AMT600, AMT622 and AMT626 All Material Transporters

For complete service information also see:

John Deere K Series Air Cooled Engines CTM5

John Deere Horicon Works
TM1363 (15AUG91)
LITHO IN U.S.A.
ENGLISH

Introduction

FOREWORD

This manual is written for an experienced technician. Essential tools required in performing certain service work are identified in this manual and are recommended for use.

Live with safety: Read the safety messages in the introduction of this manual and the cautions presented throughout the text of the manual.

This is the safety-alert symbol. When you see this symbol on the machine or in this manual, be alert to the potential for personal injury.

Technical manuals are divided in two parts: repair and diagnostics. Repair sections tell how to repair the components. Diagnostic sections help you identify the majority of routine failures quickly.

Information is organized in groups for the various components requiring service instruction. At the beginning of each group are summary listings of all applicable essential tools, other materials needed to do the job and service parts kits.

Section 10, Group 15—Repair Specifications, consist of all applicable specifications, wear tolerances and specific torque values for various components on each individual machine.

Binders, binder labels, and tab sets can be ordered by John Deere dealers direct from the John Deere Distribution Service Center.

This manual is part of a total product support program.

FOS MANUALS—REFERENCE

TECHNICAL MANUALS—MACHINE SERVICE

COMPONENT MANUALS—COMPONENT SERVICE

Fundamentals of Service (FOS) Manuals cover basic theory of operation, fundamentals of troubleshooting, general maintenance, and basic type of failures and their causes. FOS Manuals are for training new personnel and for reference by experienced technicians.

Technical Manuals are concise guides for specific machines. Technical manuals are on-the-job guides containing only the vital information needed for diagnosis, analysis, testing, and repair.

Component Technical Manuals are concise service guides for specific components. Component technical manuals are written as stand-alone manuals covering multiple machine applications.

MX,TMIFC,A1 -19-05FEB91

JOHN DEERE DEALERS

This is a complete revision for TM1363 AMT600 and AMT622 All Material Transporter.

Discard TM1363 dated (09MAY90) and replace with this manual.

New information added to this manual includes:

1. AMT626 repair and diagnostic information.

2. Fuel pump is no longer serviceable.

3. Steering gear repair information has been revised as a result of a steering ratio change.

4. Rear axle installation procedure was changed to improve brake disk alignment.

5. Long axle extension kit specifications were added to axle installation procedures.

NOTE: For complete engine repair information, CTM5 John Deere K-Series Air Cooled Engines Component Technical Manual is also required. Use the component technical manual in conjunction with this machine manual.

MX,TM1363,DLR -19-31JUL91

Contents

Continued on next page

All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

TM1363-19-15AUG91

Section 10
GENERAL INFORMATION

Contents

RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

T81389 -UN-07DEC88

DX,ALERT -19-04JUN90

UNDERSTAND SIGNAL WORDS

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

TS187 -19-30SEP88

DX,SIGNAL -19-04JUN90

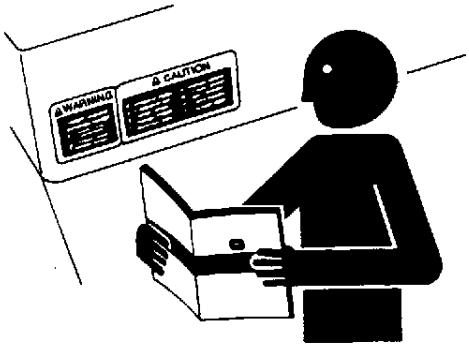
FOLLOW SAFETY INSTRUCTIONS

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.



TS201 -UN-23AUG88

DX,READ -19-04JUN90

HANDLE FLUIDS SAFELY—AVOID FIRES

When you work around fuel, do not smoke or work near heaters or other fire hazards.

Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

Make sure machine is clean of trash, grease, and debris.

Do not store oily rags; they can ignite and burn spontaneously.

TS227 -UN-23AUG88

DX,FLAME -19-04JUN90

PREVENT BATTERY EXPLOSIONS

Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.

Never check battery charge by placing a metal object across the posts. Use a volt-meter or hydrometer.

Do not charge a frozen battery; it may explode. Warm battery to 16˚C (60˚F).

