

# BUILDING INSTRUCTIONS



# INTRODUCTION



Thank you for purchasing the Tekno RC ET48.3 1/8th Scale Electric Competition Truggy Kit. The ET48.3 represents a continued evolution in the 1/8th scale electric class. Since the original ET48 was released in 2014, we have continued to focus on refining and improving the vehicle to provide superior performance and value to our customers. We are always working on new projects, so please check our website ([www.teknorc.com](http://www.teknorc.com)) regularly for the latest news, parts, and kits. Thanks again.

## **Additional equipment and parts needed:**

2/3 channel radio transmitter and receiver  
1/8th scale ESC and motor  
High torque steering servo (300 oz/in torque minimum)  
4-6s LiPo battery  
1/8th scale truggy tires, wheels & CA glue  
Paint for Body  
MOD1 Pinion (TKR4171->TKR4190)

## **Tools needed:**

Hex drivers 1.5mm (TKR1104), 2.0mm (TKR1105), 2.5mm (TKR1106)  
Nut drivers 5.0mm (TKR1107), 5.5mm (TKR1108), 7.0mm (TKR1109)  
17mm Wheel Wrench (TKR1116)  
Pivot Ball and Shock Multi-tool (TKR1115, for shock assembly)  
4mm and 5mm turnbuckle wrench (TKR1103)  
Hobby knife  
Needle-nose pliers  
4mm arm reamer  
Lexan Body Scissors

**Disclaimer:** Tekno RC is not responsible or liable for any property or personal damage, loss, or injury incurred as a result of using this product. This kit is meant for use by persons 14 years of age or older and in the strict confines of a legally permitted RC track or facility.

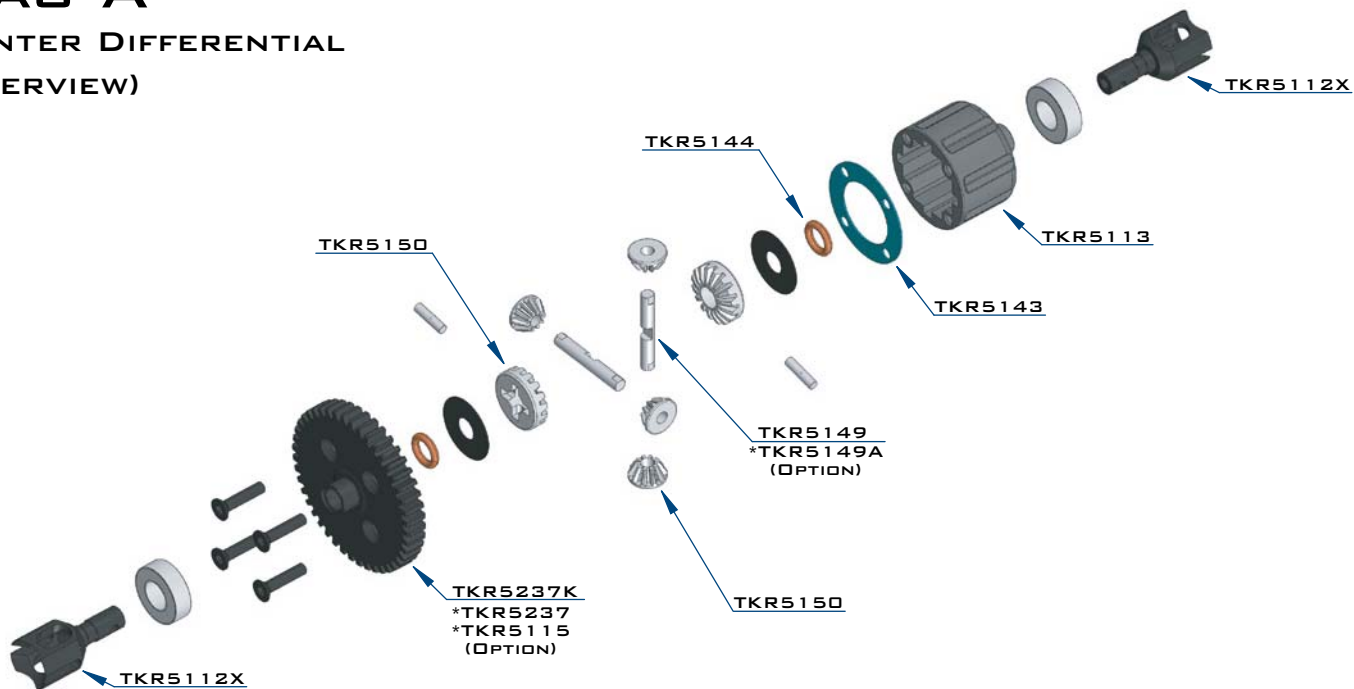
**Warnings:** Always double-check that your radio gear is working properly before operating vehicle. Never operate the vehicle indoors (unless the RC track is an indoor facility). Use caution while operating vehicle so as not to collide with people who may be turn marshalling or who might otherwise not be aware that a fast moving RC vehicle is in the vicinity.

**Warranty:** We warrant that the parts included in this kit are free from defects. If you find a defective part in your kit, please contact us @ [info@teknorc.com](mailto:info@teknorc.com) and we will help you to resolve the issue. We do not warranty parts that may be broken during operation of the vehicle or otherwise. Refer to the end of this instruction manual for a listing of spare/replacement and option parts. All spare parts and other info are available on our website ([www.teknorc.com](http://www.teknorc.com)) and through our network of domestic and international dealers and distributors.

# BAG A

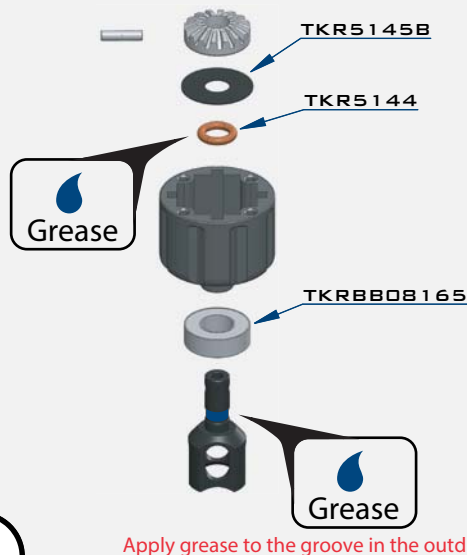
## CENTER DIFFERENTIAL

### (OVERVIEW)

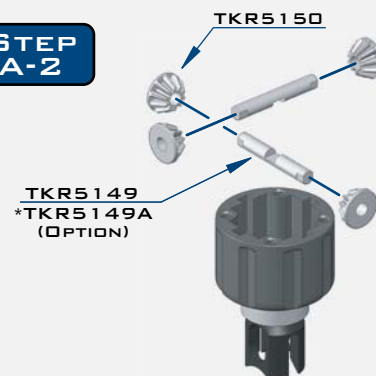


#### STEP A-1

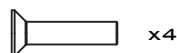
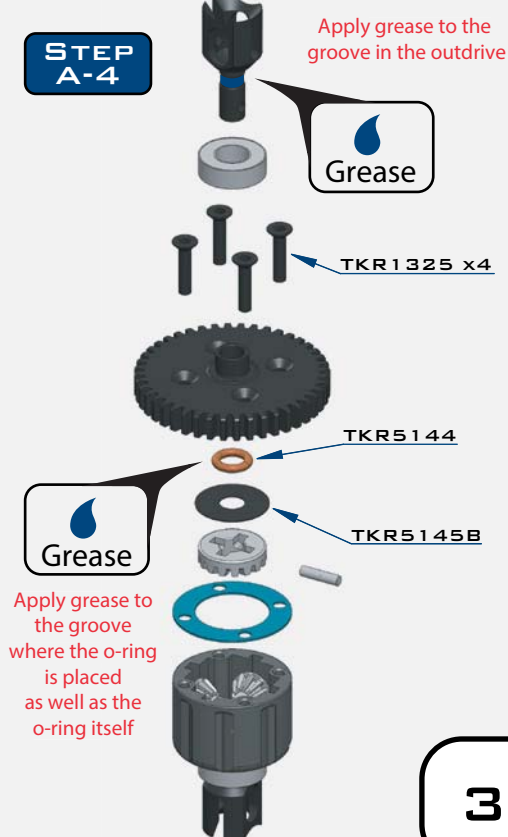
Apply grease to the groove where the o-ring is placed as well as the o-ring itself



#### STEP A-2



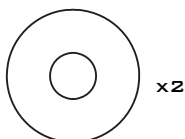
#### STEP A-4



TKR1325  
M3X14MM FLAT HEAD SCREW



TKR5144  
DIFFERENTIAL O-RINGS

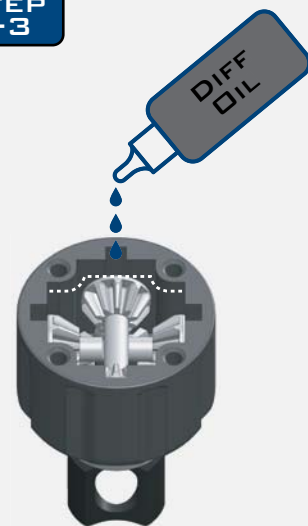


TKR5145B  
DIFFERENTIAL SHIMS (6X17MM)



TKRBB08165  
BALL BEARING(8X16X5MM)

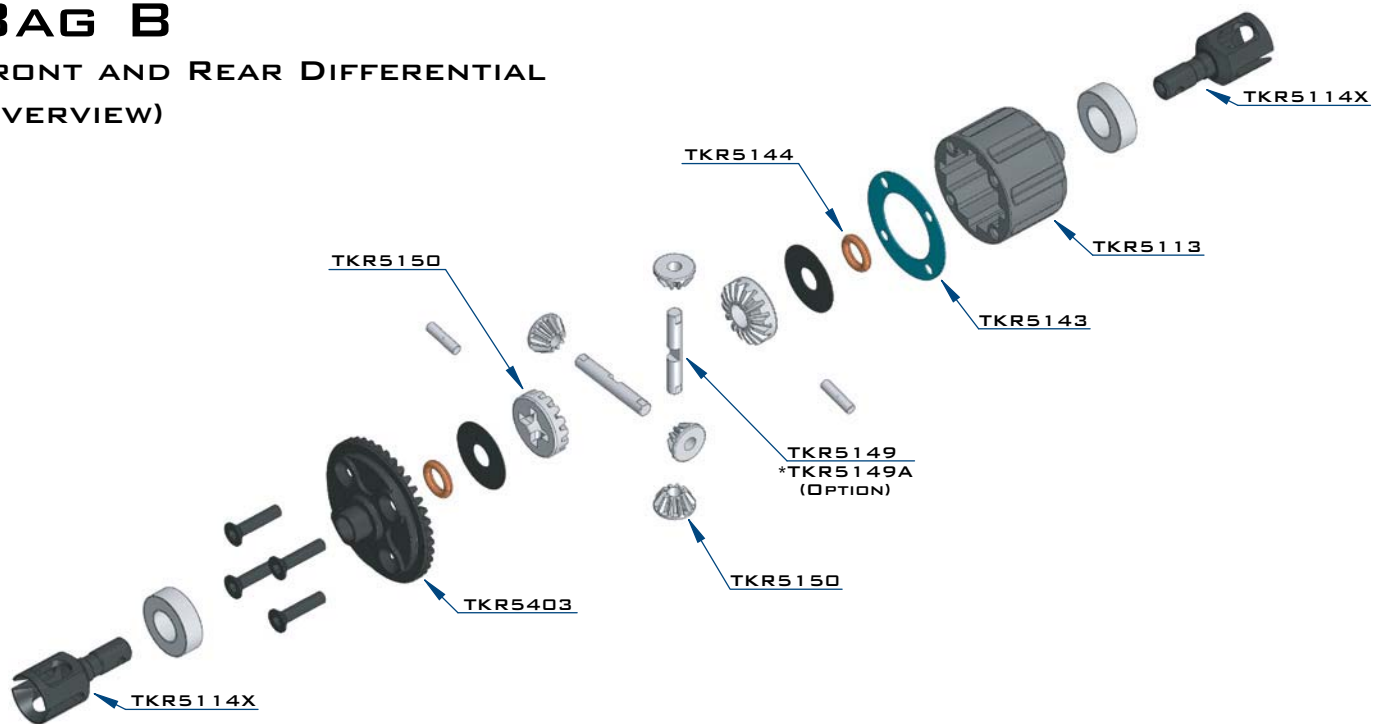
#### STEP A-3



Fill with 10,000 wt oil to 1mm below full  
DO NOT OVER FILL

# BAG B

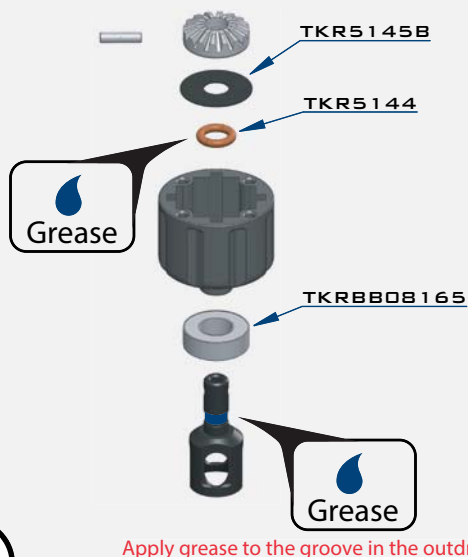
## FRONT AND REAR DIFFERENTIAL (OVERVIEW)



### STEP B-1

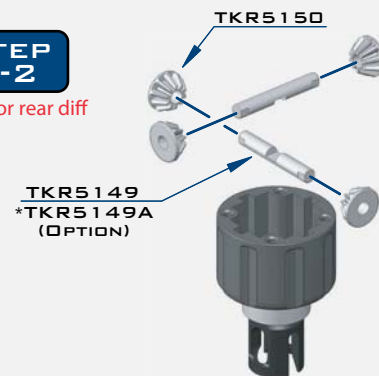
Repeat for rear diff

Apply grease to the groove where the o-ring is placed as well as the o-ring itself



### STEP B-2

Repeat for rear diff



### STEP B-4

Repeat for rear diff

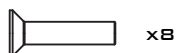


### STEP B-3

Repeat for rear diff



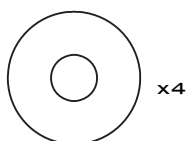
Fill FRONT with 10,000 wt oil  
Fill REAR with 5,000 wt oil  
to 1mm below full  
DO NOT OVER FILL



TKR1325  
M3X14MM FLAT HEAD SCREW



TKR5144  
DIFFERENTIAL O-RINGS



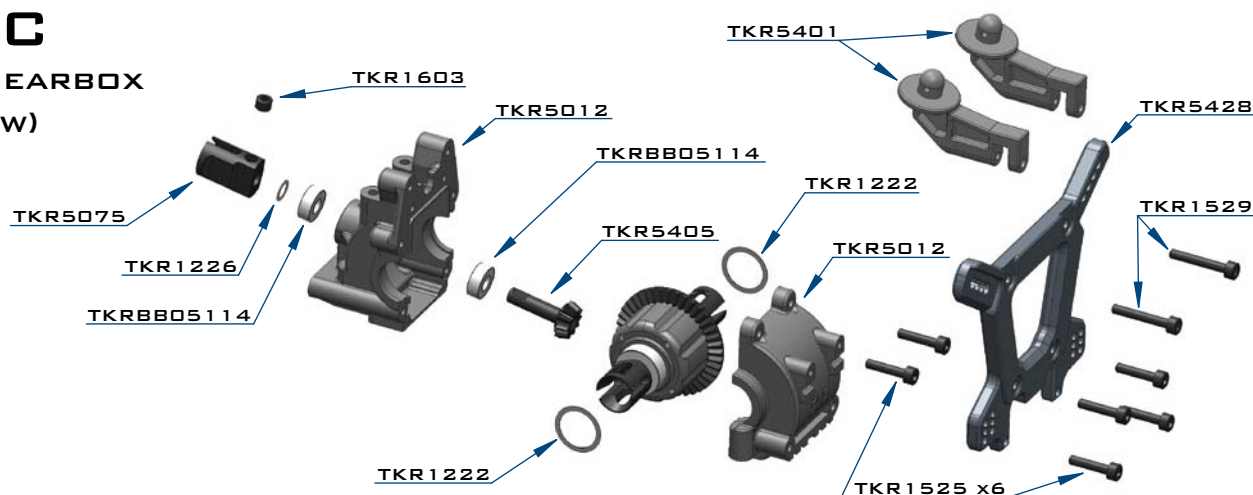
TKR5145B  
DIFFERENTIAL SHIMS (6X17MM)



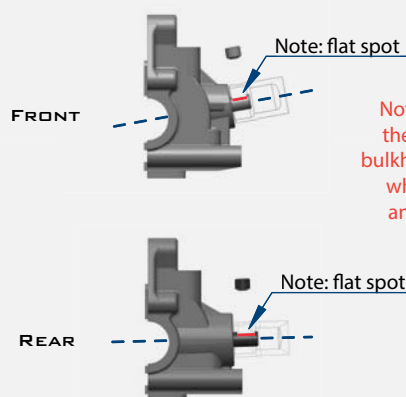
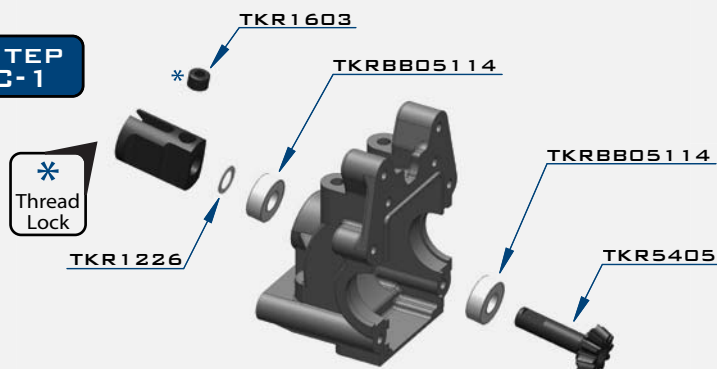
TKRBB08165  
BALL BEARING(8X16X5MM)

# BAG C

## FRONT GEARBOX (OVERVIEW)

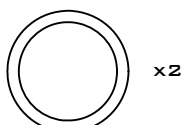


### STEP C-1

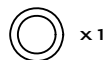


Note: The front and rear of the car use different inner bulkheads. The front is angled whereas the rear is offset and only slightly angled.

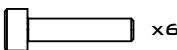
Note: TKR1222 - The gear mesh should be as close as possible without any binding. Test the fitment of the diff with both TKR1222 shims on the gear-side of the diff. If the diff turns freely without binding, continue to next step. If the diff binds and does not turn freely (it will make a grinding or crunching sound when spun), remove one TKR1222 shim from the gear side and install it onto the other side of the diff. Reassemble and test the mesh again. If it is still binding, remove the second TKR1222 shim from the gear side and install it onto the other side of the diff. When you are satisfied that you have the best gear mesh possible continue to the next step.



