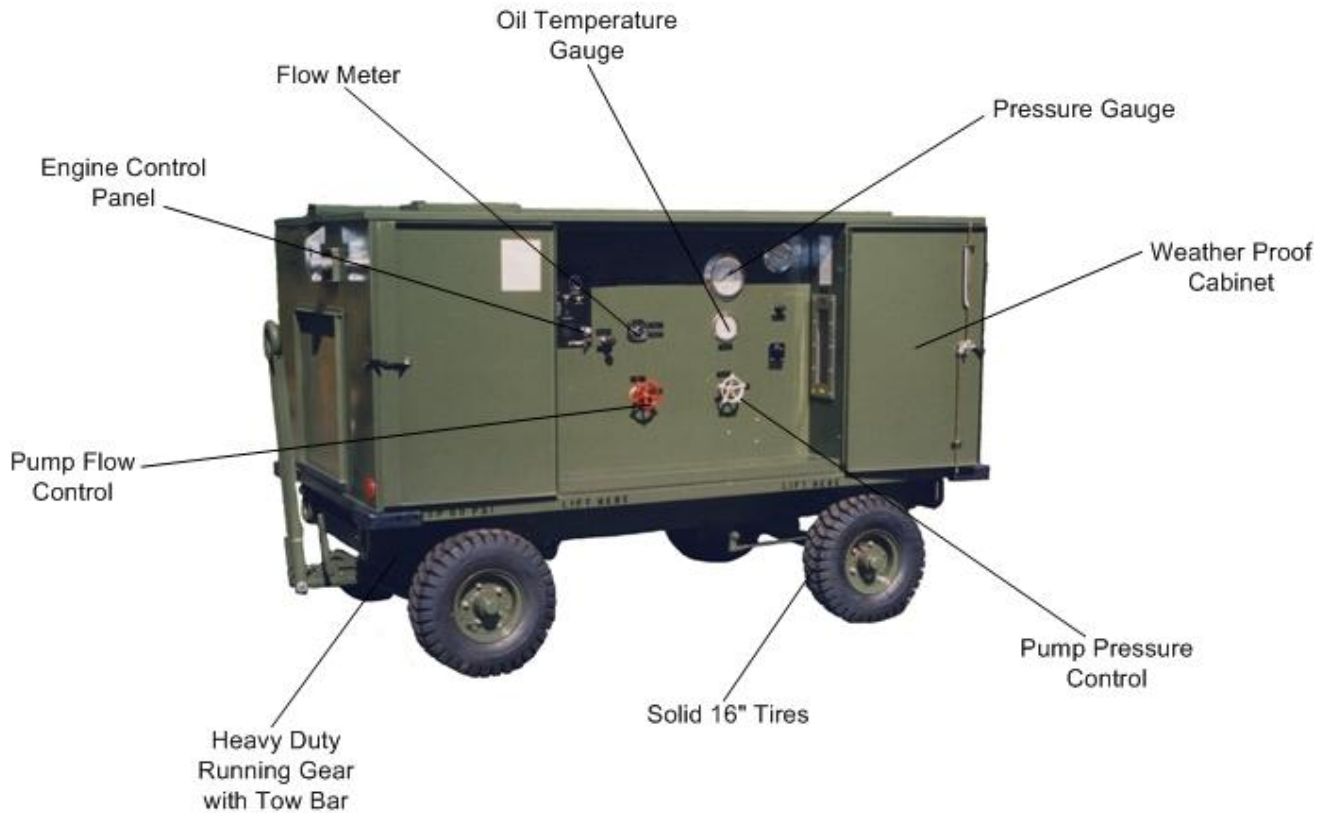


**520
Series**

**2 Year
Warranty**

SUPER DUTY SINGLE SYSTEM HYDRAULIC POWER UNIT / DIESEL POWERED

*Designed to Meet or Exceed Standards Set By
National Stock Number Specifications*



Model 05-524-03

Electric Motor Available As Prime Mover

*Durably Engineered for the
Toughest Applications*

- Performance Assured 100% Duty Cycle, Will Deliver Maximum Flow @ Maximum Pressure
- Boost Pump Continuously Filters and Cools Fluid
- Dependable Perkins® Diesel Engine
- Weather Proof Cabinet with Hose Storage
- Heavy Duty Frame with Puncture Proof Tires
- Complete with Spare Components for Maintenance



