# 65 COMBINE

JOHN DEERE

## OPERATORS MANUAL

65 COMBINE

OMH30159 A9 English

**OMH30159 A9**

LITHO IN THE U.S.A.
**ENGLISH**

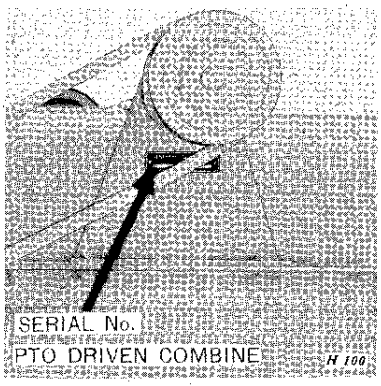
# TO THE PURCHASER

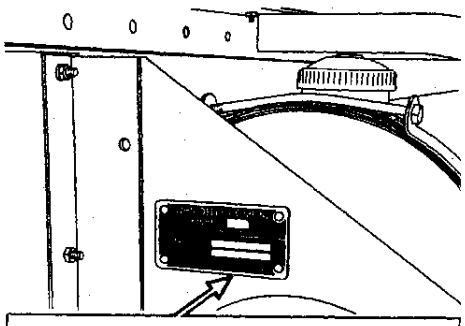
This Operator's Manual has been written and illustrated to provide you with the needed information regarding lubrication, operation, adjustments, and care of the combine. **Study this manual carefully—keep it in a handy place and refer to it often.**

**Location Reference.** "Right-hand" and "left-hand" sides are determined by facing in the direction the combine will travel when in use.

**Engine Reference Only.** Timing gear end of engine is referred to as the "front," flywheel end as the "rear."

If you have an engine-driven machine, the serial numbers of your combine and engine are stamped on a plate on the fuel tank rear support bracket. If your combine is PTO driven, the combine serial number plate is on the grain tank unloading auger jackshaft left-hand support bracket. The cutting platform serial number plate is located on the right-hand side of the cutting platform. For handy reference later, write these serial numbers **now** in the spaces provided.

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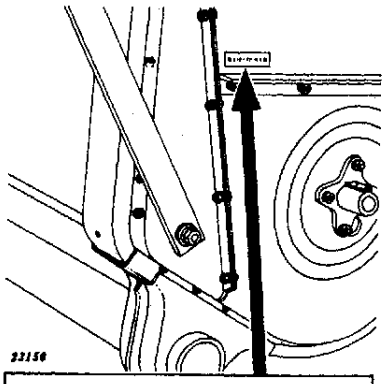


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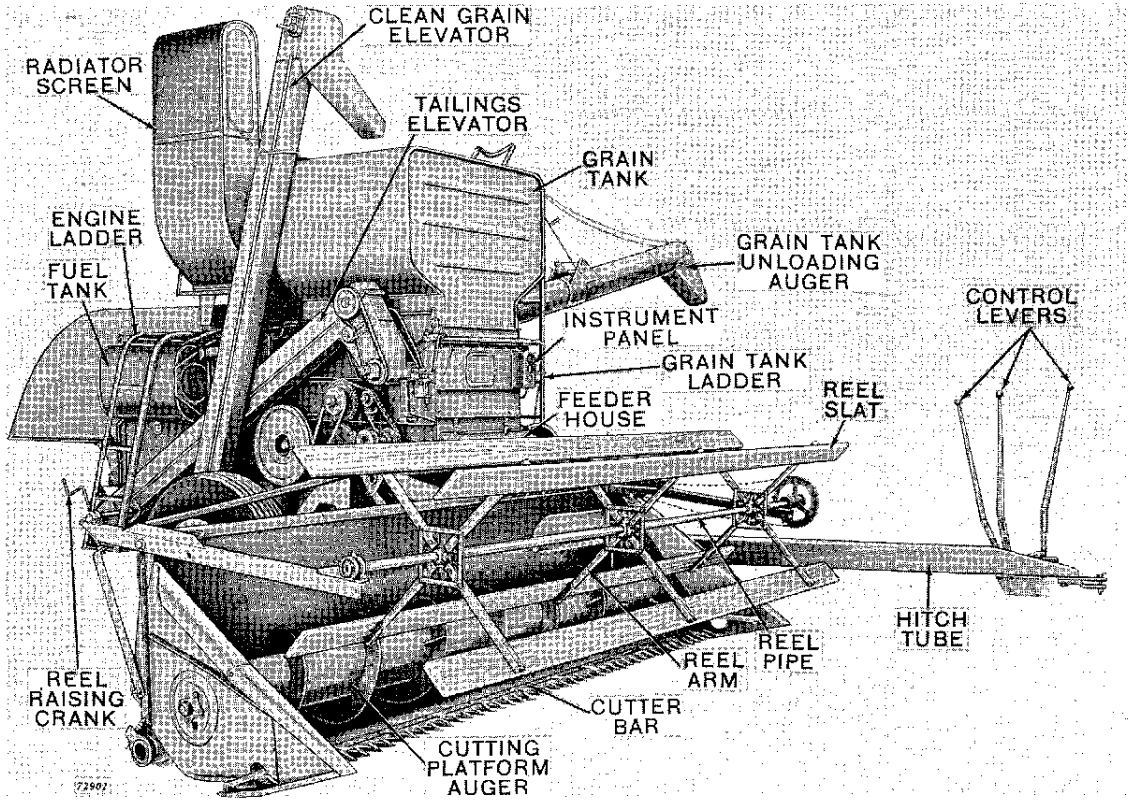
## IMPORTANT

