



# Specification

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## 320E and 323E Excavators Machine System Specifications

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S/N: WBK1-UP (320E L EXCAVATOR)



## Specifications

### 320E and 323E Excavators Machine System Specifications

Media Number -KENR9693-02

Publication Date -01/05/2013

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i04400546

## Accumulator (Pilot)

SMCS - 5077-PS

S/N - AWS1-UP

S/N - DFG1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - RAP1-UP

S/N - REE1-UP

S/N - SHX1-UP

S/N - SXE1-UP

S/N - TDW1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

S/N - YRP1-UP

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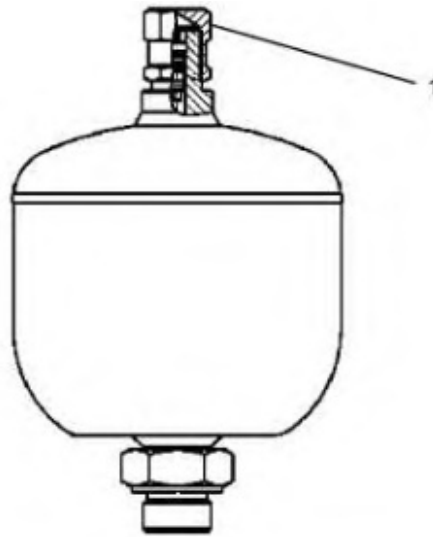


Illustration 1

g02582436

Table 1

Specification for 4I-1536 Hydraulic Accumulator Gp and 199-7447 Hydraulic Accumulator Gp			
Item	Qty	Part	Specification Description
1	1	4I-5862 Cap	Torque to 10 ± 1 N·m (89 ± 9 lb in).



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## Accumulator (Pilot)

SMCS - 5077-PS

S/N - AWS1-UP

S/N - DFG1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - RAP1-UP

S/N - REE1-UP

S/N - SXE1-UP

S/N - TDW1-UP

S/N - TEX1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

S/N - YRP1-UP

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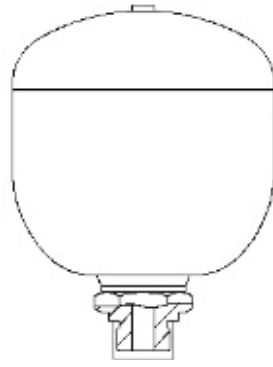


Illustration 1

g02847196

Table 1

<b>Specifications for 335-0517 Hydraulic Accumulator Gp</b>			
<b>Item</b>	<b>Qty</b>	<b>Part</b>	<b>Specification Description</b>
-	-	-	Charging medium is dry nitrogen.
-	-	-	Service pressure is 3430 kPa (500 psi).
-	-	-	Bursting pressure is 13700 kPa (1990 psi).
-	-	-	Working temperature range is -30 to 93 °C (-22 to 199 °F).
-	-	-	Internal volume of compartment for gas is 320.0 cc (19.5 in <sup>3</sup> ).
-	-	-	Precharge pressure at 20 °C (68 °F) is 1800 ± 100 kPa (261 ± 15 psi).
-	-	-	Maximum allowable working pressure is 8000 kPa (1160 psi).



## Specifications

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i04403900

## Accumulator (Pilot)

SMCS - 5077-PS

S/N - AWS1-UP

S/N - DFG1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - RAP1-UP

S/N - REE1-UP

S/N - SXE1-UP

S/N - TDW1-UP

S/N - TEX1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

S/N - YRP1-UP

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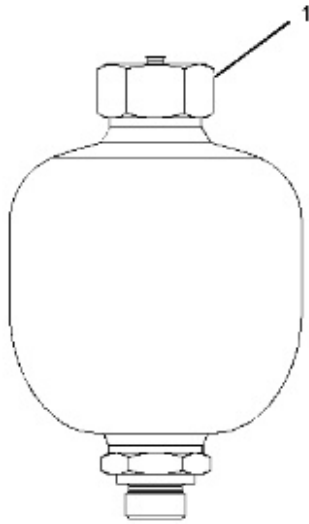


Illustration 1

g02592601

Table 1

<b>Specification for 352-6990 Accumulator Gp</b>			
<b>Item</b>	<b>Qty</b>	<b>Part</b>	<b>Specification Description</b>
1	-	-	Torque for the protecting cap 30 to 35 N·m (266 to 310 lb in).



