

3. Check Lubricating Condition

Remove the chain and check if the lubricating condition is satisfactorily done on the pin and inside the bush.

If the surface is teared off or discolored to red or dark brown color, it is a insufficient lubricant and the chain might be running without soaking in the lubricant oil of oil bath. Check this time by time.

4. Check Link Plates

The tensile strength is at least 7 times the applied tensile strength and it does not reach to the value of being cut as long as the chain is selected in accordance with the power transmission capacity table. However, if the excessive force larger than the max. tensile strength repeatedly, fatigue fracture may occur.

In this case, it is recommended to make sure if there is fatigue breakage at the maintenance.

The metal fatigue causes the crack from the side of link plate as shown in the right figure, and it is necessary to check existence of crack in details.



The locations crack may occur most

5. Check Roller

Roller receives impact when it bites sprocket tooth hitting the sprocket tooth. It is not a problem in normal usage, but if it is operated in abnormal condition such as vibration, fatigue fracture may occur due to excessive impact load.

The crack on roller is as shown in the right figure. It is necessary to check the crack as same as link plates.



Crack on Roller

6. Treatment when Fatigue Fracture has been caused

The fatigue fracture of link plate or roller occurs when the unexpectedly excessive force is applied to the chain, and the cause of fatigue fracture shall be removed once it happens.

Such incident is mostly caused by the vibration or unexpectedly larger tensile strength. The chain which has once caused fatigue fracture shall be replaced as a whole since other locations of chain has also received the same type of repeating tensile load.