TS204 -UN-23AUG88

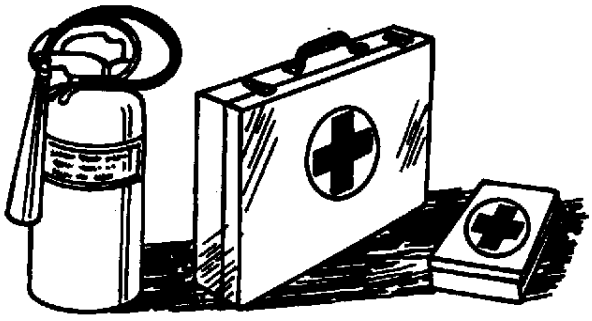
DX,SPARKS -19-04JUN90

PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



TS291 -UN-23AUG88

DX,FIRE2 -19-04JUN90

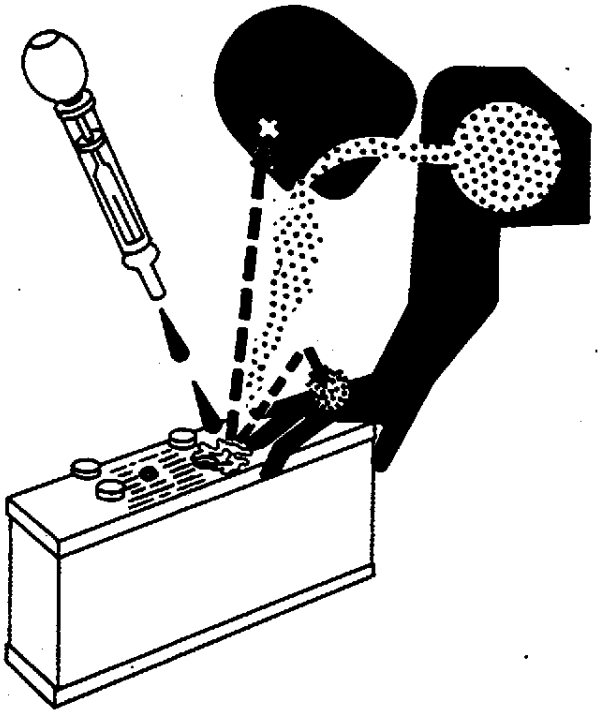
PREVENT ACID BURNS

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:
1. Filling batteries in a well-ventilated area.
2. Wearing eye protection and rubber gloves.
3. Avoiding breathing fumes when electrolyte is added.
4. Avoiding spilling or dripping electrolyte.
5. Use proper jump start procedure.

If you spill acid on yourself:
1. Flush your skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush your eyes with water for 10—15 minutes. Get medical attention immediately.

If acid is swallowed:
1. Drink large amounts of water or milk.
2. Then drink milk of magnesia, beaten eggs, or vegetable oil.
3. Get medical attention immediately.



TS203 -UN-23AUG88

DX,POISON -19-04JUN90

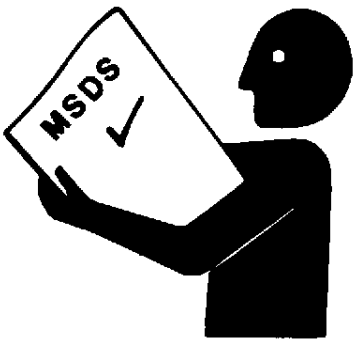
HANDLE CHEMICAL PRODUCTS SAFELY

Direct exposure to hazardous chemicals can cause serious injury. Potentially hazardous chemicals used with John Deere equipment include such items as lubricants, coolants, paints, and adhesives.

A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques.

Check the MSDS before you start any job using a hazardous chemical. That way you will know exactly what the risks are and how to do the job safely. Then follow procedures and recommended equipment.

(See your John Deere dealer for MSDS's on chemical products used with John Deere equipment.)

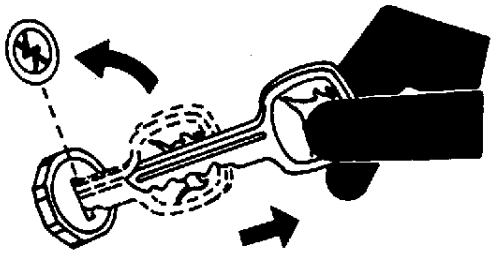


TS1132 -UN-26NOV90

DX,MSDS,NA -19-15MAR91

PARK MACHINE SAFELY

Before working on the machine:
• Stop the engine and remove the key.
• Disconnect the battery ground strap.
• Hang a “DO NOT OPERATE” tag on handlebar or steering wheel.



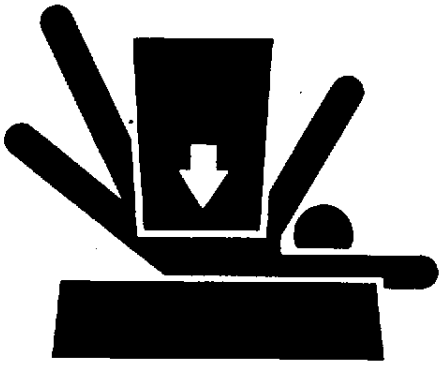
TS230 -UN-24MAY89

WX,622,TMSY,A -19-09MAY90

SUPPORT MACHINE PROPERLY

If you must work on a raised machine be sure it is supported properly.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work under a machine that is supported solely by a jack, use safety stands.



TS229 -UN-23AUG88

WX,622,TMSY,B -19-09MAY90

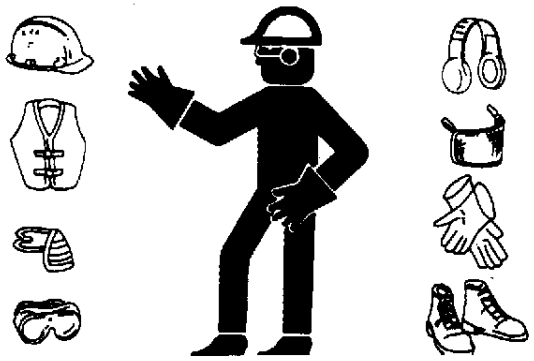
WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

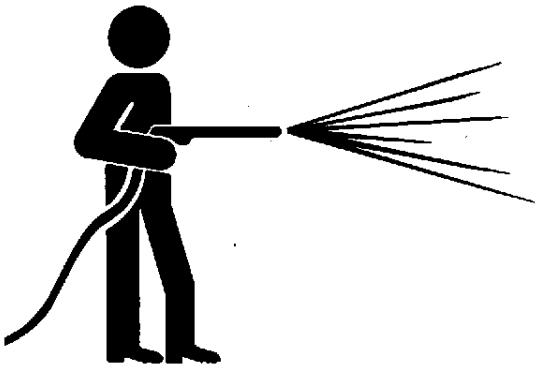


TS206 -UN-23AUG88

DX,WEAR -19-10SEP90

WORK IN CLEAN AREA

Before starting a job:
- Clean work area and machine.
- Make sure you have all necessary tools to do your job.
- Have the right parts on hand.
- Read all instructions thoroughly; do not attempt shortcuts.



