Reimer Mobile Mixer

Operator's Manual

REIMER

BY ProAll International Manufacturing Inc.

REIM-13 July 2013

R-400 OS

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Reimer International Inc.
MODEL 400

Description:

- Bin capacity to hold materials for 3.8 m3 (5 cu. yds.) concrete
- Production rate: 23 cubic metres (30 yards) per hour
- Maximum aggregate size: 40 mm (1.5")
- 450 US gallon rotationally molded plastic water tank
- Auger: 8 feet long, 10 inch diameter
- Digital counter for calibration and discharge calculations
- Operator's station with function controls and digital counter
- 40-60 HP diesel engine
- Trailer, truck or skid mounted
- Weight: 3,500 kg (7,700 lbs.)

Available Options:

- Admixture injection systems
- Variable discharge color dispensing system
- Hydraulic vibrators for sand and cement bins
- Custom units built on request

For more information, contact Reimer International Inc.

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REIMER
INTERNATIONAL INC.

P.O. Box 1168
Didsbury, AB Canada T0M 0W0

mix with the best

Reimer Mobile Mixer

ENGINE OPERATION AND MAINTENANCE SCHEDULE

Refer to the appropriate engine operations manual.

ENGINE START-UP:

a. Engine has a Murphy switch which must be depressed while cranking until oil pressure is sufficient.

b. Engine R.P.M. is set with a switch on the engine panel or one on the mixer operators panel.

HYDRAULIC COOLER:

Thermostat controlled

CONTROL GATE POSITION POINTERS:

The pointers are set at the factory to indicate 0 (or 12 on the dial) when the control gates are in the lowest position (resting on the conveyor belt). If a service function requires that the pointer setting relative to the gate position be changed, it is necessary to return it to the benchmark setting as sent from the factory. It is a good practice to check this setting during regular maintenance.

CEMENT FEED VALVE:

a. **ON -** Allows the cement feed motor to operate when the conveyor belt is running.

b. **OFF -** Stops cement motor from operating when the conveyor belt runs, allowing for the dispensing of aggregate only.

CAUTION:
The Cement Feed Valve MUST BE in the OFF position to reverse the belt.

MIXER CONTROLS AND OPERATION:

WATER PUMP:

WARNING: **Do not run water pump dry.**

If the engine is left idling for an extended period of time, the water pump should be **OFF** to prevent over heating.

Water pump pressure is set with a control valve mounted above the water pump.

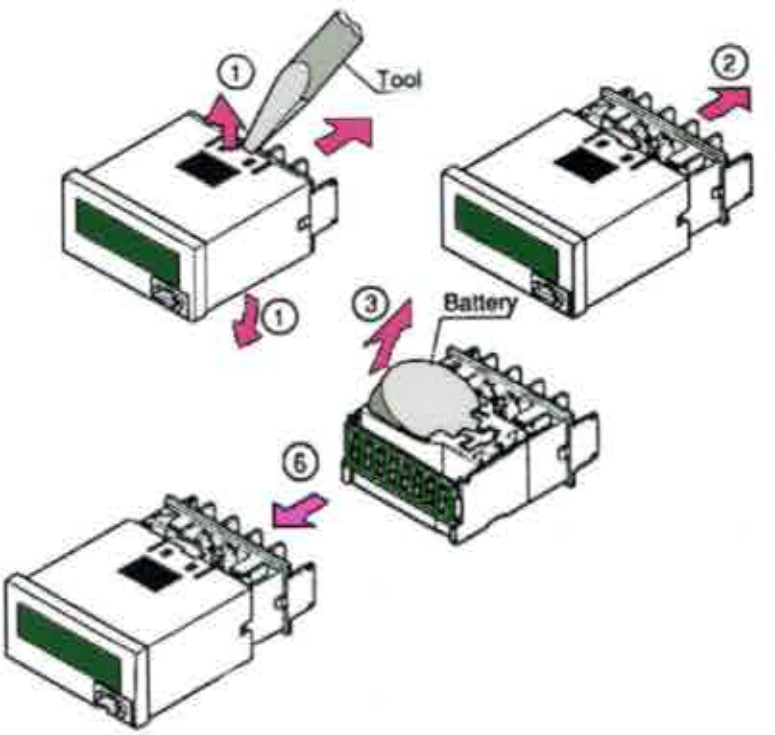
NOTE:
Open control valve fully to achieve maximum pressure for wash down. It is Recommended, that during mixing operations, the water pressure be reduced to save engine power for mixing. Allow sufficient water pressure, so the final adjustment to water flow, can be made with the water control valve on the rear of the panel.

DIGITAL METER:

Used to calibrate the mixer and to indicate the volume of material dispensed when mixing.

Reset will Zero the meter.

Changing The Omron Counter Battery



ELECTRICAL SWITCHES:

Switch #1 — **MASTER ON-OFF:** Supplies power to the electrical functions.

#2 — **2 POSITION:**

RPM - ON: High RPM
RPM – OFF: Low Idle

#3 — **3 POSITION:**

UP - MIX: This is used when mixing concrete. It enables the electric water valve to open, when the conveyor lever is moved to mix.

CENTER - OFF: Disables the water valve. Allows you to advance the conveyor belt, without having water enter the mixing bowl.

DOWN - ON: Used to add water to the mix bowl without the conveyor moving.

#4 — **2 POSITION CHAIN OILER: ON-OFF**

ON: Opens the chain oil valve when the conveyor is moving.

