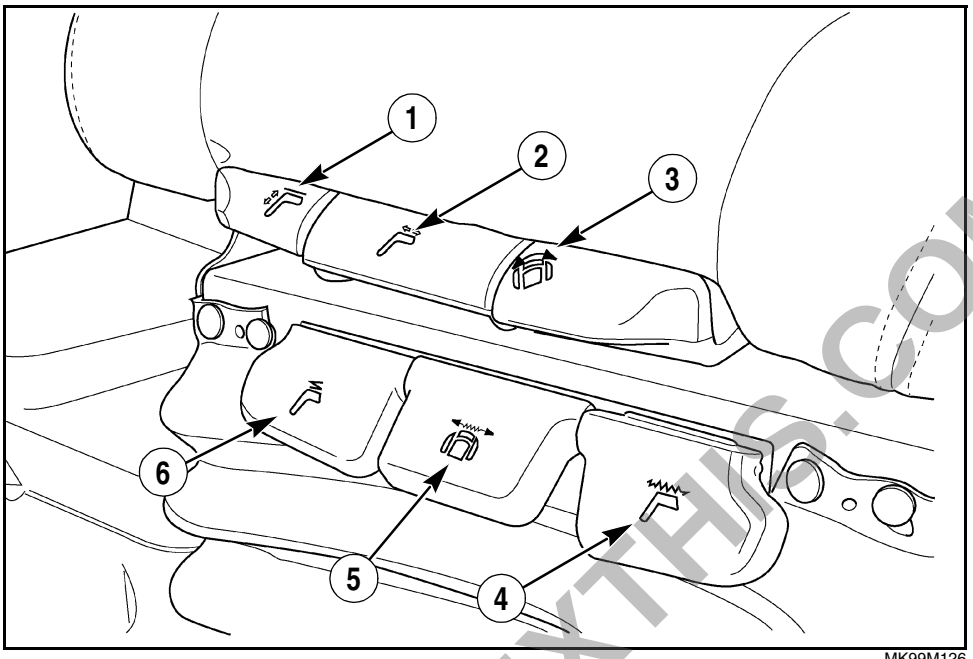
OPERATORS SEAT WITH AIR SUSPENSION



MK99M126

Your operators seat is equipped with controls to permit you to adjust the seat for your personal comfort. Adjust the seat as follows:

1. HEIGHT ADJUSTMENT SWITCH - The seat can be raised or lowered by increasing or decreasing the air pressure in the seat. Pull UP on the switch to increase the air pressure and raise the seat. Push DOWN on the switch to decrease the air pressure and lower the seat. The key switch must be in the ACCESSORY or ON position to raise or lower the seat.
2. FORE/AFT - The operators seat can be adjusted forward or rearward for individual operator size. Pull UP on the lever and slide the seat to the desired position. Release the lever to lock the seat in position.
3. SEAT SWIVEL - The seat swivels to the right and left of center. Lift the swivel control lever UP until seat can swivel. Turn the seat to the desired position. Push the lever DOWN to lock the seat in one of seven positions. The seat can also swivel freely. Lift the swivel control lever all the way up past the lever detent. The seat can now swivel freely. To lock the seat in position, push the swivel control lever DOWN past the detent.
4. FORE/AFT ISOLATOR - The seat can float a short distance forward or rearward when the isolator lever is lifted up. With the isolator lever in the DOWN position, the seat will not float forward or rearward. Having the seat in the float position will absorb shocks and reduce operator fatigue when traveling over rough terrain.
5. LATERAL ISOLATOR - The seat can float a short distance right or left when the isolator lever is DOWN. With the isolator lever in the UP position, the seat will not float right or left. Having the lever in the float (Down) position will absorb shocks and reduce operator fatigue when traveling over rough terrain. The Lateral Isolator Lever can lock the seat in three positions, Left - Middle - and Right.
6. RIDE FIRMNESS CONTROL - The amount of firmness can be adjusted for personal comfort. This control is infinitely adjustable. The lever up is soft. Push the lever down to increase the firmness.

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The following section covers the proper starting and transmission operation of the tractor.

BEFORE STARTING THE ENGINE

Before starting your tractor for the first time make the following checks. Also see Lubrication/Filters/Fluids and Maintenance/Adjustments for regular service schedule.

