

# KNC Model 3712-4-3 Hydraulic Hand Pump



## Product Description

The Model 3712-4-3 by King Nutronics Corporation is a manually operated portable hydraulic pump capable of generating pressures up to 10,000 psi. Used with customer-supplied master gauges, the Model 3712-4-3 Hydraulic Hand Pump is a simple, effective tool for testing and calibrating hydraulic gauges, sensors, and other instruments.

The Model 3712-4-3 Hydraulic Hand Pump is a dual range design employing a unique double diameter piston. A push-pull range selector valve on the pump body changes the piston diameter, enabling the operator to generate pressures from 0 to 1,000 psi at high volume, or from 0 to 10,000 psi at low volume, with a few strokes of the lever. Output pressure is directed through a dual outlet manifold incorporating female quick-disconnect fittings, which are used for connecting a master gauge and the unit being tested. A manual vernier control valve alters the volume of the test circuit for precise pressure adjustments.

The Model 3712-4-3 Hydraulic Hand Pump is intended for operation using D-2 Ethylhexyl Sebacate, hydraulic oil, isopropyl alcohol, distilled water, or other calibration fluids. In addition, the pump can be configured for use with Skydrol hydraulic fluid; contact King Nutronics Corporation for details. An optional fluid separator, KNC P/N 3460-54-1, is also available, enabling gauges using different fluid types to be tested and calibrated without contaminating the fluid in the pump assembly. An integral drip pan ensures mess-free filling of the pump assembly.

The Model 3712-4-3 Hydraulic Hand Pump is furnished with two five-foot-long high pressure hoses for connecting the unit to a master gauge, a set of adapters for commonly used thread sizes, three sets of replacement seals and packings for field maintenance, a fill/bleed wrench, and two 500 ml bottles of D-2 Ethylhexyl Sebacate calibration fluid. The pump, hoses, and accessories are housed in a compact and stackable thermoplastic carrying case for convenient transport and storage.



## General Specifications

Characteristics	Specifications
<b>Temperature range:</b> <b>Operating</b> <b>Storage</b> <b>Humidity (operating)</b>	+5° to +50° C -40° to +72° C 0 to 95% RH, from 5°C to +50°C
<b>Test fluid<sup>1</sup></b>	D-2 Ethylhexyl Sebacate or other hydraulic oil, distilled water, isopropyl alcohol, and various calibration fluids.

<sup>1</sup> Hand pump configured for use with Skydrol hydraulic fluid available upon special order.

## Hand Pump Case Assembly Specifications

Characteristics	Specifications
<b>Hand pump assembly:</b> <b>Discharge pressure</b> <b>Reservoir capacity</b> <b>Piston displacement:</b> <b>High volume</b> <b>Low volume</b> <b>Manifold ports, qty. 2</b>	0 to 10,000 psig 75 cubic inches 0.196 cubic inches per stroke 0.022 cubic inches per stroke Quick-disconnect fittings, female
<b>Adapter kit assembly:</b> <b>Quantity of adapters</b> <b>End configuration</b>  <b>Disconnects for D-H ref. standard</b>	Six 1/8" FPT; 1/4" FPT; 3/8" FPT; 1/2" FPT; 7/16" -20 UNF female thread, per AN 10050-4; 7/16" -20 UNF male thread, per AN10056-4. Two
<b>High pressure test hoses (qty. 2):</b> <b>Pressure rating:</b> <b>Operating</b> <b>Proof</b> <b>Burst (minimum)</b> <b>Material</b>	10,000 psig 15,000 psig 40,000 psig Braided stainless steel
<b>Case dimensions, inches (W x H x D)</b>	26 x 10 x 10
<b>Weight, including accessories</b>	27.5 lbs.
<b>Color</b>	Yellow and black