9283 Industrial Blvd. Leland, NC 28451 USA
Voice 910.371.1151 Fax 910.371.1152
ap-hydraulics.com

SUPER DUTY SINGLE SYSTEM HYDRAULIC POWER UNIT / DIESEL POWERED

*Designed to Meet or Exceed Standards Set By
National Stock Number Specifications*

- **Performance Assured 100% Duty Cycle**
 1. Will deliver Maximum Flow @ Maximum Pressure
 2. Reliable Perkins® Diesel Engine
 3. Dependable Oilgear® Piston Pump
- **Panel Mounted Controls for Ease of Operation and Safety**
 1. Complete Pump Flow Adjustment (0-Full GPM)
 2. Complete Pump Pressure Adjustment (250-Full PSI)
 3. By-Pass Dump Valve
- **Durable All Welded Construction**
 1. Heavy Duty All Welded Chassis
 2. 14 Gauge All Welded Steel Cabinet
 3. Anticorrosive and Weather Resistant Epoxy Paint
 4. Weather Proof Cabinet
- **Instrumentation**
 1. High Pressure, Dual Scale Flow Meter (4% accuracy)
 2. Test Quality 6" Pressure Gauge (1% accuracy)
 3. Dual Scale Pyrometer / Oil Temperature Gauge (2% accuracy)
 4. Test Quality Boost Pump Pressure Gauge
- **Safety Automatic Shut-Down**
 1. Engine Low Oil Pressure
 2. Engine Over Temperature
 3. Reservoir Low Level
 4. Pressure Filter Clogged Conditions

Dimensions:

Series Model 05-522-** and 05-523-**: Length 100", Width 60", Height 66"

Series Model 05-524-** and 05-525-**: Length 110", Width 75", Height 74"

SPECIFICATIONS:				
SERIES MODEL	PUMP PRESSURE PSI (bar)	MOTOR HP (kW)	PUMP FLOW GPM (lpm)	WEIGHT Lbs. (kg)
05-522-**	450 - 4000 PSI 30 - 272 bar	60 HP 45 kw	25 GPM 95 lpm	2350 lbs 1066 kg
05-523-**	450 - 4000 PSI 30 - 272 bar	75 HP 56 kw	35 GPM 132 lpm	2813 lbs 1276 kg
05-524-**	450 - 4000 PSI 30 - 272 bar	120 HP 89 kw	50 GPM 189 lpm	3575 lbs 1621 kg
05-525-**	450 - 4000 PSI 30 - 272 bar	150 HP 112 kw	60 GPM 227 lpm	4138 lbs 1877 kg

