

**COMBAT VEHICLE
PRE-COMBAT CHECKLIST FOR:**

**HOWITZER, MEDIUM, SELF-PROPELLED
155MM, M109A2 (2350-01-031-0586)
155MM, M109A3 (2350-01-031-8851)
155MM, M109A4 (2350-01-277-5770)
155MM, M109A5 (2350-01-281-1719)**

WARNING

THIS CHECKLIST IS TO BE USED ONLY WHEN AUTHORIZED BY THE COMMANDER. IT IS NOT INTENDED TO BE USED IN PLACE OF THE PMCS.

NOTE

THIS CHECKLIST CONTAINS CHECKS TO BE PERFORMED BEFORE COMBAT TO ASSURE VEHICLE IS MISSION CAPABLE. THE CHECKLIST SEQUENCE NUMBERS HEREIN CORRESPOND TO THOSE CHECKS IN THE OPERATOR'S TM. REPORT CHECK RESULTS TO YOUR IMMEDIATE LEADER.

DISTRIBUTION STATEMENT A. Approved for public release: distribution is unlimited.

By Order of the secretary of the Army
CARL E. VUONO
General, United States Army
Chief of Staff

Official:
THOMAS F. SIKORA
Brigadier General, United States Army
The Adjutant General

Distribution:
To be distributed in accordance with DA Form 12-37E, (Block 2116), Operator's Maintenance Requirements for TM 9-2350-311-PCL.

DEPARTMENT OF THE ARMY

15 October 1990

1. **VEHICLE EXTERIOR:** Walk-Around and Check For Fluid Leaks, Damage, Tampering, and Missing Parts That Prevent Operation.
5. **RADIATOR COOLANT:** Check Fluid Level.
3. **EXTERNAL FIRE EXTINGUISHER HANDLE:** Check Lacing and Seal.
6. **DRIVER'S COMPARTMENT FIRE EXTINGUISHER PULL HANDLE:** Check Lacing and Seal.
8. **ENGINE/INSTRUMENTS:** Start Engine. Check Warning Lights/Gauges.
68. **NBC SYSTEM CHECK:** (If So Equipped).
13. **POWER PACK RESERVOIR:** Check Fluid Level.
17. **CHECK ELEVATING MECHANISM.**
18. **CHECK TRAVERSING MECHANISM.**
16. **REPLENISHER SYSTEM:** Replenisher Gage Between 17 and 24 PSI.
24. **CHECK RAMMER SYSTEM.**
25. **CHECK RECUPERATOR PINS:** Pins Protrude Between 1/8 and 3/4 Inch.
22. **CHECK BREECH OPENING CAM AND ROLLERS:** Rollers Are Not Broken. Lube Prior To Firing.
23. **CHECK FIRING MECHANISM.**
20. **BREECHBLOCK:** Function Check. Witness Marks Aligned.
- 26-32. **FIRE CONTROL:** Mount and Check Components.
MACHINE GUN FUNCTION CHECK.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE NO.

PARA-GRAPH

FIGURE NO.

TABLE NO.

IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

THE METRIC SYSTEM AND EQUIVALENTS

NEAR MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
 1 Kilometer = 1000 Meters = 0.621 Miles

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

SQUARE MEASURE

1 Sq. Centimeter = 100 Sq. Millimeters = 0.155 Sq. Inches
 1 Sq. Meter = 10,000 Sq. Centimeters = 10.76 Sq. Feet
 1 Sq. Kilometer = 1,000,000 Sq. Meters = 0.386 Sq. Miles

CUBIC MEASURE

1 Cu. Centimeter = 1000 Cu. Millimeters = 0.06 Cu. Inches
 1 Cu. Meter = 1,000,000 Cu. Centimeters = 35.31 Cu. Feet

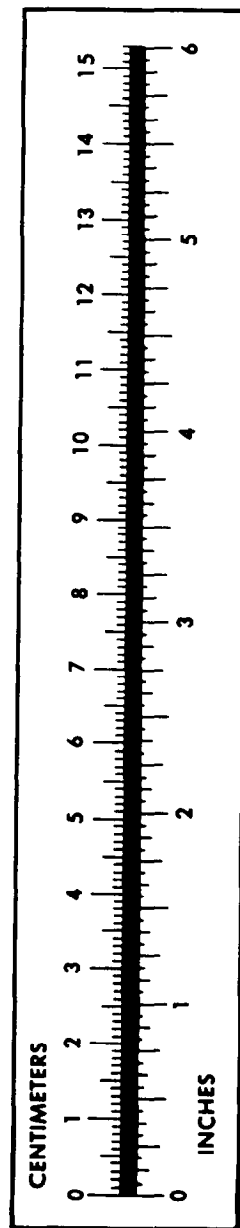
TEMPERATURE

$5/9(^{\circ}\text{F} - 32) = ^{\circ}\text{C}$
 212° Fahrenheit is equivalent to 100° Celsius
 90° Fahrenheit is equivalent to 32.2° Celsius
 32° Fahrenheit is equivalent to 0° Celsius
 $9/5^{\circ}\text{C} + 32 = ^{\circ}\text{F}$

APPROXIMATE CONVERSION FACTORS

| TO CHANGE | TO | MULTIPLY BY |
|------------------------|----------------------|-------------|
| Inches | Centimeters | 2.540 |
| Feet | Meters | 0.305 |
| Yards | Meters | 0.914 |
| Miles | Kilometers | 1.609 |
| Square Inches | Square Centimeters | 6.451 |
| Square Feet | Square Meters | 0.093 |
| Square Yards | Square Meters | 0.836 |
| Square Miles | Square Kilometers | 2.590 |
| Acres | Square Hectometers | 0.405 |
| Cubic Feet | Cubic Meters | 0.028 |
| Cubic Yards | Cubic Meters | 0.765 |
| Fluid Ounces | Milliliters | 29.573 |
| its | Liters | 0.473 |
| arts | Liters | 0.946 |
| allons | Liters | 3.785 |
| Ounces | Grams | 28.349 |
| Pounds | Kilograms | 0.454 |
| Short Tons | Metric Tons | 0.907 |
| Pound-Feet | Newton-Meters | 1.356 |
| Pounds per Square Inch | Kilopascals | 6.895 |
| Miles per Gallon | Kilometers per Liter | 0.425 |
| Miles per Hour | Kilometers per Hour | 1.609 |

| TO CHANGE | TO | MULTIPLY BY |
|--------------------|------------------------|-------------|
| Centimeters | Inches | 0.394 |
| Meters | Feet | 3.280 |
| Meters | Yards | 1.094 |
| Kilometers | Miles | 0.621 |
| Square Centimeters | Square Inches | 0.155 |
| Square Meters | Square Feet | 10.764 |
| Square Meters | Square Yards | 1.196 |
| Square Kilometers | Square Miles | 0.386 |
| Square Hectometers | Acres | 2.471 |
| Cubic Meters | Cubic Feet | 35.315 |
| Cubic Meters | Cubic Yards | 1.308 |
| Milliliters | Fluid Ounces | 0.034 |
| Liters | Pints | 2.113 |
| Liters | Quarts | 1.057 |
| ers | Gallons | 0.264 |
| ms | Ounces | 0.035 |
| ograms | Pounds | 2.205 |
| Metric Tons | Short Tons | 1.102 |
| Newton-Meters | Pounds-Feet | 0.738 |
| Kilopascals | Pounds per Square Inch | 0.145 |
| ometers per Liter | Miles per Gallon | 2.354 |
| ometers per Hour | Miles per Hour | 0.621 |



PIN: 045092-000