

# INSTRUCTION MANUAL

## SJ-2500 Hydraulic Hand Pallet Truck

### Introduction

Before attempting to use your new hydraulic pallet truck, we recommend you read this manual and familiarize yourself with the details of operation.

### Safety Instructions

1. Keep feet out from underneath load.
2. Balance load securely before moving it.
3. Don't load pallet truck beyond capacity.

### Assembling Pallet Truck

To attach hydraulic unit to fork frame.

1. Insert hydraulic ram into fork frame ram socket.
2. Line up hydraulic table with holes in lifting yoke. See Figure 1.

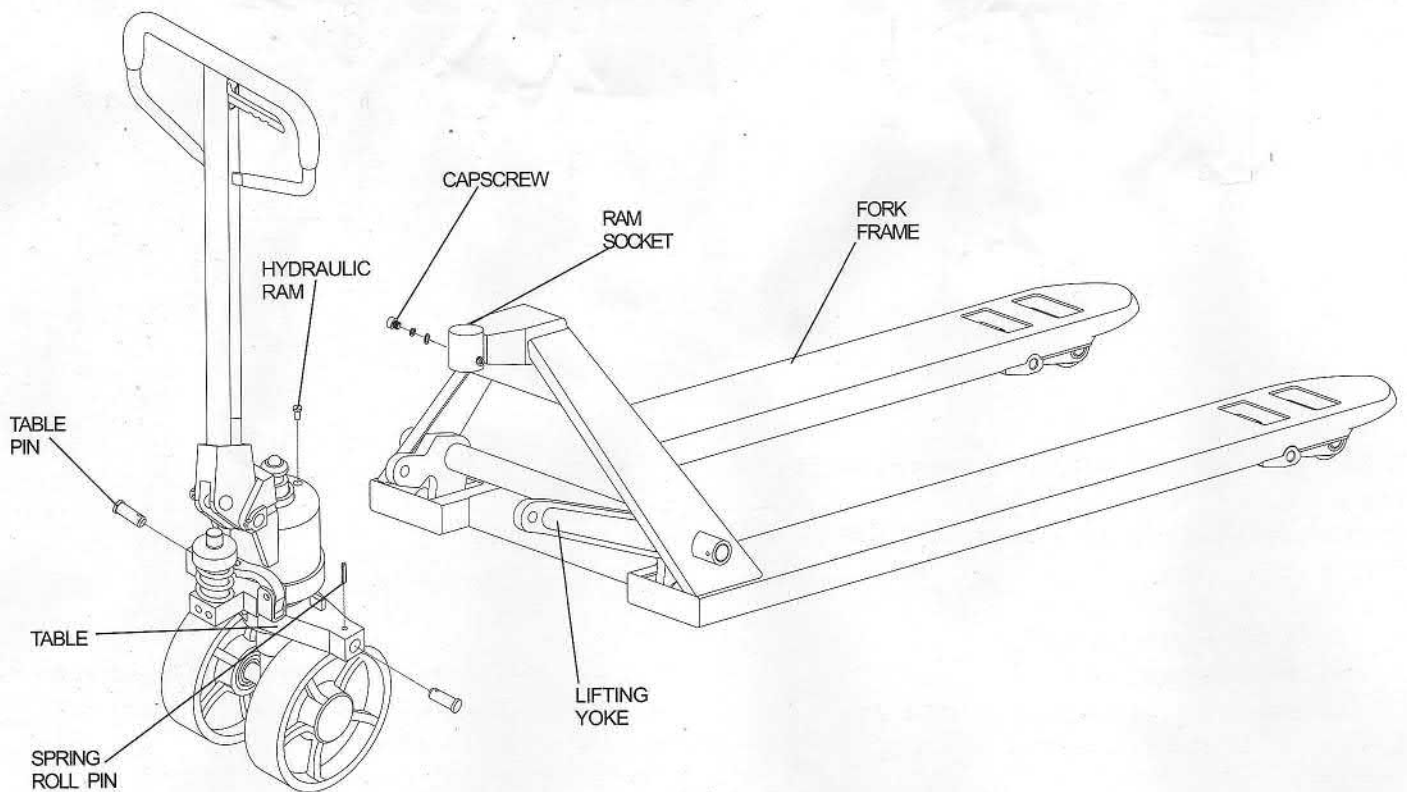


FIGURE  
PTA

3. Insert table pins back into lifting yoke slots.
4. Line up each hole in table with holes in each table pin.
5. Insert each spring roll through table top and into hole in table pin.
6. Insert capscrews into sides of fork frame cam socket. Hydraulic unit is now assembled to fork frame.

