

**740
Series**

**2 Year
Warranty**

COMPLETELY INDEPENDENT DUAL SYSTEM HYDRAULIC POWER UNIT

*Independent Dual Systems will Deliver Two
Completely Separate Flows and Pressures at the Same Time*



Model 05-746-05
Shown with Optional Digital Gauges
and Heavy Duty Running Gear

System A

- System A, Complete Flow Control (0-Full GPM)
- System A, Complete Pressure Control (250 – Full GPM)
- System A, Variable Area Flow Meter (4% Accuracy); Optional Digital Flow Meter (1% Accuracy)
- System A, Test Quality Pressure Gauge (1% Accuracy); Optional Digital Pressure Gauge (.5% Accuracy) Available

System B

- System B, Complete Flow Control (0-Full GPM)
- System B, Complete Pressure Control (250 - Full GPM)
- System B, Variable Area Flow Meter (4% Accuracy); Optional Digital Flow Meter (1% Accuracy) Available
- System B, Test Quality Pressure Gauge (1% Accuracy); Optional Digital Pressure Gauge (.5% Accuracy) Available



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COMPLETELY INDEPENDENT DUAL SYSTEM HYDRAULIC POWER UNIT

*Independent Dual Systems will Deliver Two
Completely Separate Flows and Pressures at the Same Time*

Standard Features:

- *Independent Dual System Includes:*
- *Independent Dual Motors*
- *Independent Dual Pumps*
- *Independent Dual Flow Meters*
- *Independent Dual Pressure Gauges*
- *Independent Dual Flow and Pressure Control Valves*
- *Independent, Dual By-Pass Dump Valves*
- *Dual Pressure Hoses (25 Ft. Long)*
- *Dual Return Hoses (25 Ft. Long)*
- *100% Duty Cycle, Will Deliver Maximum Flow @ Maximum Pressure*
- *Electric Reservoir Fill Pump System*
- *High Efficiency Aluminum Oil Cooler with 3 Phase Electric Fan*
- *Stainless Steel Reservoir- Capacity 150% of Rated Maximum Flow*
- *All Electrical Components Installed in Liquid Proof Enclosures (NEMA 4, 12)*
- *Extra Capacity, Reservoir Desiccant (Water Absorbing) Breather*
- *Heavy Duty All Welded Frame with Fork Lift Tubes*
- *Standard 50 ft. (15.2 m) Electrical Input Cable*
- *Guaranteed No Leaks, Stainless Steel Pan Completely Covers Bottom*
- *Durable Laser Engraved , Aluminum Placards*
- *Panel Mounted Operational Instructions*
- *Current Pressure Gauge and Flow Meter Certificate of Calibration*
- *Easy Access Exterior Fluid Sampling Valve to Meet Quality Parameters*

- ***Durable 14 Gauge Stainless Steel Cabinet Construction***
 1. Large Hinged Rear Access Door Provides Convenient Access and Inspection
 2. Removable Top Panel for Ease of Access to Unit's Components
 3. No Exterior Paint to Fade or Chip with Usage
 4. Guaranteed Not to Rust

- ***Instrumentation***
 - *Dual Variable Area Flow Meters (4% accuracy)*
 - *Optional Dual Digital Flow Meters (1% accuracy) Available*
 - *Dual Test Quality Pressure Gauges (1% accuracy)*
 - *Optional Dual Digital Pressure Gauges (.5% accuracy) Available*
 - *All Optional Digital Gauges Installed in Skydrol Resistant Enclosure*
 - *Dual Scale Pyrometer / Oil Temperature Gauge (1% accuracy)*
 - *Optional Digital Pyrometer / Oil Temperature Gauge Available*
 - *Hour Meter with Maintenance Reminder Warning Light*

- ***Reservoir Fill Pump System***
 - *For Servicing Aircraft's Reservoir*

- ***Super Clean Filtration - Industry Leading Filtration Ensures Quality While Increasing Aircraft Component Life and Decreasing Aircraft Filter Changes***
 1. *Oil Polishing Nano Filtration System (.25 Micron Absolute)*
 2. *Dual, High Efficiency, Non-Bypass Pressure Filter (3 Micron Absolute)*
 3. *Dual Large Capacity Return Filter (6 Micron Absolute)*
 4. *Dual By-Pass Filter (6 Micron Absolute)*
 5. *Dual, Pump Case Drain Filters (6 Micron Absolute)*

- ***Operational Warning Lights***
 1. *Dual Pressure Filters Condition LED Warning Indicators for Clogged Conditions*
 2. *Dual Return Filters Condition LED Warning Indicators for Clogged Conditions*
 3. *High Fluid Temperature LED Warning Indicator*
 4. *Reservoir Low Level LED Warning Indicator*
 5. *Operational Beacon*
 6. *Nano Filter Condition LED Warning Indicator for Clogged Conditions*
 7. *Dual By-Pass Filters Condition LED Warning Indicators for Clogged Conditions*
 8. *Pump Cavitation Warning Light*



