CHECK BEING PERFORMED: Custom

ZONES: 115 116 W/C NUMBER: 216I2001 DATE:
A/C NUMBER: W/O:
REV. DATE: 06/01/04 JAC CODE:
FREQUENCY: 1C

PANELS

1003

REFERENCES

Figures 1 and 2, AMM 12-21-31/301, AMM 20-10-03, AMM 32-00-05

MECH INSP

VISUALLY INSPECT EXPOSED CONTROL CABLES (NOSE WHEEL STEERING, NOSE GEAR PISTON POSITION), FOR WEAR, BROKEN STRANDS, CORROSION, KINKS, AND BIRD CAGING. CHECK END FITTINGS, TURNBUCKLES, PULLEYS, BRACKETS, FAIRLEADS, AND QUADRANTS FOR WEAR, CORROSION, CRACKS AND SECURITY.

1. Inspection of the Control Cable Wire Ropes. (Fig. 1)

A. References

(1) AMM 12-21-31-3, Control Cables

(2) AMM 20-10-03, Control Cables

(3) AMM 32-00-05, Landing Gear Control Cables

B. Procedure

_____ XXXXX (1) Remove nose landing gear summing mechanism cover.

_____ XXXXX (2) Clean the cables, if necessary, for the inspection (AMM 12-21-31).

XXXXX _____ (3) Examine wire ropes.

(a) Perform a detailed visual inspection to make sure that the cable does not contact parts other than pulleys, quadrants, cable seals or grommets

installed to control the cable routing. The minimum cable clearance from other parts is 0.20 inches except 0.10 inches within 10 inches of a pulley or quadrant. Look for evidence of contact with other parts. Condition must be corrected if evidence of contact is found.

(b) Perform a detailed visual inspection of the cable runs for incorrect routing, kinks in the wire rope, or other damage.

1) Cable assembly must be replaced if:

a) One cable strand has worn wires where one wire cross section is decreased by more than 40 percent. (Refer to Fig. 1)

b) A kink is found.

c) Corrosion is found.

2) Make sure the cable guides and fairleads have no worn or broken parts and that the parts are aligned, clean, and attached correctly.

3) Make sure the deflection angle at each fairlead is not more than 3 degrees.

4) Make sure the cable moves freely through its full travel.

(c) Perform a detailed visual inspection of the cable. To do a check for broken wires, rub a cloth along the cable. The cloth will identify broken wires by catching on them.

1) 7 x 7 cable assembly must be replaced if:

a) There is two or more broken wires in 12 continuous inches of cable.

b) There is three or more broken wires anywhere in the total cable assembly.

2) 7 X 19 cable assembly must be replaced if:

a) There is four or more broken wires in 12

continuous inches of cable.

b) There is six or more broken wires anywhere in the total cable assembly.

NOTE: A broken wire must not go over a pulley or through a pressure seal or fairlead.

_____ XXXXX (4) Lubricate cables where lubricant is removed. (AMM 12-21-31)

NOTE: Do not apply grease to CRES cables. CRES cables should not be lubricated.

Reference AMM 32-00-05 to determine Landing Gear Control Cable material used.

Reference AMM 20-10-03 figure 401 for General

cable material information.

2. Inspection of the control cable fittings.

XXXXX _____ A. Examine the control cable fittings.

(1) Perform a detailed visual inspection to make sure that the means of locking the joints are intact, (wire locking, cotter pins, turnbuckle clips, etc.).

(a) Missing parts must be replaced.

(2) Perform a detailed visual inspection of the swaged portions of swaged end fittings for surface cracks or

corrosion.

(a) Cable assembly must be replaced if:

1) A crack is visible.

2) Corrosion is present.

(3) Perform a detailed visual inspection of the unswaged portion of the end-fitting.

(a) Cable assembly must be replaced if:

1) A crack is visible.

2) Corrosion is present.

3) End fitting is bent more than two degrees.

(4) Perform a detailed visual inspection of the turnbuckle.

(a) Turnbuckle must be replaced if:

1) A crack is visible.