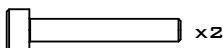
TKR1222  
13x16x0.1MM DIFF SHIM



TKR1226  
5x7x0.2MM SHIM



TKR1525  
M3x14MM CAP HEAD SCREW



TKR1529  
M3x20MM CAP HEAD SCREW

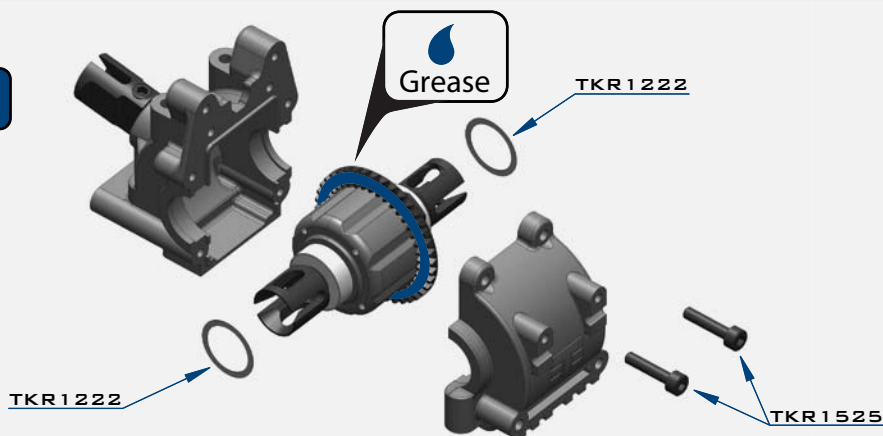


TKR1603  
M5x4MM SET SCREW

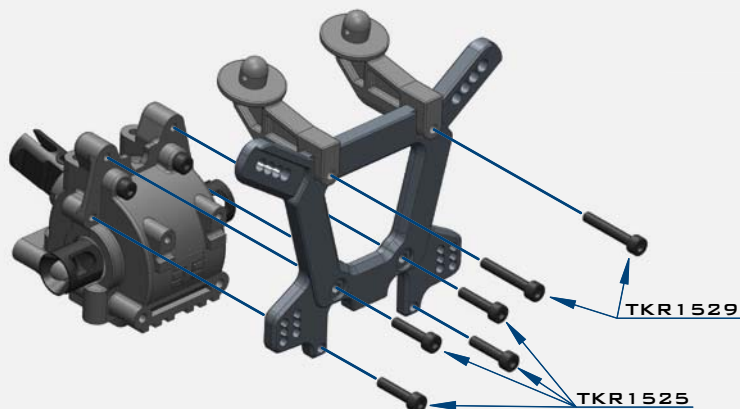


TKRBB05114  
BALL BEARING (5x11x4)

### STEP C-2



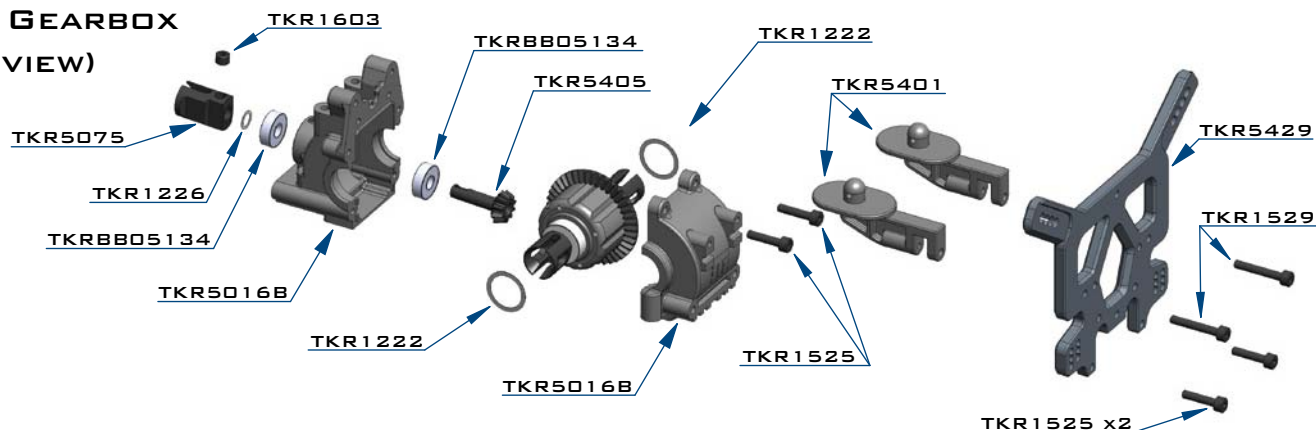
### STEP C-3



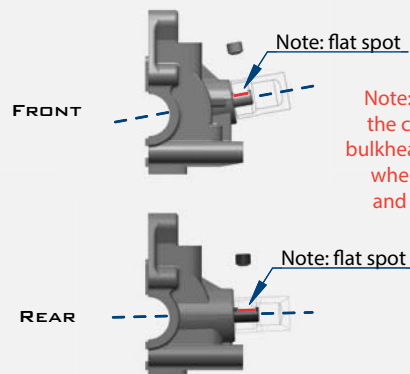
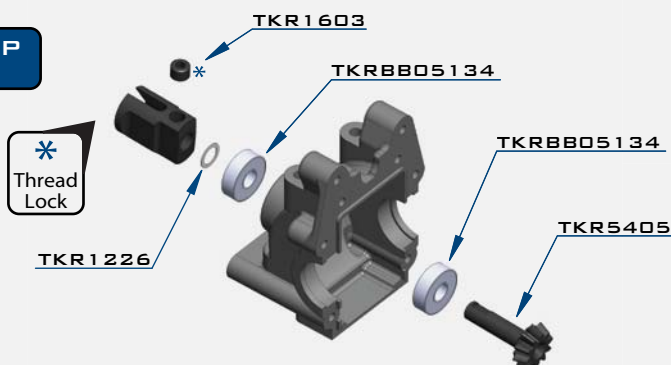


# BAG D

## REAR GEARBOX (OVERVIEW)

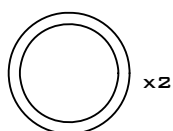


### STEP D-1



Note: The front and rear of the car use different inner bulkheads. The front is angled whereas the rear is offset and only slightly angled.

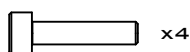
Note: TKR1222 - The gear mesh should be as close as possible without any binding. Test the fitment of the diff with both TKR1222 shims on the gear-side of the diff. If the diff turns freely without binding, continue to next step. If the diff binds and does not turn freely (it will make a grinding or crunching sound when spun), remove one TKR1222 shim from the gear side and install it onto the other side of the diff. Reassemble and test the mesh again. If it is still binding, remove the second TKR1222 shim from the gear side and install it onto the other side of the diff. When you are satisfied that you have the best gear mesh possible continue to the next step.



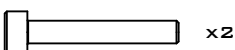
TKR1222  
13x16x0.1MM DIFF SHIM



TKR1226  
5x7x0.2MM SHIM



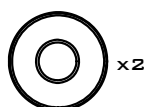
TKR1525  
M3x14MM CAP HEAD SCREW



TKR1529  
M3x20MM CAP HEAD SCREW

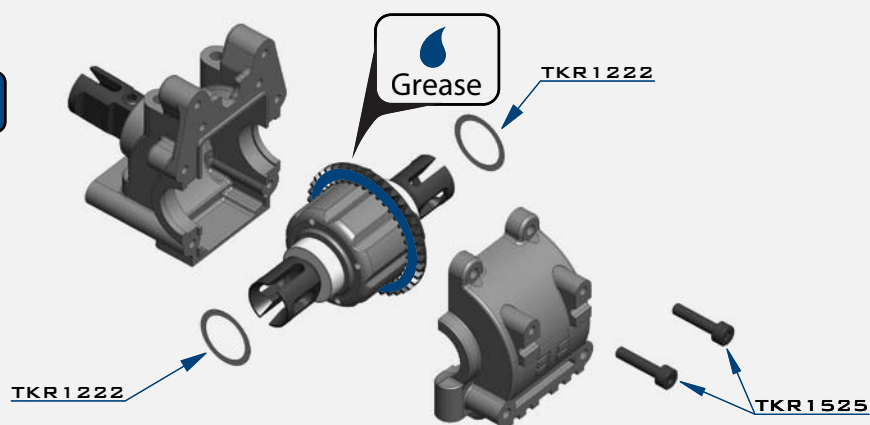


TKR1603  
M5x4MM SET SCREW

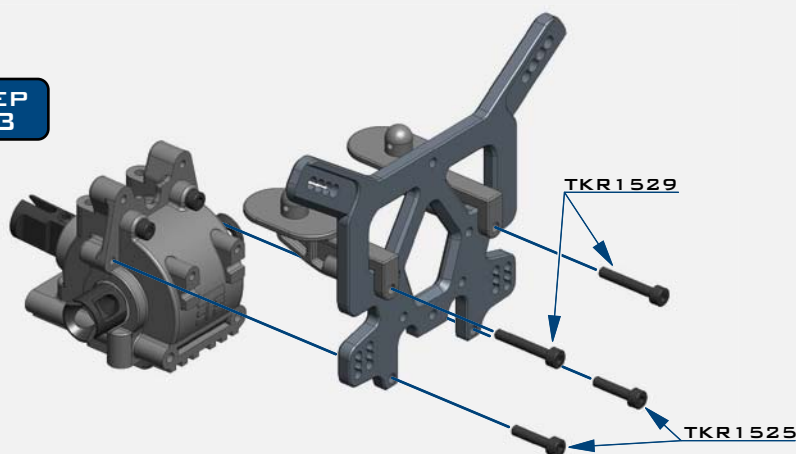


TKRBB05134  
BALL BEARING (5x13x4)

### STEP D-2



### STEP D-3



# BAG E

## LOW PROFILE WING MOUNT

### SETTINGS

#### POSITION SETTINGS



1 - REARWARD LOW

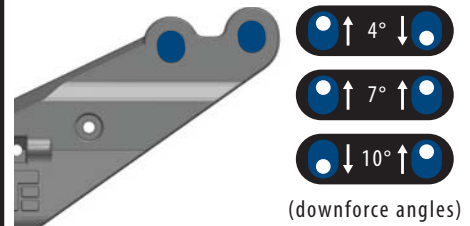
2 - FORWARD LOW

3 - REARWARD HIGH

4 - FORWARD HIGH

Note: Stock position setting is # 3, Rearward High

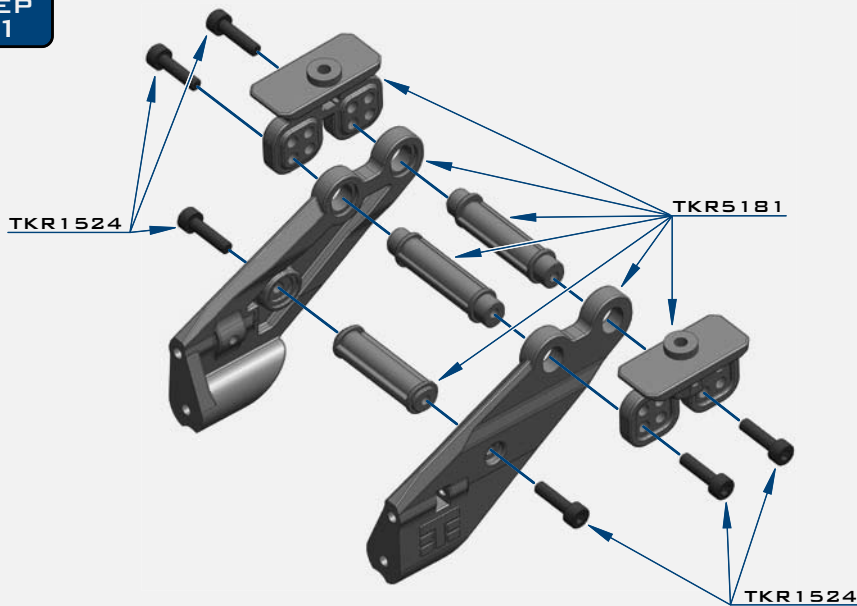
#### DOWNFORCE SETTINGS



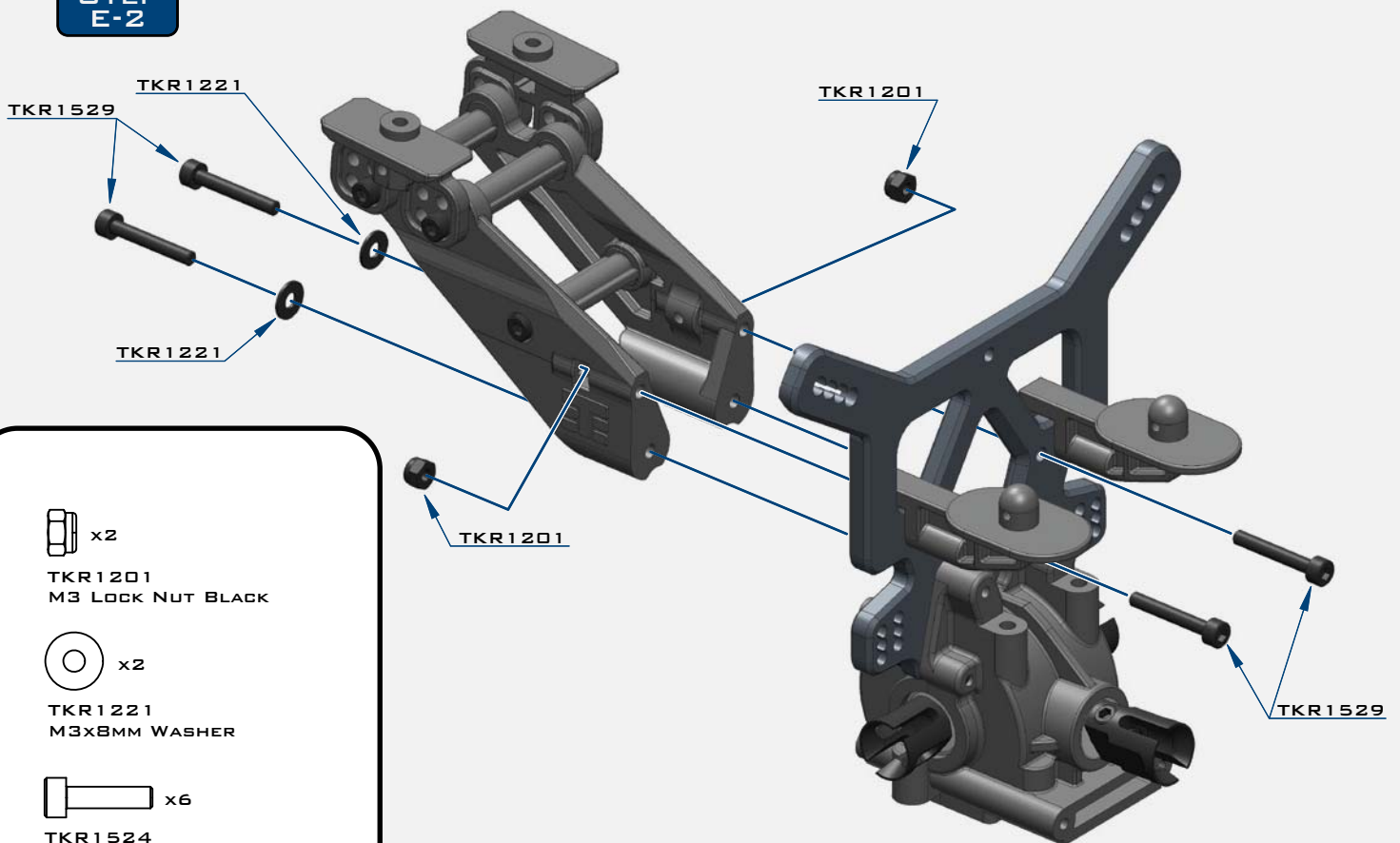
(downforce angles)

Note: Stock downforce setting is 4°

#### STEP E-1



#### STEP E-2



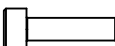
x2

TKR1201  
M3 LOCK NUT BLACK



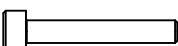
x2

TKR1221  
M3X8MM WASHER



x6

TKR1524  
M3X12MM CAP HEAD SCREW



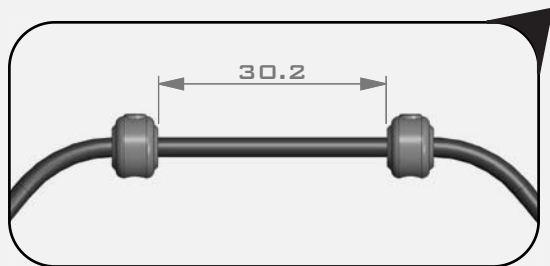
x4

TKR1529  
M3X20MM CAP HEAD SCREW

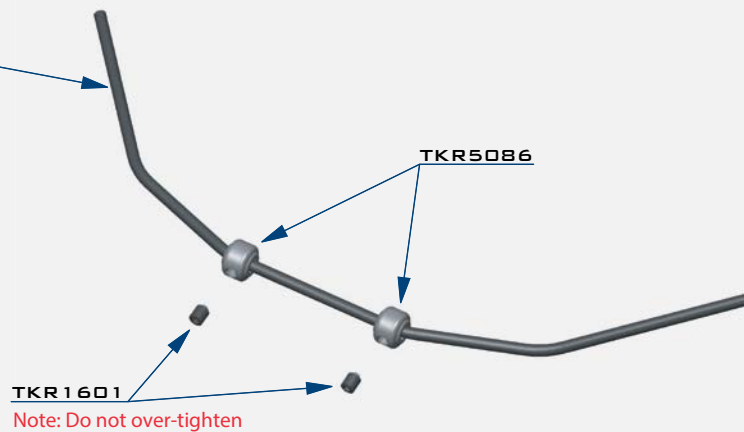
# BAG F

## REAR END

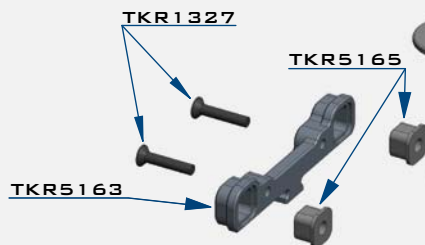
### STEP F-1



TKR5493 - 2.6MM  
 \*TKR5490 - 2.3MM  
 \*TKR5491 - 2.4MM  
 \*TKR5492 - 2.5MM  
 \*TKR5494 - 2.8MM  
 \*TKR5495 - 3.0MM  
 (OPTION)



### STEP F-2

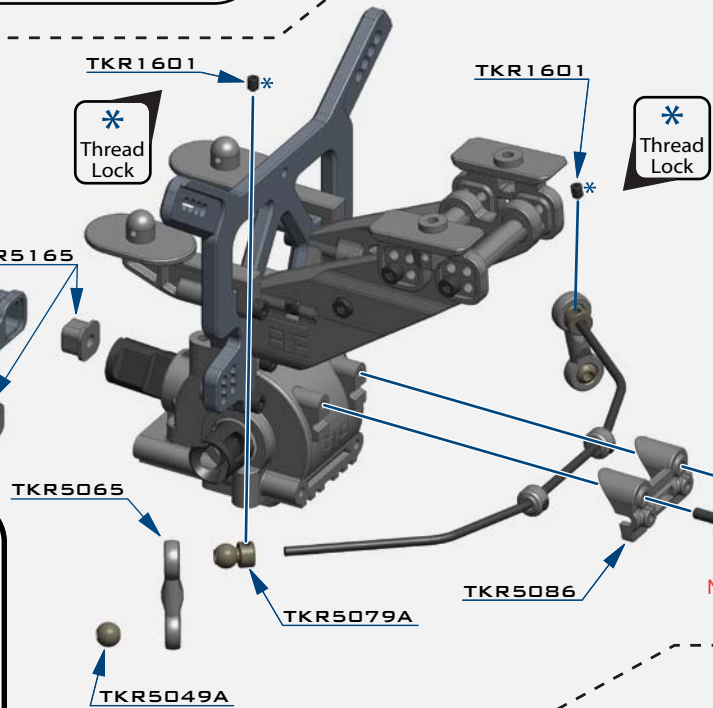
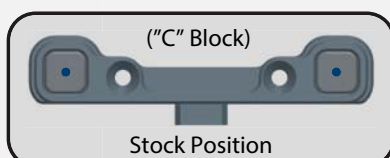


TKR1601  
 \* Thread Lock

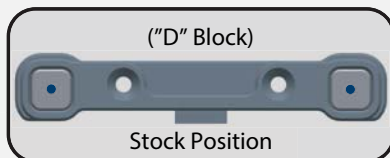
TKR1601  
 \* Thread Lock



Install the sway bar ball onto the sway bar wire until the end of the wire is flush with the ball as picture above.

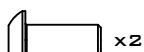


Note: Loosen the M3x4 set screw (TKR1601) if the anti-roll bar does not turn freely.

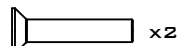


Note: With these stock center dot settings, Anti-Squat = 2° / Rear Toe = 3°

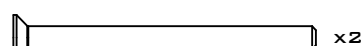
### STEP F-3



TKR1238  
 M4x10MM DROOP SCREW



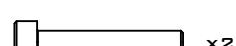
TKR1327  
 M3x16MM FLAT HEAD SCREW



TKR1333  
 M3x40MM FLAT HEAD SCREW



TKR1522  
 M3x8MM CAP HEAD SCREW



TKR1529  
 M3x20MM CAP HEAD SCREW



TKR1601  
 M3x4MM SET SCREW

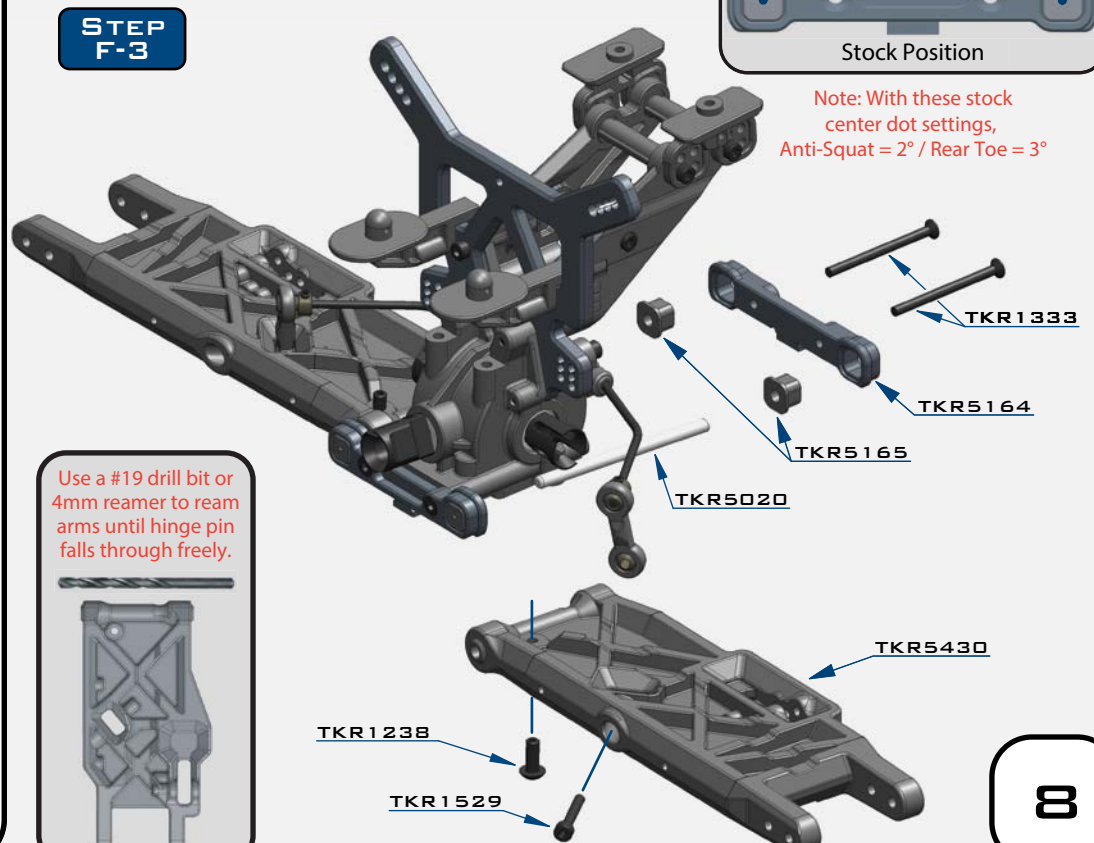


TKR5049A  
 PIVOT BALL SWAY BAR



TKR5079A  
 STABILIZER BALL

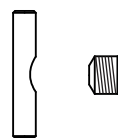
Use a #19 drill bit or 4mm reamer to ream arms until hinge pin falls through freely.





