

# Service News

SSN-004

## Suggestion of Maintenance for Safety and Relief For the safe use of Sekigahara Product

Accident  
Record

[ SUBJECT ]

### Malfunction of Travelling Movement

#### 1. Applied model

Monorail Crane, All models

#### 2. Date of manufacture

First production from up to now

#### 3. Outline of accident

There is a section where the travelling device cannot move partly because the rack gear on rail and pinion gear on travelling device do not bite each other.


#### 5. Countermeasure


Replace the pinion gear and rack gear where the worn out happened. If the replacing work is not possible, replace the pinion gear at least. In case the bite of pinion gear and rack gear is only a little, replace the wheels. If there is no development for the situation, replace the rail.

**Caution!**

Do not carry out the up-sizing of pinion gear / wheels and thickening of rail because this may change the gear pitch. The travelling device may not be able to travel due to limiting system or the deformation of the crane parts caused by the too much pressure from biting gears.

#### 6. Prevention of accident

 Carry out regular greasing for slower the wearing of the gears.

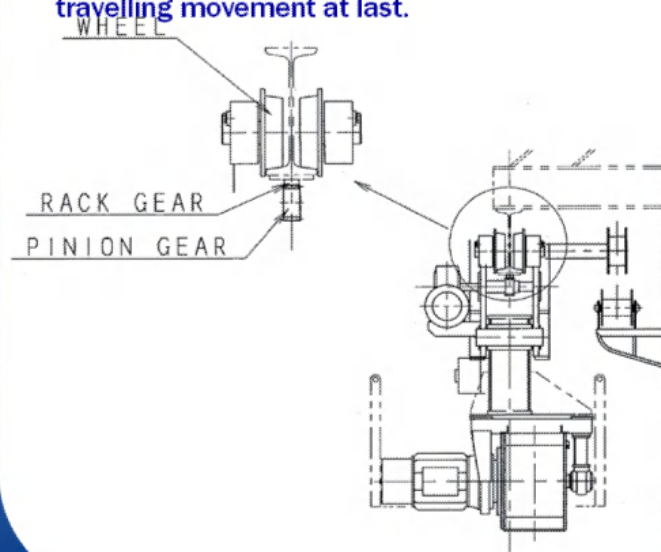
 Measure the wearing of the gear and the amount of gear bite once in 10 years and replace gears if necessary. The bite should be more than half of tooth height and the gear need to be replaced when the gear tooth became sharp.



#### 4. Cause

Pinion gear, rack gear, wheels and rail will wear little by little depending on how frequently the crane is used.

Whichever these are worn out, bite of the gears become less and less little by little. Then the top of gear teeth will be deformed and the section with frequently travelling and the most worn out section will have a problem on travelling movement at last.



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## Suggestion of Maintenance for Safety and Relief For the safe use of Sekigahara Product

RGE-7/4 Manufactured in 2001 (Photo taken in 2011)

The rack deterioration by corrosion and aging degradation



RFB-8.5/1 Manufactured in 1999 (Photo taken in 2011)



RGE-7/4 Manufactured in 2001 (Photo taken in 2014)

Pinion makes only small contact with the Rack  
by corrosion caused by rust



RLE-9 Manufactured in 1995 (Photo taken in 2010)

