International 3388, 3588, and 3788 Tractors

Operator's Manual

1096188R4

Reprinted

CASE IH

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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 PERSONAL INJURY OR DEATH.

M171B

If 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, will result in 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 INJURY OR DEATH. 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 Case Corporation instructions on machine operation and maintenance.

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WORK SAFELY — FOLLOW THESE RULES

Instructions given with this symbol are for personal safety. Be sure you and your workers follow them.

A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST AN ACCIDENT



Before handling ANY equipment, READ the OPERATORS MANUAL.

MA-16875

SERVICING AND BEFORE STARTING

Carefully supervise inexperienced operators.

Misuse or modification of this machine can cause:

— mechanical breakdown,
— property damage,
— injury or death.

Always use proper safety precautions. Tell your workers how to work safely.

Never enter the hinge or pivot area of the tractor without using the frame lock pin.

When fueling a tractor, keep any type of open flame away. Do not smoke. Stop the engine and wait for it to cool before removing the fuel cap or refueling.

Check coolant and lubricant levels, including the engine, front axle, transfer case, and rear frame.

The coolant level should be checked at the coolant recovery reservoir.

When it becomes necessary to remove the radiator cap, proceed as follows: Turn the radiator cap slowly counter clockwise to the pressure release point to allow the pressure or any steam to escape; then press down on the cap and continue to turn until the cap is free to be removed.

Check the brake and clutch pedals for correct adjustment.

Reduce tipping hazards by spreading wheels as far as your work program permits.

Be sure muffler or exhaust pipe are in place so exhaust gases are discharged above the cab.

Always keep the operator's compartment clean. Keep dirt, trash, and grease from the pedals, steps, mounting handles, steering wheel, and controls.

Always carry a "Charged" fire extinguisher and a first aid kit.

Avoid loose-fitting clothing, which could catch on moving parts.

Mounting assist handles and steps are provided for your safety. Use them when getting on or off the tractor.

STARTING

Know the controls and what they do. Be in the operator's seat and fasten the seat belt. Place the transmission in the "P" (park) position and all other controls in neutral before starting the engine.

Be sure power take-off lever is in the "OFF" or disengaged position before starting the engine.

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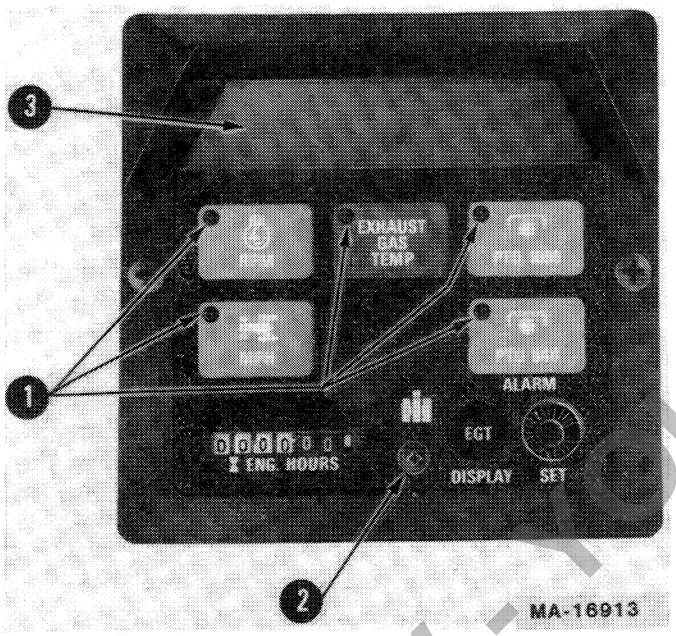
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AUXILIARY STEP

A step is provided on the left side of the tractor for fueling. This step is movable. To place the step in the work position, lift the step, rotate it clockwise, and lower it into the slot. To place it in the storage position, lift the step, rotate it counterclockwise to the slot, and lower it.

DATA CENTER



1 - Function lights
2 - Tire size set
3 - Display

The display will function whenever the key is in the "RUN" position.

Press on switch pad to read the desired function. The light on the symbol will indicate the function being displayed.

Engine speed, r.p.m.

Tractor ground speed, m.p.h.

Power Take-off, 540 r.p.m.

Power Take-off, 1000 r.p.m.

Exhaust Gas Temp (EGT) – Engine exhaust gas temperature.

Engine hours of operation are recorded.

For standard power take-off shaft speed, refer to "Specifications".