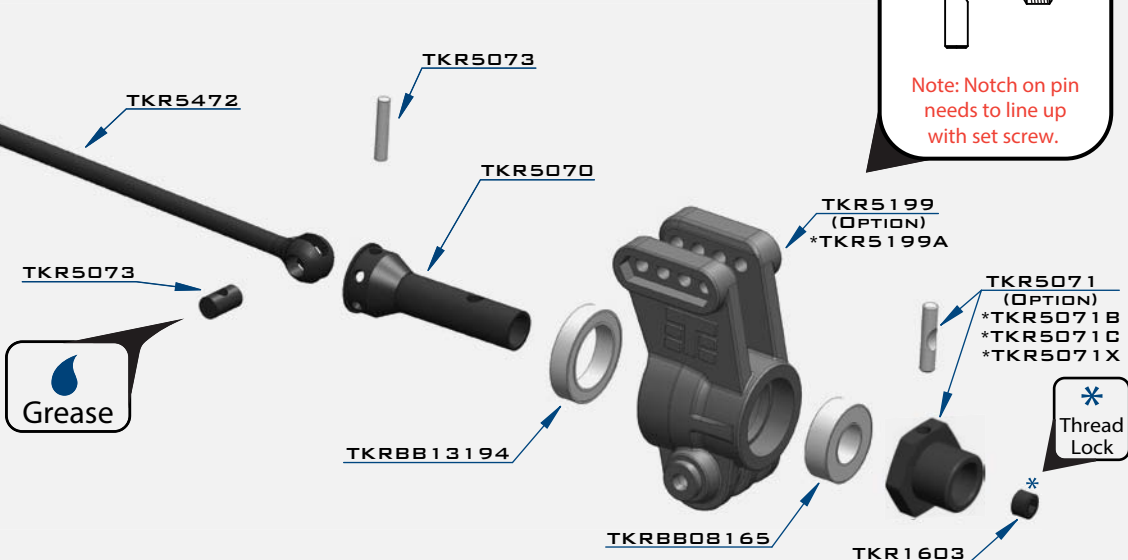
# BAG G

## REAR HUB/CVA ASSEMBLY



Note: Notch on pin needs to line up with set screw.

### STEP G-1



### STEP G-2

x4  
TKR1201  
M3 LOCKNUT BLACK

x4  
TKR1601  
M3X4MM SET SCREW

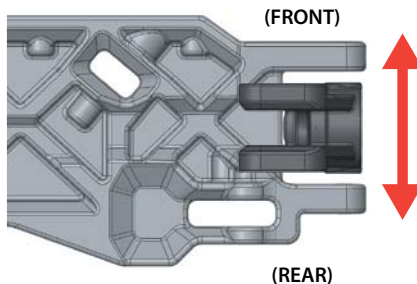
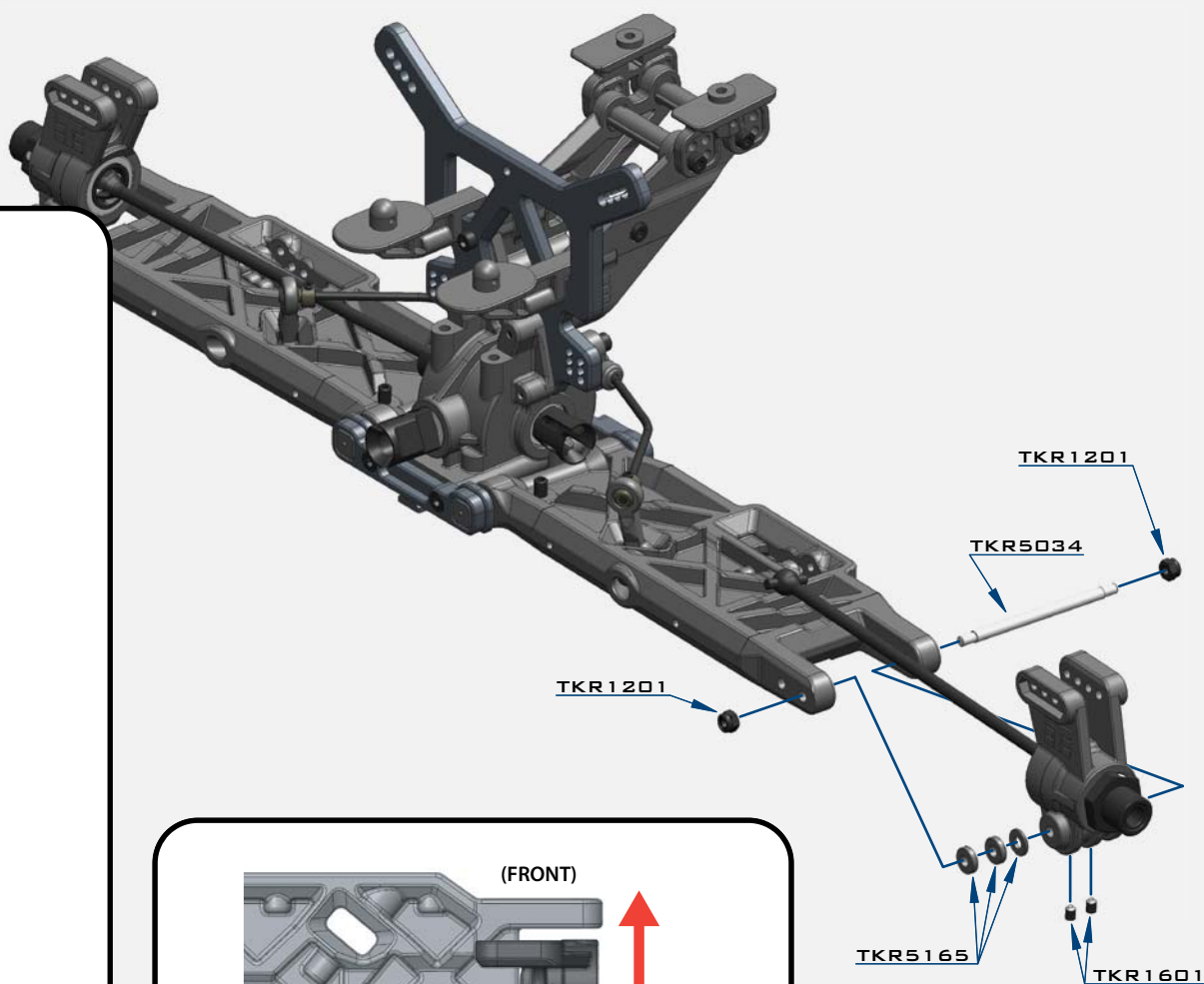
x2  
TKR1603  
M5X4MM SET SCREW

x2  
TKR5071  
M3X16.8MM PIN

x2  
TKR5073  
CV JOINT PIN

x2  
TKRBB08165  
BALL BEARING (8X16X5)

x2  
TKRBB13194  
BALL BEARING (13X19X4)

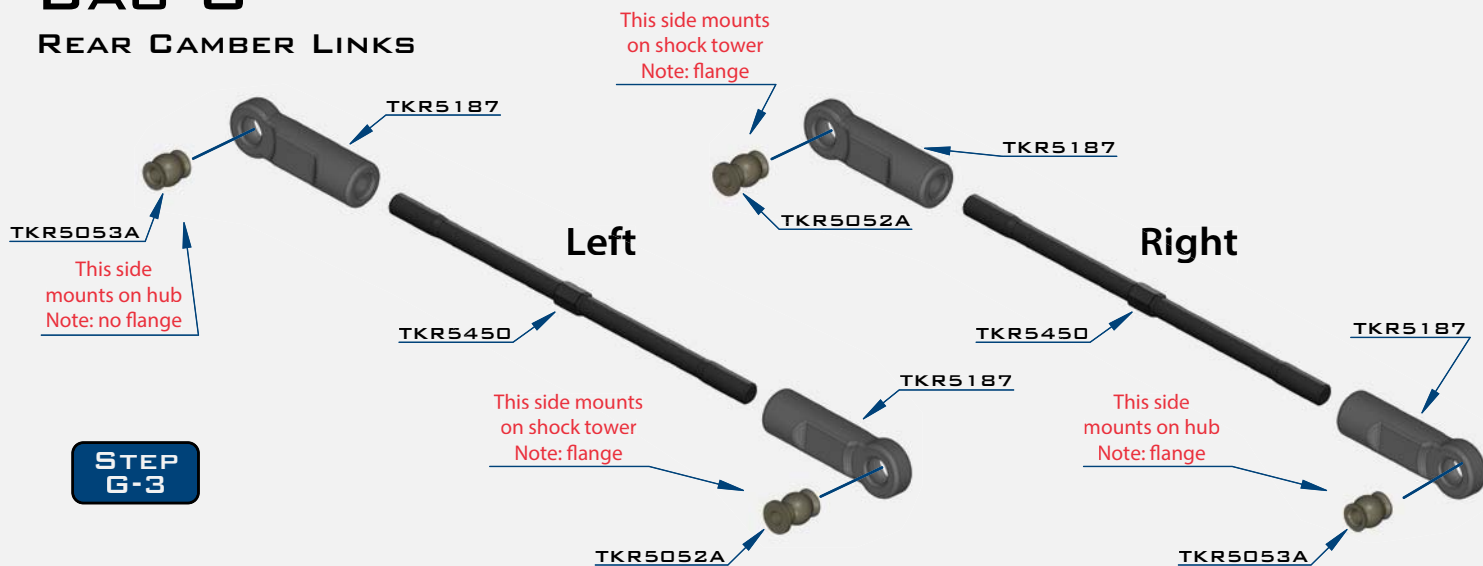


Changes to the wheelbase have a dramatic effect on handling, since it shifts the distribution of weight over the rear wheels. This adjusts traction. By shortening the wheelbase at the rear, you are placing more weight over the rear wheels.

Changes to the wheelbase also change the amount of sweep the rear driveshaft will have. More driveshaft sweep creates an effect similar to anti-squat, where the rear end gets pushed upwards on throttle. This helps reduce chassis slap when landing jumps on throttle.

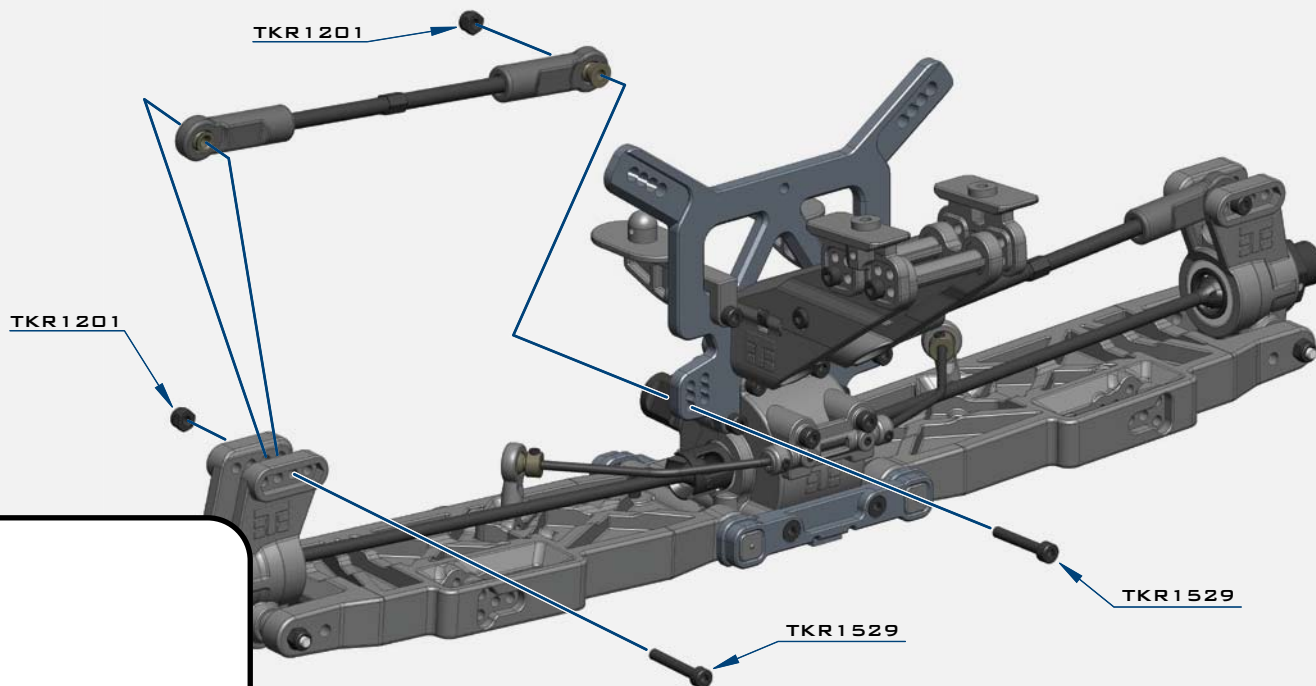
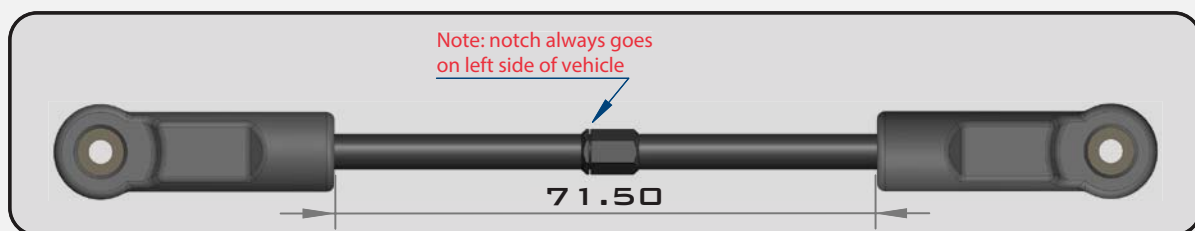
# BAG G

## REAR CAMBER LINKS



STEP  
G-3

STEP  
G-4

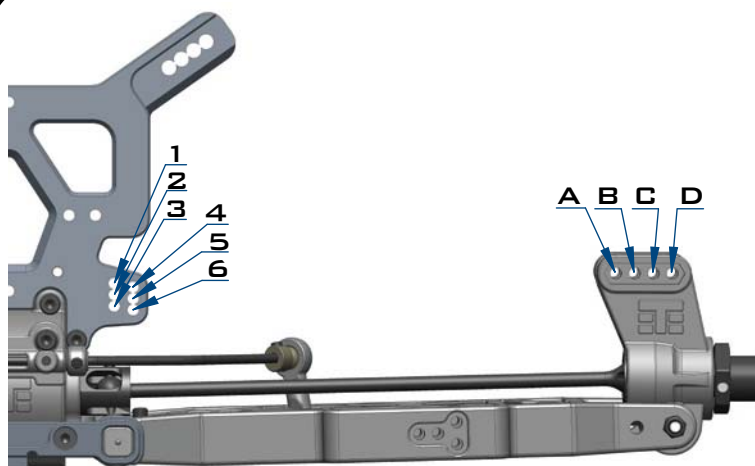


x4  
TKR1201  
M3 LOCKNUT BLACK

x4  
TKR1529  
M3X20MM CAP HEAD SCREW

x2  
TKR5052A  
PIVOT BALL M3X6.8MM

x2  
TKR5053A  
PIVOT BALL M3X6.8MM  
NO FLANGE



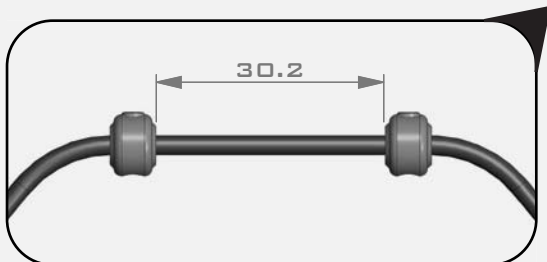
Stock position is 6/B

# BAG H

## FRONT END

### STEP H-1

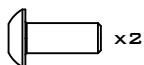
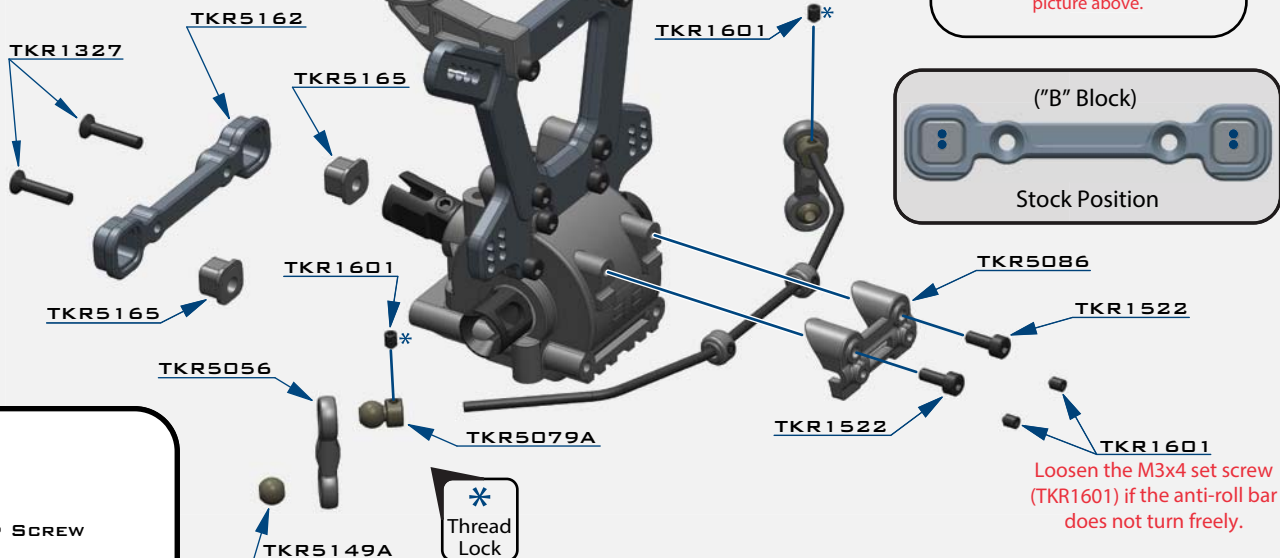
TKR5482 - 2.5MM  
\*TKR5480 - 2.3MM  
\*TKR5481 - 2.4MM  
\*TKR5483 - 2.6MM  
\*TKR5484 - 2.8MM  
\*TKR5485 - 3.0MM  
(OPTION)



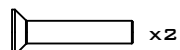
TKR1601  
Note: Do not over-tighten

TKR5086

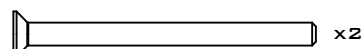
### STEP H-2



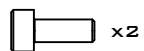
x2  
TKR1238  
M4x10MM DROOP SCREW



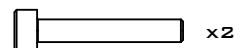
x2  
TKR1327  
M3x16MM FLAT HEAD SCREW



x2  
TKR1333  
M3x40MM FLAT HEAD SCREW



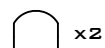
x2  
TKR1522  
M3x8MM CAP HEAD SCREW



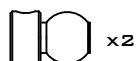
x2  
TKR1529  
M3x20MM CAP HEAD SCREW



x6  
TKR1601  
M3x4MM SET SCREW

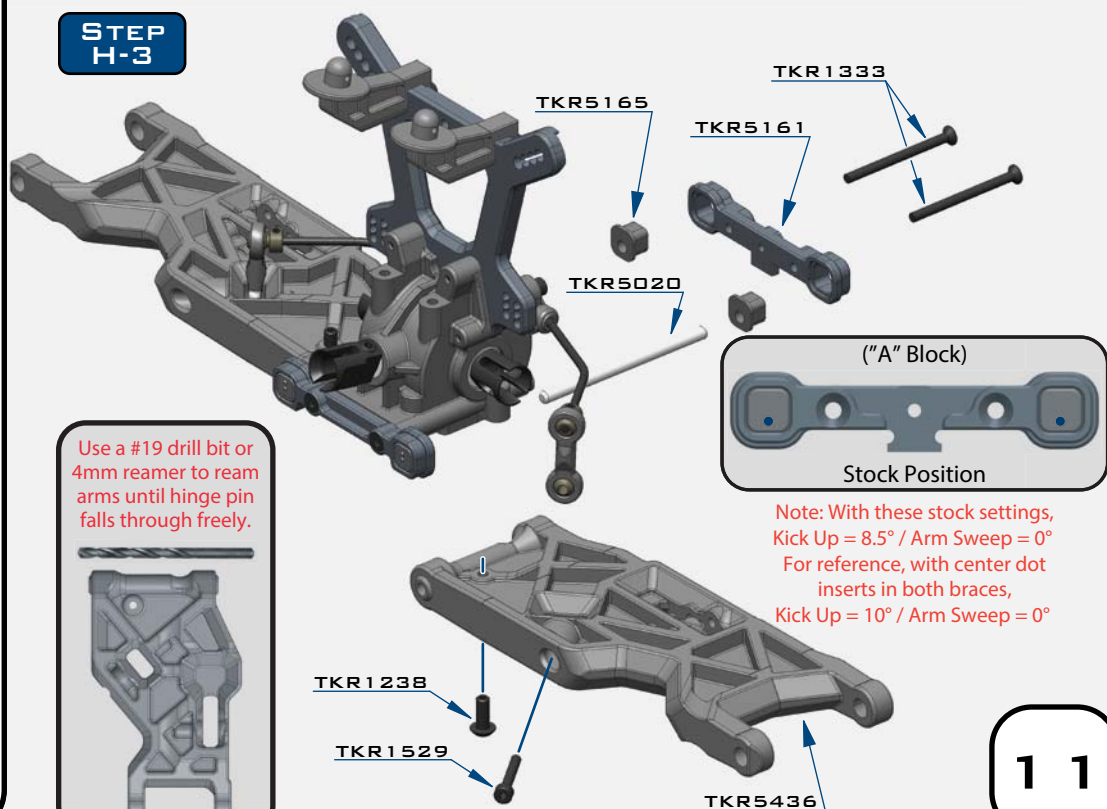


x2  
TKR5049A  
PIVOT BALL SWAY BAR



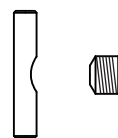
x2  
TKR5079A  
STABILIZER BALL

### STEP H-3



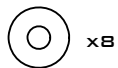
# BAG I

## FRONT SPINDLE / CVA ASSEMBLY

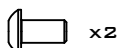


Note: notch on pin needs to line up with set screw.