**Make this manual your guide and adviser and do what it recommends, regardless of what may have been your practice with other makes of combines, or the suggestions that may be made to you by well-meaning friends or neighbors.**

**When using this combine with special attachments, special servicing of the attachments may be required. This information will be given to you in the instruction book accompanying the attachment.**




*Complete View of John Deere Engine-Driven 65 Combine*

# SPECIFICATIONS

## COMBINE

### Grain Tank

| | |
|---|---|
| Capacity | 45-Bushel |
| Type of Unloading | Rigid or Hinged Unloading Auger (Optional) |

### Cutter Bar

| | |
|---|---|
| Width of Cut | 12-Ft. |
| Length of Cutter Bar | 11-Ft. 6-In. |
| Right- or Left-Hand Cut | Right |

### Reel

| | |
|---|---|
| Speed Range | 28.1 to 36.1 rpm |
| Drive | Chain |
| Ground or Power Driven | Power |
| No. of Bats | 3, 4, 6, or 8 |
| Dia. of Reel | 31-3/8-In. or 42-In. |

### Cutting Platform

| | |
|---|---|
| Type | Auger |
| Hinged or Rigid | Hinged |
| Range of Cutting Height | 2-In. to 30-In. |
| Control | Hydraulic (2 Rams) |

### Platform Auger

| | |
|---|---|
| Diameter | 18-In. |
| Diameter of Auger Tube | 10-In. |
| Type of Auger Fingers | Round Retracting |

### Cylinder

| | |
|---|---|
| Type | Rasp-Bar or Spike-Tooth |
| Width | 30 Inches |
| Diameter | 22 Inches |
| Speed | 196 to 1190 rpm |
| Drive | Roller Chain |

### Concave

| | |
|---|---|
| Type | 12-Bar Open-Type or Spike-Tooth |

### Beater

| | |
|---|---|
| Type | Wing |
| Width | 30 Inches |
| Speed | 680 to 685 rpm |
| Drive | Belt |

### Separator

| | |
|---|---|
| Type | 3 Straw Walker |
| Width | 30 Inches |
| Length of Separator Surface | 10-Ft. 10-In. |

### Grain Conveyor

| | |
|---|---|
| Type | Slat |
| Drive | Chain |

### Fan

| | |
|---|---|
| Type | Radial-Flow |
| Speed Range | 540 to 680 rpm (550 to 810 rpm with Special Sheave) |
| Drive | V-Belt |

### Chaffer

| | |
|---|---|
| Type | Adjustable |
| Width | 28-1/2 Inches |
| Length | 48 Inches |

### Sieve

| | |
|---|---|
| Type | Adjustable |
| Width | 28-1/2 Inches |
| Length | 45 Inches |

### Straw Walkers

| | |
|---|---|
| Number | Three |
| Length | 105 Inches |
| Width | 9-1/2 Inches |
| Drive | V-Belt |
| Speed | 208 rpm |
| Bearings | Oil Soaked Maple |
| Extension Pans | One on Each Walker |

### Weights

| | |
|---|---|
| Engine-Driven with 12-Foot Cutting Platform | 6,200 Lbs. (Approx.) |
| PTO-Driven with 12-Foot Cutting Platform | 5,600 Lbs. (Approx.) |

## COMBINE—Continued

**Dimensions—Over-All**

| | |
|---|---|
| Width Over-All, Assembled (With Rigid Unloading Auger) | 21-Ft. 1-In. |
| Width Over-All—Transport without Tractor | 10-Ft. 2-1/2-In. |
| Extreme Height Over Elevator | 12-Ft. 4-3/4-In. |
| Length Over-All, Assembled | 24-Ft. 10-1/4-In. |
| Shipping Width | 10-Ft. 2-1/2-In. |
| Shipping Length | 22-Ft. 7-1/8-In. |
| Shipping Height | 10-Ft. 2-In. |
| Wheel Tread c/c of 11.25 x 24 Tires | 7-Ft. 11-In. |

## ENGINE

| | | | |
|---|---|---|---|
| Make of Engine | John Deere HA-217G (Gasoline) | Valve Arrangement | Valve-in-Head |
| Bore | 3-5/8-In. | Valve Clearance Intake | .015-In. (When Cold) |
| Stroke | 3-1/2-In. | | |
| Brake Horsepower | 64 | Exhaust | .015-In. (When Cold) |
| Number of Cylinders | 6 | | |
| Piston Displacement | 217 Cu. In. | Make of Governor | John Deere |
| Max. Load Speed | 2200 rpm | Make of Carburetor | Marvel-Schebler |
| Firing Order | 1-5-3-6-2-4 | | |
| Crankcase | Cast Integral with Block | Spark Plug | Champion H-10 or Auto-Lite AL-7 or AC-45L, Gap .025-In., Heat Range 1200° to 1500° F. |
| Type of Lubrication | Force Feed by Gear Pump to All Connecting Rods, Main Bearings, Governor, and Oil Pump Drive. Oil Strainer in Bottom of Pan. | Electrical System | 12-Volt (Two 6-Volt Batteries) |
| | | Type of Fuel | Gasoline (Regular Grade) |

