TOWING A DISABLED TRACTOR

The following procedure should be used to move a tractor that is disabled and cannot be moved under its own power.

IMPORTANT: *The tractor should only be moved a very short distance, such as onto a trailer or truck. Do not tow this tractor as a method of transport. Haul the tractor on a trailer or truck for transport.*

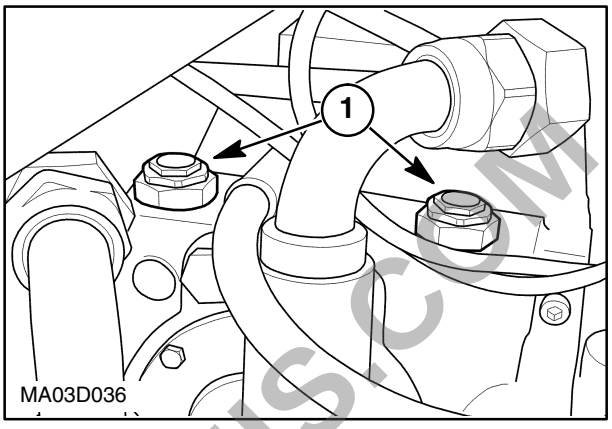
It is necessary to use a strong chain if moving the tractor. If the tractor is to be moved from the cab-end, use the drawbar as an attaching point for the chain. If towing the tractor from the engine-end, use the tie-down bracket as an attaching point for the chain.

1. Engage the park brake and attach the chain to the tractor.
2. Before the tractor is moved, the multifunction valves (1) in the hydrostatic pump must be adjusted to bypass oil. To do this, make sure the engine is off and the park brake is engaged. Use a 1-1/16″ wrench on the middle-sized hex (2) of the multifunction valve cartridge, and a 1-1/4″ wrench on the large hex (3) to prevent rotation of the cartridge assembly. Rotate the middle hex three revolutions counterclockwise to open the bypass valve. Repeat this procedure for the second valve. **Do not rotate more than 3-1/2 revolutions, as additional rotation will permit external leakage.**
3. If possible, let the engine run. If the engine cannot be run, steering response will be slower and require greater effort. If the engine is running, do not move the FNR lever as the hydrostatic motor can still rotate the driveline.
4. Release the park brake and move the tractor.

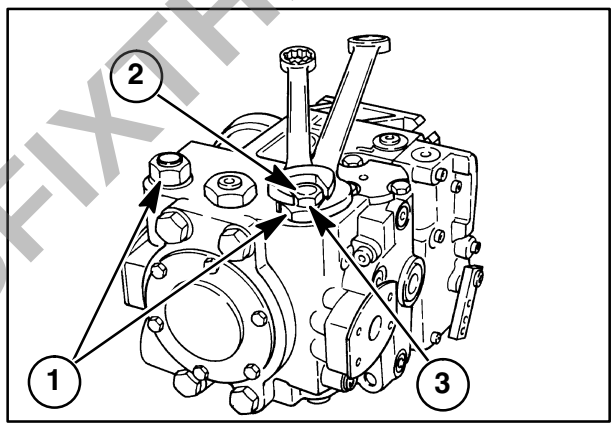
⚠ WARNING ⚠

Do not use cables or ropes to move the tractor. If the cable or rope slips or breaks, it may whip with sufficient force to cause serious injury.

5. To close the bypass valve after moving is complete, make sure the engine is off and rotate the middle hex clockwise until it is seated. Torque the middle hex nut to 41 N·m (30 ft. lbs.).



