

## Honey Bee Manufacturing Ltd.

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## SERVICE BULLETIN

MANDATORY FIX ON FAILURE INFORMATION ONLY

Ref: SRV-019-003 Date: 4-14-20

Product: 200 Series AirFlex and SDX Series AirFlex for Model Year 2019 and Above

Re: Knife Drive Changes

**Problem:** In 2018 it was recommended to only grease the bell crank bearings 1-2 pumps every 8-10 hours. Too much grease in the bearing could push the seals out of the bearing. We also recommended a certain type of grease. We have seen a few of both types of failures if the recommendations are not followed.

## Solution:

To make maintenance easier the bell crank bearings have been changed so lubrication of the bell crank bearings is not needed. The bearing has a different style inner race. This requires a few additional changes. The bearing can be changed on older headers without making all of these changes. The kits listed in the ordering information include all of the parts needed for each type of repair. Only one kit that is needed to make the repair depending on the failure. The individual parts listed are if a part is lost during assembly.

The changes made to the knife drive on Model Year 2019 and above are as follows:

- A new sealed bearing was installed. This bearing eliminates the need to lubricate the bell crank bearing. On all
  Model Year 2019 and above headers. The grease fitting under the cutter bar has been eliminated and replaced
  with a plug. This bearing is still installed with the part numbers to the top side.
- The nut that holds the stabilizer to the Bell Crank is still torqued to 765 ft. lbs. (1037 Nm)
- The hole in the stabilizer has been increased to 1 3/16". This eliminates the chance for interference when clamping the bearing.
- A Belleville washer has been added between the stabilizer and the Bell Crank bearing. This will increase the gap between the stabilizer and the Bell Crank.
- An additional O-ring has been added to each Bell-Crank and provides a better seal for the bearing.
  - One O-ring seals on the outer surface of the bearing to keep the dirt from migrating into the seal.
  - One O-ring seals between the stabilizer arm and top of the seal. This O-Ring keeps dirt out of the seal.
     This O-ring has always been in place.

Figure 1 shows a cross section of the new parts and how they are assembled.

- 1. This is the Belleville washer between the stabilizer arm and the inner race of the bearing.
- 2. This is the O-ring that stops dirt from migrating into the seal area.
- 3. This is the O-ring that seals between the stabilizer arm and the top of the bearing.

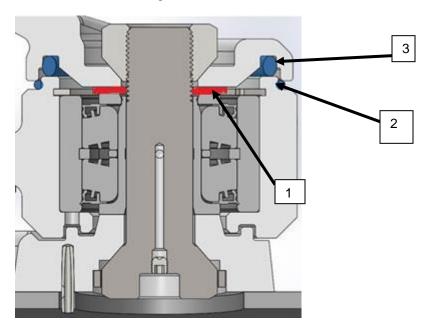


Figure 1

The Belleville washer must be installed with the Concave part of the washer facing the bearing (see figure 2)

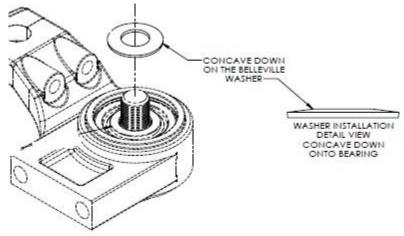


Figure 2

This placement of the O-rings is important for the durability of the bearing. **The O-rings are only used when the stabilizer that has a 1 3/16" hole** in the stabilizer for the nut and Belleville washer installed.

- Figure 3 shows the larger hole in the stabilizer.
- Figure 4 shows the locations of the O-rings.

On Model Year 2018 and older only one O-ring is used. This O-ring is item 3 in figure 2. Do not install the additional O-ring in any Model Year 2018 unless the stabilizer arm has been changed and the hole in the arm is 1 3/16".



Figure 3

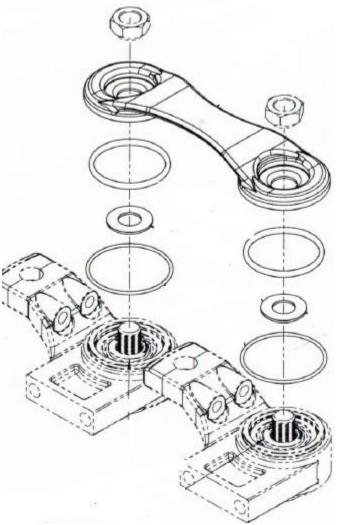


Figure 4

## **Ordering Information:**

The following are the new parts that are used on the Model Year 2019 and above headers and can be used on the older headers to convert to the newer style of bell-crank bearings.

Two new kits have been developed to replace the bell Crank bearing.

- **95147** This is a bearing kit to replace the bearing in the bell crank without replacing the bell crank. It includes, a bearing, the tool for pressing in the bearing, plug to cap the grease fitting hole, and instructions.
- **95145** This kit includes the bell crank assembly with the bearing installed, a bolt, nut, plug to cap the grease fitting hole, and instructions.

The following parts are available for repair:

- 95182 This is a kit to replace the stabilizer. It includes the stabilizer and the two Belleville washers and O-rings. The only time the washers and O-rings will be needed is if a new stabilizer is installed.
- 205416 The nut that clamps the bell crank bearing in place.
- 29112 This is the Belleville washer. Item 1 Figure 1
- 208982 O-ring on outside of the bearing. Item 2 Figure 1
- 208981 O-ring between stabilizer arm and bearing. Item 3 Figure 1

**Labor Allowance:** N/A This is for information only.

NOTE: