

# MANUAL: BLITZ LITE MONITOR SERIES

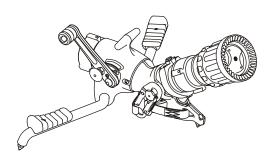
# INSTRUCTIONS FOR SAFE OPERATION AND MAINTENANCE

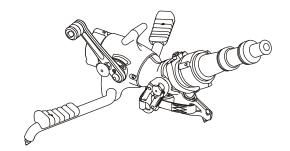
**ADANGER** 

Read instruction manual before use. Operation of this device without understanding the manual and receiving proper training is dangerous and is a misuse of this equipment.

**ADANGER** 

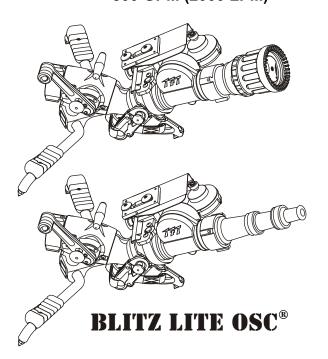
Risk of sliding increases at low elevation angles. To reduce risk of injury or death from sliding, test safety elevation plunger before using.





# BLITZ LITE®

## MAXIMUM OPERATING PRESSURE 175 PSI (12 BAR) MAXIMUM FLOW 500 GPM (2000 LPM)





#### PERSONAL RESPONSIBILITY CODE

The member companies of FEMSA that provide emergency response equipment and services want responders to know and understand the following:

- Firefighting and Emergency Response are inherently dangerous activities requiring proper training in their hazards and the use of extreme caution at all times.
- It is your responsibility to read and understand any user's instructions, including purpose and limitations, provided with any piece of equipment you may be called upon to use.
- 3. It is your responsibility to know that you have been properly trained in Firefighting and /or Emergency Response and in the use, precautions, and care of any equipment you may be called upon to use.
- 4. It is your responsibility to be in proper physical condition and to maintain the personal skill level required to operate any equipment you may be called upon to use.
- It is your responsibility to know that your equipment is in operable condition and has been maintained in accordance with the manufacturer's instructions.
- Failure to follow these guidelines may result in death, burns or other severe injury.



Fire and Emergency Manufacturers and Services Association, Inc. P.O. Box 147, Lynnfield, MA 01940 • www.FEMSA.org

TASK FORCE TIPS, Inc.

2800 E. Evans Ave, Valparaiso, IN 46383-6940 USA 800-348-2686 • 219-462-6161 • Fax 219-464-7155

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#### 1.0 MEANING OF SIGNAL WORDS

A safety related message is identified by a safety alert symbol and a signal word to indicate the level of risk involved with a particular hazard. Per ANSI standard Z535.4-1998 the definitions of the three signal words are as follows:



DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

#### 2.0 GENERAL INFORMATION

The Blitz Lite is an efficient, compact and easy to maneuver portable monitor. The monitor is a lightweight aluminum unit, which can deliver 500 GPM of water. This monitor can be mounted in a pre-connected state on the truck-mounting bracket for achieving quick and effective initial attack. General product specifications are as follows:

- · Standard Inlet Coupling: 2 ½ inch NH Female
- Standard Outlet: 2 ½ inch NH male
- Flow range: up to 500 GPM (2000 LPM)
- · Maximum inlet pressure: 175 PSI (12 BAR)
- Vertical Stream Range: 20 to 60° above horizon manned (30 to 60° above horizon unmanned)

(30 to 50° above horizon with osc unmanned)

- Horizontal Stream Range: +/- 20 degrees either side of centerline
- Size, legs folded: 14.8"L x 9.0"W x 9.4"H (375 x 230 x 240mm)
- Size, legs unfolded: 15"L x 25.8"W x 10"H (380 x 655 x 254mm)
- Weight: 15 lbs (6.9 kg)



This equipment is intended for use by trained personnel for firefighting. Its use for other purposes may involve hazards not addressed by this manual. Seek appropriate guidance and training to reduce risk of injury.



An out of control monitor can cause injury or death. To reduce the risk of instability, do not attempt to move the monitor with water flowing.



The flow from the monitor may be vital to keep a firefighter from injury or death. Avoid situations that may interrupt flow to the monitor such as: hose line kinks, traffic running over hose, and automatic doors or devices that can pinch the hose.



Master streams are powerful and capable of causing injury and property damage. Make sure the monitor is pointing in a safe direction before water to the nozzle is turned on. Use care in directing the stream.



Monitor must be properly connected to hose and nozzle. Mismatched or damaged threads may cause leaking or uncoupling under pressure and could cause injury.



Do not couple aluminum to brass. Dissimilar metal coupled together can cause galvanic corrosion that can result in inability to unscrew threads or complete loss of thread engagement.

#### 2.1 BLITZ LITE PART IDENTIFICATION

Figure 2.1 identifies the various parts and controls of the Blitz Lite Portable Monitor.

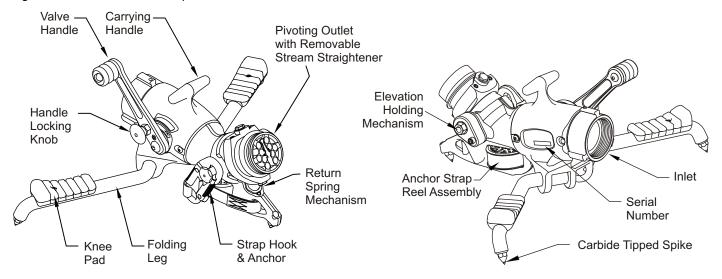


Figure 2.1 Blitz Lite Parts and Controls

#### 2.2 VALVE OPERATION

The valve handle is locked in the closed position so that the Blitz Lite may be carried/moved without the valve inadvertently opening when water flow is not desired. To unlock the valve handle from the closed position:

- 1. Pull ring on right side of valve handle.
- While pulling on ring move valve handle slowly to an open position with other hand.

As soon as valve is opened the ring may be released. Valve handle may be moved to any position by pushing or pulling on the valve handle. When the valve is closed the valve handle automatically locks and must be unlocked again to reopen. The monitor has a label that indicates the direction to open and close the valve. The valve opening procedure is shown in figure 2.2. Remember to close the valve slowly to reduce water hammer.

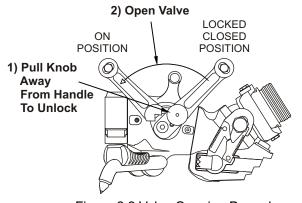


Figure 2.2 Valve Opening Procedure



Injury or death from an out of control monitor can occur. If monitor gets out of control, retreat from monitor immediately. Do not attempt to regain control of monitor while it is flowing.

To minimize the risk of an out of control monitor:

- Test Shut-off Valve before each use.
- Tie off the monitor when practical.
- Hook legs on stationary objects such as doorframes, cracks, sign posts etc.
- · Keep elevation as high as practical.
- · Choose surfaces that allow spikes to dig in.
- Assure that the hose is not lifting the spikes off the ground.
- Reduce flow to limit nozzle reaction if stability is questionable.

#### 2.3 FOLDING LEGS

The Blitz Lite has two legs that fold for storage and unfold for operation. The legs are held in the folded and unfolded position by spring detents. To fold or unfold the legs:

- 1. Grasp the spike end of one leg and pivot it to the folded or unfolded position.
- 2. Repeat for the other leg.



In the unfolded position the legs provide a stable base for operation of the monitor. Lack of stability can cause an out of control monitor resulting in injury or death. Do not operate as a portable monitor with either one or both legs in the folded position.

#### 2.3.1 CARBIDE SPIKES

The Blitz Lite monitor has 3 tungsten carbide tipped spikes on the legs and the base to resist sliding by digging into the surface the monitor is sitting on. The amount of sliding force these spikes can withstand depends upon the amount of downward and sideways force that is on the base and the hardness and texture of the surface the spikes are in contact with. At low elevation angles, it is difficult for these spikes to resist sliding. These spikes are essential to safe operation of the monitor and must be in contact with the ground at all times. Set the monitor on an even surface so that all three spikes contact the ground. Replace any spike if the tip diameter exceeds 1/16 inch (1.6 mm).

# **▲**WARNING

For stable operation the three spikes must maintain in contact with the ground. Do not place the Blitz Lite on top of debris, objects, or uneven terrain that would keep any of the spikes from contacting the ground.



On hard slippery surfaces the spikes may provide little resistance to sliding. In these cases the monitor should be tied off or the legs hooked on stationary objects to keep the monitor in position. Also, a person's weight applied to the monitor may help increase resistance to sliding.



Spikes must be sharp to provide resistance to sliding. Replace any spike if the tip diameter exceeds 1/16 inch (1.6 mm).



Spikes are sharp and exposed. Use care around spikes to avoid injury and damage to clothing or other property.

#### 2.4 FULL TIME SWIVEL INLET HOSE COUPLING

The Blitz Lite has a full-time swiveling inlet coupling so that when the hose is charged, any twist in the hose will minimize the lifting of the spikes off the ground. The Blitz Lite is equipped with three spikes to provide traction when flowing from the ground. For the spikes to provide traction they must remain in contact with the ground. Assure that the hose is not on top of anything that would cause the spikes to be lift off the ground.

#### 2.5 OUTLET PIVOTS AND ELEVATION PLUNGER MECHANISM

The Blitz Lite's outlet pivots allow for 20 degrees of horizontal rotation either side of center. The elevation range is from 20 to 60 degrees manned and 30 to 60 degrees unmanned. (30 to 50 degrees with the oscillator version) While manned, to lower the outlet below the 30 degrees elevation, just push down the outlet to the desired elevation. Below the outlet pivot is a spring-loaded plunger that returns the outlet to 30 degrees if the operator releases on the outlet or the monitor is unmanned. The pivots are easy to reposition under pressure and are good for rapid redirecting of the stream. Figure 2.5 shows the outlet pivots range of motion.

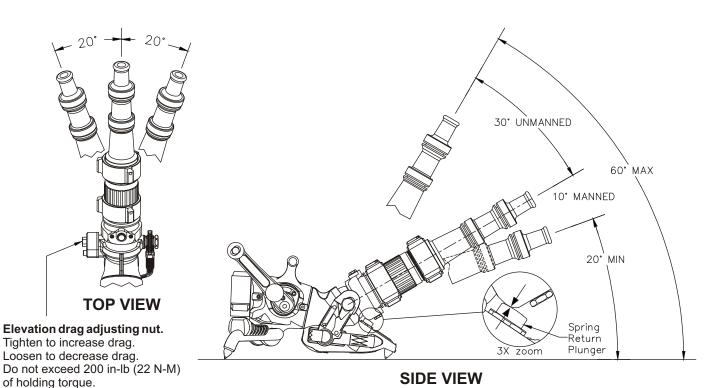


Figure 2.5 Outlet Pivot Range of Motion

#### 2.5.1 ELEVATION HOLDING MECHANISM

The elevation pivot has a mechanism to support the weight of a nozzle. It is factory set to support the weight of nozzles likely to be used. It may be adjusted (see figure 2.5). The mechanism releases when raising the nozzle so upwards drag from the mechanism is not felt. Avoid the use of long stream straighteners or heavy nozzles which may overcome the holding torque of the elevation mechanism.

#### 3.0 FLOWS AND PRESSURES

The Blitz Lite Portable Monitor is designed for maximum flows of 500 GPM (2000 LPM) and a maximum pressure of 175 PSI (12 BAR). Do not exceed these limits.



An inadequate supply of pressure and/or flow will cause an ineffective stream and can result in injury, death or loss of property.

#### 3.1 AUTOMATIC, FIXED, AND SELECTABLE FLOW NOZZLES

A variety of water or foam nozzles may be used with the Blitz Lite.

Automatic nozzles maintain a constant pressure by adjusting their opening to match the available flow. Consult the nozzle manufacturer for maximum flow and pressure ratings. In all cases do not exceed 500 GPM (2000 LPM) and/or 175 PSI (12 BAR).

#### 3.2 STACKED TIPS OR SMOOTHBORE NOZZLES

i i										
				NOZ	ZLE IN	LET PRES	SURE			
NOZZLE	50	PSI	80	PSI	100	) PSI	150	) PSI	175	S PSI
DIAMETER	FLOW (GPM)	REACTION (LBS)								
1.0 INCH	210	80	266	126	297	157	364	236	390	275
1-1/4 INCH	328	120	415	196	464	245	_		_	_
1-1/2 INCH	473	177	_	_	_	_	_	_	_	_

				NOZ	ZLE INI	LET PRES	SURE			
NOZZLE	4 E	BAR	6 E	BAR	8 B	AR	10	BAR	12	BAR
DIAMETER	FLOW (L/min)	REACTION (KG)								
25 MM	830	40	1000	60	1200	80	1300	100	1400	120
32 MM	1300	70	1700	100	1900	130				
38 MM	1900	90	_	_	_	_	_	_	_	_

### FLOW EXCEEDS RATING OF BLITZ LITE MONITOR

#### 3.3 STREAM STRAIGHTENERS

Stream quality, especially with smooth bore nozzles, is generally improved with the use of a stream straightener.

#### 3.4 USE WITH FOAM

The Blitz Lite may be used with various foam nozzles and foam solutions. Refer to fire service training for the proper use of foam.

#### 3.5 USE WITH SALT WATER

Use with salt water is permissible provided the monitor is thoroughly cleaned with fresh water after each use. The service life of the monitor may be shortened due to the effects of corrosion and is not covered under warranty.

#### 3.6 BLITZFIRE PRESSURE LOSS

Figure 3.6 gives the pressure loss for the Blitz Lite Portable Monitor

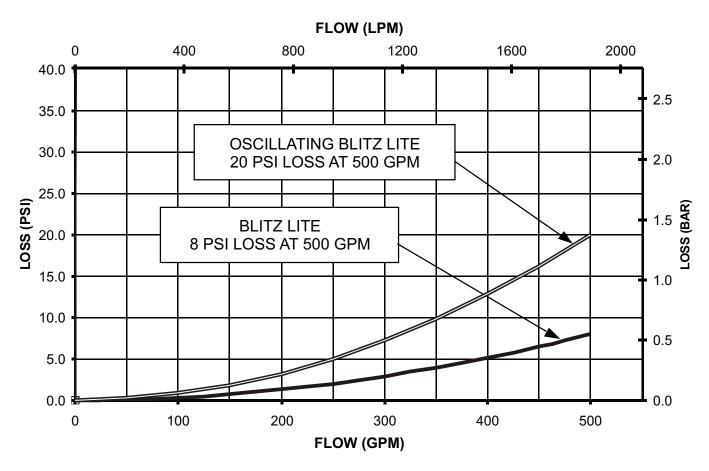


Figure 3.6 Blitz Lite Pressure Loss

#### 4.0 DEPLOYMENT OF BLITZ LITE

It is the responsibility of the individual fire department or agency to determine physical capabilities and suitability for an individual's use of this equipment.

#### 4.1 CARRYING WITH AN UNCHARGED HOSE

On a preconnected hoseline the Blitz Lite may be carried by the T-shaped handle or over the shoulder with the legs folded as illustrated in figure 4.1.

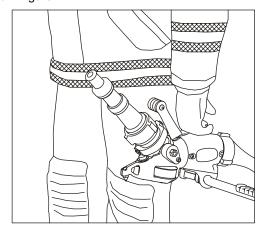


Figure 4.1 Carrying the Blitz Lite on an Uncharged Hose



#### 4.2 CARRYING WITH A CHARGED HOSE

On a charged hose the Blitz Lite may be carried by holding the T-shaped handle located on top of valve body as shown in figure 4.2. Shut-off valve handle should be locked in the closed position to keep the valve from inadvertently opening.

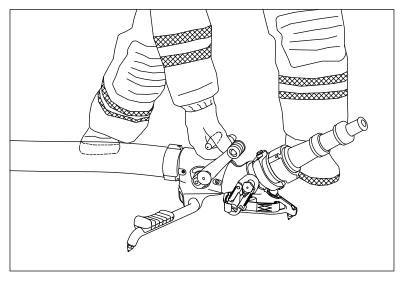


Figure 4.2 Carrying the BlitzLite with a Charged Hose

#### 5.0 ANCHORING

The nozzle reaction force on the Blitzfire may be as high as 330 lbs - 500 GPM at 175 PSI (150 kg- 2000 LPM at 12 BAR). This nozzle reaction must be restrained to keep the monitor from moving.

The monitor should be anchored from moving by one or more of these methods:

METHOD	RISK of MOVING
Anchoring by Weight	High
Anchoring by Spike Holds	Medium
Hooking legs on vertical surfaces	Medium
Using a tie off strap	Low

#### **5.1 ANCHORING BY WEIGHT**

On surfaces with good traction a person's weight on the monitor and/or hose may be sufficient to keep the monitor from sliding. This is highly dependant on the friction of the surface. The ability to keep one or more people's weight on the monitor is subject to operator fatigue and may not be as reliable as other methods. Operating at limited flows will reduce the risk.

#### 5.2 ANCHORING BY SPIKE HOLDS

The holding ability of the spikes is generally excellent on surfaces like asphalt, wooden and carpeted floors because they allow the spike to penetrate well. On hard smooth surfaces such as ceramic tile, smooth concrete, marble, terrazzo, or steel decking the Blitz Lite's spikes may not hold well. Placing the spikes into cracks, expansion joints, or gratings or the like will help hold the monitor from sliding. Even with the spikes anchored, sliding may be caused by the surface cracking under the load, or from the hose or nozzle moving the monitor thereby dislodging the spikes from their hold. Figure 5.2 shows a close up of a spike caught in a crack.

The holding ability of the spikes on soft surfaces such as sand, gravel and mud is generally poor, therefore other anchoring methods should be considered.

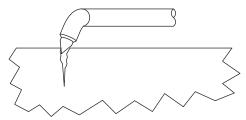


Figure 5.2 Spike Caught in a Crack

#### 5.3 ANCHORING BY HOOKING LEGS

The legs on the Blitz Lite point back slightly so they can act as a hook for anchoring on posts, walls, doorframes or other fixed objects. Sliding can occur if the legs are unhooked due to the influence of the hose, nozzle, or operator. See figure 5.3 for illustrations of this.

