

#5515 INSTRUCTIONS
For RC500 4WD Conversion Kit

Photo #1 - File the edge of the #5520 rear pod, as shown, for belt clearance. File between 5/8" to 1 1/4" -18mm to 32mm from the R.H. edge, and then sand file marks smooth.

Photos #2 & 3 - Take the #5530 rear idler block and one of the #5524 14 tooth sprockets. Install two of the smallest #3655 ball bearings into the sprocket. Put an "E" clip into the slot on the end of the #3212 shaft. NOTE: The "E" clips are taped together. Slip the shaft through the bearings from the R.H. side. Now slip one of the plastic washers on the shaft and slip the shaft in the block, as shown. Slip 3 aluminum washers on the shaft and install another "E" clip. Install the set screw in the front of the block. Install the block onto the power pod with the two flat head screws.

Attach the completed rear end of the car to the rear pod, with the #5533 bracket.

Slip the #5522 and #5529 drive pulley's on the idler shaft, as shown in Photo #3 and measure where you'll have to grind two flat spots on the idler shaft for the set screws. Remove the shaft and grind 2 flat spots. Re-install the shaft with the 2 sprockets and the belt in place. The #5522 sprocket should be close to the bulkhead, but not touching it. The #5529 sprocket must have the flange on the side, as shown, so the flange on the sprocket on the differential must be on the opposite side.

Photos #4 & 5 - Please note: In Photo #4 the shafts are marked as a #3212. This should actually be #6227. Install the ball bearings in the 3 sprockets and install the sprockets in the location, as shown, in the #5526 bulkhead. The smooth sprocket is the #5525. Install one of the nylon washers between the bearings and bulkhead. Install all the #6299 shaft "E" clips. Install the #5516 chassis plate and bulkhead to pod.

Photo #6 - Cut off lower "A" arms, as shown, for dogbone (driveshaft) clearance.

Photo #7 - Install the #5531 front bulkhead. Now slip two of the #897 bearings into the #5542 aluminum blocks. Install the blocks so that the bearings are closest to the front end

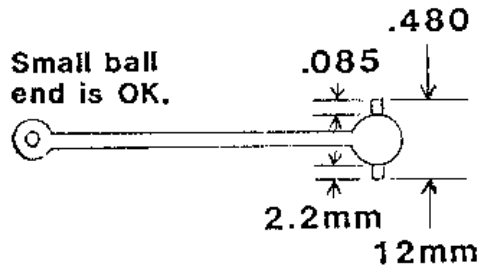
of the car. Set the #5523 sprocket in place, as shown.

Photo #8 - Grind a flat spot on the ends of the two #5539 inner drive shafts, as shown.

Photo #9 - Now install the two #5539 shafts. It will probably be easier, if you go back and remove the #5525 idler sprocket which will loosen up the belt first. Install the shafts. Locate the sprocket so it's centered in the bulkhead cutout. Re-install #5525.

Photos #10, 11 & 12 - Install the #5545 RH steering arms onto the #5546 RH steering block, as shown, then do the LH side. We'll want to install the #897 bearing into the inside of the steering block, but first you might want to take a XXXXXXXXXX knife and clean out any burrs inside the block. Install the #5548 bearings, and then install the steering blocks into the front "A" arms.

Photos #13 & 14 - We'll install the small plastic buttons inside the #5538 front axles, but first take an Exacto knife and bevel the end of the plastic so it will slip in easier. Install the buttons.



The pins on the big ball MUST be cut as shown.

Photo #15 - We'll have to grind the pins on the big end of the dogbones, as shown, for clearance in the steering blocks. Paint the dogbone shaft yellow so it will be easier to find on the truck.

The #5541 dogbone (driveshaft) spring goes on the small end of the dogbone, as shown, so slip it into the #5539 shaft. Slip the #5538 axles in the steering blocks. Put the small end of the dogbone into the #5539 shaft and then turn the steering block, as shown in photo #10 and you'll be able to slip the other end of the dogbone into the front axle. NOTE: The front end might work a little more freely if you grease the big end of the dogbone, but this can also attract grease and will have to be cleaned every race day. It depends on your track conditions,

whether dry is better than greased.

Photo #16 - First install two of the 4/40 screws into the wheel hubs and cut off, as shown, being careful not to get any chips in the one way bearings. Then install the #897 ball bearings in both wheel hubs, as shown.

Photo #17 - The wheel hubs are marked "R" for RH and "L" for LH. Make sure the "R" hub is always on the RH side of the car. If you rotate front tires from the LH side of the car to the RH side make sure the RH hub stays on the RH side of the car, otherwise you'll be running a 2 wheel drive car! Slip one of the small washers on the axle, then the inner wheel hub, which would be pushed into the inside of the front wheel, and the outer wheel hub, which would be pushed into the outside of the front wheel. They'll go in easier if you bevel the wheel slightly. Install as many #5549 front washers as necessary and then the #858 horseshoe clip.

Photo #18 - Your front end should look like this now.

Photos #19, 20 & 21 - Install your servo in the #5517 radio tray. You'll have to drill out and cut the 2 nylon mounting blocks to fit your servo. Leave the rubber grommets on the servo, but remove the brass eyelets and tie wrap your servo in place, as shown. Install the servo saver onto the servo with the proper adaptor. Install the short ball ends on the servo saver in the farthest forward holes, as shown. Install tie rods and set final adjustment later. Depending on the type of your servo, you might have to trim a little off of your servo case. In photo #19, this would be at the corner closest to you in the photo, to clear the tie-rod arm. You'll have to check this after the car is completed.

Slip the radio tray onto the chassis.

Photo #22 - Place 2 aluminum washers under the mounting posts and install screws where necessary. Install 4/40 screws in the #5542 aluminum blocks, and the #5526 bulkhead. Tighten all chassis, pod, front bulkhead and radio tray mounting screws and nuts.

Photos #23 & 24 - We'll install the #5532 brace now. We'll also have to install one thick and one thin washer, as shown in photo #23, on the upper "A" arm pin. If the washers are installed on the forward side of the bulkhead, the car will be smoother and

easier to drive, giving understeer, which is most desirable on low traction tracks. On high traction tracks, the washers can be placed on the rear of the bulkhead, which will give more castor and more steering.

