



## IMPORTANT SAFETY INSTRUCTIONS CONSIGNES DE SÉCURITÉ IMPORTANTES

# READ, FOLLOW, AND UNDERSTAND ALL INSTRUCTIONS LIRE, SUIVRE ET COMPRENDRE TOUTES LES INSTRUCTIONS

## **Manufacturers Safety Instructions**

DANGER: BEFORE INSTALLING OR USING THIS PRODUCT, READ, FOLLOW, AND UNDERSTAND ALL SAFETY

INFORMATION. FAILURE TO DO SO CAN RESULT IN DAMAGE, INJURY, OR DEATH.

DANGER: SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS PRODUCT IS NOT INSTALLED OR USED

CORRECTLY.

**WARNING:** This unit should be installed only per the manufacturer's instructions.

WARNING: This product must be installed in accordance with any applicable state and local codes. Consult the

local building and health codes for more information.

WARNING: RISK OF ELECTRICAL SHOCK: All electrical connections should be made by a licensed electrician in

accordance with all applicable national and local codes and ordinances.

**WARNING:** Before each use, examine the unit for damage or signs of wear. Do not use the product if found in

this condition. Contact Endless™ Customer Service.

WARNING: Never operate the unit without reading and completely understanding the results of

any operational change you request from the controller.

**WARNING:** Never use this product alone.

**WARNING:** Keep all breakables, especially glass, away from this product.

**WARNING:** Never insert any objects into any openings.

**WARNING:** Wear appropriate hearing and eye protection while installing this product.

WARNING: Consult a physician before using this product. Stop exercising if you feel pain or tightness in your

chest, become short of breath, or feel faint. Contact your doctor before using this product again.

**WARNING:** The appliance is not to be used by persons (including children) with reduced physical, sensory or

mental capabilities, or lack of experience and knowledge, unless they are under adult supervision at

all times and after they have been given instruction by a qualified adult.

## **Other Important Safety Instructions**

**WARNING:** To reduce the risk of injury, do not permit children to use this product unless they are closely

supervised by an adult at all times.

AVERTISSEMENT: Pour réduire le risque de blessure, ne permettez pas aux enfants d'utiliser ce produit à moins qu'ils

ne soient surveillés de près en tout temp

**WARNING:** To reduce the risk of injury:

**AVERTISSEMENT:** Pour réduire le risque de blessure:

a. The water in a spa should never exceed 104 °F (40 °C). Water temperatures between 100 °F (38 °C) and 104 °F (40 °C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes. L'eau dans un spa ne doit jamais dépasser 40 °C (104 °F). Les températures de l'eau comprises entre 38 °C (100 °F) et 40 °C (104 °F) sont considérées comme sûres pour un adulte en bonne santé. Des températures d'eau plus basses sont recommandées pour les jeunes enfants et lorsque l'utilisation du spa dépasse 10 minutes.

- b. Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 100 °F (38 °C). Étant donné que les températures excessives de l'eau ont un potentiel élevé de causer des dommages au fœtus pendant les premiers mois de la grossesse, les femmes enceintes ou éventuellement enceintes devraient limiter la température de l'eau du spa à 38 °C (100 °F).
- c. Before entering a spa, the user should measure the water temperature since the tolerance of water temperature regulating devices vary. Avant d'entrer dans un spa, l'utilisateur doit mesurer la température de l'eau car la tolérance des dispositifs de régulation de la température de l'eau varie.
- d. The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning. La consommation d'alcool, de drogues ou de médicaments avant ou pendant l'utilisation du spa peut entraîner une perte de conscience avec possibilité de noyade.
- e. Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa. Les personnes obèses et les personnes ayant des antécédents de maladie cardiaque, d'hypotension ou d'hypertension artérielle, des problèmes de système circulatoire ou de diabète devraient consulter un médecin avant d'utiliser un spa.
- f. Persons using medication should consult a physician before using a spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation. Les personnes qui prennent des médicaments devraient consulter un médecin avant d'utiliser un spa, car certains médicaments peuvent provoquer de la somnolence tandis que d'autres médicaments peuvent affecter la fréquence cardiaque, la pression artérielle et la circulation.

**DANGER:** 

RISK OF INJURY: The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.

**DANGER:** 

RISQUE DE BLESSURE: Les raccords d'aspiration de ce spa sont dimensionnés pour correspondre au débit d'eau spécifique créé par la pompe. En cas de besoin de remplacement des raccords d'aspiration ou de la pompe, assurez-vous que les débits sont compatibles. N'utilisez jamais le spa si les raccords d'aspiration sont cassés ou manquants. Ne remplacez jamais un raccord d'aspiration par un autre de moins que le débit indiqué sur le raccord d'aspiration d'origine.

DANGER: RISK OF ACCIDENTAL DROWNING: Extreme caution must be exercised to prevent unauthorized

access by children. To avoid accidents, ensure that children cannot use this spa unless they are

supervised by an adult at all times.

**DANGER:** RISQUE DE NOYADE ACCIDENTELLE: Une extrême prudence doit être exercée pour empêcher tout

accès non autorisé aux enfants. Pour éviter les accidents, assurez-vous que les enfants ne peuvent

pas utiliser ce spa à moins qu'ils ne soient surveillés en tout temps.

DANGER: RISK OF ELECTRIC SHOCK: Install at least 5 feet (1,5 m) from all metal surfaces. As an alternative,

a spa may be installed within 5 feet (1,5 m) of metal surfaces if each metal surface is permanently connected by a minimum 8 AWG (8.4 mm2) solid copper conductor to the wire connector on the

terminal box that is provided for this purpose.

A wire connector is provided on this unit to connect a minimum 8 AWG (8.4 mm2) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1,5 m) of the unit. Un connecteur de fil est fourni sur cette unité pour connecter un conducteur en cuivre solide d'au moins 8,4 mm2 (8 AWG) entre cette unité et tout équipement métallique, les boîtiers métalliques de l'équipement électrique, la conduite

d'eau métallique ou le conduit à moins de 1,5 m (5 pieds) de l'unité.

DANGER: RISK OF ELECTRIC SHOCK: Do not permit any electric appliance, such as a light, telephone, radio, or

television, within 5 feet (1,5 m) of a spa.

DANGER: RISQUE DE CHOC ÉLECTRIQUE: Ne laissez aucun appareil électrique, comme une lampe, un

téléphone, une radio ou une télévision, à moins de 1,5 m (5 pieds) d'un spa.

WARNING: CHILDREN SHOULD NOT USE SPAS OR HOT TUBS WITHOUT ADULT SUPERVISION.

AVERTISSEMENT: NE PAS LAISSER LES ENFANTS UTILISER UNE CUVE DE RELAXATION SANS SURVEILLANCE.

WARNING: DO NOT USE SPAS OR HOT TUBS UNLESS ALL SUCTION GUARDS ARE INSTALLED TO PREVENT

BODY AND HAIR ENTRAPMENT.

**AVERTISSEMENT:** POUR ÉVITER QUE LES CHEVEUX OU UNE PARTIE DU CORPS PUISSENT ÊTRE ASPIRÉS, NE PAS

UTILISER UNE CUVE DE RELAXATION SI LES GRILLES DE PRISE D'ASPIRATION NE SONT PAS

TOUTES EN PLACE.

WARNING: PEOPLE USING MEDICATIONS AND/OR HAVING AN ADVERSE MEDICAL HISTORY SHOULD

CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB.

AVERTISSEMENT: LES PERSONNES QUI PRENNENT DES MÉDICAMENTS ET (OU) ONT DES PROBLÈMES DE SANTÉ

DEVRAIENT CONSULTER UN MÉDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION.

**WARNING:** PEOPLE WITH INFECTIOUS DISEASES SHOULD NOT USE A SPA OR HOT TUB.

AVERTISSEMENT: LES PERSONNES ATTEINTES DE MALADIES INFECTIEUSES NE DEVRAIENT PAS UTILISER UNE CUVE

DE RELAXATION.

WARNING: TO AVOID INJURY, EXERCISE CARE WHEN ENTERING OR EXITING THE SPA OR HOT TUB.

AVERTISSEMENT POUR ÉVITER DES BLESSURES, USER DE PRUDENCE EN ENTRANT DANS UNE CUVE DE

RELAXATION ET EN SORTANT.

WARNING: DO NOT USE DRUGS OR ALCOHOL BEFORE OR DURING THE USE OF A SPA OR HOT TUB TO

AVOID UNCONSCIOUSNESS AND POSSIBLE DROWNING.

AVERTISSEMENT POUR ÉVITER L'ÉVANOUISSEMENT ET LA NOYADE ÉVENTUELLE, NE PRENDRE NI DROGUE NI

ALCOOL AVANT D'UTILISER UNE CUVE DE RELAXATION NI QUAND ON S'Y TROUVE.

WARNING: THE USE OF ALCOHOL OR DRUGS CAN GREATLY INCREASE THE RISK OF FATAL HYPERTHERMIA

IN HOT TUBS AND SPAS.

