Operators and Safety Manual

Model
644B

10709799
May 1997

ANSI

ISO9001

JLG

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CONTENTS

Section **Page No.**

INTRODUCTION ii

SAFETY 1

INSTRUMENTS AND CONTROLS 8

BEFORE OPERATING THE MACHINE 19

GENERAL OPERATING PROCEDURES 21

FLUID AND LUBRICANT SPECIFICATIONS 26

SERVICE/LUBRICATION SCHEDULE 28

SAMPLE LOAD CHART 32

SAFETY ALERT SYMBOL



This Safety Alert Symbol means:

ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!

When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

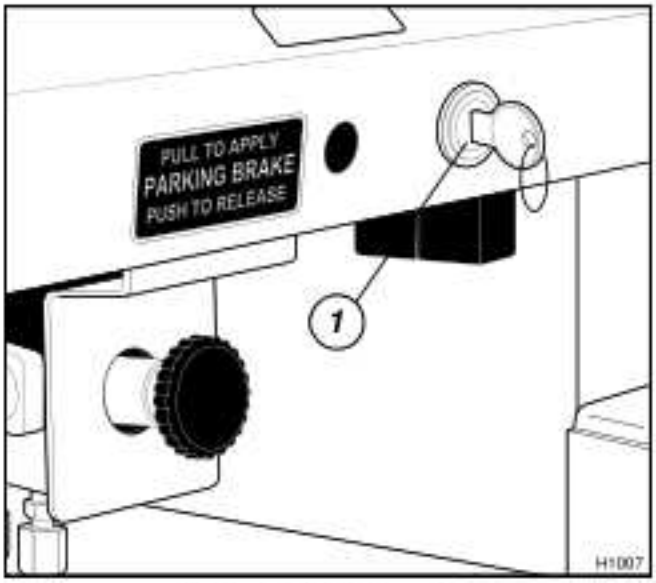
Three Reasons Why Safety is Important to You:

1. Accidents disable and kill.
2. Accidents cost.
3. Accidents can be avoided.

W1027

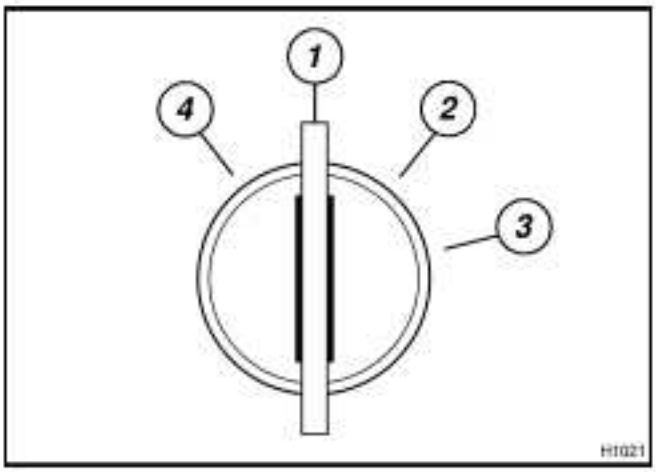
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IGNITION SWITCH



Ignition Switch Location

The ignition switch *(1)* is located on the dash, near the right side.



Ignition Switch Positions

The ignition switch has four positions:

(1) **OFF**: The key may be removed or inserted only at this position. The engine and all electrical circuits except the horn circuit are shut down at this position.

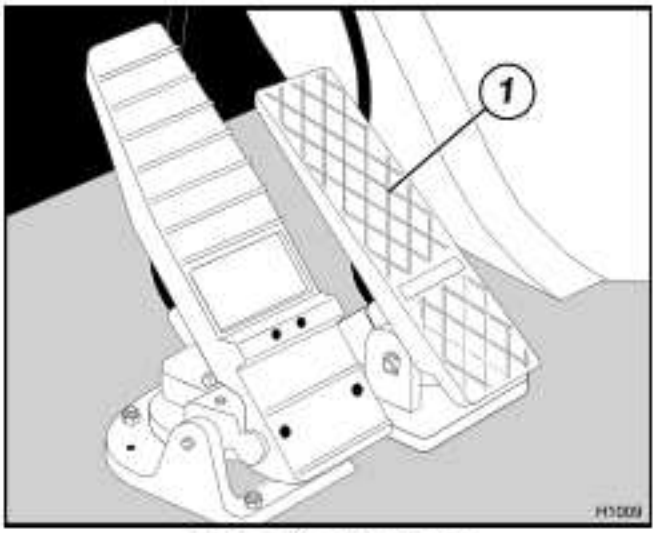
(2) **ON**: All electrical circuits except the engine starter circuit are operational.

