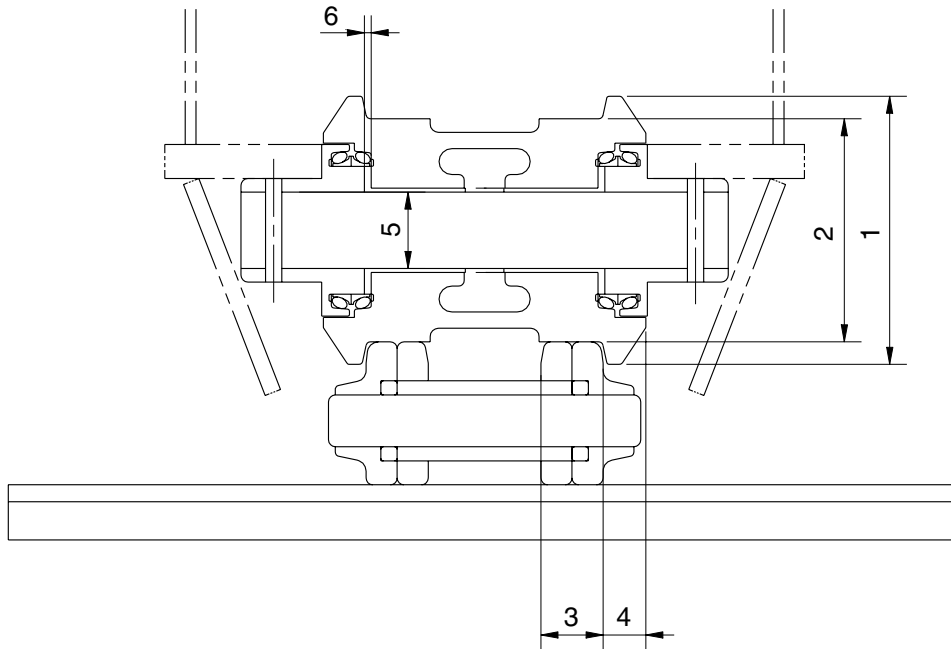


## GROUP 3 TRACK AND WORK EQUIPMENT

### 1. TRACK

#### 1) TRACK ROLLER

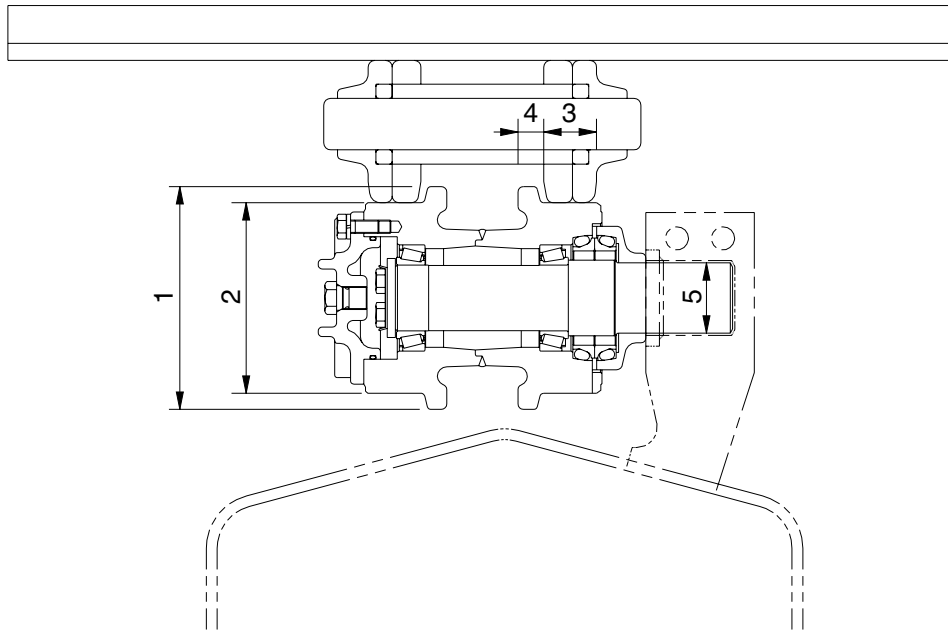


21037MS01

Unit : mm

| No. | Check item                           | Criteria              |                |                 |                                     | Remedy                 |
|-----|--------------------------------------|-----------------------|----------------|-----------------|-------------------------------------|------------------------|
|     |                                      | Standard size         |                | Repair limit    |                                     |                        |
| 1   | Outside diameter of flange           | ø 190                 |                | -               |                                     | Rebuild or replace     |
| 2   | Outside diameter of tread            | ø 150                 |                | ø 138           |                                     |                        |
| 3   | Width of tread                       | 36.5                  |                | 42.5            |                                     |                        |
| 4   | Width of flange                      | 26.5                  |                | -               |                                     |                        |
| 5   | Clearance between shaft and bushing  | Standard size<br>ø 65 | tolerance      |                 | Standard clearance<br>0.325 to 0.47 | Clearance limit<br>2.0 |
|     |                                      |                       | Shaft          | Hole            |                                     |                        |
|     |                                      |                       | -0.25<br>-0.35 | +0.12<br>+0.075 |                                     |                        |
