A4LD AND 4R44E/4R55E PowerPack® High/Reverse (Direct) Clutch Pack

ALTO PART #041756

Alto # 041756 POWERPACK® CONTENTS:
(7) 041702A (.059" / 1.50mm) Friction Plates
(7) 041703A (.060" / 1.52mm) Steel Plates

DURABILITY AND PERFORMANCE BENEFITS

This kit will correct, prevent and reduce the complaints of 2-3 light throttle bang and/or cut loose, 2-3 slip and/or slide with tail end bump at moderate throttle, 2-3 bang at higher throttle openings, 3-2 kickdown bang, 3-2 slide with tail end bump, abrupt reverse engagements when hot. Will increase overall performance and durability. Also provides shorter and cleaner high throttle, 2-3 shifts in street performance or heavy duty applications.

The contents of this PowerPack® kit will allow you to increase the friction plate capacity to address the above listed complaints. The additional capacity not only increases clutch pack performance and durability but also offers more resiliency in addition to a significant increase in torque holding ability. Therefore, the direct clutch apply will be smoother. The kit is designed to convert an original five (5) friction drum to accept six (6) friction plates, and an original six (6) friction plate drum to accept seven (7) friction plates. This is accomplished without any machine work to the drum, piston or top pressure plate. Installation is quick and easy.

This clutch kit was designed for an average vehicle application such as an Aerostar or Ranger. However, it is also a perfect durability and performance enhancement in an application such as a Mustang, Thunderbird, Bronco II and Explorer 4x4's. Ford lists four different thicknesses of top snap rings available for the clutch drum. The .068" snap ring was factory installed in the majority of clutch drums we checked. We also found that our recommended clutch clearance of .025" - .035" was easily achieved with the .068" snap ring. However, depending on some variances in the piston and drum, you may need to use one of the three other thickness snap rings. Alto Products manufacturers all four of these snap rings (and many more for other transmissions). We have listed the different sizes available for this application along with the Alto part numbers.

INSTALLATION INSTRUCTIONS

Begin installation by determining which original capacity drum you are working with. The factory used a five friction plate capacity drum from 1985 to late 1989. In 1990, the factory increased the total friction plate capacity to six (6) by moving the drum snap ring groove closer to the top of the drum. You may be working on a 1985 -1989 unit that has been previously repaired using a 1990 and up six plate drum. The drum pistons, release springs, spring retainers, and the top pressure plates are the same for both the five to six plate drum setup. The drum itself is the only difference between an original five or six friction plate setup.

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Identifying the five or six plate drum is easy. Here's how. Install the drum top snap ring. Using a vernier caliper, hold the snap ring firmly UP towards the TOP of the snap ring groove and measure the height between the TOP of the snap ring and the TOP of the clutch drum at the sun gear shell lug area. An original five friction plate drum will measure approximately .850" while an original six plate drum will measure approximately .725". The dimensional difference of .125" (1/8") can be easily distinguished. A six plate drum is available from the Ford dealer or your parts supplier under part number F0TZ-7D044-C.

For an original five (5) friction plate drum: Install six (6) steel plates and six (6) friction plates in the conventional manner ending with the top pressure plate.

For an original six friction plate drum: Install seven (7) steel plates and seven (7) friction plates in the conventional manner ending with the top pressure plate.

Checking and adjusting clutch pack clearance: Install the originally removed top snap ring. Air check the clutch pack several times to apply and seat all the components. Insert a feeler gauge between the bottom of the pressure plate and the top of the friction plate or insert the feeler gauge between the top of the pressure plate and the bottom of the drum snap ring. Regardless of the total friction plate capacity, set the clearance to .025" - .035". If necessary, adjust the clearance with the different thickness snap rings listed below and/or removing a thin steel plate and inserting a standard thickness steep plate (not furnished) measuring either .068" (Alto 041707) or .078" (Alto 041703). Be sure to presoak the friction plates for no less than fifteen minutes to dissipate heat on start up which results in friction paper glazing.

Snap rings available to adjust the clearance:

ALTO #	REPLACES OEM#	THICKNESS
041250-054	E860126S	.054" / 1.37 mm
041250-068	E860127S	.068" / 1.73 mm
041250-082	E860128S	.082" / 2.08 mm
041250-096	E860129S	.096" / 2.44 mm