

SPECIFICATIONS (PUMP)

| Table 1. Specifications (Pump) | | |
|--------------------------------|--------------------------|---|
| Pump | Model | QP2TH |
| | Type | Trash Pump |
| | Suction | 2.0 in. (51 mm.) |
| | Discharge Size | 2.0 in. (51 mm.) |
| | Maximum Pumping Capacity | 211 gallons/minute (800 liters/minute) |
| | Max. Solids Diameter | 1.00 in. (25.4 mm) |
| | Max. Lift | 25 ft. (7.6 m) |
| | Max. Head | 98 ft. (30.0 m) |
| | Max. Pressure | 42 psi (292 kPa) |
| Dry Net Weight | 97 lbs. (44 Kg.) | |

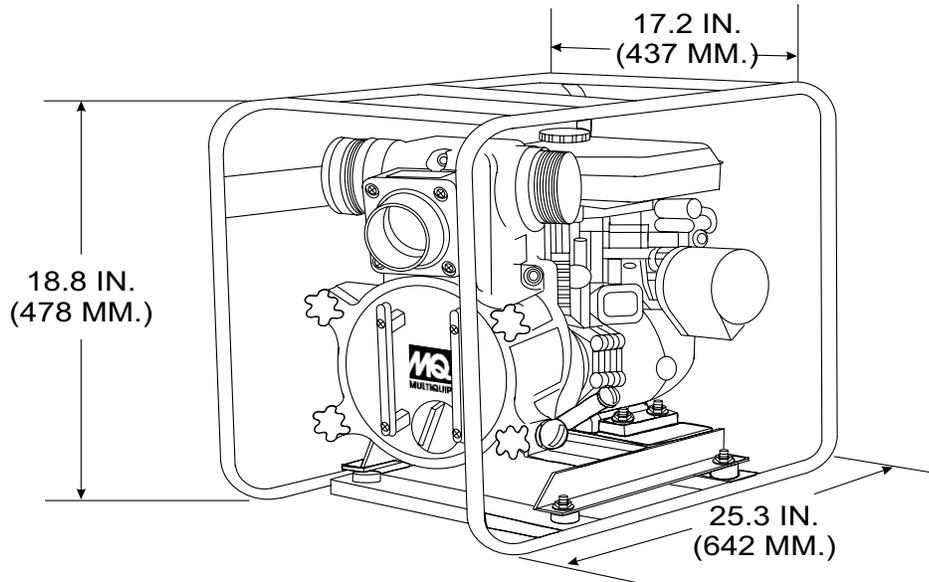


Figure 1. QP2TH Dimensions

SPECIFICATIONS (ENGINE)

| Table 2. Specifications (Engines) | | |
|-----------------------------------|----------------------------------|--|
| Engine | Model | HONDA GX160K1QX2/ GX160U1QX2/GX160UT2QX2 |
| | Type | Air-cooled 4 stroke, Single Cylinder, OHV, Horizontal Shaft Gasoline Engine |
| | Bore x Stroke | 2.7 in. x 1.8 in. (68 mm x 45 mm) |
| | Displacement | 163 cc (9.9 cu-in) |
| | Max Output | 4.8 H.P./3,600 R.P.M. |
| | Fuel Tank Capacity | Approx.0.82 U.S. Gallons (3.1liters) |
| | Fuel | Unleaded Automobile Gasoline |
| | Lube Oil Capacity | 0.61 quarts (0.58 liters) |
| | Speed Control Method | Centrifugal Fly-weight Type |
| | Starting Method | Recoil Start |
| | Dimension (L x W x H) | 12.0 x 14.4 x 13.2 in. (304 x 362 x 335 mm) |
| Dry Net Weight | 33.1 lbs (15 Kg.) | |

