

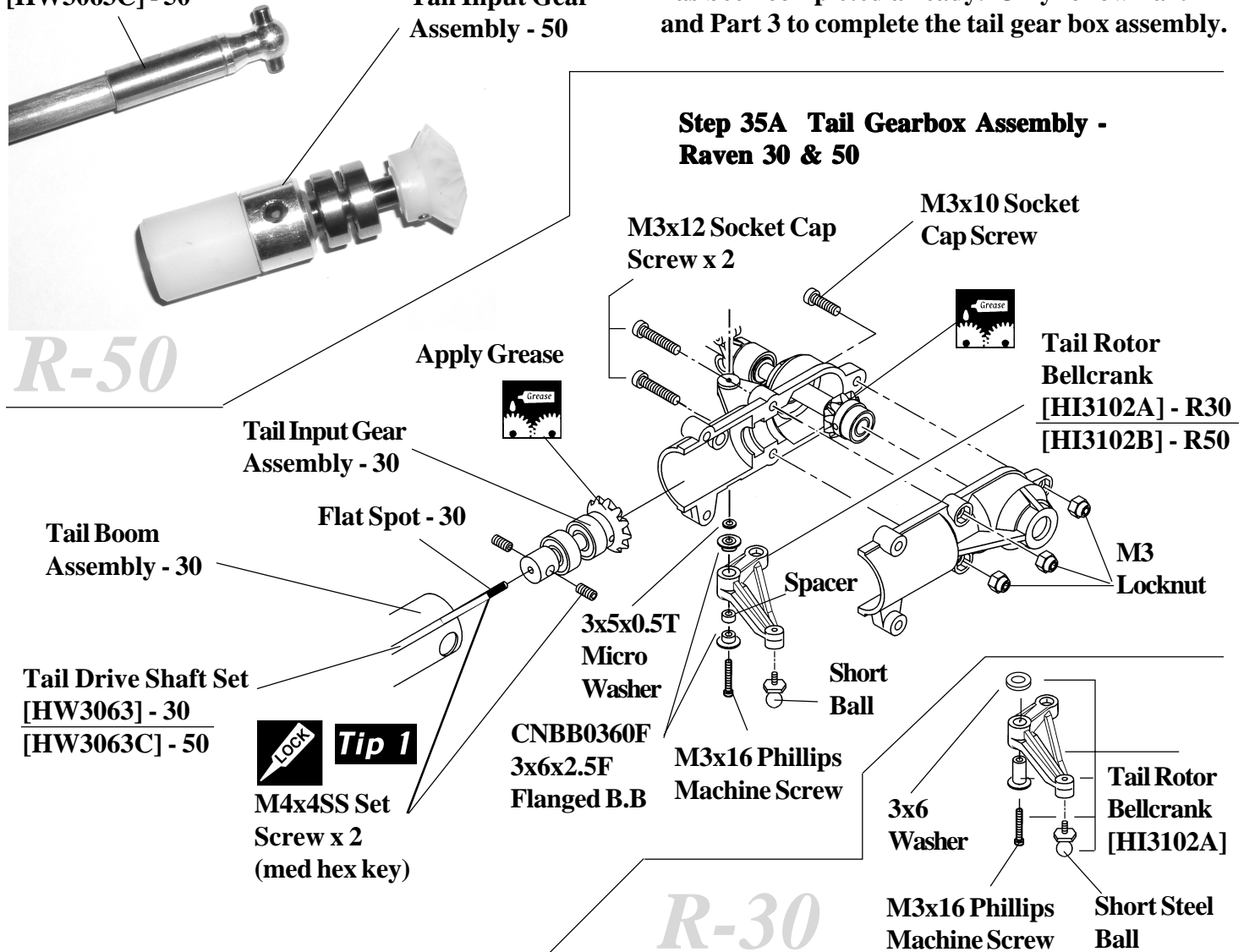
Step 35B Tail Gearbox Assembly - Raven 50

Tail Drive Shaft Set
[HW3063C] - 50

Tail Input Gear
Assembly - 50

When building the Raven 50, Part 1 in Step 35A
has been completed already. Only follow Part 2
and Part 3 to complete the tail gear box assembly.

Step 35A Tail Gearbox Assembly - Raven 30 & 50



Part 1. Raven 30, attach the tail input gear assembly on to the drive shaft with two 4x4mm Set Screws (**Tip 1**) (make sure the flat spot is aligned with one of the set screws and only use **ONLY** blue locktite here) apply red locktite to the drive shaft end and insert into the gearbox input shaft. **Warning**, do not use red locktite on ANY screw because it is permanently bonded in place.

Part 2. Position the output gear assembly into the right gear box half (**insure the 2 bevel gears are meshed properly and the ball bearings are fully seated in their recesses**) and liberally grease the gears before closing the gearbox. Position the gear box halves over the holes in the end of the tail boom and secure with one 3x10mm Socket Cap Screw and M3 locknut at the end of the gearbox and two 3x12mm Socket Cap Screws with M3 locknuts at the center of the gearbox.

Part 3. Raven 50, while holding the tail bellcrank, thread in one short steel ball. Insert one ball bearing from one side, then insert the spacer followed by the second ball bearing. Insert one 3x16mm Phillips Machine Screw through the bellcrank assembly (from the bottom) and add one 3x5x0.5mm micro washer that will fit between the bellcrank and flange on the gearbox. As the screw is tightened, **make sure** the steel ball is engaged in the hole on the bellcrank and the bellcrank turns freely without binding.