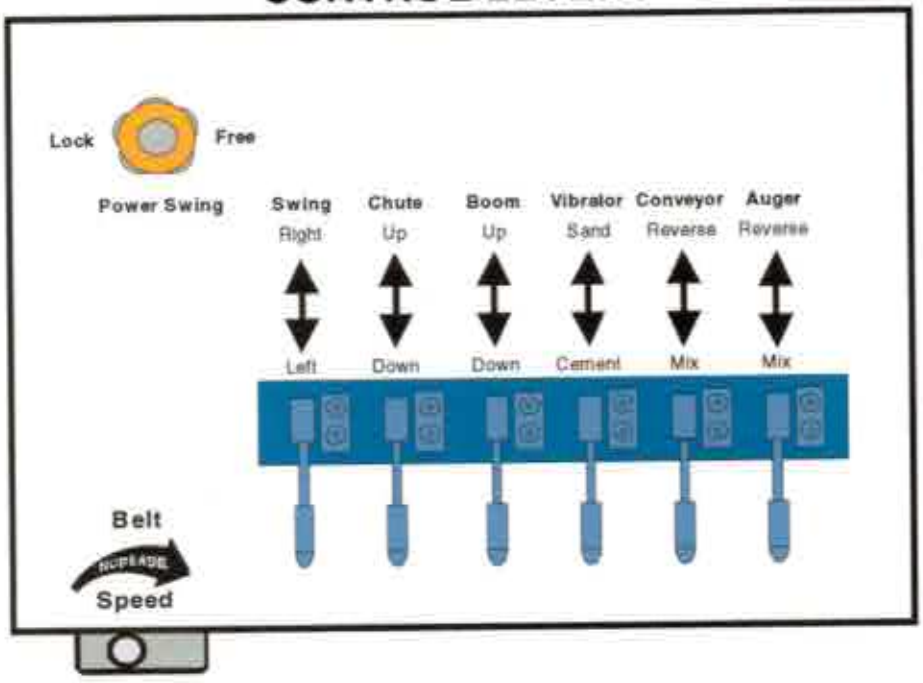
#5 & 6 — **3 POSITION – ADMIX CONTROL:** *(Refer to admix calibration)*

UP – ON: Enables the admix pump to start, when the conveyor lever is moved to mix.

CENTER – OFF: Used when no admix is required.

DOWN – PRIME: Runs the admix pump to prime the system. Also can be used to calibrate the pump, without moving the conveyor belt. *(See admix calibration)*

CONTROL LEVERS



CONTROL LEVERS

AUGER 2 position detent

UP - Reverse
Down - Mix

BELT 2 position

Up - Reverse belt **(cement valve MUST be OFF)**
Down - Advances conveyor belt **(See note a & b)**

VIBRATOR 2 position spring centering

Up - Sand
Down - Cement

BOOM 2 position spring centering

Up - Boom Up
Down - Boom Down

CHUTE 2 position spring centering

Up - Chute Up
Down - Chute Down

SWING 2 position spring centering

UP - Swing Right
DOWN - Swing Left

NOTE:

a. **Speed adjustments can be made to the valve spools to balance the conveyor speed with the auger speed. These have been pre-set, but field adjustment can be made, should the conveyor run too fast for the auger to adequately mix.**

b. **Conveyor speed may also be adjusted, using the flow control under the panel. This valve slows the conveyor speed by bleeding off oil. Therefore, if you are continually running the machine with this valve open, you should adjust the speed with the**

MAINTENANCE

MIX AUGER: Grease auger bearings and top and bottom seal every 30 yards.

MIX AUGER WEAR PLATES: The mix auger is equipped with replaceable wear plates designed to protect the auger from premature wear. The wear plates must be inspected frequently and replaced when they wear down to the auger flighting.

WARNING:
Never allow the plates to wear into the mounting holes drilled in the flighting. The complete auger, or a portion of it, will have to be replaced if this occurs.

Inspect the wear plates during wash out and monitor their condition. Also be aware of the nature of upcoming pours. This will help prevent a war plate failure part way through a large, remote pour.

REPLACING WEAR PLATES: Remove the old wear plates by removing the old nuts with a chisel or cutting torch, being careful not to damage the auger flighting. When attaching the new wear plates, it is important that they are firmly placed against the flat mounting area of the flighting. Make sure that the mounting area is clean and free from any debris. Excessive pressure on an uneven surface can cause the wear plate to crack or break.

All other bearings and grease points should be monitored by the operator and lubricated, as necessary.

CONVEYOR CHAIN: Maintain adequate tension and ensure that the front shaft is adjusted square to the main frame with equal tension on both bearing take-ups.

CHAIN DRIVE FOR CONVEYOR MOTOR AND CEMENT FEED SYSTEM: Lubricate as necessary and maintain adequate tension.

WATER PUMP: On a weekly basis check the in let screen in the Y-strainer for debris. Increase this interval if a clean water supply is not used.

ENGINE MAINTENANCE: Refer to appropriate engine owners manual.

ADMIX CALIBRATION

Determine the discharge rate of concrete in Y^3 / M^3 or lbs. / kg. of cement dispensed per minute or per counts on the meter. Calculate the amount of admix product to be metered for the correct dosage in the same amount of time or counts

Open the valve on the bottom of the admix tank. If the tank has been dry, it may be necessary o close the bypass valve on the pump, until the pump is primed.

Turn on ignition switch to power the control panel. Place the admix switch in the prime position. Adjust the admix flow-rate using the flow control beside the admix flow meter. **USE THE METER AS A REFERENCE ONLY. Admixtures should be measured into a calibrated container to ensure accurate discharge rates.**

NOTE:
If the belt speed is changed, the admix flow rate should be adjusted accordingly.

Place the admix switch in the **ON** position to dispense admix product when the conveyor is running.

Barksdale

Installation And Maintenance Instructions

Pressure/ Vacuum Switches

Pressure Switches
Series 96200, 96201, 96210, 96211
Vacuum Switches
Series 96220, 96221

Description

These switches are miniature size pressure/vacuum switches having factory set or field-adjustable set-points, fixed deadbands (differentials), and have piston or diaphragm piston sensors. The switches are designed to provide long life and maintain excellent set-point accuracy despite environmental conditions. Materials wetted by the process fluid include pressure connections of brass or stainless steel and internal elastomers of Buna-N and Teflon as standard.

Caution: Do not use these switches for hazardous or corrosive service, and do not use for oxygen service without proper degreasing and proper preparation. Check nameplates on switch for maximum proof (overpressure) pressure or vacuum limits.

Installation

Caution: This switch should be installed by a trained service person. A media filter should be in the system to protect the switch.

Mounting: Switch may be mounted in any position.

