Service and Parts Manual

SPM 625

CSP 15

SERIAL NUMBER _____

ALWAYS GIVE TRUCK SERIAL NUMBER WHEN ORDERING PARTS

CLARK® Material Handling Company

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IMPORTANT: READ AND UNDERSTAND THE CONTENTS OF THIS MANUAL BEFORE OPERATING THIS EQUIPMENT

ARRIVAL INSPECTION

his equipment was thoroughly inspected and tested prior **to leaving the factory. Before placing the equipment in** ervice **it should be thoroughly checked for damage or loss occurring in transit. If any such damage or loss is** vident, **a claim must be made against the carrier. Refer to Damage in Transit information enclosed with the** acking **slip.**

PRE-OPERATION INSTRUCTIONS

Remove any packing material and check for visible damage.

Open the drive unit cover and check the wiring harness and hydraulic hoses for damage or loose connections. Remove the breather and check that the oil reservoir is filled to approximately 1" from the top (forks must be ir lowered position).

Open the battery compartment and check that all connections are tight. Check that the battery has not been damaged and is fully charged. Refer to Battery and Charger Instructions.

Refer to operating instructions and check that the truck operates satisfactorily.

Complete the Warranty Validation form included in this manual and return it to Blue Giant.

SAFETY INFORMATION

DO NOT OPERATE THIS TRUCK UNLESS YOU HAVE BEEN **TRAINED** AND AUTHORIZED TO DO SO.

DO NOT OPERATE THIS TRUCK UNTIL YOU HAVE CHECKED ITS CONDITION. GIVE SPECIAL ATTENTION TO TIRES, BATTERY, CONTROLS, LIFTING SYSTEMS INCLUDING SWITCHES, BRAKES, STEERING MECHANISM, GUARDS AND SAFETY DEVICES.

REPORT THE NEED FOR TRUCK REPAIRS TO YOUR SUPERVISOR PROMPTLY. DO NOT OPERATE TRUCK. NEGLECT MAY CAUSE A MINOR REPAIR TO BECOME A MAJOR SERVICE PROBLEM AND CAUSE THE TRUCK TO BECOME UNSAFE.

DO NOT EXCEED THE RATED CAPACITY OF THE VEHICLE AS MARKED ON THE NAMEPLATE. DO NO LIFT WITH THE FORK TIPS OR ONE FORK ONLY, AND **BE** SURE LOAD IS CENTERED AND FORKS AR PUSHED COMPLETELY UNDER LOAD.

. DO NOT HANDLE UNSTABLE OR LOOSELY STACKED LOADS. USE SPECIAL CARE WHEN **HANDLIN(** LONG, HIGH OR WIDE LOAD, TO AVOID TIPPING, LOSS OF LOAD, OR STRIKING BYSTANDERS.

. ALWAYS LOOK IN DIRECTION OF TRAVEL. KEEP A CLEAR VIEW AND WHEN LOAD INTERFERES WITH VISIBILITY, TRAVEL WITH LOAD TRAILING (EXCEPT WHEN CLIMBING RAMPS).

. WATCH SWING CLEARANCE WHEN TURNING NEAR WALLS, RACKS, PILLARS OR OTHER OBSTACLES.

- START, STOP, CHANGE DIRECTION, TRAVEL AND BRAKE SMOOTHLY. SLOW DOWN FOR TURNS AND ON UNEVEN OR SLIPPERY SURFACES THAT COULD CAUSE TRUCK TO SLIDE OR TIP. **BE** AWARE THAT THE TRUCK BEHAVES DIFFERENTLY WITHOUT A LOAD THAN WITH A LOAD.
- OBSERVE APPLICABLE TRAFFIC REGULATIONS. YIELD RIGHT OF WAY TO PEDESTRIANS. SLOW DOWN AND SOUND HORN AT ALL AISLE INTERSECTIONS AND WHERE VISION IS OBSTRUCTED.
- DO NOT RIDE ON TRUCK UNLESS EQUIPPED WITH RIDER PLATFORM.
- DO NOT CARRY PASSENGERS.
- BEFORE YOU LEAVE THE TRUCK, FULLY LOWER LIFTING MECHANISM, SHUT OFF POWER, REMOV KEY. DO NOT LEAVE TRUCK UNATTENDED ON RAMP.

