

COLD AIR BLOWER

Model CAB-2



OPERATORS MANUAL/PARTS LIST

NOVEMBER 2011



Model CAB-2, Cold Air Blower is a Snow Blower attachment for use on the Geismar KGT Tronic. It is mounted on the end of the boom where it can be manipulated to direct a high velocity air stream to blow snow away from the track.

FOR YOUR SAFETY

Before operation read, understand and follow all warnings, cautions and instructions in this manual and on the Cold Air Blower (CAB-2). Failure to do so could cause serious injury and/or damage to the equipment.

KEEP THIS MANUAL WITH THE COLD AIR BLOWER

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FOREWORD

This manual contains safety, operation, lubrication and maintenance information.

Operation techniques outlined in this manual are basic. Skill and technique will develop and improve as the operator gains knowledge of the machine and its capabilities.

The notes and illustrations reproduced in this manual may show details and attachments that are different than your machine. While the basic performance characteristics of the machine remain essentially the same, continuing improvements and advancement of product design may have caused some modifications to the machine.

Whenever a question arises regarding your machine, or this manual, please consult your Modern Track Machinery representative for the latest available information.

PARTS ORDER AND INQUIRIES

When calling or writing the company with regard to your machine, always refer to the model and serial number. The identification plate with this information is located on the front of the machine.

IMPORTANT SAFETY INFORMATION

Most accidents involving machine operations and maintenance are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs.

Read and understand all safety precautions and warnings before operating or performing lubrication and maintenance on this machine.

Basic safety precautions are outlined in the “Safety” sections of this guide and in the description of operations where hazards exist. **DANGER** labels have also been put on the machine to provide instructions and to identify specific hazards which if not observed could cause bodily injury or death to you or to other persons. These warnings in the guide and on the machine labels are identified by the symbol **DANGER**.

CAUTION labels on the machine and in the guide only identify operations that may cause machine damage.

We cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this guide and on the machine are, therefore, not all-inclusive. If a procedure, tool or work method or operating technique not specifically recommended by Modern Track Machinery is used, you must satisfy yourself that it is safe for you and others.

SAFETY RULES

WARNING SIGNS AND LABELS

There are several safety signs on your machine. Their exact location on the equipment and description of the hazard are reviewed in this section. Please take the time to familiarize yourself with these safety signs.

Make sure that you can read all safety signs. Clean or replace these if you cannot read the words or see the pictures. When cleaning the labels use a cloth, water and soap.

You must replace a label if it is damaged, missing or cannot be read. If a label is on a part that is replaced, make sure a new label is installed on the replaced part. See your Modern Track Machinery representative for new labels.

WARNING DO NOT GO NEAR LEAKS

- High-pressure oil easily punctures the skin causing serious injury, gangrene or death.
- If injured, seek emergency medical help. Immediate surgery is required to remove oil.
- Do not use finger or skin to check for leaks.
- Lower load or relieve hydraulic pressure before loosening fittings.

DANGER

- Improper operation or lubrication of this machine can be dangerous and could result in injury or death.
- Do not operate this machine until you read and understand the instructions in the Operation Guide or the “Operation” section of the Operation and Maintenance Guide.

OPERATE AT 55 GPM

DELIVERY REPORT

IMPORTANT:

- This report concerns one machine only.
- This report is required in order to validate the guarantee.
- This report is in two copies: the original copy must be sent to the Seller.

NAME OF MACHINE: _____

MODEL: _____ SERIAL NO. _____

DELIVERY DATE: _____ DELIVERY LOCATION: _____

NAME OF THE BUYER: _____

ADDRESS OF BUYER: _____

- * I have inspected the machine and have verified that it is in good condition and has no parts missing.
- * I have been instructed in the basic operation, maintenance and lubrication of the machine.
- * I have received the instruction, maintenance and parts manuals.
- * I have been instructed and understand the safety section of this manual concerning the operation of this machine.

The machine conforms to my requests and the delivery is accepted.

