

# Hydraulic Ground Power Unit Regional Aircraft 3000psi at 12USgpm

>HGPU<



Hydraulic Ground Power Unit used for maintenance and testing of regional aircraft hydraulic systems (i. a. w. ATA Chapter 29).

Designed for all aircraft types with 3000psi systems and a flow rate of up to 12USgpm.

- > Single hydraulic system capable of open or closed circuit operation
- > Easy pressure control using "0psi" and "3000psi" push buttons
- > Ramp function ensures a controllable pressure build up
- > Pressure and flow rates are infinitely variable and limitable
- > The customer can choose whatever matches his requirements
  - e.g. pressure, single or dual system, hydraulic fluids, electric or diesel driven, accessories etc.
  - In addition, any customer special wishes will be respected.

## RANGE OF APPLICATION

The HGPU family is designed for aircraft using Phospate-Ester Hydraulic Oil ("Skydrol" or "Hyjet") or Mineral Oil based Hydraulic Media ("MIL-H-5606", "MIL-H-83282", "MIL-H-87257")

ATR: 42/72	Bombardier: CRJ Series Dash 8 / Q 100-300	Embraer: ERJ135/145	Pilatus: PC-7MKII PC-9, PC-9M, PC-21
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## GENERAL INFORMATION

- > The stainless steel hydraulic reservoir has a capacity of 70l (19USgal)
- > Open or closed circuit operation is selected electrically (Option P)
- > Easy draining and filling of the aircraft reservoirs is carried out by "Fill"/"Drain" push buttons (Option M)
- > A large fan operated oil-air cooler ensures optimum cooling
- > Easy access for maintenance is provided by a hinged cover which is fitted with gas spring struts
- > Maximum towing speed is 25km/h (15mph)
- > Designed to be used in an external environment

## TECHNICAL DATA

<p><b>&gt; Hydraulic Parameters:</b></p> <p>High pressure circuit:</p> <p>7 - 207bar at max. 30 - 45lpm (100 - 3000psi at max. 8 - 12USgpm) max. 240bar (3500psi) at reduced flow rate</p>	<p><b>&gt; Measurement range:</b></p> <p>Supply pressure (analog): 0 - 250bar (0 - 3600psi), cl. 1 (EN 837)</p> <p>Return pressure (analog): 0 - 10bar (0 - 145psi), cl. 1,6 (EN 837)</p> <p>Oil temperature indicator: 0 - 100°C (32 - 212°F)</p> <p>Flow measurement (Option A): 0.2 - 46lpm (0,05 - 12USgpm), ±1% F.S.</p>
<p><b>&gt; Electrical parameters (requirements):</b></p> <p>Supply: 3/N/PE AC 50-60Hz 400V 3/N/PE AC 50-60Hz 230V</p> <p>Nominal current: 30A / 50A</p> <p>Power: approx. 20kVA</p>	<p><b>&gt; Operating conditions:</b></p> <p>Operating temperature: -25 to +45°C (-13 to +113°F)</p> <p>Noise emission: max. 73dB(A) at 1m distance</p>
<p><b>&gt; Dimensions and weight:</b></p> <p>Length: 1900mm (6.2ft) Length: 2100mm (6.9ft) (Option N) Width: 1200mm (3.9ft) Height: 1500mm (4.9ft) Weight: approx. 850kg (1.870lb)</p>	<p>Test medium (depending on type of equipment):</p> <p>Phosphate-Ester Hydraulic Oil ("Skydrol" or "Hyjet") or Mineral Oilbased Hydraulic Media ("MIL-H-5606", "MIL-H-83282", "MIL-H-87257")</p> <p>Filter: 3 micron in filling and low pressure circuit; 3 micron in high pressure circuit; 25 micron in return (Option D)</p>

### Hydraulic Ground Power Unit >HGPU< Suitable for aircraft with 3000psi system

Type	System	Flow (USgpm)	Motor (kW)
HGPU8-30-1	Single	8	15
HGPU12-30-1	Single	12	22

## HYDRAULIC GROUND POWER UNIT

- ① Filter (3 micron) in filling/low pressure circuit and in high pressure circuit
- ② Retaining brackets for electrical connection cable
- ③ Chassis with towing bar (Option N)
- ④ The large oil-air cooler
- ⑤ Gas spring struts enabling easy operation of the hinged cover
- ⑥ Electrical drive motor

