Previous Screen

Product: ENGINE - MACHINE
Model: 3406B ENGINE - MACHINE 6TB
Configuration: 3406B INDUSTRIAL ENGINE 6TB09166-09856

Specifications

3406B INDUSTRIAL & MARINE ENGINES

Media Number -SENR4022-01 **Publication Date -01/08/1986** **Date Updated -11/10/2001**

V-Belt Tension Chart

V-BELT TENSION CHART

BELT SIZE	WIDTH BELT TOP		WIDTH TOP OF PULLEY GROOVE		BELT TENSION "INITIAL"* GAUGE READING		BELT TENSION "USED"** GAUGE READING		BORROUGHS GAUGE NUMBERS	
	mm	in.	mm	in.	N	lb.	N	lb.	OLD GAUGE NO.	NEW GAUGE NO.
3/8	10.72	.422	9.65	.380	445 ± 22	100 ± 5	400 ± 22	90 ± 5	BT-33-73F	BT-33-95
1/2	13.89	.547	12.70	.500	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-96-4-16	BT-33-95
5V	15.88	.625	15.24	.600	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C
11/16	17.46	.688	15.88	.625	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C
3/4	19.05	.750	17.53	690	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C
15/16	23.83	.938	22.30	.878	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C

MEASURE TENSION OF BELT FARTHEST FROM THE ENGINE

*"INITIAL" BELT TENSION is for a new belt.
**"USED" BELT TENSION is for a belt which has more than 30 minutes of operation at rated speed of engine. A10232-1X1

Sat Jul 14 02:16:42 PDT 2012

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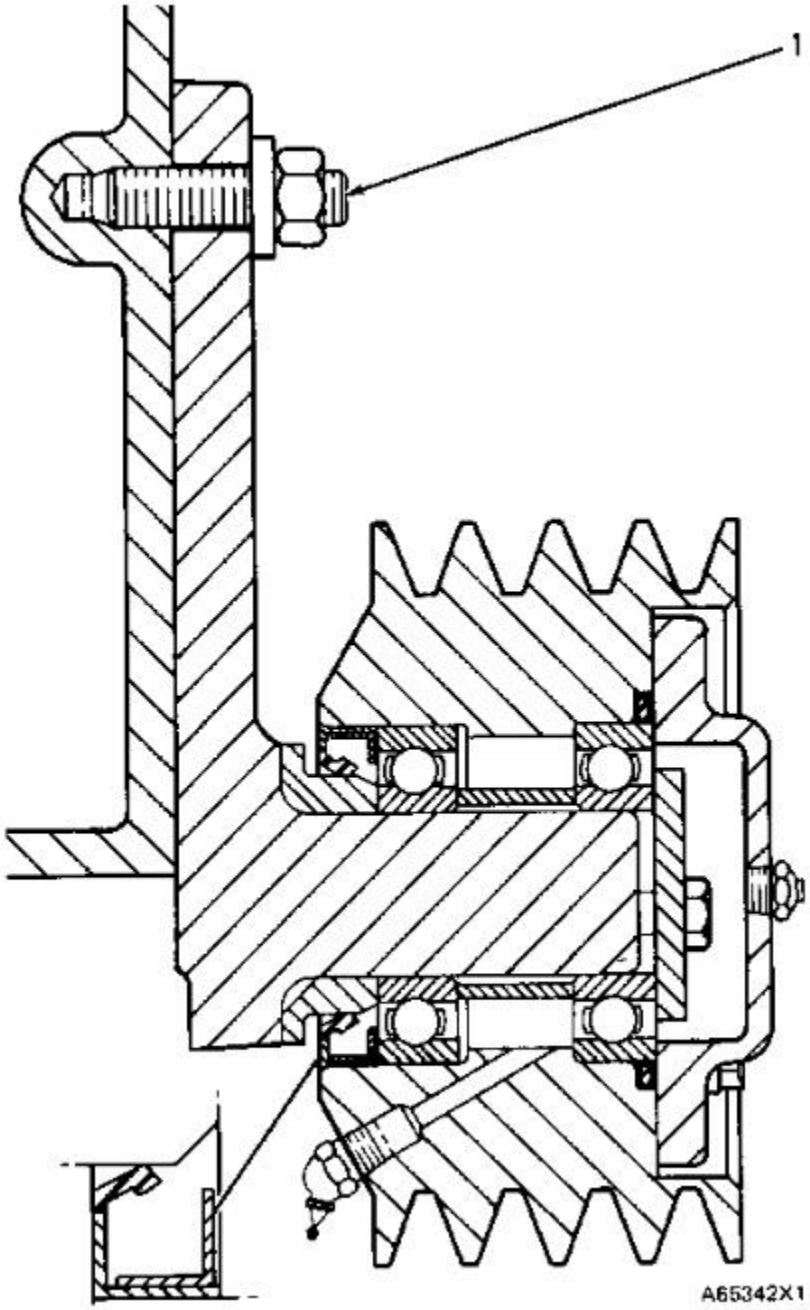
Product: ENGINE - MACHINE
Model: 3406B ENGINE - MACHINE 6TB
Configuration: 3406B INDUSTRIAL ENGINE 6TB09166-09856