Photos #25, 26 & 27 - With the steering servo saver centered, install the tie rods to the steering block arms. Set the tie rods so that the wheels will be pointing straight forward. No toe in or no toe out is a good starting point.

Photos #28 & 29 - We have to adjust the belt with the fuel tank and throttle servo out of the car.

Adjusting the belt - You do not want the belt adjusted too tight, because this will take extra horsepower and it will also cause the belt to slip. You also don't want it too loose, because then it will slip and wear out. Look back at photos 4 & 5. The upper and forward sprockets are used to set the belt tension. They can be adjusted with the fuel tank and throttle servo out of the car. To check the correct belt tension, set the car on a clean, dry table with the rear end towards you. Pick up the rear of the car with the LH tire in your left hand and the RH tire in your right hand. Leave the front tires resting on the table by their own weight. Turn both the rear tires forward. The front tires should either turn forward on the bench, or you'll feel the belt slip with a ratcheting effect. If your belt does not slip, move the forward sprocket #5525 in photo #5, forward one or two holes until it does slip. You have to start from this point to know where you are. Once the belt slips, move the sprocket towards the rear until the belt stops slipping, and leave it there.

After you run the car for 15 to 30 minutes the belt will stretch a little as it seats itself, and you'll have to re-set it.

After the belt is adjusted, we'll install the fuel tank. You'll have to cut off the front and back screw mounting lugs on the fuel tank, so the tank will be able to drop into the radio tray.

Then as shown in photo #28, slip a tie wrap, from the bottom inside of the radio tray hole, as the arrows show, down through the hole in the outside of the radio tray. Now slip the tank in the tray and pull the tie wrap down. Using a 2nd tie wrap, slip the head of it over the tail of the 1st tie wrap

and pull them snug, but not tight enough to bend the radio tray. Cut off excess tie wraps.

Photos #30 & 31 - The top and bottom of your car should look like this now. Make sure all screws are tight.

Photo #32 - The motor can only be taken in or out if the clutch bell is removed. **Take your time here and be careful that you don't stretch the belt.**

Additional info: For the correct drive ratio between the front and rear ends, the front tires should be 2.80 - 71mm, and the rear tires 3.25" - 82mm.

It's important to lighten your car as much as possible, without weakening it. 5 1/2 pounds seems to be an ideal weight for most tracks.

4WD cars are capable of using more power, so we highly recommend the #5500 2 speed transmission with the new #5507 13/15 tooth clutch bell.

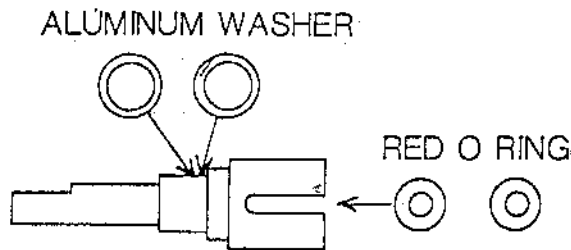
Good luck in your racing.

#5515 ADDITIONAL INSTRUCTIONS

This kit has new type front steering blocks #5546 and #5547, which now use two of the larger #5548 ball bearings for improved reliability. The new steering blocks will require a small difference in installation than what the photo sheet shows.

In photo #8, slip 2 of the small aluminum washers that are in the same bag as the #5539 inner drives, onto the 1/4" bearing shaft on the inner drive. In photo #9 the 2 washers would be placed between the ball bearing and the inner drive to space the inner drive farther out. This would be done on the LH side as well. Then use the set screw locations in the #5523 sprocket that are farthest toward the outside to secure inner drives.

In photo #15, instead of using the spring as shown, use one or two of the red "O" rings to replace the spring. The "O" rings are used to take up the end play on the small ball end of the dogbone.



This kit also has 2 new larger front sprockets and a longer belt, which will keep the belt from slipping.

OLD PART #	NEW PART #
16T 5522	18T 5555
28T 5523	32T 5556
Belt 5527	Belt 5557

Be sure to order the new part # when ordering replacement parts.

INSTRUCTIONS for #5515

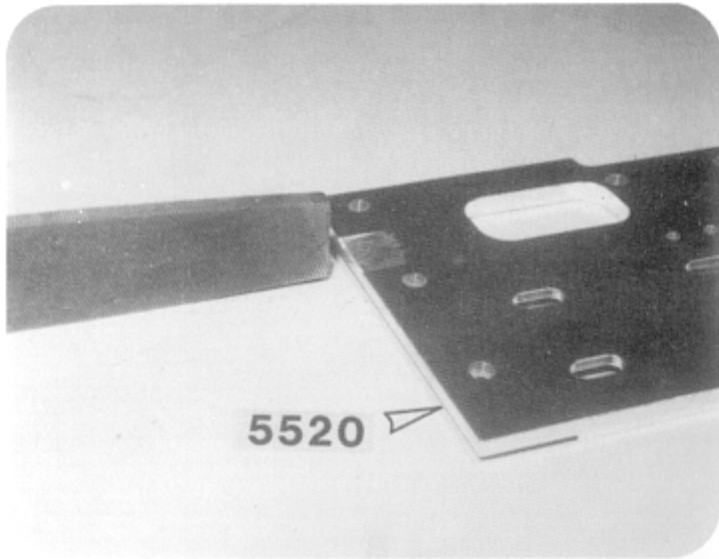
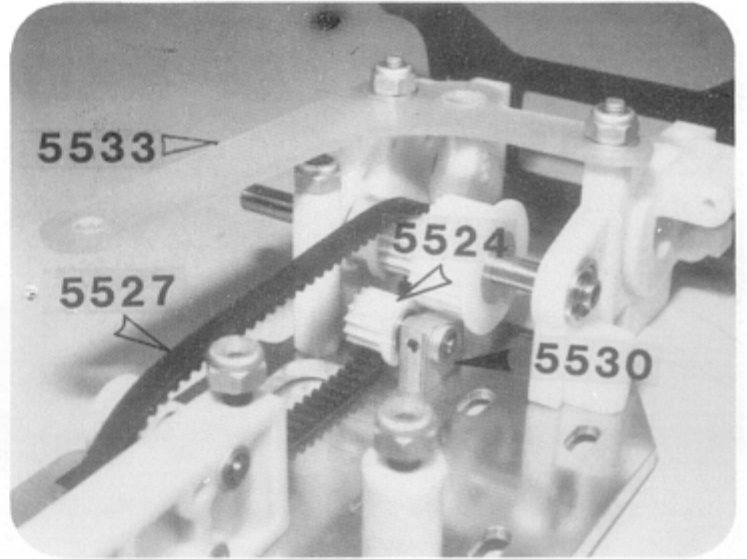
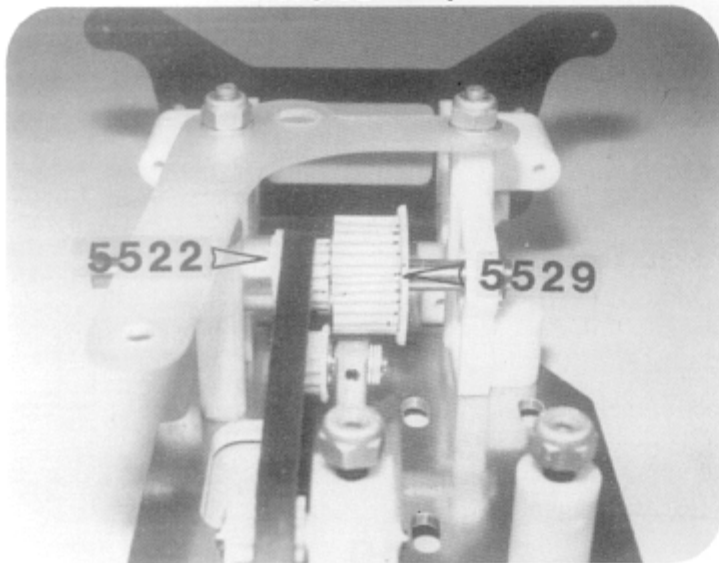