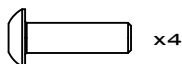
### STEP I-1



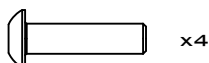
x8  
TKR1221  
M3x8MM WASHER



x2  
TKR1401  
M3x6MM BUTTON HEAD SCREW



x4  
TKR1445  
M4x14MM BUTTON HEAD SCREW



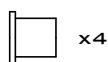
x4  
TKR1447  
M4x16MM BUTTON HEAD SCREW



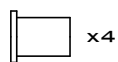
x8  
TKR1601  
M3x4MM SET SCREW



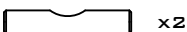
x2  
TKR1603  
M5x4MM SET SCREW



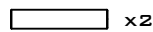
x4  
TKR5054A  
SPINDLE PIN SLEEVE



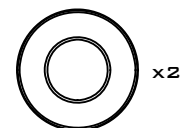
x4  
TKR5055A  
SUSPENSION PIN SLEEVE



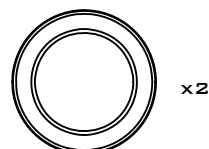
x2  
TKR5071  
M3x16.8MM PIN



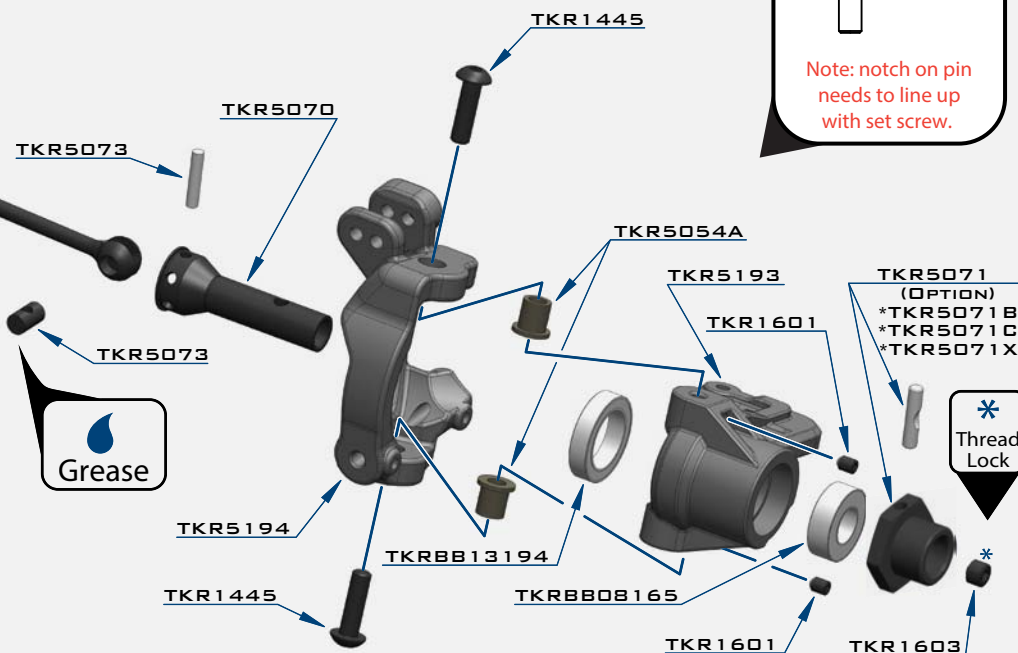
x2  
TKR5073  
CV JOINT PIN



x2  
TKRBB08165  
BALL BEARING (8x16x5)

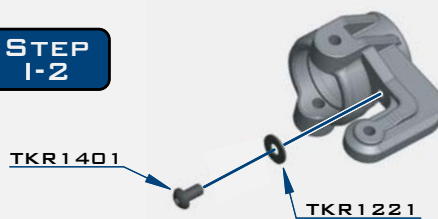


x2  
TKRBB13194  
BALL BEARING (13x19x4)



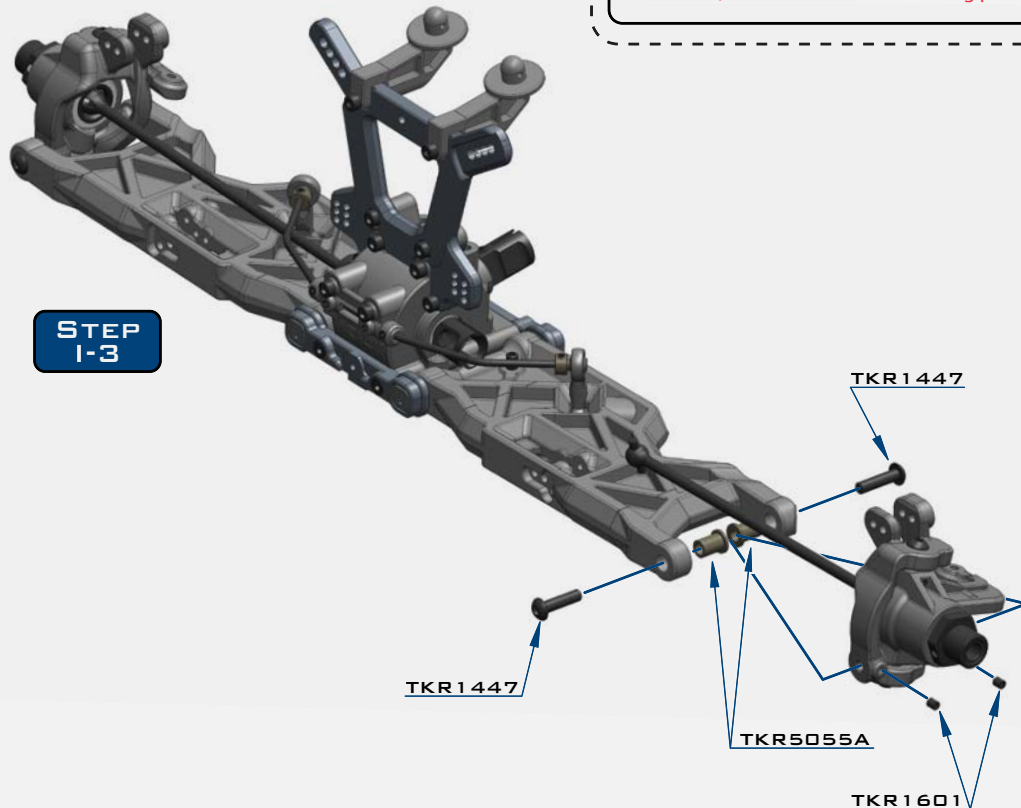
Note: The TKR1601 set screws are meant to keep the TKR1445 screws from coming loose. After installing TKR1445 and ensuring the steering action is free, install TKR1601 in the locations indicated. Very slowly tighten the screws until you feel some resistance from contacting the TKR1445 screws. DO NOT OVERTIGHTEN. Also be sure to loosen TKR1601 before unscrewing TKR1445 or you will damage the screws and the parts.

### STEP I-2



Note: The steering stops provide adjustable travel limiters that you can adjust to your driving style. For very tight tracks you may want to experiment with less limiting washers (more steering travel). However, with too much steering travel the rear end can lose traction more easily coming out of corners. After months of testing on different track surfaces, 1 washer is the best starting point.

### STEP I-3

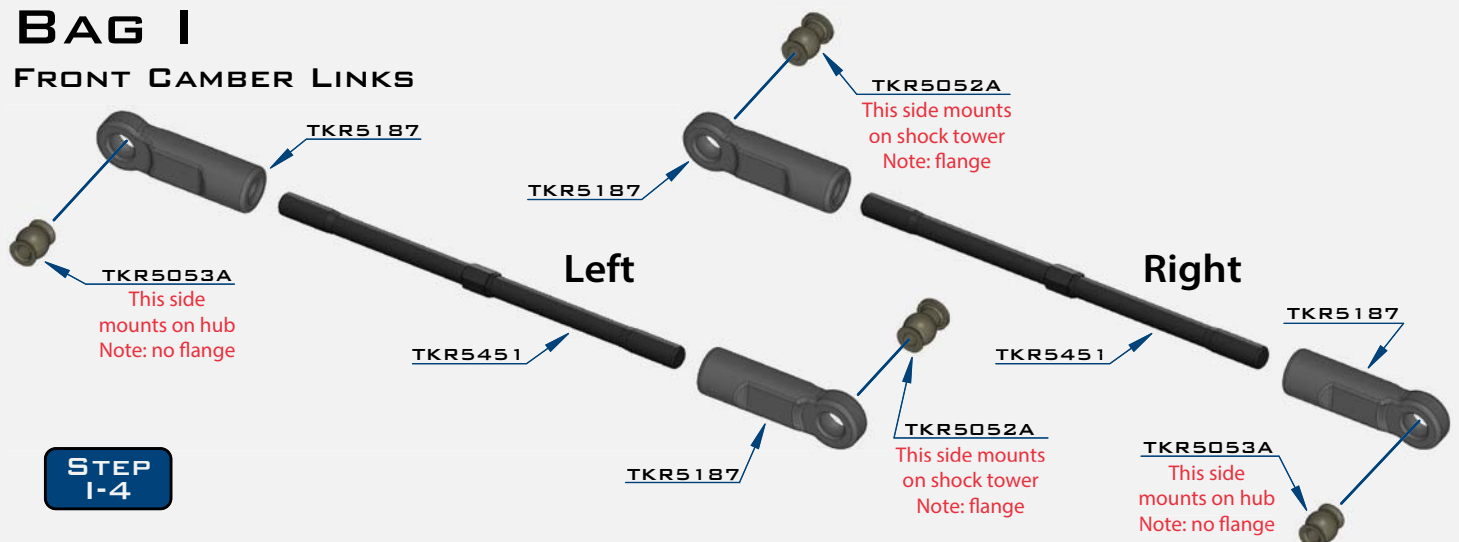


Note: The TKR1601 set screws are meant to keep the TKR1447 screws from coming loose. After installing TKR1447 and ensuring the steering action is free, install TKR1601 in the locations indicated. Very slowly tighten the screws until you feel some resistance from contacting the TKR1447 screws. DO NOT OVERTIGHTEN. Also be sure to loosen TKR1601 before unscrewing TKR1447 or you will damage the screws and the parts.

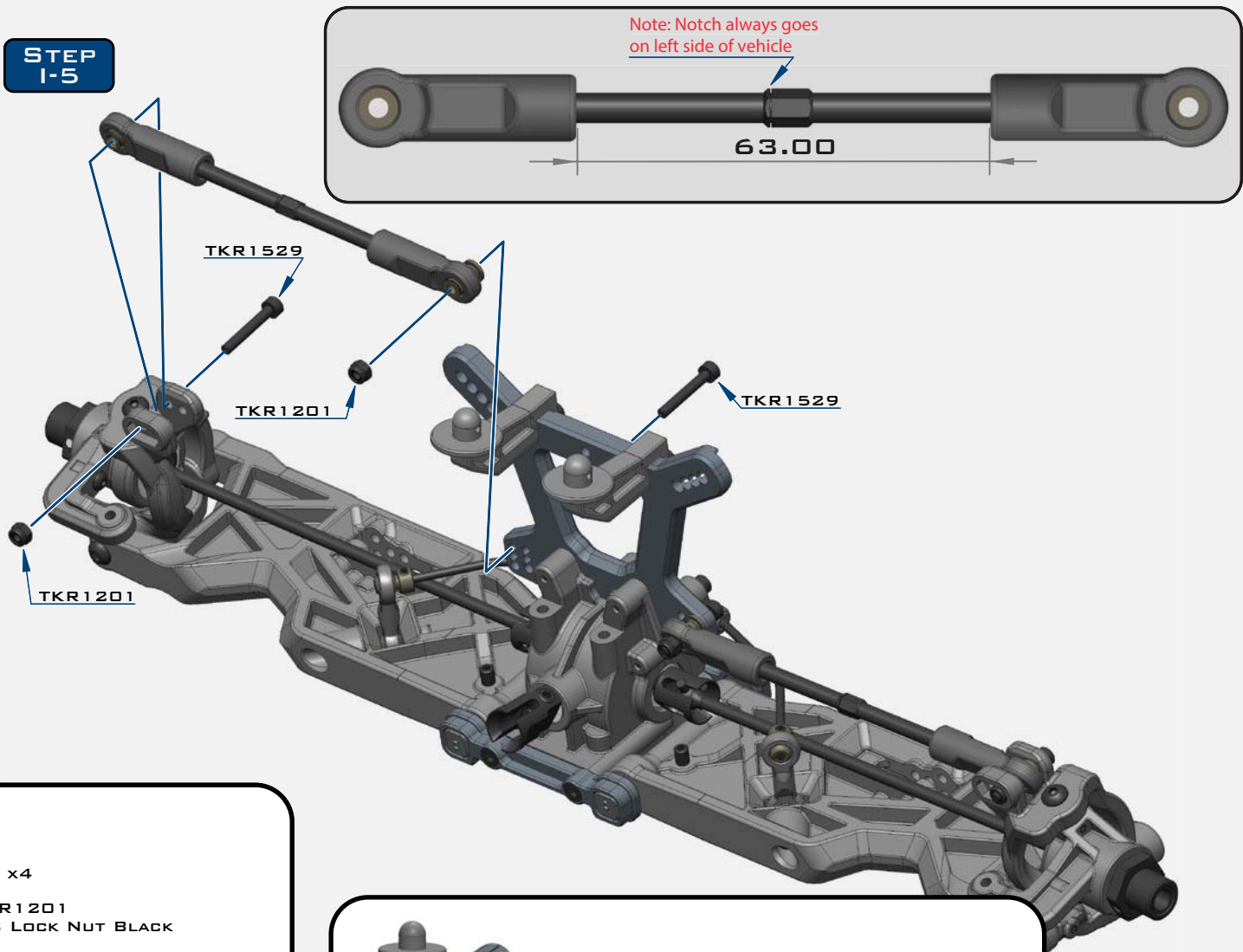


# BAG I

## FRONT CAMBER LINKS

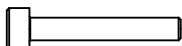


### STEP 1-5



x4

TKR1201  
M3 LOCK NUT BLACK



x4

TKR1529  
M3x20MM CAP HEAD SCREW



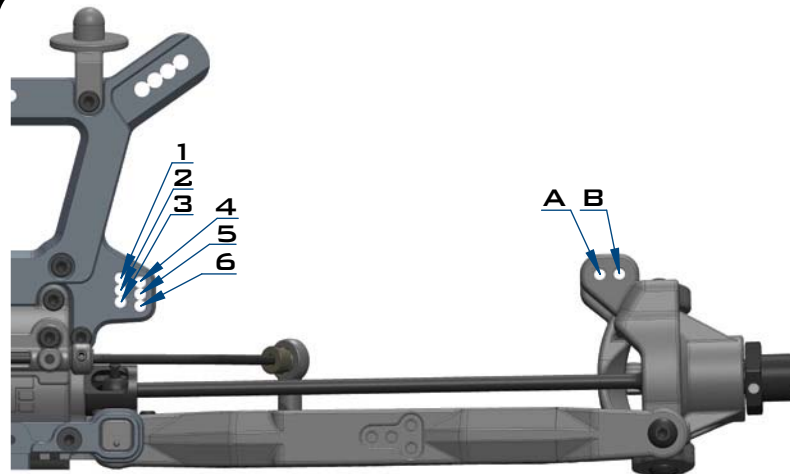
x2

TKR5052A  
PIVOT BALL M3x6.8MM



x2

TKR5053A  
PIVOT BALL M3x6.8MM  
NO FLANGE

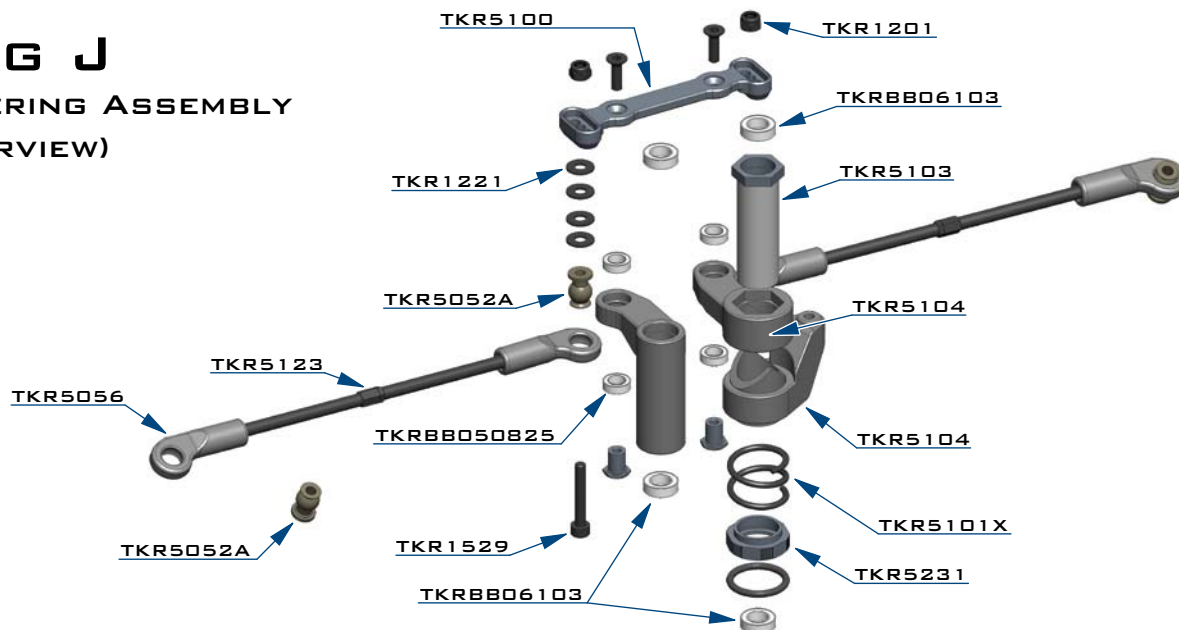


Stock position is 4/B

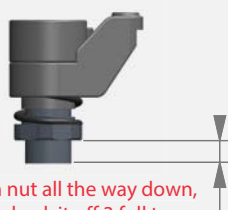


# BAG J

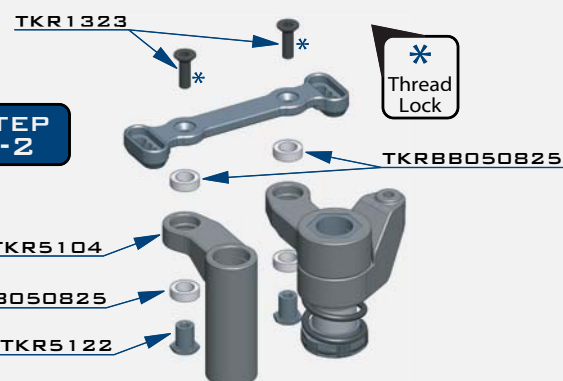
## STEERING ASSEMBLY (OVERVIEW)



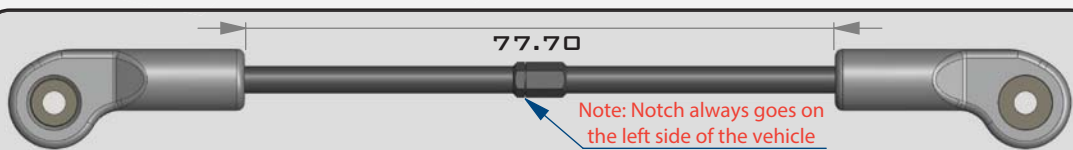
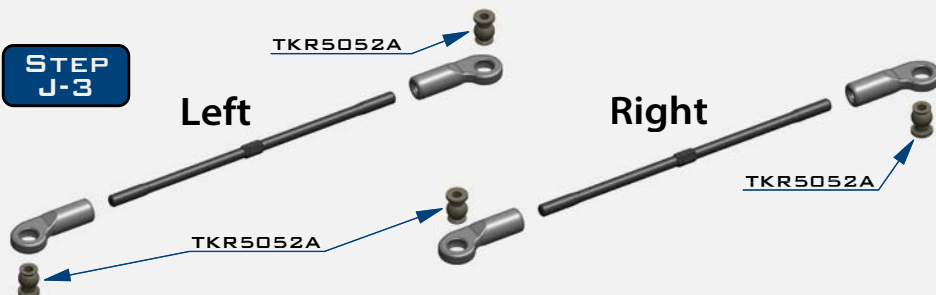
### STEP J-1



