# Bishamon<sup>®</sup>-Blue-Label

# **Operation and Service Manual**

Model - BM20, BM25, BM30 Model - BM15-L50, BM10-L40

### **GETTING STARTED**

PLEASE READ THIS MANUAL CAREFULLY BEFORE USING THE Blue Label Pallet Truck. The safety of all persons using or servicing the BlueLabel pallet truck is of utmost importance to Bishamon. The truck is capable of supporting heavy loads and is capable of causing SEVERE INJURY if used improperly or certain safety precautions are not taken. When properly used and maintained, the Blue Label truck will provide many years of safe, trouble free service. If you have any questions about any of the instructions in this manual or about the use of this product, PLEASE contact your DEALER or Sugiyasu Corporation. Throughout this manual the Blue Label pallet truck may be referred to as the "pallet truck" or the "truck".

### Safety Definitions

In this manual, Bishamon uses the following systems to identify the degree of risk associated with hazards and unsafe practices.

Warning : Hazard or unsafe practice which, if not avoided, could result in DEATH or SEVERE PERSONAL INJURY and PROPERTY DAMAGE.

Warnings

Caution : Hazard or unsafe practice which, if not avoided, may result in MINOR or MODERATE PERSONAL INJURY and PROPERTY DAMAGE.

## Warnings and Cautions



KEEP FEET CLEAR of Hand Pallet Truck to prevent pinch points from causing severe personal injury



DO NOT USE on the

truck

KEEP FEET CLEAR of slope or unlevel surface rolling wheels that could that could result in loss result in severe personal of control to hand pallet iniury.

DO NOT ride on hand pallet truck or unit may overturn.

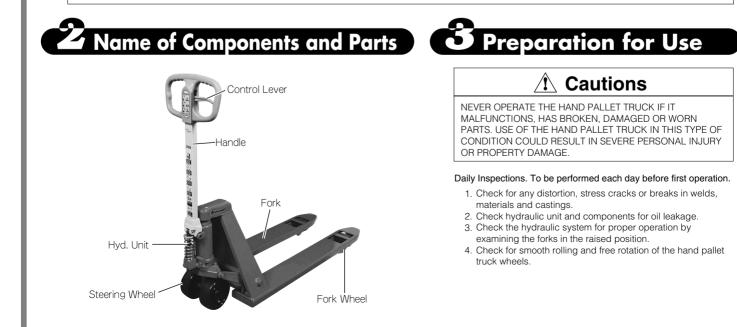
USE ONLY in areas

clear of all personnel and objects to prevent severe personal injury and property damage.

DO NOT use in areas of multi level floor surfaces that could create loss of control and result in severe personal injury and property damage.

### Cautions ∕¶∖

- 1. READ THIS MANUAL COMPLETELY BEFORE USING AND THOROUGHLY UNDERSTAND AND FOLLOW ALL SAFETY INSTRUCTIONS.
- 2 DO NOT exceed the rated load capacity
- 3. DO NOT lower the forks rapidly. DO NOT stop suddenly. Sudden movements reasult in unbalanced loads that result in severe personal injury and property damege.
- 4. DO NOT LOAD the hand pallet truck improperly centered on the length of forks or side-to-side. ENSURE that the load is evenly distributed. UNBALANCED loads may become unstable and fall.
- SEVERE PERSONAL INJURY and PROPERTY DAMAGE COULD RESULT.
- 5. NEVER modify the hand pallet truck in any manner without the prior written consent of Sugiyasu Corporation.
- The hand pallet truck is NOT waterproof and is intended to be used in a dry environment and at a moderate temperature range.



# Derating Instructions

The Blue Label pallet truck is simple to operate. However, before using the truck, you should review the handle controls and their operation. ALWAYS follow all safety precautions and warnings while operating the truck. Refer to Fig. 1 for all operating instructions. Raising the forks

### 1. Position the handle control lever in the RAISE position. Actuate the pump by raising and lowering the control handle. Each pump should raise the forks approximately 10mm.

