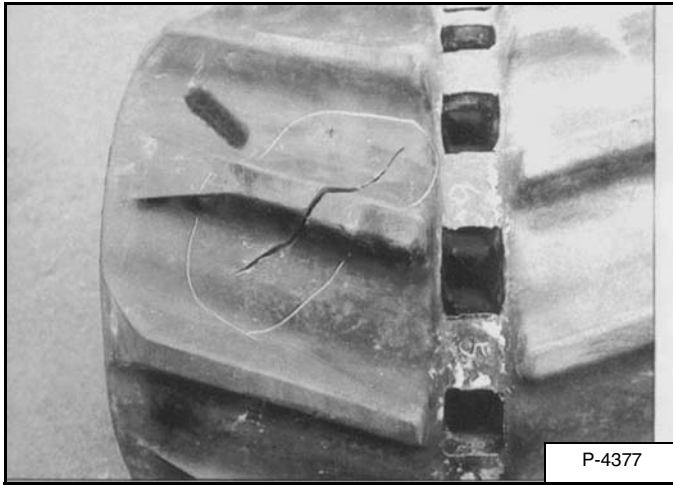


TRACK MAINTENANCE (CONT'D)

Track Damage Identification (Cont'd)

Cuts On The Lug Side Rubber

Figure 30-30-12



Damage:

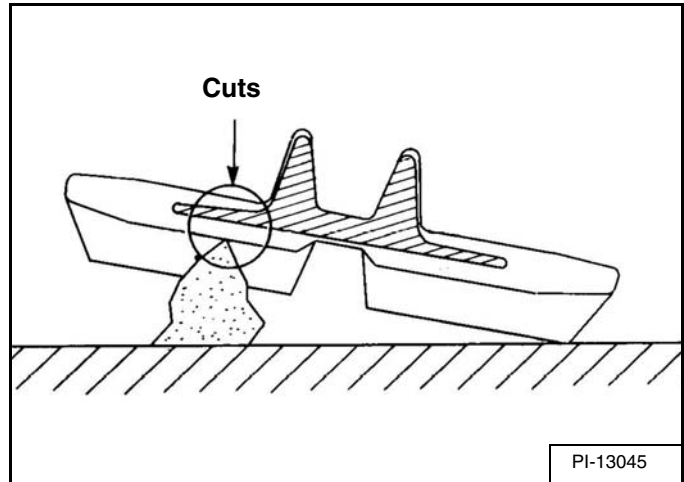
Cuts on the lug side rubber often occurs as one of the most typical failure modes [Figure 30-30-12]

Replacement:

When a cut on the lug side rubber reaches the embedded steel cords, it should be immediately repaired with cold vulcanization rubber.

Causes of the damage:

Figure 30-30-13



When rubber tracks drive over projections or sharp stones in the fields, the concentrated forces applied cause cuts on the lug side rubber surface. In case of making turns on projections, the lug side rubber surface will have an even higher chance to be cut. If the cuts run through the embedded steel cords, it might result in the steel cords' breakage due to their corrosion. It is highly recommended to repair the cuts with cold vulcanization rubber as soon as they are observed [Figure 30-30-13].

Prevention:

Machine operators are requested to drive with great attention to the ground's surface especially in terrains of the following type:

- Construction sites
- Demolition sites
- Paths covered with rocks and wood
- Concrete ridges
- Stumpy fields

When operating on terrains as mentioned above, high speed, quick turns and overloading should be avoided.

