
TECHNICAL MANUAL

DIRECT SUPPORT, GENERAL SUPPORT, AND
DEPOT MAINTENANCE MANUAL

TRUCK, LIFT, FORK; DIESEL ENGINE, PNEUMATIC TIRED
WHEELS, ROUGH TERRAIN, 6,000 LB CAPACITY,
24 INCH LOAD CENTER, (ANTHONY MODEL MLT-6,
ARMY MODEL MHE-200) FSN 3930-903-0900,
(CHRYSLER MODEL MLT-6CH, ARMY MODEL
FSN 3930-937-0220, (ATHEY MODEL ARTFT-6,
ARMY MODEL MHE-222) FSN 3930-419-5744°

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(CHRYSLER MODEL MLT-6CH, ARMY MODEL MHE-202) FSN 3930-937-0220,
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CHAPTER 1

INTRODUCTION

Section 1. GENERAL

1-1. Scope

This manual is for your use in maintaining the Anthony Co. Model MLT-6 (Army Model MHE 200), Chrysler Ccrp. MLT-6CH (Army Model 202), and Athey Co. Model ARTFT-6 (Army Model 222) wheel-mounted rough terrain forklift trucks. They provide information on the maintenance of the equipment that is beyond the scope of the tools, equipment, personnel, or supplies that are normally available to using organizations.

1-2. Maintenance Forms and Records

Maintenance forms and records that you are required to use are explained in TM 38-750.

1-3. Reporting of Errors

You can improve this manual by calling attention to errors and by recommending im-

provements, using DA Form 2028 (Recommended Changes to Publications) or by a letter, and mail directly to Commander, U. S. Army Troop Support Command, ATTN: AMSTS-MPP, 4300 Goodfellow Boulevard St. Louis Mo. 63120. A reply will be furnished directly to you.

1-4. Destruction of Army Materiel to Prevent Enemy Use

Procedures for the destruction of Army materiel to prevent enemy use and explained in TM 750-244-3.

1-5. Administrative Storage

Administrative storage procedures are explained in TM 740-90-1.

Section II. DESCRIPTION AND DATA

1-6. Description

A general description of the forklift trucks, as well as the identification and differences in models, can be found in TM 10-3930-242-12. Repair instructions applicable to Direct and General Support maintenance and additional descriptive material, where required, are to be found in the appropriate sections and paragraphs.

1-7. Tabulated Data

a. Identification and Instruction Plate. Each forklift truck is provided with a Corp of Engineers "A" plate. This is described in TM 10-3930-242-12.

b. Tabulated Data.

(1) *General.* This subparagraph contains overhaul data that is applicable to direct and general support personnel. A hydraulic diagram (fig. FO-1) is also included. Refer to TM

10-3930-242-12 for the electrical schematic diagram.

*FO-1. Hydraulic diagram.
(Located in back of manual)*

(2) Engine.

Manufacturer -----	Detroit Diesel
Model -----	5043-7000
Series -----	53 N
Rpm (Revolutions per minute) no load -----	2700 ±15
Stall speed rpm -----	2280-2310
Firing order -----	1-3-4-2
Number of cylinders -----	4
Bore -----	3.875 in.
Stroke -----	4.5 in.
Compression ratio -----	21-to-1
Total displacement-Cu. In. -----	212.4
Number of main bearings --	5

(3) Engine generator.

Manufacturer -----	Prestolite
Volts -----	24V, dc
Model -----	GHA-4804 UT

(4) Transmission.

Manufacturer -----	Allison
--------------------	---------

Model ----- 3331-1
 Type ----- Torque converter and planetary gear
 Rating:
 Maximum input speed ----- 300 ft-lb net
 Maximum input torque ----- 3,000 rpm
 Maximum input ----- 175 gross hp (horsepower)
 Rotation, viewed from input end:
 Input ----- Clockwise
 Output, forward operation.
 Gear ranges, selector positions:
 Forward ----- 3 speeds
 Reverse ----- 3 speeds
 Range control ----- Low, intermediate, and high
 Direction control ----- Forward, neutral, reverse
 Torque converter:
 Type ----- Single-stage, polyphase, 3-element, free-wheeling stator
 Elements ----- Pump, turbine, stator
 Torque multiplications:
 Ratios ----- TC 320-3.50:1
 Gear data:
 Direction and range
 gears ----- 10-pitch, straight spur planetary
 Transfer gears ----- 4-pitch, straight spur
 Accessory gearing ----- 6-pitch, straight spur
 Clutch data:
 Type ----- Multidisk, hydraulic-actuated spring-released, oil-cooled; automatic compensation for wear
 Material ----- Reaction plates—steel friction plates-sintered bronze on steel
 Parking brake:
 Size ----- 13³/₈ x 2
 Type ----- Expanding shoe, mechanical
 Rating ----- 45,000 inch-pound at 2,100 lb apply force
 Flanges:
 Input (remote mount) ----- Mechanics 6C, 7C; Spicer 1500,1600; Rockwell 5N
 Rear ----- Mechanics 6C, 7C, 9C; Spicer 1500, 1700; Rockwell 5N, 6N
 Front ----- Mechanics 6C, 7C, 9C; Spicer 1600; Rockwell 5N, 6N
 Oil system:
 Oil pump (pressure) ----- Input driven, gear type, positive displacement
 Oil capacity; US gal ----- Initial fill 7.5; refill 5.5
 Oil cooler ----- Heat exchanger
 Converter-out oil temperature ----- 250 F. maximum
 Main pressure ----- 110 to 135, or 135 to 155 psi at full throttle stall
 Lubrication oil pressure ----- 20 to 25 psi
 Steer pump drive:
 Rating ----- 15 hp continuous
 Ratio to engine speed ----- 1:1
 Power takeoff
 Rating ----- 50 hp continuous, 80 hp intermittent (subtract 15 hp when steer pump is used)

Ratio to engine speed -----1:1
 (5) *Generator regulator.*
 Manufacturer ----- Delco-Remy
 Volts ----- 24V, dc
 (6) *Starter.*
 Manufacturer ----- Delco-Remy
 Volts ----- 24V, dc
 (7) *Steering adjustments.*
 Front steering linkage:
 Length between pivot centers ----- 13 in.
 Rear steering linkage:
 Length between pivot centers ----- 21.484 in.
 Length between grease fittings ----- 21 7/8 in.
 Steering mode cylinder:
 Length is adjusted so holes in intermediate link and pitman arm are aligned
 Front drag link
 Length between pivot centers ----- 38 5/8 in.
 Rear drag link
 Length between pivot centers ----- 45¹⁵/₁₆ in.

(8) *Nut, bolt, stud and pipe plug torque data.*
 The following specifications apply to clean, dry threads. Reduce the torque 10 percent when the threads are clean and oiled.

(a) *Exceptions to standard bolt and nut torque specifications.*

Application	Size Nut or Bolt	Torque (ft.lb)
Injector Control Shaft Bracket Bolts	¼-20	10-12
Cam Follower Guide Bolts	¼-20	12-15
Governor to Flywheel Housing	5/16-18	10-12
Idler Gear Hub and Spacer Bolts	5/16-18	19-23
Idler Gear Hub and Spacer Bolts	3/8-16	40-45
Flywheel housing Bolts	3/8-16	25-30
Injector Clamp Bolts	3/8-16	20-25
Air Box Cover Bolts	3/8-16	12-16
Connecting Rod Nuts Lubricated	3/8-24	40-45
Connecting Rod Nuts (Plain)	3/8-24	50-55
Flywheel Housing Bolts	3/8-24	25-30
Fuel Line Nuts	3/8-24	12-15
Fuel Connector	3/8-24	20-28
Rocker arm Bracket Bolts	7/16-14	50-55
*Flywheel Bolts	½-20	110-120
*Main Bearing Cap Bolts	9/16-12	120-130
*Cylinder Head Bolts	5/8-11	170-180
Flange Mounted Air Compressor Drive Shaft Nut	3/4-10	Ø
Crankshaft End Bolt	3/4-16	200-220
Crankshaft End Bolt (In-Line engines with cone mounted pulleys not stamped with the letter "A")	3/4-16	290-310
Air Compressor Drive Pulley Nut	3/4-16	80-100

Note. Ø—100 lb. ft. plus increase torque to line up cotter pin.

● —Lubricate at assembly with International Compound No.2 or equivalent