39



40

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 4
TROUBLESHOOTING

ENGINE

PROBLEM	POSSIBLE CAUSE	CORRECTION
Engine will not start or starts hard.	Parking brake not engaged.	Engage parking brake.
	Hydrostatic (FNR) Lever not in Neutral	Place FNR Lever in Neutral
	PTO Switch “ON”	Move PTO Switch to “OFF”
	Auxiliary hydraulic drive control switch in the “ON” position.	Turn control switch to the “OFF” position.
	Operator’s rotating console not latched securely to the Engine-End or Cab-End.	Rotate console and lock into position.
	Incorrect starting procedure.	Review starting procedures.
	Low or no fuel.	Check fuel level.
	Air in fuel lines.	Bleed fuel system.
	Incorrect engine oil viscosity.	Use correct viscosity oil.
	Incorrect fuel for operating temperature.	Use correct type fuel for temperature conditions.
	Contaminated fuel system.	Clean system.
	Clogged fuel filter.	Replace filter element.
	Malfunctioning fuel injector(s).	Contact New Holland dealer.
	Malfunctioning fuel solenoid or solenoid relay.	Contact New Holland dealer.
	Clogged air filter.	Clean or replace air filter.
Engine runs rough and/or stalls.	Clogged fuel filter.	Replace filter.
	Clogged air filter.	Clean or replace air filter.
	Engine cylinder temperature too low for clean fuel burn.	Refer to cold weather starting (Section 2).
	Contaminated fuel system.	Clean system.
	Defective fuel solenoid.	Contact New Holland dealer.
	Malfunctioning fuel injector(s).	Contact New Holland dealer.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 6
SPECIFICATIONS

The specifications on the following pages are given for your information and guidance. For further information concerning your tractor, consult your authorized New Holland dealer.

New Holland policy is one of continuous improvement, and the right to change prices, specifications 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 New Holland dealer.

GENERAL

Frame

Type	Articulated
Articulation	45°
Oscillation	10°

Cab

Type	Module enclosed Rollover Protective Structure (R.O.P.S.)
Glass	Tinted safety
Isolation	Rubber mounts (4)
Doors	Two
Wipers	Two wipers std. Cab-end: Pantograph, two speed. Engine-end: one speed.
Features	Rubber floor mats, dome lights, cigar lighter and ashtray, pocket for manuals, two adjustable convex rear-view mirrors mounted inside cab.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

LUBRICATION AND MAINTENANCE CHART

SERVICE INTERVAL	OPERATION NUMBER	MAINTENANCE REQUIREMENT	CHECK	CLEAN	LUBE	CHANGE	ADJUST	DRAIN
WHEN INDICATOR LAMP LIGHTS	1.	ENGINE AIR CLEANER OUTER ELEMENT*	X	X				
EVERY 10 HRS OR DAILY	2.	ENGINE COOLANT LEVEL*	X				X	
	3.	ENGINE OIL LEVEL	X				X	
	4.	HYDRAULIC HOSES, TUBES, FITTINGS	X					
	5.	RADIATOR, OIL COOLER, AND AIR CONDITIONER CONDENSOR	X	X				
	6.	BRAKE FLUID RESERVOIR LEVEL*	X				X	
EVERY 50 HRS	7.	CAB-END AXLE OIL LEVEL*	X				X	
	8.	WINDSHIELD WASHER FLUID RESERVOIR	X				X	
	9.	LOWER ARTICULATION PIN			X			
	10.	UPPER ARTICULATION PIN			X			
	11.	FRONT STEERING CYLINDER PINS			X			
	12.	REAR STEERING CYLINDER PINS			X			
	13.	ENGINE–END AXLE OSCILLATION PIVOT			X			
	14.	FUEL FILTER/WATER SEPARATOR						X
	15.	CAB AIR FILTERS		X				
	16.	TIRE PRESSURE AND CONDITION	X				X	
	17.	PARK BRAKE LINKAGE ADJUSTMENT	X				X	
	18.	CAB–END THREE–POINT HITCH			X			
	19.	DRIVELINE ARTICULATION STEADY BEARINGS			X			
EVERY 300 HRS	20.	ENGINE AIR INTAKE CONNECTIONS*	X			X		
	21.	ENGINE OIL AND FILTERS*				X		
	22.	DRIVELINE ARTICULATION SLIP YOKES			X			
	23.	ENGINE ACCESSORY DRIVE BELT	X					
	24.	WHEEL HARDWARE TORQUE	X					
	25.	ENGINE–END AXLE OIL LEVEL*	X					
EVERY 600 HRS	26.	CRANKCASE BREATHER ELEMENT				X		
	27.	FUEL FILTERS*	X			X		
	28.	BATTERY CONNECTIONS	X	X				
	29.	BATTERY ELECTROLYTE LEVEL	X				X	
	30.	STARTER CONNECTIONS	X					
	31.	FUEL TANK HOSES AND CONNECTIONS	X					
	32.	HYDRAULIC OIL FILTER*				X		
	33.	HYDROSTATIC OIL FILTER*				X		
	34.	AUXILIARY HYDRAULIC DRIVE FILTER*				X		
	35.	AUXILIARY HYDRAULIC RETURN FILTER*				X		
EVERY 1200 HRS OR ANNUALLY	36.	CAB AIR FILTERS				X		
	37.	HYDRAULIC OIL*				X		
	38.	ENGINE-END AXLE OIL				X		
	39.	RADIATOR AND HEATING SYSTEM HOSES	X					
	40.	CHANGE PRIMARY FUEL FILTER				X		
	41.	ENGINE INNER AND OUTER AIR FILTER*				X		
EVERY 1200 HRS OR TWO YEARS	42.	ENGINE COOLANT AND COOLANT FILTER*				X		