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i05045990

## Accumulator (Pilot)

SMCS - 5077-PS

S/N - AWS1-UP

S/N - DFG1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - RAP1-UP

S/N - REE1-UP

S/N - SXE1-UP

S/N - TDW1-UP

S/N - TEX1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

S/N - YRP1-UP

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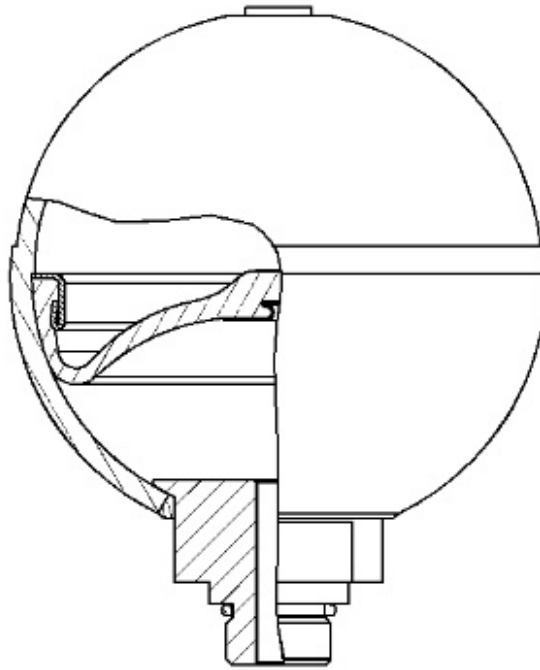


Illustration 1

g03215496

Table 1

Specification for 352-6830 Hydraulic Accumulator Gp			
Item	Qty	Part	Specification Description
-	-	-	Charging medium is dry nitrogen.
-	-	-	Service pressure is 3430 kPa (497 psi).
-	-	-	Bursting pressure is 13700 kPa (1987 psi).
-	-	-	Working oil temperature is -20 to 90 °C (-4 to 194 °F). Working environment temperature is -20 to 50 °C (-4 to 122 °F).
-	-	-	Internal volume of compartment for gas is 300.0 cc (18.3 cubic inch)
-	-	-	Precharge pressure at 20 °C (68 °F) is 1770 ± 200 kPa (257 ± 29 psi).
-	-	-	Maximum working pressure is 6860 kPa (995 psi). Withstand pressure is 10300 kPa (1494 psi). Normal working pressure 3430 kPa (497 psi).



