

OPERATOR'S MANUAL

MODEL 1H2

Platinum SRX Series Rider Reach
36V AC Powered Electric
3,000-4,500 lb. Capacities



OPERATOR

Reliability.

It's the defining trait of our company and our forklifts.

UniCarriers' roots extend back over 100 years, and over that time, strong, reliable performance has always been the hallmark of our organization, our people and our equipment.

Today, our unrivaled reliability continues to provide UniCarriers' customers with a competitive edge. And together, we move the merchandise that moves world commerce with greater efficiency, economy and reliability.

When it comes to providing forklifts that make a difference for our customers and theirs...

We Never Quit.

UNICARRIERS AMERICAS OPERATOR'S MANUAL

MODEL 1H2 SERIES




WARNING

- **This Original Manual contains important safety information and must be made available to the operator.**
- **Keep this manual on the truck at all times.**
- **Do not operate the forklift unless you have reviewed and fully understand the Operator's Manual. Failure to follow all of the instructions in this manual could be a violation of the Occupational Safety and Health Act.**
- **Do not operate this forklift unless you are trained and authorized by your employer. Improper operation may result in a serious or fatal injury to yourself or others.**
- **On December 1st, 1998 the Occupational Safety and Health Administration (OSHA) adopted a new and stringent Powered Industrial Truck Operator Training rule 29 CFR 1910.178(1). Based on the Industrial Truck Standards Development Foundation (ITSDF) B56 2000 standard, Operator Training is now explained in detail. The employer shall ensure that operators of powered industrial trucks are competent and trained in the safe and proper operation of powered industrial trucks. This training will include formal training, practical demonstrations and an on-site evaluation.**

OSHA also requires a proper pre-shift inspection, and any repair required shall be performed by a person trained and authorized to repair industrial trucks.

As the employer you should be familiar with the rules of 29 CFR 1910.178(1) as well as ANSI/ITSDF B56.1 for the user. You should also be aware of any state OSHA rules that may differ from the federal rules.

THE FOLLOWING WARNING IS PROVIDED PURSUANT TO CALIFORNIA HEALTH & SAFETY CODE SECTIONS 25249.5 ET. SEQ.

| |
|---|
|  WARNING |
| California Proposition 65 This product contains and emits chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. |



WARNING

An important message for the operator (for North America)

- **Do not operate this truck unless you are trained and authorized by your employer. Improper operation may result in a serious or fatal injury to yourself or others. Make sure that you read and fully understand the Operator's Manual supplied with this truck. Failure to follow all instructions in this manual could be a violation of the Occupational Safety and Health Act.**

A WORD TO UNICARRIERS FORKLIFT OPERATORS

This Original Manual describes operating procedures, daily checks and simple maintenance for safe usage of your UniCarriers industrial truck. We urge you to read this manual carefully before operating a UniCarriers industrial truck to familiarize yourself with the safety instructions. An operator of any industrial truck should maintain safety as the number one priority at all times. In addition, we strongly recommend that you obtain and read the Industrial Truck Standards Development Foundation (ANSI/ITSDF) B56.1 Manual entitled "Safety Standard for Low Lift and High Lift Trucks" before operating any industrial truck. These instructions will not only reduce mechanical issues with a forklift, but may also save a life.

Contact your Local Authorized Dealer to keep your industrial truck in peak operating performance. If you encounter any problems with a UniCarriers industrial truck, contact your Local Authorized Dealer and request a complete checkup. The dealership will ensure that your forklift is serviced in accordance with the latest factory approved methods.

This manual is not a training manual, it is a guide to help trained and authorized operators safely operate this forklift. Please consult your employer for proper training on the appropriate use of this forklift while performing your job. Illustrations in this manual will show the operator the correct procedures for checking, starting, operating and stopping this forklift.

OSHA 1910.178 requires that only trained and authorized operators use powered industrial trucks.

All information, specifications and illustrations in this manual are based on the latest data obtainable at the time of publication. UniCarriers Americas Corporation, hereafter referred to as UCA, reserves the right to make changes or improvements at any time without notice.

This Operator's Manual has been prepared on the assumption that your forklift is fully equipped (including all optional equipment). Thus, if you have any questions regarding equipment, please contact your Local Authorized Dealer. This manual also includes information on the General Overseas Market (GOM) forklifts.

©2015 UniCarriers Americas Corporation
240 N. Prospect Street
Marengo, IL 60152 USA

TRUCK MODIFICATIONS

Unauthorized forklift modification is not permitted.

Per OSHA 1910.178, no modifications or alterations to a powered industrial truck, which may affect capacity, stability or safe operation of the forklift shall be made without the prior written approval of UniCarriers Americas Corporation [UCA], its authorized representative or a successor thereof.

After receiving the approval of UniCarriers Americas Corporation, its authorized representative or a successor thereof, the data & capacity plate, decals, tags, operation and maintenance manuals shall also be changed appropriately.

Only in the event that UniCarriers Americas Corporation is no longer in business and there is no successor to the business, the user may arrange for a modification or alteration to a powered industrial forklift, provided however, that the user shall:

- a. Arrange for the modification or alteration to be designed, tested and implemented by an engineer(s) expert in industrial forklifts for their safety;
- b. Maintain a permanent record of the design, test(s) and implementation of the modification or alteration;
- c. Approve and make appropriate changes to the data & capacity plate(s), decals, tags, and operation and maintenance manuals;
- d. Affix a permanent and readily visible label to the forklift stating the manner in which the forklift has been modified or altered together with the date of the modification or alteration, and the name and address of the organization that performed the modification or alteration.

TABLE OF CONTENTS

| SUBJECT | PAGE |
|--|------|
| Warnings | 1 |
| A Word to UniCarriers Forklift Operators | 3 |
| Truck Modifications | 4 |
| Introduction | 8 |
| Maintenance and Servicing | 8 |
| Daily Inspection | 8 |
| Planned Maintenance | 8 |
| How to use this Manual | 9 |
| Safety Signs and Safety Messages | 10 |
| Warning Symbols & Levels | 10 |
| Safety Rules and Practices | |
| Operator Qualifications | 11 |
| Safety Guards | 11 |
| Personal Protective Equipment for Operating Forklift | 12 |
| Daily Inspection | 12 |
| Operator Responsibility | 13 |
| General | 13 |
| No Riders | 15 |
| Traveling | 16 |
| Loading | 18 |
| Dockboards (Bridge Plates), Trucks and Railroad Cars | 19 |
| Surface & Capacity | 20 |
| Installation of Attachments | 21 |
| ANSI/ITSDF Standards for Forklift Clamp Attachments | 21 |
| In Case of Tip-Over | 21 |
| Transporting Forklift | |
| Gangway | 22 |
| Hoisting (Lifting) up the Forklift | 23 |
| Function Tests | 24 |

TABLE OF CONTENTS

| SUBJECT | PAGE |
|--|------|
| Safety Rules and Practices | |
| Position of Data & Capacity Plates and Decals | 24 |
| Data & Capacity Plates and Decals | |
| Data Plate | 26 |
| Alternate Capacity Plate | 26 |
| Identification Numbers | 27 |
| Caution Drive Decal (In Case of Tip-Over) | 27 |
| Battery Gate Decal | 28 |
| Pinch Point Decal | 28 |
| EE Decal | 28 |
| Battery Decal | 29 |
| Warning Drive Decal (Trained and Authorized) | 29 |
| Caution Fork Decal | 30 |
| Refrigerator Symbol Decal | 30 |
| Shipping Warning Tag | 30 |
| Operating Controls and Functions | |
| Applications | 31 |
| Application Area for UniCarriers Trucks | 31 |
| Prohibited Applications for UniCarriers Trucks | 31 |
| Main Components | 32 |
| Overview | 33 |
| Meters, Indicators and Lamps | 34 |
| Basic Operation | 34 |
| Battery Capacity Indicator | 35 |
| Wheel Indicator | 35 |
| Status Display | 35 |
| Clock and Hour Meter Display | 38 |
| Mode Selection Buttons | 40 |
| Automatic Fork Height Select Option (AFHS) | 41 |

TABLE OF CONTENTS

| SUBJECT | PAGE |
|--|------|
| Operating Controls and Functions (cont'd) | |
| Turning Meter panel Fork Height Display On | 43 |
| AFHS Programming | 44 |
| Using AFHS Feature | 46 |
| Reprogramming AFHS Buttons | 47 |
| Multi-Function Handle | 48 |
| Travel Control | 48 |
| Lift/Lower | 48 |
| Tilt and Sideshift Control | 48 |
| Reach Function Control Button | 49 |
| Horn Button | 49 |
| Steering Wheel | 49 |
| Steering Direction | 50 |
| Switches | 50 |
| Ignition Switch | 50 |
| Emergency Switch | 51 |
| Brake and Operator Presence Pedals | 51 |
| Operator Presence Pedal | 51 |
| Brake Pedal | 52 |
| Braking by Plugging | 52 |
| Operating the Truck | |
| Inspection before Operating | 53 |
| Forklift Operating Precautions | 53 |
| Condensation | 54 |
| Recommendations to Avoid Condensation | 54 |
| Precautions for Operating in Cold Storage | 55 |
| Operational Procedures | 55 |
| Starting and Operation | 56 |
| Traveling | 57 |

TABLE OF CONTENTS

| SUBJECT | PAGE |
|--|------|
| Operating the Truck (cont'd) | |
| Turning | 58 |
| Climbing | 58 |
| Stopping and Parking | 58 |
| Braking by Plugging (Controlled Reversing) | 59 |
| Transporting Loads | 59 |
| Forks | 59 |
| Picking up a Load | 60 |
| General Care and Maintenance | |
| Battery and Battery Charging Equipment | 62 |
| Battery Care and Maintenance | 62 |
| Precautions for Cold and Hot Weather | 64 |
| Battery Chargers | 65 |
| Battery Charge Classifications | 66 |
| Charging Preparations | 67 |
| How to Charge Battery (Off-Forklift Type) | 67 |
| Battery Replacement | 70 |
| Battery Connector | 71 |
| Daily Inspection | 72 |
| Operator's Daily Checklist (Sample) | 74 |
| Tire Replacement | 75 |
| Drive/Steer Tire | 75 |
| Rear Caster | 75 |
| Maintenance and Inspection | 76 |
| Hydraulic Oil Level | 76 |
| Refilling Hydraulic Oil | 76 |
| Checking Mast | 76 |
| Checking Lift Chain | 77 |
| Fork Inspection | 77 |
| Fork Repair | 78 |

TABLE OF CONTENTS

| SUBJECT | PAGE |
|---|------|
| General Care and Maintenance (cont'd) | |
| Maintenance and Inspection (cont'd) | |
| Checking Horn | 78 |
| Checking Lights | 78 |
| Checking Cargo-Handling Control Lever(s) | 78 |
| Checking Safety Start System Operation | 78 |
| Checking Brake Pedal | 78 |
| Fuses | 78 |
| Periodic Maintenance and Lubrication Schedule | 79 |
| Lubrication Chart | 85 |
| Recommended Lubricants | 85 |
| Moving Disabled Unit | 86 |
| Putting Forklift in Storage | 87 |
| Daily Storage | 87 |
| Storage over a Long Period of Time | 87 |
| Pre-Storage Servicing | 88 |
| Servicing the Forklift in Storage | 88 |
| Post-Storage Servicing | 88 |
| Side Shift (Option) | 89 |
| Overview of Side Shift | 89 |
| Main Terms used in this Section | 90 |
| Safety Rules and Practices | 90 |
| Operation of the Control Lever for Side Shift | 92 |
| Side Shift Operation | 93 |
| Daily Checks and Simple Maintenance | 94 |

TABLE OF CONTENTS

| SUBJECT | PAGE |
|---|------|
| Specifications | |
| Model Variation (Long Model Code) Breakdown | 95 |
| Main Truck - | |
| 1H2 | 96 |
| Mast Specifications - | |
| 1H2 (SRX35N) | 102 |
| 1H2 (SRX45N, SRX45LN) | 103 |
| 1H2 (SRX30ND, SRXLND) | 104 |
| Tire Size | 105 |
| Oil Capacity | 106 |
| Noise Level | 106 |
| Index | 107 |

INTRODUCTION

UniCarriers model 1H2 series industrial trucks meet all applicable requirements of ITSDF B56 at the time of manufacture. UCA will not assume, and expressly disclaims, any liability for injuries or damage arising from or caused by the removal, disconnection or disengagement of any part from any of its forklifts. UCA recommends that all replacement parts be of OEM (Original Equipment Manufacture) origin.

UCA would like to take this opportunity to thank you for purchasing our product. Your UniCarriers industrial truck was carefully designed and manufactured to ensure maximum reliability, ease of service and reasonable cost for our customers. The purpose of this guide is to introduce and familiarize you, the operator, with the controls and features of the unit.

This manual will help you learn how to operate your powered industrial truck. This manual describes the controls, their function and some special features which may be installed on the unit. UniCarriers industrial trucks are built to work hard but not for misuse and/or abuse.

MAINTENANCE AND SERVICING

UniCarriers industrial trucks are built to be dependable, but as with any industrial truck, they are only as efficient as the operator and the persons responsible for maintaining them. It is essential to keep your lift truck in good operating condition by following a recommended maintenance schedule. A damaged lift truck is a potential source of danger to the operator, and to other personnel around it.

DAILY INSPECTION

OSHA 1910.178 requires a daily or per shift inspection. Before operating a lift truck it should always be inspected by the operator. This procedure is detailed in the “Daily Inspection” (refer to page 72) and the “Operator’s Daily Checklist Sample” (refer to page 74).

PLANNED MAINTENANCE

A Periodic Planned Maintenance program is used in addition to the daily inspection of the lift truck and is performed by a trained and authorized mechanic. Planned Maintenance (PM) provides the opportunity to do a thorough inspection of the operating system and safety condition of your lift truck. This can reduce unscheduled downtime by doing necessary adjustments and repairs. Our dealers are ready to help you with a Planned Maintenance Program by trained service personnel (refer to page 79).

HOW TO USE THIS MANUAL

Included in this manual are the essentials of safe forklift operation, truck features and functions and explanation of how to maintain your lift truck. This manual is organized as follows:

SAFETY RULES AND PRACTICES

Safety rules and major operating hazards you could encounter while operating a lift truck.

OPERATING CONTROLS AND FUNCTIONS

Description of each major component of the 1H2 series forklifts and how the instruments, gauges, and controls operate.

OPERATING THE TRUCK

Details of safe and efficient operating procedures.

GENERAL CARE AND MAINTENANCE

Care and planned maintenance of the battery, forklift, forks and side shift.

SPECIFICATIONS

Truck and mast specifications.

The operating instructions in this guide do not replace any other rules or laws of safety that are used in or required by federal, state, local agencies or your own operational area. The operating practices listed do not follow any order of importance but are all to be learned and used in your daily operation. Make sure that your truck is correctly equipped for use in your work area according to these rules or laws.

There may be certain hazards that may not or cannot be avoided solely by mechanical means in the everyday use of material handling trucks. Only the intelligence, good judgement and care of the operator, along with proper planned maintenance, will help assure that the unit operates correctly. It is important to have only trained, reliable personnel operating material handling trucks. Operate your lift truck safely; careful driving is your responsibility. Drive defensively and think about the safety of people who are working nearby. Know your truck's capabilities and limitations.

UCA recommends that this Operator's Manual be kept with the unit at all times or in a location easily accessed by the operator. If a replacement manual is needed, please contact your Local Authorized Dealer and a replacement will be sent for a nominal fee.

SAFETY SIGNS AND SAFETY MESSAGES

Safety signs and Safety messages are placed in this manual and on the truck to provide instruction and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs and messages. Damage to the truck, death or serious injury to you or other persons may result if these messages are not followed. If warning decals are damaged, they must be replaced.

WARNING SYMBOLS & LEVELS

Always follow the warnings in this Operator's Manual and any located on the truck to help avoid accidents and/or injuries from occurring.

WARNING LEVELS

Warning text is given three levels and provides information on the risks, describes the consequences and instructs how to avoid accidents.



DANGER

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



WARNING

- Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

- Indicates a hazardous situation which, if not avoided, may result in minor or moderate injury.

SAFETY RULES AND PRACTICES

OPERATOR QUALIFICATIONS



WARNING

- Operator must be trained, evaluated and authorized to drive the forklift and must understand safety techniques and rules for forklift operation.
- Under OSHA regulations in the U.S., all operators must be formally trained and tested. These tests must be about basic forklift knowledge and in the operators' work environment. Refer to OSHA regulations or you may also contact the Industrial Truck Standards Development Foundation (ANSI/ITSDF) 1750 K Street NW, Suite 460, Washington, DC 20006 and request a copy of B56.1 Safety Standard for Power Industrial Trucks "Section for the User".

SAFETY GUARDS

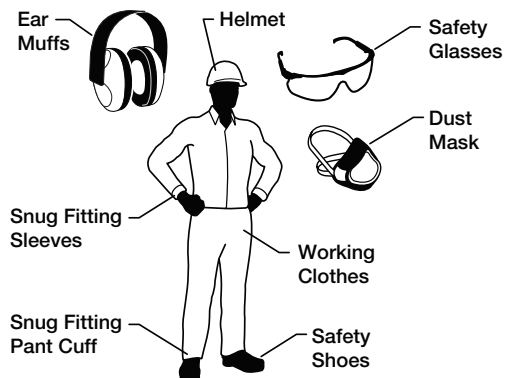


WARNING

- An overhead guard is intended to offer protection from falling objects but cannot protect against every possible impact. Therefore, it should not be considered a substitute for good judgement and care in loading, handling, storage, etc.
- Do not remove overhead guard or backrest unless specifically authorized per ANSI/ITSDF B56.1 Section 4.5.1.

SAFETY RULES AND PRACTICES

PERSONAL PROTECTIVE EQUIPMENT FOR OPERATING FORKLIFT



WARNING

- For operation of the forklift, the protective equipment for the operator shall be dependent upon the conditions of use and the applicable provisions of the local laws and regulations.
- The working clothes worn by the operator shall be such that sleeves and cuffs fit snugly so as to prevent them from getting caught on forklift levers, etc. Personal Protective Equipment such as safety glasses, earmuffs, dust mask, helmet (hard hat) and safety shoes should also be worn, as required by the work environment, employer or local and state regulations.

DAILY INSPECTION



WARNING

- OSHA 1910.178 requires a daily or per shift inspection. Inspect the forklift before operating. Do not operate the forklift if it is in need of repair. If it is in need of repair, tag the forklift, remove the key and report the condition to the proper authority. Do not attempt repair unless you are trained and authorized to perform repairs (refer to "Daily Inspection" on page 72 and "Operator's Daily Checklist Sample" on page 74).

SAFETY RULES AND PRACTICES

OPERATOR RESPONSIBILITY



WARNING

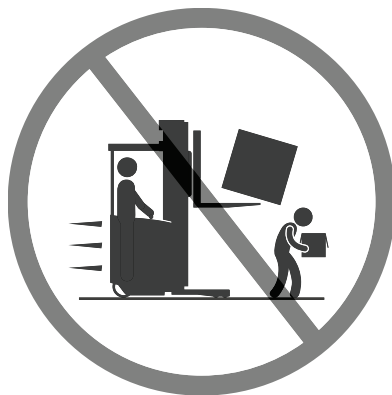
- Safe operation is the responsibility of the operator.
- The operator shall develop safe working habits and also be aware of hazardous conditions in order to protect himself, other personnel, the truck, and material being handled.
- The operator shall be familiar with the operation and function of all controls and instruments before undertaking to operate the truck.
- Before operating any truck, operators shall have read and be familiar with the operator's manual for the particular truck being operated and they shall also abide by the safety rules and practices.
- Before operating any truck, the operator shall be familiar with unusual operating conditions that may require additional safety precautions or special operating instructions.

GENERAL



WARNING

- Use 3-point contact when mounting or dismounting a truck when the operator's compartment floor height is 300 mm or higher. Maintain contact with one hand and two feet or two hands and one foot at all times. Keep hands free of items (i.e. food, beverage, tools).



WARNING

- Do not allow anyone to stand or pass under the elevated portion of any truck, whether empty or loaded.
- Before starting to operate the truck conduct daily inspection.
- Do not start or operate the truck, any of its functions or attachments, from any place other than from the normal operator's position.

SAFETY RULES AND PRACTICES

GENERAL (cont'd)



WARNING

- **Keep hands, feet and other parts of your body inside the operator's compartment. Do not put any part of the body outside the operator compartment of the truck.**
- **Never put any part of the body into the mast structure or between the mast and the truck.**
- **Never put any part of the body within the reach mechanism of the truck or other attachments.**
- **Understand truck limitations and operate the truck in a safe manner so as not to cause injury to personnel. Safeguard pedestrians at all times.**
 - a. Do not drive a truck up to anyone standing in front of an object.
 - b. Ensure that personnel stand clear of the rear swing area before conducting turning maneuvers.
 - c. Exercise particular care at cross aisles, doorways, and other locations where pedestrians may step into the path of travel of the truck.



WARNING

- **A powered industrial truck is unattended when the operator is more than 8 m (25 ft) from the truck which remains in his view, or whenever the operator leaves the truck and it is not in his view.**
- **Before leaving the operator's position:**
 - a. Bring truck to a complete stop.
 - b. Place multi-function handle in neutral position.
 - c. Lower load-engaging means fully.
 - d. Turn the ignition switch off.
 - e. If unit is unattended remove the key.
- **Maintain a safe distance from the edge of ramps, platforms, and other similar working surfaces. Do not move railroad cars with a powered industrial truck.**
- **When powered industrial trucks are driven on and off highway trucks or trailers, the brakes on the highway trucks or trailers shall be applied, and wheel chocks or other positive mechanical means shall be used to prevent unintentional movement.**
- **Whenever powered industrial trucks are driven on and off semitrailers not coupled to a tractor, supports may be needed to prevent upending or corner dipping.**
- **Provision shall be made to prevent railroad cars from being moved during loading and unloading. Wheel stops, hand brakes, or other recognized positive means shall be used to prevent movement of railroad cars during loading and unloading.**

SAFETY RULES AND PRACTICES

GENERAL (cont'd)



WARNING

- Care shall be taken not to contact overhead installations such as lights, wiring, pipes, sprinkler systems, etc.
- Always ensure there is sufficient height and width for the truck to pass.



