

TECHNICAL BULLETIN
Bell Helicopter **TEXTRON**

A Subsidiary of Textron Inc.

No. 206-00-173

Date 11-16-00

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DATE
REV

MODEL AFFECTED: 206A and 206B

SUBJECT: DRAG PIN ASSEMBLY 206-031-633-101
FEATURING A SLOTTED ENTRY TYPE
BEARING, INTRODUCTION OF

HELICOPTERS AFFECTED: Model 206A Serial Number 004 through 660
Serial Number 672 through 715
Model 206B Serial Number 661 through 671
Serial Number 716 through 4523.

[Bell 206B III Serial Number 4524 and subsequent will have the intent of this bulletin completed before delivery.]

COMPLIANCE: At Customer's Option

DESCRIPTION:

This Technical Bulletin introduces a drag pin assembly 206-031-633-101 with a slotted entry type bearing. This new feature will permit the replacement of the bearing with the drag pin assembly installed on the helicopter. This new installation will facilitate maintenance and reduce operation cost by doing away with complicated staking procedures.

Removal and installation of the drag pin assembly 206-031-633-101 will remain unchanged.

Part I of this Technical Bulletin will describe the replacement of bearing ball 206-031-633-105 use with the drag pin assembly 206-031-633-101

Part II of this Technical Bulletin is an inspection criteria for drag pin assembly 206-031-633-101 and bearing ball 206-031-633-105.

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada approved.

MANPOWER:

Approximately 3.5 man-hours are required to complete this bulletin.

Man-hours are based on hands-on time, and may vary with personnel and facilities available.

MATERIALS:

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
206-031-633-105	BEARING BALL	1

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-206A/B-Series-Maintenance Manual, Issue January 07, 1997.

Chapter 07, Lifting and Jacking.
Chapter 53, Fuselage.
Chapter 62, Main Rotor.
Chapter 63, Transmission.

BHT-206A/B-Maintenance and Overhaul Manual, Revision 41, 21November 1995.

Section VI, Drag pin assembly.

BHT-206B3-CR&O,Revision 1, 22 August 1993.

Chapter 63, Transmission.

BHT-206A/B-IPB, Revision 1, 31 January 1997.

Chapter 63, Main Rotor Drive.

PUBLICATIONS AFFECTED:

BHT-206A/B-Series-Maintenance Manual, Issue January 07, 1997.

BHT-206A/B-Maintenance and Overhaul Manual, Revision 41, 21November 1995.

BHT-206B3-CR&O,Revision 1, 22 August 1993.

BHT-206A/B-IPB, Revision 1, 31 January 1997.

ACCOMPLISHMENT INSTRUCTIONS:

Part I –Replacement of bearing ball 206-031-633-105.

1. Remove cowling to get access to transmission assembly (Refer to BHT-206A/B-MM, Chapter 53).
2. Remove main drive shaft (1, Figure 1) (Refer to BHT-206A/B-MM, Chapter 63).
3. Install clevis on mast nut. Lift transmission assembly just enough to remove weight of transmission assembly from helicopter (Refer to BHT-206A/B-MM, Chapter 07).

-NOTE-

Protect transmission deck with proper padding to prevent damage from transmission especially at the lower chip detector location.

4. Remove only the nuts (2), washers (3) and bolts (4) from the two pylon link aft ends.
5. Remove and discard cotter pin (8).
6. Remove nut (5) washers (6) and bolt (7) from isolation mount.