Specifications
3406B INDUSTRIAL AND MARINE ENGINE ATTACHMENTS
Media Number -SENR4024-01 **Publication Date -01/09/1986** **Date Updated -11/10/2001**

Belt Tightener (3N9582)



(1) Tighten studs in cover to torque as follows:

1/2" - 13 Thd. Taperlock Stud ... 55 ± 7 N·m (40 ± 5 lb.ft.)

5/8" - 11 Thd. Taperlock Stud ... 100 ± 14 N·m (75 ± 10 lb.ft.)

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Product: ENGINE - MACHINE
Model: 3406B ENGINE - MACHINE 6TB
Configuration: 3406B INDUSTRIAL ENGINE 6TB09166-09856

Specifications

3406B INDUSTRIAL AND MARINE ENGINE ATTACHMENTS

Media Number -SENR4024-01 **Publication Date -01/09/1986** **Date Updated -11/10/2001**

V-Belt Tension Chart

V-BELT TENSION CHART										
BELT SIZE	WIDTH BELT TOP		WIDTH TOP OF PULLEY GROOVE		BELT TENSION "INITIAL"*		BELT TENSION "USED"**		BORROUGHS GAUGE NUMBERS	
					GAUGE READING		GAUGE READING			
	mm	In.	mm	in.	N	lb.	N	lb.	OLD GAUGE NO.	NEW GAUGE NO.
3/8	10.72	.422	9.65	.380	445 ± 22	100 ± 5	400 ± 22	90 ± 5	BT-33-73F	BT-33-95
1/2	13.89	.547	12.70	.500	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-96-4-16	BT-33-95
5V	15.88	.625	15.24	.600	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C
11/16	17.48	.688	15.88	.625	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C
3/4	19.05	.750	17.53	.690	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C
15/16	23.83	.938	22.30	.878	534 ± 22	120 ± 5	400 ± 44	90 ± 10	BT-33-72-4-15	BT-33-72C
MEASURE TENSION OF BELT FARTHEST FROM THE ENGINE										
*"INITIAL" BELT TENSION is for a new belt. **"USED" BELT TENSION is for a belt which has more than 30 minutes of operation at rated speed of engine. A10232-1X1										