- A load backrest extension shall be used when necessary to guard against a load, or part of it, from falling toward the operator.
- In areas classified as hazardous, use only trucks approved for use in those areas.
- Report all accidents involving personnel, building structures, and equipment to the supervisor or as directed.
- Do not block access to fire aisles, stairways, or fire equipment.

NO RIDERS



WARNING

- Do not sit on the forks (when loaded or not) or get under the forks or operator's platform.
- Do not permit riders on any part of the truck at any time. The operator is the only one who should be on a truck.

SAFETY RULES AND PRACTICES

TRAVELING



WARNING

- Observe all traffic regulations including authorized plant speed limits. Under normal traffic conditions, keep to the right. Maintain a safe distance, based on speed of travel, from the truck ahead; and keep the truck under control at all times.
- Yield the right of way to pedestrians and emergency vehicles such as ambulances and fire trucks.
- Do not pass another truck traveling in the same direction at intersections, blind spots, or at other dangerous locations.
- Slow down and sound the audible warning device(s) at cross aisles and other locations where vision is obstructed.
- Do not cross railroad tracks.
- Keep a clear view of the path of travel and observe for other traffic, personnel, and safe clearances.
- If the load being carried obstructs forward view, travel in the opposite direction.
- When backing out of trailers, docks or racking always ensure that the direction you are traveling is clear of objects that may enter operators compartment and cause serious injury or death.



WARNING

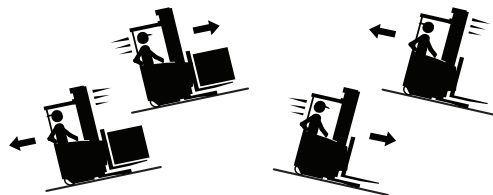
- When descending a grade, stopping distance will be greater than on-level operation. Methods shall be provided to allow for this condition. Some methods are: reduce speed, limit loads, allow adequate clear space at the bottom of grade, etc.

SAFETY RULES AND PRACTICES

TRAVELING (cont'd)

With load

Without load



WARNING

- **Ascend or descend grades slowly, and with caution.**
 - When ascending or descending grades, loaded trucks shall be driven with the load upgrade.
 - Unloaded trucks should be operated on all grades with the load-engaging means downgrade.
 - On all grades the load and load-engaging means shall be tilted back, if applicable, and raised only as far as necessary to clear the road surface.



- Avoid turning, if possible, and use extreme caution on grades, ramps, or inclines; normally travel straight up and down.



WARNING

- Under all travel conditions, operate the truck at a speed that will permit it to be brought to a stop in a safe manner.
- Travel with load-engaging means or load at lowered height except during stacking operation.



- **Make starts, stops, turns, or direction reversals in a smooth manner so as not to cause unsafe conditions.**
- **Do not indulge in stunt driving or horseplay.**
- **Slow down for wet and slippery floors.**

SAFETY RULES AND PRACTICES

TRAVELING (cont'd)



WARNING

- Before driving over a dockboard or bridge plate, be sure that it is properly secured. Drive carefully and slowly across the dockboard or bridge plate, and never exceed its rated capacity.
- Do not drive trucks onto any elevator unless specifically authorized to do so. Do not exceed the capacity of the elevator. Approach elevators slowly, and then enter squarely after the elevator car is properly leveled. Once on the elevator, neutralize the controls, shut off power, and set brakes. It is advisable that all other personnel leave the elevator before truck is allowed to enter or leave.
- Avoid running over loose objects on the driving surface.
- When negotiating turns, reduce speed to a safe level consistent with the operating environment. Make the turns smoothly. Except when maneuvering at a very low speed, turn the steering control at a moderate, even rate.

LOAD HANDLING



WARNING

- Handle only stable or safely arranged loads.



- a. When handling off-center loads that cannot be centered, operate with extra caution.
- b. Handle only loads within the capacity of the truck.
- c. Handle loads exceeding the dimensions used to establish truck capacity with extra caution. Stability and maneuverability may be adversely affected.

SAFETY RULES AND PRACTICES

LOAD HANDLING (cont'd)

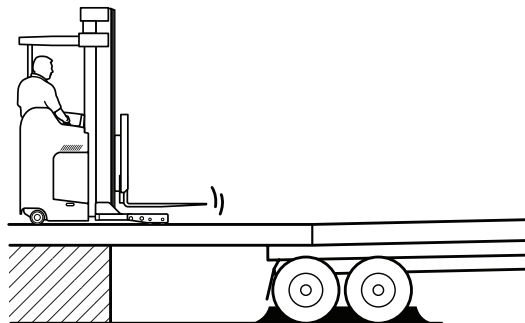
- d. Handle loads only with the load engaging means and do not transport loads or miscellaneous items with the operator's compartment or other areas of the truck.



WARNING

- When attachments are used, extra care shall be taken in securing, manipulating, positioning, and transporting the load. Operate trucks equipped with attachments as partially loaded trucks when not handling a load.
- Completely engage the load with the load-engaging means. Fork length should be at least two-thirds of load length. Where tilt is provided, carefully tilt the load backward to stabilize the load. Caution should be used in tilting backward with high or segmented loads.
- Use extreme care when tilting load forward or backward, particularly when high tiering. Do not tilt forward with the load-engaging means elevated except to pick up or deposit a load over a rack or stack. Use only enough backward tilt to stabilize the load when picking up or depositing a load in a rack or from a stack.

DOCKBOARDS (BRIDGE PLATES), TRUCKS AND RAILROAD CARS



WARNING

- Portable and powered dockboards shall be marked conspicuously (in plain sight) with their carrying capacity. The carrying capacity indicated shall not be exceeded.
- Portable dockboards shall be secured in position, either by being anchored or by being equipped with devices that will prevent unexpected movement.
- Handholds or other effective means shall be provided on portable dockboards to permit safe handling. When possible, fork loops or lugs shall be provided for handling by fork trucks.

SAFETY RULES AND PRACTICES

DOCKBOARDS (BRIDGE PLATES), TRUCKS AND RAILROAD CARS (cont'd)



WARNING

- All types of dockboards shall have a high friction surface designed to reduce the possibility of employees or trucks slipping and shall be designed and maintained so that one end will have a substantial contact with the dock (or loading platform) and the other end with the transport vehicle to prevent the dockboard from rocking or sliding.
- When powered industrial trucks are driven on and off highway trucks or trailers, the brakes on the highway trucks or trailers shall be applied, and wheel chocks or other positive mechanical means shall be used to prevent unintentional movement of highway trucks and trailers.
- Provision shall be made to prevent railroad cars from being moved during loading and unloading. Wheel stops, hand brakes, or other recognized positive means shall be used to prevent movement during loading and unloading.
- Whenever powered industrial trucks are driven on and off semitrailers not coupled to a tractor, supports may be needed to prevent upending or corner dipping.
- Maintain a safe distance from the edge of ramps, platforms, or other similar working surfaces.
- Do not move railroad cars or trailers with a powered industrial truck unless the truck is properly designed and equipped for that operation.

SURFACE & CAPACITY



WARNING

- The 1H2 models must be used on only smooth, solid floor conditions. The following conditions should be avoided at all times.

| | |
|-------|--------------------|
| -Sand | -Gravel |
| -Oil | -Ice |
| -Mud | -Unstable surfaces |
- Operating the truck on these surfaces may cause dangerous conditions for the operator, other personnel and equipment.

SAFETY RULES AND PRACTICES

INSTALLATION OF ATTACHMENTS



WARNING

- The 1H2 series forklifts have been designed for side shift attachments (refer to "Truck Modifications" on page 4).

ANSI/ITSDF STANDARDS FOR FORKLIFT CLAMP ATTACHMENTS



WARNING

- The ANSI/ITSDF Standards regarding forklift mounted clamp attachments took effect for trucks shipped on or after October 7, 2010. This current standard affects lift trucks equipped with a load bearing clamp (paper roll clamp, carton clamp, etc.) and requires the operator to perform two distinct motions before opening (releasing) the clamp. For example, the operator must press a button and then move a lever to release the load.

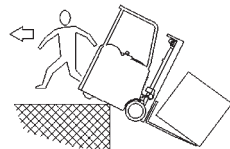
ANSI B56.1 Section 7.25 "Load-Handling Controls" can be reviewed by visiting the ITSDF website at www.itsdf.org

IN CASE OF TIP-OVER



WARNING

A TIP OVER OR FALL MAY CAUSE SERIOUS INJURY OR DEATH. IN THE EVENT OF A TIP OVER OR FALL EXIT THE TRUCK AND QUICKLY MOVE AWAY.



NOTE: These instructions apply to stand-up rider type trucks with a large rear opening in the drivers compartment.

If the electric stand-up lift truck starts to tip over or fall in any direction, step off the rear and away from the truck.



WARNING

- In an electric stand-up lift truck tips or falls off a ramp or dock, you could be seriously injured, or killed no matter what you do! The best chance of surviving is to get away from the truck and load.
- You must step out and away from the driver's compartment.

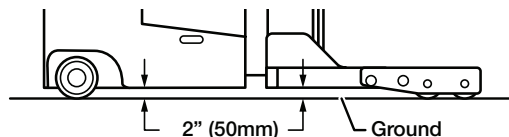
SAFETY RULES AND PRACTICES

TRANSPORTING FORKLIFT



WARNING

1. Check to make sure the underside of the forklift does not come into contact with the load carrying platform or the ground. Ground clearance of only 2 in (50 mm).



2. When using a load bridge, make sure the planks are capable of withstanding the deadweight of the forklift and battery.



CAUTION

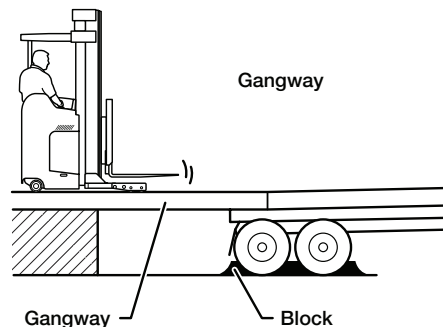
- **This forklift has an electric brake.**
- **This brake must be electrically or mechanically released to move unit.**
- **UniCarriers does not recommend winching this model forklift without brakes released.**
- **If winching is required, a strap or cable must be wrapped around the forklift and its load carrying device (mast).**

3. When hoisting (lifting) up the forklift, be sure to use the lifting points (refer to page 23).

4. Turn off the ignition switch and remove key.

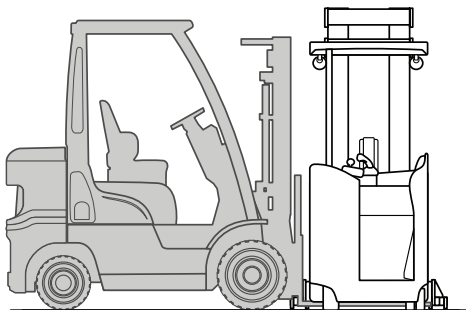
5. Make sure the battery connector is disconnected.

GANGWAY



SAFETY RULES AND PRACTICES

TRANSPORTING FORKLIFT (cont'd)



Recommended method for moving (transporting) this reach truck.

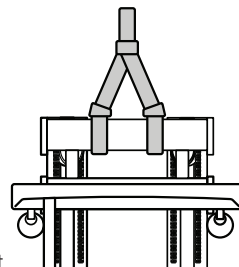
HOISTING (LIFTING) UP THE FORKLIFT



WARNING

- **Only use this method as a last resort to move the forklift if the normal application requires repeated lifting. Permanent lifting devices must be mounted on the forklift by UCA. Contact your Local Authorized Dealer for more details.**

When lifting the entire forklift, secure cables/wire ropes to center top crossbeam of mast rails, and then utilize a lifting device that can lift the capacity of the truck and battery.



WARNING

- **Make sure that the cables/wire ropes do not interfere with the overhead guard while lifting the forklift.**
- **Make sure that cables/wire ropes and the lifting device are strong enough to support the forklift safely, as the forklift is extremely heavy.**
- **Do not use the overhead guard to lift up the forklift.**
- **Never get under the forklift while lifting the forklift.**

SAFETY RULES AND PRACTICES

TRANSPORTING FORKLIFT (cont'd) FUNCTION TESTS

The functional tests are carried out to check whether the forklift functions correctly after it has been transported (over land or water), or after it has been taken out of storage. The test covers the following items, but since exclusive tools and equipment are required for Items 1 and 2, request that your Local Authorized Dealer perform the test.

Items

1. Those that are indicated in "Daily Inspection" (refer to page 72).

2. Dynamic tests

Mobility (traveling and maneuvering) test

Make sure the forklift moves in the direction specified by the multi-function handle, and the forklift operates correctly when the brake pedal is depressed or released. Also check to see that the steering feels normal and that it operates satisfactorily. Elevate and lower test load.

Stacking test

Raise the test load to the maximum height of the mast and lower at maximum speed, stopping the descent several times, to see that it stops smoothly.

Lowering speed test

Make sure the maximum lowering speed does not exceed 2.0 ft/s (0.6 m/s) (by measuring the speed).

3. Test for holding load

Check the rate at which the mast lowers naturally [3.94 in (100 mm)/10 min max]. Check the rate at which the tilt cylinder tilts forwards naturally (5 degrees/10 min max).

POSITION OF DATA & CAPACITY PLATES AND DECALS



WARNING

- **When data & capacity plates or warning & caution decals are damaged such that they cannot be read or have peeled off, they should be immediately replaced with new ones to ensure that they are constantly maintained in a legible condition. The plates and decals are available from your Local Authorized Dealer.**
- **The warning and caution decals are affixed to the designated locations of the forklift as shown in the figure on page 25. Before operating the forklift, be sure to take note of the details given in the decals so as to ensure proper and safe operation.**

POSITION OF DATA & CAPACITY PLATES AND DECALS (cont'd)

POSITION OF DATA & CAPACITY PLATES AND DECALS (cont'd)



SAFETY RULES AND PRACTICES

DATA & CAPACITY PLATES AND DECALS

Know your unit. The data plate indicates all necessary information regarding the type of attachments, lifting capacity, etc. Always check the unit's data plate and understand areas 1 through 16 as shown in the illustration below.

DATA PLATE

| AS SHIPPED FROM THE FACTORY THIS TRUCK CONFORMS TO ANSI/ISO D56.1 | | | | |
|--|---------------|---------|---------------|---------------|
| MODEL | 1 | | UL TYPE | 2 |
| SERIAL NO. | 3 | | BAT. TYPE | 4 |
| MAST | 5 | | | MAST VERTICAL |
| GRADEABILITY | 6 | | | |
| MAX REAR TILT | DEG 7 | | | |
| BAT. MAX. AMP HR AT 6 HR RATE | 8 | VOLTAGE | 9 | V |
| ATTACHMENT | 10 | | | |
| BAT. WL. | MAX. | 11 | MIN. | 12 |
| UNIT OF MEASURE: kg (lbs) / mm (in) | A-LOAD CENTER | | C-FORK HEIGHT | CAPACITY |
| TRUCK WEIGHT WITHOUT BAT. $\pm 5\%$ | 14 | | 15 | 16 |
| 13 | | | | |
| UniCarriers Americas Corporation <small>MARENGO, IL U.S.A. 99070 GP21C</small> | | | | |

- Model Variation (Long Model Code)
- UL Type ("E" or "EE")
- Chassis No. (Truck Serial Number)
- Battery Type
- Mast Type
- Gradeability
- Maximum Tilt Degree
- Battery Amp Hour Max @ 6 Hours
- Voltage (36V)
- Attachment (Model & Serial Number)
- Battery Weight Maximum
- Battery Weight Minimum
- Truck Weight without Battery
- Load Center
- Fork Height
- Maximum Lifting Capacity

Actual Capacity will vary with forklift configuration and load center. Mast configuration will determine the maximum lifting distance. These values are stamped on the data plate.



WARNING

- Do not exceed the actual capacity of the forklift. Note the specifications of the forklift you are using and operate the forklift accordingly.

ALTERNATE CAPACITY PLATE

| + ALTERNATE CAPACITY PLATE + | | | |
|--|-------------|-------------|----------|
| CHASSIS NO. | 1 | | |
| ATTACHMENT | 2 | | |
| TRUCK Wt. WITHOUT BAT. $\pm 5\%$ | LOAD CENTER | FORK HEIGHT | CAPACITY |
| 3 | 4 | 5 | 6 |
| UNIT OF MEASURE kg (lbs) / mm (in) | | | |
| + UniCarriers Americas Corporation, MARENGO, IL U.S.A. 99070 FW81A + | | | |

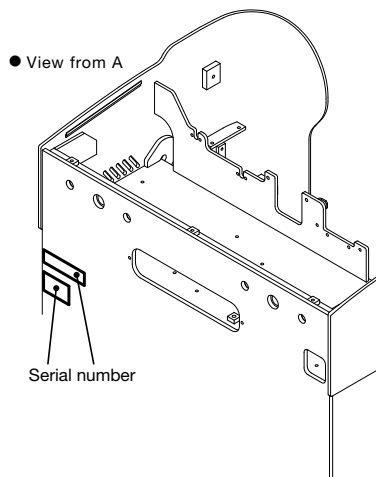
- Chassis No. (Truck Serial Number)
- Attachment
- Truck Weight without Battery
- Load Center
- Fork Height
- Capacity

Knowing the model and serial number for this unit is very helpful whenever ordering repair parts. For any further information and specifications on this unit or any other, contact your Local Authorized Dealer.

SAFETY RULES AND PRACTICES

DATA & CAPACITY PLATES AND DECALS (cont'd)

IDENTIFICATION NUMBERS



Truck Serial Number

1H2 - XXXXXX

Truck Serial Number - Manufactured in Marengo, IL USA

1H2 - 99XXXX

CAUTION DRIVE DECAL (IN CASE OF TIP-OVER DECAL)



NOTE: These instructions apply to stand-up rider type trucks with a large rear opening in the drivers compartment.

If the electric stand-up lift truck starts to tip over or fall in any direction, step off the rear and away from the truck.



WARNING

- In an electric stand-up lift truck tips or falls off a ramp or dock, you could be seriously injured, or killed no matter what you do! The best chance of surviving is to get away from the truck and load.
- You must step out and away from the driver's compartment.

SAFETY RULES AND PRACTICES

DATA & CAPACITY PLATES AND DECALS (cont'd)

BATTERY GATE DECAL



WARNING

- Battery gates must be installed before operating the truck.

PINCH POINT DECAL



WARNING

- This decal instructs the operator to keep fingers away. Do not reach into the mast area. Personal injury may occur if any part of your body is between the moving and fixed sections of the mast.

EE DECAL



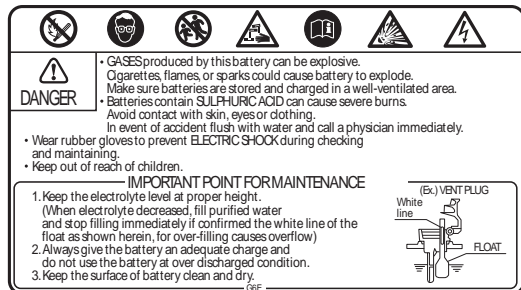
WARNING

- "EE" labeled and classified forklifts require special equipment and enclosures.
- These include but are not limited to; static strap, enclosed fuse(s), contactors, motors and switches. The battery compartment is reinforced with battery covers that can be locked.
- Refer to NFPA 505 for specific location classifications and application guidelines.
- To maintain this classification of electrical protection, all guards, covers and enclosures must be in good working order and in place whenever the forklift is in operation. Lock battery covers should only be removed when servicing or in approved battery charging areas.
- If damaged in any way, the unit must be taken out of service until repaired or replaced.

SAFETY RULES AND PRACTICES

DATA & CAPACITY PLATES AND DECALS (cont'd)

BATTERY DECAL



DANGER

- **GASES** produced by this battery can be explosive. Cigarettes, flames, or sparks could cause battery to explode. Make sure batteries are stored and charged in a well-ventilated area.
- Batteries contain **SULFURIC ACID**, which can cause severe burns. Always use personal protective equipment. Avoid contact with skin, eyes or clothing. In event of accident flush with water and call a physician immediately.
- Wear rubber gloves to reduce a possible **ELECTRIC SHOCK** during checking and maintaining.
- Keep out of reach of children.

WARNING DRIVE DECAL (TRAINED AND AUTHORIZED)



WARNING

- Do not operate this truck unless trained and authorized by your employer.
- Improper operation may result in a serious or fatal injury to yourself or others.
- Make sure you fully read and understand the operators manual supplied with this truck.
- Failure to follow all instructions in this manual could be a violation of the Occupational Safety and Health Act.
- Additional Operator's Manuals can be obtained from your dealers.



WARNING

- Operator must be trained and authorized to drive the forklift, and must understand safety techniques and rules for the forklift operation.
- Make sure that you read and fully understand the Operator's Manual supplied with this forklift. Failure to follow all instructions in this manual could be a violation of the Occupational Safety and Health Act.

SAFETY RULES AND PRACTICES

DATA & CAPACITY PLATES AND DECALS (cont'd)

CAUTION FORK DECAL



WARNING

Do not stand on or underneath forks.

- Riding on the forks is strictly prohibited. Furthermore, do not stand immediately underneath the forks. Otherwise, serious accidents can occur if the forks should move abruptly and the load placed on the forks unexpectedly falls down.

REFRIGERATOR SYMBOL DECAL



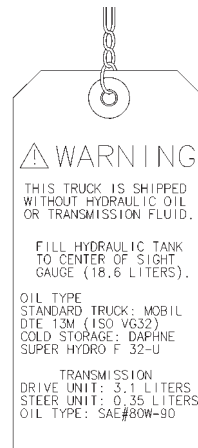
CAUTION

Usable in refrigerator

- This label indicates that the forklift can be used in a refrigerator and to use the appropriate hydraulic oil.



SHIPPING WARNING TAG



WARNING

- This truck is shipped without hydraulic oil or transmission fluid.

OPERATING CONTROLS AND FUNCTIONS

APPLICATIONS

These trucks are operated in a standing position. The truck is available in different fork lengths and lifting heights. Refer to the truck's data plate for this information.

The trucks are equipped with a 36 Volt electrical system. Travel and lifting speeds are transistor controlled to provide smooth operations. In addition, the travel function and the different hydraulic functions have additional controls which further enhance these features. Different speeds can be set by a trained service technician.

APPLICATION AREA FOR UNICARRIERS TRUCKS

UniCarriers industrial trucks are solely designed and manufactured to handle goods. The truck should only be fitted with the appropriate accessories relevant to the application.

PROHIBITED APPLICATIONS FOR UNICARRIERS TRUCKS

It is not permitted to use these trucks for other purposes including the following:

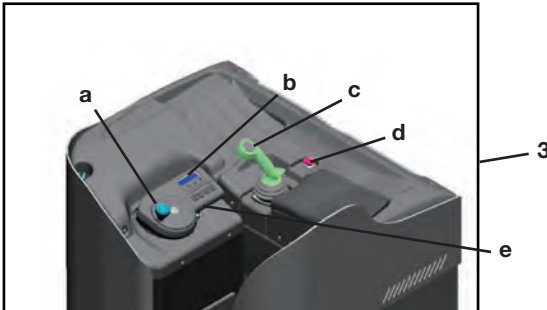
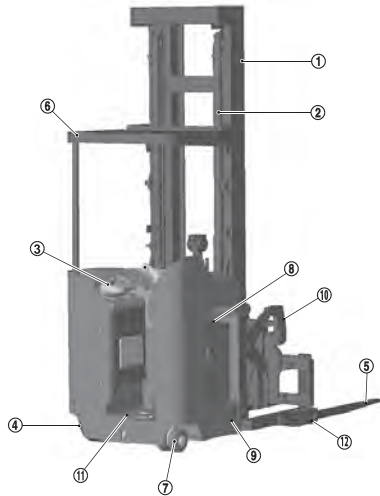


WARNING

- **Do not operate in areas that contain gases which can cause fire or explosions**
- **Do not use as a towing truck for trailers**
- **Not to be used for pushing applications**
- **Do not tow other lift trucks**
- **Do not transport or lift passengers**
- **Do not drive on any non-paved areas (refer to page 20).**

OPERATING CONTROLS AND FUNCTIONS

MAIN COMPONENTS



1. **Mast Upright:** The mast upright is the lifting device for the forks. The lifting is done through hydraulic lift cylinders and chains.
2. **Lift Cylinders:** The cylinders are used to lift the forks up and down.
3. **Operator Compartment:** (a) Steering wheel, (b) Control Panel, (c) Multifunction Handle, (d) Emergency Switch, (e) Ignition Switch
4. **Steering Tire**
5. **Forks:** Their widths can be easily adjusted to fit differing pallets or loads.
6. **Overhead Guard :** Intended to offer protection from falling objects, but cannot protect against every possible impact.
7. **Drive Caster**
8. **Battery Connector**
9. **Battery Gate**
10. **Reach Pantograph**
11. **Floor Board w/ Brake and Operator Presence Pedals**
12. **Tandem Load Wheel**

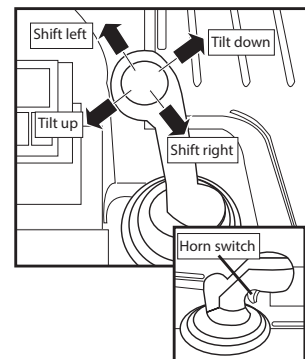
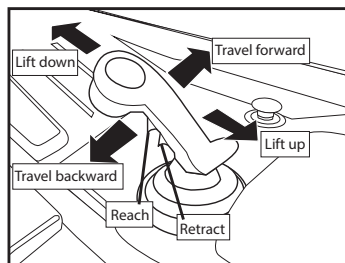
OPERATING CONTROLS AND FUNCTIONS

OVERVIEW

Control Panel



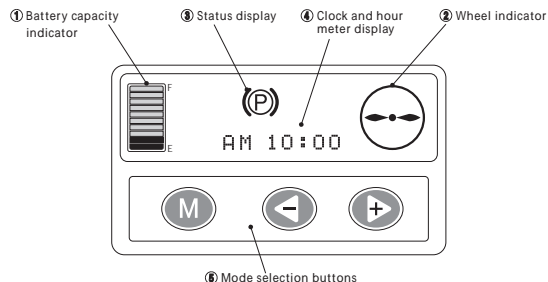
Multi-function handle



OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS

The operator compartment contains the 1H2 main functional controls to operate the truck in a safe and controlled manner. The meter panel consists of two sections: LCD (Liquid Crystal Display) monitor and mode selection buttons.



1. Battery Capacity Indicator
2. Wheel Indicator
3. Status Display
4. Clock and Hour Meter Display
5. Mode Selection Buttons

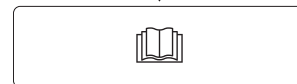
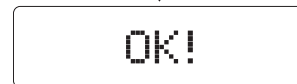
BASIC OPERATION

1. Turn the key switch to the [START] position to illuminate the display monitor.
 - The safety monitor symbols are displayed.
2. Checks brake, controller & steering system.
 - If the system detects no malfunctions, [OK!] will be displayed
 - The icon that is referred to as "read the operator's manual" will be displayed.
 - The basic screen will be displayed. After the basic screen is displayed, the forklift truck is ready to be used.

NOTE:

If a malfunction is detected, the error code and safety monitor symbol appear.

When ignition switch is ON
(all displays illuminated)



Basic screen



Error screen



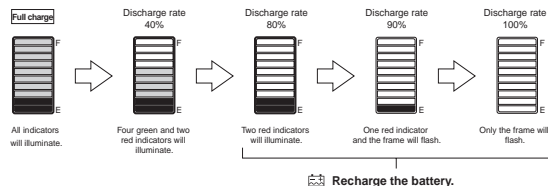
OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

BATTERY CAPACITY INDICATOR

During forklift operation, periodically check the battery capacity. Make every effort to recharge the battery before the battery low message appears.

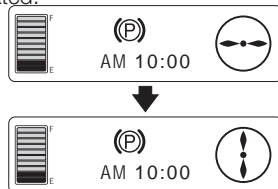
The controller and the sensors act together to regulate the forklift's electrical system. Whenever one of the malfunctions listed below occurs, the LCD meter panel will show an indication explaining the details of the malfunction.



WHEEL INDICATOR

Wheel position indicator

This indicator shows the current direction of the driving/steer wheel. When the steering wheel is turned, the wheel position indicator will move in accordance with the change of the driving/steer wheel direction. (Both of the forward and reverse directions of the wheel are simultaneously indicated.)



CAUTION

- Turning the steering wheel frequently while the forklift truck is stopped may cause uneven wear of the tire on the driving wheel or overload to the EPS motor (steering motor).



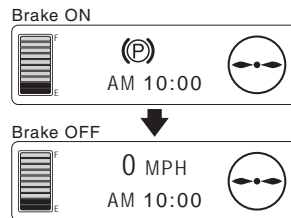
WARNING

- Do not turn the steering wheel quickly while traveling at high speed to reduce the possibility overturning the forklift truck or the possibility of the load shifting and falling off the forks.

STATUS DISPLAY

Parking brake indicator

When this indicator is shown, the parking brake is applied. When the brake pedal is depressed, the parking brake is released and then the parking brake indicator is replaced with the speedometer. If there is no travel command given, the brake will reapply. Brake will release when the next travel direction is selected.



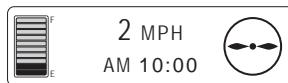
OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

STATUS DISPLAY (cont'd)

Speedometer

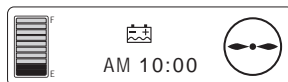
The current traveling speed (MPH) is displayed.



| | |
|---------------|---------------|
| Display range | 0 MPH - 8 MPH |
|---------------|---------------|

Battery discharge indicator

When the battery is discharged to more than 70 percent of capacity, the battery discharge indicator is displayed.



CAUTION

- **When the “charge battery” symbol mark appears, immediately charge the battery. If the truck is used until it stops operating, the battery lifetime will be shortened.**

Neutral safety (for traveling)

If the ignition switch is turned to the ON position with the multi-functional lever operated to travel forward/backward, a warning is displayed and the forklift truck cannot travel. When the multi-functional lever is returned to the neutral position, the warning disappears and the forklift truck can travel.



Neutral safety (for brake)

If the ignition switch is turned to the ON position with the brake pedal depressed, a warning is displayed and the forklift truck cannot travel. When the brake pedal is released to apply the parking brake, the warning disappears and the forklift truck can travel after re-depressing the brake pedal.



When starting to travel

If the presence pedal is depressed with the multifunctional lever operated to travel (forward/backward) and the brake pedal depressed when starting to travel, a warning is displayed and the forklift truck cannot travel. When the multi-functional lever is returned to the neutral position, the warning disappears and the forklift truck can travel.



OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

STATUS DISPLAY (cont'd)

While traveling

If the presence pedal is released for more than 0.5 second while traveling, a warning is displayed and the forklift truck stops traveling. When the multi-functional lever is returned to the neutral position, and you depress the presence pedal the warning disappears and the forklift truck can travel.



Neutral safety (for hydraulic equipment)

If the ignition switch is turned to the ON position with the multi-functional lever operated to lift down/up or any other hydraulic switch is operated, a warning is displayed and the hydraulic function will not operate. When the multi-functional lever is returned to the neutral position or the operation of the hydraulic switch is returned to neutral, the warning disappears and the forklift truck hydraulic function can then be operated.



When starting to handle a load

If the presence pedal is depressed with the multi-functional lever operated to lift down/up, or hydraulic function is operated when starting to handle a load, a warning is displayed and the forklift truck cannot handle the load. When the multi-functional lever is returned to the neutral position or the operation of the hydraulic function switch is stopped, the warning disappears and the forklift truck can start to handle loads again.



While handling a load

If the presence pedal is released for more than 0.5 second while handling a load, a warning is displayed and the forklift truck stops the hydraulic functions. When the multi-functional lever is returned to the neutral position or the operation of the hydraulic functions are stopped, the warning disappears and the forklift truck can handle the load.





OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

STATUS DISPLAY (cont'd)

Hour meter confirmation screen

When pressing the  or  button of the mode selection buttons with the display showing the basic screen, the hour meter confirmation screen will appear. The display will return to the basic screen after 5 seconds have passed.

TOTAL

The meter shows the length of time the ignition switch is in the ON position.

TRAVEL

The meter shows the total traveling time.

HYD.

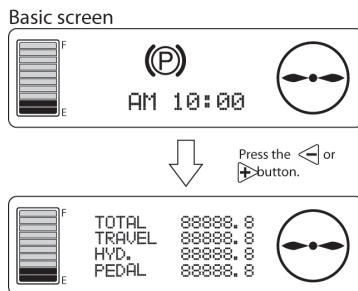
The meter shows the total hydraulic operation time.

PEDAL

The meter shows the total length of time the presence pedal is depressed.



NOTE:

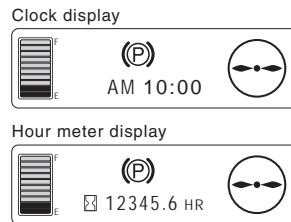
If the forklift truck travels or hydraulic operation is performed within 5 seconds after the hour meter confirmation screen is displayed, the display returns to the basic screen immediately.



CLOCK AND HOUR METER DISPLAY

Clock setting screen

To set the clock press the  button of the mode selection buttons for more than 3 seconds with the display showing the basic screen, the clock setting screen will appear. After setting the clock, press the  button once to return to the basic screen.



Hour meter check screen

Any of the following three types of hour meter displays can be selected:

OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

CLOCK AND HOUR METER DISPLAY (cont'd)

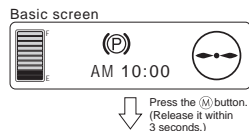
Selecting the Clock and Hour Meter Display

From the basic screen, press the mode selection (M) button (releasing it within 3 seconds) to display the time/hour-meter display selection screen.

Here you can select the item that will be displayed on the basic screen. After selecting the item to display (the selected item is highlighted), press the (M) button 2 times to return to the basic screen. On the basic screen, the selected item will be displayed.

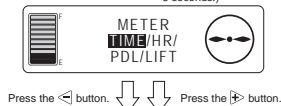
TIME

Indicates that the time display has been selected.



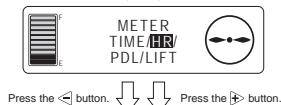
HR

Indicates that the display of the total time (ignition ON time) has been selected.



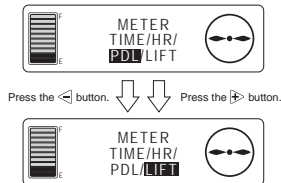
PDL

Indicates that the display of the presence pedal ON time has been selected.



LIFT

Indicates that the digital lift height display (optional) has been selected.



CLOCK AND HOUR METER DISPLAY (cont'd)

Clock Setting Screen

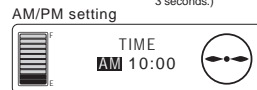
From the basic screen, press and hold the mode selection (M) button for 3 seconds or longer to display the time setting screen.



Press the (M) button. (Release it within 3 seconds.)

Settings/Correcting AM/PM

When "AM/PM" is selected (the text is highlighted and flashing), press the mode selection (<) button or (>) button to select AM or PM. After selecting, press the (M) button to change to the hour setting.



Use the <> button to select AM/PM.

Press the (M) button.

Setting/Correcting the Hour

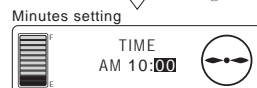
When the hour is selected (the numbers are highlighted and flashing), press the mode selection (<) button or (>) button to set the hour. the hour can be set from 1-12.



Use the <> button to set the hour (1 - 12).

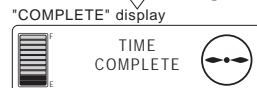
Press the (M) button.

After setting, press the (M) button to change to the minutes setting.



Use the <> button to set the minutes (0 - 59).

Press the (M) button.



Use the <> button to set the minutes (0 - 59).

Press the (M) button.



The screen returns to the basic screen.

OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

CLOCK AND HOUR METER DISPLAY (cont'd)

Setting/Correcting the Minutes

When the minutes are selected (the numbers are highlighted and flashing), press the mode selection  button or  button to set the minutes. the minutes can be set from 00-59.

After setting is completed, press the  button. "COMPLETE" appears and flashes 3 times, and then the screen returns to the basic screen.

NOTE:

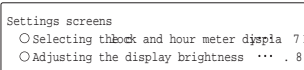

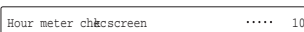
Each time the  or  button is pressed, the seconds display is corrected to 00.

The clock and hour meters are accumulated and stored in the EPS controller. If the EPS controller is replaced, the clock will have to be set.


MODE SELECTION BUTTONS


The mode selection buttons are used for checking the value shown on the hour meter, changing the display or setting the clock.



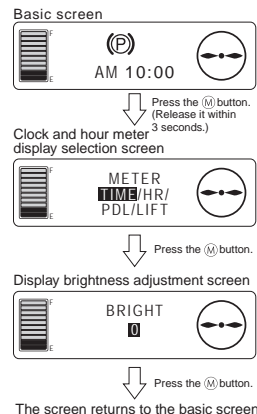
- Press the mode selection button. (Release it within 3 seconds)

 - Selecting the clock and hour meter display 7
 - Adjusting the display brightness ... 8
- Press and hold the mode selection button for 3 seconds or longer

- Press the mode selection button


Setting screens

From the basic screen, press the mode selection  button to display the various setting screens.

Press the  button again to return to the basic screen.

If a travel or hydraulic operation occurs while a settings screen is displayed, the screen immediately returns to the basic screen.



OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

MODE SELECTION BUTTONS

Adjusting the Display Brightness

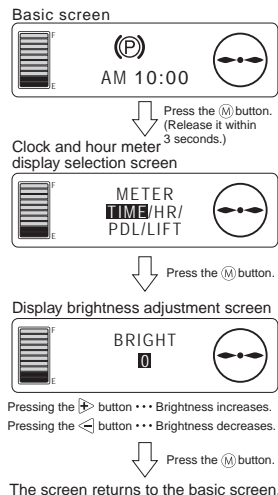
From the basic screen, press the mode selection (M) button (releasing it within 3 seconds) to display the time/hour-meter display selection screen.

Press the (M) button again to display the display brightness adjustment screen.

After adjusting the brightness, press the (M) button once to return to the basic screen.

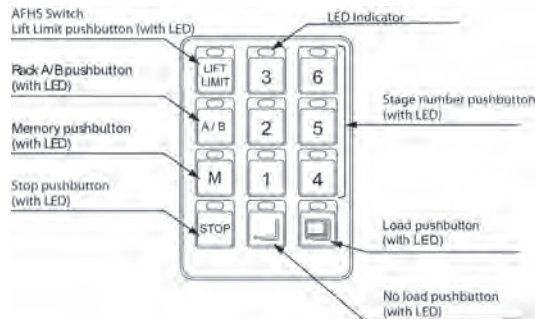
NOTE:

BRIGHT (display brightness) can be set in 8 stages from 0 (dimpest) to 7 (brightest).



AUTOMATIC FORK HEIGHT SELECT (OPTION): AFHS

Two Maximum Lift Heights can be set up using the A/rack B/rack buttons. Six (6) preset lift heights for picking/depositing loads may be programmed using the A/rack button and 6 presets on the B/rack button, for a total of 12 presets.



Programming AFHS Buttons

NOTE: PB (Push button) 1 thru 6 must be set sequentially, with 1 being the lowest rack level, 2 the next etc. If the racking is changed by adding a lower rack level the stops will need to reset. Trying to program a higher PB, i.e. setting PB6 at a lower level than PB 1 will cause the following warning screen on the meter panel display.



WARNING

- When using the loaded automatic fork stop feature, make sure there is adequate clearance between the load and the rack immediately above where the load is being placed.

OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

AUTOMATIC FORK HEIGHT SELECT (OPTION): AFHS

Pushbutton Functions



Lift limit: Limits Maximum Fork Height. When programmed, two separate maximum lift heights can be set using the A/B pushbutton (PB).



A/B Pushbutton (PB A or PB B): Can be used to program AFHS for two (2) maximum lift heights and preset height stops for two (2) racks having different rack height requirements. When the A/B switch LED is on, the B rack memory is being utilized on buttons 1-6.



Memory Pushbutton (PB M): Use to program/change/clear pushbuttons.



Stop Pushbuttons (PB S): Use to cancel selection or automatic lift.



No Load Pushbutton: Use to place a load onto rack. When selecting the load PB the automatic fork stop will stop the forks at the proper height to enter a pallet.



Preset Pushbutton (PB 1-6): Selects rack level for automatic stop.



Loaded Pushbutton: Use to place a load into rack. When selecting the loaded PB the automatic fork stop will raise the forks 100 mm (4 inches) higher than the no load PB so a pallet can be placed on the rack. 100 mm (4 inches) dimension can be changed by a trained and authorized technician.

OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

TURNING METER PANEL FORK HEIGHT DISPLAY ON

Press PB (M) on the dash display

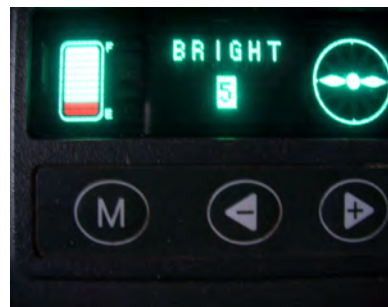


Use the - or + to change the display to lift and press PB (M).



Press PB - or + to change display brightness if desired and press PB

(M).



Note: Fork Height Indicator will only display fork height when above free lift.



OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

AFHS PROGRAMMING



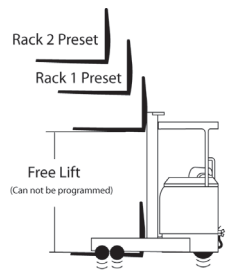
NOTE:

If the LED for the A/B switch is off, you are setting the fork height presets for the A rack.



If the LED for the A/B switch is on you will be setting the fork height stop setting for the rack presets.

1. Take the truck to rack type that will be used with the Automatic Fork Height Select feature.



2. Use the multifunction handle and raise the forks to the first racking level above the free lift height of the mast.
3. The fork height indicator on the meter panel display will now display the height of the forks inches.
4. Place the forks under the load.



5. Do not lift the load at this time.
6. Press and hold PB M down until the LED on the switch lights up.
7. Press PB 1, the LED for PB 1 is now on.

NOTE:

If the mast is below free lift, the following warning will be displayed on the meter panel display.



8. Press and release PB M, the LED for PB M is now off and the LED for PB 1 is on, indicating the preset no load fork height for rack A, position 1 is set.

NOTE:

To set fork heights for another rack configuration press PB A/B and perform steps 1 thru 8.

OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

AFHS PROGRAMMING (cont'd)

Programming Lift Limit Button to On



NOTE: Maximum mast heights must be programmed prior to using.

Limits Maximum Mast Height

In conjunction with the A/B pushbuttons it can be programmed for two (2) separate areas, each have different maximum lift height requirements.

Lift limit for rack A or B are independent of each other and must be programmed separately.

