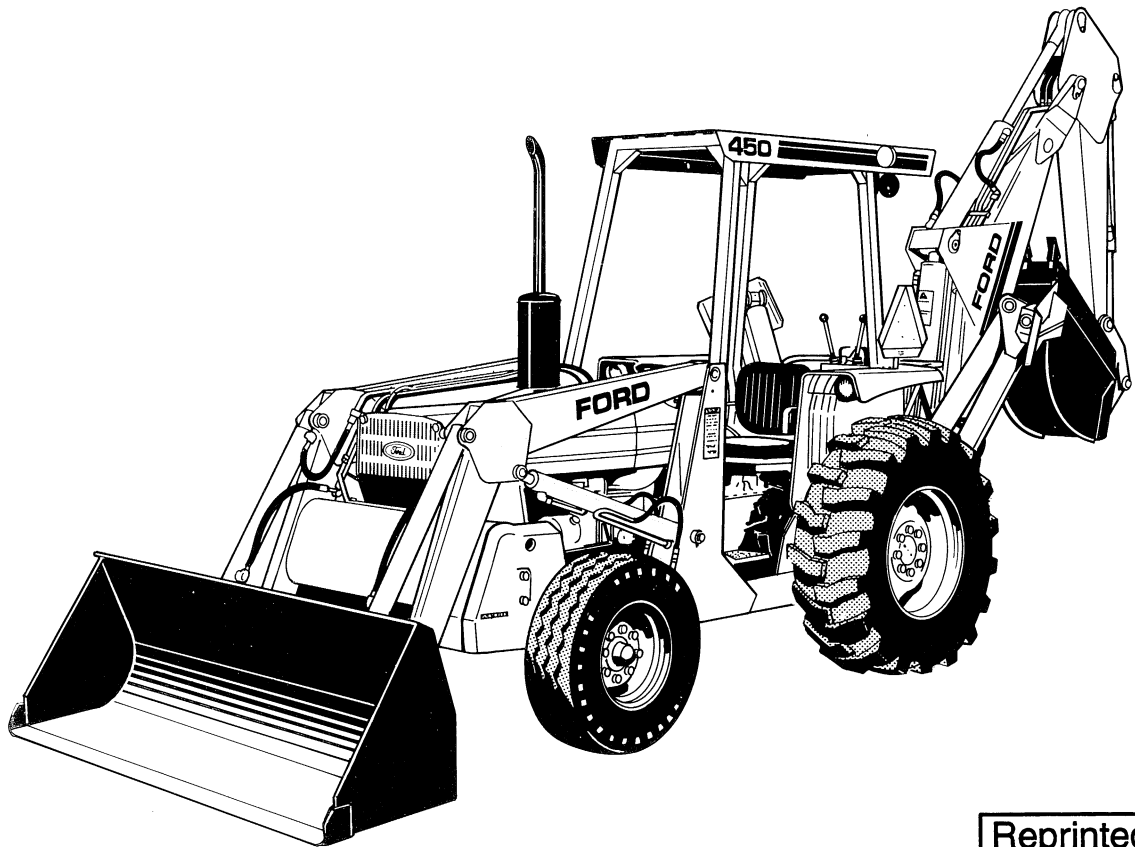


FORD

450

Tractor-Loader-Backhoe

42045010



Reprinted

OPERATOR'S MANUAL



S-21303

FOREWORD

This manual has been prepared to assist you in the proper break-in, daily care, and operation of your new Ford Tractor. It contains specific information on its many features; the attachments that are available; instructions for making minor repairs and adjustments; safety precautions; general specifications; suggested operating techniques; the pre-delivery and 50-hour check lists.

Your Ford Tractor has been carefully inspected before leaving the factory and by your Ford Tractor Dealer prior to delivery to see that it is "ready to go." To keep it in this "ready to go" condition, it is important to follow regularly scheduled service periods as recommended in this manual.

The information in this manual applies to the Ford 450 Industrial Tractor, 745 Industrial Loader and 765 Backhoe.

Read this manual carefully before operating your Ford Tractor and keep it in a convenient location for future reference. If, at any time, you have a service problem concerning your new Ford Tractor, remember that your Ford Tractor Dealer has factory trained service personnel, genuine Ford parts, and the necessary tools and equipment to best satisfy your service needs.

