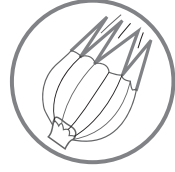
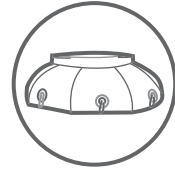


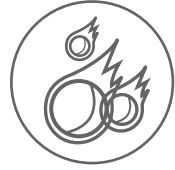
INSTA-BERM (FRAME) MANUAL



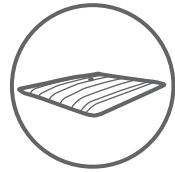
Bambi Bucket



Fireflex



Dragon



Remote Site



Environmental



Emergency Response

INSTA-BERM (FRAME) OPERATIONS MANUAL - Version B

Issue Date: December 2008

PLEASE READ BEFORE USING.

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We Engineer Solutions

Insta-Berm (Frame) Operations Manual *(Version B)*

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Section 1: Introduction

Overview of the Insta-Berm (Frame) System

This manual provides the necessary information and instructions for the installation, operation, maintenance, shipping and safe use of SEI Industries' Insta-Berm (Frame) – a portable secondary containment berm liner system.



Additional copies of this manual are available from SEI Industries Ltd.

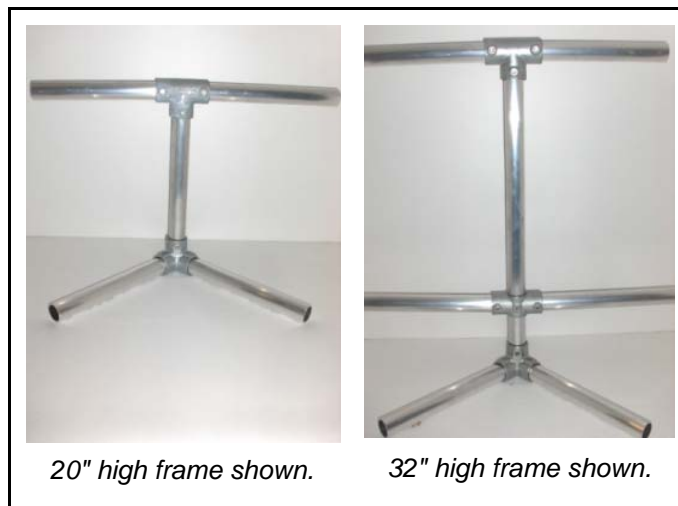
Section 2: Description

Description of the Insta-Berm (Frame) System

The frame-supported Insta-Berm system is a portable secondary containment berm liner, intended to prevent the spill of liquids and hazardous materials. The liner is constructed of polymer-coated nylon or polyester fabric. Some models may be constructed of urethane-coated nylon. This type of berm system is used for larger applications that require superior environmental protection.

The prefabricated support frame is constructed of corrosion resistant aluminium pipe and galvanized malleable iron fittings.

There are two Insta-Berm frame models available (20" high and 32" high frames). The 32" model has a second set of rails to support the bottom of the liner.



Fabric Information

There are two types of fabric available with the frame-supported Insta-Berm systems:

- 30oz Chem-Shield fabric
- Petro-Shield (Arctic berm fabric)

Chem-Shield (30 oz., black/black color)

Chem-Shield liners are constructed with interpolymer alloy coating that combines excellent durability with resistance to many chemicals. This fabric is suitable for containment of oily water, sludge, transformer mineral oil, sulphuric acid, PCB transformer oils, 30% chlorine, ammonium hydroxide, ethanol and fertilizer. This liner is designed to contain most chemicals suitable to -20 F. Call SEI to confirm usage of a specific chemical. Using optional corrosion proof fittings, phosphoric acid (10%) and sodium hydroxide (60%) is also permissible. *An alternative glue for repairs would be Loctite 495, which should be available locally.*

Petro-Shield (tan/tan color, used in Arctic berms)

Petro-Shield liners are constructed from urethane-coated nylon that meets U.S. military specification MIL-T-52983G for fuel tanks. The following fluids are acceptable for containment: Jet A, Jet B, JP-1, JP-4, JP-8, kerosene, avgas, diesel fuels with less than 40% aromatic content and isopropyl alcohol suitable to -50 F. Petro-Shield fabric is not suitable for use with gasoline (contact SEI for information on the Desert King). Petro-Shield fabric meets U.S. military specification MI-T-52983G and ATPD-2266. *An alternative glue for repairs would be 3M(DP420), which should be available locally.*

The Arctic berm material (Petro-Shield) will provide longer service life due to a higher resistance to abrasion. The Arctic berm (Petro-Shield) can also be used in warmer climates.

Important Note

Please contact an SEI representative for information on which fluids are acceptable for containment in a chemical resistant Insta-Berm system. The user is responsible for ensuring the berm is suitable for each application.

Chemically Resistant Insta-Berm System

Chemically resistant Insta-Berm systems are made from polymer coated polyester or nylon fabric. This fabric combines excellent durability with resistance to many chemicals.

The data shown in the chart on the following page is the result of laboratory tests and is intended to serve only as a guide. No performance warranty is intended or implied. The degree of chemical attack on any material is governed by the length of time, temperature and size of the area exposed.

When considering chemically resistant Insta-Berm system for specific applications, a fabric sample should be tested in as close to actual service conditions as possible.

Fabric Chemical Resistance

	Chem- Shield	Petro-Shield Arctic King		Chem- Shield	Petro-Shield Arctic King
ACIDS			ORGANICS (Continued)		
Acetic, 5%	G	-	Kerosene	E	G
Formic, 20%	P	P	Methylene chloride	P	P
Hydrochloric, 10%	E	P	Methyl ethyl ketone	-	F-P
Sulfuric, 20%	E	F-G	N-Methyl-2-Pyrrolidene	D	D
			Oil, Texas crude	F-G	-
ALCOHOLS			Oil, detergent 20W	E	-
Ethanol	E	-	Oil, Skydrol type B	D	-
Isopropanol	-	P	Oil, transmission type A	E	E
Methanol	E	F	Perchloroethylene	P	F
			Pyridine	D	D
ALKALI			Tetrahydrofuran	D	D
Sodium hydroxide 20%	E	F-P	Toluene	P	F
Ammonium hydroxide 10%	-	P	Trichloroethylene	P	P
			Turpentine	G	G
ORGANICS			MISCELLANEOUS		
Acetone	P	P	Chlorox (5%)	E	F-P
ASTM Fuel A	E	G	Calcium chloride saturated solution	-	G
ASTM Fuel B	E	F-G	Freon 113	P	P
ASTM Fuel C	G	F	Freon 11B	P	P
ASTM Oil #1	E	E	Freon 12	G	G
ASTM Oil #2	E	E	Hydrogen disulfide (5%)	G	G
ASTM Oil #3	E	E-G	Mr. Clean	G	G
Benzene	-	F-P	Sodium chloride saturated solution	G	G
Brake fluid, Type A	G	F-P	Synthetic perspiration	G	G
Brake fluid, (H.D.)	G	-	Tide (1%)	G	G
Butane	G	G	Water	G	F
Carbon tetrachloride	F	F			
Cyclohexanone	D	D			
Dimethyl formamid	D	D			
Dimethyl sulfoxide	D	D			
1, 4-Dioxane	F	D			
Diocetyl phthalate	G	G			
Ethylene dichloride	-	P			
Ethylene glycol	-	G			
Ethylene glycol 50% H ₂ O	G	G			
Gasoline, 100 octane	G	G			