1. Raise mast to maximum desired lift height.
2. Press and hold PB M until the LED on the switch turns on.
3. Press and release the Lift Limit Button.
4. Press and release PB M.
5. LED for PB is now off.
6. LED for Lift Limit button is now on.
7. LED's on any programmed numbered preset buttons should now be off.
8. LED for A/B switch is OFF. Lift limit switch for rack A preset settings is now active.



NOTE: PB 1 thru 6 must be set sequentially, with 1 being the lowest rack level, 2 the next etc. If the racking is changed by adding a lower rack level the stops will need to reset. Trying to program a higher PB, i.e. setting PB 6 at a lower level than PB 1 will cause the following warning screen on the meter panel display.

NOTE: Lift limit button for B rack is still off and needs to be turned on separately. To turn on the B rack lift limit button, press the A/B button. The LED should now be on. Repeat steps 1 thru 6 to program the B rack lift limit button.

Using Lift Limit Feature

NOTE: Maximum mast heights must be programmed prior to using. Limits maximum mast Height. When programmed, two separate maximum lift heights can be set using the A rack/B rack pushbutton (PB).



1. Press the A/B button to select preset maximum mast height for the area to be worked in.

NOTE: If the LED for the A/B switch is off the A presets are active. If the LED for the A/B switch is on the B presets are active.



2. Press the lift limit PB.
3. The LED on the lift limit switch should now be on.

NOTE: If the LED is not on, push the lift limit PB again. If the LED is not on lower the mast, it might be raised higher than the preset limit.

4. When using the Multifunction Handle the mast will only raise to the maximum preset height.

OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

USING AFHS FEATURE

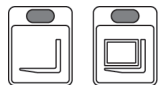
Picking Load from Rack

When selecting the no load PB the automatic fork stop will stop the forks at the proper height to enter a pallet.

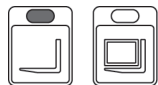
- Square truck with load



- Press preset PB programmed for rack level where load is located.



- At bottom of key pad no load and loaded push button LED's will turn on.



- Press the no load PB and the loaded LED will turn off.

- Check that area above forks to load is clear.
- Use the multifunction handle to lift the forks. Forks will automatically stop at the preset rack height.



CAUTION

- **Make sure forks have stopped at correct height before attempting to pick up load.**

Continue to pick load from the rack manually.

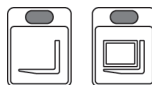
Placing a Load onto Rack:

When selecting the loaded PB the automatic fork stop will raise the forks 100 mm (4 inches) higher than the no load PB so a pallet can be placed on the rack (100 mm (4 inches) dimension can be changed by a trained and authorized technician).

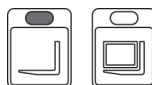
- Square truck with rack where load is to be placed.



- Press preset PB programmed for rack level where load is located.



- At bottom of key pad no load and loaded pushbutton LED's will turn on.



- Press the loaded PB and the no load LED will turn off.
- Check that area above load to the selected rack level is clear.

- Use the multifunction handle to lift the load. Forks will automatically stop at the preset rack height.



CAUTION

- **Make sure forks have stopped at correct height before attempting to load on rack.**



WARNING

- **When using the loaded automatic fork stop feature, make sure there is adequate clearance between the load and the rack immediately above where the load is being placed.**

Continue to pick load from the rack manually.

OPERATING CONTROLS AND FUNCTIONS

METERS, INDICATORS AND LAMPS (cont'd)

REPROGRAMMING AFHS BUTTONS

NOTE: PB 1 thru 6 must be set sequentially, with 1 being the lowest rack level, 2 the next etc. If the racking is changed by adding a lower rack level the stops will need to reset. Trying to program a higher PB, i.e. setting PB 6 at a lower level than PB 1 will cause the following warning screen on the meter panel display.



1. Press and hold PB **(M)** until the LED on the switch turns on.



2. Press and hold the preset pushbutton to be reprogrammed until the LED on the switch turns off.



3. Press and release PB **(M)**.

The LED on PB **(M)** will go out and the preset button LED will flash and go out.

4. Refer to the AFHS Programming section to program for new rack height.

Turning Lift Limit Off

1. Raise the mast above free lift.
2. Select which lift limit you wish to turn off, A or B. If the A/B switch LED is off you will be turning off the A rack lift limit. If the A/B switch LED is on, you will be turning off the rack B lift limit.

3. Press and hold PB **(M)** until the LED on the switch turns on.



4. If the LED on the lift limit switch is not on, press and release the lift limit switch.



5. Press and hold the lift limit switch until the LED goes out.



6. Press and release PB **(M)**.

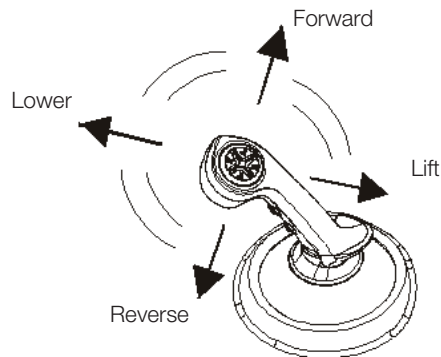
7. The chosen lift limit switch is now active.

OPERATING CONTROLS AND FUNCTIONS

MULTI-FUNCTION HANDLE

TRAVEL CONTROL

Pushing the control handle toward the forks makes the lift truck travel forward. To change direction, move the multi-function handle in the opposite direction the lift truck is traveling, regardless of travel speed. The lift truck will come to a stop, then accelerate in the opposite direction. This control is proportional; therefore, the farther the control handle is pushed, the faster the lift truck will accelerate or decelerate. If the multi-functional handle is released, it will return to neutral and the truck will slow down to a stop.



The multi-functional handle also controls the direction and speed at which the carriage moves vertically on the mast.

There are additional control buttons that control the reach.

LIFT/LOWER

(Lift/Lower) is activated by moving the entire control handle towards the left or right side of the truck. To control lift speed pull the multifunction control handle towards the operator. To lower the mast push the control handle away from the operator. Lift and lower speeds are proportional to the movement of the control handle. The more the control handle is moved, the faster the Lift/ Lower speed.

It is not a recommended practice to lift loads or mast while traveling. Lift Speed will reduce when traveling a high speed.

This unit was not designed to transport or lift any person(s).



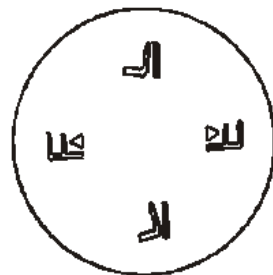
CAUTION

- **Control of lifting and lowering speed: For both lifting and lowering, the speed can be changed by manually controlling the angle of the lever.**

TILT AND SIDESHIFT CONTROL

The Tilt/Sideshift Control, located at the top of the multi-function handle lever, controls the tilting of the forks and side-shifting of the carriage. The control toggle is operated with the thumb of the right hand.

To tilt the carriage forward, press to the top of the control handle. To tilt the carriage back, press to the bottom of the control. On lift trucks equipped with a side-shifting carriage, press the top of the control toggle to move the carriage to the left. To sideshift right press the bottom. Tilt and sideshift are single speed functions.



OPERATING CONTROLS AND FUNCTIONS

MULTI-FUNCTION HANDLE (cont'd)

REACH FUNCTION CONTROL BUTTON

The reach in & out (pantograph) buttons are used to control any reach in & out functions. Push top button to reach out; push lower button to reach in.



WARNING

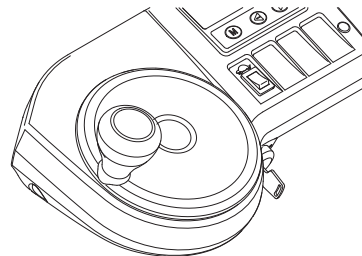
- Never travel with reach extended as it will effect stability of the 1H2 (SRX).
- It could also cause the load to shift and damage the pantograph (reach) itself.

HORN

The button to operate the horn is activated by the index finger of the right hand.

STEERING WHEEL

Hold the steering wheel knob with the left hand. Confirm the direction of the driving wheel (traveling forward or in reverse) with the wheel indicator shown on the display.















WARNING

- Do not make a sharp turn while traveling at high speed.
- Do not operate the steering wheel rapidly.
- Unit could tip over or load could shift & fall off forks.

OPERATING CONTROLS AND FUNCTIONS

STEERING DIRECTION

| | | Forks Leading | Forks Trailing |
|---------------------------------|---|---|---|
| Control | Steering direction | Travel forward | Travel backward |
| Forward direction (standard) | Clockwise  |  |  |
| | Counterclockwise  |  |  |
| Reverse direction (optional) | Clockwise  |  |  |
| | Counterclockwise  |  |  |

SWITCHES

IGNITION SWITCH

Insert the key into the ignition switch to start or stop the motor. Each new forklift comes with two keys, use one for operation and store the other in a safe place as a spare.

OFF Position

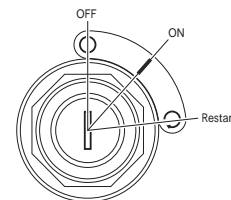
This position allows the key to be inserted or removed.

ON Position

When the ignition switch is in the ON position, backlighting for the LCD will be on. The hour meter, clock and battery capacity meter will all be active. The forklift is now ready for operation.

START Position

The electric motor is powered and started at this position. Turn the key to the right from the {ON} position. The display illuminates and the forklift truck is powered on. When the key is released, the key switch will automatically return to the {ON} position.



WARNING

- Before leaving the operator compartment, be sure the multi-function handle is in the neutral position, fully lower the load carrying device and turn the ignition switch OFF. If the unit is unattended, remove the key.



CAUTION

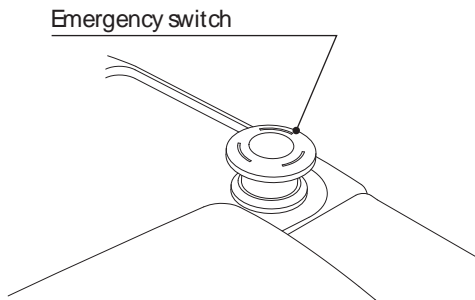
- Even if the key is in the OFF position, electric accessories such as control units are powered when the battery is connected to the truck.

OPERATING CONTROLS AND FUNCTIONS

SWITCHES (cont'd)

EMERGENCY SWITCH

This forklift is equipped with an emergency switch. When an accident occurs or there is a potential hazard, press the emergency switch to shut off the power supply. To resume the power supply, turn the emergency switch clockwise to reconnect the electric circuit.

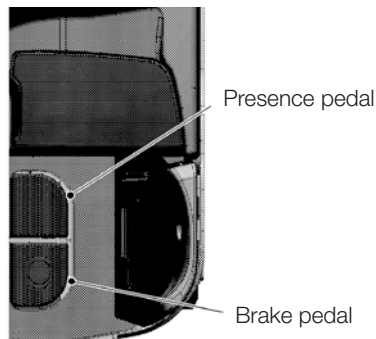


CAUTION

- When the emergency switch is depressed, the steering wheel cannot be operated; therefore, do not press the emergency switch unexpectedly, especially while traveling. Press the emergency switch only in an emergency.

BRAKE AND OPERATOR PRESENCE PEDALS

In the Operator's Compartment the cushion floor has 2 pedals. The pedal on the right (farther in) is the operator presence pedal. The pedal on the left (at the rear of the compartment) is the brake pedal.



OPERATOR PRESENCE PEDAL



WARNING

- Step down on this pedal to power up the unit, to travel or make use of Hydraulic or Steer Systems.

Note:

If you remove your foot from this pedal for more than 0.5 seconds, the truck will slow down to a stop and then apply the brakes.

OPERATING CONTROLS AND FUNCTIONS

BRAKE AND OPERATOR'S PRESENCE PEDALS (cont'd)

OPERATOR PRESENCE PEDAL (cont'd)

Depress the presence pedal with the right foot. Always depress the presence pedal while traveling or operating hydraulic equipment. If the foot is released from the presence pedal and 0.5 second has passed while traveling or operating hydraulic equipment, the system will stop traveling or operating hydraulic equipment, and then the warning indicator will appear on the display. To resume operation, return the multi-functional lever to the neutral position and depress the presence pedal again.

BRAKE PEDAL

- The rearward pedal closest to the compartment opening functions as the Brake Pedal.
- The Brake Pedal enables the travel functions of the lift truck.
- When the operator steps on the pedal, the brakes are released and the travel functions are enabled.

Depress the brake pedal with the left foot. Depressing the brake pedal releases the parking brake.

BRAKING BY PLUGGING (Controlled Reversing)

- Plugging is a normal operation to slow down and/or stop an industrial truck. To plug a unit while traveling either direction simply tilt the Multi-functional handle to the opposite direction. The unit should come to a smooth stop in about its own length.
- Braking by plugging is the recommended method of braking the 1H2 (SRX). Note: At start-up (key-on) if brake pedal is depressed meter panel will be interrupted and an error message displayed on screen. Release Brake pedal to continue meter Panel start-up.

NOTE:

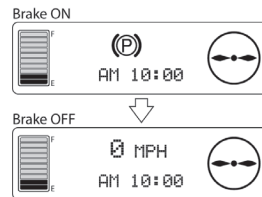
Both presence and brake pedals must be depressed to enable travel.



WARNING

- **Always operate the forklift truck with your body inside the operator's compartment.**

Operating the forklift truck with your head, arms or feet sticking out of the operator's compartment can cause a part of your body to hit a storage rack post or other piled loads or be caught in trucks.



If the multi-function handle is tilted forward or back before the brake pedal is engaged, travel is disabled until the multi-function handle is released to neutral. To stop the fork lift in an emergency, release the brake pedal completely to apply the brakes.



WARNING

- **DO NOT use the brake pedal to stop the lift truck except in an emergency. A full and rapid release of the brake pedal will stop the lift truck abruptly and could cause damage or injury or possibility of a lost load. NEVER USE TWO FEET ON THE BRAKE PEDAL.**

OPERATING THE TRUCK

The following are the recommended procedures that should be followed before and while operating a UniCarriers forklift.

Since the Occupational Safety and Health Act (OSHA) 29CFR1910.178(l) requires that “**only trained and authorized operators shall be permitted to operate a powered industrial truck**”, it is the owner/end user’s responsibility to comply. The following is intended as a guide in training operators in safe truck operation; it is not a training manual nor is it intended to preclude good judgment and common sense.

For a complete listing of what should be covered in a training program, obtain a copy of ANSI/ITSDF B56.1 Safety Standard for Low Lift and High Lift Trucks.(www.itsdf.org).

INSPECTION BEFORE OPERATING

The OSHA regulation requires that the operator completely checks the unit at the beginning of **each shift** or **work period**. Ensure that all of the Daily Inspection checks (refer to page 72, also refer to page 74 for Sample Operator’s Daily Checklist) have been made before operating the unit.

FORKLIFT OPERATING PRECAUTIONS

- 1. Safety stop system:** This system is designed to stop the forklift when malfunctions occur in the electric system which controls forklift speed. If this system should be activated, turn the ignition switch OFF; then turn it ON again and resume driving the forklift. If the safety stop system begins to operate frequently while starting the forklift or operating the forklift, contact your Local Authorized Dealer.
- 2. Low voltage lock system:** When battery voltage drops below a certain level, this system will activate causing the low voltage lock indicator/mark to illuminate, causing the forklift to lockout hydraulic functions and reduce travel speeds. At this time, the battery warning indicator/mark will be displayed on the meter panel. The battery must be recharged or replaced before further forklift operation is possible. If the operator continues to drive on low battery at reduced performance, the controller will stop all functions and no further operation is possible.



WARNING

- **When the low voltage lock system becomes active, immediately turn the ignition switch OFF and then back ON again. The buzzer will stop sounding. However, further forklift operation is not possible. Have the forklift moved to a service area and replace the existing battery with a fully-charged battery.**

OPERATING THE TRUCK

FORKLIFT OPERATING PRECAUTIONS (cont'd)



CAUTION

- a. The low voltage lock system is not a device which warns of a weak battery, but rather one that prevents possibly erroneous operation of electrical parts. Always determine whether or not the battery should be recharged by referring to the battery capacity meter.
 - b. After the low voltage lock system has activated, take sufficient time to recharge the battery so that the specific gravity of the electrolyte is resumed.
- 3. Prohibitive overloading the traction motor:** Do not overload the forklift by climbing a steep slope or pushing heavy objects for an extended period of time. This will cause a high current in motor and controller resulting in high temperatures, which will cause the control system to go into thermal cut-back. Continued operation could cause damage to the motor or controller.
- 4. Action to be taken in an emergency:** In an emergency, push the battery disconnect button. By pushing this button all power will be cut and all functions will be inoperable (refer to page 51).



WARNING

- The mechanical emergency/parking brake will be applied and if the truck was traveling it will come to an abrupt stop.
- Do not tow this unit. It has an electric brake which can only be released by applying power. This procedure can only be performed by a Local Authorized Dealer Service Technician (refer to moving a stuck or disabled forklift on page 86).
- If mast is up, call your Local Authorized Dealer Service Technician to lower mast. Do not attempt by yourself.

CONDENSATION

Condensation can be seen on forklift coming out of cold storage: condensed water is frozen on the forklift. This can cause a number of problems. After some time outside the cold storage, the frost melts to water and when the forklift enters the cold storage, the frost melts to water and when the forklift enters the cold storage again, any water remaining on the forklift will freeze to ice again.

RECOMMENDATIONS TO AVOID CONDENSATION

- If you have to leave the cold storage, stay outside long enough to allow the forklift to dry completely. This time can be shortened by blowing hot air over the forklift with big ventilators (fans).
- If you frequently have to go in and out of the cold storage make the stays inside as short as possible and the stays outside as long as possible so that the temperature of the forklift never goes below 0°C (32°F). i.e. doesn't cause water to freeze.
- Or spend as much time as possible inside and as little time as possible outside, but observe that the temperature of the forklift doesn't go above 0°C (32°F). i.e. doesn't cause ice to melt.
- When charging batteries observe the above.

OPERATING THE TRUCK

PRECAUTIONS FOR OPERATING IN COLD STORAGE

The 1H2 (SRX) unit has been designed to operate in cold storage and freezer operation as follows:

Standard 1H2 (SRX) can be operated:

- Continuous to +32° F (0°C)
- Intermittent to +14°F (-10°C)

With Optional freezer:

- Continuous to -4°F (-20°C)
- Intermittent to -40°F (-40°C)

Note: The Hydraulic oil used for this option is intended to be used for cold storage and freezers use only.

Even with the freezer option please keep in mind that the batteries must be charged correctly to avoid damage or poor truck performance.

OPERATIONAL PROCEDURES

There are certain hazards that cannot be avoided solely by mechanical means in the everyday use of material handling trucks. Only the intelligence, good sense, and care of the operator, along with proper maintenance, will assure that the trucks are operated properly. It is important to have trained, reliable personnel operating your units. If, at any time, the operator finds that the unit is not performing properly, discontinue operation of the truck and report the condition to your supervisor for correction.

When operating the forklift under severe climatic conditions such as high temperature, high altitudes, in cold storages, and when handling explosives and combustibles, and in areas where the forklift is apt to cause radio interference, make sure that the forklift is manufactured and approved as conforming to the local specifications, laws and regulations.

Steering the truck is easier with the forks leading. Always look in the direction of travel. Always raise forks & load OFF floor approx. 8 inches (200 mm).

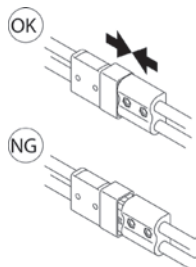
Operate the unit from the operator's position after assuring that the operation will not endanger the operator or any other person. Do not operate a truck in hazardous areas. Make sure that the forks and/or load have clearance to lower and do not "hang-up".

OPERATING THE TRUCK

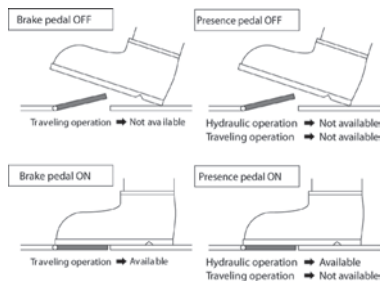
OPERATIONAL PROCEDURES (cont'd)

STARTING AND OPERATING

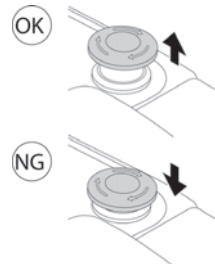
1. Make sure that the ignition switch is in the OFF position, and then connect the battery plugs correctly. If plugs are not fully connected, the forklift could overheat and damage the plugs.



2. Ensure the Multifunction handle is in the neutral position.
3. Step into operator compartment. Ensure that one foot is on operator's presence foot pedal and the other is on the brake pedal to release the brake.



4. Make sure that the emergency switch is released.



5. Turn ignition switch on. Make sure that the LCD is ON and make sure that the LCD is not showing a malfunction indication mark. The meter panel will indicate to cycle the brake pedal to ensure proper operation.



WARNING

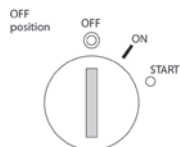
- **Do not turn the ignition switch ON unless the Multifunctional Handle is in Neutral.**

OPERATING THE TRUCK

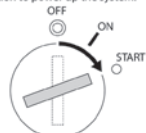
OPERATIONAL PROCEDURES (cont'd)

STARTING AND OPERATING (cont'd)

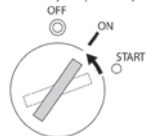
6. Sound horn if in blind area.



Turn the key switch to the [START] position to power up the system.



When the key is released, the key switch will automatically return to the [ON] position with the system powered up.



7. Select a direction to travel.

TRAVELING

While traveling, the forks should be raised approximately 200 mm (8 in.) above the ground. Always have reach fully retracted during any travel, whether loaded or unloaded.



WARNING

- **Avoid quick steering or acceleration as this may cause an accident, which could result in serious injury or death.**

TURNING

The smaller the radius of a turn to be made, the lower the speed of the forklift should be. When making a sharp turn, always drive the forklift at a reduced or slow speed.

