



#44 Super Gearing for Athearn 4-axles - Reg. & Mark II units

#06 Super Gearing for Athearn 6-axle trucks

INSTRUCTIONS FOR REGEAR INSTALLATION IN ATHEARN RDC

ABOUT OIL- We have found the resin materials our gears are made of to be completely self lubricating. In our tests oils have caused a surface adhesion resulting in a loss of performance instead of an improvement. However, use oil on the motor and metal shafts.

Use these instructions with the aid of the photographs. Be sure to check for smoothness of operation with each assembly step. Doing so will ensure a smooth running unit without the need to backtrack and troubleshoot.

Figure 1. Remove body shell. For reassembly purposes take note that the commutator end of the motor faces away from the large round hole in the frame. The commutator end of the motor is the end that the flywheel will be pressed onto.

Figure 2. In order, remove top electrical clip, motor and drive shafts, and truck assemblies from frame.

Figure 3. You may cut off the rubber bands from the unpowered truck. The unpowered truck is the one on the end opposite the round hole in the frame mentioned earlier. Disassemble the other truck which will be used for powering.

Figure 4. Carefully twist out metal axle assemblies from the plastic axle centers. Do this by gripping the axle itself with a good set of pliers. Do not twist the wheel itself.

Figure 5. Layout parts. Trim the flash on the sides of the 16 tooth spur gears with a sharp exacto knife. Also custom fit the axies into the gearbox sideframes. Assemble the two sideframes with axies only. Turn and wiggle the gear to check for fit. A loose fit with absolutely no drag is required here. Place the exacto knife in the hole and twist to enlarge the hole from the inside face of the gearbox. Assemble and disassemble to work this over as many times as necessary. This is the most critical fit of the gearbox as if too tight a bind will occur.

Figure 6. Now assemble the seven 16 tooth gears into the gearbox. Spin the gears to check for mesh. Double check that the area you trimmed earlier doesn't hang

Figure 7. Install axies and other sideframe. Check for smoothness. This is the last chance to correct any fit problems on the axies.

Figure 8 Push the spacers onto the axles. Again test the mechanism for smoothness. Do not allow the spacers to be pressed against the gearbox creating a bind.

Figure 9. Twist the wheel assemblies into the axles using the same method you removed them with.

Figure 10. Completed gearbox! Test roll for smoothness.

Figure 11. We used a Tuff Wheel cutoff disc to cut the post off of the frame as shown. Cut it close to the frame but it dose not need to be perfectly smooth.

Figure 12. Frame with post cut off.

