

# I. <u>STANDARD EQUIPMENT</u>

The following items are included with each complete PTS system:

#### A. Instruction Packet

1. Installer Copy - Includes all information required to install a complete Portable Tank System, including wiring diagram and parts list.

2. Customer Copy - Includes all information provided to installer plus "Warning" labels that must be affixed to apparatus prior to operating the PTS.

#### B. <u>Control Switch (P/N 3097-105-144)</u>

A double pole double throw momentary switch provided for operation of system.

#### C. Flashing Light Kit (Model PTS-FLK)

Prior to January 1, 1997 an audio-visual alarm (Model LAS-AVA) with relay (P/N 3097-105-152) was provided with each PTS. NFPA 1901-96 now requires only flashing lights, which must flash unless the System is in the stored position. You may still purchase the audio-visual alarm (see P/N 8047-125-000, Model AVA), but it is no longer provided with the System.

## II. <u>OPTIONAL EQUIPMENT</u>

The following equipment may be added to any PTS:

#### A. Tank Cover Hardware (Model PTS-TCH)

Tank cover hardware should be ordered when a metal cover is added to the PTS System. **Failure to use our tank cover hardware will void our warranty in the event of damage.** For more information, see pages 18 & 19.

## B. Flashing Light Kit (Model PTS-FLK)

A Flashing Light Kit may be added to systems purchased prior to January 1, 1997. See Section I. C. above.

#### III. GENERAL INSTALLATION INFORMATION

When the portable tank is placed into the tank box (9 & 10), there should be approximately 2 inches of space left over the top of the tank.

#### A. Mounting Points for Base Castings

Mounting holes have been provided on both the vertical and horizontal mounting surfaces. Athough the device may be securely mounted from the horizontal surface only, it is of great advantage to use mounting bolts on the vertical surface as well. If using only the vertical or horizontal hole sets for mounting, one-half inch thick aluminum backing plates should be used (see page 16).

All bolts should have a reinforcement structure added underneath the mounting surface whenever possible.

## B. Electrical Circuit

The control switch (supplied) is a double pole double throw momentary 30 amp switch. It should be placed in such a position that the operator has full view of the PTS and any personnel that might come in contact with it. Using wiring of **equal length** between power source and the electric actuators will help keep the actuators running in synchronization (see page 21). We recommend that all electrical connections be soldered.

Several "Lock Out" circuits may be considered to prevent accidents from occurring. An ideal "Lock Out" system would only permit operation when the ignition switch is on, the transmission is in park, and any obstructing compartment doors are shut. Because of the higher amperage required to operate the PTS, a separate "Lock Out" circuit should be used. The "Lock Out" circuit should be separated from the PTS circuit by a relay. This will prevent damage to the existing wiring system. The PTS circuit should be protected by a 35 amp fuse.

The NFPA 1901-96 standard requires flashing lights be provided, facing the front and rear of the apparatus. Lights must flash whenever the System is out of the stored position. The flashing light kit (Model PTS-FLK) was added to all Systems beginning January 1, 1997 (see Section I. C.). Prior to January 1, 1997 all units were provided with an audio-visual alarm and relay. The audio-visual alarm may still be ordered as an option (see Model AVA, P/N 8047-125-000 in catalog).

#### C. Synchronization of Actuators

It is important to the operation of the PTS that the actuators work in synchronization. The actuators may operate out of synch a considerable amount before binding occurs, however, reducing this occurence will increase the life of the actuators and prevent damage to the existing wiring system.

**Do not permit personnel to hang, sit or stand on portable tank while stored on the PTS.** If the unit *is* overloaded, the internal clutch will slip and prevent damage to the actuators.

Whenever the operator raises or lowers the unit, they should let it run until they hear both clutches start to ratchet, so that the actuators re-synchronize and are ready to run in the opposite direction.

#### IV. INSTALLING THE PORTABLE TANK SYSTEM

#### A. Preparation for Mounting

Plan and lay out the entire installation before making any cuts or drilling any holes in the body of the fire apparatus. This will keep "out of service" time to a minimum and also help to minimize mistakes. See Section IV. C. (Electrical System) before any holes are drilled into the apparatus. Check both halves of unit to verify they have the same Serial Number on their tags.

The PTS was designed for use on a shelf with a minimum depth of 8-1/4". The total depth of the PTS is 9-1/2". To determine the total length required to mount the PTS, measure the length of the collapsed portable tank and add 21". We are allowing 10-1/2" for each device on the end of the tank which includes 1" at each end or a total of 2" of "play" for the tank to move within the boxes (9 & 10). This 2" must be provided or the tank may bind during raising or lowering (see page 13).

#### B. Mounting the System

Double check your measurements making sure to add 21" to the collapsed length of the portable tank. Mark this total length on your mounting surface (as a reference) and then set the two devices in place on the shelf. Mark absolute locations on shelf using measurement guides on pages 16 & 17. Note the minimum clearance required for the hinge to pivot (detail drawing in top right corner, page 17). Mark the outside edges of each device on the mounting surface.

The tank boxes (9 & 10) are shipped separate from the devices. The neoprene pads (14) and 14-20 x 1" flat head screws (20) are also shipped loose.

#### B. Mounting the System (continued)

Check for any obstructions behind or below the selected mounting locations. Also be sure you can run your wiring unobstructed through the back of the base castings. The outboard ends of the devices cannot be obstructed as access is necessary for mounting, emergency operation, and adjustment of the actuators.

You are now ready to mount the devices as follows (refer to page 11 for item numbers in parenthesis):

1. The flat surface, between the three ears on the base castings (1 or 2) should be flush and parallel with the edge of the mounting surface. Both devices should be parallel and in-line to within 1/16'' of each other.

2. Pull cotterless pin (35) and lower shelf castings (4 or 5).

3. Mark eight base holes and two lower back holes. Remove devices.

4. Drill ten holes for 3/8" mounting bolts (not supplied). Replace devices, insert bolts and snug up on nuts.

5. Pull cotterless pin (34) and remove shelf arm casting (3).

6. Lay electric actuator (13) forward and also lay Back Arm Casting (6) forward.

7. Mark two top holes in base casting (if used). Also mark hole location for electrical wiring through bottom rear of base casting.

8. Remove device and drill holes for the two top holes in base casting and for the wiring.

9. Re-position devices on shelf and mount in place with 3/8" bolts and nuts.

10. Wiring should be run through lower hole in base casting at this time. We suggest the wire be run in a protective sheath to prevent chaffing. The wire should be run under the actuator adjuster casting (7) and up to the wire harness. Connection is provided for mating to connector from the actuator.

11. Flip the back arm casting (6) and electric actuator (13) back. Connect wires to actuator and check clearance through full swing of actuator. Replace shelf arm casting (3) and pin the three units together using cotterless pin (34). Flip up the shelf casting (4 or 5) and place cotterless pin (35) through the shelf casting and shelf arm casting (3).

## B. <u>Mounting the System</u> (continued)

12. Attach the flashing light kit (Model PTS-FLK) at this time (see pages 14 & 15), following the "Wiring System" directions on page 15.

13. Connect the electrical system at this time (see Section IV. C.) so the system may be tested.

14. With the electric connected, run the devices up and down through a couple of cycles. The units should run in synchronization. The units may appear to be a little loose at this time.

15. Lower the devices so the neoprene pads (14) may be attached using  $1/4-20 \times 1"$  flat head screws (20). Tighten the screws so they depress approximately 1/16" into the neoprene.

16. Run the units to the up position and ratchet actuators. The units should now be tight.

17. Lower the units 15 to 20 degrees and attach tank boxes (9 & 10) to the shelf casting (3). Use  $5/16-18 \ge 5/8$ " button head socket screws (30) through front of casting and  $5/16-18 \ge 7/8$ " button head socket screws (42) through base of casting.

18. The PTS is now operational and you are ready to mount the portable tank.

#### C. Electrical System

A "WARNING" label (48) is provided with each PTS. The pressure sensitive label must be mounted by the electrical control switch (43). All apparatus operators must be instructed to keep area in front of the PTS clear of personnel when the PTS is being raised or lowered.

An additional "WARNING" label (49) is also provided. This pressure sensitive label must also be mounted by the electrical control switch. This label is a reminder to the operator to check for any deviation from standard operation that may signal a problem in the System.

## V. TROUBLESHOOTING

All units are tested after final assembly to ensure proper operation and adjustment. You should not have to make any adjustments when mounting the devices.

The following procedures are offered in the event of problems in the field. We strongly urge you to contact Ziamatic if any problems are encountered before attempting to correct them yourself.

## A. Actuator Adjuster

The actuator adjuster (7) is factory set and should not be touched unless you are replacing a failed actuator. The following sequence should be used for adjusting the actuator (see drawing on page 12):

1. Loosen 3/8-16 x 1-5/8" hex head clamp bolt (24).

2. Back out 3/8-16 x 1" socket set screw (23) until actuator adjuster casting (7) drops as low as it will go.

3. Tighten socket set screw (23) until actuator adjuster casting (7) begins to raise.

4. Tighten clamp bolt (24).

5. Bring device to full up or raised position. Actuator is properly adjusted when the bottom of the shelf casting (4 or 5) is resting firmly on the neoprene pad (14). NOTE: Four flat head screws in neoprene pad should be 1/16" below the surface of the neoprene pad.

6. If there is play between the shelf casting and pad, continue raising the actuator adjuster casting with set screw (23). Use 1/2 turn of screw at a time.

7. Always re-tighten clamp bolt (24) before checking adjustment.

#### B. One Actuator Running Two Seconds or More Slower Than the Other

All actuators are timed, under load, at the factory and the times are recorded. Electric actuators are matched as close to equal times as possible when a PTS is assembled. When one actuator is running more than two seconds behind the other, it is normally due to some type of resistance in the wiring system. Check all wire connections to make sure they are secure. Make sure to ratchet both actuators at the end of each up and down cycle. If they are still greatly out of synch after checking the security of the wires and ratcheting the units at the end of each cycle, you may switch the actuators to confirm that the problem is in the wiring system itself. With the portable tank removed, and the devices in the lowered position, pull cotterless pins (34 & 35) and remove shelf arm casting (3). Remove 1/2" x 2-1/2" shoulder bolt (37) and 3/8-16 nut (38) to remove electric actuator (13). Switch the two actuators and reassemble. If the rear actuator was running slower before switching, and is still running slower after, then there is a problem in the wiring.

# VI. INSTALLING PORTABLE TANK COVER USING MODEL PTS-TCH

#### A. <u>Preparation for Mounting</u>

Follow installation instructions for the Portable Tank System (Section IV. A. & B.). Particular attention must be paid to ensure that the center hinge (page 16) is in alignment with the left and right casting sets.

Parts (page 18) and cover dimensions (page 19) are provided.

#### B. Mounting

Use the 1/2" hinge pin (114) for alignment. Shims may be required to correct adjustment problems. All three pins should be aligned to within 1/16".

After the three hinges are aligned and the tank cover (page 19) has been fabricated, you are ready to proceed with mounting.

# NOTE: Measure the tank box (see page 20) to determine the "A & B" dimensions. This will determine the size of your cover. The length of the cover will also vary depending on the mounting distance between the casting sets.

You are now ready to mount the tank cover and hardware as follows (refer to page 18 for item numbers in parenthesis):

1. Lay hinges (100) down along side of truck.

2. Place top of cover (115) onto the top of the tank boxes (9 & 10). You may have to place temporary shims between tank cover and tank box to raise the cover. The bottom edge of the tank cover should be just above the hinge (page 18 top right drawing).

