

ACK-B01 & ACK-T01

TEKIN CHASSIS

USER'S GUIDE



Thank you for your purchase of the TEKIN Active-Link Suspension chassis. This is the most technologically advanced replacement chassis ever offered for the Associated RC10 and RC10T. The unique design of the chassis and suspension components maximize performance by increasing the contact patch of the rear tires in all racing situations. The result is better-than-ever traction on any type of surface.

Tools required for assembly:

- #2 Phillips screwdriver
- Needle-nose pliers
- 3/32" Allen wrench
- 1/16" Allen wrench
- 1/4" open-end wrench or nut driver
- 3/16" open-end wrench or nut driver
- A hobby knife (e.g. X-acto with a pointed blade)

To begin installation of your new TEKIN Active-Link Suspension chassis, some disassembly of your Associated RC10 car or truck is required.

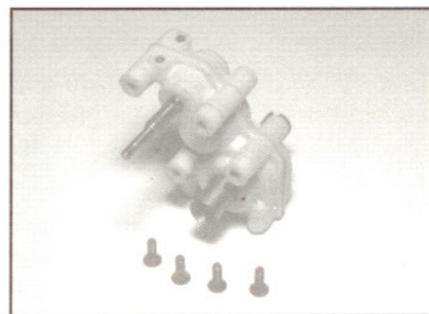
Step 1: Begin by removing all of the electronics from your RC10 or RC10T truck (if the kit was previously assembled). Next, remove the 4-40 x 3/8" flathead socket screws that fasten the transmission to the original chassis. It will also be necessary to remove the upper transmission brace before the transmission can be completely removed. Note: Removal of the two screws fastening the rear of the motor mounting plate to the chassis will also be required for cars or trucks using an aluminum chassis plate.

Step 2: It will be necessary to flip the transmission's drive gear so the shaft exits the casing opposite its original position to accommodate the new mid-motor mounting position. Remove the slipper-clutch assembly before taking apart the transmission. Remove the four screws that hold the transmission case to the stock motor mounting plate. Using a pair of needle-nose pliers, remove the roll-pin in the drive gear shaft, separate the transmission halves and slide the drive gear out of the casing. Pop the dust cover out of the other half of the transmission casing and re-install the drive gear, 180 degrees from its original position, with the shaft exiting through the dust cover hole.

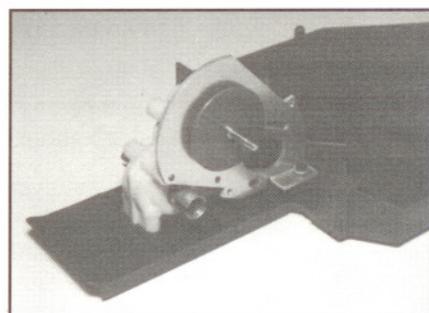
Step 3: Re-assemble the transmission with the new motor mounting plate included with the TEKIN kit. Re-install the roll-pin in the drive gear. Remove the motor mounting plate spacers from their original location and install them and the felt dust shield on the other side of the transmission where the drive gear shaft now exits. Fasten the motor mounting plate with the 4-40 x 1" Allen-head screws supplied with



Step 2 - Before



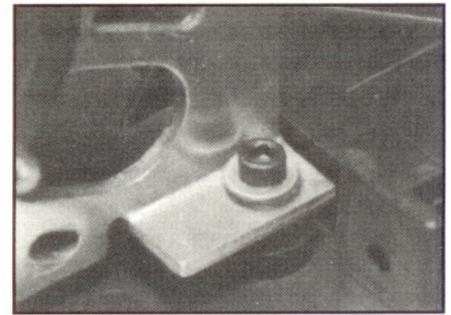
Step 2 - After



Step 3

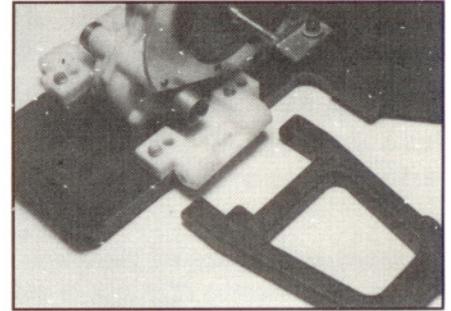
the Associated kit. Re-install the Associated slipper clutch as per the original RC10 instructions. Install a gear cover. It is best to start with a new one. You will have to trim it a bit differently. There are three screw holes provided, use at least 2.

