WAVE LOCH
Flow Rider

MFG: WAVE LOCH
~~RIDE~~NAME: FLOW RIDER
Type: NON-MOTORIZED

WAVE LOCH

FLOW RIDER™

OPERATIONS AND PROCEDURES MANUAL

Prepared by

Coulter Consulting Group, Inc.

Box 557, Delaware, OH 43015
(614) 363-9715

WAVE LOCH FLOW RIDER™

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Water Mania
Attn. Gary Larson
6073 W. Irlo Bronson Mem. Highway
Kissimmee, Florida 34746

Thursday, June 4, 1992

RE: REVISIONS TO FLOW RIDER™ OPERATIONS AND PROCEDURES MANUAL

Dear Gary,

Further to today's telephone conversation, please review and incorporate the following changes to the Flow Rider™ Operations and Procedures Manual:

1) In Section 2 ,"Flow Rider Operation", last page, delete the first sentence and replace with:

> "Management should use its best efforts to insure that each patron understands the instructions and rules posted on the signs at the entrance to the ride, prior to dispatching the patron."

2) In Section 3, "Flow Rider™ Rules and Regulations", first page, delete the third sentence and replace with:

> "Only persons as tall as a Wave Loch approved bodyboard (41") or taller may ride this ride. Persons smaller than approved bodyboard height are not permitted to ride.

3) In Section 4, "Recommended Signage For Flow Rider™", first page, delete instruction number 1, and replace with:

> "1. Riders must be as tall as their bodyboard (41") to participate."

Should you have any questions regarding the above, please give me a call. I look forward to seeing you on July 17.

Sincerely,

TJC 6/4/92

Thomas J. Lochtefeld
CEO

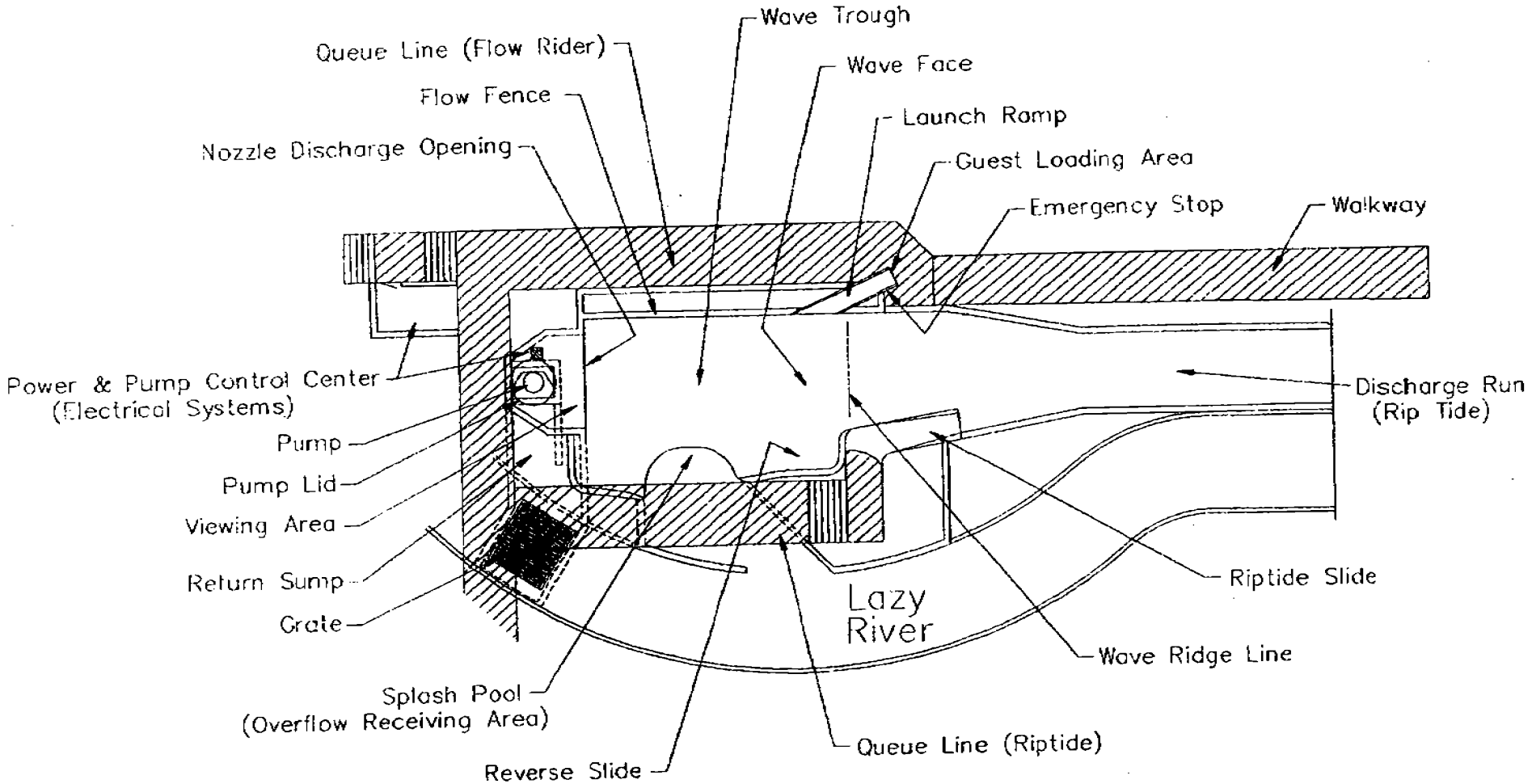
WAVE LOCH, INCORPORATED FLOW RIDER™

Statement of Purpose

This manual is designed and written for the purpose of providing guidelines and rules for the safe and efficient operation of the Flow Rider™. Wave Loch, Incorporated recommends that the contents of this manual be used as a part of a complete operational training program.