3. Clamp the tank cover to the tank boxes.

4. Raise the three hinges and mark the four hole sets for each hinge. Use 9/32 drill to drill out the twelve holes.

5. Place the end backplates (104) and center backplate (103) in place and attach with 1/4-20 screws (111). Holes are tapped in the backplates.

#### B. <u>Mounting</u> (continued)

6. Drill holes for 5/16-18 screws (110 & 112) in the backplates and attach with nuts (113).

7. Attach spring housing (105) to the tank boxes (9 & 10).

8. Drill holes in the two end backplates (104) for 5/16-18 screws (108) and assemble the spring-loaded adjusting mechanism.

9. Adjust tension on the spring (107) by setting the pre-load so it will support the weight of the cover when the System is being lowered.

## VII. <u>MAINTENANCE</u>

## A. <u>Periodic</u>

Any time the tank boxes (9 & 10) appear to be "loose", refer to Actuator Adjuster (Section V. B.).

#### B. Semi-Annually or at Scheduled Apparatus Lube Service

1. Actuator Adjuster (7) (page 12) - Check for loose bolts; refer to adjustment directions (Section V. B., page 6).

2. Lubrication - We suggest that all pivoting surfaces be sprayed in the joints and pivot points with CRC brand Stor&Lube long-term lubricant and rust preventative #03032. Excess lubrication should be wiped off.

3. Electric Actuator - We suggest the exposed shaft be cleaned and sprayed with WD-40 or a similar light, moisture-repelling silicon-type lubricant.

#### C. Pressure Washing

**Do not operate pressure washer on or anywhere around the electric actuators.** Excessive pressure may allow soap and water to blow past the seal, damaging the actuator.

## VIII. <u>SERVICE</u>

If you experience any problems with your Portable Tank System, please call us at 800-711-FIRE (3473) for assistance. Please have the serial number of your System available.

#### IX. DRAWINGS AND DIAGRAMS

#### Model PTS Portable Tank System

- 1. Parts Listing (page 11)
- 2. Assembly Drawing (pages 12 & 13)
- 3. Side View of System (page 13)
- 4. Flashing Light Kit (pages 14 & 15)
- 5. Alignment (page 16)
- 6. Elliptical Tank Adapter (page 16)
- 7. Dimension Drawing (page 17)
- 8. Tank Cover and Hardware (pages 18 & 19)
- 9. Tank Boxes (page 20)
- 10. Wiring Diagram (page 21)
- 11. Left Side Assembly Photos (page 22)
- 12. Right Side Assembly Photos (page 23)
- 13. Light Kit Components Photo (page 24)
- 14. Spring Mechanism for Tank Cover Hardware Photos (page 24)
- 15. Tank Box Component Photos (page 25)

#### X. <u>WARRANTY</u>

A copy of the warranty registration **MUST** be returned to ZICO to ensure registration of your System (page 27). You may mail the copy or fax it to (215) 493-1401.



FIGURE 1. MODELS AVAILABLE FOR PORTABLE TANKS

MODEL	DESCRIPTION	WT./SET IN LBS.
PTS-30-7	PTS for 28-1/2" H x 7" D Tank	170.0
PTS-32-7	PTS for 30" H x 7" D Tank	170.0
PTS-34-7	PTS for 32" H x 7" D Tank	170.0
PTS-36-7	PTS for 34" H x 7" D Tank	170.0
PTS-38-7	PTS for 36" H x 7" D Tank	170.0
PTS-30-8	PTS for 28-1/2" H x 8" D Tank	170.0
PTS-32-8	PTS for 30" H x 8" D Tank	170.0
PTS-34-8	PTS for 32" H x 8" D Tank	170.0
PTS-36-8	PTS for 34" H x 8" D Tank	170.0
PTS-38-8	PTS for 36" H x 8" D Tank	170.0
PTS-30-9	PTS for 28-1/2" H x 9" D Tank	170.0
PTS-32-9	PTS for 30" H x 9" D Tank	170.0
PTS-34-9	PTS for 32" H x 9" D Tank	170.0
PTS-36-9	PTS for 34" H x 9" D Tank	170.0
PTS-38-9	PTS for 36" H x 9" D Tank	170.0
PTS-TCH-30	Hardware Kit for 28-1/2" H Tank	12.0
PTS-TCH-32	Hardware Kit for 30" H Tank	13.0
PTS-TCH-34	Hardware Kit for 32" H Tank	14.0
PTS-TCH-36	Hardware Kit for 34" H Tank	15.0
PTS-TCH-38	Hardware Kit for 36" H Tank	16.0

There are several systems available covering all known portable tank dimensions.

FOL-DA-TANK<sup>®</sup> portable tanks always fit into the Model PTS-30-7 system. For all other brands of portable tank, measure the height and thickness of the tank when in the closed position.

Tank boxes (left and right) are the only items to vary between systems.

Tank cover hardware kits are based upon the height of the tank boxes. All hinges and hardware included, less the cover. (See page 19.)

