

TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT
AND GENERAL SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS LIST
FOR**

**STAND, ENGINE TRANSPORT
MODEL MTM-6325
(4910-00-338-6673)**

HEADQUARTERS, DEPARTMENT OF THE ARMY

MARCH 1983

WARNING

The transport stand breaking mechanism must be fully engaged prior to loading or unloading engine. Failure to do so may result in serious injury and equipment damage.

TECHNICAL MANUAL }
No. 9-4910-714-14&P }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 2 March 1983

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FOR
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MODEL MIM-6325

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS-SE, Rock Island, IL 61299. A reply will be furnished to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this equipment is issued.

Manufactured by: Medley Tool Co., Inc.
1950 W. Rockland St.
P.O. Box 20918
Philadelphia, PA 19141
Procured under Contract No. DAAA09-78-C-4217

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

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INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number. 32000
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number. MTM-6325
- 5 - Manufacturer's Serial Number (End Item),
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

- (a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 32000 followed by a colon and manufacturer's Part Number for the repair part.
- (b) Complete Remarks field as follows:

Noun:	(nomenclature of repair part)
For:	NSN: 4910-00-338-6673
Manufacturer:	Medley Tool Co., Inc. 1950 W. Rockland St P.O. Box 20918 Philadelphia, PA 19141
Model:	MTM-6325
Serial:	(of end item)

Any other pertinent information such as Frame Number, Type, Dimensions, etc.

SECTION 1 INTRODUCTION

- 1-1. SCOPE.** This section contains information on the physical description, function and capabilities of the Engine Transport Stand, Ordnance part number 8708857.
- 1-2. PURPOSE AND FUNCTION.** The Engine Transport Stand is designed to provide shop transportation during overhaul and repair activities. It is capable of supporting a variety of aircraft engines by means of adjustable support assemblies.
- 1-3. PHYSICAL CHARACTERISTICS.** Weight, dimensions and other relevant characteristics are specified in table 1-1 below.

TABLE 1-1. PHYSICAL CHARACTERISTICS.

LENGTH	49 1/8 INCHES
WIDTH	43 INCHES
OVERALL HEIGHT	22 1/2 INCHES
WEIGHT	280 POUNDS
WHEEL, RIGID	2000 LB CAPACITY, 5" DIA.
WHEEL, SWIVEL	2000 LB CAPACITY, 5" DIA., SWIVEL RADIUS

- 1-4. STORAGE AND TOOLS.** The Engine Transport Stand is a rugged piece of shop equipment and requires no special storage condition. Adjustments and/or maintenance can be accomplished using standard mechanics tools.

SECTION II

OPERATION

- 2-1. **FUNCTION.** The Engine Transport Stand is designed to accommodate various size aircraft engines by means of adjustable support assemblies.

WARNING

THE TRANSPORT STAND BREAKING MECHANISM MUST BE FULLY ENGAGED PRIOR TO LOADING OR UNLOADING ENGINE. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND EQUIPMENT DAMAGE.

- 2-2. **BREAKING MECHANISM.** Prior to loading or unloading, the breaking mechanism at the Transport Stand must be set using a box wrench.

The locking screw is turned clockwise until the foot is fully seated on the floor surface. Test stability of the Transport Stand by applying pressure on the Transport Stand handle in both a forward and backward direction.

- 2-3. **SUPPORT ASSEMBLIES.** The four support assemblies may be adjusted to receive various size engines. Loosen the hex head screw and position the support assembly along the slot in the longitudinal frame member of the stand or along the axis of the slot in the base member of the support assembly. After the proper location has been achieved, tighten the mounting screw securely.
- 2-4. **TRANSPORTATION.** Prior to movement of the Transport Stand with engine mounted, turn the locking screw counterclockwise to retract the brake mechanism.

SECTION III

TROUBLESHOOTING

- 3-1. Troubleshooting instructions are not required due to the basically simple design utilized.