#### Maneuvering the Truck

- 1. Position the handle control lever in the NEUTRAL position. This disengages the pumping mechanism and allows the control handle to be raised or lowered without actuating the pump.
- 2. Push or pull the control handle to move the truck. All steering is accomplished by rotating the control handle. Lowering the forks
- 1. Slowly shift the handle control lever upward to the LOWER position.
- This releases the hydraulic pressure and allows the forks to lower.

### ▲ Cautions

DO NOT exceed the rated load capacity. Capacity for Bishamon models. BM20 2000 kgs. BM15-L50 1200 kgs BM25 2500 kgs. BM10-L40 1000 kgs BM30 3000 kgs.

|    | \land Warnings  |
|----|---|
| 1. | DO NOT USE on slope or unlevel surface that could result in loss of control to hand pallet truck. |
| 2. | KEEP FEET CLEAR of rolling wheels that could result in severe                                     |

Cover Position(C)

Neutral

Raise

Position(B)

Position(A)

Handle

Control

Lever

Fig.1

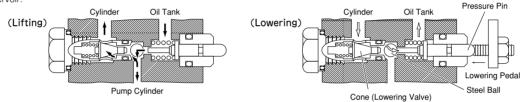
## D Lift and Lower Function

### Lift Function

Pumping of the handle causes hydraulic oil to be suctioned from the oil reservoir through the pump cylinder and into the lift cylinder. Hydraulic pressure is maintainded by the cone lowering valve performing as a check valve.

#### Lower Function

The cone lowering valve is activated by the procedure of pulling the control lever. This result in oil being released from the lift cylinder and being returned into the oil reservoir.



### Routine Maintenance

The Blue Lable truck is designed to provide years of trouble free service and requires very little maintenance. However, a routine inspection and maintenance program will prevent costly replacement parts and/or downtime. All service should be performed by a qualified service person, who has an understanding of pallet trucks and their operation.

Monthly Inspection and Maintenance

- 1. Visually inspect the truck for bent or damaged structural members. Repair as required.
- 2. Inspect all pivot points, wheels and axle for signs of wear. If worn, replace at once.
- 3. Inspect the pump for signs of seal leakage. The presence of a small amount of oil around the pump piston and cylinder rod is normal. However, oil following from around the pump piston or from the top of the cylinder head cap indicates worn seals. Replace the piston or cylinder seals at once.
- 4. Check the pump oil level. With the frame in the lowered position, remove the filler plug.
- The oil level should be at the bottom of the hole. DO NOT use brake fluid(use recommended hydraulic oil in the chart below). After checking the fluid level, reinstall the filler plug.

### Recommended Hydraulic Oil

| Manufacturer | Hydraulic Oil                 | Manufacturer | Hydraulic Oil |
|--------------|-------------------------------|--------------|---------------|
| Esso         | Unipower SQ32                 | Mobil        | Mobil DTE24   |
| Shell        | Tellus Oil 32, K32, W-R Oil32 | Caltex       | Rando Oil A   |

## Troubleshooting

| Trouble                           | Cause  | Shooting  |
|-----------------------------------|--|---|
| Hand pallet truck will not raise  | Reservoir has insufficient oil.                    | Add fluid and check for leaks.                          |
|                                   | Valve is out of adjustment.                        | See Hydraulic Control Valve Adjustment procedure below. |
| Hand pallet truck will not remain | Valve is out of adjustment. Cone lowering valve is | See Hydraulic Control Valve Adjustment procedure below. |
| raised (hold pressure)            | defective Lift cylinder U-Packing is defective     | Replace cone lowering valve Replace U-Packing           |
| Hand pallet truck will not lower  | Valve is out of adjustment.                        | See Hydraulic Control Vlave Adjustment Procedure below. |

#### Adjusting Hydraulic Control Valves

1. Loosen Lock Nut and turn Push Bolt out (counter-clockwise), raising it to its maximum height.

- 2. While pulling up on Control Lever (in position C), turn Push Bolt in (clockwise) until Frame begins to lower.
- 3. If Frame raise while actuating Operating Handle in neutral (B) position, turn Push Bolt in (clockwise) slightly.
- 4. Tithten Lock Nut while preventing Push Bolt from turning. If adjustment of Hydraulic Control Valve does not provide proper operation, problem may be due to contaminated fluid. Then flush hydraulic system.

