Ford E4OD Delayed Reverse Fix Kit™

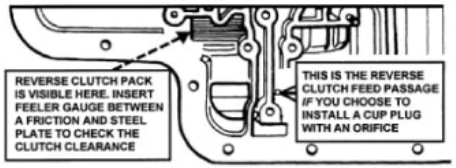
ALTO PART # 026759

Alto # 026759 KIT CONTENTS:
(4) 026703A (.081" / 2.06mm) Reverse Steels
(3) 026717A (.090" / 2.29mm) Direct Steels
(1) 028252B-088 (.088" / 2.24mm) Coast Clutch Drum Snap Ring

INSTALLATION INSTRUCTIONS

Our continuing field testing of the E4OD Delayed Reverse Fix Kit™ has found that in some applications, a double apply (bump-bump) can be experienced during the initial reverse engagement. In order to have this kit perform properly, you must reduce the clutch clearances in the Reverse, Direct, and Coast Clutch Packs. Failure to reduce ALL THREE clutch pack can often result in a double or even triple apply feel during the initial reverse engagement. This repair kit significantly reduces the reverse engagement time duration by reducing the amount of clutch fill volume to the bare essentials of what is actually needed for reverse apply. However, even with this clutch fill volume reductions, do not expect an instant reverse engagement. During reverse apply, three friction element circuits are slowly filling simultaneously along with the direct clutch accumulator system and the 4-3-2 manual timing valve circuit which also acts as an accumulator. Simply stated, the E4OD is a "thirsty" unit in terms of reverse apply clutch fill volume. When the E4OD transmission is functioning properly, you will find the total engagement time, from the moment the selector is moved to FULL reverse engagement, will average 1.42 seconds with this kit installed. If you find the total engagement time exceeds 2.5 seconds WITH this kit installed, suspect valve body and/or case warp, loose valve body and/or accumulator body bolts, or loose and/or stripped bolts for the hold down support plate located near the reverse clutch feed hole.

Rebuilder's Question: "Some technical advisories have said that by installing an orifice into the reverse feed hole, it will help to fix a double apply feel. Can this be done with the Alto kit?"
Answer: Yes. Installing a cup plug with a .100" drilled orifice will allow the reverse clutch to apply with better coordination when the direct and coast clutch applies. Just be sure to use a cup plug that properly fits the case feed hole and also ensure that the size of the orifice is drilled to .096"-.101". A hole below .090" can cause a double apply feel.



ALTERNATE BETWEEN THE OEM (.068") AND THE FURNISHED THICKER (.081") STEELS DURING CLUTCH PACK BUILDUP. INSTALL THE TOP BACKING PLATE AND SNAP RING. AIR CHECK SEVERAL TIMES. DESIRED CLEARANCE IS .020" - .025".

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FOR THE DIRECT CLUTCH: Build the clutch pack by alternating between the OEM thickness steels (.078") and the furnished thicker steels (.090). Install top backing plate and snap ring. Air check the direct clutch several times to seat all components. Insert a feeler gauge between the top of the backing plate and the bottom of the snap ring or between the bottom of the backing plate and the top friction plate, whichever is more convenient. The desired clearance is .020" - .025". Alternate between the OEM sized steels and the furnished thicker steels until all the clearance is achieved.

FOR THE COAST CLUTCH: Build the clutch pack with the OEM thickness steel and friction plates. Install the top backing plate. Install the furnished top backing plate snap ring. Air check the coast clutch several times to seat all components. Insert a feeler gauge between the bottom of the backing plate and the top friction plate. The desired clearance is .015" - .025". Some clutch pack clearances may be slightly tighter than .015". This is acceptable providing there is an absolute minimum of .010" clearance. If the clutch clearance is tighter than .010", then reinstall the originally removed snap ring.