AVERTISSEMENT: LA CONSOMMATION D'ALCOOL OU DE DROGUE AUGMENTE CONSIDÉRABLEMENT LES RISQUES

D'HYPERTHERMIE MORTELLE DANS UNE CUVE DE RELAXATION.

WARNING: PREGNANT OR POSSIBLY PREGNANT WOMEN SHOULD CONSULT A PHYSICIAN BEFORE USING A

SPA OR HOT TUB.

AVERTISSEMENT: LES FEMMES ENCEINTES, QUE LEUR GROSSESSE SOIT CONFIRMÉE OU NON, DEVRAIENT

CONSULTER UN MÉDECIN AVANT D'UTILISER UNE CUVE DE RELAXATION

WARNING: WATER TEMPERATURE IN EXCESS OF 100 °F (38 °C) CAN BE INJURIOUS TO YOUR HEALTH.

AVERTISSEMENT: IL PEUT ÊTRE DANGEREUX POUR LA SANTÉ DE SE PLONGER DANS DE L'EAU À PLUS DE 38 °C (100 °F).

WARNING: BEFORE ENTERING THE SPA OR HOT TUB, MEASURE THE WATER TEMPERATURE WITH AN

ACCURATE THERMOMETER.

AVERTISSEMENT: AVANT D'UTILISER UNE CUVE DE RELAXATION, MESURER LA TEMPÉRATURE DE L'EAU À L'AIDE

D'UN THERMOMÈTRE PRÉCIS.

WARNING: DO NOT USE A SPA OR HOT TUB IMMEDIATELY FOLLOWING STRENUOUS EXERCISE.

AVERTISSEMENT: NE PAS UTILISER UNE CUVE DE RELAXATION IMMÉDIATEMENT APRÈS UN EXERCICE FATIGANT

**WARNING:** PROLONGED IMMERSION IN A SPA OR HOT TUB CAN BE INJURIOUS TO YOUR HEALTH.

AVERTISSEMENT: L'UTILISATION PROLONGÉE D'UNE CUVE DE RELAXATION PEUT ÊTRE DANGEREUSE POUR LA SANTÉ.

WARNING: DO NOT PERMIT ELECTRIC APPLIANCES (SUCH AS A LIGHT, TELEPHONE, RADIO, OR TELEVISION)

WITHIN 5 FEET (1,5 M) OF THIS SPA OR HOT TUB.

AVERTISSEMENT: NE PAS PLACER D'APPAREIL ÉLECTRIQUE (LUMINAIRE, TÉLÉPHONE, RADIO, TÉLÉVISEUR, ETC) À

MOINS DE 1,5 M (5 PIEDS) DE CETTE CUVE DE RELAXATION.

**CAUTION:** MAINTAIN WATER CHEMISTRY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

ATTENTION: LA TENEUR DE L'EAU EN MATIÈRES DISSOUTES DOIT ÊTRE CONFORME AUX DIRECTIVES DU

**FABRICANT** 

**WARNING:** Hyperthermia occurs when the internal temperature of the body reaches a level several degrees

above the normal body temperature of 98.6 °F (37 °C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of

hyperthermia include:

AVERTISSEMENT: L'hyperthermie se produit lorsque la température interne du corps atteint un niveau supérieur

de plusieurs degrés à la température corporelle normale de 37 °C (98.6 °F). Les symptômes de l'hyperthermie comprennent la somnolence, la léthargie et une augmentation de la température

interne du corps. Les effets de l'hyperthermie comprennent:

a. Unawareness of impending hazard/ méconnaissance d'un danger imminent.

b. Failure to perceive heat/incapacité à percevoir la chaleur.

c. Failure to recognize the need to exit spa/incapacité à reconnaître la nécessité de quitter le spa.

d. Physical inability to exit spa/incapacité physique de quitter le spa.

e. Fetal damage in pregnant women/ dommages foetaux chez les femmes enceintes.

f. Unconsciousness and danger of drowning/inconscience et danger de noyade.

## **AWARNING**

- INGESTION HAZARD: This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.
- KEEP new and used batteries OUT OF REACH of CHILDREN.
- Seek immediate medical attention if a battery is suspected to be swallowed or inserted inside any part of the body.



Battery Type: CR2032 Nominal Voltage: 3V

- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above (manufacturer's specified temperature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- Ensure the batteries are installed correctly according to polarity (+ and -).
- Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.
- Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

## **Suction Outlet Fitting Assembly (SOFA) Safety Instructions**

**WARNING:** Any modification that increases the flow rate of the circulation system shall require re-evaluation

of the cover/grate and sump to ensure that the flow rating of the suction outlet fitting assembly

(SOFA) is not exceeded.

WARNING: Missing, broken, or cracked cover/grates, sumps, mud frames, or any other SOFA component shall

be replaced before bathers are allowed to use the pool.

**WARNING:** Loose cover/grates shall be reattached before bathers are allowed to use the pool.

## Suction Outlet Fitting Assembly (SOFA) User Maintenance Instructions

#### Field Modifications

Any field modification made to the SOFA not authorized by Endless Pools installation instructions shall void the suction outlet fitting assembly certification.

#### **Configuration Modifications**

No modification shall be made to a SOFA structure or flow path unless the new configuration has been certified as a new SOFA.

#### Service Life

The Endless Pool SOFA is constructed of 316L perforated stainless steel. It shall be replaced after 25 years of use using a #2 Phillips head screwdriver. The SOFA shall be replaced at or before the end of the service life. The service life of the SOFA begins the month and year in which the SOFA is installed with or without water.

#### Service Instructions

If service is required to inspect, repair, or replace the SOFA, it shall be done so with a #2 Phillips head screwdriver. DO NOT USE POWER TOOLS TO INSTALL FASTENERS. Start installation of screws by hand to ensure proper thread engagement and to prevent cross threading.

REFER TO SECTION 14, "SUCTION OUTLET FITTING ASSEMBLY SERVICE INSTRUCTIONS," FOR ANY SERVICE REQUIRED TO REPAIR OR REPLACE ANY SOFA COMPONENT OR FASTENER.

- Hand check the SOFA after installation to verify that it's snug.
- 2. Before each use, verify the SOFA including the fasteners, are undamaged and have not been tampered with.
- 3. Any missing, broken, or cracked SOFA shall be replaced before using.
- 4. A loose SOFA and associated components shall be reattached before using.
- 5. SOFA components and fastener receptacles shall be clean and free of debris or obstructions during the installation.

## SAVE THESE INSTRUCTIONS. CONSERVEZ CES INSTRUCTIONS

#### Fastlane® Pro Information

The Fastlane® Pro is ETL listed, Ref. # 2001779 and is evaluated to UL 1563 and CSA 22.2 NO. 218.1-13.

Individually, all electrical components of the Endless™ Pool are UL and or CSA approved.

All electrical connections should be made by a licensed electrician in accordance with the current national and local electrical codes.

Please read this Owner's Manual and all associated Supplemental Guides prior to beginning your project.

#### **Table of Contents**

Warnings and Safety Information	Hydraulic Power Unit Installation21
General Overview of the Fastlane Pro7	Electrical Requirements - 60Hz23
Choosing a Location For Your Fastlane Pro8	Electrical Requirements - 50Hz24
Receiving Your Fastlane Pro	Bonding Your Fastlane Pro
Wall Mount Bracket Installation9	Using Your Fastlane Pro
Assembly of Fastlane Pro Current Unit	Product Installation Information
Wall Mount Fastlane Pro Installation	Fastlane Pro Maintenance31
Deck Mount Fastlane Pro Installation	Suction Outlet Fitting Service Instructions32

### 1. General Overview of Fastlane® Pro

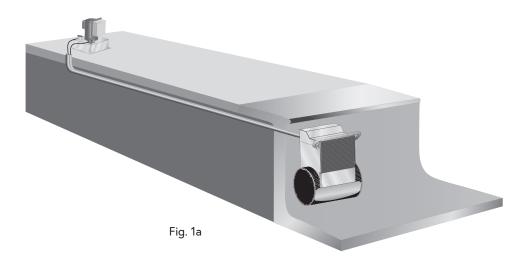
The Fastlane® Pro is a hydraulically powered swimming machine that creates a smooth, adjustable speed swim current in a conventional pool. The Fastlane Pro has been fabricated with the finest, most durable materials and designed to meet the most stringent safety standards including VGB 2017.

The swim current produced is wider than your body and deeper than your stroke — far superior to currents created by one or more jets. Two hydraulic hoses carrying a non-food grade, biodegradable vegetable oil run between the hydraulic power unit and the Current Unit, thus eliminating the need for electricity poolside. When pumped at high pressure, this hydraulic fluid creates a swim current by turning the shaft of a submerged stainless steel hydraulic motor in the Current Unit, rotating a propeller. The hydraulic Power Unit is controlled using a wireless transmitter that turns the unit on and off and adjusts the speed.