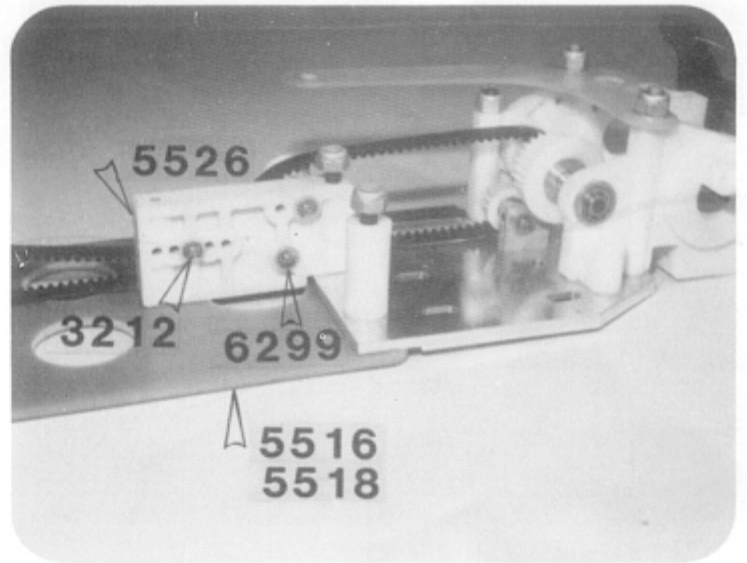
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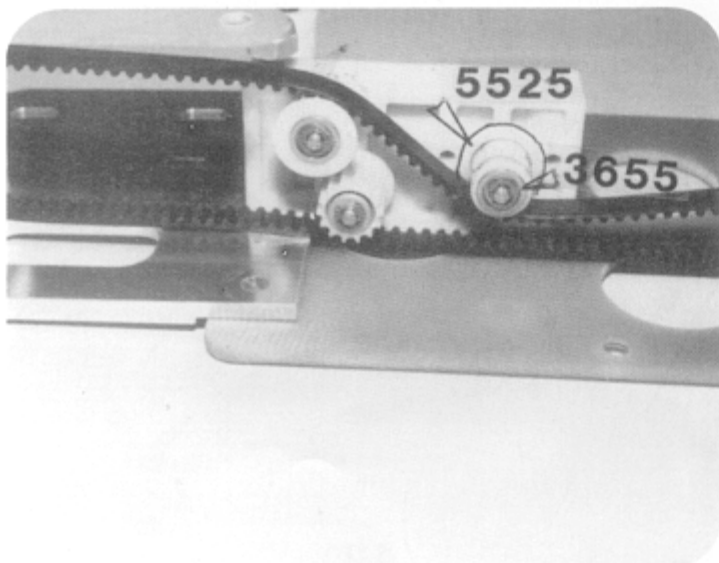
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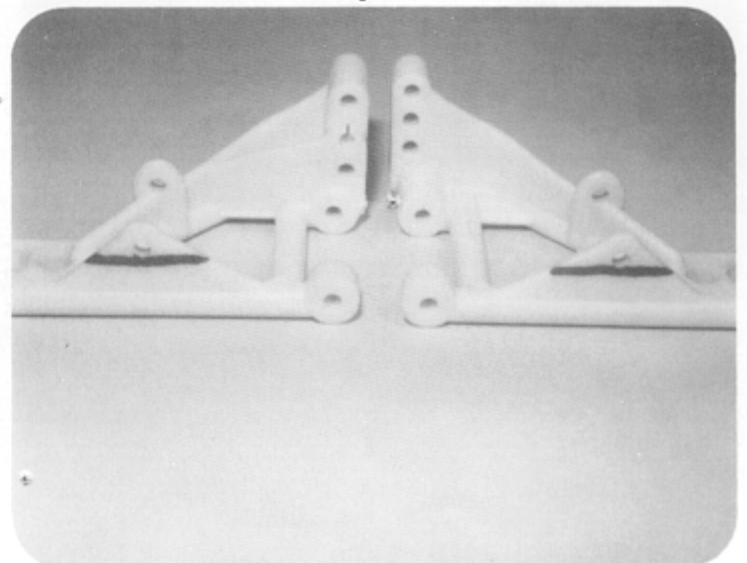
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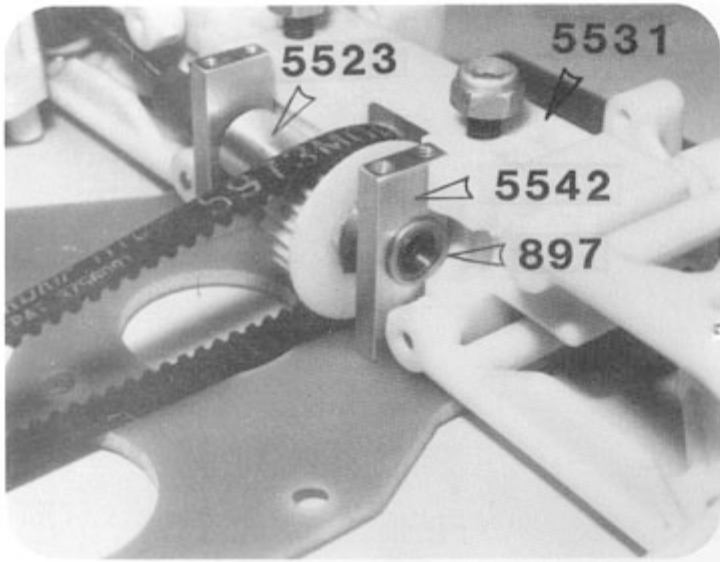


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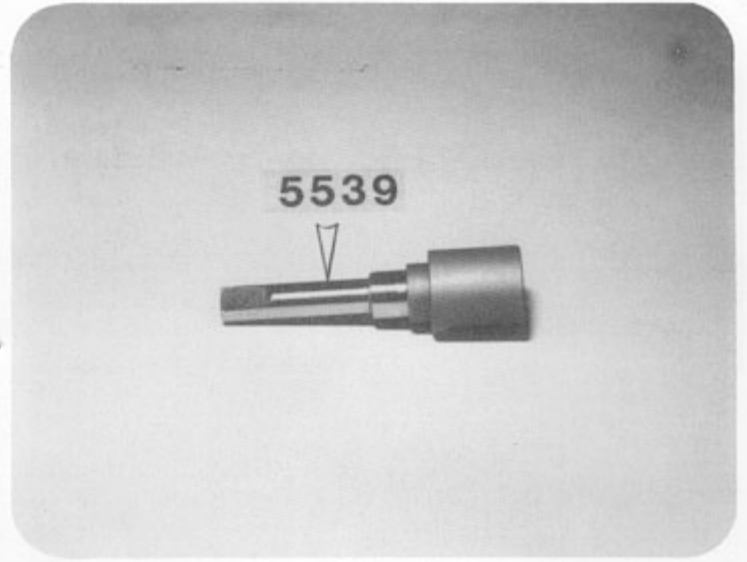


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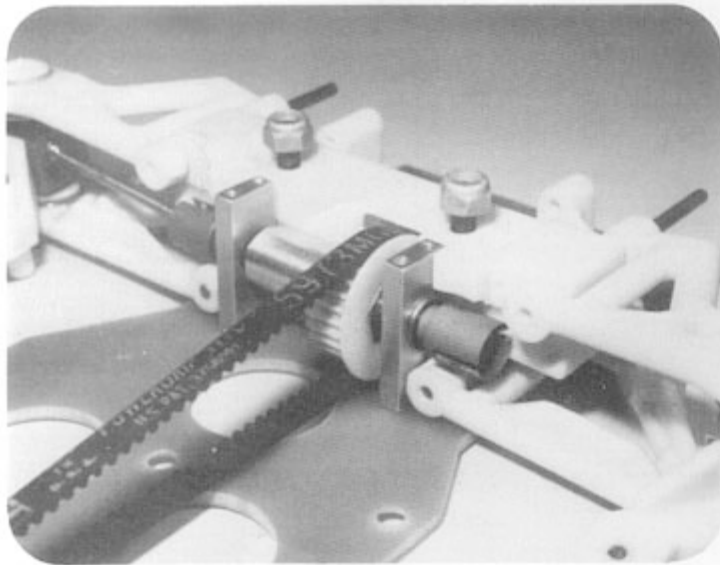