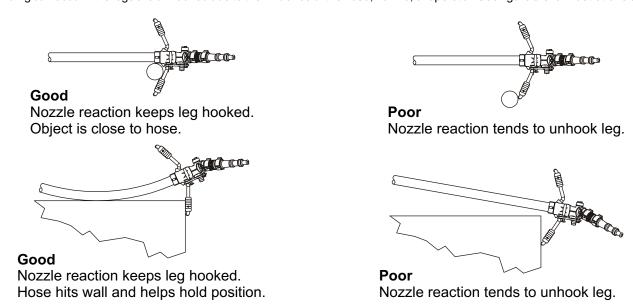
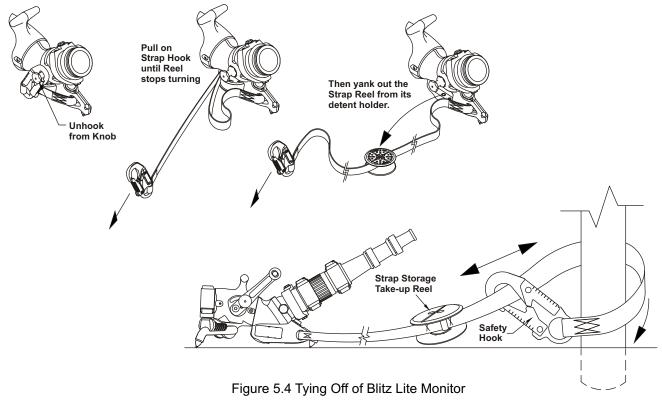


Figure 5.3 Hooking Legs to Gain Support

#### 5.4 ANCHORING BY TYING OFF WITH SAFETY STRAP

The safest method of restraining the monitor is to use a tie down strap. It is inherently more reliable then other methods since it does not rely on traction or digging in of the spikes. It is also the safest method because even if the monitor slides its travel is limited by the strap length. Permanently anchored from the factory is a safety strap system that comes with a storage take-up reel attached to the midlength of the strap and a safety hook attached to the other end of the strap, which may be wrapped around an object, such as a tree, and snap back onto the strap itself and pulled tight. Keep the entire length of the strap as close to the ground as possible. If the strap is too short to reach a suitable anchor, it may be extended with strong rope or chain. Keep the distance between the Blitz Lite and anchor as short as possible. Remove all slack between the Blitz Lite and anchor before flowing water. Figure 5.4 shows the deployment method for the strap mechanism and the elements of tying off the monitor.



#### 6.0 OSC OSCILLATING UNIT

An automatic oscillating mechanism is available for the Blitz Lite Monitor. The Blitz Lite Monitor can be purchased with the oscillating mechanism factory installed or added at the factory later.

#### **6.1 SAFETY - OSCILLATOR**



Do not attempt to modify this oscillating mechanism to fit any other monitor. To do so will cause the reaction force of the nozzle to be unaligned with the center of rotation. The monitor may spin very fast with a very high force.



Keep hands and fingers away from the moving parts of the oscillating unit when water is flowing. There are moving parts that can pinch fingers and hands. Keep the guard in place.



Make sure the Blitz Lite is on a firm surface with adequate holding power. As the nozzle goes back and forth, the reaction force is acting in different directions on the leg spikes. Surfaces such as asphalt, turf and dirt generally have good holding power. Surfaces like concrete and loose gravel hold poorly.



Because the nozzle attached to the Blitz Lite must slow down, stop and reverse direction at the end of each sweep, the ends of the covered area will receive more water than the center. If the center area of coverage needs the most cooling, occasionally narrow the area of coverage or use the oscillator manually.

#### 6.2 GENERAL - OSCILLATOR

The Blitz Lite oscillating mechanism can be used for exposure protection, cooling, or any other situation where it is desirable to have a monitor sweep back and forth. The oscillator outlet pivot range is same as the standard Blitz Lite. Flow and pressure ratings are the same as the standard Blitz Lite.

A turbine wheel drives the oscillating mechanism. A worm gear drive reduces the speed and increases the torque of the turbine wheel. A simple crank mechanism makes the outlet of the Blitz Lite and the nozzle attached to it move back and forth. The horizontal sweep can be set for a 20, 30 and 40 degree sweep. The oscillating mechanism can be uncoupled and the water stream can be aimed manually. Elevation angle is set the same as the standard Blitz Lite. The speed of oscillation is a function of flow rate; see the following Blitz Lite Oscillation Speed Chart on page 10.

#### 6.3 CONTROL IDENTIFICATION - OSCILLATOR

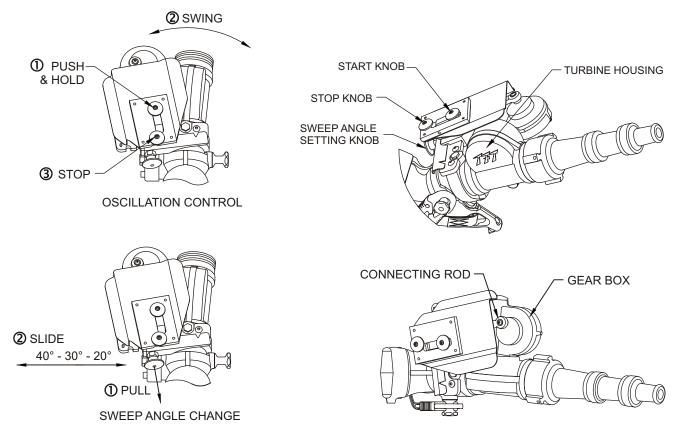


Figure 6.3 Control Identification - Oscillator

#### 6.4 USE - OSCILLATOR

Deploy the Oscillation Blitz Lite as you would the standard Blitz Lite, see section 4.0. Align the base of the Blitz Lite with the center of the area you wish to cover.

**To Engage The Oscillating Mechanism:** If the nozzle moves freely left to right by hand, the oscillating mechanism is not engaged. Depress the green START KNOB and move the nozzle from one side to the other until the roll pin drops in the groove in the connecting rod. Open the valve on the Blitz Lite and adjust the elevation to hit the desired spot. The minimum flow is 175 GPM (650 L/min). To adjust the area of coverage, pull the silver knob and move it left or right until the pointer aligns with the desired angle of coverage.

**To Disengage The Oscillating Mechanism:** To operate the oscillating Blitz Lite Manually, depress the Red STOP KNOB and move the Nozzle to the desired position by hand. The green START KNOB will pop up to indicate the mechanism is disengaged. The crank and

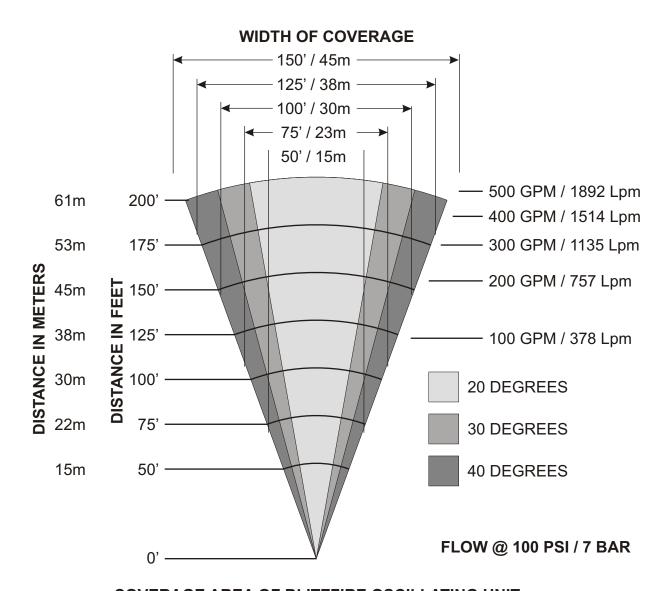
connecting rod will continue to move.

To protect the gears from overload, the oscillating mechanism will disengage if sufficient force is applied to either side of the oscillator outlet. The green START KNOB will pop up to indicate the mechanism is disengaged. See the instructions above to engage the drive mechanism.

Oscillation speed: The chart shows how many times per minute the oscillator makes one complete cycle as a function of flow. The higher the flow, the faster it oscillates.

APPROXIMATE		
CYCLES/MIN	GPM	L/MIN
8	175	650
13	250	1000
21	375	1500
28	500	2000

#### **BLITZ LITE OSCILLATION SPEED CHART**



**COVERAGE AREA OF BLITZFIRE OSCILLATING UNIT** 

#### 7.0 STORAGE

The monitor may be stored pre-connected to its hose on the optional storage bracket, TFT part number XXL-B. The storage bracket may be mounted on a horizontal surface, or a vertical surface with the nozzle end pointing down or sideways.

To mount the bracket follow the instructions provided with the bracket kit.



The storage bracket is not intended to support the nozzle reaction forces from a flowing

#### **8.0 MAINTENANCE**

The Blitz Lite monitor requires little maintenance. The unit should be kept clean and free of dirt by rinsing with water after each use. Any inoperable or damage parts should be repaired or replaced before placing the unit in service.



Any alterations to the Blitz Lite and it's markings could diminish safety and constitutes a misuse of this product.

#### MAINTENANCE CHECK LIST:

- · Valve handle moves smoothly without binding (see section 2.2)
- Valve label legible
- · Legs pivot freely and detents hold folded or unfolded position
- Spikes are sharp. Replace if tip diameter exceeds 1/16 inch (1.6 mm).
- · Inlet coupling rotates freely
- · Pull pin for Valve Handle locking locks and releases easily
- · Outlet pivots freely from side to side
- · Outlet pivots freely upward
- · Outlet pivot has sufficient drag to support weight of nozzle
- Tie down strap is in good condition; no frays on strap or damage to hook

#### 9.0 WARRANTY

Task Force Tips, Inc., 2800 East Evans Avenue, Valparaiso, Indiana 46383 ("TFT") warrants to the original purchaser of its Blitz Lite Monitor ("equipment"), and to anyone to whom it is transferred, that the equipment shall be free from defects in material and workmanship during the five (5) year period from the date of purchase.

TFT's obligation under this warranty is specifically limited to replacing or repairing the equipment (or its parts) which are shown by TFT's examination to be in a defective condition attributable to TFT. To qualify for this limited warranty, the claimant must return the equipment to TFT, at 2800 East Evans Avenue, Valparaiso, Indiana 46383, within a reasonable time after discovery of the defect. TFT will examine the equipment. If TFT determines that there is a defect attributable to it, it will correct the problem within a reasonable time. If the equipment is covered by this limited warranty, TFT will assume the expenses of repair.