1. Make sure all persons that operate or do maintenance on the tractor understand that clean fuel is important.
2. Check all lubrication fittings for grease as given in the Lubrication Chart.
3. Check the oil level in the engine crankcase. Check the fluid level in the transmission and hydraulic reservoir.
4. Check that the tractor fuel tank is filled with clean fuel that has the specifications given in this manual.

NOTE: *Clean around the fuel tank cap before you remove the cap.*

5. Check the fuel system, cooling system and engine oil pan for leaks.
6. Check that the alternator and compressor belts are adjusted correctly.
7. Remove any water or sediment from the water trap of the fuel tank.
8. Check the air pressure of the tires.
9. If your tractor has a power takeoff, make sure the safety guard is installed.
10. Check the coolant level in the coolant recovery bottle. Add water and ethylene glycol coolant as needed.

WARNING: *Before starting the engine, be sure all operating controls are in neutral or park lock position. This will eliminate accidental movement of the machine or start up of power driven equipment.* SM106E

Daily Inspection

Do a daily walk around visual inspection of the tractor. Check for such items as hoses or wires rubbing against other components, oil leaks, trash buildup, loose bolts or anything that would affect the normal operation of the tractor.

Make any necessary corrections before operating the tractor.

RUN-IN PROCEDURE

Engine Run-In

It is important that the run-in instructions for a new engine be followed. Proper run-in will increase engine power and service life. If the engine is not run-in properly the piston rings and cylinder bore can be damaged.

Your tractor is shipped from the factory with 15W-40 oil in the engine crankcase. If the tractor is operated in high or low ambient temperature and/or severe operating conditions, change to the recommended oil viscosity grade as specified. See Engine Lubrication.

During the initial 100 hours of operation, operate the tractor as follows:

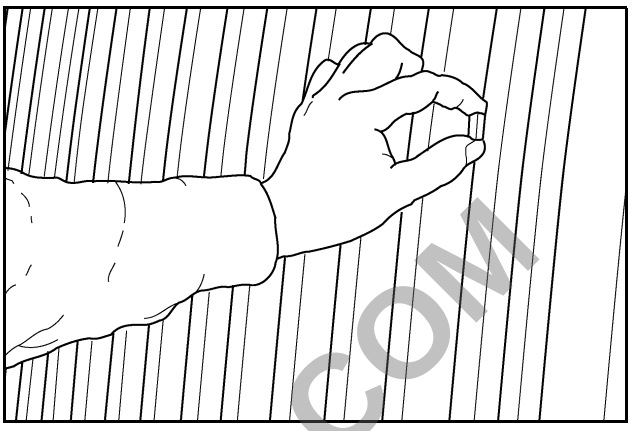
1. Do not run the engine at idle speed for long periods of time.
2. Operate at reduced load range as much as possible.
3. Do not lug the engine. Shift to a lower gear to prevent lugging.
4. Operate in a gear range that permits acceleration to governed speed when more power is required.
5. Monitor the engine instruments frequently during operation. Reduce throttle and/or load if the coolant temperature exceeds safe operating limits.
6. Check the oil level every 8 to 10 hours of operation.
7. Avoid starting and immediately stopping a cold engine.

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GRILLE AND HOOD ACCESS

Opening The Hood

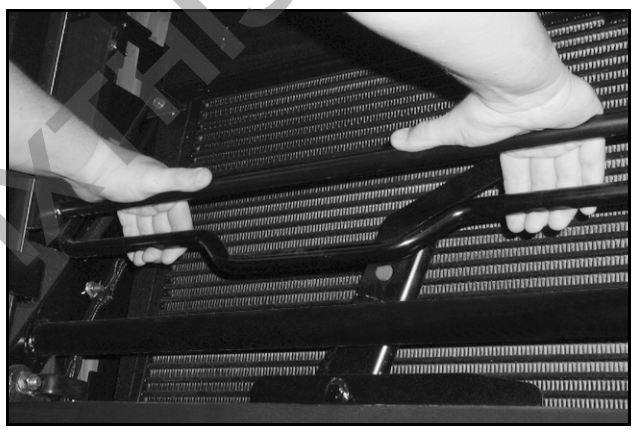
To open the grille screen, push upwards on the latch lever.



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Pull outwards on the hood latch release bar (1) to release the hood.