Date: _____

Buyer's Signature

SELLER'S NAME: _____

SELLER'S ADDRESS: _____

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GENERAL SAFETY RULES

- Attach a **“Do Not Operate”** or similar warning tag to start switch or handle of the machine before servicing or repairing.
- Perform all maintenance unless otherwise specified after confirming the following:
- **The hydraulic oil supply is disconnected.**
- Do not wear loose clothing or jewellery that can catch on controls or other parts of the tool.
- Keep the tool free of foreign material such as debris, oil or other items that are not an authorized part of the unit.
- Never put maintenance fluids into glass containers.
- Report all needed repairs.
- When using air pressure for cleaning, wear a protective face shield and protective clothing.
- Maximum air pressure from an air nozzle must be less than 30 PSI (205 Kpa) for cleaning purposes.
- Stay clear of all rotating and moving parts.
- Wear protective glasses when striking a retainer pin to avoid injury to your eyes.
- Chips or other debris can fly off objects when struck. Before striking any object, ensure that no one will be injured by flying debris.
- Hot hydraulic oil and machine components can cause personal injury. Do not allow components to contact skin.
- Relieve all pressures in hydraulic system before any lines, fittings or related items are disconnected or removed.
- All fuels, most lubricants and hydraulic oils are flammable.
- Do not smoke while in any area where fuel or lubricants are stored.
- Keep all hydraulic oils and lubricants stored in properly marked containers away from all unauthorized persons.
- Always have a fire extinguisher available where hydraulic oil is used or stored.
- Do not weld or flame cut on pipes or tubes that contain flammable fluids.
- Remove all flammable materials such as fuel, oil and other debris before they accumulate on the machine.

General Safety Rules (continued):

- Repair any loose or damaged hydraulic lines, tubes or hoses immediately as leaks can cause fires.
- Ensure that all clamps, guards and heat shields are installed correctly to prevent vibration, rubbing against other parts and excessive heat during operation.
- Shields, which protect hot components from oil or spray in the event of a line, tube or seal failure, must be installed correctly.
- For cleaning operations use only solvents harmless to rubber, non-toxic & non-flammable. Do not use gasoline or other flammable fluids.
- Do not start the tool before ensuring it is safe to do so.
- The operator must satisfy himself that no one will be endangered before starting or operating the machine.
- Report any needed repairs noted during operation.
- When working on railway lines with double tracks where one of them is in use, be extremely careful of the live track.
- As a general precaution, take extreme care that all flammable products never come in contact with fire sources.
- Do not work in any position where the abrasive dust, sparks or escaped gas can reach unprotected parts of the body.
- Make sure you have secure footing on the ground. Never work if your balance is not good.
- Take extreme care in wet or freezing weather conditions to assure proper footing.
- Remove cloths and rags used for cleaning hydraulic spills and put them in a safe place where there can be no risk of fire or combustion.
- It is advisable to use hearing protection, conforming to the general safety regulations in force at the worksite.
- Wear a hard hat, protective glasses and other protective equipment as required by job conditions.
- Always work with good visibility and light conditions.
- Do not expose the machine to flames, burning brush, etc.
- Store hydraulic oil in containers designed for this use, marked and labelled accordingly. These containers should be stored away from all sources of fire.
- Keep the machine under control and do not work it over its capacity.

General Safety Rules (continued):

- When working on the railway track, pay close attention to visual and acoustic signals given by surveillance personnel.
- Clear all personnel from the area.
- Always remove hot slag from the areas where the machine is to be used. Never place machine in the proximity of flame or any source of heat.
- Work steadily and carefully to avoid putting others in danger.
- After the machine has started, if your machine does not function properly, stop it and call the person responsible for maintenance.
- Work carefully to avoid setting fire to grass, shrubs, etc. or to other flammable materials, especially in hot weather.
- Disconnect the hydraulic pressure supply to the tool before doing any repairs, i.e. general maintenance and cleaning, changing of the pulling jaws etc.
- Keep handles dry, clear and free of hydraulic oil.

OPERATING INSTRUCTIONS

Before operating the tool the operator should become familiar with the general features of the Cold Air Blower (CAB-2) by looking at the parts illustration and taking note of the following:

The CAB-2 is a Snow Blower attachment for use on the Geismar KGT Tronic. It can be manipulated to direct a high velocity air stream to blow snow away from the track. It requires 55GPM of hydraulic power.

