

SEASTAR  
SOLUTIONS®

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SeaStar Solutions  
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 **pro-trim**  
**PT1000-1/PT2000-1**  
**SINGLE/DUAL BEZEL SWITCH ASSEMBLY**  
**INSTRUCTIONS**

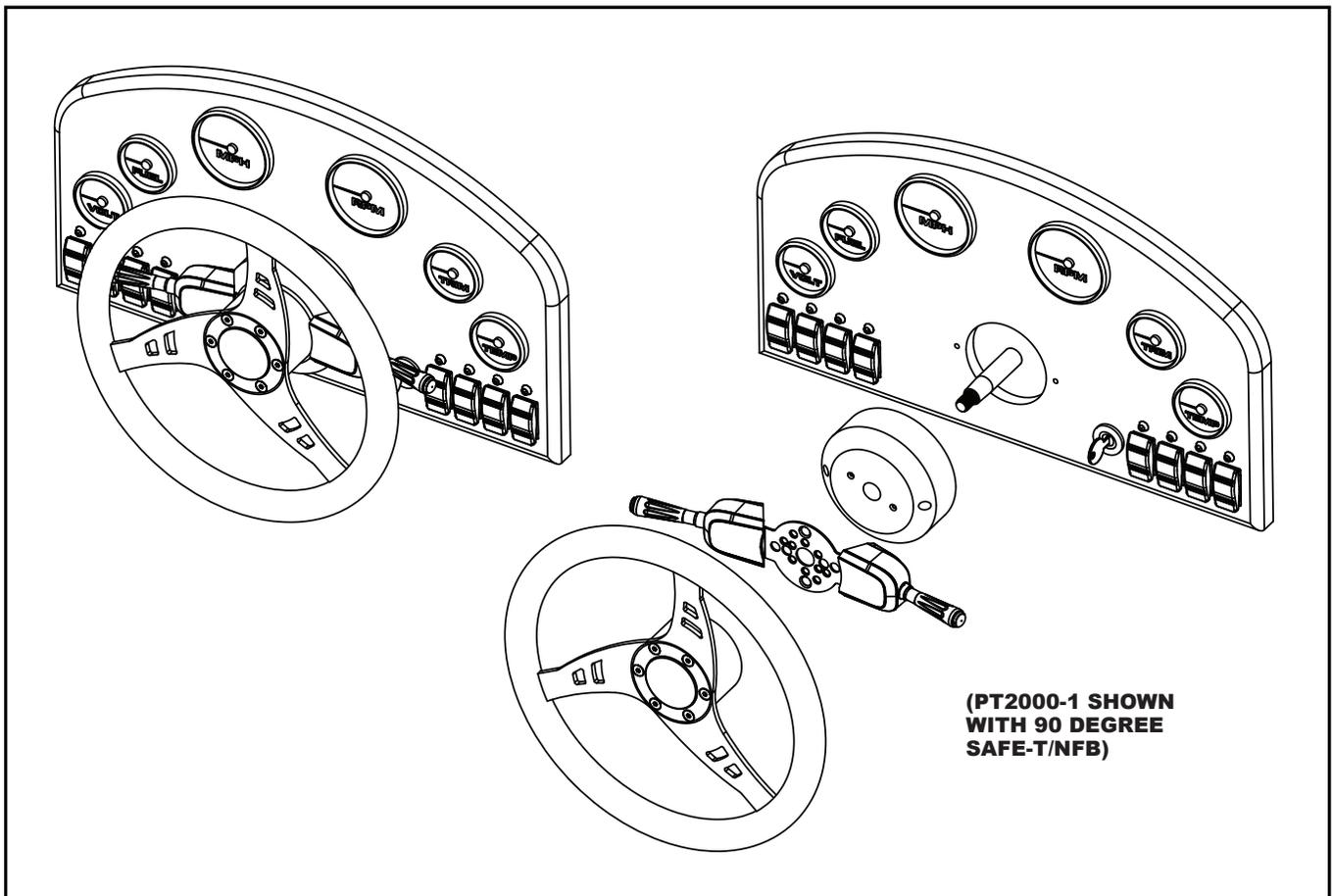
**INSTALLER: THESE INSTRUCTIONS CONTAIN IMPORTANT SAFETY INFORMATION AND MUST BE FORWARDED TO BOAT OWNER.**

These instructions describe how to install the PRO TRIM™ Single or Dual Bezel Switch Assembly on a boat. The switches are designed to fit SeaStar Solutions mechanical steering systems including tilt and non-tilt rotary as well as rack systems 1984 to date, except the Big-T. It will also work on HH4314 BayStar and 1991 to date SeaStar helms. Before beginning installation, take a moment to identify your steering system to be sure of compatibility and then follow the instructions for your system.