Have your Dealer record the information called for in the spaces below.

Ford New Holland, Inc.

ISSUED TO:		ISSUED BY:	
_____	Owner's Name	_____	Ford Tractor Dealer
_____	Mailing Address	_____	City
_____	City	_____	State
_____	State	_____	Zip Code
_____	Zip Code	_____	Delivery Date

DEAR CUSTOMER – PLEASE READ CAREFULLY

The warranty coverage that is extended to your Ford Tractor is explained in the Warranty and Limitation of Liability, Ford Tractor and Equipment form. Your dealer will provide you with a copy of the warranty and retain a copy which you have signed. After you read the warranty, ask your dealer to explain any points that you do not understand.

Do not modify or alter or permit anyone else to modify or alter this tractor or any of its components or any tractor function without first consulting a Ford Tractor Dealer. If you have any questions regarding tractor modifications contact Ford New Holland, Inc.

Your safety and the safety of those around you depends upon the care and good judgement you use while operating this equipment. Read the safety precautions carefully.

For a complete list of the pre-delivery service checks performed by your dealer, refer to PRE-DELIVERY SERVICE on the upper portion of pages 89 and 91. The copy on page 89 is your record of the service performed, and the copy on page 91, which is to be removed from the manual, is your dealer’s record. **MAKE SURE THAT YOU AND THE DEALER SIGN BOTH COPIES.**

After you have operated your tractor for fifty hours, take the manual and your tractor to your dealer. He will then perform the factory recommended 50-HOUR SERVICE as listed on the lower portion of pages 89 and 91 – without charge – except for lubricants, hydraulic oil, or filters replaced as part of normal maintenance. **MAKE SURE THAT YOU AND THE DEALER SIGN BOTH COPIES.**

A machine identification plate is located on the inside of the right hood panel. The numbers on the plate are important should your tractor require future service. For your convenience, have your dealer record the numbers in the appropriate space below.

“This tractor is equipped with a new Ford engine. During manufacturing, the cylinder walls of some engines are sleeved and some are unsleeved. Both sleeved and unsleeved engines have the same operating characteristics.”

PARTS AND SERVICE CATALOGS AVAILABLE

Ford New Holland, Inc. is pleased to announce the availability of parts and service catalogs to owners of Ford tractors and equipment.

To obtain these catalogs merely fill out the order form available from your local authorized Ford Tractor Dealer. Mail with your remittance to Helm Inc. Your order will be processed promptly.

The form is enclosed in a rounded rectangular border. At the top center is the Ford logo. Below it, the text "TRACTOR NUMBER" is centered above a single horizontal line. Underneath, the words "MODEL" and "UNIT" are positioned above two separate horizontal lines. The word "ENGINE" is centered above a single horizontal line. Below this, the words "TRANSMISSION" and "REAR AXLE" are positioned above two separate horizontal lines. At the bottom, the words "HYDRAULIC PUMP" and "HYDRAULIC LIFT" are positioned above two separate horizontal lines.

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SAFETY PRECAUTIONS

The following precautions are suggested to help prevent accidents.

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. Read and take the following precautions before operating this tractor to help prevent accidents. Equipment should be operated only by those who are responsible and instructed to do so.

THE TRACTOR

1. Read the Operator's Manual carefully before using the tractor. Lack of operating knowledge can lead to accidents.
2. Use an approved roll bar and seat belt for safe operation. Overturning a tractor without a roll bar can result in death or injury. If your tractor is not equipped with a roll bar and seat belt, see your Ford Tractor Dealer.
3. Always use the seat belt with the roll bar installed. Do not use the seat belt if the roll bar is removed from the tractor.
4. Use the handholds and step plates when getting on and off the tractor to prevent falls. Keep steps and platform cleared of mud and debris.
5. Do not permit anyone but the operator to ride on the tractor. There is no safe place for extra riders.
6. Replace all missing, illegible or damaged safety decals. See list of decals on Page 84.
7. Keep safety decals clean of dirt and grime.