SECTION IV REPAIR

- 4-1. **DISASSEMBLY.** Instructions for removal of various components and subassemblies are specified in the following paragraphs.
- 4-2. **SUPPORT ASSEMBLY.** Removal of the support assembly requires only the removal of a hex nut and the removal of a screw and two washers.
- 4-3. **HANDLE ASSEMBLY.** The triangular assembly at the rear of the Transport Stand can be disassembled by the removal of three screws, six washers, and three hex nuts.
- 4-4. **WHEEL ASSEMBLY.** To disassemble the wheel assembly from the Transport Stand frame member, remove sixteen hex nuts, washers, and capscrews. This is a purchased assembly and further disassembly is not recommended.
- 4-5. **BRAKING ASSEMBLY.** Remove the setscrew from the braking foot and remove the foot. Unscrew the locking screw until it is clear of the tapped hole in the plate on top of the Transport Stand frame member.
- 4-6. **REPAIR.** Structural damage to frame members may require cutting the frame member loose and welding a new part in its place. Damage to the locking screw or wheel assembly will require replacement of the damaged item.
- 4-7. **REASSEMBLY.** To reassemble any component, reverse the directions given above.

**SECTION V
PARTS LISTS**

5-1. Table 5-1 lists each component of the Engine Transport Stand together with the quantity per unit and part number. Identifying: part numbers are Department of the Army Ordnance numbers, MS numbers, or NAS numbers.

TABLE 5-1. PARTS LIST

ITEM NAME	QUANTITY PER UNIT	PART NUMBER
SCREW, LOCKING	1	7550159
PLATE	4	7550160
SPACER	1	8708858
CROSSMEMBER	1	8708860
CROSSMEMBER	1	8708861
SUPPORT ASSY.	4	8708862
LEG	2	8708865
CHANNEL	2	8708866
FOOT	1	8708870
PLATE	1	8708871
WASHER	4	MS27183-18
WASHER	4	MS27183-21
WASHER	16	MS35338-48
WASHER	4	MS35338-50
SETSCREW	1	MS51964-65
NUT	19	MS51968-14
NUT	4	MS51968-20
SCREW	18	MS90726-115
SCREW	1	MS90726-116
SCREW	4	MS90726-162
WASHER BEVEL 9½"	2	NAS1099-8
WHEEL ASSY.	2	Model NO.7-5609-169 or equal
WHEEL ASSY.	2	Model NO.7-5608-169 or equal

SECTION VI CLEANING AND LUBRICATION

6-1. CLEANING. The Transport Stand is primed and painted olive drab. It should require only paint touchup at periodic intervals and the removal of dirt, grease and other foreign materials from all surfaces.

