## AMT600, AMT622 and AMT626 All Material Transporters

For	complete	service	information	also	see:
John Deere	K Series	Air Coo	led		
Engines				C	TM5

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

#### Introduction

#### 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

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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

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# SECTION 260—STEERING & BRAKES OPERATION, TESTS & ADJUSTMENTS—AMT600

Group 05—Component Location

Group 10—Theory of Operation

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Group 05—Component Location

Group 10—Theory of Operation

Group 15—Diagnosis, Tests & Adjustments

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Group 05—Component Location

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# Section 10 GENERAL INFORMATION

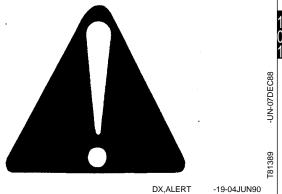
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#### RECOGNIZE SAFETY INFORMATION

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.



#### **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.

## **A** DANGER

### **AWARNING**

**ACAUTION** 

DX,SIGNAL -1

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#### **FOLLOW SAFETY INSTRUCTIONS**

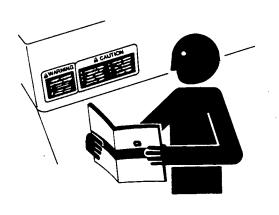
Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere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

TM1363 (15AUG91)



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.



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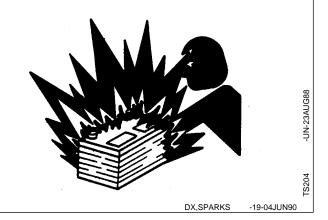
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#### PREVENT BATTERY EXPLOSIONS

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).

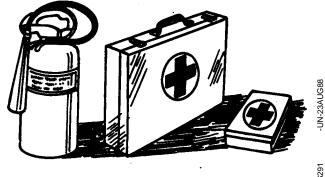


#### PREPARE FOR EMERGENCIES

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.



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DX,FIRE2

9-04JUN90

#### 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.



DX,POISON

-19-04JUN90

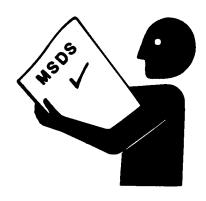
#### HANDLE CHEMICAL PRODUCTS SAFELY

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.)



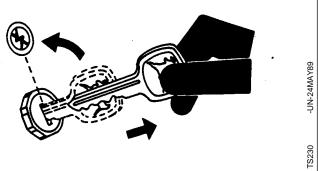
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DX,MSDS,NA -19-15MAR91

#### 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.

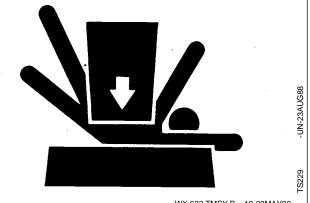


WX,622,TMSY,A -19-09MAY90

#### 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.



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

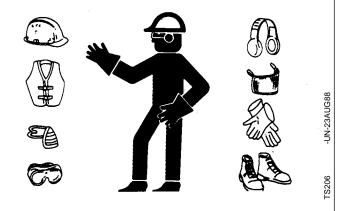
#### WEAR PROTECTIVE CLOTHING

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.

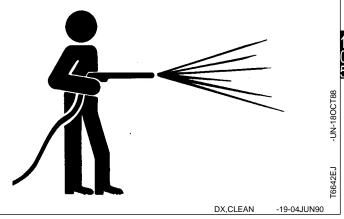
Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



#### **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.



#### 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.



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.

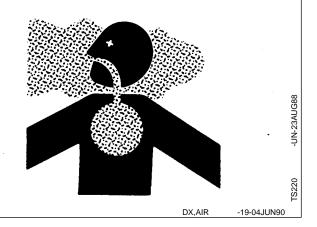


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#### **WORK IN VENTILATED AREA**

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.



#### **ILLUMINATE WORK AREA SAFELY**

Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.

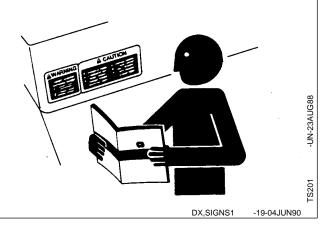


DX,LIGHT

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#### REPLACE SAFETY SIGNS

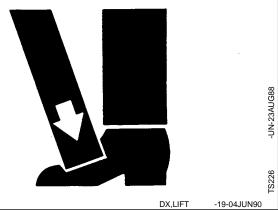
Replace missing or damaged safety signs. See the machine operator's manual for correct safety sign placement.



#### **USE PROPER LIFTING EQUIPMENT**

Lifting heavy components incorrectly can cause severe injury or machine damage.

Follow recommended procedure for removal and installation of components in the manual.



#### SERVICE TIRES SAFELY

Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.



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DX,TIRECP -19-24AUG90

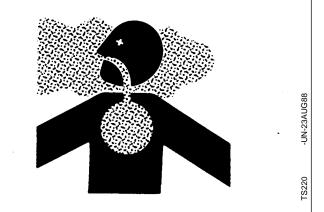
#### **AVOID HARMFUL ASBESTOS DUST**

Avoid breathing dust that may be generated when handling components containing asbestos fibers. Inhaled asbestos fibers may cause lung cancer.

Components in products that may contain asbestos fibers are brake pads, brake band and lining assemblies, clutch plates, and some gaskets. The asbestos used in these components is usually found in a resin or sealed in some way. Normal handling is not hazardous as long as airborne dust containing asbestos is not generated.