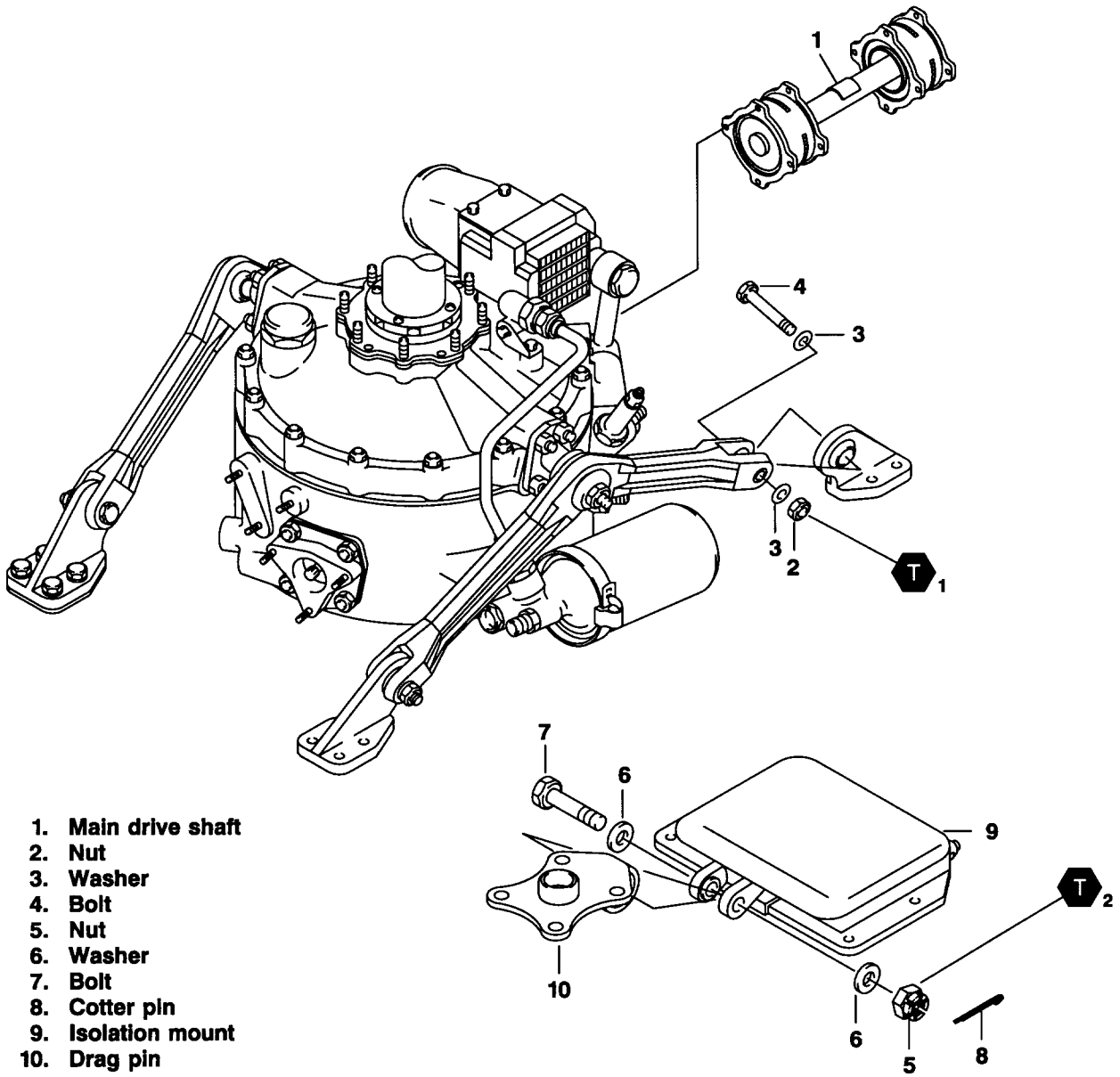
-NOTE-

Transmission will move up and forward, do not stretch the flexible oil lines and electrical harness.

7. Lift transmission up and forward enough to disengage drag pin bearing from isolation mount clevis.
8. Rotate bearing ball 90 degrees to align it with the slots in drag pin assembly (Figure 2) and remove bearing ball from drag pin assembly.
9. Reverse the procedure to install a new bearing ball.
10. Align bearing with isolation mount clevis and the two pylon link aft ends with pylon mounts and lower the transmission.
11. Reinstall Bolt (7, Figure 1), washers (6) and nut (5) ❶. Install cotter pin (8).
12. Reinstall Bolts (4), washers (3) and nut (2) ❶.
13. Reinstall main drive shaft (1) (Refer to BHT-206A/B-MM, Chapter 63).
14. Remove clevis from mast nut.
- 1) Install cowling previously removed.

Part II – Inspection criteria

1. For damage/wear criteria (refer to figure 3).



- 1. Main drive shaft
- 2. Nut
- 3. Washer
- 4. Bolt
- 5. Nut
- 6. Washer
- 7. Bolt
- 8. Cotter pin
- 9. Isolation mount
- 10. Drag pin

T₁ 468 TO 516 IN-LBS
(52.58 TO 57.97 N-m)

T₂ 480 TO 690 IN-LBS
(53.9 TO 77.5 N-m)

NOTE

Drag pin shown removed to simplify sketch.