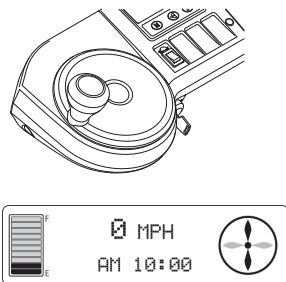


WARNING

- **Because the movement of forklift is different from that of a passenger car, when turning, slow down and look around.**
- **Do not make a turn with the forks lifted higher than necessary or at a high speed. This could cause the forklift to become unbalanced, and could cause an accident that could result in serious injury or death.**

OPERATING THE TRUCK

TURNING (cont'd)

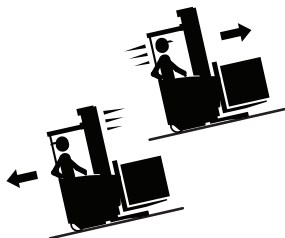


Hold the steering wheel knob with your left hand, and turn the steering wheel confirming the direction of the driving wheel shown on the wheel indicator.

CLIMBING

The 1H2 (SRX) Reach Truck has been designed to operate on smooth level floors. It may be required to travel on grades.

For safety reasons, when driving a loaded forklift up a grade, slope or incline, it must be driven forward with the load in front; on a downgrade, backward, with the load behind.



STOPPING AND PARKING

To stop the forklift either move the multifunction handle to neutral position or plug until the truck comes to a stop.

1. Use the multifunction handle to slow the unit until it comes to a stop. The electric brake will automatically apply when the truck stops & multifunction handle is in neutral position.
2. Lower forks.
3. Be sure to turn the ignition switch off.
4. Depress emergency switch.
5. Disconnect battery.

OPERATING THE TRUCK

BRAKING BY PLUGGING (CONTROLLED REVERSING)

Braking by plugging is a method of braking in which the Multi-functional Handle is switched to the opposite direction in which the forklift is traveling. Refer to page 52.



WARNING

- **Do not make sudden stops as the forklift will pitch forward and this may cause the load to shift.**

If the brake pedal is released while traveling at a high speed, the forklift truck will stop suddenly and the load may shift or fall off or truck skidding may occur.

When leaving the forklift, adjust the fork to a level position, lower the mast to the ground and turn off the ignition switch. The brake is automatically applied when the truck comes to a stop or the ignition is turned off.

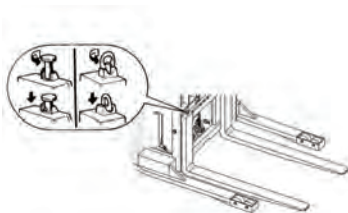
When leaving the operator's position, be sure the Multi-functional handle is in the Neutral position and turn the ignition switch OFF. As required by OSHA in United States, if the operator is more than 7.6 m (25 ft.) from unit or out of sight of the forklift, the key must be removed.

TRANSPORTING LOADS

- When transporting loads, the forklift should be driven carefully at slow speed with the load kept low and tilted back. When the load is so large that it blocks forward visibility, drive the forklift backward. Follow the safety rules.
- Always ensure that load is within the truck's permitted lifting capacity. Refer to trucks dataplate.

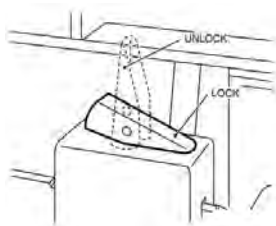
FORKS

The fork-to-fork distance can be properly adjusted by unlocking the lock pins on the forks. These pins are unlocked by turning them 90°. Forks must be equally located from the center of the forklift. After correct fork-to-fork distance is obtained, secure the forks with the lock levers.



CAUTION

- **Various kinds of forks are available depending on the lifting capacity. Select proper forks so that the specifications stamped on the upper face of them will meet the lifting capacity of your forklift. Do not use forks below the lifting capacity of your forklift.**



WARNING

(in United States)

- **Forks should be inspected daily for any damage, bending or other abnormal conditions. Report any conditions to your supervisor.**
- **ANSI/ITSDF & OSHA require that forks be replaced if worn more than 10% of the starting thickness, this should be checked during normal P.M. or at minimum, yearly by your Local Authorized Dealer.**

OPERATING THE TRUCK

PICKING UP A LOAD

When picking up a load from the ground, approach the load slowly and carefully align the truck square with the load. Ensure that the forks are adjusted to fit the load or pallet being handled and spread as wide as possible to provide good stability and balance.

- Before lifting, be sure the load is centered and the forks are fully under and supporting the load.
- Supporting the load. The fork length should be at least 2/3 of load length. Using the lift, reach and tilt function with the multifunction handle to adjust the forks to the correct height and angle for freely engaging the load.
- Move forward until the load wheels are square to the load, then reach the forks out and completely under the load.
- Slowly tilt back & raise the load until it clears the top of the load wheels, then retract the load fully.

NOTE: Be sure that the forks do not extend beyond the load collected causing damage or pushing of other adjacent materials behind the load being moved.



WARNING

- **Forks are not horizontal, the load can slide off the forks or catch on the rack. When the load is lifted or lowered the forks should always be positioned horizontally. The forks and load must be positioned completely clear of the racking and other obstructions before lifting and lowering begins.**

- Raise the load from the floor or rack by tilting the forks back just enough to lift the load from the surface when stacking, tiering, or racking use only enough backward tilt to stabilize the load.
- Once clear of rack or stack lower the load to traveling height, just above the load wheels and tilt fully back to travel (except for loads that must be transported as level as possible).

Placing Loads in Racking

1. Drive the truck parallel with the rack, with the rack on the right side of the 1H2 (SRX).
2. Turn slowly into the rack. Watch the outriggers and the rear of the truck as you move forward.
3. Stop when the load is within a couple of inches of the rack.
4. Raise load 4-6 inches above the rack, making sure you have plenty of clearance above the load and around the truck itself.
5. Extend carriage, forks and load into the rack
6. Drive forward until outriggers are a couple of inches from rack or the load is in position.
7. Tilt forks down until the load is level and lower until the forks clear the pallet.
8. Retract the reach slowly.
9. When the forks are fully retracted, sound horn reverse and swing back parallel to the rack, lower the carriage and forks to travel height.

NOTE:

In some applications it would be a good idea to have a spotter in the next aisle. The spotter can watch and make sure that you do not push other items off into the next aisle or on to a person.

OPERATING THE TRUCK

PICKING UP A LOAD (CONT'D)

Stacking Loads

Recommended Steps:

1. Stop near to the stack.
2. Align the 1H2 (SRX) and load squarely with the stack
3. Lift (raise) the load high enough to clear the top of the stack using the reach function.
4. Drive forward, slowly, until the load is a few inches away from the stack.
5. Slowly extend the load into position to ensure not to damage or move adjacent loads.
6. The leading edge and sides of the load should be lined up with the near edge and sides of the stack or rack on which the load is being stacked.



CAUTION

- **Be sure that the forks do not extend beyond the load, causing damage or tipping of other adjacent loads or materials behind the load being moved. If the forks are longer than the load, move the tips partially under the load without extending beyond the load.**
- **When the load is aligned with the stack beneath it, tilt the forks to the vertical position and carefully lower the load on the stack.**
- **Slowly lower the forks to clear (disengage) the load's pallet. Tilt the forks forward slightly, if needed. Retract the reach slowly.**
- **Carefully check your travel path, sound horn, then carefully back away until the forks are clear of the stack. Stop and lower the forks to the travel position (6 to 8 inches above the ground).**



WARNING

- **Lifting a loaded pallet when truck is still moving can result in load falling off the pallet. Never lift a load if truck is moving.**

Removing a Load from a Stack:

1. Approach the stack carefully, truck lined up squarely with the load.
2. Raise lift to the correct height for freely engaging the loaded pallet.
3. Adjust fork angle as needed to fit squarely under the load.
4. Slowly move forward until the outriggers are close to and aligned to the stack.
5. Raise the load from the stack by tilting the forks back just enough to lift the load from the stack.
6. Raise (lift) the forks until they begin to lift the load.
7. Tilt back the forks to stabilize the load.
8. Retract the reach until it stops against the upright.
9. Check your travel path, sound horn, slowly back out until clear of the stack. Stop and then lower the load to travel position (6 to 8 inches off the ground except for certain loads that may have to be transported as level as possible).
10. Be sure the load is back flush against the carriage or front face of the forks.
11. Be careful not to lower the load on top of the outriggers.

Operational Note: Certain loads may have to be transported as level as possible.

GENERAL CARE AND MAINTENANCE

BATTERY AND BATTERY CHARGING EQUIPMENT



CAUTION

- The following information is general information regarding the best methods for using and maintaining the battery, and it in no way can cover every type of manufacture of battery/charger. You should always contact the manufacturer of the battery or charger to ensure that you are following their recommended procedures and operation methods of the equipment.

BATTERY CARE AND MAINTENANCE

Refer to the appropriate manuals attached to the battery for information about how to handle and maintain the battery.



CAUTION

- Do not allow the alkaline solution to fall in the battery cell, this will result in a dead or weak battery.

Proper care and servicing of the battery is vital to ensure satisfactory operation and life of your electric truck. Battery acid is extremely corrosive and should be washed off the unit if any spills occur.



CAUTION

- Check with Local and State Regulations on storing, charging and cleaning of corrosive materials. There may be conditions locally which will not allow you to simply wash off acid spills.



WARNING

- Only trained and authorized personnel should conduct any maintenance or servicing of this unit and its battery.
- Always turn ignition switch off and disconnect battery before doing any servicing of the battery.
- Always wear personal protective equipment (PPE), i.e. safety goggles, rubber gloves and boots, when servicing the battery. Battery acid will cause severe burn or injury.
- The battery generates highly explosive hydrogen gas. A short circuit resulting in sparks or even a lit cigarette in the vicinity of the battery can cause a serious explosion. Do not permit smoking, open flames or sparks near the battery or battery maintenance area. Be particularly careful during battery charging and for the first 30 minutes following battery charging.
- Battery fluid contains highly corrosive sulfuric acid. If acid contacts your skin or clothing, flush the area immediately with large amounts of clean fresh water. If acid enters yours, immediately wash out your eyes with large amounts of clean fresh water and contact a physician. If acid is accidentally swallowed, immediately contact a physician.
- If a large quantity of battery fluid is spilled, neutralize it with an equivalent quantity of basic neutralizing agent (baking soda, calcium hydroxide, or sodium carbonate). Wash away the resulting solution with large quantities of clean fresh water.

GENERAL CARE AND MAINTENANCE

BATTERY CARE AND MAINTENANCE (cont'd)



WARNING

- When changing industrial batteries, replacement batteries shall be of the service weight that falls within the minimum/maximum range specified on the truck data plate by the truck manufacturer.
- Do not place tools or other metallic objects on the top surface of the battery where they may come in contact with the battery terminals and cause an electrical short. This electrical short may cause sparking. The sparking may ignite the hydrogen gas escaping from the battery resulting in a serious explosion. It may cause some nearby object to burn.
- Battery fluid exhaustion (gases) creates the danger of explosion. Replenish the battery fluid frequently to maintain the specified fluid level. During battery charging, the proportion of water in the battery fluid decreases. Before battery charging, always check that the battery fluid level is above plates. If the fluid level is low, replenish it with distilled water to cover the plates. Do not overfill to standard level.
- After charging is complete fill cells to the standard fill level.
- During battery charging, there is a high risk of hydrogen gas explosion. To reduce this risk, always perform battery charging in a well-ventilated room or area. Continue ventilation for at least 30 minutes after the completion of charging.
- Do not attempt to recharge a frozen battery; this may cause it to rupture or explode.



WARNING

- Cleaning the battery upper surface and connections with certain types of dry cloth or laying a dust cover or vinyl sheet across these areas may create a static electricity charge that can lead to dangerous sparking. An explosion can result. Do not use dust covers or vinyl sheets to protect the battery. If you are cleaning battery surfaces, use a slightly damp cloth.



CAUTION

- Over-discharge precautions. Recharge the battery immediately after the meter panel battery warning mark begins to blink. Do not operate the forklift until it simply stops running and then recharge the battery. This technique will result in greatly reduced battery service life. After completing forklift operations, park the forklift and immediately begin battery charging. Do not store a discharged battery for an extended period of time. Recharge it before storing.
- The battery and its surroundings should be kept clean and dry at all times. Keep the battery plugs tightly closed to prevent the leakage of battery fluid. Battery fluid leakage will result in battery corrosion.

GENERAL CARE AND MAINTENANCE

BATTERY CARE AND MAINTENANCE (cont'd)

For North America

The level should be to the bottom of the filler neck after charging; if not, replenish to the proper level with distilled water after charging.

Adding Water

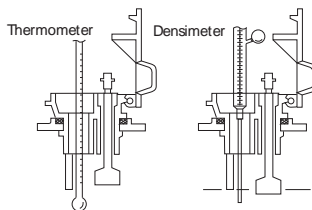
On a routine basis after every 50 hours of operation, remove the battery vent caps and inspect the electrolyte level. The water in the electrolyte solution evaporates at high temperatures or with excessive charging rates.

Checking the Specific Gravity of the Electrolyte

Measure the specific gravity and temperature of the electrolyte in all cells.

Normal: It is normal when the specific gravity of all cells are the same level at 20°C.

Abnormal: It is abnormal if the difference of the specific gravity is more than 0.05 from other cells. Contact your local dealer.



Cleaning Terminals and Cable Connections

The top of the battery must be kept clean. Tighten the vent caps and clean the battery with a brush dipped in an alkaline solution (ammonia or baking soda and water). After the foaming has stopped, flush top of battery with clean water. If terminals and cable clamps are corroded, disconnect the cables and clean them with the same solution.

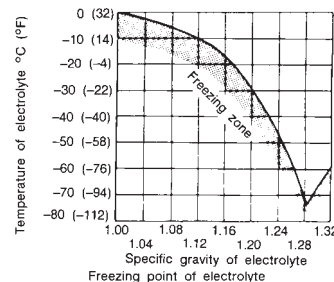
PRECAUTIONS FOR COLD AND HOT WEATHER

In Cold Weather

Battery electrolyte freezing point varies with acid concentration or its specific gravity. A battery with an insufficient charge will freeze at higher temperatures.

NOTE:

Use extreme caution to avoid freezing the battery since freezing will generally ruin the battery.



In Hot Weather

Since the battery electrolyte quickly evaporates in hot weather, it is necessary to fill with distilled water frequently.

GENERAL CARE AND MAINTENANCE

BATTERY CHARGERS

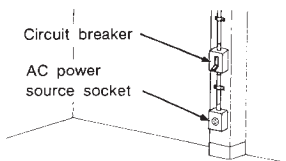
The off-truck type charger is a separate entity. The battery charger may or may not be included with the truck.



WARNING

Determine the type of battery charger that is used for the forklift you are using. Operate the forklift accordingly.

- Alternating current power source voltage will vary with the area in which the forklift is used. Determine the local voltage before attempting to charge the battery. Use the appropriate transformer tap on the battery charger.
- Tap adjustment requires specialized knowledge and expertise.
- Tap configuration must be set before battery charging. For full charging, select a time frame in which minimum voltage fluctuation occurs, then select the appropriate transformer tap. If the wrong tap is selected, over-charging or under-charging will result. If you have any questions, contact your Local Authorized Dealer.
- A current or over-current circuit breaker (hereafter referred to simply as breaker) must always be connected to the AC power supply side of the battery charger.
- Always use charging equipment that is appropriate for the forklift battery being charged.



WARNING

- If multiple battery chargers are in use, each battery charger must be equipped with its own circuit breaker.
- Alternating current requires high-capacity units. Set the charging equipment power source to the appropriate level.
- Specialized knowledge and expertise is required. For information on the legal requirements of your country, contact your Local Authorized Dealer.

GENERAL CARE AND MAINTENANCE

BATTERY CHARGE CLASSIFICATIONS

Normal Battery Charge

The normal battery charge is used to restore the battery to its original power level.

Equation Battery Charge

When the normal battery charge is applied many times, the voltage level and the battery fluid specific gravity of the individual cells will show a wide variation. This wide variation will prevent full charging of the battery. Equation battery charge is used to equalize individual cell voltage and battery fluid specific gravity and make full battery charging possible again.

As a general rule, a battery charged and discharged on a daily basis should have equation charging applied after every 10 or 15 charge/discharge cycles.

Additionally, equation charging should be performed as soon as possible if any of the following conditions occur.

- a. Battery discharge in excess of the specified limit.
- b. Battery charging following discharge is delayed for an extended time period.
- c. A battery short circuit has occurred.
- d. A battery that has not been used for an extended time period is readied for use.



CAUTION

- **Equation battery charging is used to restore a battery to its full potential. However, it should not be performed too frequently. Frequent equation battery charging will result in a greatly reduced battery service life.**

NOTE:

- The battery consists of lead cells connected in series to one another. Each cell has a capacity of approximately 2 volts. There are several dozen cells. The connected cells are contained in the battery case. When there is significant variation in voltage and battery fluid specific gravity between individual battery cells, full charging will not be possible.
- With some battery charging equipment, equation battery charging occurs automatically after some specified number of charge/discharge cycles. Manual selection of the equation battery charging mode is not required.

Supplementary Battery Charge

Supplementary battery charging is used when the original single battery charge is not sufficient to get through the entire work day. It is performed at some time during the work day (example; during the lunch break). Supplementary battery charging techniques are identical to those for normal battery charging.



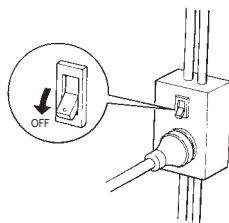
CAUTION

- **Supplemental battery charging could shorten battery life if not recommended by battery manufacturer.**

GENERAL CARE AND MAINTENANCE

CHARGING PREPARATIONS

1. Move the forklift to the charging area and park it.
2. Check the battery fluid level. Replenish the battery fluid to the specified level with distilled water as required.
3. Check that the circuit breaker on the AC power supply side is OFF.



WARNING

- During battery charging, large quantities of highly-explosive hydrogen gas may be released from the battery. To minimize the danger of an explosion, battery charging should be performed in a well-ventilated area protected from direct sunlight. Remove all objects that might ignite the gas from the immediate area before beginning charging.

NOTE:

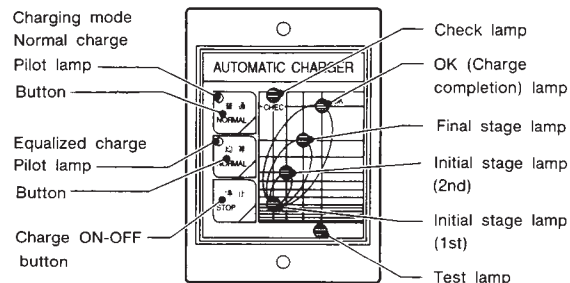
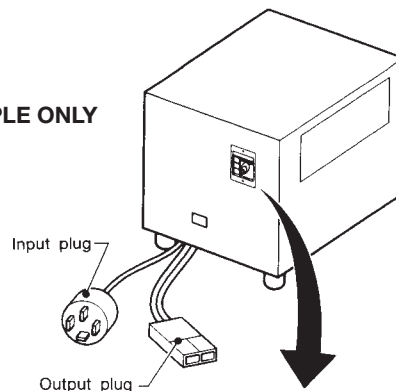
Transformer tap selection is required before beginning charging. Measure the charger power supply voltage. Select the appropriate transformer tap.

Selection of the wrong tap will result in battery over-charging or under-charging. Contact your Local Authorized Dealer if you require more detailed information.

HOW TO CHARGE BATTERY (OFF-FORKLIFT TYPE)

Charge the battery according to the manual supplied with the charger being used.

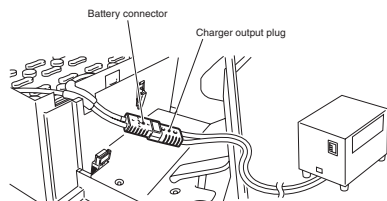
EXAMPLE ONLY



GENERAL CARE AND MAINTENANCE

HOW TO CHARGE BATTERY (OFF-FORKLIFT TYPE) (cont'd)

1. Connect the charger output plug to the battery plug.



CAUTION

- **Do not connect the charger output plug to the body harness connection. The battery will not charge through this connection.**
2. Connect the charger input plug to the wall outlet (in the service shop).



CAUTION

- **To prevent a short circuit, install a no-fuse breaker on the wall outlet side (in the service shop) to connect the charger input plug.**

3. Push the NORMAL or EQUAL button to select normal or equalizing charge, respectively.

When an equalizing charge is desired, press the EQUAL button to set the charger in that mode. The NORMAL pilot lamp will go out and the EQUAL pilot lamp will come on.

Make sure only the pilot lamp of the selected charging mode is lit.

At this time, charging will be started automatically.

NOTE:

- Push the NORMAL or EQUAL button for about 2 seconds. Do not push it more than 5 seconds. If the button is pushed for extended periods of time, the timer will enter test mode. The test lamp will come on. The test mode will end in 10 seconds to 2 minutes and the test lamp will go off. When the test mode is operating, charging will not start because the charging mode is not selected.
 - After charging is started, it is not possible to change the charging mode (NORMAL or EQUAL). If it is necessary to change the mode, stop charging (push the STOP button), and then select the charging mode again.
 - It is advisable to charge the battery using the equalize charging mode at least two or three times a month.
4. While charging, the charge indicator lamp will come on sequentially and remain lit. Firstly, the Initial (1st) lamp comes on, then the 2nd lamp, and they remain lit. Finally, the Final lamp will come on.

NOTE:

When the FINAL lamp comes on, the timer will activate.

GENERAL CARE AND MAINTENANCE

HOW TO CHARGE BATTERY (OFF-FORKLIFT TYPE) (cont'd)

- When charging has been completed, the charging circuit automatically opens. At this point, the Initial (1st) lamp, 2nd lamp, Final lamp and OK (charge completion) lamp will all come on to indicate that charging has been completed.

