



## **WR35PS – GTR GR6 CLUTCH A/B PISTON SEAL REPLACEMENT INSTALLATION GUIDELINES**



WR35PS is designed as a high performance Piston Seal replacement for the existing GTR clutch seals that have exhibited failure from the factory. Utilising a completely different style of design (O-ring technology vs Lip Seal) WR35PS has a unique installation technique and method that ensures successful application every time.

Note: Designed as a press fit to the factory clutch piston arrangement it may be required to use a small amount of fastening compound (i.e. Loctite) to hold the piston seal in position firmly. This is due to variance in the manufacturers (Nissan) sizing of their assembly.

***WR35PS is a precision machined piece and correct installation technique and following these guidelines is recommended for successful installation***



WR35PS must be specifically lubricated before installation is carried out. This lubrication must be the same type as the transmission. In the instance of using WR35TM in the transmission then please thoroughly wipe the O-ring surface using WR35TM as shown.

Do not under any conditions use grease, or a petroleum jelly style compound in an attempt to gain better lubrication from the outset. This is in fact harmful to the O-ring assembly and can effectively cut off the critical supply of transmission oil to the O-ring and lead to premature wear of WR35PS.



### **INCORRECT INSTALLATION METHOD**

Using a test bore sample the same size as the clutch basket, and a WR35PS not attached to the piston we can show the different ways of installing WR35PS. This is indeed totally the wrong way and if WR35PS is installed in this manner then premature wear of the sealing edge of WR35PS can occur.

The problem with this installation method is that WR35PS is being pushed into the bore at an angle, which can lead to the seal edge being 'picked up' and rolled between the bore and the edge of WR35PS. Once this has occurred you have no visual way of checking other than removing the piston assembly and checking the O-ring for damage.

Another possible problem is that installing WR35PS on an angle can put a twist into the O-ring, which can in turn lead to premature wear in some instances.



### **CORRECT INSTALLATION METHOD**

Note that using the correct installation method the WR35PS Piston Seal is kept totally square with the bore at all times. This way there is no chance of incorrect interference between the bore and the seal face which could in turn lead to mis-alignment.

When installing the WR35PS the action will be smooth, and when the seal takes up on the bore there will be no interference, just a single smooth action as the two surfaces work together as designed.

Successful installation of WR35PS can be assisted by following these points –

- 1) Ensure that the WR35PS is affixed properly in position
- 2) Lubricate the sealing edge of WR35PS with the transmission fluid being used in your application
- 3) Install the piston and seal into the bore as pictured without rocking on an angle