

Superior Engineering's

Turret Master Training Manual



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PART 1 OF 3

Part 1 – Classroom

Part 2 – Hands on Supervised Review

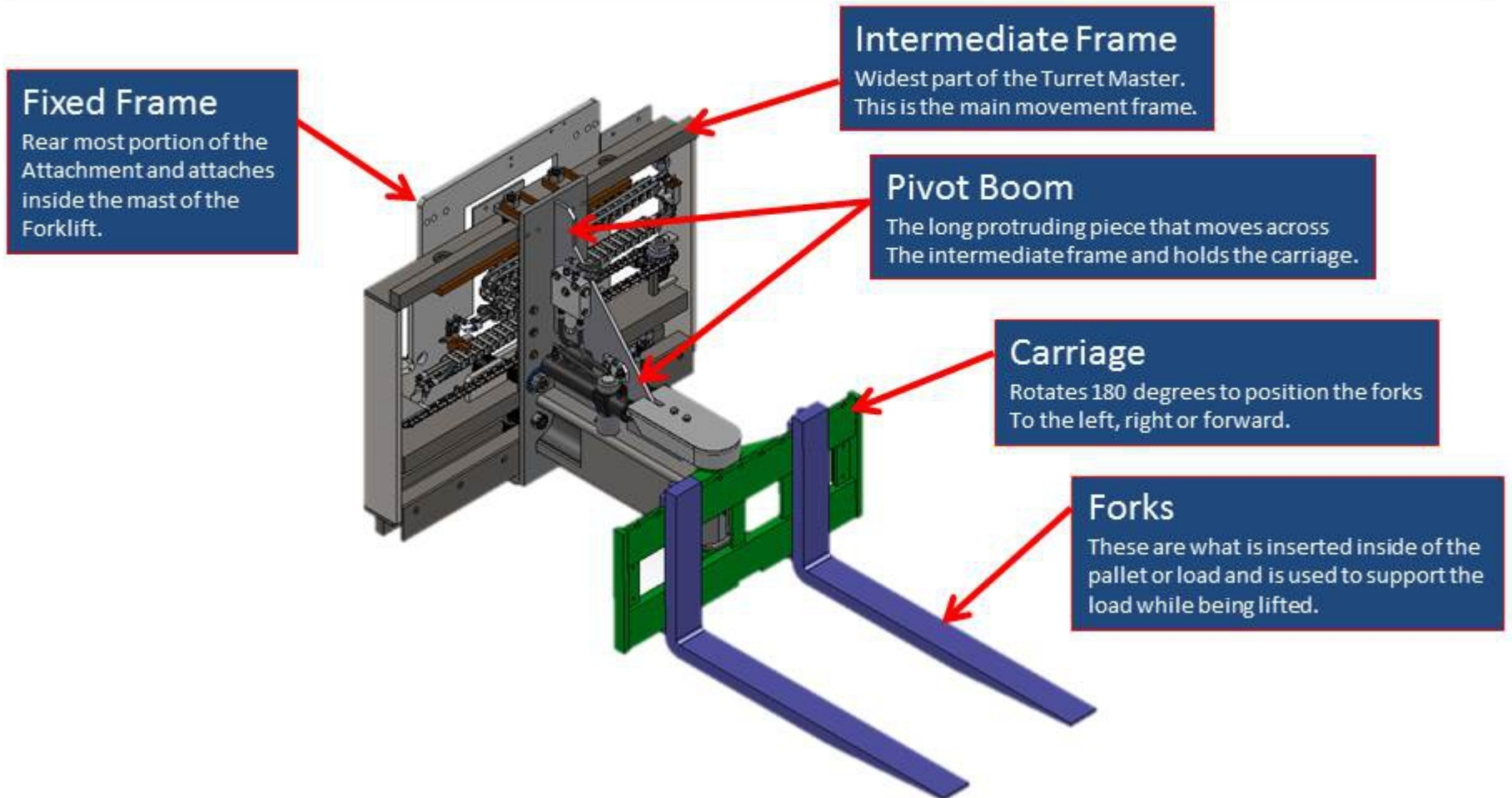
Part 3 –Practice/Training

WHAT DO I NEED TO KNOW?

- Getting to Know the Turret
- Read and be trained.
- Operator Controls.
- How does the Turret work?
- What to know before hand.
- Checklist.
- How to travel.
- What not to do.
- Training Procedures.
- How to do it properly.
- Overview of the processes.