E -excellent, little or no change
G -good, slight loss in properties, slight swell
F -fair, swelling and some loss in properties
P -poor, significant loss of properties and significant swelling
D -dissolves
Note: Chemical resistance generally improves with increasing hardness.

Note: This table should be used as a guide only. Consult SEI Industries for specific applications.

Standard Equipment

The frame-supported Insta-Berm system comes complete with a berm liner, prefabricated support frame (20" or 32" high), pre-installed stake down tabs and bulkhead fittings for the optional RainDrain system. A crate for shipping and a repair pouch are also included. All repair instructions are found in this manual.

Optional Equipment

Also available from SEI Industries:

- RainDrain system
- High wind stakes
- Groundsheet to protect the bottom of the Insta-Berm
- Track belting to protect the inside of the Insta-Berm from tires
- Carrying bag

RainDrain Description

The RainDrain system allows operators to continuously gravity-drain rain water from secondary containment berms without having to monitor the discharge. The RainDrain is designed as a go-no-go filtration system that will automatically stop the flow of discharge water when it is full or when there is a large amount of hydrocarbons present in the water being discharged.



18" Filter Assembly



36" Filter Assembly

RainDrain Performance

The RainDrain system allows rainfall and water from other sources to be discharged from the berm. The filtration unit stops all target contaminants, acting as a hydrocarbon selection unit and reducing the discharged water below 10 ppm hydrocarbon content.

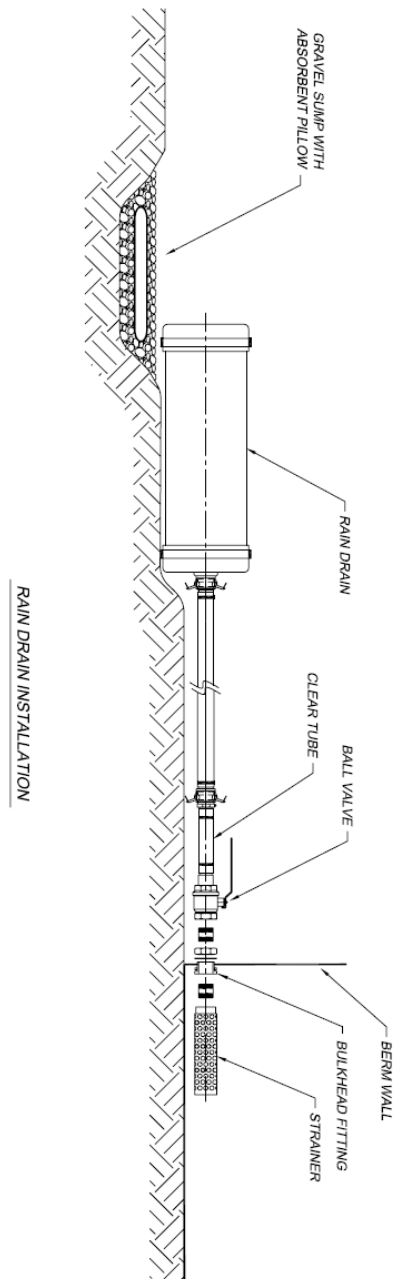
When the filtration unit reaches containment capacity, it will automatically cease to discharge all fluids. When this occurs the filter cartridge will have to be replaced. Once that is completed, the system is ready for normal operation.

Important Note

The amount of hydrocarbons present in the secondary containment system will determine the frequency in which to replace the filter cartridge.

Warning

In the event of a catastrophic failure of a primary containment tank (that is secured within a secondary containment berm and protected by the RainDrain), the subsequent spill of a significant amount of fuel will cause the filter to shut down automatically. It is still possible that a small amount of fuel will escape through the RainDrain because of the higher fuel to water discharge ratio. This discharge can be trapped in a small discharge pit filled with hydrocarbon absorbent pads.

RainDrain Installation

RainDrain Specifications**Models**

Model #	Oil Capacity	Water Flow Rate	Dimensions	Weight
IBMKF0618	.5 USG 1.9 Liters	.32 USGPM 1.2 L/Min	6" Dia. X 18" L (15 cm x 45 cm)	13 lbs. (5.89 Kg)
IBMKF0636	2 USG 7.6 Liters	.32 USGPM 1.2 L/Min	6" Dia. X 36" L (15 cm x 91 cm)	26 lbs. (11.79 Kg)

The RainDrain meets or exceeds the design requirements as well as free oil and grease water *discharge* levels for the following regulations:

- Environmental Protection Agency (EPA) 40 CFR Part 112.7
- Canadian Council of Ministers of the Environment (CCME) Code of Practice for above ground and underground storage tank systems containing petroleum and allied petroleum products. Section 3.10.3(1)(b)(i)
- British Columbia Waste Management Act, BC Regulation 168/94
- Alaska State AAC-75.075

The RainDrain is designed to produce a *discharge* of water that does not contain more than 10mg/L of free oil and grease as measured by the partition-gravimetric method. Independent testing has proven the RainDrain exceeds this performance requirement and those results are available upon request.

Based upon data available to SEI Industries Ltd. components in this product are not hazardous under the OSHA Hazard Communication (29 CFR 1910.1200).

Section 3: Safety

Safety Precautions

Handling Chemicals and Fluids

When handling chemicals and fluids, the following rules should be observed:

- Use approved skin and eye protection, as required.
- Use suggested safety procedures; contact the chemical manufacturer for the specific material safety data sheets.

