BAG D

TRANSMISSION ASSEMBLY

CLEAN IT UP!

D1 We suggest you clean and inspect all your B4 transmission parts at this time. You might want to re-build the diff. If you re-lube the bearings, make sure the outside is clean and dry so they do not attract dirt. You need the following items from your B4: the assembled diff with both outdrive bearings (6903), the idler gear (9360) with its shaft (9361) and two 3/16 X 3/8 bearings (6906), and the top shaft (9601) with its spacer (9602) and two 3/16 X 3/8 bearings (6906

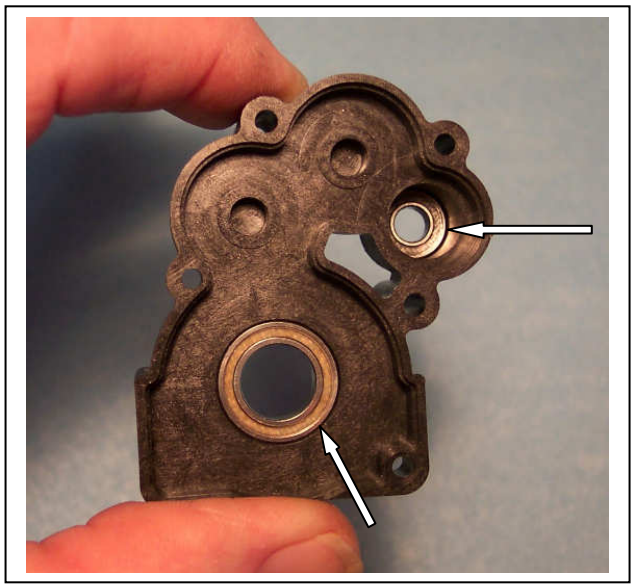


ASSEMBLE THE X – 6 TRANSMISSION

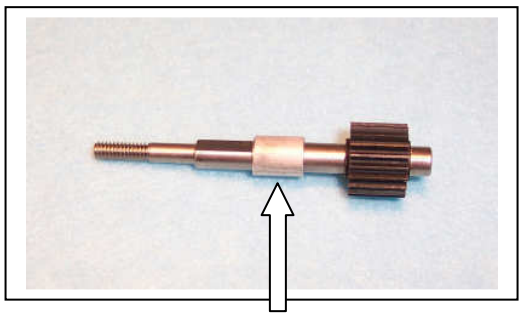
D2 Remove the transmission case from Bag D and separate the two halves. Note the small round ejector pin bosses on the mounting tabs. You may wish to file these off for ease of installation in the car.

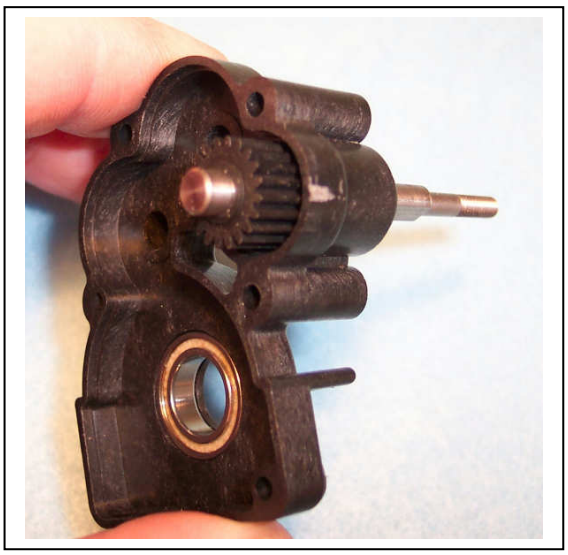


D3 Install a 3/8 X 3/16 (6906) bearing all the way into the top shaft boss in the left transmission case half. The Team pushes them in with the shank of an Allen driver or, better yet, with a socket. See Inst. D5. Install an outdrive bearing (6903) in its boss.



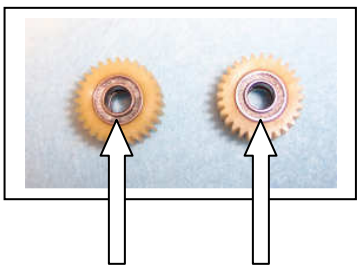
D4 Make sure the spacer (9602) is on the top shaft (9601) and slide the shaft with spacer through the bearing in the transmission case.