Piping: Support adequate piping and mount the pressure switch to avoid excessive shock or vibration. To minimize the effect of vibration on switch, mount perpendicular to vibration. Apply pipe compound sparingly to male pipe threads only. Avoid pipe strain on switch by properly supporting and aligning piping.

Tamper Resistant Option: Field-adjustable models with a "T" prefix have two set screws to lock-in the set-point adjustment sleeve. Use a 5/64 allen wrench. Overtightening will result in switch damage.

Set-point adjustment for field-adjustable models

For pressure switch (96201 and 96211 models):

1. After connecting switch, turn adjustment sleeve clockwise to increase the set-point and counter-clockwise to decrease the set-point. The switch can be set either on "increasing pressure" mode or "decreasing pressure" mode.
2. For exact pressure setting, cycle pressure switch and make fine adjustments with sleeve.

For vacuum switch (96221 model):

1. After connecting switch, turn adjustment sleeve counter-clockwise to increase the set-point and clockwise to decrease the set-point. The switch can be set either on "increasing vacuum" mode or "decreasing vacuum" mode.
2. For exact vacuum setting, cycle vacuum switch and make fine adjustments with sleeve.

Switch Number Coding (Example Only)

T 96201-BB3 SS-T2-P1

- Tamper Proof
- Series
- Limit Switch
- Optional Range
- Wetted Material
- Optional Electrical Termination
- Optional Pressure Port

Wiring

Wiring must comply with local and national electric codes.

Caution: Electrical rating must be within range stated on the switch nameplate. Failure to stay within the rating of the switch may result in damage to, or premature failure of, the electrical contacts.

Standard switch rating: 5 amps, 250 VAC/28 VDC SPDT

Standard free leads color code:

Pressure switch	Vacuum switch
purple = COMMON	purple = COMMON
red = NO	red = NC
blue = NC	blue = NO

Optional termination:

-T1: 1/4" male quick connect terminals. C, NO, NC markings are on the switch.

-T2: DIN 43650 type. Use 5 to 8 mm O.D. cable size. After the cable hook-up, tighten the gland squeeze nut to ensure firm environmental seal.

Pressure switch	Vacuum switch
position 1 = C	position 1 = C
position 2 = NC	position 2 = NO
position 3 = NO	position 3 = NC
position 4 = NOT USED	position 4 = NOT USED

-T4: 1/2" NPT male conduit connection with free leads.

-T5: 1/2" NPT female conduit connection with free leads.

Connect applicable conduit to the switch (plastic conduit is recommended). Generally, handtight is adequate for a conduit enclosure. Caution: use conduit hex only when tightening. Do not exceed 80 lb in tightening or bending torque. Failure to follow this instruction may result in switch damage.

Testing of the switch

Testing of the switch may be done before or after final installation. If bench tested, the switch should be re-tested when installed in the final application. Be sure switch can be tested without affecting other equipment. Check nameplates for electrical rating and circuitry (normally closed or normally open) of switch. Cycle switch a few times to check operation.

Troubleshooting

Warning: Disconnect electrical power supply to switch before removal or inspection.

Important: The switch is not field-repairable. In case of damage, replace entire switch.

Causes of improper operation:

1. Incorrect electrical connection: check leads to switch. Be sure they are properly connected. See "Wiring" section for circuitry color code.
2. Faulty control circuit: check electrical power supply to switch Check for loose or blown fuses, open-circuited or grounded wires, loose connections at switch.
3. Incorrect pressure: check pressure in system. Pressure/vacuum must be within range specified on nameplate.
4. External leakage: replace pressure/vacuum switch.
5. Excessive vibration or surges: check for pressure fluctuations in system. Check switch mounting and be sure there is no excessive vibration.

If the operation of the pressure/vacuum switch cannot be corrected by the above means, consult factory or authorized factory representative.

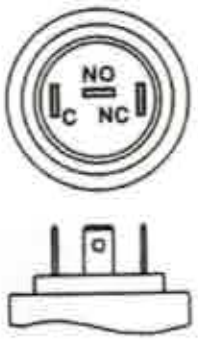
For service or ordering information

Consult factory or authorized factory representative. Specify full catalog number (with any optional modifications) and factory set-point.

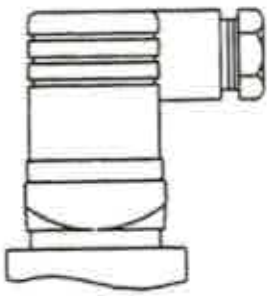
Warranty

All products of the company are sold and all services are offered subject to the company's standard conditions of sale.