Getting to know the Turret Master

Below are parts of the Turret to familiarize yourself with. These parts are top level part names and will be referred to throughout the training session.



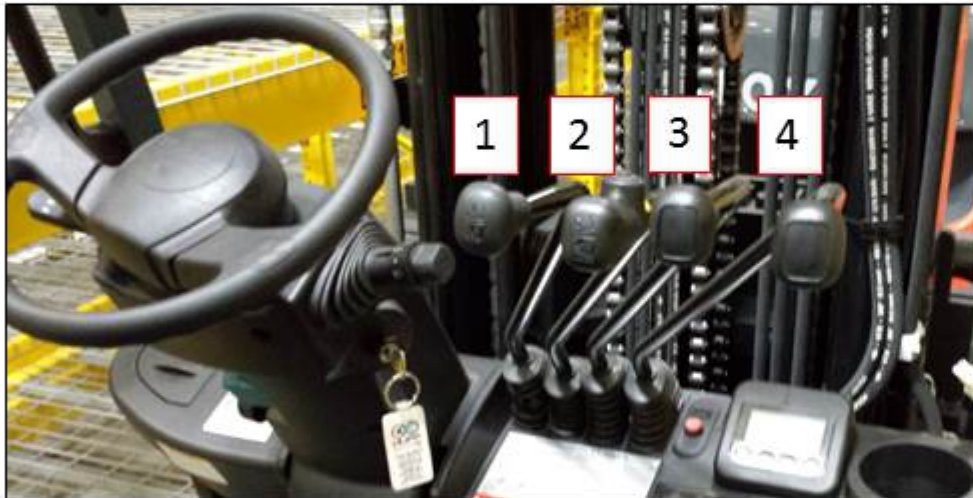
Read up - Be trained.

SAFETY: Read and study the operators manual and special instructions from the lift truck manufacturer before attempting to operate the Turret Master attachment. It is recommended that the operators have completed a forklift safety course prior to operating any lift truck.



Operator Controls

CONTROLS: Be sure that the operator is familiar with the controls that operate the attachment.



The four levers are as follows:

1. Mast Lift/Lower
2. Mast Tilt
3. Side-Shift and Traverse - This is a compound function that moves the forks across the main frame of the turret
4. Fork Pivot - This function will rotate the forks from being indexed to the left to being indexed to the right.

How Does the Turret Work

The Turret Master is an integral attachment that is designed to store and retrieve loads within a narrow aisle. The Turret Master is able to store and retrieve loads from both sides of the aisle way without the need to re-index the direction of truck travel.



The Turret Master operates utilizing the following:

- Compound Side-Shift and Traverse System
- 180 degree pivoting carriage
- Standard Mast Lift, Lower and Tilt

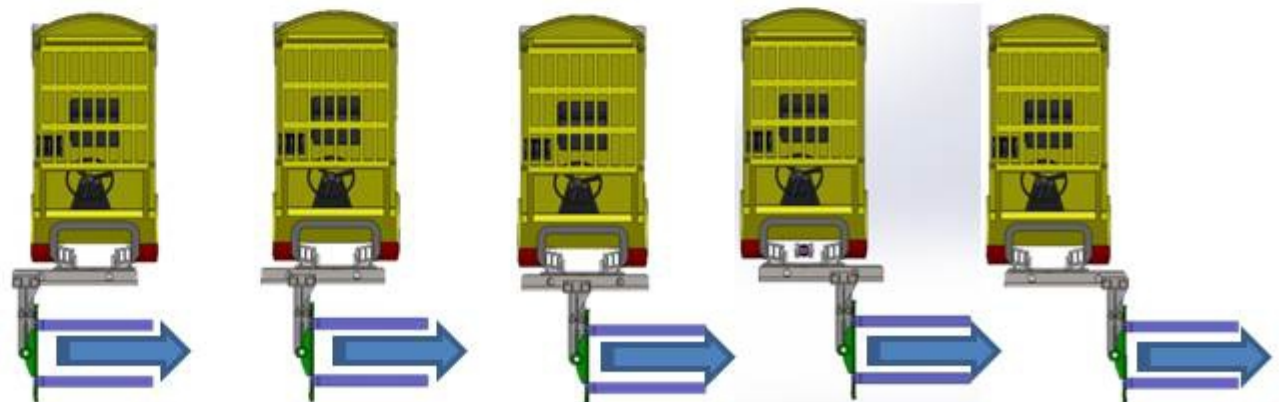
How Does the Turret Work

Compound Traverse and Side-Shift- This feature allows for a greater amount of lateral movement in the aisle, while maintaining a narrow body width of the turret truck front end. The compound traverse and side-shift feature also allows for the lateral movement to be performed using one hydraulic function instead of the standard two in many trucks.