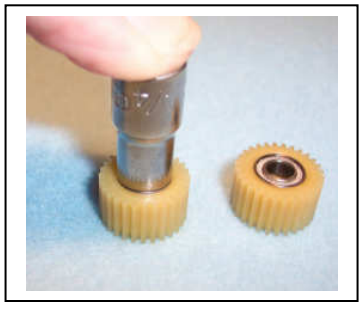




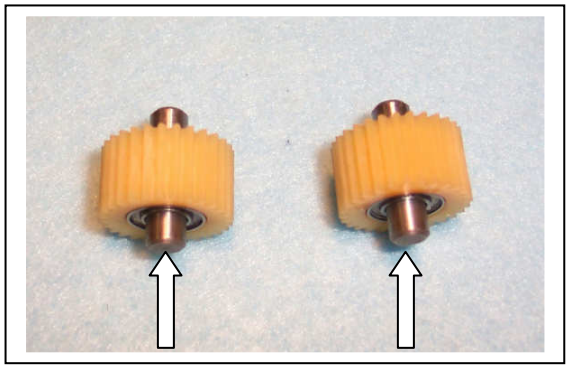
D5 Gather the idler pulley (9360) from your B4, the idler pulley from Bag D, the two 3/8 X 3/16 bearings (6906) from your B4 and the two 3/8/ X 3/16 bearings from Bag D (left photo) Install two bearings in each idler pulley, one from each side. (center) If a bearing is hard to install, we suggest a socket where the OD of the socket matches the diameter of the outer race of the bearing so you do not push on the balls or the inner race. (right)

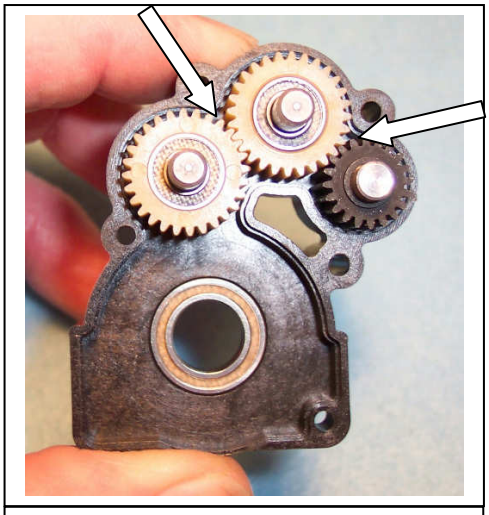


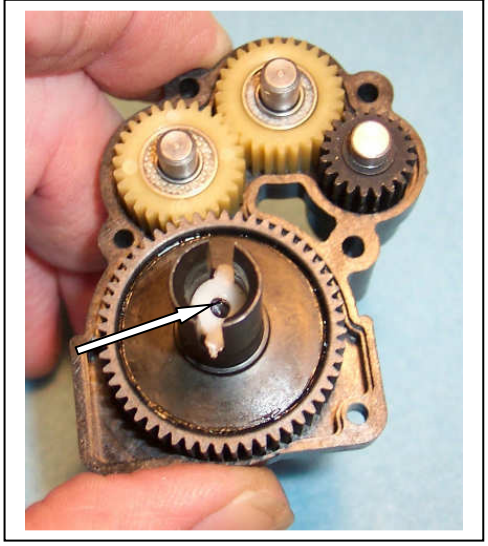




D6 Slide the idler shaft (9361) through the bearings in one idler pulley and the idler shaft from Bag D through the other. Then install the shafts with the two pulleys into their bosses in the left transmission case. Be certain to mesh all the gears properly.

