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MUSTANG SKID STEER LOADER

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OPERATOR'S MANUAL

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Mustang 960 Skid Steer Loader Operator Manual

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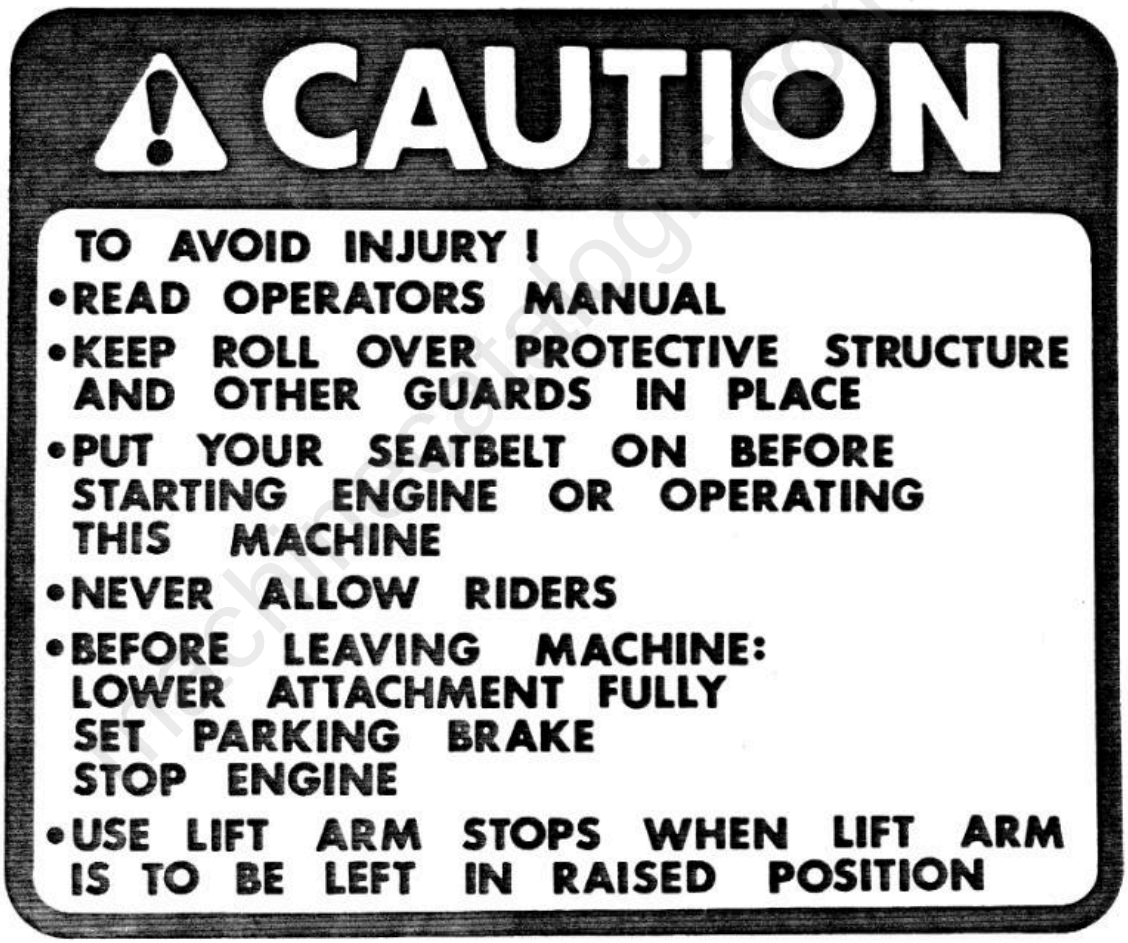
Sample pages follow. Full manual: machinecatalogic.com

SAFETY EQUIPMENT

It is the business philosophy of MUSTANG MANUFACTURING COMPANY, INC., to comply with all Federal, State, OSHA, American National Standards Institute, American Society of Agricultural Engineers, International Standards Organization, National Fire Protection Association and Society of Automotive Engineers Standards.