** IF THE INDICATOR LIGHT IS ON, SERVICE IMMEDIATELY. DO NOT CONTINUE WITH INDICATOR LIGHT ON.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 2
OPERATION

INTRODUCTION

Read this section thoroughly. It details the location and operation of the various instruments, switches and controls on your tractor. Even if you operate other tractors, you should thoroughly read this section of the manual and be sure that you are familiar with the location and function of all the features of the tractor.

Do not start the engine or attempt to drive or operate the tractor until you are fully accustomed to all the controls. It is too late to learn after the tractor is moving. If in doubt about any aspect of operation of the tractor, consult your authorized dealer.

Pay particular attention to the break-in recommendations to ensure that your tractor will give the long and dependable service for which it was designed.

See Section 3 for lubrication and maintenance requirements. Tractor specifications are listed in Section 6.

PRE-OPERATION CHECKS

Before operating the tractor, be sure you are thoroughly familiar with the location and operation of the controls.

Perform all daily lubrication and maintenance operations as outlined in Section 3.

After completing the daily maintenance operations, perform a walk around visual inspection of the tractor. Pay particular attention to the following items:

- Fan belt for cracks.
- Check and clean tractor of any buildup of crop residue or other debris. Follow the instructions in OPERATION 57 “Additional Daily Cleaning” on page 3–57 of this manual.
- Check tractor for damage or loose hardware.
- Hoses, lines, and fittings for leaks or damage.
- Tires for damage.
- Driveline and hydraulic pump areas for leaks or debris accumulation.
- Make sure the tractor is ballasted properly for the work to be performed (see “Ballasting” in Section 2).

Make any necessary repairs before using the tractor.

PRECAUTIONARY STATEMENTS

⚠ CAUTION ⚠

Do not operate the tractor in a closed building.

Before starting the engine, be sure all operating controls are in neutral or off and the park brake is engaged.

Always sit in the Operator’s seat before starting and operating the tractor. Ensure the seat belt is securely buckled.

Operate all controls only from the Operator’s seat.

Stop the engine before servicing the tractor.

Keep all shields in place.

Stop the engine before raising the engine hood.

Use handholds and steps when mounting and dismounting the tractor.

Use the articulation lock in stationary applications and servicing. Never use the lock when the tractor is moving.

On highways, use signals before turning.

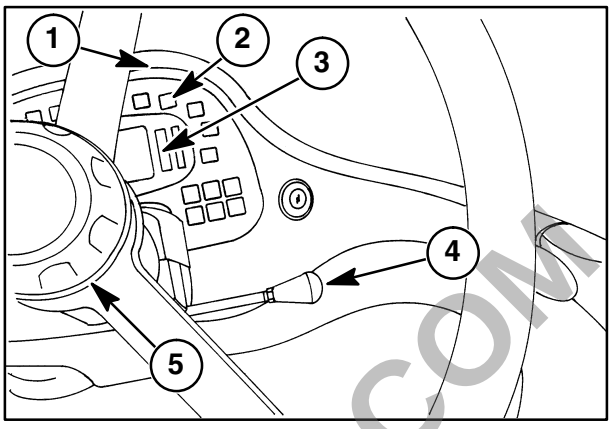
Use proper safety devices to warn of a slow-moving vehicle when driving on public roads. Check with local authorities concerning highway travel.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

