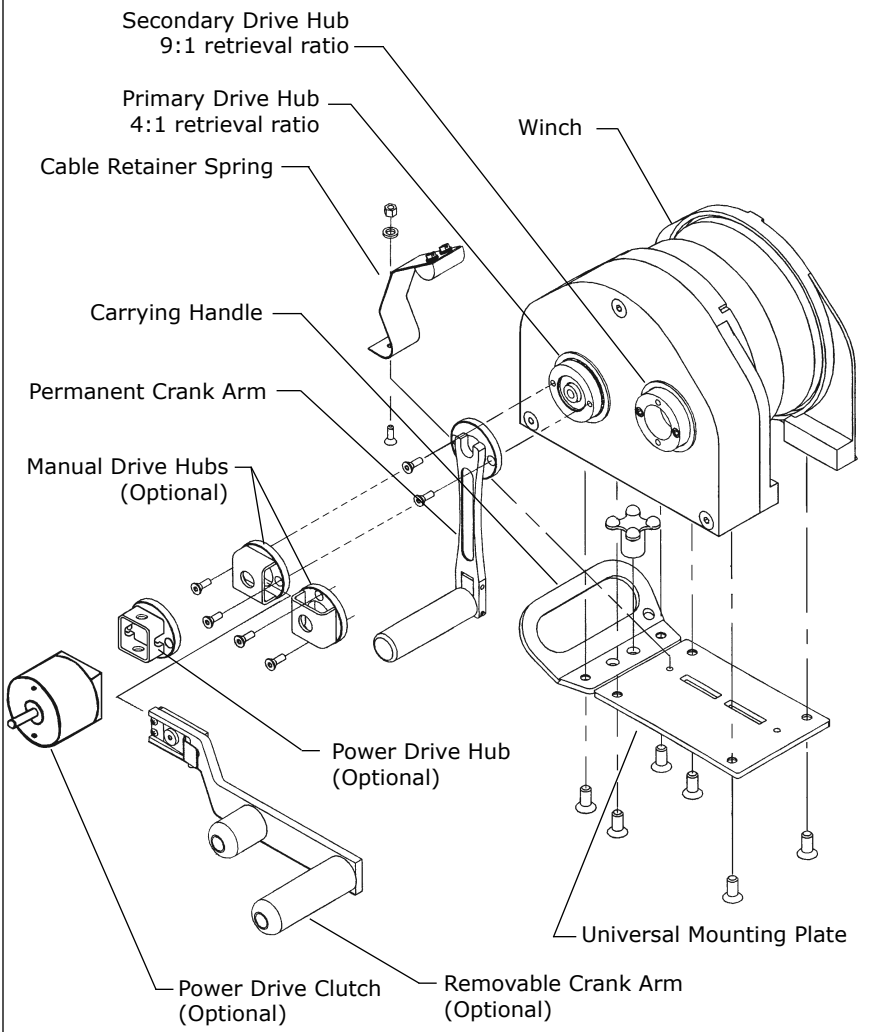
Figure 1 - Parts Identification



DBI-SALA connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user 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.*

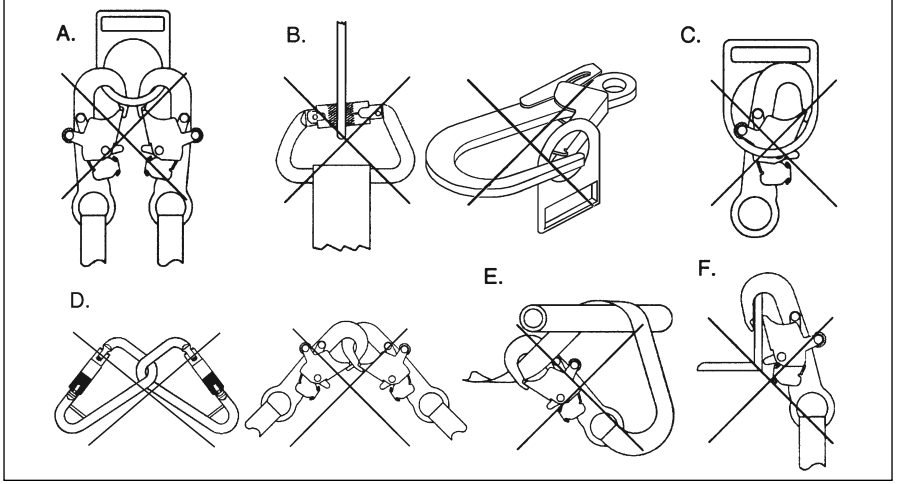
C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.

