

# RATOR'S MANUAL

Reprinted

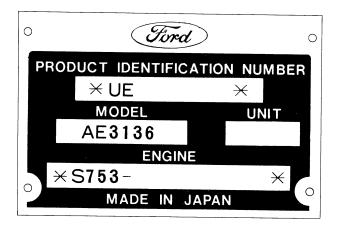


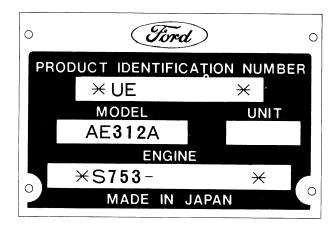
# PLEASE READ CAREFULLY:

For a complete list of the pre-delivery service checks performed by your dealer, refer to PRE-DELIVERY SERVICE on the upper portion of page 57 and 59. The copy on page 57 is your record of the service performed, and the copy on page 59, which is to be removed from the manual, is your dealer's. MAKE SURE THAT YOU AND THE DEALER SIGN BOTH COPIES.

After you have operated your tractor for fifty hours, take this manual and your tractor to your dealer. He will then perform the factory recommended 50-HOUR SERVICE as listed on the lower portions of pages 57 and 59 — without charge — except for lubricant, oil, or filters replaced as part of normal maintenance. MAKE SURE THAT YOU AND THE DEALER SIGN BOTH COPIES.

A PRODUCT IDENTIFICATION PLATE is located on the left-hand side of the transmission housing. 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 spaces below.





Ford policy is one of continuous improvement, and the right to change prices, specification or equipment at any time without notice is reserved.

All data given in this book is subject to production variations. Dimensions and weights are approximate only and the illustrations do not necessarily show tractors in standard condition. For exact information about any particular tractor please consult your Ford tractor dealer.

ı

# **CONTENTS**

INTERNATIONAL SYMBOLS
SAFETY PRECAUTIONS4-5
CONTROLS AND INSTRUMENTS6-12
SEAT, LIGHT AND ENGINE CONTROLS
INSTRUMENT PANEL7-8
THROTTLE CONTROLS.         8–9           BRAKE CONTROLS.         9–10
DIFFERENTIAL CONTROL
TRANSMISSION AND PTO CONTROLS
HYDRAULIC LIFT SYSTEM CONTROLS12
OPERATION
BREAK-IN PROCEDURES
STARTING THE ENGINE13-14
STOPPING THE ENGINE
DRIVE AND PTO
TOWING THE TRACTOR
OPERATING THE DIFFERENTIAL LOCK
OPERATING THE HYDRAULIC LIFT SYSTEM
WHEEL TREAD SETTINGS
TRACTOR WEIGHTING21-22
TIRE PRESSURES23—24
LUBRICATION AND MAINTENANCE 25-48
LUBRICATION AND MAINTENANCE CHART25—26
TWO-WHEEL DRIVE
FOUR-WHEEL DRIVE
FUEL AND LUBRICANTS
GENERAL MAINTENANCE
TRACTOR STORAGE46 47
GENERAL TORQUE SPECIFICATION TABLE48
SPECIFICATIONS
CAFETY DECALO
INSTRUCTION DECALS
PREDELIVERY AND 50-HOUR SERVICE57-59

# INTERNATIONAL SYMBOLS

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



# 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 precatuions. 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

- Read the Operator's Manual carefully before using the tractor. Lack of operating knowledge can lead to accidents.
- Use an approved Rollbar and Seat Belt for safe operation.
   Overturning a tractor without a rollbar can result in death or injury. If your tractor is not equipped with a rollbar and seat belt, see your Fod Tractor Equipment Dealer.
- Always use the seat belt. Do not use the seat belt if the rollbar has been removed from the tractor.
- If a front end loader is to be installed, always use a ROPS canopy to avoid injury from falling objects.
- 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.
- Do not permit anyone but the operator to ride on the tractor. There is no safe place for extra riders.
- Replace all missing, illegible, or damaged safety decals. See list of decals on page 53.
- 8. Keep safety decals clean of dirt and grime.

#### SERVICING THE TRACTOR

- The 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 the pressure to escape before removing the cap entirely.
- Do not smoke while refueling the tractor. Keep any type of open flame away. Wait for engine to cool before refueling.
- Keep the tractor in good operating condition for your safety. An improperly maintained tractor can be hazardous.
- 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.
- 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.