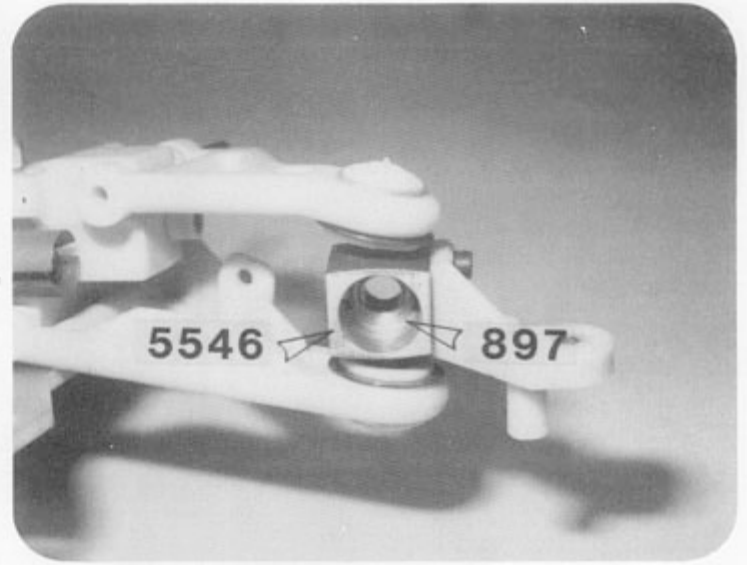
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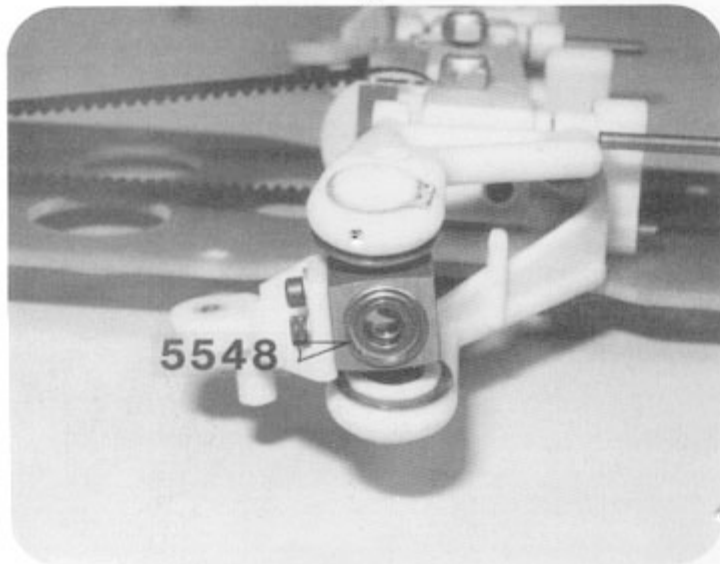
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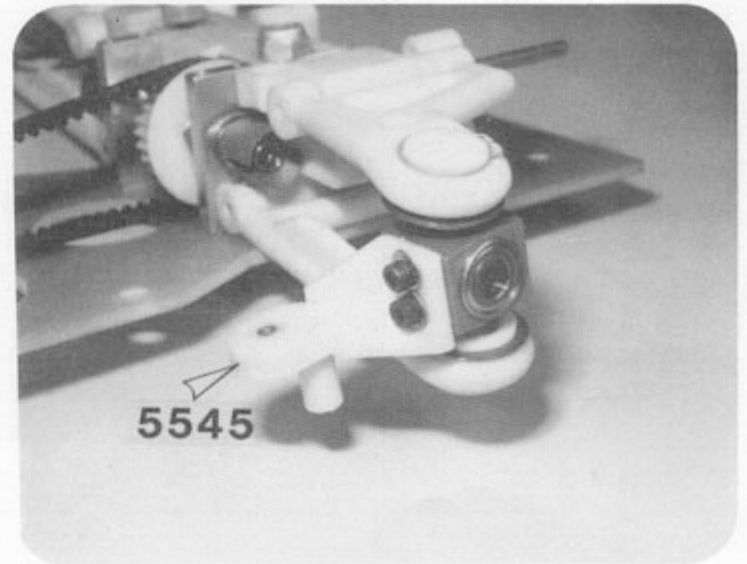
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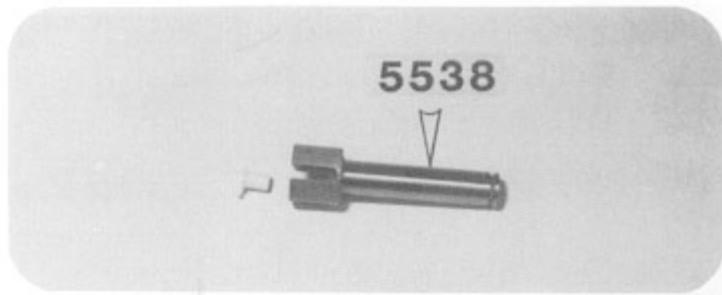
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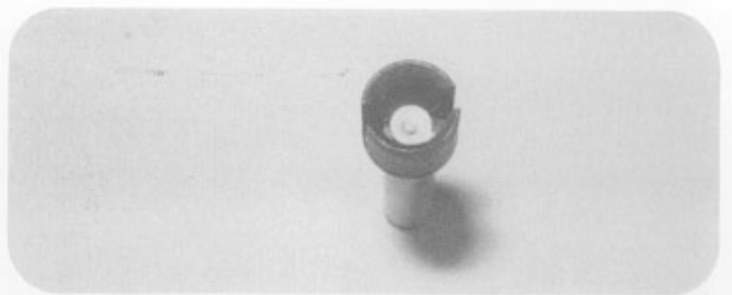
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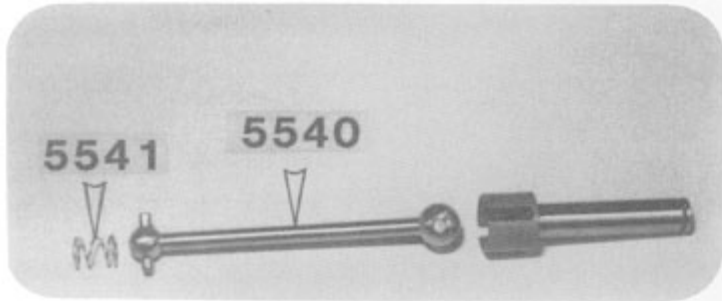
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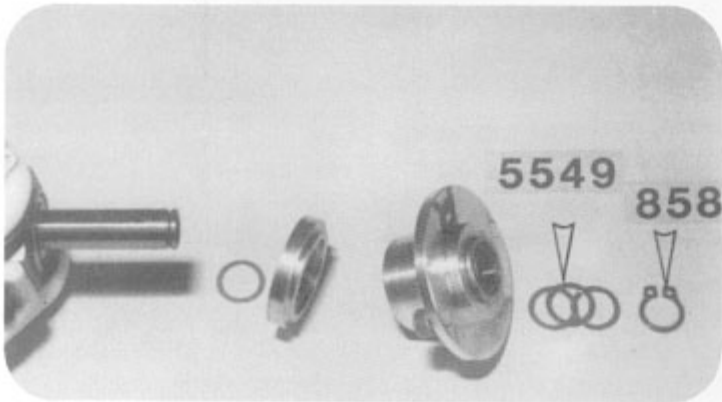
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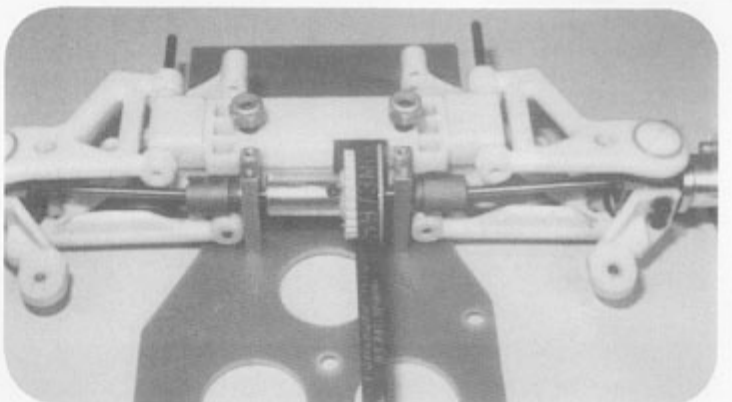
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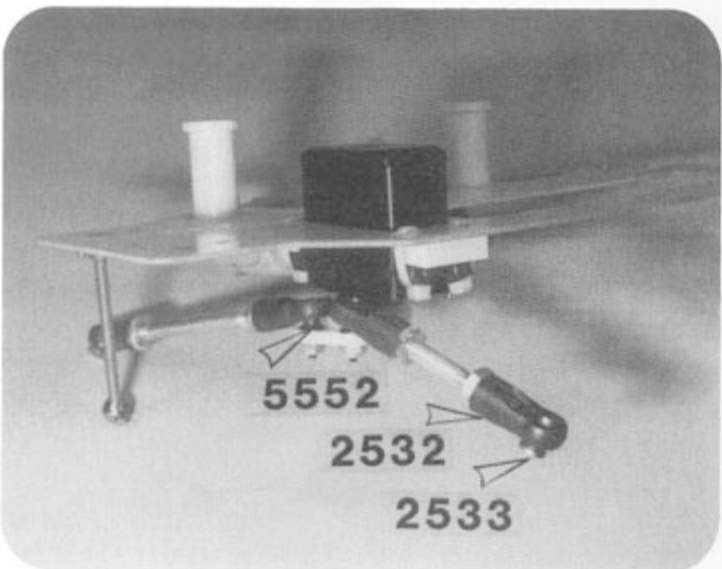
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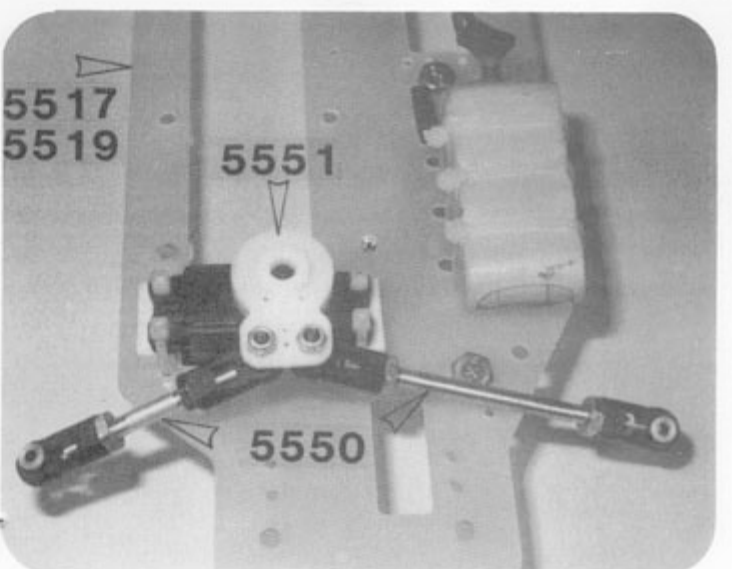
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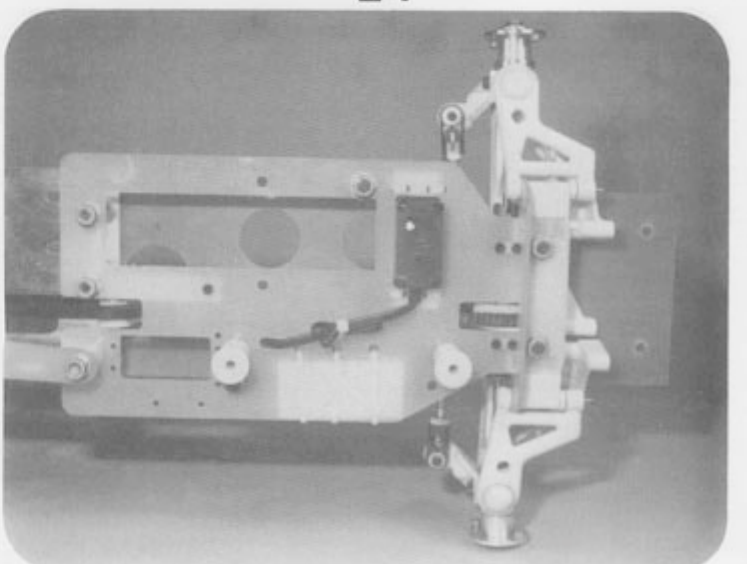
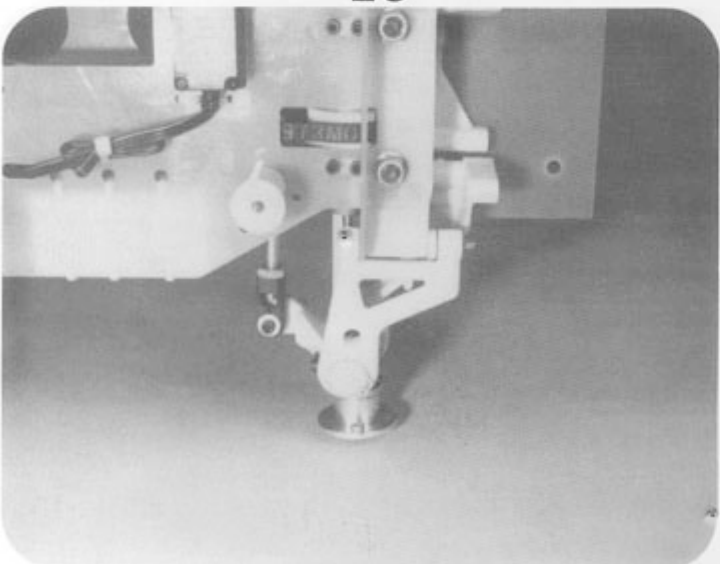
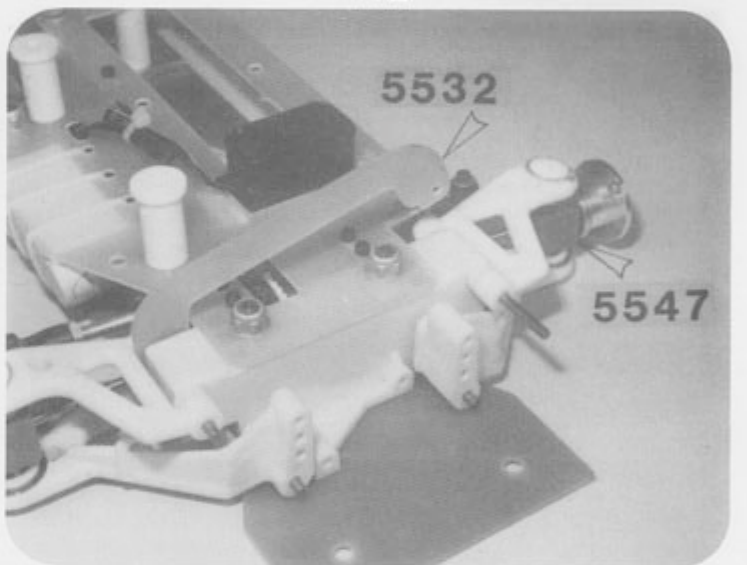
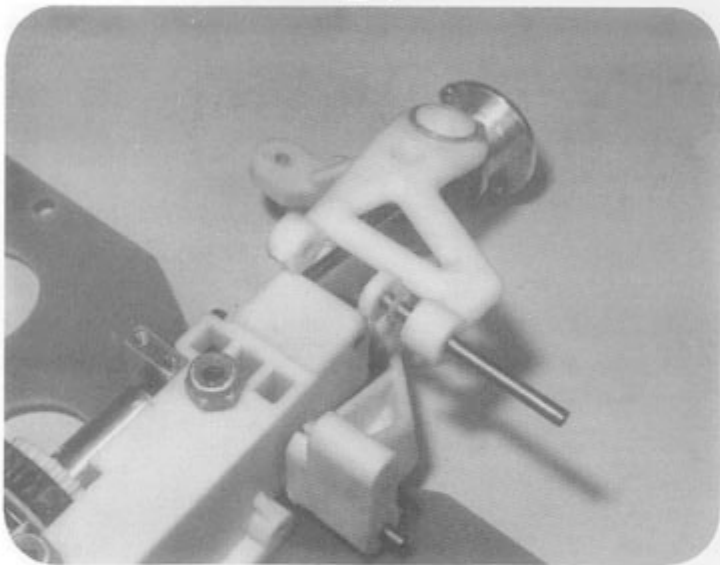
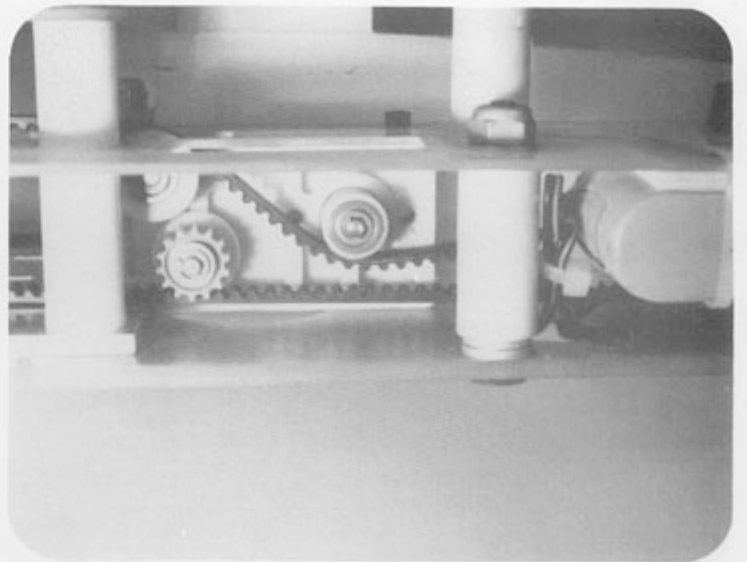
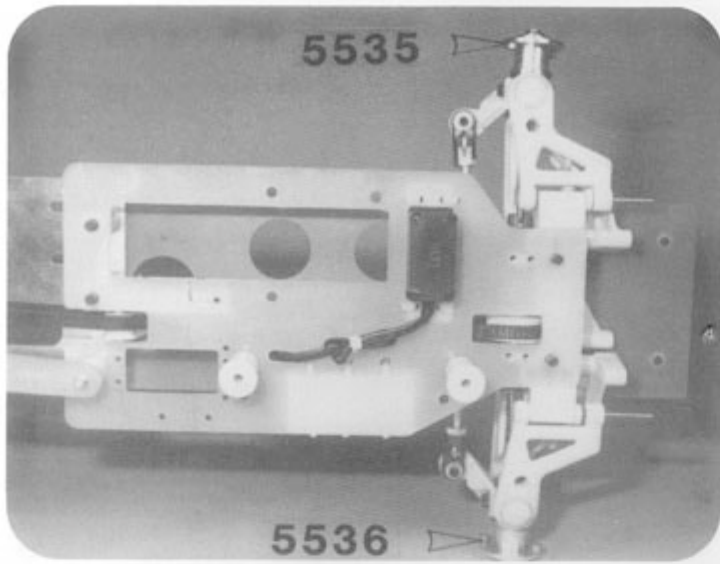
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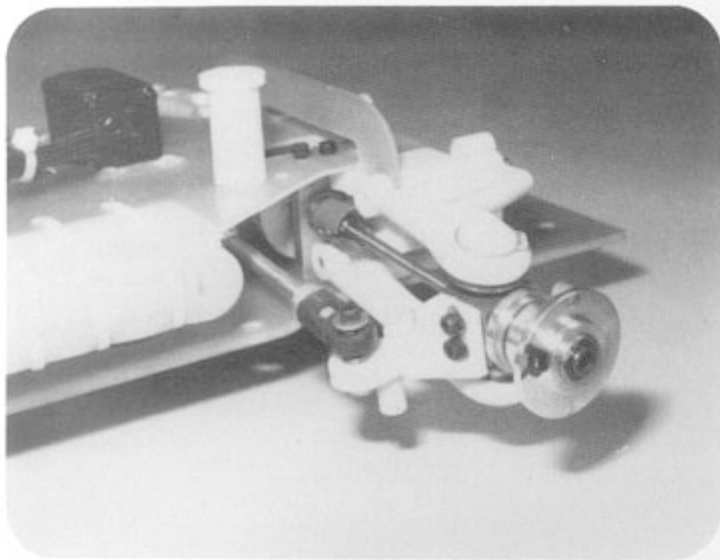