## Specifications

### 320E and 323E Excavators Machine System Specifications

Media Number -KENR9693-02

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i04564588

## Auxiliary Pump Drive and Mounting

SMCS - 3108

S/N - AWS1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - RAP1-UP

S/N - REE1-UP

S/N - SHX1-UP

S/N - SXE1-UP

S/N - TEX1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

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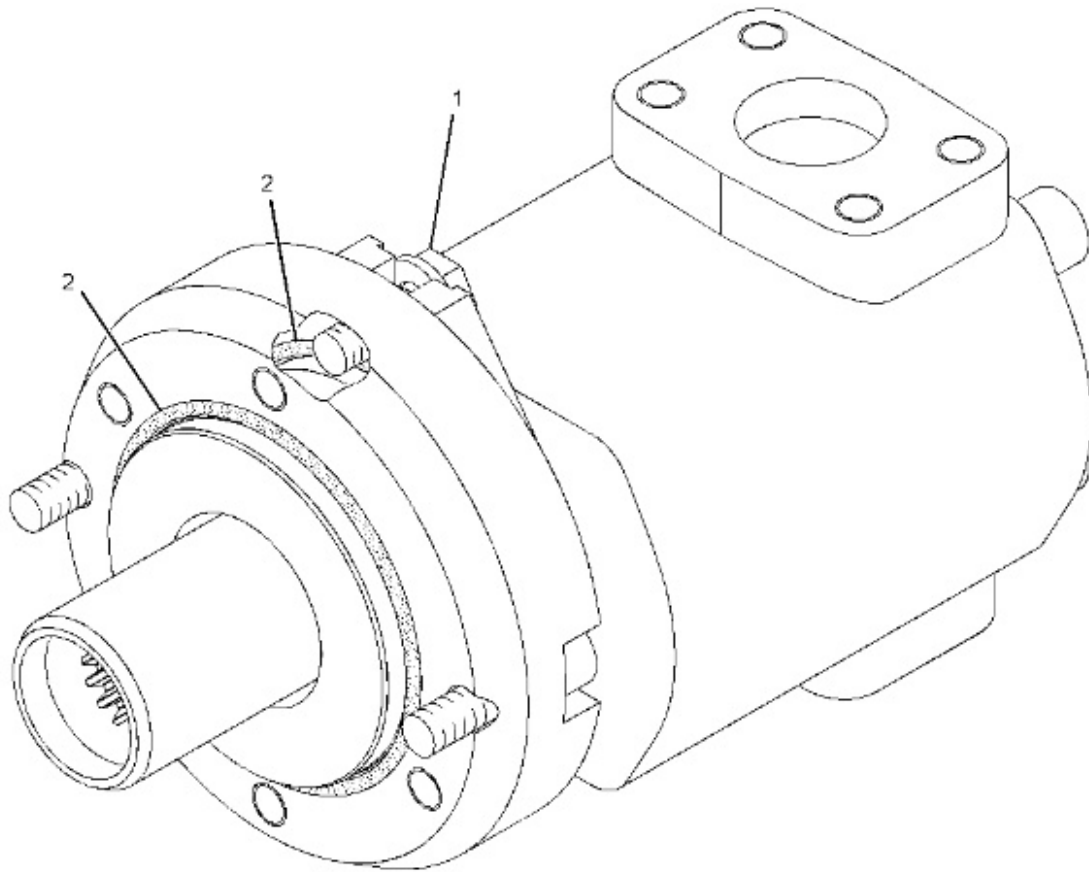


Illustration 1

g02560039

Table 1

<b>Specification for 200-3365 Auxiliary Pump and Mounting Gp</b>			
<b>Item</b>	<b>Qty</b>	<b>Part</b>	<b>Specification Description</b>
1	2	<b>8T-4195 Bolt</b>	Torque to $44 \pm 4$ N·m ( $32 \pm 3$ lb ft).
2	2	<b>273-8315 O-Ring Seal</b>	Lubricate the bore of the O-ring seals lightly with the lubricant that is being sealed..