Intermediate Frame Side-Shifts
From side to side.

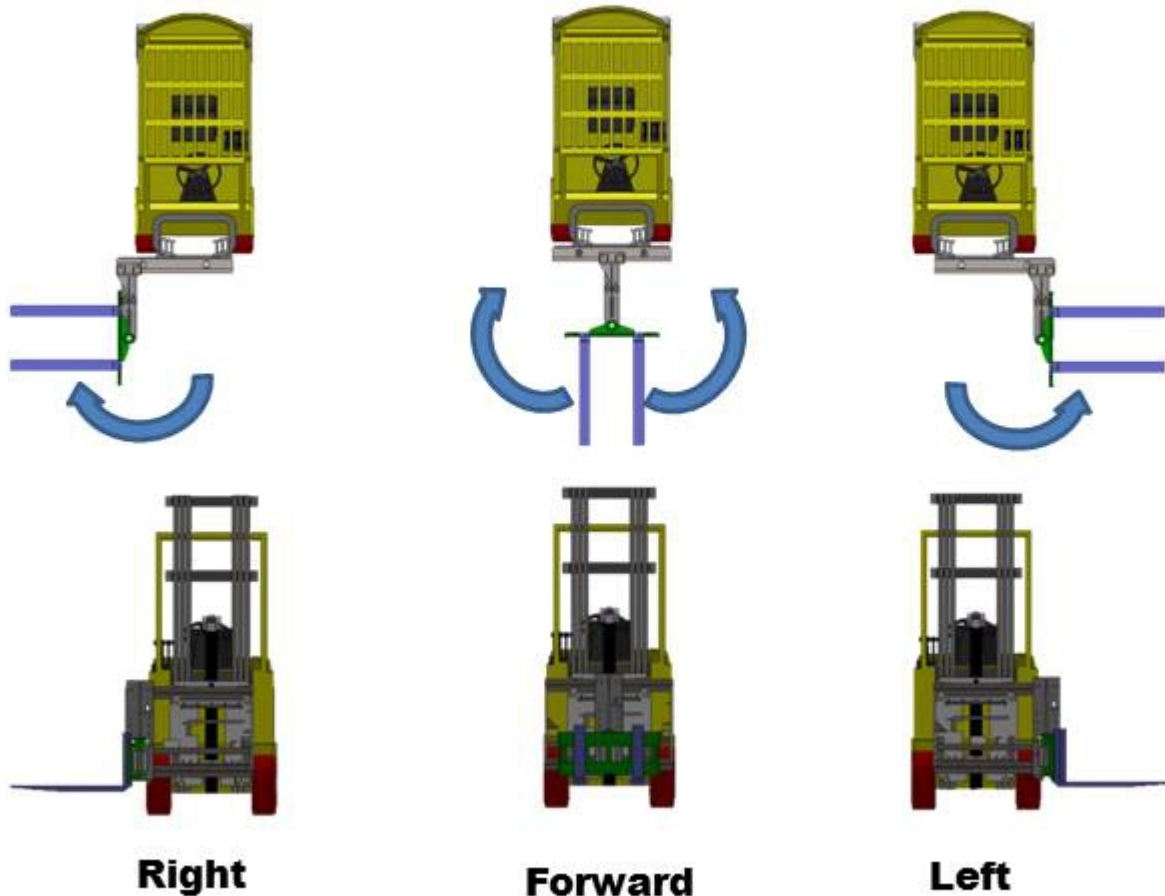
The Pivot Boom and Carriage traverses
across the front of the Intermediate
frame.



Above Traverse is from the right of the truck to the left of the truck

How Does the Turret Work

180 Degrees of Pivoting Action- With 180 degrees of fork pivot, the operator can easily work either side of the aisle regardless of forklift orientation. The operator can also swing the forks from one side to the other while positioned in the aisle to give ultimate flexibility to the operator and turret truck.



