



TECHNICAL SERVICE BULLETIN

Bulletin Number: DC-2163

Date: 5/3/05

Affected Model(s): 82206 Bare Reels and Associated Configured Models

Subject: Inlet Swivel/Outlet Adapter Changes

Over the past several years Lincoln has made several series changes directed toward enhancing the performance of our 82206 Heavy Duty Reels, including the inlet swivel and outlet adapter. In an effort to help you better understand these enhancements; we have put together the following brief history depicting the changes.

Late 60's through Late 1990

Beginning in 1968 and through most of 1990 the standard inlet swivel for the 82206 was the 82181. The swivel stud that screwed into the side of the reel was black and the threads were 33/64-27", tapered threads (commonly referred to as 1/2-27"). The repair kit, 83050, includes all the soft parts necessary to repair the swivel. This swivel requires use of an inlet adapter and a series of packing, washers, and a u-keeper to secure the inlet adapter to the swivel. The outlet side of the reel has also remained much the same as it has an outlet adapter, a series of packings and washers, all held into the reel axle by a u-keeper. The last series to include these parts was Series "N".

Late 1990 through Late 1998

Beginning in late 1990 (date code "WJ"-October, 1990) we moved from the 82181 swivel to a new 237684 swivel. The swivel stud that screws into the side of the reel became 3/8" NPTF. The new swivel includes a u-cup (237679) instead of the series of packings in the old swivel and still includes an inlet adapter (237686) and a u-keeper (15674). The outlet side of the reel also changes to include a u-cup (237679), an outlet adapter (237678), and a u-keeper (15674). We upgraded to the new style swivel and outlet adapter for ease of repair and because the u-cup formed a better seal than the older style stacked packings. Both swivels look very much the same, but are not interchangeable due to the thread size on the stud. These reels were known as "Series P".

Late 1998/Early 1999 through Late 2003

Beginning in August of 1998 (date code "US"), the u-cup (237679) in the inlet swivel (237684) was removed and replaced by an o-ring (261187), and a backup ring (260389). By January, 1999 (date code "MT") the same changes were incorporated into the outlet side of the reel and the u-cup (237679) was removed and replaced by the o-

ring and backup washer combination. We changed from the u-cup to the o-ring and backup ring because of numerous complaints on leakage with units containing u-cups. We determined that the leakage was due to the u-cup being placed incorrectly into the swivel or adapter. In all cases returns received for our review were backwards and when placed properly in the swivel or adapter leakage stopped. These reels remained as "Series P".

Late 2003 through Late 2004

Beginning in November of 2003 (date code "XX"), the inlet swivel was changed to a part number 272730 and the inlet adapter was changed to 273065. The 273065 inlet adapter includes u-cup packing that is pressed on to it and the individual u-cup is not replaceable. If the u-cup does fail, the entire 273065 inlet adapter must be replaced. Originally the outlet adapter remained as the part number 237678 on these reels, and it incorporated the 261187 o-ring and 260389 backup rings. The change back to the u-cup was due to developing issues with leakage with the o-ring and backup ring. It was found to be too easy to reverse placement of these two parts and if this was done, there would be increase possibility of leakage. It was determined that the u-cup was the best seal and if it was pressed on the adapter, there would be less chance of it being reversed. These reels included a series change to "Series Q". **PLEASE NOTE: THE ORIGINAL SERIES "Q" REELS WERE NOT DEPICTED CORRECTLY ON THE SERVICE PAGE. THE REELS BECAME TRUE SERIES "Q" IN NOVEMBER, 2004 AS THE CHANGES IN THE INLET SWIVEL AND OUTLET ADAPTER WERE FINALIZED (SEE NEXT PARAGRAPH).**

Late 2004 through Current

As of November, 2004 (date code "XY"), we were certain that going back to the u-cup design on the inlet swivel was a more acceptable seal against leakage. Changes were implemented at this time to remove the 237678 outlet adapter and it was replaced by a new style, part number, 273212. The o-ring and backup washer was removed and replaced by the 273212 with a u-cup pressed on to it. Again, if the u-cup fails, the entire outlet adapter must be replaced.

Care should be taken when ordering a replacement inlet swivels and/or outlet adapters for the 82206 reel. Things to remember:

- 82181 is for reels up through Series "N" only,
- The inlet stud on the 82181 is black. The inlet stud on the 237684 and the 272730 are plated and maybe silver or brass looking,
- 237678 swivel and 237686 inlet adapter can be used in combination with Series "P" or "Q" (the 237679 u-cup or a combination of 261187 o-ring and 260389 backup rings can be used),
- 272730 swivel and 273065 inlet adapter can be used in combination with Series "P" or "Q".
- Component parts of the inlet swivels on Series "P" and "Q" cannot be mixed,
- Outlet adapters can not be used on reels with a date code prior to the release of the TRUE Series "Q" reel in November, 2004 (date code "XY"),

-When replacing the older style swivels with the 237678 u-cup, the u-cup must be installed with the heel or flat service positioned towards the inlet adapter (the lips of the u-cup toward the pressure). If the swivel has the o-ring and backup ring, the o-ring goes into the swivel body first, followed by the backup ring. Failure to comply with the steps will cause the swivels to leak.

As always, if you have questions or concerns, please do not hesitate to call Lincoln Technical Services at 314/679-4200, Ext. 4782 or fax us at 314/679-HELP (4357).

Regards,

Barry Frankum