## Specifications

### 320E and 323E Excavators Machine System Specifications

Media Number -KENR9693-02

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i04561211

## Boom - 5.675 m (18.6188 ft)

SMCS - 6501

S/N - AWS1-UP

S/N - DFG1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - RAP1-UP

S/N - REE1-UP

S/N - SHX1-UP

S/N - SXE1-UP

S/N - TDW1-UP

S/N - TEX1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

S/N - YRP1-UP

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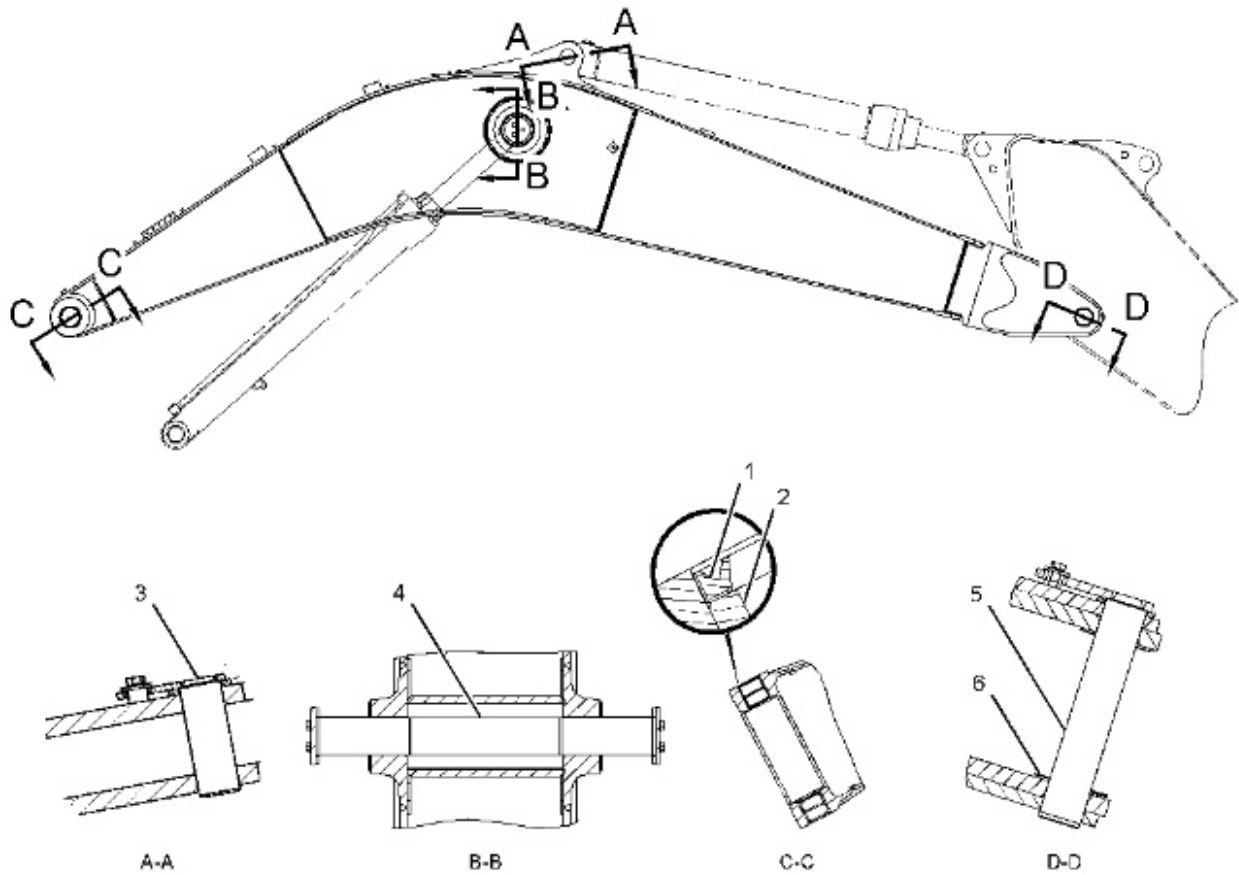


Illustration 1

g02563156

Table 1

Specification for 339-4149 Boom , 339-4150 Boom, 357-5681 Reach Boom Gp , 357-5682 Reach Boom Gp, 371-5470 Reach Boom Gp, and 346-7190 Boom			
Item	Qty	Part	Specification Description
All bores must be free of paint. Use the <b>5P-0960</b> Grease Cartridge in order to coat all bores for the pins, the stick, the upper frame, and the cylinder pin bores.			
1	2	<b>166-1495</b> Lip Type Seal	Lubricate the sealing lip of the lip type seals lightly with the lubricant that is being sealed. Install the dust seal so that the lip faces outside, as shown. Install the lip type seals so that the lip type seals do not extend beyond the face of the boss.
2	2	<b>357-5709</b> Bushing	Inside diameter before assembly is $90.385 \pm 0.030$ mm ( $3.5585 \pm 0.0012$ inch). Installation depth is $9.5 \pm 0.8$ mm ( $0.37 \pm 0.03$ inch).
3	1	<b>41-4809</b> Pin As	Diameter is $79.850 \pm 0.025$ mm ( $3.1437 \pm 0.0010$ inch).
4	1	<b>176-2278</b> Pin	Diameter is $79.850 \pm 0.025$ mm ( $3.1437 \pm 0.0010$ inch).
5	1		

		<b>346-7276</b> Pin As	Diameter is 89.850 ± 0.025 mm (3.5374 ± 0.0010 inch).
6	As required, use the following shims to adjust the maximum lateral clearance of 1.6 mm (0.06 inch). The steel shim should be located at the boom side:		
	1	<b>113-2127</b> Shim	Thickness is 0.5 mm (0.02 inch).
	2	<b>093-0084</b> Shim	Thickness is 1.0 mm (0.04 inch).



