

## WARNING - BACKHOE SAFETY

Any piece of equipment can be dangerous if not operated properly. **YOU** are responsible for the safe operation of this equipment. The operator must carefully read and follow any warnings, safety signs and instructions provided with or located on the equipment. Do not remove, defeat, deface or render inoperable any of the safety devices or warnings on this equipment. **IF** any safety devices or warnings have been removed, defeated, defaced, or rendered inoperable, **DO NOT USE THIS EQUIPMENT!!!**

**⚠ WARNING:** Operating, servicing, and maintaining this equipment can expose you to chemicals including engine exhaust, carbon monoxide and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize your exposure, avoid breathing exhaust, do not idle the engine except as necessary, operate and service your equipment in a well-ventilated area and wear gloves or wash your hands frequently when servicing your equipment. For more information go to [www.P65warnings.ca.gov](http://www.P65warnings.ca.gov)

### WARNING!

- Never operate power equipment of any kind if you are tired or if you are under the influence of alcohol, drugs, medication, or any substance that could affect your ability or judgment. Be alert! If you get tired while operating this equipment, take a break. Tiredness may result in loss of control.
- Provide adequate ventilation when operating this equipment. Internal combustion engines consume oxygen and give off deadly carbon monoxide gas.
- **DANGER: This equipment has multiple pinch points that can cause dismemberment or death. Keep hands, feet and all other body parts clear at all times.**

**WARNING: 4-wheel drive can only be used in first and second gear, and never on asphalt or concrete surfaces. NEVER use 4 wheel drive on the pavement or in 3rd or 4th gear.**

*Always make sure to be at a complete stop, and have the throttle set at an idle before shifting between forward and reverse.*

### **This equipment is subject to Section 2449 (d)(3) California Code of Regulations**

(A) **Idling Limit** - No vehicle or engines subject to this regulation may idle for more than 5 consecutive minutes. Idling of a vehicle that is owned by a rental company is the responsibility of the renter or lessee, and the rental agreement should so indicate. The idling limit does not apply to:

1. idling when queuing,
2. idling to verify that the vehicle is in safe operating condition,
3. idling for testing, servicing, repairing or diagnostic purposes,
4. idling necessary to accomplish work for which the vehicle was designed (such as operating a crane),
5. idling required to bring the machine system to operating temperature, and
6. idling necessary to ensure safe operation of the vehicle.

**DANGER: Never operate this loader on hillsides or side slopes.**

**Warning: Hillside or side slope operation, misuse and overloading the bucket will cause this Loader to Rollover. The Equipment Protection Plan does not cover damage from Rollover or to Tires. Renter is responsible for tow and recovery services should the Loader become stuck or rolled over. A Tool Shed does not provide any tow or recovery services.**

**Warning metal conducts electricity. Do Not use this Tractor where it may come into contact with power lines or other electric circuits. Failure to comply to this warning will result in serious personal injury or death.**

**Keep appropriate distances from High Voltage lines. Never use the Tractor as a ground for welding.**

**Smart digging means calling 811 before each job. Whether you are a homeowner or a professional excavator, one call to 811 gets your underground utility lines marked for FREE!**

## **IMPORTANT SAFETY RULES TO FOLLOW**

As these machines vary in controls, etc., the operator must read the Operator's Manual for the unit you are renting before operating the rental machine. The following are some basic safety precautions for typical Loader/Backhoe Tractors, however the operator's manual Instructions and the insurance requirements, safety codes and local, state and federal laws rules and regulations are paramount, and this sheet isn't intended to replace them.

**Personal Protection:** Dress properly: Wearing hard hat, safety-toed shoes, safety glasses, etc. is required.

**Know the Equipment:** Read the Operator's Manual, check the machine over before starting, paying particular attention to the condition of the safety devices. If any aren't in good order, report the problem to you supervisor.

