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Rac 7-63072

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Section

1001

SAFETY, GENERAL INFORMATION AND TORQUE SPECIFICATIONS

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**Thanks very much for your reading,
Want to get more information,
Please click here, Then get the complete
manual**

JustClickHere 

NOTE:

**If there is no response to click on the link above,
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click on it.**

**Have any questions please write to me:
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SAFETY

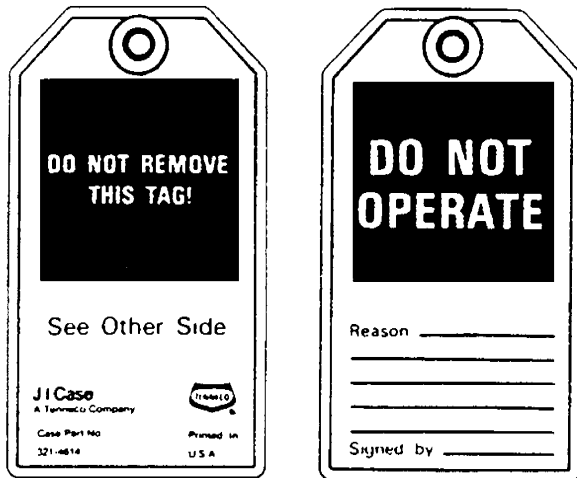


This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

SB001

To prevent injury always follow the Warning, Caution and Danger notes in this section and throughout the manual.

Put the warning tag shown below on the key for the keyswitch when servicing or repairing the machine. One warning tag is supplied with each machine. Additional tags Part Number 331-4614 are available from your service parts supplier.



1001-01



WARNING: Read the operator's manual to familiarize yourself with the correct control functions.

46-27



WARNING: Operate the machine and equipment controls from the seat position only. Any other method could result in serious injury.

48-55



WARNING: This is a one man machine, no riders allowed.

35-8



WARNING: Before starting engine, study Operator's Manual safety messages. Read all safety signs on machine. Clear the area of other persons. Learn and practice safe use of controls before operating.

It is your responsibility to understand and follow manufacturers instructions on machine operation, service and to observe pertinent laws and regulations. Operator's and Service Manuals may be obtained from your Case dealer.

SA055



WARNING: If you wear clothing that is too loose or do not use the correct safety equipment for your job, you can be injured. Always wear clothing that will not catch on objects. Extra safety equipment that can be required includes hard hat, safety shoes, ear protection, eye or face protection, heavy gloves and reflector clothing.

45-3A



WARNING: When working in the area of the fan belt with the engine running, avoid loose clothing if possible, and use extreme caution.

35-4



WARNING: When doing checks and tests on the equipment hydraulics, follow the procedures as they are written. DO NOT change the procedure.

47-44



WARNING: When putting the hydraulic cylinders on this machine through the necessary cycles to check operation or to remove air from a circuit, make sure all people are out of the way.

47-45



WARNING: Use insulated gloves or mittens when working with hot parts. 47-41A



CAUTION: Lower all attachments to the ground or use stands to safely support the attachments before you do any maintenance or service. 49-11



CAUTION: Pin sized and smaller streams of hydraulic oil under pressure can penetrate the skin and result in serious infection. If hydraulic oil under pressure does penetrate the skin, seek medical treatment immediately. Maintain all hoses and tubes in good condition. Make sure all connections are tight. Make a replacement of any tube or hose that is damaged or thought to be damaged. **DO NOT** use your hand to check for leaks, use a piece of cardboard or wood. 40-6A



CAUTION: When removing hardened pins such as a pivot pin, or a hardened shaft, use a soft head (brass or bronze) hammer or use a driver made from brass or bronze and a steel head hammer. 46-17



CAUTION: When using a hammer to remove and install pivot pins or separate parts using compressed air or using a grinder, wear eye protection that completely encloses the eyes (approved goggles or other approved eye protectors). 46-13



CAUTION: Use suitable floor (service) jacks or chain hoist to raise wheels or tracks off the floor. Always block machine in place with suitable safety stands. 40-7A



CAUTION: When servicing or repairing the machine, keep the shop floor and operator's compartment and steps free of oil, water, grease, tools, etc. Use an oil absorbing material and/or shop cloths as required. Use safe practices at all times. 40-8



CAUTION: Some components of this machine are very heavy. Use suitable lifting equipment or additional help as instructed in this Service Manual. 40-10



DANGER: Engine exhaust fumes can cause death. If it is necessary to start the engine in a closed place, remove the exhaust fumes from the area with an exhaust pipe extension. Open the doors and get outside air into the area. 48-56



WARNING: When the battery electrolyte is frozen, the battery can explode if (1), you try to charge the battery, or (2), you try to jump start and run the engine. To prevent the battery electrolyte from freezing, try to keep the battery at full charge. If you do not follow these instructions, you or others in the area can be injured. SA033

GENERAL INFORMATION

CLEANING

Clean all metal parts except bearings, in a suitable cleaning solvent or by steam cleaning. Do not use caustic soda for steam cleaning. After cleaning, dry and put oil on all parts. Clean oil passages with compressed air. Clean bearings in a suitable cleaning solvent, dry the bearings completely and put oil on the bearings.