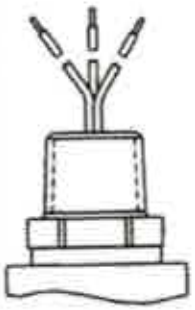
OPTIONAL ELECTRICAL TERMINATIONS



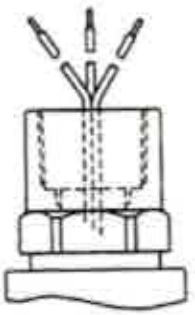
-T1 SUFFIX



-T2 SUFFIX

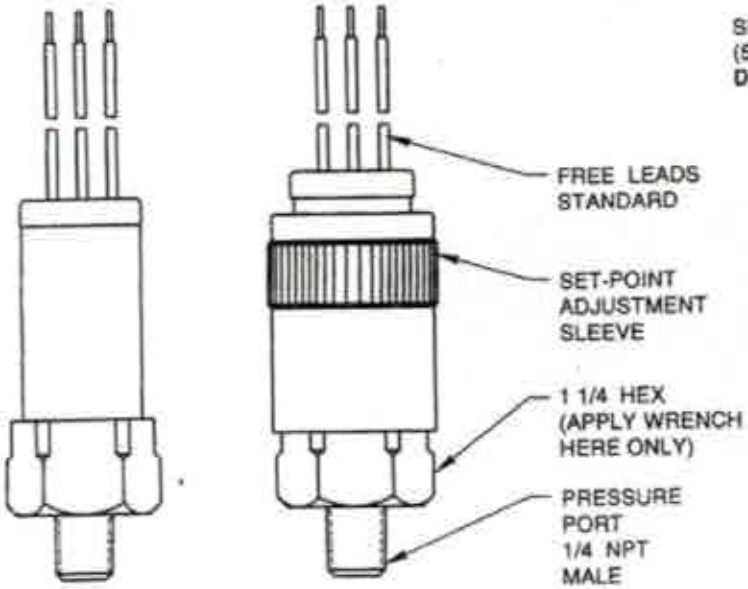


-T4 SUFFIX



-T5 SUFFIX

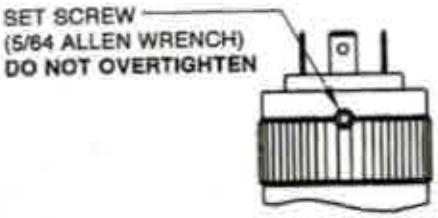
STANDARD MODELS



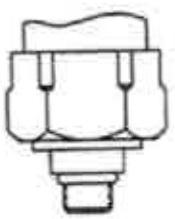
FACTORY SET MODEL
96200, 96210, 96220 SERIES

FIELD-ADJUSTABLE MODEL
96201, 96211, 96221 SERIES

OTHER OPTIONS



PREFIX "T"
TAMPER RESISTANT ADJUSTMENT SLEEVE



-P1 SUFFIX
7/16-20UNF MALE PRESSURE PORT WITH O-RING

VIBCO
Area Code
401-539-2392
P.O. Box 8
Station Road
Wyoming, R.I. 02898

PRODUCT INFORMATION BULLETIN

HYDRAULIC VIBRATORS OPERATING INSTRUCTIONS

Models: HLF-700, HLF-1300

INSTALLATION INSTRUCTIONS:

- Connect input line to one of the 3/8 NPT ports on the vibrator. The vibrator is reversable, so either port can be used.
- Connect the return line to the other port. This must be an unpressurized line to the reservoir.
- Test run the unit at low psi and inspect for any leaks in the connections.

MOUNTING INSTRUCTIONS:

- See reverse side.

SPECIFICATIONS:

Maximum Operating Pressure		1500 PSI
Maximum FLow		2.8 GPM
Maximum Frequency		9000 VPM
Maximum Force	HLF-700	700 LBS.
	HLF-1300	1300 LBS.

MAINTENANCE:

- Every 200 hours check:

  Hydraulic connections
  Mounting bolts
  Hydraulic vibrator bolts

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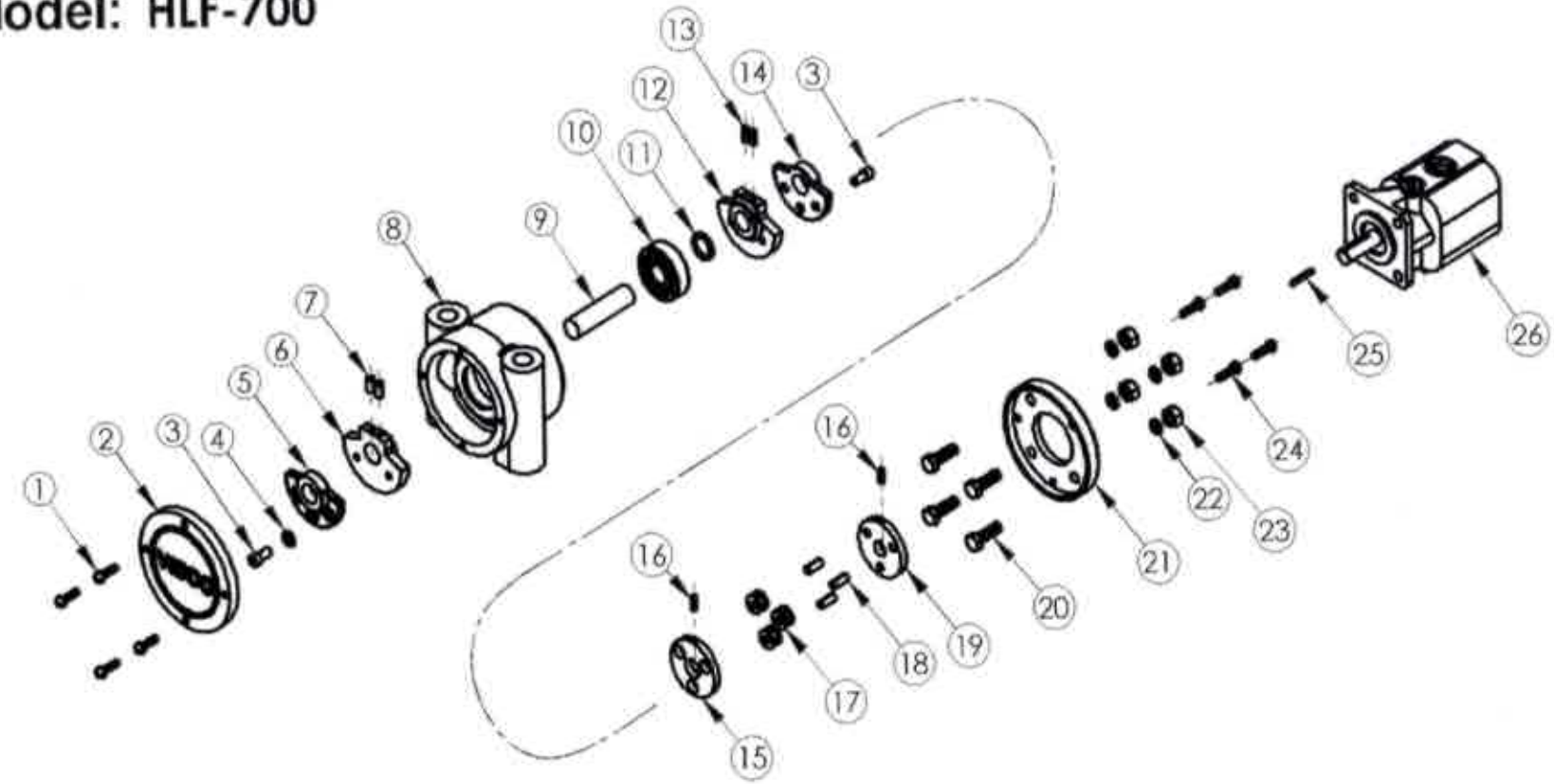
We're The SILENT Vibrator Guys.™

