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The following pages are the collation of the contents pages from each section and chapter of the TC29D and TC33D Repair manual. Complete Repair part # 87036756

The sections used through out all New Holland product Repair manuals may not be used for each product. Each Repair manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Repair manual and which sections are in each book.

The sections listed above are the sections utilized for the TC29D and TC33D Tractors.

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PRECAUTIONARY STATEMENTS

PERSONAL SAFETY

Throughout this manual and on machine decals, you will find precautionary statements (“**DANGER**”, “**WARNING**”, and “**CAUTION**”) followed by specific instructions. These precautions are intended for the personal safety of you and those working with you. Please take the time to read them.



DANGER



This word “**DANGER**” indicates an immediate hazardous situation that, if not avoided, will result in death or serious injury. The color associated with Danger is RED.



WARNING



This word “**WARNING**” indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.



CAUTION



This word “**CAUTION**” indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. The color associated with Caution is YELLOW.

FAILURE TO FOLLOW THE “DANGER”, “WARNING”, AND “CAUTION” INSTRUCTIONS MAY RESULT IN SERIOUS BODILY INJURY OR DEATH.

MACHINE SAFETY

The precautionary statement (“**IMPORTANT**”) is followed by specific instructions. This statement is intended for machine safety.

IMPORTANT: *The word “IMPORTANT” is used to inform the reader of something he needs to know to prevent minor machine damage if a certain procedure is not followed.*

INFORMATION

NOTE: *Instructions used to identify and present supplementary information.*

SAFETY

PRECAUTIONARY STATEMENTS

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

Carefully review the procedures given in this manual with all operators. It is important that all operators be familiar with and follow safety precautions.

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 New Holland Dealer.
3. Always use the seat belt. The only instance when the seat belt should not be used is if the roll bar has been removed from the tractor.
4. If a front end loader is to be installed, always use a FOPS (Falling Object Protective Structure) 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. Keep all safety decals clean of dirt and grime, and replace all missing, illegible, or damaged safety decals. See the list of decals in the Decal section of this manual.
3. Keep the tractor and equipment, particularly brakes and steering, maintained in a reliable and satisfactory condition to ensure your safety and comply with legal requirements.
4. Keep open flame or cold weather starting aids away from the battery 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. If fluid is injected into the skin, obtain medical attention immediately or gangrene may result.
 - DO NOT use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.
 - Stop the engine and relieve pressure before connecting or disconnecting lines.
 - Tighten all connections before starting the engine or pressurizing lines.
7. Do not modify or permit anyone else to modify or alter this tractor or any of its components or functions without first consulting a New Holland Dealer.

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 pressure to escape before removing the cap entirely.
2. Keep any type of open flame away from the tractor and do not smoke while refueling. Wait for the engine to cool before refueling.
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.
9. 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 of 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 advised to have any maintenance or repair on such components carried out by an authorized New Holland Dealer. However, if 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.
9. Pull only from the 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.
10. 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.
11. Always set the hydraulic selector lever in position control when attaching or transporting equipment. Ensure hydraulic couplers are properly mounted and will disconnect safely in case of accidental detachment of implement.
12. Do not leave equipment in the raised position.
13. Use the flasher/turn signal lights and SMV signs when traveling on public roads both day and night (unless prohibited by law).
14. When operating at night, adjust lights to prevent blinding oncoming drivers.

OPERATING THE TRACTOR

1. Before starting the tractor, apply the parking brake, place the PTO 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.
2. Always sit in the tractor seat when starting the engine or operating controls. Do not start the engine or operate controls while standing beside the tractor.
3. Do not bypass the neutral start switches. Consult your New Holland 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 the engine is running, as this can cause unexpected tractor movement.
5. Before getting off the tractor, disengage the PTO, turn the engine off, and apply the parking brake. Never get off the tractor while it is in motion.
6. Do not park the tractor on a steep incline.
7. Do not operate the tractor engine in an enclosed building without adequate ventilation. Exhaust fumes can cause death or illness.
8. If the power steering or engine ceases operating, stop the tractor immediately.