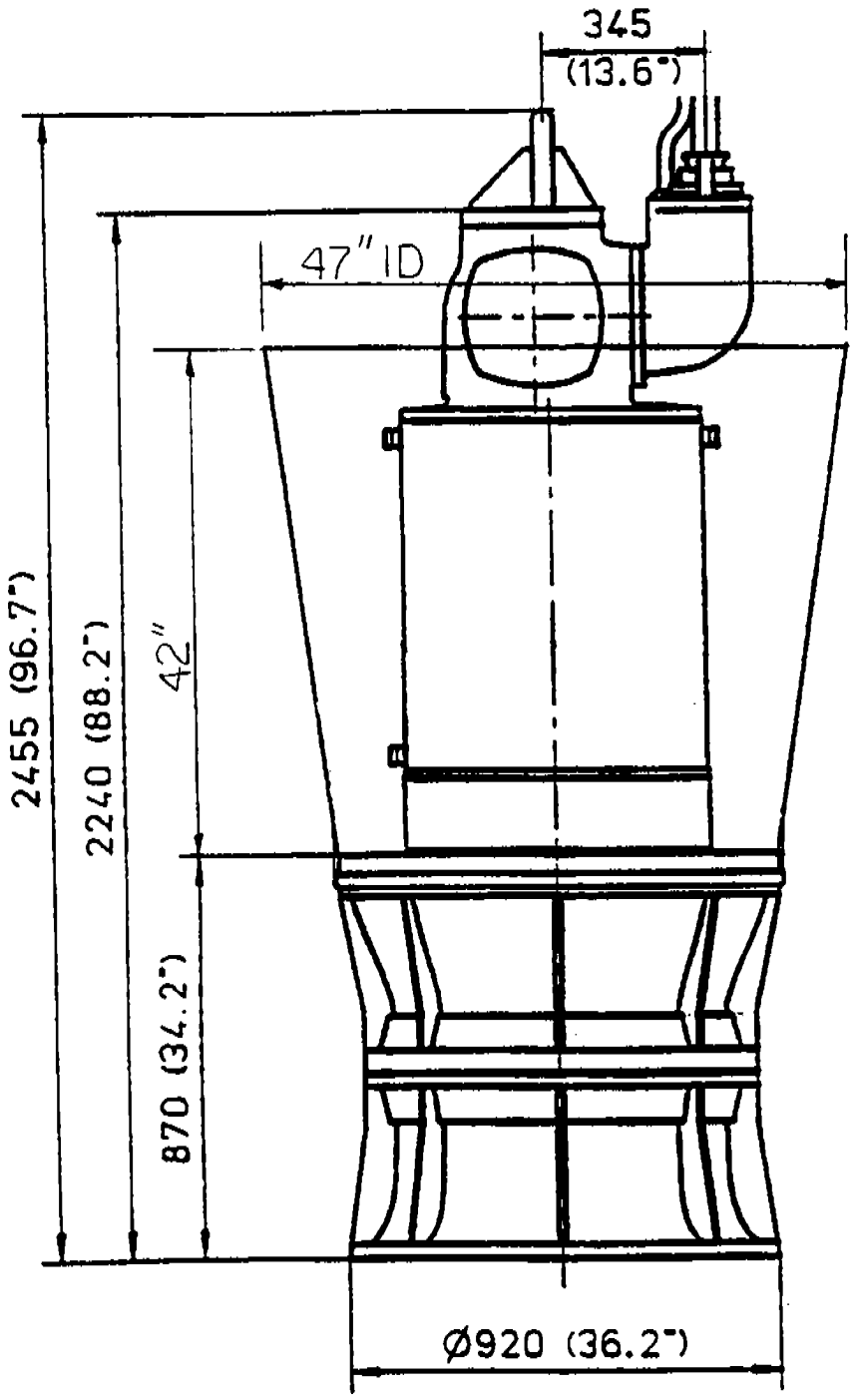
The Flow Rider™ system provides the experience of riding an unbroken wave, in a stable environment, which has been designed with the safety of the rider as a primary factor. The components of the Flow Rider™ have all undergone extensive testing as part of Wave Loch's commitment to safety. It is the desire of Wave Lock, Incorporated that its equipment always be operated with the safety of the riding public in mind.

THE FLOW RIDER™
AT
WATER MANIA



WATER MANIA
FLOW RIDER

PL 7080



Motor type	Tot weight	
	kg	lbs
51-56-8. 1. 3. 5	2580	5690

FLYGT	MOTOR CHART	MOTOR NO: 51-56-10AA	Edition No: 10 Date: 88 09 14

NOMINAL VALUES:

VOLTAGE:	3 ~460	V	FREQUENCY: 60	HZ	POLES: 10	STATOR: 38	
P-INPUT:	174	KW	P-SHAFT: 160	kW	CURRENT: 279	A	SPEED: 705 RPM

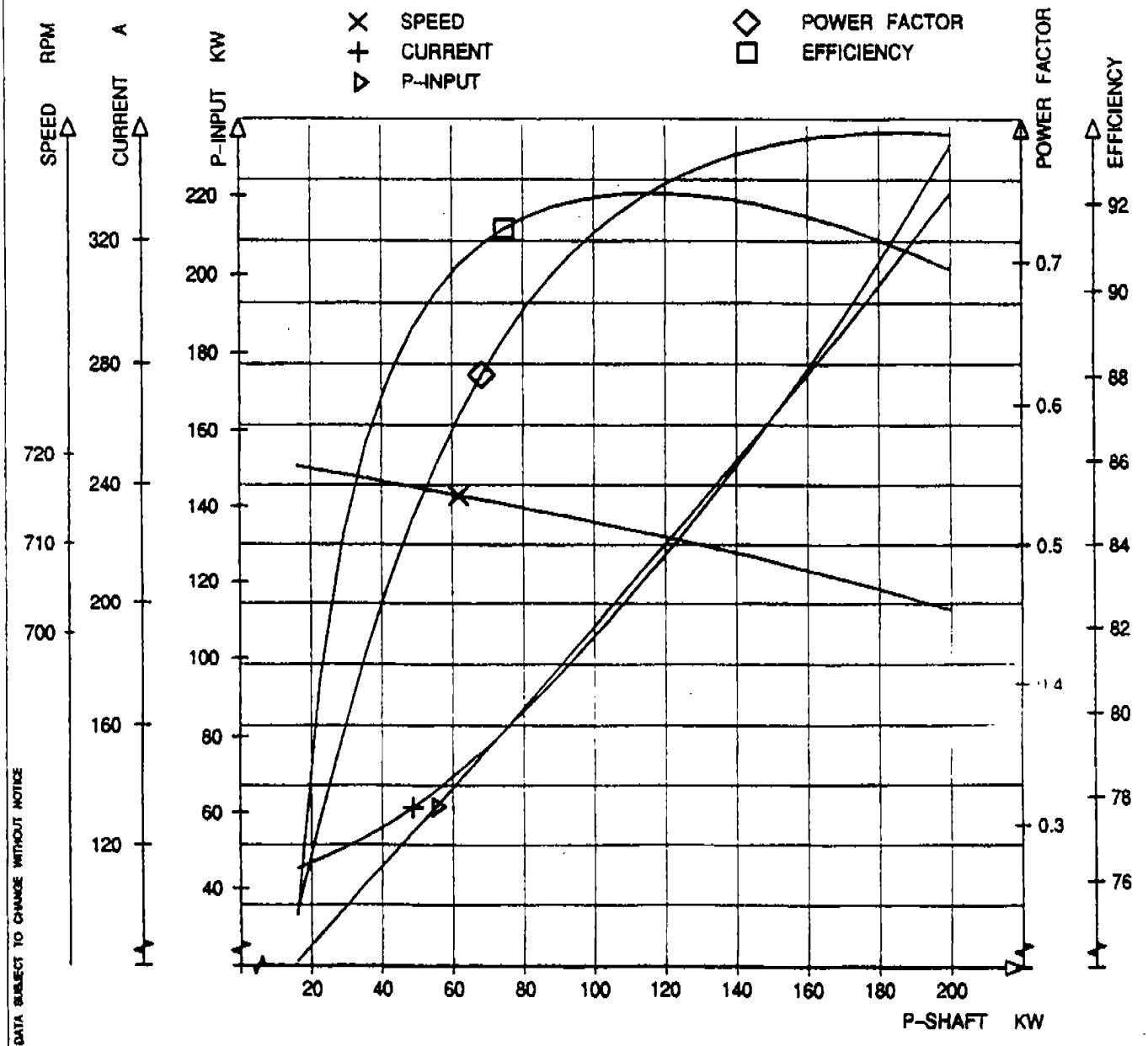
TORQUE (NM / QUOTIENT COMPARED TO TORQUE AT NOMINAL SPEED)