TRACK MAINTENANCE (CONT'D)

Track Damage Identification (Cont'd)

Cracks On The Lug Side Rubber Due To Fatigue

Figure 30-30-14

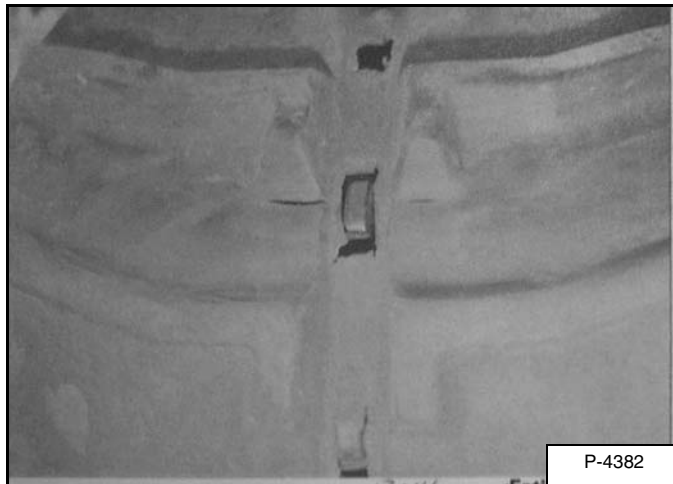


Figure 30-30-15



Damage:

Small cracks around the root of the lug as a result from operation fatigue [Figure 30-30-14] and [Figure 30-30-15].

Replacement:

When the cracks reach so deep that they expose the steel cords, track replacement is required.

Causes of the damage:

Because of wound stress applied to rubber tracks around the undercarriage parts during operation, the fatigue especially causes cracks on the lug side rubber surface. Once the cracks occur, they gradually deteriorate with even small external cracks. When operating near seashores or under cold temperatures, rubber tracks are more likely to suffer from ozone cracks.

Prevention:

Rubber tracks are designed with special rubber compounds to prevent cracks due to fatigue. External injuries on the lug side rubber sometimes cause more chance of cracking. Machine operators should observe soil conditions when driving, so as not to cause external injuries to the lug side rubber. In order to minimize the occurrence of ozone cracks, attention should be paid to the following instructions for maintenance:

Avoid exposing stored tracks to direct sun light.

Avoid exposing stored tracks to direct rain and snow fall.

Store tracks in well ventilated warehouses.

Use the tracks at least once a month.

TRACK MAINTENANCE (CONT'D)

Track Damage Identification (Cont'd)

Lug Abrasion

Figure 30-30-16

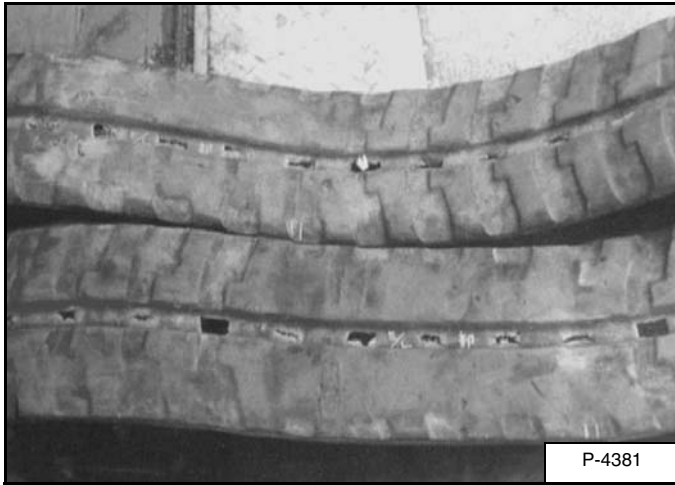
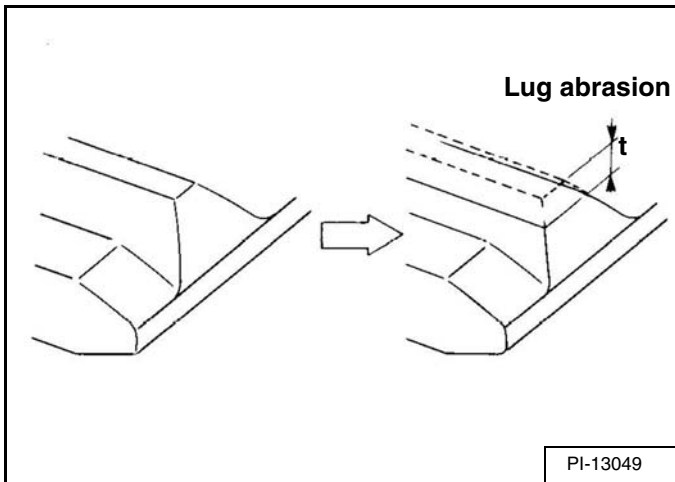


Figure 30-30-17



Damage:

As its service time proceeds, the lug side inevitably undergoes abrasion [Figure 30-30-16] and [Figure 30-30-17].