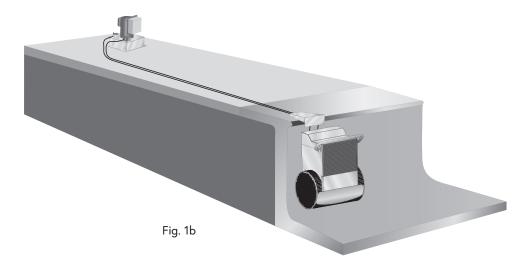
#### WALL MOUNT FASTLANE® PRO

The Wall Mount Fastlane Pro attaches directly to your pool wall with the use of a mounting kit that is specific to the pool type (gunite pool, concrete pool with vinyl liner, steel panel pool with vinyl liner, fiberglass pool). Because the mounting kit is embedded in the pool wall (in most configurations), the Wall Mount Fastlane Pro is ideal for new pool construction or pool refurbishment. Two 1-1/2" (38mm) PVC pipes, which serve as conduits for the hydraulic hoses, run under the pool deck to a remotely located Hydraulic Power Unit, as shown in Figure 1a.



## D DECK MOUNT FASTLANE® PRO

The Deck Mount Fastlane Pro will typically be installed in an existing backyard pool using a bracket kit that attaches to the pool deck. The two hydraulic hoses then run back to a remotely located Hydraulic Power Unit. The hoses can run through conduit or run above ground as shown in Figure 1b.



## 2. Choosing a Location For Your Fastlane® Pro





The Fastlane Pro can fit in virtually any swimming pool. For optimal water flow, we recommend that you allow at least 12 feet (3,7m) between the wall the Fastlane Pro is installed on and the opposing wall in line with the Current Unit (Fig. 2a).

The water depth where the Fastlane Pro is installed must be at least 39" (99cm) deep. In addition, the Fastlane Pro must be installed no closer than 18" (46cm) from any adjacent wall (Fig. 2b).

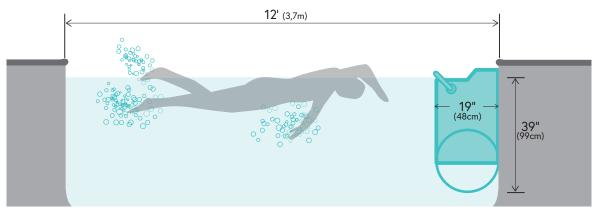
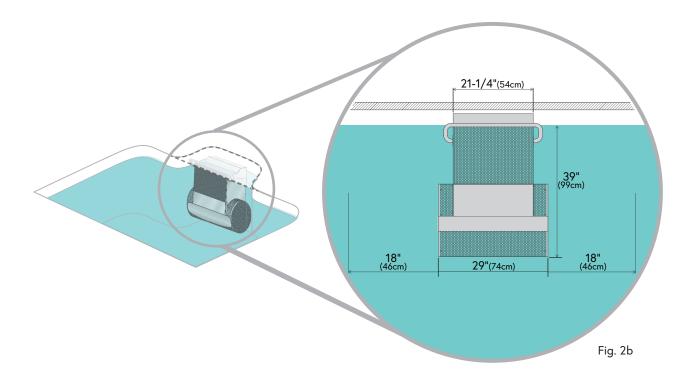


Fig. 2a



When choosing a location for your Fastlane Pro, you should also consider the route for the hydraulic hoses that run back to the Hydraulic Power Unit. The power unit needs to sit on a solid, level surface, preferably not on wet ground. For ample ventilation and general maintenance, a minimum of 12" (30,5cm) air space must be provided on all sides. Typically, the power unit is located with the other pool equipment.

## 3. Receiving Your Fastlane® Pro





The Fastlane Pro arrives in a wooden crate. Upon arrival, the crate should be inspected for external damage. Should there be visible damage, you must complete a damage-claim report provided by the truck driver. Please call the shipping department immediately at 800-732-8660. The Fastlane Pro shipment is comprised of the following parts:

#### WALL MOUNT FASTLANE PRO

#### QTY DESCRIPTION

- 1 Wall Mount Fastlane Pro Mounting Kit
- 1 Fastlane Pro Current Unit
- 1 Run Hose Kit
- 1 Hydraulic Power Unit
- 1 Hydraulic Fluid, 5 Gallon Container
- 1 Accessory Kit for Fastlane Pro
- 1 Standoff Kit

#### **DECK MOUNT FASTLANE PRO**

#### QTY DESCRIPTION

- 1 Bracket Kit for Deck Mount Fastlane Pro
- 1 Fastlane Pro Current Unit
- 1 Run Hose Kit
- 1 Hydraulic Power Unit
- 1 Hydraulic Fluid, 5 Gallon Container
- 1 Accessory Kit for Fastlane Pro

## 4. Wall Mount Fastlane® Pro Mounting Kit Installation



Provided with this Owner's Manual is the appropriate supplemental guide for the Wall Mount Fastlane Pro Mounting Kit specific to the pool type (gunite pool, concrete pool with vinyl liner, steel panel pool with vinyl liner, fiberglass pool). Because the mounting components are installed during the pool construction, the mounting kit is often shipped prior to the actual Current Unit. **Refer to the Mounting Kit Supplemental Guide at this time.** 

## 5. Assembly of Fastlane® Pro Current Unit





The components and hardware required for the assembly are located in the Accessory Kit. When assembling, a low torque setting should be used on your drill to prevent the holes in the acrylic from stripping.

1. Slide the Vertical Grill (A) up and out of the Current Unit (Fig. 3).

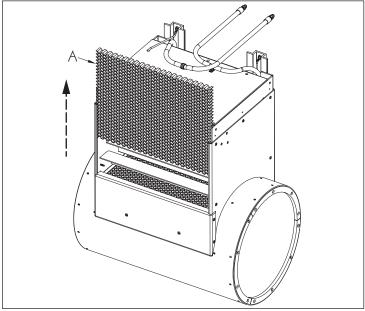


Fig. 3

2. Position the Grab Bar (A) on the Current Unit, aligning the holes in the flanges with the corresponding holes on each side of the unit. Machine screws (B) and Nuts (C) are used to secure the Grab Bar. On the left side, there is a preattached #8 Solid Copper Bonding Wire (D). Attach the wire to one of the screws before installing the nut (Fig. 4).

If the Fastlane Pro is being installed into a pool using a salt-chlorine generator, the Sacrificial Anode MUST be installed to combat the corrosive nature of the salt. Secure the lanyard of the anode to one of the screws on the right side of the unit. **THE ANODE SHOULD ONLY BE USED IN SALT POOLS** (Fig. 4).

**IMPORTANT NOTE:** If the pool is new and salt won't be added right away, then install the lanyard but remove the anode from the lanyard until the salt system is installed. Otherwise, discoloration and pitting of the stainless steel can occur.

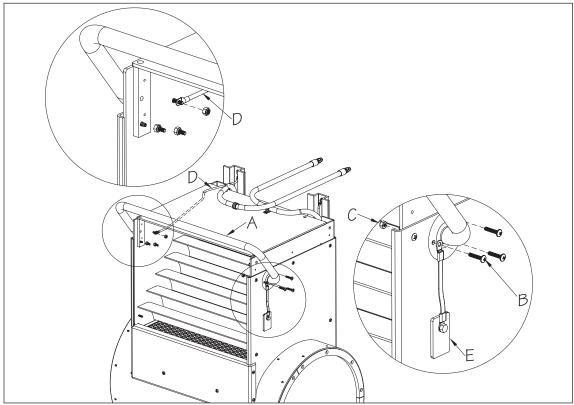


Fig. 4

3. Re-install the Vertical Grill (A) (Fig. 5).

Proceed to Section 6 if installing a Wall Mount Fastlane Pro or Section 7 if installing a Deck Mount Fastlane Pro.

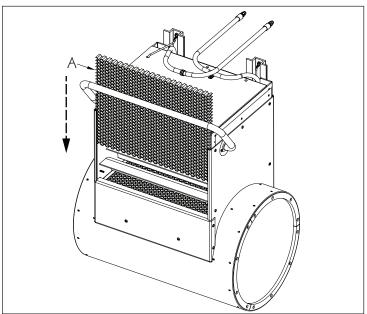


Fig. 5

### 6. Wall Mount Fastlane® Pro Installation



By this point in the installation, the mounting kit should be installed, 1-1/2" (38mm) conduit should be routed, and Current Unit should be assembled. Fill the pool to operating level which should be approximately 1-1/2" (38mm) below the Threaded Rods/Studs protruding into the pool from the mounting kit.

#### **HYDRAULIC RUN HOSES**

Each Hydraulic Run Hose has a white label (A) that reads "Pool" on the end that attaches to the Fastlane Pro Current Unit in the pool (Fig. 6).

IT IS CRITICAL TO VERIFY THAT THE HOSE END WITH THE POOL LABEL IS POOLSIDE AND THE OPPOSITE END, WITH NO LABEL (B), IS THE END THAT IS FED THROUGH THE CONDUIT TO BE ATTACHED TO THE HYDRAULIC POWER UNIT OUTSIDE THE POOL.

