

# GM 8L90E 14-On

1-3-5-6-7 Clutch PowerPack®

2-3-4-6-8 Clutch PowerPack®

4-5-6-7-8-Reverse Clutch PowerPack®

# Alto # 224756 1-3-5-6-7 Clutch PowerPack®

Qty	Part #	Description
6	224704A164	G3® Frictions Plates (1.64mm / .065")
5	224705-203PS	Steel Plates (2.03mm / .080")
1	224705-280PS	Steel Plate (2.80mm / .111")

### Alto # 224757 4-5-6-7-8-Reverse / PowerPack®

Qty	Part #	Description
5	224706A160	G3® Frictions Plates (1.60mm / .063")
5	224707-152PS	Steel Plates (1.52mm / .060")

## Alto # 224758 2-3-4-6-8 Clutch PowerPack®

Qty	Part #	Description
1	224709-485	Apply Steel Plate (4.82mm / .190")
6	224708A165	G3® Frictions Plates (1.62mm / .064")
5	224709-240	Steel Plates (2.40mm / .095")
2	224709-203PS	Steel Plates (2.03mm / .080")

### Installation:

# Alto # 224756 1-3-5-6-7: Use for 4 Friction Drum

The stack-up is the same as OE, you will be adding an extra friction and steel plate.

Install the 1<sup>st</sup> of 5 steel plates on top of the apply piston. Then install an internally splined friction plate, continue stacking external and internal plates ending with an internal splined friction plate, (5 internal and 5 external plates) Reuse and install the OEM pressure plate and snap ring.

### Alto # 224756 1-3-5-6-7: Use for 5 Friction Drum

The stack-up is the same as OE, you will be adding an extra friction and steel plate.

Install the 1<sup>st</sup> of 6 steel plates on top of the apply piston, the thick .111" plate. Then install an internally splined friction plate, continue stacking external and internal plates ending with an internal splined friction plate, (6 internal and 6 external plates) Reuse and install the OEM pressure plate and snap ring.

#### Alto # 224757 4-5-6-7-8-Reverse: Use for 4 Friction Drum

The stack-up is the same as OE, you will be adding an extra friction and steel plate.

Install the wave cushion plate against the apply piston, install the 1<sup>st</sup> of 5 steel plates on top of the wave plate. Then install an internally splined friction plate, continue stacking external and internal plates ending with an internal splined friction plate, (5 internal and 5 external plates) Reuse and install the OEM pressure plate and snap ring.

### Alto # 224758 2-3-4-6-8: <u>5 Friction Drum</u>

The stack-up is the same as OE, except you will eliminate the bottom wave plate, you will be adding an extra friction and steel plate. Install the 1<sup>st</sup> of 6 steel plates on top of the apply piston, the thick .190" apply plate, install the 1<sup>st</sup> of 6 friction plates on top of the apply plate. Then install an externally splined steel plate (.095"), continue stacking internal and external plates, ending with an internal splined friction plate (6 internal friction and 6 external steel plates). If clearance is too tight, use the 2 included .080" steels to adjust clearance. In most cases using 1 of the .080" steels will work best. Reuse and install the OEM pressure plate and snap ring.

#### **Notes & Clearance Specifications**

Air-check the assembly several times to seat the stack-up. Always pre-soak the frictions in the type of ATF recommended by the OE for at least 30 minutes. Check clutch pack clearance between the pressure plate and the snap ring in 3 different locations, <u>clearance should be .045" to .065" (1.14 – 1.52 mm) on all PowerPacks.</u> GM provides selective snap rings and replacement pressure plates if needed.