2) Corrosion is present.

3. Inspection of the Control Cable Pulleys. (Fig. 2)

XXXXX _____ A. Perform a detailed visual inspection to make sure that pulleys are free to rotate.

(1) Pulley must be replaced if:

(a) Pulley does not rotate freely.

(b) Pulley matches the description in Figure 2.

4. Inspection of the Control Cable Pulley Brackets.

XXXXX _____ A. Examine the brackets and the support structure for cracks or other damage.

(1) Brackets or structure that have damage must be repaired or replaced.

XXXXX _____ 5. Check upper and lower nose wheel steering summing mechanism bearings for condition and wear.

6. Inspect and lubricate nose wheel steering tiller cables and gearbox.

XXXXX _____ A. Inspect captain's nose wheel steering tiller cables and gearbox.

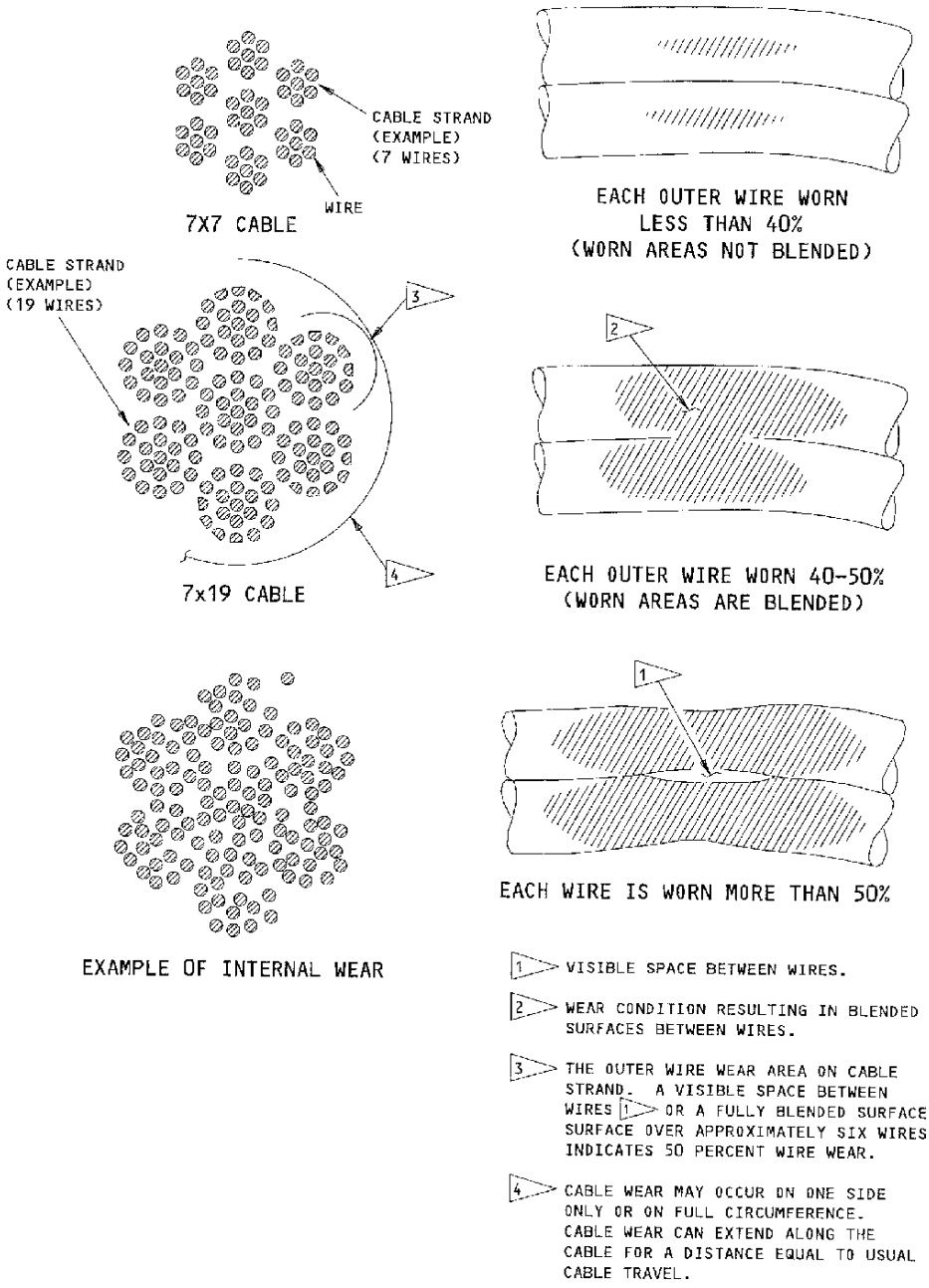
_____ XXXXX B. Lubricate captain's nose wheel steering tiller cables and gearbox.