SERVICING THE TRACTOR

1. The cooling system operates under pressure which is controlled by the radiator cap. It is dangerous to remove the cap while the system is hot. Always turn cap slowly to the first stop and allow the pressure to escape before removing the cap entirely.
2. Do not smoke while refueling the tractor. Keep any type of open flame away. Wait for engine to cool before refueling.
3. Keep the tractor in good operating condition for your safety. An improperly maintained tractor can be hazardous.
4. Keep open flame away from battery or cold weather starting aids to prevent fires or explosions. Use jumper cables according to instructions to prevent sparks which could cause explosion.
5. Stop the engine before performing any service on the tractor.
6. Escaping hydraulic/diesel fluid under pressure can penetrate the skin causing serious injury.
 - **DO NOT** use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.
 - Stop engine and relieve pressure before connecting or disconnecting lines.
 - Tighten all connections before starting engine or pressurizing lines.
7. If fluid is injected into the skin obtain medical attention immediately or gangrene may result.
8. Do not modify or alter or permit anyone else to modify or alter this tractor or any of its components or any tractor function without first consulting a Ford Tractor Dealer.

9. The fuel oil in the injection system is under high pressure and can penetrate the skin. Unqualified persons should not remove or attempt to adjust a pump, injector, or nozzle or any other part of the fuel injection system. Failure to follow these instructions can result in serious injury.

OPERATING THE TRACTOR

1. Apply the parking brake, and place the transmission in neutral before starting the tractor.
2. Do not start the engine or operate controls while standing beside the tractor. Always sit in the tractor seat when starting the engine or operating controls.
3. Do not bypass the starter neutral start switch. Consult your Ford Tractor Dealer if your starter safety controls malfunction. Use jumper cables only in the recommended manner, improper use can result in tractor runaway.
4. Do not get off the tractor while it is in motion.
5. Shut off the engine and apply the parking brake before getting off the tractor.
6. Always apply the parking brake and remove the starter key when leaving the unit parked or unattended.
7. Never leave the unit when it is parked on an incline. Always park the unit on level ground where possible. If the unit is to be parked on an incline, always lower the buckets so that the cutting lips contact the ground, apply the parking brake, and securely block the wheels.
8. Do not operate the tractor engine in an enclosed building without adequate ventilation. Exhaust fumes can suffocate you.
9. If power steering or engine ceases operating, stop the tractor immediately.

DRIVING THE TRACTOR

1. Watch where you are going especially on roads, around trees and low hanging obstacles.
2. To avoid upsets, drive the tractor with care and at speeds compatible with safety, especially when operating over rough ground, when crossing ditches or slopes and when turning corners.
3. Lock tractor brake pedals together when transporting on roads to provide two wheel braking.
4. Keep the tractor in the same gear when going downhill as used when going uphill. Do not coast or free wheel down hill.
5. Any towed vehicle whose total weight exceeds that of the towing tractor must be equipped with brakes for safe operation.

6. When the tractor is stuck or tires are frozen to the ground, back out to prevent upset.
7. Always check overhead clearance especially when transporting the tractor.

LOADER/BACKHOE OPERATION

1. Always be sure of water, gas, sewage and electrical line locations before you start to dig.
2. Watch out for overhead and underground high-voltage electrical lines when operating the loader or backhoe.
3. Operate the loader or backhoe controls only when properly seated at the controls.
4. Never attempt to lift loads in excess of loader or backhoe capacity.
5. Always lower the loader or backhoe buckets to the ground, shut off the engine and apply the parking brake before getting off the unit.
6. Always be watchful of bystanders when operating the loader, when lowering the stabilizers, and when operating the backhoe.
7. Use caution when operating on steep grades to maintain proper stability. Always carry the bucket as low as possible.
8. Never attach chains, ropes, cables, etc. to the loader or backhoe for pulling purposes.

LOADER OPERATION

1. Do not transport anyone in the loader bucket.
2. Always carry the loader bucket low for maximum stability and visibility, whether the bucket is loaded or empty.
3. Always use the recommended amount of counterweighting to ensure good stability.
4. Be careful when handling round objects such as round bales, poles, etc. Lifting too high or rolling bucket too far back could result in these objects rolling down the loader arms on the operator.
5. Never allow anyone to get under the loader bucket or reach through lift arms when the bucket is raised.
6. Exercise caution when operating the loader with a raised loaded bucket or fork.

