284 Tractor

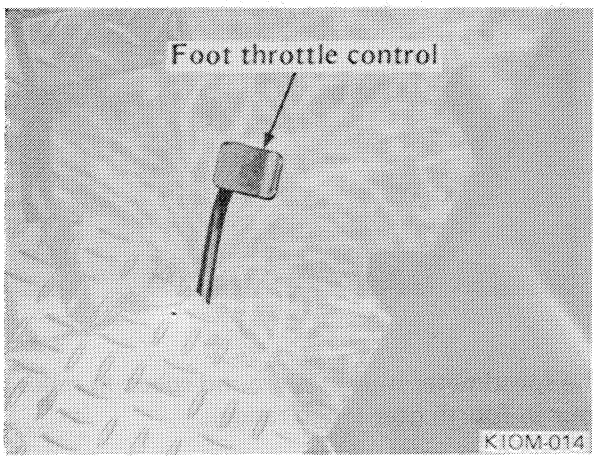
Operators Manual

1004164C1

CASE IH

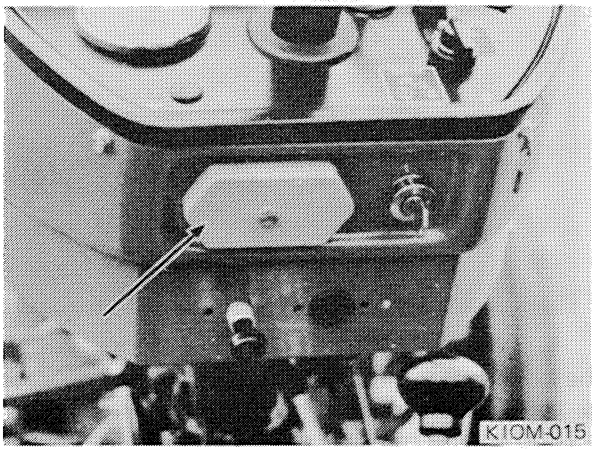
FOOT THROTTLE CONTROL

The foot throttle control is used when making frequent changes of engine speed. Pressing it down with the foot increases the speed of the engine.



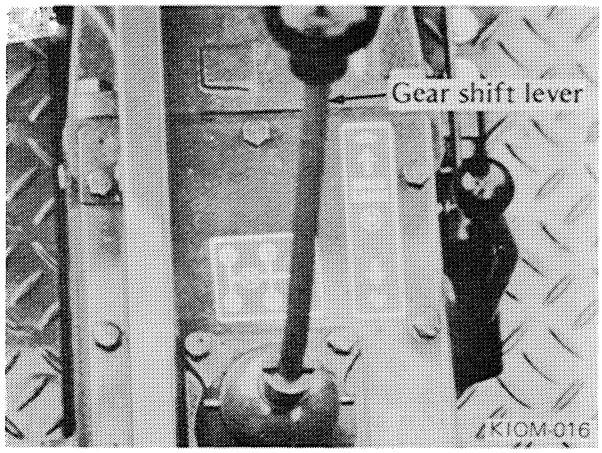
NOTE: The engine speed control lever should be set to give the slowest engine speed, when the foot throttle control is to be used.

FUSE BLOCK



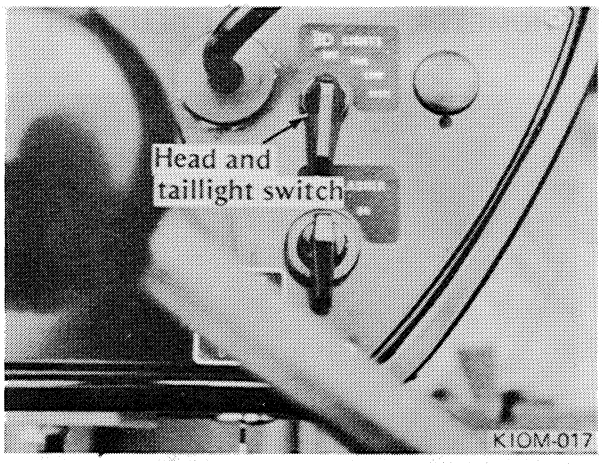
Three fuse elements located under the fuse holder cover system. **See "ELECTRICAL SYSTEM"** for replacement instructions.