## Operating Pallet Truck

To raise forks, place handle in the UP position (bottom part of the handle slot), See Figure 2.

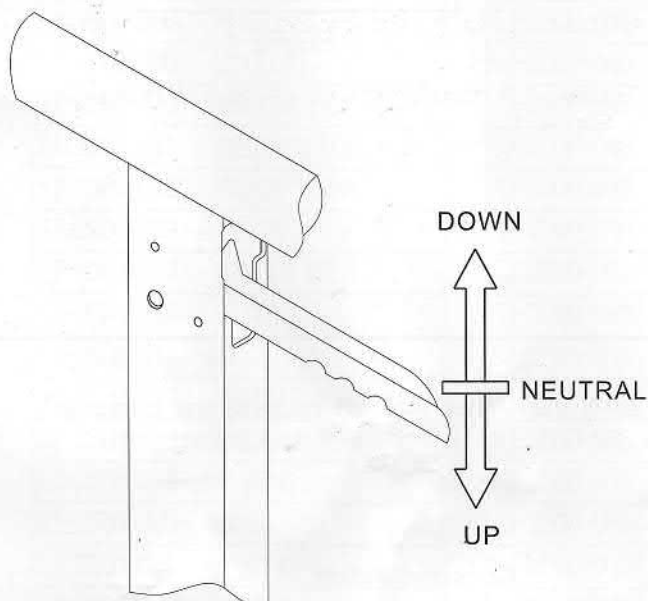


FIGURE 2

To lower forks, pull lever to DOWN position (upper part of slot).

To freely move handle, set lever in NEUTRAL (center notch of slot).

To lift load:

1. Lower fork to lowest position.
2. Insert fork under load
3. Place lever in UP position (bottom part of slot).
4. Pump handle until forks reach desired height

To move load:

1. Place lever in NEUTRAL position (center notch of slot).
2. Pull or push load to desired location.

To lower load:

1. Pull lever to DOWN position (upper part of slot).

**NOTE: Load is now down.**

2. Pull fork away from load.

## Adjusting Up-Down Cam

To adjust cam, set lever in NEUTRAL position, and turn cam nut while pumping handle. (See Figure 3) When no longer lifting, turn nut on cam more.

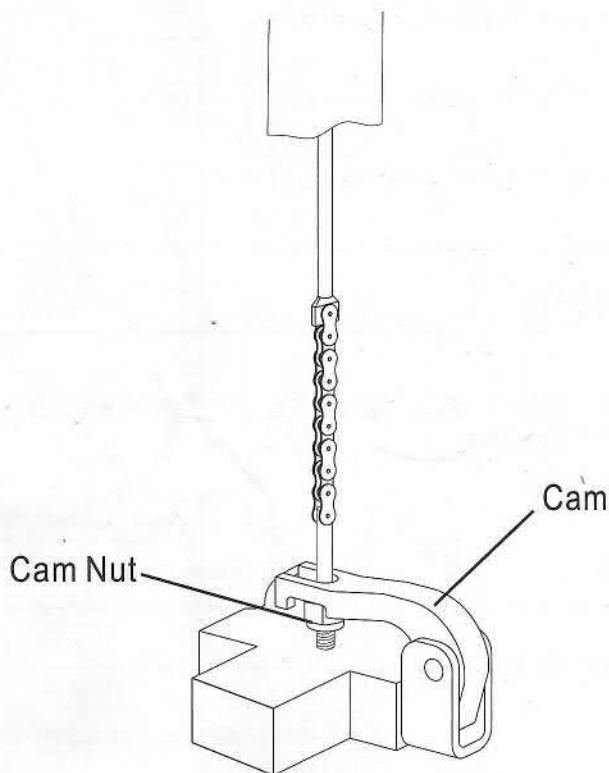


FIGURE 3

## Cleaning Relief Valve

Over time, relief valve may become clogged with debris and will not work properly. To clean relief valve, flush out hydraulic system as follows:

Pump handle quickly, raising pallet truck to full extent. Then quickly release pumping action.