It is our sincere desire to manufacture safe products based upon the highest standards available for use by our customers. In the interest of our customers, we are bringing to your attention, safe practices that can prevent serious injury. It is our belief that trained operators can avoid painful experiences by carefully reading and adhering to the following facts.

Below is a copy of the decal on your machine. Also see other SAFETY RECOMMENDATIONS in this manual.



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A CAREFUL OPERATOR IS THE BEST INSURANCE AGAINST ACCIDENTS!

SAFETY RECOMMENDATIONS

AVOID ELECTRICAL HAZARDS – Never use wet, worn or frayed power cords. Don't use electrical equipment in wet areas. be sure all electric drills, drivers, wrenches, hoists, grinders and other power tools are correctly wired and properly grounded. Never touch bare wires without first making sure they are not carrying current. Always disconnect the battery before working on the electrical system. Remove the ground terminal first. When reconnecting the battery, install the ground terminal last. Never check the battery by placing a metal object across the posts. Serious burns can result. In case of electrical fire, use a foam fire extinguisher. **DEFECTIVE WIRING IS USUALLY A "SHOCKING" CONDITION.**



BE CAREFUL WITH FLUIDS UNDER PRESSURE. Cooling system pressure builds up as the engine gets hot. The hydraulic system is under pressure whenever the engine is running and may hold residual pressure even after shutdown. Before working on any pressurized system, relieve all operating and residual pressures. To relieve cooling system pressures, shut down the engine, permit it to cool, Cover the radiator cap with a cloth and open it slowly. To relieve pressure in the hydraulic system, cycle all steering and other controls after shutdown. **CAUTION:** Hydraulic systems are highly pressurized and must be approached with great care. Hydraulic pressure can drive hydraulic fluid through the skin. Check for leaks in the hydraulic system with a piece of wood or scrap of cardboard and not your bare hands. If a pinhole leak injects into your body, see a physician immediately. **IF YOU ARE CARELESS WITH HYDRAULIC SYSTEMS, EVEN A "LITTLE SQUIRT" CAN PUT YOU IN THE HOSPITAL.**



WRONG

SERVICING BRAKES – Follow instructions found in your operator's manual when servicing and adjusting brakes. Use tools, techniques and replacement parts recommended by MUSTANG MANUFACTURING COMPANY, INC. Improperly adjusteD brakes can cause a serious accident. **IF YOU CAN'T STOP - DON'T START!**

DON'T TAKE CHANCES – Use the correct tools. Make sure wrenches and drivers are properly sized and fitted. Don't use broken, damaged or badly worn parts. Don't change sealed relief valve settings. Do not reset an adjustable relief valve for a pressure higher than recommended. Replace all filters and screens. **USING A BIGGER HAMMER DOES NOT ALWAYS MEAN YOU WILL BE ABLE TO DO MORE WORK.**

DON'T TAKE CHANCES – Tighten all bolts, fittings and connections to torque values specified. Replace all guards, covers and shields. **Refill and charge pressure systems only with MUSTANG MANUFACTURING COMPANY, INC., approved fluids.** Check your work, clean up and recheck engine oil, coolant, hydraulic fluid and all other service points before restarting the engine. **DO IT SAFELY – DO IT RIGHT.**

ONE FINAL WORD – It is impossible to cover every hazardous situation you may encounter, within this manual.; but your knowledge of these safety precautions and your adherence to the basic rules of safety will help you build good judgement in all situations. OUr objective is to help develop good safety habits by you the operator. **REMEMBER – SAFETY IS YOUR BUSINESS AND YOUR RESPONSIBILITY. DO A GOOD JOB; HAVE A GOOD DAY: HAVE A SAFE DAY.**

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GENERAL INFORMATION



The 960 Mustang Skid Steer Loader is equipped with a diesel engine.