**Model by Fluid Type: Mil-H-5606 = 02 Mil-H-83282 = 03



DIESEL POWERED HYDRAULIC POWER UNIT

**520
Series**

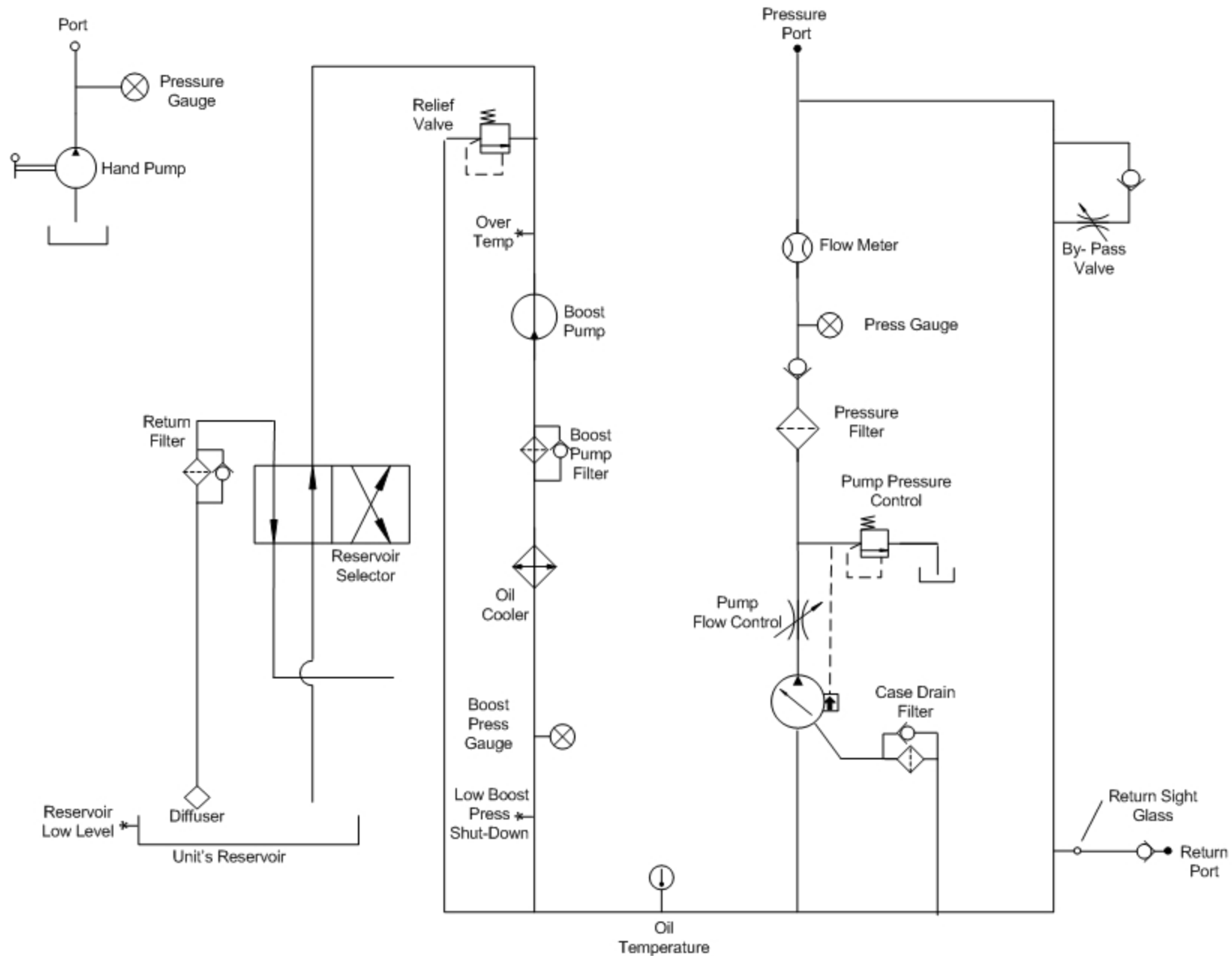
Leading Particulars

Item	Specifications
Purpose	To test independent hydraulic systems of aircraft.
Functions	<ul style="list-style-type: none"> a. Boost pump for close loop circuit. b. Open loop configuration for filling and draining of A/C reservoir. c. Single system with in and outlet with a shut-off valve.
Performance	<ul style="list-style-type: none"> a. Maximum pressure at maximum flow: 300 - 3000 PSI, 4000 PSI b. Flow Range: refer to model number
Engine	Perkins® Diesel Engine
Hydraulic System	<ul style="list-style-type: none"> a. Axial piston pump variable stroke with proportional control of flow and pressure b. Fluid Sample Port c. Pressure filter 3 micron absolute, low pressure filter 10 micron absolute with electric clogged conditions indicator d. Stainless steel reservoir capacity 150% of maximum pump output (refer to model number) e. Pressure and return hoses 35 ft. long f. High volume hand pump with filter and pressure gauge for servicing aircraft's reservoir
Switches/Gauges/Indicators	<ul style="list-style-type: none"> a. Analog pressure gauge 0-4000 PSI in pressure line and 0-200 PSI in return line (1% Accuracy) b. Analog read out for actual flow c. Flow setting by flow control valve d. Pressure setting by pressure relief valve e. Temperature shut down switch f. Emergency shut-down button g. Low pressure filter clogged conditions indicator h. Switch for low and high level and return pressure gauge
Control Panel	<ul style="list-style-type: none"> a. Contains all control gauges and indicators for hydraulic system b. Accessible through hinged panel in a dust and water proof housing c. Illuminated to enable easy operation at night d. Graphic lay out for ease of operation e. Protective cover for control panel
Safety System	HTS have all required safeties pertaining to electrical, Hydraulic and emergency system.
Structure	<ul style="list-style-type: none"> a. Strong and heavy duty chassis. b. Heavy duty frame with drip tray. Hydraulic and Electrical components completely isolated from each other. c. Canopy out of steel, spray painted. d. Maximum towing speed 16 Km/hour, parking brake on front wheel by tow in upright position. e. Tie down / lifting points. Fork-lift pick-up points.