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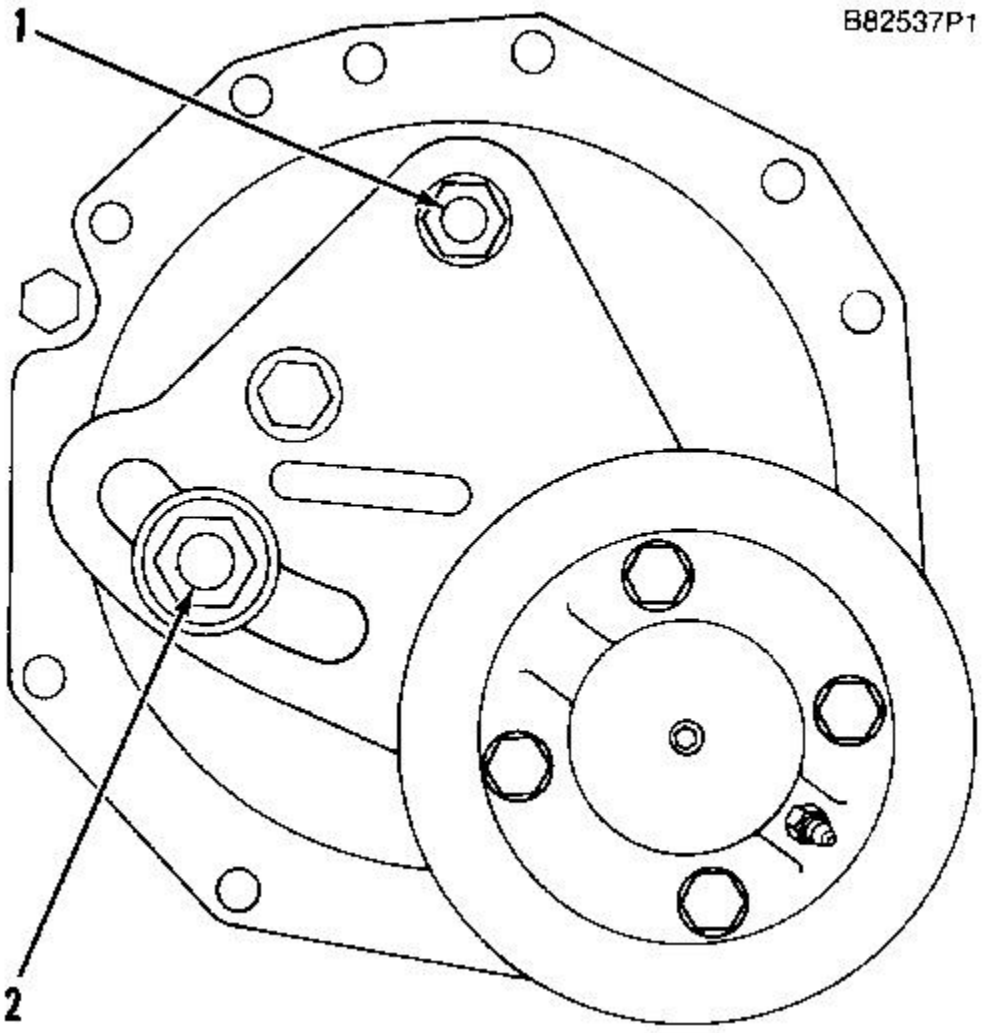
Product: ENGINE - MACHINE
Model: 3406B ENGINE - MACHINE 6TB
Configuration: 3406B INDUSTRIAL ENGINE 6TB09166-09856

Pulley Tightener Group



(1) Tighten 1/2 - 13 NC Taperlock stud in cover to a torque of ... 55 ± 7 N·m (40 ± 5 lb ft)

(2) Tighten 5/8 - 11 NC Taperlock stud in cover to a torque of ... 100 ± 14 N·m (75 ± 10 lb ft)

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Product: ENGINE - MACHINE
Model: 3406B ENGINE - MACHINE 6TB
Configuration: 3406B INDUSTRIAL ENGINE 6TB09166-09856

Specifications

3406C INDUSTRIAL & MARINE ENGINE ATTACHMENTS

Media Number -SENR6527-02 **Publication Date -01/08/2003** **Date Updated -29/07/2003**