Step 4: Attach the transmission to the new TEKIN chassis with the 4-40 x 3/8" flathead socket screws supplied with the Associated kit. Do not tighten the screws all the way yet. NOTE: The oversized hole in the front of the motor mounting plate is to accommodate bushings that isolate vibration and electrical noise from the chassis. The chassis is molded of a graphite composite which is a conductor. Failure to properly install these bushings may result in erratic radio operation. Install one shoulder bushing (supplied) between the motor mounting plate and the chassis, and the other on top. Install a 4-40 locknut in the bottom of the chassis. Secure the front of the motor mounting plate with a 4-40 x 1/2" Allen head screw and a washer. Finish tightening the four screws securing the transmission to the chassis plate.



Step 4

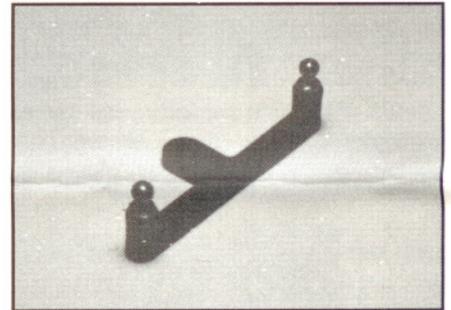
Step 5: Remove the rear suspension mounts, shock absorbers, and hub carriers from the stock suspension arms. Make note of which side of the car these components were removed from so they may be re-installed in the same location.



Step 5

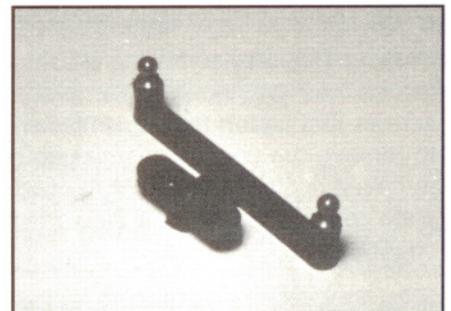
Step 6: Attach the rear suspension mounts included with the Associated kit, as they were installed on the original chassis, to the TEKIN chassis with the same 3/32 Phillips screws. Because of varying tolerances in the factory suspension mounts, it may be necessary to trim some material from the suspension mounts to allow for proper alignment. NOTE: Associated kits come with varying degrees of toe-in built in to the rear suspension mounts. The best results have been with the use of 0 degree rear suspension mounts (available at your local hobby shop). The new rear suspension mounts, Associated part number 7364 are recommended (the photo shows the old mounts). Rear toe-in can cause the TEKIN chassis to turn excessively, and is not recommended.

Step 7: Attach the new TEKIN suspension arms to the rear suspension mounts with the stock 1/8" pins and E-clips. You may need to trim some plastic for a proper fit. The suspension arm should move freely. The longer arms are for use with the trucks, and the shorter arms are used with the cars. The suspension arms should be installed with the active-link mounting tabs facing rear and the shock mounting holes facing forward. Its important that the hub carriers remain in their original position. Remove the ball ends from the hub carriers and re-install them facing rear to accommodate the new active-link suspension. NOTE Losi hub carriers, part # A-2038 will provide MUCH better handling with this chassis. Use them on both the buggy and the truck. (Use one-piece wheels so they fit the buggy). INSTALL THE LOWER HINGEPIN IN THE LOWEST OF THE TWO HOLES ON THE HUB CARRIER.



Step 7

Step 8: Set the chassis aside and begin assembly of the active-link components. Locate the upper link T-bar. Remove the pivot balls from the Associated bulkhead and install them in the standoffs at either end of the T-bar (not in the flat side of the T-bar).



