



®

**Instructions for the following
series products:**

Rescue Davit System

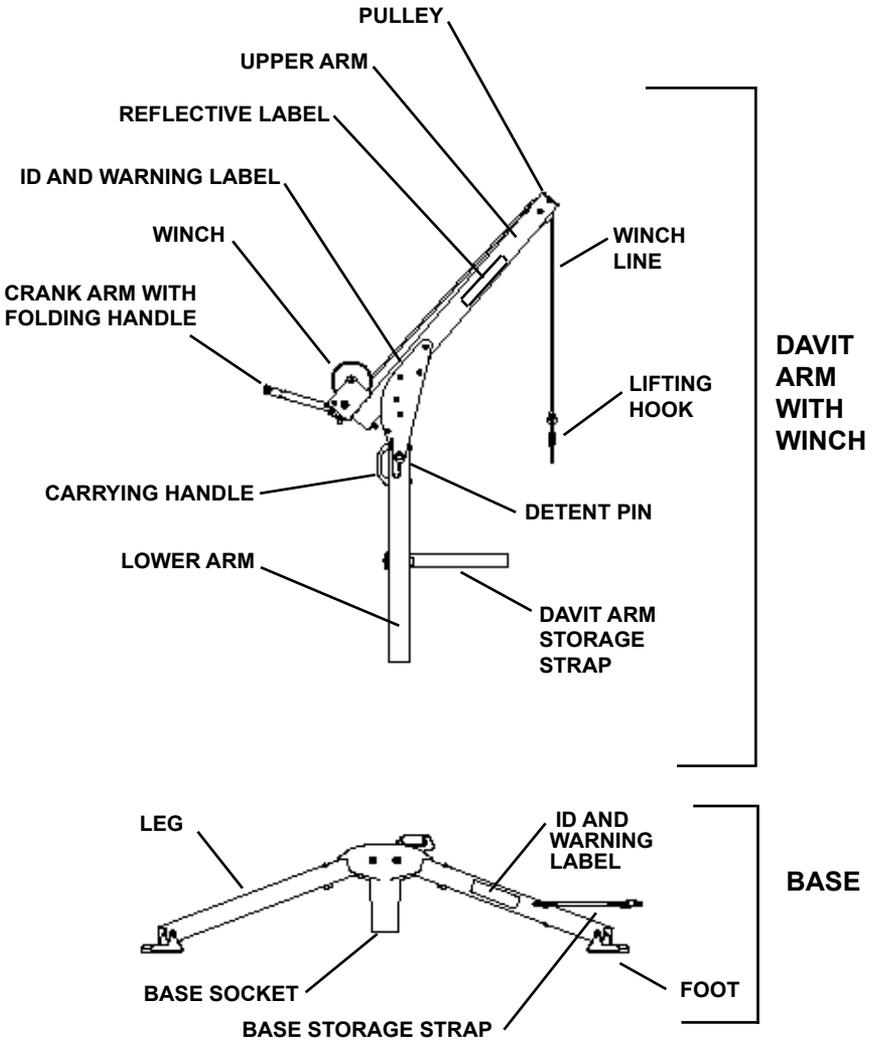
Model numbers 8004000 and
8302500

User Instruction Manual For Davit Rescue System

*This manual should be used as part of an employee training
program as required by OSHA.*



Figure 1 - Davit Arm & Base Parts Identification



WARNING: *This product is part of a rescue or evacuation system. The user must read and follow the manufacturer's instructions for each component or part of the complete system. These instructions must be provided to the user of this equipment. The user must read and understand these instructions or have them explained before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this product. Alterations or misuse of this product or failure to follow instructions may result in serious injury or death.*

IMPORTANT: *If you have any questions on the use, care, application, or suitability for use of this safety equipment, contact DBI/SALA immediately.*

IMPORTANT: *Before using this equipment, record the product identification information found on the I.D. label of your Rescue Davit System on the inspection and maintenance log in section 9.0 of this manual.*

DESCRIPTIONS:

Davit Arm: Portable davit arm with rescue winch and base. Aluminum and zinc-plated steel construction, see Figure 1.