COMPLETELY INDEPENDENT DUAL SYSTEM HYDRAULIC POWER UNIT

Dimensions:

Series Model 05-741-05: Length 84 in (213 cm), Width 52 in (132 cm), Height 52 in (132 cm)
 Series Model 05-742-05, 05-743-05, 05-744-05, 05-745-05: Length 86 in (218 cm), Width 56 in (142 cm), Height 66 in (167 cm)
 Series Model 05-746-05, 05-747-05, 05-748-05, 05-749-05: Length 116 in (294 cm), Width 76 in (193 cm), Height 86 in (218 cm)

SERIES MODEL	MAX. SYSTEM PRESSURE PSI (bar)	COMBINED MAX. PUMP FLOW GPM (lpm)		SYSTEM A MAX. PUMP FLOW GPM (lpm)		SYSTEM B MAX. PUMP FLOW GPM (lpm)	
		50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
05-741-**	450 - 4000 PSI 30 - 272 bar	25 GPM 94 lpm	30 GPM 113 lpm	12 GPM 47 lpm	15 GPM 57 lpm	12 GPM 47 lpm	15 GPM 57 lpm
05-742-**	450 - 4000 PSI 30 - 272 bar	41 GPM 157 lpm	50 GPM 189 lpm	21 GPM 78 lpm	25 GPM 95 lpm	21 GPM 78 lpm	25 GPM 95 lpm
05-743-**	450 - 5000 PSI 30 - 340 bar	41 GPM 157 lpm	50 GPM 189 lpm	21 GPM 78 lpm	25 GPM 95 lpm	21 GPM 78 lpm	25 GPM 95 lpm
05-744-**	450 - 4000 PSI 30 - 272 bar	66 GPM 251 lpm	80 GPM 302 lpm	33 GPM 125 lpm	40 GPM 151 lpm	33 GPM 125 lpm	40 GPM 151 lpm
05-745-**	450 - 5000 PSI 30 - 340 bar	66 GPM 251 lpm	80 GPM 302 lpm	33 GPM 125 lpm	40 GPM 151 lpm	33 GPM 125 lpm	40 GPM 151 lpm
05-746-**	450 - 4000 PSI 30 - 272 bar	100 GPM 376 lpm	120 GPM 454 lpm	50 GPM 188 lpm	60 GPM 227 lpm	50 GPM 188 lpm	60 GPM 227 lpm
05-747-**	450 - 5000 PSI 30 - 340 bar	100 GPM 376 lpm	120 GPM 454 lpm	50 GPM 188 lpm	60 GPM 227 lpm	50 GPM 188 lpm	60 GPM 227 lpm
05-748-**	450 - 4000 PSI 30 - 272 bar	133 GPM 502 lpm	160 GPM 605 lpm	66 GPM 251 lpm	80 GPM 302 lpm	66 GPM 251 lpm	80 GPM 302 lpm
05-749-**	450 - 5000 PSI 30 - 340 bar	133 GPM 502 lpm	160 GPM 605 lpm	66 GPM 251 lpm	80 GPM 302 lpm	66 GPM 251 lpm	80 GPM 302 lpm

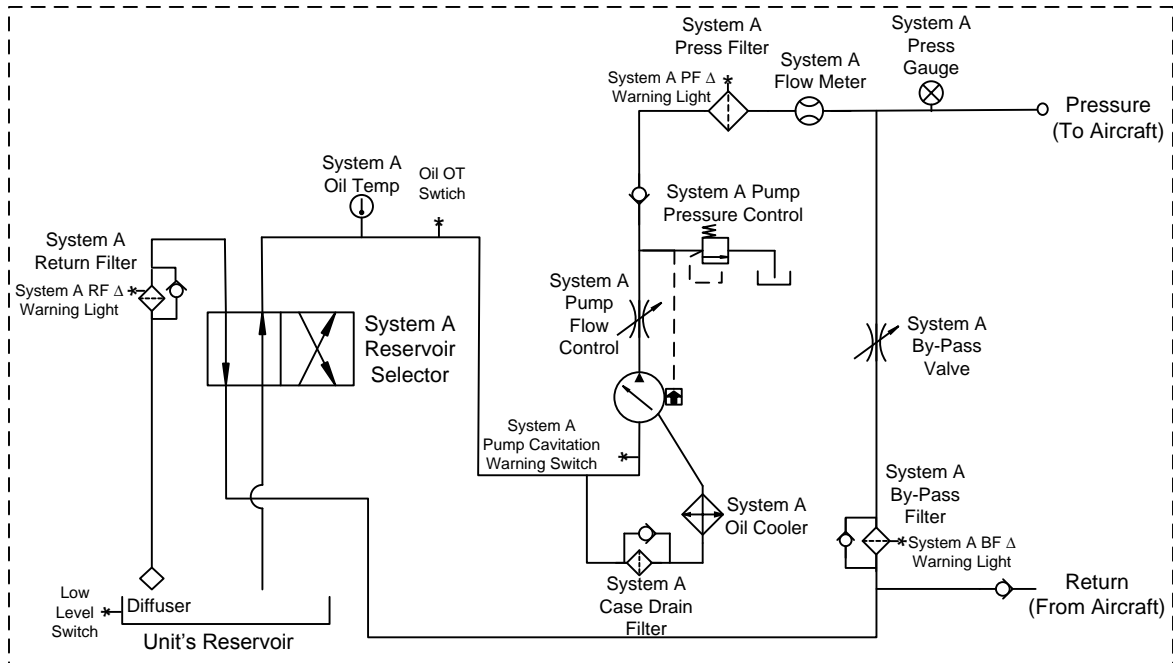
SPECIFICATIONS:

SERIES MODEL	COMBINED MOTOR HP (kw)	SYSTEM A MOTOR HP (kw)	SYSTEM B MOTOR HP (kw)	WEIGHT Lbs. (kg)
05-741-**	50 HP 37 kw	25 HP 19 kw	25 HP 19 kw	2850 lbs 1293 kg
05-742-**	100 HP 74 kw	50 HP 37 kw	50 HP 37 kw	5250 lbs 2381 kg
05-743-**	150 HP 112 kw	75 HP 56 kw	75 HP 56 kw	5750 lbs 2608 kg
05-744-**	150 HP 112 kw	75 HP 56 kw	75 HP 56 kw	6100 lbs 2766 kg
05-745-**	200 HP 149 kw	100 HP 74 kw	100 HP 74 kw	6250 lbs 2835 kg
05-746-**	200 HP 149 kw	100 HP 74 kw	100 HP 74 kw	6600 lbs 2993 kg
05-747-**	300 HP 224 kw	150 HP 112 kw	150 HP 112 kw	6850 lbs 3107 kg
05-748-**	300 HP 224 kw	150 HP 112 kw	150 HP 112 kw	7200 lbs 3265 kg
05-749-**	400 HP 298 kw	200 HP 149 kw	200 HP 149 kw	8150 lbs 3696 kg

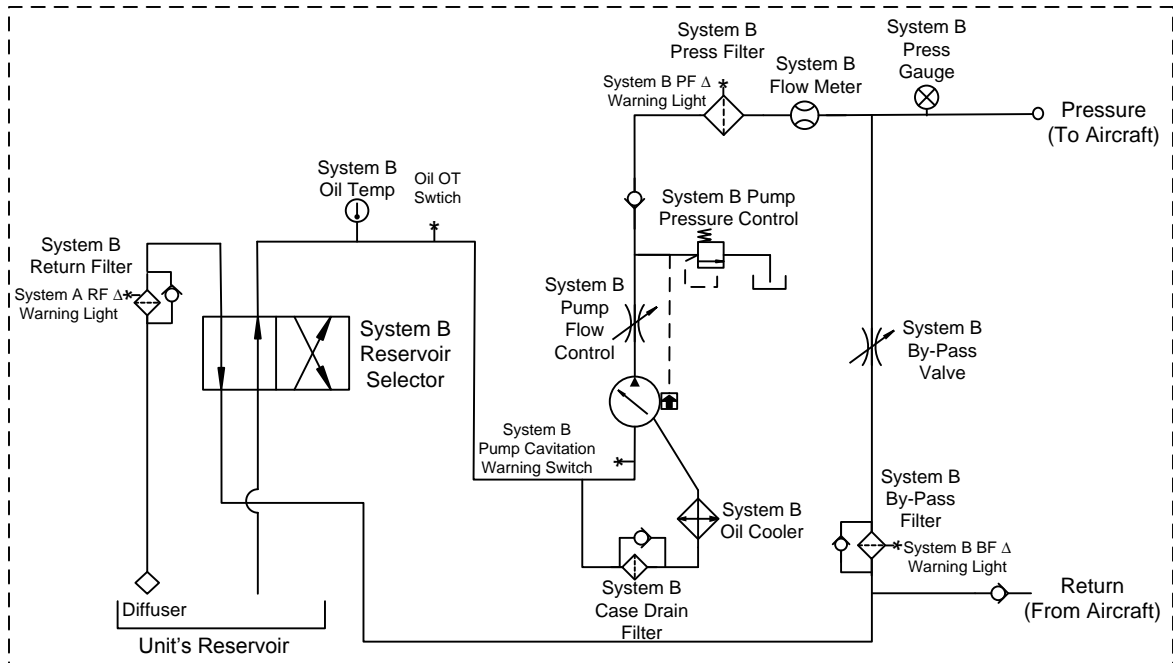
**Model by Fluid Type: Mil-H-5606 = 02 Mil-H-83282 = 03 Skydrol = 05