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Figure 1. Drag Pin Bearing Replacement

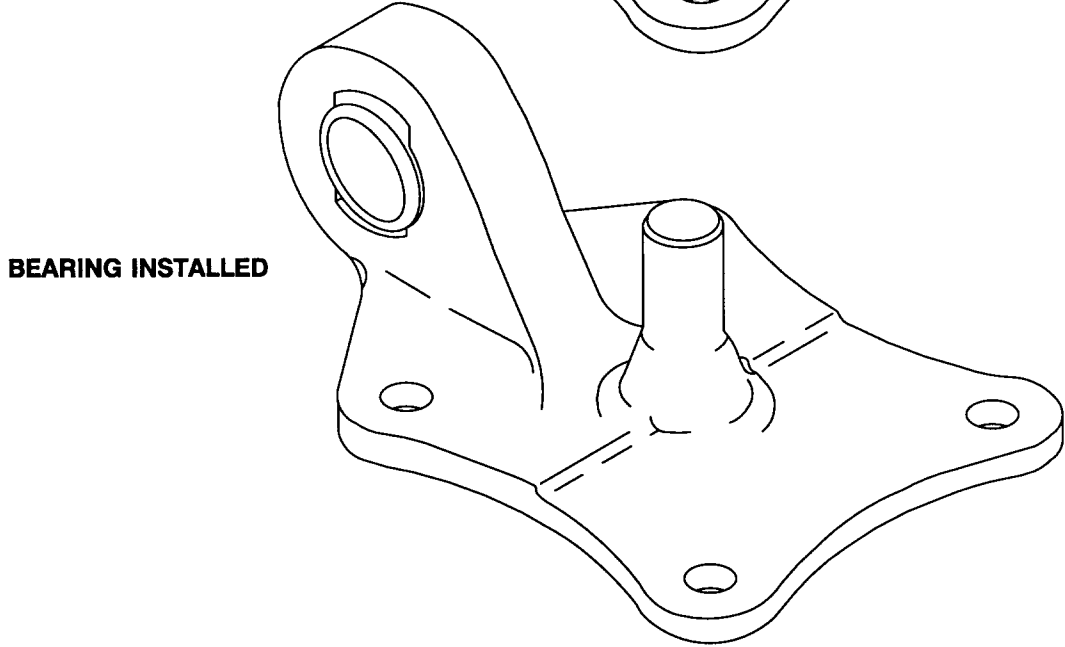
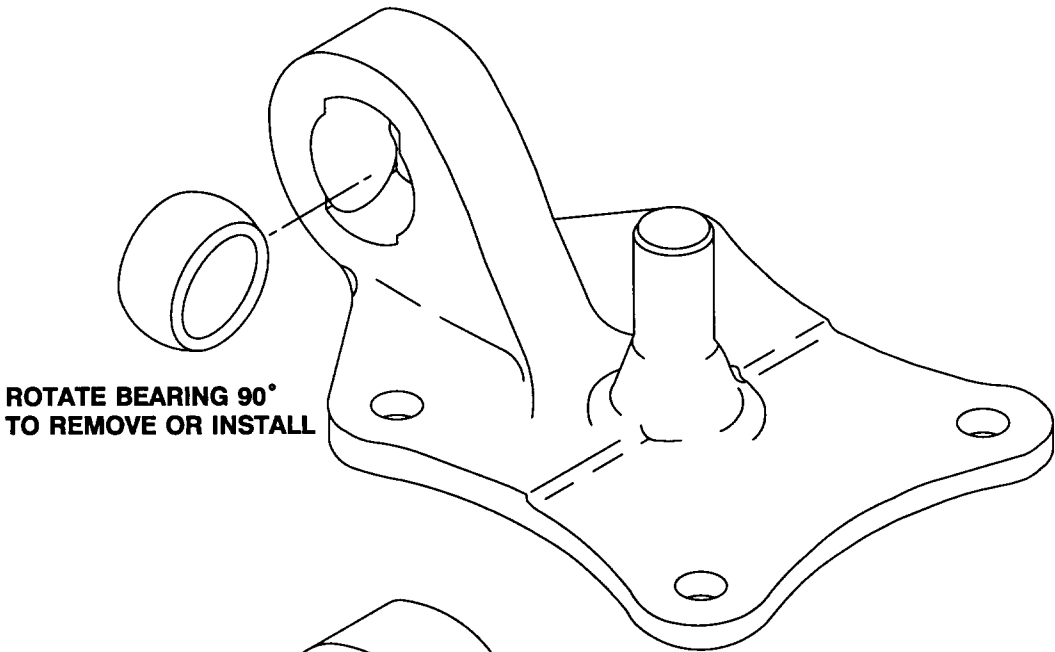
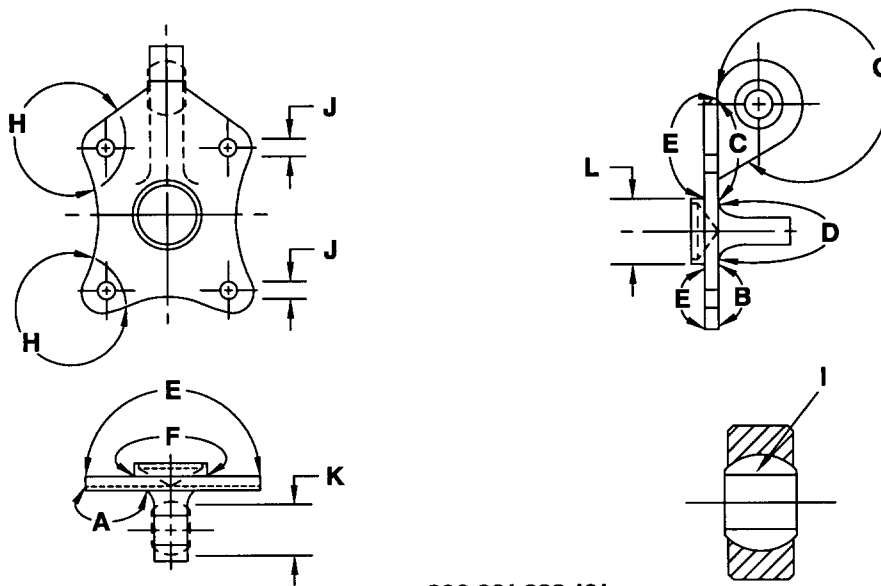


