2066
2076
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Including
2076 (EU)
2086 (EU)
Skid-Steer Loaders

Operator's Manual

#917083/GP0408

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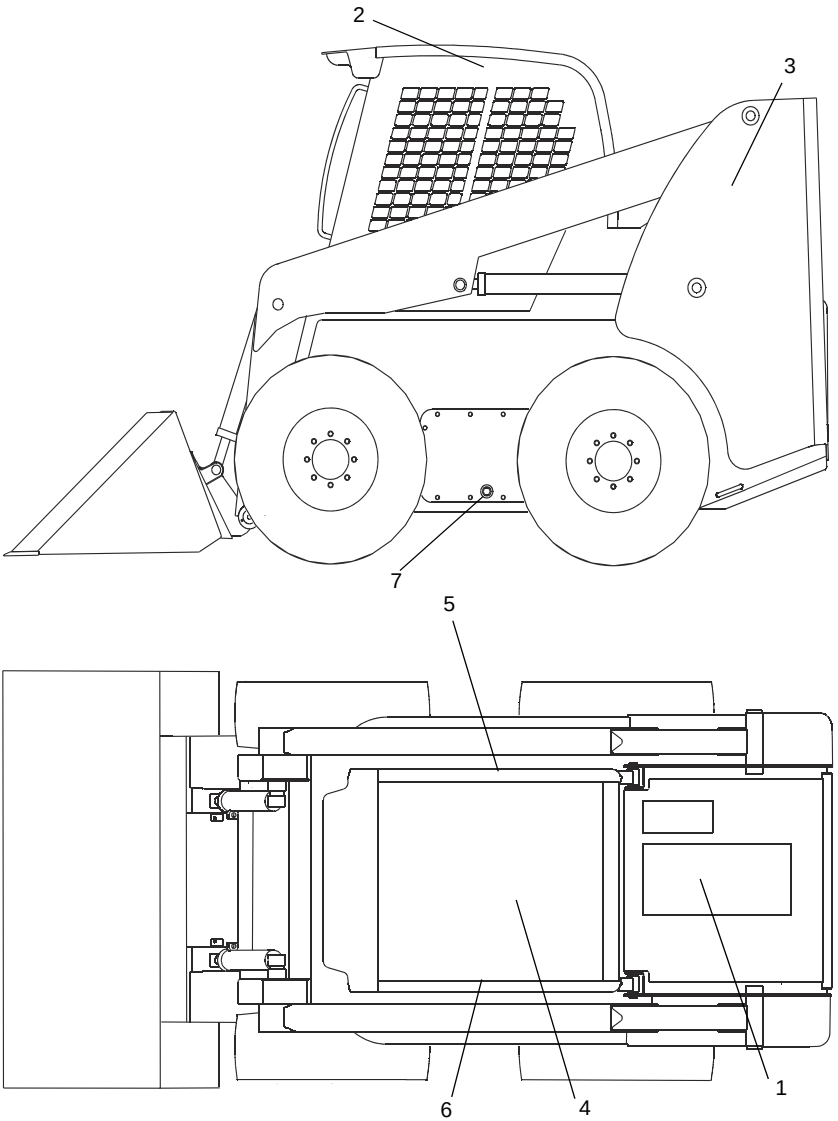
During Operation

- Machine stability is affected by: the load being carried, the height of the load, machine speed, abrupt control movements and driving over uneven terrain. **DISREGARDING ANY OF THESE FACTORS CAN CAUSE THE LOADER TO TIP, THROWING THE OPERATOR OUT OF THE SEAT OR LOADER, RESULTING IN DEATH OR SERIOUS INJURY.** Therefore: ALWAYS operate with the seatbelt fastened and the restraint bar lowered. Do not exceed the machine's Rated Operating Load. Carry the load low. Move the controls smoothly and gradually, and operate at speeds appropriate for the conditions.
- When operating on inclines or ramps, always travel with the heavier end of the loader toward the top of the incline for additional stability.
- Do not raise or drop a loaded bucket or fork suddenly. Abrupt movements under load can cause serious instability.
- Never activate the float function with the bucket or attachment loaded or raised, because this will cause the lift arm to lower rapidly.
- Do not drive too close to an excavation or ditch; be sure that the surrounding ground has adequate strength to support the weight of the loader and the load.
- Never carry riders. Do not allow others to ride on the machine or attachments, because they could fall or cause an accident.
- Always look to the rear before backing up the skid-steer loader.
- Operate the controls only from the operator's seat.
- Always keep hands and feet inside the operator's compartment while operating the machine.
- New operators must operate the loader in an open area away from bystanders. Practice with the controls until the loader can be operated safely and efficiently.
- Always wear safety goggles and head protection while operating the machine. Operator must wear protective clothing when appropriate.
- Exhaust fumes can kill. Do not operate this machine in an enclosed area unless there is adequate ventilation.
- When you park the machine and before you leave the seat, check the restraint bar for proper operation. The restraint bar, when raised, deactivates the lift/tilt controls and auxiliary hydraulics, and applies the parking brake.