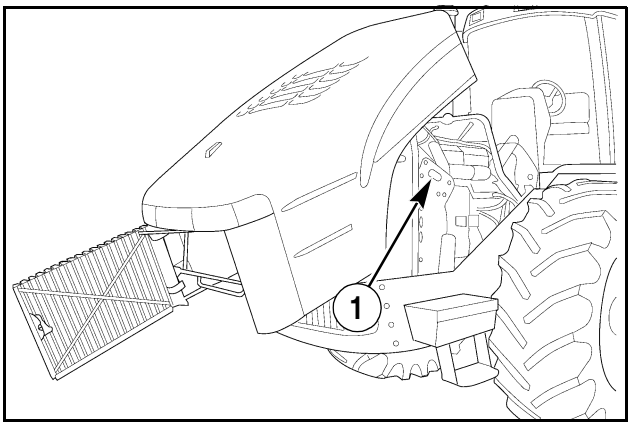
Grasp the hood crossbar and release bar together and pull forward to raise the hood.



MK01H056

Pull forward to raise the hood until it latches in the safety support. Close the grille screen.

Use the steps and hand hold (1) provided when performing under hood maintenance.



MK01G097

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The following section covers all engine specifications, power train specifications, travel speeds, weights and dimensions on the tractor.

DIESEL ENGINE

Tractor Model	TJ 275	TJ 325	TJ 375-425-450
Engine Manufacturer	CDC	CDC	Cummins
Engine Model	6TAA-8304	6TAA-9004	QSX 15
Type	In-Line, Six Cylinder, Four Stroke Cycle		
Aspiration	Turbo Charged, Air To Air After Cooled		
Firing Order	1-5-3-6-2-4		
Bore - inch (mm)	4.49 (114)	4.49 (114)	5.4 (137)
Stroke - inch (mm)	5.31 (135)	5.69 (144.5)	6.7 (168)
Displacement - inch^3 (L)	506 (8.3)	543 (9)	912 (15.0)
Compression Ratio	17.1:1	16.6:1	16.5:1
Cylinder Sleeves	Replaceable Wet Type		
High Engine Idle RPM	2125-2165 RPM	2125-2165 RPM	2125-2165 RPM
Rated Engine Speed	2000 RPM	2000 RPM	2000 RPM
Engine Idle Speed	830-870 RPM	830-870 RPM	850-900 RPM
Engine Power Rating-HP (kw) at 2000 RPM	278 (205)	325 (242)	**TJ375** 375 (279) **TJ425** 425 (317) **TJ450** 450 (335)
Peak Torque - lb-ft (Nm) at 1400 RPM	1022 (1386)	1150 (1559)	**TJ375** 1380 (1871) **TJ425 PS** 1594 (2161) **TJ425 MS** 1500 (2034) **TJ450** 1669 (2263)
Torque Rise - %	40	35	**TJ375** 40% **TJ425 MS** 34% **TJ425 PS** 43% **TJ450** 41%

Engine Lubrication System

Oil Pressure at Idle Speed (Minimum)
- TJ 275-325 ..... 10 PSI (69 kPa)
- TJ 375-425-450 ..... 20 PSI (138 kPa)

Oil Pressure at High Idle
- TJ 275-325 ..... 40 to 50 PSI (276 TO 344 kPa)
- TJ 375-425-450 ..... 35-40 PSI (240-276 kPa)

Type of System ..... Pressure and Spray

Fuel System

Fuel Injection Pump ..... CUMMINS
Fuel Injectors ..... CUMMINS
Tank Capacity
- TJ 275-325 ..... 200 Gallons (758 Liters)
- TJ 375-425-450 ..... 300 Gallons (1136 Liters)

Air Intake System

Type ..... Dry Type, Two Stage Aspirator System with Service Indicator in Instrument Cluster

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PERSONAL SAFETY ALERT

THIS SAFETY ALERT SYMBOL INDICATES IMPORTANT SAFETY MESSAGES IN THIS MANUAL. WHEN YOU SEE THIS SYMBOL, CAREFULLY READ THE MESSAGE THAT FOLLOWS AND BE ALERT TO THE POSSIBILITY OF DEATH OR SERIOUS INJURY.

M171C

Safety Decals on this machine use the words **Danger, Warning or Caution,** which are defined as follows:

- **DANGER:** Indicates an immediate hazardous situation which if not avoided, will result in death or serious injury. The color associated with Danger is RED.
- **WARNING:** Indicates an potentially hazardous situation which if not avoided, could result in death or serious injury. The color associated with Warning is ORANGE.
- **CAUTION:** Indicates an potentially hazardous situation which 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.

