

WITH ILLUSTRATED PARTS BREAKDOWN

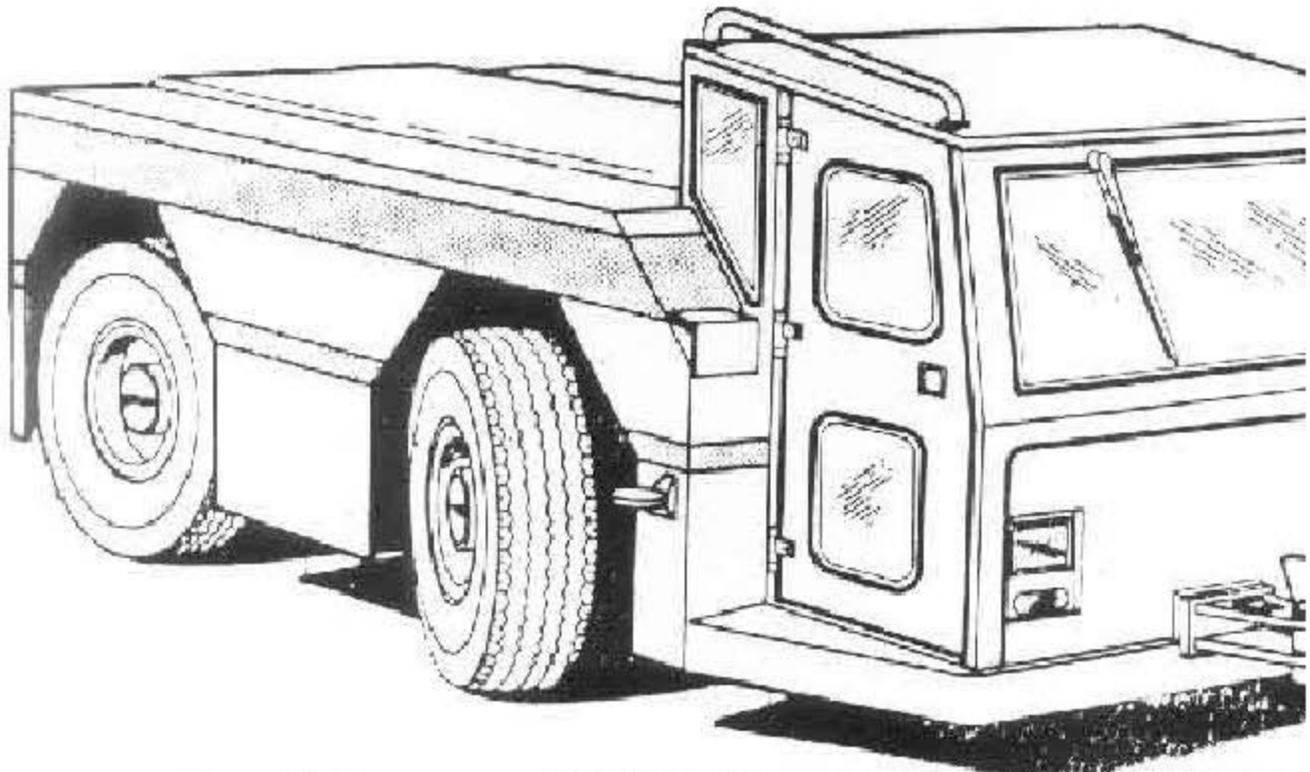
Stewart & Stevenson

MB2 Aircraft Tractor

CLASS I NSN 1740-01-082-1303

CLASS II NSN 1740-01-082-1304

CLASS I WINTERIZED NSN 1740-01-083-3708



This publication supersedes TOPS 101 dated 25 April 1983, T.O. 36A10-3-5-71C dated 16 February 1984, T.O. 36A10-3-5-71D dated 5 June 1984, T.O. 36A10-3-5-71E dated 30 November 1984, Operational Supplements T.O. 36A10-3-5-71S-1 dated 15 September 1986 and T.O. 3-5-71S-2 dated 8 December 1986.