ITEM	PART NO.	DESCRIPTION	QTY.
1	3098-105-101	Base Right Casting	1
2	3098-105-102	Base Left Casting	1
3	3098-105-106	Shelf Arm Casting	2
4	3098-105-103	Shelf Right Casting	1
5	3098-105-104	Shelf Left Casting	1
6	3098-105-105	Back Arm Casting	2
7	3098-105-107	Actuator Adjuster Casting	2
8	3098-105-108	Tank Stop .187 Thick Steel	2
9	3098-110-000	Tank Box Right .187 Thick Aluminum	1
10	3098-112-000	Tank Box Left .187 Thick Aluminum	1
11	3098-105-111	Shelf Arm Cover .062 Thick Aluminum	2
12	3098-105-112	Base Cover .062 Thick Aluminum	2
13	3098-105-113	Actuator	2
14	3098-105-114	Neoprene Pad	2
15	3098-105-115	Shaft 1/2" Dia. x 16-7/8"	2
16	3098-105-116	Pin 1/2" Dia. x 4-1/2" (not shown)	2
17	3098-105-117	Box Liner Top 7-3/4" x 8"	2
18	3098-105-118	Box Liner Bottom 7-34" x 7-7/8"	2
19	9140-101220	Spring Pin 1/8" Dia. x 1-1/4" (not shown)	2
20	9010-152516	Flat Head Screw 1/4-20 x 1"	8
21	9114-115000	Washer 1/2" I.D. x 1/16" Thick	4
22	9140-101214	Spring Pin 1/8" Dia. x 7/8"	4
23	9110-303716	Socket Set Screw Cup Point 3/8-16 x 1"	2
24	9110-103726	Hex Head Bolt 3/8-16 x 1-5/8"	2
25	9110-103116	Hex Head Bolt 5/16-18 x 1"	4
26	9114-203100	Lock Washer 5/16" I.D.	8
27	9112-103100	Hex Head Nut 5/16-18	8
28	9110-222008	Pan Head Screw Phillips 10-32 x 1/2"	8
29	9113-102000	Hex Head Lock Nut 10-32 Nylon	8
30	9110-353114	Button Head Socket Screw 5/16-18 x 7/8"	8
31	4005-000-105	Reflective Tape	1
32	9110-222510	Pan Head Screw 1/4-20 x 5/8"	4
33	9113-172500	Hex Head Lock Nut 1/4-20 Nylon	8
34	9050-135090	Cotterless Pin 5.6 Lg.	2
35	90501350128	Cotterless Pin 8 Lg.	2
36	9010-315032	Shoulder Bolt 1/2" Dia. x 2"	4
37	9010-315040	Shoulder Bolt 1/2" Dia. x 2-1/2"	2
38	9113-173700	Hex Head Lock Nut 3/8-16 Nylon	6
39	9114-103800	Flat Washer, Narrow, 3/8" I.D.	1
40	9110-162512	Flat Head Screw 1/4-20 x 3/4"	8
41	9114-202500	Lock Washer 1/4" I.D.	4
42	9110-353110	Button Head Socket Screw 5/16-18 x 5/8"	8
43	3097-105-144	Switch (not shown)	1
44	3097-105-145	Boot, Toggle Switch	1
45	3097-105-159	Label "Do not Rigidly Connect"	2
48	3098-105-148	Label - Warning Keep Clear (not shown)	1
49	3098-105-149	Label - Warning Vibration (not shown)	1
50	3098-160-000	Flashing Light Kit (see pages 14 & 15)	1
50	9114-113700	Flat Washer 3/8"	1

CHART 1. PARTS LIST

#### NOTE: ITEMS 9 & 10 ARE THE ONLY PARTS THAT VARY BETWEEN SYSTEMS

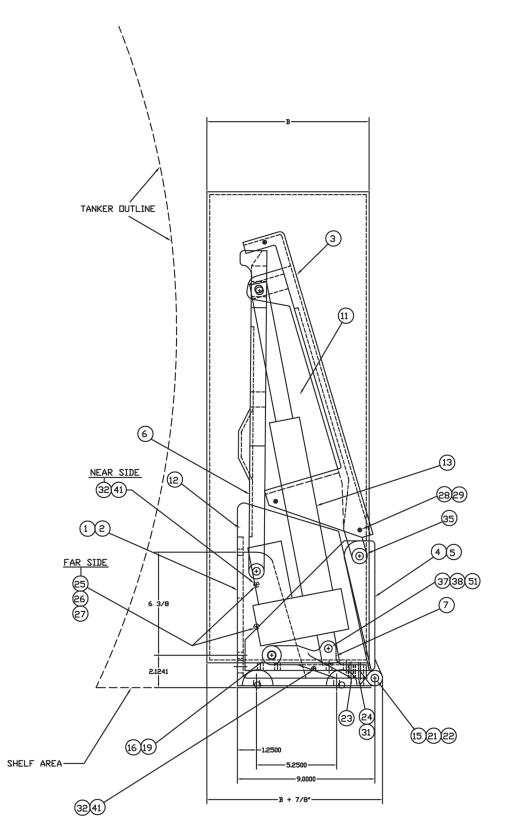
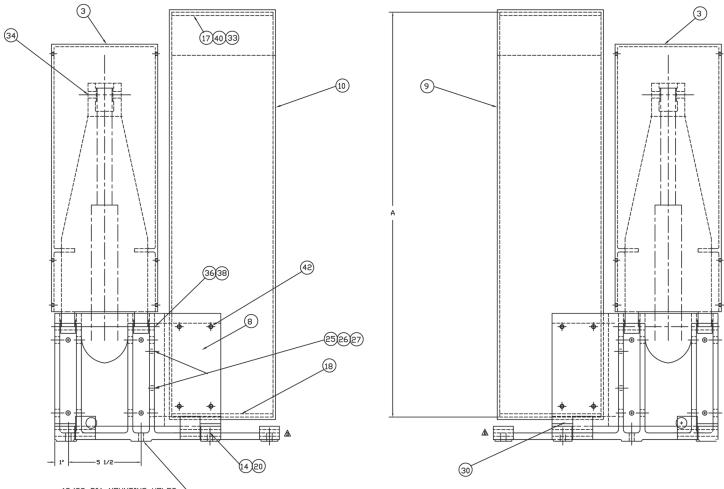
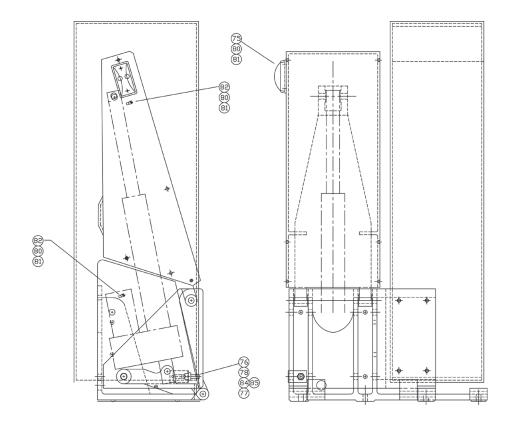