START: 2025 / 0.9 PULL-UP: 1510 / 0.7 BREAK-DOWN: 4200 / 1.9

MOMENT OF INERTIA: 7.2 KGM^2

LOAD	1/1	3/4	1/2
POWER FACTOR	0.79	0.75	0.67
EFFICIENCY %	91.5	92.0	91.5
CURRENT A	279	216	164

BREAKAWAY STARTING CURRENT (LOCKED ROTOR CURRENT ACC. TO NEMA)	1085
BREAKAWAY STARTING POWER FACTOR	0.29
NO LOAD CURRENT	109
NO LOAD POWER FACTOR	0.06
INSULATION	CLASS F



DATA SUBJECT TO CHANGE WITHOUT NOTICE

THE VALUES ARE STATED WITH TOLERANCES ACC. TO IEC 34-1

AT 25 °C TOTAL TEMPERATURE AND ... W FRICTION LOSSES

PERFORMANCE CURVE

FLYGT

DATE	PROJECT	ISSUE	PRODUCT
1991-10-15	FLOW RIDER	4	P 7080 /860

NO. OF BLADES.....	4		TOT. MOM. OF INERTIA.....	12.17	KGM²	POLES 10	FREQ 60 HZ
PROPELLER DIAMETER.....	700	MM	PROPELLER SPEED.....	705	RPM	VOLTAGE.....	460 V
HUB DIAMETER.....	400	MM				MOTOR SHAFT POWER.....	160 KW
						STARTING TORQUE.....	2025 NM
						MAX TORQUE.....	4200 NM
						RATED CURRENT.....	278 A
						STARTING CURRENT.....	1085 A

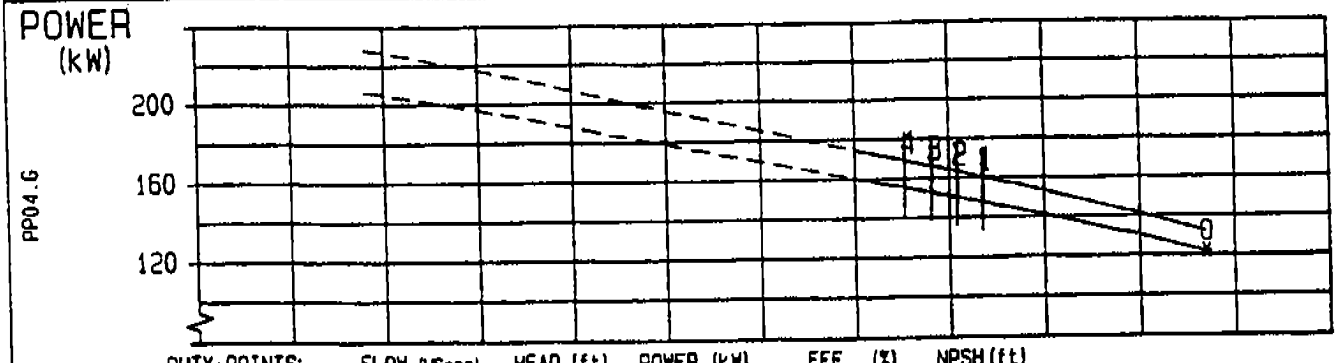
	1/1-LOAD	3/4-LOAD	1/2-LOAD
MOTOR POWER FACTOR	0.79	0.75	0.67
MOTOR EFFICIENCY	91.5%	92.0%	91.5%
GEAR EFFICIENCY			

