Factory Works USA-1

Requirements: Ball joints from bellcrank to servos (4), 5.8mm pillow balls (4). Traxxas 1942 works well

Start by removing the chassis from your front and rear gearboxes. Remove the wheels and tires. Remove your electronics and set them aside. Bags are numbered to match instruction steps.

1) Install the 3d printed supports onto the ends of the chassis and upper plates. These are simply used to guide the standoffs into place, they are not structural. Install the battery holders using 3x14mm screws, plain nuts, and lock nuts.



2) Next, install the ball bearing steering kits as shown. The front and rear are identical. Install your servos using servo blocks. Install the servo horns or servo savers. Build and install the linkage from the servo horn to the steering bellcrank. The rack bars will be installed later.



3) Set the upper chassis onto the lower chassis using the 35mm posts. Now, slide one end into the front transmission. Install the clamp plate on the transmission both top and bottom with 3x14mm screws into the posts. Be careful not to overtighten, and also make certain the screws start straight. Do the same with the rear gearbox.



4) Attach the ladder supports to the lower chassis using the 3x14mm screws and a 35mm post. Attach the top of that post to the upper chassis using a 3x10mm screw. Do this on all 4 points.



5) Attach the front steering linkage using a 3x20mm screw, through the ball joint, add a plain nut, and into the steering arm. Tighten securely, but do not overtighten. Do this on both front steering bellcranks. Do the same on the rear, but leave off the plain nut. Now, with the long screws protruding at the top of the bellcranks, install a shim, then the rack bar, another shim, and follow with a locknut. Tighten the nut then back off until the movement is free. Do this on all 4 points. Note that most of the problem with the USA-1 steering is the stock mechanism- BUT there is often also an issue at the steering knuckles. If you have any tightness, you should investigate and get the steering knuckles moving freely in the carriers. This is essential to proper steering!



6) At this point you are ready to reinstall the electronics. We like the receiver up front and ESC at the back, however you are free to get creative. You will need a way to control your servos, either with a reversing Y harness or a radio that has mixing. We highly recommend a radio that will allow you to do the mixing as it will unlock the ability to crab steer, and lock out the rear steer for stability when racing. If you do the Y harness, look at something like Daves RC Electronics sells. It's a simply plug and play device that will reverse one servo. Now you can install your tires- unless you have purchased our Cantilever kit, in which case don't install the tires quite yet!