FIGURE 2. TRUCK END VIEW COMPONENT PARTS



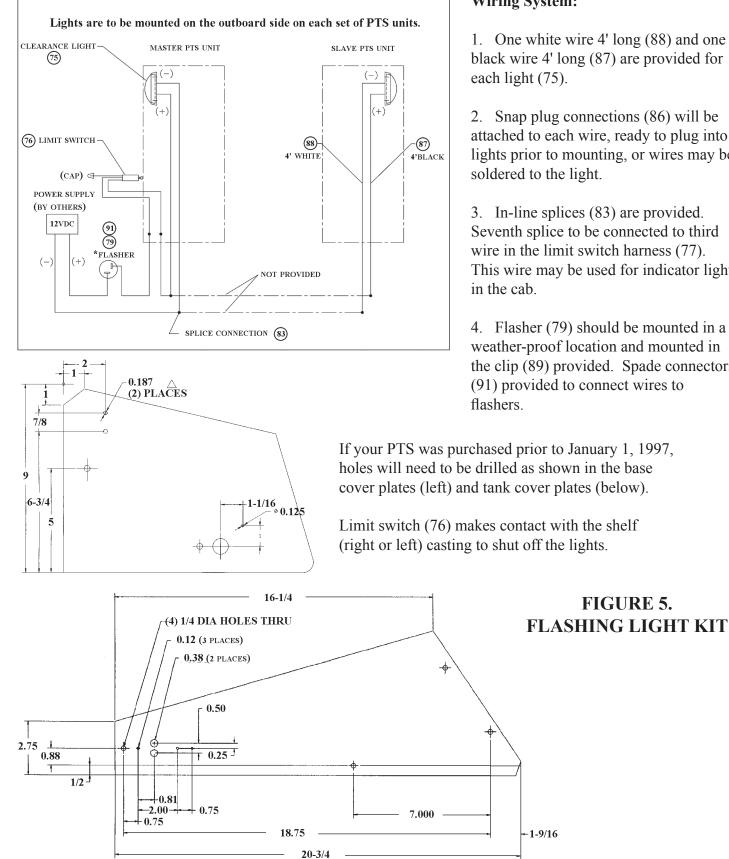
13/32 DIA MOUNTING HOLES 8 HORIZ & 4 VERT

FIGURE 3. TRUCK SIDE VIEW



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
75	3097-270-101	Clearance Light	2
76	3097-270-205	Switch, Limit	1
77	3097-270-117	Harness, Limit Switch (provided/item 76)	1
78	3098-105-165	Bracket, Limit Switch	1
79	3097-270-109	Flasher (see page 15 - not shown)	1
80	9025-111308	Screw, #6 x 1/2 Pan Hd Phillips SMS	8
81	9012-171100	Nylok Hex Nut 4-40, ZPS	8
82	3097-270-111	Cable Tie	4
83	3097-270-113	In Line Splice (see page 15 - not shown)	7
84	9010-221908	10-32 x 1/2 Pan Hd. Phil. M/S	2
85	9113-171900	10-32 Nylok Hex Hd. Nut	2
86	3097-270-115	Snap Plug Connector (see page 15 - not shown)	4
87	3097-270-119	16 ga. Lead Wire - Black	4 Ft
88	3097-270-120	16 Ga. Lead Wire - White	4 Ft
89	3075-175-105	Delrin Tool Clip (not shown)	1
90	3097-270-122	Butt Connector (use/items 87 & 88)	2
91	3097-270-121	Female Spade Connector (use with # 79)	2

# FIGURE 4. FLASHING LIGHT KIT MODEL PTS-FLK



## Wiring System:

1. One white wire 4' long (88) and one black wire 4' long (87) are provided for each light (75).

2. Snap plug connections (86) will be attached to each wire, ready to plug into lights prior to mounting, or wires may be soldered to the light.

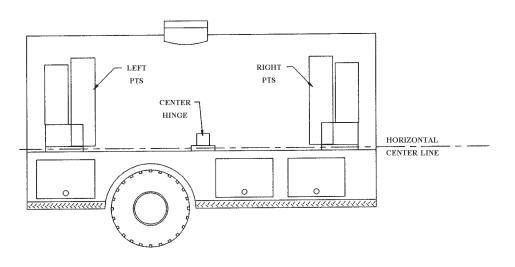
3. In-line splices (83) are provided. Seventh splice to be connected to third wire in the limit switch harness (77). This wire may be used for indicator light in the cab.

4. Flasher (79) should be mounted in a weather-proof location and mounted in the clip (89) provided. Spade connectors (91) provided to connect wires to

FIGURE 5.

If your PTS was purchased prior to January 1, 1997, holes will need to be drilled as shown in the base cover plates (left) and tank cover plates (below).

Limit switch (76) makes contact with the shelf (right or left) casting to shut off the lights.



# FIGURE 6. ALIGNMENT OF CASTING SETS



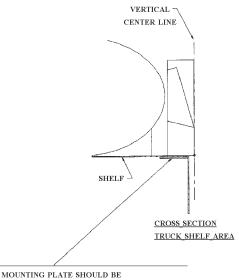
Mounting plate with support casting. Mounting plate 3/8" thick aluminum x 16-3/4" W x 16" D. Aluminum support is 9-3/4" H x 7-1/2" W x 3" D.