GEARSHIFT LEVER



This lever is used to shift the transmission gears into reverse or any of the four forward speed ranges.

HEAD AND TAILLIGHT SWITCH



The switch has four positions: "OFF" positions; "TAIL" position for the instrument panel and red taillight; "LOW" position for panel light, red taillight and dim headlights; "HIGH" position for red taillight, panel light and bright headlights.

NOTE: The switch works independently of the key switch.

DIFFERENTIAL LOCK

The differential lock helps prevent unequal drive wheel slip when one wheel is operating under poorer traction conditions than the other. Continual engagement of the differential lock is not harmful to the wearing parts and may result in improved performance of the tractor even when excessively unequal slip is not apparent. However, the differential lock must be disengaged before attempting turns.

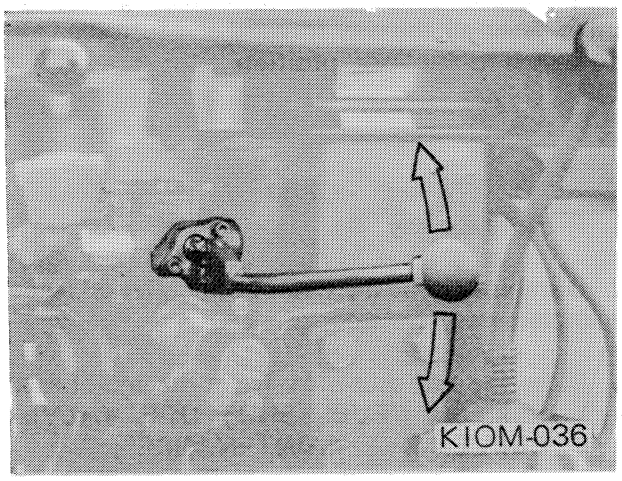
The pedal may be depressed to engage the differential lock under wheel slip or when the tractor is still in motion. If one wheel is spinning too rapidly for the differential lock to engage, a clicking noise will be heard. If this continues for more than a few seconds, depress the engine clutch pedal momentarily and the differential lock will come into operation immediately.

If the differential lock does not disengage when the foot is taken off the differential lock pedal as evidenced by the pedal remaining in the depressed position, quick pressure on one of the brake pedals or the clutch pedal will release the differential lock.

HYDRAULIC AUXILIARY VALVE (OPTIONAL)

Hydraulic flow for the auxiliary valve is provided by the bypass flow from the position control valve and supplied to rear self-sealing coupling.

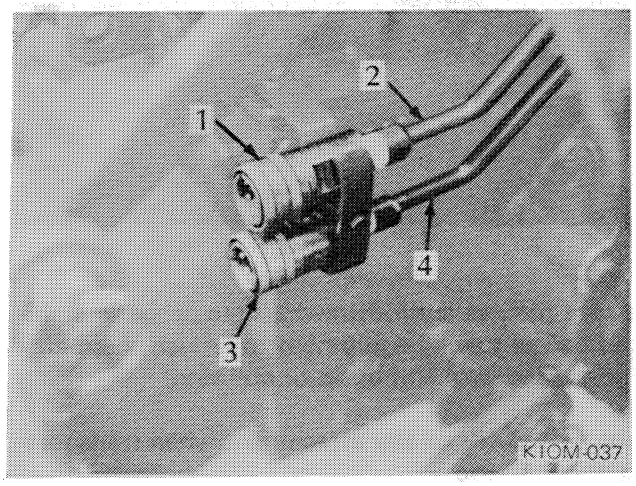
The valve is used for double acting cylinder, and has three positions.