Engine hours will be recorded when the engine is running whether the key is in the "RUN" or "OFF" position.

NOTE: The EGT alert light will function with or without the temperature being displayed.

The data center contains adjustment to recalibrate ground speed for various tire sizes. Adjustment information is available in the service manual.

(EGT) EXHAUST GAS TEMPERATURE

The exhaust gas temperature is an indication of engine load and is used to monitor the performance and condition of the engine.

The alert can be set to actuate the EGT tellite at any temperature between approximately 900 deg. F. (480 deg. C.) and 1460 deg. F. (790 deg. C.)

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PREVENTIVE MAINTENANCE GUIDE

To keep your tractor performing efficiently, it is advisable to systematically inspect the following points at intervals as outlined below.

Before Operating the Tractor

Before operating a new tractor for the first time, be sure to follow the instructions given under "Work Safely — Follow These Rules", "Operating the Tractor". Also see "Lubrication", "Lubrication Table", and "Lubrication Guide".

After the First 10 Tachometer Hours of Operation

Hydraulic fluid filter	Replace element. Clean the by-pass valve screens and replace filter cartridges. Refer to "Hydraulic Fluid Filters".
Water pump, fan and alternator-generator belts	Check tension. Refer to "Water Pump, Alternator-Generator and Fan Belt Tension".
Wheel retaining hardware	Check and tighten to proper torque. Refer to "Wheels".
Cooling System	Check the level of the coolant in the radiator. Refer to "Cooling System".

After Every 10 Tachometer Hours of Operation

Cooling System	Check the level of coolant in the recovery reservoir. Refer to "Cooling System".
Fuel tank water drain cock	Drain off water and sediment. Refer to "Fuel System".
Lubrication points	See "Lubrication Guide".

After the First 50 Tachometer Hours of Operation

Flexible rubber connections between air cleaner and manifold	Inspect for loose fit or leakage. Refer to "Air Cleaning System".

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STORING THE TRACTOR

STORAGE

When your tractor is not to be used for some time, it should be stored in a dry and protected place. Leaving your tractor outdoors, exposed to the elements, materially shortens its life.

Follow the procedures outlined below when your tractor is placed in storage for periods up to approximately six months.

See your International Harvester dealer for the procedure on longer storage periods.

Store the tractor so the tires are protected from light. Before storing the tractor, clean the tires thoroughly. Jack up the tractor so the load is off the tires, when it is to be out of service for a longer period. If not jacked up, inflate the tires at regular intervals.

Run the engine long enough to thoroughly warm the oil in the crankcase, then drain the oil. Change the oil filter as instructed in "Lubrication". Refill the crankcase with fresh oil as specified in the "Lubrication Table" and run the engine for five minutes.

Open the fuel tank water drain valve and be sure that all water and sediment has drained from the tank before closing.

Fill the fuel tank with a premium grade diesel engine fuel. If this grade has not been used regularly, drain the fuel tank and refill. Run the engine for about five minutes to circulate the fuel through the injection system.

Drain, flush and fill the cooling system with an antifreeze mixture ratio to protect the coolant to the lowest anticipated temperature and add I.H. cooling system conditioner. Refer to "Cooling System".

Plug up the end of the breather pipe and exhaust pipe.

Clean the air cleaner as described under "Air Cleaning System."

I.H. International maintenance free batteries need not be removed from the tractor. Batteries should be fully charged to prevent freezing of electrolyte. Disconnect both negative ground cables at the batteries to prevent accidental discharge.

REMOVING FROM STORAGE

Be sure that the grade of oil in the engine crankcase is as specified in the "Lubrication Table".

Remove the plugs from the exhaust pipe and the valve cover breather pipe.

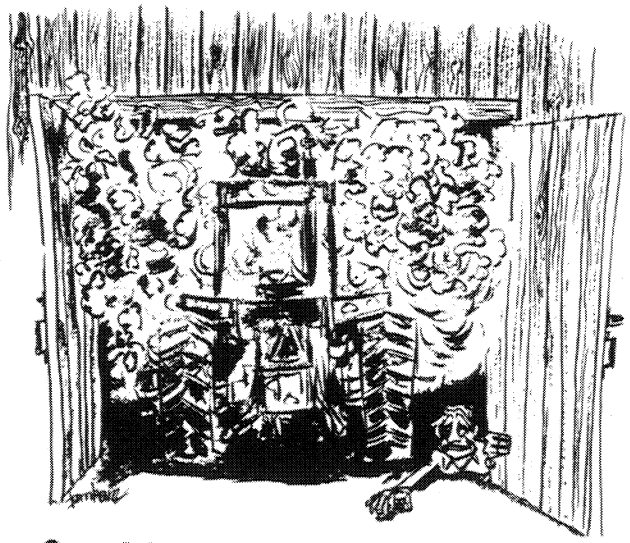
Check the level of the coolant in the radiator.