If any defect attributable to TFT under this limited warranty cannot be reasonably cured by repair or replacement, TFT may elect to refund the purchase price of the equipment, less reasonable depreciation, in complete discharge of its obligations under this limited warranty. If TFT makes this election, claimant shall return the equipment to TFT free and clear of any liens and encumbrances.

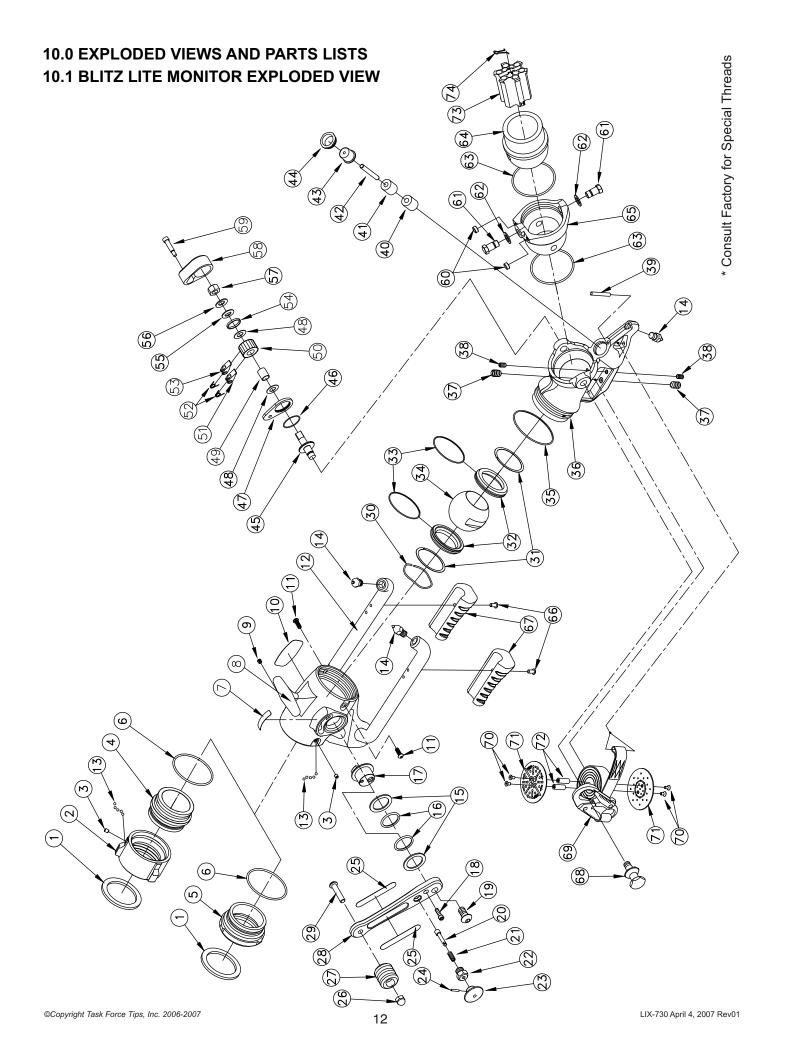
This is a limited warranty. The original purchaser of the equipment, any person to whom it is transferred, and any person who is an intended or unintended beneficiary of the equipment, shall not be entitled to recover from TFT any consequential or incidental damages for injury to person and/or property resulting from any defective equipment manufactured or assembled by TFT. It is agreed and understood that the price stated for the equipment is in part consideration for limiting TFT's liability. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

TFT shall have no obligation under this limited warranty if the equipment is, or has been, misused or neglected (including failure to provide reasonable maintenance) or if there have been accidents to the equipment or if it has been repaired or altered by someone else.

THIS IS A LIMITED EXPRESS WARRANTY ONLY. TFT EXPRESSLY DISCLAIMS WITH RESPECT TO THE EQUIPMENT ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE. THERE IS NO WARRANTY OF ANY NATURE MADE BY TFT BEYOND THAT STATED IN THE DOCUMENT.

