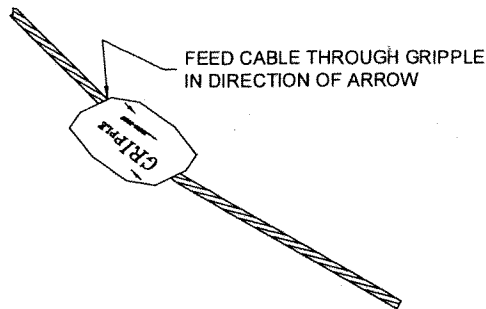


GRIPPLE Installation Procedure

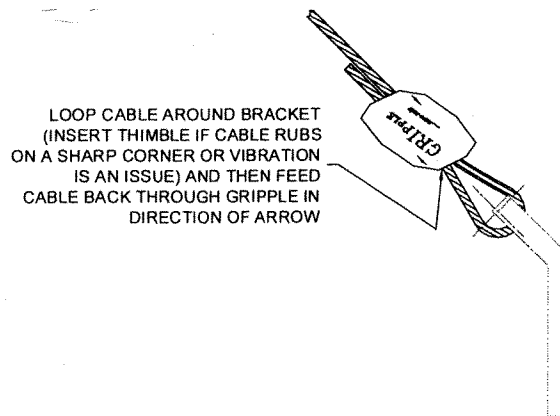
GRIPPLE's allow quick effective end connections to be made when using cables to restrain equipment, piping, ductwork or conduit. These components are fitted with spring loaded jaws that grip the cables and can be installed with no special tools in only a few seconds. They are secure and resistant to the large cyclic loads that can be applied to them in a seismic event.

As with other types of cable hardware, the key to making them work properly is to ensure that they are properly installed. Below are listed the few steps needed for proper installation.

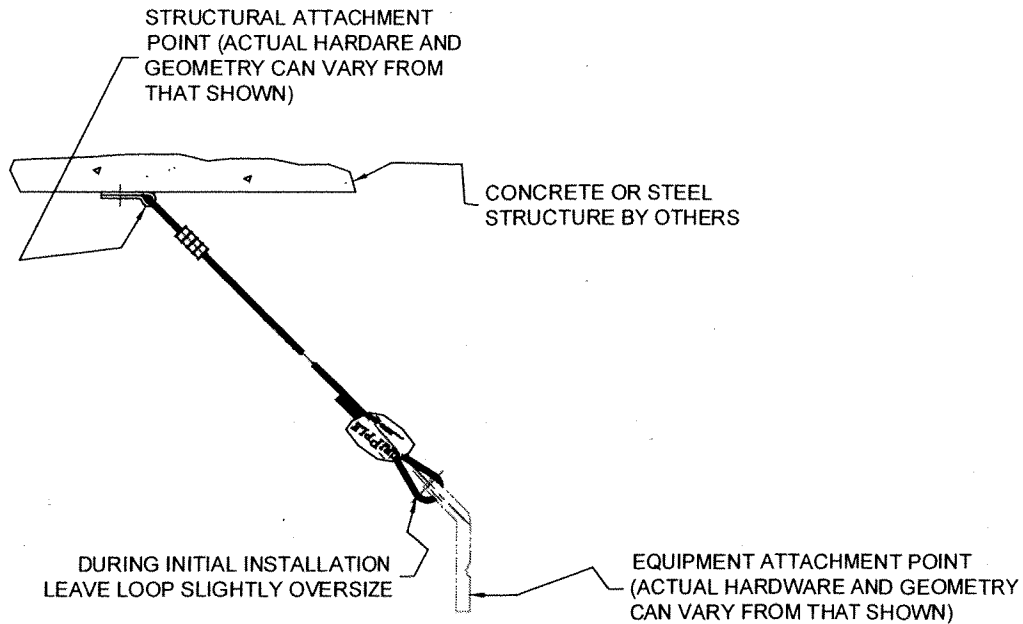
- 1) Feed the proper sized cable as provided by Kinetics Noise Control through the Gripple as shown.



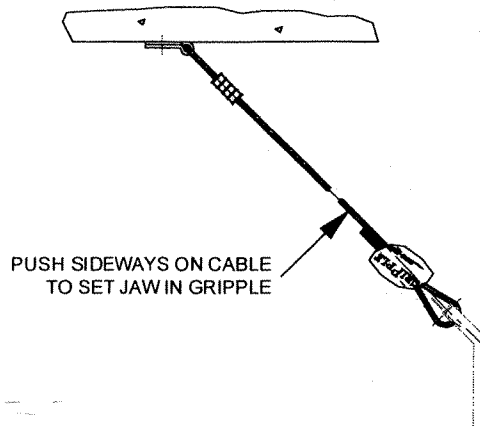
- 2) Loop the cable through the equipment or structural attachment bracket. If the cable rides against any sharp edges or corners or is subject to excessive vibration in service, fit the Kinetics Noise Control provided thimble into the loop and then feed the cable back through the opposite side of the GRIPPLE. (Note: The holes in any of the Kinetics Noise Control provided brackets are smooth enough not to be a problem by themselves)



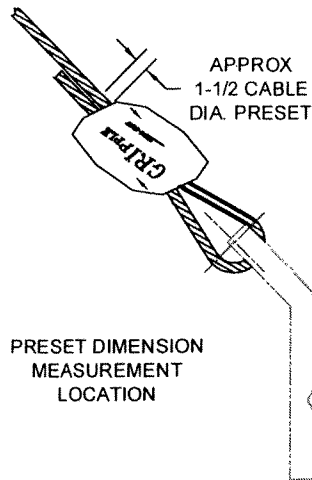
- 3) Remove the slack from the cable by slipping the cable through the GRIPPLE, but leave the loop slightly oversized to allow later tensioning.



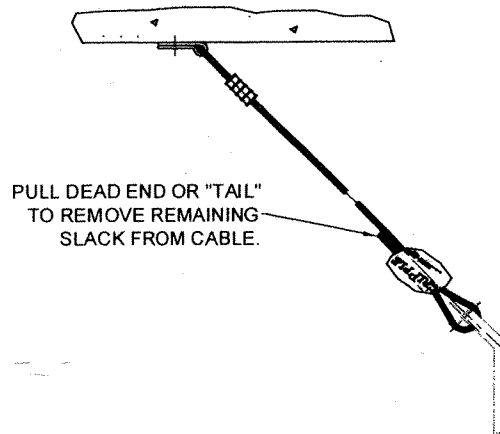
- 4) Apply a sideways load to the cable by pulling or pushing on it to fully seat the GRIPPLE.



- 5) When seating the GRIPPLE, jaws will ride up an internal ramp in the GRIPPLE itself and "bite" into the cable. In a properly seated GRIPPLE, the cable will shift approximately 1-1/2 cable diameters (the preset distance) as the jaws engage. If need be, mark the cable to check the preset. This step may be required initially, but once a "feel" for it is obtained, it is no longer necessary. Once the 1-1/2 cable diameter preset dimension has been obtained, the GRIPPLE is adequately seated.



- 6) Once fully seated, any additional slack should be removed from the cable restraint by pulling on the dead end or "tail" of the cable sticking out of the GRIPPLE. If Isolated, the cables should not be made tight, but should instead be left slightly loose to prevent the transfer of vibrations into the structure. (Slightly loose could be defined as having approx 1/8 to 1/4" of visible sag in the cable – 1/8 for short cables (up to 2 ft), 1/4 for cables longer than that.)



- 7) The GRIPPLE installation is now complete.