See that the batteries are fully charged and that the terminal connections are clamped tightly.

Check the fuel level and open the fuel tank water drain valve to drain off any water. Then close the valve.

Before starting the engine, prime the lubrication system by setting the engine speed control lever in the shut-off position, turning the key switch to the start position, and cranking the engine until the engine oil pressure builds up or up to a maximum of 30 seconds.

Start the engine and let it run slowly.

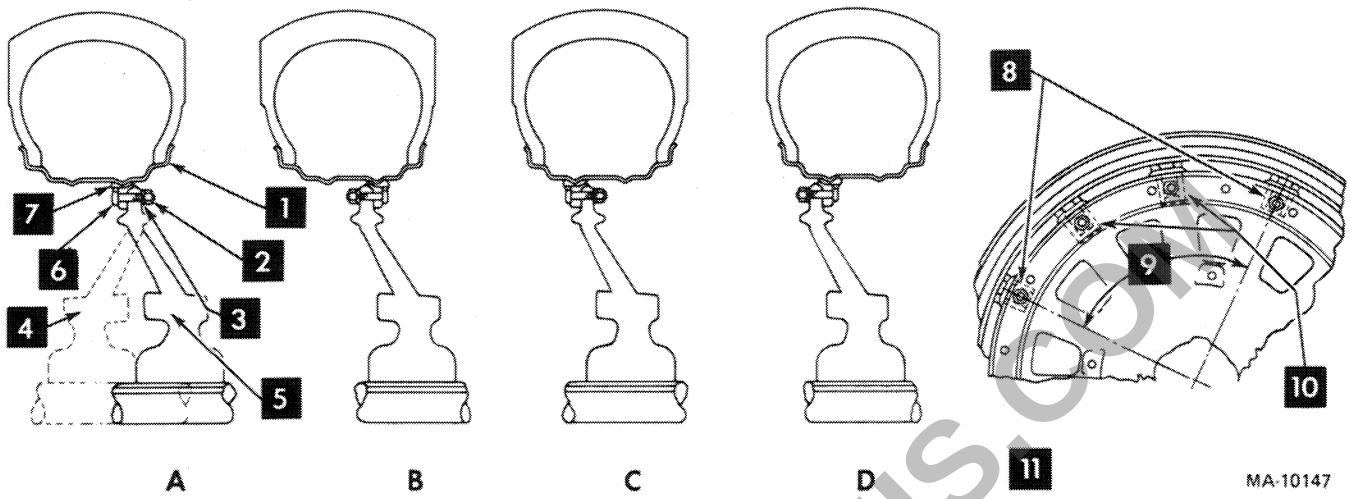


CAUTION! EXHAUST FUMES CAN KILL. Never operate vehicle in an enclosed area.

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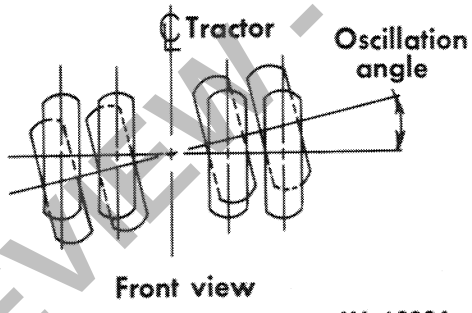
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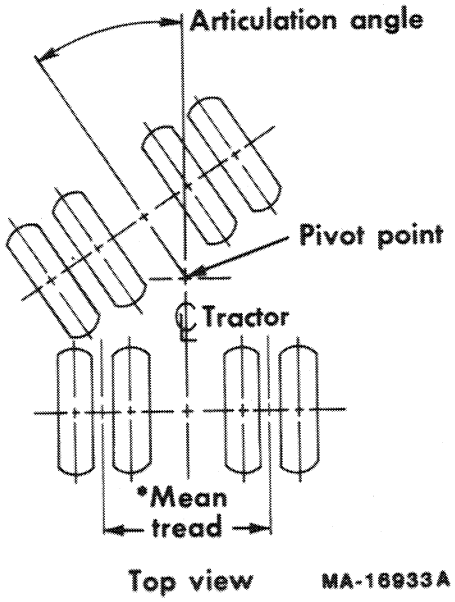
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1 - Rim
2 - Hex-nut
3 - Lock wahser
4 - Wheel concave out
5 - Wheel concave in
6 - Clamp bolt
7 - Rim clamp
8 - Rim to be mounted with two fixed type locating clamps over driving lugs at 90 degrees to each other as shown
9 - Measurement is 90 degrees
10 - Adjustable run clamps
11 - Rim clamp bolts to be tightend to 270 foot-pounds (366 N·m) torque

Wheel tread and rim mounting diagram (right wheel shown).