DRIVING THE TRACTOR

1. 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 a safe speed. Use extra caution when operating over rough ground, when crossing ditches or slopes, and when turning corners.
3. To provide two-wheel braking, lock tractor brake pedals together when transporting on roads.
4. Do not coast or free wheel down hills. Use the same gear when going downhill as is used when going uphill.
5. Any towed vehicle with a total weight exceeding that of the towing tractor should be equipped with brakes for safe operation.
6. If the tractor becomes stuck or the tires become frozen to the ground, back up the tractor to prevent upset.
7. Always check overhead clearance, especially when transporting the tractor.
8. When operating at night, adjust lights to prevent blinding oncoming drivers.

OPERATING THE PTO

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

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 with the engine running or hot.
3. Do not smoke while refueling or when standing near fuel.
4. Maintain control of the fuel filler 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 New Holland 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.

SAFETY FRAME (ROPS)

Your New Holland tractor is equipped with a safety frame. It must be maintained in a serviceable condition. Be careful when driving through doorways or working in confined spaces with low headroom.

UNDER NO CIRCUMSTANCES should you:

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



WHEN YOU SEE THIS SYMBOL

IT MEANS:

ATTENTION!

BECOME ALERT!

YOUR SAFETY IS INVOLVED!

DECALS

If safety or instruction decals become damaged or illegible, new decals should be obtained from your New Holland Dealer and placed at their original positions.

SAFETY DECALS



WARNING: Pull Only From Drawbar
 PART NO: 86532904
 LOCATION: PTO Shield

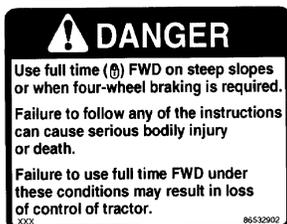


WARNING: Before Starting and Operating
 PART NO: 86401125
 LOCATION: Inside Left-Hand Fender

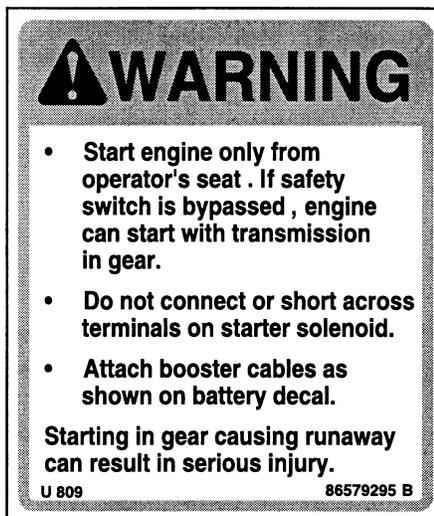


WARNING: To Jump Start
 PART NO: 86532905
 LOCATION: Battery Hold Down

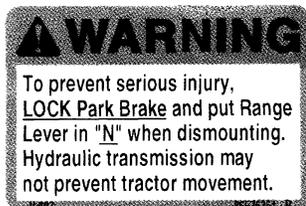
WARNING: Rotating Fan and Belts
 PART NO: 86532907
 LOCATION: Both Sides of Radiator



WARNING: Front-Wheel Drive Usage (Super Steer only)
 PART NO: 86532902
 LOCATION: Inside Left-Hand Fender



WARNING: Start Engine Only From Operator's Seat
 PART NO: 86579295
 LOCATION: Firewall Above Starter Motor



WARNING: Lock Park Brake
 PART NO: 86576391
 LOCATION: Right Side Rear Console Below Light Switch