Handling of Petroleum Fuels

Handling of petroleum fuels is always a potentially dangerous operation. The following rules should be observed:

- Keep the fueling site free of debris and flammable materials such as dry grass, etc.
- Observe all normal safety practices; e.g. a strict ***no smoking*** rule.
- Collect all intentional spillage in a container and discard safely.
- Keep all unnecessary personnel off site.
- Use grounding devices, where applicable.
- Have fire extinguishers manned during refuelling.
- Do not pack and ship containers with fuel residue inside.

Personnel Safety

The berm liner can become slippery when snow or water has accumulated inside. Track belting and proper footwear is recommend when walking inside the berm liner.

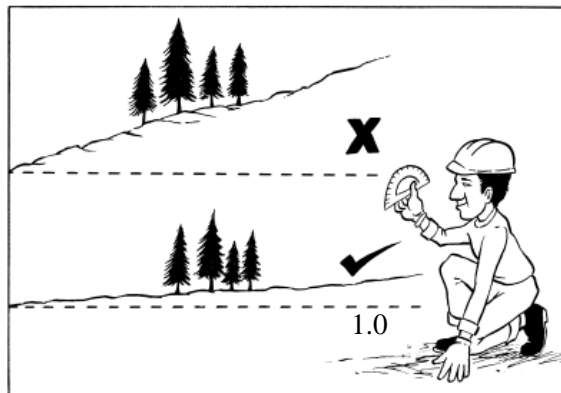
Section 4: Installation

Installation Procedures

Selecting a Site

The frame-supported Insta-Berm system may be installed on asphalt, concrete, sand or soil if the surface is well groomed and level. The site selected must be free of rocks, sticks and other debris that may damage the floor of the berm.

Select a site approximately 6' (1.8m) larger in each direction than the overall berm size (see *Section 7: Specifications and Parts* for overall dimensions). For best operating conditions, the slope of the site selected should not exceed one degree in any direction. Any slope will reduce the capacity of the berm. However, if the site has a slope in only one direction, it can result in better draining of the berm.



Select a site (maximum slope one degree).

Preparing the Site

Important Note

SEI recommends consulting a soils engineer to determine soil composition. A soils engineer can also determine if the soil is stable enough to support the weight of the berm and any objects inside the berm.

The surface of the ground should be smooth and firm. If the berm is to be installed on a paved surface, the surface should be swept clean before installation. Sharp gravel on top of a hard surface may puncture the berm.

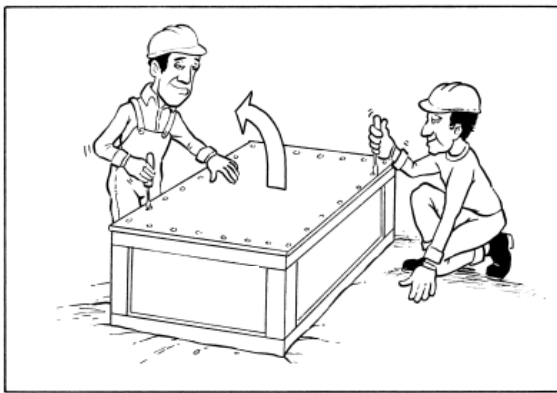
If the ground surface is too rough or irregular, it must be prepared by placing 1-2" (25-50 mm) of pea gravel covered by 1-2" (25-50 mm) of sand or soil. This also provides some drainage and helps keep water away from the liner.

The ground supporting the Insta-Berm system must be firm enough to prevent the berm from settling after filling, otherwise the berm liner may stretch and rupture. The ground must also be firm enough to prevent the frame support legs from sinking, should the berm fill with liquid.

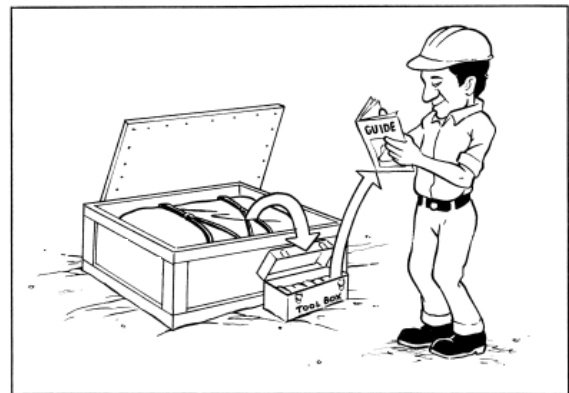
A groundsheet is recommended to protect the bottom surface of the berm from sharp objects (available from SEI Industries). An inside chafing liner is also available.

Assembling the Berm

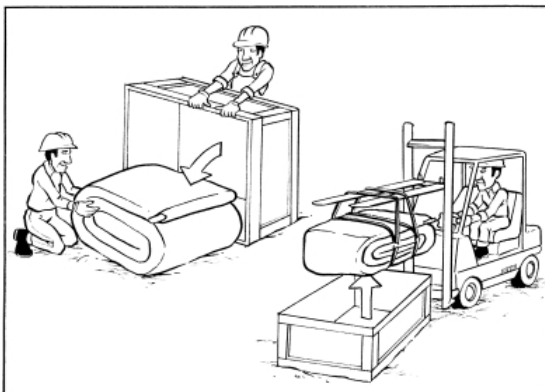
Move the crate to the assembly site and follow the procedures below:



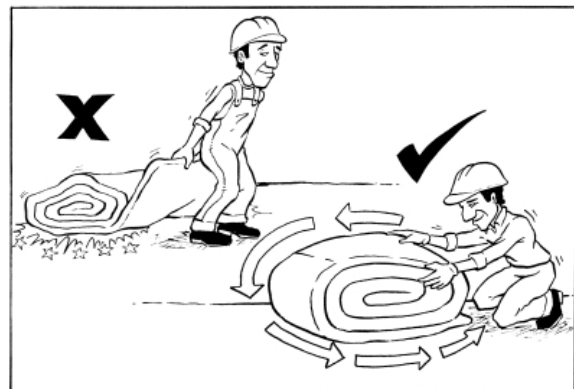
1. Open the crate.



2. Read the operator's manual.



3. Tip the crate and roll the liner and berm out
OR lift the liner out with straps.



4. Roll the liner and berm to move it. Do not drag.

5. The shipping container should be retained for storage or for shipping the berm to a new location. Note how the liner is folded for easy return to the container.
6. If the berm is to be equipped with a groundsheet, spread the groundsheet out first. The groundsheet must be at least 2-3' larger than the berm itself.

Important Note

If the berm is equipped with an optional groundsheet, the groundsheet will be the smaller of the two.

7. Place the groundsheet at one corner of the site.



Groundsheet.

