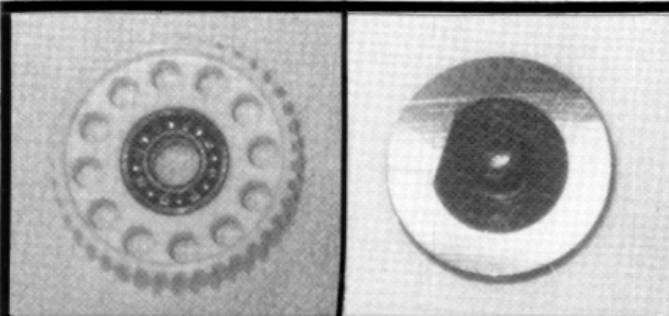
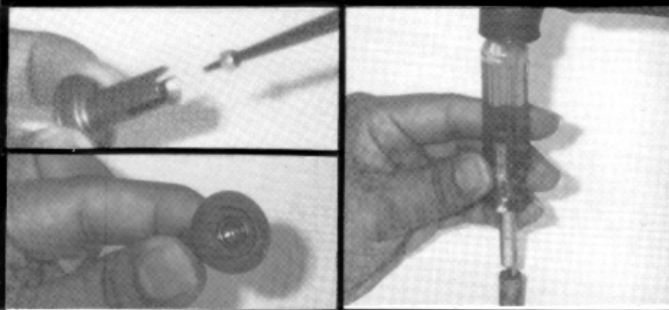


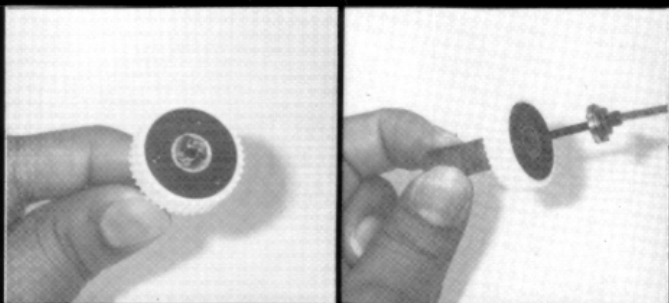
# DIFF ASSEMBLY INSTRUCTIONS



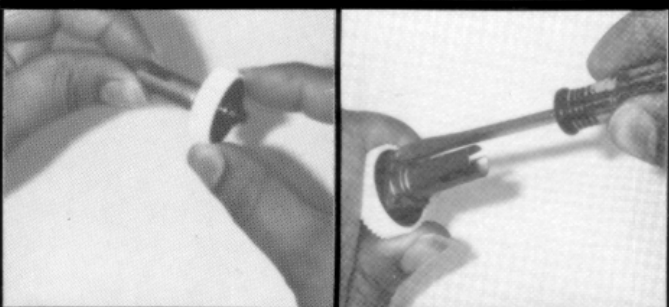
**STEP 1:** Locate and install special 5 x 11 x 3mm bearing #5015 (the thinnest of the five 5 x 11's) into the diff gear #219, making sure it's centered in gear from side to side. Now put one of the diff rings #216 onto the thrust plate #240. Be sure to lock the "D" shapes of the parts into each other.



**STEP 3:** Take the 3-48 Nylock nut #238 and put it on a wooden tooth pick or a smooth pointed piece of metal (nylon end first). Work it down into the thrust drive adapter #236 or #237 making sure it seats into the hex cut down inside. With the drive on a work bench, gently tap nut down (tap around the top of nut and tap only on the outside metal part of nut). Once set, pull out tooth pick and continue tapping nut down until it's seated at bottom of drive. Turn drive over and place 5 x 8mm bearing #5014 (smallest of all the bearings) into center of drive. Then put remaining diff ring in place, "D" shapes interlocked. set aside for now.

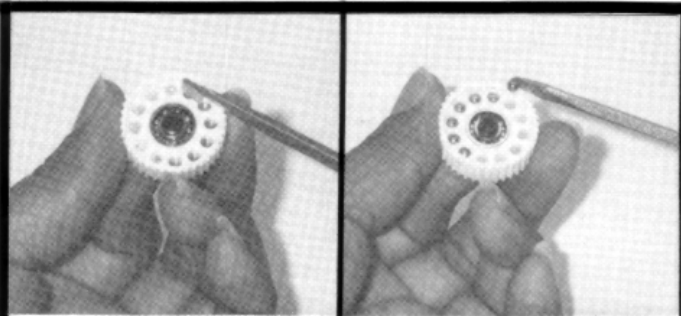


**STEP 5:** Turn this complete assembly drive end down in one hand and place the remaining steel thrust washer into recess of thrust plate. Put on a little black grease. Install clamp screw group, starting it slowly to keep from cross threading it.