D. To each other.

E. Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allows such a connection).

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.

Figure 3 - Inappropriate Connections



2.4 SUPPORT STRUCTURE STRENGTH: The support structure to which the winch is installed must meet minimum strength requirements stated in section 3.4

3.0 OPERATION AND USE

WARNING: *Do not alter or intentionally misuse this equipment. 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 operation of this equipment. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, and sharp edges.*

WARNING: *Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall arrest. Age and fitness seriously affect a worker's ability to withstand falls. Pregnant women or minors must not use a DBI-SALA winch, unless for unavoidable emergency use situations.*

3.1 BEFORE EACH USE: Inspect this equipment carefully to ensure it is in good working condition. Check for worn or damaged parts. Ensure all parts are present and secure. Check operation of the winch; ensure that it will lift, lower, and hold the load under normal operation. Check the winch and entire system for damage and corrosion. See section 5.0 for further inspection details. Do not use if inspection reveals an unsafe condition.

3.2 PLANNING: Plan your system and how it will function before starting your work. Consider all factors that affect your safety during use. Some important points to consider when planning your system are:

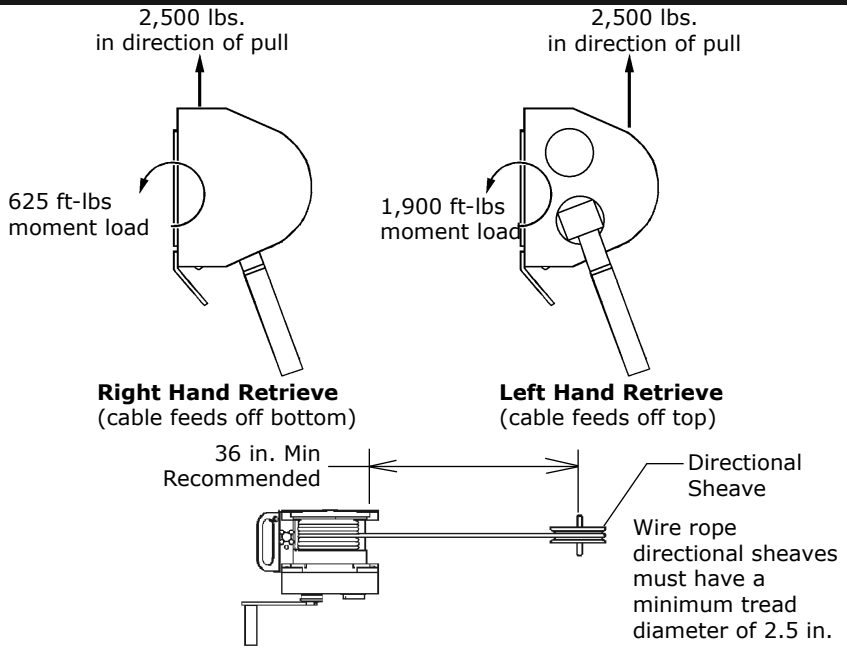
A. HAZARD EVALUATION: Evaluate job site hazards prior to starting work. Consult applicable OSHA and industry standards for guidelines and regulatory requirements on issues such as confined space entry, personal fall arrest systems (PFAS), and single point adjustable suspended scaffolds.

B. WORK SITE GEOMETRY: The installation and use of the support structure (tripod, davit arm and base) must be consistent with the geometric requirements stated in the associated manufacturer's instruction manuals. When suspending working lines from the support structure, 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.

C. SECONDARY OR BACK-UP FALL ARREST SYSTEM: When using the Digital Winch as a support for work positioning or for personnel riding, a secondary or back-up fall arrest system is required. See OSHA 29 CFR 1910.28 and 1926.451. The DBI-SALA tripod and davit arm have provisions for connection of a secondary or back-up PFAS. See sections 3.3 and 3.5 (A).

