

OLS INGROUND REPLACEMENT JACK PROGRAM

ENCLOSED IS THE FOLLOWING INFORMATION:

- 1. Inground Jack Data Form**
- 2. Limitations of Replacement Jack Information Form**
- 3. Information & Dimensional Drawings of Jacks**
- 4. Information & Dimensional Drawing of Pit Channels**
- 5. Information & Dimensional Drawing of P.V.C.**
- 6. Heat Exchangers**
- 7. Information & Dimensional Drawings of Power Units**

S00001

48 Hour Replacement Jack Program



Oil Lift Systems Inc.

INGROUND JACK DATA FORM

2 Cochran Dr. R.R.#1 Ayr, Ontario, Canada, N0B 1E0 Tel: (519) 621-4563 Fax: (519) 624-5675 Toll Free: (800) 567-3557

Please fill out as much information as possible, and fax to (519) 624-5675

(Check One) New Construction Replacement Jack

Date: _____

Company Information:

Company Name: _____

Contact Name: _____

Address: _____

Zip / Postal Code: _____

Telephone No. () _____

Fax No. () _____

Existing Conditions

Job Reference: _____

Capacity: _____ lbs

Gross Load on Plunger: _____ lbs

(Including Capacity)

Travel (Floor to Floor) : _____ in.

Speed: _____ FPM

Existing Piston Dia.: _____ in.

Existing Piston Wall Thickness: _____ in.

*Pump Flow: _____ GPM

*Coil Voltage: _____ V

*Motor Size: _____ HP

*Motor Voltage: _____ V

* Only required if power unit is to be ordered

Check Equipment Required

Jack: 1pc 2pc 3pc **

Sealed PVC System:

Pit Channels:

Power Unit:

Heat Exchanger:

*LRV(LINE RUPTURE VALVE) STANDARD ON ALL JACKS (TO BE SIZED BY OLS)

Jack Bolt Size (B): _____

Inlet Size (I): _____ LRV (STANDARD)

Inlet Height (H) [4-1/2" Min]: _____ in.

Pit Channels (C): _____ in.

Top Overtravel (Top Runby) : _____ in.

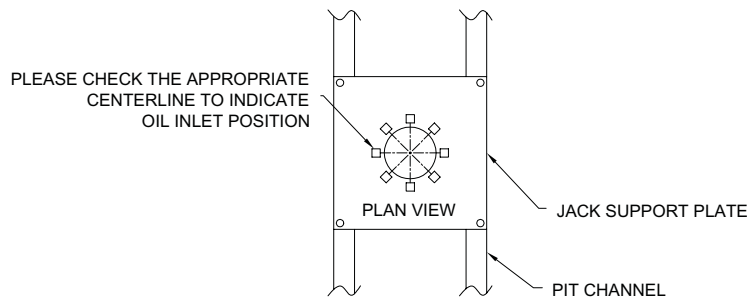
Total Bottom Undertravel (T)*: _____ in.

*Total Bottom Undertravel = Runby + Buffer Stroke + 1"

Plate + Plank + Platform (P): _____ in.

Existing Inlet Size: _____ in.