This limited warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

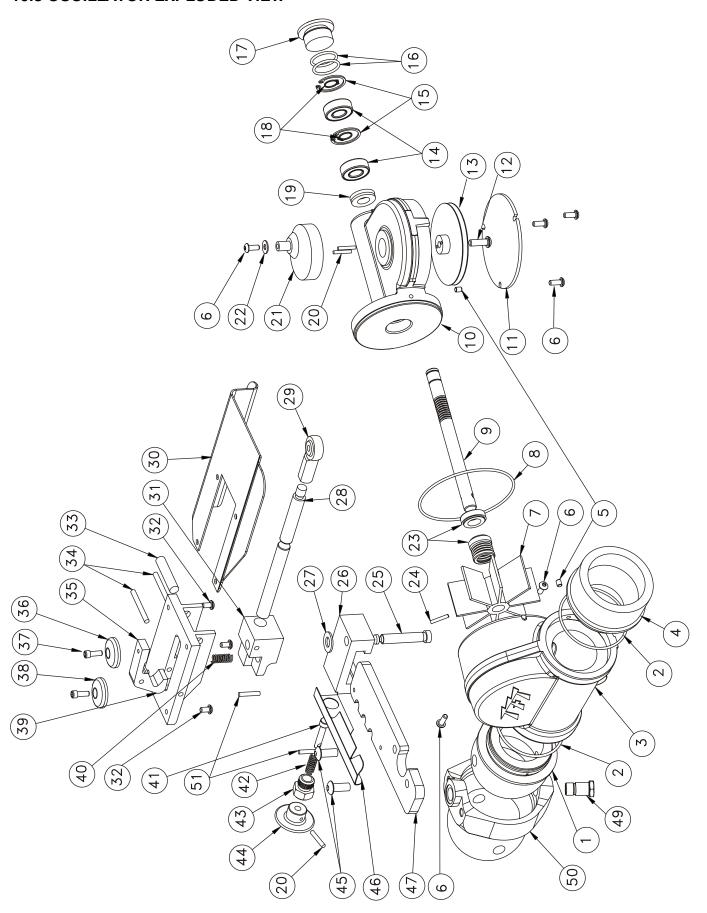
Visit TFT's web site at www.tft.com



# **10.1 BLITZ LITE MONITOR PARTS LIST**

2.5 INCH COUPLING GASKET   1 V3190   37 221° BALL PLUNGER 10-13 X 314     2. SIN COUPLING SCOKET SETS SCREW   1 V122-2885500   39 STRAPP IN 14 X 18 LONG     3. 142-28 X 172 SOCKET SETS SCREW   1 X X 1606   4 SFRING URETHANE 88X 38X 10 GRN     4. IN LET AMPTER - BLITZ LITE   1 X X 1606   4 SFRING URETHANE 88X 38X 10 GRN     5. OKRING-151   X X 1606   4 SFRING URETHANE 88X 38X 10 GRN     6. OKRING-151   X X 1606   4 SFRING URETHANE 88X 38X 10 GRN     7. LABEL, OPEN/CLOSE   1 X X 1600   4 SFRING URETHANE 88X 38X 10 GRN     8. OKRING-151   X X 1600   4 SFRING URETHANE 88X 38X 10 GRN     9. DOME PLUG	#	DESCRIPTION	QTY	PART #	#	DESCRIPTION	QΤΥ	PART #
2.5 NH COUPLING ROCKER LUG         1         M307N         38           1/4-28 X 1/2 SOCKET SET SCREW         1         V/L5-28SS500         39           INLET MATE - BLITZ LITE         1         XXL605         40           INLET MATE - BLITZ LITE         1         V/O-151         42           LABEL: OPEN/CLOSE         1         XXL600         44           O-RING-151         1         XXL600         44           DOME PLUG         1         XXL670-F         45           NAME LABEL - BLITZ LITE         1         XXL670-F         46           NAME LABEL - PARTINER LITE         1         XXL670-F         47           NAME LABEL - PARTINER LITE         1         XXL670-F         47           NAME LABEL - PARTINER LITE         2         V/C-20         50           SPIKE         1         XXL336         52           O-RING-219         2         V/C-210         53           O-RING-219         1         XXL336         56           1/2-13 X 1 BUTTON HEAD SCREW         1         XXL340         57           PULL PIN         1         XXL340         67           PULL L PIN HOUSING         1         XXL626         63	_	2.5 INCH COUPLING GASKET	_	V3190	37	.281" BALL PLUNGER 1/2-13 X 3/4	2	XXL505
Intel MATE - BLITZ LITE         1         VXL605         40           INLET MATE - BLITZ LITE         1         XXL606         40           O-RING-151         1         VXL606         41           O-RING-154         1         XXL600         44           O-RING-151         1         XXL600         44           LABEL: OPEN/CLOSE         1         XXL600         44           NAME LABEL - BLITZ LITE         1         XXL600         44           DOME PLUG         1         XXL670         46           NAME LABEL - PARTINER LITE         1         XXL670         46           NAME LABEL - PARTINER LITE         1         XXL670         47           IA-28 X 3/4 BUTTON HEAD SCREW         1         XXL100         57           SPIKE         3         X482         54           SPIKE         3         XXL30         56           O-RING-219         1         XXL130         55           O-RING-18         1         XXL130         56           12-13 X 1 BUTTON HEAD SCREW         1         XXL130         56           PULL PIN         1         XXL1620         67           PULL DIN HANDLE LABEL - BLITZ LITE         2 </td <td>2</td> <td>2.5 NH COUPLING ROCKER LUG</td> <td>1</td> <td>M307N</td> <td>38</td> <td>.156" BALL PLUNGER 5/16-18 X 37/64</td> <td>2</td> <td>XXL506</td>	2	2.5 NH COUPLING ROCKER LUG	1	M307N	38	.156" BALL PLUNGER 5/16-18 X 37/64	2	XXL506
INLET MATE - BLITZ LITE         1         XXL606         40           INLET ADAPTER - PARTNER LITE         1         XXL606         41           O-RING-151         1         XXL606         43           LABEL: OPEN/CLOSE         1         XXL600         43           VALVE BODY         1         XXL670         44           DOME PLUG         1         XXL670         45           NAME LABEL - BLITZ LITE         1         XXL670         46           NAME LABEL - PARTNER LITE         1         XXL670         46           NAME LABEL - PARTNER LITE         1         XXL670         47           LEG ASSEMBLY         2         V/2120         49           31/6* SS BALL         3/6         V/2120         50           SPINE         TRUNNION SHIM         2         V/2120         52           TRUNNION SHIM         2         V/2120         55           PULL PIN         XXL325         54           HAL PON         XXL340         56           PULL PIN         XXX340         60           PULL KNOB         1         XXX140           PULL KNOB         1         XXX140           HANDLE LABEL - PARTNER LITE	3	1/4-28 X 1/2 SOCKET SET SCREW	1	VT25-28SS500	39	STRAP PIN 1/4 X 1.8 LONG	1	XXL585
INLET ADAPTER - PARTNER LITE         1         XXL606         41           O-RING-151         VO-151         42           LABEL; OPEN/CLOSE         1         XXL600         44           VALVE BODY         1         XXL600         45           DOME LABEL - BLITZ LITE         1         XXL670-F         46           NAME LABEL - PARTNER LITE         1         XXL670-F         46           1/4-28 X 3/4 BUTTON HEAD SCREW         2         VT25-28BH750         49           LEG ASSEMBLY         1         XXL670-F         49           JAF-28 X 3/4 BUTTON HEAD SCREW         1         XXL305         55           SPIKE         3/16* SS BALL         3         XA82         53           SPIKE         3         XXL305         55           TRUNNION         1         XXL325         54           1/2-13 X 1 BUTTON HEAD SCREW         1         XXL340         55           PULL PIN         1         XXL350         56           PULL PIN HOUSING         1         XXL340         56           PULL PIN HOUSING         1         XXL626         63           PULL KNOB         1         XXL626         63           PULL KNOB	4	INLET MATE - BLITZ LITE	_	XXL605	40	SPRING URETHANE .88X.36X1.0 GRN.	7	XXL583
ORING-151         1         VO-151         42         PLUNGER PIN 5/16 X2-1ABL           LABEL: OPEN/CLOSE         1         XXL660         43         PLUNGER RETAINER           DOME PLUG         1         XXL660         44         PLUNGER RETAINER           DOME PLUG         1         XXL670         45         CLUTCH TRUNION           NAME LABEL - BAITAER LITE         1         XXL670         46         C-RING-027           MAME LABEL - PARTMER LITE         1         XXL670-F         47         CLUTCH TRUNION           LEG ASSEMBLY         1         XXL670-F         49         NTLON BASERRE PHEND           3.16° SS BALL         96         V2120         50         RATCHET           3.16° SS BALL         96         V2120         50         RATCHET           3.16° SS BALL         3         XXL920         50         RATCHET           TRUNNION SHIM         2         V0-219         53         PAWL 37 12 DEGREE           TRUNNION SHIM         1         XXL326         54         DINT SEAL           PULL PIN         TALOTO HEAD SCREW         1         XXL326         55         D-WASHER           PULL RINO         BALL         XXL336         56         D-WASHER </td <td>2</td> <td>INLET ADAPTER - PARTNER LITE</td> <td>_</td> <td>XXL606</td> <td>41</td> <td>SPRING URETHANE .88X.36X1.0 YEL.</td> <td>7</td> <td>XXL584</td>	2	INLET ADAPTER - PARTNER LITE	_	XXL606	41	SPRING URETHANE .88X.36X1.0 YEL.	7	XXL584
LABEL: OPEN/CLOSE         1         XXL660         43         PLUNGER HEAD           VALVE BODY         1         XXL600         44         PLUNGER RETAINER           DOME PLUG         1         XXL670-F         45         CLUTCH TRUNION           NAME LABEL - BLITZ LITE         1         XXL670-F         46         CLUTCH BASE           14-28 X 34 BUTTON HEAD SCREW         2         VT55-28BH750         48         FLATWASHER - PHENO           1 GASSEMBLY         3         XXL670-F         48         FLATWASHER - PHENO           1 GASSEMBLY         3         XXL670-F         48         FLATWASHER - PHENO           1 GASSEMBLY         3         XXL670-F         48         FLATWASHER - PHENO           1 SPIKE         3         XA282         50         DANASHER           1 SPIKE         1         XYL620         52         TORSION SPRING           1 TRUNNION         1         XXL340         56         D-WASHER           1 TRUNNION         1         XXX340         56         D-WASHER           1 PULL FIN         1         XXX340         50         STRAN SOCKET NUT           1 PULL KNOB         1         XXX340         51         SWINCE TRUNNION	6	O-RING-151	1	VO-151	42	PLUNGER PIN 5/16 X 2-1/2 LONG	1	XXL580
VALVE BODY         1         XXL600         44         PLUNGER RETAINER           DOME PLUG         NM4142         45         CLUTCH TRUNION           NAME LABEL - BLITZ LITE         1         XXL670-F         45         CLUTCH REUNION           NAME LABEL - PARTNER LITE         1         XXL670-F         47         CLUTCH BASE           14-28 X 34 BUTTON HEAD SCREW         2         V725-28BH750         49         NYLON BUSHING           SPIKE         31 * XX190         50         RATCHET         A           SPIKE         34 * SDALL         36         V2120         50         RATCHET           SPIKE         34 * SDALL         36         NYLON BUSHING         50         ANAL 40 DECREE           O-RING-219         1         XXL325         55         D-MASHER         D-MASHER           PULL PIN         1         XXL325         56         D-MASHER         50         ANAL 40 DECREE           PULL PIN         1         XXL340         56         D-MASHER         50         ANAL 40 DECREE           PULL PIN         1         XXL340         50         51/6 X 1 SOCKET HEAD         50         51/6 X 1 SOCKET HEAD           PULL RNOB         1         XXL340         51 <td>7</td> <td>LABEL; OPEN/CLOSE</td> <td>1</td> <td>XXL660</td> <td>43</td> <td>PLUNGER HEAD</td> <td>1</td> <td>XXL581</td>	7	LABEL; OPEN/CLOSE	1	XXL660	43	PLUNGER HEAD	1	XXL581
DOME PLUG         1         VM4142         45         CLUTCH TRUNION           NAME LABEL- BLITZ LITE         1         XXL670-F         46         O-RING-027           NAME LABEL- PARTNER LITE         1         XXL670-F         47         CLUTCH BASE           114-28 X 34 BUTTON HEAD SCREW         1         XXL205         49         NYLON BUSHING           12G ASSEMBLY         3         X482         51         PAWL 37 12 DEGREE           3716" SS BALL         96         V2120         51         PAWL 37 12 DEGREE           316" SS BALL         3         X482         52         TORSION SPRING           3 PULL PIN SHING         1         XXL325         52         TORSION SPRING           4 PULL PIN SHING         1         XXL340         55         D-WASHER           PULL PIN SHING         1         XXL340         56         D-WASHER           PULL PIN SHING         1         XXL340         56         D-WASHER           PULL PIN SHING         1         XXL340         56         D-WASHER           PULL PIN SHING         1         XXL350         50         SIGLACH HADDING           PULL PIN SHING         1         XXL326         50         SIGLACH HADDING <td>8</td> <td>VALVE BODY</td> <td>1</td> <td>XXL600</td> <td>44</td> <td>PLUNGER RETAINER</td> <td>1</td> <td>XXL582</td>	8	VALVE BODY	1	XXL600	44	PLUNGER RETAINER	1	XXL582
NAME LABEL - BLITZ LITE         1         XXL670 - F         46         O-RING - 0.27           NAME LABEL - PARTNER LITE         1         XXL670-F         47         CLUTCH BASE           1/4-28 X 3/4 BUTTON HEAD SCREW         2         VZ120         58         FAT WASHER - PHENO           2/16" SS BALL         3         X482         51         PAWL 37 1/2 DEGREE           3/16" SS BALL         3         X482         51         PAWL 37 1/2 DEGREE           1 SPIKE         1         X725-208H750         52         TORSION SPRING           1 C-RING-219         2         VO-219         53         PAWL 4D DEGREE           1 C-RING-19         1         XXL326         50         D-WASHER           1 C-RING-19         1         XXL340         56         BELEVILLE WASHER           1 D-LIL PIN         1         XXL340         50         MAN SHER           PULL FIN         1         XXL340         50         MAN SHER           PULL KNOB         1         XXL350         50         MAN SHER           PULL L KNOB         1         XXL340         50         MAN SHER           HANDLE LABEL - BLITZ LITE         2         XXL626         61         EXIT SGMEN	6	DOME PLUG	-	VM4142	45	CLUTCH TRUNION	1	XX325