| 6   | Side clearance of roller (both side) | Standard clearance    |                | Clearance limit |                                     | Replace                |
|     |                                      | 0.1 to 1.3            |                | 2.0             |                                     |                        |

## 2) CARRIER ROLLER

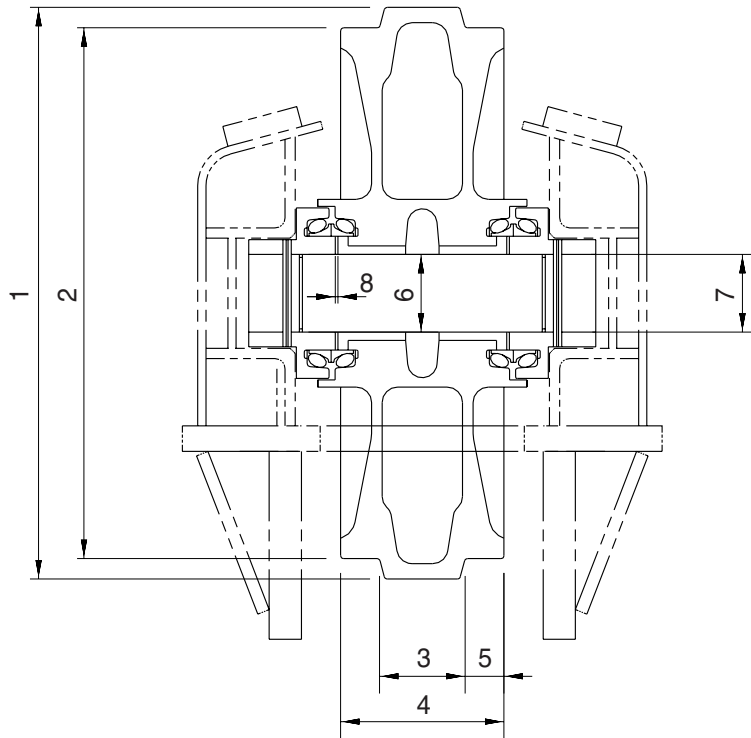


21037MS02

Unit : mm

| No. | Check item                          | Criteria                                |  |                    | Remedy             |                 |
|-----|-------------------------------------|---|--|--------------------|--------------------|-----------------|
|     |                                     | Standard size                           |  | Repair limit       |                    |                 |
| 1   | Outside diameter of flange          | ø 175                                   |  | -                  | Rebuild or replace |                 |
| 2   | Outside diameter of tread           | ø 151                                   |  | ø 141              |                    |                 |
| 3   | Width of tread                      | 37.25                                   |  | 42.25              |                    |                 |
| 4   | Width of flange                     | 18.25                                   |  | -                  |                    |                 |
| 5   | Clearance between shaft and bushing | Standard size & Tolerance               |  | Standard clearance | Clearance limit    | Replace bushing |
|     |                                     | Shaft                                   | Hole                                     |                    |                    |                 |
|     |                                     | ø 41.27 <sup>0</sup> / <sub>+0.05</sub> | ø 41.5 <sup>+0.2</sup> / <sub>-0.1</sub> | 0.13 to 0.48       | 1.2                |                 |