At this time, the charging mode lamp will go out.

- After ensuring that the Initial (1st and 2nd), Final and OK lamps are on, disconnect the charger output connector from the battery plug. All lamps will then go out.

NOTE:

- Do not disconnect the input plug while charging is taking place.
- Before disconnecting the charger output plug from the battery plug, make sure the Initial (1st and 2nd), Final and OK lamps are lit (4 lamps in all).



WARNING

- If the CHECK lamp remains on after charging the battery, the problem may be due to a malfunctioning main timer or an abnormal battery. Immediately contact your Local Authorized Dealer for inspection. When the charger output plug is disconnected from the battery plug, the CHECK lamp will go out.**
- Leave the battery lid open during the charging process.**



WARNING

- While the battery is being charged or immediately afterward, inflammable gases are actively produced. Be careful to keep any open flame away from the battery.**
- Before charging the battery, add distilled water up to the upper limit level. Do not overfill.**
- If a fuse located on the transformer is blown, replace it with one of the same type and rating.**
- Periodically clean the caps, removing any foreign matter from gas vents. The caps need not be removed during the charging operation.**
- When charging is complete, ascertain with a gravimeter that the specific gravity is 1.28 at a temperature 20°C (68°F).c**

GENERAL CARE AND MAINTENANCE

BATTERY REPLACEMENT

Battery Selection

A battery also serves as a counterweight, and the lifting capacity will vary according to the weight of the battery which is mounted on the forklift.

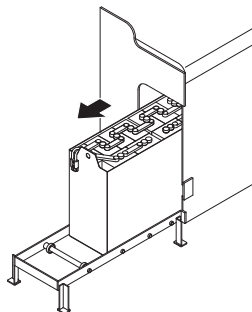
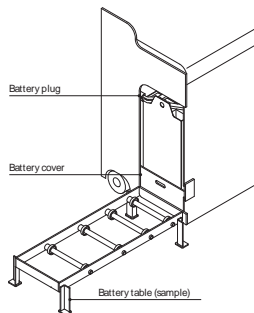
Accordingly, it is necessary to choose a battery which is within the battery weight range specified on the data plate attached to each forklift.

When using any battery which is not within the battery weight range specified on the data plate attached to the forklift, be sure to contact your Local Authorized Dealer, and ask them to change the lifting capacity and battery weight range stamping on the data plate attached to this forklift.

Battery removal and installation

To remove the battery proceed as follows:

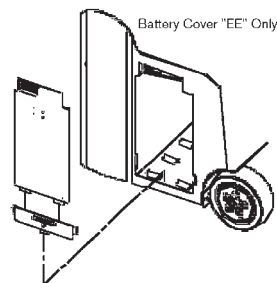
1. Align the battery table and the forklift truck in the proper angle & height.
2. Turn the key switch to the OFF position
3. Disconnect the battery plug.



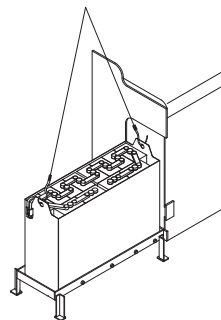
4. Remove the battery retainer (cover on "EE").
5. Slowly pull the battery out of the truck.

To install, proceed in reverse order.

6. If battery must be lifted to be changed, apply proper battery lifting attachments to the battery box, and then hang the battery by the hoist to replace the battery.



- **Be careful not to damage the truck or the equipment when lifting up the battery.**

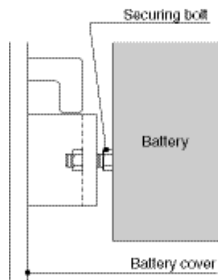


7. Place a freshly charged battery on the battery table, and then slowly install it to the forklift truck.

GENERAL CARE AND MAINTENANCE

BATTERY REPLACEMENT (cont'd)

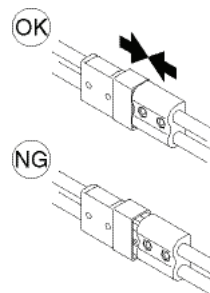
8. Connect the battery plug.
9. Install the battery retainers (covers on "EE")



WARNING

- Secure the battery by adjusting the battery securing bolt so that the battery cannot move.
- Horizontal motion of the battery must not exceed. (1/2 inch) (13 mm) side to side or front to back.

BATTERY CONNECTOR



WARNING

- Make sure the battery is secure & battery gates/retainers are in place. Improper connection could damage some electronic components.

The battery connector is used to supply battery power to the required electrical units or parts. Always connect the connector before forklift operation and check that the gate is secure.

GENERAL CARE AND MAINTENANCE

DAILY INSPECTION

To maintain your forklift in proper condition and ready for safe operation, be sure to perform the daily checks indicated below. If you note any malfunction notify your Local Authorized Dealer.

1. Check battery fluid level.
2. Check brake fluid level and for leaks.
3. Check hydraulic oil level and for oil line leaks.
4. Check for full motion and proper function of all the steering and travel controls.
5. Check steering tiller rotation.
6. Check the condition of tires and wheels. Check for looseness, wear or damage of wheel nuts and bolts. If pneumatic tires check inflation pressure.
 - Remove objects that are embedded in the tread.
 - Check for damage and friction of wheels and for bends and cracks in the rim.
7. Check that all guards, horn, lights, limit switches, warning and safety devices, indicators, etc. are functional.
8. Check safety start systems operation
9. Check operation of hydraulic control valve using multifunctional handle.
10. Check mast operation for the following items:
 - Smooth lifting and lowering
 - Smooth roller rotation
 - Wear or damage to chains
 - Wear or damage on mast rail
 - Lift bracket and forks for bends or damage
11. Conduct an operational check, including braking functions and plugging distance.
12. Check forks and frame for cracks, breaks, bend and wear.
13. Check the fork latches.
14. Check the backrest and overhead guard for proper installation and function.
15. Inspect the condition of battery connectors, electrical cables, wiring and chains. Make a report of any found to be worn or cracked.
16. Check that the battery retainers, if used, are in place and working properly.
17. Check additional options, i.e. attachments or special equipment as specified by the manufacturer or employer.
18. Check that capacity plates and decals are legible, if not replace.
19. Check all reach function.
20. Check operator presence pedal operation.
21. "EE" forklift must have battery covers installed and locked for operation.

GENERAL CARE AND MAINTENANCE

DAILY INSPECTION (cont'd)



WARNING

- If the truck is found to be in need of repair or in any way unsafe, or contributes to an unsafe condition, or if during operation the truck becomes unsafe in any way, the matter shall be reported immediately to your designated authority, and the truck shall not be operated until it has been restored to safe operating condition.
- Do not make repairs or adjustments unless specifically authorized to do so.
- Do not use open flames when checking electrolyte level in storage batteries.
- Be certain that your truck is the correct UL safety rating type for the area in which you are working. The proper type designation for the industrial truck is on the data plate. In areas classified as hazardous, use only trucks approved for use in those areas. All hazardous areas should have classified markings. If you are unsure of the classification of the area you wish to enter, ask your designated authority before entering.

GENERAL CARE AND MAINTENANCE

OPERATOR'S DAILY CHECKLIST (SAMPLE)



WARNING

Carry out the daily checks as per "Daily Inspection" in this Operator's Manual on page 72 and the applicable provisions of laws and regulations of your country. (In U.S. OSHA 29CFR1910.178)

Operator's Daily Checklist and Safety Inspection (sample)

I.T.A. Class I, II & III

IMPORTANT: Check each of the following items before the start of each shift. Notify your supervisor and/or maintenance department if there are any problems with the forklift.

DO NOT OPERATE A FORKLIFT WITH ANY MALFUNCTION.

FORKLIFT DETAILS:

Electric Sit-down

Electric Stand-up

Electric Pallet

Serial/Unit Number: _____

Operator: _____

Supervisor's OK: _____

Please review the list below and mark each item accordingly. Please provide any additional explanation as necessary.

| # | OK | NG | Visual Check Items | # | OK | NG | Operational Checks |
|----|----|----|--|----|----|----|---|
| 01 | | | Forks: bent, worn, stops, forklocks OK | 18 | | | Horn Operation |
| 02 | | | Load Backrest: bent, cracked, loose, missing | 19 | | | Operator Restraint (if equipped): operation |
| 03 | | | Tires/Wheels: wear, damage, nuts tight | 20 | | | Brake: loose/binding, operation, adjustment |
| 04 | | | Battery Connectors: cracked, loose, missing | 21 | | | Battery Retainer: operation |
| 05 | | | Hydraulic Oil: level, dirty, leaks | 22 | | | Mast: smooth lifting/lowering and roller rotation, wear or damage to chains or mast rails |
| 06 | | | Covers/Sheet Metal: damage, missing | 23 | | | Tilt: loose/binding, excessive drift, "chatters", leaks |
| 07 | | | Overhead Guard: bent, cracked, loose, missing | 24 | | | Carriage and Attachments: operation, leaks |
| 08 | | | Battery: connections loose, state of charge, electrolyte level | 25 | | | Control levers: loose/binding, free return to neutral position |
| 09 | | | Warning Decals/Operator's Manual: missing, unreadable | 26 | | | Battery Test: indicator shows full charge while holding full forward tilt |
| 10 | | | Data Plate/Capacity Plate: incorrect: unreadable, missing | 27 | | | Directional Control: loose/binding, find neutral position OK |
| 11 | | | Operator Restraint (if equipped): damage, mounting, operation, oily, dirty | 28 | | | Drive Axle: noise, leaks |
| 12 | | | Gauges/Instruments: damage, operation | 29 | | | Steering: loose/binding, leaks, operation |
| 13 | | | Brakes: linkage loose, reservoir fluid level, leaks | 30 | | | Warning Lights (if equipped): mounting, operation |
| 14 | | | Carriage and Attachments: damage, mounting, operation, leaks | 31 | | | Back-Up Alarm (if equipped): mounting, operation |
| 15 | | | Head/Tail/Working Lights: damage, mounting | 32 | | | Head/Tail/Working Lights: mounting, operation |
| 16 | | | Side Gates: damage | 33 | | | Side Gates: operation, binding |
| 17 | | | Battery Retainer: damage, latched, operation | | | | |

Additional explanation of problems marked above: _____

GENERAL CARE AND MAINTENANCE

TIRE REPLACEMENT

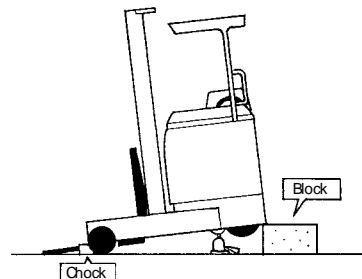
DRIVE/STEER TIRE



WARNING

- **Do not remove the wheel unless you are familiar with the procedure. For wheel replacement, contact your Local Authorized Dealer.**
1. Park the forklift on firm level ground.
 2. Raise the mast approx. 100mm (3.97 in.).
 3. Place a wedge block behind the load wheel to help prevent truck from moving.
 4. Turn drive wheel as shown as above.
 5. Loosen the wheel nuts one to two turns, turning counterclockwise.
 6. Using a jack as shown above raise drive tire off the floor.
 7. Place a wood block under the frame near the jack. Remove the nuts and change the wheel.
 8. Install the new wheel and put nuts back on. Cross tighten evenly. Apply final torque after drive wheel is on floor.
 9. Remove the wood block from under the frame.
 10. Lower the forklift slowly until the wheels touch the ground.
 11. Finish cross tightening the wheel nuts, applying the specified torque: use 111-140 ft/lbs. or 150-190 Nm.

REAR CASTER



WARNING

- **This rear caster replacement requires you to be trained in the correct procedure in removal of the wheels. If you have not been trained & do not have the correct tools do not attempt this repair. Contact your Local Authorized Dealer.**
1. Park the forklift on firm, level ground.
 2. Install wedge blocks behind the front load wheels to help avoid movement.
 3. Place a jack under the rear end of the forklift, making sure that the load capacity of the jack is at least 2/3 the full weight of the forklift then block.

GENERAL CARE AND MAINTENANCE

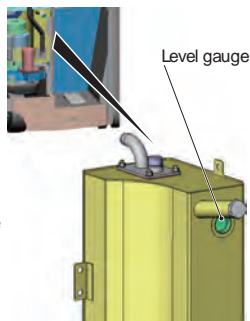
MAINTENANCE AND INSPECTION

HYDRAULIC OIL LEVEL

Check the oil level in the hydraulic oil tank. The oil level should be in the middle of site glass with mast fully lowered and reach retracted.

NOTE:

For correctly checking the hydraulic oil level, park the forklift on level ground and stand the mast vertically with the forks lowered to their lowest limit beforehand.



REFILLING HYDRAULIC OIL

Remove the hydraulic oil filler cap. While checking the hydraulic oil level with the site gauge, pour the specified hydraulic oil into the oil filler until the oil level is in the proper area (refer to page 85).



CAUTION

- Each forklift model has a different level of hydraulic oil. Confirm the model when checking level. Refilling oil to incorrect level is a cause of oil leakage.
- Do not use any hydraulic oil other than those specified by the OEM, otherwise it may cause not only deterioration in the performance of the forklift but could result in an accident.
- Carefully add the hydraulic oil so as not to mix dust and foreign substances in the oil.

CHECKING MAST

Check the mast to ensure that:

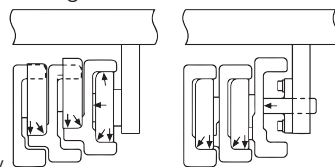
- a. No oil leakage occurs at or around the lift and tilt cylinders.
- b. Check rollers for proper rotation.
- c. Check the chain anchors and pins.

Lubricate the points shown periodically in accordance with the Periodic Maintenance and Lubrication Schedule (refer to pages 79-84). Apply a coat of grease to the thrust metals and liner.

NOTE:

- a. The lubrication interval will vary with working conditions. During months in which working conditions are severe, it will be necessary to grease the parts frequently.
- b. When forklift is operated, apply a coat of grease to the contact surface of the lift roller and inner mast or outer mast.

3 stage mast



GENERAL CARE AND MAINTENANCE

MAINTENANCE AND INSPECTION (cont'd)

CHECKING LIFT CHAIN

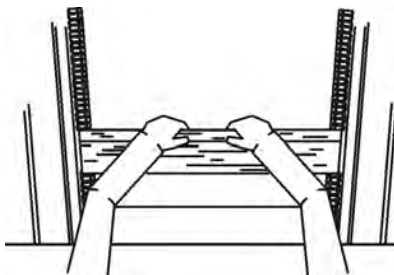


WARNING

- **Use extreme care when checking lift chain tension.**

Check the chains for cracks or broken links and pins.

Check lift chain tension periodically. Lift up the forks slightly and depress the midpoint of the lift chain with a board.



Deflection:

25 - 35 mm (0.98 - 1.38 in)

If the deflection is not within the specifications, have the chain adjusted by your Local Authorized Dealer.

FORK INSPECTION

Ensure the forks are secured in their proper position and they are not damaged.



WARNING

- **Forks in use shall be inspected at intervals of not more than 12 months (for single shift operations) or whenever any damage or permanent deformation is detected. Severe applications will require more frequent inspection. (see ANSI/ITSDF B56.1 Section 6.2.8 for inspection and repair of forks in service on forklift trucks.)**
- **Individual Load Rating of Forks.** When forks are used in pairs (the normal arrangement), the rated capacity of each fork shall be at least half of the manufacturer's rated capacity of the truck, and at the rated load center distance shown of the truck's data plate.
- **Fork inspection shall be carried out carefully by trained personnel with the aim of detecting any damage, failure, deformation, etc., which might impair safe use. Any fork that shows such damage shall be withdrawn from service, and shall not be return to service unless it has been satisfactorily repaired in accordance with ANSI/ITSDF B56.1-2012 standards.**

GENERAL CARE AND MAINTENANCE

MAINTENANCE AND INSPECTION (cont'd)

FORK REPAIR

Repair - Only the manufacturer of the fork or an expert of equal competence shall decide if a fork may be repaired for continued use, and the repairs shall only be carried out by such parties. It is not recommended that surface cracks or wear be repaired by welding. When repairs necessitating resetting are required, the fork shall subsequently be subjected to an appropriate heat treatment, as necessary.

CHECKING HORN

Check the horn for proper operation.

CHECKING LIGHTS (If EQUIPPED)

Make sure that lights illuminate when switches are placed into the "ON" position.

CHECKING CARGO-HANDLING CONTROL ON MULTI-FUNCTION HANDLE

Check the cargo-handling control for proper operation. Ensure that the forks lift, lower, and tilt forward and backward properly.

CHECKING SAFETY START SYSTEM OPERATION

If the ignition switch is turned to the "ON" position again after it has been turned to the "OFF" position with the multi-function handle set in the forward or reverse position, make sure that the traction circuit will not operate and the forklift will not start. After making sure of the above, return the handle to the neutral position. Then make sure the traction circuit operates and the forklift starts when the ignition switch is turned "ON" and the handle is set in the forward or reverse position. If either tests do not function contact your Local Authorized Dealer.

CHECKING BRAKE PEDAL OPERATION

Depress brake

FUSES

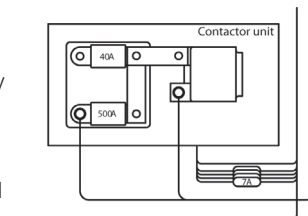


WARNING

- **Remove all jewelry.**
- **Make sure the ignition switch is "OFF" and disconnect the battery before changing any components or disconnecting any wiring. This will reduce the possibility of damage to the controller system.**
- **Do not use fuses that are rated higher or lower than shown on the fuse label.**

- Fuse 40 A (for EPS)
- Fuse 500 A (for travel/hydraulic)
- Tube fuse 7A

Remove the fuse box cover and visually check if the fuse is blown. Before replacing any malfunctioning fuse, check and correct the cause of the malfunction. Use a fuse of the specified rating which is clearly shown on the label.



GENERAL CARE AND MAINTENANCE

PERIODIC MAINTENANCE AND LUBRICATION SCHEDULE

Before delivery of your new forklift, your dealer provides a pre-delivery inspection and adjustment service specified by the factory and designed to ensure satisfactory performance.

The following tables list the servicing required to keep your forklift operating in good mechanical condition. The forklift should be attended to as indicated, preferably by your Local Authorized Dealer.



WARNING

- **Do not inspect any part of the system while the battery is being charged.**
- **Before checking any part of the system, be sure to disconnect connectors from the battery.**
- **When it is necessary to check with the battery connected, raise the drive wheels. Be extremely careful to prevent electric shocks.**

NOTE:

- Periodic maintenance should be performed after specified intervals have elapsed in months or hours, whichever comes first.
- Under dusty, dirty or heavy operation, more frequent maintenance is necessary. All items listed must be maintained in order to meet and keep control systems operating at design level. Failure to maintain the systems could compromise the warranty.
- The inspection/service intervals shown are based on the assumption that the vehicle is operated in a clean and dry environment for 200 hours or less in one month. When determining the inspection/service intervals, consider the actual working conditions of the vehicle.