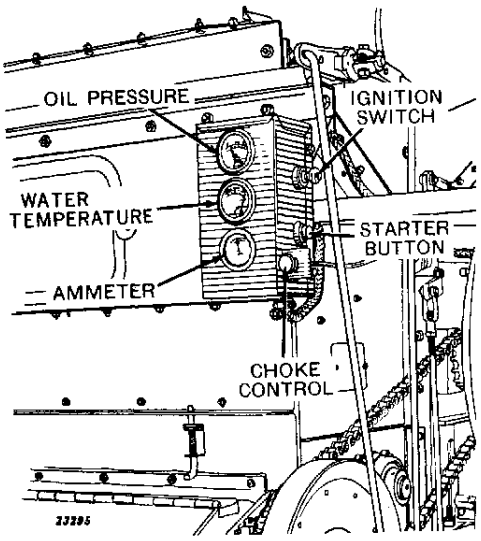
| | | | |
|---|---|---|---|
| **Capacities (Approx.)** | | | |
| Fuel Tank | 25 U. S. Gallons | Air Cleaner | 1 U. S. Quart |
| Cooling System (Radiator) | 6 U. S. Gallons | Hydraulic Unit (Including Hydraulic Oil Lines and Cylinders) | 7 U. S. Quarts |
| Engine Crankcase | 6 U. S. Quarts | | |
| Oil Filter | 1 U. S. Quart | | |

## SPECIAL EQUIPMENT AVAILABLE

Weed Seed Cleaner (Hart Scour-Kleen)
Straw Spreader
Straw Chopper
Belt Pickup Attachment
Lifting Guards
Reel End Shield
Concave Cover Plates
Special Chaffer and Sieves
High Speed Fan Sheave
Belt Wipers for Reel
Parking Stand (Adjustable)
Feed Rolls Attachment

*(Specifications and design subject to change without notice.)*

# COMBINE CONTROLS




**Oil Pressure Gauge** on engine-driven combines indicates the pressure of engine lubricating oil — not the amount of oil in the crankcase. Oil pressure will vary slightly with wear but with recommended oil it should read 26 pounds at full governed speed. If oil pressure drops, **stop immediately** and determine cause.

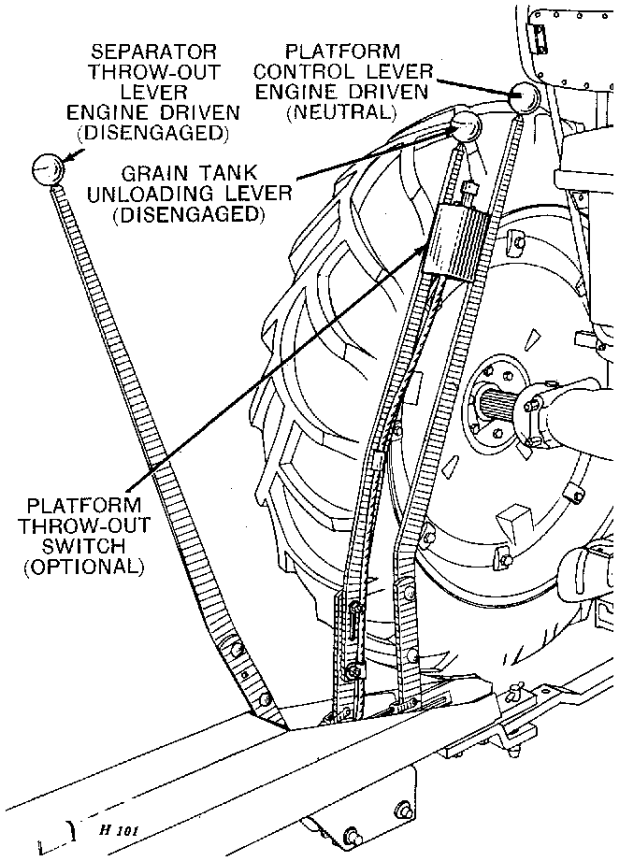
**Water Temperature Gauge** on engine-driven combines indicates water temperature in the cooling system—not quantity. Normal operating temperature is 180° to 190°F. If 200°F. or above, stop engine and determine cause.

**Ammeter** on engine-driven combines indicates the rate of charge or discharge of the battery. If ammeter shows discharge for an extended period during normal operation, check for a ground, short circuit or faulty regulator. If ammeter shows charge continually, inspect for low battery, faulty connections, low battery water, or bad regulator.

**Separator Throw-Out Lever** on engine-driven combines, moving lever forward engages separator. When separator is engaged, throttle control linkage between separator belt tightener and engine automatically increases engine speed to full throttle. On PTO-driven combines, separator is engaged by engaging tractor PTO.

**Grain Tank Unloading Lever.** This control is present on both engine-driven and PTO-driven combines. Moving lever back engages unloading auger drive. On engine-driven combines, if grain tank is to be unloaded while separator is disengaged, move separator throw-out lever forward slightly to increase speed of engine but not enough to engage separator.

**Platform Throw-Out Switch** operates electromagnetic throw-out clutch which permits stopping the platform and feeder while the separator continues to run. This control is available for both engine-driven and PTO-driven combines.




**Platform Control Lever** for engine-driven combines is within easy reach from any tractor seat and controls the range of platform height from 2 to 30 inches from the ground. When released, it automatically returns to neutral position with platform remaining at the desired position. To raise platform, move lever back—to lower platform move lever ahead. For safe operation, platform cannot be operated unless engine is running.