In United States:
75 Stilson Road
P.O. Box 8
Wyoming, RI 02898
Phone: 401-539-2392
800-633-0032
FAX: 401-539-2584

In Canada:
2215 Dunwin Drive
Mississauga, Ont. L5L 1X1
905-828-4191
800-465-9709
FAX: 905-828-5015

Model: HLF-700



Parts List For The HLF-700

Model: HLF-700

ITEM #	PART NO.	DESCRIPTION	QTY.
1	10-24 X 3/4 SEMS	SCREW, ROUND HEAD W/ LW & PA	4
2	300US06-1	ENDBELL COVER	1
3	1/4-20 X 1/2 SH	SCREW, SOCKET HEAD CAP	2
4	1/4 LW	LOCKWASHER	1
5	900US36	ADJUSTABLE OUTSIDE ECCENTRIC	1
6	900US35	FIXED ECCENTRIC	1
7	1/4-20 X 1/2 SS	SOCKET SET SCREW	2
8	300US03-1	HOUSING	1
9	700HLF03	SHAFT	1
10	6303LLB-C3	BEARING	1
11	42SCR15	SPACER	1
12	900US35	FIXED ECCENTRIC	1
13	10-24 X 1/2 SS	SOCKET SET SCREW	2
14	900US36	ADJUSTABLE OUTSIDE ECCENTRIC	1
15	700HLF04-1	COUPLING HALF	1
16	8-32 X 1/2 SS	SOCKET SET SCREW	2
17	700HLF08	GROMMET	3
18	1/4 X 5/8 SP	SPRING PIN	3
19	700HLF04-2	COUPLING HALF	1
20	5/16-18 X 1 HH	SCREW, HEX HEAD	4
21	700HLF02	MOTOR MOUNT COVER	1
22	5/16 LW	LOCKWASHER	4
23	5/16-18 HN	HEX NUT	4
24	10-24 X 3/4 HH	SCREW, HEX HEAD	4
25	700HLF09	KEY	1
26	700HLF05	HYDRAULIC MOTOR (10561)	1
27	1/2CV	1/2 NPT HYD CHECK VALVE (NOT SHOWN)	1

