BREAK-IN PROCEDURES

Your new Ford tractor will provide long and dependable service if given proper care. During the first 50 hours of operation:

1. Avoid "lugging" the engine. Operating in too high a gear under a heavy load will cause excessive engine lugging. Lugging occurs when the engine is under load and will not respond to a throttle increase.

2. Avoid continuous operation at a constant engine speed. Use a lower gear when pulling a heavy load; a higher gear when pulling a light load. Selecting the correct gear ratio will save fuel and prolong engine life.

3. Check the instruments frequently and keep the radiator and oil reservoirs filled to the recommended levels. Daily checks should include:

   - Engine oil level.
   - Power steering oil level.
   - Transmission oil level.
   - Tractor hydraulic lift system oil level (rear axle).
   - Air cleaner restriction indicator.

STARTING THE ENGINE

A starter neutral switch permits current to flow to the starting motor only when the transmission high-low range shift lever is in the neutral (6x4 or 8x2 transmissions) or when the gearshift lever is in "neutral" (8x4 syncromesh transmission). See Figures 8, 9 and 10.

WARNING: *Always shift both levers to neutral before starting the engine. NEVER ATTEMPT TO START THE ENGINE WHILE STANDING BESIDE THE TRACTOR—ALWAYS SIT IN THE OPERATOR'S SEAT.*

IMPORTANT: *Do not crank the starting motor continuously for more than 30 seconds to avoid starting motor failure.*

WARM WEATHER STARTING

1. Depress the clutch pedal and move the shift levers to the neutral position. Apply the parking brake. Place the hydraulic lift control lever(s) in the lower position, the P.T.O. control lever in the disengaged position, and the remote valve handles in the neutral position.

2. Move the hand throttle half-open. Make sure the diesel engine stop control is pushed all the way in.

3. Turn the starter key to its "START" position, Figure 15. When the engine starts, release the key. Make sure the warning lights go out. If the engine fails to start after cranking for approximately 30 seconds, refer to the following "Cold Weather Starting" information.

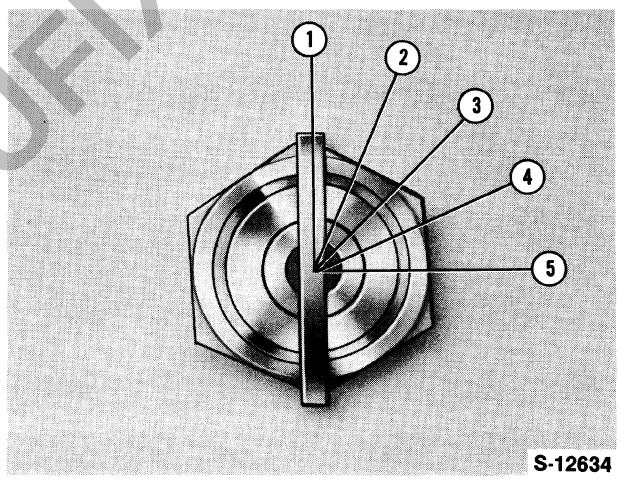


Figure 15
Key-Starter Switch Positions

1. 'OFF'
2. Accessories 'ON'
3. Warning Lights and Instruments 'ON'
4. Heat
5. Heat-Start

COLD WEATHER STARTING

Thermostart: The thermostart cold weather starting aid is available for all diesel tractors. The unit is effective in temperatures down to 0°F (-18°C). If colder temperatures are encountered, a coolant immersion heater is recommended.

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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 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 Ford Tractor Equipment Dealer.
3. Always use the seat belt, Do not use the seat belt if the rollbar has been 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 84.
8. 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 the 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 the 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 attempt to service the air conditioning system. It is possible to be severely frostbitten or injured by escaping refrigerant. See your dealer for service.
9. 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.
10. 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 part of the fuel injection system. Failure to follow these instructions can result in serious injury.
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

1. 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.
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. Avoid accidental contact with the gear shift lever while engine is running. Unexpected tractor movement can result from such contact.
5. Do not get off the tractor while it is in motion.
6. Disengage the P.T.O., shut off the engine and apply the parking brake before getting off the tractor.
7. Do not park the tractor on a steep incline.
8. Do not operate the tractor engine in an enclosed building without adequate ventilation. Exhaust fumes can cause death.
9. 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.

(CONT.)

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UNIVERSAL SYMBOLS

As a guide to the operation of your tractor, various universal symbols are shown below with an indication of their meaning.