### 3) IDLER

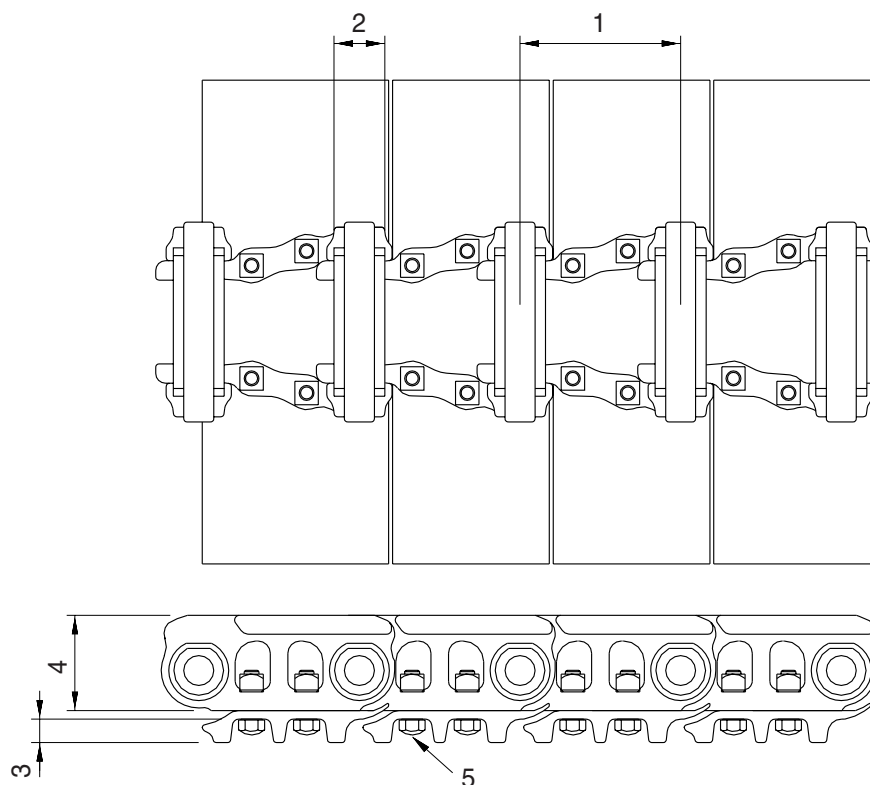


21037MS03

Unit : mm

| No. | Check item                          | Criteria                                      |   |                    |                 | Remedy             |
|-----|-------------------------------------|---|---|--------------------|-----------------|--------------------|
|     |                                     | Standard size                                 |   | Repair limit       |                 |                    |
| 1   | Outside diameter of flange          | ø 552   |   | -                  |                 | Rebuild or replace |
| 2   | Outside diameter of tread           | ø 507   |   | ø 497              |                 |                    |
| 3   | Width of protrusion                 | 67  |   | -                  |                 |                    |
| 4   | Total width                         | 135   |   | -                  |                 |                    |
| 5   | Width of tread                      | 34  |   | 39                 |                 |                    |
| 6   | Clearance between shaft and bushing | Standard size & Tolerance                     |   | Standard clearance | Clearance limit | Replace bushing    |
|     |                                     | Shaft   | Hole  |                    |                 |                    |
|     |                                     | ø 70 $\begin{matrix} 0 \\ -0.03 \end{matrix}$ | ø 70.3 $\begin{matrix} +0.05 \\ 0 \end{matrix}$   | 0.3 to 0.38        | 2.0             |                    |
| 7   | Clearance between shaft and support | ø 70 $\begin{matrix} 0 \\ -0.03 \end{matrix}$ | ø 70 $\begin{matrix} +0.07 \\ +0.03 \end{matrix}$ | 0.3 to 0.1         | 1.2             | Replace            |
| 8   | Side clearance of idler (both side) | Standard clearance                            |   | Clearance limit    |                 | Replace bushing    |
|     |                                     | 0.25 to 1.15                                  |   | 2.0                |                 |                    |