The CAB 2 is comprised of a centrifugal air blower powered by a direct drive hydraulic motor mounted to the input shaft. The air is discharged from the blower through a converging nozzle to concentrate the air discharge in the form of a high velocity air stream about three feet or one meter wide. The airspeed is approximately 275 miles per hour or 440kms per hour. This high velocity air is used to remove snow from the track area.

The CAB 2 is pinned to the end of the boom using the bucket curling linkage to allow vertical positioning of the air discharge. The frame on the CAB 2 has hydraulic cylinders to allow side to side pivoting of the blower. This arrangement allows complete positioning of the air stream to all areas of the track.

WARNING

Never under any circumstance should anyone place their fingers close to inlet screen or outlet nozzle while machine operation.

- Never operate the CAB-2 on any higher flow than 55 GPM at 4000 psi.
- Place the CAB-2 on the end of the KGT boom.
- Connect the hoses to the tool and to the power source before turning the power source on. Make sure all hose connections are tight and connected to the proper ports.
- Start the CAB-2 through the KGT tronic.
- Adjust the desired sluing speed using the flow control valves. Please note that equal sluing of CAB-2 to left and right depend of flow control adjustment.
- Move the KGT tronic arm around to blow snow away from the track.
- Continue to blow snow as required.
- Turn the power source off before disconnecting the CAB-2 hoses.

MAINTENANCE

1. Disconnect the tool from the power source before performing any type of maintenance.
2. Keep couplers clean and free of dirt at all times.
3. Check hoses daily for leaks or cracks, fittings, fasteners for any signs of damage.
4. Use only recommended hydraulic oils.
5. After 3 months of operation perform periodic maintenance on the tool:
Replace any worn out parts.

Parts & Service:

Service information and/or spare parts can be obtained at the following locations:

CANADA:

Modern Track Machinery Canada Ltd.
5926 Shawson Drive
Mississauga, Ontario, Canada L4W 3W5

Tel: 1-800-563-1772 or 905-564-1211 Fax: 905-564-1217
Email: sales@mtmgeismar.com

U.S.A.

Modern Track Machinery Inc.
1415 Davis Road
Elgin, Illinois, U.S.A. 60123

Tel: (847) 697-7510 Fax: 847-697-0136
email: info@geismar-mtm.com

TROUBLE SHOOTING

PROBLEM	CAUSE	REMEDY
Tool overheats	<ul style="list-style-type: none"> - Wrong hydraulic flow - Hoses reversed - Defective bearings 	<ul style="list-style-type: none"> - Operate 55 GPM maximum - Ensure correct connections - Replace bearings
Tool won't work	<ul style="list-style-type: none"> -No oil supply -Motor not working 	<ul style="list-style-type: none"> -Check that supply is turned on -Check/replace motor
CAB-2 sluing works slowly and/or has no power	<ul style="list-style-type: none"> - Wrong hydraulic flow - Wrong hydraulic pressure - Dirt/foreign object in the system - Incorrect flow control adjustment 	<ul style="list-style-type: none"> - Check that hydraulic flow is correct - Check relief valves in power supply - Clean ports/adapters in the system - Adjust flow control until get the desired sluing speed
CAB-2 sluing runs too fast	<ul style="list-style-type: none"> - Hydraulic flow too high - Incorrect flow control adjustment 	<ul style="list-style-type: none"> - Check that hydraulic flow is correct - Adjust flow control until get the desired sluing speed

GENERAL MAINTENANCE

The Modern Track Machinery Cold Air Blower, Model CAB-2 is designed to provide safe, trouble free service. To ensure long service from your machine, you must give it thorough care and maintenance. At the end of each day, check the general condition of the tool looking for loose screws, nuts and bolts, fittings, and damage to hoses. Tighten as required or replace if necessary.

NORMAL OPERATING RATING

WARNING

55 GPM AT 4000 PSI

HOSES

Supply hoses shall have a minimum working pressure rating of 16000 psi (1120 bar). Hoses shall have an oil-resistant inner surface and an abrasion resistant exterior surface. When severe operating conditions make the possibility of cutting or damaging the hose likely, the hose shall be extra-ply, armoured or have other protective construction. Hoses should be as flexible as possible to provide maximum manoeuvrability and control. Threaded hose fittings shall be securely affixed to the hose. Tools and hoses shall be replaced if unsuitable for safe operation.