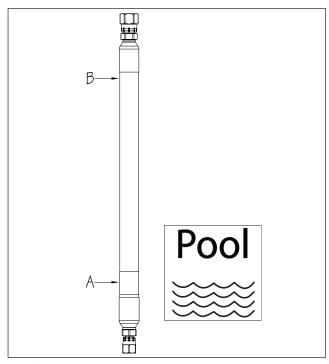


Fig. 6

Route the Run Hoses (A) into the fittings from the inside of the pool and through the conduit (B) to the Hydraulic Power Unit outside the pool. The hoses should extend no more than 6" (15cm) into the pool. **AGAIN, VERIFY THE POOL LABEL ON THE END OF EACH HOSE IS POOLSIDE** (Fig. 7).

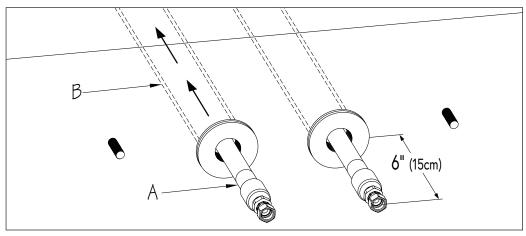


Fig. 7

#### MOUNTING WALL MOUNT FASTLANE PRO

1. Remove the outside screws of each Hat Section (A). Align the holes in the Standoff (B) with the corresponding holes in the Hat Section and attach using the screws that were removed (Fig. 8).

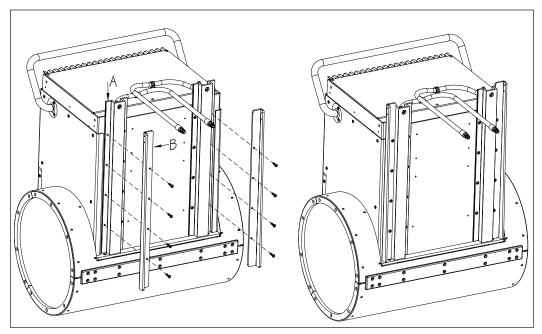


Fig. 8

2. With a minimum of two people, lower the Fastlane Pro into the pool. Align the mounting holes in the Hat Sections (A) with the Threaded Rods/Studs that protrude into the pool and hang the Current Unit.

Install a Flat Washer (B) and Bonding Wire (C1) and (C2) onto the Threaded Rod/Stud. IT IS CRITICAL THAT BOTH BONDING WIRES ARE INSTALLED. Secure Current Unit to the wall using Lock Washers (D) and Jam Nuts (E) (Fig. 9).

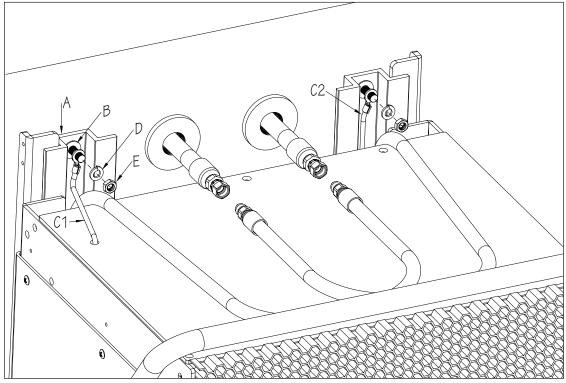


Fig. 9

3. The Hydraulic Sub Hoses can be removed from the hose clamps to make this next step easier. Apply Teflon tape to the threads of the Liquid Tight Fittings (A) and then install the fittings onto the Sub Hoses (B).

There is red tape wrapped around one of the Sub Hoses (B) and one of the Run Hoses (C) representing low-pressure. Attach the Sub Hose with the red tape to the Run Hose with the red tape. Attach the other Sub Hose (high-pressure) to the remaining Run Hose. Feed the hoses into the conduit (Fig. 10).

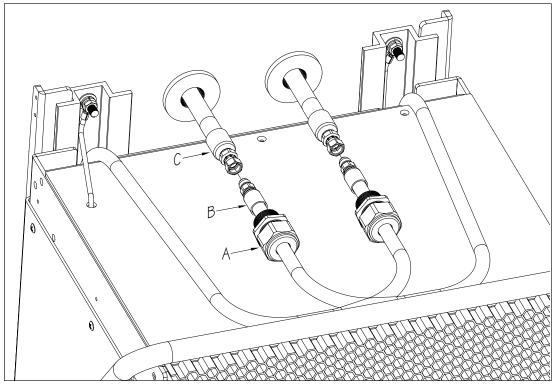


Fig. 10

4. Thread the Liquid Tight Fittings (A) into the Bushing Reducers and tighten the compression nuts. Secure Sub Hoses with hose clamps (B) (Fig. 11).

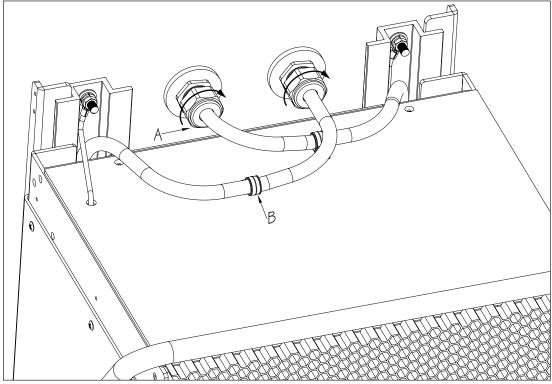


Fig. 11

5. Attach the Standoff Bracket Top (A) to the left and right Standoffs using the 1" Phillips Truss Head Screws (B) (Fig. 12).

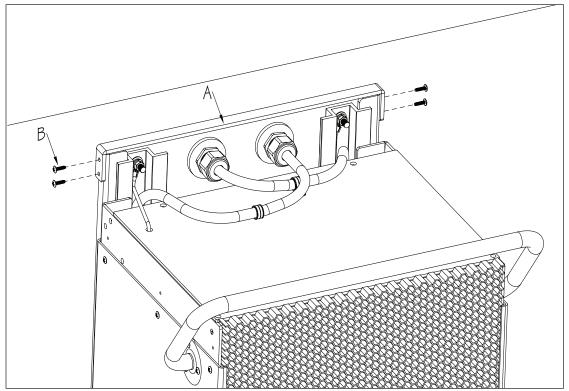


Fig. 12

6. Attach the Top Lid (A) using the 1" Phillips Truss Head Screws (B) (Fig. 13).

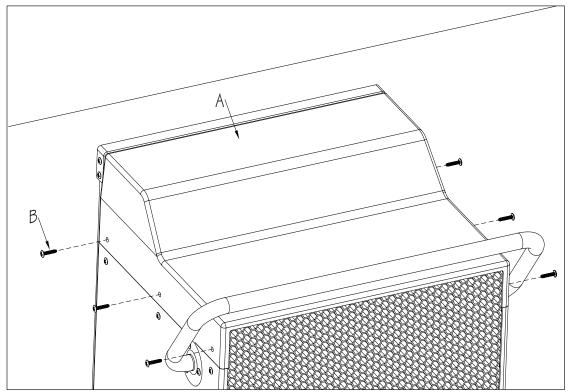


Fig. 13

## 7. Deck Mount Fastlane® Pro Installation



By this point in the installation, the Fastlane Pro mounting location should be determined per the clearances specified in Section 2 and Current Unit should be assembled.

#### **BRACKET KIT INSTALLATION**

1. Position the Deck Plate (A) onto the pool deck so that the vertical lip is seated firmly against the pool coping. The plate will be centered to the Current Unit. If the pool has bullnose coping, it is acceptable for the plate to be slightly out of level as shown in Figure 14.

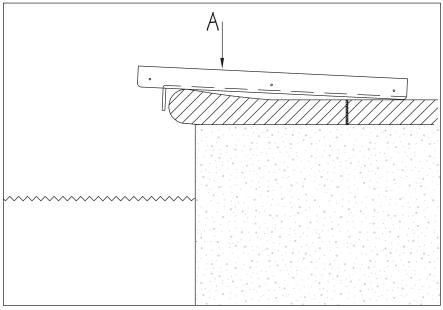


Fig. 14

2. Use the provided 5/32" (4mm) drill bit to drill the anchor holes into the pool deck approximately 2" (51mm) deep through the two holes in the rear of the plate (A). While these two anchor points are enough to secure the Fastlane Pro to the pool deck, additional anchor locations at the front of the plate (B) should be used when possible. Secure plate with provided Masonry Screws (C) (Fig. 15).

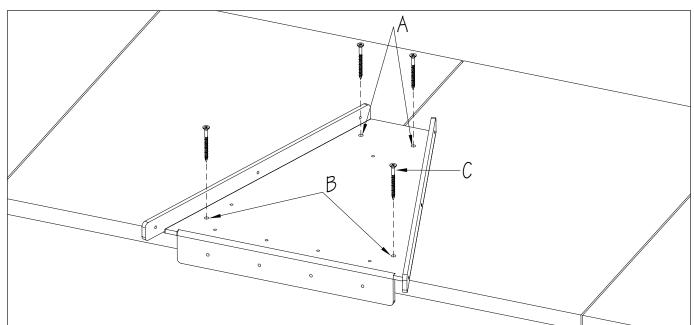


Fig. 15

3. Loosely secure the Hanging Bracket (A) to the Deck Plate (B) with two of the 1/2" (13mm) Phillips Truss Head Screws (C). Measure from the top of the Hanger Bracket to the waterline to capture the freeboard measurement (X). The Hanger Bracket can then be removed (Fig. 16).