NAME LABEL - PARTNER LITE         1         XXL670-F         47         CLUTCH BASE           1/4-28 X 3/4 BUTTON HEAD SCREW         2         VT25-28BH750         48         FLAT WASHER - PHENO           1/EG ASSEMBLY         3         XX2905         50         NYLON BUSHING           3/H SPIKE         3         XX482         50         PANL 37 12 DEGREE           5PIKE         3         X482         51         PAWL 37 12 DEGREE           1 C-RING-219         2         VO-219         52         TORSION SPRING           1 C-RING-219         1         XX2356         52         TORSION SPRING           1 C-RING-219         1         XX2340         55         D-WASHER           PULL PIN         1         XX2340         56         BELLEVILLE WASHER           PULL PIN         4         XX2340         56         LO-CATH HEAD           PULL PIN         4         XX2346         56         LO-CATH HEAD           PULL PIN         4         XX2346         56         LO-CATH HEAD           PULL PIN         4         XX2456         56         LO-CATH HEAD           PULL RIN         5         1         XX24656         50         MANLE SPRING	10	NAME LABEL - BLITZ LITE	1	XXL670	46	O-RING -027	1	VO-027
142-28 X 34 BUTTON HEAD SCREW         2         VT25-28BH750         48         FLAT WASHER - PHENO           LEG ASSEMBLY         3         XXL205         49         NYLON BUSHING           31/6"SS BALL         3         XXL205         50         AZTCHER           SPIKE         5         PAML ST 12 DEGREE         51         PAML ST 12 DEGREE           TRUNINION SHIM         2         VO-219         53         PAML 40 DEGREE           O-RING-219         1         XXL325         54         DIRT SEAL           172-13 X 1 BUTTON HEAD SCREW         1         XXL340         56         D-WASHER           PULL PIN SPRING         1         XXX1340         56         D-WASHER           PULL BIN HOUSING         1         XXX350         59         5/16 × 1 SOCKET HEAD           PULL KNOB         1         XXX1430         56         D-WASHER           PULL BIN HOUSING         1         XXX350         59         5/16 × 14 SOCKET HEAD           PULL KNOB         1         XXX1626         61         5/16 × 14 SOCKET HEAD           HANDLE LABEL - BLITZ LITE         2         XXL625         63         5/16 × 18 SCRIME LEAN           HANDLE LABEL - BARINER LITE         2         XXL625		NAME LABEL - PARTNER LITE	_	XXL670-F	47	CLUTCH BASE	_	XX336
LEG ASSEMBLY         1         XXL905         49         NYLON BUSHING           3/16" SS BALL         96         V2120         50         RATCHET           SPIKE         3         X482         51         PAWL 37 12 DEGREE           TRUNNION SHIM         2         VO-219         52         TORSION SPRING           O-RING-219         2         VO-219         53         PAWL 40 DEGREE           TRUNNION         3         VO-219         53         PAWL 40 DEGREE           TRUNNION         1         XXL230         55         D-MASHER           TRUNNION         1         XXL340         56         BELLEVILLE WASHER           PULL PIN         1         XXL340         56         BELLEVILLE WASHER           PULL PIN         1         XXL340         56         BELLEVILLE WASHER           PULL PIN         1         XXL340         56         STIC TH HOUSING           PULL PIN         4         XXL340         57         L12-20 HEX NUT           PULL PIN         4         XXL340         51         LVDTH HOUSING           PULL PIN         4         XXL350         50         STIC STIC HOUSING           PULL PIN         4         XXL250	11		2	VT25-28BH750	48	FLAT WASHER - PHENOLIC	2	VW1.0X500-03
3/16" SS BALL         96         V2120         50         RATCHET           SPIKE         3         X482         51         PAWL 37 1/2 DEGREE           TRUNNION SHIM         2         P330         52         TORSION SPRING           O-RING-219         2         VO-219         53         PAWL 40 DEGREE           TRUNNION         1         XXL235         54         DIASHER           14-20 X 34 SOCKET HEAD SCREW         1         VT50-13BH1.0         56         BELLEVILLE WASHER           17-2.13 X 1 BUTTON HEAD SCREW         1         XXL340         57         1/2-20 HEX NUT           PULL PIN         1         XXL340         56         BELLEVILLE WASHER           PULL PIN HOUSING         1         XXL250         56         LUTCH HOUSING           PULL PIN HOUSING         1         XXL250         56         5/16 X 1 SOCKET HEAD           PULL PIN HOUSING         1         XXL250         56         5/16 X 1 SOCKET HEAD           PULL PIN HOUSING         1         XXL250         56         5/16 X 1 SOCKET HEAD           PULL PIN HOUSING         1         XXL250         57         5/16 X 1 SOCKET HEAD           PULL PIN HOUSING         1         XXL250         58	12	LEG ASSEMBLY	_	XXL905	49	NYLON BUSHING	_	XX334
SPIKE         3         X482         51         PAWL 37 1/2 DEGREE           TRUNNION SHIM         2         P330         52         TORSION SPRING           O-RING-219         2         VO-219         53         PAWL 40 DEGREE           TRUNNION         1         XXL325         54         DIRT SEAL           1/2-13 X 1 BUTTON HEAD SCREW         1         VT56-13BH1.0         56         D-WASHER           PULL PIN         1         XXL340         56         D-WASHER           PULL PIN         1         XXL340         58         51/6 X 15 SOCKET S           PULL PIN         1         XXL340         58         51/6 X 14 SOCKET S           PULL PIN HOUSING         1         XXL350         60         51/6 X 13 SOCKET S           PULL RANDB         1         XXL350         60         51/6 X 14 SOCKET S           PULL RANDB         1         XXL626-F         63         CLUTCH HOUSING           HANDLE LABEL - PARTNER LITE         2         XXL626-F         63         O-RING-235           SHUTOFF HANDLE         1         XXL626-F         63         CRIT SEGMENT           SHUTOFF HANDLE         1         XXL626-F         65         EXIT SEGMENT	13	3/16" SS BALL	96	V2120	20	RATCHET	1	XX333
TRUNNION SHIM         2         P330         52         TORSION SPRING           O-RING-219         2         VO-219         53         PAWL 40 DEGREE           TRUNNION         1/4-20 x 3/4 SOCKET HEAD SCREW         1         XXL326         56         D-WASHER           1/2-13 X 1 BUTTON HEAD SCREW         1         XXL340         56         BELLEVILLE WASHER           PULL PIN SPRING         1         XXL340         58         CLUTCH HOUSING           PULL RNOB         1         XX345         59         5/16 X 1 SOCKET HEAD           PULL RNOB         1         XX345         59         5/16 X 1 SOCKET HEAD           PULL RNOB         1         XX345         60         5/16 X 1 SOCKET HEAD           PULL RNOB         1         XX1626         60         5/16 X 1 SOCKET SCKET	14	SPIKE	3	X482	51	PAWL 37 1/2 DEGREE	_	XX332
O-RING-219         2         VO-219         53         PAWL 40 DEGREE           TRUNNION         TRUNNION         1         XXL325         54         DIRT SEAL           1/4-20 X 3/4 SOCKET HEAD SCREW         1         VT25-20SH750         56         D-WASHER           1/2-13 X 1 BUTTON HEAD SCREW         1         XXL340         56         BELLEVILLE WASHER           PULL PIN         1/2-30 HEX NUT         57         1/2-20 HEX NUT           PULL PIN SPRING         1         XXL340         58         CLUTCH HOUSING           PULL PIN HOUSING         1         XX345         59         5/16-18 X 1/4 SOCKET HEAD           PULL RNOB         1         XXX341         60         5/16-18 X 1/4 SOCKET HEAD           PULL RNOB         1         XXX1626         60         5/16-18 X 1/4 SOCKET HEAD           PULL RNOB         1         XXX1626-F         63         5/16-18 X 1/4 SOCKET HEAD           PULL RANDLE LABEL - PARTNER LITE         2         XXL626-F         63         63         64         EXIT SEGMENT           ABHU CFF HANDLE         1         XXL620         65         EXIT SEGMENT         66         SWINCEL TRUNNION / WH           SHIM 2-5/8 O.D.         2         V4300         69 <t< td=""><td>15</td><td>TRUNNION SHIM</td><td>2</td><td>P330</td><td>52</td><td>TORSION SPRING</td><td>2</td><td>XX338</td></t<>	15	TRUNNION SHIM	2	P330	52	TORSION SPRING	2	XX338
TRUNNION         1         XXL325         54         DIRT SEAL           1/4-20 X 3/4 SOCKET HEAD SCREW         1         VT25-20SH750         55         D-WASHER           1/2-13 X 1 BUTTON HEAD SCREW         1         XT50-13BH1.0         56         BELLEVILLE WASHER           PULL PIN         PULL PIN         57         1/2-20 HEX NUT           PULL PIN HOUSING         1         XX345         58         CLUTCH HOUSING           PULL PIN HOUSING         1         XX345         59         5/16-18 X 1/4 SOCKET 1EAD           PULL KNOB         1         XX345         60         5/16-18 X 1/4 SOCKET 1EAD           PULL KNOB         1         XX345         60         5/16-18 X 1/4 SOCKET 1EAD           PULL KNOB         1         XX1626         63         5/16-18 X 1/4 SOCKET 1EAD           PULL KNOB         1         XX1626         63         5/16-18 X 1/4 SOCKET 1EAD           PULL KNOB         1         XX1626         63         5/16-18 X 1/4 SOCKET 1EAD           HANDLE LABEL - PARTNER LITE         2         XX1626         63         5/16-18 X 1/4 SOCKET 1EAD           SHUTOFF HANDLE         1         XX1626         63         5/14-20 X 1/2 BUTTON HANG           SHIM 2-5/8 BOLE         1	16	O-RING-219	2	VO-219	53	PAWL 40 DEGREE	_	XX331
1/4-20 X 3/4 SOCKET HEAD SCREW         1         VT25-20SH750         55         D-WASHER           1/2-13 X 1 BUTTON HEAD SCREW         1         XXL340         56         BELLEVILLE WASHER           PULL PIN         1         XXL340         57         1/2-20 HEX NUT           PULL PIN         3/45         58         CLUTCH HOUSING           PULL PIN HOUSING         1         XX341         60         5/16 X 1 SOCKET HEAD           PULL KNOB         1         XX341         60         5/16 X 1 SOCKET HEAD           PULL KNOB         1         XX341         60         5/16 X 1 SOCKET HEAD           PULL KNOB         1         XX1626         60         5/16 X 1 SOCKET HEAD           PULL KNOB         1         XX1626         62         MAVE SPRING WASHER           HANDLE LABEL - PARTNER LITE         2         XX1626         63         O-RING-235           HANDLE LABEL - PARTNER LITE         1         XX1620         65         EXIT 2.6"           SINGLE HANDLE         1         XX1620         65         EXIT 2.6"           SHUTOFF HANDLE         1         XX1620         65         SWIVEL TRUNNION / WHANDLE           SHIM 2-5/8 O.D.         2         V4300         70         1	17	TRUNNION	1	XXL325	54	DIRT SEAL	1	XX339
1/2-13 X 1 BUTTON HEAD SCREW         1         VT50-13BH1.0         56         BELLEVILLE WASHER           PULL PIN         XXL340         57         1/2-20 HEX NUT           PULL PIN SPRING         1         XX345         58         CLUTCH HOUSING           PULL PIN HOUSING         1         XX340         50         5/16-X1 SOCKET HEAD           PULL RNOB         1         XX341         60         5/16-X1 SOCKET HEAD           PULL KNOB         1         XX341         61         SWIVEL TRUNNION           PULL KNOB         1         XX341         61         SWIVEL TRUNNION           PULL KNOB         2         XXL626         63         5/16-X12 SOCKET	18	1/4-20 X 3/4 SOCKET HEAD SCREW	_	VT25-20SH750	22	D-WASHER	_	XX350
