DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

MANDATORY BRAKE HOSE INSPECTION AND REPLACEMENT-TACTICAL VEHICLES

Headquarters, Department of the Army, Washington, DC

21 July 1989

1. Purpose. This bulletin is to alert operators, organizational, direct and general support personnel to the safety hazards involving brake hose failures on Tank-Automotive Command tactical vehicles.

2. Procedures. The brake systems on all tactical vehicles will be closely inspected during scheduled semiannual services. Pay extremely close attention to all flexible hydraulic brake hoses installed on the vehicle. Where the brake hose is close to the frame, check for wear, pinching, or interference. If any of these are found, the hose must be carefully inspected for serviceability and replaced and repositioned to prevent failure. When inspection shows that hose is worn, chafed, cracked, crimped or abraded which has resulted in damage to hose through outer casing to the first ply of fabric, it is mandatory that hose assembly be replaced prior to use of the vehicle. If there is any evidence of hose leakage, the hose must be replaced prior to use of the vehicle. Also, if there is evidence of internal hose damage such as bulges, hose must be replaced prior to placing vehicle in service.

3. Preventive Maintenance Checks and Services (PMCS). PMCS tables of the affected TM's are being changed to include the above inspections.

4. Reporting of Equipment Publication Improvement. The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to U.S. Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000.

Approved for public release; distribution is unlimited.

By Order of the Secretary of the Army:

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Distribution:

To be distributed in accordance with DA Form 12-34C, Unit, Direct Support and General Support Maintenance Requirements for Tactical Vehicles.

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The Metric System and Equivalents

Linear Measure

- 1 centimeter = 10 millimeters = .39 inch
- 1 decimeter = 10 centimeters = 3.94 inches
- 1 meter = 10 decimeters = 39.37 inches
- 1 dekameter = 10 meters = 32.8 feet
- 1 hectometer = 10 dekameters = 328.08 feet 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

- 1 centigram = 10 milligrams = .15 grain 1 decigram = 10 centigrams = 1.54 grains
- 1 gram = 10 decigram = .035 ounce
- 1 dekagram = 10 grams = .35 ounce

- 1 hectogram = 10 dekagrams = 3.52 ounces
- 1 kilogram = 10 hectograms = 2.2 pounds
- 1 quintal = 100 kilograms = 220.46 pounds
- 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

- 1 centiliter = 10 milliters = .34 fl. ounce
- 1 deciliter = 10 centiliters = 3.38 fl. ounces
- 1 liter = 10 deciliters = 33.81 fl. ounces
- 1 dekaliter = 10 liters = 2.64 gallons
- 1 hectoliter = 10 dekaliters = 26.42 gallons
- 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

- 1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
- 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
- 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
- 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
- 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
- 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

- 1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
- 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
- 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	То	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29 ,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit	5/9 (after	Celsius	°C
	temperature	subtracting 32)	temperature	

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