Maintenance

- Never attempt to by-pass the keyswitch to start the engine. Use only the jump-starting procedure detailed in the *Operation* chapter of this manual.
- Never use your hands to search for hydraulic fluid leaks. Instead, use a piece of paper or cardboard. Escaping fluid under pressure can be invisible and can penetrate the skin and cause serious injury. If any fluid is injected into your skin, see a doctor at once. Injected fluid must be surgically removed by a doctor or gangrene may result.

Product and Component Plate Locations



Product and Component Plates

1. Engine plate: with e.g. type designation, product- and serial number
2. Operator protection system plate: with e.g. model, certification and operator protection system serial number
3. Product plate: with Product Identification Number and e.g. model/type designation
4. Seat plate according to ISO 7096
5. Component, plate right drive motor: with e.g. product- and serial number
6. Component, plate left drive motor: with e.g. product- and serial number
7. Component, hydrostatic transmission: with e.g. product- and serial number

Right Panel

1. **Hourmeter** – Displays the total operating hours of the loader.
2. **Fuel Level Gauge** – Displays the amount of fuel in the tank.
3. **Engine Oil Temperature Gauge** – Displays the temperature of the engine oil.
4. **Engine Coolant Temperature** – Lights if the engine oil is too hot this warns the operator to stop the engine and determine and correct the cause for the high temperature. During normal operation this indicator should be OFF.
5. **Hydraulic Oil Temperature** – Lights if the hydraulic oil is too hot. This warns the operator to reduce the hydraulic load and determine the cause of the high temperature. During normal operation this indicator should be OFF.
6. **Light Switch** – Controls all the lights on the loader. Symbols denote the four positions of the light switch. In a clockwise direction these are:
   - Off
   - Tail Lights
   - Front Work Lights with Tail Lights
   - both Front and Rear Work Lights

   For the lights to function, the keyswitch must be in the RUN position.
7. **Keyswitch** – In a clockwise rotation, these positions are:
   - **OFF Position** – With the key vertical, power from the battery is disconnected from the controls and instrument panel electrical circuits. This is the only position the key can be inserted or removed from the keyswitch.

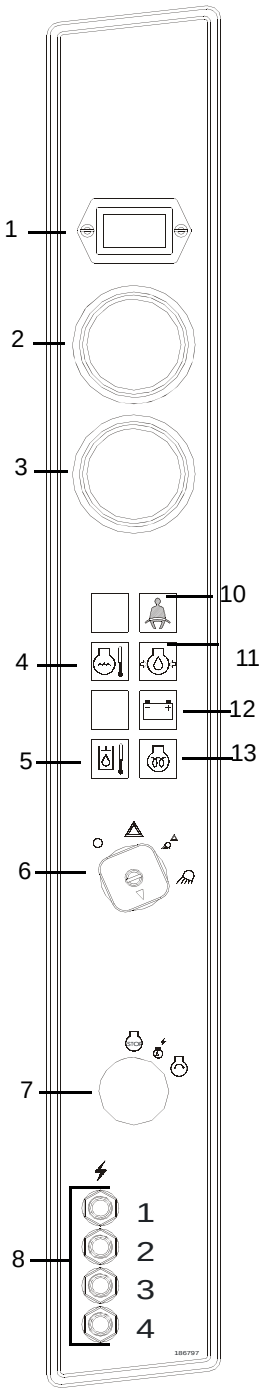


Figure 10 Right Panel

Auxiliary Hydraulic Controls

Auxiliary hydraulics are used with attachments that have a mechanism requiring its own hydraulic power.

Important: *Always be sure the auxiliary hydraulic control is in neutral before starting the loader or disconnecting the auxiliary hydraulic couplers.*

Standard-Flow Auxiliary Hydraulic Control

Loaders are shipped from the factory with a standard-flow auxiliary hydraulic system with flat-face couplers. The couplers are located under the lift arm on the left side.