SENR65270015

Belt Tension Chart

BELT TENSION CHART

BELT SIZE	WIDTH BELT TOP		GAUGE READING				BORROUGHS GAUGE NUMBERS	
			BELT TENSION "INITIAL"*		BELT TENSION "USED"**		OLD GAUGE NUMBER	NEW GAUGE NUMBER
	MM	IN	N	LB	N	LB		
3/8	10.72	0.422	445+/-22	100+/-5	400+/-22	90+/-5	BT-33-95	BT-33-97
1/2	13.69	0.547	534+/-22	120+/-5	400+/-44	90+/-10	BT-33-95	BT-33-97
5V	15.88	0.626	534+/-22	120+/-5	400+/-44	90+/-10	BT-33-72	BT-33-72C
11/16	17.48	0.688	534+/-22	120+/-5	400+/-44	90+/-10	BT-33-72	BT-33-72C
3/4	19.05	0.750	534+/-22	120+/-5	400+/-44	90+/-10	BT-33-72	BT-33-72C
15/16	23.83	0.983	534+/-22	120+/-5	400+/-44	90+/-10	BT-33-72	BT-33-77
8K	27.92	1.099	800+/-22	180+/-5	489+/-44	110+/-10	--------	BT-33-109
6PK	20.94	0.824	667+/-22	150+/-5	467+/-44	105+/-10	--------	BT-33-109

MEASURE TENSION OF BELT FARTHEST FROM ENGINE

* BELT TENSION "INITIAL" is for a new belt.

** BELT TENSION "USED" is for a belt with over 30 minutes of operation at rated speed.

D01599

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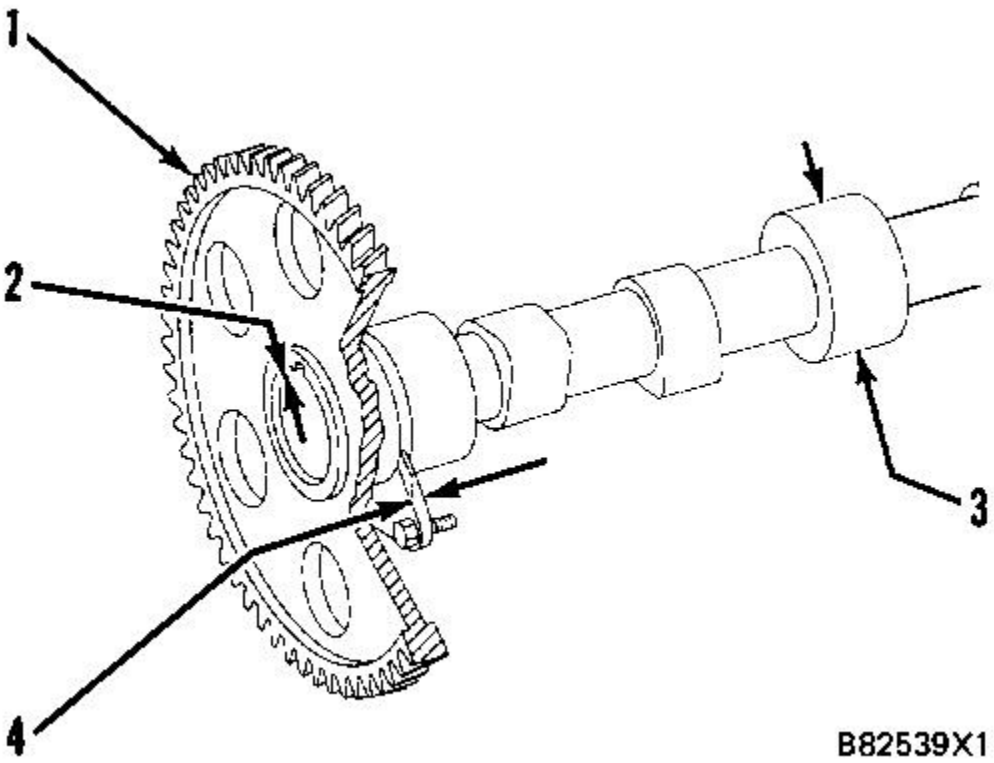
Product: ENGINE - MACHINE
Model: 3406B ENGINE - MACHINE 6TB
Configuration: 3406B INDUSTRIAL ENGINE 6TB09166-09856

Specifications

3406B INDUSTRIAL & MARINE ENGINES

Media Number -SENR4022-01 **Publication Date -01/08/1986** **Date Updated -11/10/2001**

Camshaft



(1) Maximum permissible temperature of the gear for installation on the camshaft (do not use a torch) ... 315°C (600°F)

(2) Tight fit between the gear and camshaft ... 0.037 to 0.123 mm (.0016 to .0048 in.)