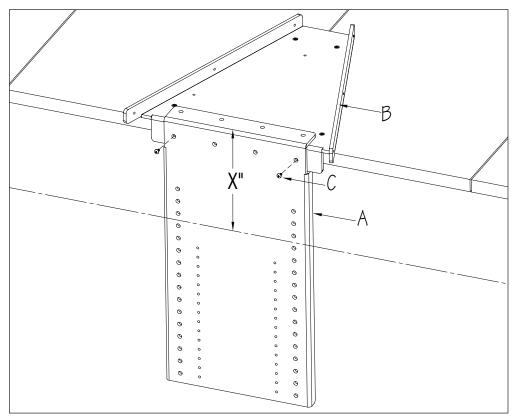


Fig. 16

4. The numbers etched into the back of the Hanger Bracket (A) represent the freeboard height in inches. Carefully lay the Current Unit on its front face. There are six pre-drilled holes between the Hat Sections. Align the hole set in the Hanger Bracket, that represents your freeboard height, with the top set of holes in the back of the Current Unit. Use the Phillips Truss Head Screws (B) to secure the bracket (Fig. 17).

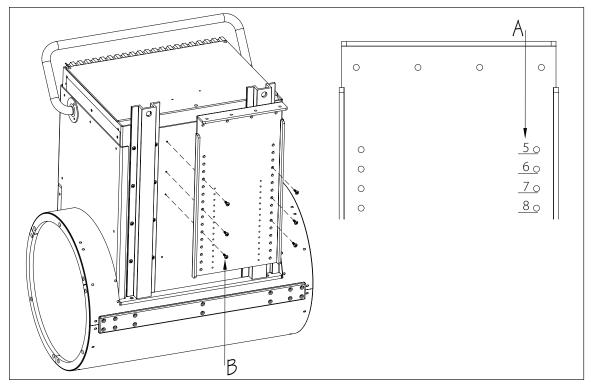


Fig. 17

#### **HYDRAULIC RUN HOSES**

Each Hydraulic Run Hose has a white label (A) that reads "Pool" on the end that attaches to the Fastlane Pro Current Unit in the pool.

IT IS CRITICAL TO VERIFY THAT THE HOSE END WITH THE POOL LABEL IS POOLSIDE AND THE OPPOSITE END, WITH NO LABEL (B), IS THE END THAT IS FED THROUGH THE CONDUIT TO BE ATTACHED TO THE HYDRAULIC POWER UNIT OUTSIDE THE POOL.

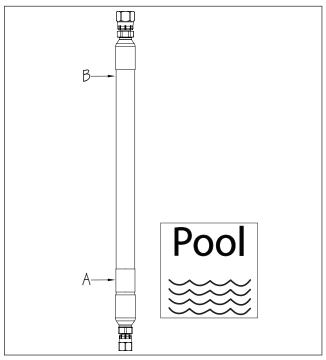


Fig. 18

Route the Run Hoses (A) from the poolside Deck Plate to the remotely located Hydraulic Power Unit. **AGAIN, VERIFY THE POOL LABEL ON THE END OF EACH HOSE IS POOLSIDE** (Fig. 19).

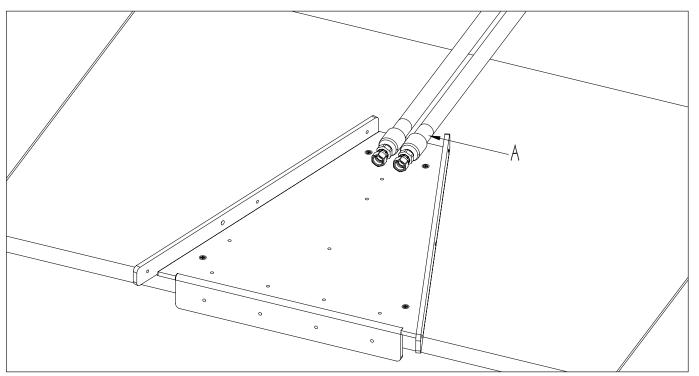


Fig. 19

#### MOUNTING DECK MOUNT FASTLANE PRO

1. With a minimum of two people, lower the Fastlane Pro into the pool aligning the holes in the Hanger Bracket (A) with the corresponding holes in the Deck Plate (B). Attach using the 1/2" (13mm) Phillips Truss Head Screws (C) (Fig. 20).

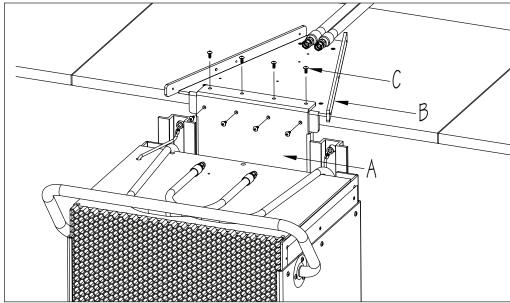


Fig. 20

2. Locate the bonding hardware in the hardware kit. Insert the Machine Screw (A) into the countersunk hole on the side of the Deck Plate. On the inside of the plate, install a Flat Washer (B) onto the screw. Attach Bonding Wire (C1), from the Grab Bar, to the screw. Install another Flat Washer (B) and attach Bonding Wire (C2), from the right side of the Current Unit. Next, attach the Bonding Lug (D) and Nut (E). IT IS CRITICAL THAT BOTH BONDING WIRES ARE INSTALLED (Fig. 21).

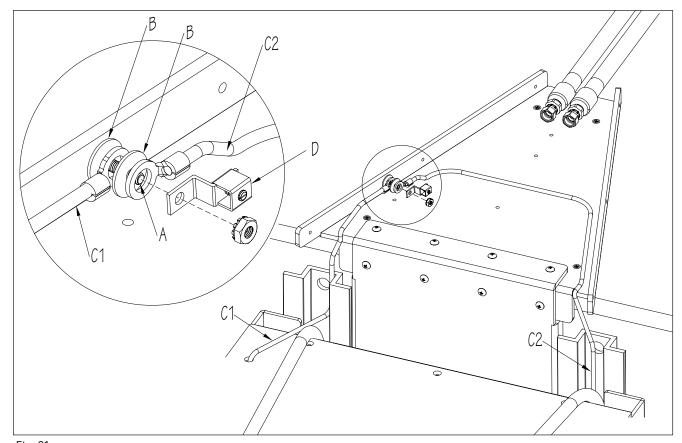


Fig. 21

3. Route the Hydraulic Sub Hoses onto the Deck Plate. There is red tape wrapped around one of the Sub Hoses (A) and one of the Run Hoses (B) representing low-pressure. Attach the Sub Hose with the red tape to the Run Hose with the red tape. Attach the other Sub Hose (high-pressure) to the remaining Run Hose. Attach a #8 Solid Copper Wire (C) to the Bonding Lug (D). This wire MUST be attached to a connection incorporated into the pool's bonding grid (Fig. 22).

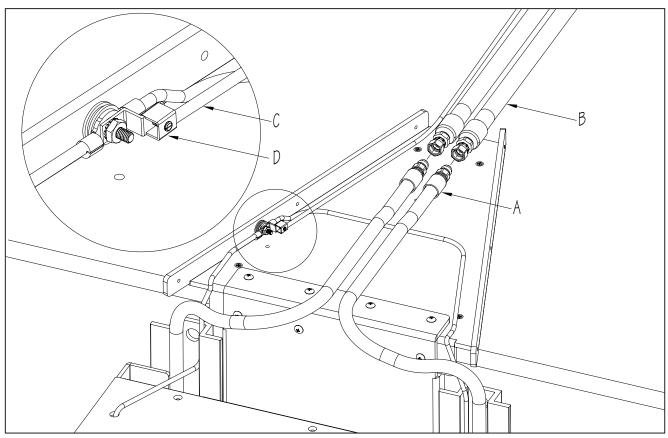


Fig. 22

4. Route the hoses into the Hose Clip (A) and secure the clip to one of the center holes in the Deck Plate using a Masonry Screw (B) (Fig. 23).