INSPECTION

Check all parts when the parts are disassembled. Replace all parts that have wear or damage. Small scoring or grooves can be removed with a hone or crocus cloth. Complete a visual inspection for indications of wear, pitting and the replacement of parts necessary to prevent early failures.

BEARINGS

Check bearings for easy action. If bearings have a loose fit or rough action replace the bearing. Wash bearings with a suitable cleaning solvent and permit to air dry. **DO NOT DRY BEARINGS WITH COMPRESSED AIR.**

NEEDLE BEARINGS

Before you press needle bearings in a bore always remove any metal protrusions in the bore or edge of the bore. Before you press bearings into position put petroleum jelly on the inside and outside diameter of the bearings.

GEARS

Check all gears for wear and damage. Replace gears that have wear or damage.

OIL SEALS, O-RINGS AND GASKETS

Always install new oil seals, O-rings and gaskets. Put petroleum jelly on seals and O-rings.

SHAFTS

Check all shafts that have wear or damage. Check the bearing and oil seal surfaces of the shafts for damage.

SERVICE PARTS

Always install genuine Case service parts. When ordering refer to the Parts Catalog for the correct part number of the genuine Case replacement items. Failures due to the use of other than genuine Case replacement parts are not covered by warranty.

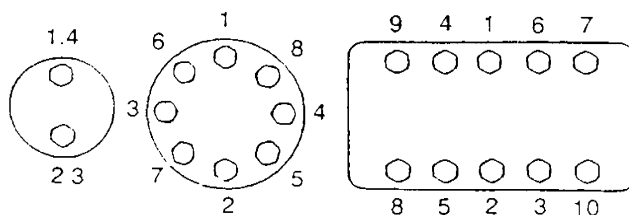
LUBRICATION

Only use the oils and lubricants specified in the Operator's or Service Manuals. Failures due to the use of non-specified oils and lubricants are not covered by warranty.

STANDARD TORQUE DATA FOR CAP SCREWS AND NUTS

TIGHTENING OF CAP SCREWS, NUTS

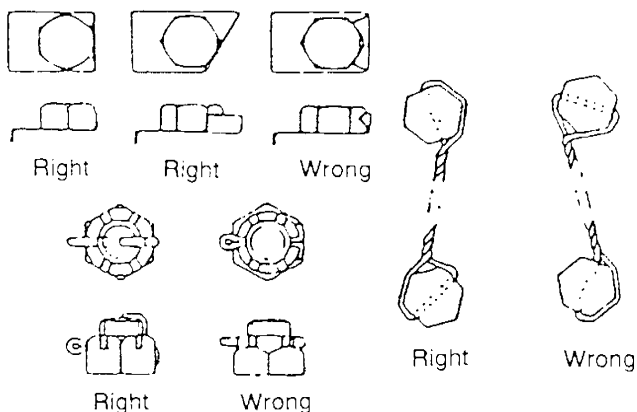
Tighten alternately so that tightening torque can be applied evenly. The numbers in the figure below indicate the order of tightening.



1001-02

Apply engine oil to the thread portion of the cap screw so that uniform tightening torque is obtained.

The cap screws and nuts that cannot be inspected externally or those as indicated in the assembly/installation sections should be saftied with lockwire, cotter pin or bent washer.



1001-03

Cap screws which have had Loctite used (white residue remains after removal) should be cleaned with light oil or suitable cleaning solvent and dried. Apply 2-3 drops of Loctite to the thread portion of the cap screw and then tighten.

TORQUE TABLE

Tighten cap screws and nuts according to the table below if there are no other special instructions.