Auxiliary valve lever

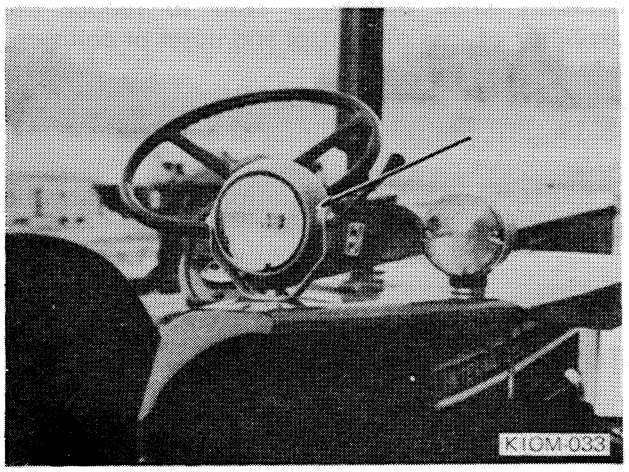
When the lever is pulled up from the neutral position, the oil in the lower tube is pressurized. When the lever is pushed down, the oil in the upper tube is pressurized.

The lever returns to the neutral position automatically when it is released. **See illustration.**



1 – Upper self-sealing coupling
2 – Upper tube
3 – Lower self-sealing coupling
4 – Lower tube

REAR WORK LAMP (OPTIONAL)



The rear work lamp is turned on by the switch on the lamp.

The lamp should be used only when the tractor is operated in the field.

CAUTION! Do not use the rear work lamp while travelling on public road.

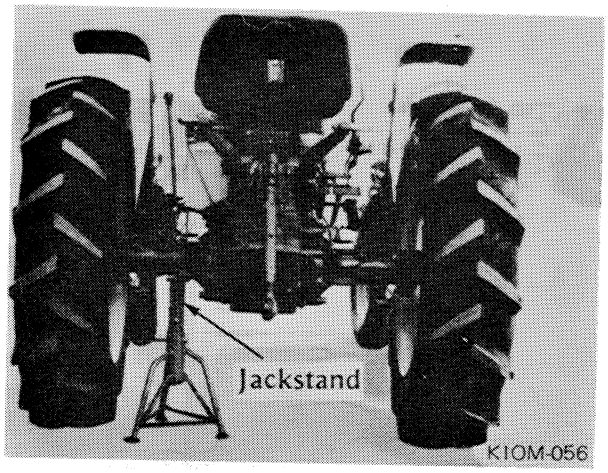
ADJUSTING THE TREAD WIDTH

Disc Wheels With Demountable Rims

Rear wheels with demountable rims can be set to 41.5 (1054), 44.8 (1138), 48.7 (1236), 53.9 (1370) and 57.8 (1468) inch (mm) tread positions, by reversing the rims and bolting them on the inner or outer side of the wheels. **See illustration.**

To adjust the rear wheels proceed as follows:

1. Jack up rear of the tractor and securely block or place sturdy jack stands under the rear part of the transmission case. **See illustration.**



1 — Jack stand

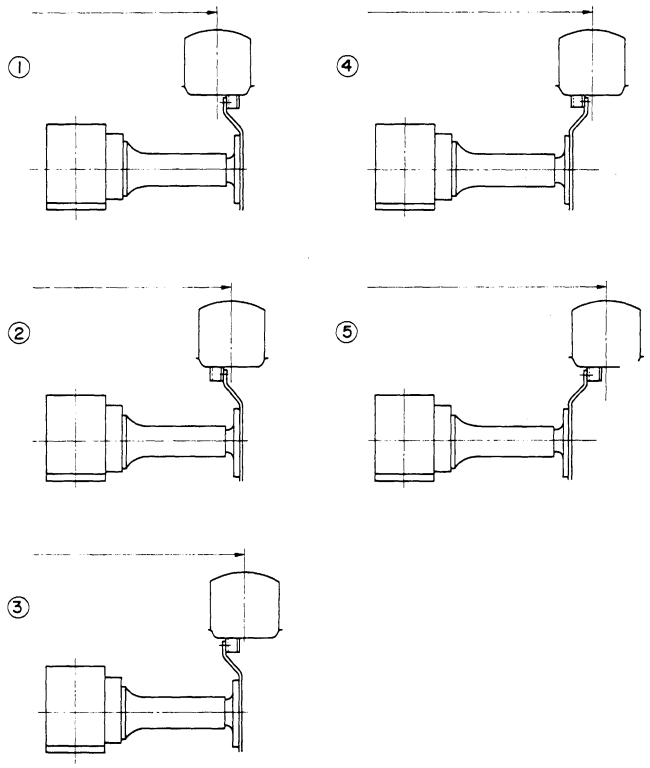
2. Remove and position the wheel and disc for the desired tread width. **See illustration.** Tighten all bolts securely and periodically check tightness.

