



of the portable actuator, it is easy to turn the unit 180° with respect to the Hydro Gate gear lift and open or close the gate. The two-cycle gasoline engine power unit drives the output shaft at approximately 125 rpm with a torque of 65 ft-lb. This portable power assembly is easily moved between gate installations because it weighs less than 40 lb. The unit also can be adapted for tripod mounting.

Portable Hydraulic Operator

This unit is used to operate Hydro Gate manual lifts where electricity is not available. The unit consists of a two-wheel “hand truck” that has a gasoline engine-driven pump, 6-gal. Reservoir with temperature gauge and sight glass, directional control valve, pressure relief valve and oil filters. An optional electric start engine is available. The compact unit is easily maneuvered by a single person. It has auxiliary handles allowing two people to carry it in a stretcher fashion. A rotary hydraulic drive rotates the lift input shaft to move the gate. The rotary drive head connects to the power cart with 10 ft of twine hose (longer hose is available within practical limits that won’t cause pressure losses). The drive can be either hand-held or a mounting bracket can be provided. Hand-held units are supplied with an overload release clutch for additional personnel safety. The bracket-mounted unit relies on a pressure relief valve for overload protection.

Dry weight of the power cart (without the drive head and hoses) is approximately 175 lb. The weight of the bracket-mounted drive head with standard hoses is approximately 45 lb.

Power-Operated Lifts

These devices vary from a simple portable wrench for operating a geared lift to an electrically operated unit with torque and limit switches. The type selected depends upon the gate size, the unbalanced head under which the gate will operate, operational speed required, frequency of operation and available power supply.

Introduction

Handwheel lifts are normally used to operate small gates. Motorization of these handwheel lifts is not practical. Since there is no gearing in the lift and the gates are usually small, two or three turns of the handwheel will move the gate 1 in. The gate can be moved a few inches in less time than it takes to remove the handwheel, install the portable wrench, plug it in and operate the required distance.

There are a number of different methods that may be used in motorizing a Hydro Gate lift. The following is a partial list of those methods most frequently encountered:

1. Electric-powered heavy-duty wrench
2. Hydro Gate portable power unit with gasoline engine
3. Portable hydraulic gasoline-powered unit

Hydro Gate Portable Gasoline Engine

This portable power unit is designed primarily for remote locations where electric power is not available. The unit consists of a gasoline engine with an attached reducer that has a double output shaft. An adapter is furnished to connect with the input shaft of the lift. By utilizing the double output shaft



Portable hydraulic operator