#### 4) TRACK

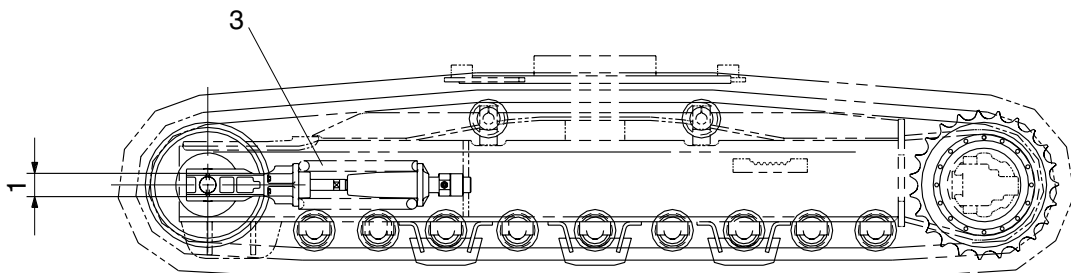
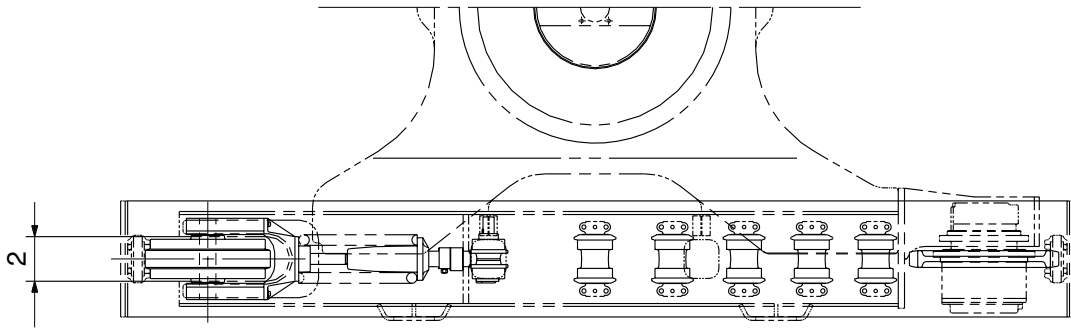


21037MS04

Unit : mm

| No. | Check item                                     | Criteria  |              | Remedy             |
|-----|--|---|--------------|--------------------|
|     |  | Standard size   | Repair limit |                    |
| 1   | Link pitch                                     | 171.45  | 175.65       | Turn or replace    |
| 2   | Outside diameter of bushing                    | ∅ 53.75   | ∅ 43.95      |                    |
| 3   | Height of grouser                              | 25  | 16           | Rebuild or replace |
| 4   | Height of link                                 | 94.5  | 86.5         |                    |
| 5   | Tightening torque<br>(Tightening angle method) | Initial tightening torque : $42 \pm 4 \text{ kgf} \cdot \text{m}$<br>Additional tightening angle : $32^\circ$ |              | Retighten          |