(3) **START**: Activates the engine starter. When the key is released the switch will return to the ON position and remain there.

(4) This position is reserved for future use and currently has no function.

Note: *The starter will not engage unless the shift selector is placed in the NEUTRAL position.*

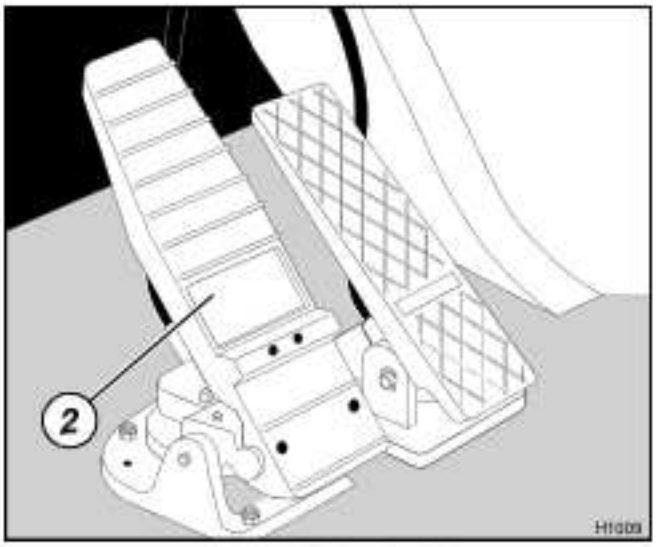
THROTTLE



Engine Throttle Pedal

Push throttle pedal *(1)* down to increase engine speed.

BRAKE PEDAL



Service Brake Pedal

Push brake pedal *(2)* down to slow or stop machine.

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FLUID & LUBRICANT SPECIFICATIONS

GENERAL FLUID AND LUBRICANT SPECIFICATIONS

General Fluid & Lubricant Specifications

System or Component	Fluid or Lubricant	Specification
Fuel System[1]	See "Fuel Requirements"	
Hydraulic System	Heavy Duty Hydraulic Fluid	Amoco Rykon MV or equiv.
Engine Cooling System[1]	Ethylene Glycol/ Pure Water Mix with additives.	Low silicate Ethylene Glycol ASTM D5345 ASTM D4985
Engine Oil[1]	See "Engine Oil Specifications"	
Transmission	See "Transmission Oil Specifications"	
Differential (Front & Rear)	Gear Lubricant	SAE 90 API GL-5
Planetary Hub	Use 58 oz. SAE 90 API GL-5 and 4 oz. Friction Modifier, LULL ® P26720	
Grease Points	Grease	Lithium-based

1. Consult engine manufacturer's Operator's Manual for additional information.

ENGINE OIL SPECIFICATIONS

John Deere Engines

Use the table below to select the oil viscosity based on expected air temperature range during the period between oil changes. Consult the John Deere Operator's Manual for additional information.