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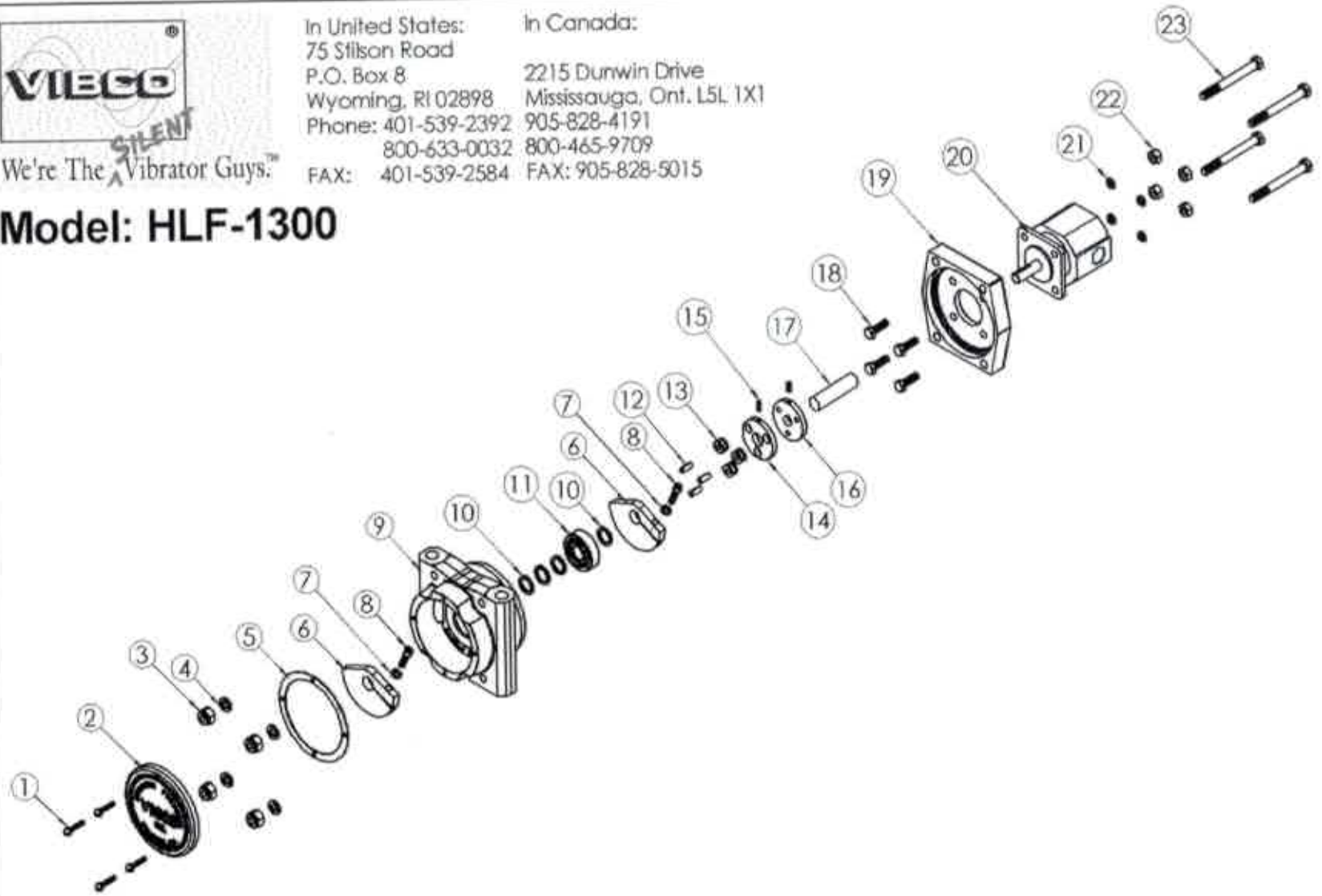
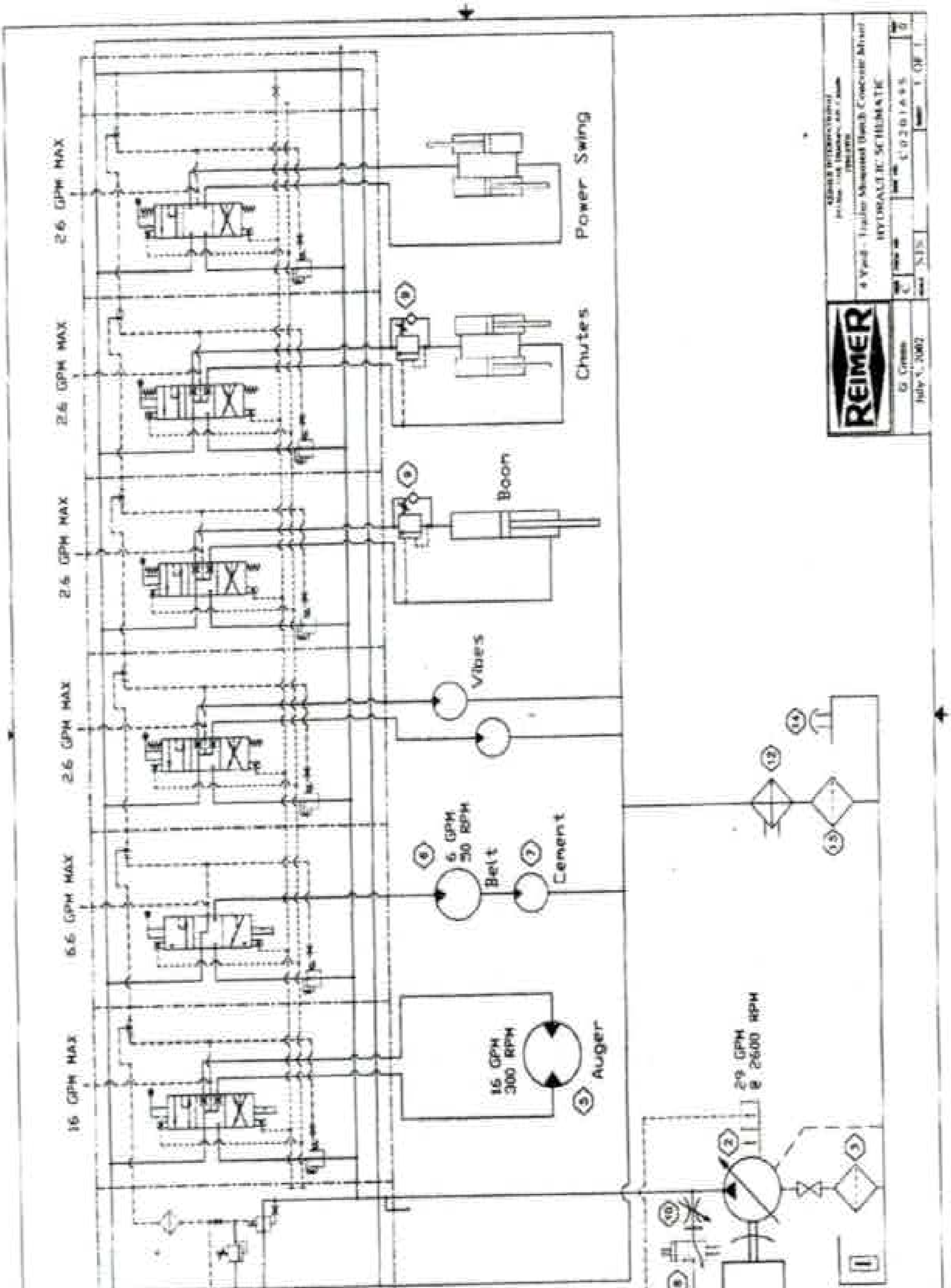
In Canada:
2215 Dunwin Drive
Mississauga, Ont. L5L 1X1
905-828-4191
800-465-9709
FAX: 905-828-5015