If fluid is injected into the skin obtain medical attention immediately or gangrene may result.

- 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.
- 8. 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, nozzle or any other part of the fuel injection system. Failure to follow these instructions can result in serious injury.
- Continuous long term contact with used engine oil may cause skin cancer. Avoid prolonged contact with used engine oil. Wash skin promptly with soap and water.
- 10. Some components on your tractor, such as gaskets and friction surfaces (brake linings, clutch linings, etc.), may contain asbestos. Breathing asbestos dust is dangerous to your health. You are therefore advised to have any maintenance or repair operations on such components carried out by an authorized Ford tractor dealer. If, however, service operations are to be undertaken on parts that contain asbestos, the essential precautions listed below must be observed:
  - Work out of doors or in a well ventilated area.
  - Dust found on the tractor or produced during work on the tractor should be removed by extraction not by blowing.
  - Dust waste should be dampened, placed in a sealed container and marked to ensure safe disposal.
  - If any cutting, drilling, etc., is attempted on materials containing asbestos, the item should be dampened and only hand tools or low speed power tools used.
- 11. Continuous long term contact with used engine oil has caused skin cancer in animal tests. Avoid prolonged skin contact with used engine oil. Wash skin promptly with soap and water.

#### **OPERATING THE TRACTOR**

- Apply the parking brake, place the P.T.O. lever in the "OFF" position, the lift control lever in the down position, the remote control valve levers in the neutral position, and the transmission in neutral before starting the tractor.
- 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.
- 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.
- Avoid accidental contact with the gear shift lever while the engine is running. Unexpected tractor movement can result from such contact.
- 5. Do not get off the tractor while it is in motion.
- Disengage PTO, shut off the engine and apply the parking brake before getting off the tractor.
- 7. Do not park the tractor on a steep incline.

(cont.)

# SAFETY PRECAUTIONS (Continued)

- Do not operate the tractor engine in an enclosed building without adequate ventilation. Exhaust fumes can cause death.
- If power steering or engine ceases operating, stop the tractor immediately.
- 10. Pull only from the swinging drawbar or the lower link drawbar in the down position. Use only a drawbar pin that locks in place. Pulling from the tractor rear axle or any point above the axle may cause the tractor to upset.
- 11. If the front end of the tractor tends to rise when heavy implements are attached to the three-point hitch, install front end or front wheel weights. Do not operate the tractor with a light front end.
- 12. Always set the hydraulic selector lever in position control when attaching equipment and when transporting equipment. Be sure hydraulic couplers are properly mounted and will disconnect safely in case of accidental detachment of implement.
- 13. Do not leave equipment in the raised position.
- Use the Flasher/Turn Signal Lights and SMV signs when traveling on public roads both day and night unless prohibited by law.
- Be sure tractor lights are adjusted to prevent blinding an oncoming vehicle operator.

#### **DRIVING THE TRACTOR**

- Watch where you are going especially at row ends, on roads, around trees and low handing obstacles.
- 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.
- Lock tractor brake pedals when transporting on roads to provide two wheel braking.
- Keep the tractor in the same gear when going downhill as used when going uphill. Do not coast or free wheel down hills.
- Any towed vehicle whose total weight exceeds that of the towing tractor must be equipped with brakes for safe operation.
- When the tractor is stuck or tires are frozen to the ground, back up the tractor to prevent upset.
- Always check overhead clearance, especially when transporting the tractor.
- When operating at night, adjust lights to prevent binding an oncoming driver.

#### OPERATING THE P.T.O.

- When operating P.T.O. driven equipment, shut off the engine and wait until the P.T.O. stops before getting off the tractor and disconnecting the equipment.
- Do not wear loose clothing when operating the power take-off, or when near rotating equipment.
- When operating stationary P.T.O. driven equipment, always place both gear shift lever in neutral apply the tractor parking brake and block the rear wheels front and back.
- To avoid injury, do not clean, adjust, unclog or service P.T.O. driven equipment when the tractor engine is running.
- Make sure the P.T.O. master shield is installed at all times and always replace the P.T.O. shield cap when the P.T.O. is not in use.