1.0 APPLICATIONS:

1.1 PURPOSE: DBI/SALA's Rescue Davit System is designed to be used as part of a rescue or evacuation system. The davit arm and base acts as a support structure or anchorage for this purpose.

1.2 LIMITATIONS: The following limitations must be recognized and considered before using this product. Failure to observe product limitations could result in serious injury or death.

- A. INSTALLATION:** The davit arm and base must be properly installed in accordance with the requirements found in section 3.0 of this manual.
- B. CAPACITY:** The maximum working load for this product is 350 lbs. (160 kg) for personnel or 175 lbs. (80 kg) for material.
- C. PERSONAL FALL ARREST SYSTEMS:** This Rescue Davit System is not designed to be used as an anchorage for fall arrest purposes.
- D. PHYSICAL AND ENVIRONMENTAL HAZARDS:** Use of this equipment in areas containing physical or environmental hazards may require that additional precautions be taken to reduce the possibility of damage to this equipment or injury to the user(s).

Hazards may include but are not limited to high heat such as welding or metal cutting, strong or caustic chemicals such as acids, corrosive environments such as exposure to sea water, high voltage power lines, explosive or toxic gases, moving machinery or sharp edges. Contact DBI/SALA if you have any questions about the application of this equipment in areas where physical or environmental hazards are present.

E. TRAINING: This equipment is intended to be installed and used by persons who have been properly trained in its correct application and use.

1.3 Refer to national consensus standards including ANSI Z117.1-1989, applicable local, state and federal (OSHA) requirements including 26 CFR 1910.146, for more information on the application of this and associated equipment.

2.0 SYSTEM REQUIREMENTS

2.1 COMPATIBILITY OF COMPONENTS: DBI/SALA equipment is designed for use with DBI/SALA approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may effect the safety and reliability of the complete system.

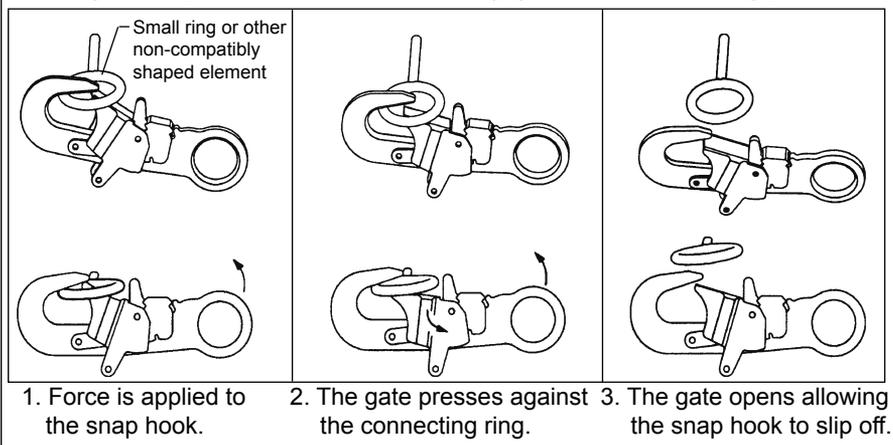
2.2 COMPATIBILITY OF CONNECTORS: Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Contact DBI/SALA if you have any questions about compatibility.

Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22.2kN). Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage. See Figure 2. Connectors must be compatible in size, shape, and strength. Self locking snap hooks and carabiners are required by ANSI Z359.1 and OSHA.

2.3 MAKING CONNECTIONS: Only use self-locking snap hooks and carabiners with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

Figure 2 - Unintentional Disengagement (Roll-out)

If the connecting element that a snap hook (shown) or carabiner attaches to is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.



