

CONTROL CABLE WIRE BREAKAGE AND CORROSION LIMITATIONS - MAINTENANCE PRACTICES

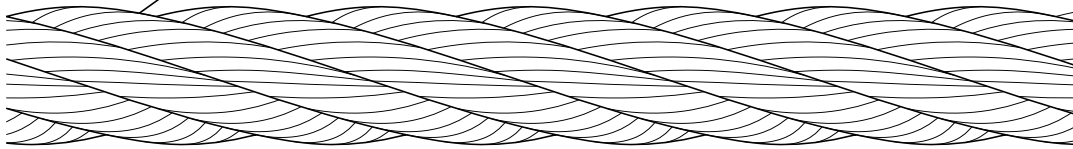
1. Examination of Control Cables.

- A. Control cable assemblies are subject to a variety of environmental conditions and forms of deterioration. Some deterioration, such as wire or strand breakage, is easy to recognize. Other deterioration, such as internal corrosion or cable distortion, is harder to identify. The following information will aid in detecting these cable conditions.
- B. Broken Wire Examination (Refer to Figure 201).
 - (1) Examine cables for broken wires by passing a cloth along length of cable. This will detect broken wires, if cloth snags on cable. Critical areas for wire breakage are those sections of cable which pass through fairleads, across rub blocks, and around pulleys. If no snags are found, then no further inspection is required. If snags are found or broken wires are suspected, then a more detailed inspection is necessary which requires that the cable be bent in a loop to confirm broken wires. Loosen or remove cable to allow it to be bent in a loop as shown. While rotating cable, inspect bent area for broken wires.
 - (2) Wire breakage criteria for cables in flap, aileron, rudder, and elevator systems are as follows:
 - (a) Individual broken wires at random locations are acceptable in primary and secondary control cables when there are no more than six broken wires in any given ten-inch cable length.
- C. Corrosion.
 - (1) Carefully examine any cable for corrosion that has a broken wire in a section not in contact with wear-producing airframe components, such as pulleys, fairleads, rub blocks, etc. It may be necessary to remove and bend cable to properly inspect it for internal strand corrosion, as this condition is usually not evident on outer surface of cable. Replace cable if internal corrosion is found. If a cable has been wiped clean of its corrosion-preventive lubricant and metal-brightened, the cable shall be examined closely for corrosion. For description of control cable corrosion, refer to Chapter 51, Corrosion and Corrosion Control - Maintenance Practices.

Figure 201 : Sheet 1 : Cable Broken Wire Examination

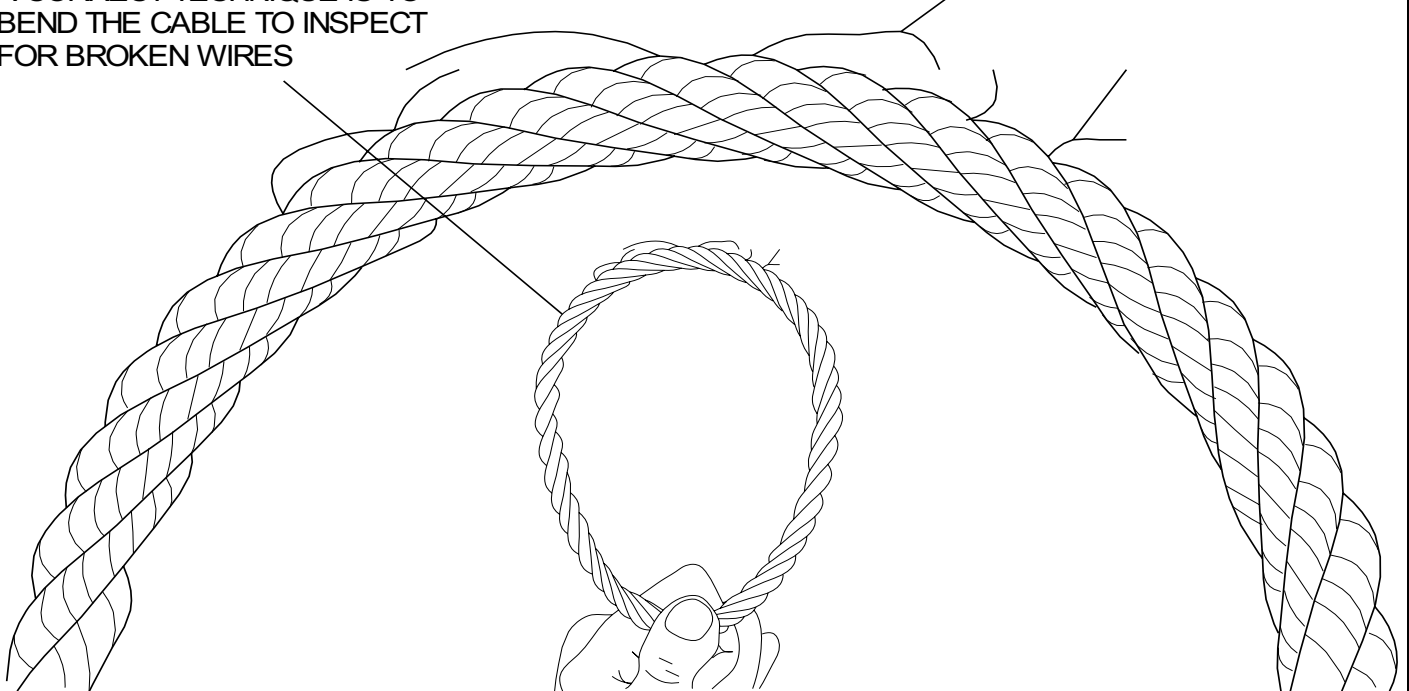
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BROKEN WIRE NOT FOUND WHEN RUBBED WITH A CLOTH ALONG THE LENGTH OF THE CABLE

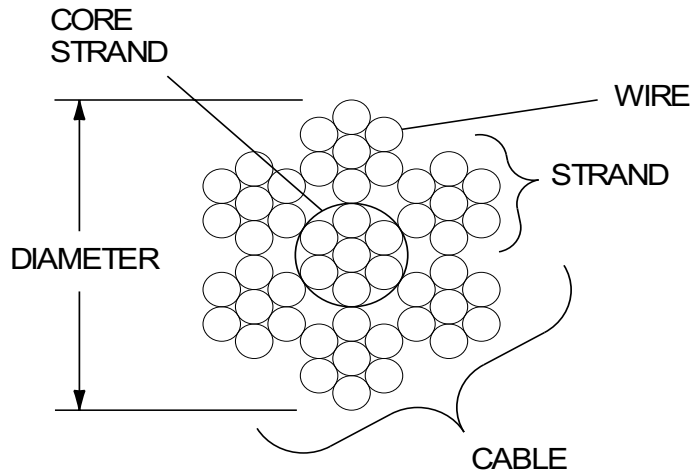


A CORRECT TECHNIQUE IS TO BEND THE CABLE TO INSPECT FOR BROKEN WIRES

BROKEN WIRE FOUND VISUALLY WHEN THE CABLE WAS REMOVED AND BENT



DO NOT BEND THE CABLE INTO A LOOP SMALLER THAN 50 CABLE DIAMETERS



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