D. RESCUE: A means of dealing with an accident or emergency must be planned in advance. Response time can play an important role in the survival of an injured worker. Users of this equipment must be trained in emergency procedures.

Figure 4 - Required Load Strength



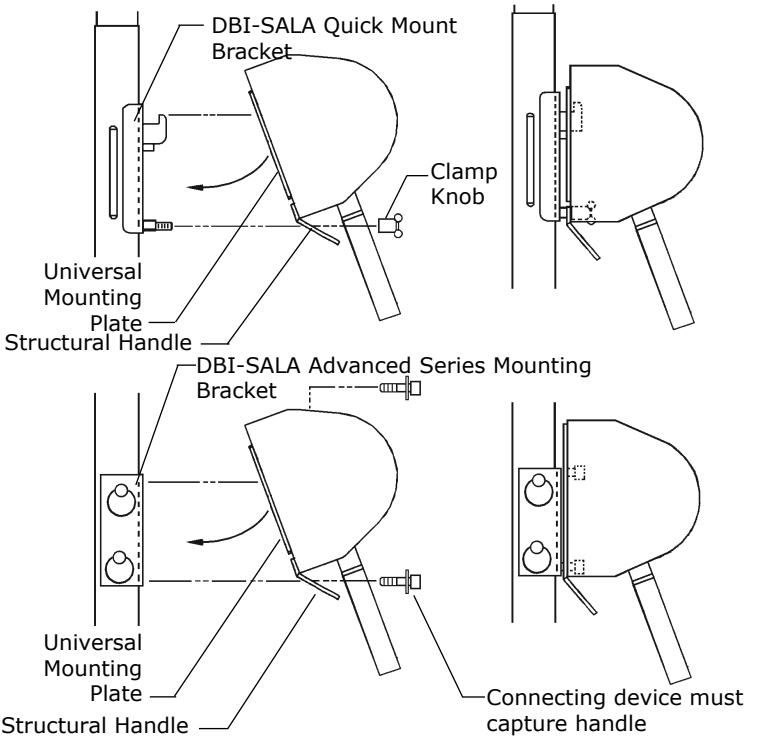
provided by DBI-SALA must meet the geometric requirements shown in Figure 4. Position the support structure so the load and the lifeline of the winch can be directed over the work area when installed. For personnel use, do not position the support structure where the worker will have to swing under the support structure to reach the work area. Avoid positioning the support structure where the working line may abrade against sharp edges.

IMPORTANT: *Position the winch and support structure in a location which allows the operator to safely use the winch.*

C. MOUNTING PLATE: The Digital Winch is equipped with a universal mounting plate. The universal mounting plate is designed to attach to the quick mount bracket and the advanced series winch mount bracket (see Figure 5) and will accommodate most other support structures which meet the requirements specified in section 3.3. See the support system user manual for mounting information or contact DBI-SALA for optional mounting kits. When attaching the winch to the support, one of the attachment features (i.e., bolt or stud) must capture the structural carrying handle.

D. WELDED INSTALLATIONS: If welding the mounting bracket to a support structure it is recommended that the welding be done by a certified welder. Portions of the mounting bracket that have been exposed due to welding should be painted or otherwise protected from corrosion.