If Safety Decals on this machine are ISO two panel Pictorial, decals are defined as follows:

- **The first panel indicates the nature of the hazard.**
- **The second panel indicates the appropriate avoidance of the hazard.**
- **Background color is YELLOW.**
- **Prohibition symbols such as**  **and**  **if used are RED.**

WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE DEATH OR SERIOUS INJURY. BEFORE USING THIS MACHINE, MAKE CERTAIN THAT EVERY OPERATOR:

- Is instructed in safe and proper use of the machine.
- Reads and understands the Manual(s) pertaining to the machine.
- Reads and understands ALL Safety Decals on the machine.
- Clears the area of other persons.
- Learns and practices safe use of machine controls in a safe, clear area before operating this machine on a job site.

It is your responsibility to observe pertinent laws and regulations and follow New Holland instructions on machine operation and maintenance.

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

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GENERAL INFORMATION

INTRODUCTION TO THIS MANUAL

This manual contains important information about the safe operation, adjustment and routine maintenance of your New Holland TJ Series Tractors. The manual is divided into ten sections as outlined in the General Table of Contents Page(s). Refer to the Detail Index at the end of this manual for locating specific items about your tractor.

Use this manual as a guide. Your tractor will remain a reliable working machine as long as it is kept in good working condition and serviced properly.

Read this manual before you start the engine or operate this tractor. If any information in this manual is not understood, or if you need more information or assistance, contact your dealer.

All persons training to operate, or who will be operating this tractor, should be old enough to possess a valid local vehicle operating permit (or other applicable local age requirement) and must have demonstrated the ability to operate and service the tractor correctly and safely.

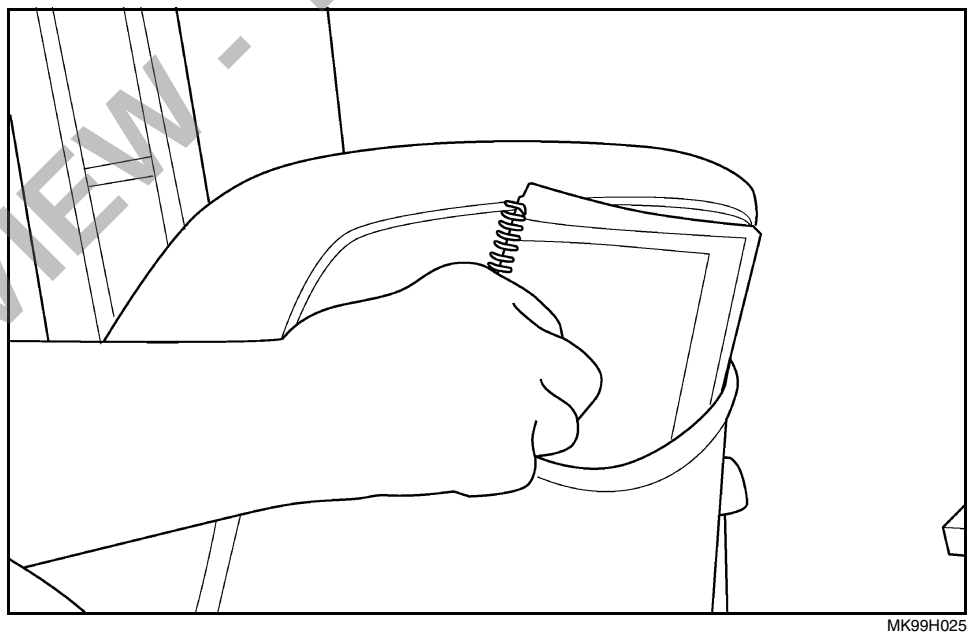
If your tractor requires replacement parts, do not use unauthorized parts or substitute materials. New Holland dealers stock approved service parts and have technicians with special training that know the best methods of repair and maintenance for your tractor.

STATEMENT OF TRACTOR INTENDED USE

The New Holland TJ Series Tractor, with standard equipment and authorized attachments, is intended to be used for customary farming, land leveling and related agriculture operations.

Installation of utility (dozer) blades, front loaders or push bars on the tractor is not recommended. Any tractor damage resulting from the installation and/or use of such equipment is not covered by the tractor warranty.