CURVE NO 63-705 B4

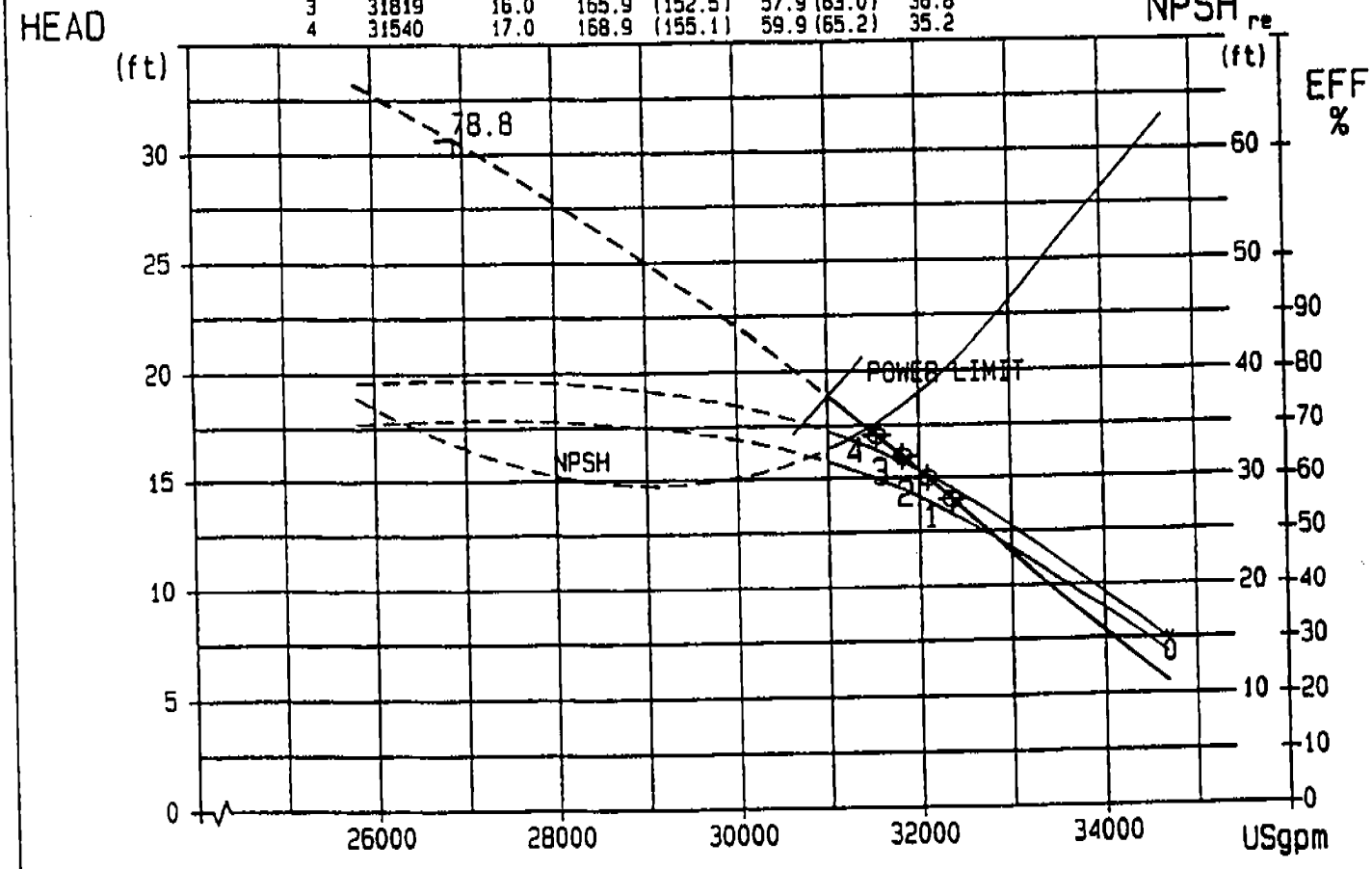
BLADE ANGLE 20 DEGREES

MOTORTYPE 51-56-10AA/38

GEARTYPE	GEAR RATIO



DUTY-POINTS:	FLOW (USgpm)	HEAD (ft)	POWER (kW)	EFF. (%)	NPSH (ft)
1	32358	14.0	160.2 (147.3)	53.3 (58.0)	40.6
2	32091	15.0	163.1 (149.9)	55.7 (60.6)	38.6
3	31819	16.0	165.9 (152.5)	57.9 (63.0)	36.8
4	31540	17.0	168.9 (155.1)	59.9 (65.2)	35.2



CURVES SHOW PERFORMANCE WITH CLEAR WATER AND NPSH-AVAILABLE > NPSH-REQUIRED

x=PUMP EFFICIENCY/SHAFT POWER

O=OVERALL EFFICIENCY/INPUT POWER

ALL HYDRAULIC LOSSES UP TO 20 INCHES ABOVE THE TOP OF THE UNIT ARE INCLUDED

FLOW RIDER™ OPERATION

The Flow Rider™ by Wave Loch was designed to allow the rider, in a controlled environment, to simulate the experience of a body board ride on an unbroken 4.5 foot wave. The Flow Rider™ operates by generating an unbroken sheet of flowing water over a specially-designed curved riding surface. The Flow Rider™ is an attraction that allows repeat riders to improve their skill. Few riders will be able to "catch the wave" the first time; however, in just a few rides, the novice can quickly learn how to turn, drop and climb on the wave face, and perform tricks, e.g. spins.

The operation of the Flow Rider™ is relatively uncomplicated. Once the Flow Rider™ has been inspected and turned on for the day, the water safety staff is responsible for its safe operation. To insure the safety of the guests using the attraction, each guest must use a body board to enter the Flow Rider™. This body board must be a Wave Loch-approved body board and have no leashes or attachments of any kind.

When the guest has reached the head of the line with his or her body board, a water safety staff member must reconfirm that the guest is not wearing loose jewelry, glasses, watches, dangling earrings or any items which could potentially injure the guest or damage the riding surface of the Flow Rider™. The water safety staff must also check for the proper height of the guest, as set forth in the attached Rules and Regulations. The guest should be instructed to place the body board into the launch ramp and lay down, stomach first, on the body board with his or her hips on the rear of the board. Riders must always start from this position; no other riding position is to be allowed on the launch ramp. The guest is now ready to ride the Flow Rider™.

Just prior to a rider's slide entry into the flow, the water safety staff member controlling the launch ramp must visually verify that the flow is unobstructed. Upon safety verification, the guest may now be told to go. Depending on the ability of the guest, the water safety staff member may have to assist the guest in getting started down the launch ramp. The water safety staff must now closely monitor the guest on the riding surface until out of the zone-of-control of the water safety staff operating the Flow Rider™.

Only one rider at a time is to be permitted on the Flow Rider™. Multiple riders or tandem riding is strictly prohibited. The water safety staff person that is controlling the launch ramp must make sure that the previous guest has completed his or her ride before dispatching the next guest onto the riding surface. A guest's ride on the Flow Rider™ may be considered complete when the rider has

either been swept over the wave ridge line and down the discharge run (Rip Tide), with no possibility for re-entry onto the wave face, or has entered into the scalloped-shaped overflowing receiving area, adjacent to the wave trough.

If any problems develop with the characteristics of the sheet-flow of water on the Flow Rider™, or with the guest on the ride, the Flow Rider™ should immediately be shut off utilizing the emergency stop located at the launch ramp. Whatever assistance is needed, should be immediately rendered to the guest and a supervisor summoned. CAUTION, THE SURFACE OF THE FLOW RIDER™ IS SLIPPERY. Use care at all times when walking on the riding surface. A guest that is in the trough of the Flow Rider™ when the water has been shut off might remain there. They need to be assisted out of the trough by the safest means possible, preferably by sliding towards, and into the scalloped-shaped splash pool adjacent the Lazy River.

The Flow Rider™ should not be restarted following an emergency stop until management or supervision is present, the situation that caused the emergency stop is corrected, and it is determined that it is safe to do so. In any event, a ten-second delay is mandatory before restarting the pump. This delay is required in order to prevent damage to the pump.

Members of the park's water safety staff must remain alert and attentive at all times when operating the Flow Rider™. Wave Loch recommends that the water safety staff members assigned to operate the Flow Rider™ be qualified lifeguards, trained in water safety procedures, able to recognize guests needing assistance and trained to react to that need in a proper manner.

Guests riding the Flow Rider™ must be monitored at all times when riding, from the time they enter the launch ramp, until the time they exit the Flow Rider™ ride environment and enter the zone-of-coverage of another water safety staff member. For this reason, Wave Loch recommends that to achieve capacity and maintain a safe ride environment, a minimum of two water safety staff members be assigned to the Flow Rider™. One acts as a loader and dispatcher, and focuses on the guest as they reach the head of the line and mount their body board, and the other's focus is to monitor the guest while on the riding surface. Both safety staff members should be positioned so that they can see the entire launch ramp area, the riding surface and the discharge run (Rip Tide).

