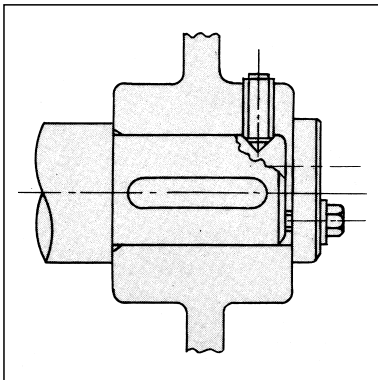


Installation

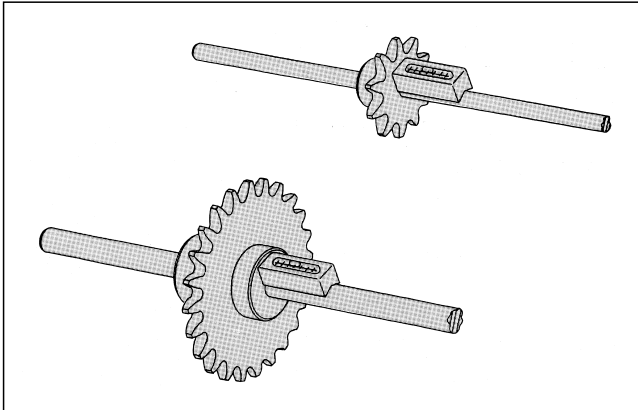
Installation of sprockets

For smooth transmission and extended life of the roller chain, it is important to correctly install proper sprockets. Use the following installation procedure.

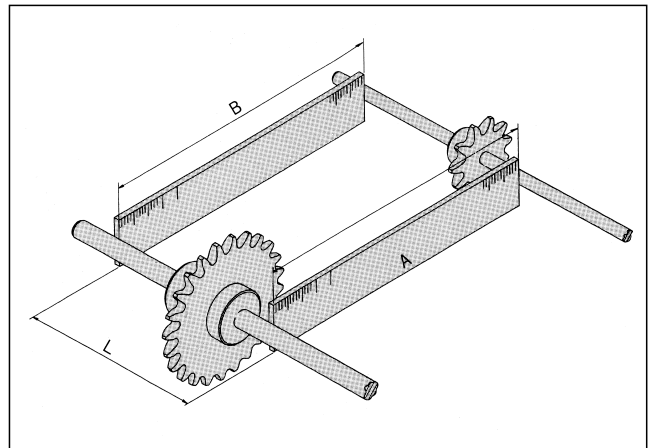
1. Properly install a sprocket on a shaft, and fix it with a key to prevent it from rattling during operation. Also, place the sprocket as close as possible to the bearing.



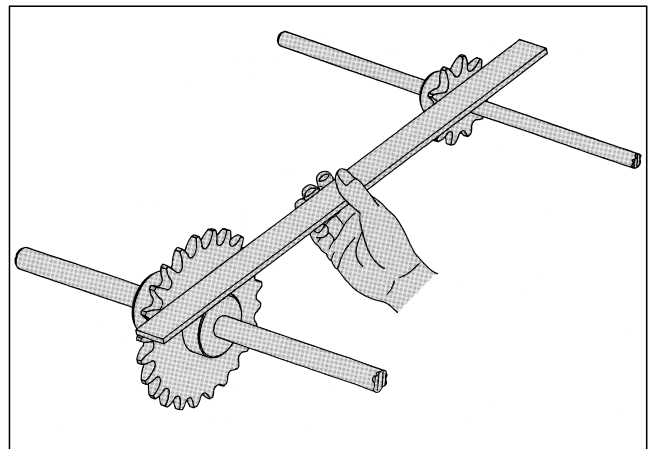
2. Adjust the shaft levelness to $\pm 1/300$ or less using a level.



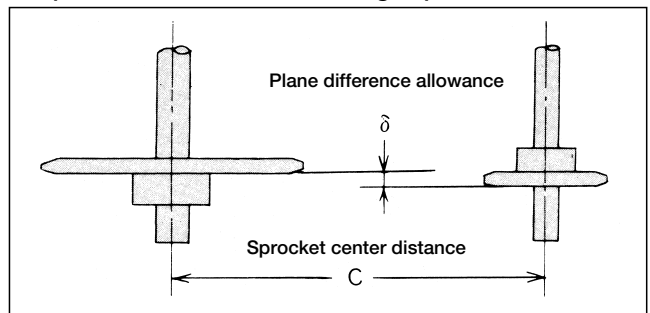
3. Adjust the shaft parallelism ($\frac{A-B}{L}$) to $\pm 1/300$ or less.



4. Adjust the level of driving and driven sprockets using a linear scale. (Also adjust the idler and the sprockets, or the tensioner and the sprockets in the same way.)



Keep the allowance δ in the range specified below.



Sprocket center distance C	Allowance δ (mm)
1m or less	± 1
1m~10m	$\pm C$ (mm) / 1000
10m or more	± 10

Installation of roller chain

When connecting a roller chain with the sprockets, observe the following procedure. When the connecting link is not well lubricated, apply sufficient grease.

