

OPERATING INSTRUCTIONS

Brave Trencher

BEFORE STARTING ENGINE

1. Check machine.
 - a. Read and be familiar with equipment operating instructions.
 - b. Be sure you have the proper rotor for trench size and soil conditions.
 - c. Check rotor retaining nut for tightness.
 - d. Be sure belts and pulleys are properly aligned and adjusted.
 - e. Check hood mounting bolts and nuts for tightness.
 - f. Check set screws in pulleys and lock collars for tightness.
 - g. Check all other nuts and bolts for tightness.
 - h. Check Clutch Cable tension. Tension is adjusted using the turnbuckle so that the clutch spring stretches approximately $\frac{3}{4}$ " to 1" when clutch is engaged.
2. Check machine



CAUTION: NEW ENGINES SHIPPED WITH MACHINES ARE NOT SERVICED. ADD OIL TO CRANKCASE BEFORE STARTING.



WARNING: Gasoline is extremely flammable and highly explosive under certain conditions. Always stop the engine and do not refill tank while you are smoking or near open flame or sparks.



WARNING: Never start or run the engine while in an area where fumes may collect. Carbon Monoxide from the exhaust is an odorless and deadly gas which must have adequate space or ventilation to allow rapid dispersal.

- a. Be familiar with manufacturer's operating and safety instructions for engine.
 - b. Check oil level with dipstick and add if necessary. Do not overfill.
 - c. Check air filter and clean if necessary. Clean frequently if operating in dusty conditions.
 - d. Use only clean fuel. Unleaded fuel is recommended in all engines.
 - e. Be sure muffler and exhaust deflector are installed, are in proper position, and are in good operating condition. (Deflector should exhaust to the left, away from the air intake.)
3. Start engine
 - a. Be sure clutch lever is in disengaged position and no tension is on drive belts.
 - b. Turn ignition switch to "ON" position.
 - c. Turn fuel on.
 - d. Close choke if engine is cold.
 - e. Pull start cord rapidly.

Starting Engine Continued

- f. When engine starts, gradually open choke and let engine warm up at about ¼ speed.



WARNING: Do not operate machine without rotor hood installed and secure.



WARNING: Do not operate the machine within a 50' radius of people, animals, automobiles or glassed areas which might be damaged by projectiles.



WARNING: Operator must wear eye protection when operating the trencher.



WARNING: Operator must locate and stay clear of all underground gas, electric, water and communications lines before starting trenching operation.

CALIFORNIA PROPOSITION 65 WARNING: Engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

4. Operations

- a. **To start trenching, set throttle full open.** Before engaging the clutch lever, the handle must be pushed toward the ground enough to allow the rotor to turn without hitting the ground. Engage clutch and when rotor attains operating speed, the handle should be raised slowly so that the rotor engages the ground and gradually digs to trench depth.
- b. When trench depth is achieved, the operator should **pull the machine to the rear** at such a speed that the trencher will dig without overloading the engine.



WARNING: Starting the trench is the most critical time for dangerous flying projectiles. Be especially cautious by policing the area for rocks or other possible projectiles and ensure the area is completely clear of people, animals, vehicles, etc. that may be damaged by projectiles.

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- c. When trenching, **if trencher strikes an underground object, stop immediately** to determine what the object is. Investigation should be done visually since touching an exposed electric wire could be fatal.
 - d. When trencher strikes a rock, either the trench or rock should be moved.
 - e. When digging in extremely hard clay or other difficult soils, it may sometimes be necessary to use an oscillating action by applying and releasing pressure on handlebar, front to rear, alternately.