OPERATOR MANUAL STORAGE COMPARTMENT



MK99H025

DO NOT permit anyone to operate or service this tractor until you or other operators have read this manual. The Operators Manual is a part of your tractor and must be available to all operators.

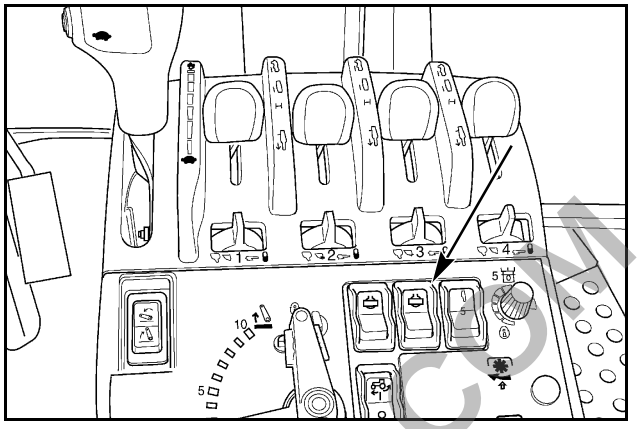
Make sure the manual is complete and in good condition. Store the Operators Manual and other important tractor information in the storage compartment provided on the rear side of the seat backrest.

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REAR DIFFERENTIAL LOCK SWITCH (If Equipped)

This switch engages the rear differential lock. The DIFF LOCK icon on the ROPS post instrument display will be illuminated when the rear differential lock is engaged. To disengage, momentarily depress the brake pedal a small amount.

NOTE: *The differential lock(s) will automatically disengage when ground speed goes above 11.5 MPH (18.5 KPH) and cannot be re-engaged until ground speed falls below 11 MPH (17.7 KPH).*

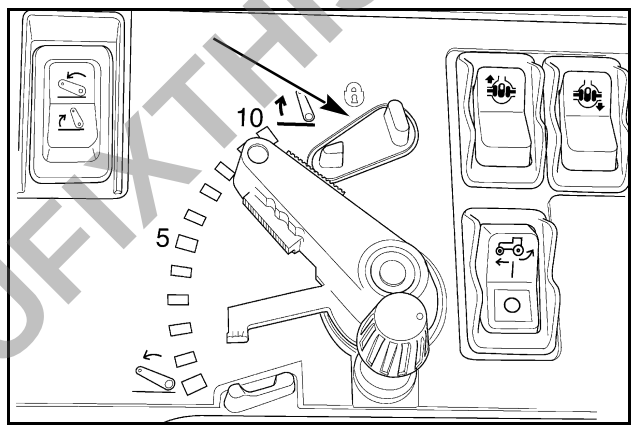


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HITCH POSITION CONTROL TRANSPORT LOCKOUT POSITION (If Equipped)

The hitch position control can be locked in the raised position by rotating the control clockwise and clicking it into the detent.

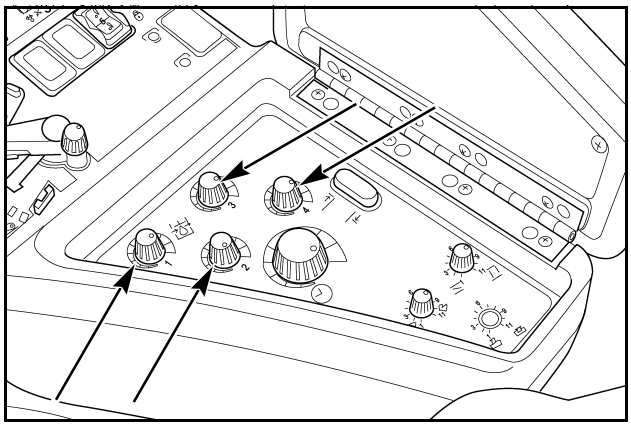
NOTE: *The hitch UP/DOWN switch must be in the up position.*



MK01G211

HYDRAULIC FLOW CONTROLS (If Equipped)

These control the flow rate of number 1 through number 4 remote couplers at the rear of the tractor. Clockwise rotation increases flow to the remote couplers, counterclockwise rotation decreases flow.