The safety staff member at the launch ramp should ask each patron whether they have read and understand the instructions and rules posted on the signs at the entrance to the ride, prior to dispatching the patron. Such patron should not be dispatched until such time that rules and instructions are understood.

It is recommended that signs be posted at the entrance to the ride setting forth the rules and instructions of the ride. The signage which is attached hereto is recommended.

It is also recommended that an assignment rotation and break schedule be implemented for the safety staff members, to prevent boredom. It is suggested that station and assignment rotations occur a minimum of one time per hour.

FLOW RIDER™ RULES AND REGULATIONS

This is an intense, physically-challenging thrill ride. Riders must be in good physical condition and be able to swim in turbulent moving water.

This ride is not recommended for expectant mothers, small children, non-swimmers, persons with limiting physical conditions, including individuals that are overweight, or with previous or current neck, back, joint or heart problems.

Only persons 44" tall or taller may ride this ride. No one under 44" is to be permitted to ride.

No jewelry, hats, eye glasses, or loose articles of any type are to be permitted on the ride.

Only Wave Loch-approved body boards are permitted to be used on the Flow Rider™. No leashes or attachments of any type are permitted on the body board used on the Flow Rider™.

Single riding only is permitted. No tandem riders or double-riding should be allowed or attempted. The previous guest must pass over the wave ridge line and down the discharge run (Rip Tide), with no possibility for re-entry onto the wave surface, prior to the next rider being dispatched.

Control of the ride environment must be maintained at all times whenever the Flow Rider™ is operating.

Horseplay, dare-devil stunts, or tricks are not permitted.

All riders entering the Flow Rider™ must start on a body board and from a prone (on stomach) position only. No one should be permitted to start from a kneeling position.

Knee riding is permitted after entering the ride from the proper starting position. Never ride or attempt to ride in a standing position. Body surfing is permitted after releasing the body board subsequent to a conventional body board entry.

Rider Instructions:

1. Obey the commands of the lifeguards at all times.

2. When instructed to do so by the lifeguard, place your body board into the launch ramp, slick side down. Lay down on your body board facing forward with your hips along the rear edge of the board and your legs extended straight out behind you. Your feet can be used as rudders.

3. Wait until the lifeguard tells you it is safe to enter the ride. Start yourself down the launch ramp when the lifeguard signals.

4. Steer your body board into the center of the flowing water. You can control your body board by gently shifting your weight forward, backward or side-to-side. While in the flow of water, always keep your body board pointed into the flow of water by dragging your feet.

5. When you complete your ride, you will be discharged into the fast-flowing water of the adjacent river.

6. Caution: bathing suit tops, bottoms and loose shorts may be pulled off by the flowing water on this ride. Cover ups are suggested.

RECOMMENDED SIGNAGE FOR FLOW RIDER™

CAUTION

THIS IS A STRENUOUS RIDE.

RIDERS MUST BE IN GOOD PHYSICAL CONDITION AND FREE FROM ANY PHYSICAL LIMITATIONS TO PARTICIPATE.

PREGNANT WOMEN AND PERSONS WITH OR HAVE A HISTORY OF HEART, BACK, NECK OR JOINT PROBLEMS SHOULD NOT RIDE.

FOR YOUR SAFETY AND ENJOYMENT FLOW RIDER™ INSTRUCTIONS

1. Riders must be 44" tall to participate.
2. Obey lifeguards at all times.
3. Do not enter the ride until the lifeguard tells you. Start yourself down the launch ramp when the lifeguard signals.
4. When instructed by the lifeguard, place your body board into the launch ramp, slick side down. Lay down with your stomach on the body board, head first, with your hips along the rear edge of the board. Your legs should be extended straight behind you.
5. Steer your body board into the center of the flowing water. You can control your body board by gently shifting your weight. Always keep your body board pointed into the flow of water.
6. When you complete your ride, you will be discharged into the fast flowing water of the adjacent river. If you are a weak or non-swimmer, a life vest should be worn.
7. Bathing suit tops, bottoms and loose clothing may be pulled off by the flowing water on this ride. Cover ups are suggested.
8. Caution! The surface of the ride is slippery. Do not at any point attempt to stand up in the ride.

Failure to follow these rules may result in injury to yourself or others.

FLOW RIDER™ INSPECTION PROCEDURES

Wave Loch, Inc. recommends that whenever maintenance, inspection, or work of a mechanical nature is being performed on the Flow Rider™, all power and controls be locked-out to place the ride in a zero-energy state using an approved lock-out procedure. This will insure the safety of the person performing the maintenance/inspection work.

Prior to operating the Flow Rider™ each day, the following inspections should be completed by an operations supervisor or mechanic.

1. The structure housing, the pump, nozzle and power controls should be checked for structural integrity.

2. All concrete should be visually checked for signs of stress, cracking or spalling.

3. Special attention should be focused on the nozzle discharge orifice. It is important to make sure that no debris or objects have become trapped in the nozzle which could later be propelled out into the riding environment. A flashlight should be used to assist in viewing the inside of the nozzle.

4. The return sumps, grates and the pump lid should be visually inspected. The pump itself is not accessible. It is protected by a set of grates that must be in place and secure prior to any operation of the Flow Rider™. Check that all grates are secure in their mountings and that all fasteners are present and the grate itself is in good condition. Also check for leaks in the pump lid.

5. The sumps and waterways of the Flow Rider™ should be checked for the presence of debris and foreign material. Any loose objects or debris found, should be removed prior to operation to prevent damage to the pump and to eliminate the possibility of an object being discharged from the pump nozzle into the ride. The condition and structural integrity of the sumps and waterways should also be visually inspected at this time. Check for cracks and defects in the walls, floors and ceilings of the sumps and waterways. Externally check for any leaks or movement in the walls of the sumps and pump structure.

6. The pump controls should be checked that they are in good condition and easily accessible and operable. The ride electrical system should also be checked to ensure all conduits and connections are tight and secure.

7. Inspect the soft foam riding surface of the Flow Rider™. The complete ride surface must be checked for tears, bubbling, cracking, holes, or any other defect, damage, debris or wear within the surface of the ride.

   This phase of the daily inspection is extremely important in that even small cuts, tears, or holes in the surface of the foam can lead to problems with the Flow Rider™ riding surface. Special attention should be given to any seams noted under the surface coating and all edges of the surface coating. Wave Loch, Inc. recommends that any defects found in the surface coat be repaired prior to the operation of the Flow Rider™.