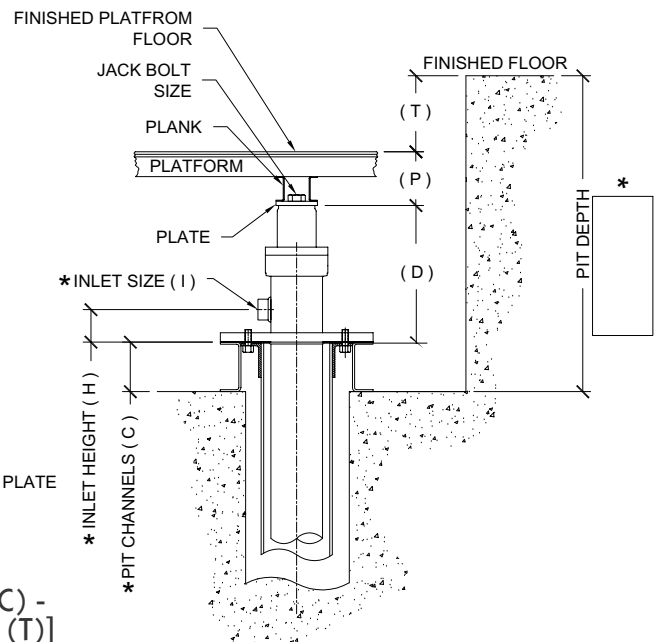
Existing Inlet Type: NPT VIC



Support Plate Location (D) = [Pit Depth - Pit Channels (C) - Plate + Plank + Platform (P) - Total Bottom Under Travel (T)]

JACK INFORMATION

Total Stroke = [Travel (Floor to Floor) + Bottom Undertravel + Top Over Travel]



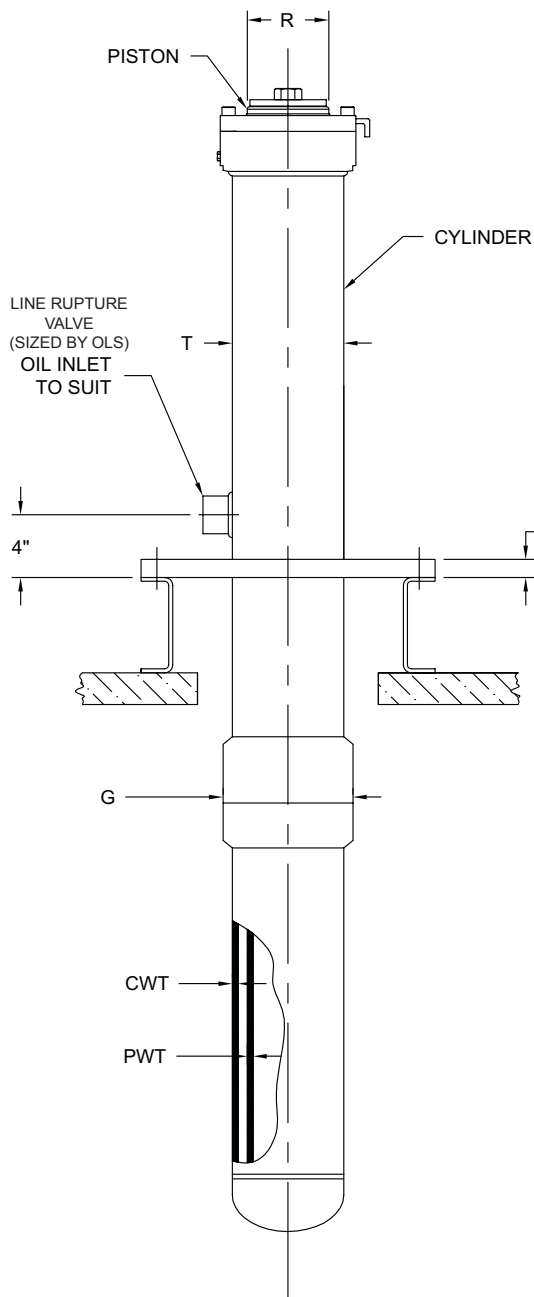
LIMITATIONS OF REPLACEMENT JACK PROGRAM

- Maximum Travel - 43 ft. depending on load and piston diameter.
- Nominal piston diameters available:
 - 3 1/2" (90 mm)
 - 4" (100 mm)
 - 4 3/8" (110 mm)
 - 4 3/4" (120 mm)
 - 5" (130 mm)
 - 5.5" (140mm)
 - 6" (150 mm)
- Jack can be supplied in one, two or three pieces (Three piece jacks only available for thicker walled jacks).
- Lead time - 48 hours from date of order.
- Transport Cost - Extra.
- For all U.S. customers, duty and brokerage - Paid by Oil Lift Systems Inc.
- For all U.S. customers, customs clearance by Oil Lift Systems Inc.
- Inlet type - Line Rupture Valve (Standard):