When using the sprocket teeth

1. Engage the chain with the sprockets so that both ends of the chain are on one of the sprockets, as shown in the following photo.
2. Insert connecting pins at the joint.
3. Fit a connecting plate, and fasten by a spring clip or cotters.

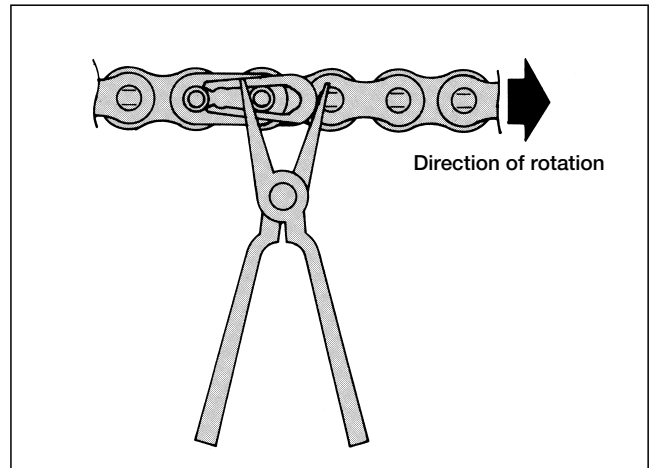


Pay extra attention not to damage the tooth heads of the sprocket.

When using tools

Cautions

1. When a connecting plate is fastened by a spring clip, apply the spring clip to the pin grooves of the connecting pins as illustrated below, and lock it using pliers, etc. As for the direction of spring clip insertion, keep the opening of the spring clip turned in the direction opposite to the direction of chain rotation, as illustrated below.



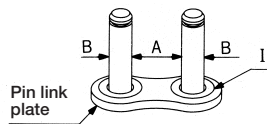
2. In circumstances where the sprocket center distance can hardly be adjusted, an odd number of links may be used. However, add one link, to use an even number of links and eliminate the sag by shifting a sprocket or installing an idler.
3. When an H-connecting link is used, pins must be driven into the connecting plate because of interference. In this case, ensure that the pair of pins are kept parallel to each other when inserted into the connecting plate. Never make the holes of the connecting plate larger or make the pins thinner for easier connection work. This applies also when a cotter type outer link (CP) is used instead of a connecting link.

How to connect O-ring Chains

Remarks to connect general O-ring Chains:

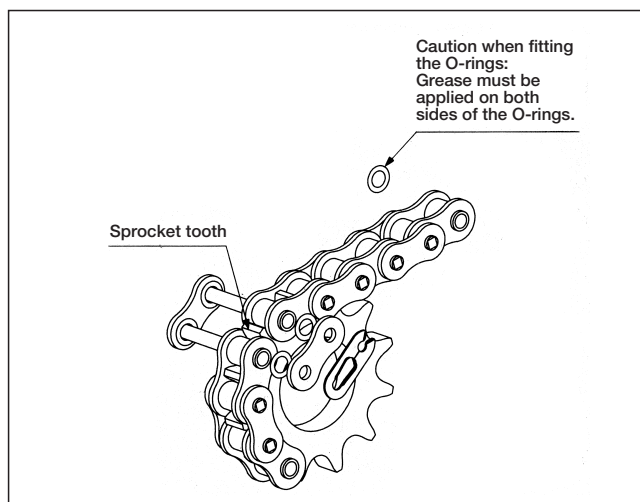
1. A connecting link of an O-ring Chain for general application is pre-coated with grease at the pins. Before connection, confirm the grease on the surfaces of pins, and if the amount of grease is small, apply grease with bare hands. (If gloves are used, the grease will be absorbed by the gloves.)

Example: When the connecting link (I) of an O-ring chain for general application is shipped, O-rings are fitted at the roots of the pins. If the O-rings come loose due to vibration during transport, refit the O-rings in to the roots of the pins.



In this case, be sure to return the grease collected at the roots of the pins to the central surfaces of the pins, more at portion A than at portions B shown in the above illustration. (Portions A is worn because of sliding with the bushings.)

2. The chain can be most easily connected on the teeth of a sprocket. Engage the links at both ends of the chain with the sprocket teeth and fit connecting pins. If the sprocket can be moved, the chain can also be connected on the loosened side.



3. Connecting procedure

- ① Confirm that O-rings are attached to the roots of the pins.
- ② If the amount of grease applied on the connecting pins is small, coat the pins with grease at the central portions.
- ③ Insert the connecting pins into the bushings of the inner links at both ends.
- ④ Confirm that the grease is applied to the entire face of the O-ring, and fit the O-ring onto the connecting pins.
- ⑤ Insert the connecting pins into the connecting plate and while pressing the connecting plate, install the spring clip. Confirm whether the head (the end without a split) of the spring clip is turned in the feeding direction of the chain. (See the following illustration.)
- ⑥ Be sure to confirm that the spring clip is securely fitted in the clip grooves of the connecting pins.

This completes jointing of the connecting link. Note that grease on the surfaces of connecting pins and O-rings can be removed during installation work. In this case, re-grease using the grease on the surface of the base chain or the grease in the polyethylene bag in which the connecting link was contained.