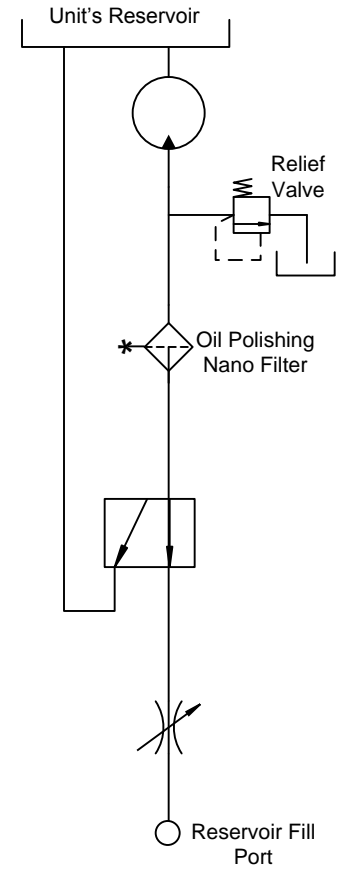
System A



System B



Automatic Oil Polishing Nano Filtration System



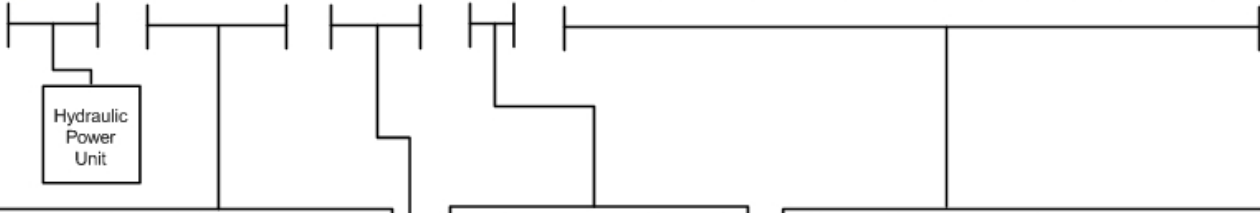
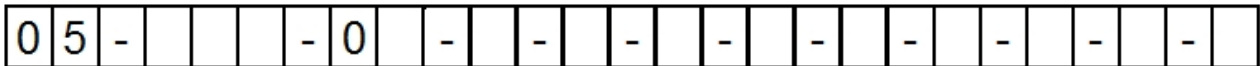
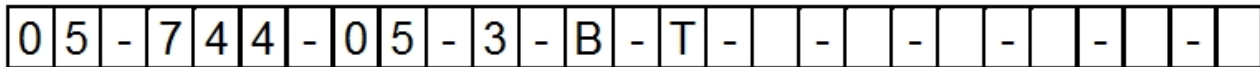
Series 740 Hydraulic Power Unit Schematic

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: Determine the input voltage the Hydraulic Power Unit will be operated on. When ordering, the most common error is selecting Incorrect input voltages, 50 Hertz the flow will be reduced by 17%
- Step 4: Call A&P Hydraulics experienced sales staff for any questions for explanation of the complete range of Hydraulic Power Unit Options that we offer.

EXAMPLE:

Hydraulic Power Unit – 40 GPM @ 4000 PSI – Skydrol Fluid – 460 Volt 60 Hertz 3 Phase
 Optional: 50 ft. Hoses and Return Back Pressure with Sight Glass



CHAR	GPM	LPM	PSI	BAR	HP	KW
741	15	57	4000	272	25	19
742	25	95	4000	272	50	37
743	25	95	5000	340	75	56
744	40	151	4000	272	75	56
745	40	151	5000	340	100	74
746	60	227	4000	272	100	74
747	60	227	5000	340	150	112
748	80	302	4000	272	150	112
749	80	302	5000	340	200	149

CHAR	VOLT/FREQ/PHASE
2	308V60Hz/3ph
3	460V60Hz/3ph
4	575V60Hz/3ph
7	380V50Hz/3ph
8	415V50Hz/3ph
9	440V50Hz/3ph

CHAR	FLUID TYPE
2	Mil-H-5606
3	Mil-H-83282
5	Skydrol
6	Mil-PRF-87257

CHAR	OPTION DESCRIPTION
B	50 ft. Hoses
H	Voltage Monitor (308-380V)
I	Voltage Monitor (415-460V)
J	Voltage Monitor (575V)
S	Heavy Duty Under Carriage with Tow Bar and Brake
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
Z	Digital Gauges