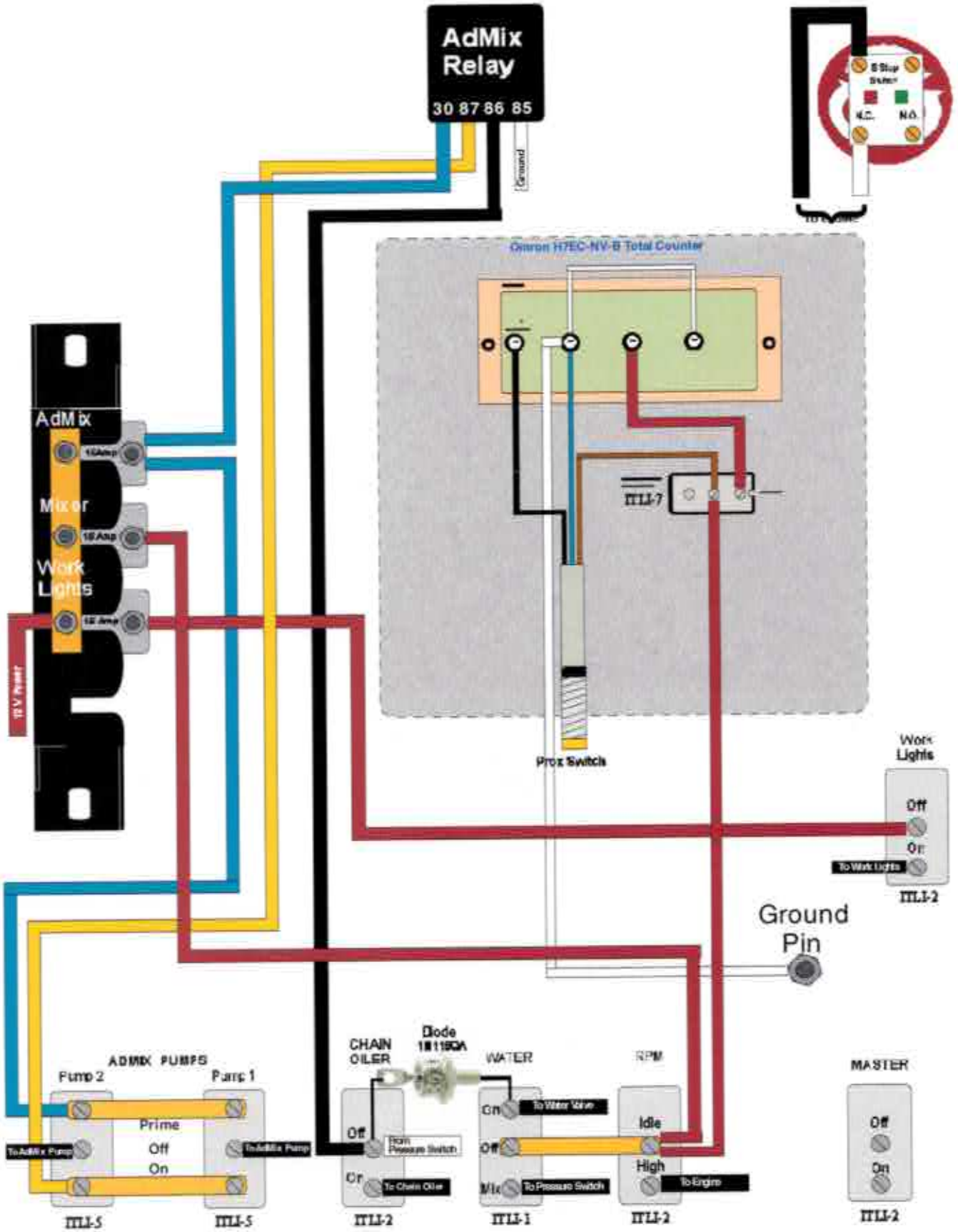
Model: HLF-1300



Parts List For The Model HLF-1300

MODEL: HLF-1300			
ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	10-24X1 SEMS	SCREW, ROUND HEAD MACHINE, W/LW&PA	4
2	48VM23-3	COVER	1
3	3/8-16LN	NYLON LOCK NUT	4
4	3/8LW	HEAVY LOCKWASHER	4
5	56VM38-2	GASKET	1
6	1300HLF07	ECCENTRIC	2
7	1/4LW	LOCKWASHER	2
8	1/4-20X1-1/4 SH	SCREW, SOCKET HEAD CAP	2
9	42VM02	HOUSING	1
10	425CR15	SPACER	4
11	6303LLB-C3	BEARING	1
12	1/4X5/8 SP	SPRING PIN	3
13	700HLF08	GROMMET	3
14	700HLF04-1	COUPLING HALF (ECC. SIDE)	1
15	8-32X1/2 SS	SCREW, SOCKET SET	2
16	700HLF04-2	COUPLING HALF (MOTOR SIDE)	1
17	700HLF03	SHAFT	1
18	5/16-18X1 HH	SCREW, HEX HEAD	4
19	1300HLF04	MOTOR MOUNT	1
20	700HLF05	HYDRAULIC MOTOR (10561)	1
21	5/16LW	HEAVY LOCKWASHER	4
22	5/16-18 HN	HEX NUT	4
23	3/8-16X3-1/2 HH	SCREW, HEX HEAD	4
24	1/2CV	1/2 NPT HYD CHECK VALVE (NOT SHOWN)	1


16 GPM MAX
6.6 GPM MAX
2.6 GPM MAX
2.6 GPM MAX
2.6 GPM MAX
2.6 GPM MAX
16 GPM
300 RPM
Auger
6 GPM
30 RPM
Belt
Cement
Vibes
Boom
Chutes
Power Swing
29 GPM
@ 2600 RPM
Water
Pump
15 GPM
REIMER
HYDRAULIC SCHEMATIC


AdMix Relay
30 87 86 85
Ground
E Stop Switch
N.C.
N.O.
Omron H7EC-NV-B Total Counter
ITLI-7
AdMix
Mixer
Work Lights
12V Power
Prox Switch
Work Lights
Off
On
To Work Lights
ITLI-2
Ground Pin
ADMIX PUMPS
Pump 2
Pump 1
Prime
Off
On
To AdMix Pump
To AdMix Pump
ITLI-5
ITLI-5
CHAIN OILER
Diode
WATER
RPM
MASTER
Off
On
Horn Pressure Switch
To Chain Oiler
ITLI-2
On
To Water Valve
Off
Mix
To Pressure Switch
ITLI-1
Idle
High
To Engine
ITLI-2
Off
On
ITLI-2

Reimer Parts List For Model 400
Serial # R4-77-05
Hydraulic Components

ITEM	QTY	DESCRIPTION	MFR
1	1	Deutz F4L914 Model 8750767	DIN ISO 3046 IFN
2	1	K3VL45/B -1ARSS-LO	Kawasaki
3	1	26001 / RZJ	Eaton
4	1	DPC 130/6 Section Valve c/w 6 ea. AL11/M8-120 Handles	Walvoil
5	1	104-1033 Auger Motor	Eaton
6	1	109-1212 Belt Motor	Eaton
7	1	104-1027 Cement Motor	Eaton
8	1	Water Pump Control FCR51-1/2	Brand
9	2	CBV7-10-S-0-A-40 Counterbalance Valve c/w EJB Body	Modular
10	1	Belt Speed Control PCM-400S	Parker
11	1	Oil Cooler 038682	Hayden
12	1	Oil Filter Mixer 4C2544FMP9H	Pall
13	1	ABGP-1000-3-HN-CHAIN	Flo Ezy
14	1	Cement Valve DH 5/3 B SAE	Walvoil

Vibrators	1	Vibco HLF-700
	1	Vibco HLF-1300
Water Valve		7221GBN64N00 Parker
Admix Pump		8000 543 250 1.4 GPM ShurFlo
Admix Flo-Meter		H205B-005 Parker
Electrical Switches		3 position Latching 1TL1-1
		3 position momentary 1TL1-7
		2 position Latching1TL1-2
Digital Counter		H7EC-NV-B Omron
Auger Bearing		EFRB22432H Link Belt
Auger Wear Plates		Curved Wear Plates AU009
		Straight Wear Plate AU010
Engine RPM		2300

Reimer Mobile Mixer

Calibration procedure

The calibration of the mixer is the process which determines the control gate settings and the meter count required to produce concrete of a certain specification. A predetermined "mix design" is used as the guide for the calibration procedure.

