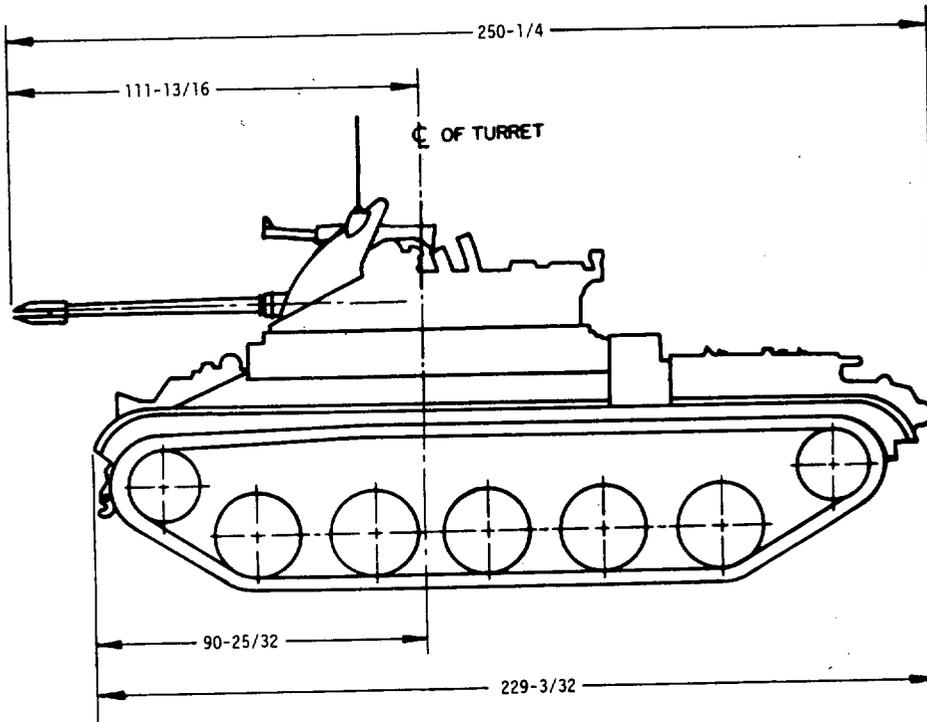
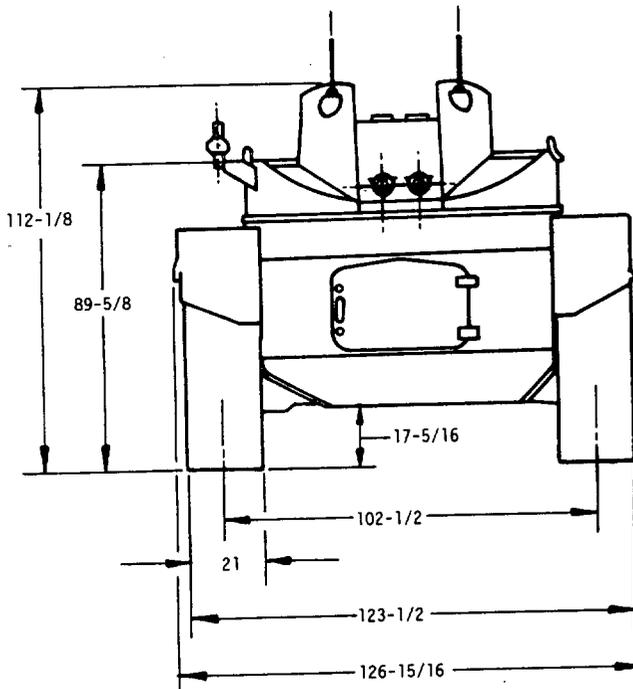


FED. SUP CLASS
2350



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(B) ENTIRE STANDARD REVISED

MS PART NO.	DRAWING NO.
MS 51978 -I	8750204

P. A. ARMY-AT Other Cust	INTERNATIONAL INTEREST	TITLE GUN, ANTI-AIRCRAFT ARTILLERY, SELF-PROPELLED: TWIN 40 MM, M42 A1
PROCUREMENT SPECIFICATION NONE	SUPERSEDES:	

MILITARY STANDARD	
MS51978(AT)	
SHEET 1	OF 2

FED. SUP CLASS
2350

VEHICLE CHARACTERISTICS

WEIGHT:
 COMBAT LOADED 49,800 LBS
 6 MAN CREW
 LESS CREW, STOWAGE AND FUEL 44,300 LBS
 GROUND PRESSURE 9.3 LBS/SQ IN

VISION AND SIGHTING EQUIPMENT:
 2 PERISCOPE, VISION, DRIVER'S M13 OR M13B1
 2 PERISCOPE, SIGHT, COMMANDER'S M13 OR M13B1
 1 SIGHT, COMPUTING M38
 1 SIGHT, REFLEX M24C
 2 SIGHT, RING
 1 QUADRANT, GUNNER'S M1A1
 1 PERISCOPE, VISION, DRIVER (OTHER) M19
 1 INDICATOR, AZIMUTH M27

ARMAMENT:
 PRIMARY GUN, DUAL/AUTOMATIC M2A1
 MOUNT M4E1
 RECOIL MECH, TYPE SPRING AND OIL RECUPERATOR
 TRAVERSE, RIGHT 360°
 LEFT 360°
 RATE 40°/SEC
 POWER, TYPE HYDRAULIC, MANUAL
 GEAR AND PINION
 ELEVATION 85°
 DEPRESSION 30°
 RATE 25°/SEC
 STABILIZER SYSTEM NONE