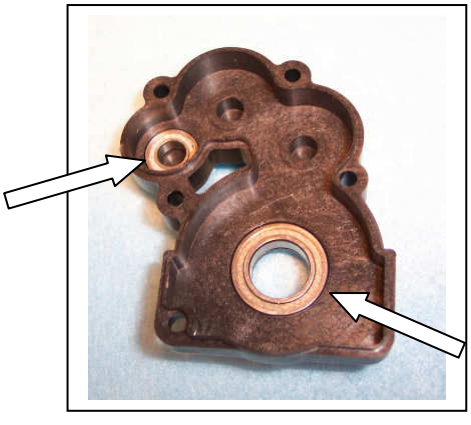


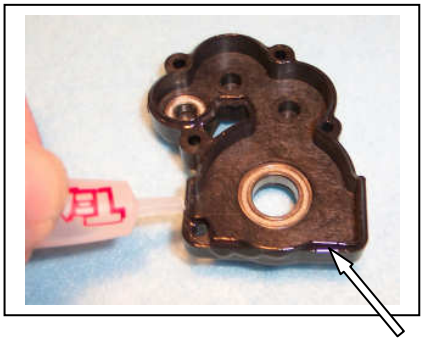




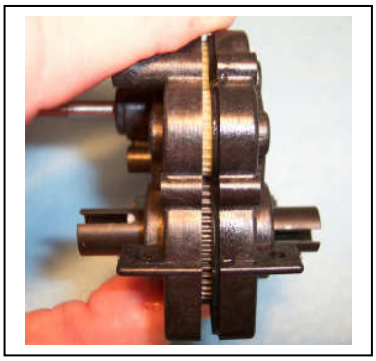
D7 Insert the diff through the outdrivebearing in the left transmission case half. The head of the diff screw should be up (arrow). Make sure all the gears are properly meshed and the trans rotates freely.

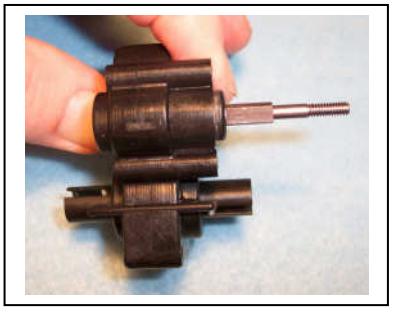
D8 In the right side of the transmission case, insert the remaining 3/8 X 3/16 bearing (6906) in the top shaft boss and the remaining outdrive bearing (6903) in its boss. Place a small bead of inexpensive grease around the mating surface of the right transmission half. This grease only helps keep dirt out, it does not lubricate anything. Grease attracts dirt; paradoxically this grease is used to seal out dirt, so be thorough, but don't use more than is needed.



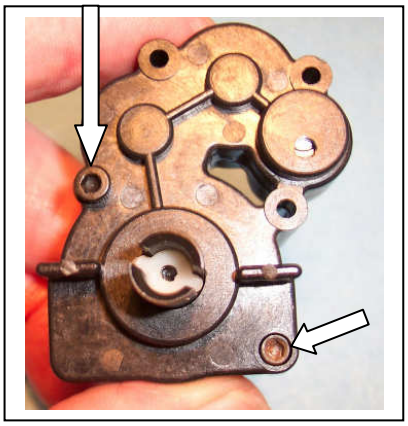


D9 Some Team drivers put a small amount of AE Stealth Lube on the teeth of their diff gear to lubricate the transmission. Other Team drivers do not, saying the trans is freer without the grease. Pay your money and take your pick. Carefully put the two halves of the transmission together. Make sure everything rotates very freely. Later is not the time to repair a binding transmission. Wipe excess grease off the outside of the case.

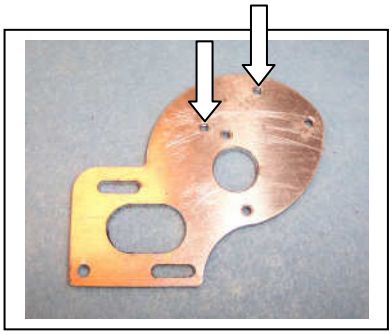


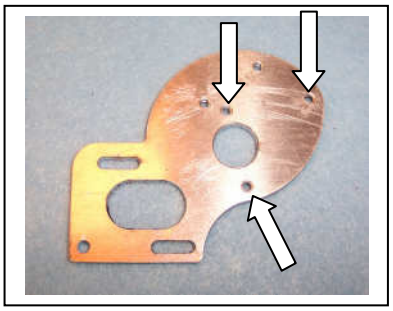


D10 Install the 4-40 X 3/8" bolt in the corner (short arrow) and the 4-40 X ½" bolt in the rear center of the transmission (long arrow). Leave them finger tight until step D12. Make sure the head of the 3/8" bolt is fully down in its boss and no part of the bolt protrudes on either side. This part of the transmission must fit into the "box" at the rear of the chassis.



D11 The motor plate has two extra 4-40 tapped holes which are useful to install a fan for the motor (left photo). The arrows in the right photo point to the three holes that attach the plate to the transmission. Team drivers put a drop of thread lock in these holes prior to the next step. Thread lock on the long bolts will come off going through the transmission, so a drop here works best.





D12 Insert the three 4-40 X 1” screws through the transmission case, threading them into the motor plate finger tight. Check once again to ensure the transmission rotates freely but without excessive slop. This is your last chance! Now put the final torque on all five transmission bolts.

