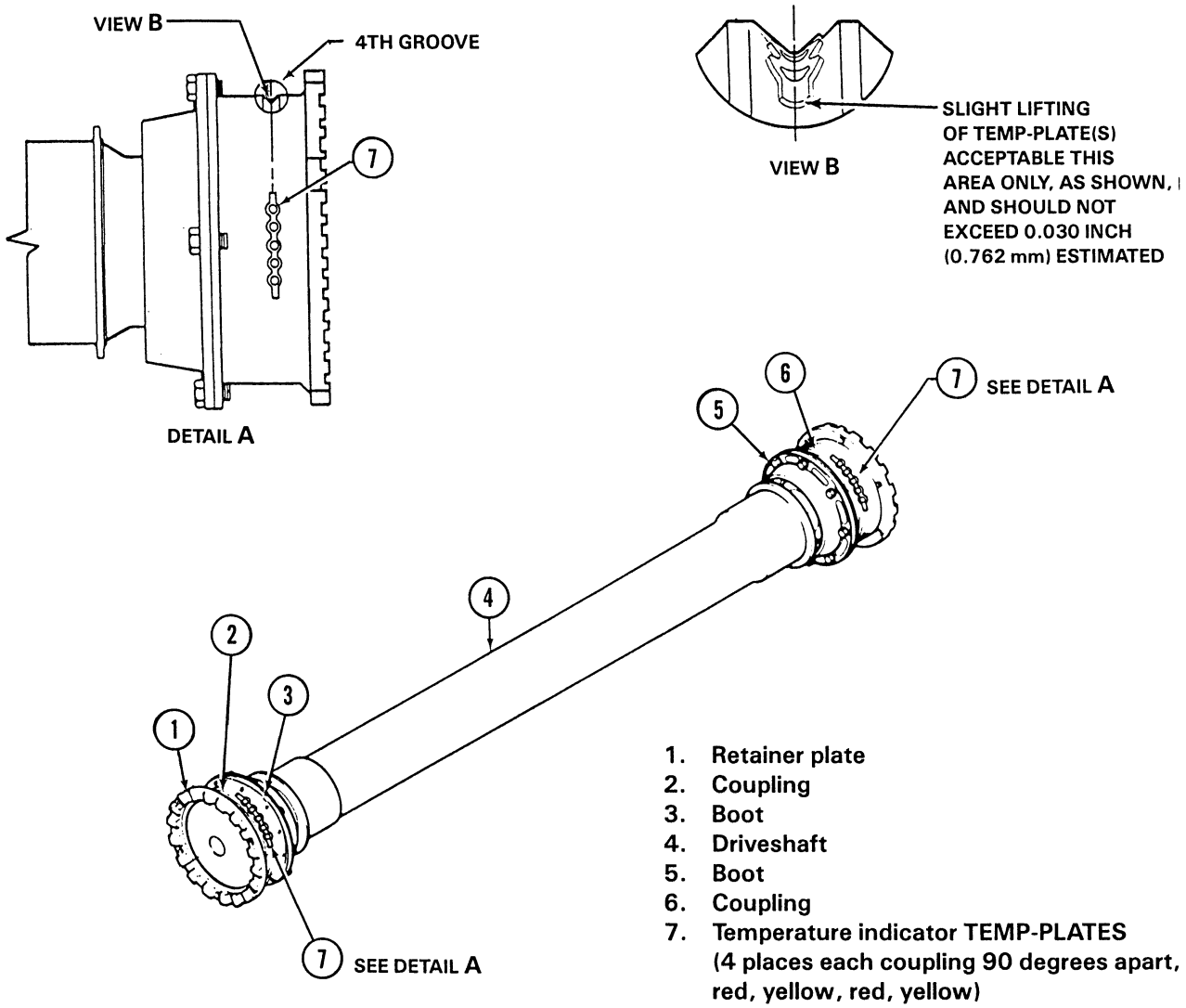

NOTES

1. Evidence of lubricant leakage at couplings (2) or (6) is cause for overhaul evaluation of driveshaft. Refer to BHT-212-CR&0 manual.

2. Mechanical and/or corrosion damage on plate (1) in coupling (2) or similar plate in coupling (6) that could result in lubricant leakage is not acceptable.

3. Mechanical and/or corrosion damage on boots (3 and 5) that could result in lubricant leakage is not acceptable.

4. Superficial mechanical damage on couplings (2 and 6) is acceptable without repair. Mechanical damage in excess of superficial and/or corrosion damage is cause for overhaul evaluation of driveshaft. Refer to BHT-212-CR&0.

212-M-63-4-1

Figure 63-4. Damage limits — engine-to-transmission (main)driveshaft (sheet 1 of 4)

NOTES (Cont)

5. Mechanical and corrosion damage limits on shaft (4) are defined as follows:

a.	Nicks and scratches running parallel to, or within 15 degrees of parallel of shaft axis.	Not exceeding 0.004 inch (0.101 mm) in depth are acceptable without repair. Not exceeding 0.008 inch (0.203 mm) in depth or 1.5 inch (38 mm) in length are acceptable if polished out, provided total polished area does not exceed 10 percent of circumference at any point.
b.	Nicks and scratches not running within 15 degrees of shaft axis.	Not exceeding 0.004 inch (0.101 mm) in depth are acceptable on up to 100 percent of the circumference of shaft if polished out. Not exceeding 0.008 inch (0.203 mm) in depth or 1.5 inches (38 mm) in length are acceptable provided the total polished area does not exceed 10 percent of the circumference at any point.
c.	Corrosion pitting.	Not exceeding 0.008 inch (0.203 mm) in depth is acceptable provided it is polished out. Maximum length of rework at any point must not exceed 1.5 inches (38 mm) nor cover more than 10 percent of the circumference at any point. The maximum acceptable total reworked area is 4.0 square inches (2580 square mm).