Note: *A second set of hydraulic couplers can be added to the front of the lift arm by ordering a field installation kit.*

T-Bar, Dual Hand and T-Bar/Joystick Control Loaders: A foot pedal is used to control the direction of oil flow. A latch is provided to lock the foot pedal for continuous operation (Figure 16).

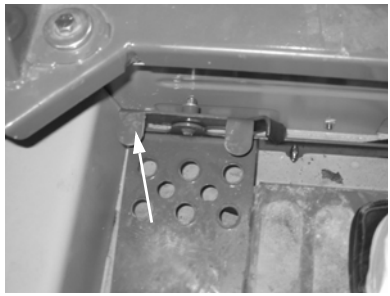


Figure 16 T-Bar, Dual Hand & T-Bar/Joystick Auxiliary Hydraulic Control

T-Bar/Joystick Control Loaders equipped with Electric Auxiliary: The yellow button located on the joystick controls the direction of the flow. The farther the switch is moved from the center, the faster the flow in the auxiliary circuit. The direction of the flow is reversed when the switch is moved in the opposite direction from the center. For continuous operation, move the switch fully in either direction and press the red button, located on the front of the grip, and release. To cancel continuous operation, press the red button or move the yellow switch in either direction.

Figure 17 T-Bar/Joystick Electric Auxiliary Control

Hand/Foot Control Loaders: The right handle controls the direction of oil flow. A locking pin locks it in the up position for continuous operation (Figure 18).

Figure 18 Hand/Foot Auxiliary Control

Observe all local regulations governing the loading and transporting of equipment (Reference U.S. Federal Motor Carrier Safety Regulations, Section 392.9). Ensure that the hauling vehicle meets all safety requirements before loading the skid-steer loader.

1. Place blocks at the front and rear of the hauling vehicle's tires.
2. If the loader has an attachment, lift it slightly off the ground.
3. Back the loader slowly and carefully up the ramp onto the vehicle.
4. Lower the loader attachment to the vehicle deck, turn off the engine and remove the key.
5. Fasten the loader to the hauling vehicle at the points indicated by the tie-down decals (Figure 27 and Figure 28).
6. Measure the clearance height of the loader and hauling vehicle. Post the clearance height in the cab of the vehicle.

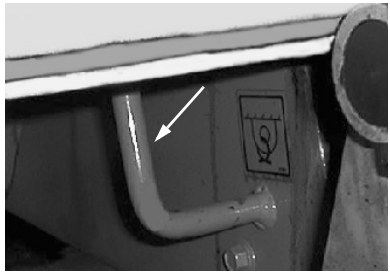


Figure 27 Front Tie-Down

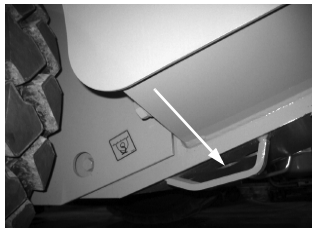


Figure 28 Rear Tie-Down

Drive Chains

Drive chains are located in the chaincase on each side of the machine. Refer to the *Maintenance Interval Chart* (page 77) for tension check interval.

Checking Chain Tension

1. Raise the loader following the *Loader Raising Procedure* (page 50).
2. Rotate each tire by hand. The proper amount of chain defection should be 1/8 in. to 1 in. (3 to 25 mm) forward and rearward. If the chain defection is more than 1 in. (25 mm) or less than 1/8 in. (3 mm) in either direction, the chains should be adjusted.

Adjusting Chain Tension

1. Raise the loader following the *Loader Raising Procedure* (page 50).
2. Remove the tire from the axle to be adjusted.
3. Loosen (but **DO NOT** remove) the bolts holding the axle to the chaincase.
4. **Front Chain Tension** – To tighten the front chain, move the front axle assembly toward the front of the loader. To loosen the chain, move the front axle assembly toward the rear of the loader.

   Rear Chain Tension – To tighten the rear chain, move the rear axle assembly rearward. To loosen the chain, move the rear axle assembly toward the front of the loader.
5. After proper tension is achieved, retighten the bolts.

Important: *Be careful not to over-tighten the drive chains. Over-tightening will cause premature drive chain and axle sprocket wear.*

6. Reinstall the tire.
7. Repeat Steps 2 through 6 for any other axle requiring adjustment.
8. Lower the loader following the *Loader Lowering Procedure* (page 51).