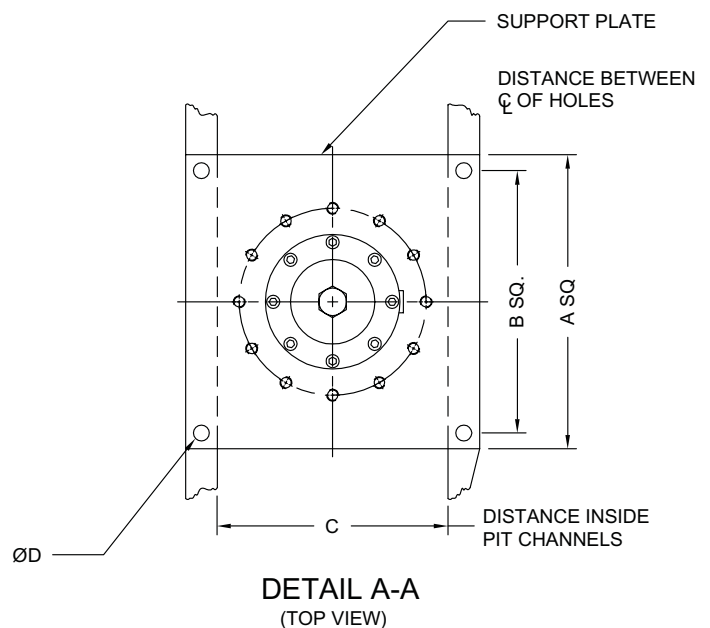
SIZE	(THREAD)
1"	1" NPT
1 1/4"	1 1/2" NPT
1 1/2"	1 1/2" NPT
2"	2" NPT
2 1/2"	2 1/2" NPT
- Cylinder - Painted Grey Primer.

Jack

- Replacement Jacks supplied meet or exceed ASME-A17.1 and CSA -B44.
- All welding is in accordance with CWB Standards (Canadian Welding Bureau).
- Jacks supplied will have slight differences to existing jack but from the information you supply we will ensure we provide correct runby, buffer stroke, travel, Line Rupture Valve size and location, and jack bolt size.
- Jack is painted with a grey primer. We do not provide any other wrap protection.
- The jack can be supplied in two pieces when requested which is typical for existing buildings.
- For all two-piece jacks, the cylinder and piston are screwed together using an "o" ring seal and loctite. Welding is not required.
- Installation instructions will be provided with each jack supplied.
- We do not supply buffer springs and stands for replacment jacks.

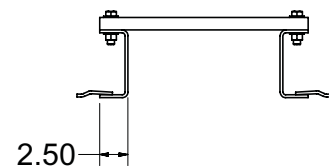
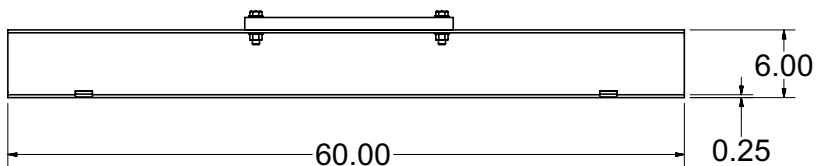
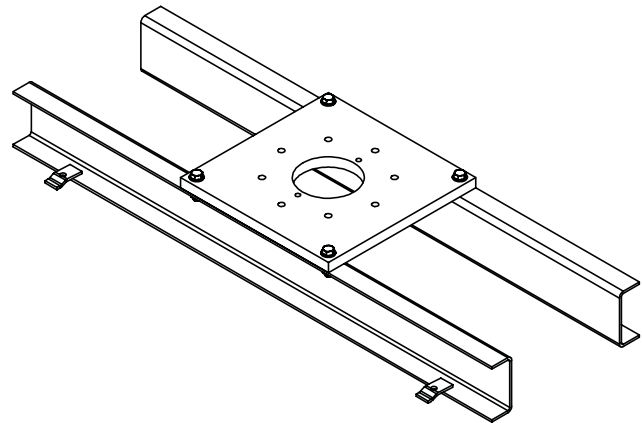
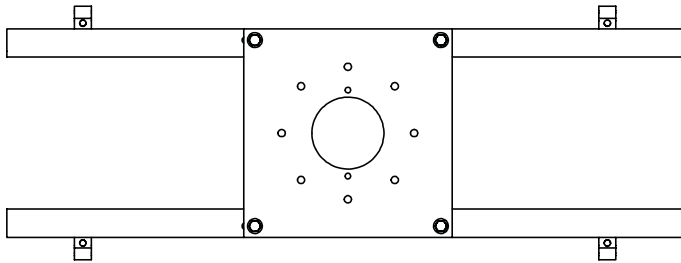


