



INSTALLATION INSTRUCTIONS

GRIP-TITE BEARINGS

• FLAIL CUTTING/OUTPUT SHAFT • DOC#15-2004 •

DIAMOND MOWERS, LLC
350 E 60th St. North
Sioux Falls, SD 57104

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Note: The bearing should slip easily onto the shaft; if it does not, loosen the set-screw (if necessary) and turn the spanner locknut counter-clockwise to expand the bearing until it fits onto the shaft.

Note: A spanner wrench (part #24-0110) and spanner socket (part #24-0109) are recommended for tightening grip-tite bearings. Contact *Diamond Mowers Inc.* to order these tools.

Reference (Figure 1) for the following instructions:

1. Cutting/Output Shaft: Secure the flail's cutting or output shaft to prevent rotation, and where no more than 75 lbs of dead load weight is being applied to the new bearing(s) when they are being installed.

2. Cutting/Output Shaft: Slide the bearing onto the flail cutting shaft or flail output shaft on the drive (belt) side. Prime the bearing bolt hardware with primer 7649, add Loctite 262 to the bolt threads, and secure the bearing to its mounting surface with its hardware (there should be NO gap between the bearing and its mounting surface - use an alternating criss-cross tightening pattern to tighten down the bearing to its mounting surface). Torque the bearing bolt hardware to 30 ft/lbs (40 Nm).

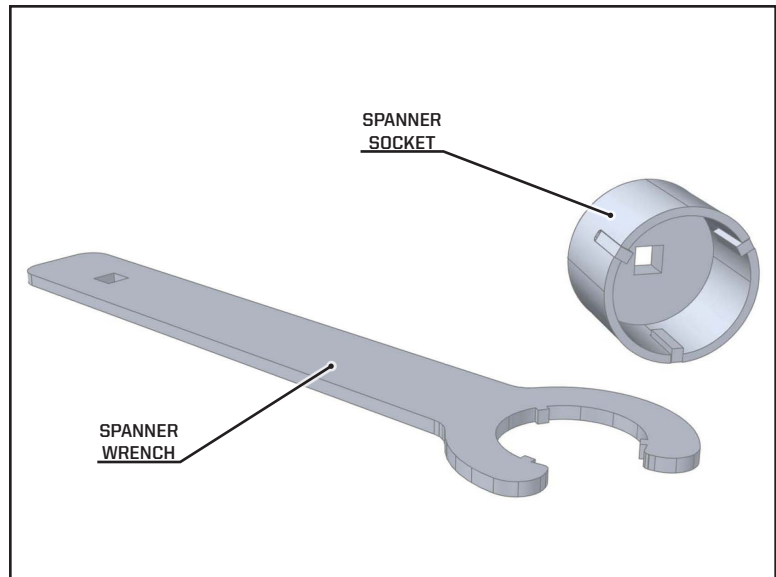
3. Cutting Shaft Only: Center the cutting shaft within the flail bonnet.

4. Cutting/Output Shaft: Rotate the spanner locknut on the bearing clockwise until it is tight as possible (by hand,) and the cutting or output shaft cannot slide back and forth within the bearing (If bearing will not tighten down on the cutting or output shaft, lightly tap the outside of the spanner locknut with a hammer or similar while continually hand tightening approximately 1/16 turn, while checking for slippage. Repeat until there is no slippage).

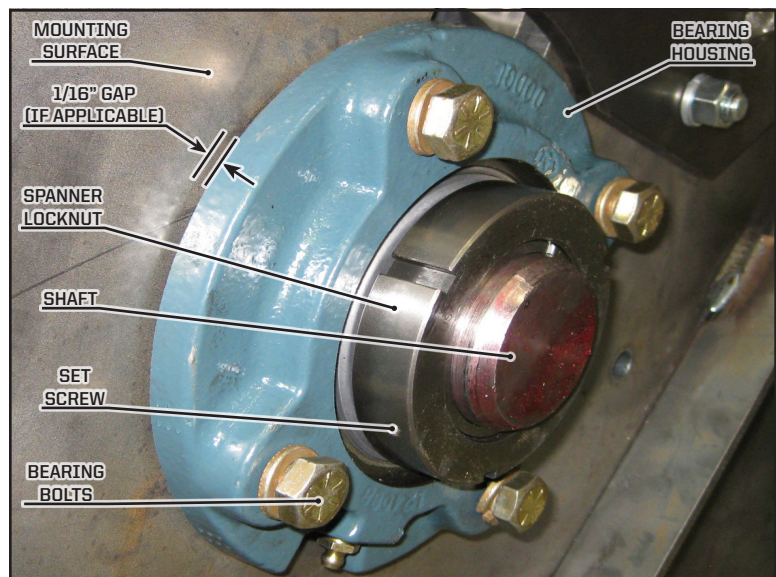
5. Cutting/Output Shaft: Scribe a line onto the spanner locknut above the adapter sleeve slot. Lock the bearing to the cutting or output shaft by rotating the spanner locknut clockwise (1) additional full turn, using a spanner wrench or drift and hammer. Tighten the set-screw on the spanner locknut with an allen key. Torque the set-screw with the allen wrench until the long side of the allen key begins to deflect/bend.

6. Cutting Shaft Only: Slide the 2nd bearing onto the flail cutting shaft on the non-drive (non-belt) side up to the mounting surface, but leave a minimum gap of 1/16 to a maximum gap of 1/8" between the bearing housing and the mounting surface (this gap MUST be maintained when tightening the bearing down onto the cutting shaft).

7. Cutting Shaft Only: Rotate the spanner locknut by hand on the 2nd bearing clockwise until it is tight as possible (without the bearing shifting position on the cutting shaft,) and the cutting shaft cannot slide back and forth within the bearing (If bearing will not tighten down on the cutting or output shaft, lightly tap the outside of the spanner



(Figure 1)



(Figure 2)

locknut with a hammer or similar while continually hand tightening approximately 1/16 turn, while checking for slippage. Repeat until there is no slippage).

- 8. Cutting Shaft Only:** Prime the 2nd bearing bolt hardware with primer 7649, add Loctite 262 to the bolt threads, and secure the bearing to its mounting surface with its hardware (*use an alternating criss-cross tightening pattern to tighten down the bearing to its mounting surface*). Torque the bearing bolt hardware to 30 ft/lbs (40 Nm).
 - 9. Cutting Shaft Only:** Scribe a line onto the spanner locknut above the adapter sleeve slot. Lock the bearing to the cutting shaft by rotating the spanner locknut clockwise (1) additional full turn, using a spanner wrench or drift and hammer. Tighten the set-screw on the spanner locknut with an allen key. Torque the set-screw with the allen wrench until the long side of the allen key begins to deflect/bend.
 - 10. Cutting/Output Shaft:** Check the cutting or output shaft turns freely; if not, repeat the above instructions, making sure bearings are not binding on the flail housing, there is too much tension on the shaft, or that the shaft shifted to one side or the other.
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