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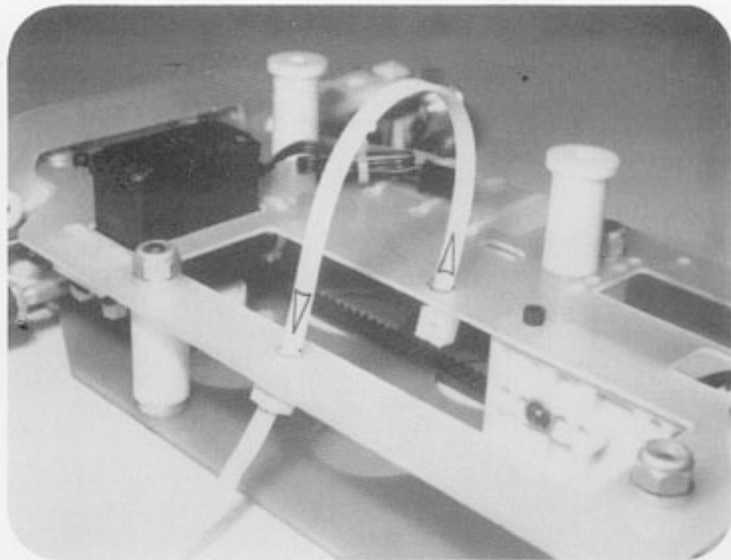