GENERAL CARE AND MAINTENANCE

PERIODIC MAINTENANCE AND LUBRICATION SCHEDULE (cont'd)

| Inspection Items | | | Interval | | | | | | | | | | | | How to check | |
|-------------------|---|--|-------------------|---|---|---|---|----|----|----|----|----|----|----|--------------|-------------|
| | | | Months | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | 12 |
| | | | Hundreds of hours | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | | 24 |
| Drive system | Motor | Pump motor | | | | | | | C | | | | | | C | Clean |
| | Controller | Wiring, bolts and nuts | | I | | | | | I | | | | | | I | Visual |
| | | Resistance between forklift body and negative/positive terminals | | | | I | | | I | | | I | | | I | Visual |
| | | Operation of contactor points and plunger | | | | | | | I | | | | | | I | Measure |
| | | Resistance of contactor coil | | | | | | | | | | | | | I | Test |
| | | Controller surface | | C | | C | | | C | | | C | | | C | Visual |
| | | Rotor | | | | | | | C | | | | | | C | Clean |
| | | Inspect Brush/Rotor on EPS Motor | | | | I | | | C | | | I | | | I | Visual/Test |
| | | Traction motor | | | | | | | C | | | | | C | C | Visual |
| Electrical system | Battery: mounting, level and specific gravity | | I | | I | | | I | | | I | | | I | Visual/Test | |
| | Harness and connectors | | I | | I | | | I | | | I | | | I | Visual | |
| | Fuses | | I | | I | | | I | | | I | | | I | Visual | |
| | Relays | | I | | I | | | I | | | I | | | I | Visual | |
| | Switches | | I | | I | | | I | | | I | | | I | Test | |
| | Lights (all) | | I | | I | | | I | | | I | | | I | Test | |
| | Horn/Buzzer | | I | | I | | | I | | | I | | | I | Test | |
| | Gauge and indicators | | I | | I | | | I | | | I | | | I | Test | |
| | Bulbs | | If Necessary | | | | | | | | | | | | Visual/Test | |

Abbreviations: I = Inspect (correct or replace if necessary), D: Drain, R: Replacement, A: Adjustment, C: Clean, T: Retighten, L: Lubricate/Grease

GENERAL CARE AND MAINTENANCE

PERIODIC MAINTENANCE AND LUBRICATION SCHEDULE (cont'd)

| Inspection items | | | Interval | | | | | | | | | | | | How to check | |
|------------------------------|-----------------------------|-------------------------------|-------------------|---|---|---|---|----|----|----|----|----|----|----|--------------|---------------|
| | | | Months | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | 12 |
| | | | Hundreds of hours | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | | 24 |
| Differential/ drive unit | Oil level | | | I | | I | | | I | | | I | | | I | Visual |
| | Crack, damage and leakage | | | I | | I | | | I | | | I | | | I | Visual |
| | Differential/drive unit oil | | | | | | | | | | | | | | R | Replace |
| Chassis and body maintenance | Load wheels | Cracks, distortion, etc. | | I | | I | | | I | | | I | | | I | Visual |
| | | Mounting bolts | | I | | I | | | I | | | I | | | I | Visual |
| | | Wheel play | | I | | I | | | I | | | I | | | I | Test |
| | | Wheel bearing grease | | L | | L | | | L | | | L | | | L | Grease |
| | Casters | Fore-aft play link to frame | | I | | | | | I | | | | | | I | Measure |
| | | Spring adjustment | | I | | | | | I | | | | | | I | Visual |
| | | Wheel play | | I | | I | | | I | | | I | | | I | Test |
| | | Wheel bearing grease | | L | | L | | | L | | | L | | | L | Grease |
| | | Caster pivot linkage to frame | | | | L | | | L | | | L | | | L | Grease |
| | Wheels | Drive wheel nuts | | T | | T | | | T | | | T | | | T | Visual/torque |

Abbreviations: I = Inspect (correct or replace if necessary), D: Drain, R: Replacement, A: Adjustment, C: Clean, T: Retighten, L: Lubricate/Grease

GENERAL CARE AND MAINTENANCE

PERIODIC MAINTENANCE AND LUBRICATION SCHEDULE (cont'd)

| Inspection items | | | Interval | | | | | | | | | | | | How to Check | |
|------------------------------|------------------|---|-------------------|---|---|---|---|----|----|----|----|----|----|----|--------------|---------|
| | | | Months | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | 12 |
| | | | Hundreds of hours | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | | 24 |
| Chassis and body maintenance | Hydraulic system | Function of hydraulic system | | I | | I | | | I | | | I | | | I | Test |
| | | Hydraulic leakage | | I | | I | | | I | | | I | | | I | Visual |
| | | Hydraulic oil level | | I | | I | | | I | | | I | | | I | Visual |
| | | Hydraulic oil replacement | | | | | | | | | | | | | R | Replace |
| | | Micron oil filter | | | | | | | | | | | | | R | Replace |
| | | Suction filter | | | | | | | | | | | | | C | Clean |
| | | Control valve (mounting) | | I | | | | | I | | | | | | I | Visual |
| | | Movement multi-function handle | | I | | I | | | I | | | I | | | I | Test |
| | | Hydraulic hoses (cracks, damage and fittings) | | I | | I | | | I | | | I | | | I | Visual |
| | | Lift cylinder mounting | | I | I | I | I | I | I | I | I | I | I | I | I | Visual |

Abbreviations: I = Inspect (correct or replace if necessary), D: Drain, R: Replacement, A: Adjustment, C: Clean, T: Retighten, L: Lubricate/Grease

GENERAL CARE AND MAINTENANCE

PERIODIC MAINTENANCE AND LUBRICATION SCHEDULE (cont'd)

| Inspection items | | | Interval | | | | | | | | | | | | How to Check | |
|------------------------------|------|----------------------------------|-------------------|--------------|---|---|---|----|----|----|----|----|----|----|--------------|---------------|
| | | | Months | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | 12 |
| | | | Hundreds of hours | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | | 24 |
| Chassis and body maintenance | Mast | Function of mast | | I | | I | | | I | | | I | | | I | Test |
| | | Mast system (damage/cracks/wear) | | I | | I | | | I | | | I | | | I | Visual |
| | | Clearance of each stage | | If Necessary | | | | | | | | | | | | Measure |
| | | Mast rail | | L | | L | | | L | | | L | | | L | Grease |
| | | Mast/carriage rollers | | If Necessary | | | | | | | | | | | | Visual/test |
| | | Back up metals | | L | | L | | | L | | | L | | | L | Grease |
| | | Lift chains wear/tension | | I | | I | | | I | | | I | | | I | Visual/Adjust |
| | | Attachments mounting | | I | | I | | | I | | | I | | | I | Visual |
| | | Lift chains | | L | | L | | | L | | | L | | | L | Lubricate |
| | | Hose pulleys | | I | | I | | | I | | | I | | | I | Visual/Test |
| | | Mast support | | I | | | | | I | | | | | | I | Grease |
| | | Forks (wearing/damage/cracks) | | I | | I | | | I | | | I | | | I | Visual |
| | | Carriage height | | I | | | | | I | | | | | | I | Test/Adjust |

Abbreviations: I = Inspect (correct or replace if necessary), D: Drain, R: Replacement, A: Adjustment, C: Clean, T: Retighten, L: Lubricate/Grease

GENERAL CARE AND MAINTENANCE

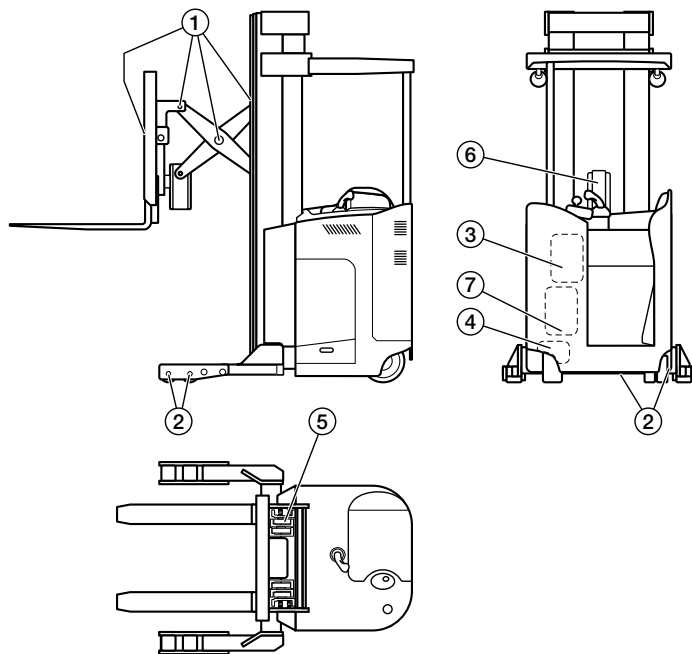
PERIODIC MAINTENANCE AND LUBRICATION SCHEDULE (cont'd)

| Inspection items | | | Interval | | | | | | | | | | | | How to check | |
|---|-----------------|--|-------------------|---|---|---|---|----|----|----|----|----|----|----|--------------|--------|
| | | | Months | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | | 12 |
| | | | Hundreds of hours | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | | 24 |
| Chassis and body maintenance (tilt function) | Reach Attach. | Reach attachment operation | | I | | | | | I | | | | | | I | Visual |
| | | Reach and sideshift cylinder operation | | I | | I | | | I | | | I | | | I | Test |
| | | Pivot points on reach attachment | | L | | L | | | L | | | L | | | | Grease |
| | Steering system | Function of steering system | | I | | I | | | I | | | I | | | I | Test |
| | | Mounting orbitrol | | I | | I | | | I | | | I | | | I | Visual |
| | | Steering wheel (movement and play) | | I | | I | | | I | | | I | | | I | Test |
| | Brake system | Function of brake system | | I | | I | | | I | | | I | | | I | Test |
| | | Brake pedal adjustment | | I | | I | | | I | | | I | | | I | Check |
| | | Brake lining wears | | I | | | | | | | | | | | I | Visual |
| | | Parking brake operation | | I | | I | | | I | | | I | | | I | Test |

Abbreviations: I = Inspect (correct or replace if necessary), D: Drain, R: Replacement, A: Adjustment, C: Clean, T: Retighten, L: Lubricate/Grease

GENERAL CARE AND MAINTENANCE

LUBRICATION CHART



Refer to Periodic Schedule for Intervals

RECOMMENDED LUBRICANTS

Lubrication Points

| Item # | Item | Specifications | Remarks |
|--------|---------------------------------|---|--|
| 1 | Reach attachment | N.L.G.I. 1 | Lithium soap |
| 2 | Chassis | N.L.G.I. 1 | |
| 2 | Wheel bearing | N.L.G.I. 2 | |
| 3 | Standard forklift | Hydraulic oil ISO VG32 or equivalent | AntiWear oil |
| | Cold Storage Refer to pg 55 | Hydraulic oil SAE No DTE 13 M (ISO VG15) | |
| 4 | Differential and reduction gear | SAE 80W (API GL-4) | Refer to recommended SAE Viscosity Chart |
| 5 | Mast and chain guide bar | N.L.G.I. 2 | Lithium soap |
| 6 | Lift chain | Sprayon LU202 Moly Chain Lubricant | |
| 7 | Steer gear | SAE 80W | |

Recommended Oil

| Recommended hydraulic oil | | Gear oil | Grease |
|---------------------------|--------------------------------------|----------------------|---|
| Standard | ISO VG32 or equivalent | API GL-5 (80W-90) | Lithium-based grease: N.L.G.I. No. 1 |
| CS type | ISO VG15 (SAE No. 10W) or equivalent | | |

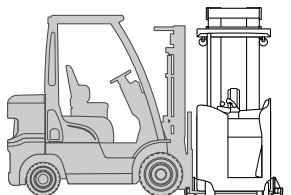
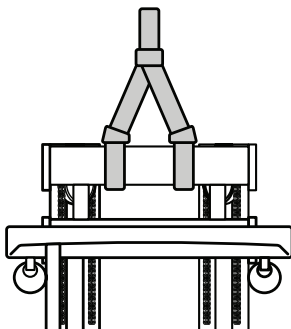
GENERAL CARE AND MAINTENANCE

MOVING DISABLED UNIT



WARNING

- Do not tow this unit. Unit has electric brake which can only be released with electric signal, or manual using release screws.
- To avoid serious damage to unit and possible serious injury only have Local Authorized Dealer Industrial Truck Technician with the correct tools & training to do this procedure.
- If unit must be moved follow these sets:
 - Remove load and forks
 - Remove battery if possible
 - Use another forklift with a capacity greater than the weight of unit and battery if not removed.
 - Raise unit only enough to clear floor and move to area clear for repairs.



GENERAL CARE AND MAINTENANCE

PUTTING FORKLIFT IN STORAGE

Putting the forklift in storage involves storing the forklift at the end of each working day or storing the forklift over a long period of time.

Be sure to observe the precautions for forklift storage.

DAILY STORAGE

At the end of the working day, check the forklift for oil leakage and other malfunctions. Always park it in the designated location. Put chocks under the tires to prevent the forklift from moving by itself.

Keep the body and areas surrounding the driver seat clean. Make it a habit to always keep the forklift clean.



CAUTION

- **The forklift has many electrical parts, do not wash with water. However, the battery can be washed with water after removing it from the forklift, but it must be completely dry before use.**
- **Blow off dust and dirt using compressed air with OSHA air nozzle or wipe with a wet cloth to clean the forklift.**



WARNING

- **As soon as a malfunction is detected, immediately report it to the appropriate personnel or contact your Local Authorized Dealer for repair. Do not operate the forklift until the malfunctions is repaired.**

STORAGE OVER A LONG PERIOD OF TIME

When the operation of the forklift is completely suspended for a given period of time, take the following measures and store the forklift in a dry area.

NOTE:

- When the forklift cannot be stored indoors, park it on level ground. Cover with a waterproof sheet or protective cover.
- When storing for a long period of time, be sure to consult your Local Authorized Dealer.



WARNING

- **Do not use a protective covering or waterproof sheet made of vinyl which is liable to produce static electricity. Static electricity may cause the battery to explode.**

GENERAL CARE AND MAINTENANCE

PUTTING FORKLIFT IN STORAGE (cont'd)

PRE-STORAGE SERVICING

1. Lubricate the forklift (refer to page 85). Change the oil and coat all exposed areas of hydraulic cylinders with corrosion resistant grease.
2. Charge the battery and leave it disconnected from the forklift. Store the forklift in a low fire-risk area.

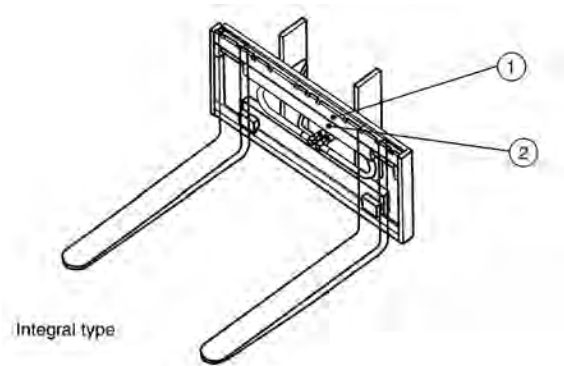
SERVICING THE FORKLIFT IN STORAGE

1. Periodically check the specific gravity and level the battery fluid. Charge and replenish as necessary. Perform uniform charge on the battery every 2 months.
2. Check various sections of the forklift for stains or corrosion. Clean such areas and coat with a corrosion preventive agent.

POST-STORAGE SERVICING

3. Wipe anticorrosive grease off the outer parts of the oil pressure cylinder.
4. Lubricate each part.
5. Check the battery fluid level and specific gravity. Fully charge the battery.
6. Turn the ignition switch "ON" and check the meters, warning lights and indicators.
7. Perform Daily Inspection (refer to page 72).

GENERAL CARE AND MAINTENANCE
SIDE SHIFT (OPTION)



- 1. Shift finger bar.
- 2. Side shift cylinder.

This section describes only the handling of loads using the side shift option. Before using the side shift, be sure to read this section thoroughly and understand it. For handling (safety, operations, inspection) of the forklift, refer to the applicable sections of this manual.

OVERVIEW OF SIDE SHIFT

Since the shift finger bar (on which the forks and the backrest are mounted) can be shifted to the right and left only by operating the lever from the operator's seat, you can accurately insert the fork under pallets or stack loads correctly at targeted positions.

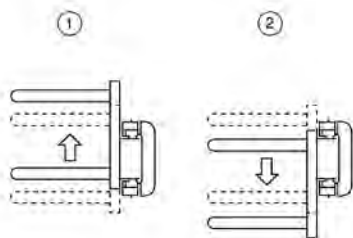
The following is the standard amount of side shift.

| Model Variation | Side Shift Distance |
|---------------------|-------------------------------------|
| 1H2 Series (option) | Each to right/left 100 mm (3.94 in) |
| | Each to right/left 50 mm (2 in) |

GENERAL CARE AND MAINTENANCE

SIDE SHIFT (OPTION) (cont'd)

1. Shift to right.
2. Shift to left.



MAIN TERMS USED IN THIS SECTION

Shift: To move the forks or load to the right or the left.

Side Shift Stroke: The maximum distance the forks or load can travel to the right or the left.

Shift Finger Bar: An oblong board on which the forks and the backrest are mounted. This shift finger bar shifts (moves) to the right and left.

Attachment: Equipment or parts to be added or replaced with the loading/unloading devices to perform a variety of loading and unloading.

SAFETY RULES AND PRACTICES



WARNING

- Do not make sudden and quick shifts with the forks loaded or raised.



If you make sudden shifts with the forks loaded, there is a risk of a load collapse. This can cause the forklift to become unstable and possibly tip over.



WARNING

- Only operate the side shift when entering or placing a load to correct position before lowering.
- Never operate side shift during travel.
- Never operate side shift during lifting or lowering.

GENERAL CARE AND MAINTENANCE

SIDE SHIFT (OPTION) (cont'd)

SAFETY RULES AND PRACTICES (CONT'D)



WARNING

- Do not use the shift function to push or pull loads or pallets.



If you use the side shift to push or pull loads, the equipment can be overstrained, resulting in a malfunction. In addition, there are risks of damaging loads or injuring people. Never push or pull loads with the side shift.



WARNING

- Do not shift when the forks are in contact with the floor or on a table.

If you do so, it can result in a malfunction of the equipment or a load collapse. Do not shift when the forks are in contact with the ground.



WARNING

- Do not travel with unstable or unsecured loads.



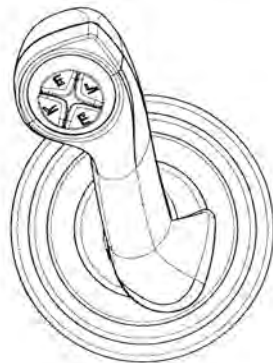
- Do not travel with loads shifted to one side.
- When loads are shifted (off centered) they will be less stable. This could cause the load to shift or fall off unit.
- It also could cause the forklift to become unstable and tip over.

GENERAL CARE AND MAINTENANCE

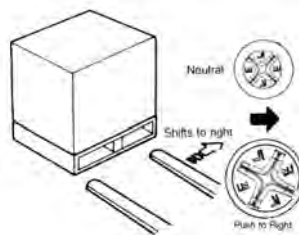
SIDE SHIFT (OPTION) (cont'd)

OPERATION OF THE CONTROL LEVER FOR THE SIDE SHIFT

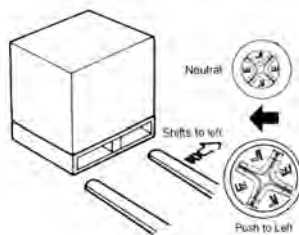
A forklift attached with a side shift has a control lever to operate the side shift, in addition to the control levers for standard operations.



When you pull the lever toward the operator, the shift finger bar (with forks mounted) shifts (moves) to the right.



When you push the lever forward, the shift finger bar (with forks mounted) shifts (moves) to the left.



CAUTION

- Do not move the levers suddenly and quickly. There is a risk of a load collapse.

NOTE:

The shifting speed changes depending on the amount the lever is moved forward or backward.



WARNING

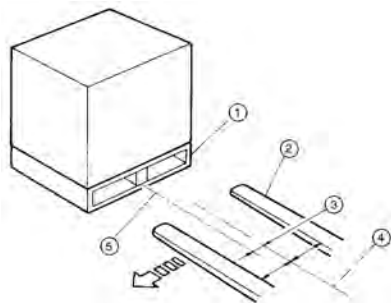
- When you operate your side shift, make sure to raise the forks approximately 100 - 200 mm (3.94 - 7.87 in) from the ground before operation. If you shift with the forks while they are in contact with the ground, the side shift forks or load could get caught and damage the forklift or load.

GENERAL CARE AND MAINTENANCE

SIDE SHIFT (OPTION) (cont'd)

SIDE SHIFT OPERATION

1. Pallet
2. Fork
3. Deviation
4. Center of forks
5. Center of pallet



This section describes the operation of your side shift.

Always keep the side shift finger bar in the neutral position except during load handling.

Adjust the forks as far apart as possible in order to minimize the deviation.

For basic operations, refer to the instructions in "Loading and Unloading" previously in this manual.

If the forks deviate either to the right or the left, operate the side shift lever and shift (move) the forks until the center of the pallet matches the center of the interval between the forks.



CAUTION

- Do not shift the forks while the forks are inserted into the pallet. This could cause the load to shift if the pallet is pushed.
- If it is not possible for the forks to be centered under the load even with them shifted as far as possible, back the forklift out and try to center the forks under the load. Always ensure loads are centered and secure before lifting or traveling.



WARNING

- Do not shift while traveling with loads.

Stacking



WARNING

- Do not operate the side shift when loads are lifted until load is in position to be placed. Doing so could cause loads to shift or a forklift to possibly tip over.
- Do not operate the side shift lever and the lift lever quickly. It is dangerous if a load collapse occurs.

GENERAL CARE AND MAINTENANCE

SIDE SHIFT (OPTION) (cont'd)

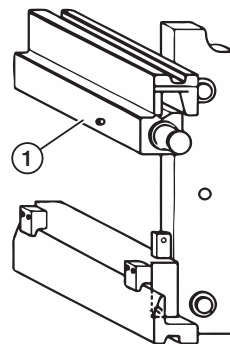
DAILY CHECKS AND SIMPLE MAINTENANCE



WARNING

- If any abnormality is noted in the daily checks, immediately report it to the appropriate personnel or contact your Local Authorized Dealer for repair. Do not operate the forklift until the malfunctions is repaired.
- To assure safe operation and maintain the side shift in proper functional condition, be sure to perform the daily checks below in addition to the "Daily Checks" outlined previously in this manual.

1. Check that any problems noted the previous day have been completely repaired.
2. Check all parts of the hydraulic piping and the cylinder of the side for oil leaks and looseness.
3. Check that the side shift is not damaged or deformed.
4. Check visually the jaw installation bolt on the finger bar for looseness.
5. Operate the side shift several times to check that it operates smoothly without abnormal noise. Also check that the side shift lever operates smoothly without rattling.



Integral Type

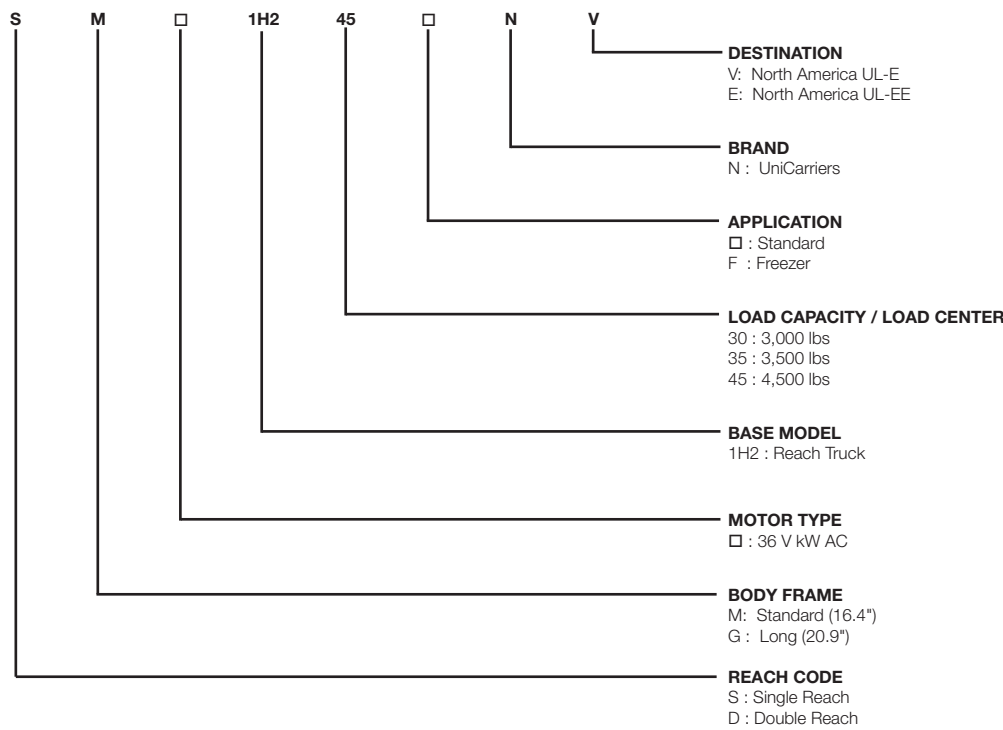
1. **Integral type:** Grease nipple (1 each on right and left)

NOTE:

Apply chassis grease once a week (or every 50 hours) to the grease nipples in the sleeve of the shift finger bar.