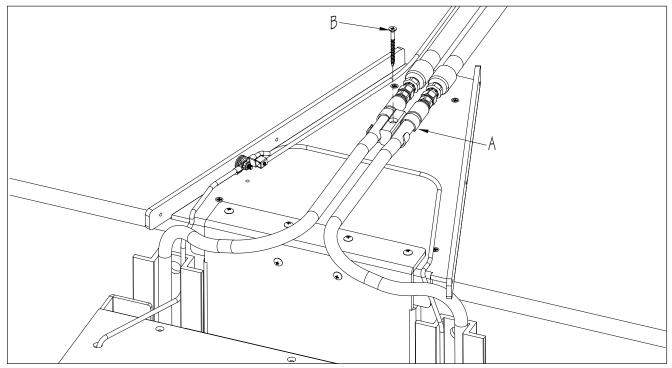
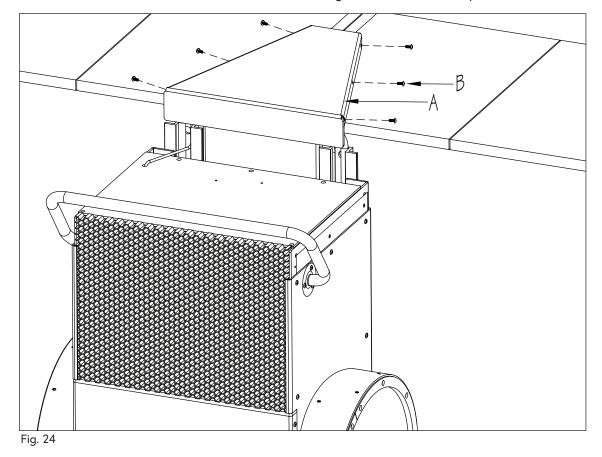
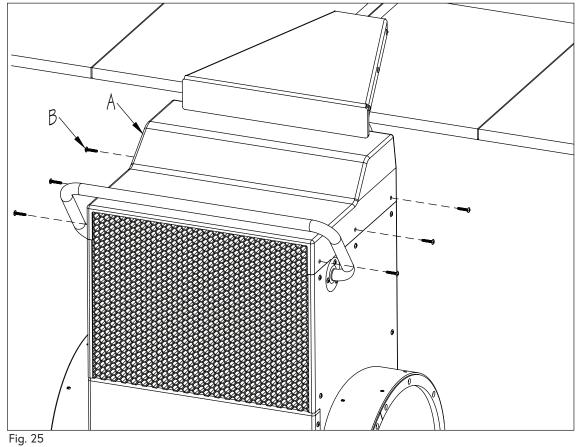


Fig. 23

5. Attach the Deck Plate Cover (A) to the Deck Plate using the 1/2" (13mm) Phillips Truss Head Screws (B) (Fig. 24).



6. Attach the Top Lid (A) using the 1" Phillips Truss Head Screws (B) (Fig. 25).



## 8. Hydraulic Power Unit Installation





The Hydraulic Power Unit should be placed on a solid, level surface, preferably not on wet ground. If placing the unit outside, it is recommended that the optional Weather Guard (A) be purchased but should not be subject to driving rain (Fig. 26). If placing the unit indoors and at a level below the pool deck, such as a basement, a floor drain is mandatory to accommodate the unlikely event of a hole developing in the hydraulic hose creating a siphon. For ample ventilation, a minimum of 12" (30,5cm) air space must be provided on all sides. In addition, the power unit MUST be accessible for service and maintenance purposes.

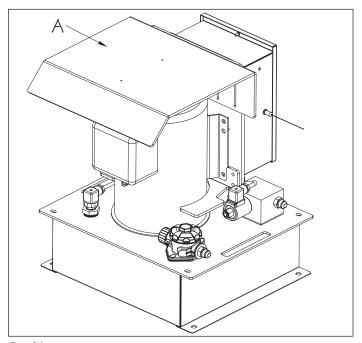


Fig. 26

#### **ANTENNA**

Remove the Front Cover (A) of the power unit controller by removing the screws (B). Remove the Wireless Transmitters (C) and the Antenna (D). Attach the Antenna to the Antenna Connection (E) on the side of the controller (Fig. 27).

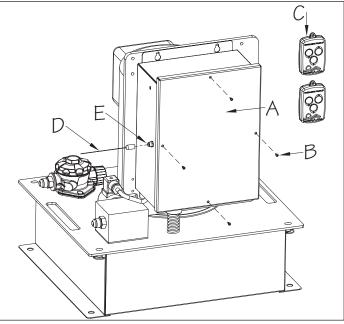


Fig. 27

#### HYDRAULIC HOSE CONNECTIONS

Attaching the Hydraulic Run Hoses to the power unit is next. Remove the caps on the ports of the power unit. Attach the Low-Pressure Hose (A), hose with the red tape wrapped around the end, to the fitting attached to the Fill Cap (B). Attach the High Pressure-Hose (C) to the fitting on the Manifold Block (D). Tighten the hoses firmly (Fig. 28).

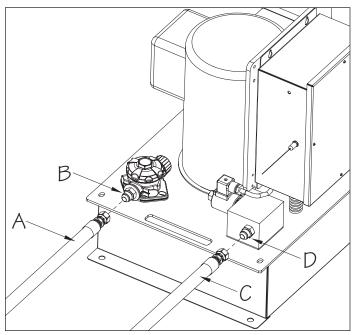


Fig. 28

#### **HYDRAULIC FLUID**

Endless™ Pools supplies a special vegetable-based hydraulic fluid created for this equipment. DO NOT use a substitute hydraulic fluid. Any excess fluid should be retained for future use.

Remove the Fill Cap (A) and then remove the Oil Filter (B) by lifting it out of the fill opening (Fig. 29). Use the provided paper funnels and fill the reservoir so that the fluid level is within 2" (5cm) of the reservoir lid. Once filled, replace the Oil Filter and ensure that it is seated properly before reinstalling the Fill Cap. Additional fluid has been provided if long run hoses were ordered and will be added to the reservoir during the initial start up.

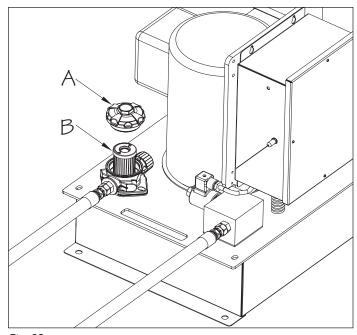


Fig. 29

## 9a. Electrical Requirements - 60Hz (and countries with a similar power supply)

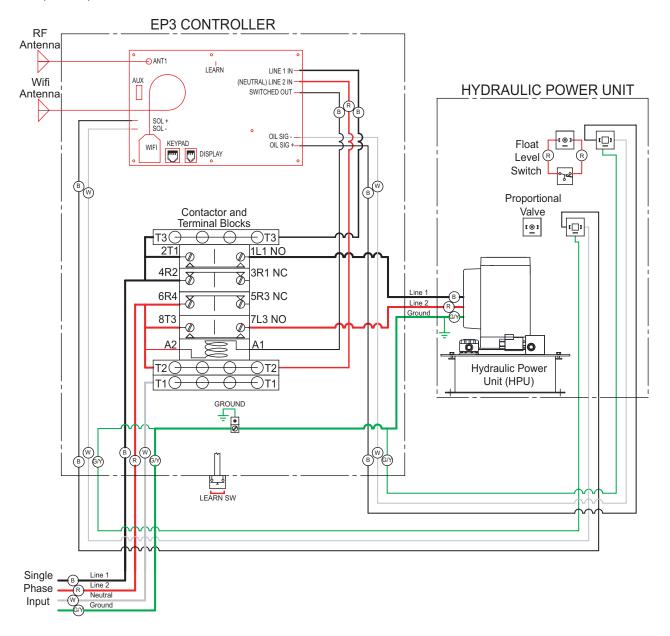




#### ALL ELECTRICAL CONNECTIONS SHOULD BE MADE BY A LICENSED ELECTRICIAN.

**NOTE:** The following instructions are intended for **Single Phase** equipment. If **Three Phase** equipment was ordered, refer to the **Three Phase Equipment Supplemental Guide** at this time.

A Ground Fault Circuit Interrupter (GFCI) is required for this product. A GFCI is a device that shuts off an electrical circuit when it detects that electricity is flowing along an unintended path. The path could be through a person or water. The purpose of this device is to reduce the chance of electrical shock. The Hydraulic Power Unit requires one single phase 220v 30amp GFCI protected service.



## 9b. Electrical Requirements - 50Hz (and countries with a similar power supply)





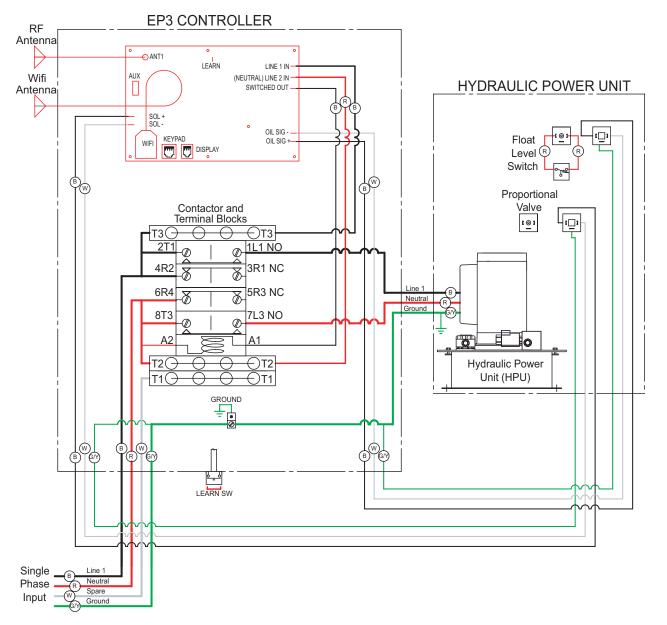
#### ALL ELECTRICAL CONNECTIONS SHOULD BE MADE BY A LICENSED ELECTRICIAN.