#### **DIESEL FUEL**

- Under no circumstances should gasoline, alcohol or blended fuels be added to diesel fuel. These combination 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.
- Never remove the fuel cap or refuel with the engine running or hot.
- 3. Do not smoke while refueling or when standing near fuel.
- Maintain control of the fuel filler pipe nozzle when filling the tank,
- 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.
- 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.
- Arrnage fuel purchases so that winter grade fuels are not held over and used in the spring.



# SEAT, LIGHT, AND ENGINE CONTROLS

#### TRACTOR SEAT

Your Ford 1310 Tractor is equipped with a suspension seat as shown in Figure 1. The seat is adjustable to obtain the most comfortable position.

To move the seat fore and aft, move the seat release lever to the forward and slide the seat fore or aft as desired, Figure 2.

To adjust the seat for flotation, turn the flotation adjustment bolt right for a firm ride, or left for a soft ride, Figure 2.

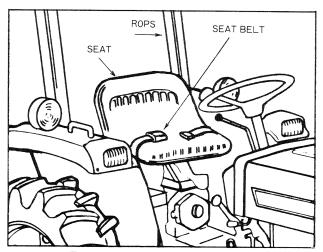


Figure 1-Tractor Seat, ROPS and Seat, Belt

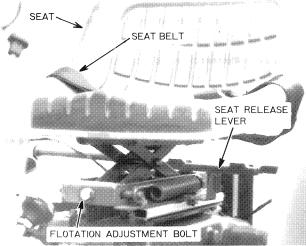


Figure 2 - Tractor Seat Adjustment

# ROLL OVER PROTECTIVE STRUCTURE (ROPS)

A Roll Over Protective Structure (ROPS) and seat belts were standard equipment for this

tractor at time of factory assembly. If the ROPS was deieted by the original purchaser or has been removed, it is recommended that you equip your tractor with a Roll Over Protective Structure (ROPS) and seat belts. ROPS are effective in reducing injuries during tractor overturn accidents. Overturning tractor without a ROPS can result in serious injury or death.

Roll Over Protective Structure (ROPS), and seat belts are available from your Ford Tractor Equipment Dealer.

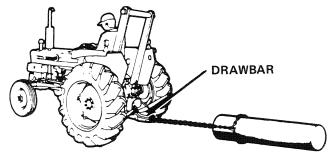
The safety offered by the roll bar and seat belt is minimized if your seat belt is not buckled. Always use your seat belt — they save lives.



**WARNING:** Always wear the seat belt when the tractor is equipped with a ROPS. DO NOT use the seat belt if the ROPS is removed from the tractor.



WARNING: DO NOT attach chains or ropes to the roll bar for pulling purposes since the tractor can tip backward. Always pull from the tractor drawbar. Be careful when driving through door openings or under low overhead objects. Make sure there is sufficient overhead clearance for the roll bar.



# ADJUSTING THE SEAT BELT

To lengthen the belt, tip the buckle end down and pull on the buckle until the ends can be joined.

To shorten the belt, buckle it, then pull on the loose end until the belt is snug.

If the seat belt is to be cleaned, use soap and water. Do not use carbon tetrachloride, naptha, etc., as these will weaken the webbing. For the same reason, do not bleach or redye the webbing. Replace seat belt if worn or damaged.

# **LIGHTING**

## FLASHER WARNING LAMP

Your Ford tractor is equipped with flasher warning lamps, Figure 3. The switch for the warning lamps is located on the right side of the instrument panel.

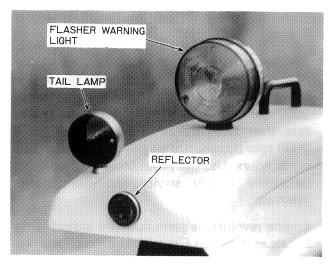


Figure 3 — Flasher Warning and Tail Lamp

The light switch must be in one of the "ON" positions before the flasher will operate.

For your protection, use the flasher warning lamp and the SMV emblem when traveling on public roads, day or night.

## LIGHT SWITCH

The light switch, shown in Figure 4, is a push-pull type switch. Its positions are:

Full in	Off
Intermediate	.Headlights (High Beam),
	and Tail Lamp
Full out	. Headlights (Low Beam),
	and Tail Lamp

# **INSTRUMENT PANEL**

# **KEY SWITCH**

The key switch is shown in Figure 4. Turning the key to the left will activate the cold-start aid. Turning the key to the right to the "on" position will activate the warning lights and instruments. Turning the key further right to the "start" position will start the engine. Upon release, the key will spring return to the "on" position.