On PTO-driven combines, platform height is controlled by the tractor hydraulic system.

# LUBRICATION

The economical and efficient operation of any machine depends on regular and proper lubrication of all moving parts with a quality lubricant. This is especially true of farm equipment which must operate in hot, dusty conditions over rough ground. Neglected lubrication quickly leads to reduced efficiency, heavy draft, wear, breakdown, and replacement of parts.

Use a clean container for storing and handling all lubricants. **See that only clean lubricants go into the working parts of your combine.**

## LUBRICATION CHARTS

All lubrication points will be found in the lubrication charts that follow. The way the charts have been grouped organizes your lubrication work for you.



For the 5, 10, 50, and 150 Hour Lubrication Points, use a good grade of gun grease. For the 300 Hour, use SAE Multi-Purpose grease. **Do not use regular gun grease.**

### BEARINGS.

Lubricate at all grease fittings thoroughly, with a good grade of gun grease, until grease oozes out of bearing. This assures that the bearing is full, and also flushes out dirt that may have accumulated in the bearing. However, avoid excessive lubrication. Excessive lubricant that has dropped onto belts should be wiped off immediately to avoid belt slippage.

Two types of sealed bearings are used on this combine. One type is a sealed for life bearing which requires no lubrication; the other type is prepacked at the factory and will require yearly lubrication.

To lubricate bearings where a pipe plug is provided in bearing housing, remove the pipe plug and insert a 1/8-inch diameter slotted grease fitting (JD7805); the slotted fitting allows the bearing housing to be filled to capacity without blowing out seals due to pressure building up. Then remove grease fitting and replace pipe plug.

Where no end cap or pipe plug is provided in bearing housing, it will be necessary to pull bearing housing from shaft to pack bearing with new grease. Clean bearing with a safe solvent and pack with new grease. Reinstall bearing housing.

## LUBRICATION OF LINKAGES.

When lubricating the combine, make a practice of putting a few drops of oil on all clevises, linkages, and other moving parts. This will make them work easier and prolong their life.

## LUBRICATION OF CHAINS.

Chains should be lubricated at frequent intervals. A good grade of light machine oil should be used. A paint brush is a good instrument for applying oil to chains. **CAUTION: Do not oil chains when operating in sandy conditions. Sand will stick to the oiled chain and act as an abrasive.**

## KNIFE LUBRICATION.

The amount of lubricant to use on a knife depends on the conditions in which the work is being done. When the grain is being topped and the cutter bar is carried some distance from the ground, liberal lubrication with oil is permissible. In conditions where the cutter bar must operate close to the ground, it is better not to use oil except for a small amount on the knife holders.

## HYDRAULIC UNIT.

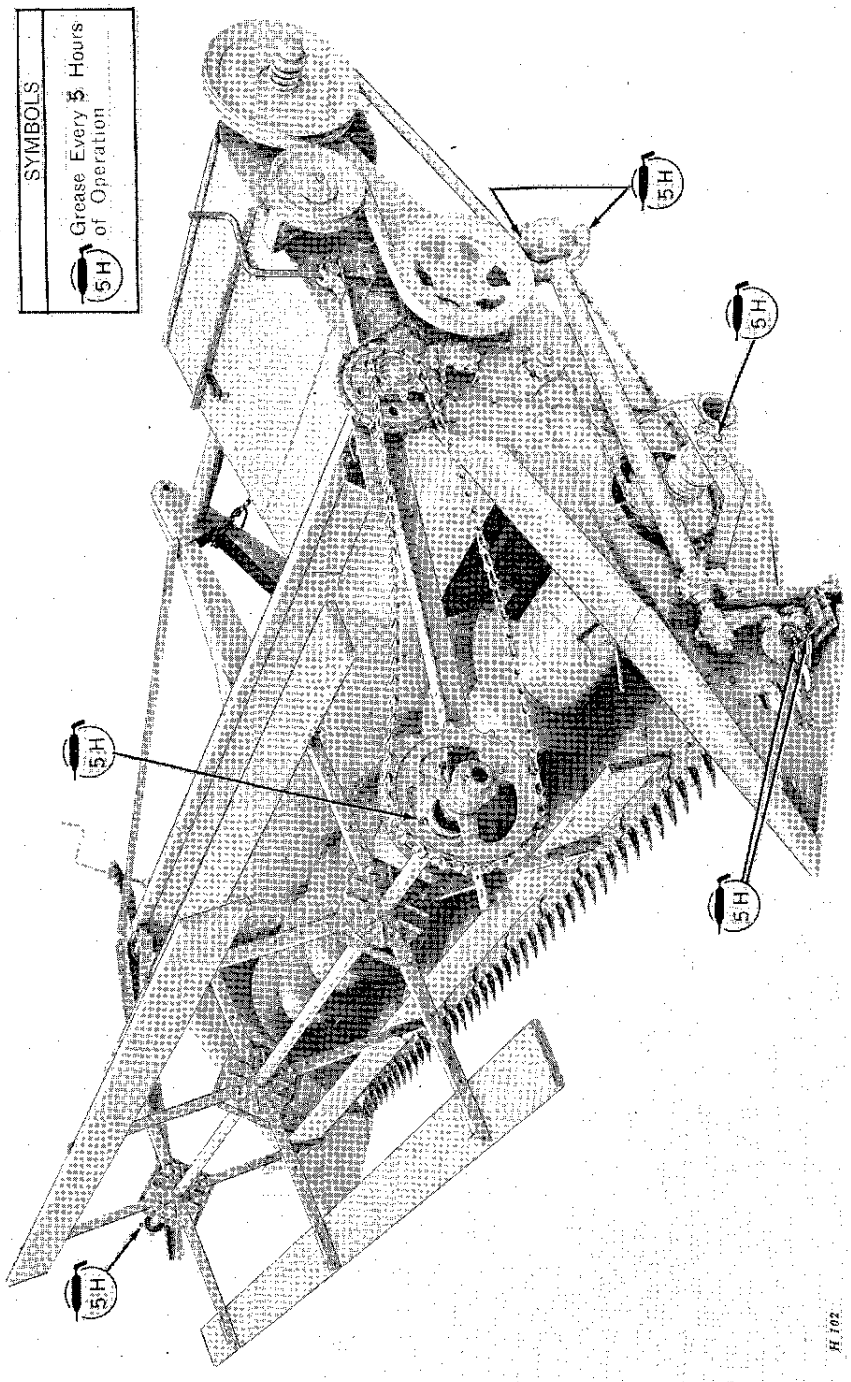
A premium grade of engine oil is recommended for use in the hydraulic unit—see page 28. Check oil level daily. Be sure platform is lowered to the ground when checking or adding oil.