Engine Air Cleaner

Important: *Failure to follow proper filter servicing instructions could result in catastrophic engine damage.*

The air cleaner assembly consists of an outer (primary) filter element and an inner (secondary) filter element. An air filter restriction indicator for monitoring the condition of the elements is located on the front of the air cleaner. If the air filter becomes restricted, this indicator turns red to warn the operator that the air cleaner requires service. Push the reset button located at the end of the indicator after fitting a clean element. For replacement elements, refer to the *Replacement Parts* chart (page 50).

Note: *Before replacing the filter element(s), push the reset button on the indicator. Start the engine and adjust the throttle to full speed. If the indicator does not turn red, do* ***not*** *replace the element(s).*

TROUBLESHOOTING

Electrical System

Problem	Possible Cause	Remedy
Entire electrical system does not function.	Battery disconnect switch is OFF position.	Turn battery disconnect switch to ON.
	Circuit breakers on engine panel have tripped or malfunctioned.	Check circuit and locate problem causing breaker to trip (breaker resets automatically).
	Main wiring harness connectors at rear of ROPS/ FOPS not properly plugged in.	Check main harness connectors.
	Battery terminals or cables loose or corroded.	Clean battery terminals and cables and retighten them.
	Battery is faulty.	Test battery, replace as needed.
No instrument panel lamps with keyswitch turned to “ON”.	Circuit beaker #1 has tripped.	Check circuit, install new fuse.
	Battery terminals or cables are loose or corroded.	Clean battery terminals and cables and retighten them.
Fuel gauge does not work.	Faulty fuel gauge sender.	Replace fuel gauge sender.
	Faulty fuel gauge.	Replace fuel gauge.
	Loose wiring/terminal connections.	Verify wiring connections.
Engine temperature gauge does not work.	Faulty temperature sender.	Replace temperature sender.
	Faulty temperature gauge.	Replace temperature gauge.
	Loose wiring/terminal connections.	Verify wiring connections.
Hourmeter does not work.	Loose wiring/terminal connections.	Verify wiring connections.
	Faulty alternator.	Repair alternator.
	Faulty Hourmeter.	Replace Hourmeter.

CHAPTER 7

MAINTENANCE

This *Maintenance Interval Chart* was developed to match the *Service* chapter of this manual. Detailed information on each service procedure may be found in the *Service* chapter. A *Maintenance Log* follows the chart for recording the maintenance performed. Recording the 10-hour (or daily) service intervals would be impractical and is therefore not recommended.

Important: *Under severe operating conditions, more frequent service than the recommended intervals may be required. You must decide, based on your use, if your operation requires more frequent service.*

Service Procedure	Maximum Interval		
	10 Hours (or Daily)	250 Hours	500 Hours (or Annually)
Foreign Material Removal (page 53)	l		
Check Engine Air Cleaner Restriction Indicator (page 57)	l		
Check Engine Oil Level (page 61)	l		
Check Hydraulic Oil Level (page 62)	l		
Check Tire Pressures (page 65)	l		
Grease Lift Arm, Hitch, Cylinder Pivots and Latch Pins (page 53)	l		
Check Bucket Cutting Edge (page 63)	l		
Test Safety Interlock System (page 20)	l		
Check Coolant Level (page 64)	l		
Clean Cooling System (page 64)	l		
Check Drive Chain Tension (page 57)		l	
Check Wheel Nuts Torque (page 63)	m	l	
Check All-Tach Pivot Torque (page 63)		l	
Check Oil Level in Chaincases (page 56)		l	
Check Alternator/Fan Belt Tensions (page 63)		l	
Change Engine Oil and Filter (page 61)	o	v	l
Change Hydraulic Oil Filter (page 62)	o		l
Check Battery (page 66)			l
Check Engine Mounting Hardware (page 61)			l
Change Fuel Filters (page 61)			l
Change Hydraulic Oil (page 63)			u
Change Chaincase Oil (page 56)	o		u

m Perform the initial procedure at 2 hours then at “l” intervals.

o Perform the initial procedure at 50 hours then at “l” or “u” intervals.

v Severe operating conditions.

u Perform the procedure at 1000 hours.

Pallet Forks

15.75 in (400 mm) Forks with Backrest per EN474-3	492 lbs (223 kg)	1624 lbs (737 kg)	1913 lbs (868 kg)
19.68 in (500 mm) Forks with Backrest per EN474-3	492 lbs (223 kg)	1519 lbs (689 kg)	1807 lbs (820 kg)
24 in (670 mm) Forks with Backrest per SAE 1197	492 lbs (223 kg)	1441 lbs (654 kg)	1711 lbs (776 kg)