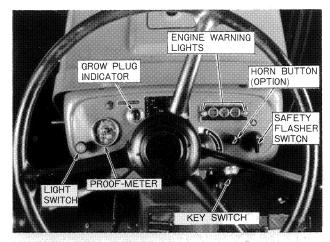


Figure 4 — Instrument Panel

The starting circuit can only be activated when the main shift lever is in neutral. Always check to make certain the transmission main shift lever and P. T. O. lever are in neutral before attempting to start the engine. Refer to page 13 for complete starting instructions.

**IMPORTANT:** The key switch must remain in the ON position while operating the engine. The warning lights and battery charging system will not function with the switch in the OFF position.

# **FUEL GAUGE**

The fuel gauge is shown in Figure 5. The amount of fuel in the gauge indicates the amount of fuel in the tank.

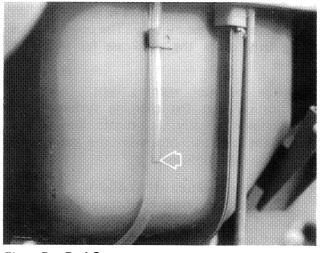


Figure 5 — Fuel Gauge

## FUEL SHUTOFF VALVE

The fuel shutoff valve is shown in Figure 6. To open the fuel shutoff valve, move the handle so that it points straight up and down. To close the fuel shutoff valve, move the handle to the horizontal position. Always shut off the valve when servicing any portion of the fuel system.

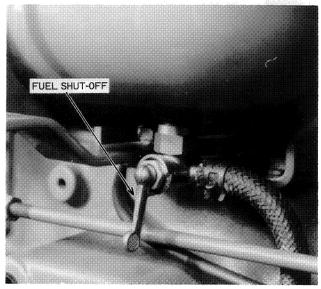


Figure 6 - Fuel Shutoff Valve

## **WARNING LIGHTS**

The engine temperature, oil pressure and charge indicator warning lights are located as shown in Figure 4. When the key switch is turned "on" the oil pressure and charge lights come on. After the engine has been started, the lights should go out within a few seconds. If they do not go out:

- Engine oil pressure warning light: Stop the engine immediately and investigate the cause.
   It is important to remember that this light indicates oil pressure only. The operator must regularly check the crankcase for proper oil level.
- Charge indicator warning light: This is an indication that the charging system is not operating normally. Investigate the cause as soon as possible, otherwise the battery will become fully discharged.
- Coolant temperature warning light: The warning light is not on under normal operating condition. If the light comes on, stop the engine and investigate. Regularly check the radiator for proper coolant level.



**WARNING:** When engine is at operating temperature always relieve pressure in the cooling system before removing the radiator cap.

#### PROOF-METER

The Proof-Meter is located on the left side of the instrument panel, Figure 4. The Proof-Meter indicates:

- The hours and portions of hours your tractor has operated, based on an average engine speed of 2000 rpm. Engine speeds below 2000 rpm accumulate engine hours at a slower rate than clock hours. Engine speeds above 2000 rpm accumulate engine hours faster than clock hours. Use the Proof-Meter as a guide to determine hourly service and maintenance intervals.
- Engine revolutions perminute are indicated on a scale as shown in Figure 4. Use the engine revolutions per minute scale when operating PTO-driven equipment. PTO-driven equipment must be operated at an engine speed not to exceed 2422 rpm as shown by the yellow line on the rpm scale. Additional information on PTO operation can be found on page 15. Ground speeds are indicated on a decal attached to the instrument panel. The decal shows ground speeds for 3rd, 6th, 9th, 12th and R² gears, with engine speeds from 1500-2800 rpm. Additional ground speed information can be found on page 52.

# THROTTLE CONTROLS

# HAND THROTTLE AND ENGINE STOP CONTROL

The hand throttle is shown in Figure 7. Pull the throttle rearward to increase engine rpm. Push the throttle forward to decrease engine rpm. Push the throttle full forward to stop the engine.