## ENGINE BREAK-IN.

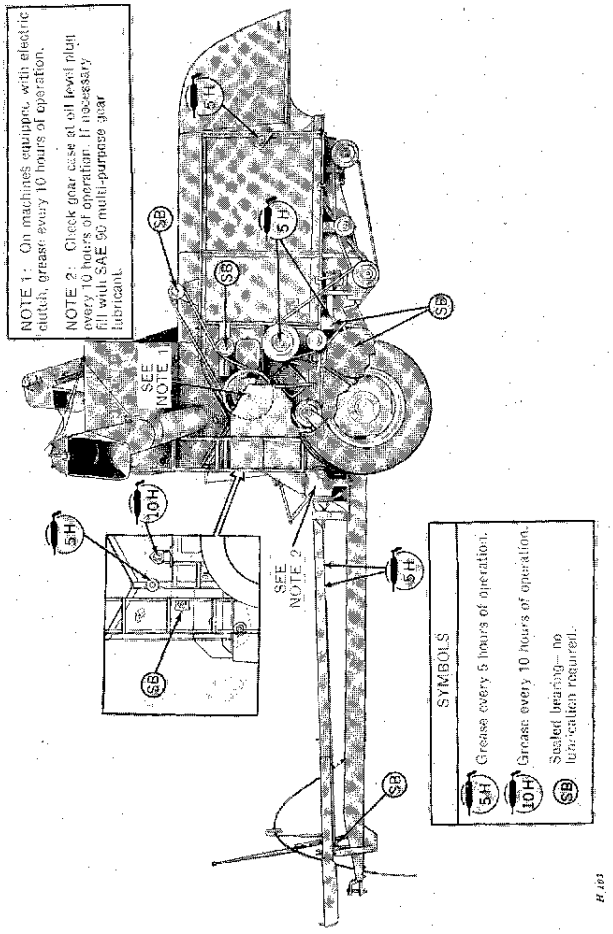
The engine on your new combine is shipped from the factory with a special break-in oil in the crankcase. After 150 hours of operation, this oil must be drained from the crankcase and oil filter and replaced with 5 quarts of oil no heavier than SAE 10W or SAE 5W-20 if temperature is below 32° F.; SAE 20 or 10W-30 if temperature is above 32° F.

**THE COMPLETE OBSERVANCE of one simple rule would prevent many thousand serious injuries each year. THAT RULE IS: "NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST A MACHINE WHILE IT IS IN MOTION."**

