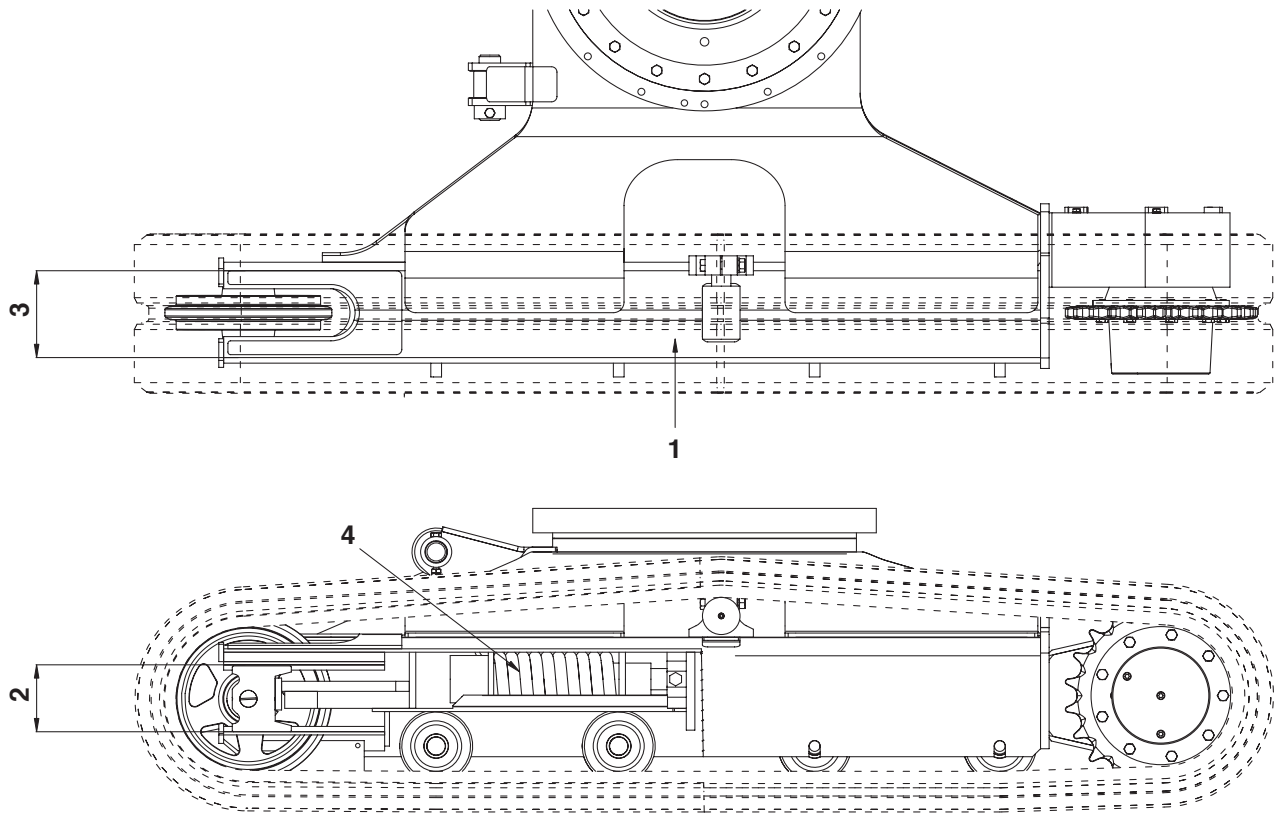


## Track frame spring

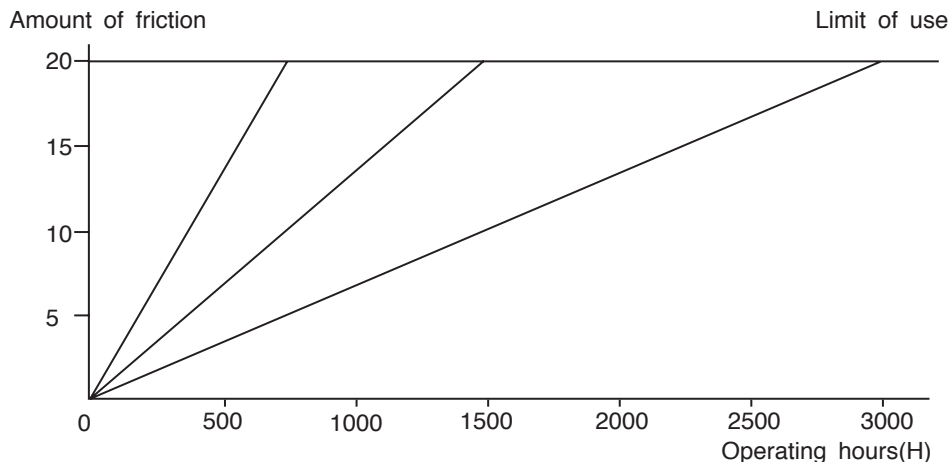


FG008462

Figure 12

No.	Item	Criteria		Remarks	
			Limit		
1	Deformed frame	Bending	5(Overall length of track frame	Bent	
		Distorted	10(Distortion between left and right crawler frames)		
		Widened idler	5 mm		
2	Gap between upper and lower sides of idler guide	Standards	Limits	Build up or replace	
		Track frame	126 mm		131 mm
3	Gap between left and right of idler guide	Idler frame	124 mm	119 mm	Build up or replace
		Track frame	166 mm	171 mm	
4	Track spring (Standards)	Idler support	162±1.0 mm	157 mm	Replace
		Free length	Installed load	Installed length	
		286.5 mm	2,700 kg	233.5 mm	

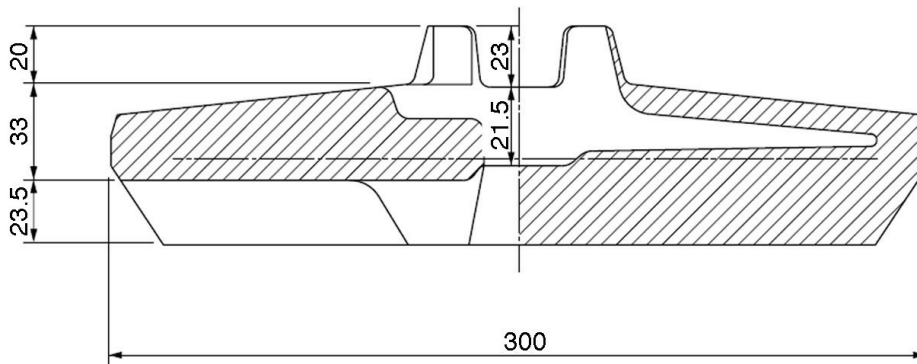
# Rubber crawler features



FG008467

**Figure 13**

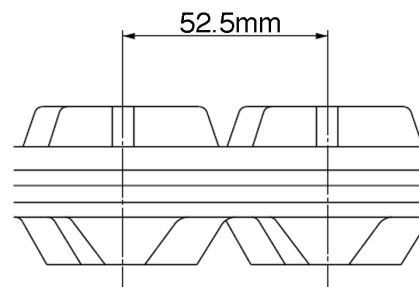
The amount of friction of the rubber crawler sets the limit of use. However, it is subject to change depending upon the work condition and environment.



FG008468

**Figure 14**

Item		DX35Z
Distance between centers of crawlers		4,390±12
Scale cord	Rigid	800 kg
Scale cord	No. of coils	40±4
Range of temperature of use		-25°C~55°C
Width x Pitch		300x52.5 mm

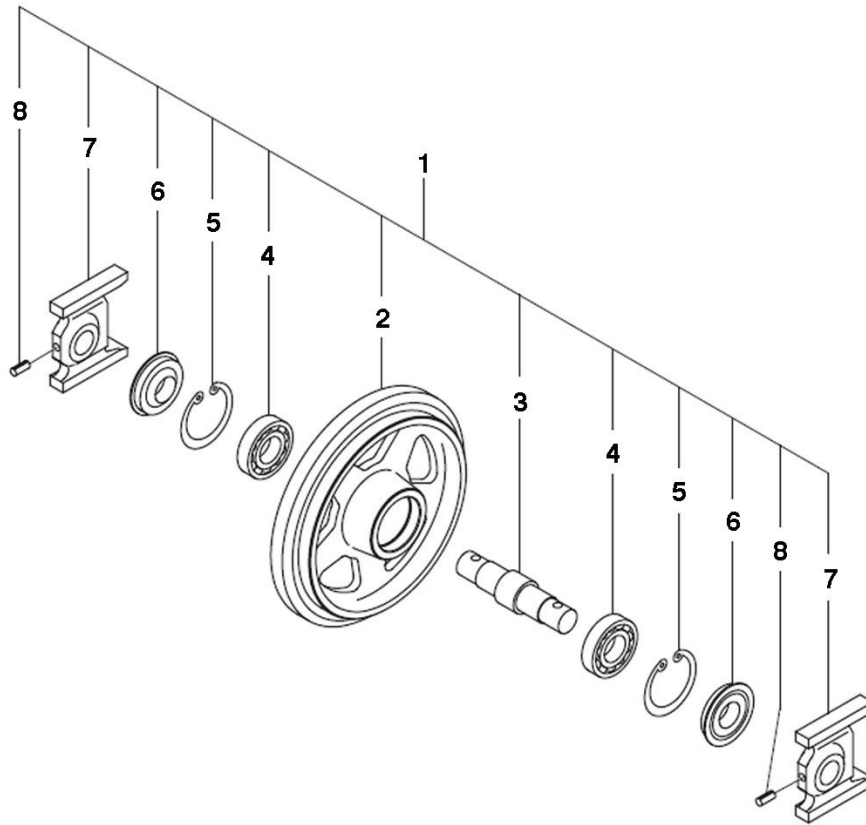


FG008469

**Figure 15**

# IDLER

## Construction



FG008470

Figure 16

Reference Number	Description
1	Front idler assembly
2	Idler
3	Shaft
4	Bearing (BL-207)

Reference Number	Description
5	C-type stopper ring
6	Oil seal (QLF 35, 72, 12, 19.5)
7	Guide
8	Spring pin (Ø10x60L)

# Disassembly and Reassembly

## Disassembly procedures

1. Refer to "Crawler Disassembly" to remove the crawlers and then idler assembly.
2. Remove the spring pin(8) from the guide(7).
3. Remove the guide(7) from the shaft(3).
4. Remove the oil seal(6) using a screw driver.
  - Once removed, the oil seal should not be reused.
5. Remove the C-type stopper ring(5), bearing(4), and shaft(3).

## Reassembly procedures

1. For reassembly, reverse the disassembly procedures.
  - Clean segregated parts.
  - Coat clean gear oil or engine oil(80cc) before assembling the oil seal(6).
  - Refer "Crawler Installation" for crawler reassembly.

## Idler (for steel crawlers)

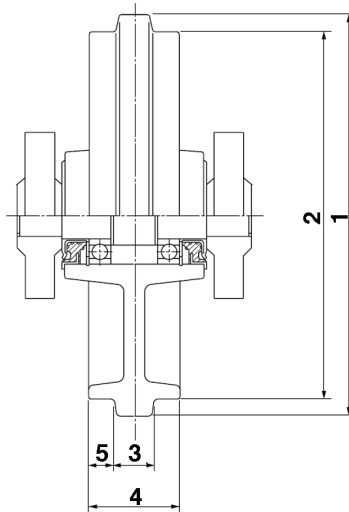


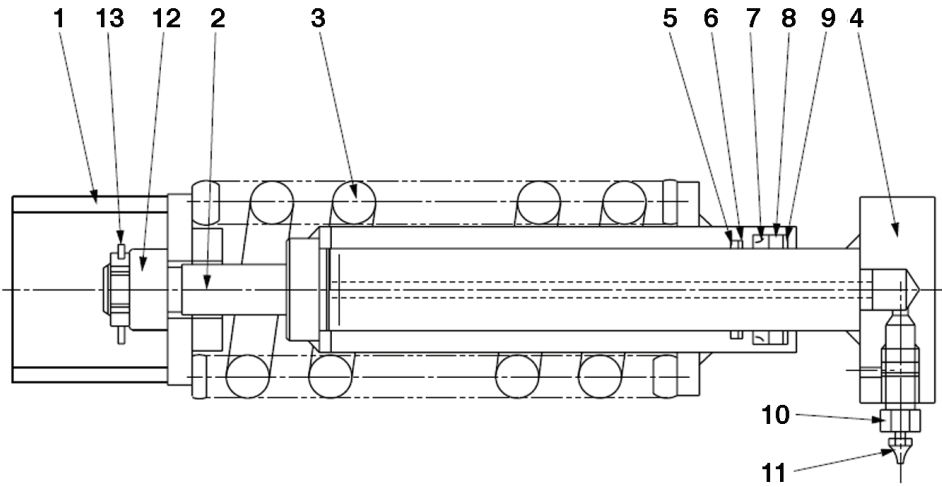
Figure 17

FG008471

No.	Item	Unit	Standard	Limits	Remarks
1	Outside diameter	mm	Ø311	Ø287	Build up or replace
2	Contact outside diameter	mm	Ø269	Ø265	Build up or replace
3	tab width	mm	26.2	22	Build up or replace
4	Overall width	mm	65	60	Build up or replace
5	Contact width	mm	19.4	24	Build up or replace
6	Lubricant volume	cc	80	80	Gear oil

# TRACK TENSION ADJUSTING CYLINDER

## Construction



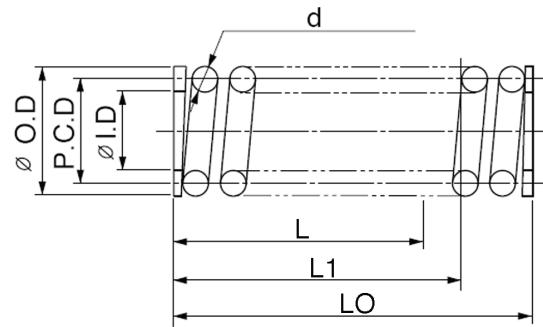
FG008472

Figure 18

Reference Number	Description
1	Plate
2	Cylinder
3	Spring
4	Rod
5	O-ring (IB-P40)
6	Backup Ring (T2-P40)
7	Dust Seal (DKR-40)

Reference Number	Description
8	Spacer
9	Snap Ring (H-52)
10	Cartridge Valve
11	Grease Nipple (PT1/8-A)
12	Castle nut
13	Split pin

# Spring Specifications



FG008473

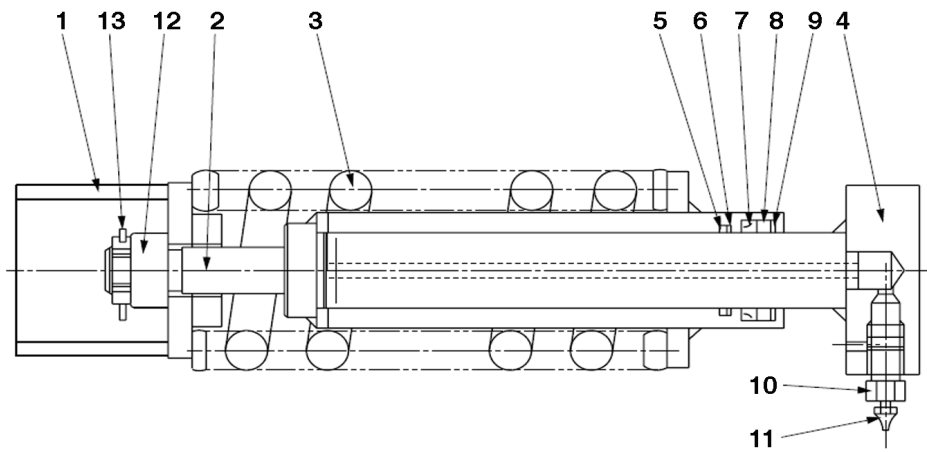
Figure 19

Designation	Dimensions	Designation	Dimensions
No. of active coils	7.5	Minimum closed length	195.1
Total No. of coils	9	Outside diameter	107
Spring constant(kg/mm)	50.9	Mean diameter	85
Set load(kg)	2698	Inside diameter	63
Compressive load(kg)	4650	Wire diameter	22
Free length(mm):L0	286.5	Set length	233.5

## Disassembly and Reassembly

Be sure to use a special tool when removing the spring.

Take care as the spring may pop out.



FG008472

Figure 20

Reference Number	Description
1	Plate
2	Cylinder
3	Spring
4	Rod
5	O-ring
6	Backup Ring
7	Dust Seal

Reference Number	Description
8	Spacer
9	Snap Ring
10	Cartridge Valve
11	Grease Nipple
12	Castle nut
13	Split pin
14	Yoke

# Disassembly and Reassembly Procedures

## Disassembly Procedure

1. Remove the crawlers and idlers.
2. Remove the idler yoke(14).
3. Use a press to relieve the spring force.
4. Remove the split pin(14) and castle nut(12).
5. Remove the spring(3) from the tension cylinder tube(2).
6. Remove the cartridge valve(10) and grease nipple(11) together from the tension cylinder rod(4).
7. Remove the cylinder rod(4) from the tension cylinder tube(2).
8. Remove the snap ring(9), and then remove the spacer(8), dust seal(7), backup ring(6), and O-ring(5).

## Reassembly Procedure

1. Reverse the disassembly sequence for reassembly operation.
  - Install the O-ring(5), backup ring(6), Dust seal(7), and spacer(8) to the cylinder tube(2).

To prevent damage, coat great to the O-ring and dust seal at assembly.
  - Assemble the cylinder(4) to the cylinder tube(2). First, inject great into the cylinder tube. Install the cartridge valve(10) into the tension adjusting cylinder rod until two threaded portions contact the threaded hole, and then assemble the cylinder rod. At this time, ensure that grease is drained from the grease drain port, and then tighten the cartridge valve.
    - Cartridge valve tightening torque: 6~9 kg·m
  - Use a special tool to install the spring(3) to the cylinder tube(2) and secure the spring in place with a castle nut(12).
  - After adjusting the spring set length, bend the split pin(13) completely.
    - Spring set length: 233.5 mm



## CAUTION!

---

**Release air from the cylinder tube completely before assembly.**

**Be sure to apply grease to the piston area on the cylinder tube rod before assembly.**

---