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TO ORDER PARTS

For prompt service when ordering parts, please provide the following information to your local distributor.

1. Model and serial number of the vehicle
2. Part number, description and quantity
3. Shipping instructions.

When in doubt as to part required, please provide a sketch or the used part as a sample.

RECORD HERE FOR FUTURE REFERENCE

Model Number:

Serial Number:

Distributor:

FOR RECOMMENDED SPARE PARTS CONTACT BLUE GIANT

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PREVENTIVE MAINTENANCE

Spotting trouble before it happens can prevent costly down-time and extensive repairs and make it possible for service and repairs to be performed when the unit is not required for regular operations.
Inspection intervals outlined are for normal conditions. More frequent inspections are necessary for adverse conditions such as: rough floor conditions, temperature extremes, several operators, dusty atmosphere. etc.

INSPECTION INTERVALS

DAILY: Operating Controls (SAFETY)
Battery

QUARTERLY: Electrical System
Hydraulic System
Drive Unit & Mechanical Parts

CAUTION: DISCONNECT THE BATTERY BEFORE ATTEMPTING INSPECTION OR SERVICE

LUBRICATION (based on single shift, normal usage)

EVERY MONTH:
Apply engine oil (SAE 10) to all points as shown on page 5 and including: •
1. Handle pivot points on E Series Units.

EVERY THREE MONTHS:
To check oil level remove breather cap (reference, item 9, page 9). Add approved oil if necessary through reservoir hole until oil is level with bottom of filler hole.
Before you assemble, the breather cap should be cleaned with a suitable cleaning solvent.

EVERY SIX MONTHS:
Drive unit swivel bearings and wheel bearings.
- Disassemble, clean and inspect for wear or damage. Reassemble and grease.
The hydraulic oil should be changed after the truck has been in service for three months then every six months thereafter.
Remove reservoir, discard used oil and clean reservoir. Clean and inspect strainer and replace if damaged. Reinstall and add oil until oil is level with bottom of filler hole. Use only good quality hydraulic oil with a viscosity equivalent to SAE 10 or SAE 20 for operation at normal room temperature, or SAE 10 for low temperature. Approved hydraulic oils for normally temperatures are Esso Polar 32; Shell Tellus 29. Gulf Harmony 48AW. Texaco Rando Oil HD32(150); Dextron II transmission fluid or equal. SAE 10W30 motor oil may be used as a substitute if conditions are not adverse (moisture, low temperature, etc.).

BATTERY MAINTENANCE

CHARGING:
The battery should be charged as required. Loosen vent caps but do not remove them.
Note: Do not allow the battery to become discharged below a specific gravity of 1.150 or there will be a permanent loss of capacity.

RECORDS:
A daily record should be kept showing hydrometer readings of pilot cell at start and at end of charge. Change to a different pilot cell monthly., Once a week after the battery has received an equalizing charge, record the hydrometer readings of all cells.

EQUALIZING CHARGE: (For industrial type batteries)
Once a week, following a normal charge, the battery should be given an equalizing charge, continued until there is no improvement between two successive hydrometer readings of each cell. This is usually a continuation of the regular charge at a low rate.

ELECTROLTYE LEVEL:
Distilled water should be added to each cell as often as necessary, after charging, to keep the electrolyte to the bottom of the vent welt. Do not over fill. Normally water is required no more than once a week. Excessive Water use indicates over-charging or high charging rates.

GENERAL:
The top of the battery should be kept clean and dry. Wash off with clear water when necessary. Good ventilation should be provided during charging. Do not allow electrolyte temperature to exceed 110°F (43°C). Keep open flames away from battery. Never add acid to cells without special instructions. Batteries used at temperatures below or above normal room temperature will have reduced capacity.