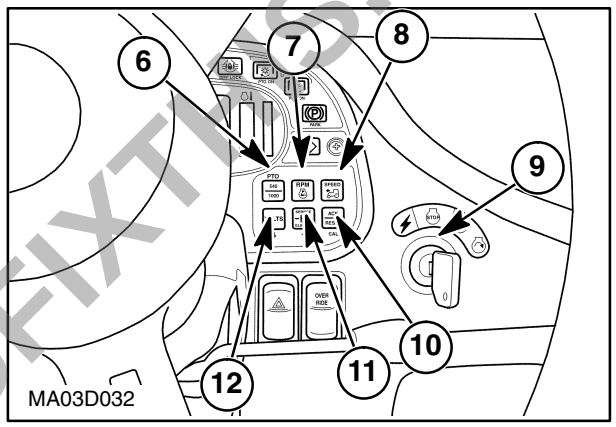
FRONT CONSOLE CONTROLS

1. Electronic instrument control system
2. Indicator light display
3. Engine coolant temperature bar graph
4. Steering column tilt control lever
5. Steering column telescoping control knob



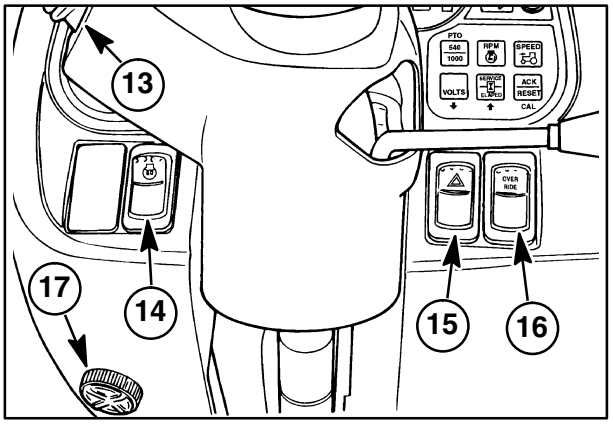
24

6. PTO speed display switch
7. Engine RPM display switch
8. Ground speed display switch
9. Key switch
10. Electronic monitor Acknowledge / Reset switch
11. Hours display switch
12. VOLTS / Electrical system voltage display switch



25

13. Multifunction switch
14. Cold start switch
15. Hazard light switch
16. Override switch
17. Warning device (Audible alarm)



26

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 5
OPTIONAL ACCESSORIES

This section lists the Dealer and/or Factory installed optional accessories.

Not all listed accessories are available in all markets.

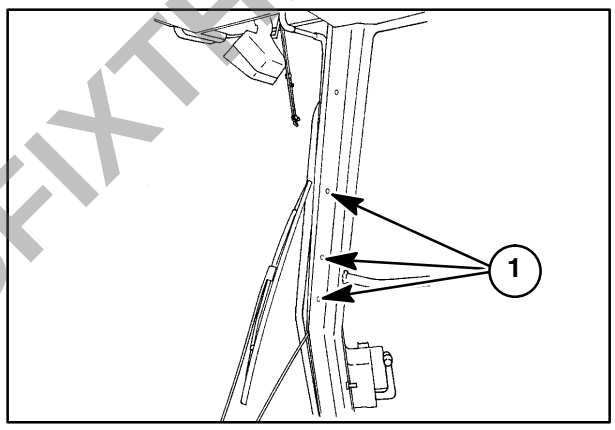
Some accessories were discussed earlier in this manual.

This is not a complete listing for all markets. Contact your New Holland dealer for a complete listing of accessories for your market area.

INSTALLATION OF CAB MOUNTED ACCESSORIES

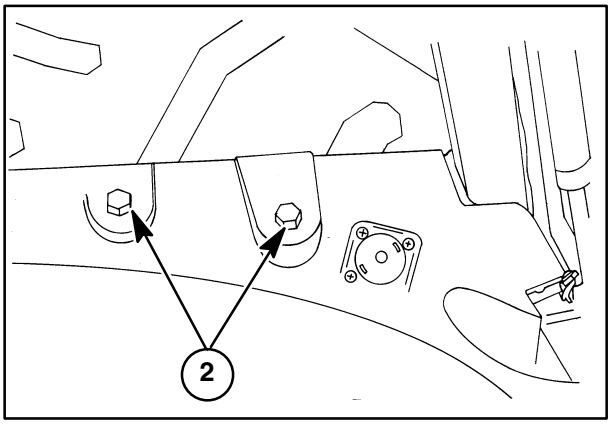
Implement Monitor Boxes, Gauges, CB Radio and Cellular Phone

The cab has three convenient locations to attach mounting brackets for monitor boxes, radios, or phones. The first location (1) is located on the right front cab post.