**Compatible Steering System's:**

- Xtreme™
- NFB™
- Performance Tilt
- Rotary, Classic Tilt
- HH4314 BayStar
- Safe-T®
- Rack & Pinion (1984 to present)
- SeaStar Hydraulic
- Rotary, non-Tilt
- SeaStar (1991 to present)

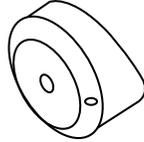
NOTE: IF YOUR STEERING SYSTEM IS NOT LISTED ABOVE, PLEASE CALL SEASTAR SOLUTIONS TECHNICAL SERVICE AT (217) 324-9781 FOR ADDITIONAL INFORMATION.



# MOUNTING INSTRUCTIONS FOR: XTREME™ STEERING HELM, SAFE-T® AND NO FEEDBACK (NFB) STEERING SYSTEMS



Safe-T®; NFB™/Xtreme™  
(90 Degree)



Safe-T®; NFB™  
(20 Degree)

Safe-T® Steering (1986-present)/No FeedBack™ Steering (1990-present). These helms can be identified by the plastic bezel (trim piece) through which the steering shaft passes. Both Safe-T® and No FeedBack™ utilize the same types of bezels.

**Step 1.** Remove the steering wheel.

**Step 2.** Using the guide provided, mark the plastic bezel and drill two 3/16" diameter holes (see Figure 1a). NOTE: IF YOUR BEZEL ALREADY HAS RECESSED HOLES AT THESE LOCATIONS, THEN NO DRILLING OF THE BEZEL IS NECESSARY.

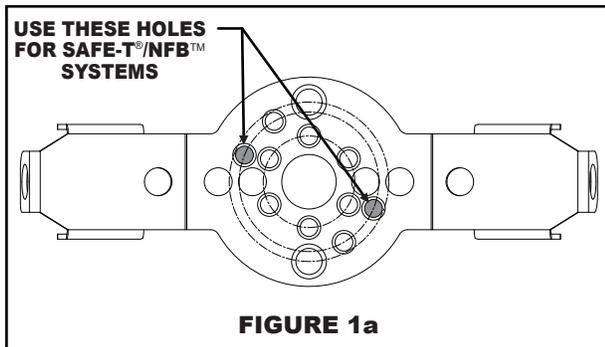


FIGURE 1a

**Step 3.** Provide a passageway for the wires to the inside or underside of the dash. This can be done one of three ways:

### CAUTION

IF DRILLING THROUGH THE DASH, BE SURE THAT THE DRILL WILL NOT INTERFERE WITH ANY OBJECTS SUCH AS WIRES, INSTRUMENTATION, OR BRACKETS ON THE INSIDE OF THE DASH.

Option 1: Drill 3/8" diameter hole(s) (one for single switch; two required for dual switch) in the beveled face of the helm bezel (see Option 1 holes in Figure 2a). The holes will allow the wires to pass through the dash while concealed by the bezel. Note: If installing a single switch, be sure that the hole is drilled on the side the switch lever will be installed.

Option 2: Drill 3/8" diameter hole(s) (one for single switch; two for dual switch) through the dash (see Option 2 holes in Figure 2a).

Note: If installing a single switch, be sure that the hole is drilled on the side the switch lever will be installed.

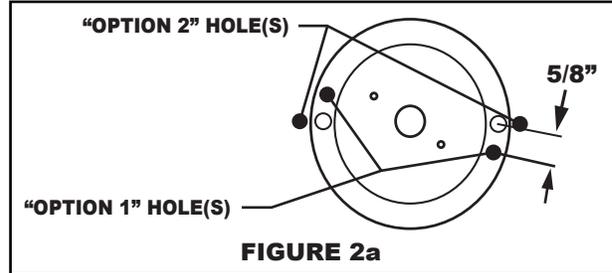


FIGURE 2a

Option 3: If you choose to route the wires underneath the dash then no drilling of holes will be required.

