

DRAINCHEM

DRAIN MAINTENANCE PRODUCTS AND SOLUTIONS

Drainchem Hydrostatic Test Pump 119 Hydro 71 T

The **119 Hydro 71TP** is an engine driven hydrostatic test machine designed to pressure test pipes and vessels for integrity and leaks. The 119 Hydro 71TP consists of a petrol or diesel engine direct coupled through a reduction gearbox to a COMET diaphragm pump

The Drainchem Hydro 71TP is designed to allow quick and effective testing of pipes up to 2000Kpa with standard gauges or 4000Kpa with optional gauges. The Hydro 71TP comes complete with all equipment to test pipes quickly. Digital gauges are required by some authorities and are available to swap out for analogue gauges at extra cost

The pump is fitted with an adjustable pressure/flow controller to vary the pressure up to a maximum of 580psi and flow up to 71l/m. The flow performance is set at the maximum pump speed of 550rpm. If the speed is reduced the resulting flow will also reduce

Engine	Honda GX270 9Hp recoil start
Pump	Comet model APS71 Max pressure 40bar (580psi) Flow @ 550rpm 71lpm @ 0bar
Gearbox	Comet model C50050221
Pressure/Flow Controller	Comet model C12040189

Filtration	150 Micron 250mm clear filter 430 Micron 250mm clear filter
Gauges	Two 100mm Traceable 0-2000Kpa gauges Two NATA Traceable certificates (min 11 months) Gauges contained in a tough box Two 63mm 0-2000Kpa gauges mounted on the trolley for pre testing without the NATA Gauges

Tank	200 litre poly tank to ensure constant water supply Tank is fitted with a low water switch to stall the engine if water supply fails Tank is fitted with a water supply shut off valve to avoid tank over flow Water returns to tank when outlet is shut off
------	---

Supply connection	to customer requirements
Out let hose	10M of 3/8" high pressure hose
Labels	all components and oil requirements labelled
Trolley	Heavy duty galvanised trolley with 10" wheels for easy manoeuvring



OPERATION

Connect a water supply capable of a flow of at least 95lpm to the Inlet on the tank
Before starting the engine ensure adequate water supply to the pump.

Insufficient water will cause pump cavitation and damage

- Pressure Knob B on the controller unwound to minimum pressure
- Flow Direction lever C is in the bypass position
- Ball Valves D & E are open
- High Pressure outlet F is connected to the test vessel

The engine should be started in accordance with the recommendations in the engine owner's manual. With the engine running the Flow Control lever C may be operated to direct the flow to the High Pressure outlet F.

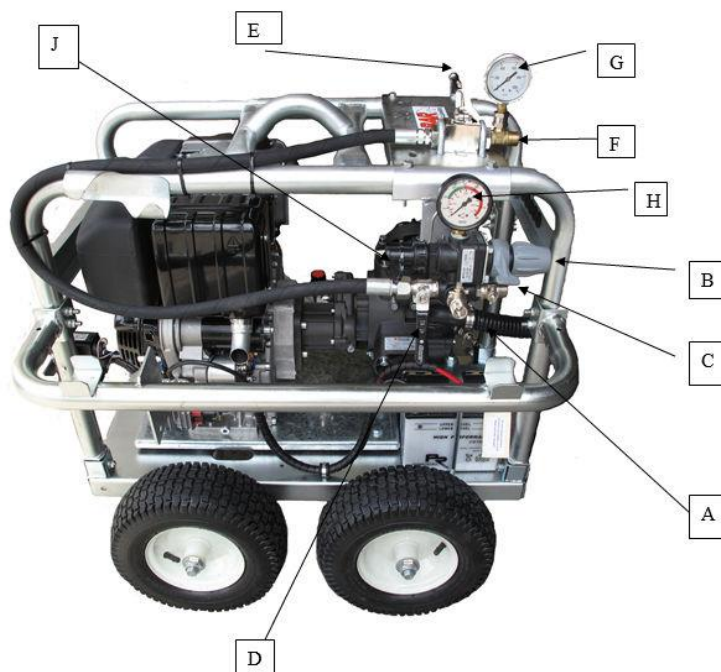
When the test vessel is filled with water the Pressure Control knob B can be operated to increase the pressure to the required level as indicated on the Pressure Gauges H [pump] & G [line]

When the desired pressure is reached Ball Valve E is closed which will isolate the Test Vessel from the pump.

The test vessel pressure can be monitored on Pressure Gauge G [line] the flow will be automatically directed to the Bypass Line J of the pressure/flow controller.

The unit may then be stopped while the test vessel pressure is monitored

When the test is complete the test vessel pressure can be reduced by slowly opening a drain valve incorporated in the high pressure line connected between the test vessel and the High Pressure Outlet F.



SAFETY CAUTION

- Do not point high pressure guns, hoses, or jets at any person whether the machine is in operation or stationary
- High pressure machines are dangerous & if not used correctly & in accordance with the manufacturers recommendations can cause serious injury
- Ensure that all the hoses & pipework are securely fastened before operating the machine
- Do not fill the engine fuel tank while the unit is hot or operating
- When using extended hose lengths ensure no part of the hose is placed where vehicles can run over the hose and cause damage to the hose & system
- Petrol engines discharge noxious exhaust gases and units should only be used in well ventilated locations
- To prevent injury DO NOT TOUCH HOT SURFACES such as engine & muffler
- Use only genuine original manufacturer replacement parts and components to ensure compatibility with original equipment

DAILY CHECKS

- Before starting unit check engine, pump & gearbox oil levels replenish as necessary
- Check all high pressure fittings are tight and secure
- Check condition of all hoses and hose fittings for cracks and possible damage. Replace if necessary
- Check fuel tank level and refill if required
- Check engine muffler guard is in position and secure
- Check all holding down and retaining bolts to ensure they are tight and secure

PERIODIC MAINTENANCE

Engine refer to the Engine owner's manual
Comet Pump refer to the Comet Pump owner's manual

OPERATION

Connect a water supply capable of a flow of at least 95l/m to the **Inlet A** connected to the pump
Before starting the engine ensure adequate water supply to the pump. Insufficient water will cause pump Cavitation

NOTE maximum water inlet pressure to the pump is 1.5psi [1m]

Pressure Knob B on the controller unwound to minimum pressure

Flow Direction lever C is in the bypass position

Ball Valves D & E are open

High Pressure outlet F is connected to the test vessel

The engine should be started in accordance with the recommendations in the engine owner's manual. With the engine running the **Flow Control lever C** may be operated to direct the flow to the **High Pressure outlet F**.

When the test vessel is filled with water the **Pressure Control knob B** can be operated to increase the pressure to the required level as indicated on the

Pressure Gauges H [pump] & **G** [line] when the desired pressure is reached **Ball Valve E** is closed which will isolate the Test Vessel from the pump.

The test vessel pressure can be monitored on **Pressure Gauge G** [line] the flow will be automatically directed to the **Bypass Line J** of the pressure/flow controller.

The unit may then be stopped while the test vessel pressure is monitored

When the test is complete the test vessel pressure can be reduced by slowly opening a drain valve incorporated in the high pressure line connected between the test vessel and the **High Pressure Outlet F**.

Also available is a test kit gauge box with two Nata traceable 100mm pressure gauges. The kit features quick connect fittings from pump to the gauge box and from the gauge box to your testing Equipment. The hose from test box is not included but can be supplied with your required fittings as an option