1

The second location (1) is on the right rear corner of the cab.



2

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

6-POSITION WHEEL SPACING ADJUSTMENT

IMPORTANT: *DO NOT install dual tires and wheels on this tractor – damage to the final drive may occur.*

1. Raise one drive wheel off the ground, one at a time, to change the wheels, unless it is necessary to install a wheel on the opposite side of the tractor.

⚠ WARNING ⚠

Do not work under a raised tractor unless the frame is securely blocked and the articulation lock is installed. Do not rely on the jack or hoist only.

⚠ WARNING ⚠

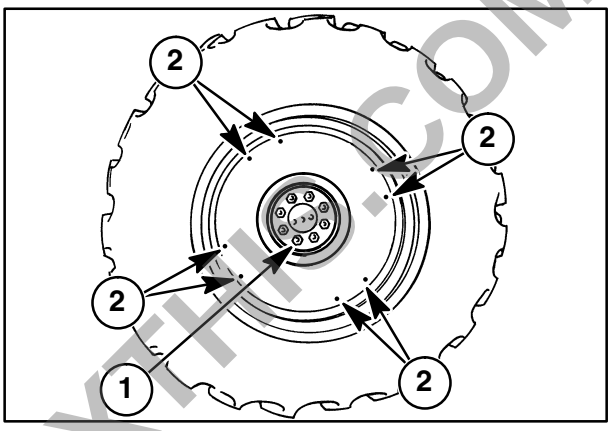
Tractor wheels are very heavy. Handle with care and make sure, when stored, that they cannot fall and cause injury.

2. Remove the wheels and tires from the tractor by removing the eight lug nuts (1). Use caution when removing tire and wheel assemblies.
3. With the wheel removed from the tractor, remove the disc-to-rim retaining bolts (2).
4. Reposition the center disc to the rim, referring to the “Tire and Wheel Option” and “6-Position Rim” charts, and reinstall retaining bolts (2).
5. After repositioning the wheel discs, install and retighten the hardware. Tighten wheel disc-to-rim hardware (2) to specifications. Lubricate the wheel nuts (1) with SAE 10W–30 engine oil, and tighten to specifications.
6. Repeat the procedure on the other wheels. Be sure all wheels are set at the same tread spacing.

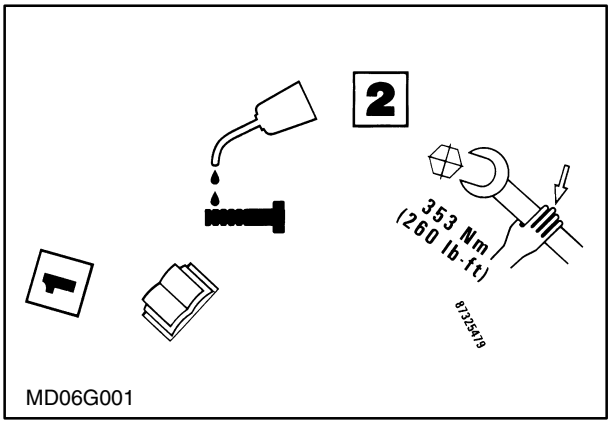
NOTE: *Check the articulation stop adjustment after changing the wheel tread spacing and set stop to the correct position stated in the “Tire and Wheel Options” chart.*

HARDWARE ITEM	TORQUE
Dish to Rim Hardware (dry)	332 N·m (245 ft. lbs.)
Wheel Nuts (oil threads)	353 N·m (260 ft. lbs.)