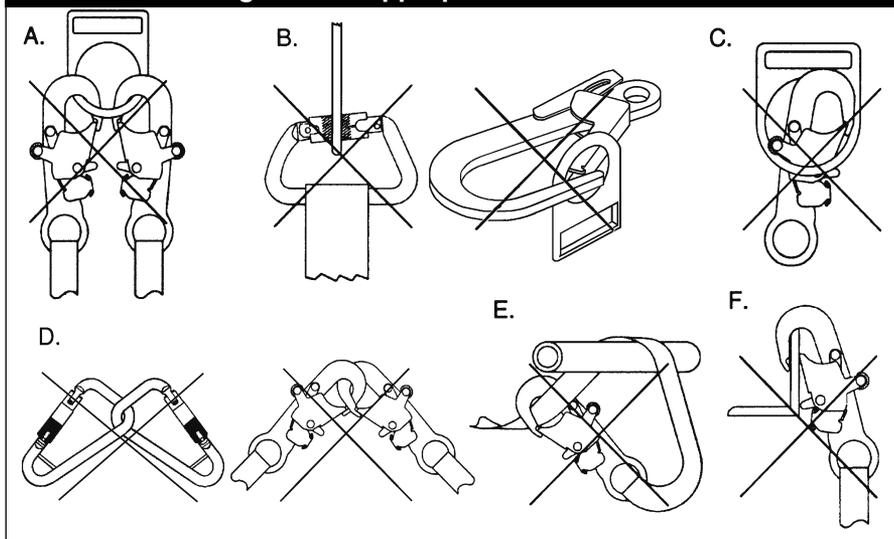
DBI/SALA connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 3 for inappropriate connections. DBI/SALA snap hooks and carabiners should not be connected:

- A. To a D-ring to which another connector is attached.
- B. In a manner that would result in a load on the gate.

NOTE: Large throat opening snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.

- C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor and without visual confirmation seems to be fully engaged to the anchor point.
- D. To each other.
- E. Directly to web lanyard or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection).

Figure 3 - Inappropriate Connections



F. To any object which is shaped or dimensioned such that the snap hook or carabiner will not close and lock, or that roll-out could occur.

2.3 STRUCTURAL STRENGTH: The structure (mounting surface) to which the Rescue Davit System is installed must meet minimum strength requirements:

The structure (mounting surfaces) selected for rescue applications must be capable of sustaining a static load of at least 1,400 lbs. applied in the direction(s) permitted by the rescue system when in use. Each Rescue Davit System installation must be independently capable of sustaining this load.

3.0 OPERATION AND USE:

WARNING: Do not alter or intentionally misuse this equipment, your safety may depend on it. Consult DBI/SALA when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the proper operation of this equipment. Use caution when using this equipment around moving machinery or electrical hazards. Use caution when using this equipment around sharp edges or chemical hazards.

3.1 BEFORE EACH USE: Before each use of this equipment carefully inspect it to assure that it is in serviceable condition. Check for worn or damaged parts. Ensure all parts (nuts, bolts, etc) are present and

secure. Check davit arms and base legs to ensure they are straight, free of cracks, dents, etc. Check the overall system for signs of severe corrosion. Refer to section 5.0 for further inspection details. Do not use if inspection reveals an unsafe condition.

3.2 PLANNING: Plan your rescue or evacuation system before starting your work. Take into consideration factors that affect your safety at any time during use. Some important points to consider when planning your system are as follows:

- A. HAZARD EVALUATION:** An evaluation of job site hazards is necessary prior to starting work. Consult applicable OSHA and industry standards for guidelines and regulatory requirements.
- B. WORK SITE GEOMETRY:** The installation and use of the Rescue Davit System must be consistent with the geometric requirements given in section 3.4 or 3.5. When suspending winch line from the davit arm, check for obstructions or sharp edges in the work path. Avoid working where the user may swing and hit an object or where lines may cross or tangle with that of another worker in the area.
- C. RESCUE:** In the event of an accident with injuries or other medical emergency, it is critical that a means of dealing with such a situation has been planned in advance. Response time often plays an important role in the survival of an injured worker. Users of this equipment must be trained in emergency procedures as appropriate.

3.4 INSTALLATION OF FIXED BASE

- A. GEOMETRIC REQUIREMENTS:** The base must be mounted on a surface that is sufficiently level such that tipping of the base cannot occur during use. See Figure 4. Position the base such that the pulley will be directly over the intended work area when installed. Avoid positioning the base where, when in use, the winch line may abrade against sharp edges.