NOTE: The arrow on the side wall of the tire is to point in the direction the tire will rotate with forward motion of the tractor. If the arrow does not point in the correct direction when mounting the tire and rim assembly at the desired tread width, exchange left and right tire and rim assembly.

Front and rear weights are available to provide safe and efficient operation with various equipment under different conditions.

This improved efficiency and overall reduction in cost is attained in several ways:

1. More ground compaction.
2. More work done.
3. Less equipment cost in the form of ballast and tools.
4. Less wheel slippage.



1. **41.5" (1054 mm) Minimum**
2. **44.8" (1138 mm) Standard**
3. **48.7" (1236 mm)**
4. **53.9" (1370 mm)**
5. **57.8" (1468 mm) Maximum**

Diagram of rear wheel tread positions

Rear ballast should be added to the tractor, to prevent excessive tire slippage and treadwear. The amount of rear weight needed will depend upon the type of soil or operating surface. However, excessive weight is not to be added to the rear wheels to obtain continuous pulls in first gear which are greater than the maximum pull obtained in second gear.

General Precautions

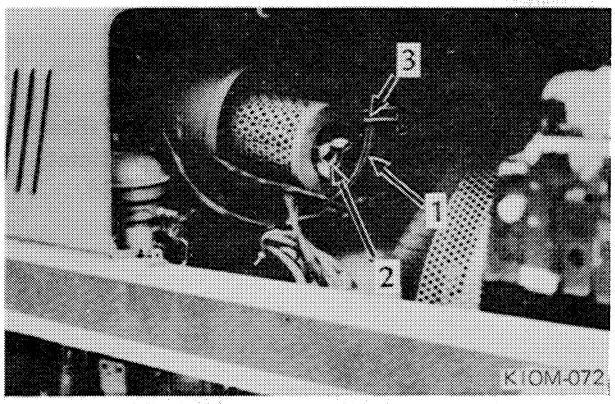
Frequently inspect all hose connections. If hoses show any signs of deterioration replace them.

All the joints between the air cleaner and the engine must be tight. All the gaskets must be in good condition and the bolts must be drawn up tight.

Never operate the engine unless the element is in place.

NOTE: Never attempt to remove the element from the air cleaner while the engine is running.

Removing the Filter Element



1 – Cover
2 – Wing bolt
3 – Clamp

1. Stop the engine.

2. Open the front left side hood by pressing the latch. **See "HOOD" in "PREVENTIVE MAINTENANCE".**

3. Loosen the two clamps and take off the air cleaner cover. **See illustration.**

4. Loosen the wing bolt and remove the filter element by pulling it straight out very slowly.

5. After replacing the new or cleaned element, install and tighten the wing bolt and clamp the cover in place.

Cleaning the Filter Element

NOTE: The paper element must be handled with care. It will not stand the abuse of rapping on a tire or hard surface.

1. Direct clean, dry compressed air up and down the pleats on the "CLEAN SIDE" (inside) of the element. Continue this until the element is clean.

NOTE: Air pressure at the nozzle must not exceed 100 pounds per square inch.

Replace the filter element after ten cleanings or annually, whichever comes first, with a new element supplied by your international Harvester dealer.