Figure 2. Drag Pin Bearing Replacement



206-031-633-101

NO	REF AREA	CHARACTERISTIC	INSPECTION PROCEDURE	LIMITS
1	A, B, C G, H	Mechanical/corrosion damage	Measure/visual	0.005 IN (0.127 mm) maximum depth after repair
2	A, B, C G, H	Maximum area per full depth repair	Measure/visual	0.05 SQ-IN (0.322 SQ-cm)
3	A, B, C	Edge chamfer		0.010 IN (0.254 mm) maximum depth after repair
4	G, H	Edge chamfer		0.005 IN (0.127 mm) maximum depth after repair
5	D	Mechanical/corrosion damage	Measure	0.030 IN (0.762 mm) maximum depth after repair
6	D	Maximum area per full depth repair	Measure/visual	0.15 SQ-IN (0.976 SQ-cm)
7	D	Edge chamfer		0.030 IN (0.762 mm) maximum depth after repair
8	E	Mechanical/corrosion damage	Measure	0.010 IN (0.254 mm) maximum depth after repair

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Figure 3. Inspection (Sheet 1 of 2)

NO	REF AREA	CHARACTERISTIC	INSPECTION PROCEDURE	LIMITS
9	E	Maximum area per full depth repair	Measure/visual	0.10 SQ-IN (0.645 SQ-cm)
10	F	Mechanical/corrosion damage		None
11	I, K	Wear	Measure	Must not exceed 0.010 IN (0.254 mm) of axial play and 0.008 IN (0.203 mm) of radial play
12	J	Mechanical/corrosion damage	Measure (See Note)	0.002 IN (0.050 mm) maximum depth after repair
13	J	Wear	Measure	0.255 IN (6.477 mm) maximum
14	I, K	Wear and galling of bearing ball and bearing cavity	Measure/visual	0.003 IN (0.076 mm) maximum depth
15	L	Wear	Measure	1.2515 IN (31.788 mm) minimum

NOTE

No more than 25% of the total circumference.

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