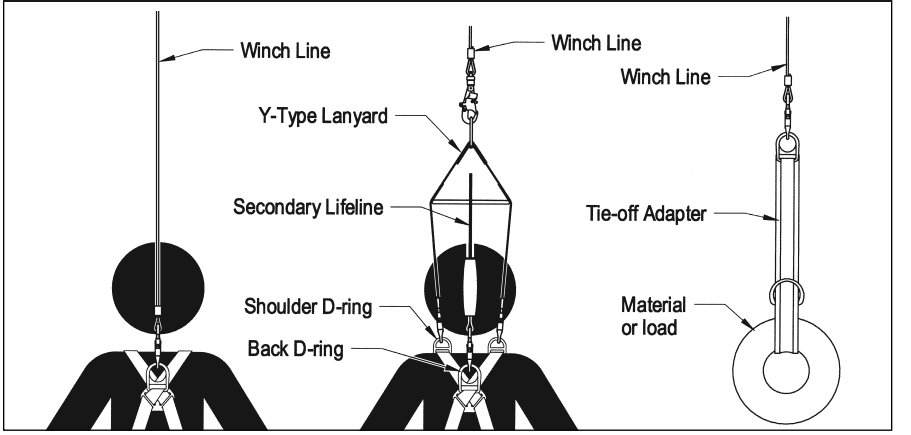
Figure 5 - Mounting Bracket



3.5 OPERATION OF WINCH:

A. CONNECTING THE WINCH LINE TO A LOAD: See Figure 6. For applications that do not require a secondary PFAS, the winch line should be connected to the worker's harness back D-ring. For applications requiring a secondary PFAS, the winch line should be connected to a Y-type lanyard and this lanyard

Figure 6 - Connecting to Winch Line



D. WINCH REMOVAL: Disconnect the lifeline from the worker's harness or from the material load. Maintain at least a 10 lb. (4.5 kg) load on the lifeline winding the lifeline onto the drum. Retract the lifeline through the support structure. See the support structure user instructions. Continue to wind the lifeline onto the drum until the copper ferrules and thimble contact the drum. Disconnect the winch from the support structure. Refer to the support structure user instructions for details.

3.6 LOAD ATTACHMENT: Pull on the snap hook while cranking the handle counterclockwise to extend lifeline until there is sufficient line to comfortably attach to the worker or load. Perform the attachment away from the entrance so there is no danger that the worker or load will fall. Use two hands when attaching the lifeline; one hand maintaining tension on the lifeline, the other to depress the lock and open the gate on the snap hook. Insert the hook into the harness D-ring. Release the gate and ensure the snap hook is securely locked onto the D-ring.

3.7 SYSTEM INTEGRITY: Verify the integrity of the attachment and support system as follows:

A. Crank the winch handle in the raise direction until the line is snug. The worker should slowly transfer their weight to the harness and lifeline until they are able to lift both feet off the ground.

B. Make sure the winch holds the worker in a stationary position. Also adjust the fit of the harness at this time so that it does not pinch, chafe or bind.

IMPORTANT: *Do not use winch for lifting or lowering of more than one person, except for emergency situations. The maximum lifting force is 450 lbs. (2.0 Kn)*

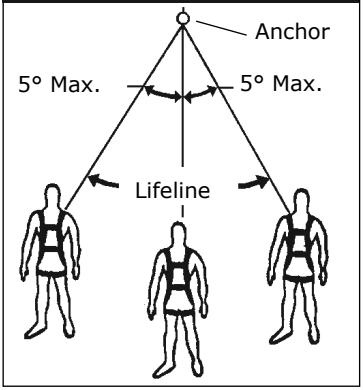
3.8 LOWERING A WORKER: The attendant should turn the winch handle counterclockwise to pay out the lifeline. The attendant should keep a gloved hand on the lifeline as it extends to keep a slight tension on the lifeline.

If the line becomes tight or slack during use, communicate with the suspended worker to determine whether there is a problem. Correct any problems before proceeding.

WARNING: *If the cranking tension eases during lowering, the person or material being lowered has reached a work level or obstruction. Do not continue cranking without communicating with the person or checking the material being lowered. Always keep the cable tension firm. Slack cable could cause a free fall.*

While a worker is suspended maintain the swing angle at less than 5°. The worker can be seriously injured in a swing fall at more than 5° (see Figure 8).

Figure 8 - Swing Angle



If the worker is not suspended and there is no chance of a fall. The attendant may pay out sufficient line [2 ft. max. (.6 m)] so the worker can work comfortably. The attendant should hold the line so there is always a slight tension on it.

Maintain constant communication between the worker and the attendant.