8. Unfold the groundsheet and centre it along one edge of the site.



9. Unroll the groundsheet across the site.



10. The groundsheet should now look like this.



11. Pull the edges of the groundsheet to remove any wrinkles. Flapping the edge to release trapped air will make it easier to pull flat.

Warning

Do not drag the berm without a barrier to protect the fabric from the ground.

Important Note

The berm liner can be moved by having personnel at opposite sides of the liner, lifting the edges. By flapping the edges, air is caught under the berm, allowing the berm to be moved without possible damage.

12. Using the crate liner fabric, carefully drag or roll the berm onto the ground-sheet.



Folded berm liner.

13. The size of your berm will determine how it should be placed on the ground-sheet. As you begin to unroll the berm, you may need to adjust its position to align the long and short sides.



14. To adjust the alignment of the berm, lift the berm by pulling on each end and move it into the correct position. For larger berms, re-roll the berm and place the crate liner material under the berm to slide it to the correct position.

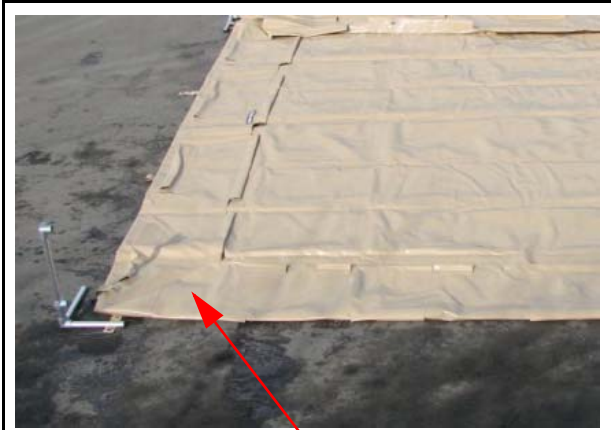
15. Unfold the berm liner (ensuring the alignment is correct) as shown and pull the berm liner flat to ensure there are no wrinkles.



16. Unroll the berm liner across the site.



17. Fold back each side and end until a natural corner is formed. This creates space to assemble the frame.



Forming a natural corner.

18. Locate the four corner posts with fittings attached.



Corner posts.

19. Attach the 16" (long) legs to the corner post.



20. Tighten the leg set screws with the supplied Allan wrench to 29 ft-lb. (39 Nm).

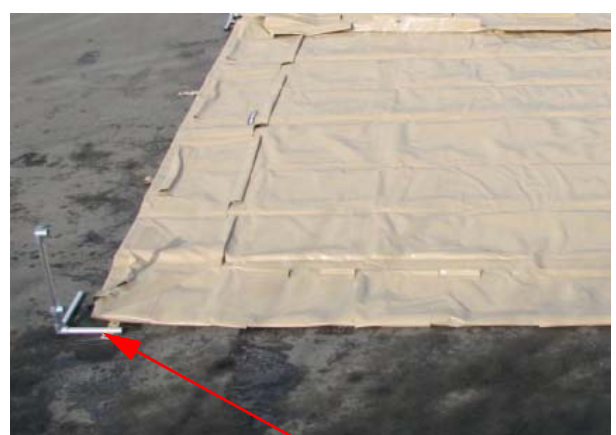


Tightening the leg set screws.

21. Locate the side posts and attach legs in the same manner as the corner posts.



22. Place the completed corner posts at each corner.



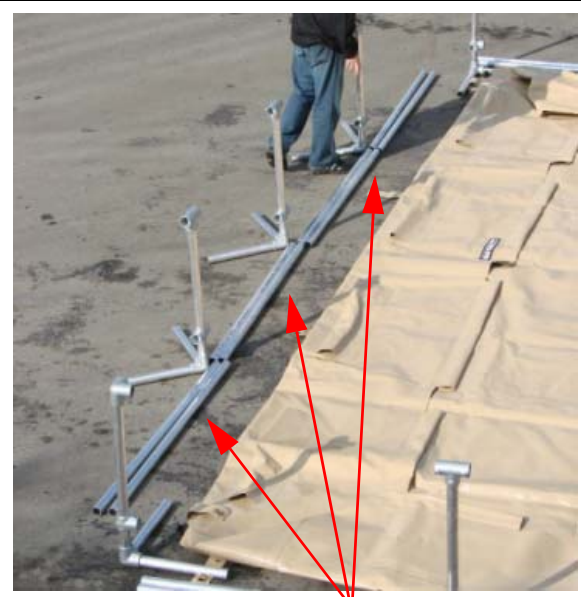
Corner post in position.

23. Place side posts approximately 5' apart along each side.



Side posts in position.

24. Place the 5' (1500 mm) rails in between the posts on each end and both sides. One rail for each section of 20" high berms and two rails for each section of 32" berms.



Rails laid along the side of the berm.

25. For a 20" high berm, slide the rails into each pocket around the berm.



Sliding rails on a 20" high berm.

26. For a 32" high berm, slide the rails into both the top and bottom pockets around the berm.



Slide top and bottom rails into pockets.

27. Starting with one corner, insert the lower rails. Tighten the set screw on the corner post to 29 ft-lb. (39 Nm).



Lower rails in place and tighten set screw.

28. Attach the top rails to the starting corner post and tighten the set screw to 29 ft-lb. (39 Nm).



Tightening the top rail.

29. Move to the closest side post to the starting corner and attach the other end of the top rail onto the side post. Tighten the set screw.



Attaching the top rail to the side post.

30. Continue attaching the rails around the entire berm until you return to your starting point. If sufficient personnel are available, two teams can work in opposite directions from the starting corner.
31. The completed berm should now look like this.



High Wind Precautions**Warning**

When using the Insta-Berm system near a helicopter or in high wind areas, it must be secured with tie-downs or sandbags to prevent the helicopter downwash or wind from lifting the liner. Helicopters can create enough downwash to lift an unsecured, empty berm liner completely off the ground. This could cause a rotor-strike.

Installing high wind stakes will lock the berm in place.

1. To secure the Insta-Berm system in high wind areas, place sandbags inside the liner near the edges. If the berm is empty, sandbags should also be placed on the corners of the liner.



High wind stake.

Section 5: Maintenance

Maintenance and Repairs

Spill Clean-Up

Caution

The Insta-Berm system is for temporary secondary containment. Neutralize or transfer spills collected within the liner to permanent holding containers promptly.

Chemical resistance data is based on an exposure limit of 28 days duration at room temperature. The liner may be over-lined with disposable thin polyethylene sheeting for rapid clean up of spills.

