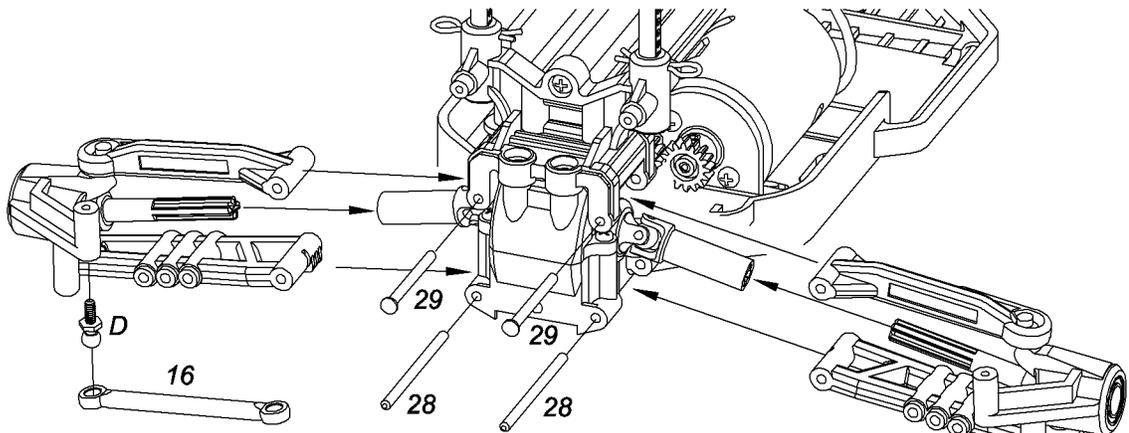
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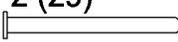
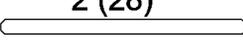


27



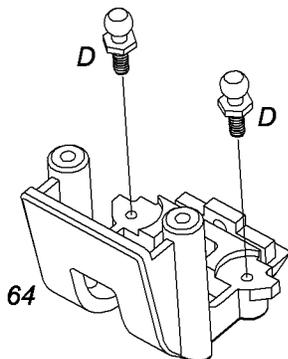
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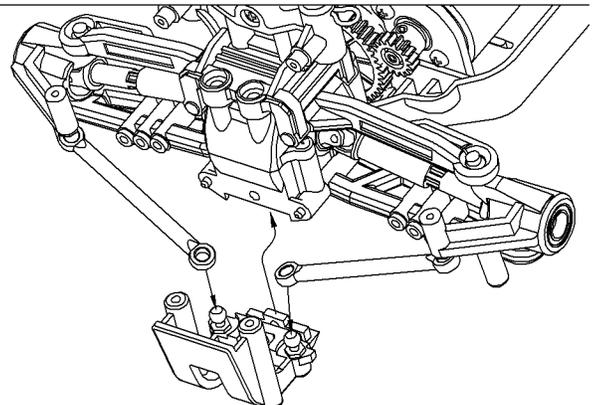
 2 (29) 2x23mm Shaft	 2 (28) 2x32mm Shaft	 2 (D) 3.8mm Ball
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29

 2 (D) 3.8mm Ball
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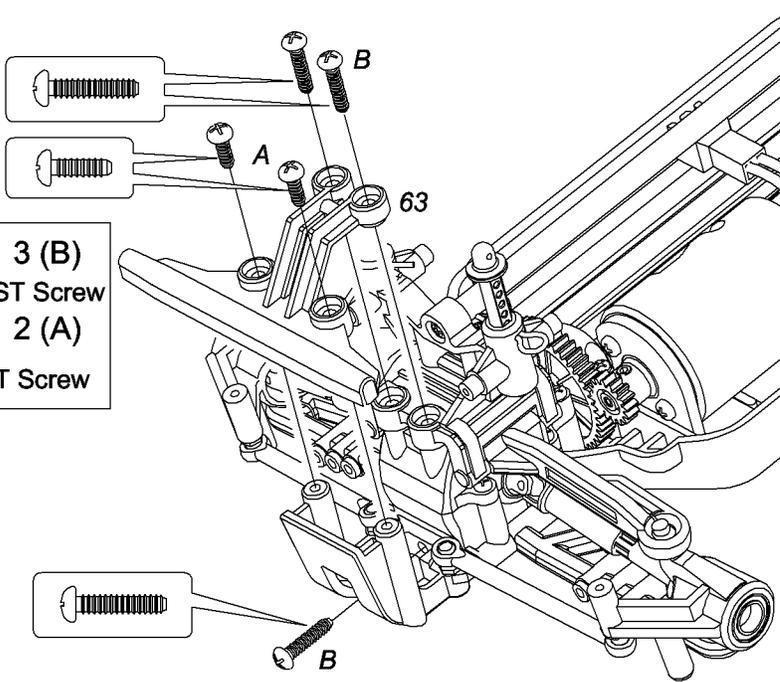