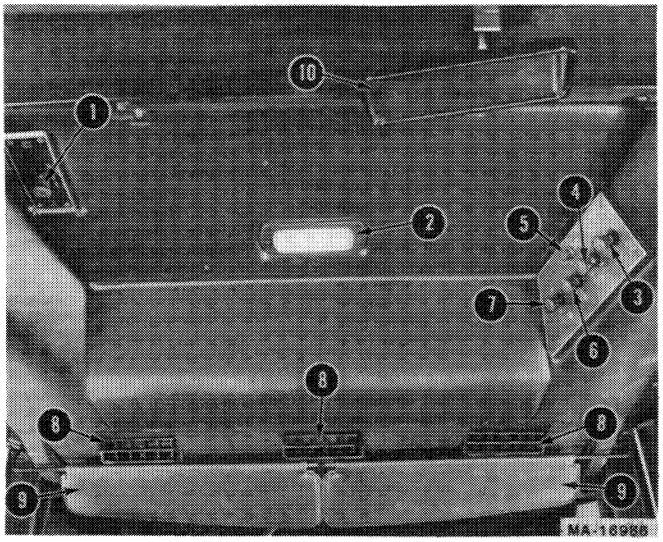


* - Mean tread is measured between the middle position of the dual wheels.

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CAB INTERIOR



1 - Air recirculation control
2 - Dome light
3 - Windshield wiper control
4 - Air conditioner control
5 - Refrigerant pressure indicator light
6 - Blower control
7 - Heater control
8 - Air flow louvers
9 - Sun visors
10 - Hitch view mirror

BEFORE OPERATING YOUR TRACTOR

Before you operate the tractor study this manual carefully. It has been prepared to help you operate and maintain your tractor with utmost efficiency.

Familiarize yourself with the operation of all the instruments and controls.

Fill the fuel tank.

Prime the turbocharger if the tractor has been idle for a month or longer. Refer to "Engine and Fuel System".

Check the engine, transmission, transfer case, and front axle oil level.

Lubricate the chassis points as recommended.

Check the engine coolant system for the proper level. Check the level at the coolant recovery reservoir.

NOTE: The access panel between the clutch and brake pedal has a convenient lubrication chart. Remove the panel by pulling on the handle. Always replace the panel after use.

Be sure the water pump, alternator-generator, and fan belt tension is correct.

Check the tire inflation pressures.

Adjust the seat, steering wheel, and mirrors for operator's maximum comfort, visibility, and complete control of the tractor. Fasten the seat belt and adjust it for a snug and comfortable fit.

Check all tellites for operation.

Refer to various sections of the operator's manual for additional information.

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To The Owner

Before you operate the tractor study this manual carefully. It has been prepared to help you operate and maintain your tractor with utmost efficiency.

Instructions given with this symbol are for personal safety. Be sure you and your workers follow them.

Assembled in this manual are operation, lubrication, and maintenance instructions for the International 3388, 3588 and 3788 Articulated Tractors. This material has been prepared in detail in the hope that it will help you to better understand the correct care and efficient operation of your tractor.

For prompt, efficient service, always specify the tractor model and serial numbers, including prefix and suffix letters. Write these serial numbers in the spaces under "Serial Numbers".

The International 3388, 3588, and 3788 four-wheel drive tractors are designed to distribute the tractor weight on the four driving wheels during operation, and thus provide better floatation and less soil compaction. Also, the four driving wheels, with proper load distribution, will enable the tractor to achieve higher drawbar pull than a two wheel drive tractor with equivalent power.

Your local International Harvester dealer is interested in the performance you receive from these tractors. He has factory-trained servicemen, informed in the latest method of servicing tractors, modern tools, and original-equipment IH service parts which assure proper fit and good performance.