Jack Size	90	100	110	120	130	140	150
A	18.5"	18.5"	21"	21"	21"	21"	21"
B	16.5"	16.5"	19"	19"	19"	19"	19"
C	13.5"	13.5"	16"	16"	16"	16"	16"
∅D	1"	1"	1"	1"	1"	1"	1"
PWT	0.295" 0.478"	0.295" 0.478"	0.295" 0.478"	0.295" 0.478"	0.295" 0.478"	0.295" 0.478"	0.394"
CWT	0.177"	0.177"	0.197"	0.197"	.221"	0.221"	0.232"
S	1"	1"	1"	1"	1"	1"	1"
∅T	4.50"	5.00"	5.75"	6.26"	7.00"	7.00"	7.63"
∅G	6.10"	6.69"	7.68"	7.09"	7.87"	7.87"	8.66"
∅R	3.54"	3.94"	4.33"	4.72"	5.12"	5.51"	5.91"
PVC	8"	8"	10"	10"	10"	10"	10"



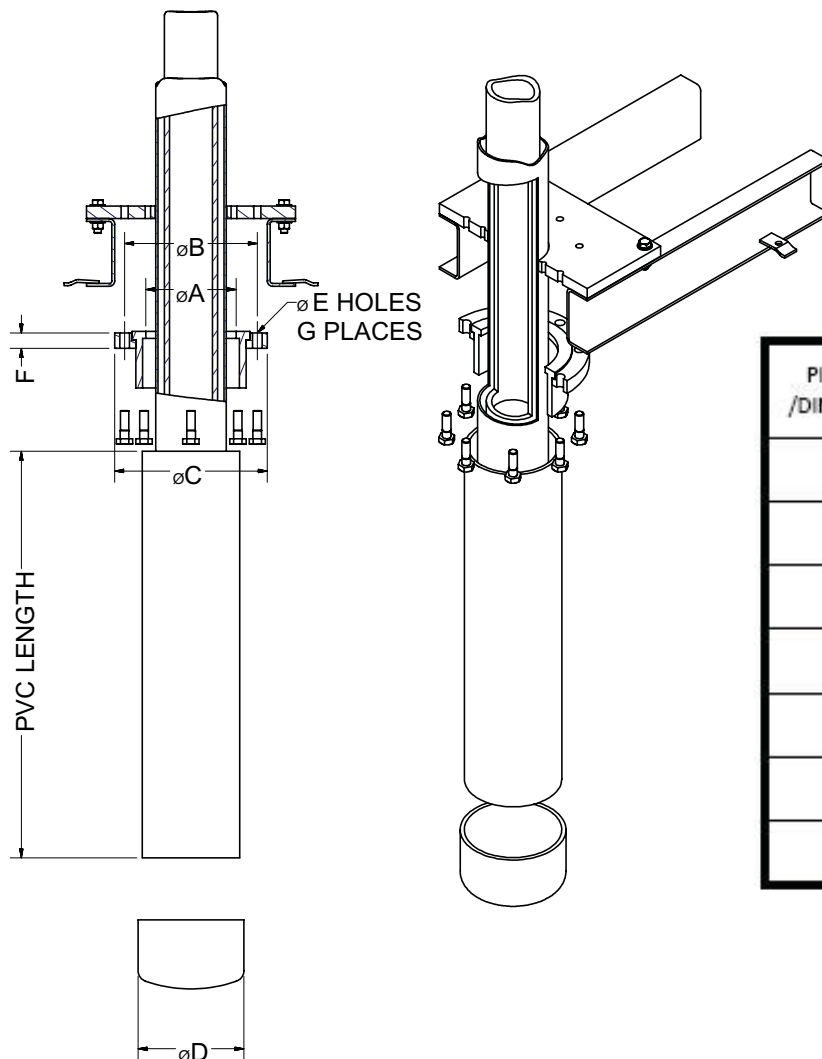
Pit Channels

- In some cases, you may need to purchase Pit Channels with the Jack. Please make sure you indicate this on your order form.
- Your existing Pit Channels may not be wide enough to accept the P.V.C. or the P.V.C. vanstone flange. Please check this.
- If your existing Pit Channels are concreted in place and are not wide enough to accept the P.V.C., it will be necessary to break out the existing Pit Channels.
- If your existing Pit Channels are concreted in place and are wide enough to accept the P.V.C., but not the P.V.C. vanstone flange, you may consider placing new Pit Channels on top of the existing Pit Channels.
- See drawing below for dimensional data on the pit channels



P.V.C.

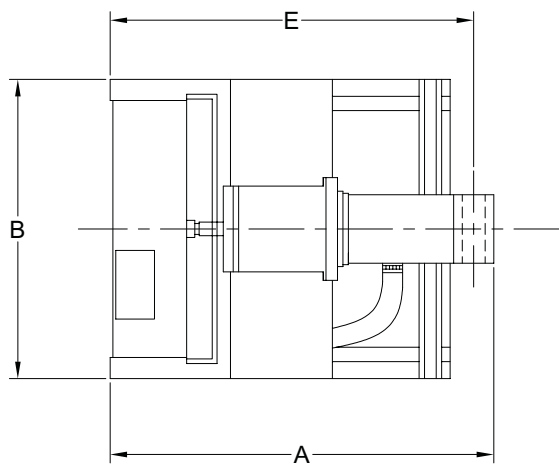
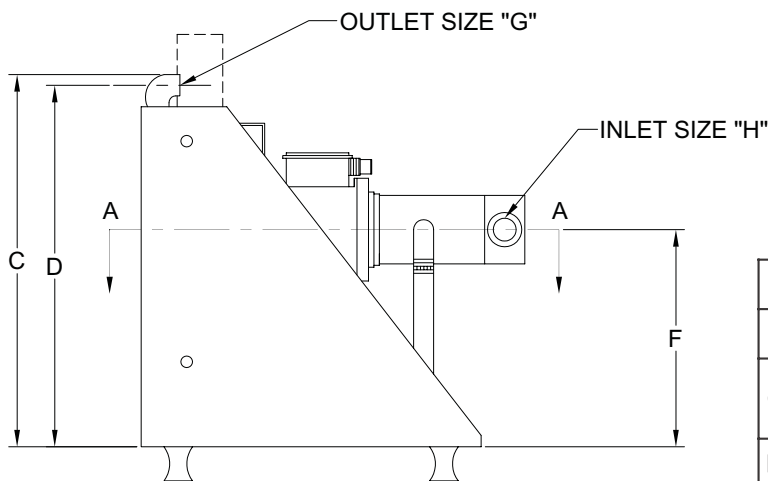
- P.V.C. can be supplied in one, two or three pieces, up to a maximum length of 20 ft. per section
- P.V.C. is shipped separately with the jack to prevent damage in transport. We do not assemble the P.V.C. to the jack.
- Our P.V.C. System is completely sealed to prevent any water leaking into the P.V.C. case. P.V.C. is bolted to the under side of jack support plate using a vanstone flange and rubber gasket. See page #
- See page # showing the width required for Pit Channels to be able to clear the P.V.C. vanstone flange.
- P.V.C. and jack can be bolted together prior to lowering into drill hole, eliminating the need to hold P.V.C. down if you have water in the drill hole.
- P.V.C. is cut to length and prepared for each job.
- Installation instructions will be supplied with each shipment of P.V.C.
- The introduction of P.V.C. may cause heat problems. Jacks without P.V.C. serve as a heat sink (a method of cooling). When you introduce P.V.C., you will lose the effect of cooling transfer. You may need to consider a heat exchanger (cooler). See Heat Exchanger information.
- Two 1/2" NPT holes are provided in top of jack pit plate for monitoring integrity of P.V.C protection. Using a string and a small weight (not supplied), it is possible to lower string through 1/2" NPT hole between the cylinder and P.V.C. to identify presence of water or oil.