30



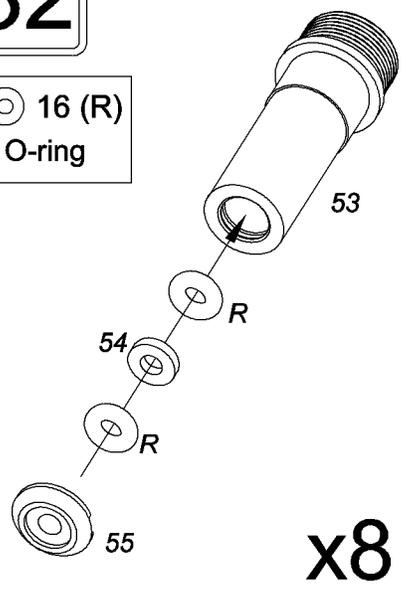
**31**

-  3 (B)  
2.6x12mm ST Screw
-  2 (A)  
2.6x8mm ST Screw



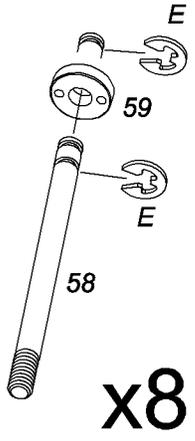
**32**

-  16 (R)  
O-ring

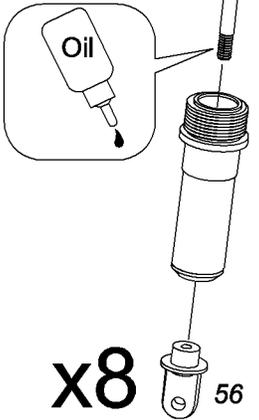


**33**

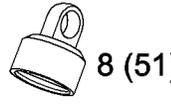
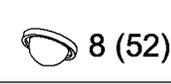
-  16 (E)  
1.5mm E-CLIP



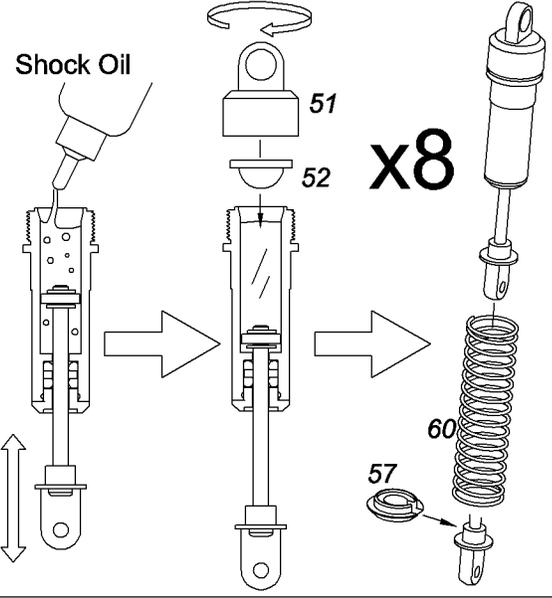
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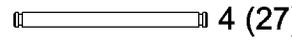
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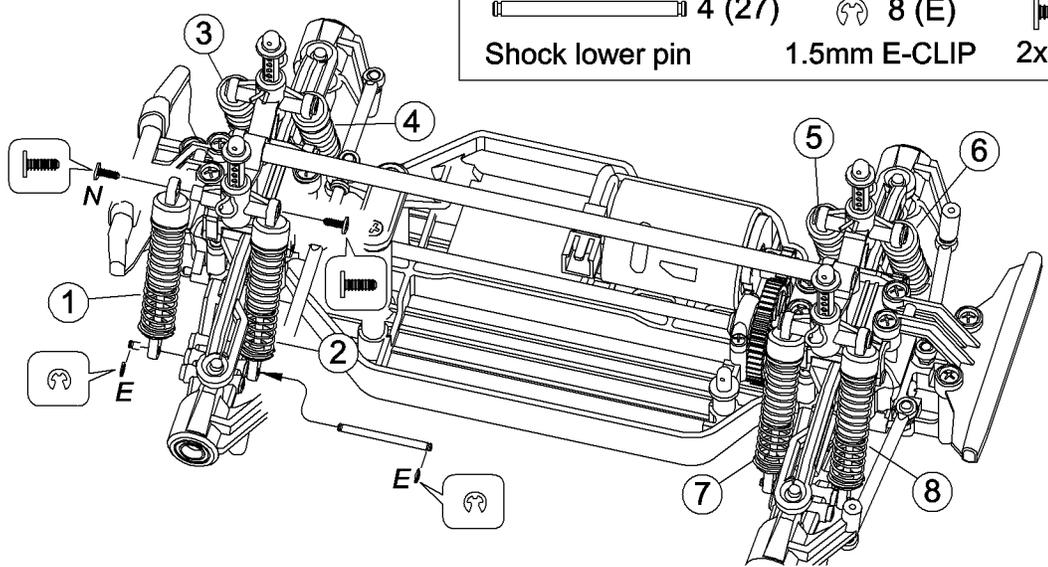
-  8 (51)
-  8 (52)

