

## **Dynamic C4 Number 9 Roller Kit**

Dynamic Racing Transmissions has designed this kit to replace the stock thrust washer in the number 9 position behind the rear sprag.

Installation requires disassembly of the transmission, and minor machining to the rear drum splines.

## **Kit Contents**

1) Modified Sprag Hub

1) Enclosed Roller Bearing

## <u>Installation</u>

- 1. Completely disassemble the internals of the C4 so that the case is empty.
- 2. Using a 5/16" six point socket, remove the bolts holding the sprag assembly to the case.
- 3. Remove and discard the stock thrust washer and clean the area thoroughly.
- 4. Disassemble the sprag into its components by pushing the center hub out and then extracting the roller retainer. Note the direction the springs mount in the retainer in relation to the rollers.
- 5. Inspect the springs and rollers for wear and clean. If any of them are bad, a new kit is available from Dynamic.
- 6. With everything clean, insert the spring retainer back into the outer ring from the bolt hole side.
- 7. Now lay the ring, with the installed retainer on a flat surface bolt hole side down.
- 8 Install the new sprag hub into the center of the assembly with the machined notched side down. See Picture, next page.
- 9. Place the steel rollers into the spring retainer in their locations.

Dynamic Racing Transmissions LLC 104-5 Enterprise Drive Unit 1 North Branford CT 06471 203-315-0138 Fax 203-315-0352 www.dynamicracetrans.com 10. Now install the accordion springs into the spaces between the retainer posts and the roller.

It is easiest to pinch the springs between your fingers to compress them, then slide them into place.

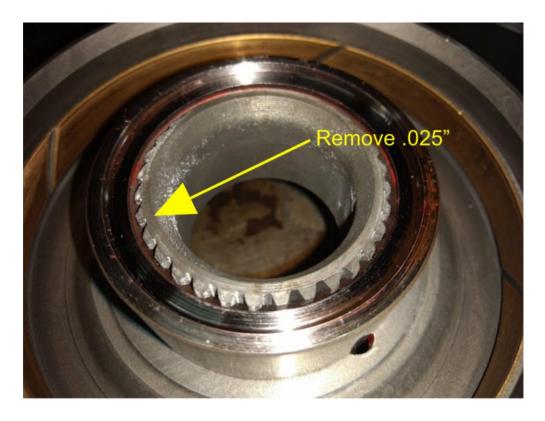


- 11. With all the springs installed, test the assembly by holding the outer ring and rotating the inner hub. It should only turn one way.
- 12. Using some grease, install the new bearing into the recess on the new hub as shown in the picture. The bearing must be installed with the outer shell into the hub.



- 13. Reinstall the sprag assembly into the case, lining it up with the case holes and centered on the shoulder in the rear of the case.
- 14. Tighten the bolts to 25 ft/lbs.

Dynamic Racing Transmissions LLC 104-5 Enterprise Drive Unit 1 North Branford CT 06471 203-315-0138 Fax 203-315-0352 www.dynamicracetrans.com 15. It is necessary to shorten the splines on the rear drum by .025" to ensure it doesn't hit the new bearing. This can be done with a lathe or carefully with a hand grinder. Deburr the splines after machining.



16. Assemble the rest of the transmission as usual, pay close attention to your final endplay. You may need to add or subtract front pump shims to get to spec.

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