IMPORTANT: *The base must be positioned such that the arm will be as directly as possible over the intended work area when installed. It also must be positioned in such a way to ensure a safe working area for the operator.*

3.5 INSTALLATION OF DAVIT ARM TO THE BASE: Place the lower arm of the davit arm into the base socket and lower the arm down into the base, see Figure 5. Next, lift the upper arm into position and pin in place, then rotate the arm into position over work area. Ensure that once installed, the winch line will remain within the feet of the base to prevent tipping. See Figure 4.

Figure 4 - Installation

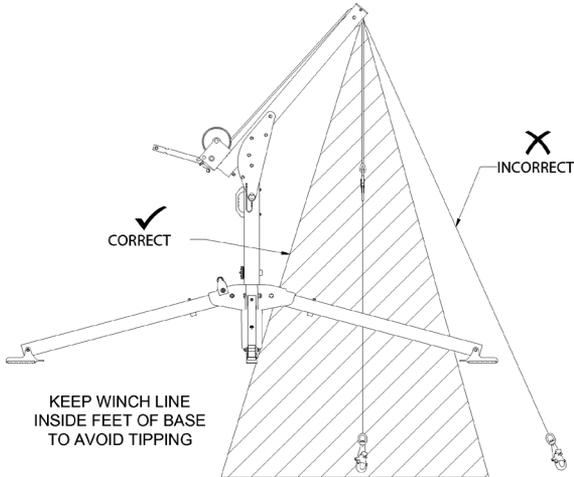
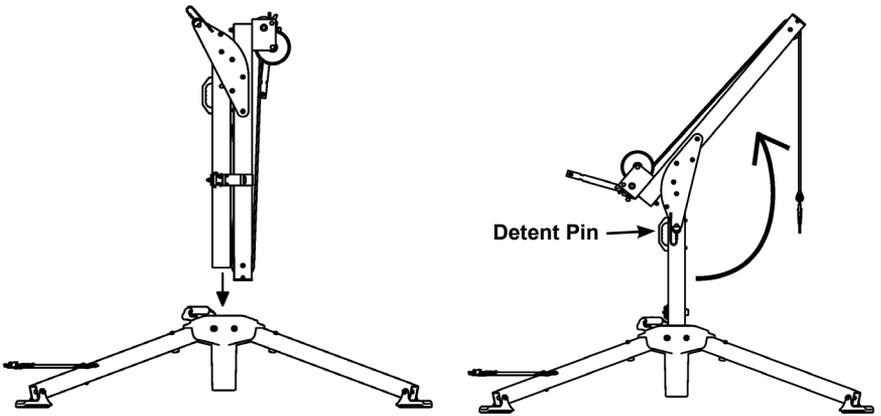
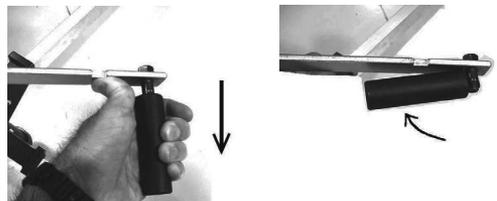


Figure 5 - Installation



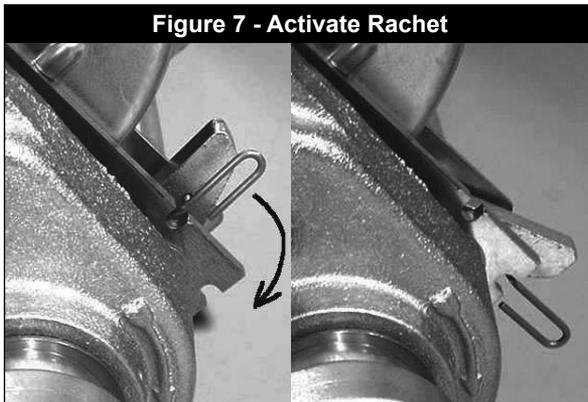
- 3.6 OPERATION OF WINCH:** To operate the winch, fold the handle out on the crank arm to ready the winch for use. See Figure 6. To lower the load, or extend line from the winch, rotate the crank arm in a counterclockwise direction. Note, if there is no load on the winch line, it may be necessary to feed line off the winch by pulling on the hook end of the winch line. To raise the load, rotate the crank arm in the