# FIGURE 7. ELLIPTICAL TANK ADAPTER

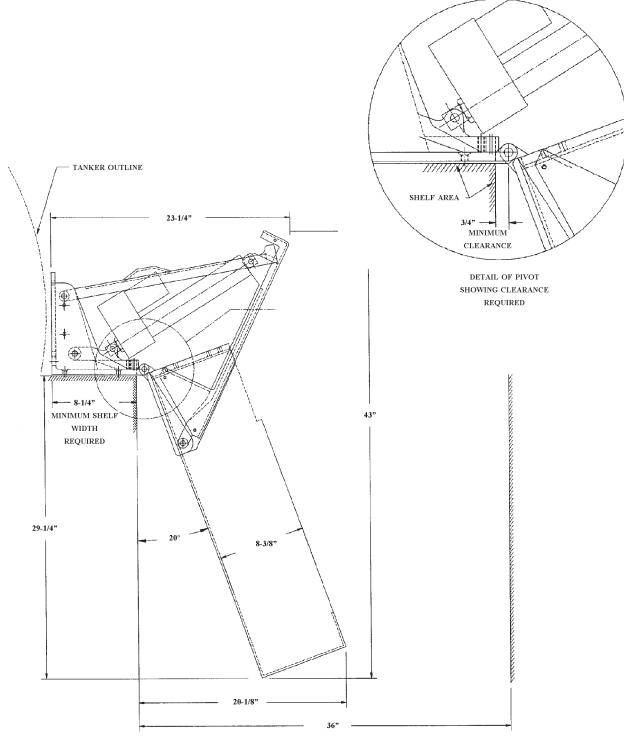
		WT.
MODEL	DESCRIPTION	IN LBS.
PTS-ETA	Complete Adapter Set/Hardware	29.0/set
3098-115-105	Support Casting - Each	4.4/ea.
3098-115-110	Mounting Plate - Each	10.1/ea.

Note: If tank cover is to be used, order one (1) Hinge Extension, 3098-115-113, in addition to tank cover kit required.





MOUNTING PLATE SHOULD BE TIED INTO MAIN SUPER STRUCTURE IF POSSIBLE

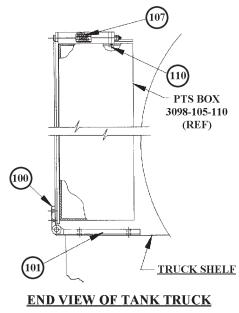


MINIMUM SIDE CLEARANCE FOR 28-1/2" TANK HEIGHT

# FIGURE 8. TRUCK END VIEW FULL EXTENDED DOWN POSITION

ITEM NO.	PART NO.	DESCRIPTION	QTY.
100	3098-150-101	Hinge	3
101	3098-150-102	Center Hinge	1
102	3098-150-103	Center Hinge Pin	1
103	3098-150-104	Center Backplate	1
104	3098-150-105	End Backplate	2
105	3098-150-106	Spring Housing	2
106	3098-150-107	Spring Retainer	2
107	3098-150-108	Spring (inside of Item 105)	2
108	91101031128	Hex Hd. Bolt 5-16-18 x 8 Lg.	2
109	9112-103100	Hex Hd. Nut 5/16-18	2
110	9110-353114	But. Hd. Soc. Screw 5/16-18 x 7/8" Lg.	6
111	9110-362514	Fl. Hd. Soc. Screw 1/4-20 x 7/8" Lg.	12
112	9110-363112	Fl. Hd. Soc. Screw 5/16-18 x 3/4" Lg.	4
113	9113-173100	Hex Hd. Lock Nut 5/16-18 Nylon	8
114	9140-101214	Spring Pin 1/8" Dia. x 7/8" Lg.	1
115	3098-150-116	Tank Cover 1/8" Thick Diamond Plate	1
		(Furnished By Customer)	

1/8" THICK -



NOTE: OUTLINE OF PORTABLE TANK NOT SHOWN IN THIS VIEW

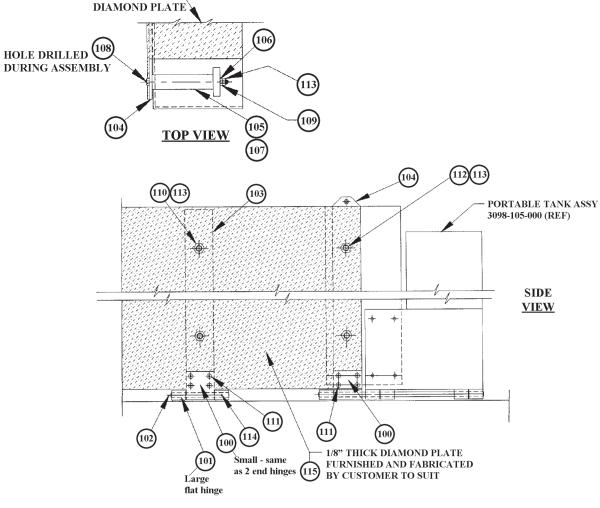


FIGURE 9. TANK COVER HARDWARE

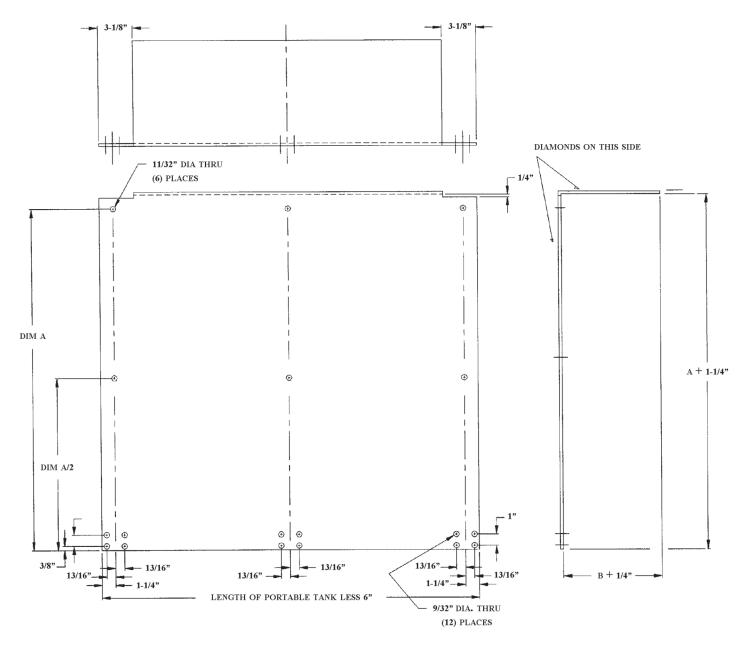
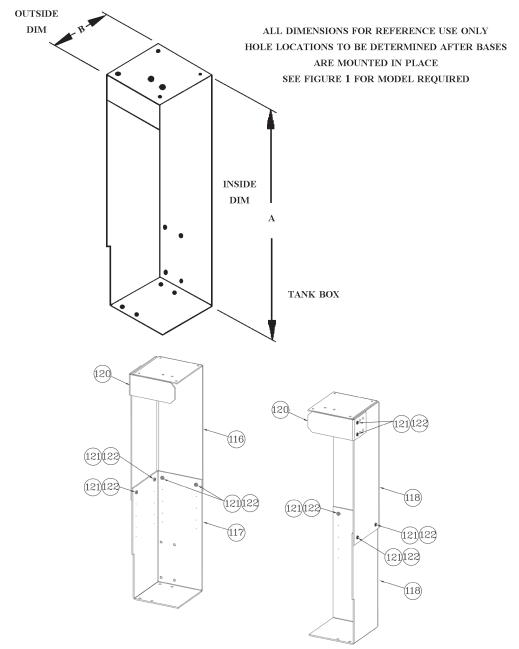