T6642EJ -UN-18OCT88

DX,CLEAN -19-04JUN90

SERVICE TRANSPORTER SAFELY

Before you make repairs or adjustments—stop the engine, shift to neutral, and lock parking brake.

If service requires, lift and secure cargo box.

Do not change engine governor settings or overspeed engine.

Before you work on any part of engine, let it cool. Hot engine parts can burn skin on contact.

Do not run engine for any type of service work, unless park brake is locked.

W14979 -UN-28JUN89

WX,622,TMSY,C -19-09MAY90

AVOID ENTANGLEMENT IN DRIVES

Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is by passed.

NEVER start engine while standing on ground. Start engine only from operator's seat, with transaxle in neutral with park brake engaged.

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing, or necklace when you work near machine tools or moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.

W14661 -UN-12OCT88

WX,622,TMSY,D -19-09MAY90

MACHINE SPECIFICATIONS - AMT600

ENGINE

Horsepower	6.3 kW (8.5 hp)
Manufacturer	Kawasaki
Cylinders	1
Strokes/Cycle	4
Cooling	Air
Air Cleaner	Semi-Wet
Displacement	341 cc (20.9 cu in)
Compression Ratio	6.0 : 1

ENGINE SPEEDS

Slow Idle (no load)	1300 rpm
Fast Idle (no load)	4000 rpm

CAPACITIES

Fuel Tank	18 L (4.75 gal)
Crankcase	1.2 L (1.3 qt)
Transaxle	2.3 L (2.5 qt)

ELECTRICAL SYSTEM

Alternator	11 amps
Battery Cold Capacity at 0˚F (-18˚C)	255 amps
Battery	BCI-U-1 12 V
Regulator	Solid State

TRANSMISSION

Type	Belt-Driven Torque Converter With Gear-Driven Transaxle
Speeds	Forward—Neutral—Reverse

TRAVEL SPEEDS

Forward	26 km/h (16 mph)
Reverse	26 km/h (16 mph)

BRAKE . . . . . **Mechanically Operated Disc**

DIMENSIONS

Width Overall	1300 mm (51 in)
Height Overall	1040 mm (41 in)
Length Overall	2590 mm (102 in)
Ground Clearance	250 mm (10 in)

TIRES

Front	22.5 x 10.00—8
Rear	25 x 12.00—9

INFLATION PRESSURE

Front/Rear	34—41 kPa (5—6 psi) (0.34—0.41 bar)

NET WEIGHT (approx.) . . . . . **363 kg (800 lb)**

PAYLOAD CAPACITY . . . . . **272 kg (600 lb)**

TOWING CAPACITY . . . . . **454 kg (1000 lb)**

Specifications and design subject to change without notice.

WX,622,SPEC,A -19-09MAY90

MACHINE SPECIFICATIONS - AMT622

ENGINE

Horsepower	7.5 kW (10 hp)
Manufacturer	Kawasaki
Cylinders	1
Strokes/Cycle	4
Cooling	Air
Air Cleaner	Dry
Displacement	290 cc (17.7 cu in)
Compression Ratio	8.4 : 1

ENGINE SPEEDS

Slow Idle (no load)	1300 rpm
Fast Idle (no load)	4000 rpm

CAPACITIES

Fuel Tank	18 L (4.75 gal)
Crankcase	1.1 L (1.2 qt)
Transaxle	2.3 L (2.5 qt)

ELECTRICAL SYSTEM

Alternator	13 amps
Battery Cold Capacity at 0˚F (-18˚C)	255 amps
Battery	BCI-U-1 12 V
Regulator	Solid State

TRANSMISSION

Type	Belt-Driven Torque Converter With Gear-Driven Transaxle
Speeds	Forward—Neutral—Reverse

TRAVEL SPEEDS

Forward	26 km/h (16 mph)
Reverse	26 km/h (16 mph)

BRAKE . . . . . **Mechanically Operated Disc**

DIMENSIONS

Width Overall	1372mm (54 in)
Height Overall	1245mm (49 in)
Length Overall	2690mm (106 in)
Ground Clearance	250mm (10 in)

TIRES

Front	22.5 x 10.00—8
Rear	25 x 12.00—9

INFLATION PRESSURE

Front/Rear	34—41 kPa (5—6 psi) (0.34—0.41 bar)

NET WEIGHT (approx.) . . . . . **390 kg (860 lb)**

PAYLOAD CAPACITY . . . . . **272 kg (600 lb)**

TOWING CAPACITY . . . . . **454 kg (1000 lb)**

Specifications and design subject to change without notice.