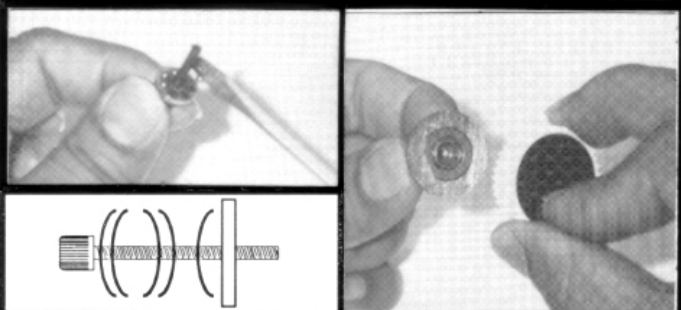


**STEP 7:** At this time check for smooth diff rotation. If diff is not smooth, disassemble diff backwards through the steps until you find the problem and have it corrected before continuing on. Now put drive adapter #234 or #235 into place on thrust plate and line up three holes. Install the three small 2-56 screws and tighten down with regular size screw driver. **Be sure they are good and tight, because if they come loose (out), they will cause severe damage to the belt and gears.**

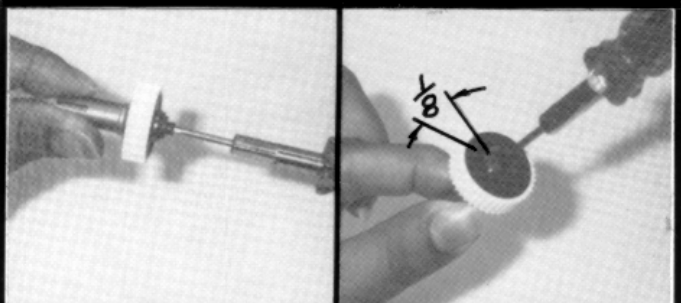
**NOTE: READ AND FOLLOW ALL DIRECTIONS FOR LONG, PROBLEM-FREE USE OF YOUR LETHAL WEAPON 2.**



**STEP 2:** Keeping the diff ring locked in place, put the diff gear onto the thrust plate. Using a small screwdriver put some of the light grease in each of the holes of gear. Once their all packed, place a 1/8" ball into each hole (larger ones). Set assembly aside for now.



**STEP 4:** Find the 3-48 clamp screw group #223. Put the cone washers on screw alternating their direction as in above drawing. Then put on one of the steel thrust washers and spread a thin layer of black grease on it. Then put on the yellow brass thrust washer and pack the holes with black grease. Place a 3/32" ball into each hole and set aside. Take thrust drive adapter assembly & thrust plate/diff gear group and put the two together. Be sure both diff rings stay properly locked into their "D" shaped cuts.



**STEP 6:** Be careful not to over tighten clamp screw, as this will damage outer steel thrust washer. Stop when the cone washers have just become flat against each other and back screw off 1/8 turn.



We highly recommend the use of a **POWER CLUTCH** on all vehicles, especially those using modified motors and trucks. This prolongs the life of the diff and belt, lowering operational costs.

**THE PROBLEM:** Not enough slip in the diff will cause the belt to skip over the top gear (making a clicking sound), and damaging both the gear and belt. However, **ANY SLIP** at all in the diff greatly increases wear to diff rings, balls and grease. The more the slip, the faster the wear. This is a common problem with all R/C trannies, the difference is stripped teeth off of gears in a gear tranny instead of a skipping belt in the Lethal Weapon.

**THE SOLUTION:** Put simply **SLIPPERS**. A&L Power Clutch is designed and engineered to withstand hours and hours of slippage without damage (resulting in the need for parts replacement) as compared to a diff's ability to last only a few minutes subjected to the same slippage. This is why all top racers use slippers—fewer breakdowns (DNF's), greater control of **HOT WIND MOTORS** and less maintenance.

Then to set diff, give vehicle full throttle from a standing stop on a smooth carpet surface; to aid in longer diff and belt life, the diff should slip from 1 1/2 feet to 3 1/2 feet on your smooth carpet surface. This is a base point for diff adjustment. Diff should be readjusted for different track conditions (traction) to the 1 1/2 to 3 1/2 feet of slip.

**STEP 8:** (A) To set diff adjustment for use with A&L's Power Clutch, put a small screw driver or Allen drive into each out drive slot. Hold as pictured above. Pinch diff gear with thumb and index finger and try to spin gear. When properly adjusted you should not be able to move diff gear or barely be able to move it. Diff should still spin smoothly. (Younger racers should get help from an adult for correct pressure setting.) Read Performance Hints for more facts on proper diff use and maintenance.

(B) Setting diff adjustment for use without A&L's Power Clutch, leave diff adjusted as assembled from Step 6 until tranny is completely assembled and in car or truck.