Cap Screw Name Size (Size)			M6	M8	M10	M12	M14	M16	M18	M20
Cap Screw	Spanner	[mm]	10	13	17	19	22	24	27	30
		[in.]	0.39	0.51	0.67	0.75	0.87	0.95	1.06	1.18
	Tightening torque	[Nm]	6.9	15.7	32.3	58.8	98.0	137.2	196.0	274.0
		[lb-ft]	5.1	11.6	23.9	43.4	72.3	101.2	144.6	202.4
Socket Head Cap Screw	Spanner	[mm]	5	6	8	10	12	14	14	17
		[in.]	0.20	0.24	0.32	0.39	0.47	0.55	0.55	0.67
	Tightening torque	[Nm]	8.8	21.6	42.1	78.4	117.6	176.4	245.0	343.0
		[lb-ft]	6.5	15.9	31.1	57.8	86.8	130.1	180.8	253.1

Section 1002

SPECIFICATIONS

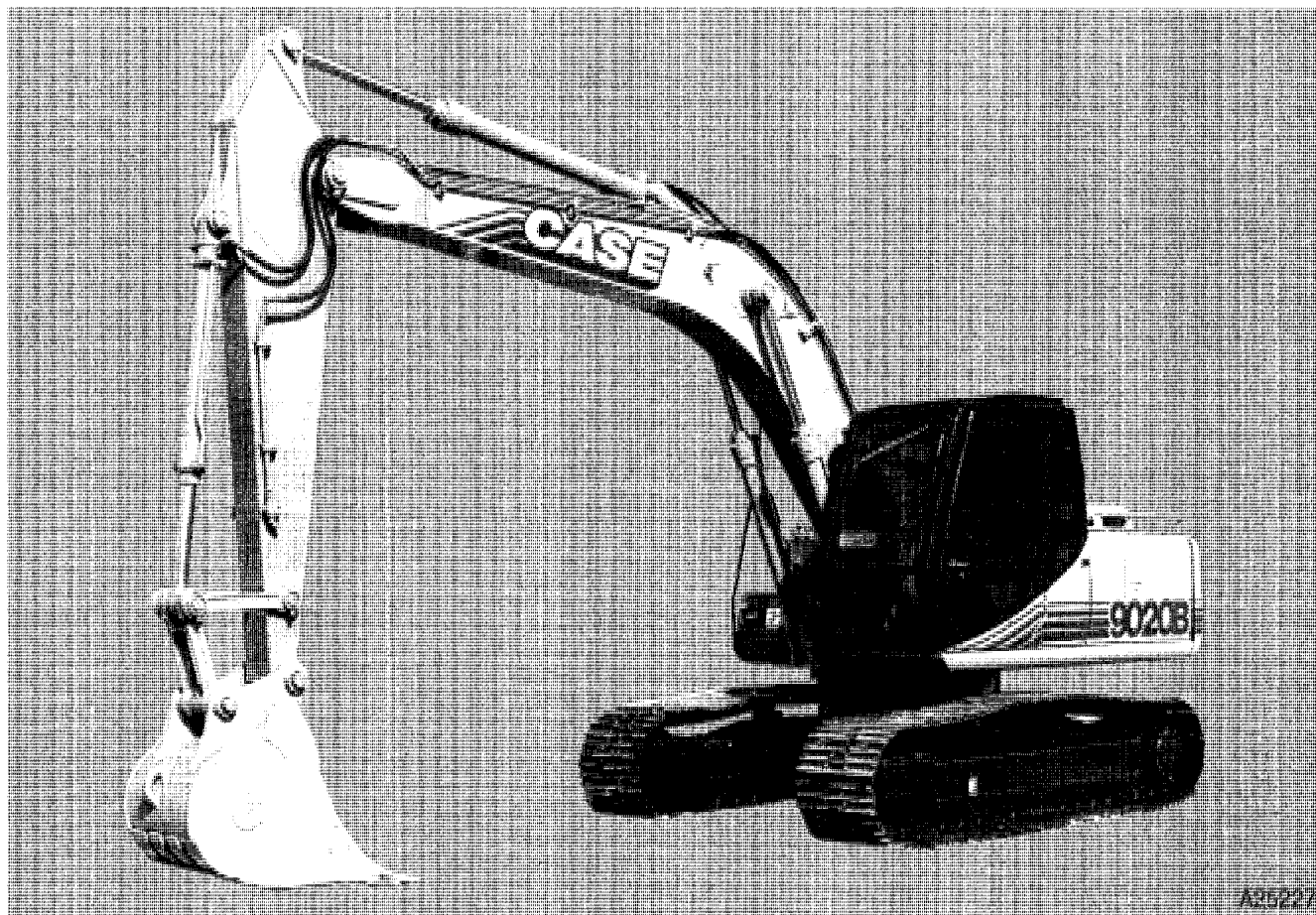
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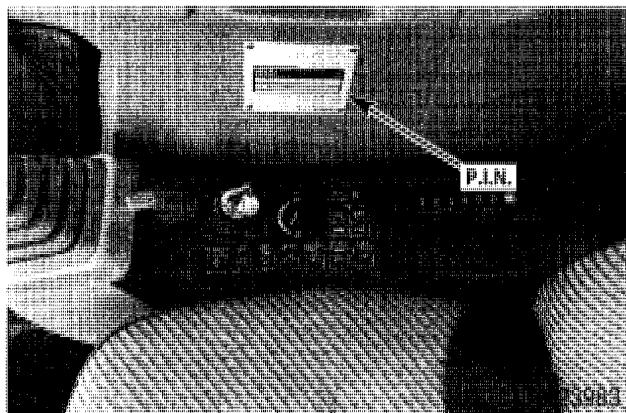
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MODEL AND PIN NUMBERS