*Slowly move the shaft up and down several times to remove bubbles.*



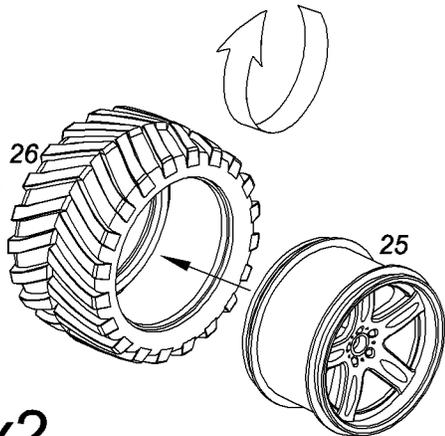
**36**

-  4 (27)
-  8 (E)
-  8 (N)



**37**

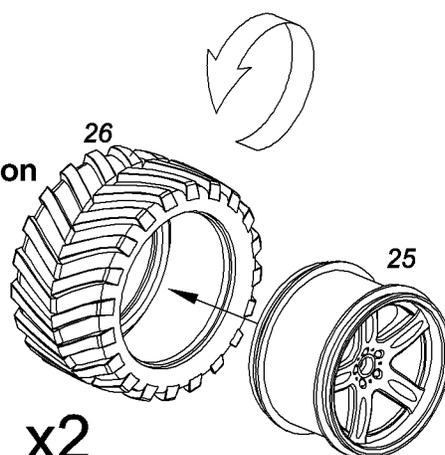
Note direction of treads



Right x2

