

3) Manually cycle the directional valve control lever to determine the valve is in the spring centered, neutral position. The valve must properly return to the neutral position without any externally applied force.

DANGER

DO NOT OPERATE THE DIG-R-MOBILE IF THE SELF-CENTERING MECHANISM OF THE DIRECTIONAL CONTROL VALVE DOES NOT PROPERLY FUNCTION. WHEN THE LEVER IS RELEASED, THE DIRECTIONAL CONTROL VALVE MUST PROPERLY RETURN TO THE NEUTRAL POSITION WITHOUT ANY APPLIED EXTERNAL FORCE. IMPROPER DIRECTIONAL CONTROL VALVE OPERATION CAN RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY.

4) Turn the remote engine ignition ON/OFF switch located under the directional valve control lever to the ON position. The engine can only be started if the remote engine ignition ON/OFF switch is in the ON position. FIGURE 41.



FIGURE 41

5) Open the fuel tank breather vent (if so equipped) to its maximum set position. Failure to properly open the breather vent will prevent the engine from receiving a continuous supply of fuel.

6) Turn the fuel tank ON/OFF valve located near the fuel tank to the ON position. FIGURE 42.



FIGURE 42

7) Turn the engine ignition ON/OFF switch to the ON position as outlined in the information supplied by the specific engine manufacturer. FIGURE 43.



FIGURE 43

8) When starting a cold engine, close the engine choke as outlined in the information supplied by the engine manufacturer. A warm engine may not require choking. FIGURE 44.



FIGURE 44

9) Move the engine throttle control to the starting position as outlined in the information supplied by the engine manufacturer. Pull the recoil starter handle until engine compression is felt. Then, give a fast, short, steady pull. Allow the starter rope to retract slowly. If the engine does not start after three pulls, stop and consult the information supplied by the engine manufacturer for specific information. Keep body parts clear of engine and frame assembly. Proper operator position for starting the engine is depicted in FIGURE 45.



FIGURE 45

CAUTION

Keep all body parts and foreign objects clear of the structural components of the DIG-R-MOBILE during the engine starting procedure. Contact with any structural component during the starting procedure can result in property damage and/or personal injury.

10) Normally an engine that has not run for some time will require three to five pulls before it will start. On the other hand, a recently operated engine will usually start on the first or second pull. In cold weather, initial starting will require additional pulls because an extremely rich fuel/air mixture is required.

11) Allow the engine to properly "warm up" before operating at high speed. Check for excessive hydraulic pump noise and/or vibration.

12) Increase the engine RPM to the maximum, governed speed as set by the factory.

13) Stopping the DIG-R-MOBILE is accomplished by either one of two methods:

a) Turn the engine ignition ON/OFF switch to the OFF position.

b) Turn the remote engine ignition ON/OFF switch located under the directional control valve lever to the OFF position.

13) When the engine is not running, turn the fuel tank ON/OFF valve to the OFF position to minimize the potential for fuel flooding the carburetor and/or entering the engine crankcase and/or impacting upon the environment.

CAUTION

If the DIG-R-MOBILE and/or an individual component or accessory does not appear to be functioning properly, STOP and do not further operate it until the necessary corrective action has been completed. If you have any questions regarding the proper operation of the DIG-R-MOBILE, contact the Customer Service Department BEFORE further utilization. There is no charge for this service.

OPERATING THE DIG-R-MOBILE

Applications: All models

1) Grab operator handle with both hands, cradling the handle between fingers and thumbs. Do not attempt to begin digging with the DIG-R-MOBILE until the operator is ready to begin the process and is in full control of the machine.

2) Release the SNAP-LOK lever to position the tip of the auger over (and in contact with) the desired position for the hole. Manually push the DIG-R-MOBILE forward until the auger axle makes approximately a 15 to 20° degree angle relative to the ground. FIGURE 46.



FIGURE 46

This configuration is depicted on decal, part number 660-5130, located on the side of the oil reservoir. The operator should assume a position with the following characteristics:

- Both hands are properly gripping the operator handle/directional valve control lever.
- The back is positioned in a vertically orientation as much as possible and/or practical for the specific application.
- The left foot is placed in front of the right foot and both feet are spread apart in a comfortable stance as practical for the specific application to aid in body stability. Do not stand in a flat-footed position. Specific characteristics will vary from one operator to another.
- Pull the right side of the directional valve control lever to its maximum set position. The movement will initiate auger rotation. FIGURE 47. The auger should rotate in a clockwise (right hand rotation) direction into the ground as viewed by the operator. If the auger rotates in a counter-clockwise (left hand rotation) direction when the right side of the control lever is pulled, STOP and DO NOT further operate the DIG-R-MOBILE. This occurrence indicates the hydraulic hoses are not properly connected to the hydraulic motor and required service MUST be performed BEFORE further use.