**Step 4.** Attach wires to switch(es) (red to center terminal, green to top and blue to bottom terminal).

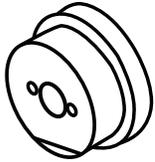
**Step 5.** Remove the bezel from the dash, taking care to leave the attachment screws in the countersunk holes of the bezel.

**Step 6.** Attach Pro Trim™ to the bezel using the two short (7/16" long) screws and locknuts (only if no recessed holes were provided in the bezel). If recessed holes were provided then use the two 5/8" long self tapping screws supplied with this kit. If Option 1 was chosen then feed the wires through the bezel and dash in the available space around the helm mounting bracket.

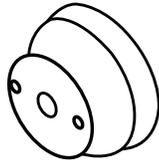
**Step 7.** Replace bezel over steering shaft; using access holes provided in switch bracket, tighten bezel attachment screws securely.

Please proceed to **WIRING INSTRUCTIONS (ALL SYSTEMS)** for the remaining instructions.

## MOUNTING INSTRUCTIONS FOR RACK & PINION STEERING SYSTEMS



Rack & Pinion



Back Mount  
Rack & Pinion

Rack & Pinion Steering (1984-present). These helms can be identified by the plastic bezel (trim piece) through which the steering shaft passes.

**Step 1.** Remove the steering wheel.

**Step 2.** Using the guide provided, mark the plastic bezel and drill two 3/16" diameter holes (see Figure 1b). NOTE: IF YOUR BEZEL ALREADY HAS RECESSED HOLES AT THESE LOCATIONS, THEN NO DRILLING OF THE BEZEL IS NECESSARY.

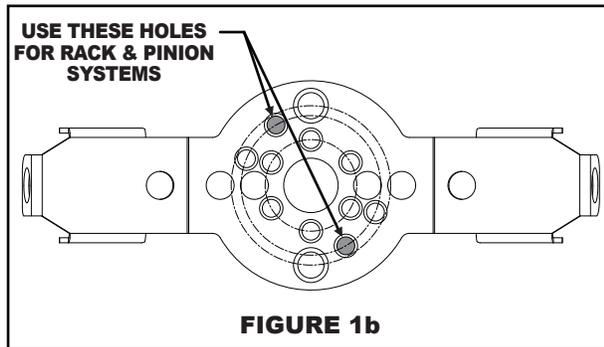


FIGURE 1b

**Step 3.** Provide a passageway for the wires to the inside or underside of the dash. This can be done one of two ways:

### CAUTION

IF DRILLING THROUGH THE DASH, BE SURE THAT THE DRILL WILL NOT INTERFERE WITH ANY OBJECTS SUCH AS WIRES, INSTRUMENTATION, OR BRACKETS ON THE INSIDE OF THE DASH.

Option 1: Drill 3/8" diameter hole(s) (one for single switch; two required for dual switch) through the dash (see Figure 2b). Note: If installing a single switch, be sure that the hole is drilled on the side the switch lever will be installed.

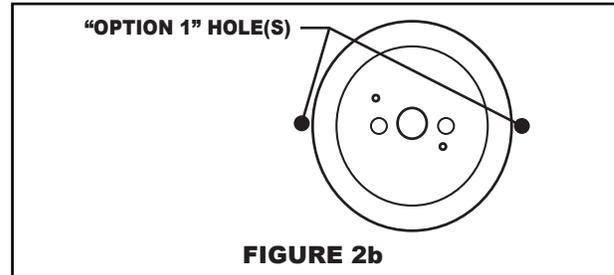


FIGURE 2b

Option 2: If you choose to route the wires underneath the dash then no drilling of holes will be required.

**Step 4.** Attach wires to switch(es) (red to center terminal, green to top and blue to bottom terminal).

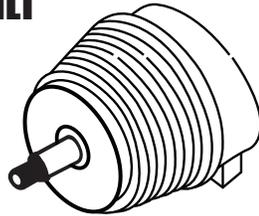
**Step 5.** Remove the bezel from the dash.