**NOTE:** The following instructions are intended for **Single Phase** equipment. If **Three Phase** equipment was ordered, refer to the **Three Phase Equipment Supplemental Guide** at this time.

A Residual Current Device (RCD) is required for this product. An RCD is a device that shuts off an electrical circuit when it detects that electricity is flowing along an unintended path. The path could be through a person or water. The RCD must have a rated residual operating current not exceeding 30mA. The purpose of this device is to reduce the chance of electrical shock. The hydraulic power unit requires one single phase 220v 32amp RCD protected service. The MCB (breaker) for the Hydraulic Power Unit must be C-type, D-type, or motor rated.

United States wire color-coding is different than international color-coding. The wires have a colored sleeve to conform to the international color codes:

WIRE COLOR	US WIRE TYPE (60Hz)	INT. WIRE TYPE (50Hz)
BLACK with BROWN SLEEVE	HOT OR LIVE (120V)	HOT OR LIVE (220V)
RED with BLUE SLEEVE	HOT OR LIVE (120V)	NEUTRAL
GREEN with GREEN/YELLOW SLEEVE	GROUND	EARTH



## 10. Bonding Your Fastlane® Pro





Bonding is the joining of metal components in or around a pool and its associated equipment to bring them to the same electrical potential (equipotential). The purpose of bonding is safety. Bonding also prevents corrosion between different types of metal components. Pools generally contain various grades of stainless steel, copper, galvanized metal etc. in or around them. This includes metal light rings, ladders, rebar in concrete as well as pool equipment such as pumps, heaters, and pool controllers.

When two different types of metals are immersed in a conductive solution (pool water), they undergo what's called a galvanic reaction. The weaker metal (anode) will begin to dissolve; these particles will react with the conductive solution and coat the stronger metal (cathode). This will develop an electrical charge between the two metals called electrical potential and can be measured as voltage.

All metallic components outside the pool should be connected by a solid copper wire. This wire and all of the metal components form a pool's bonding grid. Bonding wires and connections may be readily visible in a pool's equipment area or on anything metal around the pool. Endless<sup>TM</sup> Pools uses a #8 solid insulated copper wire to bond the metal components of the Fastlane Pro internally and to the pool's bonding grid.

**SAFE:** All metallic components in or around the pool ARE connected with bonding wires. This reduces the chance of galvanic reactions and prevents the build-up of electrical potential between these components. This reduces the chance of a user receiving an electrical shock if they make contact with two metallic components in the pool at the same time.

**UNSAFE:** One or more metallic components in or around the pool ARE NOT connected with bonding wires. The unconnected components become either an anode or cathode, leading to corrosion and the development of electrical potential. The electrical potential IS DANGEROUS and can incapacitate a pool user.

The Endless Pools equipment is properly bonded when the Fastlane Pro, Hydraulic Power Unit, and power unit controller are tied into the pool's equipotential bonding grid.

Refer to the Wall Mount Fastlane Pro Bonding Overview on the following page OR the Deck Mount Fastlane Pro Bonding Overview on Page 27 for detailed instructions.

#### WALL MOUNT FASTLANE PRO BONDING OVERVIEW



The Fastlane Pro and Hydraulic Power Unit MUST be tied into the pool's bonding grid. Refer to Figure 30 below.

- All Wall Mount Fastlane Pro shipments include bonding hardware. Bonding clamps are to be attached to the
  threaded rods of the mounting kit. Before shooting gunite or pouring a concrete collar, a #8 solid copper wire MUST
  be attached to each bonding clamp and then attached to a bonding connection that's incorporated into the pool's
  bonding grid.
- 2. When the Fastlane Pro is being mounted on the pool wall, the (2) #8 solid copper wires that are pre-attached to the Current Unit MUST be attached to the threaded rods/studs protruding into the pool. Making these connections will ensure that the metal components of the Fastlane Pro are connected to the pool's bonding grid.
- 3. Outside of the pool, the hydraulic power unit and power unit controller MUST be tied to the pool's bonding grid with a #8 solid copper wire. This is typically done by extending the bonding wire from the existing pool equipment (heater, pump, etc.) and attaching to the bonding connections located on the power unit and power unit controller.
- 4. The bonding grid should be verified by testing the continuity between all metallic components around the pool. Refer to the Bonding Verification procedure on Page 28.

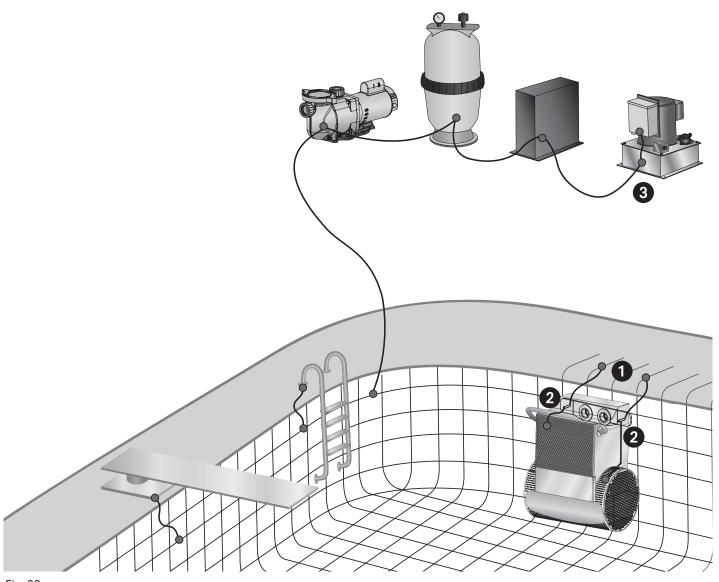


Fig. 30

#### DECK MOUNT FASTLANE PRO BONDING OVERVIEW



The Fastlane Pro and Hydraulic Power Unit MUST be tied into the pool's bonding grid. Refer to Figure 31 below.

- 1. All Deck Mount Fastlane Pro shipments include bonding hardware. When the Fastlane Pro is being mounted on the pool wall, the (2) #8 solid insulated copper wires that are pre-attached to the Current Unit and provided bonding lug MUST be attached to the Deck Plate with the bonding hardware provided.
- 2. A #8 solid copper wire is then attached to the bonding lug which MUST tie into the pool's existing bonding grid. This is typically done by attaching the copper wire to a connection at the pool's existing equipment (pump, heater, etc.) that is presumably already incorporated into the bonding grid of the pool.
- 3. Outside of the pool, the hydraulic power unit and power unit controller MUST be tied to the pool's bonding grid with a #8 solid copper wire. This is typically done by extending the bonding wire from the existing pool equipment (heater, pump, etc.) and attaching to the bonding connections located on the power unit and power unit controller.
- 4. The bonding grid should be verified by testing the continuity between all metallic components around the pool. **Refer** to the Bonding Verification procedure on the following page.

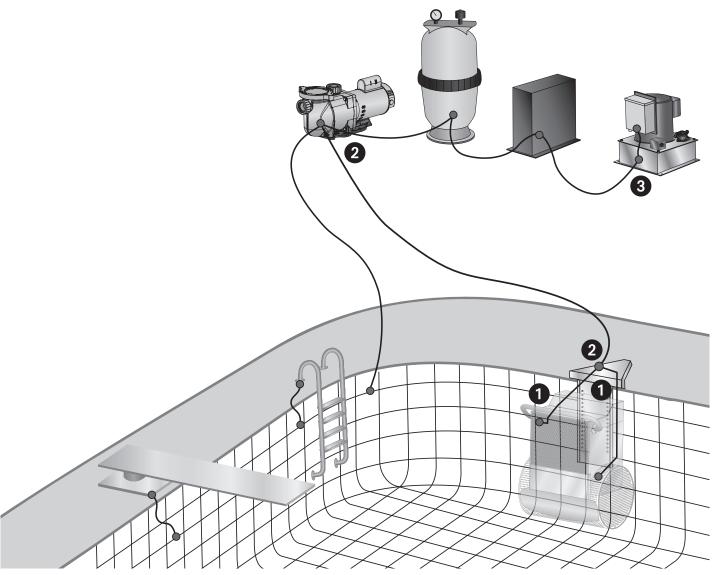


Fig. 31

#### **BONDING VERIFICATION**





#### **REQUIRED TOOLS:**

- Multimeter
- Roll of Test Wire (common 14 gauge wire will work)
- Alligator Clips

#### ZERO OUT (or calibrate) THE METER:

If this feature is not available on your multimeter, proceed to the following step. Attach one of the multimeter leads to one end of the test wire. Attach the other lead to the other end of the test wire. The meter will display a measurement (it is measuring the resistance of the test wire). Use the calibration dial or button on the meter to zero out the meter. You are now ready to begin the testing.