Removing Water and Foreign Materials

Caution

SEI Industries will not be liable for any loss of stored liquids or related damage. To maximize spill retention, inspect the Insta-Berm frequently and remove rain water, snow or dirt promptly from the liner.

If the water has any chemicals floating on the surface or suspended in the water, a filter system should be used to eliminate these chemicals before allowing the water to return to the environment. SEI Industries recommends using SEI's RainDrain system for removing hydro-carbons. For non hydro-carbon chemicals, contact the local authorities to determine how to safely dispose of the chemicals.

To facilitate the pumping of water from inside the berm, each berm should be equipped with a manually operated pump. The pump should be located at the lowest point in the berm. An automatic pump should not be used as it would pump out any spillage in the berm.

If the Insta-Berm is installed on a grade, the liner can be un-hooked from the top pipe on the downhill side to allow the water to drain. Re-install the liner on the top pipe after draining the water. Do not leave the berm unattended while one side is lowered to facilitate draining. SEI Industries can automate this process with the RainDrain system. See this manual for more information.

Extending the Service Life of the Insta-Berm System

As with any equipment, the service life of the Insta-Berm system can be extended with proper care. Various factors affect portable berms:

- Ultra-violet radiation
- Folding
- Abrasion
- Moisture
- Temperature
- Type of liquid stored

An Insta-Berm system used in shady, dry, cool conditions and not moved frequently will provide longer service life.

The following suggestions will help extend berm service life:

- When moving the liner it should not be dragged or abraded. The folds should be made at different places each time the liner is moved. Be particularly careful with fork-lifts as the liner should be rolled onto the forks rather than sliding the forks under the tank.
- Spilled fluids should be removed promptly from the liner or tubes.
- The site should be arranged so the liner or tubes will not be sitting in water. A ditch around the berm will allow water to collect below the berm pad.
- Fabric berms are affected more by some liquids than by others. Contact SEI Industries for information on the liquid you intend to store.

Important Note

Check the setscrews annually for tightness. Tighten to 29 ft-lb. (39 Nm).

- If vehicles are intended to enter/exit the berm, track belting is recommended.

Track belting.



Important Note

If the berm is equipped with the optional track belting, it should now be spread out evenly inside the berm. If sharp or abrasive equipment is to be placed inside the berm, plywood panels can be laid down to protect the fabric.

Repairs

Using Glue

Tools and Materials Required

- Roller
- Scissors
- Patch material
- Glue
- Solvent (isopropyl rubbing alcohol is recommended)
- Abrasive pad

Important Note

Try a test repair before attempting to repair the item. It is much harder to fix a repair once a failed attempt has been made as the hardened glue is difficult to remove.

Before commencing repairs using glue, the following should be noted:

- The weather should be warm (above 60 deg. F or 15 deg. C) and dry.
- If the glue and patch are not properly placed, air bubbles will be created between the glue and patch.
- The patch should be weighted down for 8-12 hours.
- The repaired item should not be used before the glue has set.

Important Note

Dura-Seal glue has been designed specifically for the SEI family of fabrics. The shelf life of this adhesive is about one year. Fresh adhesive can be obtained directly from SEI Industries Ltd.

Warning

Glue vapours are highly explosive. Explosive vapours may occur causing fire and/or injury. Keep away from all sparks, flame, lighters or cigarettes.

Solvent and glue are both extremely hazardous. Use solvent and glue under well ventilated conditions only.

When using a warm air fan, either use one which is rated EXPLOSION PROOF or make sure that there is a steady flow of air past the work area to remove fumes as they are generated.

Repairing in High Humidity

In conditions of high humidity, a proper technique is essential for securing the bond strength desired as the presence of surface moisture can destroy the effectiveness of the cemented bond.

The evaporation of solvent from the adhesive may reduce the surface temperature below the dew point resulting in condensation of water vapour on the surface of the adhesive. This is often visible as fogging or a milky white appearance on the surface.

The use of a solvent to clean the surface prior to cementing can also reduce temperatures below the dew point.

To overcome the high humidity problem, raise the temperature of the patch area. This can be accomplished with a warm air fan.

Applying the Glue

Small scrapes, damaged fabric coating or pinholes, which are not leaking, can be repaired with glue only. They do not require a patch. (A small scrape is defined as damage to the outer fabric coating only. A pinhole is defined as a small puncture that is not leaking.) However, damage to the base fabric must be repaired with a patch.

1. Fill the weight bag with water prior to beginning repairs.
2. Clean the area to be repaired with an abrasive pad dampened with solvent. Remove all traces of masking tape, if previously used. If possible, place a piece of masking tape on the back side of the item being repaired.
3. Paint the damaged area with glue. Use a thick coat of glue, overlapping the edges of the repair by 1" (25 mm). Be sure that the edges are well coated. A damaged coating should be given two coats of glue. Apply the second coat within four hours of the first coat.



Apply masking tape on the backside of tear.



Squeeze glue around tear and spread with fingers.

Important Note

Allow repair to harden for 24 hours at room temperature before using the item.

Gluing with Patches

If liquid is escaping or there is dampness around the damaged area, the item must be drained. If the damaged area is still dry, it will be possible to obtain a good bond without draining the item.

Any loose coating should be cut back with scissors. Trim to a point where there is a solid bond between the reinforcing fabric or scrim and the coating.

1. Support the damaged area on a flat, solid platform. If the item is drained, the damaged area should be supported above the rest of the item. This allows residual liquid to drain away from the damaged area. This platform should be strong enough to support the fabric (flat) and allow the patch to be rolled once it is in place.



2. Scrub the damaged area with an abrasive pad dampened with solvent (isopropyl rubbing alcohol is recommended). Scrub vigorously to remove the cured surface. The area should be clean and dry with a dull matte finish.



Caution

Solvent will damage the fabric if too much is used or if the fabric is left exposed to solvent residue.

3. Wipe with a rag, dampened with solvent, to remove any residue from cleaning. Check to see if the area is totally clean and all coated surfaces and edges are dull. If not, repeat the cleaning. This is critical for a good glue bond.