WX,622,SPEC,B -19-09MAY90

MACHINE SPECIFICATIONS—AMT626

ENGINE

Horsepower	7.5 kW (10.0 hp)
Manufacturer	Kawasaki
Cylinders	1
Strokes/Cycle	4
Cooling	Air
Air Cleaner	Dry
Displacement	290 cc (17.7 cu in)
Compression Ratio	8.41:1

ENGINE SPEEDS

Slow Idle (no load)	1300 rpm
Fast Idle (no load)	4000 rpm

CAPACITIES

Fuel Tank	18 L (4.75 gal)
Crankcase	1.1 L (1.2 qt)
Transaxle	2.3 L (2.5 qt)

ELECTRICAL SYSTEM

Alternator	13 amps
Battery Cold Capacity at 0˚F (-18˚C)	255 amps
Battery	BCI-U-1 12 V
Regulator	Solid State

TRANSMISSION

Type	Belt-Driven Torque Converter With Gear-Driven Transaxle
Speeds	Forward-Neutral-Reverse

TRAVEL SPEEDS

Forward	25 km/h (15.4 mph)
Reverse	21.7 km/h (13.4 mph)

BRAKE . . . . . **Mechanically Operated Disc**

DIMENSIONS

Width Overall	1576 mm (62 in.)
Height Overall (top of steering wheel)	1245 mm (49 in.)
Length Overall	2650 mm (104.3 in.)
Ground Clearance	250 mm (10 in.)

TIRES - KNOBBY, BAR-TYPE, AND TURF

Front	22.5 x 10.00—8
Rear	25 x 12.00—9

INFLATION PRESSURE

Front/Rear	34—41 kPa (5—6 psi) (0.34—0.41 bar)

NET WEIGHT (approx.)	390 kg (860 lb)
CARGO BOX CAPACITY	272 kg (600 lb)
TOWING CAPACITY	454 kg (1000 lb)

(Specifications and design subject to change without notice)

MX,626,SPEC,A -19-31JUL91

REPAIR SPECIFICATIONS

ITEM	SPECIFICATION
SECTION 20—ENGINE REPAIR	
Engine Rubber Mount Cap Screw Torque—AMT600	27 ± 5 N·m (20 ± 4 lb-ft)
Engine to Frame Cap Screw Torque	50 ± 10 N·m (37 ± 7 lb-ft)
Muffler to Exhaust Pipe Clearance—AMT622/626	4 mm (0.16 in.)
Muffler Nut Torque—AMT622/626	25 N·m (18 lb-ft)
SECTION 50—POWER TRAIN REPAIR	
DRIVE BELT	
New Width	30 mm (1-3/16 in.)
Minimum Width	27 mm (1-1/16 in.)
Deflection	38—42 mm at 45 N (1.50—1.75 in. at 10 lb)
Pulley Alignment—distance between straightedge and drive pulley	28.7—30.2 mm (1.13—1.19 in.)
Bearing Support Strap Cap Screw Torque	50 N·m (37 lb-ft)
Muffler to Exhaust Pipe Clearance	4 mm (0.16 in.)
Muffler Mounting Nut Torque	25 N·m (18 lb-ft)
Drive Chain Maximum Slack	25 mm (1 in.)
DRIVE PULLEY	
Roller Arm Cap Screw Torque	7—9 N·m (60—84 lb-in)
Ramp Plate Cap Screw Torque	11—14 N·m (96—120 lb-in)
Clutch Retaining Cap Screw Torque	50 N·m (35 lb-ft)
TRANSAXLE	
Input Shaft Drive Gear Thrust Washer Thickness	1.45—1.55 mm (0.057—0.061 in.)
Input Shaft Drive Gear ID	24.00—24.02 mm (0.945—0.946 in.)
Input Shaft Sprocket Thrust Washer Thickness	1.55—1.65 mm (0.061—0.064 in.)
Input Shaft at Drive Gear OD	19.98—20.00 mm (0.786—0.787 in.)
Chain Sprocket ID	24.01—24.03 mm (0.945—0.946 in.)
Input Shaft at Drive Sprocket	19.99—20.01 mm (0.787—0.788 in.)
Shift Collar Groove Width	14.1—14.3 mm (0.55—0.56 in.)
Shift Detent Spring	
Free Length	24.2 mm (0.95 in.)
Minimum Length	20.0 mm (0.79 in.)
Working Length	15.8 mm at 53 N (0.62 in. at 12 lb)