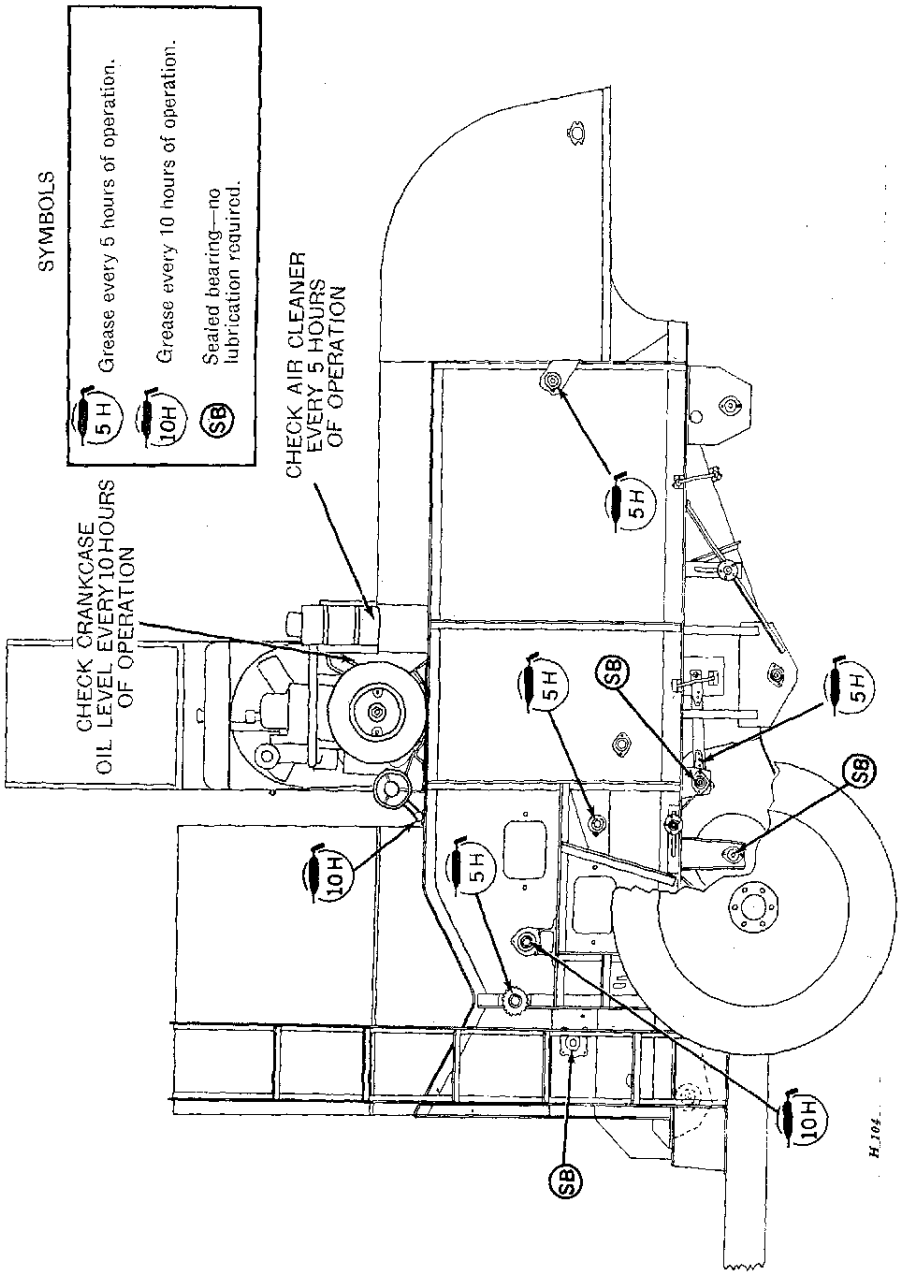
## EVERY 5 HOURS OF OPERATION



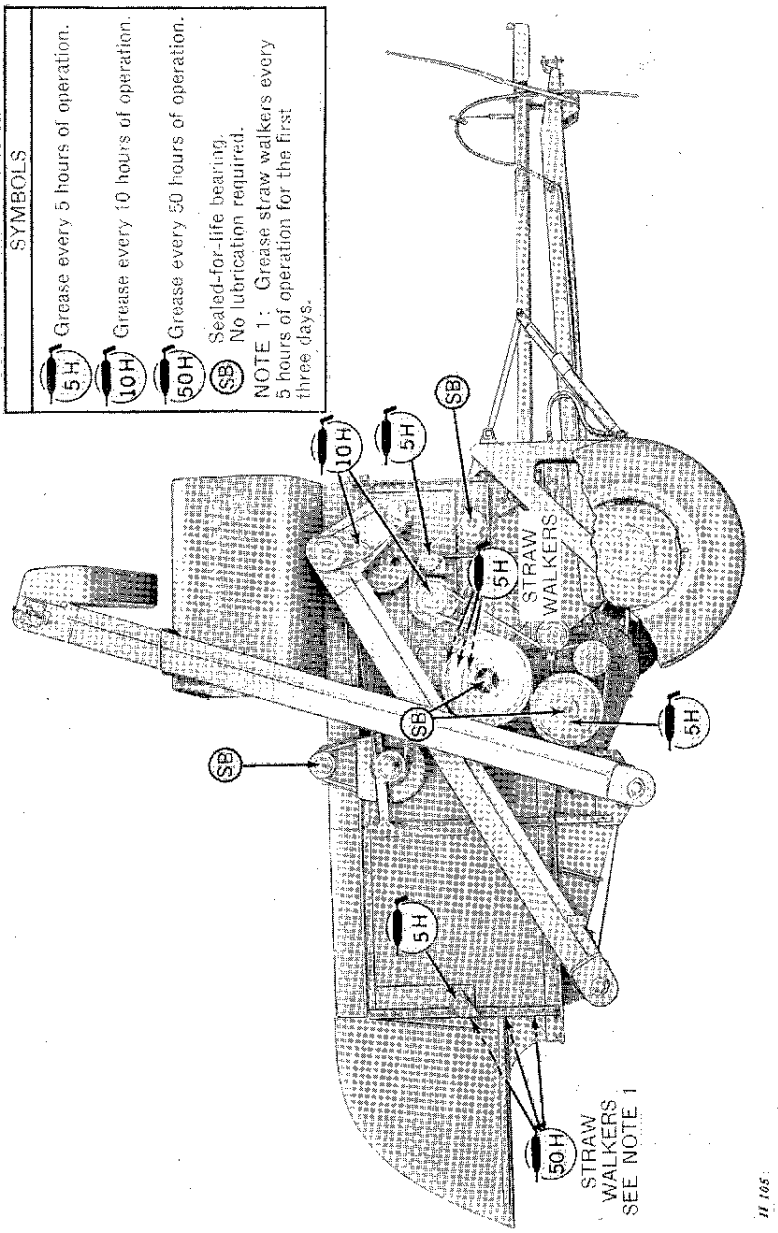
## EVERY 5 OR 10 HOURS OF OPERATION
## PTO-DRIVEN COMBINE