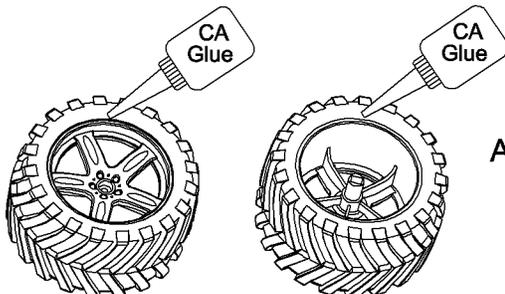
**38**

Note direction of treads



Left x2

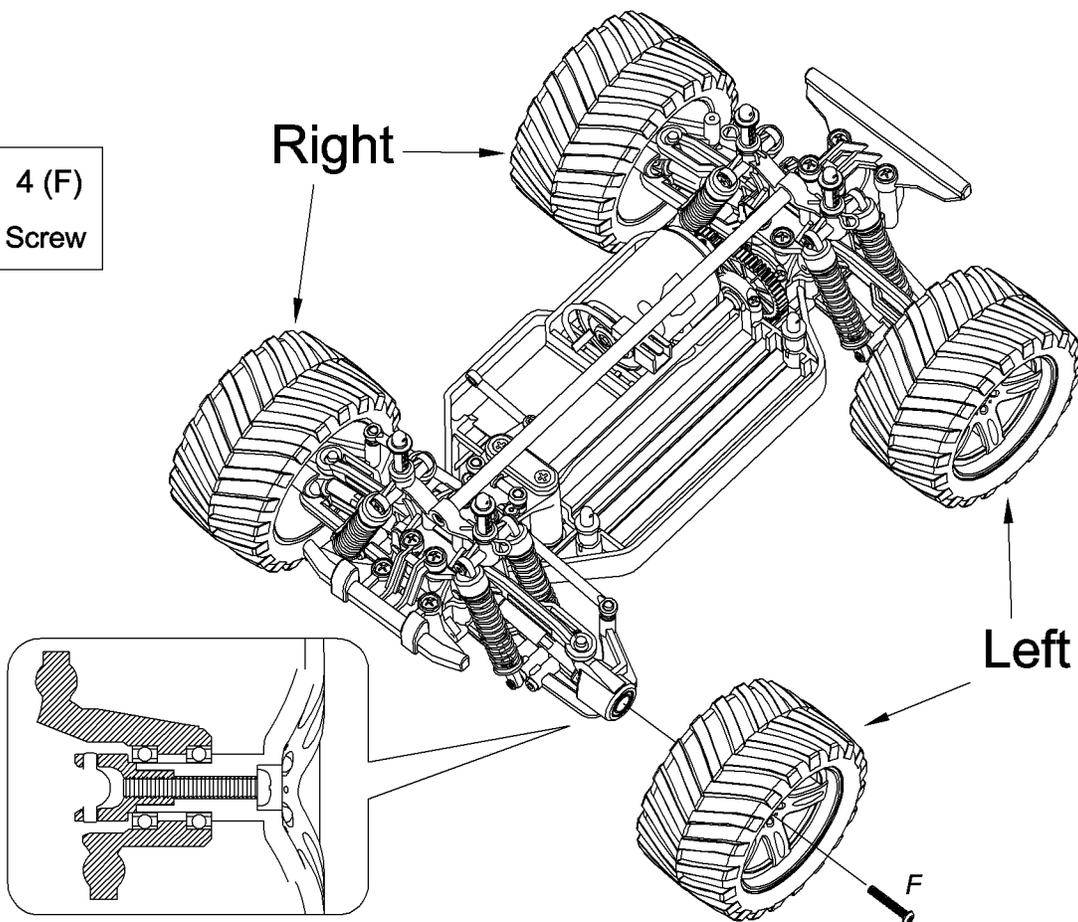
**39**



Add the CA Glue inside both on the rim and tire.

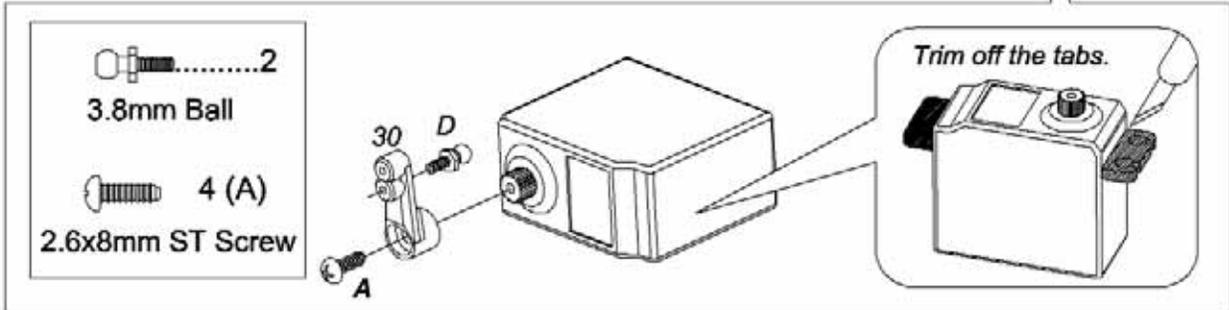
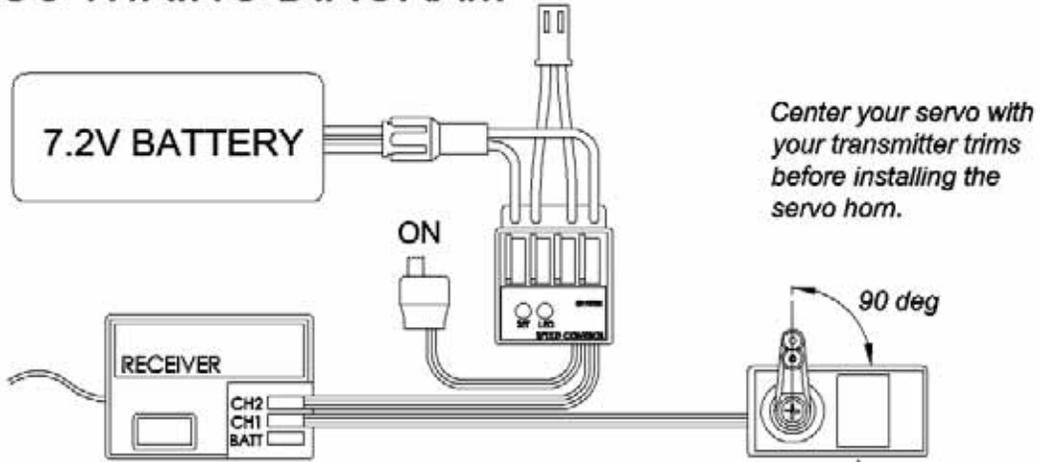
**40**