IMPORTANT: *Torque all wheel nuts as specified. Drive the tractor under no load condition for 200 m (200 yards) and retorque. Repeat torque check after one hour, then ten hours or daily intervals until bolt torque remains constant.*



135



136

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

ELECTRICAL SYSTEM

PROBLEM	POSSIBLE CAUSE	CORRECTION
Electrical system is inoperative.	Loose or corroded battery connections.	Clean and tighten connections.
	Sulfated batteries.	Check each battery voltage for 12.6 volts minimum.
	Fuse or relay failure.	Check fuse panel.
	Ignition switch failure.	Contact New Holland Dealer.
	Master circuit breaker tripped.	Reset breaker.
Starter speed low and engine cranks slowly.	Loose or corroded connections.	Clean and tighten connections.
	Low battery output.	Check each battery open circuit voltage for 12.6 volts minimum. Check electrolyte level and specific gravity of each battery.
	Incorrect viscosity engine oil.	Use correct viscosity oil for temperature conditions.
	Defective starter.	Contact New Holland dealer.
Starter inoperative.	Hydrostatic lever not in neutral.	Place lever in neutral.
	Park brake not engaged.	Engage park brake.
	Rotating seat console not locked in place.	Lock seat console in place.
	Loose or corroded connections.	Clean and tighten loose connections.
	Auxiliary hydraulic drive switch on.	Move auxiliary hydraulic drive control switch to “OFF”.
	Dead batteries.	Charge or replace batteries.
	PTO switch on.	Move PTO switch to off.
	Neutral start switch or PTO switch malfunction.	Contact New Holland dealer.
	Master circuit breaker tripped.	Reset breaker.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

ENGINE

Make . . . . . New Holland

No. of cylinders 6

Bore . . . . . 111.8 mm (4.4″)

Stroke . . . . . 127.0 mm (5.0″)

Displacement . . . . . 7.5 L (456.0 cu. in.)

Compression Ratio 17.5:1

Firing Order 1-5-3-6-2-4

Idle Speed . . . . . 775-825 RPM

Rated Speed . . . . . 2200 RPM

Maximum No Load Speed (High Idle) . . . . . 2350-2400 RPM

Turbocharged . . . . . Yes

Intercooled . . . . . Yes

INTAKE AND EXHAUST SYSTEMS

Engine Air Intake
- Type . . . . . Dual element with exhaust aspiration

Exhaust
- Type . . . . . Oval muffler
- Location . . . . . Under hood

FUEL SYSTEM

Injection Pump Type (Distributor) . . . . . Bosch VE

Timing BTDC . . . . . 2° ± 5° (refer to valve decal)

Injector Crack-Off Pressure . . . . . 270 bar (3915 PSI)

Fuel
- Capacity . . . . . 208 L (55 gal. U.S.)
- Tank Location . . . . . Saddle on cab-end frame

COOLING SYSTEM

Type . . . . . Pressurized with full-flow bypass, recovery tank and filter/conditioner

Capacity . . . . . 27 L (29 Quarts U.S.)

Thermostats 2
- Start to Open at . . . . . 81°C (178°F)
- Fully Open at . . . . . 95°C (203°F)

Cooling System Pressure Cap . . . . . 1.0 bar (14.5 PSI)

Fan
- Type . . . . . Steel 7 blade
- Size . . . . . 550 mm (21.6″)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

LUBRICATION AND MAINTENANCE CHART

SERVICE INTERVAL	OPERATION NUMBER	MAINTENANCE REQUIREMENT	CHECK	CLEAN	LUBE	CHANGE	ADJUST	DRAIN
EVERY 1800 HRS	43.	FUEL INJECTORS	X	X			X	
AS REQUIRED	44.	HEADLAMP					X	
	45.	BULB REPLACEMENT				X		
	46.	FUSES AND RELAYS				X		
	47.	RESETTING MASTER CIRCUIT BREAKER					X	
	48.	ENGINE IDLE SPEED	X				X	
	49.	CAB FLOOR		X				
	50.	CAB SEAT AND UPHOLSTERY		X				
	51.	WINDSHIELD WIPER BLADES				X		
	52.	BRAKE FLUID				X		
	53.	FUEL TANKS						X
	54.	STORAGE	X					
	55.	BLEEDING FUEL SYSTEM						X
	56.	ETHER CANISTER				X		
	57.	DAILY CLEANING	X	X				

FIRST 50 HOUR SERVICE

At the first 50-hour service, make sure that the maintenance operations listed on the “First 50-Hour Service” checklist, located at the back of this manual, are carried out.