MX,1010FD,A1 -19-15AUG91

ITEM	SPECIFICATION
10 15 2 SECTION 50—POWER TRAIN (CONTINUED)	
TRANSAXLE (CONTINUED)	
Shifter Block Width	13.7—13.9 mm (0.54—0.55 in.)
Shifter Block-to-Shift Collar Groove Maximum Clearance	2.0 mm (0.08 in.)
Differential Lock Collar Groove Width	7.1—7.3 mm (0.28—0.29 in.)
Pinion Gear Thrust Washers Thickness	0.74—0.86 mm (0.029—0.033 in.)
Bevel Pinion Cup Washers Thickness	0.96—1.04 mm (0.038—0.041 in.)
Bevel Pinion ID	16.03—16.05 mm (0.631—0.632 in.)
Bevel Pinion Shaft OD	15.95—15.97 mm (0.628—0.629 in.)
Bevel Pinion-to-Bevel Pinion Shaft Maximum Clearance	0.2 mm (0.01 in.)
Differential Lock Fork Finger Thickness	6.7—6.9 mm (0.26—0.27 in.)
Differential Lock Collar-to-Fork Maximum Clearance	2.0 mm (0.08 in.)
Differential Lock Spring	
Free Length	77.7 mm (3.06 in.)
Working Load Length	52.6 mm at 511 N (2.07 in. at 115 lb)
Differential Lock Fork ID	20.05—20.10 mm (0.789—0.791 in.)
Differential Lock Shaft at Fork OD	19.95—20.00 mm (0.785—0.787 in.)
Lock Shaft-to-Fork Maximum Clearance	0.5 mm (0.02 in.)
Shifter Shaft OD	16.96—17.00 mm (0.668—0.669 in.)
Shifter Shaft Bore in Case ID	17.02—17.04 mm (0.670—0.671 in.)
Shifter Shaft-to-Case Maximum Clearance	0.2 mm (0.01 in.)
Transaxle Oil (SAE 85W140) Volume	2.3 L (3.5 qt)
Drive Axle Flange-to-Frame Clearance (AMT Without Axle Update Kit)	
AMT 600	228 mm (9 in.)
AMT 622	307 mm (12.1 in.)
AMT 626	Not Applicable
Drive Axle Flange-to-Support Clearance (AMT With Axle Update Kit)	
AMT600/622/626	203 mm (8 in.)
Differential Housing Cap Screw Torque	23—29 N·m (17—21 lb-ft)
Shifter Cap Screw Torque	23—27 N·m (17—20 lb-ft)
Neutral Start Switch Torque	29—49 N·m (21—36 lb-ft)
Transaxle Housing Cap Screws	
Old Case Torque	23—27 N·m (17—20 lb-ft)
New Case Torque	27—31 N·m (20—23 lb-ft)
Breather Tube Torque	8—12 N·m (72—108 lb-in)
Transaxle-to-Support Cap Screws Torque	50 N·m (37 lb-ft)
Axle Flange Nuts Torque	25 N·m (216 lb-in)
Input Shaft Support Strap-to-Frame Cap Screw Torque	50 N·m (37 lb-ft)
Drive Axle Bearing Set Screw Torque	5 N·m (40 lb-in)
Drive Axle Retaining Collar Set Screw Torque	33 N·m (24 lb-ft)

MX,1010FD,A2 -19-15AUG91

ITEM	SPECIFICATION
SECTION 50—POWER TRAIN (CONTINUED)	
DRIVE AXLE	
Axle Spacer Width	10.5 mm (0.413 in.)
Axle Distance From Frame (AMT Without Axle Update Kit)	
AMT600	228 mm (9 in.)
AMT622	307 mm (12.1 in.)
AMT626	Not Applicable
Axle Distance from Support (AMT With Axle Update Kit)	
AMT600/622/626	203 mm (8 in.)
Axle Bearing Retainer Nuts Torque	25 N·m (18 lb-in)
Wheel Lug Nuts Torque	100 N·m (75 lb-ft)
Bearing Flangette Nut	
Inner	25 N·m (216 lb-in.)
Outer	50 N·m (37 lb-ft)
Brake Support-to-Axle Cap Screw Torque	25 N·m (18 lb-ft)
Drive Axle Bearing Set Screw Torque	5 N·m (40 lb-in)
Drive Axle Retaining Collar Set Screw Torque	33 N·m (24 lb-ft)
Drive Axle Locking Collar Set Screw Torque	8 N·m (64 lb-in.)
SECTION 60—STEERING AND BRAKES	
STEERING	
Axle Spacer	
OD at Bearing	17 mm (0.7 in.)
Length Between Shoulders	278 mm (10.9 in.)
Axle Cap Screw Torque	41 N·m (30 lb-ft)
Yoke Cap Screw Torque	41 N·m (30 lb-ft)
Fork Pivot Cap Screw Torque	125 N·m (92 lb-ft)
Shock Absorber Cap Screw Torque	50 N·m (37 lb-ft)
BRAKES	
Brake Pad Minimum Thickness	1.5 mm (0.06 in.)
Brake Disc Minimum Thickness	4.8 mm (0.19 in.)
Piston Cover to Brake Housing Cap Screw Torque	9 N·m (81 lb-in)
Brake Caliper Cap Screw Torque	24 N·m (18 lb-ft)
Brake Pedal or Lever Freeplay	18—22 mm (0.70—0.87 in.)
Brake Pedal or Lever Cover Cap Screw Torque	2.3—2.8 N·m (20—25 lb-in)
Brake Pedal or Lever Mounting Screw Torque	3—4 N·m (26—35 lb-in)

MX,1010FD,A3 -19-15AUG91

ITEM	SPECIFICATION
SECTION 80—MISCELLANEOUS	
Choke Knob Nut to Seat Shroud Clearance—AMT600	3 mm (1/8 in.)
Platform Cap Screw Torque	25 N·m (221 lb-in)
Drive Wheel Lug Nut Torque	100 N·m (75 lb-ft)
HYDRAULIC LIFT PUMP	
Reservoir Screw Torque	5 N·m (45 lb-in)
Gear Pump Screw Torque	8 N·m (70 lb-in)
Hex Plug Torque	9 N·m (80 lb-in)
Hex Plug Torque	59 N·m (525 lb-in)
Lower and Raise Relief Valve Nut Torque	2 N·m (20 lb-in)
Thermal Relief Valve	7 N·m (60 lb-in)