The tool has been shipped from the factory with the **female quick disconnect** equipped with a whip hose and connected to the **'P' (Pressure) port** of the control manifold. Similarly, the **male quick disconnect** whip hose is connected to the **'T' (Tank Return)** port of the control manifold.

WARNING

CARE MUST BE TAKEN WHEN FIRST CONNECTING HYDRAULIC WHIP HOSES TO YOUR POWER SUPPLY. THIS IS TO ENSURE THE PROPER HYDRAULIC OIL FLOW SO THAT THE TOOL OPERATES AT THE CORRECT SPEED.

FAILURE TO CONFIRM PROPER CONNECTION OF HYDRAULIC HOSES COULD RESULT IN PERSONAL INJURY AND DAMAGE TO THE TOOL.

SPARE PARTS

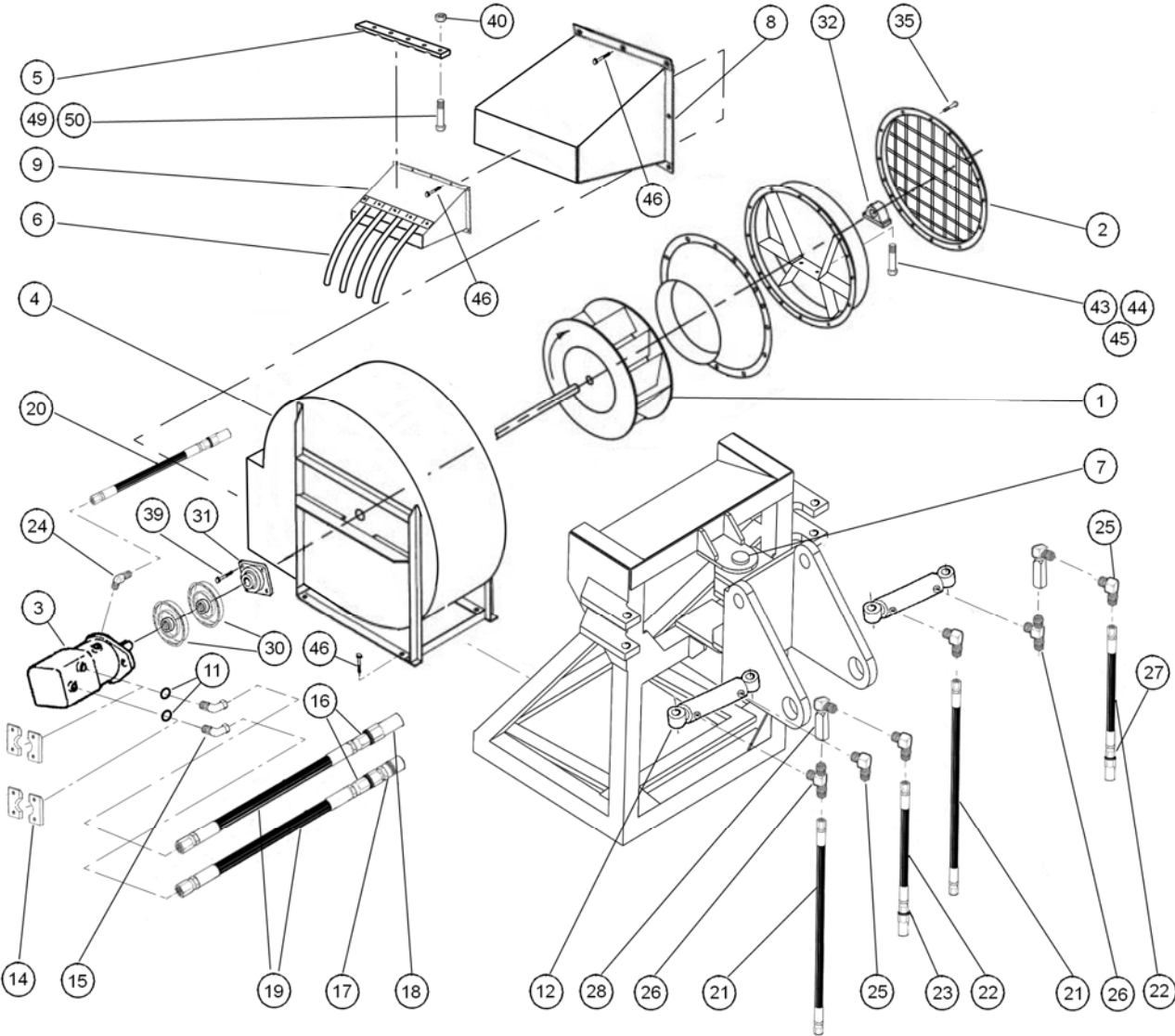
**COLD AIR BLOWER
MODEL CAB-2
PARTS LIST**