Engine speed


Hours recorded


Engine water temperature


Lights


Horn


Engine oil pressure


Hazard warning


Axle connect


Axle disconnect


Continuously variable


Increase

Decrease



Diesel fuel


Fuel cut-off


Fuel level


Transmission oil pressure


Air Filter


Pressurized open slowly


Alternator charge


Power take-off (on)


Power take-off (off)


"Tortoise", slow or minimum setting


"Hare", fast or maximum setting


Warning

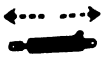

Control lever operating direction


Rock shaft (raised)


Rock shaft (lowered)


Remote cylinder (extended)

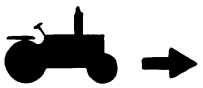

Remote cylinder (retracted)


Remote cylinder (FLOAT)


Differential lock


Read operator's manual

N
Neutral


Forward


Reverse

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If injured by escaping oil, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately.

- Removal of the remote control valve detents by your Ford Tractor dealer is recommended whenever a dozer or similar equipment is operated with the remote control valves. When detents are installed, the valve stays in an actuated position until the cylinder(s) reach the end of the stroke; without detents, the valve returns to neutral and cylinder movement stops when the control valve lever is released.

- Follow the instructions in this and the equipment manufacturer's operator's manual.

WARNING: *Before disconnecting cylinders or equipment, make certain that the implement or equipment is supported securely.*

WARNING: *Remote couplers must be properly mounted and securely fastened to tractor mounting bracket for proper function of safety disconnect feature.*

OPERATING "FOUR POSITION" REMOTE CONTROL VALVES

Your Ford Tractor can be equipped with up to four "Four Position" remote control valves. Each remote control valve has its own pair of couplers at the rear of the tractor. Also each "Four Position" remote control valve is controlled by a lever and flow control knob as shown in Figures 27 and 28.

Moving the lever(s) fully rearward will extend a cylinder. Moving the lever(s) to the first position forward of neutral will retract a cylinder. Fully forward is a "float" position which allows a cylinder to extend or retract freely. A detent will hold the lever in the selected extend or retract position until the remote cylinder reaches the end of the stroke when the control lever will automatically return to neutral. Alternately, the lever may be returned to neutral manually. The lever will not return automatically from the "float" position.

The flow control knobs permit selective control of the volume of oil directed to the remote equipment. Turn counterclockwise (tortoise symbol) to decrease flow. Adjust the flow control knob with the remote control valve levers in neutral.

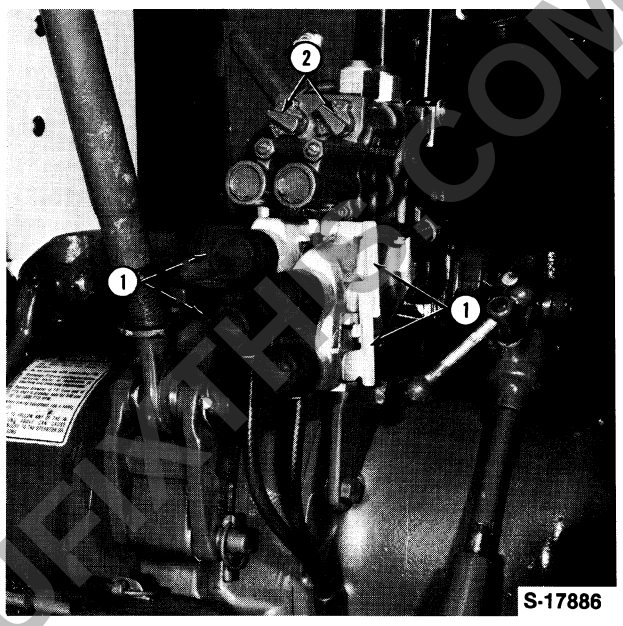


Figure 27
Remote Couplers and Valves
1. Coupler Lever 2. Flow Control Knob

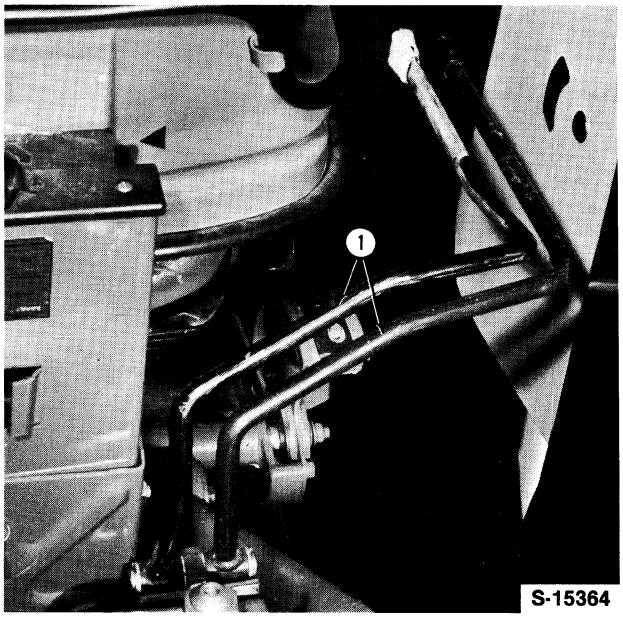


Figure 28
Valve Handles
1. Handles

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