 4 (F)  
2.6x16mm Screw



# 41

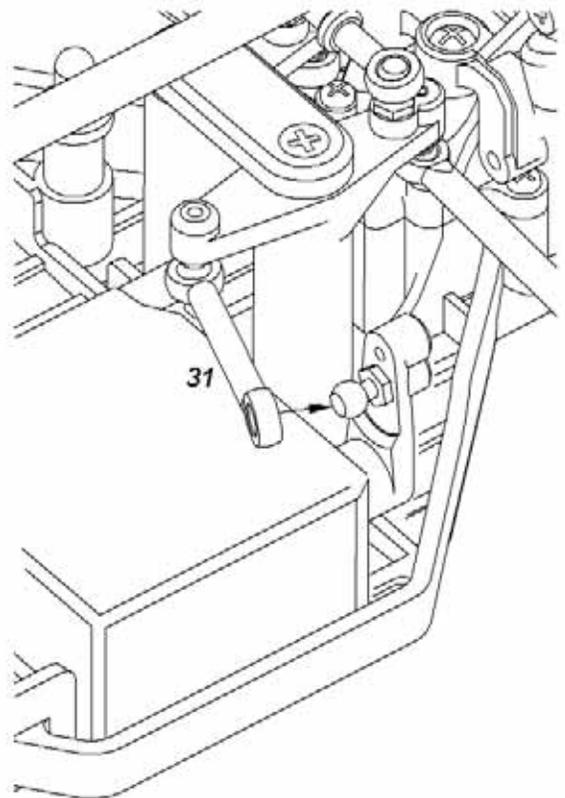
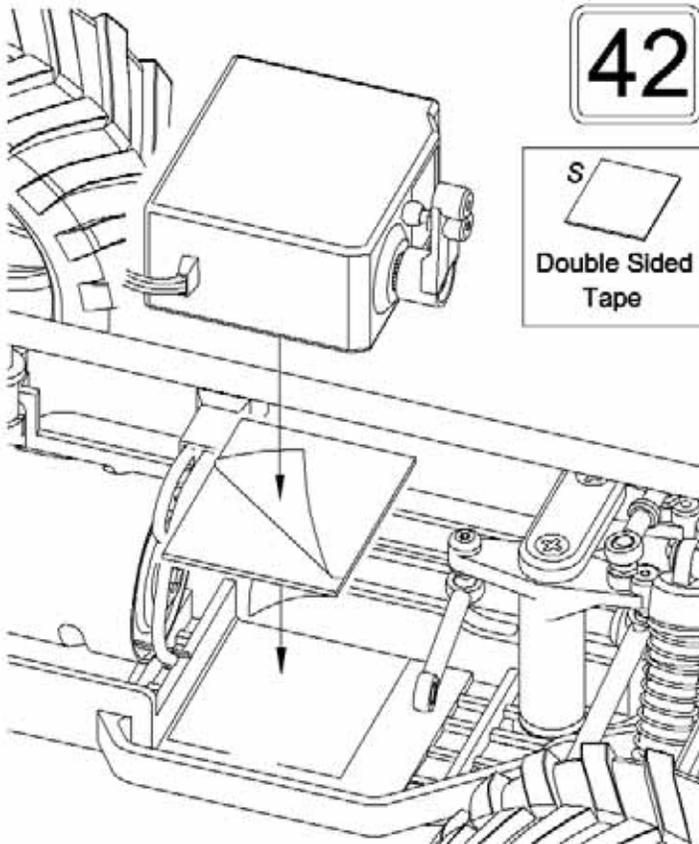
## ESC WIRING DIAGRAM