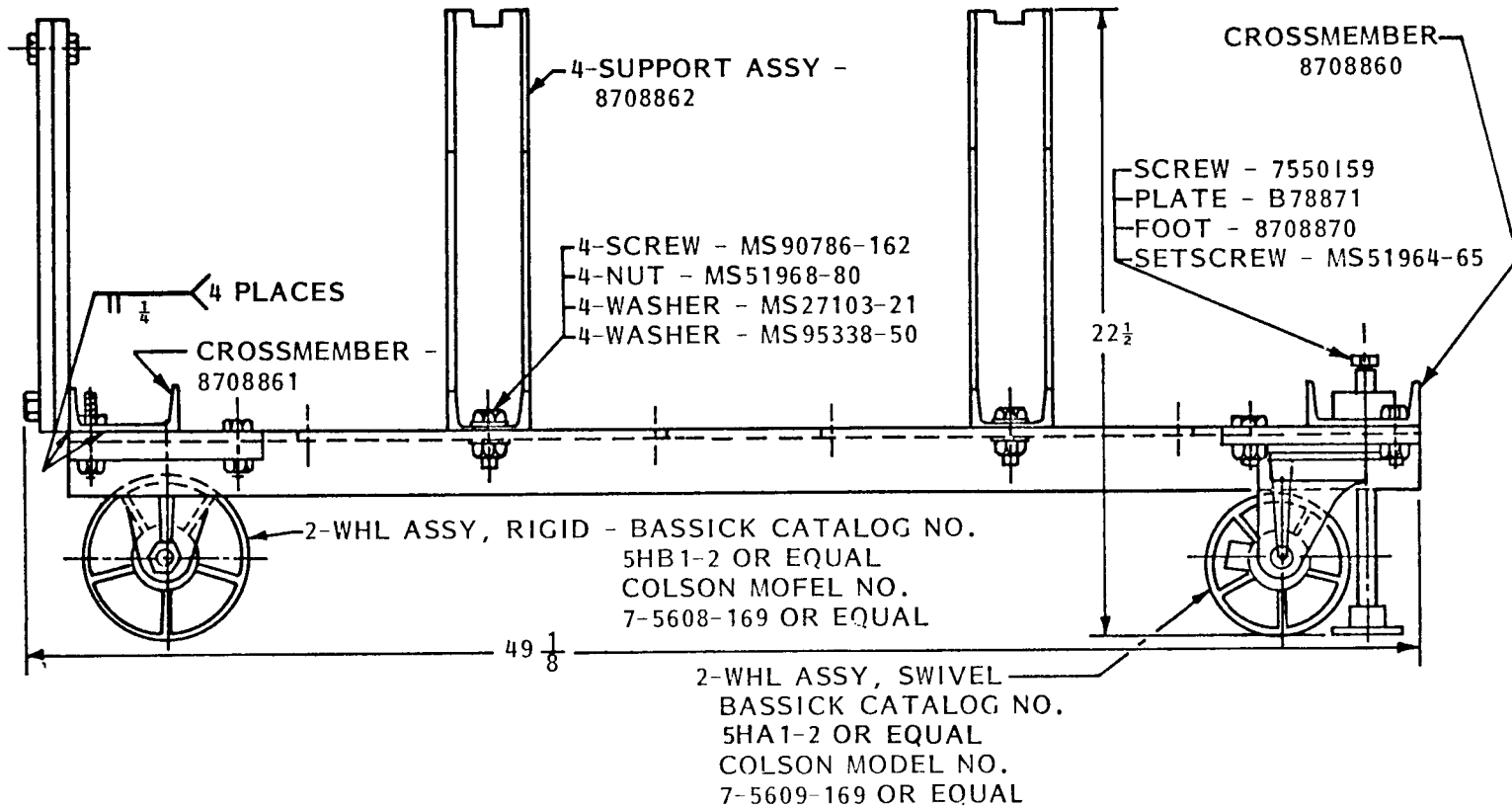
6-2. LUBRICATION. Two areas require periodic lubrication as specified below.