Power is transmitted to the hydrostatic transmission through a torsional damper drive. The pumps drive the geroller-type motors which are connected to the axles by means of a special 60 drive chain. the T-bar steering control actuates the right and left hand pumps to steer and propel the machine through an infinite range to 6.4 MPH (10.2 km/h).

Hydraulic power for the loader and auxiliary attachments is provided by a gear pump which is mounted in tandem with the hydrostatic transmission pumps. Auxiliary function is controlled by a hand lever. Lift and tilt are controlled by the left and right foot pedals. A special hydraulic self-leveling valve automatically keeps the bucket or attachment at the selected angle through the entire upward cycle of the lift arm. Auxiliary functions are controlled by a hand lever.

NOTE:
Lift and tilt pedals will not operate unless seat belt is properly fastened.

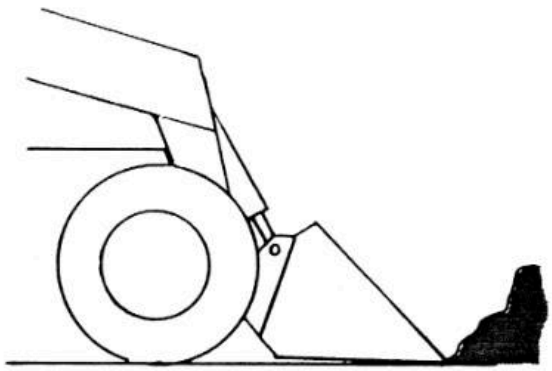
The hydrostatic transmission provides dynamic braking. The parking/emergency brake is of the wet multiple-disc type and actuated by a hand lever.

Among standard features are lights, auxiliary hydraulics, top and rear windows, custom padded interior and single-lock vandal protection.

There are over 20 attachments and kits available for this machine to make it useful in a broad spectrum of applications.

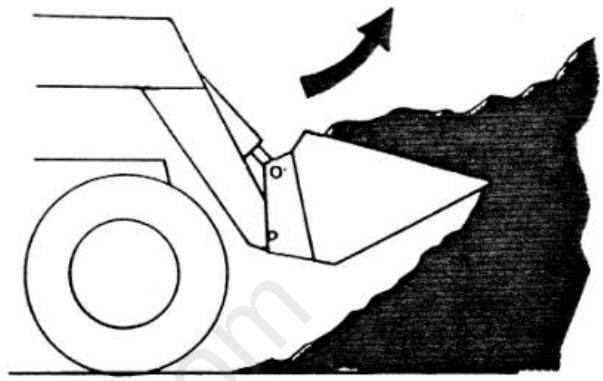
OPERATION

LOADING THE BUCKET



IMPORTANT: Keep the working area as level as possible.

1. Approach pile with bucket cutting edge on ground and lift arm all the way down.

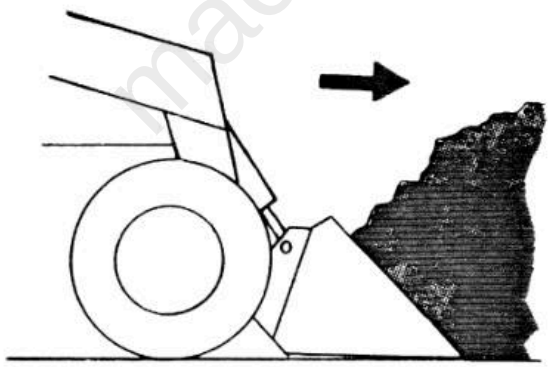


3. Continue driving forward, lifting boom and rolling bucket back to fill it.

NOTE: If bucket is rolled back too quickly, it will not fill completely. If hydraulic system stalls, release either lift or tilt function to allow hydraulic force to act upon one set of cylinders.

