Introduction

Thank you for purchasing the Tekno RC SCT410.3 1/10th Scale Electric 4WD Competition Short Course Truck. The SCT410.3 is an improved version of the already great SCT410. We are always working on new projects, so please check our website (www.teknorc.com) regularly for the latest news, parts, and kits. Thanks again.

Additional equipment and parts needed:
2 + channel radio transmitter and receiver
1/10th scale SC (4 pole) ESC and motor
High torque steering servo
2s LiPo battery
1/10th scale SC tires, wheels & CA glue
Short Course body and paint
MOD1 Pinion (TKR4171->TKR4190)

Tools needed:
Hex drivers (1.5mm, 2.0mm, 2.5mm)
Nut drivers (5.0mm, 5.5mm, 7.0mm, 8.0mm)
Hobby knife
Needle-nose pliers
Adjustable (Crescent) wrench (for shock assembly)
4mm turnbuckle wrench
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 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) and through our network of domestic and international dealers and distributors.
Apply grease to the groove where the o-ring is placed as well as the o-ring itself.

Apply grease to the groove in the outdrive.

Fill with 7000 wt oil to 1 mm below full. DO NOT OVER FILL.
Apply grease to the groove where the o-ring is placed as well as the o-ring itself.

Fill FRONT with 7000 wt oil to 1mm below full

DO NOT OVER FILL
Note: TKR1222 and TKR1226 Shims - The gear mesh should be tight without any binding. TKR1226 should always be installed. Then test 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. You may end up using only one shim on the gear side.
**Bag D**

**Rear Gearbox (overview)**

**Step D-1**

TKR1226

TKR5575X

TKR1222

TKRBB05134

TKR1603

TKR5016B

TKR5152

TKRBB05134

TKR5016B

TKR5584

TKR5584C (Option)

TKR1222

TKR1226

TKRBB05134

TKR1525

**Note:** TKR1222 and TKR1226 Shims - The gear mesh should be tight without any binding. TKR1226 should always be installed. Then test 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. You may end up using only one shim on the gear side.

**Step D-2**

TKR1222

13x16x0.1mm Diff Shim

TKR1226

5x7x0.2mm Shim

TKR1525

M3x14mm Cap Head Screw

TKR1603

M5x4mm Set Screw

TKRBB05134

Ball Bearing (5x13x4)

**Step D-3**

**Grease**

TKR1222

+may not be needed

TKR1525

+may not be needed

TKR5584

TKR5584C (Option)

**Note:** The front and rear bulkheads are different. The front has a much greater output angle compared to the rear.
Step E-1

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: Do not over-tighten

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

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

Step E-2

Note: With these stock settings, Anti-Squat is: 3° / Rear Toe is: 2°
For reference: With center dot inserts in both braces, Anti-Squat = 3° / Rear Toe = 3°
**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 landing jumps on throttle.
**Bag F**

**Rear Camber Links**

- **Left**
  - This side mounts on hub
  - Note: angled link
  - TKR5052A
  - TKR5188

- **Right**
  - This side mounts on shock tower
  - Note: straight link
  - TKR5188
  - TKR5123

**Step F-3**

- Note: Notch always goes on left side of vehicle

**Step F-4**

- Stock position is 6/8

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**List of Parts**

- **TKR1201**
  - M3 Locknut Black
  - x4

- **TKR1529**
  - M3x20mm Cap Head Screw
  - x4

- **TKR5052A**
  - Pivot Ball M3x6.8mm
  - x2

- **TKR5053A**
  - Pivot Ball M3x6.8mm
  - No Flange
  - x2

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**Bag F**

**Rear Bumper**

**Step F-5**

- TKR1327
- TKR5799
- TKR1327

*Note: “Top” side up*

**Step F-6**

- TKR1327
- TKR1528
- TKR1327
- TKR1327

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TKR1327

*4*

**M3x16mm Flat Head Screw**

TKR1528

*2*

**M3x18mm Cap Head Screw**
**Bag G**

**Front End**

**Step G-1**

- TKR5084 - 2.6mm
- *TKR5080 - 2.2mm
- *TKR5081 - 2.3mm
- *TKR5082 - 2.4mm
- *TKR5083 - 2.5mm
- *TKR5085 - 2.8mm
- *TKR5087 - 3.0mm (Option)

Note: Do not over-tighten

**Step G-2**

- TKR1327
- TKR5049A (Option)
- TKR5165
- TKR1601

**Step G-3**

- TKR1327
- TKR5049A Pivot Ball Sway Bar
- TKR5079A Stabilizer Ball
- TKR5020

Use a #19 drill bit or 4mm reamer to ream arms until hinge pin falls through freely.
**Bag H**
Front Spindle / CVA Assembly