FIGURE 10. TANK COVER



# QUANTITIES PER ASSEMBLY

ITEM			
NO.	PART NO.	DESCRIPTION	QTY.
116	3098-110-109	PTS Box Right Top	1
117	3098-110-108	PTS Box Right Bottom	1
118	3098-112-111	PTS Box Left Top	1
119	3098-112-110	PTS Box Left Bottom	1
120	3098-110-113	PTS Bracket	1
121	9110-503110	Btn Hd, Socket 5/16-18 x 5/8" SS.	6
122	9113-103100	5/16-18 Low Pro. Nylock Nut SS.	6

NOTE #117 & #118 REQUIRE 11/32" HOLE DRILLED TO SET REQUIRED SIZE

# FIGURE 11. TANK BOXES

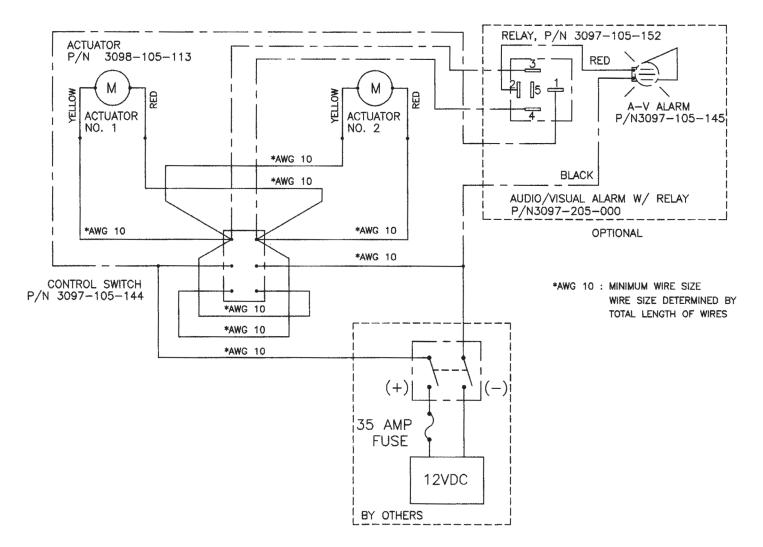


FIGURE 12. ELECTRICAL SYSTEM

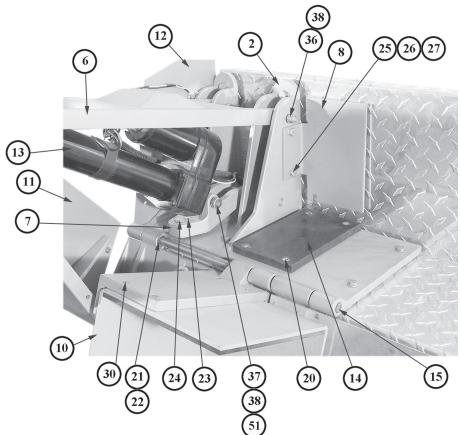
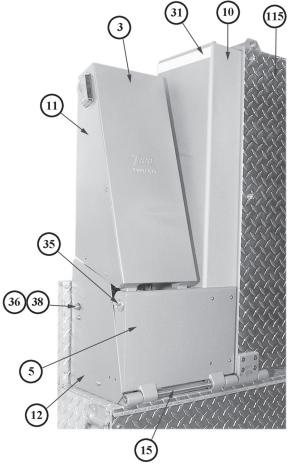
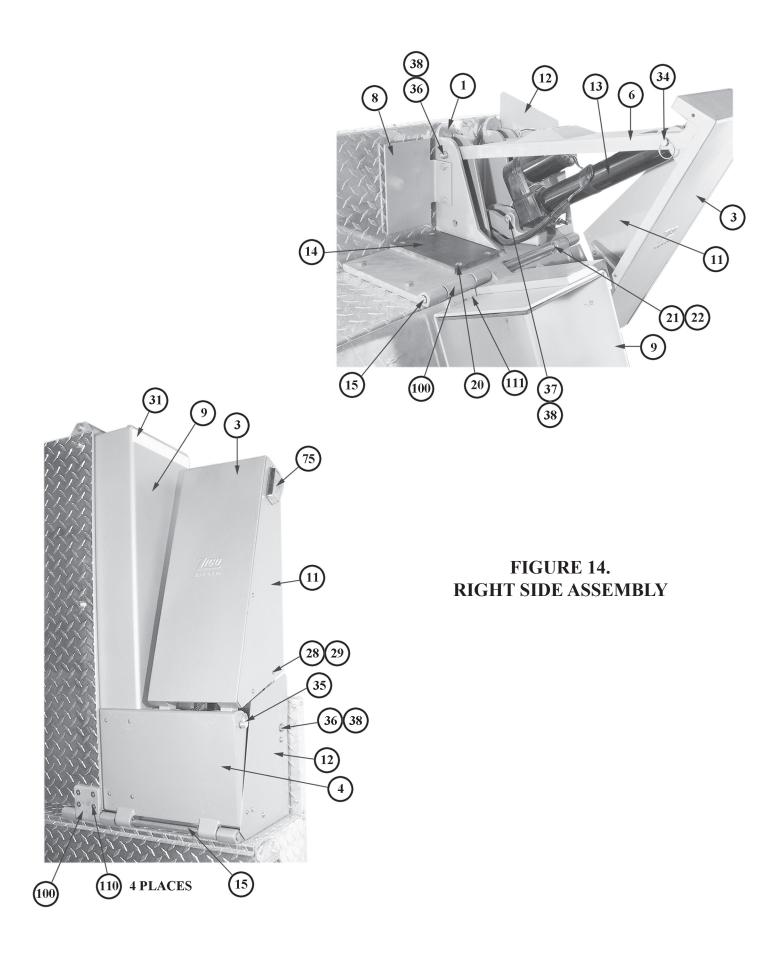