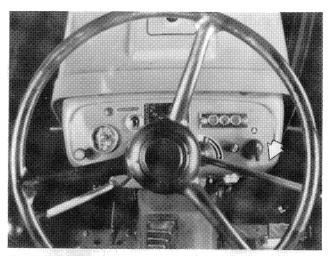


Figure 7 - Hand Throttle

#### FOOT THROTTLE

The foot throttle, shown in Figure 8, can be used separately, or in conjunction with the hand throttle. With the hand throttle control lever set at a selected engine rpm, the foot throttle can be used to increase engine rpm to its maximum speed. Upon release of the foot throttle, the engine speed will return to idle or to the rpm at which the hand throttle has been set.

# BRAKE PEDALS BRAKE PEDALS FOOT THROTTLE

Figure 8 — Foot Throttle and Brake Controls

# **BRAKE CONTROLS**

## **BRAKE PEDALS**

The brake pedals are shown in Figure 8. The right brake pedal is used to brake the right rear wheel. The left pedal is used to brake the left rear wheel. Depress both pedals simultaneously to stop the tractor.

To assist in making sharp turns at slow speeds, depress the right or left brake pedals as required.



**WARNING:** When operating the tractor at high speeds, never attempt to make sharp turns by using the brakes.

## BRAKE PEDAL LOCK

The brake pedal lock, shown in Figure 8, is used to secure the brake pedals together. Lock the pedals together whenever the tractor is operated at high speeds and at any time the tractor is used on the highway.

## PARKING BRAKE CONTROL

The parking brake control, shown in Figure 9, is used for locking the brake pedals in the applied position. The parking brake should be applied whenever the tractor is parked.

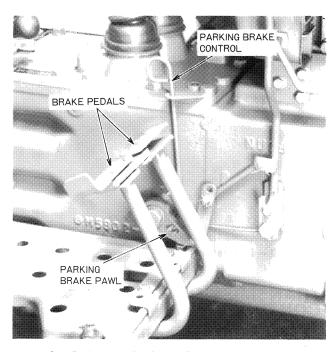


Figure 9 — Parking Brake Control

To apply the parking brake:

- Lock the brake pedals together with the brake pedal lock.
- Depress both brake pedals.
- Pull up on the parking brake lever. The pawl on the control will engage the teeth on the lefthand brake pedal and will retain the pedals in the applied position.

To release the parking brake:

- Depress the brake pedals to release the pawl.
- Unlock the brake pedals if operating conditions require independent rear wheel braking action.

# **DIFFERENTIAL CONTROL**

# DIFFERENTIAL LOCK PEDAL

The differential lock pedal is shown in Figure 10. Depressing the pedal locks the rear axle shafts together, providing additional traction in wet or loose soil. Refer to page 17 for differential lock operating information.



**WARNING:** Tractor is very difficult to steer with differential locked.

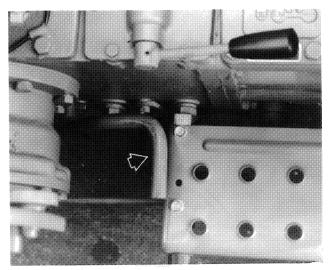


Figure 10 - Differential Lock

# TRANSMISSION AND PTO CONTROLS

## TRANSMISSION GEARSHIFT LEVERS

The transmission main shift lever and range selec-

tor lever are shown in Figure 11. A diagram showing the shift pattern is cast into the transmission cover.

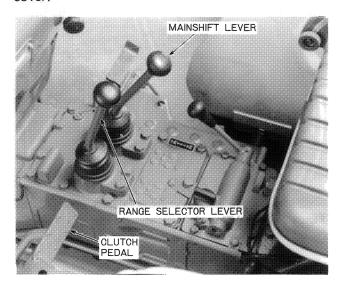


Figure 11 — Transmission Controls

Three forward and one reverse speed are provided for each of the four ranges. This provides a total of 12 forward and 4 reverse speeds.

# SYNCHROMESH TRANSMISSION GEARSHIFT LEVERS — (OPTIONAL)

The transmission main shift lever and range selector lever are shown in Figure 12. A diagram showing the shift pattern is provided on the shuttle shift cover and transmission cover.

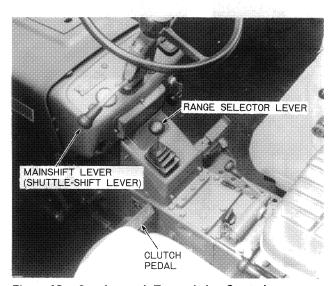


Figure 12 — Synchromesh Transmission Controls

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



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email: ebooklibonline@outlook.com