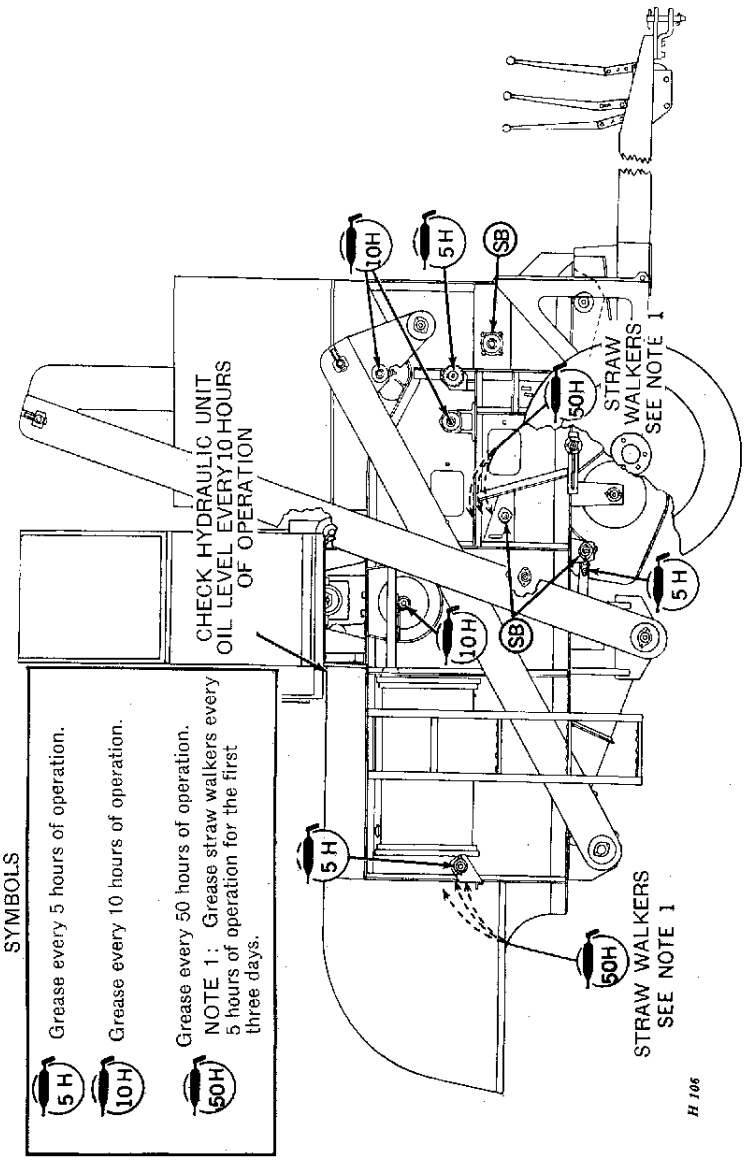
## EVERY 5 OR 10 HOURS OF OPERATION
## ENGINE-DRIVEN COMBINE



## EVERY 5, 10, OR 50 HOURS OF OPERATION PTO-DRIVEN COMBINE



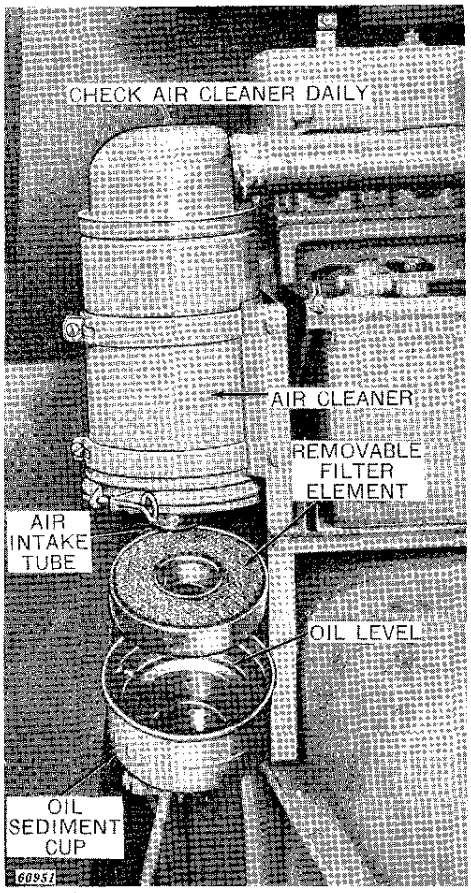
## EVERY 5, 10, OR 50 HOURS OF OPERATION ENGINE-DRIVEN COMBINE



## EVERY 10 HOURS OF OPERATION

### AIR CLEANER (Engine-Driven Combine Only).

Air cleaner requires attention every day of combine operation. **IMPORTANT: When operating under extremely dusty, sandy conditions or in crops that are heavy with rust, fuzz, or dirt, service cleaner twice a day, or more often, if necessary.**




### SERVICING AIR CLEANER.

Remove oil sediment cup from lower part of air cleaner; remove removable filter element from cup, then pour out oil and sediment. Wash sediment cup and filter element in a safe cleaning solvent. Refill cup with new oil to oil level mark. Use an oil of same viscosity as used in crankcase, except in extreme dusty conditions—then use only SAE 10W oil. **CAUTION: If oil is above oil level mark on cup, it will be drawn from air cleaner through carburetor up into engine.**

When servicing air cleaner, check connecting hose from air cleaner to carburetor. Connections should be air tight at all times, with hose placed as far onto horns of carburetor and cleaner as possible. Tight connections will permit engine to use washed air through air cleaner instead of dirty air through leaks in hose connections.