SPECIFICATIONS

MODEL VARIATION (LONG MODEL CODE) BREAKDOWN - 1H2 (SRX) SERIES



SPECIFICATIONS

MAIN TRUCK - 1H2

| Item | | Model code | 1H2 | | |
|-----------------------------------|----------------------------------|------------|---------------------------|---------------------|---------------------|
| | | | SRX35N | SRX45N | SRX45LN |
| Rated Load Capacity | lb (kg) | | Refer to Truck Data Plate | | |
| Load center | in (mm) | | 24 (610) | | |
| Overall Length (to face of forks) | in (mm) | | 54.1 (1375) | 55.6 (1415) | 60.1 (1525) |
| Overall Width (standard tires) | in (mm) | | 43.0 (1090) | | |
| Wheelbase | in (mm) | | 59.0 (1500) | 60.1 (1525) | 64.6 (1640) |
| Tire Size | Drive tire | in (mm) | 13 x 5.5 (330 x 140) | | |
| | Caster wheels - dual | in (mm) | 7 x 2.87 (178 x 73) | | |
| | Load wheels - tandem | in (mm) | 5 x 4 (127 x 100) | | |
| Minimum Turning Radius | Outside | in (mm) | 69.4 (1762) | 70.4 (1790) | 74.9 (1900) |
| Minimum Right Angle Stack | Add load length & clearance | in (mm) | 100 (2540) | 102 (2590) | 106 (2690) |
| Fork Length (standard) | | in (mm) | 42 (1070) | | |
| Fork Width x Thickness | | in (mm) | 4 x 1.5 (100 x 40) | 4 x 1.75 (100 x 45) | 4 x 1.75 (100 x 45) |
| Ground Clearance | Under Mast | in (mm) | 2.0 (50) | | |
| | Under Frame, center of wheelbase | in (mm) | 2.0 (50) | | |

SPECIFICATIONS

MAIN TRUCK - 1H2

| Item | | Model code | 1H2 | |
|-----------------------------------|----------------------------------|------------|---------------------------|-------------|
| | | | SRX30ND | SRX30LND |
| Rated Load Capacity | | lb (kg) | Refer to Truck Data Plate | |
| Load center | | in (mm) | 24 (600) | |
| Overall Length (to face of forks) | | in (mm) | 61.9 (1570) | 66.3 (1685) |
| Overall Width (standard tires) | | in (mm) | 43.0 (1090) | |
| Wheelbase | | in (mm) | 62.0 (1575) | 66.5 (1690) |
| Tire Size | Drive tire | in (mm) | 13 x 5.5 (330 x 140) | |
| | Caster wheels - dual | in (mm) | 7 x 2.87 (178 x 73) | |
| | Load wheels - tandem | in (mm) | 5 x 4 (127 x 100) | |
| Minimum Turning Radius | Outside | in (mm) | 72.4 (1840) | 76.8 (1950) |
| Minimum Right Angle Stack | Add load length & clearance | in (mm) | 108 (2745) | 113 (2870) |
| Fork Length (standard) | | in (mm) | 42 (1070) | |
| Fork Width x Thickness | | in (mm) | 4 x 1.5 (100 x 40) | |
| Ground Clearance | Under Mast | in (mm) | 2.0 (50) | |
| | Under Frame, center of wheelbase | in (mm) | 2.0 (50) | |

SPECIFICATIONS

MAIN TRUCK - 1H2

| Item | | | | Model code | | 1H2 | | |
|---------------------------|----|-----------|--------------|-------------------------|-------------|-------------|--------|---------|
| | | | | | | SRX35N | SRX45N | SRX45LN |
| Lifting Speed | 3F | Full Load | fpm (mm/sec) | 70 (356) | | | | |
| | | Empty | fpm (mm/sec) | 120 (610) | | | | |
| Lowering Speed | 3F | Full Load | fpm (mm/sec) | 95 (483) | | | | |
| | | Empty | fpm (mm/sec) | 87 (442) | | | | |
| Travel Speed | | Full Load | mph (km/h) | 6.4 (10.3) / 7.2 (11.6) | | | | |
| | | Empty | mph (km/h) | 6.4 (10.3) / 7.2 (11.6) | | | | |
| Truck Weight (no battery) | | | lb (kg) | 6005 (2725) | 6420 (2915) | 6540 (2970) | | |

SPECIFICATIONS

MAIN TRUCK -1H2

| Item | | | | Model code | | 1H2 | |
|---------------------------|----|-----------|--------------|-------------------------|--|-------------|----------|
| | | | | | | SRX30ND | SRX30LND |
| Lifting Speed | 3F | Full Load | fpm (mm/sec) | 70 (356) | | | |
| | | Empty | fpm (mm/sec) | 120 (610) | | | |
| Lowering Speed | 3F | Full Load | fpm (mm/sec) | 95 (483) | | | |
| | | Empty | fpm (mm/sec) | 95 (483) | | | |
| Travel Speed | | Full Load | mph (km/h) | 6.4 (10.3) / 7.2 (11.6) | | | |
| | | Empty | mph (km/h) | 6.4 (10.3) / 7.2 (11.6) | | | |
| Truck Weight (no battery) | | | lb (kg) | 6715 (3045) | | 6835 (3100) | |

SPECIFICATIONS

MAIN TRUCK - 1H2

| Item | | | Model code | | 1H2 | | |
|--------------------------|---------------------------|------------|--------------------------|--|---------------------------|--|---------|
| | | | SRX35N | | SRX45N | | SRX45LN |
| Traction Motor | Type | | AC Induction | | | | |
| | Control Type | | AC Inverter | | | | |
| | Rating - 36v | HP/kW/h | 8.0 (6.0) | | | | |
| Pump Motor | Type | | AC Induction | | | | |
| | Rating - 36v | HP/kW-5min | 18.8 (14) | | | | |
| Battery Data | Voltage | V | 36 | | | | |
| | Weight Minimum/Maximum | lb (kg) | 2060 (935) / 2305 (1045) | | 2600 (1180) / 3015 (1370) | | |
| Battery Compartment Size | W x L | in (mm) | 38.7 (980) x 16.4 (415) | | 38.7 (980) x 20.9 (530) | | |
| | H | in (mm) | 32 (810) | | | | |
| | Lead Acid - 36v | Type | 18 - 125 - 13 | | 18 - 125 - 17 | | |
| | Capacity - Minimum 36v | Ah/6h | 600 | | 880 | | |
| | Capacity - Maximum 36v | Ah/6h | 930 | | 1240 | | |

SPECIFICATIONS

MAIN TRUCK - 1H2

| Item | | | Model code | | 1H2 | |
|--------------------------|------------------------|---------|--------------------------|---------------------------|---------|----------|
| | | | | | SRX30ND | SRX30LND |
| Traction Motor | Type | | AC Induction | | | |
| | Control Type | | AC Inverter | | | |
| | Rating - 36v | kW/h | 8.0 (6.0) | | | |
| Pump Motor | Type | | AC Induction | | | |
| | Rating - 36v | kW/5min | 18.8 (14) | | | |
| Battery Data | Voltage | V | 36 | | | |
| | Weight Minimum/Maximum | lb (kg) | 2060 (935) / 2305 (1045) | 2600 (1180) / 3015 (1370) | | |
| Battery Compartment Size | W x L | in (mm) | 38.7 (980) x 16.4 (415) | 38.7 (980) x 20.9 (530) | | |
| | H | in (mm) | 32 (810) | | | |
| | Lead Acid - 36v | Type | 18 - 125 - 13 | 18 - 125 - 17 | | |
| | Capacity - Minimum 36v | Ah/6h | 600 | 880 | | |
| | Capacity - Maximum 36v | Ah/6h | 930 | 1240 | | |

SPECIFICATIONS

MAST - 1H2 (SRX35N)

| Mast Name | | Maximum Fork Height in (mm) | Free Lift without Backrest in (mm) | Tilt Angle Forward/Backward | Overall Height | | | |
|----------------------------|-------|--------------------------------|---|--------------------------------|----------------------------------|------------|-----------------------------------|------------------|
| | | | | | Lowered Mast Position in (mm) | | Extended Mast Position in (mm) | |
| | | | | | Top of OHG | Mast (OHL) | With Backrest | Without Backrest |
| THREE STAGE (Full Free) | 3F198 | 198 (5030) | 54.1 (1375) | 3/4 | 87.5 (2225) | 89 (2260) | 247.8 (6295) | 234.7 (5960) |
| | 3F210 | 210 (5335) | 60.1 (1530) | | 93.5 (2375) | 95 (2415) | 260.3 (6615) | 247.2 (6280) |
| | 3F240 | 240 (6095) | 72.1 (1830) | | | 107 (2720) | 290.4 (7380) | 277.3 (7045) |
| | 3F270 | 270 (6860) | 84.1 (2140) | | | 119 (3025) | 320.5 (8140) | 307.4 (7810) |

SPECIFICATIONS

MAST - 1H2 (SRX45N, SRX45LN)

| Mast Name | | Maximum Fork Height in (mm) | Free Lift without Backrest in (mm) | Tilt Angle Forward/Backward | Overall Height | | | |
|-------------------------------|-------|--------------------------------|---|--------------------------------|----------------------------------|------------|-----------------------------------|------------------|
| | | | | | Lowered Mast Position in (mm) | | Extended Mast Position in (mm) | |
| | | | | | Top of OHG | Mast (OHL) | With Backrest | Without Backrest |
| THREE STAGE (Full Free 3F) | 3F198 | 198 (5030) | 54.3 (1380) | 3/4 | 87.5 (2225) | 89 (2260) | 247.8 (6295) | 234.7 (5960) |
| | 3F210 | 210 (5335) | 60.3 (1535) | | 93.5 (2375) | 95 (2415) | 260.3 (6615) | 247.2 (6280) |
| | 3F240 | 240 (6095) | 72.3 (1840) | | | 107 (2720) | 290.4 (7380) | 277.3 (7045) |
| | 3F258 | 258 (6555) | 78.3 (1990) | | | 113 (2870) | 308.4 (7835) | 295.3 (7500) |
| | 3F270 | 270 (6860) | 84.3 (2145) | | | 119 (3025) | 320.5 (8140) | 307.4 (7810) |
| | 3F300 | 300 (7620) | 96.3 (2450) | | | 131 (3330) | 350.6 (8905) | 337.5 (8570) |
| | 3F330 | 330 (8380) | 114.3 (2905) | | | 149 (3785) | 380.5 (9665) | 367.4 (9335) |

SPECIFICATIONS

MAST - 1H2 (SRX30ND, SRX30LND)

| Mast Name | | Maximum Fork Height in (mm) | Free Lift without Backrest in (mm) | Tilt Angle Forward/Backward | Overall Height | | | |
|-------------------------------|-------|--------------------------------|---|--------------------------------|----------------------------------|------------|-----------------------------------|------------------|
| | | | | | Lowered Mast Position in (mm) | | Extended Mast Position in (mm) | |
| | | | | | Top of OHG | Mast (OHL) | With Backrest | Without Backrest |
| THREE STAGE (Full Free 3F) | 3F198 | 198 (5030) | 54.1 (1380) | 3/4 | 87.5 (2225) | 89 (2260) | 247.8 (6295) | 234.7 (5960) |
| | 3F210 | 210 (5335) | 60.1 (1535) | | 93.5 (2375) | 95 (2415) | 260.3 (6615) | 247.2 (6280) |
| | 3F240 | 240 (6095) | 72.1 (1840) | | | 107 (2720) | 290.4 (7380) | 277.3 (7045) |
| | 3F258 | 258 (6555) | 78.1 (1990) | | | 113 (2870) | 308.4 (7835) | 295.3 (7500) |
| | 3F270 | 270 (6860) | 84.1 (2145) | | | 119 (3025) | 320.5 (8140) | 307.4 (7810) |
| | 3F300 | 300 (7620) | 96.1 (2450) | | | 131 (3330) | 350.6 (8905) | 337.5 (8570) |
| | 3F330 | 330 (8380) | 114.1 (2905) | | | 149 (3785) | 380.5 (9665) | 367.4 (9335) |

SPECIFICATIONS

TIRE SIZE

| Tire Type | | | Pneumatic | |
|-----------|--------|------|--------------------|---------------------|
| Model | | | 1.5 & 1.8 ton | 2.0 & 2.5 ton |
| Front | Single | Tire | 21 x 8-9-10 PR (1) | 23 x 9-10-16 PR (1) |
| | | Rim | 9 x 6.00E TB (1) | 10 x 6.50F TB (1) |
| | Double | Tire | 6.00-9-10 PR (1) | 6.50-10-10 PR (1) |
| | | Rim | 9 x 4.00E DT (1) | 10 x 5.00F TB (1) |
| Rear | Tire | | 5.00-8-10 PR (1) | 18 x 7-8-14 PR (1) |
| | Rim | | 8 x 3.00D DT (1) | 8 x 4.33R TB (1) |

SPECIFICATIONS

OIL CAPACITY

| | | |
|---------------------------------|--------|-------------|
| Model | | 1H2 |
| Hydraulic Oil Tank | ℓ (qt) | 18.6 (19.7) |
| Differential and Reduction Gear | US qt | 3.3 |
| Steering assembly (80/90) | pints | 0.74 |

NOISE LEVEL

The values are the A-weighted sound pressure level at the operator's position, L_{PAZ} and the uncertainty value, K_{PZ} according to EN12053:2001.

| | |
|-----------|---------------------------|
| Item | |
| L_{PAZ} | Does not exceed 70 dB (A) |
| K_{PZ} | 4 dB (A) |

The whole body vibration $\bar{a}_{w,z}$ according to EN13059:2002.

Vibration emission value: 1.0 m/s²

Uncertainty: 0.3 m/s²

INDEX

A

| | |
|---|----|
| A Word to UniCarriers Forklift Operators | 3 |
| Alternate Capacity Plate | 26 |
| Application Area for UniCarriers Trucks | 31 |
| Applications | 31 |
| Automatic Fork Height Select (Option) | 41 |
| ANSI/ITSDF Standards for Forklift Clamp Attachments | 21 |

B

| | |
|---|-------|
| Battery and Battery Charging Equipment... | 62 |
| Battery Care and Maintenance | 62 |
| Battery Charge Classifications | 66 |
| Battery Chargers | 65 |
| Battery Connector | 71 |
| Battery Decal | 29 |
| Battery Gate Decal | 28 |
| Battery Replacement | 70 |
| Brake and Operator Presence Pedals | 51 |
| Brake Pedal | 52 |
| Braking by Plugging (Controlled Reversing) | 52,59 |

C

| | |
|--|----|
| Caution Drive Decal (In Case of Tip-Over) | 27 |
| Caution Fork Decal | 30 |
| Charging Preparations | 67 |

| | |
|---|----|
| Checking Brake Pedal Operation | 78 |
| Checking Cargo-Handling Control Lever(s) | 78 |
| Checking Horn | 78 |
| Checking Lift Chain | 77 |
| Checking Lights | 78 |
| Checking Mast | 76 |
| Checking Safety Start System Operation ... | 78 |
| Checking Top Panel Latch | 84 |
| Climbing | 57 |
| Clock | 38 |
| Condensation | 54 |

D

| | |
|---|---------|
| Daily Inspection | 8,12,72 |
| Daily Checks and Simple Maintenance, Side Shift (Option) | 94 |
| Daily Storage | 87 |
| Data Plate | 26 |
| Dockboards (Bridge Plates), Trucks and Railroad Cars | 19 |
| Drive/Steer Tire | 75 |

E

| | |
|----------------|----|
| EE Decal | 28 |
|----------------|----|

F

| | |
|--------------------------------------|----|
| Forklift Operating Precautions | 53 |
| Fork Inspection | 77 |

| | |
|-----------------------------|----|
| Fork Repair | 78 |
| Forks | 59 |
| Forward-Reverse Lever | 47 |
| Function Keys | 32 |
| Function Tests | 24 |
| Fuses | 79 |

G

| | |
|--|----|
| Gangway | 22 |
| General Safety Rules and Practices | 13 |

H

| | |
|--|----|
| Hoisting (Lifting) Up Forklift | 23 |
| Horn Button | 49 |
| How to Charge Battery (Off-Forklift Type) | 67 |
| Hydraulic Oil Level | 76 |
| Hydraulic Oil Refilling | 76 |
| Hour Meter | 38 |
| How to use this Manual | 9 |

I

| | |
|-----------------------------------|----|
| In Case of Tip-Over | 21 |
| Identification Numbers | 27 |
| Ignition Switch | 50 |
| Inspection before Operating | 53 |
| Installation of Attachments | 21 |
| Introduction | 8 |

INDEX

L

| | |
|-------------------------|----|
| Load Handling | 18 |
| Lubrication Chart | 85 |

M

| | |
|--|----|
| Main Components | 32 |
| Main Terms used in the Section, Side Shift (Option)..... | 90 |
| Maintenance and Servicing..... | 8 |
| Meters, Indicators, and Lamps | 35 |
| Mode Selection Buttons | 40 |
| Moving Disabled Unit..... | 86 |
| Multi-Function Handle..... | 48 |

N

| | |
|------------------|-----|
| No Riders | 15 |
| Noise Level..... | 106 |

O

| | |
|---|-----|
| Oil Capacity | 106 |
| Operation of the Control Lever for Side Shift (Option)..... | 92 |
| Operator Presence Pedal..... | 51 |
| Operational Procedures | 55 |
| Operator Responsibility..... | 13 |
| Operator Qualifications | 11 |
| Operator's Daily Checklist (Sample)..... | 74 |
| Overview of Operating Controls and Functions | 33 |
| Overview of Side Shift (Option)..... | 89 |

P

| | |
|--|----|
| Periodic Maintenance and Lubrication Schedule | 79 |
| Person Protective Equipment for Operating Forklift | 12 |
| Picking Up a Load | 60 |
| Pinch Point Decal | 28 |
| Planned Maintenance | 8 |
| Post-Storage Servicing | 88 |
| Position of Data & Capacity Plates and Decals | 24 |
| Pre-Storage Servicing..... | 88 |
| Precautions for Cold and Hot Weather..... | 64 |
| Precautions for Operating in Cold Storage | 55 |
| Prohibited Applications for UniCarriers Trucks | 31 |

R

| | |
|---|----|
| Rear Caster | 75 |
| Recommendations to Avoid Condensation | 54 |
| Recommended Lubricants | 85 |
| Refrigerator Symbol Decal | 30 |

S

| | |
|---|----|
| Safety Guards..... | 11 |
| Safety Rules and Practices (Option) | 90 |
| Safety Signs and Safety Messages | 10 |
| Servicing the Forklift in Storage..... | 88 |

| | |
|---|-----|
| Side Shift Operation (Option) | 93 |
| Shipping Warning Tag | 30 |
| Specifications, Main Truck - 1H2 | 96 |
| Specifications, Mast - 1H2)..... | 102 |
| Specifications, Model Variation (Long Model Code) Breakdown - 1H2 | 95 |
| Speedometer | 36 |
| Status Display | 35 |
| Steering Wheel | 49 |
| Stopping and Parking the Truck..... | 58 |
| Storage over a Long Period of Time | 87 |
| Surface & Capacity | 20 |
| Switches | 50 |

T

| | |
|-----------------------------|-------|
| Table of Contents | 4 |
| Tire Replacement | 75 |
| Tire Size | 105 |
| Transporting Forklift | 22 |
| Transporting Loads..... | 59 |
| Traveling | 16,57 |
| Truck Modifications..... | 4 |
| Turning | 57 |

W

| | |
|--|----|
| Warning Drive Decal (Trained and Authorized) | 29 |
| Warning Symbols & Levels..... | 10 |
| Wheel and Tire | 76 |
| Wheel Indicator..... | 35 |

UNICARRIERS GENUINE PARTS

Always use UniCarriers Genuine Parts

At first glance, it's hard to tell one part from another. The truth is, all replacement parts aren't created equal. UniCarriers Genuine Parts satisfy the same technical specifications (engine performance, sound quality, reliability, etc.) as the original parts fitted on the vehicle, providing **original equipment performance, durability and reliability.** **This way you can ensure that your UniCarriers industrial truck will always perform at its best.** This is one of the many things that make UniCarriers Genuine Forklift Parts the best choice to help maintain the value of your UniCarriers industrial truck.

So make sure, next time your truck needs service:

DemandTheBrand®



DISPOSAL OF PARTS AND MATERIALS



WARNING

- Used parts and materials such as lubricants, oils, paint, rags, battery fluid and batteries shall be disposed of as per the applicable provisions of the laws and regulations of your country, state or local regulations.
- Also consult your Local Authorized Dealer.



UniCarriers Americas Corporation

**©UniCarriers Americas Corporation
240 N. Prospect Street, Marengo, IL 60152 USA
Tel: +1-815-568-0061 Fax: +1-815-568-0179
www.unicarriersamericas.com**

UniCarriers® is a registered trademark of UniCarriers Corporation