SECONDARY ARMAMENT:
 1 MACHINE GUN, 7.62MM M60
 FLEX RT FRT GUN MT OR REAR GUN MT, TRAVERSE 360°
 ELEVATION, RT FRT 76°
 REAR 60°
 1 SUB MACH GUN, 45 CAL M3A1
 CREW COMP
 5 RIFLE, 7.62MM OR M14
 5.56MM M16
 GUN MT 4, CREW COMP 1
 1 ROCKET LAUNCHER, BOX, REAR DECK M20

AMMUNITION:
 40 MM 480 ROUNDS
 7.62MM, MG, LINK METALLIC BELT 1750 ROUNDS
 45 CAL 180 ROUNDS
 7.62MM OR 5.56MM, RIFLE 900 ROUNDS
 3.5 IN ROCKETS 4
 GRENADES 8

RUNNING GEAR:
 SUSPENSION, TYPE TORSION BAR
 5 DUAL WHEELS, EA SIDE, SIZE 25-1/2
 TRACK, T91E3, STEEL W/ DETACHABLE RUBBER PADS, CENTER GUIDE, SINGLE PIN
 SHOES, PITCH 6, WIDTH 21 75/TRACK
 TIRES, SOLID RUBBER, 25-1/2 X 4-1/2 NO 20

ELECTRICAL SYSTEM:
 NOMINAL VOLTAGE 24 VOLTS
 GENERATOR, MAIN, 150 AMPS 7727461
 GENERATOR, AUX, 300 AMPS 7402950
 4 BATTERIES, 6TN, 12V, 100 AMP HRS MS35000-4
 2 IGNITION SYSTEMS, MAGNETO 7974214
 & 7974215
 COIL MS51355-1
 DISTRIBUTOR 7403411
 STARTER 7538988

ENGINE:
 6 CYL, HORIZONTAL OPPOSED, 8376655
 AIR COOLED
 FUEL INJECTION MS51314-1
 DISPLACEMENT 895 CU IN
 BORE 5.75 STROKE 5.75
 FUEL, GASOLINE, 80 OCTANE (APPROX) 140 GAL
 GOVERNED SPEED 2950 RPM
 COMPRESSION RATIO 5.5:1
 MAX GROSS HORSEPOWER 500@ 2800 RPM
 MAX NET HORSEPOWER 446@ 2400 RPM
 MAX GROSS TORQUE 955 LB/FT@ 2400 RPM
 MAX NET TORQUE 890 LB/FT@ 2200 RPM
 MAIN COOLING SYSTEM AIR
 OIL COOLING SYSTEM LIQUID
 ENGINE OIL CAPACITY 44 QTS

POWER TRAIN:
 CROSS DRIVE TRANSMISSION 7527947
 HYD CONVERTER SINGLE STAGE
 MULTIPHASE STALL MULTIPLICATION 4:1
 OVERALL USEABLE RATIO, LOW 15.3:1, HIGH 4:1, DIRECT 1:1,
 REVERSE 15:1
 STEERING RATE 6.8 RPM
 TURNING RADIUS, PIVOT TO INFINITY
 STEERING CONTROL TEE BAR SERVO
 BRAKES MULTIPLE DISC OPERATION, MECH FOOT PEDAL
 OIL COOLING SYSTEM, ENGINE MOUNTED COOLER, AIR COOLED WITH ENGINE DRIVEN FAN

FINAL REDUCTION:
 SPUR GEAR, RATIO 4.25:1
 FT/REV 1.44
 SPROCKET, 23.44 PITCH DIA 12 TEETH

COMMUNICATIONS:
 RADTD SET, RT SIDE, COMMANDER AN/VRC 46
 RADIO SET, RT SIDE, COMMANDER AN/VRC 8,9 OR 10
 INTERPHONE, OUTLETS-NONE AN/UIC-1

FIRE EXTINGUISHER:
 FIXED, TWO 10 LB CO2 7714476
 PORTABLE, ONE 5 LB CO2 7714780

PERFORMANCE:
 GROSS HORSEPOWER TO WEIGHT RATIO 20.05 HP/TON
 MAX TRACTIVE EFFORT 40,000 LBS TE/W 93%
 MAX SPEED 45 MPH
 MAX GRADE 60°
 MAX TRENCH CROSSING WIDTH 72 IN
 MAX VERTICAL WALL 28 IN
 MAX FORDING DEPTH 48 IN
 CRUISING RANGE 120 MI

GENERAL:
 CENTER OF GRAVITY, ABOVE GROUND 41-3/4 IN
 TURRET RING, INSIDE DIA 31 IN

- NOTES:
 1. DIMENSIONS ARE IN INCHES AND ARE SHOWN FOR ENGINEERING REFERENCE ONLY.
 2. REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.
 3. THIS VEHICLE SHALL BE IN ACCORDANCE WITH REFERENCED ENGINEERING DRAWINGS. COPIES WHICH MAY BE OBTAINED FROM: US ARMY-AUTOMOTIVE COMMAND, WARREN, MICH. 48397-5000.

(B) ENTIRE STANDARD REVISED

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 MS 51978 -1 8750204

APPROVED 4 MARCH 1964 REVISED (B) 3 JUL 85

P. A. ARMY-AT Other Cust	INTERNATIONAL INTEREST	TITLE GUN, ANTI-AIRCRAFT ARTILLERY, SELF-PROPELLED: TWIN 40 MM, M42 AI	MILITARY STANDARD
			MS51978(AT)
PROCUREMENT SPECIFICATION NONE	SUPERSEDES:	SHEET 2 OF 2	

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