8. Inspect the launch ramp, the flow fence, safety barriers and the guest loading area, including the queue line. The launch ramp should be inspected for any chips, cracks or Gelcoat damage which may injure a rider. Additionally, the entire launch ramp structure and system should be examined for structural integrity. All plumbing connections should be tight and free of leaks. The emergency stop should be operable and its operation verified following initial start-up. The launch ramp should also be checked, that it is secured in its mountings and free of excessive movement. The guest loading area should be clean and free of debris or trash and all queue line handrails should be tight and secure in their foundations. The queue line handrails should also be inspected for sharp edges, burrs, splinters or damage.

9. The body boards should be inspected prior to guest usage. The boards should be in good condition and those boards showing excessive wear, damage or delamination be removed from service. Only Wave Loch-approved body boards should be used on the Flow Rider™. No leashes or attachments of any type are permitted on the body boards used on the Flow Rider™.

10. The final areas to be inspected prior to operation are the guest walkways and viewing areas, including any bleachers provided for the guests. All these areas associated with the Flow Rider™ should be clean, free of trash or debris and in good condition for use by the guests.

    The pre-opening inspection checklist should be completed and reviewed by the supervisor. Any defects or problems found during the course of inspection should be brought to the attention of the proper authority and be corrected prior to the operation of the Flow Rider™.

WAVE LOCH
FLOW RIDER™

FLOW RIDER™ INSPECTION CHECKLIST

Wave Loch recommends that the Flow Rider™ be locked-out and placed in a zero-energy state to safeguard the employee performing the inspection.

	OK	NEEDS ATTENTION
Pump House Exterior		
Nozzle Opening		
Nozzle Interior		
Pump Lid		
Return Sumps		
Return Grates		
Pump Controls		
Electrical System		
Riding Surface		
Flow Fence		
Launch Ramp		
F-Stop		
Walkways		
Queue Lines		
Bleachers/Viewing Area		
Body Boards		

Additional Comments: _____

_____

_____

_____

_____

_____

Inspected By: _____ Date: _____

FLOW RIDER™ MAINTENANCE DOCUMENTATION

Wave Loch recommends that all conditions requiring attention following an inspection be repaired as soon as practical. In addition, it is recommended that all repairs of any kind, performed on the Flow Rider™, be documented to provide a complete safety record for the ride.

A sample Ride Maintenance Log form is included in this manual.

WAVE LOCH™
FLOW RIDER™

FLOW RIDER™ MAINTENANCE LOG

Date:_____ Repair Performed By:_____

_____

Parts Used:_____

Description of Work Performed:_____

_____

_____

Down Time:_____ _____
Supervisor Signature

****

Date:_____ Repair Performed By:_____

_____

Parts Used:_____

Description of Work Performed:_____

_____

_____

Down Time:_____ _____
Supervisor Signature

****

Date:_____ Repair Performed By:_____

_____

Parts Used:_____

Description of Work Performed:_____

_____

_____

Down Time:_____ _____ _____
Supervisor Signature

****

MAINTENANCE AND REPAIRS FOR FOAM COATED SYSTEMS

To insure proper performance and appearance of your Foam Coated System, proper maintenance and repairs is essential.

Daily inspection of your Foam coated Systems is very important. In your inspection of your system, check for dirt or foreign objects and remove immediately. Check especially for sharp or pointed objects, as these can damage your system and cause injuries if not removed. Instruct your lifeguards to make sure persons using your system do not have sharp or pointed items on their clothing, shoes, back pockets, etc.

In your inspection of the system, if you determine there is damage, try to take care of this problem as soon as possible. If immediate attention is not given, this can result in bigger problems if left unattended. Some of the things to look for are cuts, cracks, delamination or bubbles.

Arrangements can be made for repair training, foam maintenance, or repair materials and supplies through New Braunfels General Store, 631 Bavarian, New Braunfels, Texas 78130, (512) 620-4000.

As one of our valued customers, we want to help you get the most from your Foam Coated System. If we can be of further assistance, do not hesitate to contact us.

GENERAL REPAIR INSTRUCTIONS

NOTE: ALL INFORMATION ON PROCEDURES AND MATERIAL MUST BE FOLLOWED AS CLOSELY AS POSSIBLE. FAILURE TO DO SO WILL RESULT IN A POOR REPAIR.

CG96 PRIMER

CG96 Primer is a two-part system (mix equal parts). CG96 Primer can be brushed, sprayed or applied with a clean, lint-free cloth. For small repairs, using a clean cloth slightly saturated with CG96 is the fastest procedure. Rub on a thin coat to sanded area or area where repair is needed. Coat should be ready in 30 minutes. CG96 Primer is an adhesion promoter and without Devcon Putty, Foam Coat or Top Coat, will not properly adhere and product failure can result.

FOAM COAT MIXING INSTRUCTIONS

This is a two-part system.
Part A = quart can
Part B = pint can.

First, mix Part A for 5 minutes, making sure it is completely mixed, then add the entire contents of Part B and stir for an additional 5 minutes. Apply thin coats to primed area. Let dry to the light touch (15 minutes to 1 hour).

Cover a slightly larger area with each coat (at least three coats). If the coat is applied too thick, cracking will occur. Also, you must keep your brush submerged in foam coat while not using. This will keep it from stiffening. Foam coat has approximately an 8-hour pot life. It will harden in the can or skin over. Always use a plastic drop cloth and rubber gloves, as Part B will turn your skin black.

PUROLAST

This is a 3-Part System:
B = quart can
A = pint can
C = plastic bottle

Power mix Part B for at least 5 minutes. Add entire contents of A and mix for three minutes. Add ten drops of Part C and mix until warm to the touch (approximately 1 minute). If the solution is over-mixed, it will harden in the can. If you are mixing less, the ratio is 5 Parts B to 1 Part A and a few drops of Part C. The amount of Part C will vary according to temperature (less in hot weather, more in cool weather).

DEVCON PUTTY MIXING AND APPLICATION INSTRUCTIONS

Devcon Putty is a two-part system.

Hardener = small plastic bottle (thick, black liquid)
Resin = one pint can (clear liquid)
Also in the kit is a plastic mixing container.

First, shake the plastic bottle vigorously for two minutes. Then pour the entire contents into the resin can. Stir this for two minutes. Devcon Putty will thicken quickly, but you must stir in can for the full two minutes.

Scrape the entire contents of can into plastic mixing container. At this point, Devcon is thick and appears easy to use. However, if Devcon is not transferred to plastic mixing container and mixed an additional two minutes, the procedure can result in product failure.

Once Devcon Putty is mixed, it will harden fast, so work must be done quickly. Pour or scrape Devcon onto primed area to be repaired and smooth out with bondo spreader or paint stick. When mixture is used for large holes or cracks, allow time for Devcon to settle (approximately 5 minutes). You may also add more if necessary.

Devcon can be smoothed or feathered by using Xylol. With a rubber glove, dip glove in Xylol, getting as wet as possible, and lightly smooth over surface. Pressing too hard will cause Devcon to stick to glove. Re-dip glove as many times as necessary to smooth entire area. Always use more Devcon than is needed, as surface must be sanded or ground before the next step.