## Lubricating and Oiling

When changing or adding oil, fill tank to 80% capacity (Figure 4) with hydraulic oil, such as:

- Shell Tellus Oil.....No. 22 or 27
- Turbine Oil.....No. 22
- Texaco Regal.....No. 32

Check oil level annually.

Change grease of rear and front wheels annually.

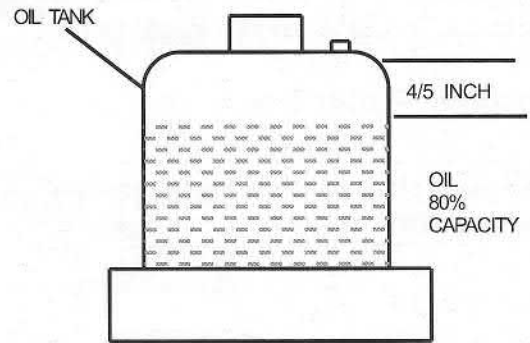


FIGURE 4

## Troubleshooting

Possible problems could arise in the operation of your hydraulic pallet truck. Their probable cause(s) and corrective action(s) follow:

| Condition                               | Probable Cause                           | Corrective Action   |
|---|--|---|
| Hydraulic unit does not lift.           | Oil low in tank.                         | Make sure there is no oil leakage from valve, and add oil.                        |
| Once lifted, truck lowers by itself.    | Steel ball not seated in hydraulic unit  | See "Cleaning Relief Valve" in this manual.                                       |
|   | Worn o-ring in cam cylinder              | Consult authorized repair station.  |
|   | Steel ball not seated in hydraulic unit. | See "Cleaning Relief Valve" in this manual.                                       |
| Fork does not lower.                    | Worn o-ring in ram cylinder.             | See "Cleaning Relief Valve" in this manual.                                       |
|   | Release valve not seated properly.       | See "Cleaning Relief Valve" in this manual.                                       |
|   | Release valve not adjusted properly.     | Reload truck within load capacity, and adjust valve by pressure adjustment screw. |
| Lever does not set at NEUTRAL position. | Oil leakage from each valve              | Tighten plug of each valve.   |
|   | Cam broken                               | Replace cam chain.  |
| Lever does not set at NEUTRAL position. | Up-down cam nut out of adjustment        | Refer to "Adjusting up-Down Cam" in this manual.                                  |
|   | Broken fork rods and linkage             | Replace broken parts  |
| Lever does not set at NEUTRAL position. | Up-down cam nut out of adjustment        | Refer to "Adjusting up-Down Cam" in this manual.                                  |
|   |  |   |

