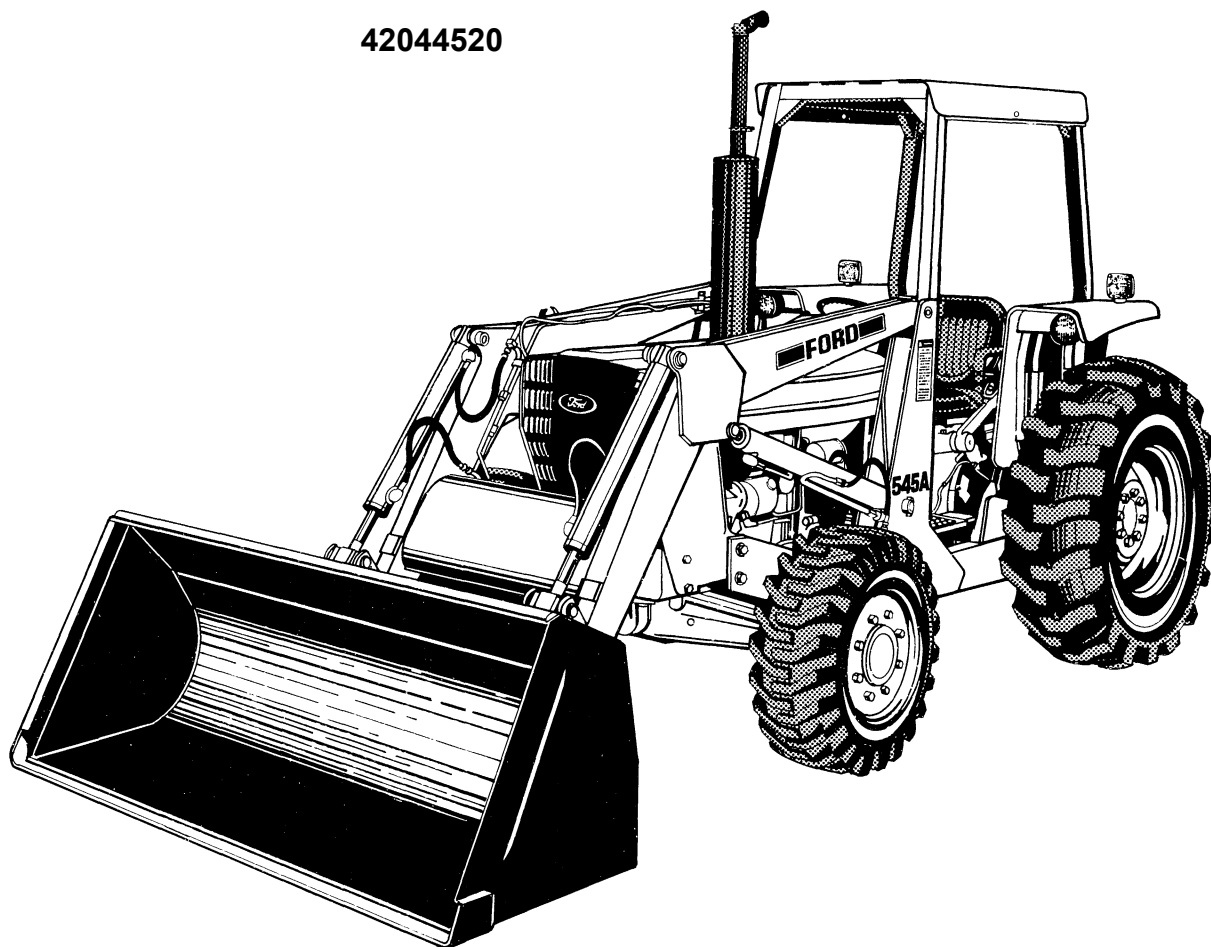




445A and 545A INDUSTRIAL TRACTORS 745 LOADERS

42044520



OPERATOR'S MANUAL

Reprinted



S-20094



S-17870

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-Equipment 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 445A and 545A Industrial Model Tractors and 745 Industrial Loaders. Where differences exist, specific information is presented for each model.

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

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-Equipment Dealer has factory trained service personnel, genuine Ford parts, and the necessary tools and equipment to best satisfy your service needs.

Ford Tractor Operations
Ford Motor Company

ISSUED TO:

Owner's Name	
Mailing Address	
City	
State	Zip Code

ISSUED BY:

Ford Tractor-Equipment Dealer	
City	
State	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 may 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 the Ford Tractor Operations of Ford Motor Company.

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 95 and 97. The copy on page 95 is your record of the service performed, and the copy on page 97 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 95 and 97 — 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 vehicle 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.


Front wheel drive (optional) equipped tractors have a manufactures identification plate located on the axle assembly. Stamped on this ID plate is the model number and serial number. These numbers should be referred to whenever replacement parts or service repairs are required.

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

PARTS AND SERVICE CATALOGS AVAILABLE

Ford Tractor Operations 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-Equipment Dealer. Mail with your remittance to Helm Inc. Your order will be processed promptly.

	
TRACTOR NUMBER	
<input type="text"/>	
MODEL	UNIT
<input type="text"/>	<input type="text"/>
ENGINE	
<input type="text"/>	
TRANSMISSION	REAR AXLE
<input type="text"/>	<input type="text"/>
HYDRAULIC PUMP	HYDRAULIC LIFT
<input type="text"/>	<input type="text"/>

<input type="text"/>
Front Axle Serial No.
<input type="text"/>
Front Axle Type
<input type="text"/>
Transfer Box Serial No.

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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.

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.
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. If a front end loader is to be installed, always use a FOPS canopy to avoid injury from falling objects.
5. 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.
6. Do not permit anyone but the operator to ride on the tractor. There is no safe place for extra riders.
7. Replace all missing, illegible or damaged safety decals. See list of decals on page 92.
8. Keep safety decals clean of dirt and grime.
4. Do not get off the tractor while it is in motion.
5. Disengage PTO. 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.

SERVICING THE TRACTOR

1. Cooling system operates under pressure which is controlled by the radiator cap. It is dangerous to remove the cap while system is hot. Always turn cap slowly to the first stop and allow 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.
5. Stop the engine before performing any service on the tractor.
6. 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 Equipment Dealer.
7. 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.
8. If any fluid is injected into the skin obtain medical attention immediately or gangrene may result.
4. Watch where you are going especially at row ends, 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

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 neutral start switch. Consult your Ford Tractor-Equipment Dealer if your neutral start controls malfunction. Use jumper cables only in the recommended manner, improper use can result in tractor runaway.
4. Always lower the loader and 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, or when operating the backhoe.
7. Use care 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, ROPS 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 rearward down the loader arms on the operator.
5. Never allow anyone to get under the loader bucket or reach through the 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 proper maintenance and repair of all pivot pins, hydraulic cylinders, hoses, snap rings, and main attaching bolts prior to each days 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 repairing 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.

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!

Thank you so much for reading.
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complete manual.



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