### Specifications

#### 320E and 323E Excavators Machine System Specifications

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i04561295

## Boom Cylinder

SMCS - 5456

S/N - -

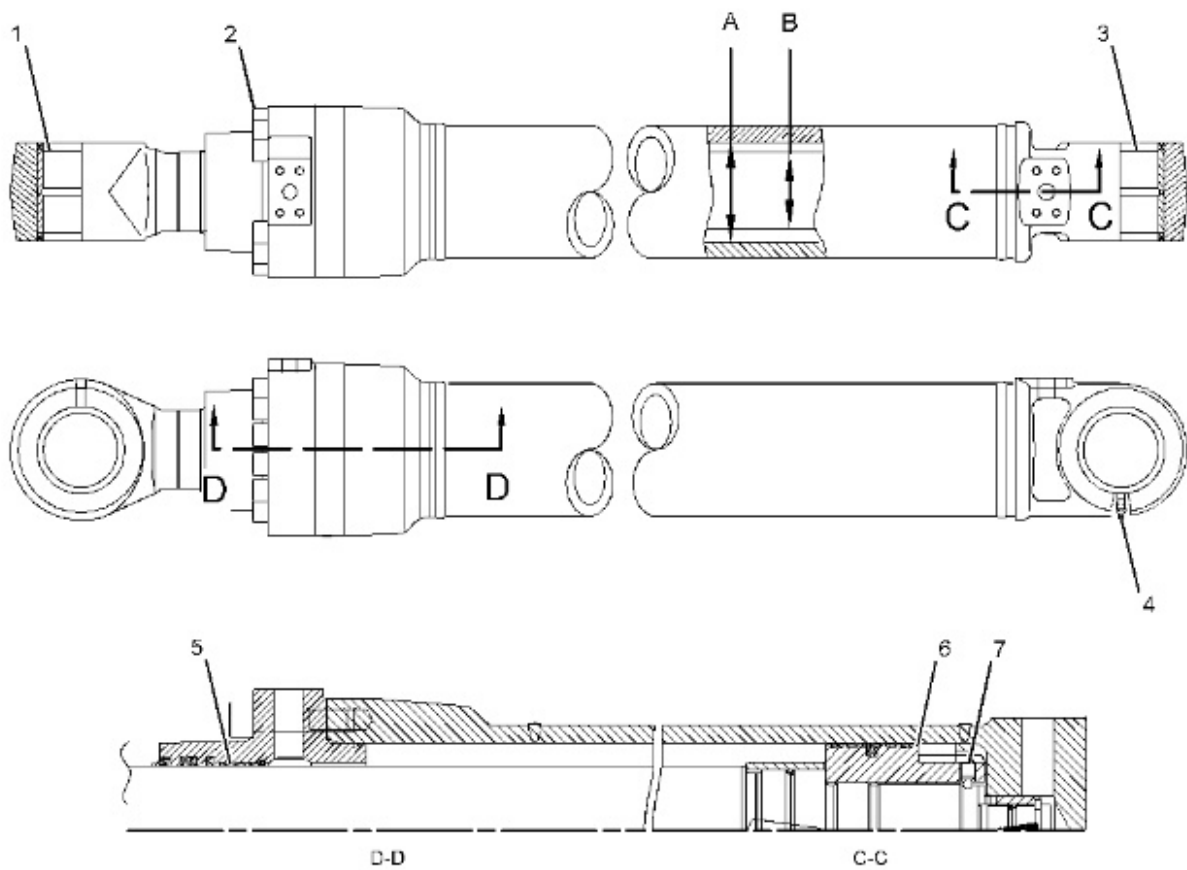


Illustration 1

g02727187

Table 1

### Specification for 341-2790 Boom Cylinder and Seal Gp

Item	Qty	Part	Specification Description
1	1	<b>240-2913</b> Bushing	Inside diameter before assembly is 80.20 ± 0.04 mm (3.157 ± 0.002 inch). Installation depth is 10 mm (0.4 inch).
2	12	<b>8T-1447</b> Bolt	Torque to 267 ± 40 N·m (197 ± 30 lb ft).
A	1	<b>352-1096</b> Boom Cylinder As	Bore diameter is 120 mm (4.7 inch).
B	1	<b>352-1102</b> Rod As	Diameter is 85 mm (3.3 inch).
3	1	<b>357-5717</b> Bushing	Inside diameter before assembly is 80.36 ± 0.03 mm (3.164 ± 0.001 inch). Installation depth is 10 mm (0.4 inch).
4	1	<b>3B-8489</b> Grease Fitting	Torque to 9.32 ± 4.90 N·m (82.49 ± 43.37 lb in).
5	1	<b>096-4402</b> Bushing	Outside diameter before assembly is 90 mm (3.5 inch). Thickness is 2.47 mm (0.097 inch).
6	1	<b>247-8864</b> Piston	Torque to 5460 ± 260 N·m (4027 ± 192 lb ft).
7	1	<b>096-3216</b> Socket Setscrew	Torque to 56.9 ± 10.7 N·m (42.0 ± 7.9 lb ft). After tightening, the socket setscrew must be sealed with caulking.