MX,1010FD,A4 -19-15AUG91

TUNE-UP SPECIFICATIONS

Spark plug gap	0.64 mm (0.025 in.)
Spark plug torque	25 N·m (18 lb-ft)
SLOW idle stop screw setting	1200 ± 50 rpm
SLOW idle limiter screw setting	1300 ± 50 rpm
Fast idle limiter screw setting	4000 ± 50 rpm

WX,622,TUNE,A -19-31JUL91

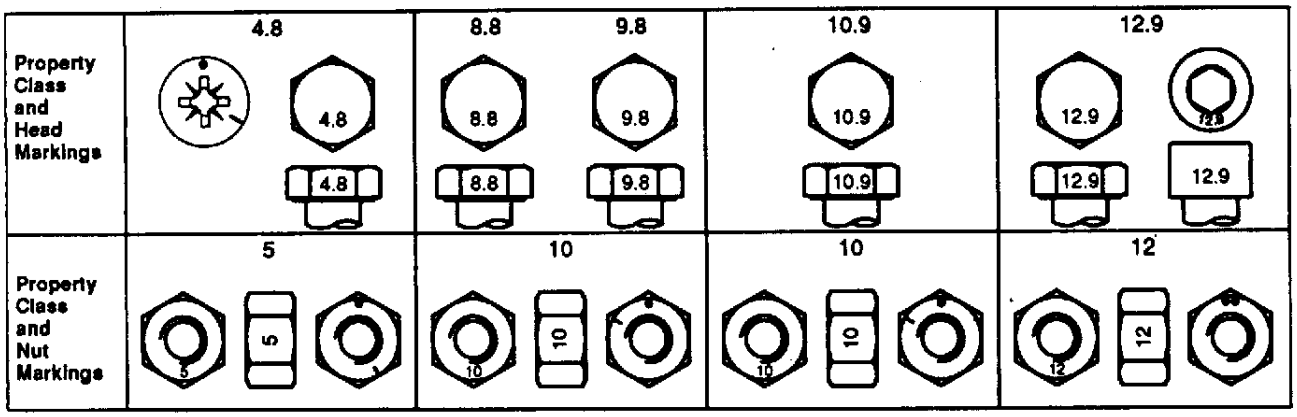
TUNE-UP ADJUSTMENTS

Perform tune-up adjustments in the following order to improve the efficiency and operation of the transporter.

Tune-up Adjustment	Section	Group
1. Clean engine cooling fins.		
2. Clean or replace air cleaner element.		
3. Check or replace fuel filter.	30	5
4. Check battery electrolyte level.		
5. Clean, regap or replace spark plug.	240	15
6. Check engine compression.	220	15
7. Adjust throttle cable.	220	15
8. Check and adjust choke.	220	15
9. Adjust governor.	220	15
10. Adjust slow idle stop and idle mixture screw.	220	15
11. Adjust slow idle limiter screw.	220	15
12. Adjust fast idle limiter screw.	220	15
13. Check and adjust brakes.	260	15
14. Check charging system output.	240	15
15. Check tire pressure.		

WX,622,TUNE,B -19-09MAY90

METRIC BOLT AND CAP SCREW TORQUE VALUES



TS1163 -19-04MAR91

Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]	
	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft
M6	4.8	3.5	6	4.5	9	6.5	11	8.5	13	9.5	17	12	15	11.5	19	14.5
M8	12	8.5	15	11	22	16	28	20	32	24	40	30	37	28	47	35
M10	23	17	29	21	43	32	55	40	63	47	80	60	75	55	95	70
M12	40	29	50	37	75	55	95	70	110	80	140	105	130	95	165	120
M14	63	47	80	60	120	88	150	110	175	130	225	165	205	150	260	190
M16	100	73	125	92	190	140	240	175	275	200	350	225	320	240	400	300
M18	135	100	175	125	260	195	330	250	375	275	475	350	440	325	560	410
M20	190	140	240	180	375	275	475	350	530	400	675	500	625	460	800	580
M22	260	190	330	250	510	375	650	475	725	540	925	675	850	625	1075	800
M24	330	250	425	310	650	475	825	600	925	675	1150	850	1075	800	1350	1000
M27	490	360	625	450	950	700	1200	875	1350	1000	1700	1250	1600	1150	2000	1500
M30	675	490	850	625	1300	950	1650	1200	1850	1350	2300	1700	2150	1600	2700	2000
M33	900	675	1150	850	1750	1300	220	1650	2500	1850	3150	2350	2900	2150	3700	2750
M36	1150	850	1450	1075	2250	1650	2850	2100	3200	2350	4050	3000	3750	2750	4750	3500

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical property class.

Fasteners should be replaced with the same or higher property class. If higher property class fasteners are used, these should only be tightened to the strength of the original.