**Step 6.** Attach Pro Trim™ to the bezel using the two short (7/16" long) screws and locknuts (only if no recessed holes were provided in the bezel). If recessed holes were provided then use the two 5/8" long self tapping screws supplied with this kit.

**Step 7.** Replace bezel over steering shaft and tighten the bezel attachment screws securely.

Please proceed to **WIRING INSTRUCTIONS (ALL SYSTEMS)** for the remaining instructions.

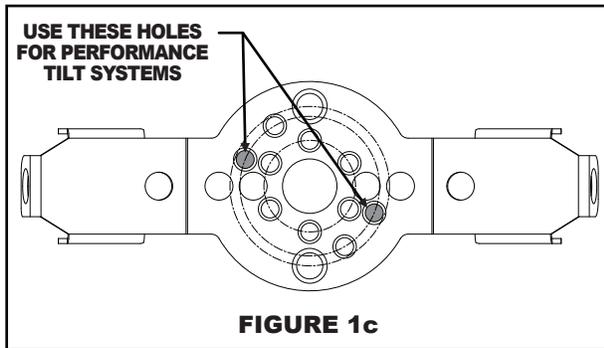
# MOUNTING INSTRUCTIONS FOR PERFORMANCE TILT STEERING SYSTEMS



**Performance Tilt / Sport / Sport Plus / Classic Hyd Performance Tilt (1991-present).** These units can be identified by a grooved rubber boot and plastic baseplate attached to the dashboard.

**Step 1.** Remove the steering wheel.

**Step 2.** Using the guide provided, punch mark the rubber boot through to its metal mounting flange. Carefully remove the boot and drill two 3/16" diameter holes in the metal mounting flange of the tilt mechanism. SH91800 tilt has pre-drilled holes. (see Figure 1c).



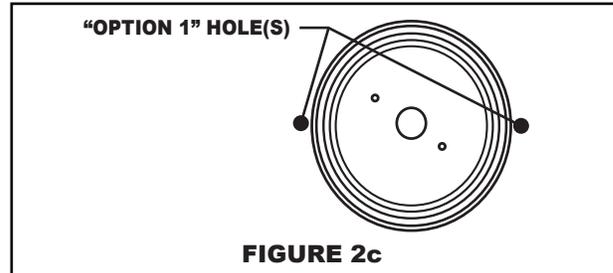
**Step 3.** Attach the wires to switch(es) (red to center terminal, green to top and blue to bottom terminal).

**Step 4.** Provide a passageway for the wires to the inside or underside of the dash. This can be done one of two ways:

**CAUTION**

IF DRILLING THROUGH THE DASH, BE SURE THAT THE DRILL WILL NOT INTERFERE WITH ANY OBJECTS SUCH AS WIRES, INSTRUMENTATION, OR BRACKETS ON THE INSIDE OF THE DASH.

Option 1: Drill 3/8" diameter hole(s) (one for single switch; two required for dual switch) through the dash (see Figure 2c). Note: If installing a single switch, be sure that the hole is drilled on the side the switch lever will be installed.



Option 2: If you choose to route the wires underneath the dash then no drilling of holes will be required.

**Step 4.** With the tilt shaft in the *middle position*, install the boot on the tilt mechanism, making sure to align the punch marks of the boot with the drilled holes of the metal mounting flange. Note: Push down completely around the top of the boot to engage it on the metal mounting flange. When pushing down, use a rolling motion with your fingers over the corners to ensure that the boot face is resting flush on the metal flange. (There is an undercut inside the boot near the face that accepts the edges of the mounting plate flange). Make sure the boot is flush against the flange before proceeding to Step 5. **Do not** attach the bottom part of the boot to the plastic bezel at this time.

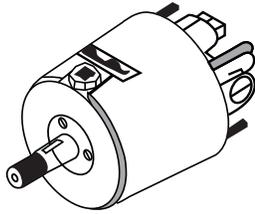
**Step 5.** With the tilt in the *full up position*, hold the Pro Trim™ switch assembly in place against the boot face and install one long (5/8" long) flat head screw on the right side through the switch bracket, rubber boot, and drilled hole of the mounting flange. While holding the screw in place, pull the rubber boot up from the bottom at the right side to allow installation of the locknut to the flat head screw and install the nut. Thread the nut to take up the slack but do not tighten at this time. SH91800 tilt install two 8/32 x 1/2 self tapping screws, do not tighten at this time.