Ready for training?



What to know before hand!

There are certain things you should know before even getting on to the forklift.

1. Read and study the lift truck operators manual before using the turret master.

2. Establish the capacity of the truck with the turret .

3. Perform a daily checklist to look for damaged components or potentially dangerous issues.

4. Establish the load weights of what you will be lifting throughout your time as the operator. If you are unsure of the load weight at any time during your operation of the turret, stop, ascertain the proper weight , and if the weight falls within the capacity of the lift truck, then proceed. If the weight does not fall within the capacity of the lift truck and turret, DO NOT attempt to lift the load.

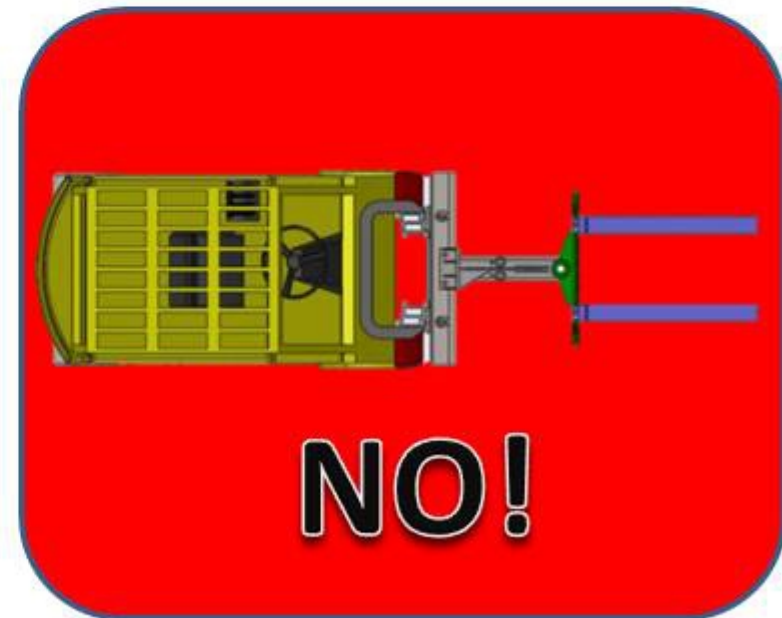
DAILY CHECKLIST

1. Perform daily routine checklist as described by the manufacturer and dealer of the lift truck.
2. Establish the capacity of the attachment before using.
3. Check all chains to make sure that they are properly attached and are not loose, sagging, broken or malformed in any way.
 - o
4. Make sure that the forks are in good shape. Look for damage that may have occurred during previous usage. Make sure that the fork hooks are solidly welded into place and no cracks in weld are visible. Make sure that the forks are not bent in any direction other than 90 .
5. Look at all hydraulic cylinder locations and hydraulic motor locations to verify that there are no visible hydraulic fluid leaks.
6. Run all functions to make sure that they are operating correctly.
7. If you notice any unusual performance or if you see anything sign of breakage or malfunction, stop, get off of the truck and immediately report it to your supervisor.
8. Please study the warning page before operating.

When Traveling

STORAGE AND RETRIEVAL- The operator should always travel with the forks in a “NESTED” position.