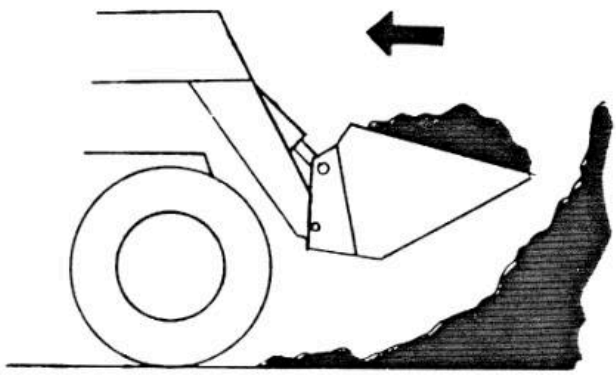


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2. Drive forward into pile to fill bucket.

NOTE: To achieve maximum power while loading, run engine at full throttle and ease machine into pile with light forward pressure on the T-lever. Entering the pile at full speed may kill the engine.



4. Back away from pile.

CAUTION! When backing up with a loaded bucket, keep load low and increase speed gradually. A sudden backward acceleration with a full bucket and boom raised can cause the loader to upset.

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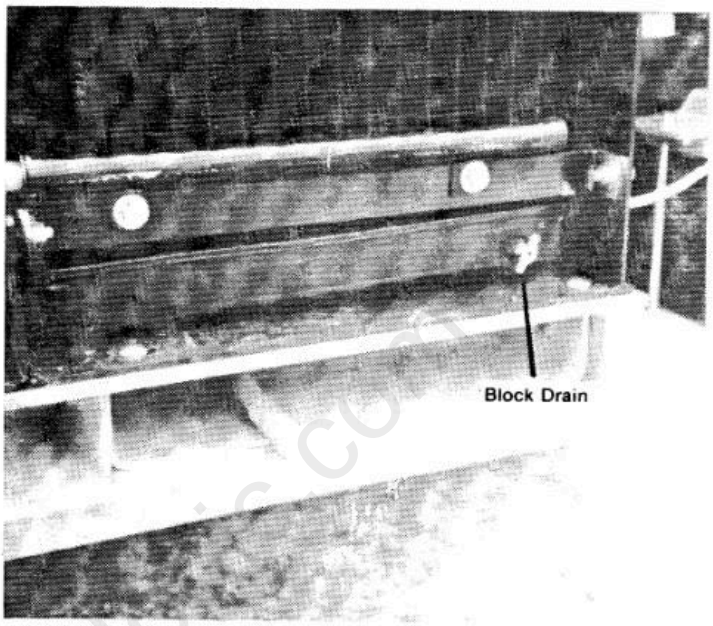
COOLING SYSTEM

The cooling system should be checked daily. Check coolant levels, condition of hoses and radiator fins.

Your loader has a pressurized cooling system with a coolant overflow/recovery tank. To check coolant level, clean dust from outside of overflow tank and observe fluid level in tank. With a cold engine, tank should be 1/2 full. With a warm engine, tank may be 2/3 - 3/4 full. Add coolant to overflow tank if level is low.

A 50% mixture of water and ethylene glycol anti-freeze is recommended for year round use in your machine.

If overflow tank is empty, coolant level in radiator must be checked.



CAUTION: Remove radiator fill cap only when coolant has cooled. Then, loosen cap slightly (to the stop) **to relieve pressure before removing the cap completely.**

Completely fill radiator with coolant (up to filler neck). Carefully check seal on filler cap for wear or cracking before installing. Replace cap if it cannot maintain pressure in radiator. Add coolant to overflow tank, stopping at half-full. Check gasket in cap for proper seating.

An empty overflow tank usually indicates a serious leak in the cooling system. Check all hoses and connections, including those in the overflow/recovery system, before putting the machine back in service.

To maintain the efficiency of the cooling system, clean thoroughly every 500 hours or once a year. Entire cooling system should be drained by opening the cylinder block drain cock.

Clean cooling system using a good quality radiator cleaning compound. Follow manufacturer's directions for cleaning. Then refill system with fresh mixture of 50% water and 50% antifreeze.



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ELECTRICAL SYSTEM

PRECAUTIONS FOR ELECTRICAL SYSTEM

When the battery is connected, observe the precautions listed here. Failure to observe them will probably result in damage to the system.