In approximately one hour, test by pressing on dry Devcon, making sure it has completely cured. Grind with a fine disk 60-grit until completely dull. Repair is now ready for top coat. Clean entire area with MEK. Prime with CG96 or CG97 on a clean cloth and see top coat section.

WATER OR AIR BUBBLES

REPAIRS:

Water bubbles under foam:

Determine the size of the bubble by pushing on it. Sometimes the bubble will be bigger than it appears. If there is no apparent damage to the foam or paint, the water may be entering somewhere upstream. When pressure is applied to the bubble, the water will come out where it originally entered. Water can channel through small cracks in subsurface and cause bubbles. Bubbles can also be caused from water seeping up through the concrete. In this case, the concrete should be repaired before the foam repair to prevent the bubbles from reappearing.

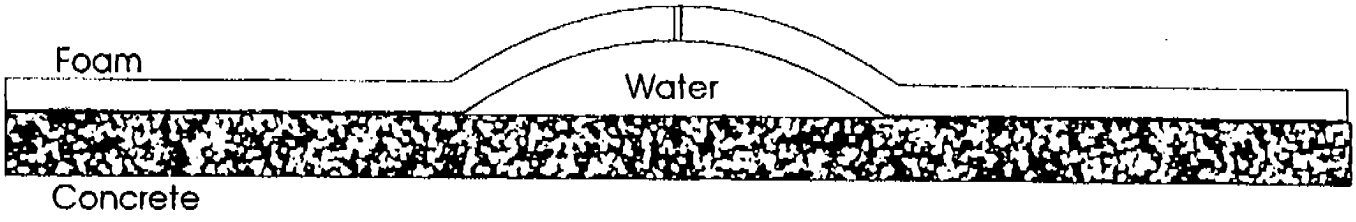
Once size has been determined, with a sharp knife, cut open parallel to the flow of water from one end to the other. The straighter the cut, the more efficient the repair. Open the bubble up. See Diagram A-1. Using a wet or dry vacuum, suck out as much water as you can. Use dry rags to soak up excess, then take a leaf blower and blow until completely dry. Foam and concrete must be completely dry. The repair can be propped open while drying.

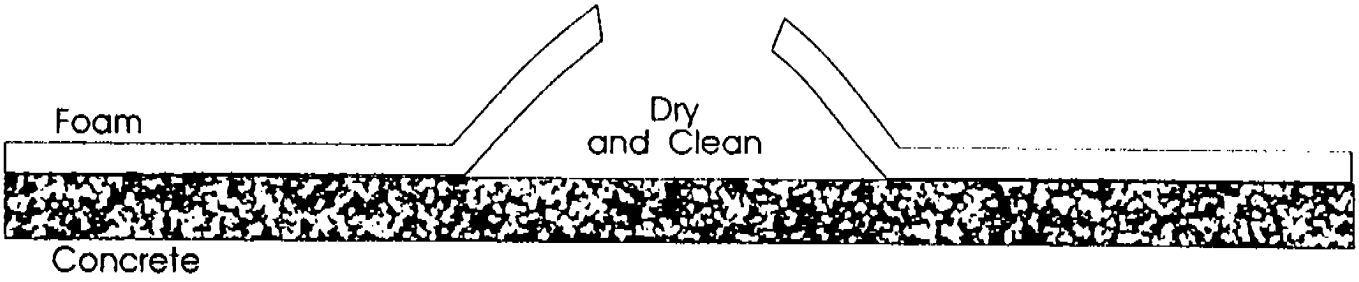
Once dry, with a hammer and chisel, remove all of the old 6101 down to clean concrete. Making sure all of the area is clean, dry, and free of dust and dirt, apply 6101 (see 6101 mixing instructions). After area is completely dry and all old Purolast has been removed, check to make sure that foam will not overlap. When put back into place, sometimes the foam will stretch where the bubble was. If foam overlaps, trim away excess. A gap is better than an overlap.

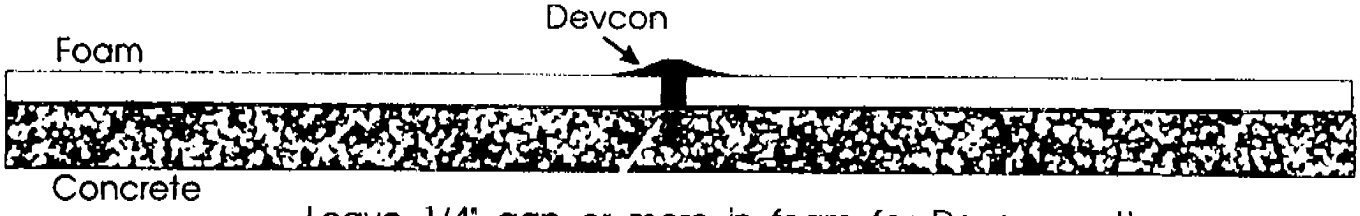
On small repairs, 6101 can be pushed under the entire area, making sure that complete area is covered. On larger bubbles, it may be necessary to make an additional cross-cut in the foam, quartering the area to be repaired. On larger areas, the 6101 can be applied with a notched trowel. Carefully, put foam back into place. Be very careful not to trap pockets of air. If air is trapped, it can be worked toward the edge of repair and released through the cut. This should be done while 6101 is still fresh. If possible, the area should be walked on or pressed for 35-40 minutes, constantly checking for bubbles or air pockets. Once Purolast has grabbed, the repair is ready for primer and Devcon Putty. See Devcon Putty instruction.

