

How to Fasten Cables to the Frame

Vintage Motorcycles and Tie Wraps

Plastic cable ties or 'tie wraps' are usually used to attach cables or cable harnesses to the motorcycle frame. Their application is inexpensive and simple (fig. 1). However, cable ties were not invented



Figure 1: Modern cable ties.

until the 1950s and they do not really belong to older machines in terms of originality. Fabric tape was often used originally. They were barely sticky and tar impregnated and lasted only long enough to get the motorcycles out of the showroom. Hence, wiring was loosely draped, rather than in the neat looms of modern machinery. So there is actually no solution that is both stable and original. However, in most cases fastenings are available that were not used by the respective manufacturer, but do follow the possibilities of time. One of these options is to fix the cable with a waxed cord that can withstand the elements (other lines are also possible, of course). Such string is available in many colours in every well assorted handicraft shop. It is usually used for jewellery production (fig. 2).

No Knots

A good technique for fixing cables to the frame comes from electricians and electronics. It has its origin in the classic production of cable harnesses. It gets by without knots and the connection can be released very simply again. Start with a loop at the end of the cord, which is laid parallel to the cable on the frame tube (fig. 3). The longer end of the cord is wound around the frame and the cable and then laid over the loop, which is



Figure 2: Black waxcord.

blocked in this way (fig. 4). Repeat this several times until the line no longer moves on the pipe under tension (fig. 5). After the cord has been



Figure 3: Starting the fastening.

wrapped around the tube & cable sufficiently often in this manner, pull the end through the loop that is still open. Then pull the open loop with the other end of the string until it is closed (fig. 6 & 7). To fix everything, pull the now completely closed loop under the turns of the string. Everything is fixed and the connection no longer opens automatically (fig. 8). Finally, the two ends are shortened so that the connection can still be opened by pulling at one of the ends (fig. 9).



Figure 4: A loop at the end of the cord is laid parallel to the frame tube.

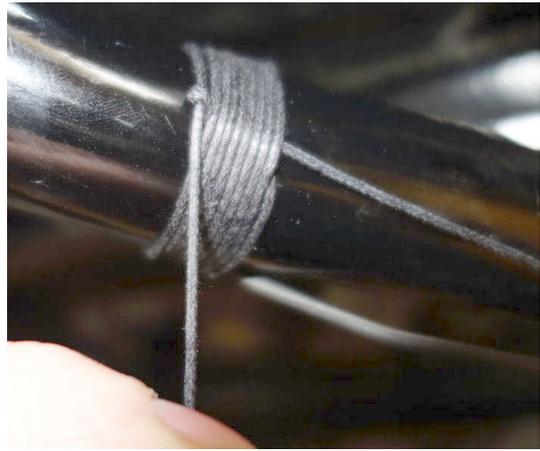


Figure 7: The closed loop.



Figure 5: Winding the longer cord end around the frame and the cable.

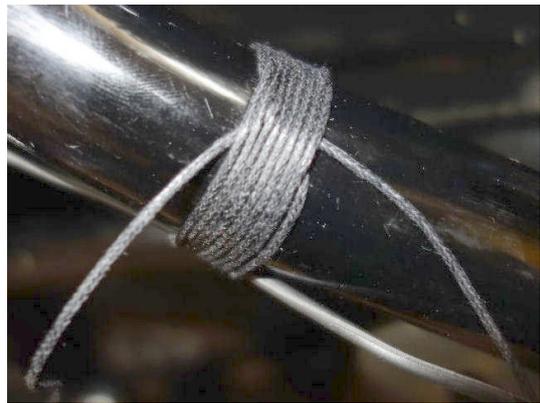


Figure 8: The closed loop is pulled under the windings.



Figure 6: The string end is pulled through the open loop and then closed by pulling the other string end.



Figure 9: The final fastening with the two shortened string ends.