REF #	DESCRIPTION	QTY	MTM PART #
0	COMPLETE CAB-2	1	CAB-2
1	FAN	1	CAB2-BOM1
2	INLET SCREEN	1	493-6
3	MOTOR	1	CAB2-BOM5
4	FAN SUPPORT FRAME	1	493-4-2
5	DISCHARGE FINGER HOLDER	1	493-1-2C
6	WHISKER SET	1	493-8
7	MAIN PIVOT PIN	1	376-8-3
8	OUTLET DUCT	1	493-2
9	OUTLET NOZZLE,1 1/2"	1	493-3-1
10	ADAPTER SPACER	2	493-7-1
11	O-RING	2	-114 N
12	HYDRAULIC CYLINDER	2	782-2-26
13	BLOWER DRIVE UNIT	1	CAB2-BOM15
14	CODE 62 SPLIT FLANGE	2	FF595-16
15	ADAPTOR	2	FF5539-16-16S
16	ADAPTOR	2	2021-16-16S
17	FEMALE COUPLER	1	5601-16-16S
18	MALE COUPLER	1	5602-16-16S
19	MOTOR DRIVE HOSE	2	CAB2-BOM16
20	HOSE CASE DRAIN	1	CAB2-BOM17
21	STEERING CROSS HOSE	2	CAB2-BOM18
22	STEERING HOSE	2	CAB2-BOM19
23	ADAPTOR	3	2081-12-8S
24	ADAPTOR	1	2061-10-8S
25	ADAPTOR	2	2024-6-8S
26	ADAPTOR	2	203007-6-8S
27	ADAPTOR	2	2021-6-8S
28	FLOW CONTROL	2	TMF375S
29	SPIRAL HOSE COVER	15'	OWHD-24 OMNI
30	DRIVE COUPLING	1	CAB2-BOM20
31	DRIVE SIDE BEARING	1	CAB2-BOM21
32	INLET SIDE BEARING	1	CAB2-BOM22
33	½ UNC X 1-1/4 HHCS BOLT	6	1/2UNCX11/4HHCS
34	½ LOCKWASHER	6	1/2"LOCKWASHER
35	½ UNC X 11/2HHCS BOLT	8	1/2-13X11/2HHCS
36	½ UNC X 2HHCS BOLT	4	1/2-13X2"
37	½ NYLOK NUT	12	1/2-13
38	½ FLATWASHER	12	1/2SAE-FLATWASH
39	5/8 UNC X 2-1/2 HHCS	6	5/8-11X2-1/2HHCS

