

SOIL MECHANIC *Heavy-Duty, Modular Unit*

The Acker SOIL MECHANIC is designed to be converted quickly from an augering unit to a unit capable of driving soil samples.

The unique modular designed of the SOIL MECHANIC allows the assembly to be converted quickly from an augering unit to a unit capable of taking soil samples. The cathead and hoisting jib provides a convenient way of taking soil samples and making SPT (Standard Penetration Tests) with a minimum of costs in equipment and time.

The compact Electric or Diesel Power Unit handles augers to a depth of 24 ft. (7.3 m) under proper conditions. The power unit, through a unique right angle gear box, also operates the cathead hoist to raise a 140 lb. (63.5 kg) drive weight used to take soil samples and carry out SPT.

Two 10 in. (25.4 cm) rubber tired wheels are included for easy moving of the unit from one hole to another. The wheels are detachable as an assembly.

Special features for the SOIL MECHANIC include a centering guide, anchor pins for stabilizing the base and a slip pin for securing the power head when transporting the unit.

The SOIL MECHANIC also includes a hoisting jib with sheaves, cathead hoist, and a dolly wheel with hand towing handle.



The SOIL MECHANIC's modular design features provide you with a lightweight, economical drill unit.

Features:

ENGINE OPTIONS:

**HATZ DIESEL ENGINE, 7 H.P. @ 3,600 RPM,
25:1 PARALLEL-SHAFT GEAR REDUCER, 320 lb.-ft. TORQUE @ 144 RPM.**
The Diesel engine features an adjustable throttle control.

**ELECTRIC MOTOR, 5 H.P. 208-230V THREE-PHASE
20:1 PLANETARY GEAR RATIO, 150 lb.-ft. TORQUE @ 180 RPM.**

**ELECTRIC MOTOR, 5 H.P. 230V SINGLE-PHASE
20:1 PLANETARY GEAR RATIO, 150 lb.-ft. TORQUE @ 180 RPM.**

Pull Down - The operator has full control of the feed system to advance the augers and produce a clean hole.

Gear Box - A unique gear box provides for smooth operation of the cathead drum. Constructed of high quality cast iron, the gearbox is mounted low on the assembly to provide stability. The engine drive output pins directly into the cathead drive assembly.

Cathead - The cathead is utilized with the drive weight for making SPT (Standard Penetration Tests). The cathead can be used for light duty hoisting applications.

Jib and Sheaves - Hoisting assembly is easily installed in the top of the mounting. Guide marks are provided to aid in mounting.

Safety Guide - Helps to keep augers from walking when starting the hole.

Anchor Holes - Holes are provided at each corner of the mounting for steel drive pin anchors to assist hold down and bolt down holes for concrete surfaces.

Towing Tongue - The tongue and dolly wheel save time and effort when moving the equipment from hole to hole.



CATHEAD FOR DRIVING OR BUMPING OUT - The cathead drum is used for developing correlation test with the 140 lb. (63 kg) drive weight. 3/4 in. (19.05 mm) manila rope.



POWER HEAD AND TRANSMISSION - The engine mounts directly to the transmission drive. Automatic rewind starter.



HAND WHEEL, PULL DOWN, 46 in. (1.168 m) TRAVEL - Downfeed is applied by a re-circulating bail-screw feed system and a 12 in. (0.304 m) diameter aluminum hand wheel. The SOIL MECHANIC is designed for using 36 in. (.914 m) overall length auger tools. Articulated joint allows for easy hookup and removal of auger sections.



TOWING TONGUE - Provides a simple method for taking the assembly into remote or rugged job sites. NOT DESIGNED FOR TOWING IN BACK OF MOTOR TRANSPORT.