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LUBRICATION POINTS

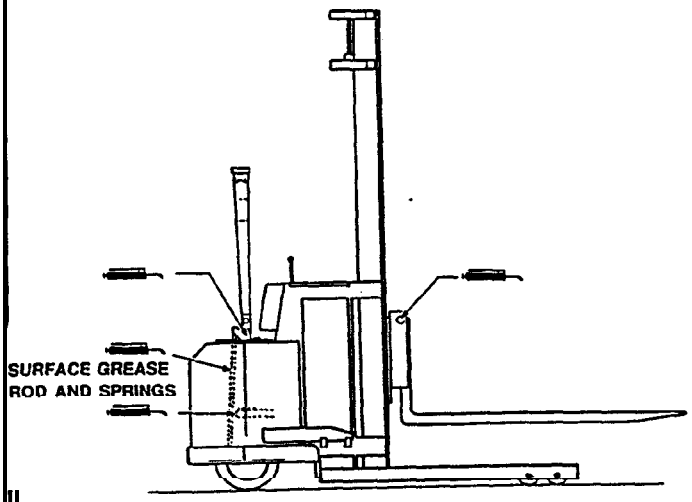

FIGURE 1

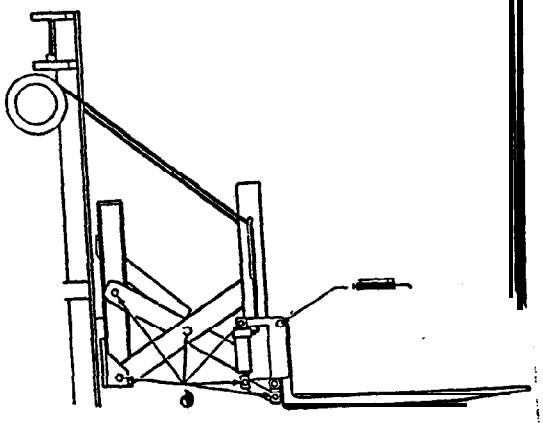

FIGURE 2

MAST & CARRIAGE

. Check the condition of ail channel rollers and replace if necessary.

!. Lubricate the points shown in Figure 3. For best performance lubricate weekly.

3. Periodically remove the lift chains and wipe clean with dry cloths. DO NOT use chemical degreasing agents since these may make the material brittle. Carefully examine the chain links, pins and devises for damage or wear and replace them if any evidence of either is found. Using a paint brush, recoat the chains with SAE motor oil. Adjust the chain tension so that with the carriage fully lowered. the chains are equally taut but not supporting the carriage.

4. Check the high limit stops for damage and repair or replace if necessary.

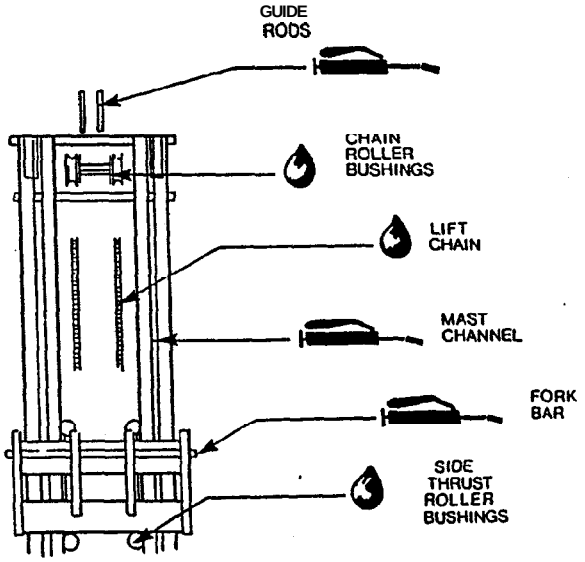

FIGURE 3

IMPORTANT NOTICE: During manufacture, hydraulic fluid is used to lubricate all cylinder components during cylinder assembly. This assembly fluid may be present in, or accumulate in, the upper headnut portion of the cylinder during the break in period or during normal use. A small amount of fluid in this area is normal and should not be mistaken as cylinder seal leakage.