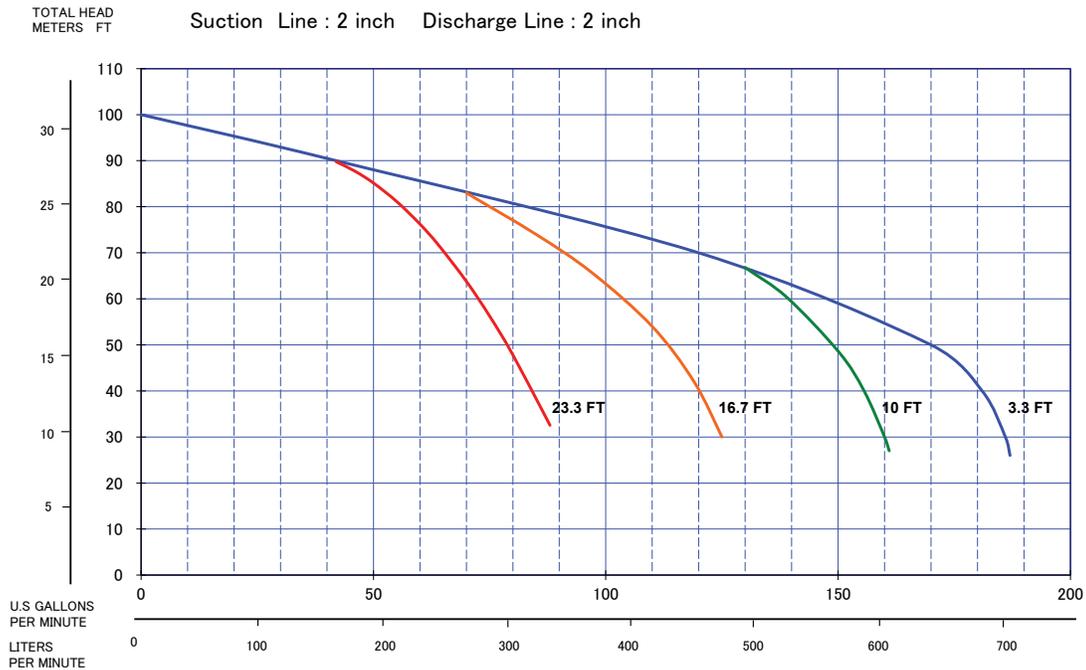


Figure 2. QP2TH Performance Curve

GENERAL INFORMATION

APPLICATION

The Multiquip QP2TH Trash Pump is designed to be used for dewatering applications. Both the suction and discharge ports on the QP2TH trash pump use a 2-inch diameter opening, which allows the pump to pump at a rate of approximately 211 gallons/minute (gpm) or 800 liters/minute (lpm).

Trash pumps are designed to purge air from the suction line and create a partial vacuum in the pump body. The reduced atmospheric pressure inside the pump allows water to flow through the suction line and into the pump body. The centrifugal force created by the rotating impeller pressurizes the water and expels it from the pump.

TRASH PUMP

Trash pumps derive their name from their ability to handle a greater amount of debris and solids than standard centrifugal pumps. These pumps generally handle solids up to 1/2 the size of the discharge opening making them less likely to clog. Also trash pumps are capable of handling water with 25% solids by weight.

The advantage of using a trash pump is that it can be quickly and easily disassembled in the field "without tools" and easily cleaned when clogged.

POWER PLANT

This trash pump is powered by a 4.8 horsepower air cooled 4-stroke, single cylinder HONDA GX160 gasoline engine that incorporates a low "Oil Alert Feature."

OIL ALERT FEATURE

In the event of low oil or no oil, the HONDA GX160 engine has a built-in oil alarm engine shut-down feature. In the event the oil level is low the engine will automatically shutdown.

SUCTION LIFT

This pump is intended to be used for dewatering applications and is capable of suction lifts up to 25 feet at sea level. For optimal suction lift performance keep the suction hose or line as short as possible. In general always place the pump as close to the water as possible.

PUMP SUPPORT

The pump should always be placed on solid stationary

ground in a level position.

NEVER place the pump on **soft soil**. The suction hose or pipe connection should always be checked for tightness and leaks. A small suction leak in the hose or fittings could prevent the pump from priming.

Elevation

Higher elevations will effect the performance of the pump. Due to less atmospheric pressure at higher altitudes, pumps **DO NOT** have the priming ability that they have at sea level. This is due to the "thinner air" or lack of oxygen at higher altitudes.

A general rule of thumb is that for every 1,000 feet of elevation above sea level a pump will lose one foot of priming ability.

For example, in Flagstaff, Arizona where the elevation is approximately 7,000 feet, the pump would have a suction lift of only 18 feet rather than the 25 feet at sea level. Table 3 shows suction lift at various elevations.

Table 3. Suction Lift at Various Elevations

| Altitude Feet (Meters) | Suction Lift in Feet (Meters) | | | |
|------------------------|-------------------------------|--------------|--------------|--------------|
| Sea Level | 10.0 (3.048) | 15.0 (4.572) | 20.0 (6.096) | 25.0 (7.620) |
| 2,000 (610) | 8.80 (2.680) | 13.2 (4.023) | 17.6 (5.364) | 22.0 (6.705) |
| 4,000 (1,219) | 7.80 (2.377) | 11.7 (3.566) | 15.6 (4.754) | 19.5 (5.943) |
| 6,000 (1,829) | 6.90 (2.103) | 10.4 (3.169) | 13.8 (4.206) | 17.3 (5.273) |
| 8,000 (2,438) | 6.20 (1.889) | 9.30 (2.834) | 12.4 (3.779) | 15.5 (4.724) |
| 10,000 (3,048) | 5.70 (1.737) | 8.60 (2.621) | 11.4 (3.474) | 14.3 (4.358) |