#### TESTING PROCEDURE:

- a. Using an alligator clip, attach one end of the test wire to an exposed bonding wire at the equipment pad. Unroll the amount of necessary wire to reach the bonding connections at the Fastlane Pro. For wall mount units, the connections are located at the threaded rods/studs under the Top Lid of the Current Unit. For deck mount units, the connections are located under the deck plate cover.
- b. Connect the other end of the test wire to one of the leads of the multimeter using another alligator clip. Use the other lead of the meter (without the alligator clip) to take readings of the various metal components by touching them. For wall mount units, test both the threaded rods/threaded studs that the Current Unit hangs from and the Grab Bar. For deck mount units, test the bonding wire attached to the deck plate and the Grab Bar. See test results below.
- c. Take the end of the wire used in step b above and perform the same tests at the Hydraulic Power Unit and power unit controller to ensure they are properly bonded. See test results below.

#### 3. TEST RESULTS:

The reading on the multimeter should be between 0 and 1 ohms. Higher readings or "OL" (open line) indicate that the component you are testing is not properly bonded. ACTION IS REQUIRED!

## 11. Using Your Fastlane® Pro

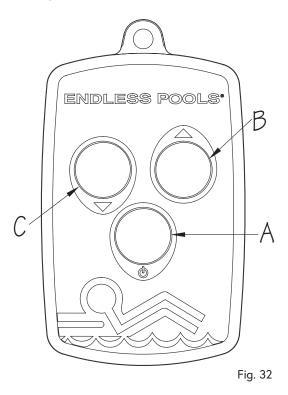




#### INITIAL START UP AND OPERATION

The Wireless Transmitter is used to operate the Fastlane Pro. To test the Current Unit, turn on the Hydraulic Power Unit by pressing and holding the On/Off Button (A). Press and hold the Faster Button (B) to increase the speed of the swim current. Press and hold the Slower Button (C) to decrease the speed of the swim current. Press and hold the On/Off Button to turn the unit off (Fig. 32).

**IMPORTANT NOTE:** If the power unit turns off automatically when running it for the first time, additional hydraulic fluid is needed. Turn off power to the breaker and add hydraulic fluid so that the fluid level is within 2" (5cm) of the reservoir lid. Restore power and wait approximately two minutes for the controller to reset before turning the unit on to test it.



#### **USER'S GUIDE**

When using the Fastlane Pro for the first time, it may not be obvious what speed might be right for you. Turn the unit on, set the current to a slower pace and begin swimming. Ideally, you want to stay approximately 6" (15cm) from the front grill, staying centered and looking down. It may take time to get used to swimming in place. A snorkel and a mask can be used as tools to better orient yourself in the swim current.

Adjust the speed to a comfortable level for your needs. Remember, since you don't have to turn, your workout is continuous, and you will tire faster then when swimming laps in a traditional pool. When changing speed, you must press and hold the buttons on the transmitter, then wait a few seconds for the current to adjust. Once you have found an optimal speed, you may leave the system at that setting. The Fastlane Pro will "remember" the speed of the swim current at which it was turned off and will default to that same speed when the unit is turned back on.

The power unit controller is equipped with a built-in timer, shutting the unit off after 30 minutes. Turning the unit back on will reset the 30 minute timer. If using the optional Fit@Home™ app, the duration of the workout will override the built in 30 minute timer.

## 12. Product Installation Information





The product installation information MUST be completed by the installer prior to using the product.

1. Fill out the installation information below:

MONTH/YEAR INSTALLED
----------------------

- 2. Hand the Owner's Manual containing the above information to the customer to be stored with other important pool related documentation.
- 3. Included on the Hydraulic Power Unit controller is a Product Information Label containing the specifications of the Endless Pools product that was purchased. Refer to the one-page Endless Pools Product Information Label Document D30015 for detailed instructions.

## 13. Fastlane® Pro Maintenance





SANITATION	ACTIONS
CHLORINE	<ul> <li>HYDRAULIC MAINTENANCE</li> <li>Replace hydraulic fluid after 500 hours of use and when replacing the underwater hydraulic motor</li> <li>Replace oil filter whenever the hydraulic fluid is replaced</li> <li>Replace underwater hydraulic motor every 6 years</li> <li>WATER QUALITY MAINTENANCE</li> <li>pH must be maintained between 7.4-7.8</li> <li>Total Alkalinity must be maintained between 80-120ppm</li> <li>Total dissolved solids must be below 3,000ppm</li> <li>COLD WEATHER MAINTENANCE</li> <li>Remove and inspect Fastlane Pro annually. Rinse with fresh water before storing for the off season. For winterizing instructions, please contact Customer Service 800-910-2714.</li> <li>GENERAL MAINTENANCE</li> </ul>
	<ul> <li>Wipe the stainless steel grab bar with a blue scotch-brite to remove any corrosion</li> <li>Remove any debris (leaves) from the vertical grill and cylindrical base</li> </ul>
SALT-CHLORINE	Placing a Fastlane Pro in a pool using a salt-chlorine generator creates an increased risk of a hydraulic system failure and oil leaks! It is imperative that this maintenance is followed!  HYDRAULIC MAINTENANCE  Replace hydraulic fluid after 500 hours of use and when replacing the underwater hydraulic motor  Replace oil filter whenever the hydraulic fluid is replaced  Replace underwater hydraulic motor and sub hoses every 2 years  WATER QUALITY MAINTENANCE  pH must be maintained between 7.4-7.8  Total Alkalinity must be maintained between 80-120ppm  Total dissolved solids must be below 3,000ppm  Salt content must be below 4,000ppm  CATHODIC PROTECTION MAINTENANCE  Inspect the sacrificial zinc anode monthly and replace anode when it becomes half its original size  COLD WEATHER MAINTENANCE  Remove and inspect Fastlane Pro annually. Rinse with fresh water before storing for the off season. For winterizing instructions, please contact Customer Service 800-910-2714.  GENERAL MAINTENANCE  Wipe the stainless steel grab bar with a blue scotch-brite to remove any corrosion  Remove any debris (leaves) from the vertical grill and cylindrical base

## 14. Suction Outlet Fitting Assembly (SOFA) Service Instructions





#### SUCTION OUTLET FITTING ASSEMBLY INFORMATION

MODEL:

**FASTLANE PRO** 

SUCTION OUTLET FITTING ASSEMBLY: #196310

SUCTION OUTLET FITTING ASSEMBLY FASTENER: #710980

#### SUCTION OUTLET FITTING ASSEMBLY REPLACEMENT INSTRUCTIONS

**Service Access:** The use of adhesives or other attachment methods that prevent access to suction piping or SOFA components requiring periodic servicing is prohibited.

The SOFA shall be replaced before the end of the 25 year service life. The SOFA and fasteners securing the SOFA should be inspected before each use throughout its service life. The SOFA MUST be repaired or replaced if it's missing, loose, dented, cracked, or broken. The fasteners and corresponding receptacles MUST be replaced or repaired if damaged.

When service is required to replace the SOFA, it shall be done so with replacement fasteners provided by the manufacturer. The fasteners securing the SOFA are  $\#10 \times 1$ " (25mm) 316 Stainless Steel Phillips Flat Head Screws. The fasteners MUST be installed using a #2 Phillips head screwdriver. The recommended torque for the fasteners is 25 inch-pounds. DO NOT USE POWER TOOLS TO INSTALL FASTENERS. Start installation of the fastener by hand to ensure proper thread engagement and to prevent cross threading.

- Remove the Top Lid of the Current Unit by removing the screws. If replacing the SOFA on a Deck Mount Fastlane Pro, remove the Deck Plate Cover.
- 2. Disconnect and cap the hydraulic hoses.
- 3. Remove the mounting hardware and bonding wires and then remove the Current Unit from the pool.
- 4. Remove the Hat Sections from the back of the Current Unit.
- 5. Remove the Outer Arcs and Discs on each side of the SOFA.
- 6. Separate the housing from the rolled perforated Base Assembly by removing the screws on each side.
- 7. Remove the SOFA with the pre-attached bonding wires by removing the nuts from the underside of the motor plate and removing the 1" (25mm) Phillips Flat Head Machine Screws.
- 8. Replace the SOFA and ALL fasteners securing the SOFA following steps 1-7 in reverse order. IF ANY SOFA fastener receptacle (screw hole) is damaged (stripped), it MUST be replaced with a new receptacle following the instructions below:
  - 8.1 Mark hole 1/2" (13mm) away from damaged receptacle.
  - 8.2 Drill hole in SOFA using 1/4" (6mm) drill bit.
  - 8.3 Drill hole in motor plate assembly using 11/64" (4mm) drill bit.
  - 8.4 Use fasteners provided by the manufacturer to reinstall the SOFA.