FIGURE 13. LEFT SIDE ASSEMBLY





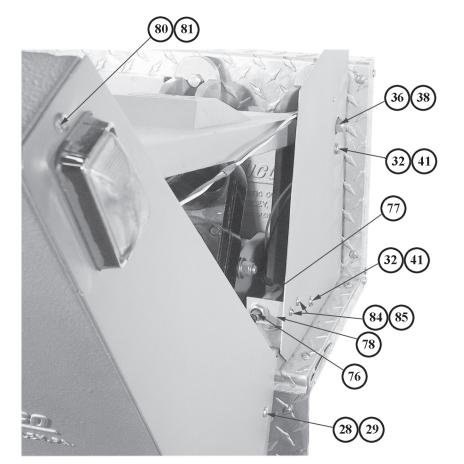


FIGURE 15. LIGHT KIT COMPONENTS

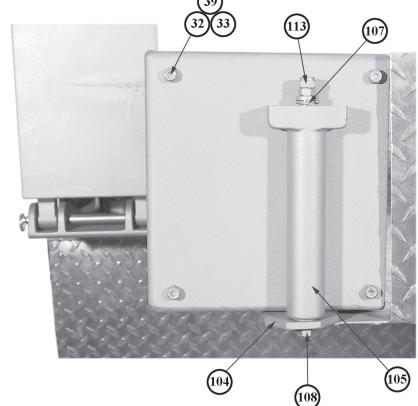
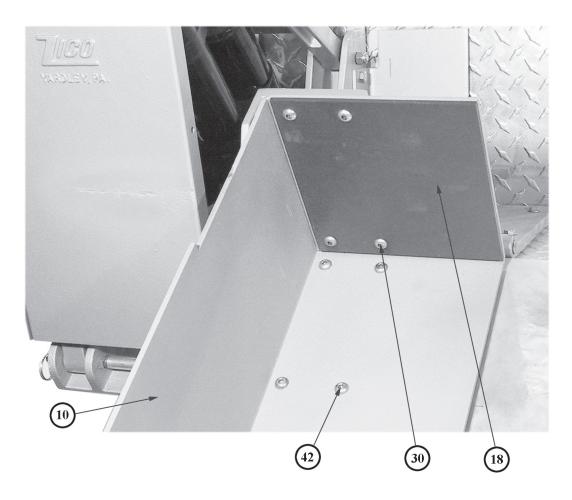


FIGURE 16. SPRING MECHANISM FOR TANK COVER HARDWARE KIT



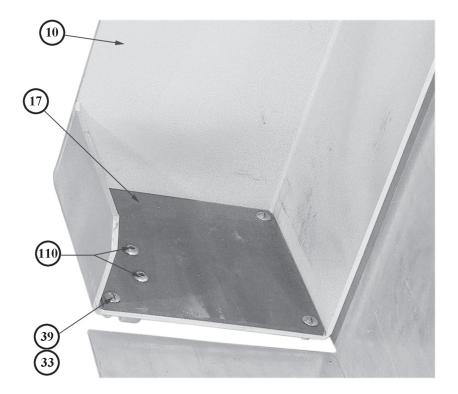


FIGURE 17. TANK BOX COMPONENTS

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# WARRANTY REGISTRATION Please Mail or Fax a Copy to ZICO to Register Your Unit

FIRE DEPARTMENT NAME:	CONTA	ACT PERSON:
PHONE NO.	FAX NO.	
STREET ADDRESS:		P.O. BOX:
СІТҮ:	_ STATE:	ZIP:
SERIAL NO. ON UNIT:		
INSTALLED ON: (VEHICLE MFG.)		DELIVERED: (DATE)
WAS UNIT INSTALLED ON:	_ NEW VEHICLE	
	_ RETROFITTED ONTO EX	ISTING VEHICLE
WAS A HARD COVER INSTALLED OVER THE PORTABLE T	rank?	YES NO
NOTE: WARRANTY IS VOIDED IF PT	'S-TCH IS NOT USED	).
MANUFACTURER OF PORTABLE TANK:	SIZE OF TANK:	
FOL-DA-TANK		GALLONS (U.S.)
FIRL		LENGTH (COLLAPSED)
BURCH		WIDTH (COLLAPSED)
OTHER (SPECIFY)		HEIGHT (COLLAPSED)
WHERE DID YOU HEAR ABOUT OUR PRODUCT?		
MAGAZINE AD (SPECIFY)		
DEALER (SPECIFY)		
VEHICLE MFG. (SPECIFY)		
ANOTHER DEPARTMENT (SPECIFY)		
OTHER (SPECIFY)		

 Ziamatic Corp.
 www.ziamatic.com

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 800-711-3473

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