**Step H-1**
- TKR6856
- TKR6856
- TKR5572
- TKR5570A
- TKR5554A
- TKR5541B
- TKR1404
- TKR1404
- TKR6856
- TKR8806135
- TKR1215
- TKR1609
- TKR5571M
- TKR5571-17
- TKR1654X (Option)

**Step H-2**
- TKR1215
  - M4 Lock Nut Flange Black
- TKR1404
  - M3x12mm Button Head Screw
- TKR1407
  - M3x16mm Button Head Screw
- TKR5554A
  - Spindle Pin Sleeve
- TKR5555A
  - Suspension Pin Sleeve
- TKR6856
  - CV Joint Pin
- TKR8806135
  - Ball Bearing (6x13x5)
- TKR8810154
  - Ball Bearing (10x15x4)
Bag H
Front Camber Links

**Step H-3**

- TKR5053A: This side mounts on hub. Note: no flange
- TKR5123
- TKR5188

**Left**

- TKR51BB

**Right**

- TKR51BB

- TKR5052A: This side mounts on shock tower. Note: flange
- TKR5123
- TKR5188

- TKR5053A: This side mounts on hub. Note: no flange

**Step H-4**

- Note: Notch always goes on left side of vehicle
- 20.50

- TKR1221: M3 Lock Nut Black x4
- TKR1201: M3x8mm Washer x4
- TKR1529: M3x20mm Cap Head Screw x4
- TKR5052A: Pivot Ball M3x6.8mm x2
- TKR5053A: Pivot Ball M3x6.8mm No Flange x2

Stock position is 2/A
**Bag I**

**Steering Assembly (Overview)**

*Note: Apply a small drop of oil for easy o-ring installation.*

*Note: Tighten nut all the way down, then back it off 3 full turns.*

*Note: Notch always goes on left side of vehicle.*

*Note: Stock bumpsteer setting is 4 washers under the steering ball link.*

**Step I-1**

**Step I-2**

**Step I-3**

**Step I-4**

**Right**

**Left**

**Stock Position**

(in MIDDLE hole)

*Note orientation of Ackermann plate when installing*
**Step J-1**

Note: on steps J-1, J-2 and J-4 Do not tighten the chassis screws all the way down until the assembly steps are complete. Position the entire front assembly on the chassis and tighten each screw evenly.

**Step J-2**

Note Step J-2: Line up the bottom of the steering posts (TKR5102) with the corresponding recess cut in the chassis.

**Step J-3**

Note: Initial bumpsteer setting is 2 washers above and 2 washer below the steering ball link.
**Bag K**

**Center/Rear Assembly**

**Step K-1**
- TKR5107
- TKR5263

**Step K-2**
- TKR1522

**Step K-3**
- TKR5579
- TKR1443
- TKR5062
- TKR1344

**Step K-4**
- TKR1524
- TKR5576

- TKR1343 x5
- TKR5062
- TKR1344 x7

- TKR1522 M3x8mm Cap Head Screw x2
- TKR1524 M3x12mm Cap Head Screw x4
- TKR1343 M4x12mm Flat Head Screw x7
- TKR1344 M4x10mm Flat Head Screw x5
- TKR1443 M4x10mm Button Head Screw x2
- TKR5062 M4x10mm Cap Head Screw x7

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 the 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)* Push the shaft in for the amount of rebound desired.

**Step 6B:** *(Vented “Stock”)* 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 EB48) 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 L**

**Front Shock Assembly**

**Step L-1**

- **TKR6008**
- **TKR6009**
- **TKR6036**
- **TKR6143**

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

**Vented Build**

- **TKR6018**
- **TKR6038**
- **TKR6003**

**Standard Build**

- **TKR6013**

**Emulsion Build**

- **TKR6003**

**#350wt Shock Oil**

**Step L-2**

- **TKR1200**
- **TKR6008**
- **TKR6009**
- **TKR6004**
- **TKR6005**

**Note:**
- Shock boots must be installed before attaching rod end.

**Step L-3**

- **TKR1211**
- **TKR6007**
- **TKR527**
- **TKR1523**
- **TKR1528**

**Note:**
- Slot in spring perch should face outside of vehicle.

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**Shock Building Options**

*NOTE: Vented is the preferred stock build*

**Vented Build**

- Drill 1-2mm hole here for bleeder
- *Do not drill bleeder hole for this build*

**Standard Build**

- **TKR1341**
- **TKR6003**
- **TKR6004**

**Emulsion Build**

- **TKR6013**
- **TKR6003**

**NOTE: Vented is the preferred stock build**

**Step L-1**

- **TKR5049A**

**Note:**
- Vented build requires a 1-2mm hole drilled in addition to the bleeder hole

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**Stock Shock Position**

- Stock shock position is outside hole on the arm and inside hole on the tower
- Stock front ride height is 25mm
- Shock length (droop) is 105mm