Step 8

Step 9: Attach the idler arm to the center of the T-bar with a 4-40 x 5/32" Allen-head screw (Do not over-tighten). The idler arm should pivot freely on the T-bar. If you notice some binding when rotating the idler arm, loosen the Allen-head screw in very small increments until it's able to move freely. Note: These are special screws with a smooth head.



Step 9

Step 10: Attach A-arm links to both ends of the idler arm with 4-40 x 5/32" Allen-head screws. Again, tighten enough for a snug fit, but allow free movement of A-arm links on idler arm.

Step 11: Attach A-arm extensions to ends of A-arm links with 4-40 x 5/32" Allen-head screws. The extensions should be allowed to pivot freely on the A-arm links.

Step 12: The entire Active-link system is now assembled and ready to be attached to the rear bulkhead. Locate the rear bulkhead included with the TEKIN kit. The front of the bulkhead is easily identified by the reinforced area around the wing tube holes, as opposed to the flatter surface of the rear of the bulkhead. The Active-link system is attached to the front bulkhead with two guides that allow the T-bar to slide

freely from left to right. Place the T-bar across the bulkhead between the four mounting holes for the guides. Attach the guides with four 4-40 x 3/8" Allen-head screws from the back of the bulkhead. With the mounting screws completely tightened, the T-bar should be able to slide left to right without any binding.

Step 13: Install the rear bulkhead to chassis in rearmost mounting holes behind the transmission with two 8/32 x 1/2" Phillips-head screws. The Active-link system should be facing forward with the A-arm links extended outward towards the suspension arms.

Step 14: Locate the transmission brace and install it (with the shock tower mounting holes on top and facing forward) between the transmission and rear bulkhead using four 4-40 x 3/8" Allen-head screws. The transponder may also be mounted to the transmission brace. To do this you will need to drill a hole in a suitable location.

Step 15: Attach the A-arm extensions of the Active-link system to the suspension arms. The extensions attach to the mounting tabs on the suspension arms with 4-40 x 1/2" Allen head screws. DO NOT over tighten.

Step 16: Install the adjustable upper suspension links between the ball ends on the hub carriers and the Active-link T-bar. Note: Be sure the dog bones are in place in the drive hubs before completely installing the upper links. IF YOU ARE USING THE Recommended LOSI HUB CARRIERS, INSTALL THE BALL JOINT FOR THE UPPER LINK IN THE MIDDLE OF THE THREE LOWER HOLES.

Step 17: Included in the TEKIN chassis kit are two shock towers to accommodate both car and truck applications. The taller of the two shock towers is for use on RC10T trucks, and the shorter one for the cars. Attach the shock tower the transmission brace, flat side facing forward, with two 4-40 x 1/2" Allen-head screws. Attach the bottom ends of the shock tower to the chassis with four 4-40 x 3/8" Allen head screws.

Step 18: Install a 4-40 x 1" Allen head screw on each side of the shock tower in the outermost hole and secure with a 4-40 nut.

Step 19: Slide a shock mounting bushing over each 4-40 x 1" Allen head screw, followed by the shock absorbers. Secure the shock absorbers with a 4-40 washer and a 4-40 nylon locking nut. Do not over-tighten as this will prevent free movement of the shock absorber.

Step 20: Attach the lower end of each shock absorber to the mounting holes of the A-arms with a 4-40 x 1" Allen-head screw. WE RECOMMEND USING THE INNERMOST OR MIDDLE HOLE. YOU MAY NEED TO ADJUST THE SPACERS IN THE SHOCK TO GET THE CORRECT LENGTH AND STOP POINT.

