



SCHWEIZER SERVICE LETTER

SUBJECT: MAIN ROTOR TRANSMISSION OIL SEAL COLLAR USAGE AND EFFECTIVITY

MODELS AFFECTED: 269A, TH-55, A-1, B, C and C-1 Helicopters

REFERENCE: 269 SERIES IPC AND HMI SECTION 10

Schweizer Aircraft Corporation has received numerous calls about the usage and effectivity of 269A5178 main rotor transmission oil seal collar. Design changes over the years have resulted in different dash numbers of the 269A5178 oil seal collar. These dash numbers may not be compatible with the variations of the 269A5175 main rotor transmission and 269A5510 belt drive assembly installed on any given helicopter.

The 269A5178-9 oil seal collar is compatible with belt drive assemblies equipped with 269A5050-56, 269A5050-78 or 269A5050-96 upper belt drive bearings. These belt drives are characterized by having the forward upper belt drive bearing captured on the main rotor input pinion shaft when the belt drive assembly is removed. The 269A5178-9 is the only oil seal collar that properly mates with the inner race of the above mentioned bearings. DO NOT USE 269A5178-13, 269A5178-15 or 269A5178-17 OIL SEAL COLLARS WITH THESE BEARINGS. These later dash number oil seal collars have a chamfer on the aft inner face (Figure 1) and if used with the above mentioned bearings, will result in insufficient contact between the oil seal collar and the inner race of the upper forward belt drive bearing.

269A5175-37 main rotor transmissions (transmission serial number 360 and subsequent) were delivered from the factory with two 269A5149-001 nuts and a 269A5178-15 or 269A5178-17 oil seal collar (Figure 2). This configuration is only to be used with belt drives incorporating 269A5050-99 upper belt drive bearings. 269A5175-37 transmissions prior to serial number 360 were equipped with a 269A5150 washer, a single SL61N9F locknut and a single SL60W9 lockwasher and could have a 269A5178-9 or 269A5178-13 oil seal collar (Figure 3). The 269A5178-13 oil seal collar is to be used on 269A5175-37 transmissions incorporating 269A5050-99 upper belt drive bearings. 269A5178-9 oil seal collars are used on 269A5175-37 transmissions incorporating 269A5050-56, 269A5050-78 or 269A5050-96 upper belt drive bearings.

The latest oil seal collar is the 269A5178-17. This oil seal collar is two way interchangeable with the 269A5178-15 oil seal collar. It is not interchangeable with any other oil seal collar.

Schweizer Aircraft Corporation is developing a kit that will enable those helicopters equipped with a 269A5175-37 main rotor transmission with double 269A5149-001 nuts on the input pinion shaft to be used with a belt drive equipped with 269A5050-56, 269A5050-78 or 269A5050-96 upper belt drive bearings. This is the only application of the kit that will be approved. Should an operator want a double nut configuration for an earlier dash number 269A5175 transmission, the transmission must be upgraded to the 269A5175-37 configuration and will then need the kit to allow usage of belt drive equipped with 269A5050-56, 269A5050-78 or 269A5050-96 bearings.