The air intake tube (running through center of air cleaner) should be swabbed out at regular intervals to allow sufficient air to pass into the air cleaner.

To swab out the air intake tube, remove oil cup from bottom of cleaner, and the cap from the top of the tube. Then swab out tube with a clean cloth wrapped around a stick. At the same time, clean inside of air cleaner cap with cleaning solvent.

At the end of operating season, remove entire air cleaner from combine so all parts may be washed in a safe cleaning solvent. This will remove any dirt which may be clinging to oily surfaces of the interior of air cleaner.

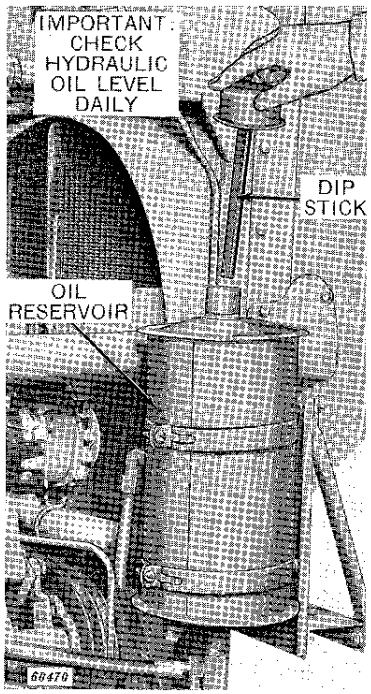
**CAUTION: Do not remove cleaning element from air cleaner. Do not attempt to dry air cleaner with an air hose. The blast will compact the filtering material.**

## EVERY 10 HOURS OF OPERATION

### HYDRAULIC UNIT OIL LEVEL (Engine-Driven Combine Only).

*NOTE: Be certain the cutting platform has been lowered to the ground before checking the oil level.*

Oil level should be up to "Full" mark on dip stick attached to reservoir breather cap. Add clean oil as necessary, of the same viscosity as used in the engine crankcase.



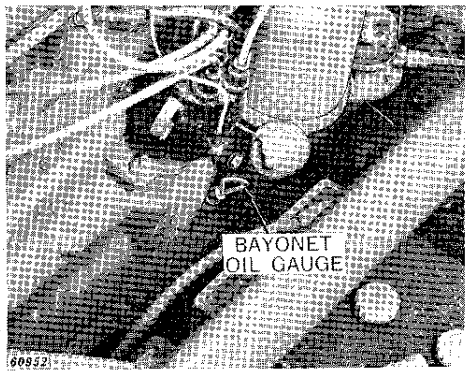

*Hydraulic Unit Reservoir and Dip Stick*

### CRANKCASE OIL LEVEL (Engine-Driven Combine Only).

A bayonet gauge for checking the quantity of oil in the crankcase is provided on the lower right-hand side of the engine. It is not necessary to add oil until crankcase oil level is down to "Add One Qt." mark on bayonet gauge. Do not operate engine with oil level below the "Add One Qt." mark.

Check oil level daily, immediately after stopping engine. If oil is above "Full" mark on bayonet oil gauge, drain to level of drain cock in oil pan.

If oil level is checked after the engine has been stopped for a period of time the oil level will indicate a reading of one quart higher than the actual operating oil level because the quart of oil necessary for the oil filter will have drained back into the crankcase.




*Bayonet Oil Gauge*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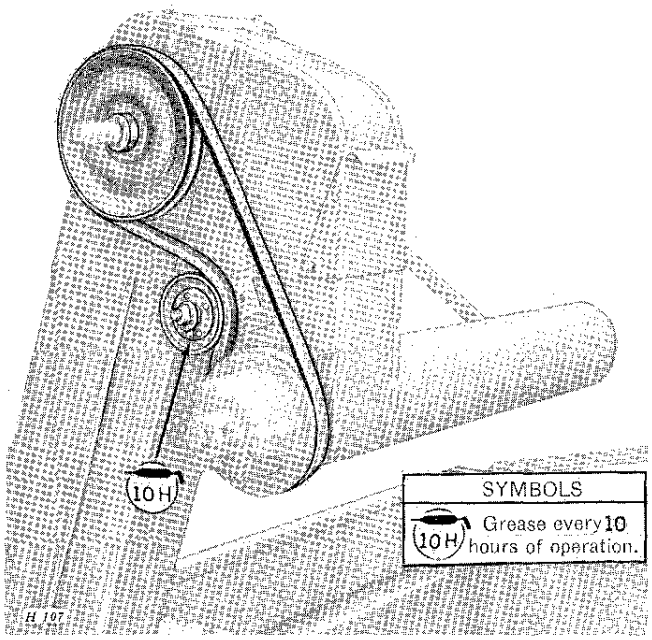
# EVERY 10 HOURS OF OPERATION

## Grain Tank Loading Auger
(Optional Equipment)




# STRAW SPREADER

(Special Equipment)