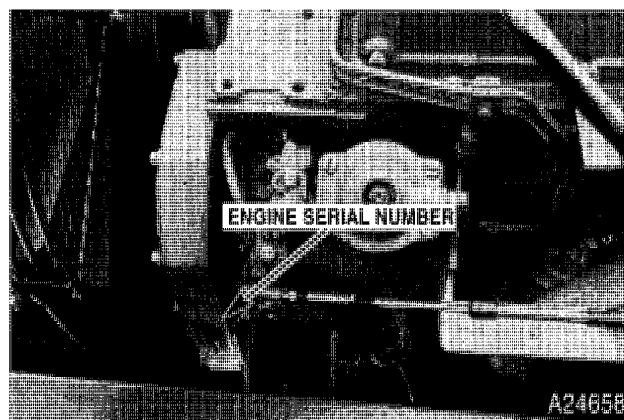
When ordering parts or when requesting information or assistance, always give the identification numbers of your machine. Write the model and PIN numbers of your machine on the lines below.



A25227



A3983



A24658

Machine Model Number _____

Machine PIN Number _____

Engine Serial Number _____

GENERAL SPECIFICATIONS

IMPORTANT: *This engine was made by using the metric system. All measurements and checks must be made with metric tools to make sure of accurate readings when inspecting parts.*

Capacities

Engine Crank Case Capacity	9 liters	2.4 US gallons
Engine Cooling System	15.7 liters	4.1 US gallons
Fuel Tank	240 liters	63 US gallons
Hydraulic Oil Tank Capacity	73 liters	19 US gallons
Total Hydraulic System Capacity	142 liters	38 US gallons
Final Drive Case Capacity	3 liters	0.8 US gallons
Swing Drive Case Capacity	5.0 liters	1.3 US gallons
Track Front Idlers	160 cc	5.28 oz
Track Lower Rollers	190 cc	6.27 oz
Track Upper Roller	35 to 40 cc	1.16 to 1.32 oz

NOTE: *These capacities are only a guide to the quantities. Always use the dipstick, sight gauges or level plug to make sure that fluid levels are correct.*

Drawbar Pull

Drawbar Pull	13100 kg	28880 lb
--------------------	----------	----------

Drive Speed

Drive Speed: High	5.5 km/h	3.4 mph
Drive Speed: Middle	3.8 km/h	2.4 mph
Drive Speed: Low	2.2 km/h	1.3 mph

Electrical System

Type of System	24 volts negative ground
Alternator	
Manufacturer	Robert Bosch
Output	45 amperes
Batteries	
Number of batteries required	2
Voltage of each battery	12 volts
Reserve capacity	160 minutes
Cold cranking capacity at -17°C (0°F)	800 amperes
Load for capacity (load) test	400 amperes
Starter Motor	
Manufacturer	Nippondenso
Voltage	24 volts

Fluids and Lubricants

Batteries.....	add drinking or distilled water
Engine Coolant Solution	refer to page 15
Engine Lubrication.....	refer to page 15
Fuel.....	refer to entry on page 5
Hydraulic System	CASE MS-1210 TCH FLUID
Final Drive Lubricant	API GL-4 90
Swing Drive Case Lubricant.....	API GL-4 90
Track Roller and Front Idler Lubricant.....	Case IH No. 1 Single Grade engine oil SAE 80
Turntable Ring Gear Lubricant.....	No. 2 EP lithium grease
Grease Fitting Lubricant	No. 2 EP lithium grease

Fuel

Use Number Two Diesel fuel having a grade of ASTM D 975-Grade 2-D.

Hydraulic System

Hydraulic Pump

Kayaba PSY2-60T KP1009 (KNJ1817)

Displacement.....	55 cm ³ /rev x 2	3.35 in ³ /rev x 2
Working Pressure: Maximum	343 Bar	4980 psi
Speed.....		2230 rpm
Maximum Flow.....	138 l/min	36.5 gpm

Hydraulic Oil Operating Temperature	10 ~ 70°C	50 ~ 158°F
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Circuit Relief Valves:

Main Relief: standard.....	294 to 333 Bar	4266 to 4835 psi
Main Relief: pressure raising.....	324 to 363 Bar	4693 to 5261 psi
Boom Port Relief: raising	343 to 373 Bar	4977 to 5404 psi
Boom Port Relief: lowering.....	279 to 309 Bar	4053 to 4479 psi
Bucket Port Relief: open, close	343 to 373 Bar	4977 to 5404 psi
Arm Port Relief: open, close	343 to 373 Bar	4977 to 5404 psi
Swing Port Relief; left, right.....	265 to 294 Bar	3839 to 4266 psi
Left Travel Port Relief: rear, front	324 to 363 Bar	4693 to 5261 psi
Right Travel Port Relief: rear, front.....	324 to 363 Bar	4693 to 5261 psi
Pilot Relief.....	37 to 42 Bar	540 to 611 psi

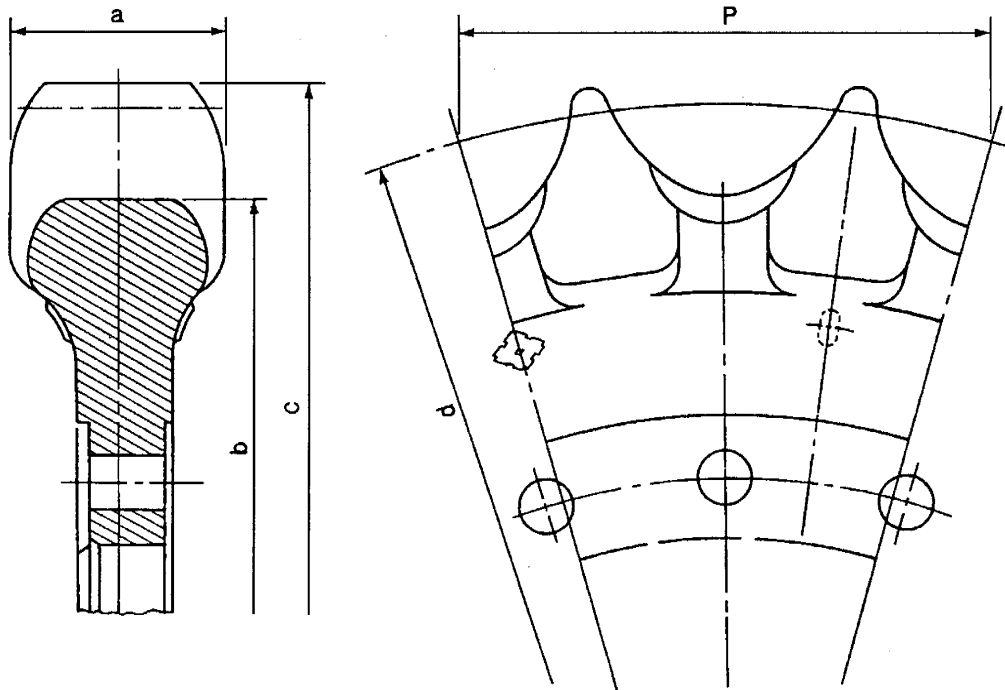
Tracks, Rollers and Idlers

Lower Mechanism (with standard 500 grouser shoe)

Total Length	3550 mm	11 ft 7.9 in.
Total Width	2490 mm	8 ft 2.1 in.
Total Weight (approximate)	4090 kg	9017 lb

Drive Sprocket

Sprocket:		
a standard value	66 mm	2.60 in.
service limit	60 mm	2.36 in.
b standard value	582.5 mm	22.95 in.
service limit	576.5 mm	22.71 in.
c standard value	659 mm	25.96 in.
service limit	653 mm	25.73 in.
d standard value	644.6 mm	25.40 in.
service limit	—	—
P standard value	190 mm	7.49 in.
service limit	—	—



Drive Sprocket

NOTE: Refer to Gauge Table for measurement gauges to be used.