## Specifications

### 320E and 323E Excavators Machine System Specifications

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## Boom Cylinder Lines

SMCS - 5057-BCD

S/N - AWS1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - REE1-UP

S/N - SXE1-UP

S/N - TEX1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

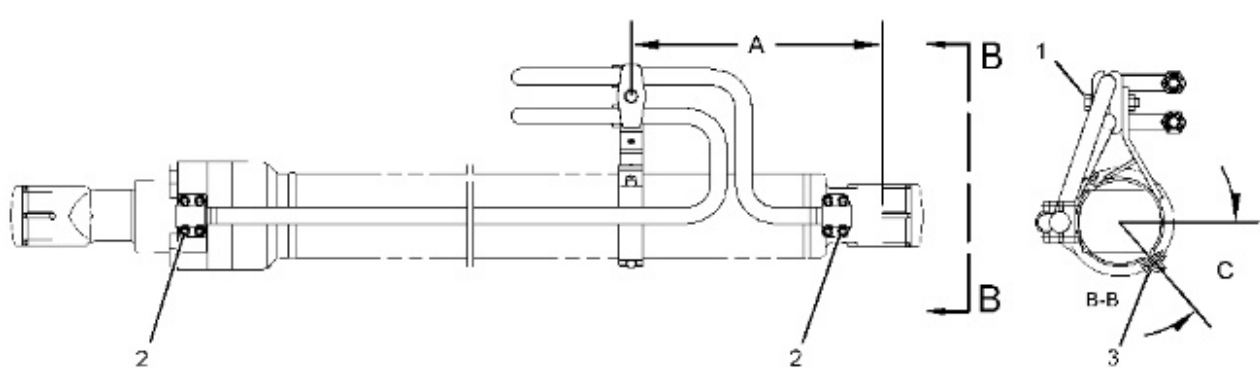


Illustration 1

g02727204

Typical example

Table 1

<b>Specification for 242-6732 Boom Cylinder Lines Gp , 331-9284 Boom Cylinder Lines Gp , 331-9286 Boom Cylinder Lines Gp , 266-8023 Boom Cylinder Lines Gp and 242-6737 Boom Cylinder Lines Gp</b>			
<b>Item</b>	<b>Qty</b>	<b>Part</b>	<b>Specification Description</b>
1	1	<b>8T-3653 Bolt</b>	Torque to $62.6 \pm 11.7 \text{ N}\cdot\text{m}$ ( $46.2 \pm 8.6 \text{ lb ft}$ ).
A	-	-	Distance from the centerline of the mounting pin to the center of the support assembly is 418.0 mm (16.46 inch).
2	8	<b>9X-6032 Bolt</b>	Torque to $51.20 \pm 9.61 \text{ N}\cdot\text{m}$ ( $37.76 \pm 7.09 \text{ lb ft}$ ).
3	2	<b>8T-4196 Bolt</b>	Torque to $31.50 \pm 5.88 \text{ N}\cdot\text{m}$ ( $278.80 \pm 52.04 \text{ lb in}$ ).
C	-	-	Orient the support assemblies to (50 degrees).