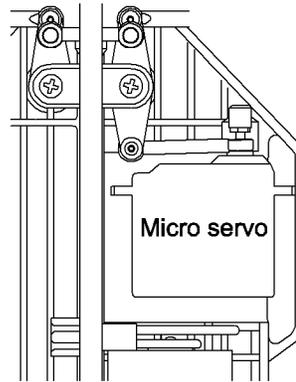
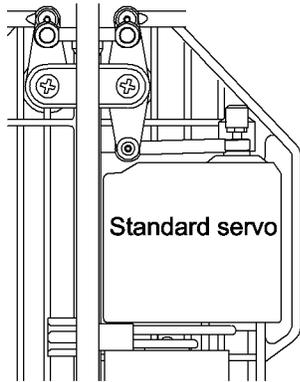
# 42

S

Double Sided Tape

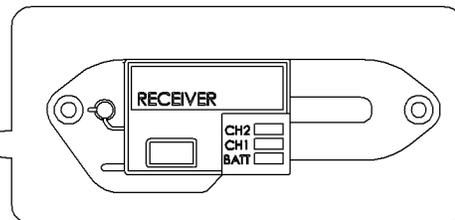
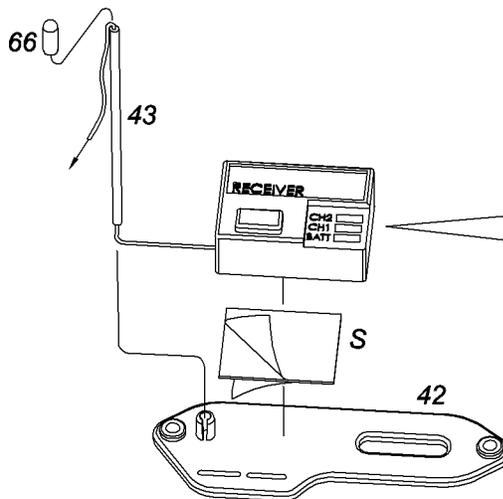


Typical steering servo installation.