**Step 6.** Repeat Step 5 for the left side screw with the tilt adjusted to the *full down position*.

**Step 7.** With the screws in place (but not fully tightened) adjust the tilt to the *middle position*. Now take the opportunity to align the switch bracket to the tilt shaft and boot. Following the previous procedures, tighten the screws securely and work the rubber boot back into the groove on the plastic base plate attached to the dash.

Please proceed to **WIRING INSTRUCTIONS (ALL SYSTEMS)** for the remaining instructions.

## MOUNTING INSTRUCTIONS FOR SEASTAR HYDRAULIC STEERING



SeaStar Hydraulic Steering (1991-present). The helm can be identified by a metallic “SeaStar” decal behind the oil fill plug. Pro Trim™ fits helms with an oil seal retaining ring held by 3 countersunk Phillips screws. This ring is on the front of the helm and surrounds the steering wheel shaft. (If your SeaStar helm does not have the ring with the three screws around the shaft, Pro Trim™ cannot be fitted. Call SeaStar Solutions Technical Service at (217) 324-9781 for additional information.

**Step 1.** Remove the steering wheel.

**Step 2.** Provide a passageway for the wires to the inside or underside of the dash. This can be done one of two ways:

### CAUTION

IF DRILLING THROUGH THE DASH, BE SURE THAT THE DRILL WILL NOT INTERFERE WITH ANY OBJECTS SUCH AS WIRES, INSTRUMENTATION, OR BRACKETS ON THE INSIDE OF THE DASH.

Option 1: Drill 3/8” diameter hole(s) (one for single switch; two required for dual switch) through the dash (see Figure 1d). Note: If installing a single switch, be sure that the hole is drilled on the side the switch lever will be installed.

“OPTION 1” HOLE(S)

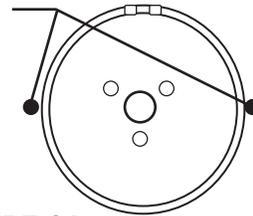


FIGURE 1d

Option 2: If you choose to route the wires underneath the dash then no drilling of holes will be required.

**Step 3.** Attach the wires to the switch(es) (red to center terminal, green to top and blue to bottom terminal.)

**Step 4.** Remove the three countersunk Phillips head screws that hold the shaft seal retaining ring in place on the front of the helm (do not remove the seal retaining ring). Slide Pro Trim™ over the shaft and position the bracket to align with the three holes of the helm.

**Step 5.** Attach Pro Trim™ *using the three (short) countersunk screws provided in the Pro Trim™ hardware kit.* Install screws, torquing alternately and gradually until all three holes of the helm are tightened securely.

Please proceed to **WIRING INSTRUCTIONS (ALL SYSTEMS)** for the remaining instructions.



## WIRING INSTRUCTIONS (ALL SYSTEMS)

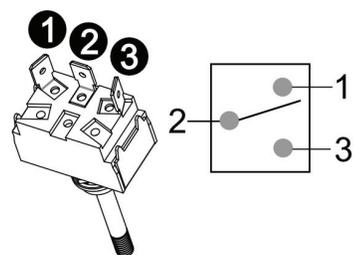
**Step 1.** Disconnect the battery.

**Step 2.** Locate the appropriate existing wires on the boat to complete needed connections.

**For trim connection** – Trim wiring consists of 3 conductors (1 red, 1 green, 1 blue) running together. Engine trim wires are typically routed from the engine to the side mounted shift and throttle control.

**For jack plate** – Jack plate wires are typically found under the dash. Refer to manufacturer wiring diagrams for wire colors to properly configure your new switch.

**For horn** – Horn wires are typically found under the dash. Refer to manufacturer wiring diagrams for wire colors to properly configure your new switch. Note: It may be necessary to use a jumper-wire on the switch for horn to operate in both the toggle-up and toggle-down positions.



INTERNAL SWITCH DIAGRAM

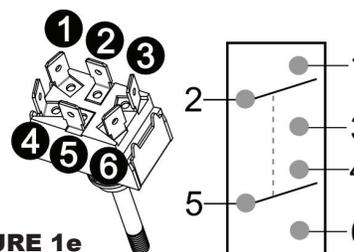


FIGURE 1e

## WIRING INSTRUCTIONS (ALL SYSTEMS) (CONTINUED)

**Step 3.** Feed the switch wires to the inside or underside of the dash according to the passageway option chosen at installation.

