



Stolle Machinery Company, LLC
Stolle Advanced Technology Operations (SATO)

Technical Bulletin Number: 001

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Necker (E-NCKR) Reform Head Proper Greasing and Maintenance Procedures

Serial Numbers Affected:

All Die Neckers using Reform Head Assembly Part Number 222160211

1.1 Overview

The Necker Reform Head operates as intended when properly greased; however, improper lubrication supply or exceeding maintenance intervals could result in undesired degradation of the head's internal bearing elements and possible premature failure of the mechanism. Correct use of the information in this bulletin can assist in maintaining performance of the Necker Reform Head.

1.2 Issue

Lack of regular maintenance and greasing eventually causes the thrust bearings to generate heat and can result in bedding of the grease with metallic particulates. This can lead to failure of the thrust bearing seals, which further reduces grease volume. Refer to Figure 1-1. As this cycle continues, reformed CAN capability characteristics may decline until eventual failure of the thrust bearing occurs. At this stage no further operation of the Reformer/Necker is recommended until the Reform Heads are inspected and parts replaced and greased as necessary. Follow the procedure in paragraph 1.3, Correction to disassemble, clean, inspect, and lubricate the Reform Head Assemblies.



Figure 1-1. Necker Reform Head Failure

1.3 Correction

To properly maintain the Necker Reform Heads, perform the following procedure every month:

1. Remove the Reform Chuck with the Reform Chuck spanner.
2. Loosen the Reform Die Retention Screw with a 1/4 inch hex tool, and remove the Reform Roller with the screw. Do not lose any spacers or shims at the base of the Reform Roller.
3. Loosen but do not remove the Bearing Retention Cap with the Reform Chuck spanner.

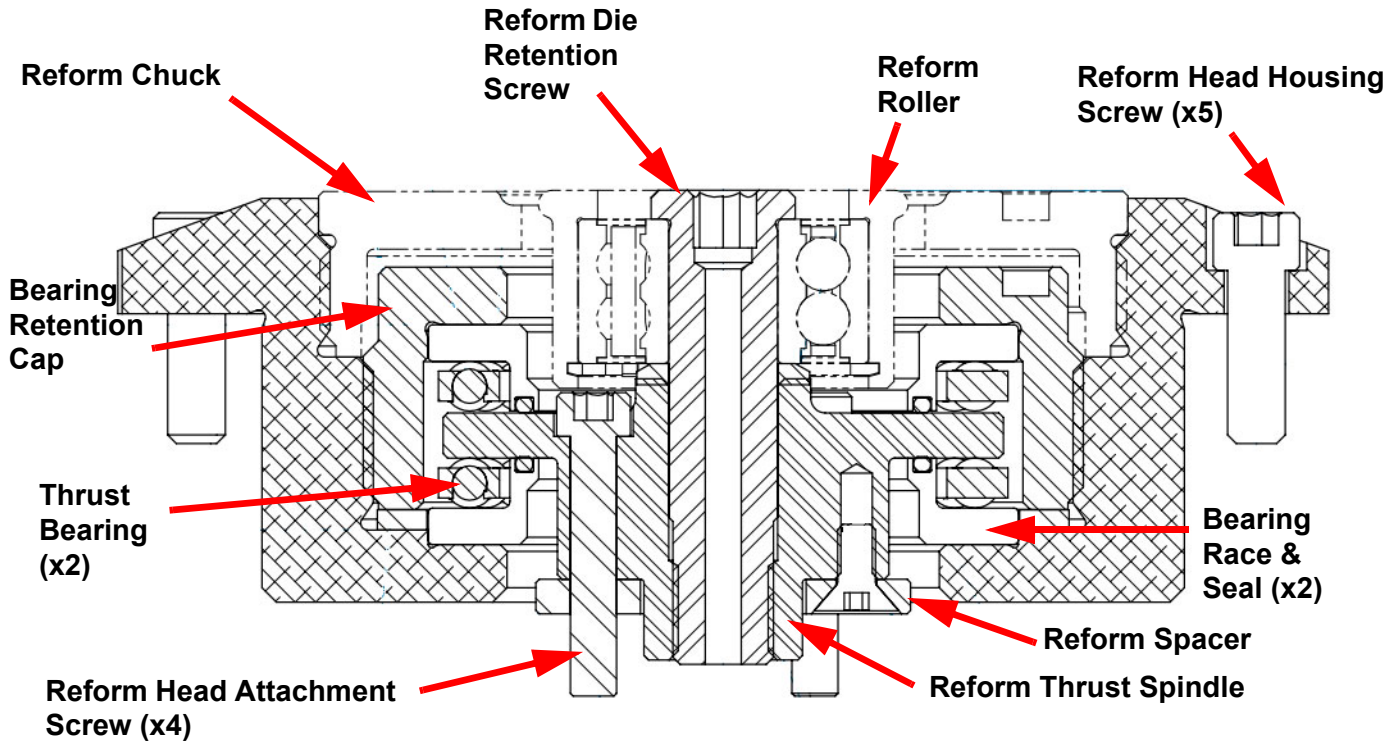


Figure 1-2. Reform Head Cross-section

4. Loosen and remove the four Reform Head attachment screws with a 5/32 inch hex tool. These screws hold the Reformer Head to the Reformer Linkage.
5. Loosen the five Reform Head housing screws with a 3/16 inch hex tool, and remove the Reform Head from the machine. Use caution not to lose the Reform Spacer.
6. Suitably restrain the Reform Head in a soft faced vise as in Figure 1-1 on page 1. Do not over tighten the vise and cause the head to warp.
7. Disassemble the Reform Head. Remove and clean all components with an Isopropyl Alcohol solution having a concentration of no less than 70 percent alcohol by volume. Dry thoroughly after cleaning.
8. Inspect all components for cracks, warpage, and heat discoloration. Check the ball bearings for score marks. Replace any damaged parts.
9. Pack the two Thrust Bearings with 0.21in³ (3.4cc) of Klueber Isoflex Topas NCA 152 grease. Any grease not packed into the bearings should be placed within the two Thrust Bearing Races in the areas that contact the Thrust Bearing.