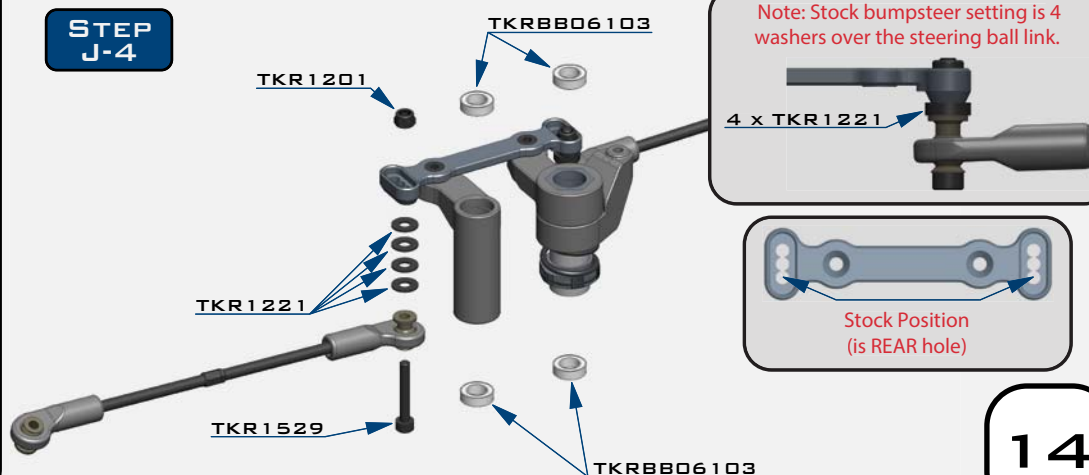
### STEP J-2



### STEP J-3



### STEP J-4



x2

TKR1201  
M3 LOCK NUT BLACK



x8

TKR1221  
M3x8MM WASHER



x2

TKR1323  
M3x10MM FLAT HEAD SCREW



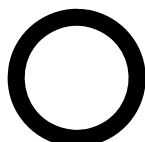
x2

TKR1529  
M3x20MM CAP HEAD SCREW



x4

TKR5052A  
PIVOT BALL M3x6.8MM



x1

TKR5231  
O-RING 16x12x2



x4

TKRBB050825  
BALL BEARING (5x8x2.5)



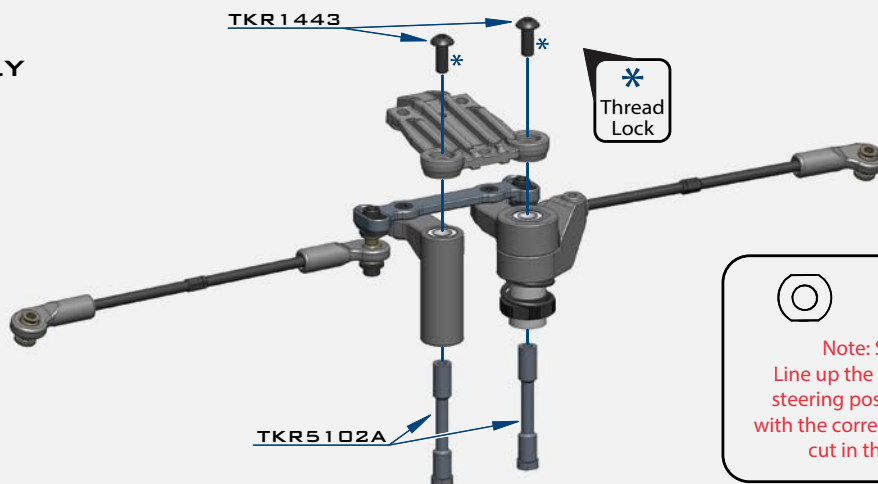
x4

TKRBB06103  
BALL BEARING (6x10x3)

# BAG K

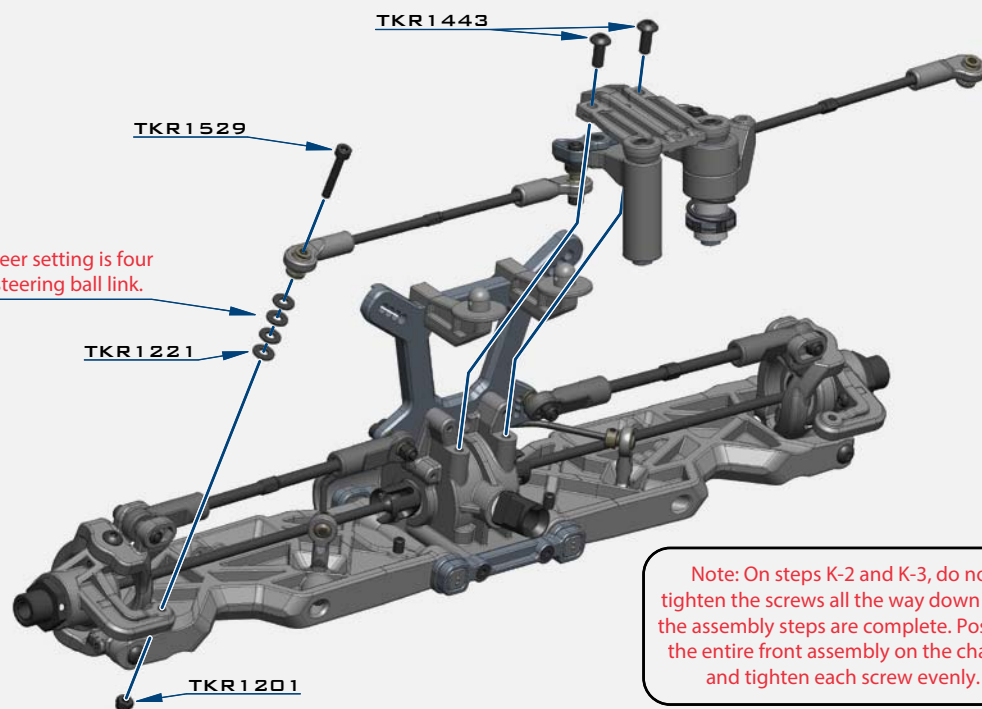
## FRONT END ASSEMBLY

### STEP K-1

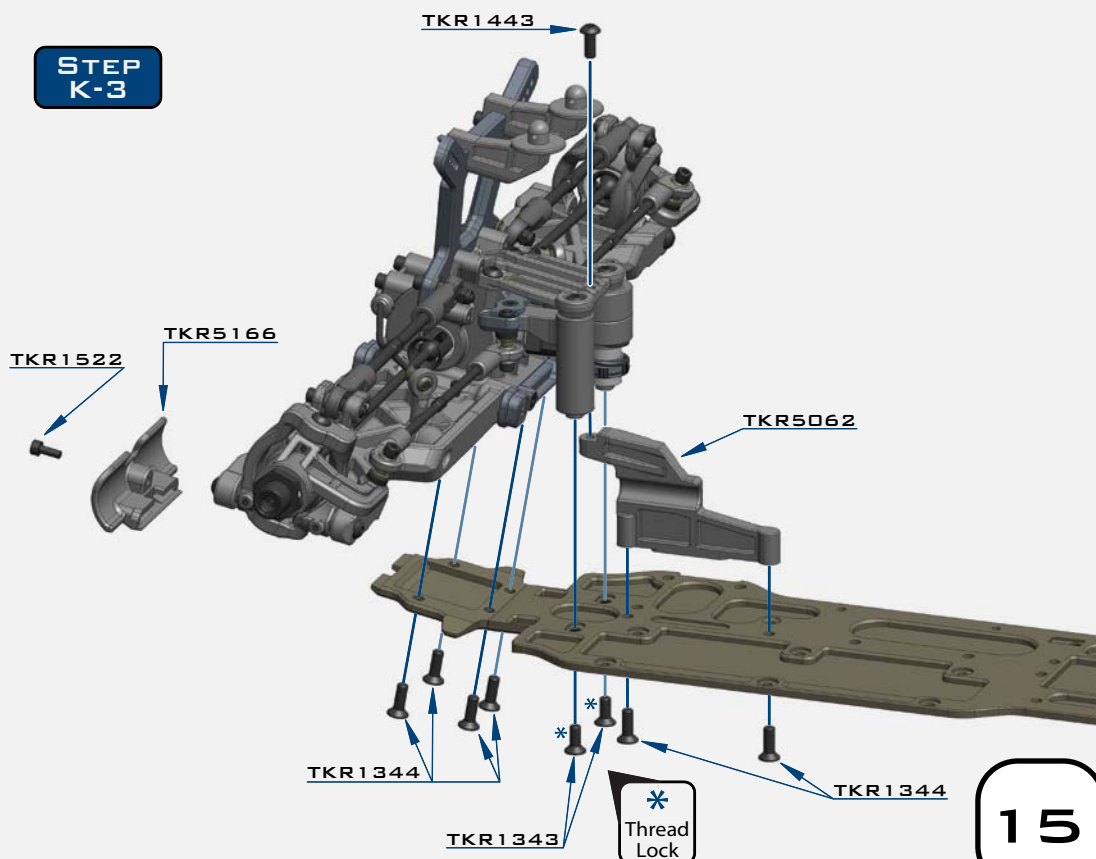


### STEP K-2

Note: Initial bumpsteer setting is four washers below the steering ball link.



### STEP K-3



x2  
TKR1201  
M3 LOCK NUT BLACK

x8  
TKR1221  
M3x8MM WASHER

x2  
TKR1343  
M4x10MM FLAT HEAD SCREW

x6  
TKR1344  
M4x12MM FLAT HEAD SCREW

x5  
TKR1443  
M4x10MM BUTTON HEAD SCREW

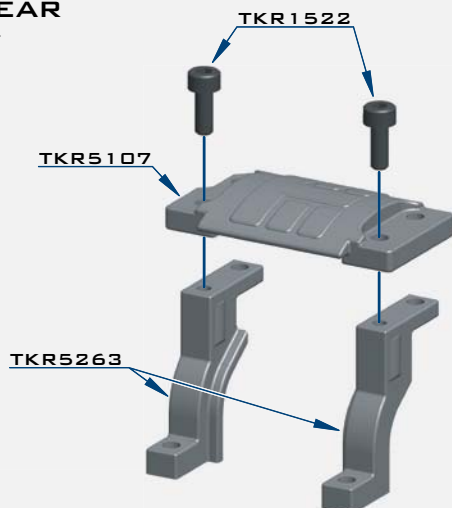
x1  
TKR1522  
M3x8MM CAP HEAD SCREW

x2  
TKR1529  
M3x20MM CAP HEAD SCREW

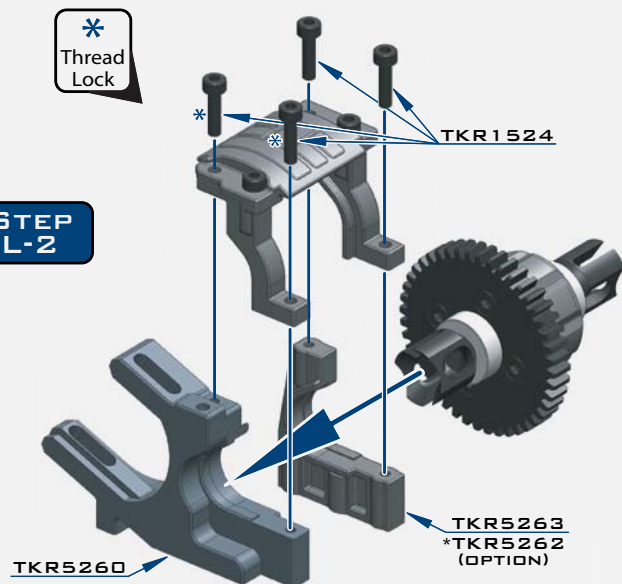
# BAG L

## CENTER/REAR ASSEMBLY

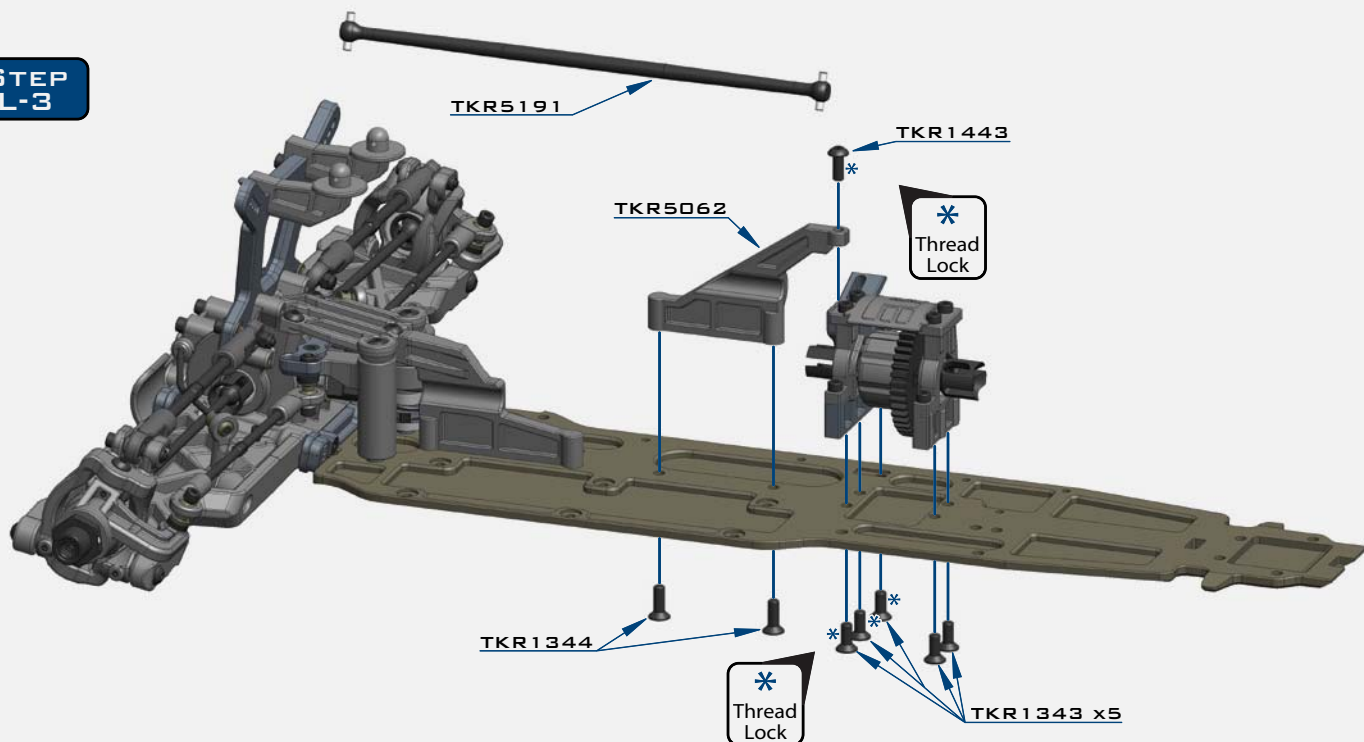
### STEP L-1



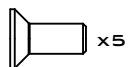
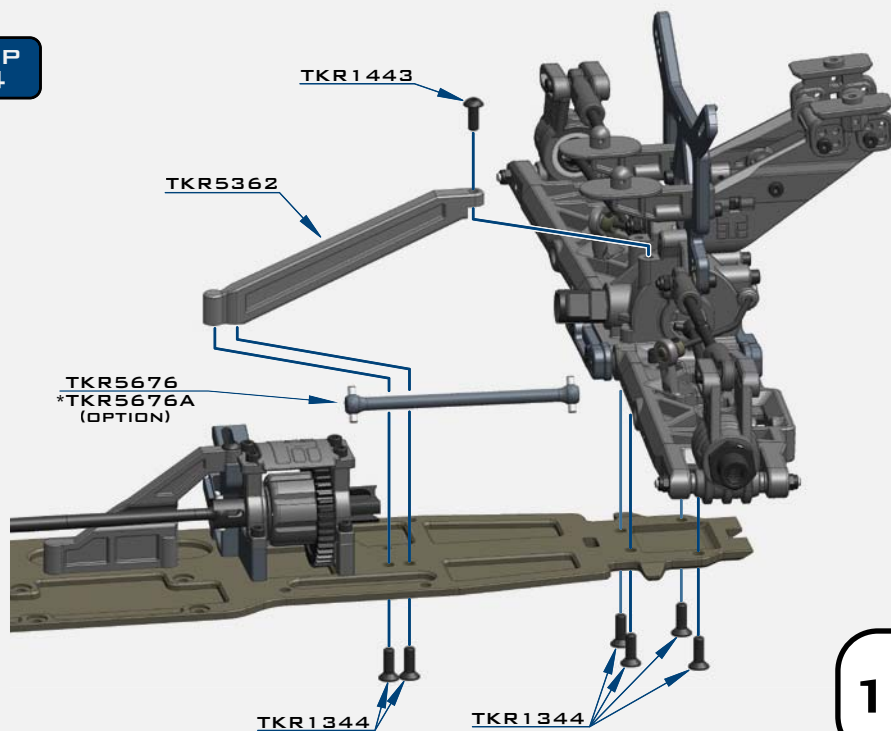
### STEP L-2



### STEP L-3

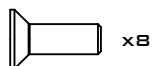


### STEP L-4



x5

TKR1343  
M4x10MM FLAT HEAD SCREW



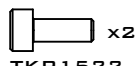
x8

TKR1344  
M4x12MM FLAT HEAD SCREW



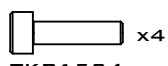
x2

TKR1443  
M4x10MM BUTTON HEAD SCREW



x2

TKR1522  
M3x8MM CAP HEAD SCREW



x4

TKR1524  
M3x12MM CAP HEAD SCREW

# SHOCK FILLING INSTRUCTIONS

## FOR BOTH FRONT AND REAR SHOCKS

The following steps and information will provide you with the best way to fill and bleed your shocks. After thorough testing, we've found it's easiest to complete steps 1 through 3 on each shock before moving onto step 4. By the time you've finished step 3 on the last shock the first one will be ready for step 4.

### Standard or Vented Cap Build:

**Step 1:** Extend the shock shaft all the way down. Fill the shock with oil until it is about 90% full.

**Step 2:** Slowly pump the shock shaft up and down 3-5 times to release air bubbles from underneath the piston.

**Step 3:** Let the shock rest vertically with the shock shaft fully extended for five minutes or until all the air bubbles have released.

**Step 4:** Next you will top off the shock with oil, to about 1-2mm below the top edge.

*(If you do overfill the shock, it won't hurt performance, it will just spill out and make a little bit of a mess. If you underfill the shock, it will cause air to be trapped inside.)*

**Step 5:** Place the bladder *INSIDE* the shock cap and put a few drops of oil on the bladder.

**Step 6:** Put a paper towel down below the build to catch drips and have another ready to wipe off excess oil. Place the cap on the shock and screw down about half way. Lay the shock over about 45 degrees with the bleeder hole facing up.

**Step 6A: (Standard non-vented "Stock")** Push the shaft in for the amount of rebound desired.

**Step 6B: (Vented)** Push the shaft in until about 15mm of shaft is showing.

- Make sure that you match the rebound amount between the left and right shocks.
- Oil should be oozing out of the bleeder hole.

**Step 7:** Hold the cap firmly in place with the bleeder hole facing up and turn the shock body until hand tight. The shock will continue to ooze oil.

**Step 8:** Fully tighten down each shock with shock tools until cap is secure and wipe excess oil away.

### Emulsion Build:

Prep your shock caps TKR6018 (optional for ET48) accordingly by drilling out the large angled bleeder hole in the top of the cap. Place the larger thin o-ring around the base of the threads where the shock cap screws on (see diagram on the next page). This seal is crucial to the build.

**Follow steps 1-4 above.**

**Step 5:** Rebound is more of a natural side effect of an emulsion shock. It's not something that can be set accurately because you run the risk of hydrolocking the shock if you do not push the shaft all the way in when you bleed it. For now leave the shaft fully extended.

**Step 6:** Fill the shock up, over filling just slightly without spilling to create a small dome of oil.

**Step 7:** Place a little bit of oil in the shock cap and quickly put the shock cap on the shock body. Tighten the cap all the way down. Very slowly push the shaft in. Oil will start to bleed out of the top of the cap. While wiping away excess oil, continue to slowly push the shaft in *ALL THE WAY*.

If no oil comes out when the shaft is fully inserted, you will need to start over at step 6.

**Step 8:** Install the TKR1341 M4x6mm flat head screw and TKR5125 black o-ring to seal the cap (see diagram). Tighten until o-ring is fully seated.

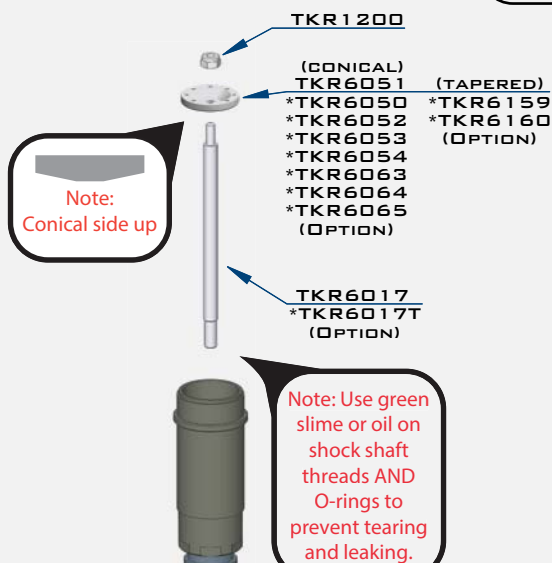
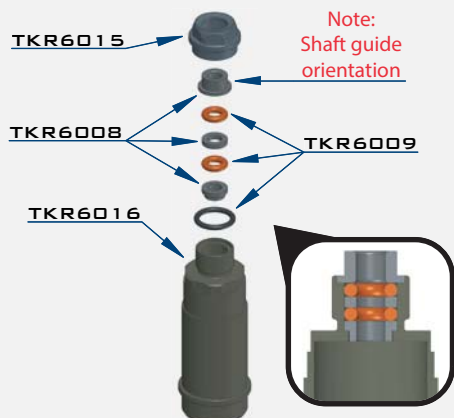


# BAG M

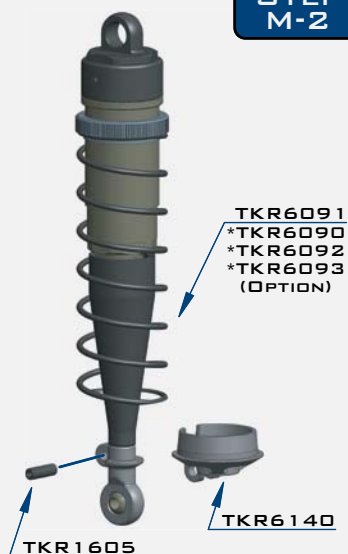
## FRONT SHOCK ASSEMBLY

### STEP M-1

Note: Make sure to tighten both cartridge cap (TKR6015) and shock cap (TKR6003B) to ensure a proper seal. Tools may be required.