6. Overtemperature indicator DOTS on TEMP-PLATES (7) are a white or light gray color and turn black when exposed to an overtemperature condition. Chemical contamination can also cause indicating DOTS to turn black.

7. Temperature indicator TEMP-PLATES must not show evidence of overtemperature, deterioration, debonding, or discoloration of the epoxy coating that prevents interpretation of the indicating DOTS. If any of these conditions exist, proceed to note 8.

8. If only one TEMP-PLATE of a given color is missing, and no DOT on any other TEMP-PLATE (on the same coupling) is discolored or shows mechanical damage or degradation of the epoxy overcoating, the aircraft may be returned to service.

9. The discrepant TEMP-PLATE (in step 8) should be replaced as soon as practical. If any indicator DOT on either the red or yellow-bordered TEMP-PLATE has changed color to black, see sheets 3 and 4 for probable cause and required corrective action.

212-M-63-4-2

Figure 63-4. Damage limits — engine-to-transmission (main) driveshaft (sheet 2)

ONE YELLOW TEMP-PLATE	OTHER YELLOW TEMP-PLATE	ONE RED TEMP-PLATE	OTHER RED TEMP-PLATE	PROBABLE CAUSE	SEE NOTE
Good	Black	Good	Good	Defect/Instl	10
Black	Black	Good	Good	Elevated Temp	11
Good	Good	Black	Good	Defect/Instl	10
Good	Good	Black	Black	Defect/Instl	13
Black	Black	Black	Black	Overtemp	12
Part Black	Good	Good	Good	Chem Contamination	10
Part Black	Part Black	Good	Good	Chem Contamination	10
Good	Good	Part Black	Good	Chem Contamination	10
Good	Good	Part Black	Part Black	Chem Contamination	13
Missing	Good	Good	Good	Defect/Instl	10
Missing	Missing	Good	Good	Possible Elevated Temperature	11
Good	Good	Missing	Good	Defect/Instl	10
Good	Good	Missing	Missing	Defect/Instl	13
Missing	Missing	Missing	Missing	Possible Overtemp	12

PROBABLE CAUSE AND REQUIRED CORRECTIVE ACTION CHART

NOTES (Cont)

10. Resume operation. Defective TEMP-PLATE or improper installation, replace defective TEMP-PLATE as soon as practical. Refer to BHT-212-CR&0.

11. Elevated coupling temperature is indicated. Determine probable cause of elevated temperature indication and take corrective action prior to continued operation. Accomplish checks in following steps 11a. and 11b. If probable cause is not revealed from steps 11a. or 11b., perform steps 11c. and 11d. It is recommended that the affected TEMP-PLATE be replaced in accordance with BHT-212-CR&0 prior to resuming operation.

212_MM_63_0004c

Figure 63-4. Damage Limits — Engine-to-transmission (Main) Driveshaft (Sheet 3 of 4)

NOTES (Cont)

a. Check the driveshaft coupling for any sign of grease leakage. If leakage is detected, the coupling must be serviced in accordance with BHT-212-CR&O prior to returning the aircraft to service.

b. Review current aircraft operating conditions to determine the probable cause of elevated coupling temperature. For example, extended operation at CG limits, extended operation at high power, repeated heavy lift, or high ambient temperature. Make appropriate adjustment to correct condition.

c. Inspect engine mounts (Chapter 71) and transmission mounts (paragraphs 63-216, 63-220 and 63-225 for condition. Make appropriate repairs as necessary.

d. Verify engine to transmission alignment. Refer to Chapter 71.

12. Coupling overtemp condition is very likely. Remove driveshaft or coupling assembly and perform overtemp inspection in accordance with BHT-212-CR&O and the following instructions. Scrap affected male and female couplings if any of the conditions listed below exist or if required by BHT-212-CR&O inspection criteria.

a. The cadmium plating on the outer coupling is discolored (circumferential tan or light brown band) or blistered.

b. The gear teeth of either coupling are discolored (brown or blue) in the normally bright contact patterns.

c. Under 5x to 10x magnification, the surfaces of the gear teeth of either the inner or the outer coupling exhibit signs of metal smearing or tearing in the contact patterns.

d. The grease is very viscous (thick) and has a strong pungent odor.

NOTE

If none of the above conditions exist the coupling may be reassembled in accordance with BHT-212-CR&O and returned to service following replacement of the TEMP-PLATES.

13. Same as Note 10 except during operations before TEMP-PLATE replacement, a yellow-bordered TEMP-PLATE indication shall be considered as an overtemp indication and Notes 11 and 12 accomplished.

212_MM_63_0004d

Figure 63-4. Damage Limits — Engine-to-transmission (Main) Driveshaft (Sheet 4 of 4)