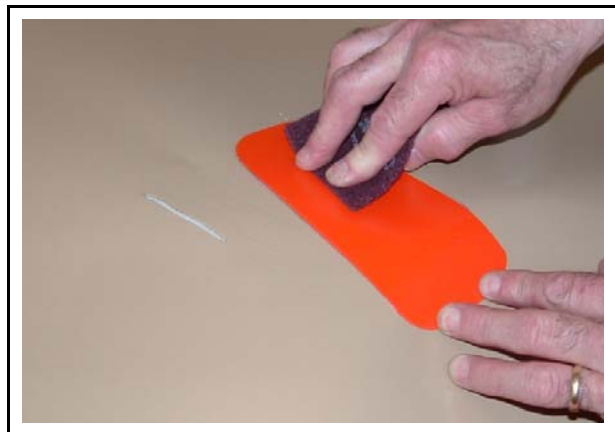
Cutting the Patch

1. Cut a patch. The patch should be at least 2" (50 mm) larger in every direction from the damaged area. A round patch is recommended but, if a rectangular patch covers the damage better, then round all corners.

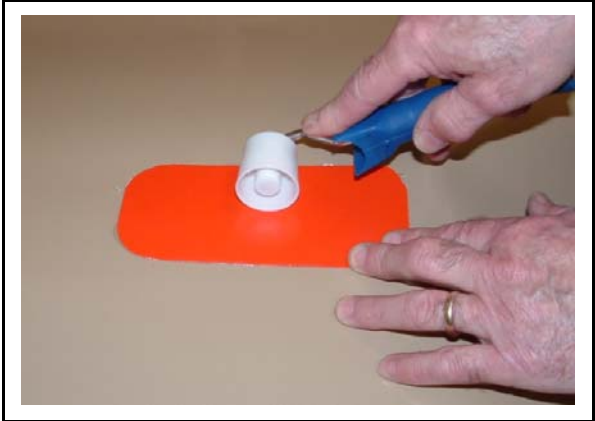


The color of patch will vary, depending on the product repair kit.

2. Clean the patch by scrubbing with a pad dampened with solvent. Rub vigorously to remove the gloss from the fabric. Clean both sides of the patch, as it is easy to get the patch turned over during installation. The patch should also be cleaned on the outside since it will be painted with glue later.



Applying the Patch

1. Apply the Dura-Seal glue to the patch and damaged area. Wait 30 minutes (at 75 deg. F or 22 deg. C) for some of the solvent to evaporate from the glue. The glue should become thicker but still be quite wet. If it has been allowed to dry too long, give both sides another thin coat. If the glue has dried too long, it will be difficult to avoid entrapping air bubbles in the bonded joint.
 2. Place the patch and roll it down with the roller. Place the centre of the patch down first, then roll it out towards the edges with the roller. This expels trapped air. Once the patch is rolled down, do not let it lift up. This will prevent air from getting under the patch which causes a weak bond.
- 
- The image shows a close-up of a person's hands applying a bright orange patch to a light-colored surface. The person is using a white roller with a blue handle to roll the patch down, ensuring it adheres properly and expels any trapped air. The patch is rectangular and has a slightly irregular edge. The person's left hand is visible, holding the patch steady, and a gold ring is visible on their ring finger.
3. If the item is sloped during the repair, tape the patch in place while holding it down. This stops the patch from sliding away from the damaged area.
 4. Weight the patch down. Place a plastic cover sheet over the patch followed by a weight bag for 12 hours at room temperature. The item can then be moved but should not be filled until the glue has cured for 24 hours. The weight should hold the patch tight against the item while the glue sets. The plastic cover sheet will prevent the glue from sticking to the weight bag.
 5. If the patch will be subjected to abrasion after 24 hours, paint over the patch with glue. Painting the patch also provides protection from ultra violet light and weather. Allow the bond to harden for 24 hours at room temperature before using the item.

Using Other Glues

If you do not have any Dura-Seal available, there are two other glues that can be used and are typically easy to purchase locally.

1. Loctite 495 can be used on Chem-Shield fabric to provide a quick patch repair but it will make a long term repair difficult at a later date as all 495 glue must be removed before applying Dura-Seal.

Warning

Loctite 495 carries the following warning: Irritating by inhalation. Eye irritant. Combustible liquid. Contains cyanoacrilate ester which may cause allergic skin reactions. Skin contact through clothing may cause burns. Use adequate ventilation in case of eye or body contact. Flush with water. Get medical attention for eye or internal contact.

2. The other glue option is 3M's 420 glue which has the advantage of creating a more permanent repair. If using this glue, follow the same instructions in this manual as for Dura-Seal adhesive.

Section 6: Packing and Storage

Repacking, Shipping and Storage

Repacking the Insta-Berm System

The following procedure is recommend for folding a liner:

1. Empty all liquids from the liner.
2. Clean the berm liner with a pressure washer using a mild soap and water solution through the RainDrain system. Allow the berm liner to dry completely.
3. Remove all rails from the posts and the liner pockets.



Removing rails from posts.

4. Collapse the sides towards the centre. Remove all rails and posts from the area.



Sides collapsed towards the centre.

5. Ensure the berm liner is completely flat.



Berm liner laid flat.

6. Begin folding the berm liner as shown.



Folding the berm liner.

7. Continue folding the berm liner as shown.



8. Finished folding procedure.



Shipping Instructions**Warning**

Do not pack and ship containers with fuel residue inside.

Important Note

If hazardous chemicals were stored, there may be restrictions on the method in which the berm can be transported. Please contact your local carriers to determine how to transport your liner safely.

To minimize the risk of damage, the Insta-Berm system should be shipped in its original crate or in an equivalent sturdy, well padded crate.

Storing the Insta-Berm System

For the best storage life, the system should be stored inside the carrying bag or shipping crate in a cool, dry location that is out of direct sunlight.