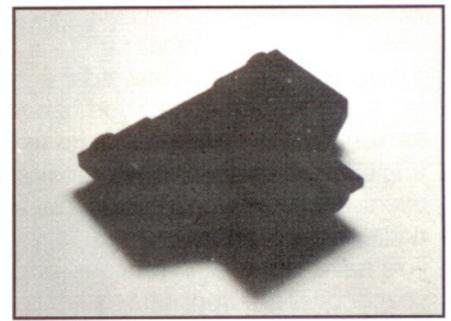
Step 21: Attach battery hold-downs to the chassis with 4-40 x 1/2" Allen-head screws. Do not over-tighten as the battery hold-downs need to pivot freely to allow easy installation and removal of battery packs.

Step 22: It's VERY IMPORTANT that the battery insulator strips be installed around the edges of the battery box. The graphite composite material used to form the chassis is a electrical conductor and may cause a battery short and/or erratic radio operation. Peel off the backing of the insulator strips and install anywhere the battery may come in contact with the battery box. For a more secure installation, use Shoe-Goo, contact cement, silicone glue, or super glue-and accelerator.

Note: Use of this conversion requires an Associated aluminum nose piece. If you are currently using a one piece graphite chassis, it will be necessary to install the front suspension components on an aluminum nose piece to use the TEKIN Active-link suspension kit.

Step 23: Begin removing the two 4-40 x 3/8" Allen head screws securing the nose brace tubes to the chassis. Remove the 3-32 Phillips head screws from the bottom of the chassis under the servo saver and idler arm. Remove the entire front end as a whole from the original Associated chassis.

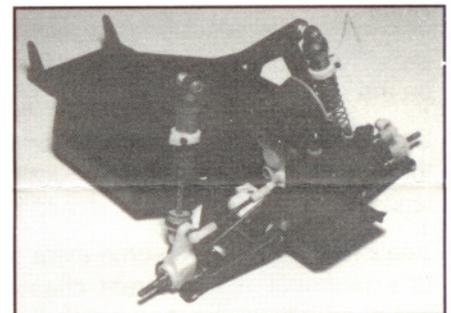
Step 24: Reinstall the front end on the new TEKIN chassis in opposite order it was removed.



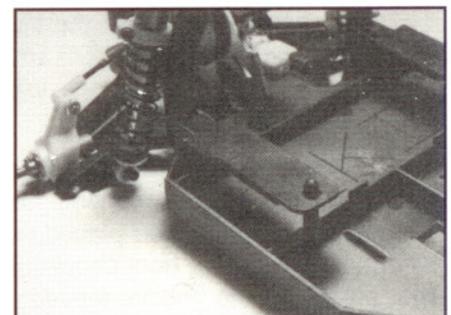
Step 12



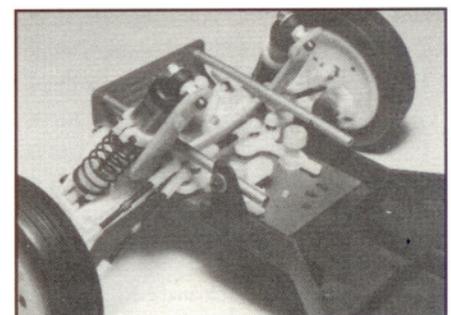
Step 13, 14, 15



Step 16, 17, 18, 19, 20

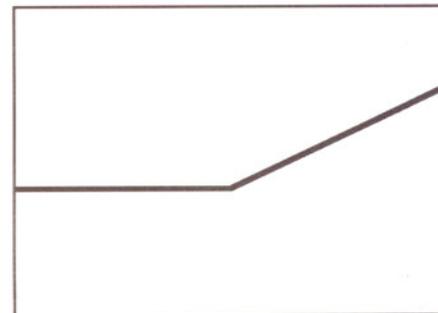


Step 21



Step 23, 24

Note: You'll notice there is an extra set of nose brace tubes included with the TEKIN chassis kit. These tubes are to accommodate a change in the degree of kick-up in the nose plate. From the factory, the nose plate has 30 degrees of kick-up which, if left alone, will produce good handling results. The best results however, come from reducing the degree of kick-up to 25 degrees. If you choose to change the kick-up angle to 25 degrees, it will require the nose plate be bent in a vise or with a pair of pliers. Follow the template included in the instructions for the proper angle. The new nose brace tubes will be required if you change the kick-up to 25 degrees. **NOTE:** If you have the buggy version, use the original nose brace tubes, but install a 1/8" spacer over the front screws before threading into the tube.