Figure 6 - Folding Handle



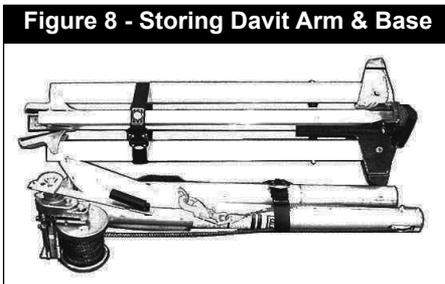
To fold, pull handle out away from crank arm and rotate outer end of handle toward crank arm.

clockwise direction. When winding the winch line onto the winch for storage, ensure the line is not excessively loose and is wound evenly. This winch includes a ratchet feature that may be used when raising a load (the ratchet must be disengaged for lowering). The ratchet is used to hold the load if the operator releases control of the crank arm. See Figure 7 for operation of the ratchet.



3.7 STORAGE:

Figure 8 shows the davit arm and base folded for storage. An eye bolt is provided on the davit arm for connection of the lifting hook when the unit is to be stored. Install the detent pin into the arm when stored to protect it against damage and loss. Both the davit arm and base include storage straps that should be wrapped and connected to secure the units during storage.



3.8 MAINTENANCE:

Lubricate winch gears at least once each year. Apply a light film of open gear lubricant to the gear teeth on all gears. Use Sprayon 201 or equivalent open gear lube. For dirty conditions, use CRC dry graphite lube.

Lubricate winch bearings and shafts at least once each year. Apply 2 to 3 drops of SAE 30 non-detergent oil or “3 in 1” oil to bearings and shafts at all friction points. Rotate the drum several times to allow the oil to penetrate, and wipe off excess oil to avoid accumulation of dirt.

Lubricate the disk brake at least once each year. Place 1 or 2 drops of SAE 30 non-detergent oil or “3 in 1” oil into the hole in the brake housing and turn the brake several times to allow the oil to penetrate.

4.0 TRAINING:

- 4.1** It is the responsibility of the user and the purchaser of this equipment to assure that they are familiar with these instructions, trained in the correct care and use of and are aware of the operating characteristics, application limits and the consequences of improper use of this equipment.

IMPORTANT: *Training must be conducted without exposing the trainee to a fall hazard. Training should be repeated on a periodic basis.*

5.0 INSPECTION:

5.1 FREQUENCY:

- **Before Each Use:** Visually inspect per steps listed in sections 5.2.
- **Periodic** A formal inspection of the davit arm, base, and winch should be conducted by a competent person on a periodic basis as established by the user's organization. DBI/SALA recommends this inspection be conducted at least annually. See section 5.2 for guidelines. Record results in Inspection And Maintenance Log in section 9.0.

WARNING: *If the davit arm or base fails to pass the inspection, do not use, the equipment must be destroyed or sent to DBI/SALA for possible repair.*

5.2 INSPECTION POINTS FOR DAVIT ARM, BASE, AND WINCH:

- Inspect all bolts and nuts. Make certain they are securely attached and tight. Check if any bolts, nuts or other fasteners are missing or have been substituted or altered.
- Check all tubular sections, ensure they are straight and free of cracks, dents, distortion or other damage.
- Ensure the davit arm opens properly and can be locked into place with the detent pin. Ensure the legs open properly.
- Inspect the pulley to ensure it is clean and rotates freely.
- Inspect the base, ensuring it is not damaged and is free of cracks, dents, bends, distortion or other damage.
- Inspect the feet, ensuring they are not damaged and are free of cracks, dents, bends, distortion, or other damage.

- Inspect the unit for signs of corrosion which may weaken or otherwise affect parts in their function.
- Ensure all labels are present and fully legible. See section 8.0.
- Inspect the winch for cracks, dents, bending, rust, wear, corrosion, or other damage.
- Ensure the winch line is anchored securely to the drum.
- Ensure the winch and brake are properly lubricated.
- Ensure fasteners are installed to hold the crank handle in place.
- Test the winch performance by raising a test weight of 100 lbs. Listen for unusual noises and look for signs of damage as the winch is operated. Lower the load and stop it above the ground. If the load continues to coast or creep, the friction disks may be worn and in need of replacement.
- Ensure the winch line winds evenly and tightly onto the drum. If the winch line is loose or uneven, rewind it.
- Ensure the crank handle rotates freely in both directions.
- Ensure the ratchet engages and disengages.
- Record results of inspection in Inspection & Maintenance Log found in section 9.0 of this manual.
- Inspect other system components (ex. body support, etc.) per associated manufacturer's instructions.