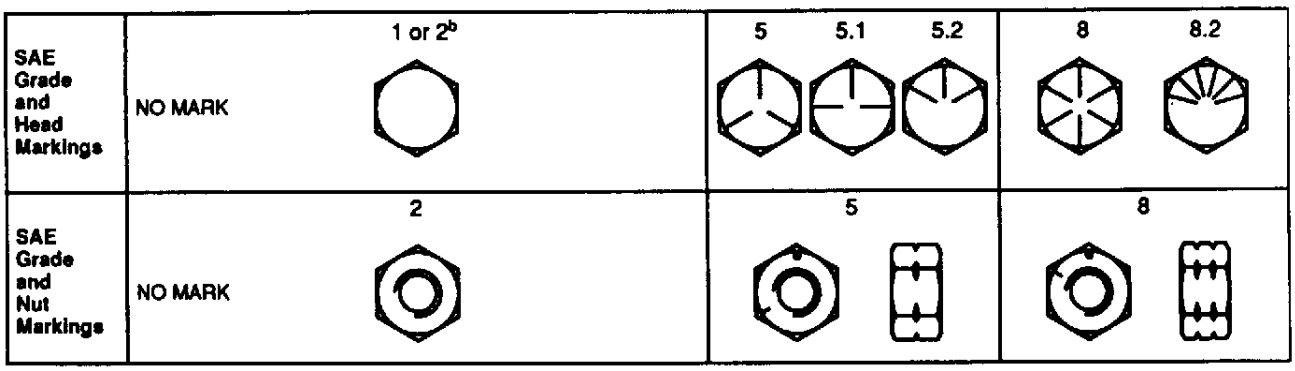
Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

[a] "Lubricated means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry means plain or zinc plated without any lubrication.

DX,TORQ2 -19-05JUN91

UNIFIED INCH BOLT AND CAP SCREW TORQUE VALUES



TS1162 -19-04MAR91

Size	Grade 1				Grade 2[b]				Grade 5, 5.1, or 5.2				Grade 8 or 8.2			
	Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]		Lubricated[a]		Dry[a]	
	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft	N·m	lb-ft
1/4	3.7	2.8	4.7	3.5	6	4.5	7.5	5.5	9.5	7	12	9	13.5	10	17	12.5
5/16	7.7	5.5	10	7	12	9	15	11	20	15	25	18	28	21	35	26
3/8	14	10	17	13	22	16	27	20	35	26	44	33	50	36	63	46
7/16	22	16	28	20	35	26	44	32	55	41	70	52	80	58	100	75
1/2	33	25	42	31	53	39	67	50	85	63	110	80	120	90	150	115
9/16	48	36	60	45	75	56	95	70	125	90	155	115	175	130	225	160
5/8	67	50	85	62	105	78	135	100	170	125	215	160	215	160	300	225
3/4	120	87	150	110	190	140	240	175	300	225	375	280	425	310	550	400
7/8	190	140	240	175	190	140	240	175	490	360	625	450	700	500	875	650
1	290	210	360	270	290	210	360	270	725	540	925	675	1050	750	1300	975
1-1/8	470	300	510	375	470	300	510	375	900	675	1150	850	1450	1075	1850	1350
1-1/4	570	425	725	530	570	425	725	530	1300	950	1650	1200	2050	1500	2600	1950
1-3/8	750	550	950	700	750	550	950	700	1700	1250	2150	1550	2700	2000	3400	2550
1-1/2	1000	725	1250	925	990	725	1250	930	2250	1650	2850	2100	3600	2650	4550	3350

DO NOT use these values if a different torque value or tightening procedure is given for a specific application. Torque values listed are for general use only. Check tightness of fasteners periodically.

Shear bolts are designed to fail under predetermined loads. Always replace shear bolts with identical grade.

Fasteners should be replaced with the same or higher grade. If higher grade fasteners are used, these should only be tightened to the strength of the original.

Make sure fasteners threads are clean and that you properly start thread engagement. This will prevent them from failing when tightening.

Tighten plastic insert or crimped steel-type lock nuts to approximately 50 percent of the dry torque shown in the chart, applied to the nut, not to the bolt head. Tighten toothed or serrated-type lock nuts to the full torque value.

[a] "Lubricated" means coated with a lubricant such as engine oil, or fasteners with phosphate and oil coatings. "Dry" means plain or zinc plated without any lubrication.

[b] Grade 2 applies for hex cap screws (not hex bolts) up to 152 mm (6-in.) long. Grade 1 applies for hex cap screws over 152 mm (6-in.) long, and for all other types of bolts and screws of any length.

DX,TORQ1 -19-15MAR91

SERIAL NUMBERS

When working on machines or components that are covered by warranty, it is IMPORTANT that you include the transporter Product Identification Number and the component serial numbers on the warranty claim form.

The location of transporter identification number and component serial numbers are shown below.

WX,622,SERNO,A -19-09MAY90

RECORD TRANSPORTER IDENTIFICATION NUMBER

Identification number plate is located on the right rear of transporter.

RW12238 -UN-21NOV88

WX,622,4SP,B -19-12JUN89

RECORD TRANSAXLE SERIAL NUMBER

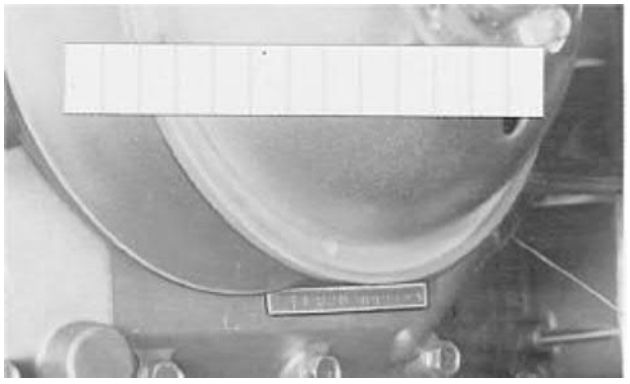
This number is stamped into the top flange of transaxle.

