
Service and Parts Manual

SPM 629

CST 10/15/20

SERIAL NUMBER

ALWAYS GIVE TRUCK SERIAL
NUMBER WHEN ORDERING PARTS

CLARK Material Handling
Company

IMPORTANT: Read and understand the contents of this manual before operating the equipment.

RECEIPT INSPECTION

Immediately upon delivery of this product, remove all packing materials (if any) and inspect for damage or loss. If damage or loss is found, make a notation accordingly on the shippers bill of lading. Contact the shipper and file a claim for the damage or loss. Clark is not responsible for shipping damage or loss.

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SAFETY INFORMATION

IMPORTANT: *All designated operators of this equipment must read and understand the contents of this manual before operating this equipment.*

1. Do not operate this truck unless you have been trained and authorized to do so.
2. Do not operate this truck until you have checked its operation and condition. Give special attention to tires, battery, controls, lifting systems including switches, brakes, steering mechanism, guards and safety devices.
3. Report the need for truck repairs to your supervisor immediately and do not operate truck until repairs are made. Neglect may cause a minor repair to become a major service problem and cause the truck to become unsafe.
4. Do not exceed the rated capacity of the vehicle as marked on nameplate.
5. Do not lift with the fork tips or one fork only, if equipped.
6. Units equipped with forks are designed for evenly centered loads with forks completely supporting the load. Off-centering of loads can result in a dangerous operating condition and may cause damage or injury.
7. Always look in direction of travel. Use caution when load interferes with visibility.
8. Extreme caution must be used when handling or transporting loosely stacked/packaged loads.
9. Watch swing clearance when turning near walls, racks, pillars or other obstacles.
10. Start, stop, change direction, travel and brake smoothly. Slow down for turns and on ramps and 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.
11. Know and understand gradeability capabilities of this vehicle. Maximum recommended gradeability under load not to exceed 5%. Straddle type equipment is designed for level surface only. Do not leave truck unattended on ramp.
12. Observe applicable traffic regulations. Yield right of way to pedestrians. Slow down and sound horn at all aisle intersections and where vision is obstructed.
13. Do not ride on this equipment unless it has been equipped and designed for such use.
14. Do not allow personnel to stand under the forks, if equipped (loaded or unloaded) when forks are in the raised position.
15. Do not carry passengers or lift personnel.
16. Before you leave the truck, fully lower lifting mechanism, shut off power and keyswitch (if equipped) and apply parking brake (if equipped).
17. Do not use forward mast tilt (if equipped), with the load elevated unless the load is directly over other support.
18. When traveling with or without a load, forks should be in lower most position and tilted back if applicable.
19. For straddle trucks, straddle distance must be equally spaced in relation to truck chassis. Straddle inside dimension must be set at a minimum of 25% of maximum lifting height. Straddle legs adjustment should be done by authorized representatives.

REMEMBER: A safe operator is a smart operator!

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 in lowered position).
- Open the battery compartment and check that all connections are tight. Check that the battery or cables have not been damaged. The battery should be fully charged before the vehicle is placed into service. Refer to Battery and Charger Instructions.
- Refer to Safety and Operating Instructions and check that the truck operates satisfactorily.
- Complete the Warranty Validation form included in this manual and return it to Clark. Warranty may be void if warranty validation form is not completed and returned to Clark

OPERATING INSTRUCTIONS

Travel Controls: rotating the twist grip in the head of the control handle controls Direction and speed. This unit is equipped with a fully programmable electronic speed control and has variable speed that is regulated by turning the twist grip handle in the forward or reverse direction as required. With the electronic speed controller travel controls (reversing travel direction) may be used for braking purposes during regular use.

Brake: The brake is applied when the control handle is in the fully raised or fully lowered position. Power to the traction (drive) motor is cut off whenever the brake is applied in the fully raised or lowered position. Equipment includes "Deadman" safety feature. Spring loaded steering handle, when released automatically returns to upright/"Deadman" position that engages the brake and will slow the unit down to a full stop.

Horn: The horn pushbutton is located on the steering handle allowing instantaneous fingertip use without travel interruption.

Safety Reversing Button: Located at the top of the steering handle. When the truck is being driven in the direction of the operator and the safety-reversing button is depressed by an obstruction or trapped operator the vehicle instantly reverses direction, in high speed and the horn will energize.

NOTE: Do not use safety reversing button for normal travel.

Lift and Lower Controls: Manual lever control (standard) is located on the right hand side of the dash plate. Pushbutton control, if ordered, is located on the top of the control handle.

**CAUTION: NEVER EXCEED THE RATED CAPACITY OF THE TRUCK AS MARKED ON THE NAMEPLATE.
DO NOT LIFT WITH THE FORK TIPS OR ONE FORK ONLY.**

Mast / Fork Tilt Controls: Manual lever control is located on the right handle side of the dash plate. Pushbutton control, if ordered, is located on the top of the control handle.

**CAUTION: DO NOT USE FORWARD TILT WITH THE LOAD ELEVATED UNLESS THE LOAD IS DIRECTLY
OVER RACKING OR OTHER SUPPORT.**

PREVENTATIVE 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 single shift use and conditions. More frequent inspections are necessary for adverse conditions such as: rough floor conditions, temperature extremes, several operators, multi shift use, dusty atmosphere, etc.

INSPECTION INTERVALS

DAILY: All Operating Controls (SAFETY)
Battery Charge
Brake Operation

QUARTERLY: Electrical System
Hydraulic System
Drive Unit & Mechanical Parts

CAUTION: DISCONNECT THE BATTERY AND DEPRESS HORN SWITCH TO DRAIN CONTROLLER RESIDUAL CURRENT BEFORE ATTEMPTING ANY TYPE OF INSPECTION OR SERVICE

LUBRICATION (based on single shift, normal usage) Refer also to Body Assembly/Lubrication Points Diagram.

EVERY MONTH: Apply engine oil (SAE 10) to all points as shown on lubrication chart and lubricate drive unit swivel bearings with extreme pressure or multi-purpose grease.

HYDRAULIC SYSTEM:

To check oil level remove breather cap. Proper oil level is approximately 1" below the top of the reservoir with forks in the fully lowered position. Add approved oil if necessary through reservoir hole. Before you assemble, the breather cap should be wiped or cleaned with a suitable cleaning solvent.

- For hydraulic oil change remove reservoir or drain plug if equipped, 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 Clark approved hydraulic oil as indicated in the approved oil chart.
- Hydraulic system and surrounding area should be kept clean and free of debris. Leaking or damaged hoses and fittings must be repaired or replaced immediately for safe operation and to prevent loss of oil and possible serious damage to hydraulic pump.
- The hydraulic cylinders should be inspected and seals replaced if excessive oil leaks are found.

Note: Some seepage past seals resulting in minor leakage during operation is normal. External oil being evident does not necessarily require cylinder repair until the leakage is at a point that normal operation is adversely affected.

Hydraulic Oil Change: 500 hours or three months after the equipment is placed in service and every 2000 hours or a minimum of once a year thereafter.