Inspection

1. Inspect the contact surfaces of the element and the air cleaner body. If faulty or damaged gaskets or surfaces are noted, correct these conditions immediately.

2. Remove any dirt, found inside the air cleaner body, with a damp cloth before reinstalling the elements.

3. Before resuming operation, inspect and tighten all air cleaner and air induction system connections.

CARE AND ADJUSTMENT OF THE ENGINE CLUTCH

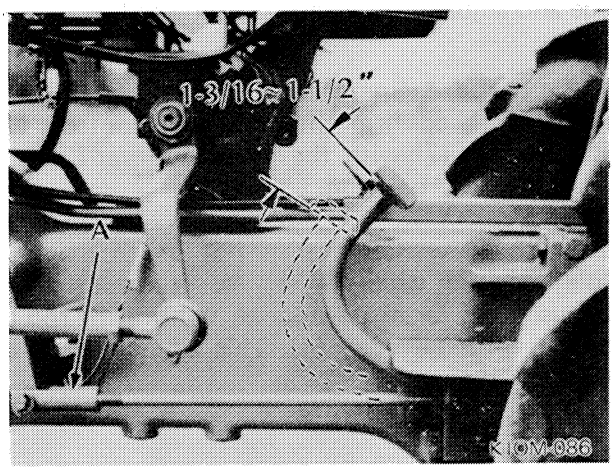
As a result of normal clutch facing wear, the free travel between the clutch release levers and the release bearing is reduced. Lack of clearance causes excess slipping, overheating, and early replacement of the clutch facing.

Specified free travel is 1-3/16~1-1/2 inch (30~40 mm) measured at the front end of pedal.

Check the clutch for free movement after every 200 hours of operation until the proper inspection interval is determined according to usage. Check the free movement thereafter, as required, to provide proper clearance between the clutch release bearing and the clutch release levers.

See illustration.

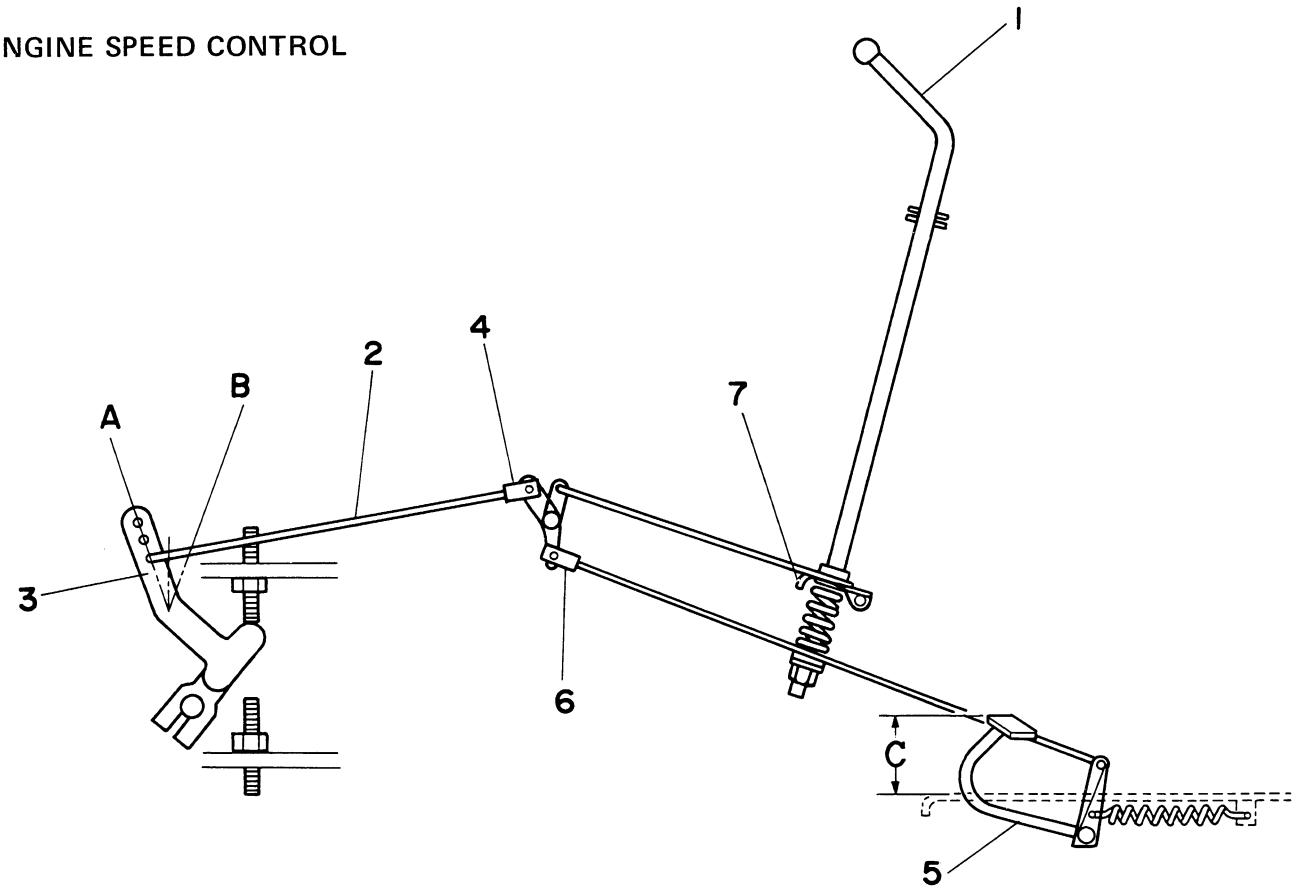
Free travel should be adjusted before it reaches 5/8 inch (9.5 mm). It is adjusted by the yoke "A".