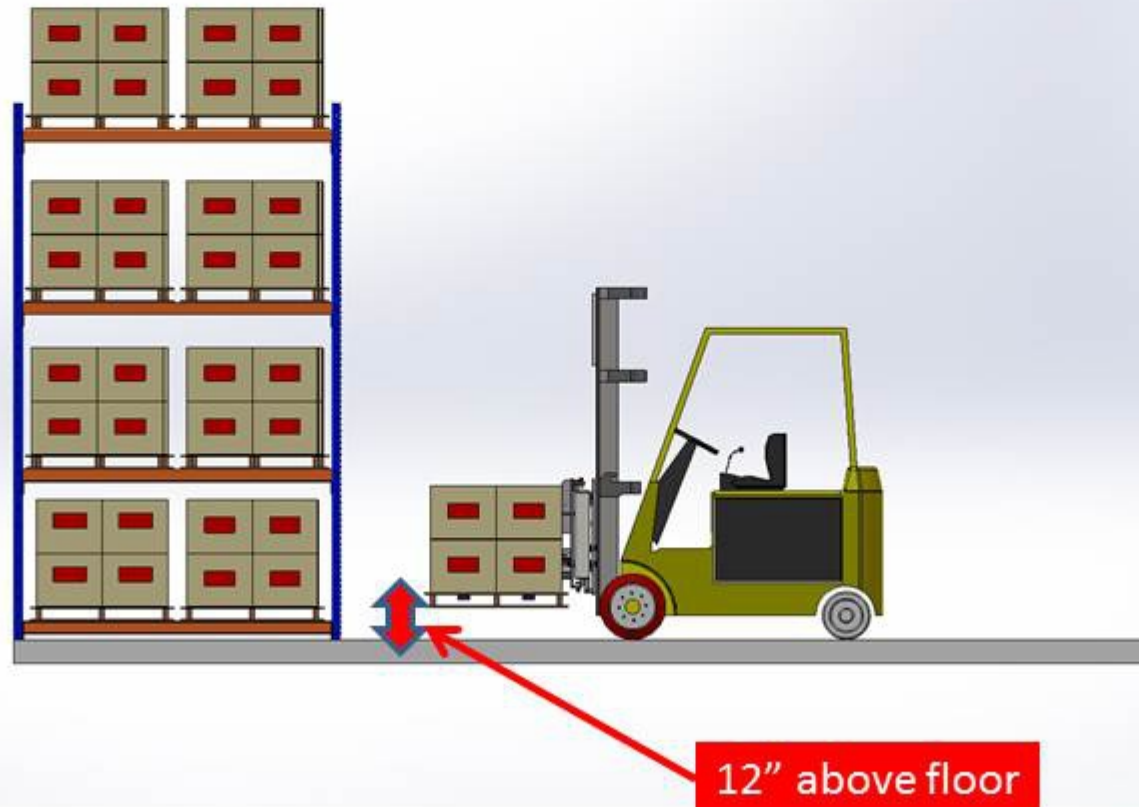
Nested: Always travel with the forks turned perpendicular to the direction of travel of the truck. Never travel long distances with the forks in any other configuration. Traveling otherwise puts undue stresses on the fixed frame and mast of the lift truck and also increases the overall length of the truck making it more difficult to maneuver in confined areas.



When Traveling

CARRYING A LOAD- The operator should always travel with the load not more than 12" above the ground level.

Always travel with the load nested and in the lowered position. Do not carry the load above 12" .



What not to do!

HIGH PIVOTING: Never pivot the Turret Master when raised above four feet. If you have to pivot the load to the opposite side, always lower the load first. Never side shift the Turret above floor level except in working aisles. The side-shift function is only to be used for loading and unloading of storage racks above floor level.



What not to do!

OVERLOADING: Never attempt to lift or carry loads that exceed the capacity of the attachment and truck.

DON'T LET THIS BE YOU.



What not to do!

PASSENGERS: Do not allow anyone to ride or sit on the lift truck or turret. Activation could cause serious injury.



**Passengers
prohibited**

What not to do!

PUSHING: Do not use the Turret as a pusher. Do not push forward. Do not push laterally. If the forks are not underneath the load and the load lifted off of the ground, do not try to move it. If the turret carriage is made to rotate without the hydraulic control valve being activated, then the hydraulic rotation mechanism can become damage.



Training Procedures

MANEUVERING: Make sure that the operator is familiar with the maneuvering capabilities of the truck with and without loads on the Turret Master attachment.

1. Practice Driving at slow speeds. As the operators skills increase, driving speeds will also improve.

2. Practice Driving in an obstacle free area until the operator is familiar with the clearances necessary to prevent collisions.



Training Procedures

AISLE SKILLS: After the operator has developed the skill of driving the lift truck with the Turret Master in an obstacle free area, and has become familiar with all controls, the following procedures might help develop the efficiency of the operator more rapidly in the area that the lift truck will be used.

1. Drive the truck in the aisle without the load until operator efficiency is obtained.
2. With a load, start at the lowest level. Store and retrieve the product from level 1 until the operator is comfortable.
3. The next step is to obtain efficiency in storing at level 2. Continue this process until the highest level is met with efficiency and comfort.
4. When the operator has attained proficiency within the rack, then the operator is now able to use the lift and Turret Master.