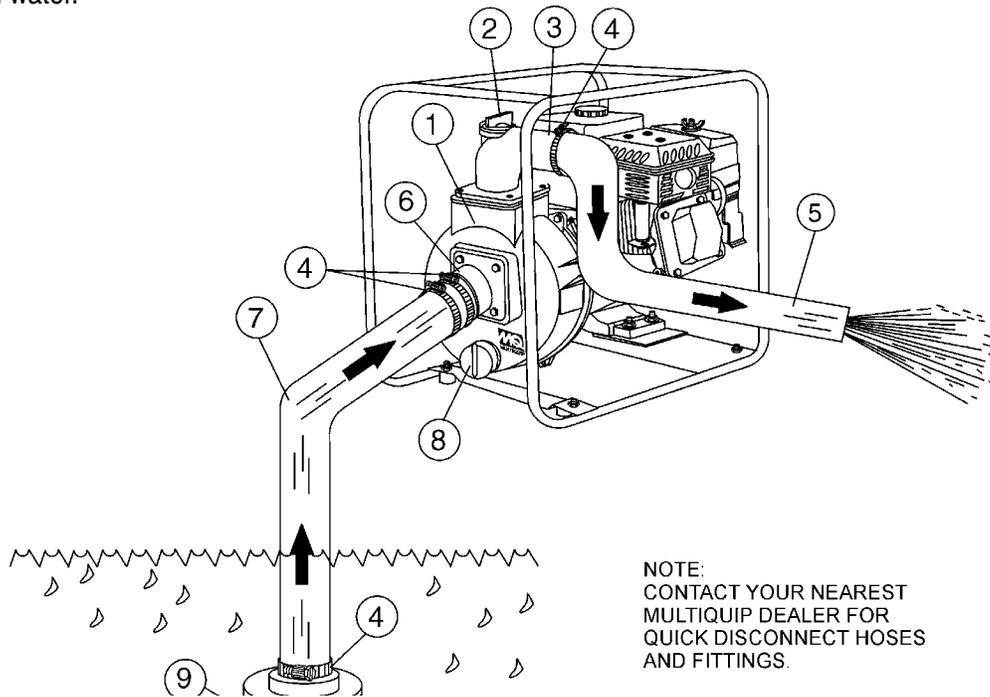
Table 4 shows percentage drops in performance as elevation increases.

Table 4. Performance Loss at Various Elevations

| Altitude Feet (Meters) | Discharge Flow | Discharge Head |
|------------------------|----------------|----------------|
| Sea Level | 100% | 100% |
| 2,000 (610) | 97% | 95% |
| 4,000 (1,219) | 95% | 91% |
| 6,000 (1,829) | 93% | 87% |
| 8,000 (2,438) | 91% | 83% |
| 10,000 (3,048) | 88% | 78% |

PUMP COMPONENTS

Figure 3 shows a typical application using the QP2TH centrifugal pump. Please note that this pump is intended for the removal of clean water.



NOTE:
CONTACT YOUR NEAREST
MULTIQUIP DEALER FOR
QUICK DISCONNECT HOSES
AND FITTINGS.

Figure 3. QP2TH Pump Application

- 1. Pump** — The model QP2TH is a 2-inch trash pump used in general dewatering applications. Typical dewatering applications consist of manholes, septic tanks, fast and slow seepage ditch water, silt water, mud water and muck water.
- 2. Fill Cap** — Prior to operation, the pump casing should be filled with water. Remove this cap to add water to the pump. After the initial prime, a sufficient amount of water will be retained in the casing so that the operator will not need to re-prime later.
- 3. Discharge Port** — Connect a 2-inch discharge hose to this port. Note there are 2 ports.
- 4. Worm Clamp** — Used to secure the hose to the inlet and outlet ports on the pump. Use two clamps to secure the hose on the inlet side of the pump.
- 5. Discharge Hose** — Connect a flexible rubber hose to the discharge port on the pump. Make sure that the hose lays flat and is not kinked. Use only recommended type discharge hose. Contact Multiquip Parts Department for ordering information.
- 6. Suction Port** — Connect a 2-inch inlet hose to this port. Use two worm clamps to secure the hose.
- 7. Suction Hose** — Connect this flexible rubber hose to the suction port on the pump. Make sure that the hose lays flat and is not kinked. Use only recommended type suction hose. Contact Multiquip parts department for ordering information.
- 8. Clean-out Cover Handles** — To gain access to the pump's clean-out area, grip both handles, then pull to remove cover. Make sure both locking knobs have been released before attempting to remove clean-out cover.
- 9. Drain Plug** — Remove this plug to drain water from the pump.
- 10. Clean-out Cover** — Remove cover to gain access to the clean-out area.
- 11. Locking Knobs** — Turn both knobs clockwise to secure clean-out cover, turn counter-clockwise to release cover.
- 12. Strainer** — Always attach a strainer to bottom side of the suction hose to prevent large objects and debris from entering the pump. Strainer should be positioned so that it will remain completely under water. Running the pump with the strainer above water for long periods can damage pump.