**Step 4.** Make the wire connections to the boat. When cutting into the boat's trim, jack plate or horn's wiring, cut only one wire at a time. Strip both ends. Using the provided butt connector put these two wires into one end of the connector and the appropriate color switch wire into

the other end of the connector. Note: If not using the supplied butt connector be sure that the connector will accept (1) 16 gauge wire on one end and (2) 16 gauge wires on the other. Follow this same procedure (one wire at a time) for the remaining wires.

**Step 5.** When all wiring is connected, reconnect the battery and test the intended function.

## TESTING THE INSTALLATION

Test PRO TRIM™ to make sure it performs properly. When installed for control of engine trim or jack plate operation, the engine moves in the direction you expect when the switch is activated in either direction; pushing the lever up should make the engine tilt or move upward, pushing the lever down should tilt or move the engine downward. Next, check the functionality of the crafts

original dash or control mounted trim switch to ensure it is still properly functioning. When installed for horn operation, simply operate the switch in both directions and check that horn functions. If all systems work properly, make a final inspection of the wiring connections. Wrap them with a good quality electrical tape to keep connections clean and secure.

## FINAL ADJUSTMENTS

Be sure the plastic covers are clean and dust free, and then install the appropriate decal(s) as shown in Figure 2e. Using the woodruff key and lock nut, reinstall the steering wheel (always refer to steering system and wheel manufacturer instructions to insure proper installation of steering components). With the seat (and wheel position, if equipped with tilt) adjusted properly, try activating the switch(es) from a normal driving grip. By bending the PRO TRIM™ mounting bracket slightly, the switches can be moved closer or farther from the rim of the steering wheel. We recommend that the driver operate the PRO TRIM™ for some time without adjusting this bracket until he or she has determined the most suitable lever distance.

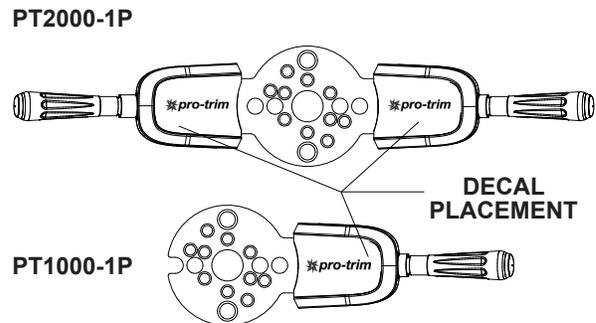
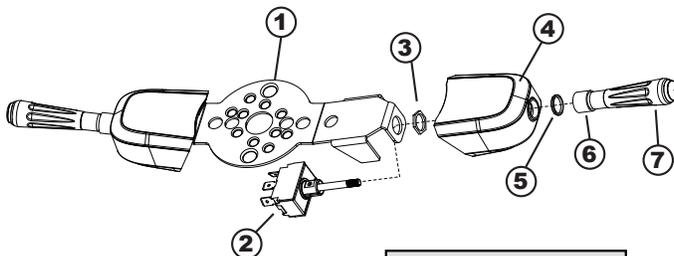


FIGURE 2e

## PARTS LIST



**WARNING**  
USE ONLY HARDWARE  
PROVIDED. DO NOT  
SUBSTITUTE.

ITEM	DESCRIPTION	QUANTITY	
		PT1000	PT2000
1	BRACKET	1	1
2	TOGGLE SWITCH	1	2
3	HEX LOCK NUT	1	2
4	COVER	1	2
5	KNURLED FACE NUT	1	2
6	BOOT	1	2
7	OPERATING LEVER	1	2
8*	DECAL SET	1	1
9*	WIRE HARNESS	1	2
10*	5/8" L. FLAT HD. SCREW	2	2
11*	7/16" L. FLAT HD. SCREW	3	3
12*	#8-32 LOCK NUT	2	2
13*	5/8" SELF TAP F.H. SCR.	2	2
14*	8/32 X 1/2 SELF TAP F.H.	2	2
*ITEMS NOT SHOWN			

## CONTACT INFORMATION:

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