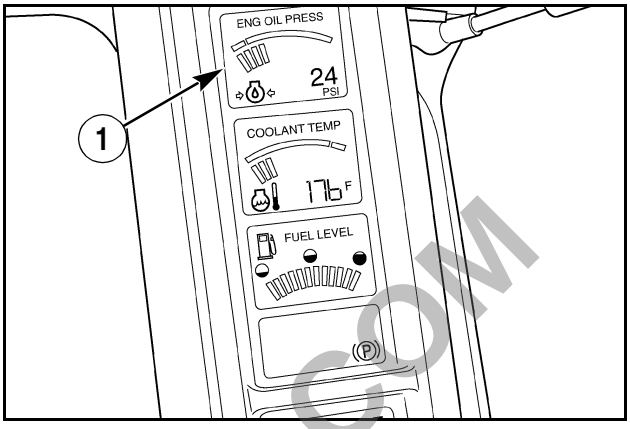
MK99K129

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STEP 6

After the engine starts, monitor the ROPS post instrument panel to be sure the oil pressure gauge (1) is operating in the green area. If it is not, shut the engine down immediately and check for the cause.

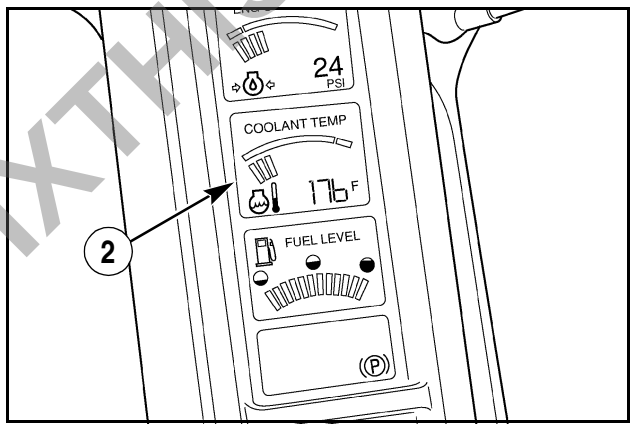


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STEP 7

During engine warm-up, check that coolant temperature indicator (2) is in the green area and that all service monitors are giving normal indications.

NOTE: *If the instrument cluster does not give normal indications, stop the engine and check for the cause.*



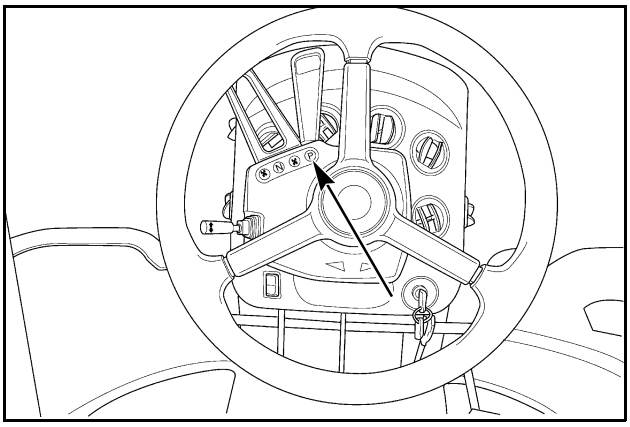
MK99M136

STOPPING THE ENGINE

IMPORTANT: *Before stopping the engine after operating under heavy load, run the engine at idle speed for a short period of time (3 to 5 minutes). This will allow the engine and turbocharger temperature to decrease gradually. If the engine stops when operating under a load, START THE ENGINE IMMEDIATELY to prevent too much heat build up caused by stopping the flow of oil for cooling and lubrication.*

STEP 1

Slow the engine and bring the tractor to a complete stop by depressing the inching pedal and brake pedal (if necessary). Put the Powershift transmission (if equipped) control lever in the PARK position. If 24 speed transmission equipped, put the gear shift lever in NEUTRAL and APPLY the park brake. Release the inching pedal and brake pedal.