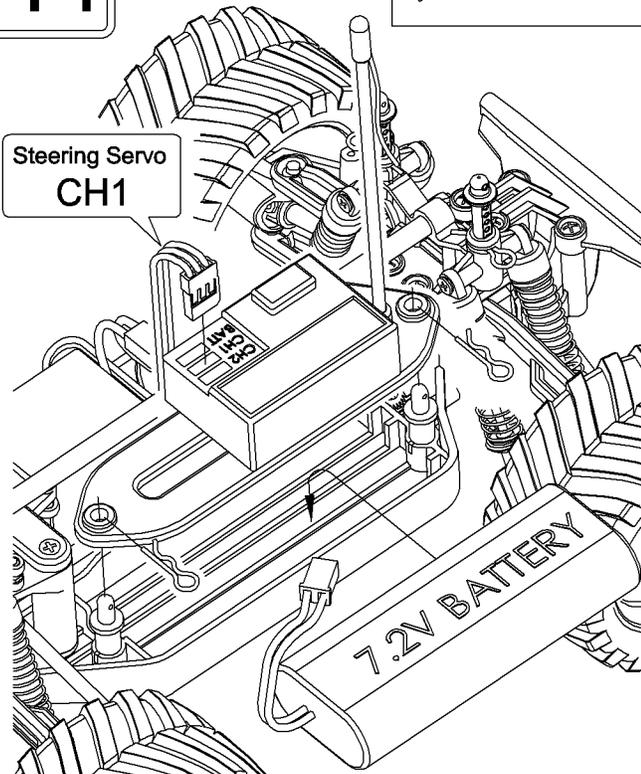
43

-  43  
Antenna Tube
-  66  
Antenna Cover
-  S  
Double Sided Tape

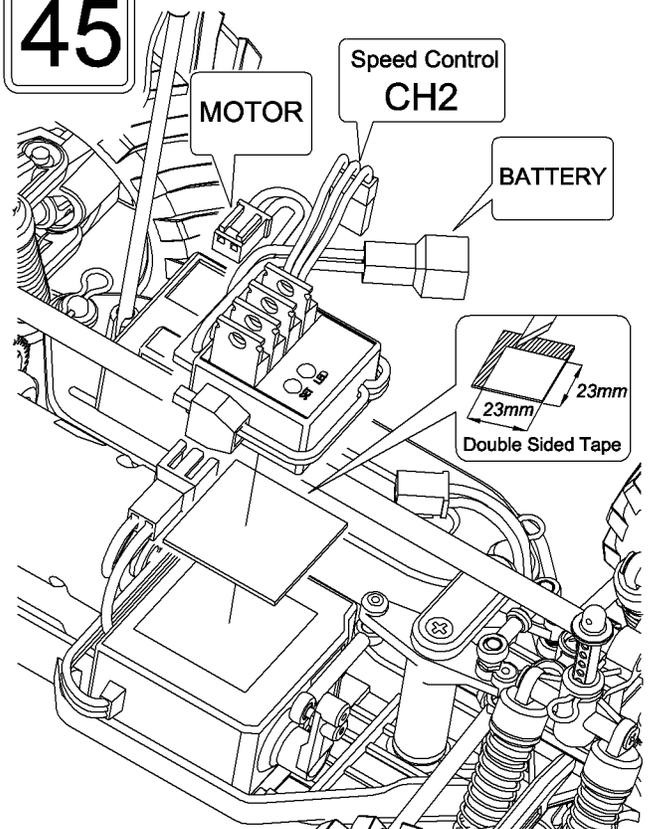


**IMPORTANT:** Never cut the receiver antenna! Doing so will severely reduce your range.

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## RUNNING AND MAINTENANCE TIPS

### BEFORE EACH RUN

- Make sure the batteries in the transmitter are charged.
- Make sure there are no loose or damaged parts on the kit.
- Check the drive train for binding that could cause possible damage to the kit or the electronics.
- Check that the ESC and receiver are properly secured to the chassis.
- Check to make sure all wires are properly secured.

### AFTER EACH RUN

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

### AFTER EVERY 10 RUNS

- Check to make sure the bearings are free of debris.
- Check for a smooth gear mesh.
- Check the tires to make sure they are still properly glued to the wheels.

## TUNING

### RIDE HEIGHT ADJUSTMENT

The ride height of the Mini Quake is easily adjusted by using the included pre-load spacers (67). To increase the ride height of the Mini Quake, install a pre-load spacer onto each of the shock bodies. 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 to each of the shocks. To lower the ride height of the Mini Quake, remove the desired amount of pre-load spacers from the shocks.

### PINIONS

The Mini Quake comes stock with the 16 tooth pinion. This pinion is for maximum acceleration and climbing. To obtain higher top speeds you can install a larger pinion gear onto the motor. This will, however, decrease your acceleration and run time.

### SHOCK LOCATION

There are three different lower shock mounting positions on the Mini Quake. For jumping and climbing, the best location is the inner most hole of suspension arm. This makes the truck's suspension feel softer. For racing and surfaces with more traction, the best location is the outer most hole. This location gives the truck's suspension a stiffer feel and allows less chassis roll in the corners. The middle is a good all around location. **Tip:** Make sure the front shocks are all in the same location and make sure all of the rear shocks are all in the same location. They do not have to be in the same location from front to rear.

### SHOCK OIL

The Mini Quake comes stock with 30 wt oil in the shocks. The handling of the truck 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 truck will have less chassis roll and become less responsive. Putting lighter oil in the shocks will cause the truck 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.

## OTHER ITEMS AVAILABLE FROM DURATRAX



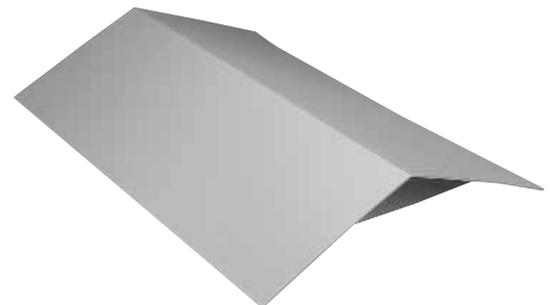
DTXR0140 Screwdriver Set



DTXP4010  
TX NiCd Conversion



DTXQ0100  
Metric Phillips Head Screw Set



DTXC2375  
Kwik Ramp Portable Jump



DTXC2377  
Kwik Trak Racing Cones