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**Materials**

- **TKR6008**
- **TKR6009**
- **TKR6036**
- **TKR6143**
- **TKR1200**
- **TKR6008**
- **TKR6009**
- **TKR6004**
- **TKR6005**
- **TKR1211**
- **TKR6007**
- **TKR527**
- **TKR1523**
- **TKR1528**
- **TKR1605**
**Shock Building Options**

*NOTE: Vented is the preferred stock build*

- **Vented Build**
  - Drill 1-2mm hole here for bleeder.
  - Drill 1-2mm hole here for emulsion.
- **Standard Build**
- **Emulsion Build**
  - Bladder not used in this build.

**Bag M**

**Front Shock Assembly**

*Step M-1*
- Note: shaft guide orientation

*Step M-2*
- Note: Use green slime or oil on shock shaft threads AND O-rings to prevent tearing and leaking.

*Step M-3*
- Note: Tighten TKR1211 lock nut all the way down, then back off 1/4 turn. Use thread lock!

- **Stock shock position is inside hole on the arm and second from inside on the tower**
- **Stock rear ride height is 24mm**
- **Shock length (droop) is 118mm**

**Note:**
- Rear shocks use longer shock bodies - TKR6016, longer shock shafts - TKR6017, longer springs - TKR6043 and longer shock boots - TKR6144
- Stock shock position is inside hole on the arm and second from inside on the tower
- Stock rear ride height is 24mm
- Shock length (droop) is 118mm

**Parts List**

- **x2**
  - TKR1200 M2.5 Lock Nut Zinc
  - TKR1211 M3 Lock Nut Flange Black
  - TKR1212 M4 Lock Nut Flange
  - TKR1341 M4x6mm Flat Head Screw
  - TKR1523 M3x10mm Cap Head Screw
  - TKR1528 M3x18mm Cap Head Screw
  - TKR1605 M3x10mm Set Screw

**Special Notes**

- Drill a 1-2mm hole in the bleeder for the Vented build.
- Do not drill the bleeder hole for the Emulsion build.
- Bladder not used in the Vented build.

**Shock Building Options**

- **#200 wt Shock Oil**
- **Vented Build**
- **Standard Build**
- **Emulsion Build**
- **NOTE: Vented is the preferred stock build**

**Dedicated Materials**

- Ventilated build requires a 1-2mm hole drilled in addition to the bleeder hole.

**Other Notes**

- Note: slot in spring perch should be outside of vehicle.
**Bag N**

**Final Assembly**

**Step N-1**
- TKR5060
- TKR5065
- Steering servo (not included)

**Step N-2**
- TKR5060
- TKR5060C (Option)
- TKR5065
- TKR5125
- ESC (not included)
- double sided tape
- CA glue

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

**Step N-3**
- TKR1525
- TKR1221
- TKR1322

**Step N-4**
- M3x6mm Button Head Screw
- M3x8mm Flat Head Screw
- M3x14mm Cap Head Screw
- O-ring 3x7mm
- Transponder (not included)
- RX (not included)

Note: Install ESC tray on the mudguard (do not overtighten).

**Step N-4**
- 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.
Battery Strap Installation:
1. Fit straps loosely
2. Position on chassis
3. Proceed to step O-2

Note: Install MOD1 pinion (TKR4171-4190) at this step. Adjust gear mesh and tighten screws (TKR1445) well. *Use thread lock.
Note: Offset servo arm so it is parallel with the connecting arm at neutral or zero servo position.
Bag P
Nerf Bars & Body Mounts

Note: Nerf Bars (TKR5502) are not left right side compatible. The left side nerf bar is wider than the right side.

Step 1

Choose the post with the offset that matches your specific body holes.

Choose the post with the angle that matches your specific body.

Step 2

Insert post and adjust height to provide proper body clearance.

Step 3

x4 TKR1407 M3x16mm Button Head Screw

x4 TKR1525 M3x14mm Cap Head Screw

*These holes should be facing up.
Note: Wheels and Tires NOT INCLUDED

Note: Body NOT INCLUDED