PULL PIN         XXL340         57         1/2-20 HEX NUT           PULL PIN SPRING         1         X345         58         CLUTCH HOUSING           PULL PIN HOUSING         1         XX350         59         5/16 X 1 SOCKET HEAD           PULL KNOB         1         XX341         60         5/16-18 X 1/4 SOCKET S           PULL KNOB         1         XX341         61         SWIVEL TRUNNION           PIN 1/8 X 3/4         1         VP125X750H         62         MAVE SPRING WASHER           HANDLE LABEL - BARTNER LITE         2         XXL626-F         63         SWIVEL TRUNNION           HANDLE LABEL - PARTNER LITE         2         XXL626-F         63         O-RING-235           3/8-16 ACORN NUT         1         XXL626-F         63         CAING-235           SINGLE HANDLE TOP         1         XXL626         65         EXIT SEGMENT           SHUTOFF HANDLE         1         XXL620         65         EXIT SEGMENT           SHUTOFF HANDLE         1         XXL620         66         1/4-20 X 1/2 BUTTON HE           SHIM 2-5/8 BORE         1         V4310         69         STRAP ASSEMBLY W/H           VALVE BALL         2         V4300         70         10-24 X 3/8 F	19	1/2-13 X 1 BUTTON HEAD SCREW	1	VT50-13BH1.0	26	BELLEVILLE WASHER	1	VW1.0X512-BV
PULL PIN SPRING         1         X345         58         CLUTCH HOUSING           PULL FIN HOUSING         1         XX350         59         5/16 X 1 SOCKET HEAD           PULL KNOB         1         XX341         60         5/16 X 1 SOCKET HEAD           PULL KNOB         1         VP125X750H         60         5/16 X 1/4 SOCKET S           PIN 1/8 X 3/4         1         VP125X750H         61         SWIVEL TRUNNION           HANDLE LABEL - BLITZ LITE         2         XXL626-F         62         WAVE SPRING WASHER           HANDLE LABEL - PARTNER LITE         2         XXL626-F         63         O-RING-235           3/8-16 ACORN NUT         1         VT37-16AC         63         O-RING-236           SINGLE HANDLE         1         XXL625         65         EXIT SEGMENT           SHINGLE HANDLE         1         XXL625         65         EXIT SEGMENT           SHOTE HANDLE         1         XXL620         65         EXIT SEGMENT           WAVE SPRING 2-5/8 BORE         1         V4310         66         STRAP ASSEMBLY W/H           VALVE BALL         1         YA300         70         70         10-24 X 3/8 FLAT HEAD           O-RING-236         1         VO-038	20	PULL PIN	_	XXL340	22	1/2-20 HEX NUT	_	VT50-20NT
PULL KNOB         1         XX350         59         5/16 X 1 SOCKET HEAD           PULL KNOB         1         XX341         60         5/16-18 X 1/4 SOCKET S           PULL KNOB         1         VP125X750H         60         5/16-18 X 1/4 SOCKET S           PIN 1/8 X 3/4         1         VP125X750H         60         5/16-18 X 1/4 SOCKET S           HANDLE LABEL - PARTNER LITE         2         XXL626-F         63         WAVE SPRING WASHER           HANDLE LABEL - PARTNER LITE         2         XXL626-F         63         O-RING-235           3/8-16 ACORN NUT         1         VT37-16AC         64         EXIT 2.5"           SINGLE HANDLE TOP         1         XXL620         65         EXIT SEGMENT           SHUTOFF HANDLE         1         XXL620         65         EXIT SEGMENT           SHUTOFF HANDLE         1         XXL620         65         EXIT SEGMENT           SHUTOFF HANDLE         1         XXL620         65         EXIT SEGMENT           WAVE SPRING 2-5/8 BORE         1         V4310         68         SWIVEL TRUNNION / KN           VALOE BALL         2         V4300         70         10-24 X 3/8 FLAT HEAD / KN           VALOE BALL         1         VO-038	71	PULL PIN SPRING	_	X345	28	CLUTCH HOUSING	_	XX337
PULL KNOB         1         XX341         60           PIN 1/8 X 3/4         1         VP125X750H         61           HANDLE LABEL - BLITZ LITE         2         XXL626         62           HANDLE LABEL - PARTNER LITE         2         XXL626-F         63           3/8-16 ACORN NUT         1         VT37-16AC         64           SINGLE HANDLE         1         XXL625         65           SHUTOFF HANDLE         1         XXL620         66           SHUTOFF HANDLE         1         XXL620         66           SHIM 2-5/8 BORE         1         V4310         68           SHIM 2-5/8 O.D.         2         V4300         69           VALVE BALL SEAT         2         V0-038         71           VALVE BALL         1         V0-038         71           VALVE BALL         1         VO-236         73           O-RING-236         1         XXL420         73	22	PULL PIN HOUSING	_	XX350	29		_	VT31-00SB1.0
PIN 1/8 X 3/4         1         VP125X750H         61           HANDLE LABEL - BLITZ LITE         2         XXL626         62           HANDLE LABEL - PARTNER LITE         2         XXL626-F         63           3/8-16 ACORN NUT         1         VT37-16AC         64           SINGLE HANDLE TOP         1         XXL625         65           SHUTOFF HANDLE         1         XXL620         66           3/8-16 X 1-3/4 BUTTON HEAD SCREW         1         V4310         67           WAVE SPRING 2-5/8 BORE         1         V4310         68           SHIM 2-5/8 O.D.         2         V4300         69           VALVE BALL SEAT         2         V0-038         71           VALVE BALL         1         V0-038         71           VALVE BALL         1         VO-236         73           O-RING-236         1         XXL420         74	23	PULL KNOB	_	XX341	09	SET	2	VT31-18SS250
HANDLE LABEL - BLITZ LITE       2       XXL626       62         HANDLE LABEL - PARTNER LITE       2       XXL626-F       63         3/8-16 ACORN NUT       1       VT37-16AC       64         SINGLE HANDLE TOP       1       XXL625       65         SHUTOFF HANDLE       1       XXL620       66         3/8-16 X 1-3/4 BUTTON HEAD SCREW       1       V4310       67         WAVE SPRING 2-5/8 BORE       1       V4310       68         SHIM 2-5/8 O.D.       2       V4300       69         VALVE BALL SEAT       2       V0-038       71         VALVE BALL       1       P305       72         VALVE BALL       1       VO-038       71         VALVE BALL       1       VO-236       73         O-RING-236       1       XXL420       74	24	PIN 1/8 X 3/4	1	VP125X750H	61	SWIVEL TRUNNION	2	XX320
HANDLE LABEL - PARTNER LITE       2       XXL626-F       63         3/8-16 ACORN NUT       1       VT37-16AC       64         SINGLE HANDLE       1       XXL625       65         SHUTOFF HANDLE       1       XXL620       66         3/8-16 X 1-3/4 BUTTON HEAD SCREW       1       VT37-16BH1.7       67         WAVE SPRING 2-5/8 BORE       1       V4310       68         SHIM 2-5/8 O.D.       2       V4300       69         VALVE BALL SEAT       2       V0-038       71         VALVE BALL       1       P305       72         VALVE BALL       1       VO-236       73         O-RING-236       1       XXL420       74	25	- BLITZ	2	XXL626	62	.74	2	VW740X550-16
3/8-16 ACORN NUT       1       VT37-16AC       64         SINGLE HANDLE TOP       1       XXL625       65         SHUTOFF HANDLE       1       XXL620       66         3/8-16 X 1-3/4 BUTTON HEAD SCREW       1       VT37-16BH1.7       67         WAVE SPRING 2-5/8 BORE       1       V4310       68         SHIM 2-5/8 O.D.       2       V4300       69         VALVE BALL SEAT       2       P315       70         O-RING-038       2       VO-038       71         VALVE BALL       1       VO-236       73         O-RING-236       1       XXL420       74		$\vdash$	2	XXL626-F	63	O-RING-235	2	VO-235
SINGLE HANDLE TOP         1         XXL625         65           SHUTOFF HANDLE         1         XXL620         66           3/8-16 X 1-3/4 BUTTON HEAD SCREW         1         VT37-16BH1.7         67           WAVE SPRING 2-5/8 BORE         1         V4310         68           SHIM 2-5/8 O.D.         2         V4300         69           VALVE BALL SEAT         2         V0-038         71           VALVE BALL         1         P305         72           VALVE BALL         1         VO-038         71           VALVE BALL         1         VO-236         73           O-RING-236         1         XXL420         74	26	3/8-16 ACORN NUT	_	VT37-16AC	64	EXIT 2.5"	_	XX310*
SHUTOFF HANDLE       1       XXL620       66         3/8-16 X 1-3/4 BUTTON HEAD SCREW       1       VT37-16BH1.7       67         WAVE SPRING 2-5/8 BORE       1       V4310       68         SHIM 2-5/8 O.D.       2       V4300       69         VALVE BALL SEAT       2       P315       70         O-RING-038       2       VO-038       71         VALVE BALL       1       P305       72         O-RING-236       1       VO-236       73         OUTLET       1       XXL420       74	27	SINGLE HANDLE TOP	_	XXL625	65	EXIT SEGMENT	_	XX305
3/8-16 X 1-3/4 BUTTON HEAD SCREW         1         VT37-16BH1.7         67         KNEE SUPPORT PAD           WAVE SPRING 2-5/8 BORE         1         V4310         68         SWIVEL TRUNNION / KN           SHIM 2-5/8 O.D.         2         V4300         69         STRAP ASSEMBLY W/ H           VALVE BALL SEAT         2         VO-038         70         10-24 X 3/8 FLAT HEAD           O-RING-038         1         VO-038         71         STRAP REEL FLANGE           VALVE BALL         1         VO-236         72         STAND OFF 3/8 X 1.0 LC           O-RING-236         1         VO-236         73         EXIT FIN INSERT           OUTLET         1         XXL420         74         EXIT FIN HANDLE	28		_	XXL620	99	1/4-20 X 1/2 BUTTON HEAD SCREW	2	VT25-20BH500
WAVE SPRING 2-5/8 BORE         1         V4310         68         SWIVEL TRUNNION / KN           SHIM 2-5/8 O.D.         2         V4300         69         STRAP ASSEMBLY W/ F           VALVE BALL SEAT         2         V0-038         70         10-24 X 3/8 FLAT HEAD           O-RING-038         2         V0-038         71         STRAP REEL FLANGE           VALVE BALL         1         P305         72         STAND OFF 3/8 X 1.0 LC           O-RING-236         1         V0-236         73         EXIT FIN INSERT           OUTLET         1         XXL420         74         EXIT FIN HANDLE	29	- 1	_	VT37-16BH1.7	29	KNEE SUPPORT PAD	2	XXL477
SHIM 2-5/8 O.D.         2         V4300         69         STRAP ASSEMBLY W/ I           VALVE BALL SEAT         2         V315         70         10-24 X 3/8 FLAT HEAD           O-RING-038         2         VO-038         71         STRAP REEL FLANGE           VALVE BALL         1         P305         72         STAND OFF 3/8 X 1.0 LC           O-RING-236         1         VO-236         73         EXIT FIN INSERT           OUTLET         1         XXL420         74         EXIT FIN HANDLE	30	SPRING 2-5/8 BOR	_	V4310	89	SWIVEL TRUNNION / KNOB	_	XXL320
VALVE BALL SEAT         2         P315         70         10-24 X 3/8 FLAT HEAD           O-RING-038         2         VO-038         71         STRAP REEL FLANGE           VALVE BALL         1         P305         72         STAND OFF 3/8 X 1.0 LG           O-RING-236         1         VO-236         73         EXIT FIN INSERT           OUTLET         1         XXL420         74         EXIT FIN HANDLE	31	2-5/8	7	V4300	69	STRAP ASSEMBLY W/ HOOK	_	XXL455-R
O-RING-038       2       VO-038       71         VALVE BALL       1       P305       72         O-RING-236       1       VO-236       73         OUTLET       1       XXL420       74	32		7	P315	70		4	VT10-24FH500
VALVE BALL         1         P305         72           O-RING-236         1         VO-236         73           OUTLET         1         XXL420         74	33	O-RING-038	7	VO-038	71	STRAP REEL FLANGE	7	XXL501
O-RING-236         1         VO-236         73           OUTLET         1         XXL420         74	34	VALVE BALL	_	P305	72	STAND OFF 3/8 X 1.0 LONG	7	XXL502
OUTLET 1 XXL420 74	35	O-RING-236	_	VO-236	73	EXIT FIN INSERT	_	XXL405
	36	OUTLET	_	XXL420	74	EXIT FIN HANDLE	_	XXL407