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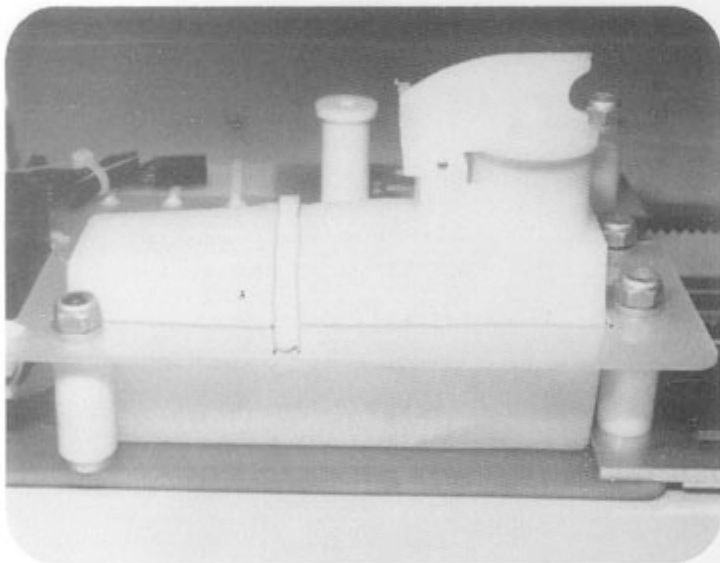