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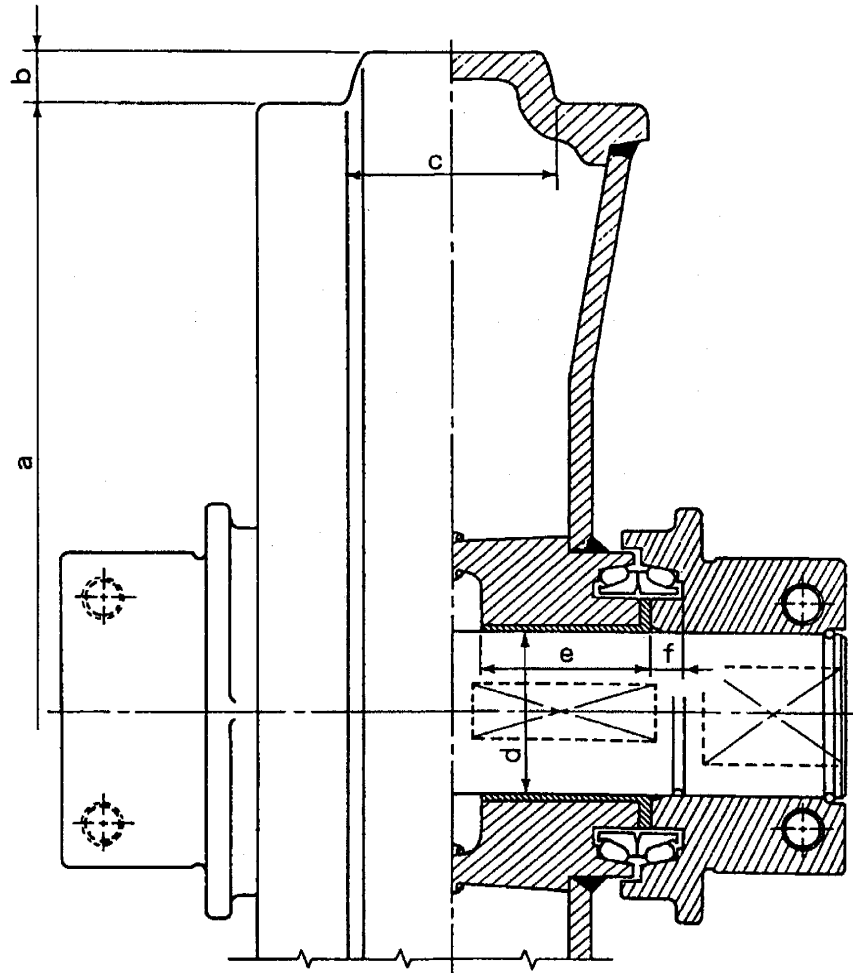
Take-Up Roller
Take-Up Roller:

Shaft:

Bushing:

Hub:

a	standard value.....	494 mm	19.46 in.
	service limit	490 mm	19.31 in.
b	standard value.....	21 mm	0.83 in.
	service limit	—	—
c	standard value.....	84 mm	3.31 in.
	service limit	80 mm	3.15 in.
d	standard value.....	65 mm	2.56 in.
	service limit	64.5 mm	2.54 in.
d	standard value.....	65 mm	2.56 in.
	service limit	65.8 mm	2.59 in.
e	standard value.....	69 mm	2.72 in.
	service limit	68.6 mm	2.70 in.
f	standard value.....	12.4 mm	0.49 in.
	service limit	11.9 mm	0.47 in.



Take-Up Roller

NOTE: Refer to Gauge Table for measurement gauges to be used.

JS00066A

Upper Roller

Carrier Roller:

a	standard value	120 mm	4.73 in.
	service limit.....	112 mm	4.41 in.
b	standard value	10 mm	0.39 in.
	service limit	—	—

Shaft:

c	standard value	85 mm	3.35 in.
	service limit.....	79 mm	3.11 in.
d	standard value	46 mm	1.81 in.
	service limit.....	45.5 mm	1.79 in.

Bushing:

d	standard value	46 mm	1.81 in.
	service limit.....	46.8 mm	1.84 in.
e	standard value	83 mm	3.27 in.
	service limit.....	82.6 mm	3.25 in.

Thrust Plate:

f	standard value	5.5 mm	0.22 in.
	service limit.....	5.0 mm	0.20 in.

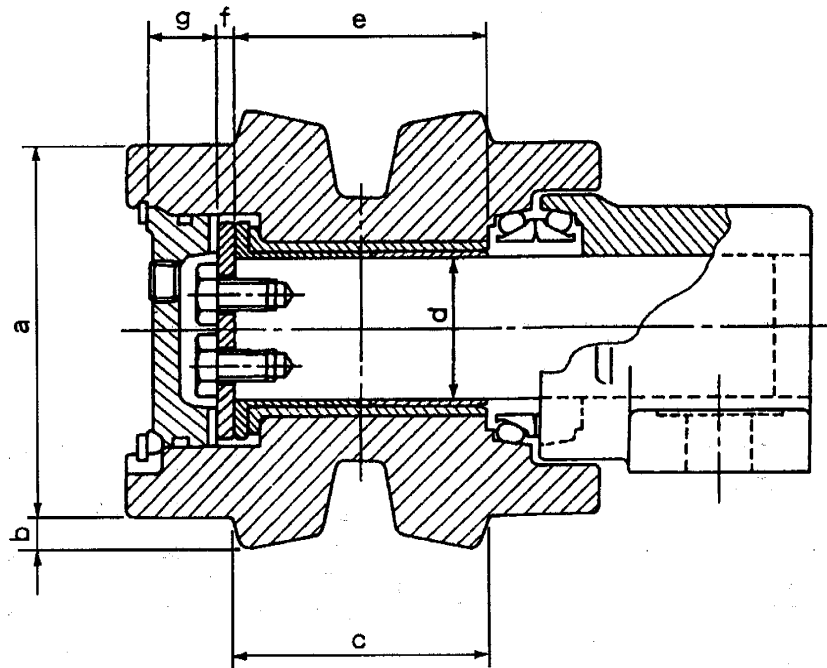
Cover:

g	standard valve	23 mm	0.91 in.
	service limit.....	22.5 mm	0.89 in.