## SJ--2500 PALLET TRUCK PARTS LIST

| PART NO.    | DESCRIPTION     | PART NO.    | DESCRIPTION       | PART NO.     | DESCRIPTION        |
|-------------|-----------------|-------------|-------------------|--------------|--------------------|
| SJ-2500-001 | HANDLE          | SJ-2500-038 | SPRING            | SJ-2500-079  | SPRING PIN         |
| SJ-2500-002 | BLOCKING SPRING | SJ-2500-039 | VALVE HOUSING     | SJ-2500-080  | LOAD WHEEL         |
| SJ-2500-003 | SPRING PIN      | SJ-2500-040 | STEEL BALL        | SJ-2500-081  | SPRING PIN         |
| SJ-2500-004 | ROLLER          | SJ-2500-040 | STEEL BALL        | SJ-2500-082  | SHAFT              |
| SJ-2500-005 | SPRING PIN      | SJ-2500-041 | SPRING PIN        | SJ-2500-082A | BRACKET            |
| SJ-2500-006 | BUSHING         | SJ-2500-042 | SPRING PIN        | SJ-2500-083  | ARM                |
| SJ-2500-007 | SPRING PIN      | SJ-2500-043 | SNAP RING         | SJ-2500-084  | COLLAR             |
| SJ-2500-008 | BUSHING         | SJ-2500-044 | SPRING PIN        | SJ-2500-086  | ROD PIN            |
| SJ-2500-009 | ROLLER          | SJ-2500-046 | WHEEL SHAFT       | SJ-2500-087  | SPRING PIN         |
| SJ-2500-010 | ROLLER PIN      | SJ-2500-047 | PUMP HOUSING ASSY | SJ-2500-088  | ROD                |
| SJ-2500-011 | RELEASE ROD     | SJ-2500-048 | HANDLE PIN        | SJ-2500-089  | E-RING             |
| SJ-2500-012 | CHAIN JOINT     | SJ-2500-049 | BEARING BASE      | SJ-2500-090  | BUSHING            |
| SJ-2500-013 | CHAIN           | SJ-2500-050 | BALL BEARING      | SJ-2500-099  | RELEASE ROD ASSY   |
| SJ-2500-014 | ANCHOR BOLT     | SJ-2500-051 | SPRING            | SJ-2500-101  | REPAIR KIT (16-23) |
| SJ-2500-015 | V-NUT           | SJ-2500-052 | RELEASE NOZZLE    | SJ-2500-103  | WHEEL SET          |
| SJ-2500-016 | DUST SEAL       | SJ-2500-053 | CAM               | SJ-2500-109  | PUMP ASSY          |
| SJ-2500-017 | O-RING          | SJ-2500-054 | SPRING PIN        | SJ-2500-111  | SPRING PIN         |
| SJ-2500-018 | BACK-UP RING    | SJ-2500-055 | TABLE             | SJ-2500-112  | SPRING PIN         |
| SJ-2500-019 | O-RING          | SJ-2500-060 | STEER WHEEL       | SJ-2500-113  | LEVEL              |
| SJ-2500-020 | DUST SEAL       | SJ-2500-061 | CAP               | SJ-2500-[1]  | STEEL BALL         |
| SJ-2500-021 | Y-RING          | SJ-2500-062 | WASHER            | SJ-2500-[2]  | OIL BAFFLE WASHER  |
| SJ-2500-023 | O-RING          | SJ-2500-063 | SPRING WASHER     | SJ-2500-[3]  | O-RING             |
| SJ-2500-024 | STEEL BALL      | SJ-2500-064 | BOLT              | SJ-2500-[4]  | VALVE BASE         |
| SJ-2500-025 | RAM PISTON      | SJ-2500-065 | SPRING WASHER     | SJ-2500-[5]  | TAPERED COLUMN     |
| SJ-2500-026 | OIL PLUG        | SJ-2500-066 | SCREW             | SJ-2500-[6]  | SPRING             |
| SJ-2500-027 | RELIEF PLUG     | SJ-2500-067 | FRAME             | SJ-2500-[7]  | WASHER             |
| SJ-2500-028 | OIL PLUG        | SJ-2500-068 | WASHER            | SJ-2500-[8]  | RELEASE PLUG       |
| SJ-2500-029 | RELIEF SCREW    | SJ-2500-069 | SPRING WASHER     |              |                    |
| SJ-2500-030 | SPRING          | SJ-2500-070 | BOLT              |              |                    |
| SJ-2500-031 | STEEL BALL      | SJ-2500-071 | CRANK SHAFT       |              |                    |
| SJ-2500-032 | E-RING          | SJ-2500-072 | BUSHING           |              |                    |
| SJ-2500-033 | PLUNGER PISTON  | SJ-2500-074 | TABLE PIN         |              |                    |
| SJ-2500-034 | SPRING CAP      | SJ-2500-075 | BUSHING           |              |                    |
| SJ-2500-035 | SPRING          | SJ-2500-076 | LIFTING YOKE      |              |                    |
| SJ-2500-036 | RELEASE PLUG    | SJ-2500-077 | SPRING PIN        |              |                    |
| SJ-2500-037 | WASHER          | SJ-2500-078 | ARM PIN           |              |                    |

NOTE: THE PARTS WITH THE NUMBER IN [ ] ARE IN THE PYRAMIDAL VALVE ASSEMBLY FOR OPTIONAL.

# Hydraulic Hand Pallet Truck Assembly