INSTRUCTION DECALS

Range Selector
Lever
(Gear)
PART NO:
86532912
LOCATION:
Left-Hand POD Top



Range Selector
Lever
(Hydrostatic)
PART NO:
86532896
LOCATION:
Left-Hand POD Top



Position Control
Lever
PART NO:
86571897
LOCATION:
Right-Hand POD Top



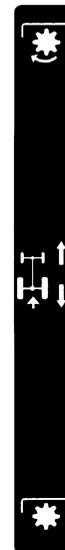
(Optional)
Operating Remote
Control
Valve-Single
Spool
PART NO:
86532910
LOCATION:
Right-Hand POD Top



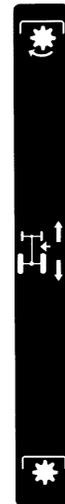
Front-Wheel
Drive Control
Lever
PART NO:
86532913
LOCATION:
Left-Hand POD Top
(Super Steer™ Only)



Front-Wheel
Drive Control
Lever
PART NO:
86532900
LOCATION:
Left-Hand POD Top



PTO Control
Lever (Rear)
PART NO:
86532898
LOCATION:
Left-Hand POD Top



PTO Control
Lever (Mid)
PART NO:
86532899
LOCATION:
Left-Hand POD Top

SECTION 00 - GENERAL INFORMATION - CHAPTER 1



Differential Lock
PART NO:
86532901
LOCATION:
Left Side Operator's
Platform (HST)
Right Side Operator's
Platform (Gear)



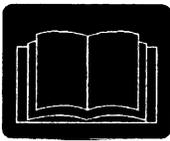
Starter Switch
PART NO:
86400175
LOCATION:
Right Console Panel



Flow Control Valve
PART NO:
86532897
LOCATION:
Top of Flow Control
Knob



ENGINE
OIL
PART NO:
86532916
LOCATION:
Engine Oil Filler Cap



Hyd. Manifold Operation
(See Operator's Manual)
PART NO:
86532914
LOCATION:
Right-Hand Side of Hyd.
Manifold/Air Filter Cap



(Optional)
Coupler-Extending
PART NO:86532920



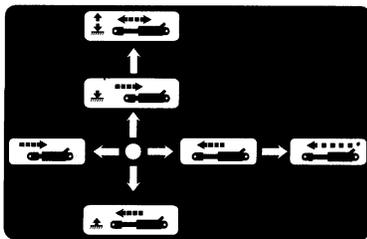
(Optional)
Coupler-Retracting
PART NO:86532919



(Optional)
Coupler-Extending
PART NO:86532921



(Optional)
Coupler-Retracting
PART NO:86532922



Optional)
Operating Remote
Control Valve-
Double Spool
PART NO:
86532911
LOCATION:
Cover of 2-Spool
Remote Valve



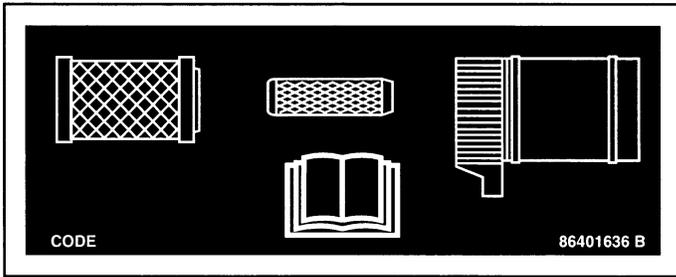
Power Steering Fluid
PART NO:
86532903
LOCATION:
Top of P.S. Reservoir