** Always check for bubbles in the hottest part of the day **
(Purolast - 100 is now 6101)

Bubble under foam

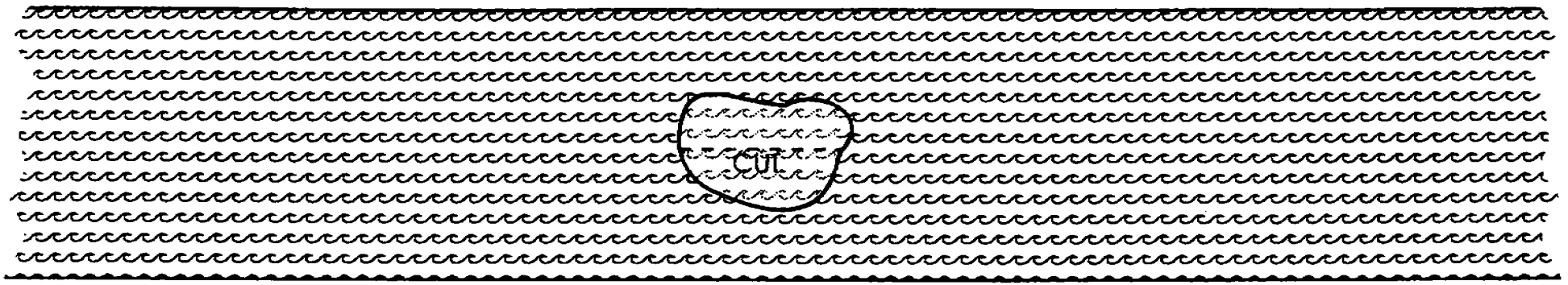






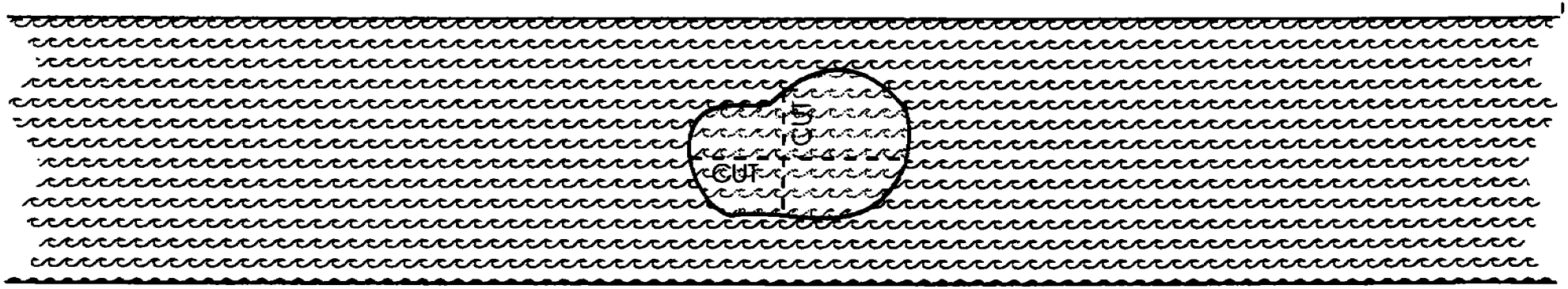
Leave 1/4" gap or more in foam for Devcon putty

TOP VIEW OF SLIDE



ALWAYS CUT WITH WATER FLOW

TOP VIEW OF SLIDE



SOMETIMES BUBBLES MUST BE QUARTERED

REPAIR INSTRUCTIONS FOR DELAMINATED IMPACT 1080 OR 1070

Bubbles in the slide:

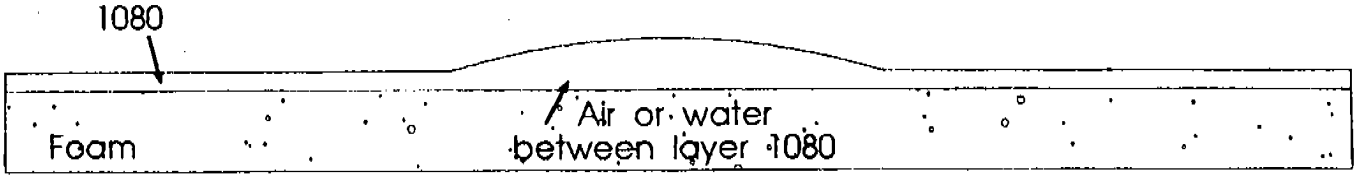
Determine the size of the bubble by pressing down in the center. Sometimes the bubble will appear smaller than it actually is. Once size is determined, in the heat of the day, make a cut from one end to the other. Always cut with the flow of the water. Make first cut as shallow as possible, being careful not to cut into the foam, causing further damage. If delamination is in Impact 1080 or 1070, underside of bubble and surface of bubble will be the same color as toffee. Note: 1080 or 1070 has no UV protection and may darken with sunlight.

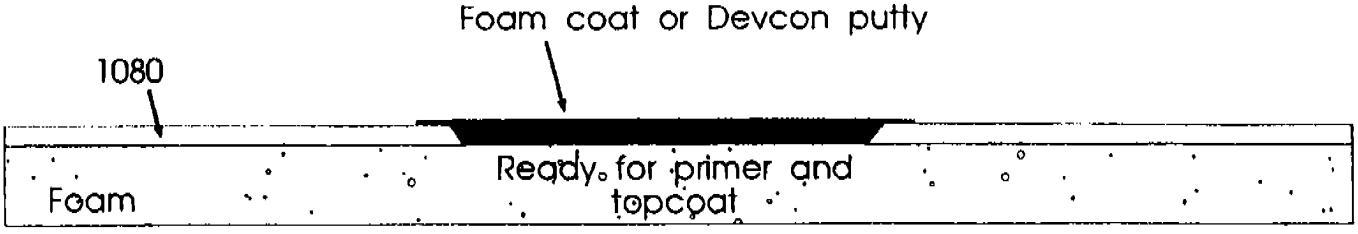
Cut away all delaminated 1080 or 1070 up to edge of bubble, being careful not to cut into 1080 or 1070. With good adhesion, once all loose 1080 has been cut away, sand with grinder 60-grit disk. Sand entire area where bubble was and an additional 2" of color or topcoat around entire perimeter. Feather the edge where the cut was made. If more than one bubble, do all repair work at one time. Repair materials have a limited pot life once they have been mixed. Make sure all repairs to be done are prepared at the same time.

Once the area has been sanded, with a clean rag, clean the entire area and at least 6" beyond. Using MEK or Xylol, allow to dry.

PRIME: Prime entire sanded surface using a clean cloth lightly saturated with CG79 Primer. Wipe a thin coat over entire sanded area. Allow to dry for 30 minutes. NOTE: CG79 is an adhesion promoter. If area is not properly primed, repair materials will not adhere.

Side View of 1070/1080 Repair





TOP COAT: (F 401) a two-part color system.

Part A (color) must be mixed thoroughly for at least 5 minutes, making sure that all pigment is mixed in. Pigments will settle to the bottom of can after mixing. Part A should be filtered into a clean container through a paint strainer. The filtering is more important if the top coat is to be sprayed.

Then add Part B (clear) and equal amount and stir for approximately 3 minutes. For spray, top coat can be thinned up to 10% using MEK. If paint is to be brushed, thinning is not necessary. Brush or spray on in thin coats, allowing time for each coat to flash, (15 to 45 minutes, depending upon temperature). The higher the temperature, the faster the cure. When the paint is dry to the light touch, it is ready for the next coat. Apply at least 3 coats until full coverage is obtained. Top coat should be allowed to dry overnight before turning water back on and cut water off at night for one week to allow full cure. When mixing top coat, mix only as much as needed, as top coat has about an eight-hour pot life. Unused catalyzed top coat should be discarded. Brushed or spray equipment can be cleaned with MEK or lacquer thinner.

** When mixing custom colors, mix Part A colors before adding equal amount Part B. **