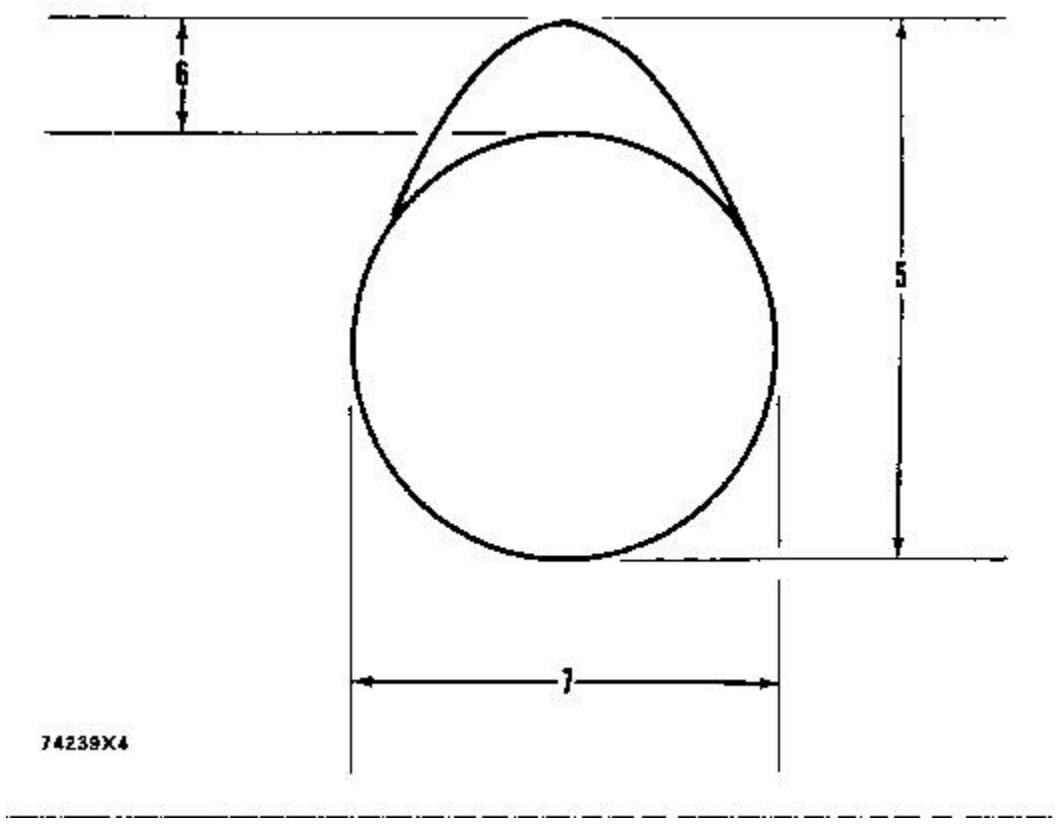
(3) Diameter of the surfaces (journals) for the camshaft bearings (new) ... 69.850 ± 0.013 mm (2.7500 ± .0005 in.)

Bore in front bearing for the camshaft (after assembly) ... 69.969 ± 0.048 mm (2.7547 ± .0019 in.)

Bore in the other six bearings for the camshaft (after assembly) ... 69.982 ± 0.061 mm (2.7552 ± .0024 in.)

(4) Thickness of thrust plate (new) ... 4.65 ± 0.03 mm (.183 ± .001 in.)

End play of the camshaft ... 0.10 to 0.26 mm (.004 to .010 in.)



(5) Height of camshaft lobes.