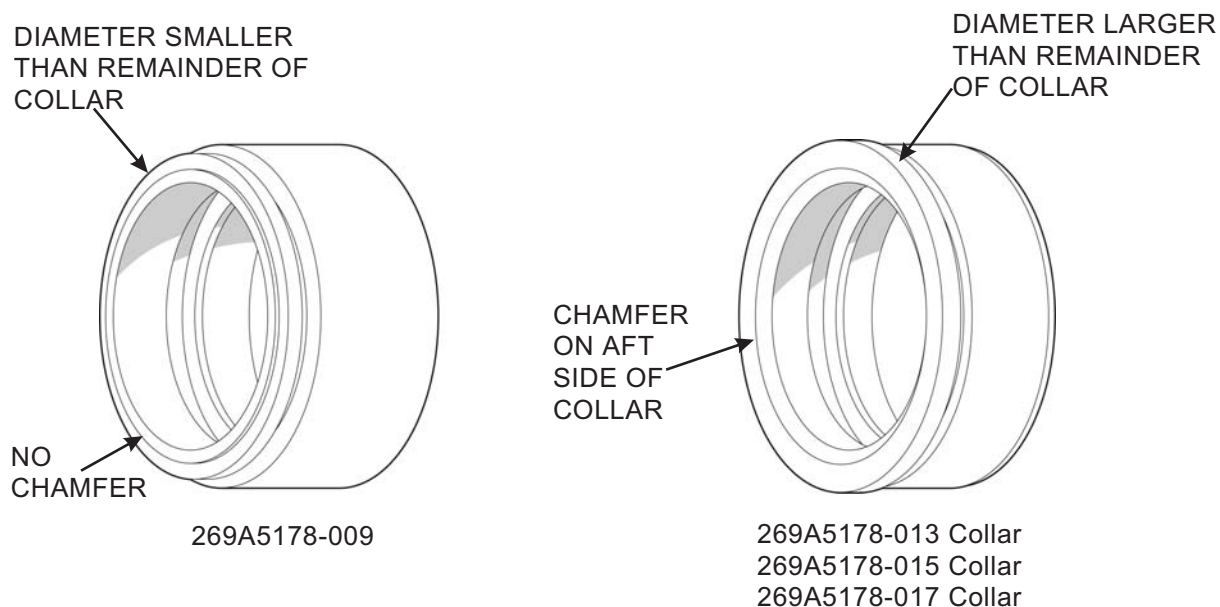


Figure 1. Oil Seal Collar Differences

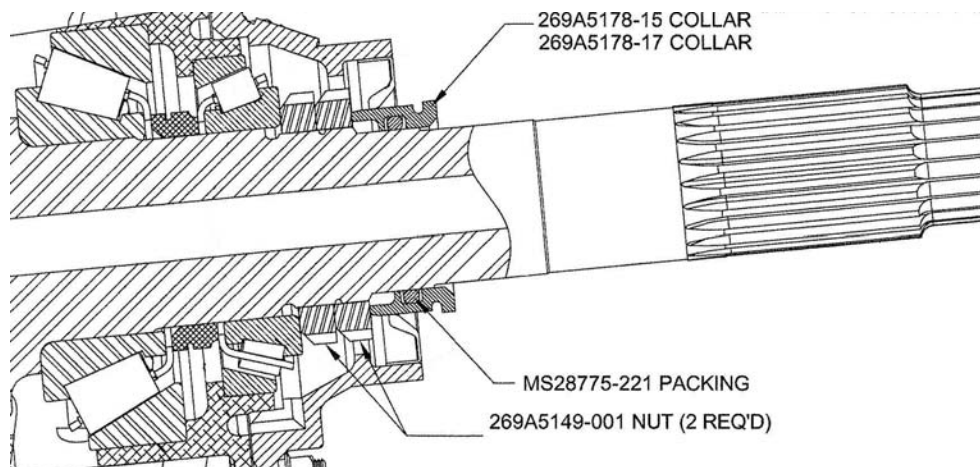


Figure 2. 269A5175-037 Transmission with two 269A5149-001 Nuts

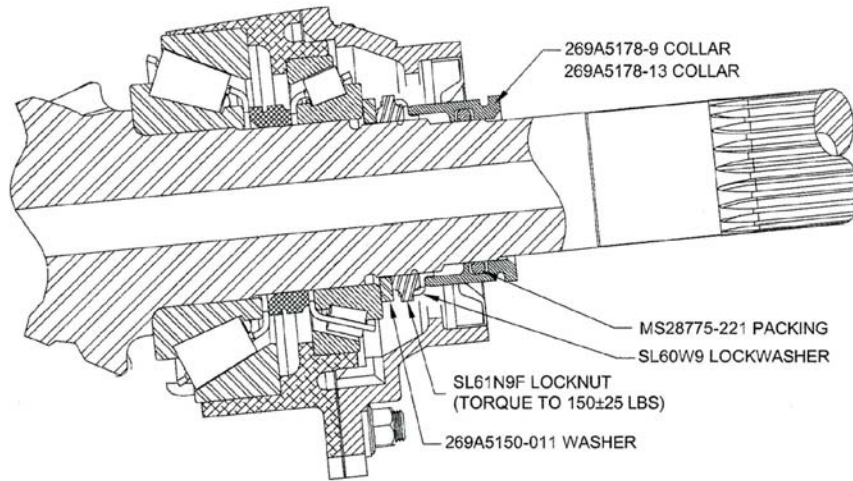


Figure 3. 269A5175-037 Transmission with Locknut and Lockwasher