DIESEL POWERED HYDRAULIC POWER UNIT

Leading Particulars

Item	Characteristics
Noise Level	a. Less than 75 dbA at two meter distance.
Accessories	<ul style="list-style-type: none"> a. Bottle samplers for laboratory check of contamination to be provided with each HTS. b. All models incorporate in Line Sensor for connection with Hydraulic contamination. c. One set of hydraulic pressure and return lines, 35 ft. long d. One 45 Watt swiveling spot light with each HTS. e. One CO₂ fire extinguisher mounted on outside of unit. f. One tool kit for routine scheduled/unscheduled maintenance with each unit.
Publications	<ul style="list-style-type: none"> a. 2 Sets of Operation Manual b. Engine maintenance and IPC manual for complete overhauling of engine
Training	One week training, depot level maintenance on troubleshooting, rectification, and maintenance
Spare Parts	<ul style="list-style-type: none"> a. Hydraulic pressure filter 6 sets and o-rings b. Boost pump filter 6 sets spin on elements c. Return filter 6 sets spin on elements d. Reservoir service pump filter 2 sets spin on elements e. Diesel engine fuel filter 4 sets f. Diesel engine air filter 2 sets g. Pump gasket kit 1 set h. O-ring set for all manual valves 1 set i. Spare puncture proof tire 1 each j. Availability of parts 20 years
Warranty	<ul style="list-style-type: none"> a. Frame and running gear 5 years b. Diesel engine 3 years c. Pumps 2 years d. Complete hydraulic system 2 years



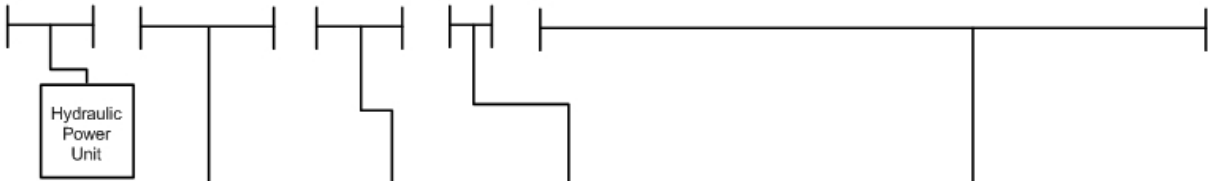
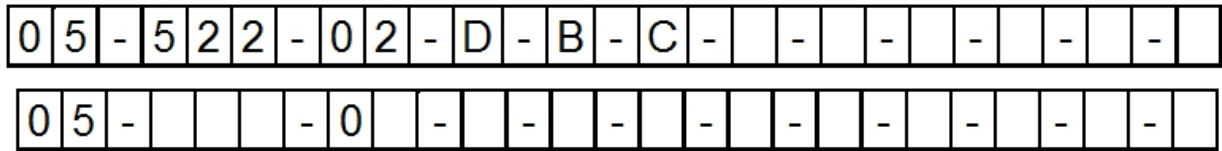
Series 520 Hydraulic Power Unit Schematic

Ordering Instructions

- Step 1: Determine Size of the Hydraulic Power Unit Required, Refer to Aircraft's Maintenance Manual For
 A. Maximum (GPM) Gallons Per Minute B. Maximum (PSI) Pound Per Square Inch
- Step 2: Refer to Aircraft's Maintenance Manual for Type of Hydraulic Fluid.
- Step 3: Call A&P Hydraulics experienced sales staff for any questions or for explanation of the complete range of Hydraulic Power Unit Options that we offer.

EXAMPLE:

Hydraulic Power Unit – 25 GPM @ 4000 PSI – Mil-H-5606 Fluid – Diesel Engine
 Optional: 50 ft. Hoses and Dual System



CHAR	GPM	LPM	PSI	BAR	HP	KW
522	25	95	4000	272	60	45
523	35	132	4000	272	75	56
524	50	189	4000	272	120	89
525	60	227	4000	272	150	112

CHAR	DESCRIPTION
D	Diesel Engine
E	Electric Motor Prime Mover

CHAR	FLUID TYPE
2	Mil-H-5606
3	Mil-H-83282

CHAR	OPTION DESCRIPTION
B	50 ft. Hoses
C	Dual System
T	Return Back Pressure w/ Sight Glass
U	Return Sight Glass
V	Return Back Pressure
W	Second Language Operation Placards & Owner's Manual
X	CE Compliant
Y	Custom Engineering

