



# DIAMOND<sup>®</sup>



## CHAIN INSTALLATION

### Installing the chain

Fit chain around the sprockets in the drive and bring the free ends together for final connection. If the ends cannot be brought together on a common sprocket, the use of Diamond's chain connecting tools may be employed. Please see the reverse side of this sheet for more information on connecting tools.

### Installing the connecting link

The connecting link, depending upon the size and type of chain, may employ either a slip-fit or press-fit cover plate, combined with either a spring clip or cotter keys as the final retainer.

### Press-fit cover plates

Press-fit plates are those which have an interference fit on the pins and provide integrity equal to the base chain itself. To assemble a press-fit cover plate, follow the steps below.

1. Insert the "master link," the portion of the link that contains the pins, and provides support or backing to resist the forces needed to drive the cover plate on.
2. Place the press-fit cover plate over the exposed pin ends and ensure that it is aligned properly.
3. Drive the cover plate on until it is flush with the ends of the pins.
4. Obtain a hollow punch and place it around/over the flush pin end.
5. Alternately from one pitch hole to the other continue to drive the ends of the linkplate onto the pins until it is clear of the spring clip groove or cotter hole. Care should be taken not to drive the plate on so far as to squeeze against or pinch the roller links – this will result in stiff or binding joints.
6. Install the retaining device, either a spring clip or cotter keys.

*Caution: Never drill out or enlarge the pitch holes of a press-fit cover plate to make the installation easier. This will lower the integrity of the link.*

### Slip-fit cover plates

Slip-fit plates are those which have a clearance fit on the pins. These connecting links are far easier to install but reduce the working load capacity of the chain. To assemble the slip-fit cover plate, follow the steps below.

1. Insert the "master link," the portion of the link that contains the pins, into the chain.
2. Slide the plate over the pin ends to a location which clears either the spring clip groove or cotter hole.
3. Install the retaining device, either spring clip or cotter.

*Note: When a slip-fit cover plate is used, a chain's working capacity can be reduced as much as 30%.*



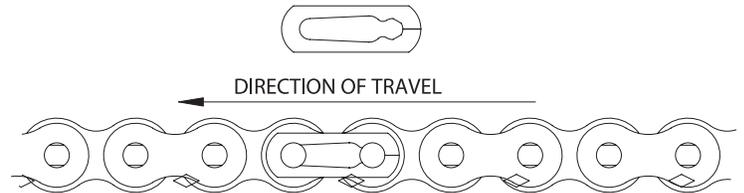
# NOTHING OUTLASTS A DIAMOND.®



## RETAINING DEVICES

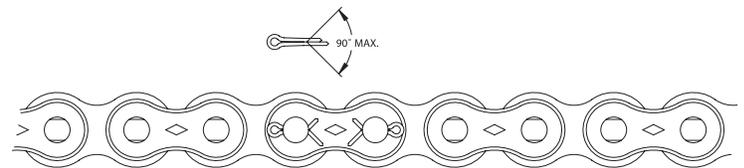
### Spring clips

Spring clips provide a quick and easy method for securing the cover plate. Installation is performed by first determining the direction of chain travel and locating the closed end of the clip over the leading pin's groove. Final installation is performed by "snapping" the clip over the trailing pin, locking it into the groove. Care should be taken not to bend or deform the clip during installation as this may cause it to come loose during operation.



### Cotter keys

Diamond manufactures cotters and specially heat treats them to obtain specific properties which are beneficial in service. After insertion, the legs should not be spread in excess of 90° (included angle) and if removed should not be reused. It is not recommended to use commercial cotters as they may not provide satisfactory performance in severe applications.



## CHAIN ASSEMBLY TOOLS



### CT 35 Connecting Tool - Small

For use with ANSI 25 through 60H roller chain.



### CT 80 Connecting Tool - Large

For use with ANSI 80 through 240 single strand chain and most conveyor and engineered chains with a width of 5/8" or wider between the inside links. For multi-strand chains, a second connecting tool will aid in the alignment of the chain.



### CT 80 CABLE Cable Connecting Tool - Large

For use with ANSI 80 through 240 single strand, multi-strand and double-pitch chain, and most conveyor and engineered chains with a width of 5/8" or wider between the inside links. This tool holds the ends of a chain together during the connection process.

*To order these products please contact Diamond Chain at 1-800-872-4246.*

For more information on the Diamond Chain Company, its products, and its services, please visit us at [www.diamondchain.com](http://www.diamondchain.com) or by calling 1-800-872-4246.