Assembly of your new TEKIN Active-link suspension chassis kit is now complete. All that remains is the electronics installation and you're ready to race! For the best results, read the following electronic installation tips.

Servos: Included with the kit are servo mounts that are pre-drilled to accommodate most popular servos. These are highly recommended over two-sided servo tape. These mounts will hold the servo firmly in place and will prevent the steering from wandering or becoming disabled because of weak servo tape. Attach the servo mounts to the servo with the flange facing outward. Only one screw is required to fasten each mount to the servo, but two may be used if you feel the need. Use 4-40 x 3/8" screws. Attach the servo and mounts to the chassis with 4-40 x 3/8" flat-head socket screws. The front mount is a fixed position, the rear is a sliding mount to accommodate all sizes of servos.

It's recommended that a heavy duty servo arm or servo saver be used to prevent any unwanted breakage. The chassis is specially designed with a built-in recess for use with these heavy-duty components. Due to the high cornering forces, the stock buggy servo saver should not be used. A large Kimbrough type is acceptable. On the truck, the servo saver must be tightened down for best steering results, use a heavy-duty servo, preferably with metal gears, to prevent breakage.

Receiver: The receiver mounting area is designed to allow the use of most popular standard two channel, and micro receivers. The receiver may be mounted flat on the chassis with two-sided mounting tape, but for the best results, it's recommended that the receiver be mounted on its side as shown. If you have radio interference, you may mount the receiver on the shock tower.

Speed controller: The speed controller mounting area is as close to the battery as possible to prevent unwanted voltage loss through long battery leads. Mount the speed controller with two-sided tape, or bolts if your speed control is so equipped. The leads for the speed control should be as close to the battery as possible.

You'll notice there are some extra sets of holes in the rear of the TEKIN chassis. These holes are designed to allow the racer to experiment with different chassis setups for different racing conditions. The extra set of holes just in front of the rear bulkhead allows the Active-link (tm) system to be removed if use of the conventional suspension configuration is desired. Simply remove the Active-link components from the bulkhead and install a pair of ball ends to attach the upper links. Reinstall the bulkhead in the forward set of mounting holes in both the tranny brace and chassis, and you're ready to go again.

The large hole in the top of the transmission brace is designed to allow installation of a transponder from an automatic lap counting system. This mount is unique in that it keeps the transponder as far away from the speed control as possible to prevent unwanted interference with the lap counting system. It's also a solid mount that will help prevent loss of the transponder during racing.

Additional Setup Recommendations: The active link may be disabled for best results on some tracks. To do this remove the slider and other components, and install the upper inner rear link ball joints into the rear bulkhead. The lower front shock mounting point should be placed in the outermost hole on the a-arm. The upper front shock mount should be placed on the innermost hole of the front shock tower. For better results, drill new front shock upper mounting holes in the front shock tower, with the top of the shocks moved as close together as possible. You may also grind the top shock cap so the tops of the shocks fit closer together. The front shocks should be as flat as possible. Do not use any rear toe-in. You may try rear toe-out by using Associated 1.5 degree hub carriers installed backward, but do not use suspension mounting blocks with toe-in.

WARRANTY

TEKIN Electronics, Inc. guarantees this chassis to be free from factory defects in materials and workmanship for a period of 120 days from date of purchase, verified by sales receipt. This warranty does not cover: Suitability for specific application, components worn by use, application or reverse, tampering, misuse or shipping. Our warranty liability shall be limited to repairing unit to our original specifications. By the act of using this chassis the user accepts all resulting liability. Equipment damaged in connection with the use of this device is **not** covered. We reserve the right to modify the provisions of this warranty without notice. If the main graphite chassis piece should ever become broken or damaged, it may be returned to the factory, and it will be replaced for a flat fee of \$20.00. This replacement offer ends 1 year after the chassis becomes a discontinued item.

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