NOTE: Do Not torque any parts in Step 10 until the Thrust Bearing Head is installed on the machine.

10. Reinstall the Reform Thrust Spindle, the two Thrust Bearings, the two Thrust Bearing Races, and the Bearing Retention Cap into the Reform Head hand tight using the Reform Chuck spanner.
11. Place the Reform Head back into position flush against the Disc.
12. To get the Reform Head Assembly to seat properly thread two attachment screws partially into the assembly. Slowly rock the unit back and forth while gently applying pressure until the threads on the screws align with the threads in the reform linkage.
13. Thread the remaining two attachment screws into place.
14. Tighten the four Reform Head attachment screws and torque to 5.7 ft/lbs (7.7 Nm).
15. Thread the five Reform Head housing screws hand tight. Torque the screws to 14 ft/lbs (19 Nm) in the order shown below:

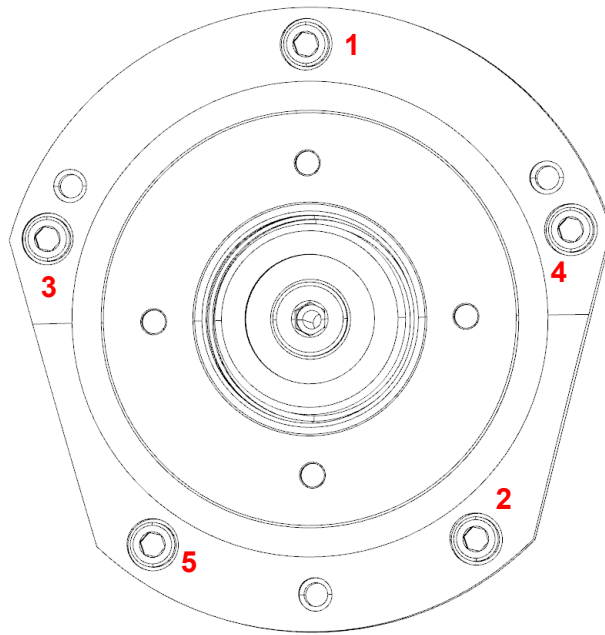


Figure 1-3. Reform Head Assembly Housing Screw Tightening Order

16. Thread the Roller Retention Screw and Roller with spacers and shims from step 2 into the Reform Head. Torque to 45 ± 2.5 ft/lbs (61 ± 3.4 Nm).
17. Re-install the Reform Chuck and hand tighten firmly with the Reform Chuck spanner.
18. Repeat the procedure for each Reform Head.

1.4 Design and Part Update

From Q4 of 2022 a new Reform Head Assembly with grease port for easier access is available.

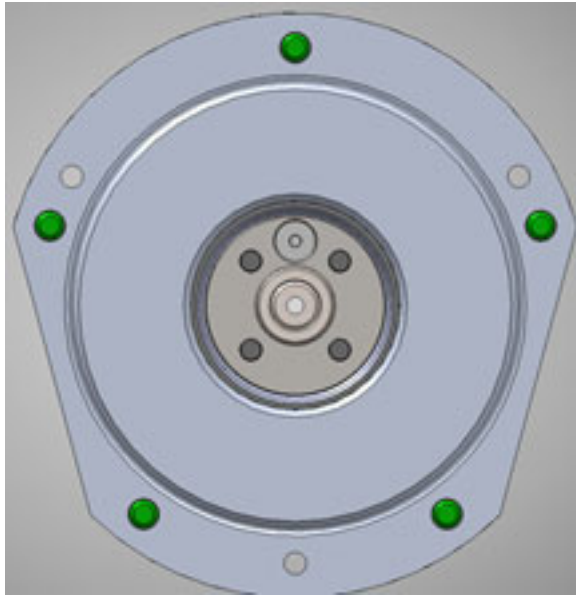


Figure 1-4. Original Reform Head Assembly

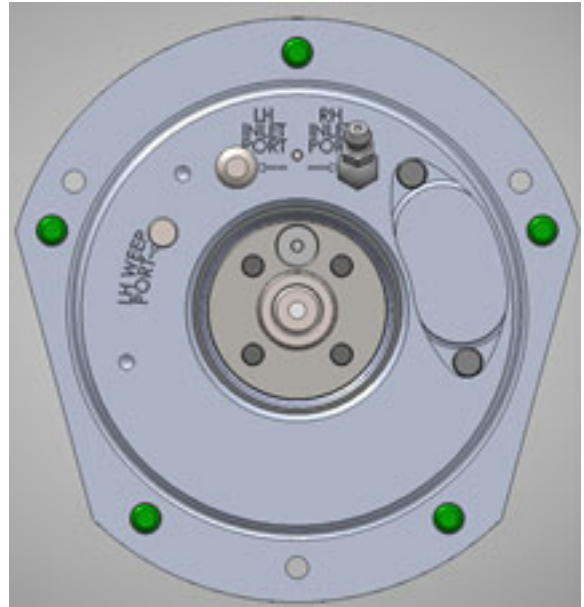


Figure 1-5. New Reform Head Assembly

1.4.1 Spare Part

Spare Reform Head Assemblies are available for purchase under part number 222279752.

Inquiries for spare part orders should be submitted to the Necker Senior Product Director:

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