PISTON Ø / DIMENSION	90mm(3.54") - 100mm(3.93")	110mm(4.33") - 150mm(5.91")
A	8"	10"
B	11 3/4"	14 1/4"
C	13 1/2"	16"
D	9 3/8"	11 7/8"
E	3/4"	3/4"
F	1 1/8"	1 3/16"
G	8"	12"

Heat Exchanger

- Heat Exchanger (cooler) can be used to keep oil cool, should you think heat is going to be a problem due to the introduction of P.V.C. See P.V.C. Important Information
- The introduction of a heat exchanger will help in ride quality, reduce wear, increase life of seals, valve, motor and pump.
- If machine room is not temperature controlled, it would be advisable to place heat exchanger in another room.
- See Drawing# 810031 for details on heat exchanger.
- Heat Exchanger will require 220 V 1 PH power supply.
- You will need to supply two 1" \varnothing diameter lines for suction and discharge from power unit to heat exchanger.
- Thermostat control is provided.
- Please see included Owner's Manual as supplied with all Heat Exchangers for installation, set up, and adjustment details.



SECTION A-A

TECHNICAL CHARACTERISTICS		
TYPE	NE06#	NE14#
COOLING CAPACITY	24,000 BTU/hr	56,000 BTU/hr
PUMP FLOW RATE	9.25 GPM	15.85 GPM
FAN CAPACITY	600 CFM	1500 CFM
MOTOR SIZE	1HP, 220V, 60Hz, 1 PHASE	1HP, 220V, 60Hz, 1 PHASE
NOISE LEVEL @ 3ft	67 dBA	71 dBA
RUNNING SPEED	1750 RPM	1750 RPM
MAX ADMITTED PRESSURE	58 psi	58 psi
WEIGHT	158 lbs	224 lbs
REQUIRED NpsH	-5.8 psi	-5.8 psi

TYPE	A	B	C	D	E	F	G	H
NE06#	21.66	17.33	21.66	20.86	20.86	11.22	1" NPT	1" NPT
NE14#	24.61	25.98	29.13	27.56	23.43	14.96	1" NPT	1" NPT