WARNING: *The last 10 ft (3 m)of the lifeline has a red marker and should not be unwound from the drum. This length provides the required wrap on the drum to properly anchor the lifeline and insures that the lifeline wrap direction is correct. Stop extending the lifeline when you see the red marker. The lifeline must wind onto the drum by turning the crank handle in the "raise" (counterclockwise) direction only. Check periodically to see that the lifeline is winding evenly on the drum. Use gloves when handling the lifeline.*

3.9 RETRIEVING A WORKER: Communicate with the worker when preparing to retrieve them and maintain communication throughout the procedure. Place the crank handle in the 4:1 or 9:1 drive hub as appropriate to keep the turning force in a comfortable range. Retract the lifeline and retrieve the worker. Maintain an even retrieval rate.

If the winch handle turning load suddenly increases, stop and investigate. Determine the cause and correct the problem before continuing.

Upon retrieval, support the load or worker and disconnect the lifeline.

3.10 INERTIAL BRAKE: The Digital Winch is designed with a constantly engaged brake that will hold a suspended load whenever the crank handle is released. The brake is composed of three independent pawls. All three pawls would have to become inoperable for the primary brake to fail. The winch has a secondary inertia brake in case the primary brake should fail. If the primary brake failed, the winch would free-wheel until the inertia brake engaged and stopped the cable. No more than 3 ft. (1 m) of cable deploys before the inertia brake engages.

B. The wire rope assembly must be replaced by an authorized service center if there are six (6) or more randomly distributed broken wires in one lay, or three (3) or more broken wires in one strand in one lay. Note: A "lay" of wire rope is the length of wire rope that it takes for a strand (the larger groups of wires) to complete one revolution or twist along the rope.

C. The wire rope assembly must be replaced by an authorized service center if there are any broken wires within one inch of the metal compression sleeves at either end of the assembly.

D. Inspect entire length of wire rope for signs of corrosion. Severely corroded wire rope must be replaced.

SYNTHETIC ROPE: Inspect for the following if the winch uses synthetic rope:

A. Inspect for concentrated wear, frayed strands, broken yarns, cuts, and abrasions. The line must be free of knots, excessive soiling, heavy paint buildup, and rust staining throughout its length.

B. The line must be free of chemical or heat damage, indicated by brown, discolored, or brittle areas.

C. The line must be free of ultraviolet damage, indicated by discoloration and the presence of splinters and slivers on the rope surface.

D. All of the above factors are known to reduce rope strength. As a rule of thumb, rope strength is reduced proportional to the cross sectional area of the rope damaged. Damaged or questionable rope must be replaced by an authorized service center.

5.4 If inspection or operation reveals a defective condition, remove the winch 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 winch using water and a mild detergent solution. Clean labels as required. At least twice a year, clean and lubricate the wire rope. Do not use solvents to clean the wire rope as they will remove internal lubrication. Lubricate wire rope using a cloth (wearing gloves) and a light machine oil.

7.2 WEIGHT

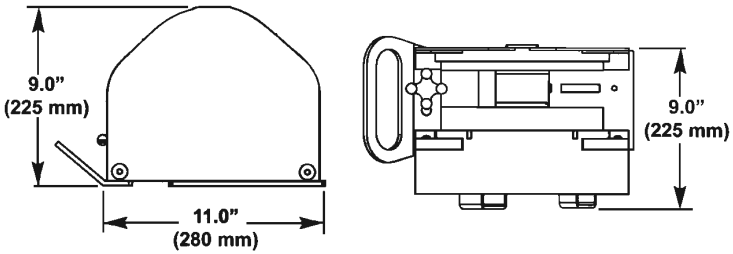
100 Series Advanced Digital Winch: 26.5 lbs (12 kg) plus lifeline.
200 Series Advanced Digital Winch: 27 lbs (12.2 kg) plus lifeline.
300 Series Advanced Digital Winch: 27.5 lbs (12.4 kg) plus lifeline.