To find lobe height, use the procedure that follows:

A. Measure camshaft lobe height (5).

B. Measure base circle (7).

C. Subtract base circle (STEP B) from lobe height (STEP A). The difference is actual lobe lift (6).

D. Specified camshaft lobe lift (6) is:

a. Exhaust lobe ... 10.211 mm (.4020 in.)
b. Intake lobe ... 10.211 mm (.4020 in.)

Minimum permissible difference between actual lobe lift (STEP C) and specified lobe lift (STEP D) is 0.13 mm (.005 in.)

Intake Valve Timing

1. Check the No. 1 intake valve clearance with the engine stopped. The valve clearance must be 0.30 to 0.46 mm (.012 to .018 in.). If the valve clearance is not in this range, adjust the clearance to 0.38 mm (.015 in.)

2. Mark Top Center Position of the crankshaft on the vibration damper or pulley.

3. Use a dial indicator to measure the intake valve movement.

4. Rotate the crankshaft in the direction of normal engine rotation. Stop when the intake valve is 1.91 mm (.075 in.) off its seat in the opening sequence. At this point the crankshaft Top Center Position Mark must be in position as follows:

Engines with 8N9245 Camshaft Assembly ... 3 ± 2° After Top Center

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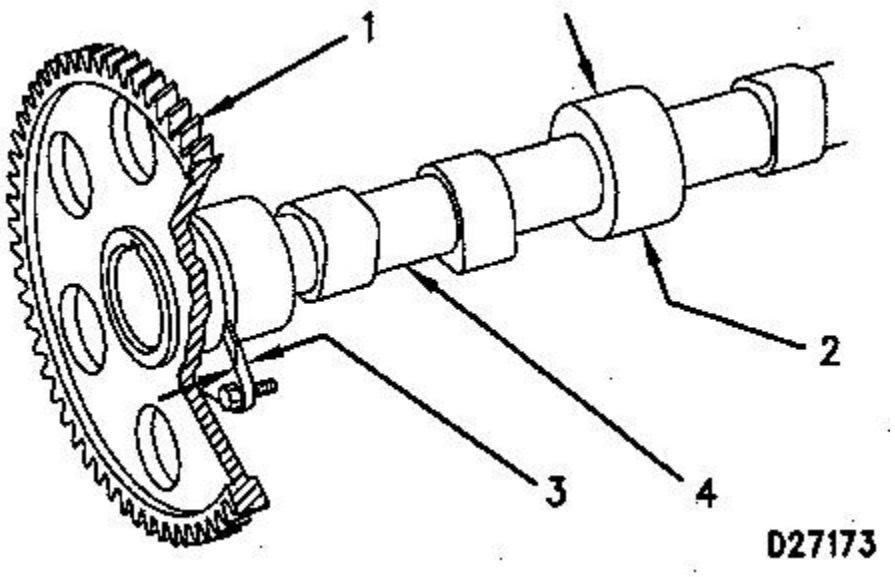
Product: ENGINE - MACHINE
Model: 3406B ENGINE - MACHINE 6TB
Configuration: 3406B INDUSTRIAL ENGINE 6TB09166-09856

Specifications
3406C INDUSTRIAL & MARINE ENGINES
Media Number -SENR6523-03 **Publication Date -01/04/2005** **Date Updated -31/05/2005**

SENR65230018

Camshaft



(1) Gear. If new gear is required, replace camshaft assembly. The heat treatment of the gear is damaged if heated.

(2) Diameter of the surfaces (journals) for the camshaft bearings (new) ... 69.850 ± 0.013 mm (2.7500 ± .0005 in)

Bore in front bearing for the camshaft (after assembly) ... 69.969 ± 0.048 mm (2.7547 ± .0019 in)

Bore in other six bearings for the camshaft (after assembly) ... 69.982 ± 0.061 mm (2.7552 ± .0024 in)

(3) Thickness of thrust plate (new) ... 4.65 ± 0.03 mm (.183 ± .001 in)

End play of the camshaft ... 0.10 to 0.26 mm (.004 ± .010 in)

(4) Camshaft.