



## SCHWEIZER SERVICE LETTER

**SUBJECT:** INTRODUCTION OF NEW MAIN ROTOR TRANSMISSION ASSEMBLY AND BELT DRIVE TRANSMISSION ASSEMBLY CONTAINING AN EXTENDED HUB UPPER PULLEY ASSEMBLY

**MODELS AFFECTED:** 269D Conf. "A" model helicopters serial number 0059A and subsequent.

**REFERENCE:** 269D Conf. "A" Basic HMI Section 10 revised 21 July 2006.

A new 269D5175-001 performance enhanced main rotor transmission and a new belt drive transmission containing an extended hub upper pulley assembly, has been designed for use in the 269D Conf "A"/333 helicopter. Starting with serial number 0059A, all new 269D helicopters will be delivered with the new main rotor and belt drive transmissions.

This new transmission can be quickly identified by an external oil line located on the top of the transmission, just behind the oil fill cap. It was designed to be used with a belt drive transmission equipped with the extended hub upper pulley assembly (described below) and as a result it is not eligible for installation in helicopters prior to serial 0059A. The assembly contains a new design 269A5201-001 carrier assembly, 269D5109-001 ring gear assembly, and 269A5103-53 pinion assembly. These components cannot be installed in earlier part number 269A5179-27 or -39 transmissions. This new transmission is to be overhauled and the carrier and input pinion assemblies are to be retired in accordance with the overhaul and life limit times published in HMI Appendix B, revised 16 June 2006 or subsequent revisions.

To reduce maintenance costs and exposure to fretting damage to the main transmission pinion, a new belt drive transmission assembly has been introduced that contains an upper pulley assembly with a hub design that accepts the upper H-frame bearings as part of the pulley assembly. With this design, the belt drive transmission assembly can be completely assembled on a bench and then installed in the helicopter. This eliminates the partial assembly of the belt drive system in the helicopter that is required with the earlier pulley design. Installation of the upper H-Frame bearings on the pulley requires the use of larger diameter bearings and this in turn requires the use of a different drive frame. Retirement of the new 269A5050-99 upper H-Frame bearings and maintenance of the belt drive transmission remains unchanged and is to be serviced and inspected on a periodic bases in accordance with the Basic HMI and its' appendices. When disassembly of the upper pulley is required for internal inspection or to retire the bearings, a 269T9336 Bearing Retraction tool is needed to remove the bearings from the hub. This tool is available through Red Barn Machine Company located in Eugene Oregon.