

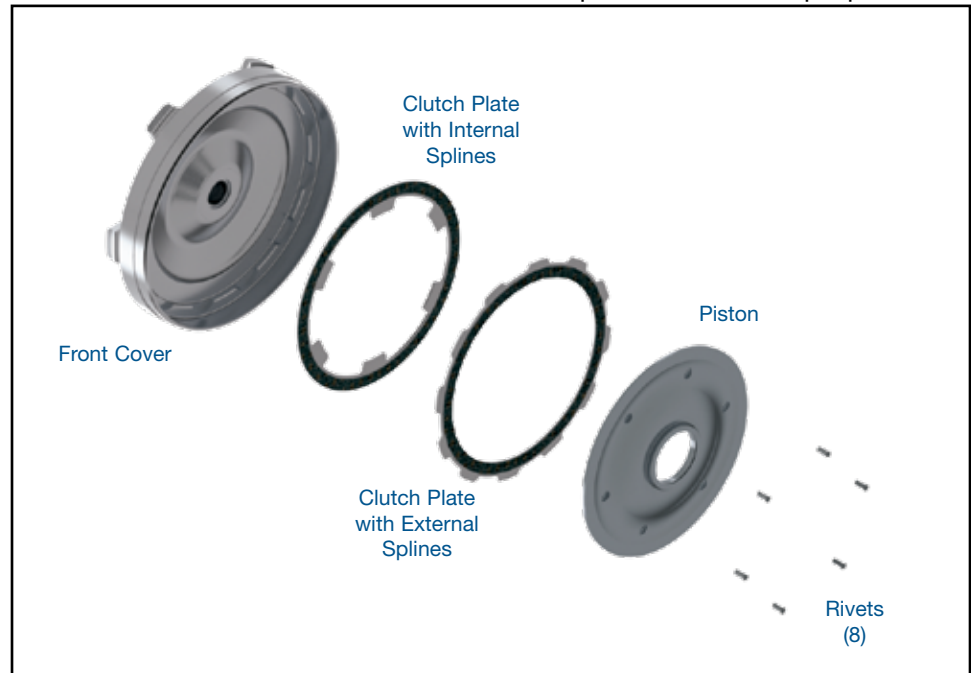
Performance Converter Kit

Part No. GM-RK-22

- Front Cover
- Clutch Plate w/External Splines
- Clutch Plate w/Internal Splines
- Piston
- Rivets (8) 2 Extra

GM 6L90 (Captive Clutch)

Unit Size: 300mm • Core: GM 6L90 JMDZ Converter • Dampered: Yes • Turbine Hub Input Spline Count: 36



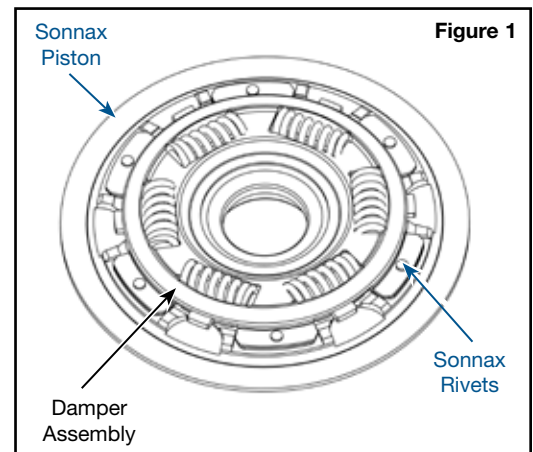
NOTE: Use a salvaged inner damper plate from a GM 6L80/6L90 300mm JMBX torque converter to build this converter. Do not use the force of peening the rivet to clamp the pads together and against the piston. It is important to use an alternate clamping force to contact both the rivet pads and the piston before installing rivets.

1. Disassembly

- Cut the OE 6L90 captive clutch (JMDZ) torque converter apart.
- Remove the captive piston by drilling through the cover at the six blind holes using a 1/4" drill.
- Discard the cover and piston and keep all of the damper parts.
- Disassemble the OE damper assembly from the clutch plate by removing the six rivets on the clutch plate and damper assembly.
- Take note how the damper is assembled, especially the location and direction of the Belleville washer.
- Inspect the top spring retainer plate check for any damage and any cracks near the spring ends. If cracks are found replace this part with Sonnax **GM-DA-18** spring retainer plate.

2. Assembly

- Assemble OE damper assembly onto Sonnax piston using six **GM-RV-13** Sonnax rivets (**Figure 1**).



2. Assembly (continued)

- b. Use a salvaged inner damper plate from a GM 6L80/6L90 300mm (JMBX) converter (**Figure 2**). At least four top tabs must be held down when riveting. To hold down the tabs for riveting, use four screws and nuts on opposing tabs and rivet the two remaining opposing tabs in between. Remove two opposing screws and rivet two of these tabs to the piston and repeat again for the last two tabs.
- c. It is recommended balancing the piston damper with the turbine assembly.
- d. Place the two clutch plates and piston damper on to the cover (**Figure 3**).



CAUTION: Refer to the Sonnax 6L90 (Captive Clutch) converter web page for replacement parts.

- Ensure the stack of converter parts measures 6.433" high before welding, allowing for about .020" endplay.
- In this converter, the clutch release clearance is the same as the endplay and must be between .015-.025".
- The overall height for the stock JMDZ converter is 6.453" ±.020" after welding.
- If the overall height needs to be increased, use a GM-WS-25 (.020" shim) or a GM-WS-26 (.030" shim) between the impeller side stator cap and needle bearing.