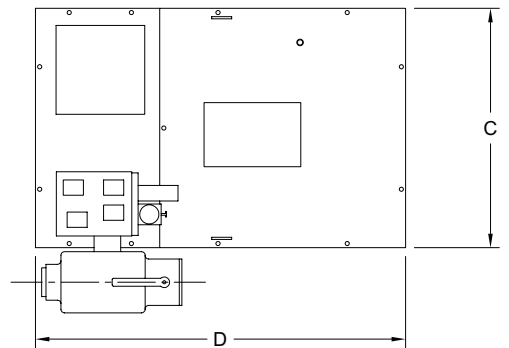
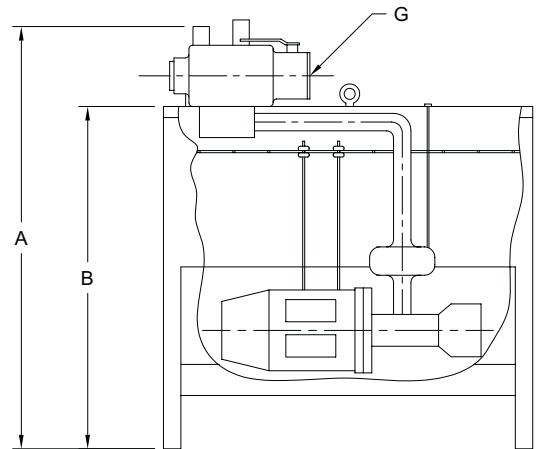
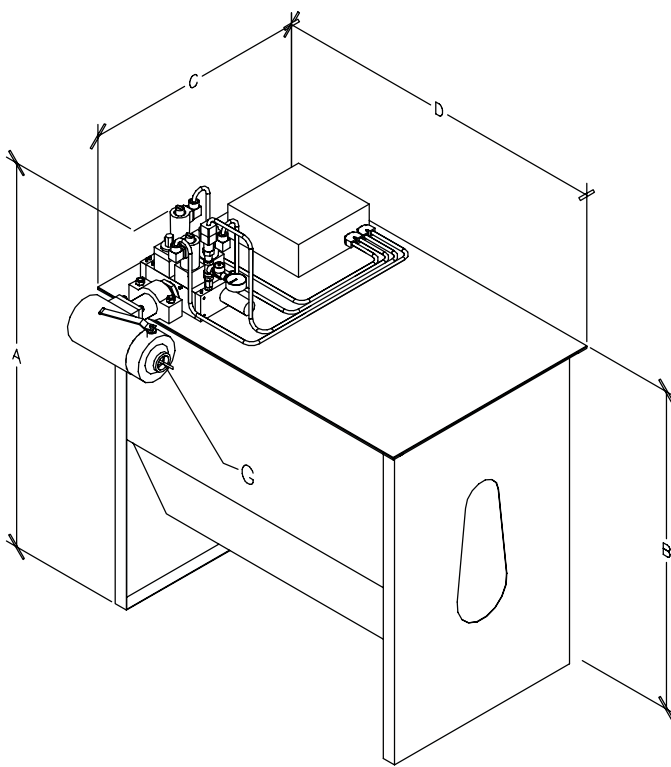
HEAT EXCHANGER

Data Sheet 6
November 2002



Power Unit

- If power unit is required, it will be supplied as per drawings supplied. Three (3) tank sizes are available, 2,3 and 4. Tank size supplied will be predetermined by motor size, pump size and oil volume required.
- Valve is a GMV 3010/S and has the same function as a Maxton or Ecco valve, but only has three solenoid-operated valves. One of the solenoid-operated valves is common with up and down travel.
- Included with the power unit are rubber isolation feet, muffler, low-pressure switch and motor protection relay.
- See information on our power units enclosed.
- All power units are tested prior to shipping. Two settings, #8 and #9, are wired off with a lead seal, and are not to be touched in the field.
- Please see included Owner's Manual as supplied with all power units for installation, set up and adjustment details.



TANK	TYPE	CAPACITY (l/min.)	A in.	B in.	C in.	D in.	G in.	DRY WEIGHT (lbs)	OIL VOLUME (US GALLONS)		
									MIN.	MAX.	CIRCULATING
500 X 850	2	66 to 216	42.91	32.68	22.05	35.83	1.25	405	19.8	58.1	38.3
625 X 1000	3	180 to 432	48.82	38.58	26.97	41.73	1.50	607	34.3	116.2	81.9
700 X 1250	4	432 to 600	54.72	44.09	29.92	51.57	2.00	809	58.1	184.9	126.8

POWER UNIT

Data Sheet 7
November 2002

