

#4111

SPRING FRONT END

STEP 1 Insert a stub axle (h) (fig. 1) into each steering block (g) from the square hole side. Put a c-clip on the square hole end of the axle. Drive the axle through carefully until the clip stops the axle.

STEP 2 Start the kingpin (i) (fig. 1) up through the bottom of the suspension arm (c), then through the steering block (g) and spring (f). Push the kingpin the rest of the way into the suspension arm.

STEP 3 Raise the spring with your fingernail or small screwdriver and install an "e"-clip (j) (fig. 2) above the steering block (g) in the top groove of the kingpin (i).

STEP 4 Raise the steering block and install a second "e"-clip in the bottom groove of the kingpin (fig. 3). Do steps 1 through 4 with the other steering block.

STEP 5 Holding the suspension arm, test for freedom of movement by pushing straight up at the far end of the stub axle. The steering block should slide easily up and down with no tendency to bind.

STEP 6 Mount the suspension arms to the chassis (fig.1) with the 8-32 screws provided, long screws (e) through the front holes, short ones through the rear holes. Then slip the cross brace (b) on the forward screws (e), holding it down with the 8-32 nylon locknuts (a).

STEP 7 When putting on your front wheels, slide a small washer on the stub axle on either side of the wheel, locking the whole assembly in place with another "e"-clip at the end of the stub axle.

SHIMS The 0 and 2 degree shims are used as mounting pads for the suspension arms to adjust the height and caster angle of the front end. In general, high caster angles give more steering coming out of a turn, and low caster angles give more steering going in. 2 degrees is a good compromise and gives the flattest tire wear. The flat shims are normally used and result in a 2 degree caster angle, since that angle is already built into the suspension arms. The wedged (2 degree) shims can be used to get either 0 or 4 degrees caster, depending on which way they are turned. Save the spare shims—you may want to use them to tune your car to particular tracks.

SPRINGS Your kit has two sets of springs. Use the .016" silver springs on low traction tracks and the .014" black springs on high traction tracks. Try both types on your car to see how they work on your track.

LINKAGE Test the full suspension travel of each front wheel once your car has been assembled and make sure the tie rods do not hinder the wheels from moving up and down or lock to lock.

RIGHT SUSPENSION ARM
FRONT VIEW

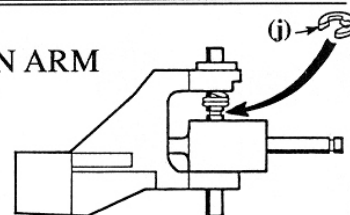


fig. 2

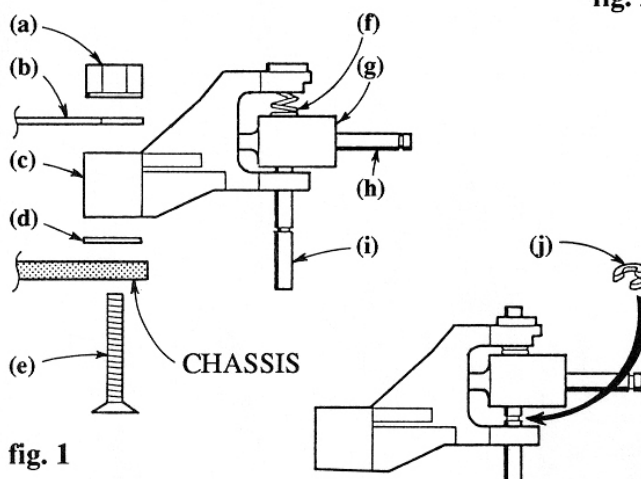


fig. 1

REPLACEMENT PARTS

Letter	Description	Part No.
(a)	Nylon locknuts, 8-32, 6	4185
(b)	Cross brace, 1	4120
(c)	Suspension arm, screws included, pr	4115
(d)	Shim set, 0 and 2 degree	4127
(e)	8-32 x 1/2" flathead alum screws, 16	3324
(e)	8-32 x 7/8" flathead alum. screws, 6	4181
(f)	Spring, .014", black, pr.	4118
(f)	Spring, .016", silver, pr.	4119
(g)	Steering block, pr.	4112
(h)	Stub axle, pr.	4122
(i)	Kingpin, pr.	4123
(j)	"E"-clips, 10	3214