1 – Clutch pedal

Engine clutch adjustments

ENGINE SPEED CONTROL



1 – Engine speed control lever
2 – Rod
3 – Governor lever
4 – Yoke
5 – Foot throttle pedal
6 – Yoke (Foot throttle)
7 – Lever stopper
A : Low idle position
B : High idle position
C : 3-1/8 in (79 mm)

LUBRICATION GUIDE

■ - After every 200 Hours of Operation

12. Engine oil filter.
13. Crank case drain plug.

Remove the crankcase drain plug and oil filter and drain all the oil while the engine is warm; then replace the drain plug and the new filter. Remove the oil filler cap and refill with new oil to the "FULL" mark on the oil level gauge. After checking oil level, replace the filler cap.

14. Hydraulic fluid filter.

Replace the filter. Check the oil level.

15. Governor

Check fluid level and add as required.

16. Distributor and Tachometer Drive

Remove the grease plug and insert a lubrication fitting. Apply four or five strokes of the lubricator (approx. 1/4 oz.) to the fitting using IH 251H EP grease or equivalent #2 multi-purpose lithium grease.

Miscellaneous parts

Lubricate all linkage pivot points with a few drops of light engine oil. Coat the threads of the three-point hitch upper link with IH 251H EP grease or equivalent #2 multi-purpose lithium grease.

● - Periodic

17. Front wheels.

Once a year remove, clean, and repack the front wheel bearings with IH 251H EP grease or equivalent #2 multi-purpose lithium grease. If tractor is operated in rice field or similar severe wet condition, wheel hub must be completely filled with grease and clean and refill grease after the particular job finished.

18. Hydraulic filter.
19. Transmission drain plug.

Remove the transmission drain plug and oil filter and drain all the oil; then replace the drain plug and new filter. Remove the oil filler cap on the hydraulic case and the oil level plug on the left side of the rear frame, and refill with new oil until oil comes out the oil level plug hole. After checking, turn the cap and the oil level plug clockwise to tighten them.

Miscellaneous

Occasionally lubricate the engine control linkage, transmission control linkage, brake and clutch pedal pivot bushings, and control linkage with a few drops of oil.