5.3 If inspection or operation reveals a defective condition, remove the Rescue Davit System from service immediately and contact an authorized service center for repair.

NOTE: *Only DBI/SALA or parties authorized in writing may make repairs to this equipment.*

6.0 MAINTENANCE - SERVICING - STORAGE:

- 6.1** Periodically clean the exterior of the Rescue Davit System using water and a mild soap detergent solution. Clean labels as required.
- 6.2** Replacement parts as well as additional maintenance and servicing procedures must be completed by a DBI/SALA factory authorized service center.
- 6.3** Store this equipment in a cool, dry and clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Inspect after any period of extended storage.

7.0 SPECIFICATIONS:

The Rescue Davit System meets ANSI Z117.1-1989 and OSHA requirements.

Rated (safe) Working Load:

350 lbs. (160 kg) rescue applications; 175 lbs. (80 kg) material

Davit Arm:

Reach: 24 inches

Height: 70 inches

Weight:

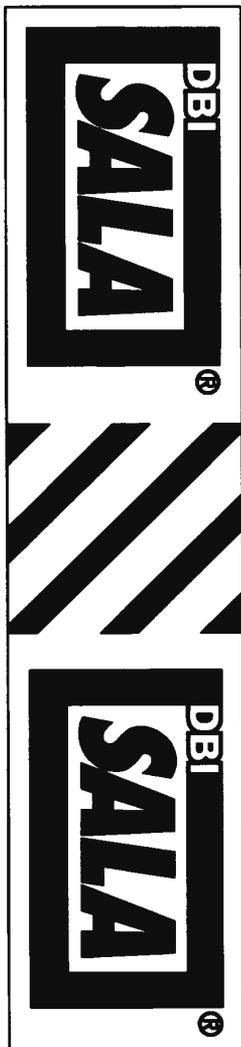
Davit Arm with Winch: 39 lbs.

Base: 38 lbs.

Material: Aluminum and Zinc-plated Steel

8.0 LABELING:

- 8.1** These labels should be securely attached to the Rescue Davit System. See Figure 1 for locations.



Reflective Label

DBI
SALA ®

www.capitalsafety.com

SERIAL NO. XXXXXXXX

SYSTEM MODEL NUMBER:

MFRD(YR/MO): LOT: MODEL NO:

SPECIFICATIONS:

Capacity: 350 lbs (160 kg)
maximum for personnel or
175 lbs (80 kg) for material.

Materials: Aluminum
Zinc plated steel.

Standards: Meets
ANSI Z117.1-1989
OSHA requirements.

⚠ WARNING

Manufacturer's instructions supplied with this product at time of shipment must be followed for proper use, maintenance, and inspection. Alteration or misuse of this product, or failure to follow instruction may result in serious injury or death. Make only compatible connections.

INSPECTION: Before each use inspect Davit Arm & Base to determine if they are in good condition and working properly. At least annually, Davit Arm and Base should be inspected by a competent person in accordance with the User Manual. Do not use if inspection reveals an unsafe or defective condition. Not user repairable.

MADE IN U.S.A. 9501772 Rev. C

ID and Warning Label

9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER: _____

MODEL NUMBER: _____

DATE PURCHASED: _____

INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:			
Approved By:			
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WARRANTY

Equipment offered by DBI/SALA are warranted against factory defects in workmanship and materials for a period of two years from date of installation or use by the owner, provided that this period shall not exceed two years from the date of shipment. Upon notice in writing, DBI/SALA will promptly repair or replace all defective items. DBI/SALA reserves the right to elect to have any defective item returned to its plant for inspection before making a repair or replacement. This warranty does not cover equipment damages resulting from abuse, damage in transit, or other damage beyond the control of DBI/SALA. This warranty applies only to the original purchaser and is the only one applicable to our products, and is in lieu of all other warranties, expressed or implied.



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Certificate No. FM 39709

Form: 5902269
Rev: D