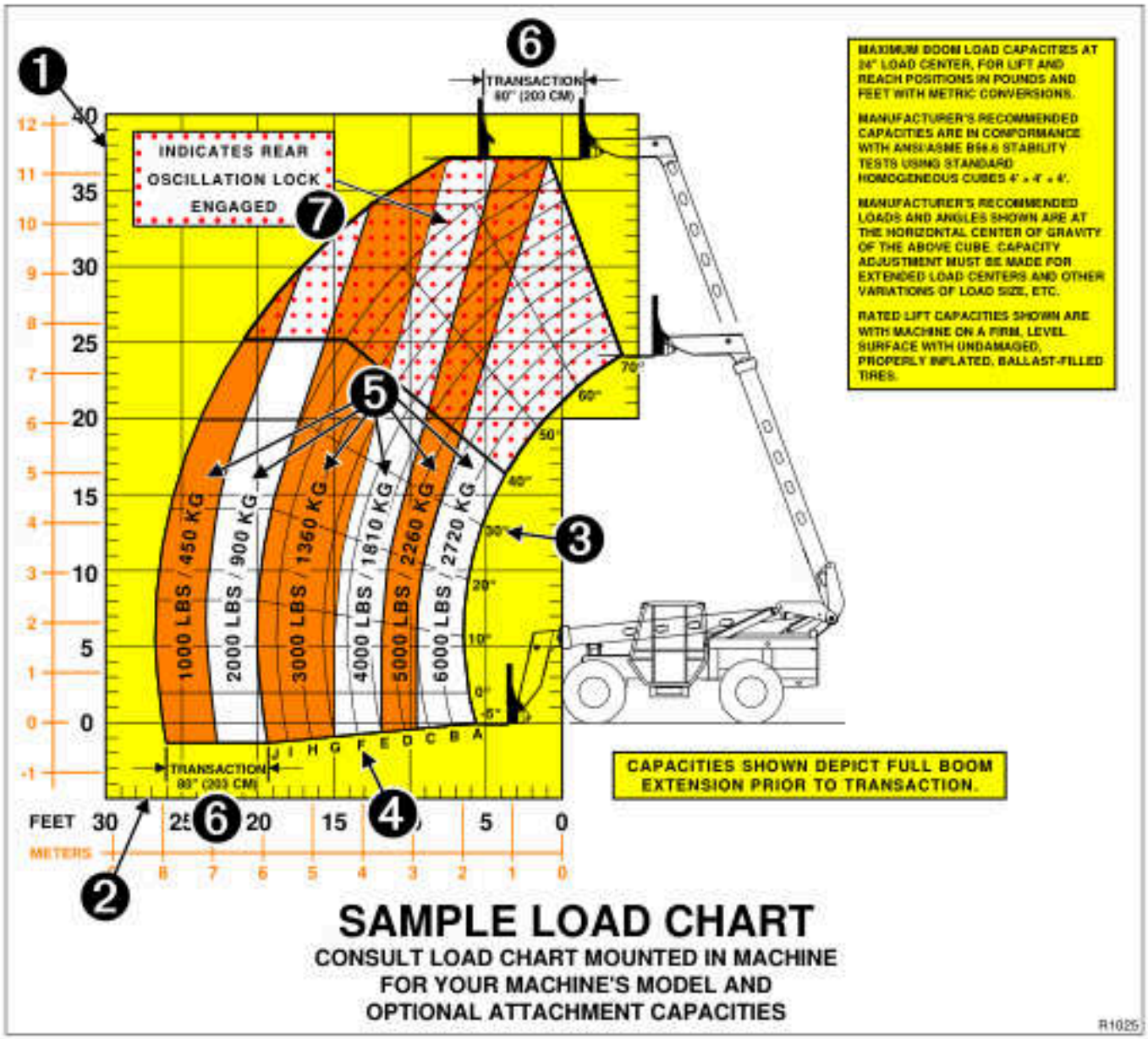
Note: *New John Deere engines use special break-in oil for the initial period of operation. Consult engine Operator's Manual for additional information.*

Engine Oil Selection Chart, John Deere

Engine Oil, John Deere		
Oil Grade	**Temperature Range ° F**	**Temperature Range ° C**
SAE 5W-30	-22 to +86 °F	-30 to + 30 °C
SAE 10W-30	-4 to +86 °F	-20 to +30 °C
SAE 15W-40	+5 to 122 °F	-15 to 50 °C
SAE 30W	+32 to +86 °F	0 to +30 °C
SAE 40W	+50 to +104 °F	+10 to +40 °C
Arctic Oil (e.g. MIL-L-46167B)	Below -22 °F	Below -30 °C
Approved Engine Oil Specifications		
API CD/ CE CCMC Specification D4, D5 SAE 5W-30 SAE 10W-30 SAE 15W-40 SAE 30W SAE 40W MIL-L-46167B		

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SAMPLE LOAD CHART



❶ VERTICAL SCALE SHOWS DISTANCE ABOVE AND BELOW GROUND LEVEL.

❷ HORIZONTAL SCALE SHOWS DISTANCE FROM FRONT WHEELS.

❸ BOOM ANGLE SCALE REPRESENTS THE BOOM ANGLE RELATIVE TO LEVEL GROUND.

❹ LETTERED ARCS SHOW THE AMOUNT OF BOOM EXTENSION AND THE ROTATION OF THE BOOM AT THESE EXTENSIONS.

❺ LOAD AREAS SHOW MAXIMUM RATED LOAD CAPACITIES.
EACH AREA DEFINES THE CAPACITY THAT MAY BE LIFTED AND PLACED.
FOR EASE OF READING, HEAVY LINES AND DIFFERENT COLORS SEPARATE THESE AREAS.

❻ TRANSACTION AREA SHOWS THE ADDITIONAL 80 INCH AREA THAT MAY BE REACHED BY MOVING THE TRANSFER CARRIAGE WITH A FULLY EXTENDED BOOM. (Models 644B, 844C, and 1044C only.)

❼ THE AREA FILLED WITH RED DOTS SHOWS WHERE THE REAR AXLE IS LOCKED AND FRAME TILT AND DRIVE ARE DISABLED. See "Rear Oscillation Lock System" on page 22.

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