To obtain top performance and assure economical operation the tractor should be inspected, depending on its use, periodically, or at least once a year by your International Harvester Dealer.

Universal symbols are used to pictorially identify various tractor instruments and controls. Throughout this manual, an identifying symbol is placed by the instructions like this example for engine coolant temperature. The waves signify water or coolant and the thermometer indicates temperature. Regardless of the language used in a nation, and without translation, this symbol means water or coolant temperature.

Optional equipment and accessories are available. Disregard the instructions for equipment not on your tractor.

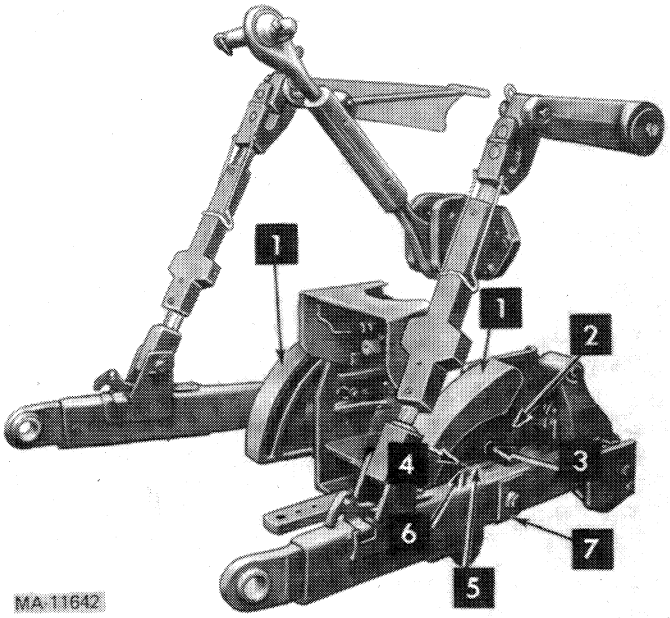


METRIC (SI) MEASUREMENTS

A standard metric measurement known as International System of Units (SI) has been adopted for world-wide use. English Units followed by Metric Equivalents are used throughout this manual. (Metric Equivalents are given in parenthesis)

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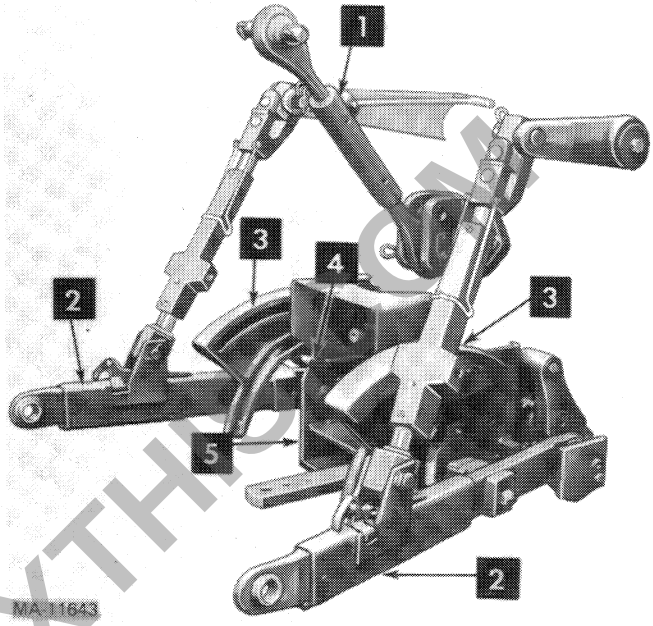
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1 - Cam sway limiter
2 - Rigid position hole
3 - Headed pin in sway position hole
4 - Cam bumer
5 - Category III spacer
6 - Cam bumper shims
7 - Cam bumper shims in storage position

Category III three-point hitch with cam sway limiter in sway position

If side play on the lower links is too great, shims may be added between the cam bumper and lower link as required. The lower links must be in the rigid position when this is done. The adjustment must be made so that the cam bumper is allowed to move through the entire stroke without binding on the cam.



1 - Upper link
2 - Lower links
3 - Cam sway limiter
4 - Headed pins
5 - Cam limiter bracket assembly

Three-point hitch with cam sway limiters in extra sway position.

The lower links of the three-point hitch with cam switch sway limiter may also be moved to extra sway lateral position for hitching purposes only, by placing the cam sway limiter in a upper position using the headed pins as a support on top of the cam limiter bracket assembly. After hitching, it is necessary to move the cams back to either rigid or sway position.

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