## Specifications

### 320E and 323E Excavators Machine System Specifications

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i05236389

## Boom Cylinder Lines

SMCS - 5057-BCD

S/N - AWS1-UP

S/N - KLT1-UP

S/N - LAK1-UP

S/N - NAZ1-UP

S/N - RAP1-UP

S/N - REE1-UP

S/N - SXE1-UP

S/N - TEX1-UP

S/N - TNJ1-UP

S/N - WBK1-UP

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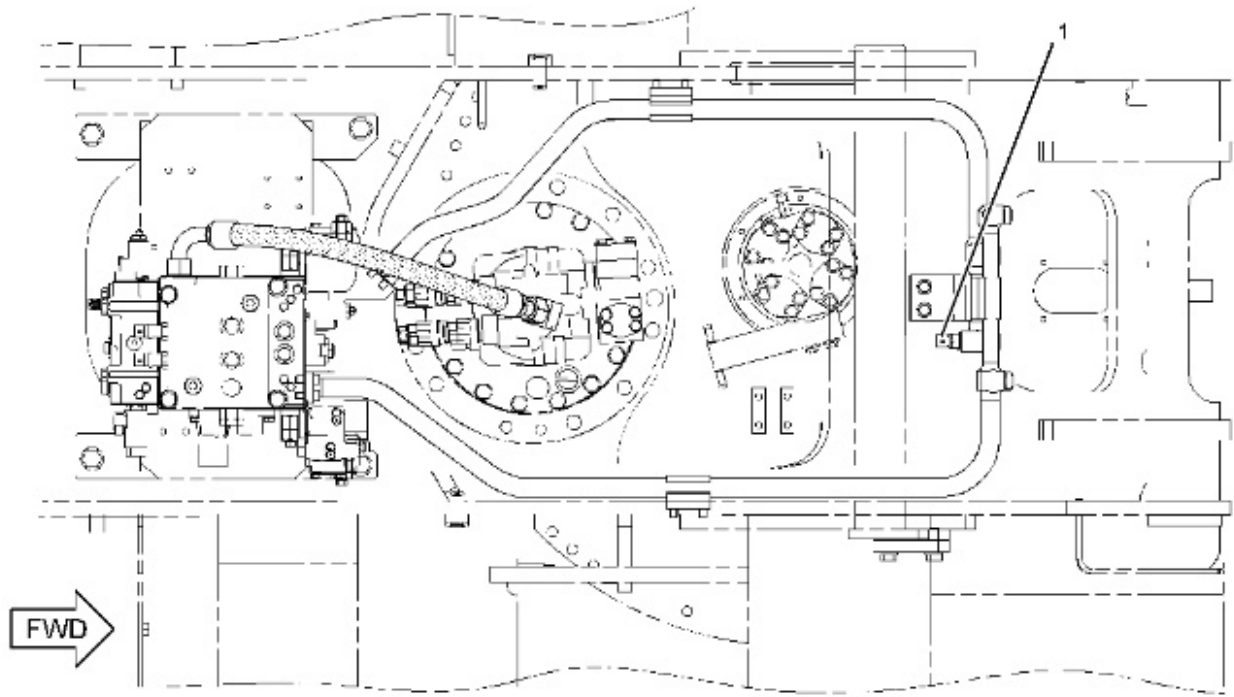


Illustration 1

g03341274

Top view

Table 1

Specification for 341-5454 Boom Cylinder Lines Gp			
Item	Qty	Part	Specification Description
1	1	338-6971 Pressure Sensor Gp	Operating voltage is 7 to 14 VDC. Out put type is PWM. Out put frequency is 500 Hz. Duty cycle is 10 to 90 %. Before assembly, apply a thin layer of hydraulic oil to out side diameter of male thread. Torque to $64 \pm 3 \text{ N}\cdot\text{m}$ ( $47 \pm 2 \text{ lb ft}$ ).