### STEP M-2



Note: Apply a small drop of oil for easy installation.

TKR6013

Note: Front shocks use shorter shock bodies - TKR6016, shorter shock shafts - TKR6017, shorter springs - TKR6091 and shorter shock boots - TKR6144

x2  
TKR1200  
M2.5 LOCK NUT ZINC

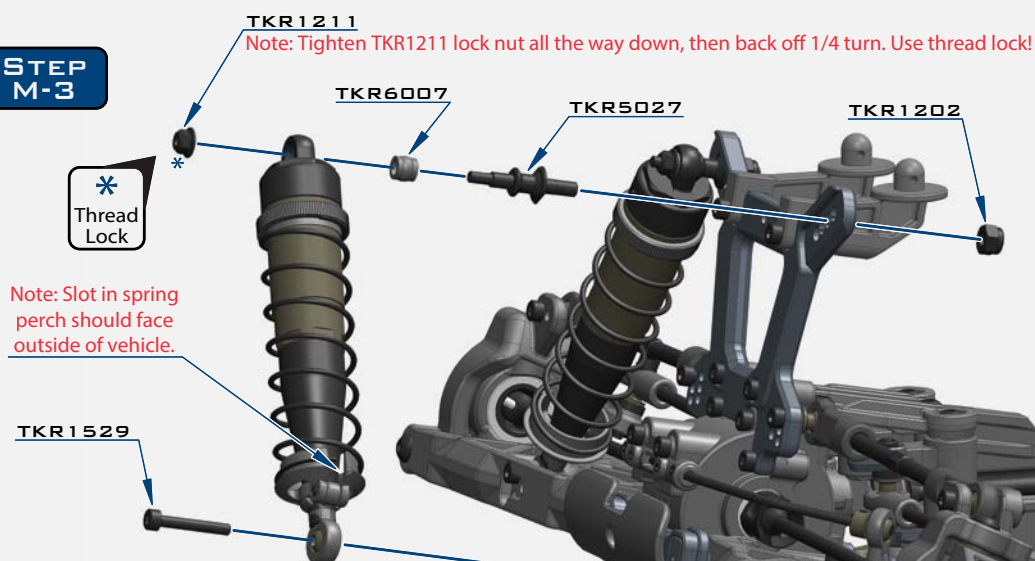
x2  
TKR1202  
M4 LOCK NUT BLACK

x2  
TKR1211  
M3 LOCK NUT FLANGE BLACK

x2  
TKR1529  
M3x20MM CAP HEAD SCREW

x2  
TKR1605  
M3x10MM SET SCREW

### STEP M-3



- Stock shock position is outside hole on the arm and 2nd from outside hole on the tower
- Stock front ride height 37mm
- Shock length (droop) 122mm

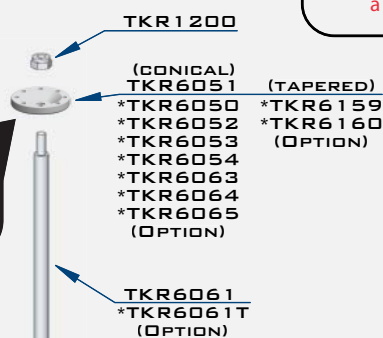
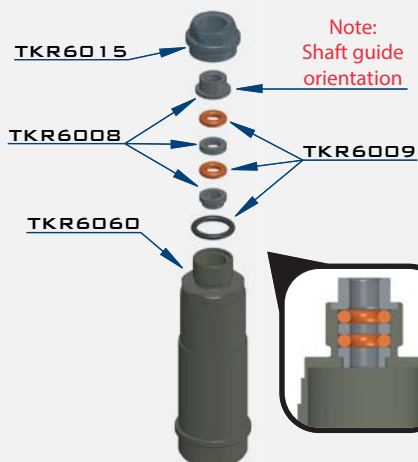


# BAG N

## REAR SHOCK ASSEMBLY

### STEP N-1

Note: Make sure to tighten both cartridge cap (TKR6015) and shock cap (TKR6003B) to ensure a proper seal. Tools may be required.

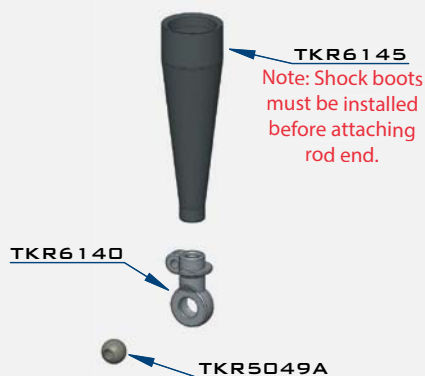
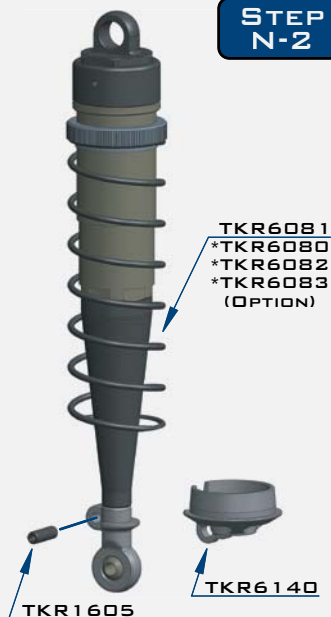


Note: Use green slime or oil on shock shaft threads AND O-rings to prevent tearing and leaking.

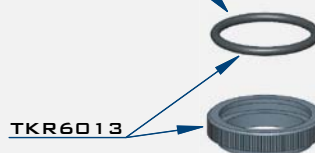


Fill oil level just below the top of the shock body. Use #600wt oil REAR

### STEP N-2



Note: Apply a small drop of oil for easy installation.



Note: Rear shocks use longer shock bodies - TKR6060, longer shock shafts - TKR6061, longer springs - TKR6081 and longer shock boots - TKR6145

x2  
TKR1200  
M2.5 LOCK NUT ZINC

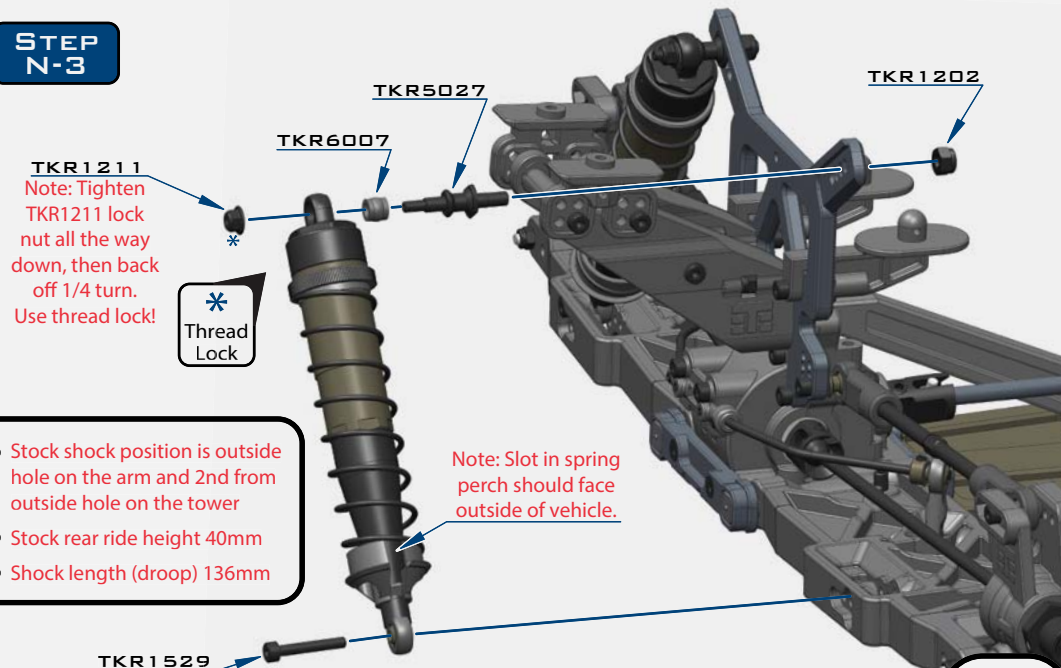
x2  
TKR1202  
M4 LOCK NUT BLACK

x2  
TKR1211  
M3 LOCK NUT FLANGE BLACK

x2  
TKR1529  
M3x20MM CAP HEAD SCREW

x2  
TKR1605  
M3x10MM SET SCREW

### STEP N-3



- Stock shock position is outside hole on the arm and 2nd from outside hole on the tower
- Stock rear ride height 40mm
- Shock length (droop) 136mm

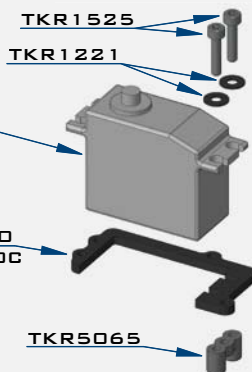
# BAG O

## FINAL ASSEMBLY

### STEP 0-1

Steering servo (not included)

Note: we recommend using a servo with at least 300 oz/in torque.



### STEP 0-2

ESC (not included)

double sided tape

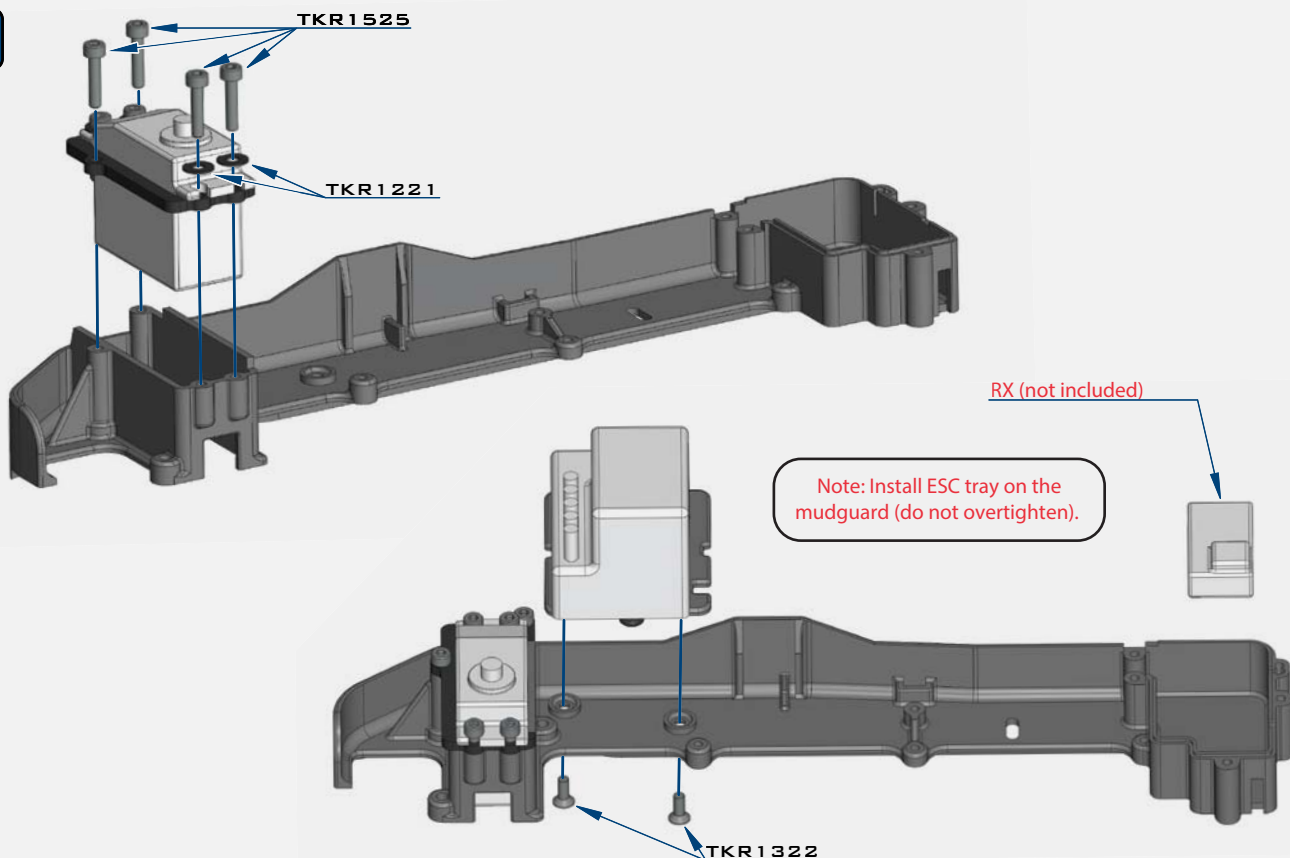
TKR5065

TKR5125

CA GLUE

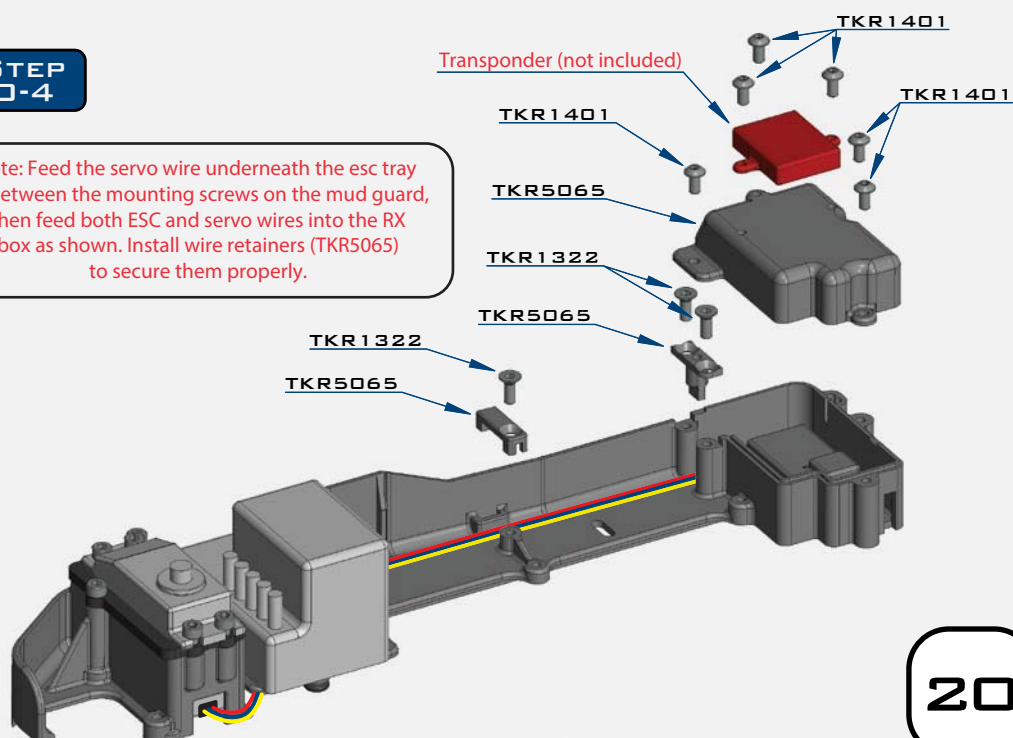
Note: CA glue 3 black o-rings (TKR5125) to the bottom legs of the ESC tray.

### STEP 0-3



### STEP 0-4

Note: Feed the servo wire underneath the esc tray in between the mounting screws on the mud guard, then feed both ESC and servo wires into the RX box as shown. Install wire retainers (TKR5065) to secure them properly.



x4  
TKR1221  
M3X8MM WASHER

x5  
TKR1322  
M3X8MM FLAT HEAD SCREW

x6  
TKR1401  
M3X6MM BUTTON HEAD SCREW

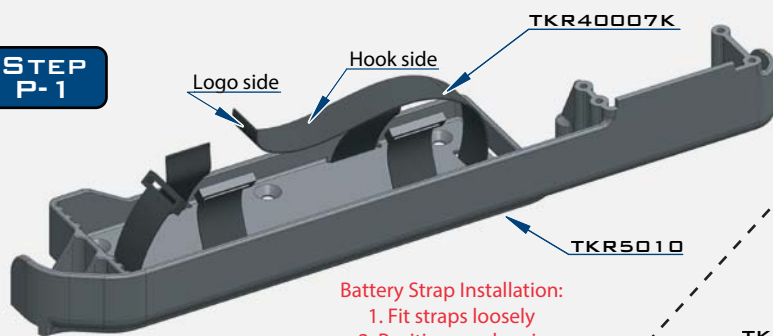
x6  
TKR1525  
M3X14MM CAP HEAD SCREW

x3  
TKR5125  
O-RING 3X7MM

# BAG P

## FINAL ASSEMBLY

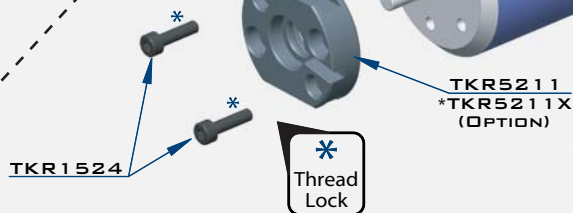
### STEP P-1



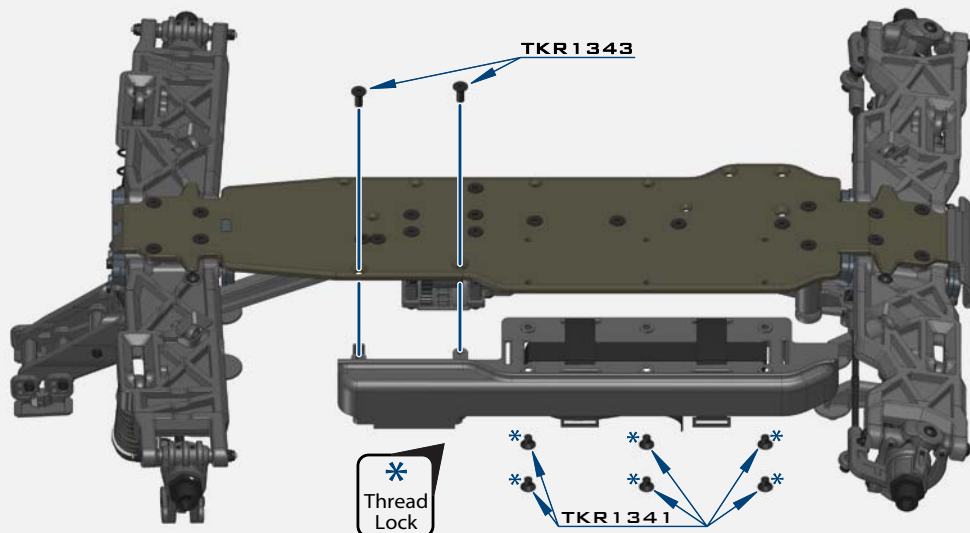
Battery Strap Installation:  
1. Fit straps loosely  
2. Position on chassis  
3. Proceed to step P-2

Motor (not included)

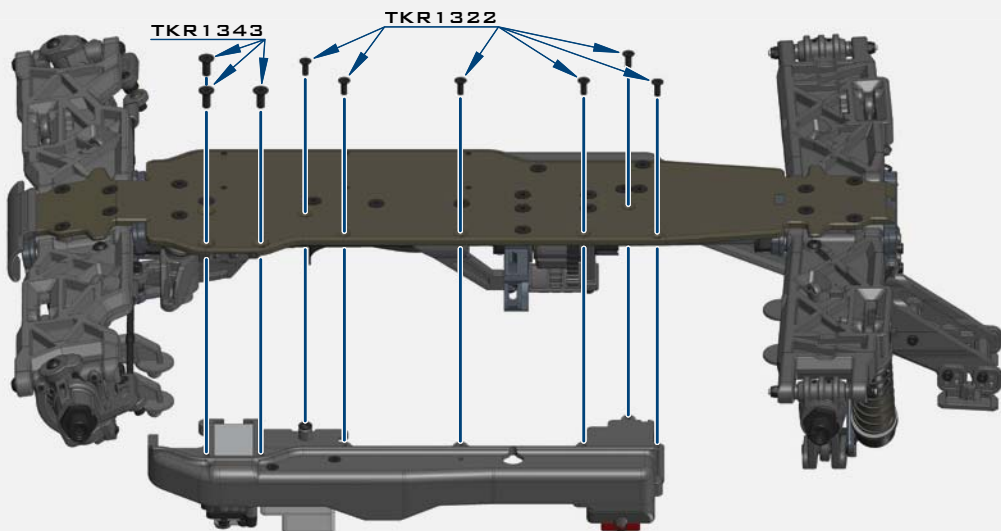
### STEP P-2



### STEP P-3



### STEP P-4



X2  
TKR1228  
M4 COUNTERSUNK WASHER

X6  
TKR1322  
M3x8MM FLAT HEAD SCREW

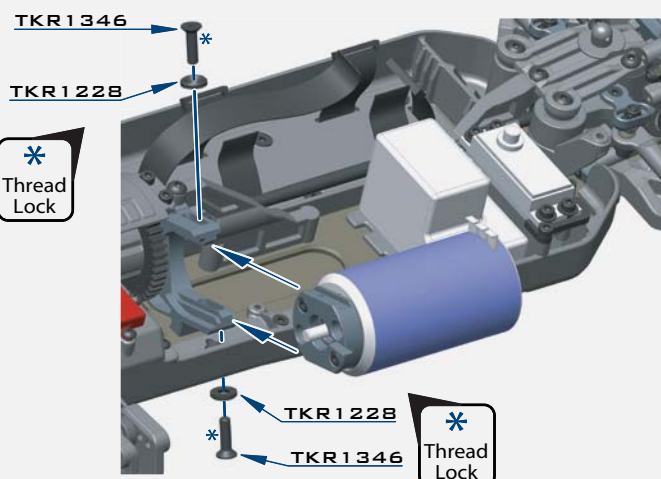
X6  
TKR1341  
M4x6MM FLAT HEAD SCREW

X5  
TKR1343  
M4x10MM FLAT HEAD SCREW

X2  
TKR1346  
M4x15MM FLAT HEAD SCREW

X2  
TKR1524  
M3x12MM CAP HEAD SCREW

### STEP P-5

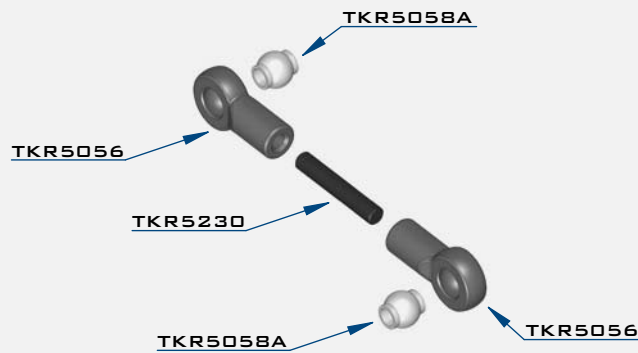


Note: Install MOD1 pinion (TKR4171-4190) at this step. Adjust gear mesh and tighten screws (TKR1346) well. \*Use thread lock.