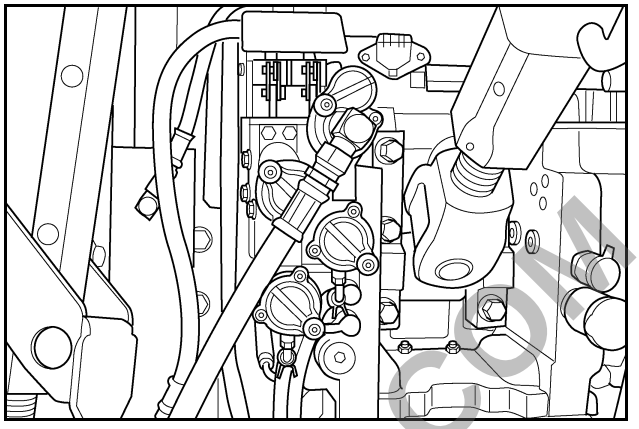


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Manual Hitch Control Remote Connection (If Equipped)


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Remote coupler No. 1 or No. 2 can be used for hitch control. Connect the hitch to the “B” (raise) port of the desired remote coupler.

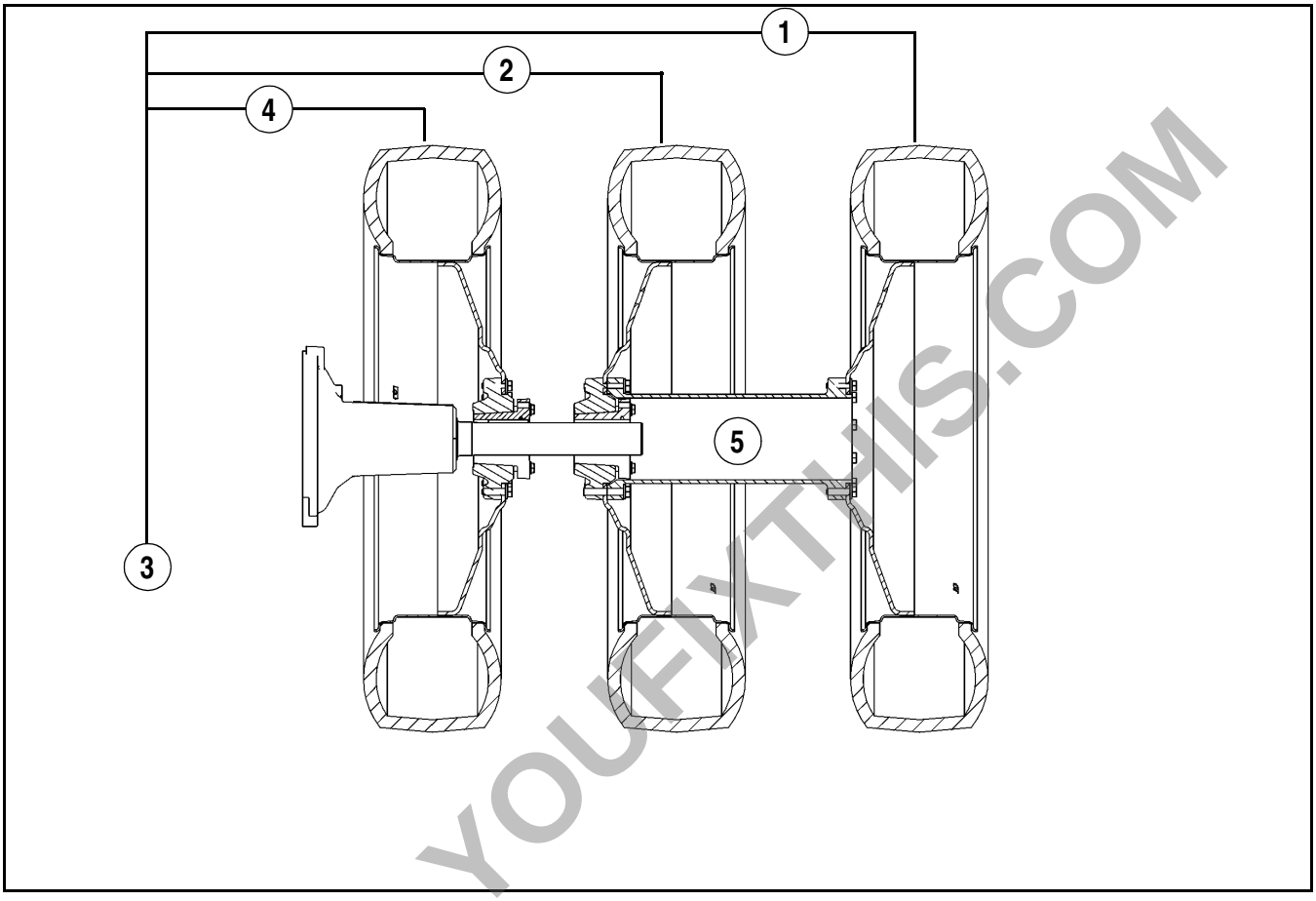
NOTE: *When transporting, always place the remote function control in the lockout position.*