**Know the Work Area:** Check for underground cables, pipes, etc. Also, check for overhead power and telephone lines.

**Check Controls Before Working:** You must be sure everything is in good order as well as becoming certain as to the function of all controls.

### **General Safety Precautions:**

Most loader equipment accidents can be avoided by following simple safety precautions. These safety precautions, if followed at all times, will help you operate your loader safely.

- **Always wear the seat belt, eye protection, a hard hat and safety shoes when operating this tractor. Improper use of a loader can cause serious injury or death.**
- No riders allowed! Do not lift or carry anybody on the loader or in the bucket or attachment.
- Do not walk or work under a raised loader or bucket or attachment unless it is securely blocked or held in position.
- This machine is equipped with a Roll Over Protective Structure (ROPS), fasten seat belt prior to starting the engine.
- Operate the loader from the "Operators Seat" only.
- Be sure machine is level and not tilted when operating.
- Move and turn tractor at low speeds. Carry loader at a low position during transport.
- Avoid loose fill, rocks, soft edges, and deep holes: They can be dangerous for loader operation or movement.
- Be extra careful when working on inclines.
- Avoid overhead wires and/or obstacles when loader is raised.
- Allow for the loader length when making turns.
- Stop the loader gradually when lowering or lifting. Use caution when handling loose loads.
- Buckets must be lowered to ground level before leaving seat.
- Visually check for hydraulic leaks and broken, missing, or malfunctioning parts before using.
- Escaping hydraulic oil under pressure can have sufficient force to penetrate the skin, causing serious personal injury. If injured by escaping fluid, obtain medical treatment immediately.
- It is the loader renter's responsibility to be certain anyone operating the loader is aware of the safe way of operating the loader.

### **OPERATING INSTRUCTIONS:**

**Filling the Bucket:** Approach and enter the pile with a level bucket. Ease both levers back to lift and roll back the bucket. The lift and rollback of the bucket will increase efficiency because a level bucket throughout the lifting cycle resists bucket lift and increases breakaway effort.

**NOTE:** Do not be concerned if the bucket is not completely filled during each pass. Maximum productivity is determined by the amount of material loaded in a given period of time. Time is lost if two or more attempts are made to fill the bucket on each pass.

**Lifting the Load:** When lifting the load, keep the bucket positioned so as to avoid spillage. Do not attempt to lift bucket loads in excess of the loader capacity.

**Carrying the Load:** Position the bucket just below the level of the tractor hood, for maximum stability and visibility, whether the bucket is loaded or empty. When operating the loader on a hill or slope, keep the bucket as low as possible. This keeps the bucket center of gravity as low as possible and will give maximum tractor stability. When transporting the load, keep the bucket as low as possible to avoid tipping, in case a wheel drops in a rut.

**Dumping the Bucket:** Lift the bucket high enough to clear the side of the vehicle. Move the tractor in as close to the side of the vehicle as possible, then dump the bucket.

**Lowering the Bucket:** After the bucket is dumped, back away from the vehicle while lowering and leveling the bucket.

**Operating with Float:** During hard surface operation, keep the bucket level and put the lift lever in the float position to permit the bucket to float on the working surface. If hydraulic down pressure is exerted on the bucket it will wear faster than normal.

- The float will also prevent the mixing of surface material with stockpile material. The float position will reduce the chance of surface gouging when removing snow or other material.
- Back grade occasionally with a loaded bucket to keep the working surface free of ruts and holes. Also, hold the lift lever forward so the full weight of the bucket is scraping the ground. Use the heel of the bucket.

**Backfilling:** Do not use the bucket in the dumped position for bulldozing. This method will impose severe shock loadings on the dump linkage, the bucket cylinder, and the tractor. It is a sure way to bend the hydraulic rams on the dump control. These rams cost several hundred dollars each and will be charged for because we consider using the bucket in the dump position to push dirt to be abuse.

