CK PERFORMANCE PRODUCTS PART # 3CC/SCDDA  
SUPER COMPETITION DIRECT DRUM WITH  
MECHANICAL DIODE

This competition component replaces the failure prone factory intermediate roller clutch and outer race with a mechanical diode assembly. This assembly has been used successfully with engines producing over 800 foot pounds of torque. This assembly uses four production FORD 4R70W high energy intermediate clutch plates and four production TH350 intermediate steel plates. Use with a 3 clutch TH350 Intermediate clutch piston which measures approximately 1.000”. Install the 4 clutches and steels supplied as well as the OEM wave plate. Do not omit the wave plate. There is an extra wide bushing installed in the drum to improve the drums concentricity as it rides on the register of the pump stator. If you have a transbrake valve body drill the bleed hole like your Transbrake manufacturer suggests. If you do not have a transbrake, drill a .065” hole between two spring perches on the clutch piston. Be certain the diode does not contact the intermediate return spring retainer. If it does adjust drum end play with shims installed under the direct drum to pump thrust bearing or washer. If you raise the drum up away from the retainer with shims, this will reduce end play. To gain extra end play, switch out the OEM forward to direct drum thrust bearing which measures .180”, with the OEM direct drum to pump thrust bearing which measures .140”. This bearing is included in the kit. Drill out the diode lube hole immediately below the bottom direct drum sealing ring on the pump stator to .125”. Be sure when adjusting end play to not cover the diode lube hole on the pump stator.

Any problems or questions with this part should be directed to CK PERFORMANCE PRODUCTS at 631-218-1989 M-F Eastern standard time.