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Section 2. GENERAL SPECIFICATIONS

CHARACTERISTICS	SPECIFICATIONS
I. COMPLETE UNIT	TRACTOR, AIRCRAFT TOWING, FOUR-WHEEL DRIVE AND STEERING
1. Manufacturer	Stewart and Stevenson Services, Inc. Houston Texas
2. Weight	CLASS I: 40,000 Pounds (18,182 KG) CLASS II: 53,000 Pounds (24,091 KG)
3. Length (less hitch)	15 Feet, 7 inches (4.75M)
4. Width	96 inches (2.41M)
5. Height	97 inches (2.46M)
6. Wheel Base	90 inches (2.29M)
7. Minimum Turning Radius (Outside Radius)	Coordinated 4-Wheel Steer: 150 inches (approximate)
8. Maximum Lateral Traverse Angle (4-Wheel Crab)	35 degrees
9. Ground Clearance	12" (30.48 cm)
10. Drawbar Pull	27,000 Pounds @ 0.75 MPH
Class I:	(12,273 KG @ 1.2 KPH)
Class II:	30,000 Pounds @ 0.75 MPH
11. Maximum Speed	15 MPH (24 KPH)
B. ENGINE	
1. Manufacturer	Detroit Diesel
2. Type	2-Cycle Full Diesel, Series 53T
3. Number of Cylinders	Four
4. Bore	3.875 inches (9.84 cm)
5. Stroke	4.5 inches (11.43 cm)
6. Effective Displacement	21.2 cubic inches (6.95L)
7. Speed (Idle) (Governed)	800 RPM 2800 RPM
8. Compression Ratio	17:1
9. Firing Order	1-2-4-3
10. Number of Main Bearings	Five (5)
11. Governor	Mechanical-Limiting Speed
12. Starting Motor	Delco-Remy Series 30 MT Type 175 (Heavy Duty)
13. Alternator (with Integral Regulator)	Delco-Remy Series 27-S1 Type 200, Negative Ground
C. TRANSMISSION	
1. Manufacturer	Allison
2. Model/Type	TT2421-1 Semi-Automatic
3. Speeds	Four Forward, Two Reverse, Dual-Range T Converter

2. Type	Limited Slip
3. Ratio	2:1
E. AXLES	
1. Manufacturer	Soma of America
2. Model	12/15 MRDDF
3. Overall Reduction:	13.24:1
G. WHEELS AND TIRES	
1. Wheel Type	Extra Heavy Duty, 10 Stud Disk
2. Tire Size	14.00X24-20 PLY
3. Inflation Pressure	95 PSIG (689.4 kPa)
H. BRAKES	
1. Service	Spindle-Mounted and Pinion-Mounted Caliper and Discs, Hydraulically Boosted and Operated
2. Parking	Cable-Actuated Pinion Mounted Calipers and Discs,
I. STEERING SYSTEM	
1. Type	Electro-Hydraulic
2. Pumps	Direct Driven Piston-Type
3. Operating Pressure	1500 PSIG Front, 1700 PSIG Rear
4. Controls	
Front Wheels	Manually-Operated Control Valve
Rear Wheels	Electrically-Operated Control Valve under servo-loop control
5. Steering Cylinders	Double Acting, 2 per Axle
J. ELECTRICAL SYSTEM	
1. Operating Voltage	12 VDC
2. Battery Size	6D
3. Maximum Alternator Current	80 Amperes
K. CAPACITIES OF SYSTEMS	
1. Engine Lube Oil	13 Quarts (12.87L)
2. Transmission Lube Oil (Type C3)	8.50 Gallons (32L)
3. Axles (each)	
Differential Carrier	2.38 Gallons (9L)
Planetary Ends	0.26 Gallons (1.5L) Each
4. Engine Cooling System	13.25 Gallons (507L)
5. Fuel Tank	57 Gallons (215L)
6. Hydraulic Steering System Res.	9 Gallons (34L)
7. Hydraulic Brake Booster Sys.	2 Quarts (1.85L)

CHARACTERISTICS

SPECIFICATIONS (Cont)

M. Reference Material

T.O. 36A10-3-5-71-2

Allison Transmission TRT2001
Series Service Manual (No. SA1277D)

T.O. 36A10-3-5-71-3

Detroit Diesel Engines Series 53
Service Manual (No. 65E201)

T.O. 36A10-3-5-71-4

Allison Transmission TT2000 Parts
Catalog (No. SA1248J)