|XXXX _____ C. Inspect first officer's nose wheel steering tiller cables
| and gearbox. (N/A IF AIRCRAFT NOT CONFIGURED)

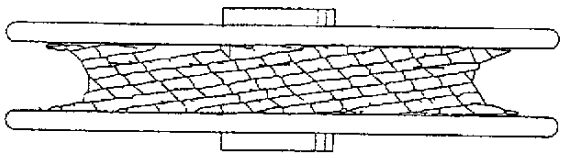
|____ XXXXX D. Lubricate first officer's nose wheel steering tiller
| cables and gearbox. (N/A IF AIRCRAFT NOT CONFIGURED)

_____ _____ 7. Install nose landing gear summing mechanism cover.

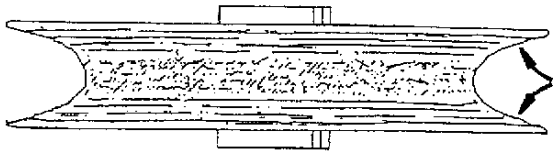
**********END OF WORKCARD**********



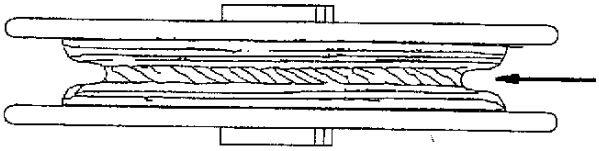
Cable Wear Patterns



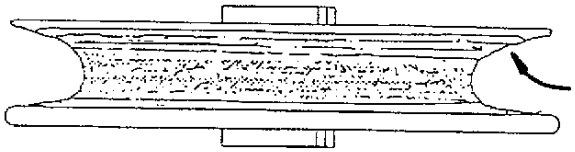
CABLE TENSION TOO HIGH



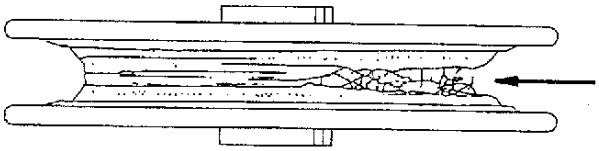
PULLEY NOT ALIGNED CORRECTLY



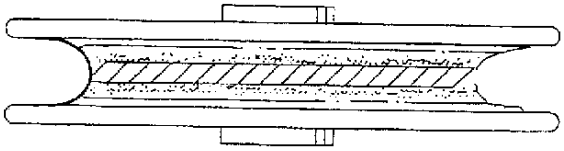
PULLEY GROOVE WITH EXCESSIVE WEAR



CABLE NOT ALIGNED CORRECTLY



PULLEY WILL NOT TURN



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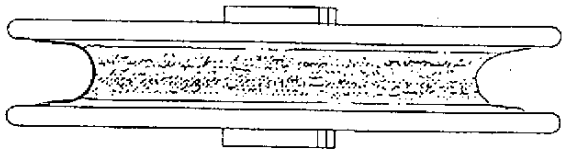

NORMAL CONDITION

Pulley Wear Patterns

CABLE PULLEY INSPECTION

FIGURE 2

12/13/2001