Section 7: Specifications and Parts

Specifications

CHEM-SHIELD						
MODEL	CAPACITY		INSIDE DIMENSIONS (L x W x H)		SHIP WT.	
	USG	LITERS	FT. / IN.	METERS	LBS.	KG.
20" Frames						
IBFS101020	1060	4012	10' x 10' x 20"	3.05 x 3.05 x 0.5	156	71
IBFS102020	2119	8023	10' x 20' x 20"	3.05 x 6.10 x 0.5	242	110
IBFS202020	4239	16046	20' x 20' x 20"	6.10 x 6.10 x 0.5	350	159
IBFS203020	6358	24069	20' x 30' x 20"	6.10 x 9.14 x 0.5	458	208
IBFS204020	8478	32092	20' x 40' x 20"	6.10 x 12.19 x 0.5	567	257
IBFS205020	10597	40115	20' x 50' x 20"	6.10 x 15.24 x 0.5	675	306
IBFS303020	9538	36104	30' x 30' x 20"	9.14 x 9.14 x 0.5	589	267
IBFS304020	12717	48138	30' x 40' x 20"	9.14 x 12.19 x 0.5	719	326
IBFS305020	15896	60173	30' x 50' x 20"	9.14 x 15.24 x 0.5	850	386
IBFS404020	16956	64185	40' x 40' x 20"	12.19 x 12.19 x 0.5	872	396
IBFS405020	21195	80231	40' x 50' x 20"	12.19 x 15.24 x 0.5	1025	465
IBFS505020	26494	100289	50' x 50' x 20"	15.24 x 15.24 x 0.5	1200	544
32" Frames						
IBFS101032	1808	6843	10' x 10' x 32"	3.05 x 3.05 x 0.8	242	110
IBFS202032	7231	27373	20' x 20' x 32"	6.10 x 6.10 x 0.8	515	234
IBFS203032	10847	41059	20' x 30' x 32"	6.10 x 9.14 x 0.8	662	300
IBFS303032	16270	61589	30' x 30' x 32"	9.14 x 9.14 x 0.8	832	377
IBFS304032	21694	82119	30' x 40' x 32"	9.14 x 12.19 x 0.8	1003	455
IBFS404032	28925	109491	40' x 40' x 32"	12.19 x 12.19 x 0.8	1195	542
IBFS405032	36156	136864	40' x 50' x 32"	12.19 x 15.24 x 0.8	1387	629
IBFS505032	45195	171080	50' x 50' x 32"	15.24 x 15.24 x 0.8	1602	727
Shipping Weight Based On 30oz. Fabric						

ARCTIC-SHIELD						
MODEL	CAPACITY		INSIDE DIMENSIONS (L x W x H)		SHIP WT.	
	USG	LITERS	FT. / IN.	METERS	LBS.	KG.
20" Frames						
IBFS101020A	1060	4012	10' x 10' x 20"	3.05 x 3.05 x 0.5	160	73
IBFS102020A	2119	8023	10' x 20' x 20"	3.05 x 6.10 x 0.5	247	112
IBFS202020A	4239	16046	20' x 20' x 20"	6.10 x 6.10 x 0.5	358	162
IBFS203020A	6358	24069	20' x 30' x 20"	6.10 x 9.14 x 0.5	469	213
IBFS204020A	8478	32092	20' x 40' x 20"	6.10 x 12.19 x 0.5	581	264
IBFS205020A	10597	40115	20' x 50' x 20"	6.10 x 15.24 x 0.5	693	314
IBFS303020A	9538	36104	30' x 30' x 20"	9.14 x 9.14 x 0.5	604	274
IBFS304020A	12717	48138	30' x 40' x 20"	9.14 x 12.19 x 0.5	740	336
IBFS305020A	15896	60173	30' x 50' x 20"	9.14 x 15.24 x 0.5	875	397
IBFS404020A	16956	64185	40' x 40' x 20"	12.19 x 12.19 x 0.5	900	408
IBFS405020A	21195	80231	40' x 50' x 20"	12.19 x 15.24 x 0.5	1058	480
IBFS505020A	26494	100289	50' x 50' x 20"	15.24 x 15.24 x 0.5	1240	562
32" Frames						
IBFS101032A	1808	6843	10' x 10' x 32"	3.05 x 3.05 x 0.8	247	112
IBFS202032A	7231	27373	20' x 20' x 32"	6.10 x 6.10 x 0.8	525	238
IBFS203032A	10847	41059	20' x 30' x 32"	6.10 x 9.14 x 0.8	675	306
IBFS303032A	16270	61589	30' x 30' x 32"	9.14 x 9.14 x 0.8	850	386
IBFS304032A	21694	82119	30' x 40' x 32"	9.14 x 12.19 x 0.8	1027	466
IBFS404032A	28925	109491	40' x 40' x 32"	12.19 x 12.19 x 0.8	1225	556
IBFS405032A	36156	136864	40' x 50' x 32"	12.19 x 15.24 x 0.8	1424	646
IBFS505032A	45195	171080	50' x 50' x 32"	15.24 x 15.24 x 0.8	1646	747
Shipping Weight Based On 32oz. Fabric						

Terra Tank to Frame Insta-Berm Cross Reference Chart

TANK CAPACITY	FRAME BERM	
	20"	32"
1000 USG	IBFS202020	
1200 USG	IBFS202020	
1500 USG	IBFS202020	
1800 USG	IBFS202020	
2000 USG	IBFS202020	
2400 USG	IBFS202020	
2500 USG	IBFS202020	
3000 USG	IBFS202020	
3600 USG	IBFS202020	
4000 USG	IBFS203020	IBFS202032
4800 USG	IBFS203020	IBFS203032
5000 USG	IBFS203020	IBFS203032
6000 USG	IBFS303020	IBFS203032
7500 USG	IBFS303020	IBFS303032
9000 USG	IBFS304020	IBFS303032
10000 USG	IBFS304020	IBFS303032
12000 USG	IBFS404020	IBFS303032
15000 USG	IBFS404020	IBFS304032
18000 USG	IBFS405020	IBFS304032
20000 USG	IBFS505020	IBFS404032
24000 USG	IBFS505020	IBFS404032
25000 USG	IBFS606020	IBFS404032
30000 USG	IBFS606020	IBFS405032
48000 USG		
50000 USG		

Repair Kits

Mini Repair Pocket Kit REPKM002

Mini Repair Pocket Kit REPKM002NG (no glue)



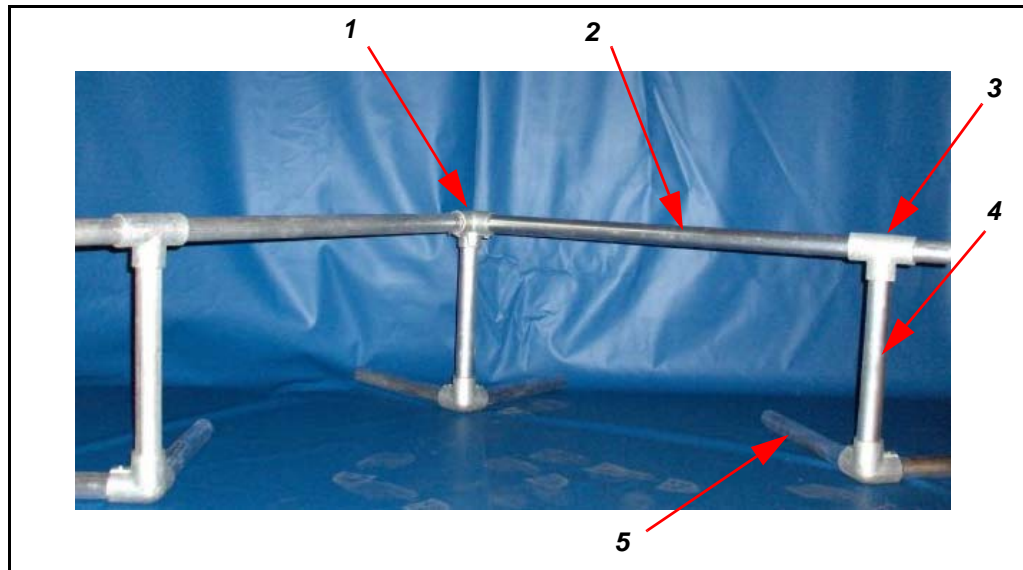
Important Note

It is the responsibility of the dealer and end user to ensure that the importation of glue is allowed in the country of use.