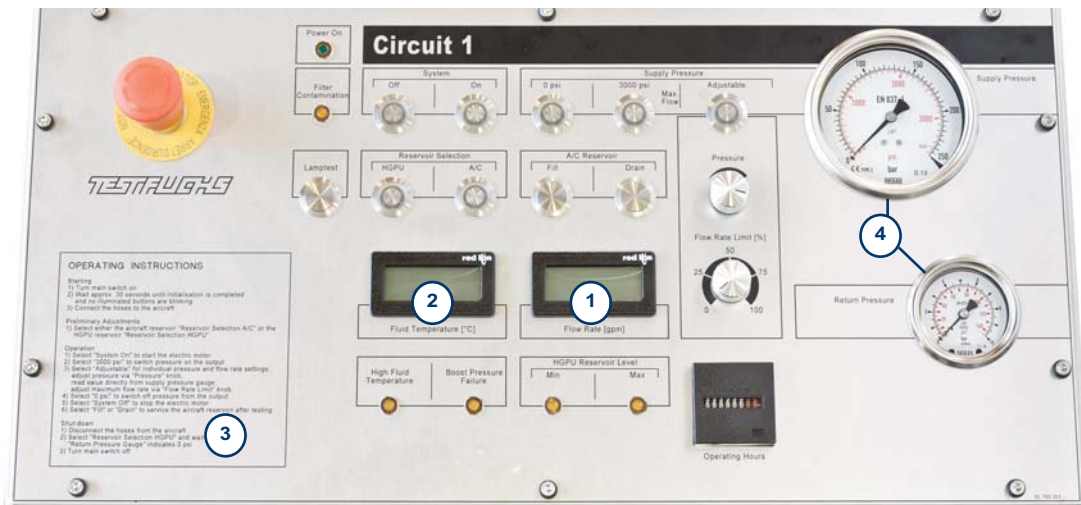


## HYDRAULIC GROUND POWER UNIT manual steering

- ① Hydraulic connection hoses
- ② Test sampling points (Option K)
- ③ Braked swivelling castors
- ④ Steering arm
- ⑤ Forklift truck access points
- ⑥ Non-standard color (Option R)
- ⑦ Signal lamp



## CONTROL PANEL



1 Digital indicator for flow measurement (Option A)

2 Digital indicator for oil temperature measurement

3 Quick guide for operation of the ground power unit. The required language can be ordered (Option S)

4 Pressure gauges for supply and return pressure

## REAR VIEW OF AN >HGPU<

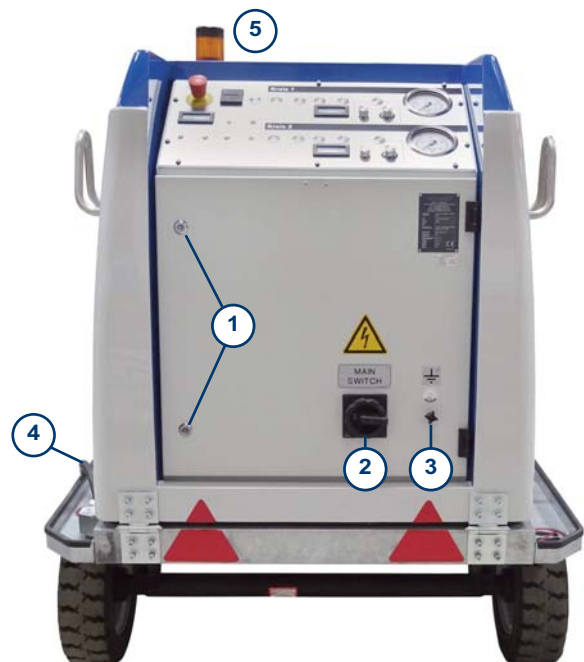
1 Safety locks

2 Main switch of the >HGPU<

3 Grounding screw for potential equilization

4 Electrical connection cable

5 Signal lamp



## OPTIONS

OPTION	DESCRIPTION
<b>A</b>	Flow measurement with digital indicator: 0,2 to 46lpm (0,05 to 12USgpm) ±1% of full scale
<b>C</b>	Flushing circuit with loading system
<b>D</b>	Filter (25 micron) in the return line
<b>G</b>	Required hose lengths differing from the standard 6 m (20ft) <u>must be specified by the customer.</u>
<b>K</b>	Test sampling points
<b>M</b>	Electrical filling pump
<b>N</b>	Chassis with steering axle and towing bar
<b>P</b>	Electrically selectable open/ closed hydraulic circuit operation
<b>R</b>	Cover color change from standard blue (RAL 5007)/ white (RAL 9003) <u>The required color combination must be specified by the customer including the RAL standard</u>
<b>S</b>	<u>Changes to the standard languages German, English for front panel markings must be clearly defined by the customer as an additional requirement.</u>
<b>T</b>	Dual Output Kit