**Tire Damage Special Note:** When these machines work on construction sites, they encounter a hazard to the tires. Nails, broken bottles, etc., cause flats and require the services of a heavy tire repair service to repair them. Broken concrete, buried pipe, stakes, reinforcing rods, running over curbs at high speeds while loaded, etc., can cause blow-outs. The cost of repairing flats and replacing blown out tires is at **YOUR EXPENSE**. Also, severe tire damage caused by spinning a tire while up against a sharp object thereby causing tread or sidewall damage will also be charged for.

## **REFUELING & MAINTENANCE**

**Warning:** The Customer is responsible for all damages resulting from lack of fuel or lubrication. Check the motor oil, coolant, and hydraulic oil every time you refuel the equipment.

### **REFUELING                    DIESEL FUEL ONLY**

Stop the engine and shut off electrical equipment while filling the fuel tank. Use extra caution when fueling a hot engine. Always ground the fuel nozzle against the filler neck to avoid sparks. NEVER SMOKE while handling fuels.

### **COOLING SYSTEM**

Keep the radiator free of debris. If at any time the motor overheats, shut it off and call us immediately.

**Danger:** *Never remove the radiator cap on a hot engine the liquid is under pressure, extremely hot and will cause serious burns.* Liquid cooling systems build up pressure as the engine gets hot. Before removing the radiator cap, stop the engine and let the system cool. Remove the radiator cap only after the system is cold. For cooling systems with an overflow tank, the coolant can usually be checked at the tank without removal of the radiator cap.

If the person receiving this handout will not be the user of the equipment, forward these instructions to the operator. **IF** there is any doubt as to the operation or safety of the equipment,

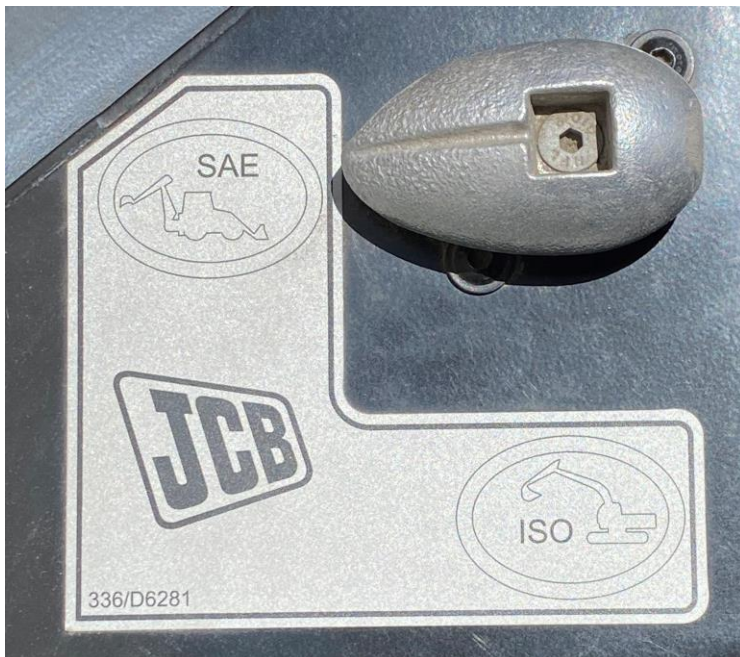
**DO NOT USE!!! CALL A TOOL SHED IMMEDIATELY!!! FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN INJURY OR DEATH**



## **Changing Digging Pattern on a Case Backhoe:**

With the seat facing the backhoe, the right control tower has two switches, the top switch is the hydraulic activation switch. Push the top of the switch to engage the backhoe's pilot controls.

The lower switch is for changing the digging pattern from "Backhoe Pattern" (1) to "Excavator Pattern" (2) the red portion of this switch is a lock. Slide it up to move the switch from position 1 to 2 & from 2 to 1.



## **Changing Digging Pattern on a JCB Backhoe**

With the seat facing the backhoe, on the left side wheel cover is this two-position switch. Allowing you to choose either the SAE "Backhoe Pattern" and the ISO "Excavator Pattern"