INSTALLATION INSTRUCTIONS

FLAIL CUTTING & OUTPUT SHAFTS

GRIP-TIGHT BEARING INSTALLATION

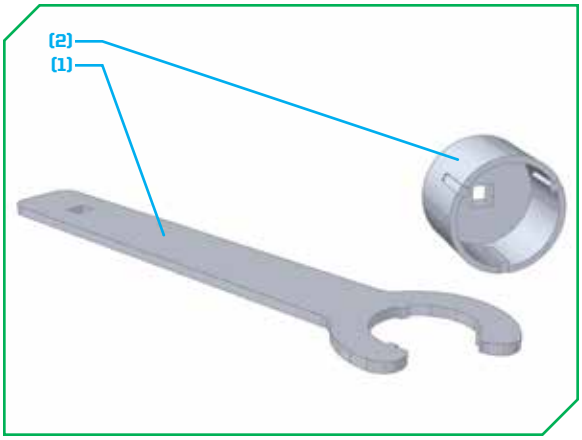
DOC #15-2004

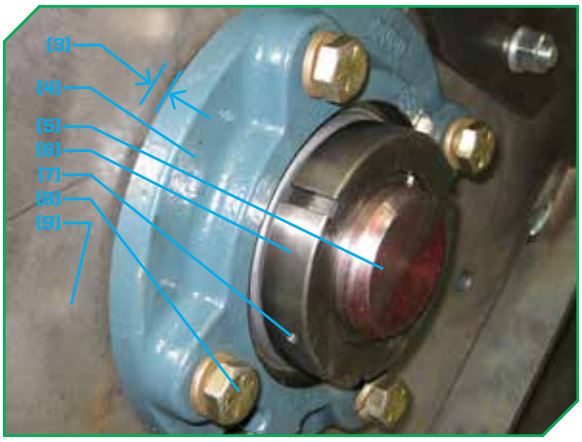
WARRANTY + SERVICE 888.960.0364
PARTS 888.960.0361

Diamond MOWERS™

DIAMONDMOWERS.COM

BEARING INSTALLATION





NOTE: A spanner wrench(1) (part #24-0110 - used for bearing #10-0002) and spanner socket(2) (part #24-0109 - used for bearing #10-0006, part #24-0111 - used for bearing #10-0057, part #24-0113 - used for bearing #10-0059) are recommended for tightening grip-tight bearings. Contact Diamond Mowers Inc. to order these tools.

NOTE: The bearing(4) should slip easily onto the shaft(5); if it does not, loosen the set-screw(7) (if necessary) and turn the locknut(6) counter-clockwise to expand the bearing(4) until it fits onto the shaft(5).

INSTALLATION INSTRUCTIONS:

- **CUTTING & OUTPUT SHAFT:** Secure the shaft(5) to prevent rotation.
- **CUTTING SHAFT ONLY:** Support the cutting shaft(5) so no more than 75lbs of dead load weight is being applied to the new bearing(s)(4) when they are being installed.
- **CUTTING & OUTPUT SHAFT:** Slide the bearing(4) onto the shaft(5) on the drive (belt) side.
- **CUTTING & OUTPUT SHAFT:** Secure the bearing(4) to its mounting surface(9) with its hardware(8).
  - Use Loctite 262 with primer 7549 on bearing hardware(8).
  - There should be **NO** gap(3) between the bearing(8) and its mounting surface(9).
  - Use an alternating criss-cross tightening pattern.
  - Torque the bearing hardware(8) to 30ft-lbs (40Nm).
- **CUTTING SHAFT ONLY:** Center the shaft(5) within the flail bonnet (mounting surface(9)).
- **CUTTING & OUTPUT SHAFT:** Rotate the locknut(6) on the bearing(4) clockwise until it is tight as possible (by hand).
  - The shaft(5) should not be able to slide back and forth within the bearing(4).
  - If the bearing(4) will not tighten down on the shaft(5), lightly tap the outside of the locknut(6) with a hammer or similar while continually hand tightening approximately 1/16 turn, while checking for slippage.
  - Repeat until there is no slippage.
- **CUTTING & OUTPUT SHAFT:** Scribe a line onto the locknut(6).
- **CUTTING & OUTPUT SHAFT:** Rotate the locknut(6) clockwise (1) additional full turn, using a spanner wrench(1), or drift and hammer.
  - Tighten the set screw(7) on the locknut(6) with an allen key.
  - Torque the set screw(7) with the allen wrench until the long side of the allen key begins to deflect / bend.
- **CUTTING SHAFT ONLY:** Slide the 2nd bearing(4) onto the shaft(5) on the non-drive (non-belt) side up to the mounting surface(9).
  - Leave a gap(3) of 1/16 - 1/8" between the bearing(4) and the mounting surface(9) .
    - This gap(3) **MUST** be maintained when tightening the bearing(4) down onto the shaft(5)).

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BEARING INSTALLATION

- **CUTTING SHAFT ONLY:** Rotate the locknut(6) by hand on the 2nd bearing(4) clockwise until it is tight as possible.
  - Do not allow the bearing(4) to shift position on the shaft(5).
  - The shaft(5) should not be able to slide back and forth within the bearing(4).
  - If the bearing(4) will not tighten down on the shaft(5), lightly tap the outside of the locknut(6) with a hammer or similar while continually hand tightening approximately 1/16 turn, while checking for slippage.
  - Repeat until there is no slippage.
- **CUTTING SHAFT ONLY:** Secure the 2nd bearing(4) to its mounting surface(9) with its hardware(8).
  - Use Loctite 262 with primer 7549 on bearing hardware(8).
  - Use an alternating criss-cross tightening pattern.
  - Torque the bearing hardware(8) to 30ft-lbs (40Nm).
- **CUTTING SHAFT ONLY:** Scribe a line onto the locknut(6).
  - 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.
- **CUTTING SHAFT ONLY:** Rotate the locknut(6) clockwise (1) additional full turn, using a spanner wrench(1), or drift and hammer.
  - Tighten the set screw(7) on the locknut(6) with an allen key.
  - Torque the set screw(7) with the allen wrench until the long side of the allen key begins to deflect / bend.
- **CUTTING & OUTPUT SHAFT:** Check the shaft(5) turns freely; if not, repeat the above instructions, making sure bearings(4) are not binding on the flail housing (mounting surface(9)), there is too much tension on the shaft(5), or that the shaft(5) shifted to one side or the other.