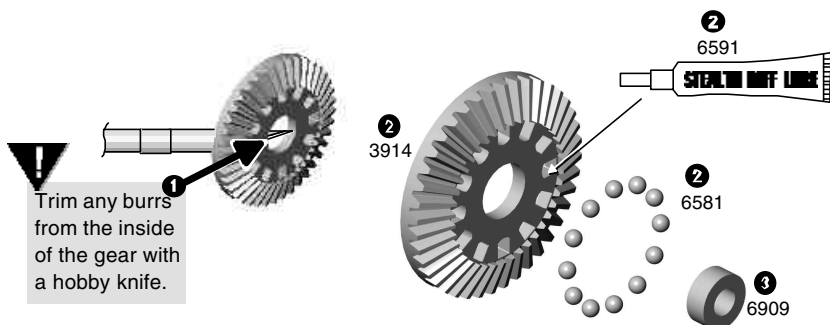


step 1

SET UP DIFFERENTIAL RING GEAR

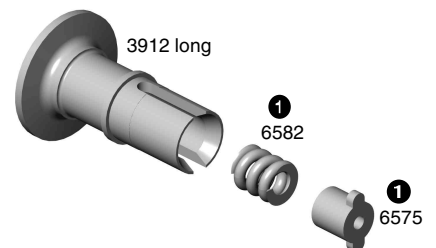
- 1 Trim any burrs from the inside of the gear with a hobby knife.
- 2 Add a generous amount of #6591 diff lube to the #3914 differential ring gear holes and push in the twelve large #6581 diff balls. Then push back in the lube that came out.
- 3 Insert one #6909 bearing into the gear.



step 2

SET UP LONG OUTDRIVE HUB

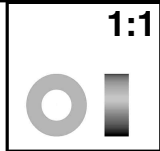
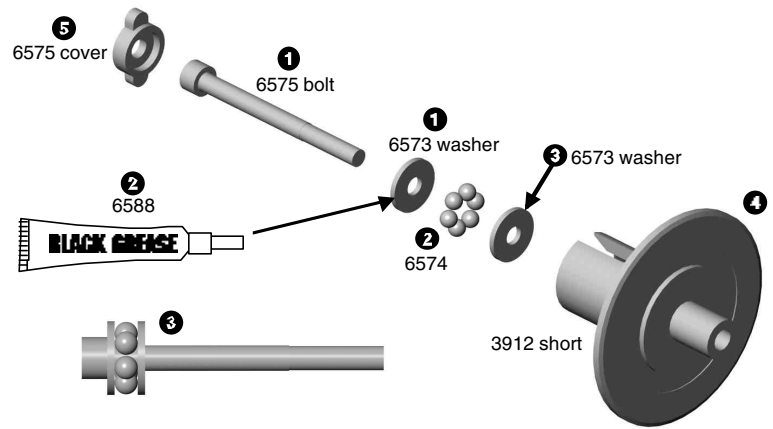
- 1 Push the #6582 spring and #6575 T-nut into the #3912 long outdrive.



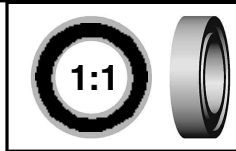
step 3

ASSEMBLE THE SHORT OUTDRIVE HUB

- Slide one #6573 washer onto the #6575 bolt.
- Apply a generous amount of #6588 black grease to the washer on the side facing away from the bolt head.
- Place six #6574 balls into the grease against the #6575 bolt and washer. Add the other #6573 washer. The grease will hold the balls in place during assembly, sandwiched between the washers. See figure for installed view.
- Slide the thrust assembly into the #3912 short outdrive hub, bearing careful not to lose any of the balls.
- Insert the #6575 bolt cover.