# **10.3 OSCILLATOR EXPLODED VIEW**



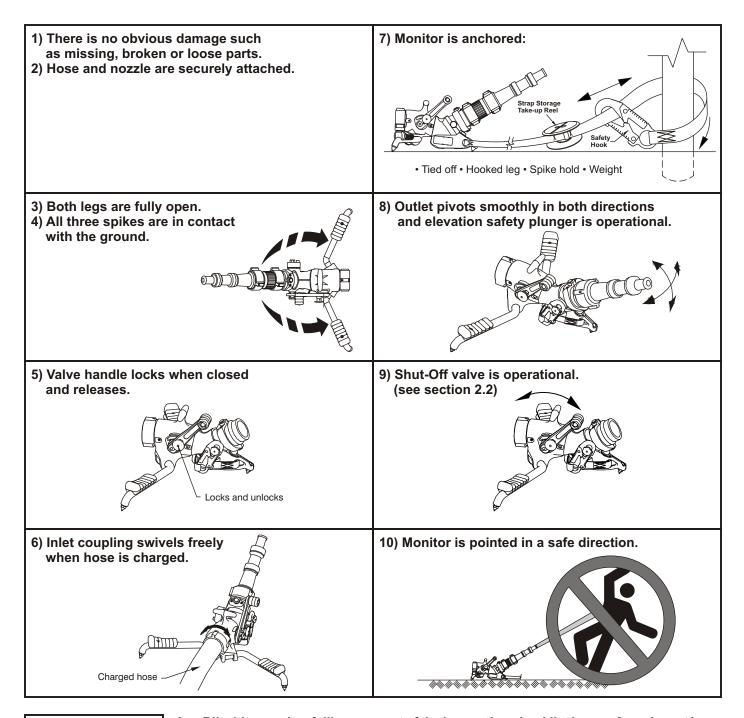
# **10.3 PARTS LIST OSCILLATOR**

#	DESCRIPTION	QTY	PART #	#	DESCRIPTION	QTY	PART #
-	INLET BALL HARDCOAT	-	XX015	25	SLIDE PIVOT MACHINED	1	XX067
7	147 O-RING	2	VO-147	56	ARM SLIDE HARDCOAT	1	XX065
က	WATERWAY DK BLUE POWDERCOAT	-	XX010	27	WASHER	1	VW812X406-65
4	EXIT 2.5"* -HARDCOAT	1	XX020 *	28	LINK MACHINED	1	XX055
2	10-32 X 1/4 SOCKET SET	2	VT10-32SS250	59	ROD END	1	XX056
	SCREW STAINLESS			30	GUARD	1	XX077
9	10-32 X ½ BUTTON HEAD	9	VT10E32BH500	31	LINK SLIDE HARDCOAT	-	990XX
	SCREW STAINLESS			32	10-32 X 3/8 BUTTON HEAD CAP SCREW	4	VT10-32BH375
7	TURBINE VANES HARDCOAT	-	XX025	33	3/8 X 1-3/4 STAINLESS PIN	1	XX081
8	153 O-RING	1	VO-153	34	3/16 X 1-3/4 STAINLESS PIN	2	XX080
6	WORM AND SHAFT	1	XX030	35	LINK TRIGGER MACHINED	1	XX075
10	GEAR BOX DK BLUE POWDERCOAT	-	XX005	36	PALM BUTTON GREEN	-	XX072-GRN
7	COVER	-	XX045	37	10-32 X 1/2 SOCKET HEAD CAP SCREW	2	VT10-32SH500
12	1/4-20 X 7/8 STAINLESS SOCKET	-	VT25-20SH875	38	PALM BUTTON RED	-	XX072-RED
	CAP SCREW			39	LINK RELEASE	1	XX070
13	WORM GEAR	1	XX040	40	RELEASE SPRING	1	XX071
14	WORM SHAFT BEARING	2	XX035	41	PULL PIN	1	XX340
15	SNAP RING 1-1/8 INTERNAL X .05	2	VR4255	42	PULL PIN SPRING	1	XX342
16	119 O-RING	2	VO-119	43	PULL PIN HOUSING	1	X350
17	SHAFT CAP	1	XX037	44	PULL KNOB	1	XX341
18	SNAP RING 1/2" EXTERNAL X .035	2	VR4250	45	5/16-18 X 5/8 BUTTON HEAD CAP SCREW	2	VT31-18BH625
19	CUP SEAL 1 OD X .5 ID X ¼ WIDE BUNA N	1	XX033	46	INDICATOR	1	XX068
20	1/8 X ¾ SPIROL PIN	3	VP125X750H	47	ARM	1	090XX
21	CRANK HARDCOAT	-	XX050	48	NAME LABEL - OSCILLATOR	1	XL610
22	#10 WASHER	-	VW500X203-60	49	SWIVEL TRUNION	7	XX320
23	TURBINE SEAL	-	XX032	20	EXIT SEGMENT	-	XX305
24	5/32 X 7/8 HDP SPIROL PIN #12437	1	V1900	51	5/32 x 1/2 SPIROL PIN	2	V1950

\* Consult Factory For Special Threads.

#### 11.0 OPERATION CHECKLIST

Monitor must be inspected for proper operation and function according to this checklist before each use. Before flowing water check:





Any Blitz Lite monitor failing any part of the inspection checklist is unsafe and must have the problem corrected before use. Operating a Blitz Lite that fails any of the above inspections is a misuse of this equipment.

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