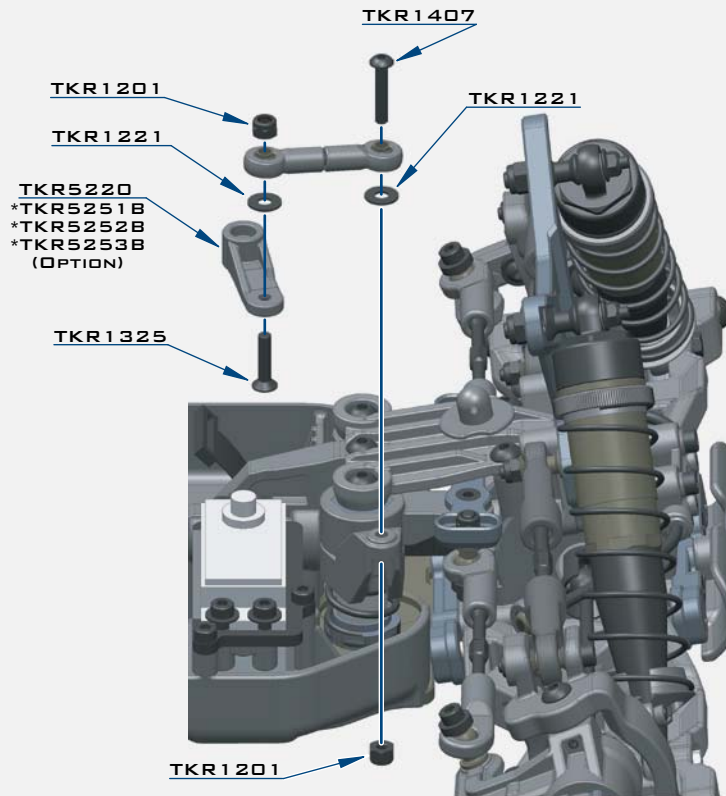
# BAG P

## FINAL ASSEMBLY

### STEP P-6



### STEP P-7



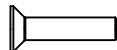
x2

TKR1201  
M3 LOCK NUT BLACK



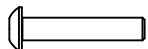
x2

TKR1221  
M3x8MM WASHER



x1

TKR1325  
M3x14MM FLAT HEAD SCREW



x1

TKR1407  
M3x16MM BUTTON HEAD SCREW



x2

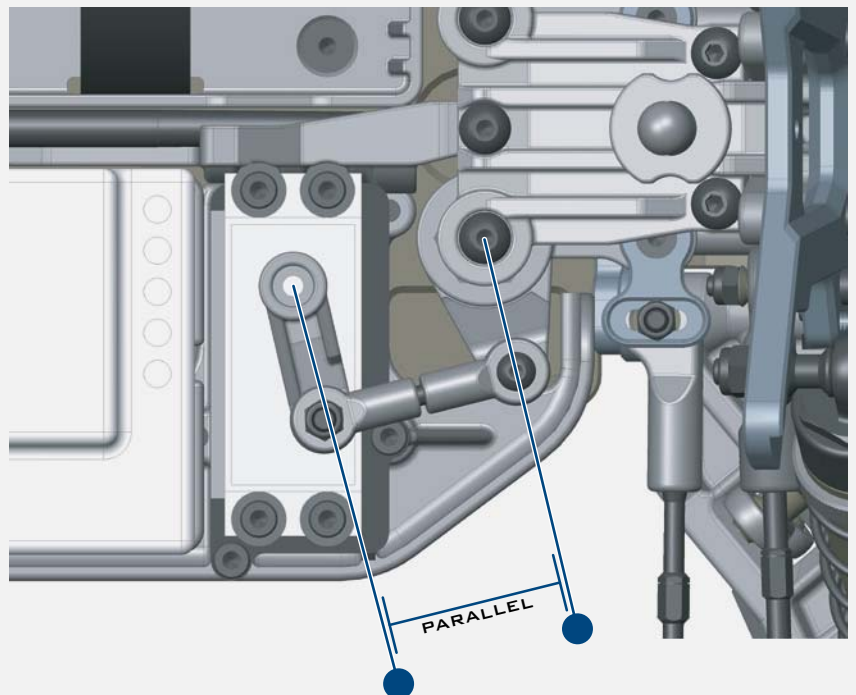
TKR5058A  
PIVOT BALL M3x5.8MM  
NO FLANGE



x1

TKR5230  
M3x18 THREADED ROD

### STEP P-8



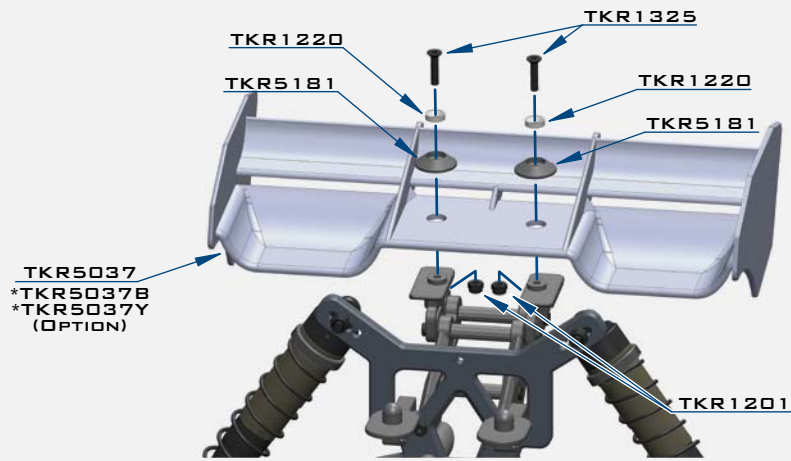
Note: Offset servo arm so it is parallel with the connecting arm at neutral or zero servo position.



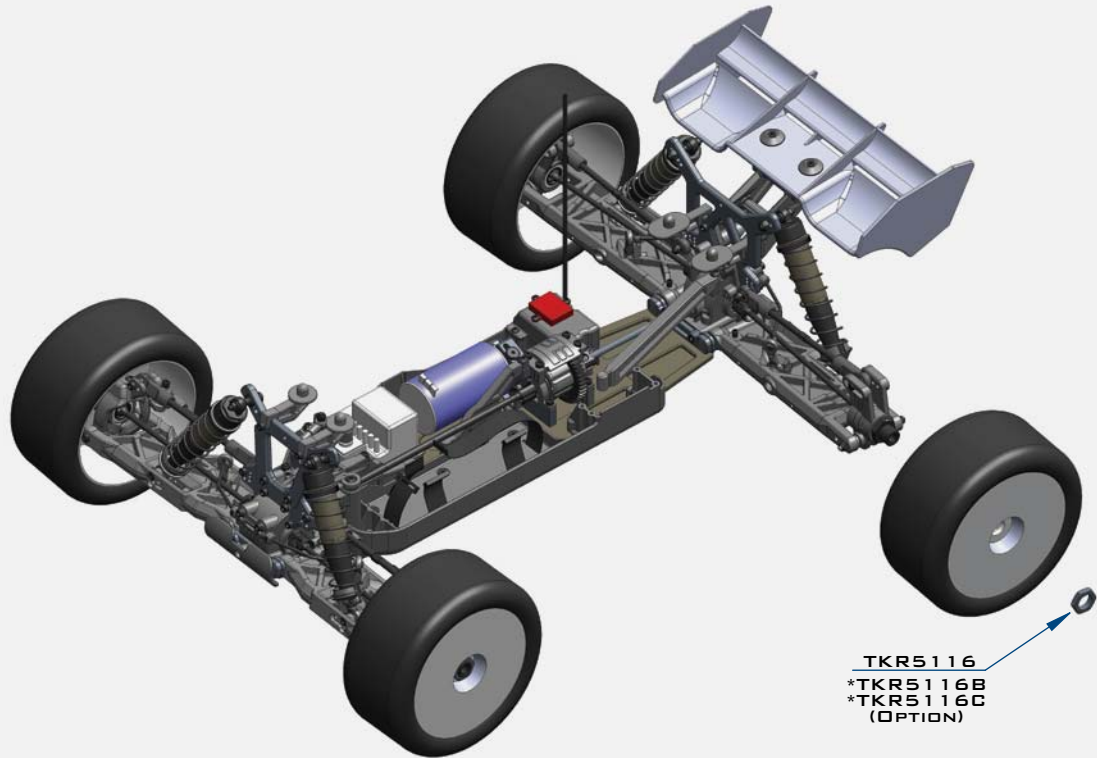
# BAG Q

## WING/WHEELS/BODY

### STEP Q-1

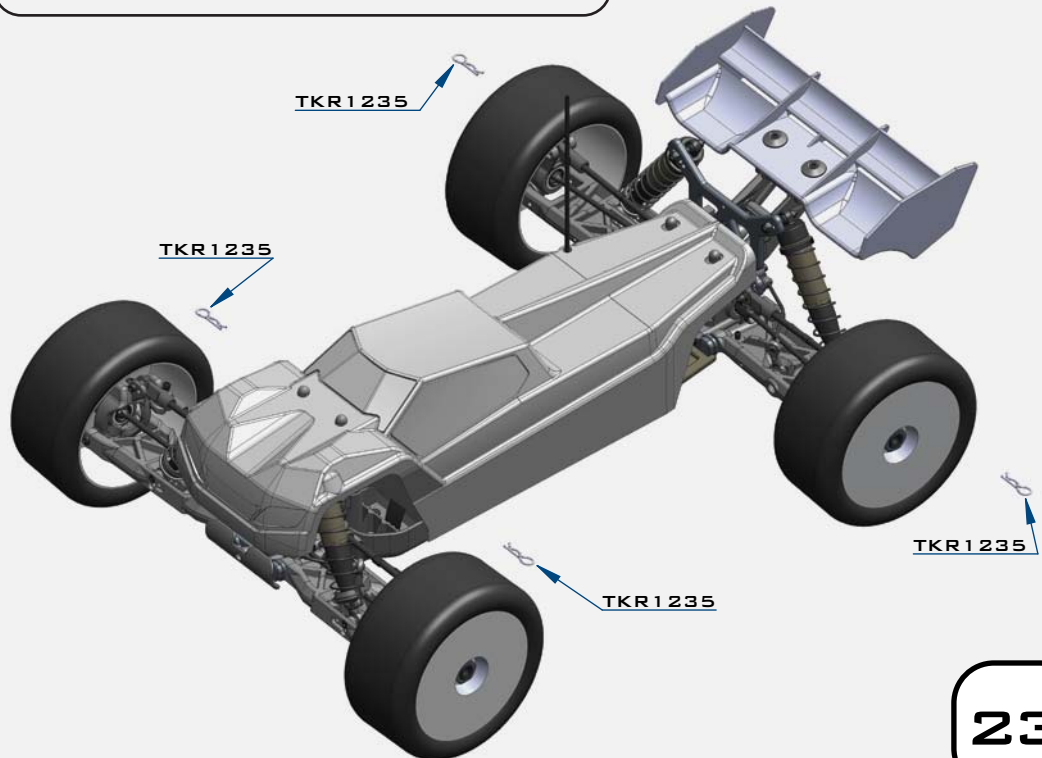







### STEP Q-2



### STEP Q-3

Note: It may be necessary to cut holes in the body for ventilation.



-  x2  
TKR1201  
M3 LOCK NUT BLACK
-  x2  
TKR1220  
M4 COUNTERSUNK WASHER
-  x2  
TKR1325  
M3X14MM FLAT HEAD SCREW
-  x2  
TKR1235  
BODY CLIP
-  x4  
TKR5116  
WHEEL NUT



# TKR5602 - ET48.3 1/8th Competition Electric Truggy Kit

## Parts List

TKR40007K – Battery Straps (EB48, black, 4 cell, 3pcs)  
TKR5010 – Battery Tray, Mud Guard (EB48, left side)  
TKR5011 – Radio Tray, Mud Guard (EB48, right side)  
TKR5012 – Gearbox (front)  
TKR5016B – Gearbox (rear, angled)  
TKR5020 – Hinge Pins (inner, front/rear)  
TKR5027 – Shock Standoffs (2pcs)  
TKR5034 – Hinge Pins (outer, rear)  
TKR5037 – Wing (white)  
TKR5049A – Pivot Balls (6.8mm, no flng, sway bar, shck ends, alnmn, 4pcs)  
TKR5052A – Pivot Balls (6.8mm, inside camber, steering links, aluminum, 4pcs)  
TKR5053A – Pivot Balls (6.8mm, flanged, outside camber, aluminum, 4pcs)  
TKR5054A – Spindle Bushings (4pcs, aluminum, hard ano)  
TKR5055A – Arm Bushings (4pcs, aluminum, hard ano)  
TKR5056 – Rod Ends (5.8mm, brake/steering/sway bar linkage, 8pcs)  
TKR5058A – Pivot Balls (5.8mm, no flange, brake/steering link, aluminum, 4pcs)  
TKR5060 – Steering Servo Brace (aluminum, gun metal ano)  
TKR5062 – Chassis Brace Set (front/rear/center)  
TKR5065 – ESC Tray and Radio/Battery Tray Accessories  
TKR5070 – Stub Axles (hardened steel, 2pcs)  
TKR5071 – Wheel Hubs (17mm, aluminum, w/pins, 2pcs)  
TKR5073 – CV Rebuild kit (f/r, for 2 axles)  
TKR5075 – Diff Coupler (f/r, hardened steel)  
TKR5079A – Stabilizer Balls (6.8mm, sway bars, aluminum, 4pcs)  
TKR5086 – Sway Bar Mounts  
TKR5100 – Ackerman Plate (aluminum, gun metal ano)  
TKR101X – Servo Saver Spring (HD, EB48, SCT410, NB48)  
TKR5102A – Steering Posts (aluminum)  
TKR5103 – Servo Saver Post (aluminum, gun metal ano)  
TKR5104 – Steering Bell Cranks  
TKR5107 – Steering Top Plate, Center Diff Top Plate, Center Diff Rear Support  
TKR5116 – Wheel Nuts (17mm, serrated, gun metal ano, M12x1.0, 4pcs)  
TKR5122 – Steering Rack Bushings (aluminum, gun metal ano, 2pcs)  
TKR5125 – O-Ring (ESC tray, 3pcs)  
TKR5126 – Antenna tube (universal, w/ caps, 5pcs)  
TKR5161 – V2 Adj. Hinge Pin Brace ("A" block, 7075, EB/NB/ET/NT/SCT)  
TKR5162 – V2 Adj. Hinge Pin Brace ("B" block, 7075, EB/NB/ET/NT/SCT)  
TKR5163 – V2 Adj. Hinge Pin Brace ("C" block, 7075, EB/NB/ET/NT/SCT)  
TKR5164 – V2 Adj. Hinge Pin Brace ("D" block, 7075, EB/NB/ET/NT/SCT)  
TKR5165 – V2 Hinge Pin Inserts, Wheelbase Shims (EB/NB/ET/NT/SCT)  
TKR5166 – Front Bumper (revised, EB/NB/ET/NT48)  
TKR5181 – Low Profile Wing Mount and Body Mounts (EB/NB48/EB48SL)  
TKR5187 – Rod Ends (straight, 6.8mm, EB/NB/ET/NT48, 8pcs)  
TKR5191 – Tapered Driveshaft (EB48, ET48, center, front, 7075 aluminum, black ano)  
TKR5193 – Spindles (trailing, L/R, requires TKR5194, EB/NB/ET/NT48, EB/NB.3)  
TKR5194 – Spindle Carriers (trailing, 15 degree, L/R, EB/NB/ET/NT48, EB/NB.3)  
TKR5199 – Rear Hubs (L/R, CV or uni, EB/NB/ET/NT48, EB/NB.3)  
TKR5211 – Motor Mount Insert (aluminum, gun metal ano)  
TKR5220 – Servo Horns (steering, brakes)  
TKR5230 – Steering linkage (M3x18mm threaded rod, 10pcs)  
TKR5231 – Servo Saver Nut and Spring  
TKR5260 – CNC Split Cntr Diff Mount (mtr mnt only, 7075, gun metal ano, EB/ET/SCT)  
TKR5263 – Split Cntr Diff Mount (composite, requires TKR5260, EB/ET/SCT/SL)  
TKR5401 – Body Mount Set (ET48, NT48)  
TKR5423 – Turnbuckle (steering links, 2pcs, ET48, NT48)  
TKR5428 – Shock Tower (front, 7075, gun metal, ET48, NT48)  
TKR5429 – Shock Tower (rear, 7075, gun metal, ET48, NT48)  
TKR5430 – Suspension Arms (rear, 2pcs, ET48, NT48)  
TKR5436 – Suspension Arms (front, 2pcs, ET48, NT48)  
TKR5450 – Turnbuckle (camber link, rear, 2pcs, ET48, NT48)  
TKR5451 – Turnbuckle (camber link, front, 2pcs, ET48, NT48)  
TKR5472 – Driveshafts (f/r, hardened steel, 2pcs, ET48, NT48)  
TKR5482 – Sway Bar (front, 2.5mm, ET48, NT48)  
TKR5493 – Sway Bar (rear, 2.6mm)  
TKR5601 – Chassis (7075, hard anodized)  
TKR5617 – Decal Sheet (ET48.3)  
TKR5645 – Body (ET48, w/ window mask)  
TKR5676 – Driveshaft (steel, center, rear)

## Differential List

TKR5112X – Differential Outdrives (center, lightened)  
TKR5113 – Differential Case (f/c/r)  
TKR5114X – Differential Outdrives (f/r, lightened)  
TKR5143 – Differential Seals (3pcs)  
TKR5144 – Differential O-Rings (6pcs)  
TKR5145B – Differential Shims (revised, 6x17mm, 6pcs)  
TKR5149 – Differential Cross Pins (steel, 6pcs)  
TKR5150 – Differential Gear Set (internal gears only)  
TKR5237K – Spur Gear (44t, black, composite)  
TKR5403 – Differential Ring Gear (40t, NT48 fr, ET48 fr/r)  
TKR5405 – Diff Pinion (straight cut, 9t, CNC, NT48)

## Shocks List

TKR6003B – Non-Vented Shock Caps (aluminum, black ano, 2pcs)  
TKR6007 – Shock Cap Bushings (4pcs, EB/NB/ET/NT/SCT)  
TKR6008 – Shock Shaft Guide, Piston, and Bushing Set (for 2 shocks)  
TKR6009 – Shock O-Ring and Bladder Set (for 2 shocks)  
TKR6013 – Shock Adjustment Nuts (aluminum, gun metal ano, 2pcs)  
TKR6015 – Shock Cartridge Caps (aluminum, gun metal ano, 2pcs)  
TKR6016 – Shock Body (rear, aluminum, hard ano, 2pcs)  
TKR6017 – Shock Shafts (rear, steel, 2pcs)  
TKR6051 – Shock Pistons (CNC, conical, 8x1.3mm)  
TKR6060 – Shock Body (rear, x-long, aluminum, hard ano, 2pcs)  
TKR6061 – Shock Shafts (rear, x-long, steel, 2pcs)  
TKR6081 – Shock Spring Set (rear, 1.6 x 10.0T, 90mm, green, 4.20 lb/in)  
TKR6091 – Shock Spring Set (front, 1.6 x 8.5T, 80mm, green, 5.17 lb/in)  
TKR6140 – Locking Shock Rod End and Spring Perch Set (EB/NB/ET/NT/SCT)  
TKR6144 – Shock Boots (long length, EB/NB, 2pcs)  
TKR6145 – Shock Boots (X-long length, rear EB/NB, 2pcs)

## Bearings List

TKRBB050825 – Ball Bearing (5x8x2.5mm, 4pcs)  
TKRBB05114 – Ball Bearing (5x11x4, 4pcs)  
TKRBB05134 – Ball Bearing (5x13x4, 4pcs)  
TKRBB06103 – Ball Bearing (6x10x3, 4pcs)  
TKRBB08165 – Ball Bearing (8x16x5, 4pcs)  
TKRBB13194 – Ball Bearing (13x19x4, 4pcs)