1. **Disconnect the negative ground cable when working on the electrical system.**

2. **Never attempt to polarize the alternator or regulator.**

3. **If either the alternator or regulator wiring is disconnected, be sure that it is properly connected BEFORE the battery is connected.**

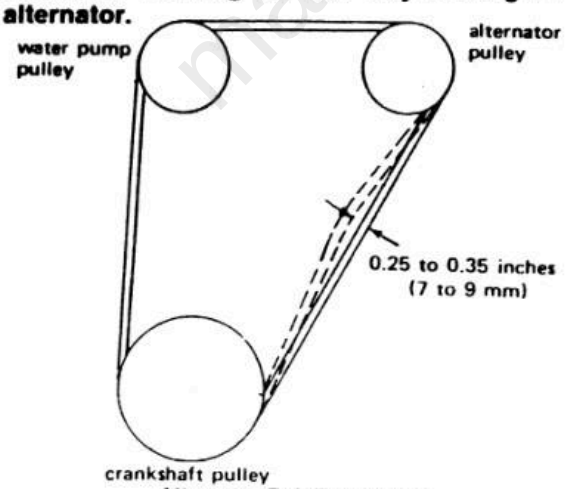
4. Always connect battery or a booster battery in the correct polarity. This is a negative grounded electrical system. Do not use a battery charger as a booster to start the engine.

5. Never disconnect the battery when the engine is running and the alternator is charging.

ADJUSTING ALTERNATOR BELT TENSION

With the alternator bracket and adjusting cap screw loose, force the alternator away from the engine until the belt has.25" - .35" flex at 20 lbs. force on one side of the belt between the alternator pulley and crankshaft pulley.

IMPORTANT: Do not pry on the rear half of the alternator housing as this may misalign the alternator.



Alternator Belt Tensioning

Inspect belts periodically. Replace worn, damaged belts.

Battery:

Your loader is equipped with a 12 volt, maintenance free battery. It should not be necessary to add water or to check on electrolyte level for the lifetime of the battery.

NOTE: This is a negative ground system.

Battery Precautions:

Disconnect negative ground cable before working on any part of the electrical system or engine.

Battery Care:

Keep battery top and terminals clean. If any corrosion is present around terminals, remove it and wash the terminals with a baking soda solution. Then flush outside of battery with clear water.

Keep battery fully charged in cold weather. Batteries with less than a full charge have a greater tendency to freeze than one on which a full charge is maintained.

Connecting Booster Batteries:

The first jumper cable should connect the positive (+) terminal of the booster battery to the positive (+) terminal of the loader battery. The second jumper cable should be first connected to the negative (-) terminal of the booster battery and then to some point on the engine block. It is important that the last connection be made away from the loader battery to avoid fire and explosion hazard caused by sparks.

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TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE	REMEDY
Engine overheats.	Low coolant level	Fill radiator and overflow tank with coolant to proper level, check hoses and connections for leaks
	Defective thermostat	Replace thermostat
	Dirty radiator core, or cooling fins	Blow radiator clean with compressed air (Brush dirt from cooling fins)
	Loose or defective alternator belt	Adjust belt tension or replace worn belt
	Defective temperature indicator light	Check water temperature with thermometer and replace light if defective
	Lack of lubrication	Check oil level in crankcase
	Defective radiator cap	Replace cap
	Light or diluted oil	Drain and fill with proper oil
Low engine oil pressure.	Low crankcase oil level	Check dipstick and add oil if necessary
	Wrong type of oil	Drain and fill with proper oil
	Plugged oil filter	Replace filter
High oil consumption.	Too low viscosity crankcase oil	Drain and refill with proper oil
	Worn piston rings	Replace rings
	Oil leaks	Check for leaks around gaskets and drain plugs
Battery will not hold a charge.	Alternator belt loose	Tighten or replace if worn
	Loose, broken or frayed wire	Check and replace
	Faulty battery	Test and replace if necessary
	Faulty alternator	Test and replace if necessary

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Full Version Available

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