GM TH440-T4 (4T60) & 4T60-E
Second Clutch PowerPack®
Regular, Heavy Duty, Race Vehicles

ALTO PART #062756 & 062756HP

Alto # 062756 & 062756HP POWERPACK® CONTENTS:

062756
(7) 062702A (.060" / 1.52mm) Friction Plates
(7) 062703A (.067" / 1.70mm) Steel Plates
(1) 062713K (.077" / 1.96mm) Kolene® Steel Plate

062756HP
(Hi-Performance)
(7) 062742A (.060" / 1.52mm) Friction Plates
(7) 062703AK (.067" / 1.70mm) Kolene® Steel Plate
(1) 062713K (.077" / 1.96mm) Kolene® Steel Plate

DURABILITY AND PERFORMANCE BENEFITS

This kit will correct, prevent and reduce the complaints of premature clutch burn-up or distress caused by: under capacity, low pump pressure/volume while cruising in 4th with TCC engaged and the converter in coupling mode. The second clutch is applied in 2nd, 3rd, and 4th very similar to a forward clutch used in other power train systems. The kit also offers additional durability with the later model, quicker responding engines even though Torque Management is used on some models.

IDENTIFYING THE DRUMS AND BACKING PLATES

1ST Design: 1984-86 has original five (5) friction plate drum with a .155" flat backing plate.

2nd Design: 1987-88 has an original six (6) friction plate drum with a .685" two stage backing plate and a backing plate snap ring with two eyelets positioned in the middle "window" of the backing plate between the two stages.

3rd Design: 1989-90 THM 440-T4 and 91-up 4T60-E (electronic transaxle) has an original six (6) friction plate drum with a .390" dished and undercut backing plate. This set-up uses a thin and narrow top snap ring measuring .062" in thickness and .093" in cross width.

Important Technical Note: 4T60-E uses a .135" tapered apply plate directly on top of the conventional waved cushion plate. Most service and reference manuals list this tapered apply plate as item number 716. You **WILL NOT** reinstall this tapered apply plate during clutch pack stack-ups on 4T60-E transaxles! You will replace one of the kit steel plates directly on top of the waved cushion plate as you would in applications 1st design, 2nd design and 3rd design THM 440-T4's.

GM TH440-T4 (4T60) & 4T60-E
Second Clutch PowerPack®
Regular, Heavy Duty, Race Vehicles

INSTALLATION INSTRUCTIONS

With an original 1st design set-up: Install the waved cushion plate. Install six (6) friction plates and six (6) steel plates in the conventional manner. Install the top backing plate and snap ring. Air check the clutch pack several times to seat all components. The clutch pack clearance should be .020"-.035".

With an original 2nd design or 3rd design set-up: Install the waved cushion plate. Install seven (7) friction plates and seven (7) steel plates. Technical note: On all 4T60-E drum steps, DO NOT reinstall the bottom tapered apply plate. Install one of the kit steel plates directly on top of the waved cushion plate. Air check the clutch pack several times to seat all components. The clutch pack clearance should be .020"-.035".

CLUTCH PACK CLEARANCE CONCERNS

With variances in the drum snap ring groove proximity and spring retainer heights, you may have a clutch pack where the .020"-.035" cannot be obtained. If the clearance exceeds .035" (too loose) remove one of the .060" steel plates and install the furnished .077" steel plate. If the clearance is below .020" (too tight), first ensure that the drum is properly assembled and all parts are fully seated. Air check the drum again and recheck the clearance. Listen carefully. During a 1-2 shift, the input sprag overruns while the second clutch applies. A clutch pack or band DOES NOT release. With this in mind, you can have a second clutch pack clearance of .010" without causing any side effects. Here's the rule…when the second clutch pack is properly assembled and has been air checked several times to fully seat all the components, the friction plates must wiggle or rotate freely with an .005" feeler gauge installed.

IMPORTANT: After final clearance check, soak all friction plates in ATF for at least 15 minutes to dissipate heat and avoid paper glazing on start-up.

TECHNICAL DEPARTMENT COMMENTS

DO NOT delete the waved cushion plate! This will cause a very abrupt and very firm 1-2 shift which you will not be able to correct with calibration changes. We recommend a second clutch apply feed orifice of .082"-.086". The OEM 2nd feed orifice of .100" (or larger) can cause a long 1-2 shift with a slide and tail end bump. In addition, through continued and on-going field testing, we have concluded that slow to respond, under active or no main line pressure rise control is one of the more prominent causes of premature 2nd & 3rd clutch failures. Watch for it!

Tired of needlessly replacing the 4th clutch shafts in 440's and 4T60-E's due to worn clutch plate splined areas?
Ask your Alto distributor for our patented "Bent Tooth" 4th clutch shaft repair kits. These kits are available for the 1st, 2nd and 3rd design level, single and dual plate applications. These kits will prevent a costly comeback even when installing a NEW 4th shaft. The kits install quickly and easily.