BACKHOE OPERATION

1. Never allow anyone to get under the backhoe bucket when the bucket is raised.
2. To prevent upsets, avoid full reach and swinging the backhoe bucket to the downhill side when operating on a slope.
3. Watch out for overhead and underground high-voltage electrical lines when operating the backhoe.
4. Do not enter the platform from the rear.
5. Always attach the backhoe transport chains before transporting the unit.
6. Always place the torque converter shuttle lever in neutral before operating backhoe.

MAINTENANCE

1. Never make repairs or tighten hydraulic hoses or fittings when the system is under pressure, when the engine is running, or when the loader or backhoe cylinders are under a load.
2. Always keep the brakes and power steering system in good operating condition.
3. Do not lubricate or make mechanical adjustments while the unit is in motion or when the engine is running. However, if minor engine adjustments must be made, apply the parking brake, securely block the wheels, and use extreme caution. Be certain that the loader is fully lowered or supported so that it cannot fall.
4. For safe operation, observe the proper maintenance and repair of all pivot pins, hydraulic cylinders, hoses, snap rings, and main attaching bolts prior to each day's operation.

5. Always wear safety goggles when servicing or repairing the machine.
6. When necessary to tow the tractor, do not exceed 5 mph (8.0 kph). Avoid towing the tractor over long distances.
7. Adequately block up the backhoe or loader when they are detached from the tractor.
8. Whenever servicing or replacing pins in cylinder ends, buckets, etc., always use a brass drift and a hammer. Failure to do so could result in injury from flying metal fragments.

ROPS MAINTENANCE

Your ROPS must be maintained in a servicable condition. Be careful when driving through doorways or working in a confined space with low headroom.

Under no circumstances

1. ---modify, drill or alter the ROPS in any way as doing so could render you liable to legal prosecution.
2. --attempt to straighten or weld any part of the main frame or retaining brackets which have suffered damage. By doing so you may weaken the structure and endanger your safety.
3. ---secure any parts on the main frame or attach your ROPS with other than the special high tensile bolts and nuts specified.
4. ---attach chains or ropes to the ROPS for pulling purposes.
5. ---take unnecessary risks even though your ROPS affords you the maximum portion possible.

DIESEL FUEL

1. Under no circumstances should gasoline, alcohol or blended fuels be added to diesel fuel. These combinations can create an increased fire or explosive hazard. Such blends are more explosive than pure gasoline in a closed container such as a fuel tank. **Do not use these blends.**
2. Never remove the fuel cap or refuel the tractor with the engine running or hot.
3. Do not smoke while refueling or when standing near fuel.
4. Maintain control of the fuel filter pipe nozzle when filling the tank.
5. Do not fill the fuel tank to capacity. Allow room for expansion.
6. Wipe up spilled fuel immediately.
7. Always tighten the fuel tank cap securely.
8. If the original fuel tank cap is lost replace it with a Ford approved cap. A non-approved, proprietary cap may not be safe.
9. Keep equipment clean and properly maintained.
10. Do not drive equipment near open fires.
11. Never use fuel for cleaning purposes.
12. Arrange fuel purchases so that winter grade fuels are not held over and used in the spring.

Whenever you see this symbol



it means:

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

UNIVERSAL SYMBOLS

As a guide to the operation of your tractor, various universal symbols have been utilized on the instruments and controls. The symbols are shown below with an indication of their meaning.



Engine Speed (rev/min x 100)



Transmission oil temperature



Engine coolant temperature



Pressurized open slowly



Fuel level



Battery



Fuel cut-off



Heater temperature control



Lights



Air conditioner temperature control



Horn



'Tortoise', slow or minimum setting



Engine oil pressure



'Hare', fast or maximum setting



Air filter



Warning

CONTROLS and INSTRUMENTS

Before attempting to start or operate your new tractor, familiarize yourself with the location and function of all controls and instruments as described on the following pages.

The instruments and warning lights are centrally located so that you can tell at a glance whether the tractor is operating properly. The warning lights also warn you of possible trouble before it becomes serious.



**Know your Controls and Instruments
to assure Safe Operation.**

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

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perfect and complete manual in
the world immediately.

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