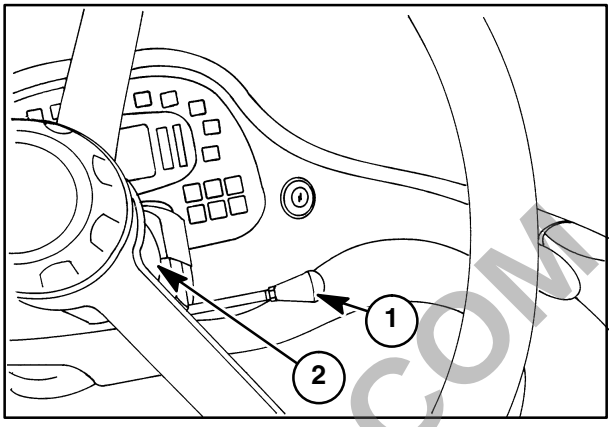
IMPORTANT: *Items listed in the first 50-hour check are important. If not performed, early component failure and reduced tractor life may result.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

STEERING WHEEL AND COLUMN

The steering column may be tilted and telescoped to provide a comfortable operating position.



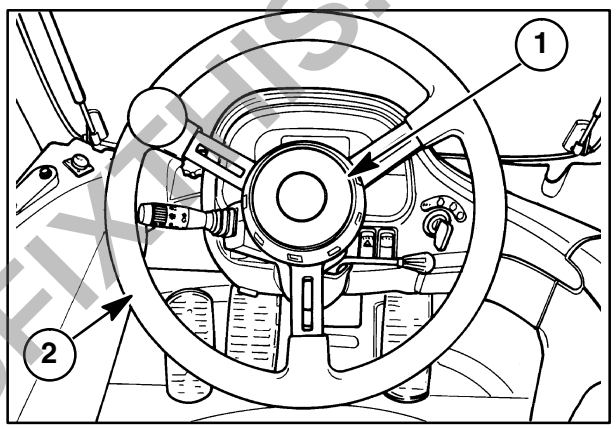
20

Steering Wheel Tilt Control

Pull the tilt control lever (1) then tilt the steering column (2) to a comfortable operating position. The steering wheel can be tilted upward to the top stop to allow easy entry and exit of the cab.

Steering Wheel Telescopic Adjustment

Rotating the center locking knob (1) counterclockwise, will unlock the steering column so the steering wheel (2) can be telescoped to a comfortable operating position. The column can be locked in place by rotating the locking knob (1) clockwise.



21

KEY SWITCH

The key switch has four positions:

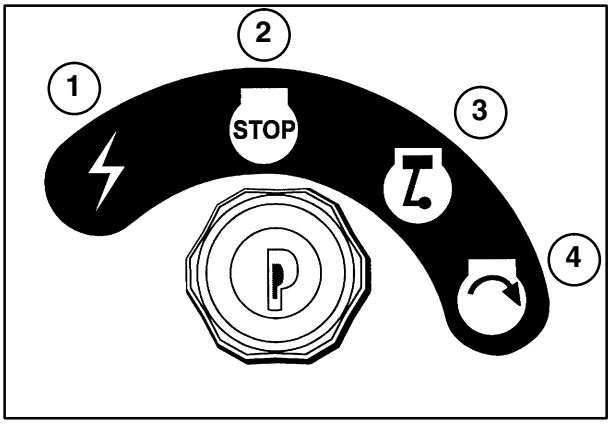
Position 1 - Acc: Electrical accessories can be used when the engine is not running. Turn the key to the left (counterclockwise) to get to the accessory position.

Position 2 - Stop: Engine and electrical functions remain off.

Position 3 - Run: Turns the electrical system on and is the normal operating position of the switch with the engine running.

Position 4 - Engine Start: Cranks the engine. After the engine has started, release the key from the start position and allow the switch to return to the run position.

NOTE: The switch has a built-in starter protection feature. If the switch is rotated to the start position, and then released to the run position, it will be necessary to rotate the switch to the stop position in order to make another attempt at starting the tractor. This will prevent accidental engagement of the engine starting motor when the engine is already running.



22

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 253 pages

The full manual includes:

- All 253 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

New Holland TV145 Operator Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual