

MUSTANG

1402RD/1502RD
1902RD/2202RD
CRAWLER EXCAVATOR

OPERATOR'S MANUAL

PART #000-49991

MUSTANG
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Mustang 1402RD, 1502RD, 1902RD and 2202RD Compact Excavator Operator Manual

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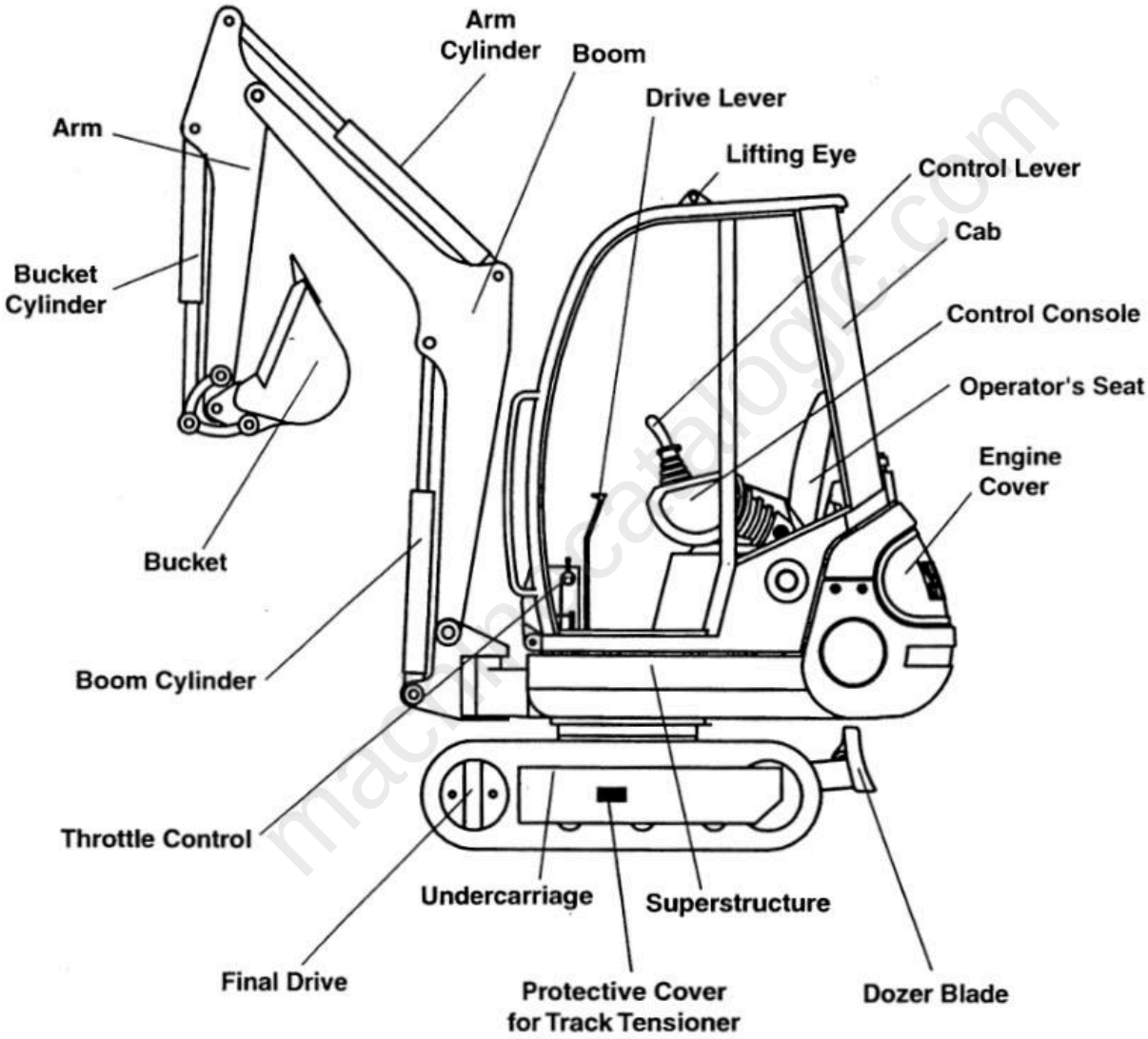
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Sample pages follow. Full manual: machinecatalogic.com

MACHINE IDENTIFICATION



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SAFETY INFORMATION

GENERAL SAFETY INFORMATION

Safety Symbols & Terminology

The MUSTANG Manufacturing Company, in cooperation with the Society of Automotive Engineers, has adopted this Safety Alert Symbol to pinpoint precautions which, if NOT properly followed, can create a safety hazard. This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! It stresses an attitude of "Heads Up For Safety" and can be found throughout this Operator's Manual and on the machine.

Before you operate this equipment, read and study the following safety information. In addition, make sure that every individual who operates or works with this equipment, whether family member or employee, is familiar with these safety precautions.

The MUSTANG Manufacturing Company always considers the operator's safety when designing its machinery, and guards exposed moving parts for the operator's protection. However, some areas cannot be guarded or shielded in order to assure proper operation.

T' llowing safety words and symbols are used throughout th. anual and on the machine to warn of dangerous situations.

⚠ DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. May also alert against unsafe practices.

Safety Reminders

- Some illustrations in this manual may show doors, guards and shields open or removed for illustrative purposes only. BE SURE all doors, guards and shields are in their proper operating positions BEFORE starting the engine to operate the machine.
- To ensure safe operation, replace damaged or worn-out parts with genuine MUSTANG service parts.
- Mustang units are designed and intended to be used ONLY with MUSTANG Manufacturing Company attachments or approved referral attachments. The MUSTANG Manufacturing Company cannot be responsible for operator safety if the unit is used with non-approved attachments.
- The terrain, engine speed, load carried, and abrupt control movements can affect machine stability. **If misused, any of the above factors can cause the machine to tip, throwing the operator forward or out of the unit, causing death of serious injury.** Therefore, ALWAYS wear the seatbelt when operating the equipment. Operate the controls smoothly and gradually at an appropriate engine speed which matches the operating conditions.
- For additional stability when operating on inclines or ramps, ALWAYS travel with the bucket and blade towards the top of the incline.
- DO NOT raise or lower a loaded bucket suddenly. Abrupt movements under load can cause serious instability.
- NEVER attempt to bypass the keyswitch to start the engine. Use only the jump-starting procedure detailed in the *Maintenance* section of this manual.
- NEVER use your hands to search for hydraulic fluid leaks; 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.
- Do not operate too close to an excavation or ditch. BE SURE that the surrounding ground has adequate strength to support the weight of the machine and the load.
- DO NOT smoke or have any spark producing equipment in the area while filling the fuel tank or while working on the fuel or hydraulic systems.

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Starting/Stopping the Engine (continued)

IMPORTANT: Indicator lamps must go out when engine starts. If they do not, turn off the engine IMMEDIATELY until cause has been determined and fixed.

COLD WEATHER STARTING PROCEDURE

1. Install an engine heater.
2. Be sure engine oil is correct type and viscosity for the ambient temperature.
3. Be sure battery is fully charged.
4. Push the throttle lever (Figure 3-9) fully forward.
5. Follow all steps under Normal Starting Procedure on previous page.
6. As the engine warms up and engine speed increases, move the throttle lever to the idling position.

NEW MACHINE BREAK-IN PROCEDURE

A new machine requires careful operation during the first 100 hours to properly break-in various parts. If the machine is subjected to hard use during the break-in period, the performance and service life will be reduced.

Perform the following when operating a new machine:

- After starting, let the engine idle for 5 minutes so all the components can warm-up.
- Avoid operation with heavy loads or at high speeds.
- Avoid sudden starting and stopping or abrupt motions.

Moving the Excavator

1. Set the travel speed using the 2-speed travel switch on the left drive lever (Figure 3-9). See *Specifications* for applicable model speeds.

NOTE: If the overdrive switch on the left drive lever is in the fast speed position, machine will not turn right or left. It will only go straight forward or rearward. Do not use fast speed when necessary to travel around a curve.

2. Push or pull the travel levers to move the machine.

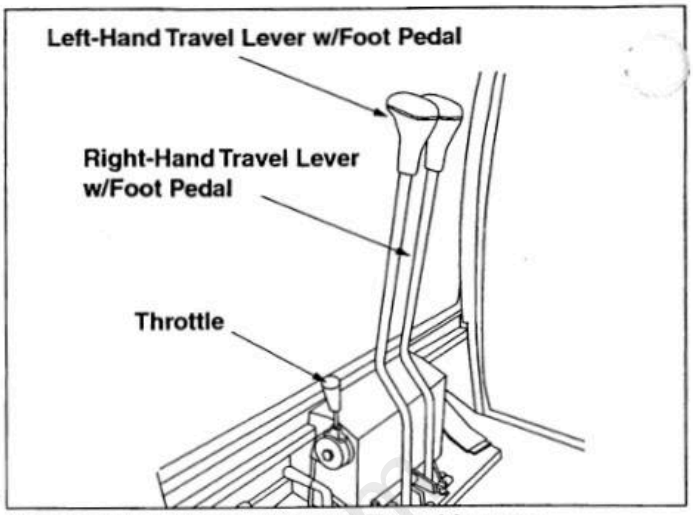


Figure 3-9. Throttle Lever & Travel Levers

Push both levers forward to move forward.

Pull both levers rearward to travel in reverse.

NOTE: If the superstructure has been rotated 180° (dozer blade at the rear), travel levers will work in the opposite manner. Pushing levers forward will cause the machine to travel in reverse and pulling levers to the rear will move the machine forward.

3. To turn left, pull the left-hand travel lever back and p the right-hand lever forward.

   To turn right, pull the right-hand lever back and push the left-hand lever forward.

4. To stop travelling, return levers to neutral (middle) position.

NOTE: When released, levers and controls return to the neutral position automatically.

Mandatory Safety Shutdown Procedure

Before leaving the machine:

1. Lower the working equipment to the ground and support it securely.
2. Reduce throttle and turn off the engine.
3. Lock out controls by raising left control console.
4. Remove the ignition key and take it with you.

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MAINTENANCE

GENERAL INFORMATION

⚠ WARNING

Instructions are necessary before operating and servicing the machine. Read and understand this entire manual. Follow warnings and instructions for operation and maintenance. Check for correct function after adjustments or maintenance. Failure to follow instructions can result in injury or death.

⚠ WARNING

Be sure you are familiar with all safety devices and controls before operating or servicing the machine. Know how to stop before starting. This MUSTANG Manufacturing Company machine is designed for use only with MUSTANG Company approved accessories or referral attachments. The MUSTANG Manufacturing Company cannot be responsible for operator safety if the unit is used with non-approved a' ıments.

⚠ WARNING

Read and thoroughly understand all safety decals before operating the machine. DO NOT operate the machine unless all factory installed guards and shields are in place.

⚠ CALIFORNIA PROPOSITION 65 WARNING

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

⚠ WARNING

Hydraulic reservoir is under pressure. Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate the skin or ·ves.

Care and Servicing

- Care and servicing have a significant influence on the readiness for operation and service life of the machine.
- For additional servicing work regarding the engine, see the engine manual provided with the machine.
- Use of lubricants which do not correspond to the manufacturer's recommendations may invalidate warranty claims.
- More frequent servicing, other than the recommended intervals, may be required under extreme operating conditions.
- Always dispose of waste lubricating oils and hydraulic fluids according to local regulations or take to a recycling center for proper disposal. DO NOT pour fluids onto the ground or down a drain.

Maintenance Safety

- **Never service the machine without reading the applicable instructions.**
- **Always lower bucket and dozer blade to the ground before performing any maintenance.**
- **Use correct procedures to lift and support the machine. Always lift the blade fully before installing jackstands.**
- **Cleaning and maintenance are required daily.**
- **Keep engine cover and valve cover closed except for service. Close and latch covers before operating the machine.**
- **Be sure to have area properly ventilated when grinding or welding parts. Wear dust mask.**
- **Vent exhaust to outside when engine must be run for service. Exhaust system must be tightly sealed. Exhaust fumes can kill without warning.**
- **Never modify equipment or add attachments not approved by Gehl Company.**
- **Stop engine and let cool, then clean engine of any flammable materials before checking fluid levels.**

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COOLANT SYSTEM

Checking Coolant Level

1. Raise the engine cover.
2. Check the coolant level in the expansion reservoir (Figure 4-7).
3. If low, slowly remove cap and fill reservoir to FULL line.

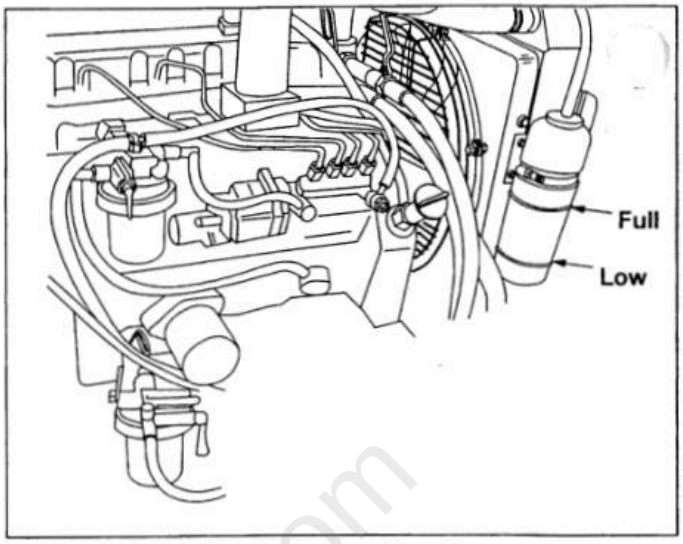


Figure 4-7. Checking Coolant Level

⚠ WARNING

Engine must be cold. Be careful to avoid burns when removing the cap. Keep face away from cap. Cover cap with a cloth, turn cap slowly to release pressure.

Refer to the engine manual for correct coolant mixture for your engine.

ELECTRICAL SYSTEM

Fuses

The fuse panel is located on the right console (Figure 4-8).

To replace a fuse, remove the panel cover and pull the old fuse from the socket. Install a new fuse and re-install the fuse panel cover.

Refer to page 3-3 in Section 3 for fuse identification.

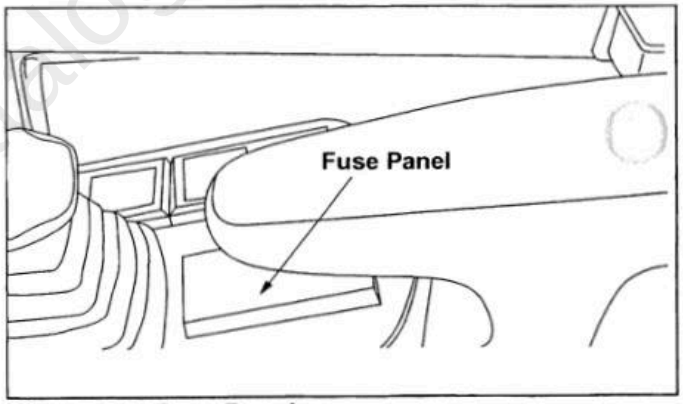


Figure 4-8. Fuse Panel

Battery

⚠ WARNING

Batteries contain acid which burns eyes and skin on contact. Wear safety goggles and protective clothing to keep acid off body.

In case of acid contact, wash immediately with water for several minutes. In case of eye contact, get medical attention immediately.

The battery is located under the engine cover. To access the battery, open the valve cover.

The battery cables must be clean and tight. Remove any acid or corrosion from the battery and cables using a sodium bicarbonate and water solution. Cover the battery terminals and cable ends with battery saver grease.

The battery is maintenance-free and requires no other service.

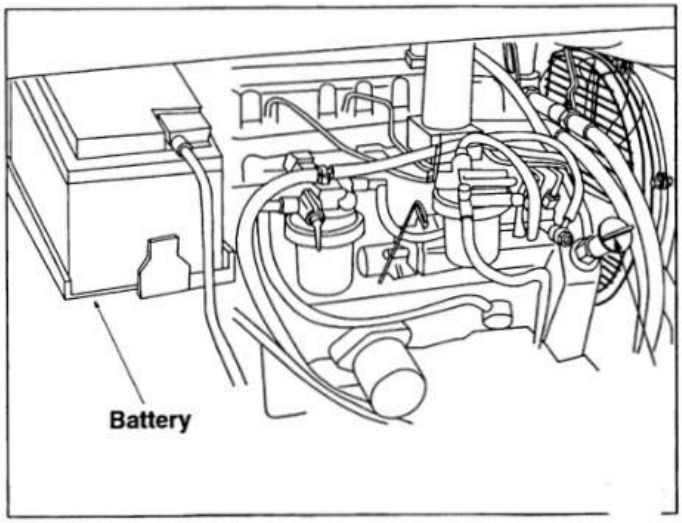


Figure 4-9. Battery

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Full Version Available

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Mustang 1402RD, 1502RD, 1902RD, 2202RD compact excavator operator manual: controls, safety, lubrication, maintenance schedule. Instant PDF download.

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