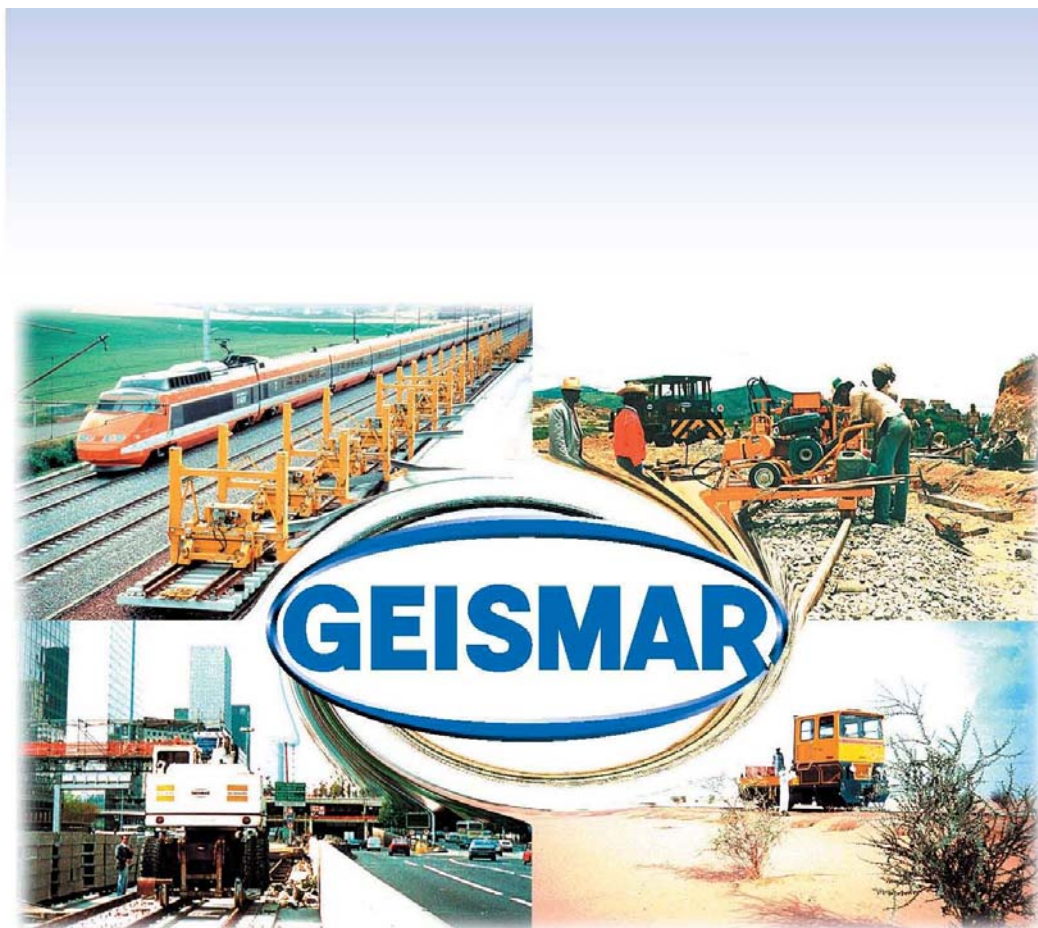
PART LIST (continued)

REF #	DESCRIPTION	QTY	MTM PART #
40	5/8 NYLOK NUT	30	49-00-028
41	5/8 SAE FLAT WASHER	24	206-10-4
42	5/8 X 2"HHCS BOLT	6	156TR-107
43	7/8 X 4"HHCS BOLT	2	7/8-9X4"HHCS
44	7/8 SAE FLAT WASHER	4	7/8SAEFLATWASHER
45	7/8 NYLOK NUT	2	7/8"NYLOK NUT
46	3/8 UNC X 1"HHCS BOLT	44	45910
47	3/8 NYLOK NUT	44	49-00-025
48	3/8 SAE FLAT WASHER	88	27929
49	5/8 X 2-1/2" CARRIAGE BOLTS	18	5/8-11X 2-1/2" CB
50	5/8 FLAT WASHER	18	5/8 FLAT WASHER

CAB-2 PARTS DIAGRAM



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■ *Nous nous réservons le droit d'apporter toute modification aux caractéristiques du matériel ainsi qu'à sa mise en œuvre, son mode d'entretien et sa liste de pièces détachées.*

■ *We reserve the right to make any alteration or improvement to the specification, operating and maintenance instructions as well as to the spare parts list.*

■ *Die von uns durch technischen Fortschritt bedingten Änderungen und Verbesserungen an der Ausführung, Wartungsart und Ersatzteilliste, werden vorbehalten.*

SOCIÉTÉ DES ANCIENS ÉTABLISSEMENTS L. GEISMAR

For Parts and Service inquiries please contact your local office

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