Avoid creating dust. Never use compressed air for cleaning. Avoid brushing or grinding material containing asbestos. When servicing, wear an approved respirator. A special vacuum cleaner is recommended to clean asbestos. If not available, apply a mist of oil or water on the material containing asbestos.

Keep bystanders away from the area.



DX,DUST

-19-15MAR91

## REMOVE PAINT BEFORE WELDING OR HEATING

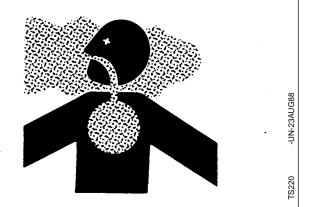
Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Do all work outside or in a well ventilated area. Dispose of paint and solvent properly.

Remove paint before welding or heating:

- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.



DX,PAINT -19-04JUN90

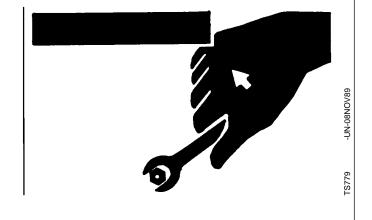
#### **USE PROPER TOOLS**

Use tools appropriate to the work. Makeshift tools and procedures can create safety hazards.

Use power tools only to loosen threaded parts and fasteners.

For loosening and tightening hardware, use the correct size tools. DO NOT use U.S. measurement tools on metric fasteners. Avoid bodily injury caused by slipping wrenches.

Use only service parts meeting John Deere specifications.



X,REPAIR -19-0

#### **DISPOSE OF WASTE PROPERLY**

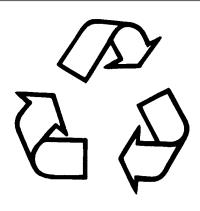
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with John Deere equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

Do not pour waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your John Deere dealer.



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DX,DRAIN

-19-09AUG91

#### LIVE WITH SAFETY

Before returning machine to customer, make sure machine is functioning properly, especially the safety systems. Install all guards and shields.



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#### HAUL TRANSPORTER SAFELY

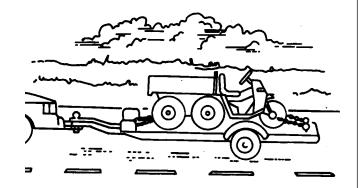
Do not tow transporter behind any other vehicle.

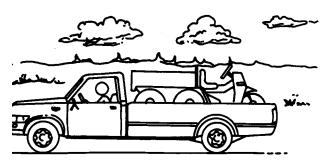
Use a heavy-duty trailer or truck box to haul your transporter.

Lock park brake.

Fasten transporter securely to trailer or full size pick up or larger truck with straps, chains, or cables.

Be sure trailer or truck has all the necessary lights and signs required by local, state, provincial, or federal laws.





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#### **KEEP OFF ROADWAYS**

This machine intended for off road use only.

Do not operate transporter on a roadway.



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

#### **OPERATE TRANSPORTER SAFELY**

Sit on center of seat and keep both feet on foot platform at all times. Never operate transporter while standing.

Always use both hands for steering.

Before leaving the operator's station:

- Come to complete halt.
- Stop engine.
- Shift to neutral.
- Set parking brake.
- Remove key.

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

Thank you very much for your reading. Please Click Here. Then Get COMPLETE MANUAL. NO WAITING



## **NOTE:**

If there is no response to click on the link above, please download the PDF document first and then click on it.

#### **MACHINE SPECIFICATIONS - AMT600 ENGINE** .....Air Air Cleaner . . . . . . . . . . . Semi-Wet **ENGINE SPEEDS CAPACITIES ELECTRICAL SYSTEM TRANSMISSION** Type ..... Belt-Driven Torque Converter With Gear-Driven Transaxle Speeds . . . . . . Forward—Neutral—Reverse TRAVEL SPEEDS BRAKE ...... Mechanically Operated Disc **DIMENSIONS TIRES INFLATION PRESSURE** Front/Rear ..... 34—41 kPa (5—6 psi) (0.34—0.41 bar) Specifications and design subject to change without notice. WX,622,SPEC,A -19-09MAY90

#### **MACHINE SPECIFICATIONS - AMT622**

ENGINE Horsepower Manufacturer Cylinders Strokes/Cycle Cooling Air Cleaner Displacement Compression Ratio	
ENGINE SPEEDS         Slow Idle (no load)         Fast Idle (no load)	•
CAPACITIES Fuel Tank	1.1 L (1.2 qt)
ELECTRICAL SYSTEM Alternator Battery Cold Capacity at 0°F (-18°C) Battery Regulator	
TRANSMISSION Type Belt-Driven Torque Conversion Speeds	
TRAVEL SPEEDS  Forward	` ' '
BRAKE	Mechanically Operated Disc
DIMENSIONSWidth OverallHeight OverallLength OverallGround Clearance	
TIRES Front	
INFLATION PRESSURE Front/Rear	kPa (5—6 psi) (0.34—0.41 bar)
NET WEIGHT (approx.)	
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
TM4202 (45AUC04) 10-10-2	AMTCOO/COO Transporter

#### **MACHINE SPECIFICATIONS—AMT626 ENGINE** Air Cleaner ...... Dry **ENGINE SPEEDS CAPACITIES ELECTRICAL SYSTEM** Solid State Regulator **TRANSMISSION** Speeds . . . . . . Forward-Neutral-Reverse TRAVEL SPEEDS BRAKE ...... Mechanically Operated Disc **DIMENSIONS** TIRES - KNOBBY, BAR-TYPE, AND TURF **INFLATION PRESSURE** (Specifications and design subject to change without notice) MX,626,SPEC,A -19-31JUL91