6909, qty 2
3/16 x 5/16 bearing
unflanged



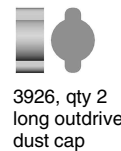
3976, qty 4
3/8 x 5/8 bearing
rubber sealed, unflanged



3911, qty 4
outdrive shim



6579, qty 4
diff drive ring



3926, qty 2
long outdrive
dust cap

TOOLS USED

5/64

step 4

ASSEMBLE THE LONG OUTDRIVE HUB

- Insert one #6909 bearing into the #3912 long hub.
- Add a light coat of #6591 Stealth lube to the long hub face where shown.
- Place a #6579 diff drive ring and then the gear assembly on the hub.

ASSEMBLE THE HUBS

- Add a light coat of #6591 Stealth lube to the #3912 short hub face where shown.
- Place a #6579 diff drive ring on the hub.
- Push the #3912 short hub into the back side of the differential ring gear. Center the diff bolt in the hub.

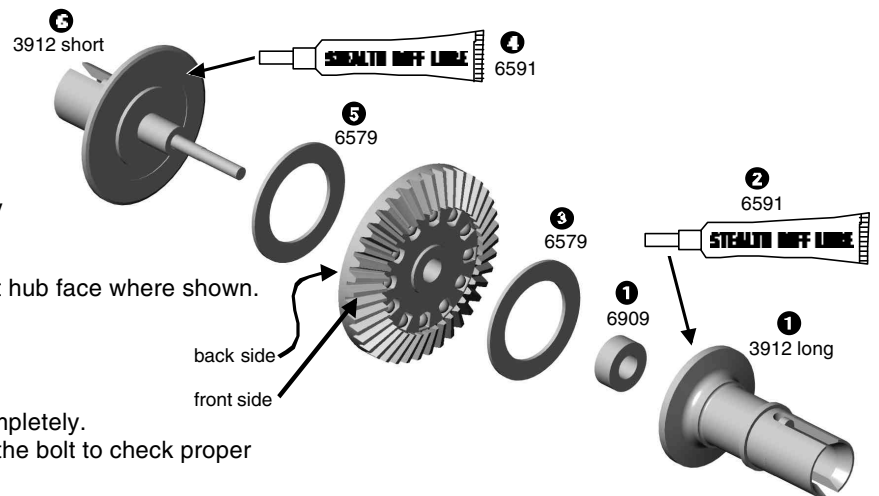
CHECK ALIGNMENT OF HUBS

- Tighten the diff with your 5/64" Allen wrench, but not completely.
- Rotate the diff hubs several times as you are tightening the bolt to check proper alignment of the parts. **Read step 9 carefully.**

ADJUST THE DIFF

- As you tighten the diff bolt, you will notice the T-nut ears moving closer to the bottom of the diff hub slot. This compresses the spring behind the T-nut. The spring should be fully compressed at the same time the T-nut reaches the end of the slot. **Caution:** Pay close attention to feeling when the spring is full compressed. **Do not overtighten the bolt.** When you feel the spring fully compressed, loosen the diff bolt 1/8 to 1/4 of a turn. No more, no less. Your diff should now operate very smoothly when turning the hubs in opposite directions. After you have driven the car once, recheck the diff adjustment. Never adjust the diff any other way.

- Now assemble the second diff the same way.

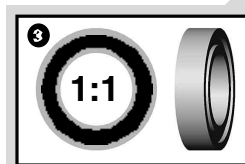


IMPORTANT NOTE: STEPS 5, 6, 7 AND 8 INVOLVE SETTING THE MESH OF THE BEVEL GEARS. IT IS EXTREMELY IMPORTANT TO USE THE EXACT AMOUNT OF SHIMS SUGGESTED IN THESE STEPS.

step 5

FINAL OUTDRIVE ASSEMBLY

- Press the #3926 outdrive dust cap into the #3912 long outdrive.
- Place one #3911 outdrive shim on both the long and short hubs.
- Place one #3976 bearing over each outdrive hub.



3976, qty 4
3/8 x 5/8 bearing
rubber sealed, unflanged