7.3 LOADS:

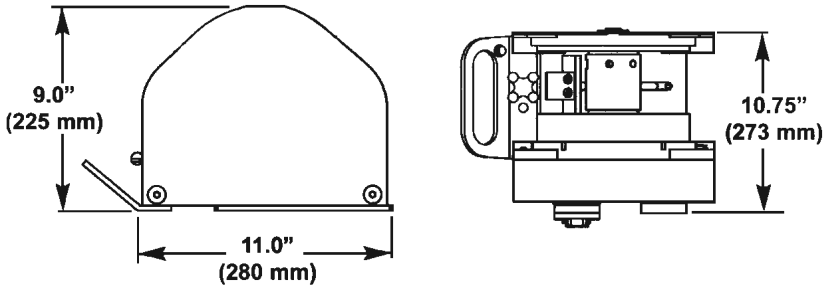
Maximum Working Load: 450 lbs (204 kg)
Winch Mechanism Proof Load 5000 lbs (22.2 kN)

7.4 DIMENSIONS:

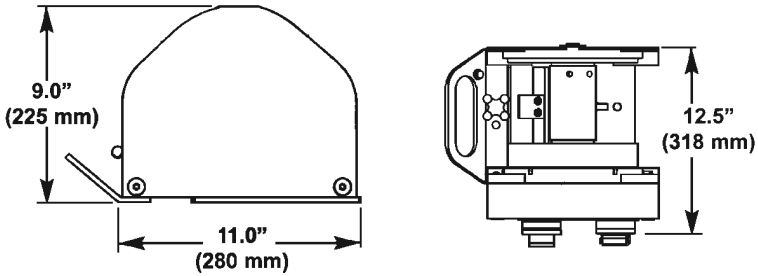
A. 100 SERIES:



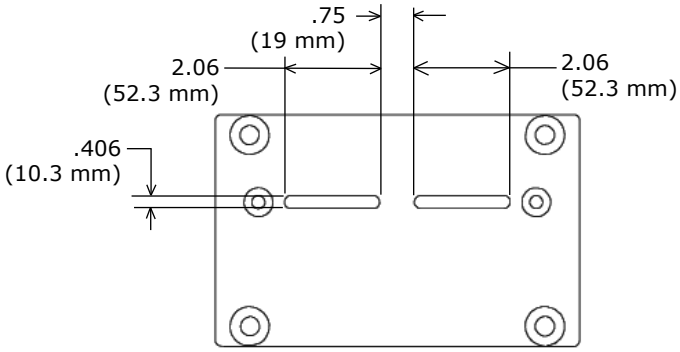
B. 200 SERIES:



C. 300 SERIES:



D. UNIVERSAL MOUNTING PLATE:



9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER: _____

MODEL NUMBER:_____

DATE PURCHASED: _____**DATE FIRST USED:** _____

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

This instruction applies to the following models:					
8514602	8518561	8518579	8518592	8518613	8518706
8518016	8518562	8518580	8518601	8518614	8524868
8518017	8518563	8518581	8518602	8518615	8526404
8518018	8518564	8518582	8518603	8518616	8526534
8518021	8518565	8518583	8518604	8518617	8530010
8518551	8518566	8518584	8518605	8518623	8530011
8518552	8518567	8518585	8518606	8518627	8530012
8518553	8518568	8518586	8518607	8518628	8530058
8518554	8518569	8518587	8518608	8518630	8530116
8518557	8518570	8518588	8518609	8518646	8530178
8518558	8518571	8518589	8518610	8518651	8530207
8518559	8518572	8518590	8518611	8518656	
8518560	8518573	8518591	8518612	8518658	
Additional model numbers may appear on the next printing of these instructions.					

LIMITED LIFETIME WARRANTY

Warranty to End User: D B Industries, Inc., dba CAPITAL SAFETY USA ("CAPITAL SAFETY") warrants to the original end user ("End User") that its products are free from defects in materials and workmanship under normal use and service. This warranty extends for the lifetime of the product from the date the product is purchased by the End User, in new and unused condition, from a CAPITAL SAFETY authorized distributor. CAPITAL SAFETY'S entire liability to End User and End User's exclusive remedy under this warranty is limited to the repair or replacement in kind of any defective product within its lifetime (as CAPITAL SAFETY in its sole discretion determines and deems appropriate). No oral or written information or advice given by CAPITAL SAFETY, its distributors, directors, officers, agents or employees shall create any different or additional warranties or in any way increase the scope of this warranty. CAPITAL SAFETY will not accept liability for defects that are the result of product abuse, misuse, alteration or modification, or for defects that are due to a failure to install, maintain, or use the product in accordance with the manufacturer's instructions.

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