## Hardware List

TKR1200 – M2.5 Locknuts (zinc finish, 10pcs)  
TKR1201 – M3 Locknuts (black, 10pcs)  
TKR1202 – M4 Locknuts (black, 10pcs)  
TKR1211 – M3 Locknuts (flanged, black, 10pcs)  
TKR1220 – M3 Countersunk Washers (aluminum, natural, 10pcs)  
TKR1221 – M3x8mm Washer (black, 10pcs)  
TKR1222 – 13x16x.1mm Diff Shims (10pcs)  
TKR1226 – 5x7x.2mm shims (10pcs)  
TKR1228 – M4 Countersunk Washer (black, 10pcs)  
TKR1235 – Body Clips (10pcs)  
TKR1238 – Droop Adjustment Screws (M4x10mm, 8pcs)  
TKR1322 – M3x8mm Flat Head Screws (black, 10pcs)  
TKR1323 – M3x10mm Flat Head Screws (black, 10pcs)  
TKR1325 – M3x14mm Flat Head Screws (black, 10pcs)  
TKR1327 – M3x16mm Flat Head Screws (black, 10pcs)  
TKR1333 – M3x40mm Flat Head Screws (black, 10pcs)  
TKR1341 – M4x6mm Flat Head Screws (black, 10pcs)  
TKR1343 – M4x10mm Flat Head Screws (black, 10pcs)  
TKR1344 – M4x12mm Flat Head Screws (black, 10pcs)  
TKR1346 – M4x15mm Flat Head Screws (black, 10pcs)  
TKR1401 – M3x6mm Button Head Screws (black, 10pcs)  
TKR1402 – M3x8mm Button Head Screws (black, 10pcs)  
TKR1407 – M3x16mm Button Head Screws (black, 10pcs)  
TKR1443 – M4x10mm Button Head Screws (black, 10pcs)  
TKR1445 – M4x14mm Button Head Screws (black, 10pcs)  
TKR1447 – M4x16mm Button Head Screws (black, 10pcs)  
TKR1522 – M3x8mm Cap Head Screws (black, 10pcs)  
TKR1523 – M3x10mm Cap Head Screws (black, 10pcs)  
TKR1524 – M3x12mm Cap Head Screws (black, 10pcs)  
TKR1525 – M3x14mm Cap Head Screws (black, 10pcs)  
TKR1529 – M3x20mm Cap Head Screws (black, 10pcs)  
TKR1601 – M3x4mm Set Screws (black, 10pcs)  
TKR1603 – M5x4mm Set Screws (black, 10pcs)  
TKR1605 – M3x10mm Set Screws (black, 10pcs)

## Option Parts

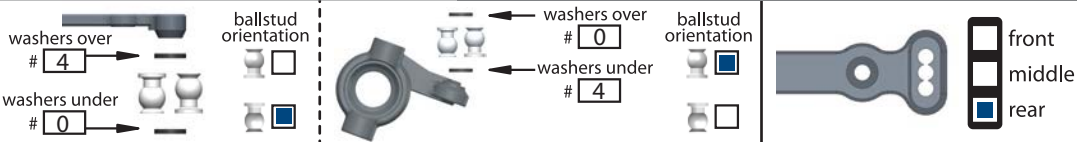
TKR1103 – Turnbuckle Wrench (4mm, 5mm, hardened steel)  
TKR1116 – 17mm Wheel Wrench, Shock Cap Tool  
TKR1119 – 5.5mm / 7.0mm Wrench (hardened steel)  
TKR1115 – Pivot Ball and Shock Multi-tool (aluminum)  
TKR5037B – Wing (black)  
TKR5037Y – Wing (yellow)  
TKR5060C – Steering Servo Brace (carbon fiber)  
TKR5070A – Stub Axles (Aluminum, 2pcs)  
TKR5071B – Wheel Hubs (17mm, alum, ltnd, gun metal ano, 1mm off, w/pins, 2pcs)  
TKR5071C – Wheel Hubs (17mm, alum, ltnd, gun metal ano, 2mm off, w/pins, 2pcs)  
TKR5071X – Wheel Hubs (17mm, aluminum, lightened, gun metal ano, w/pins, 2pcs)  
TKR5115 – Spur Gear (44t, hardened steel, lightened)  
TKR5147 – Complete Center Differential  
TKR5149A – Diff Cross Pins (aluminum, 6pcs, requires TKR5150)  
TKR5199A – Aluminum Rear Hubs (gun metal ano, EB/NB/ET/NT, 2pcs)  
TKR5211X – Motor Mount Insert (aluminum, lightened, gun metal ano)  
TKR5237 – Spur Gear (44t, composite, natural color)  
TKR5251B – Aluminum Servo Horn (23t spline, M3 clamp, double hole)  
TKR5252B – Aluminum Servo Horn (24t spline, M3 clamp, double hole)  
TKR5253B – Aluminum Servo Horn (25t spline, M3 clamp, double hole)  
TKR5261 – CNC Split Cntr Diff Mnt (complete, 7075, gun metal ano, EB/ET/SCT)  
TKR5262 – CNC Split Cntr Diff Mount (diff mounts only, 7075, gun metal ano, EB/ET/SCT)  
TKR5433 – Rear Arm Mud Guards (ET48, NT48)  
TKR5446 – Complete F/R Differential (ET48 fr/r, NT48 front only)  
TKR5480 – Sway Bar (front, 2.3mm, ET48, NT48)  
TKR5481 – Sway Bar (front, 2.4mm, ET48, NT48)  
TKR5483 – Sway Bar (front, 2.6mm, ET48, NT48)  
TKR5484 – Sway Bar (front, 2.8mm, ET48, NT48)  
TKR5485 – Sway Bar (front, 3.0mm, ET48, NT48)  
TKR5490 – Sway Bar (rear, 2.3mm)  
TKR5491 – Sway Bar (2.4mm, rear)  
TKR5492 – Sway Bar (rear, 2.5mm)  
TKR5494 – Sway Bar (rear, 2.8mm)  
TKR5495 – Sway Bar (rear, 3.0mm)  
TKR5676A – Driveshaft (aluminum, center, rear)  
TKR6003 – Vented Shock Caps (aluminum, black ano, 2pcs)  
TKR6009B – Shock O-Ring Set (16pcs)  
TKR6017T – Shock Shafts w/ TiNi coating (rear, steel, 2pcs)  
TKR6018 – Shock Cap and Spring Adjuster Set (composite, for 2 shocks)  
TKR6050 – Shock Pistons (CNC, conical, 10x1.1mm)  
TKR6052 – Shock Pistons (CNC, conical, 10x1.2mm)  
TKR6053 – Shock Pistons (CNC, conical, 8x1.4mm)  
TKR6054 – Shock Pistons (CNC, conical, 10x1.3mm)  
TKR6061T – Shock Shafts w/ TiNi coating (rear, x-long, steel, 2pcs)  
TKR6063 – Shock Pistons (CNC, conical, 6x1.5, 10.6mm<sup>2</sup>)  
TKR6064 – Shock Pistons (CNC, conical, 6x1.6, 12.1mm<sup>2</sup>)  
TKR6065 – Shock Piston Blanks (CNC, conical, 16 dimples, 16mm)  
TKR6080 – Shock Spring Set (rear, 1.6 x 10.5T, 90mm, pink, 3.96 lb/in)  
TKR6082 – Shock Spring Set (rear, 1.6 x 9.5T, 90mm, yellow, 4.48 lb/in)  
TKR6083 – Shock Spring Set (rear, 1.6 x 9.0T, 90mm, orange, 4.80 lb/in)  
TKR6090 – Shock Spring Set (front, 1.6 x 9.0T, 80mm, pink, 4.80 lb/in)  
TKR6092 – Shock Spring Set (front, 1.6 x 8.0T, 80mm, yellow, 5.60 lb/in)  
TKR6093 – Shock Spring Set (front, 1.6 x 7.5T, 80mm, orange, 6.11 lb/in)  
TKR6146 – Shock Cartridge Set (CNC, Delrin, EB/NB/ET/NT/SCT)  
TKR6159 – Shock Pistons (CNC, tapered, 4x1.8mm)  
TKR6160 – Shock Piston Blanks (CNC, tapered, 16 dimples)

Name: Box Stock Date:            Event:           

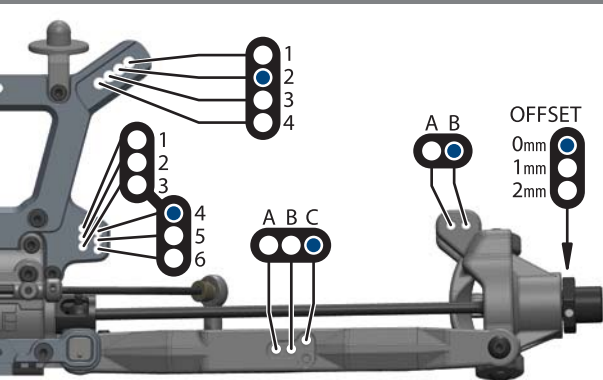
Track: Indoor ☐ Outdoor ☐ Size: Small ☐ Medium ☐ Large ☐ Traction: Low ☐ Med ☐ High ☐

Surface: Smooth ☐ Bumpy ☐ Rutted ☐ Type: Loose/Loamy ☐ Hard Pack ☐ Blue Groove ☐ Clay ☐

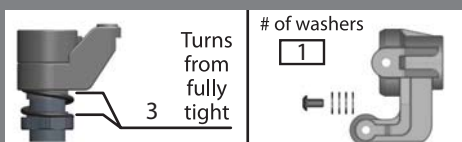
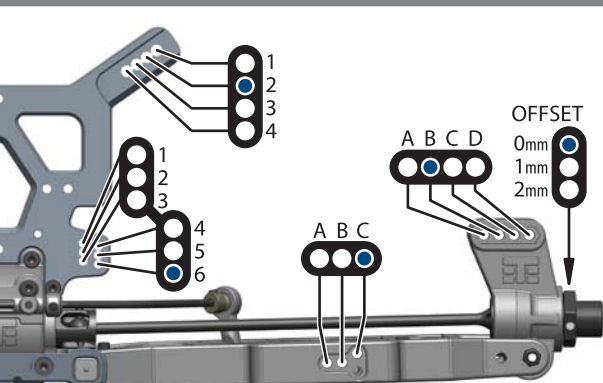
Bumpsteer/Ackerman/Servo Saver/Steering Stop:            Condition: Dusty ☐ Dry ☐ Wet ☐ Muddy ☐



### Front End:



### Rear End:

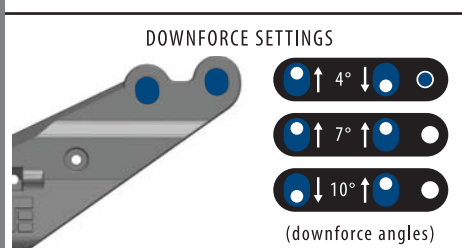
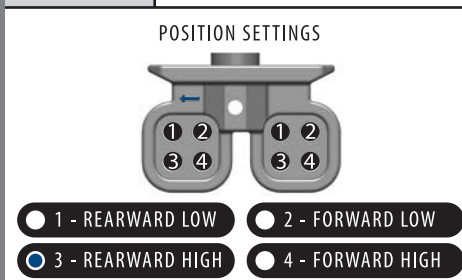


### Suspension:

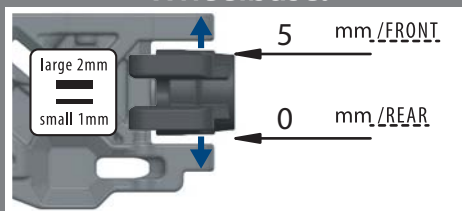
	FRONT	REAR
RIDE HEIGHT	37	40
CAMBER	-2	-2
CASTER	15 deg	
SWEEP	0 deg	
KICK UP	8.5 deg	
ANTI-SQUAT		2 deg
TOE (in/out)	.5 deg out	3 deg in
SWAY BAR	2.5	2.6
SHOCK LENGTH (DROOP)	122	136

### Body/Wing:

BODY MAKE	Tekno
WING MAKE	Tekno



### Wheelbase:



### Shocks:

	FRONT	REAR
OIL	650	600
BRAND	Tekno	Tekno
PISTON	8x1.3 cone up	8x1.3 cone up
SPRING	green	green
REBOUND	0 %	0 %
STD/EMUL/VENT	STD	STD

NOTES:

### Tires / Wheels:

	FRONT	REAR
BRAND/TREAD		
COMPOUND		
INSERT		
WHEEL		

NOTES:

### Differential Oil:

FRONT	CENTER	REAR
10k	10k	5k

### Electronics:

ESC:	
BATTERY:	
MOTOR:	
RADIO:	
SERVO:	300oz min

### Drivetrain:

PINION SIZE	
-------------	--

### Chassis Braces:

Front <input type="checkbox"/>	Middle <input type="checkbox"/>	Rear <input type="checkbox"/>
(front brace is always recommended)		

### Notes:


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Event: \_\_\_\_\_

Track: Indoor ☐ Outdoor ☐ Size: Small ☐ Medium ☐ Large ☐ Traction: Low ☐ Med ☐ High ☐

Surface: Smooth ☐ Bumpy ☐ Rutted ☐ Type: Loose/Loamy ☐ Hard Pack ☐ Blue Groove ☐ Clay ☐

Bumpsteer/Ackerman/Servo Saver/Steering Stop: \_\_\_\_\_ Condition: Dusty ☐ Dry ☐ Wet ☐ Muddy ☐

washers over  
#

washers under  
#

ballstud orientation  
☐

ballstud orientation  
☐

washers over  
#

washers under  
#

ballstud orientation  
☐

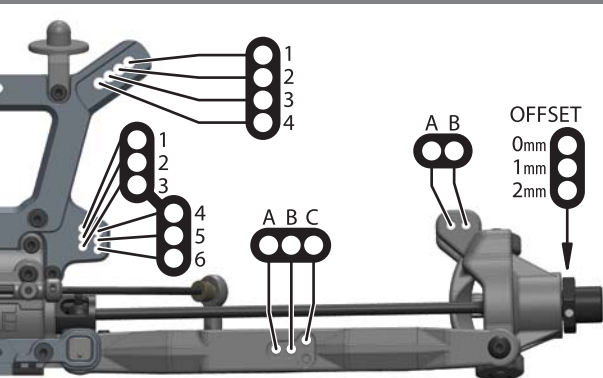
ballstud orientation  
☐

front

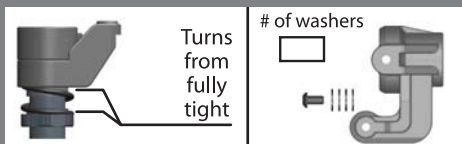
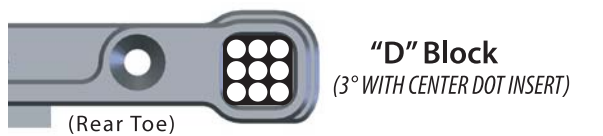
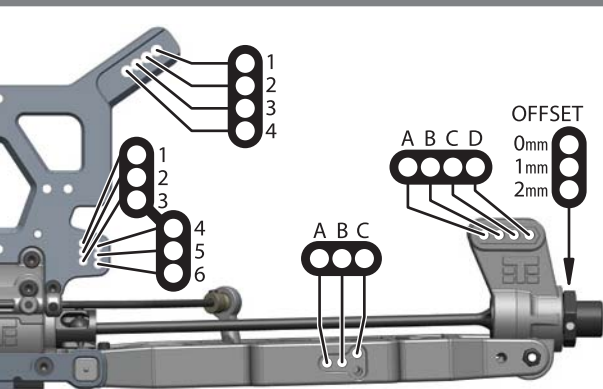
middle

rear

### Front End:



### Rear End:



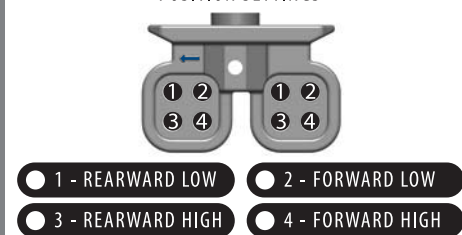
### Suspension:

	FRONT	REAR
RIDE HEIGHT		
CAMBER		
CASTER		
SWEEP		
KICK UP		
ANTI-SQUAT		
TOE (in/out)		
SWAY BAR		
SHOCK LENGTH (DROOP)		

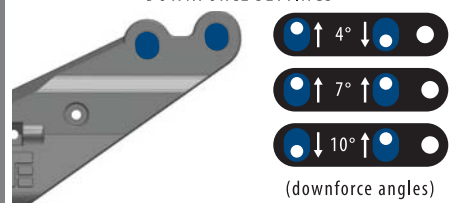
### Body/Wing:

BODY MAKE	
WING MAKE	

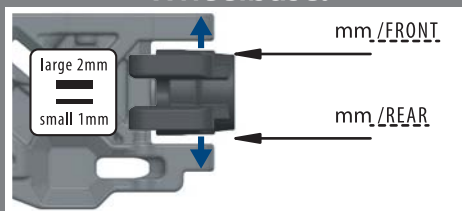
#### POSITION SETTINGS



#### DOWNFORCE SETTINGS



### Wheelbase:



### Shocks:

	FRONT	REAR
OIL		
BRAND		
PISTON		
SPRING		
REBOUND	%	%
STD/EMUL/VENT		

NOTES:

### Tires / Wheels:

	FRONT	REAR
BRAND/TREAD		
COMPOUND		
INSERT		
WHEEL		

NOTES:

### Differential Oil:

FRONT	CENTER	REAR

### Electronics:

ESC:	
BATTERY:	
MOTOR:	
RADIO:	
SERVO:	

### Drivetrain:

PINION SIZE	(teeth)
-------------	---------

### Chassis Braces:

Front <input type="checkbox"/>	Middle <input type="checkbox"/>	Rear <input type="checkbox"/>
(front brace is always recommended)		

### Notes:




Name: \_\_\_\_\_ Date: \_\_\_\_\_ Event: \_\_\_\_\_

Track: Indoor ☐ Outdoor ☐ Size: Small ☐ Medium ☐ Large ☐ Traction: Low ☐ Med ☐ High ☐

Surface: Smooth ☐ Bumpy ☐ Rutted ☐ Type: Loose/Loamy ☐ Hard Pack ☐ Blue Groove ☐ Clay ☐

Bumpsteer/Ackerman/Servo Saver/Steering Stop: \_\_\_\_\_ Condition: Dusty ☐ Dry ☐ Wet ☐ Muddy ☐

washers over  
#

washers under  
#

ballstud orientation

☐

☐

washers over  
#

washers under  
#

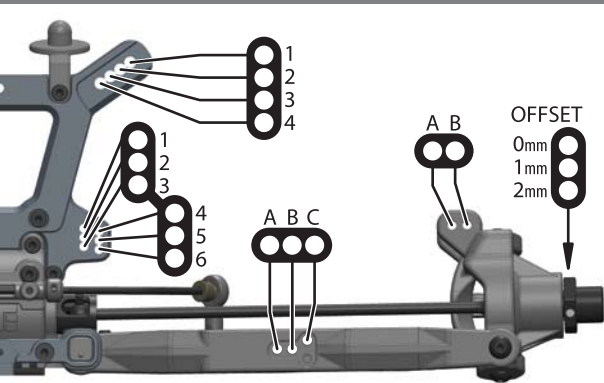
ballstud orientation

☐

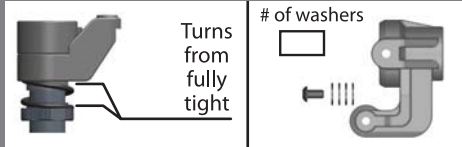
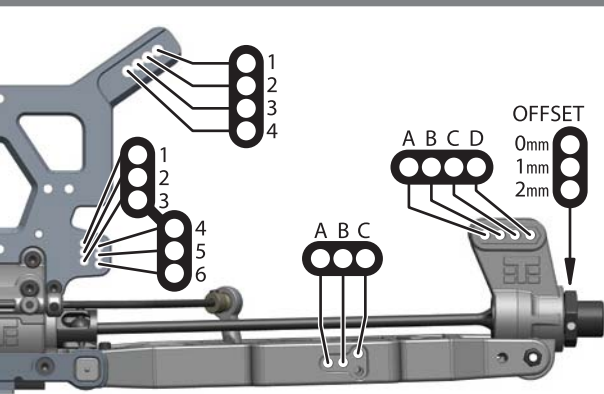
☐

front  
middle  
rear

### Front End:



### Rear End:



### Suspension:

	FRONT	REAR
RIDE HEIGHT		
CAMBER		
CASTER		
SWEEP		
KICK UP		
ANTI-SQUAT		
TOE (in/out)		
SWAY BAR		
SHOCK LENGTH (DROOP)		

### Body/Wing:

BODY MAKE	
WING MAKE	

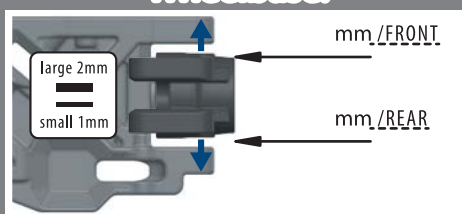
POSITION SETTINGS

1 - REARWARD LOW    2 - FORWARD LOW  
3 - REARWARD HIGH    4 - FORWARD HIGH

DOWNFORCE SETTINGS

4°    7°    10°  
(downforce angles)

### Wheelbase:



### Shocks:

	FRONT	REAR
OIL		
BRAND		
PISTON		
SPRING		
REBOUND	%	%
STD/EMUL/VENT		
NOTES:		

### Tires / Wheels:

	FRONT	REAR
BRAND/TREAD		
COMPOUND		
INSERT		
WHEEL		
NOTES:		

### Differential Oil:

FRONT	CENTER	REAR

### Electronics:

ESC:	
BATTERY:	
MOTOR:	
RADIO:	
SERVO:	

### Drivetrain:

PINION SIZE	(teeth)
-------------	---------

### Chassis Braces:

Front <input type="checkbox"/>	Middle <input type="checkbox"/>	Rear <input type="checkbox"/>
(front brace is always recommended)		

### Notes:




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