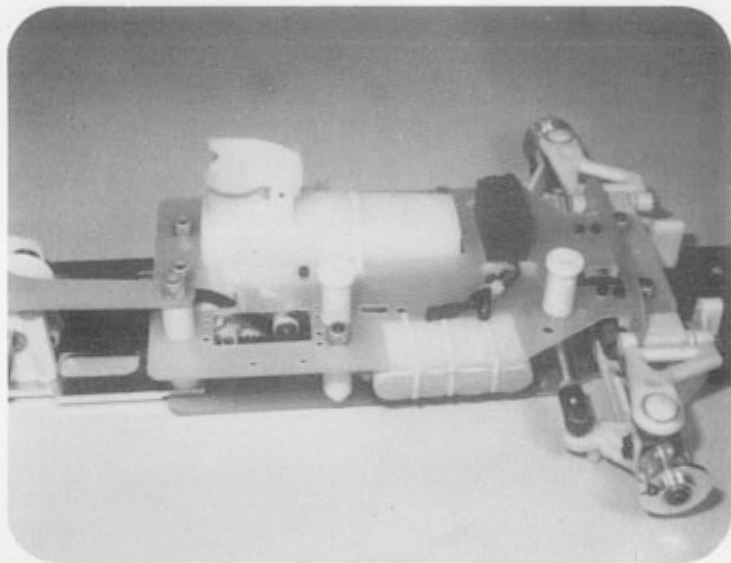
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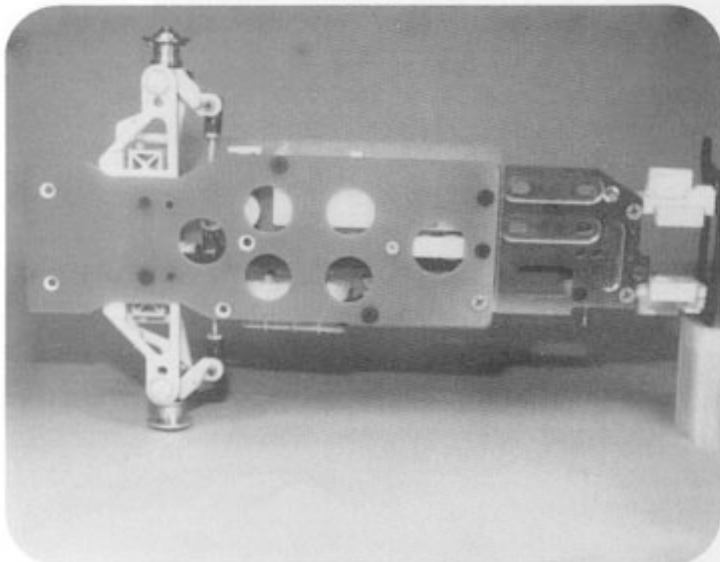
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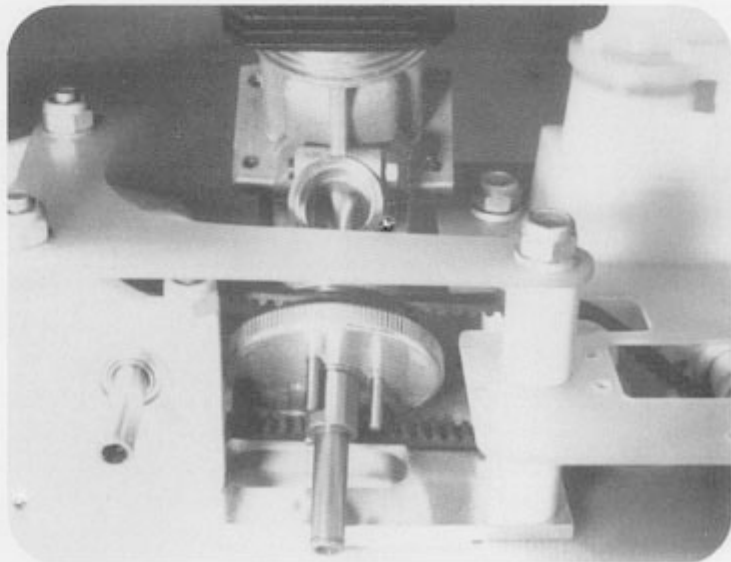
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