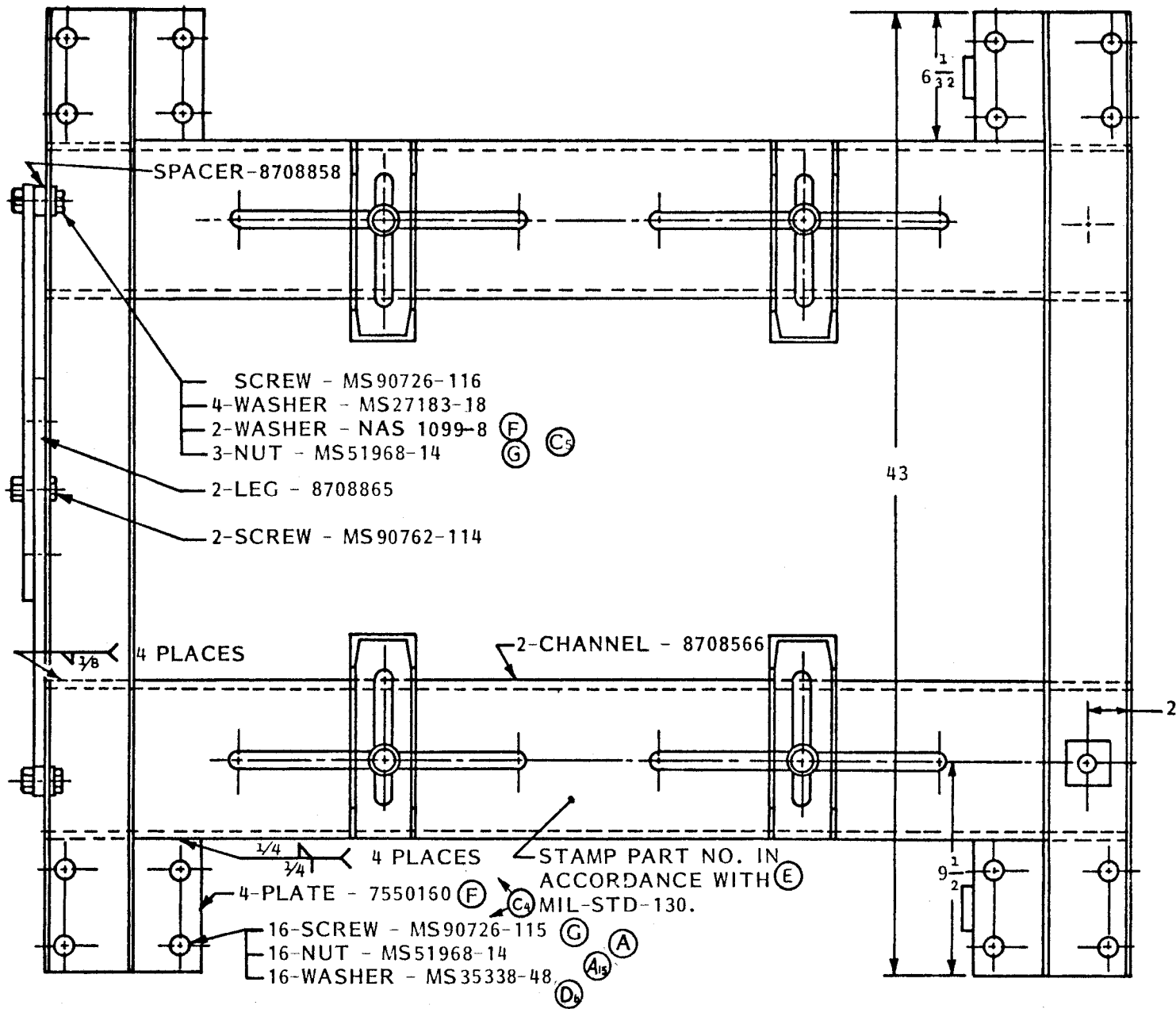
6-3. BREAKING MECHANISM. The threaded locking screw in the braking mechanism should be greased at regular maintenance intervals to assure ease of Operation.

6-4. WHEEL ASSEMBLY. Each of the four wheels is equipped with a hollow axle, tapered point grease fitting. In addition, the swivel wheels on the front end of the Transport Stand have a separate grease fitting for the swivel ball bearing. Any type of all-weather grease should provide effective protection.

SIDE VIEW 7-1
 STAND, ENGINE TRANSPORT

9





STAND, ENGINE TRANSPORT

TOP VIEW 7-2

By Order of the Secretary of the Army:

E. C. MEYER
General, United States Army
Chief of Staff

Official

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

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BE EXACT... PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO.	TABLE NO
4	2		

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

The word "figuore" should be spelled "figure".

SAMPLE

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THE METRIC SYSTEM AND EQUIVALENTS

LINEAR 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

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

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

CUBIC MEASURE

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

LIQUID MEASURE

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

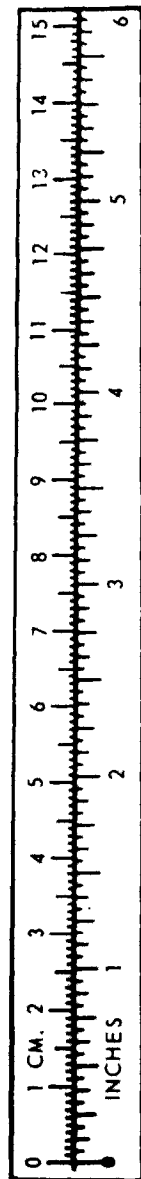
TEMPERATURE

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

APPROXIMATE CONVERSION FACTORS

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
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
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	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

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
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
Liters	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pound-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621



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