FIGURE 47

CAUTION

Do not operate a DIG-R-MOBILE with the directional valve control lever hoses improperly connected to the hydraulic motor. Improper directional valve control lever function can result in property damage and/or personal injury.

DANGER

KEEP ALL BODY PARTS, LOOSE CLOTHING AND FOREIGN OBJECTS CLEAR OF THE ROTATING AUGER. CONTACT WITH THE ROTATING AUGER CAN RESULT IN PROPERTY DAMAGE AND/OR PERSONAL INJURY.

5) Normal operating procedure for the DIG-R-MOBILE is to dig with the engine operating at full, governed speed to allow the hydraulic system to develop the rated auger speed and drilling torque. This procedure will transmit more usable power to the auger, resulting in greater productivity and less component wear.

6) The hydraulic system is equipped with a pressure relief valve. The pressure relief valve is a safety device that will deploy whenever the auger becomes overloaded or if the auger comes in contact with a buried obstruction. When the valve is deployed, a high-pitched, squealing noise will occur. This occurrence can produce excessive heat, which can substantially raise the oil reservoir temperature and affect the ability of the hydraulic motor to operate efficiently. WHEN THE RELIEF VALVE IS DEPLOYED, IMMEDIATELY RELEASE THE DIRECTIONAL VALVE CONTROL LEVER TO THE NEUTRAL POSITION.

NOTE: The response time for the relief valve to react to an overload condition is directly proportional to the amount of oil flow and system pressure being produced. The greater the oil flow and pressure of the hydraulic system at the time of overload, the greater amount of time the relief valve requires to react and deploy. This phenomenon is inherent with all open centered hydraulic systems. It is inherent with all powered equipment incorporating similar hydraulic systems.

CAUTION

When digging in areas filled with known, buried obstructions such as tree roots, rocks and other debris, moving the directional valve control lever to less than its maximum set position will help ensure more rapid deployment of the hydraulic system relief valve when an obstruction is encountered.

7) Once the auger enters the soil, carefully monitor the initial digging process. At approximately 6 inch drilling depth, the rotation of the auger will begin to push the DIG-R-MOBILE towards the operator. The action also begins to pull the auger in a more vertical orientation to produce a hole that is reasonably perpendicular to the surface. To aid in the process of producing a perpendicular hole, the operator may be required to apply a supplemental pushing force against the DIG-R-MOBILE. The amount of force required will be dependent upon a number of factors including, but not limited to: auger diameter, required digging depth, job site terrain and prevailing soil conditions. FIGURE 48.



FIGURE 48

8) To remove auger from hole, pull the left side of the directional valve control lever. This procedure will produce a counter-clockwise auger rotation.

UNDERSTANDING KICKBACK

Applications: All models

The operation of the DIG-R-MOBILE involves engine power being transmitted through the hydraulic system to the auger. The energy is then used to dig holes. But to every force (action), there is always a reaction force in the opposite direction. The design of the DIG-R-MOBILE is intended to minimize the occurrence and/or possibility of kickback during the digging process. However, given the wide number of potential soil compositions, job applications, experience levels and job site terrains, there is no specific guarantee that kickback will not occur. Thus, if the auger contacts a buried obstruction, there is a possibility the operator can feel/experience the left side of the operator handle being "thrust" towards himself. The "thrusting" force experienced by the operator is called kickback. The speed (and magnitude of the resulting impact force) at which the auger strikes the buried object is directly proportional to the amount/speed of the kickback force experienced by the operator. The torque and kickback generated by the digging process is inherent with the hole digging process and cannot be totally eliminated by any operation and/or design characteristic.

MINIMIZING THE OCCURRENCE OF KICKBACK FROM AN OPERATIONAL STANDPOINT

Applications: All models

Assume an operating position that allows the operator to exercise reactive "body english" against the potential occurrence for kickback forces created by the digging process. Keep upper arms as close to the upper body as possible to maximize mechanical leverage. The operator should position his back as vertical as possible by bending the legs as required during the digging process. Positioning the left foot ahead of the right foot will enhance proper body position. Do not stand in a flat-footed position. Maintaining a proper operating position is one of the most IMPORTANT and EFFECTIVE procedures for controlling the effects of kickback. Improper operating positions only aggravate the effects of kickback upon the operators. FIGURE 49 depicts a proper operator position that enhances machine control. FIGURE 50, FIGURE 51 and FIGURE 52 depict typical improper operator positions that reduce/minimize machine control.