Deuce Chassis - Stage IIIc (with 4 disc brakes and dropped tube front axle) RDA-2452



ASSEMBLY INSTRUCTIONS

Each part is hand cast and may have small marks or flash which must be removed with files or a hobby knife. Always test fit parts before glueing. BE CAREFUL!

Frame

A. Gently bend the side rails and the transmission support "spider" to their proper shape. Figure 1 shows the correct contour of the side rails. Drill the holes marked in the side rails all the way through the rail using a .052" (No. 55) drill bit. DRILL ONLY THE MARKED HOLES! The other indentations are locator marks for the cross-member braces. The pins on the cross-members are purposely too long to help you assemble and align the frame. The ends of the pins show in the photo.

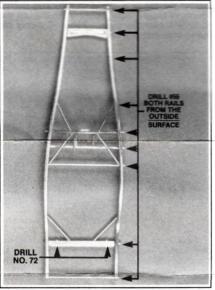


Figure 1

- **B.** Refer to Figure 1 again, and drill the holes in the rear axle cross-member for the shock absorber mounting pins using a .025" (No. 72) drill bit.
- C. Assemble the frame upside down on a flat surface to keep everything square. FIGURE 1 SHOWS THE FRAME UPSIDE DOWN. Notice that the bracket for the brake booster is on the left side in the photo. The small U-shaped slot should point to the bottom of the car. The tubes on the brake booster cross bar should touch the main tube of the "spider". The longest plain tube fits in the middle of the frame behind the "spider". Insert all the cross members, and use rubber bands to hold the assembly together. Apply the glue when all parts are in place. Cut off the pins, and smooth with sandpaper and filler.

Rear Axle

- A. Glue the third member into the recess in the axle housing. Match the small dimples on the inner faces of each part.
- B. Calculate the lengths of 1/8" tubing (not supplied) for the outer axle housings. It will vary depending on what track dimension you want for your model car. (Track is the dimension from the center of one tire to the center

of the other tire on the same axle.) It is best if you assemble your wheel/tire/brake assembly first and then figure the tubing length by actual measurement. Position the axle housing with the driveshaft mounting boss facing forward and nearer the bottom. The axle tube on the left (driver's) side should be made .1" (about 3/32") shorter than the right one. Glue the tubing to the axle. Don't put the wheel/tire/brakes on yet! See Figure 2.

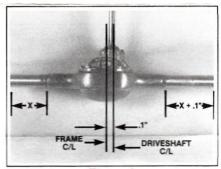


Figure 2

C. Assemble the coilover shocks. Drill .025" diameter (No. 72) holes all the way through the upper shock mount and part way through the lower shock mount. Drill the same diameter hole in the lower and upper shock body. Be careful to align the holes so they are straight along the centers of both parts, and don't drill too deeply. See Figure 3.

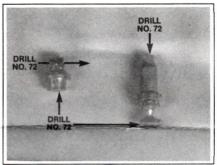


Figure 3

Glue a .025" brass rod into the upper shock body. Before assembling the shocks further, paint them. When dry, assemble the upper and lower shock body, trapping the spring in between. If you need to, cut a coil or two off the spring to lower the car's stance. Glue one or two of the spring coils directly to each body. Make sure to align the mounting holes on the top and bottom properly!

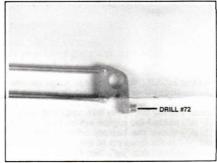


Figure 4

D. The four-bar links rear fitting should be a slip fit on the axle tubing. The links front end should be mounted to a frame side-rail. Before you mount the four-bar links, drill .025" (No. 72) holes in the mounting boss on the lower horn for the lower shock body mount. See Figure 4. Use a small length of brass rod as a pin, and don't glue the lower end of the shocks to the four-bar links until you are ready to install the rear axle in the frame.

E. Snip the frame mounting bracket off the end of the panhard bar and adjust the bar length to fit. The panhard bar should be installed after everything else is permanently glued to the frame.

Dropped Front Suspension

A. Drill the shock mounting holes all the way through the mounting horns with a .024" (No. 73) drill. Drill the kingpin holes with a .032" (No. 67) drill. See Figure 5.

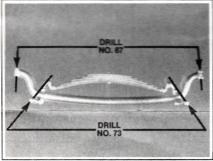


Figure 5

B. The spindle is provided as a reversible part. Drill the kingpin holes with a .032" (No. 67) drill, and test the fit of the spindle to the axle using a length of 1/32" brass rod as the kingpin. DON'T GLUE THEM TOGETHER YET. Remove one of the steering arms from each spindle. Be careful to remove opposite ones! The steering arms mount on the back side of the main axle tube. See Figure 6.

C. Clip off one of the rod ends from the left hand spindle as shown in Figure 6. Drill a .032" (No. 67) hole through each of the remaining three rod ends on the spindles using the small locating dimples as a guide.

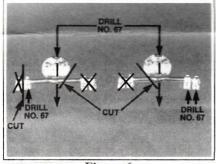


Figure 6

- D. Drill a shallow .043" (No. 57) hole in the dimple on the front of the "batwing" bracket on each of the four-bar links.
- E. Prepare the frame for the axle. Drill a .021" (No. 75) hole in the center of the front axle frame cross bar, and glue the axle to the frame.
- F. Drill a .032" (No. 67) hole through the fourbar mounting bracket, and test fit the fourbar links. Drill a .032" (No. 67) hole through the frame rail for the upper bar, approximately 4" (7/16") behind the engine mount hole and .06" (1/16") above the bottom edge of the frame rail. Glue the brackets to the frame using the four-bar links as a "jig". See Figure 7.

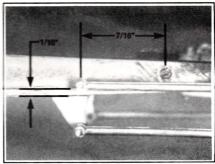


Figure 7

- G. The four-bar links are reversible parts. Trim the pins from outside, leaving a tiny bit behind to represent the head of the mounting bolt, and glue them in place.
- H. Glue the spindles in place, using a short length of 1/32* rod as the kingpin. Bend the steering arms to get clearance to connect the rod ends closest to the axle together with a 1/32* brass tie rod.
- I. Drill a .032* (No. 67) hole through the rod end on the pittman arm, and glue it to the steering box. Glue the steering box/pittman arm to the inside of the left hand frame rail so that the rod end on the pittman arm is aligned across the car with the remaining rod end on the right hand spindle. Glue a 1/32* brass rod drag link between them. Figure 8 shows the assembled steering components.

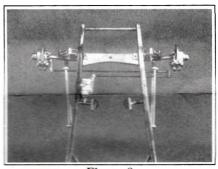


Figure 8

- J. Glue the short pin of the shock absorbers to the lower mounting horn and, after gently bending the shocks into position, glue the upper shock bracket to the frame rail and upper shock pin.
- K. Lay the completed assembly aside and assemble the disc brakes and wheels. Modify your chosen wheels as required to fit over R & D Unique scale disc brakes. Dry fit the brakes and wheels to the front axle assembly and frame. Trim a little from the axle ends to get the brakes to seat properly.

Brakes

- A. Position the front disc brakes (with the protrusion on the outside of the hub) so the caliper is on top and glue in place.
- B. Drill a .063 (No. 52) hole in the rear disc brake bracket mounting post to provide clearance for the disc and caliper, and glue them together. Glue the completed assembly to the rear axle tubing.
- C. Glue the brake pedal/master cylinder to the hole in the left frame rail. Glue the brake booster to the bracket to the right of the transmission mount.