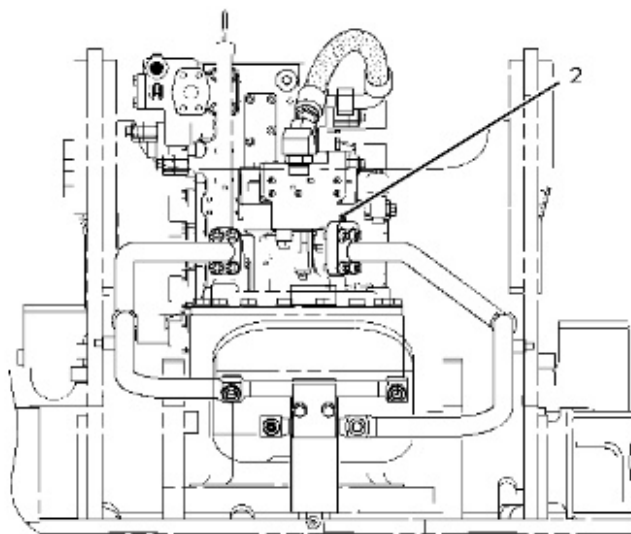


Illustration 2

g03341275

Front view

Table 2

Item	Qty	Part	Specification Description
2	1	<b>9F-2167</b> Purge Screw	Torque to $18.0 \pm 2.5 \text{ N}\cdot\text{m}$ ( $159.3 \pm 22.1 \text{ lb in.}$ )

Diesel Engines

ABS	Agco-Sisu
Akasaka	Baudouin
BMW	Bukh
Caterpillar	CHN 25/34
Cummins	Daihatsu
Detroit	Deutz
Doosan-Daewoo	Fiat
Ford	GE
Grenaa	Guascor
Hanshin	Hatz
Hino	Honda
Hyundai	Isotta
Isuzu	Iveco
John-Deere	Kelvin
Kioti	Komatsu
Kubota	Liebherr
Lister	Lombardini
MAK	MAN B&W
Mercedes	Mercruiser
Mirrlees BS	Mitsubishi
MTU	MWM
Niigata	Paxman
Perkins	Pielstick
Rolls / Bergen	Ruggerini
Ruston	Scania
Shibaura	Sisu-Valmet
SKL	Smit-Bolnes
Sole	Stork
VM-Motori	Volvo
Volvo Penta	Westerbeke
Wichmann	Yanmar

Machinery

ABG	Airman
Akerman	Ammann
Astra	Atlas Copco
Atlas Weyha.	Atlet
Bell	Bendi
Bigjoe	Bobcat
Bomag	BT
Carelift	Case
Caterpillar	Cesab
Challenger	Champion
Claas	Clark
Combilift	Crown
Daewoo-Doosan	Demag
Deutz-Fahr	Dressta

Machinery

Drott	Dynapack
Extec	Faun
Fendt	Fiat
Fiatallis	Flexicoil
Furukawa	Gehl
Genie	Grove-gmk
Halla	Hamm
Hangcha	Hanix
Hanomag	Hartl
Haulpack	Hiab
Hidromek	Hino truck
Hitachi	Hyster
Hyundai	IHI
Ingersoll-rand	JCB
JLG	John-Deere
Jungheinrich	Kalmar
Kato	Kioti
Kleeman	Kobelco
Komatsu	Kramer
Kubota	Lamborghini
Landini	Liebherr
Linde	Link-belt
Manitou	Massey-Ferg.
Mccormick	MDI-Yutani
Mitsubishi	Moxy
Mustang	Neusson
New-Holland	Nichiyu
Nissan	OK
OM-Pimespo	others-tech
Pel-Job	PH-mining
Poclain	Powerscreen
Same	Samsung
Sandvik	Scania
Schaefer	Schramm
Sennebogen	Shangli
Shibaura	Steiger
Steinbock	Steyr
Still	Sumitomo
Super-pac	Tadano
Takeuchi	TCM
Terex	Toyota
Valpadana	Venieri
Versatile	Vogele
Volvo	Weidemann
Wirtgen	Yale
YAM	Yanmar