RW12240 -UN-21NOV88

WX,622,4SP,C -19-12JUN89

ENGINE SERIAL NUMBER AMT600

This number is stamped into the left-hand side of engine block.

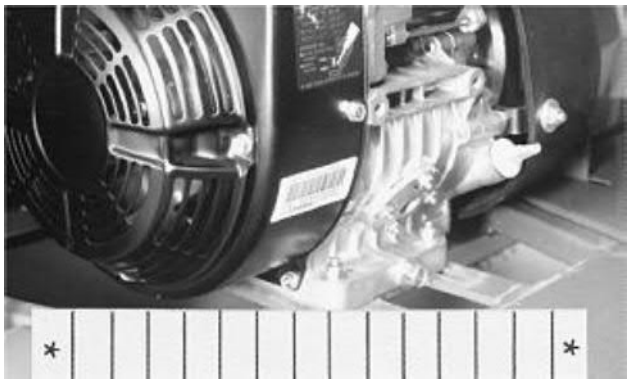


RW12239 -UN-21NOV88

WX,622,SERNO,B -19-09MAY90

RECORD ENGINE SERIAL NUMBER AMT622/626

This number is on a tag on the fan shield on the left-hand side of engine block.



MX,1025FD,A1 -19-31JUL91

AMT FEATURES

The AMT 600, 622 and 626 Utility Vehicles were designed to efficiently transport loads in all types of terrain.

Specifications can be found in Section 10, Group 10 and Section 210, Group 05.

M52243 -UN-29NOV88

Slide M52243

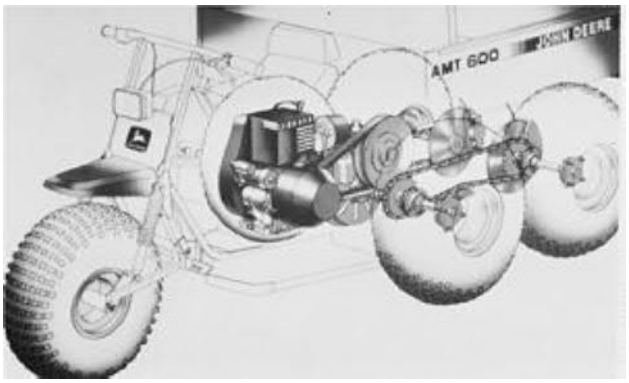
M52258 -UN-29NOV88

Slide M52258

MX,1030FD,A1 -19-29AUG91

All models offer forward and reverse in a single range, variable speed drive system. The drive system consists of a drive clutch, a driven clutch, a drive belt and a transaxle. This means that no shifting is required to increase speed, and infinite speeds up to 26 km/h (16 mph) are the result. This drive system automatically downshifts (changes gear ratios) under load while maintaining engine rpm.

Slide M52326



M52326 -UN-29NOV88

MX,1030FD,A2A -19-29AUG91

Power is transmitted from the driven clutch to the transaxle. The transaxle contains a differential to prevent wheel slippage. The front drive axles are splined to the transaxle, while the rear wheels are chain driven from the front axle. A differential lock on the transaxle locks all four drive wheels to provide better traction in rough terrain.

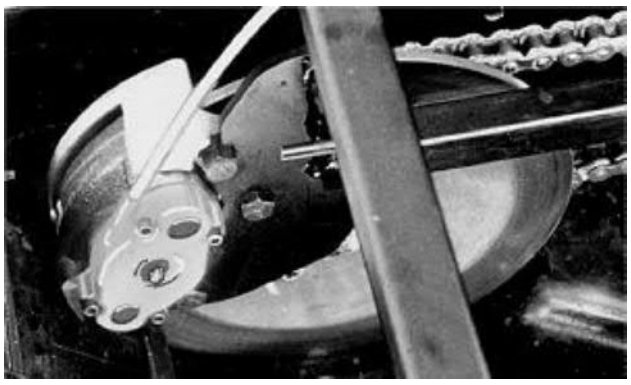
Slide M52327

M52327 -UN-29NOV88

MX,1030FD,A3 -19-29AUG91

Cable operated, dual 254 mm (10 in) disc brakes are located on the rear axle. Positive stopping is assured by continuously self-adjusting brakes.

Slide M48515



M48515 -UN-21FEB90

MX,1030FD,A4 -19-29AUG91

To perform service work on the battery, transaxle, clutch, belt, or rear drive chains, simply raise the cargo box. A support rod is standard equipment.

Slide M52249

M52249 -UN-29NOV88

MX,1030FD,A5 -19-29AUG91

An optional electro-hydraulic lift kit, which allows easy load dumping, is available for field installation.

NOTE: The cargo box can be lifted by hand if the battery is discharged with the electro-hydraulic lift kit installed.

Slide M52250

M52250 -UN-29NOV88

MX,1030FD,A6 -19-29AUG91