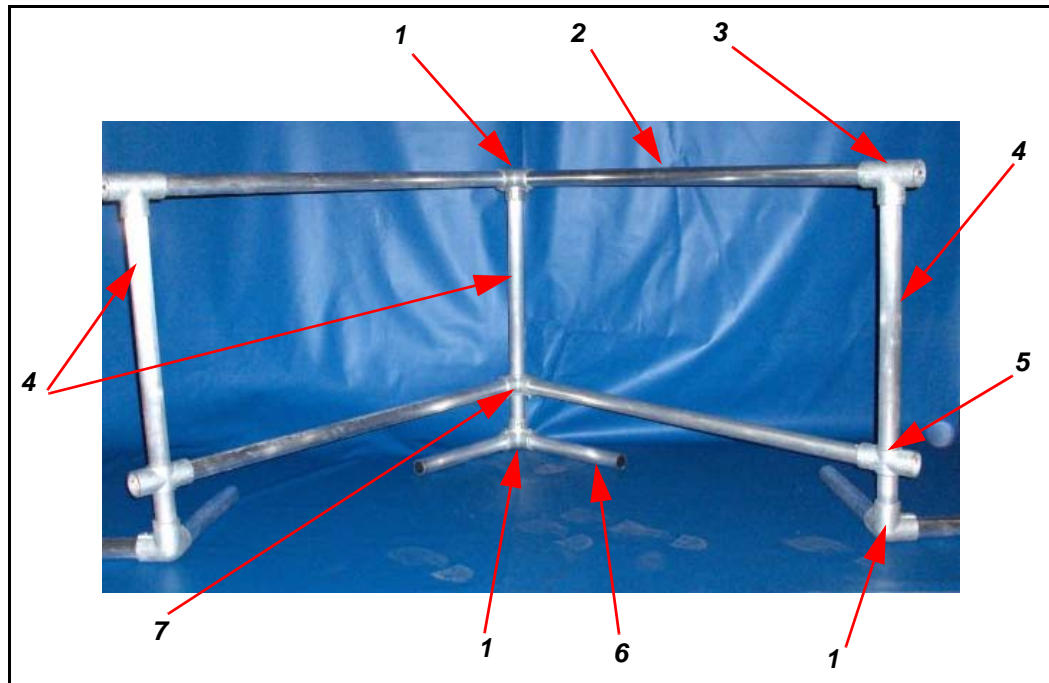
PART #	DESCRIPTION	QTY.
REPM102	FABRIC REPAIR FLYER	1
REPP001	POUCH FOR REPAIR POCKET	1
PP504	ABRASIVE PAD	2
PP525	ADHESIVE, DURA-SEAL 1 oz. (see note above)	1
PP513	SCISSORS	1
REPP140	REPAIR PATCH FOR CHEM GUARD 24 OZ	3
REPP120	REPAIR PATCH FOR CHEM GUARD 30 OZ	3
REPP142	REPAIR PATCH FOR PETROSHIELD	3
REPP150	REPAIR PATCH FOR TEMPSHEILD	3

Parts List

20" High Berms



ITEM	PART #	DESCRIPTION	QTY.
1	IBMF001	Fitting elbow 3 way 90 degrees Galv. 1 ½"	1
2	IBMF044	Rail section 1 ½" x 58" Alum.	1
3	IBMF002	Fitting long tee Galv. 1 ½"	1
4	IBMF033	Corner or side post 1 ½" x 18 ¾" Alum.	1
5	IBMF032	Foot tube 1 ½" X 15 7/8"	1

32" High Berms

ITEM	PART #	DESCRIPTION	QTY
1	IBMF001	Fitting elbow 3 way 90 degrees Galv. 1 ½"	1
2	IBMF044	Rail section 1 ½" X 58" Alum.	1
3	IBMF002	Fitting long tee Galv. 1 ½"	1
4	IBMF040	Corner or side post 1 ½" X 33 ½" Alum	1
5	IBMF011	Fitting cross straight 4 way Galv. 1 ½"	1
6	IBMF032	Foot tube 1 ½" x 15 7/8" Alum	1
7	IBMF010	Fitting side outlet 90 degrees 4 way Galv 1 ½"	1

Section 8: Warranty

- a) Warranty is limited to repairing or replacing, at the company's sole discretion, any product approved to be defective.
- b) The company's products are not guaranteed for any specific length of time or measure of service, but are warranted only to be free from defects in workmanship and material for a period of one year to the original purchaser.
- c) To the extent allowable under applicable law, the company's liability for consequential, incidental and environmental damages is expressly disclaimed. **The company's liability in all events is limited to and shall not exceed, the purchase price paid.**
- d) This warranty is granted to the original purchaser and does not extend to a subsequent purchaser or assignee.
- e) The company must receive notification in writing of any claims of warranty from the original purchaser which must give details of the claimed defect in the product.
- f) Where the original purchaser is claiming under warranty, the product must be returned to the company for inspection with all transportation and duty charges prepaid.
- g) The warranty does not extend to any product that has been accidentally damaged, abraded, altered, punctured, abused, misused or used for a purpose which has not been approved by the company.
- h) This warranty does not apply to any accessories used with the product such as pumps, filters, hoses, etc., that are not supplied by the company, and any warranty on such accessories must be requested from the manufacturer or dealer of the accessories.
- i) In the event the original purchaser does not give notice of a warranty claim within one year of the original purchase of the product, it is understood that the purchaser has waived the claim for warranty and the purchaser and/or any subsequent purchaser must accept the condition of the product as it may be, without warranty.
- j) Any technical information supplied by the company regarding the product is not a condition of warranty but rather is information provided by the company to the best of its knowledge.
- k) There are no implied warranties nor is there any warranty that can be assumed from any representation of any person, except the company itself.

Exclusions

This warranty is void if the product is not assembled, used and/or maintained in accordance with the operator's manual supplied by SEI.