Lubrication and
Maintenance Intervals
PART NO:
86400357
LOCATION:
Inside of Hood

WATCH YOUR PROOF METER HOURS				
Lubrication and maintenance service intervals				
LUBRICATION AND MAINTENANCE ITEM	CHECK	CLEAN	LUBE	SERVICE INTERVAL
Radiator Coolant	*	*		Every 10 Hours or Daily
Engine Oil level	*	*		
Air Cleaner	*	*		
Transmission Oil Level	*	*		
Power Steering Oil Level	*	*		
Front Diff Oil Level	*	*		
Front Axle Oil Level	*	*		
Tires	*	*		
Clutch Pedal	*	*		
Battery	*	*		
Lubrication Fittings	*	*		Every 50 Hours
Steering Linkage	*	*		
2-Wheel Drive King Pins	*	*		
3-point Linkage	*	*		
Pivot Shaft	*	*		
Brake Pedal	*	*		
Drive Shaft Cover	*	*		
H.S.T. Foot Pedal Shaft	*	*		
Power Steering	*	*		
Super Steer Gearbox	*	*		
Engine Oil	*	*		Every 100 Hours
Fuel Filter	*	*		
Air Cleaner	*	*		
Engine Oil Filter	*	*		
Fuel Filter	*	*		Every 200 Hours
Fan Belt	*	*		
Brakes	*	*		
H.S.T. Filter	*	*		Every 300 Hours
Front Axle Oil	*	*		
Front Diff Oil	*	*		
Hydraulic Filter	*	*		
Transmission Oil	*	*		
Fuel Injectors	*	*		Every 600 Hours
Valve Clearance	*	*		
Front Wheel Bearings	*	*		
Power Steering Oil	*	*		
Super Steer Gearbox	*	*		
Radiator Coolant	*	*		Seasonal
Air Cleaner Element	*	*		

Refer to your Operator's Manual
for additional information.

Code 86400357-0



Air Cleaner Maintenance
PART NO: 86401636
LOCATION: Air Cleaner Canister



Turn Signal
PART NO: 86400176
LOCATION: Right Console
Panel below Turn Signal
Switch



Throttle
PART NO: FONN9N848BA
LOCATION: Top Right Dash



Red Reflective Tape
PART NO: 86532998
LOCATION: Back Rear Fender

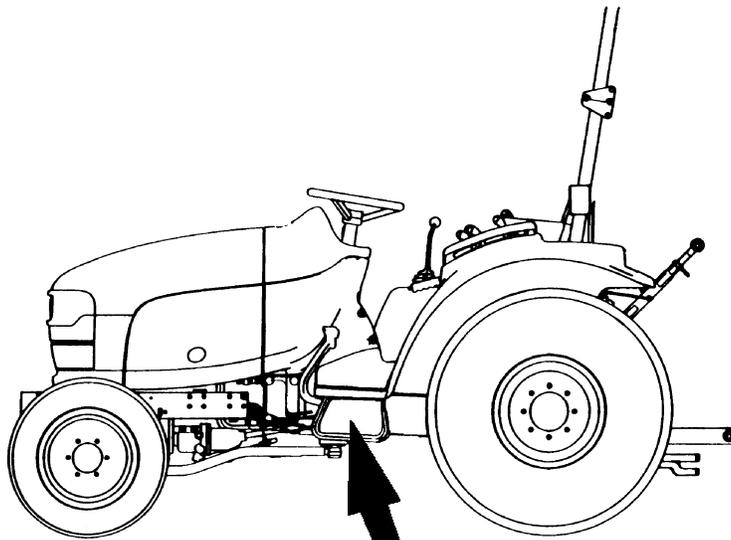
PLEASE READ CAREFULLY:

For a complete list of the pre-delivery service checks performed by your dealer, refer to the PRE-DELIVERY SERVICE checklist found at the back of this manual. Keep one copy as your record of the service performed. The other copy should be removed from the manual and kept by your dealer. **MAKE SURE THAT BOTH COPIES ARE COMPLETED AND 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 in the event your tractor should require future service. For your convenience, have your dealer record these numbers in the appropriate spaces below.

New Holland North America, Inc. is continually striving to improve its products. We reserve the right to change prices, specification, or equipment at any time without notice.

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



 NEW HOLLAND	
TRACTOR NUMBER	MODEL
<input type="text"/>	<input type="text"/>
ENGINE	UNIT
<input type="text"/>	<input type="text"/>
TRANSMISSION	
<input type="text"/>	
NEW HOLLAND NORTH AMERICA, INC.	
	MADE IN U.S.A.