## 5) TRACK FRAME AND RECOIL SPRING

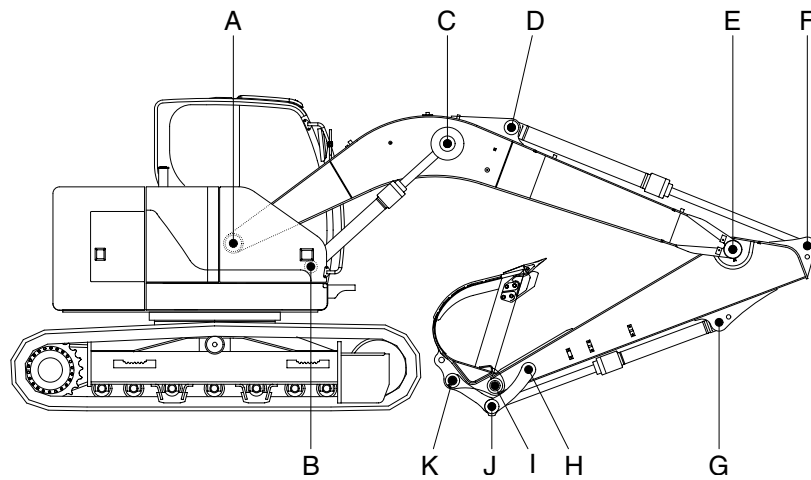


21037MS05

Unit : mm

| No. | Check item                      | Criteria      |                     |                   |              | Remedy             |         |
|-----|---------------------------------|---------------|---------------------|-------------------|--------------|--------------------|---------|
|     |                                 |               | Standard size       | Tolerance         | Repair limit |                    |         |
| 1   | Vertical width of idler guide   | Track frame   | 103                 | +2<br>0           | 107          | Rebuild or replace |         |
|     |                                 | Idler support | 100                 | 0<br>-0.5         | 98           |                    |         |
| 2   | Horizontal width of idler guide | Track frame   | 192                 | +2<br>0           | 196          |                    |         |
|     |                                 | Idler support | 190                 | -                 | 188          |                    |         |
| 3   | Recoil spring                   | Standard size |                     |                   | Repair limit |                    | Replace |
|     |                                 | Free length   | Installation length | Installation load | Free length  | Installation load  |         |
|     |                                 | ∅ 192 × 470   | 405                 | 8,497kg           | -            | 6,978kg            |         |

## 2. WORK EQUIPMENT



140Z97MS20

Unit : mm

| Mark | Measuring point<br>(Pin and Bushing) | Normal<br>value | Pin                         |                 | Bushing                     |                 | Remedy<br>&<br>Remark |
|------|--------------------------------------|-----------------|-----------------------------|-----------------|-----------------------------|-----------------|-----------------------|
|      |                                      |                 | Recomm.<br>service<br>limit | Limit<br>of use | Recomm.<br>service<br>limit | Limit<br>of use |                       |
| A    | Boom Rear                            | 70              | 69                          | 68.5            | 70.5                        | 71              | Replace               |
| B    | Boom Cylinder Head                   | 70              | 69                          | 68.5            | 70.5                        | 71              | "                     |
| C    | Boom Cylinder Rod                    | 70              | 69                          | 68.5            | 70.5                        | 71              | "                     |
| D    | Arm Cylinder Head                    | 70              | 69                          | 68.5            | 70.5                        | 71              | "                     |
| E    | Boom Front                           | 70              | 69                          | 68.5            | 70.5                        | 71              | "                     |
| F    | Arm Cylinder Rod                     | 70              | 69                          | 68.5            | 70.5                        | 71              | "                     |
| G    | Bucket Cylinder Head                 | 70              | 69                          | 68.5            | 70.5                        | 71              | "                     |
| H    | Arm Link                             | 65              | 64                          | 63.5            | 65.5                        | 66              | "                     |
| I    | Bucket and Arm Link                  | 65              | 64                          | 63.5            | 65.5                        | 66              | "                     |
| J    | Bucket Cylinder Rod                  | 70              | 69                          | 68.5            | 70.5                        | 71              | "                     |
| K    | Bucket Link                          | 65              | 64                          | 63.5            | 65.5                        | 66              | "                     |