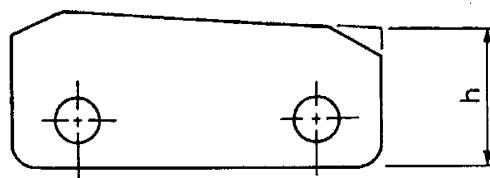
Slide Plate

Plate:

h	standard value	50.7 mm	2.00 in.
	service limit.....	40 mm or until chamfering is gone	1.58 in. or until chamfering is gone



Upper Roller



Slide Plate

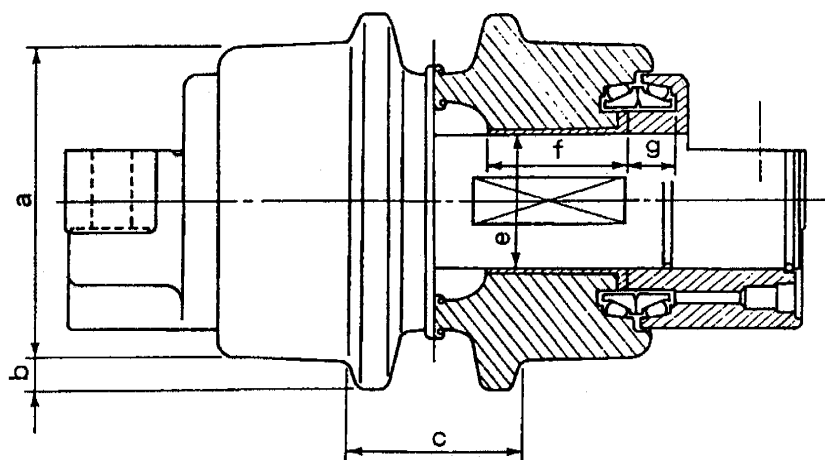
NOTE: Refer to Gauge Table for measurement gauges to be used.

JS00067A

Lower Roller (Inside)

Track Roller (Inside):

a	standard value.....	150 mm	5.91 in.
	service limit.....	142 mm	5.59 in.
b	standard value.....	15 mm	0.59 in.
	service limit.....	—	—
c	standard value.....	86 mm	3.39 in.
	service limit.....	80 mm	3.15 in.
e	standard value.....	65 mm	2.56 in.
	service limit.....	64.5 mm	2.54 in.
e	standard value.....	65 mm	2.56 in.
	service limit.....	65.8 mm	2.59 in.
f	standard value.....	69 mm	2.72 in.
	service limit.....	68.6 mm	2.70 in.
g	standard value.....	28.8 mm	1.13 in.
	service limit.....	28.3 mm	1.11 in.



Lower Roller (Inside)

NOTE: Refer to Gauge Table for measurement gauges to be used.

JS00068A

Lower Roller (Outside)

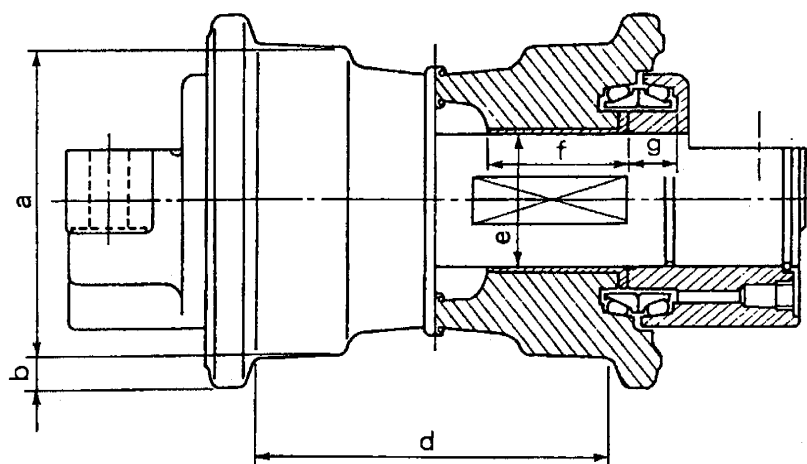
Track Roller:

a	standard value	150 mm	5.91 in.
	service limit.....	142 mm	5.59 in.
b	standard value	15 mm	0.59 in.
	service limit	—	—
d	standard value	173 mm	6.82 in.
	service limit.....	179 mm	7.05 in.
e	standard value	65 mm	2.56 in.
	service limit.....	64.5 mm	2.54 in.
e	standard value	65 mm	2.56 in.
	service limit.....	65.8 mm	2.59 in.
f	standard value	69 mm	2.72 in.
	service limit.....	68.6 mm	2.70 in.
g	standard value	28.8 mm	1.13 in.
	service limit.....	28.3 mm	1.11 in.

Shaft:

Bushing:

Collar:



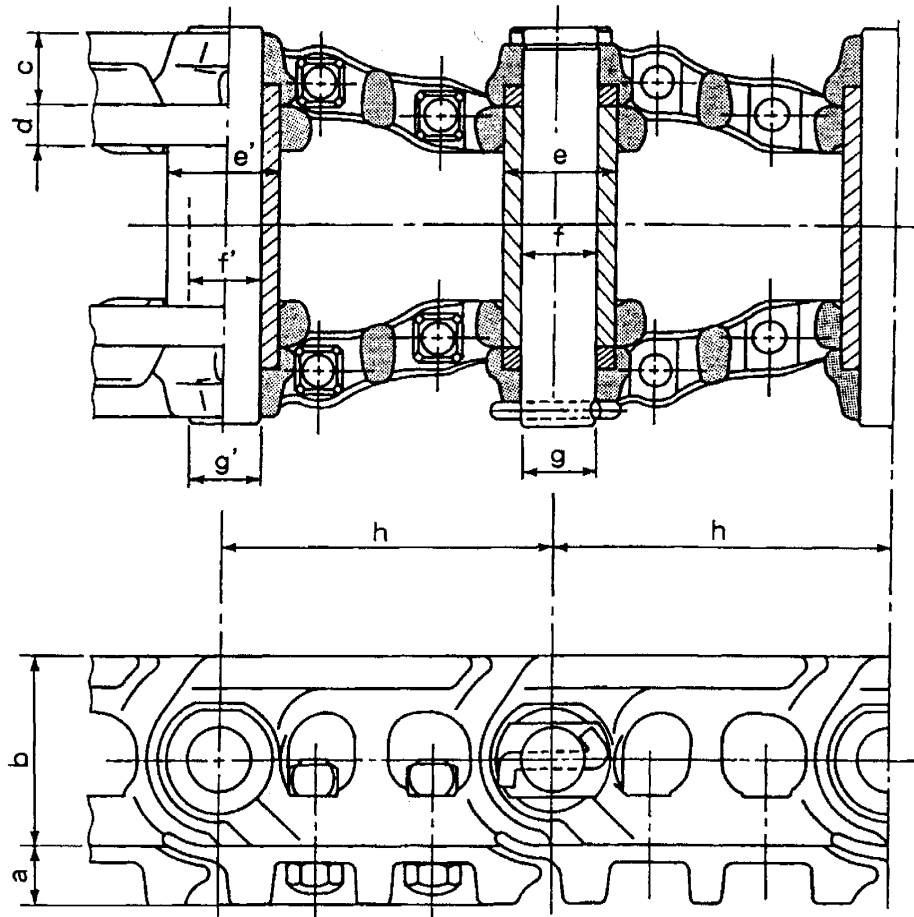
Lower Roller (Outside)

NOTE: Refer to Gauge Table for measurement gauges to be used.

JS00069A

Track Shoe (Grouser Shoe)

Shoe Plate:	a	standard value.....	34.5 mm	1.36 in.
		service limit	21.5 mm	0.85 in.
Link:	b	standard value.....	106 mm	4.18 in.
		service limit	101 mm	3.98 in.
	c	standard value.....	35 mm	1.38 in.
		service limit	33 mm	1.30 in.
Master Bushing:	d	standard value.....	23 mm	0.91 in.
		service limit	21 mm	0.83 in.
	e	standard value.....	58.72 mm	2.31 in.
		service limit	57.5 mm	2.27 in.
Master Pin:	f	standard value.....	37 mm	1.46 in.
		service limit	38 mm	1.50 in.
Link Pitch:	g	standard value.....	36.3 mm	1.43 in.
		service limit	35.5 mm	1.40 in.
Track Bushing:	h	standard value.....	190 mm	7.49 in.
		service limit	195 mm	7.68 in.
	e'	standard value.....	58.72 mm	2.31 in.
		service limit	57.5 mm	2.27 in.
Track Pin:	f'	standard value.....	37 mm	1.46 in.
		service limit	38 mm	1.50 in.
	g'	standard value.....	36.65 mm	1.44 in.
		service limit	35.5 mm	1.40 in.



Track Shoe (Grouser Shoe)

NOTE: Refer to Gauge Table for measurement gauges to be used.

JS00070A