NOTE:
The larger the sample you are able to Measure, the lower the error factor will be.

STEP 1 - Determine the 'cement output per count'. Each count is registered and displayed in the window of your meter.

Procedure:

1. Empty material from the sand and stone bins.
2. The cement bin should be at least 1/3 full.
3. Discharge an adequate amount of cement to ensure that the cement metering system is full.
4. Determine the empty weight of the container being used to collect the cement sample.
5. Zero the meter and place the container under the auger swivel ring.
6. Run the belt until the sample container is full, ensuring that all material being discharged is collected.
7. Weigh the sample.

CAUTION:
Remember to subtract the empty weight of the container.

1. Divide the sample weight by the number of counts shown on the meter to determine the cement output per count.

Cement Formula:

Sample Weight ____ divided by meter count ____ = **cement output per count** ____.

NOTE:
Collect and weigh a minimum of (3) three samples.

Step 2 – Determine **the number of counts required** to deliver the specified weight of cement powder **per yd ^{3} of concrete** as needed in your mix design.

Count Formula:

Mix design requirements: lbs. of cement per yd ^{3} _____ divided by **cement output per count** (*from step 1*) _____ = **counts required per yd ^{3}** _____.

Turn Cement Motor OFF. (*See page 10*)

Step 3 – Determine the weight of stone that must be released per count.

Using your mix design, establish the required weight of stone to produce 1 yd ^{3} of concrete.

Divide the weight of stone per yard needed by the number of **counts per yd ^{3} required** (***from Step 2***).

Stone Formula:

Mix design requirement lbs. of stone per yd ^{3} _____ divided by **counts per yd ^{3}** (***from step 2***). _____ = **weight of stone per count** _____.

Procedure:

1. Fill stone bin at least 1/4 full .
2. Determine the empty weight of the container being used to collect the material sample.
3. Adjust control gate to the setting taken from the ***'Sample Data Chart'*** found at the end of the calibration section.
4. Run the belt until material is being discharged off the end of the conveyor.
5. Zero the counter and place the sample container under the discharge ring.
6. Run the belt until the sample container is full, ensuring that all material being discharged is collected.
7. Read the meter and record the value.
8. Weigh the sample and divide by the meter reading to calculate the **weight of stone per count** that has been discharged.

CAUTION:
Remember to subtract the empty weight of the sample container.

NOTE:
After the control gate has been reset, the conveyor must be run until the adjusted material flow is past the discharge. Disregard the material released during this operation and re-zero the meter.

1. Adjust the control gate and re-sample until the **weight of stone per count** is equal to the amount established in the stone formula above.

NOTE:
Once a gate setting is established, check it by taking 3 more samples.

Record stone control gate setting _____.

Step 4 - Determine the weight of sand that must be released per count.

Sand Formula:

Mix design requirement lbs.of sand per yd ^{3} _____ divided by **counts per yd ^{3}** (*from step 2*). _____ = **weight of sand per count _____.**

Empty the stone bin and fill the sand bin ¼ full, repeating step 3, replacing stone with sand in all references.

Record sand control gate setting _____.

SUMMARY:

Mix # _____ (Operators Reference)

Strength required _____

Counts per yd ^{3} _____

Stone gate setting _____

Sand gate setting _____

The mixer must be calibrated for each mix design used and the data should be recorded on a chart for use by the operator.

Sample Data Chart – SAMPLE ONLY!

Cement Output per count .478 lbs. or .218 Kgs

Strength	Counts Required Per		Gate Setting	
	Yd ^{3}	M ^{3}	Stone	Sand
3000 psi (20mpa)	872	1147	11.2	10
3500 psi (25mpa)	1008	1326	9.5	8
4000 psi (27.5mpa)	1150	1513	8.5	7
4500 psi (30mpa)	1238	1628	8.2	6.7

All calibration data should also be recorded elsewhere for a backup.

After calibrating, using weight it is recommended that the yield of each mix be verified by batching concrete into a yield box ***(container of known volume)*** and comparing the result with that displayed by the meter. Small adjustments in the gate settings may be necessary to produce the desired yield.

CAUTION:
When mixing concrete, using a different cement powder or aggregates differing in size from those which were used when calibrating, errors in yield will result. The operator should be prepared to re-calibrate in these situations and make the necessary changes in the gate settings to maintain the accuracy of the Reimer Mobile Mixer.

NOTE:
Proper calibration will enable you to deliver an accurate volume of quality concrete without consuming extra cement powder.

Using a wheelbarrow to collect material samples for calibration.

Calibration of Reimer Model 400

Max pulses / min	**800**
Kg / cement / pulse	**0.15**
Max kg cement / min	**120**
Kg stone / pulse / unit gate opening	**0.062**
Kg sand / pulse / unit gate opening	**0.0556**

Example

1500 pulses / meter = 1500 x 0.15 = 225 kg cement / mixer

1500 pulses / meter gate set at 10 = 1500 x 10 x 0.62 = 930 kg stone / meter

1500 pulses / meter gate set at 10 = 1500 x 10 x 0.0556 = 834 kg stone / meter

Gate Adjustments for Different Mixes of Concrete

		Gate Set	Gate Set	Material / Meter		
Mix	Pulses / meter	Stone	Sand	Kg Cement	Kg Stone	Kg Sand
20 Mpa 5-8% air	1415	11.2	13	212	980	1022
25 Mpa 2% air	1545	10.3	13.1	230	986	1125
25 Mpa 5-8% air	1770	9	9.9	265	988	975
30 Mpa 2% air	2015	7.9	9.5	302	986	1065
30 Mpa 5-8% air	2168	7.3	7.7	325	981	928
32 Mpa 5-8% air	2685	5.9	5.8	400	982	700
35 Mpa 5-8% air	2510	6.3	6.3	376	980	880