IMPORTANT: *If cylinder stops are used for position control, the cylinder stops must be the same diameter (or larger) as the barrel of the hitch cylinder. Stops that are too small in diameter will damage the cylinder gland nut.*

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TRIPLE WHEEL TREAD SETTING (TJ375/425/450)



MA00E027

Tire Size	Inside Wheel (3) (center to center)	Dual Wheel (2) (center to center)	Triple Wheel (1) (center to center)
18.4R46 480/80R46 520/85R46	74 In (1880 mm)	131 In (3327 mm)	188 In (4775 mm)
20.8R42 520/85R42	74 In (1880 mm)	131 In (3327 mm)	188 In (4775 mm)

4. Center line of tractor

5. 28 inch (711 mm) spacer

*Steering Stops Required

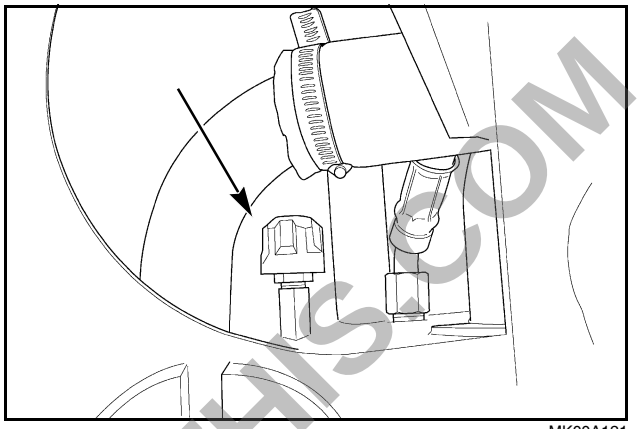
NOTE: *The middle tire can be moved in to 130 inch (3302 mm) and the outside triple moved in to 186 inch (4724 mm) which will not require the use of steering stops.*

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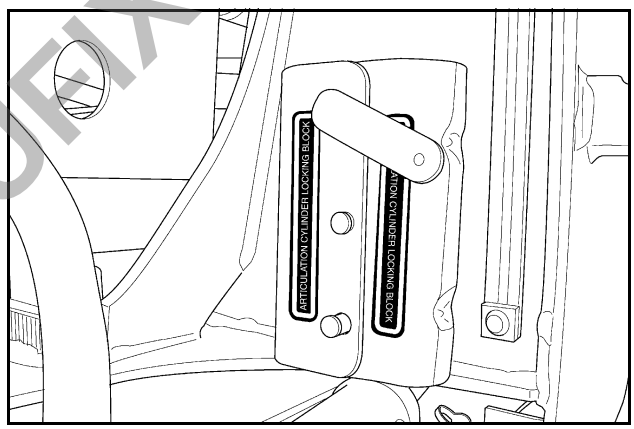
1500 HOUR MAINTENANCE

6. Remove, clean and replace the hydraulic reservoir breather. The breather is located on top of the reservoir and is accessible inside the frame on the LH side of the tractor.



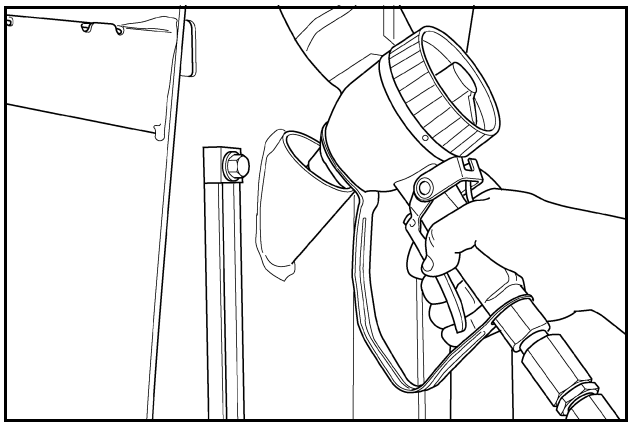
MK00A121

7. Install the locking blocks on each articulation cylinder.



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8. Fill the hydraulic reservoir to the top of the stabilized range with the correct oil specified in this manual.



MK99H102

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