Replacement:

No replacement is required.

Causes of the damage:

Lug abrasion is inevitable. Even if lug abrasion is proceeding, the rubber track can be used. As the traction performance deteriorates accordingly, it is highly recommended to replace the abraded tracks with new ones when the lug height becomes less than 5 mm (0.197 in).

Prevention:

In order to prevent the rubber track from abnormal or premature abrasion, following operating conditions should be avoided:

- Making quick and repeated turns on concrete and asphalt roads

- Driving up and down hilly paths with slippage

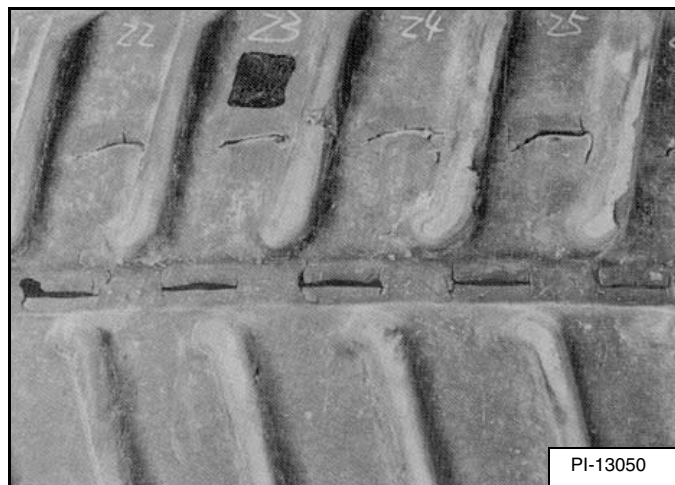
- Making frequent turns on paths covered with rocks and wood

TRACK MAINTENANCE (CONT'D)

Track Damage Identification (Cont'd)

Cracks And Cuts On The Lug Side Rubber

Figure 30-30-18



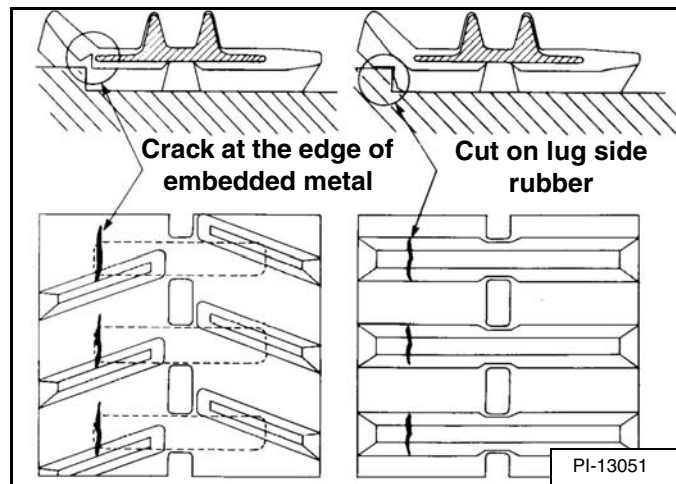
Damage:

Sometimes cracks and cuts on the lug side rubber at the edges of the embedded metals can be observed [Figure 30-30-18].

Replacement:

No replacement is required unless the cuts on the lug side rubber are discovered all around the edges of the embedded metals, as this will result in a complete cut off.

Figure 30-30-19



Causes of the damage:

When rubber tracks drive over sharp projections, intensive stress is applied to the lug side rubber surface, especially at the edges of embedded metals, causing cracks and cuts in the area around the embedded metals [Figure 30-30-19].

Prevention:

To avoid extensive stress applied to the lug root where metals are embedded, machine operators are requested to avoid driving over stumps and ridges.