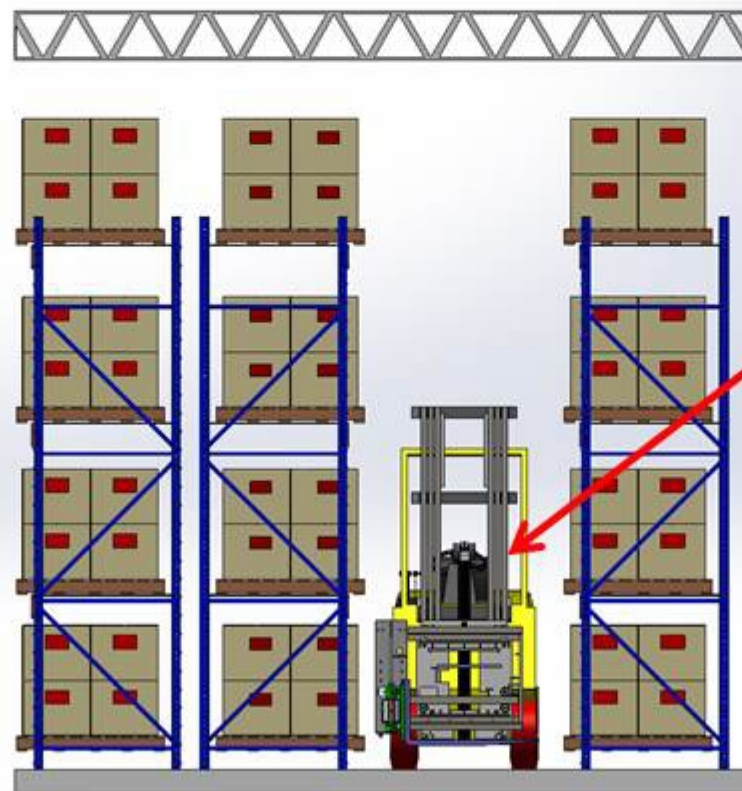
So, How do
we really do
it...properly?

How to do it. (Low Level)

How to Store and Retrieve: The following is a step by step demonstration on how to store and retrieve a load at low levels and then at high levels.

1. Center the truck the best you can before entering the aisle way.

2. Travel forward in a conscious manner down the aisle to your desired location.

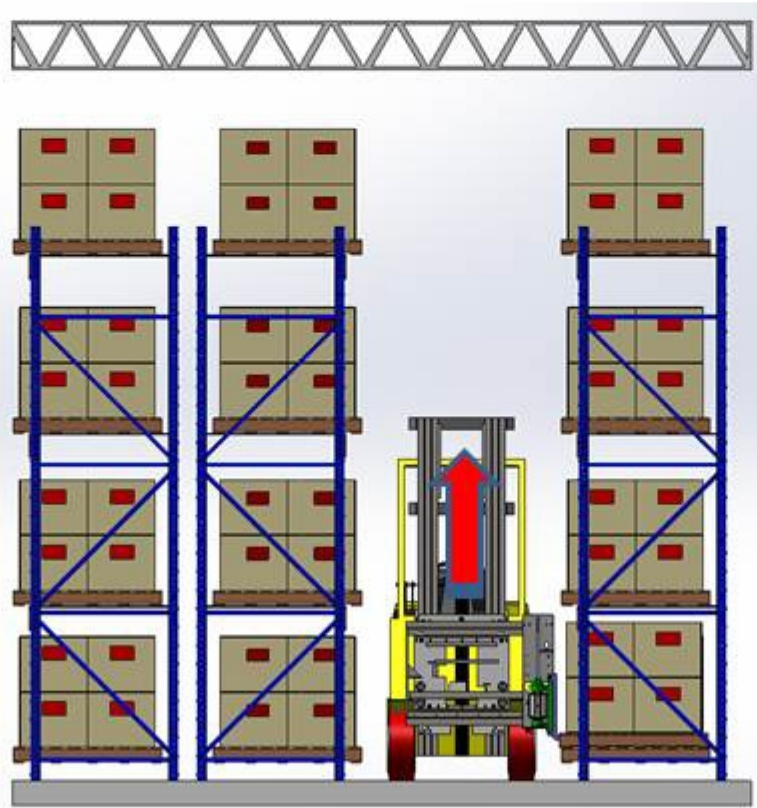


Traveling "Nested"

How to do it. (Low Level)

How to Store and Retrieve: Continued.

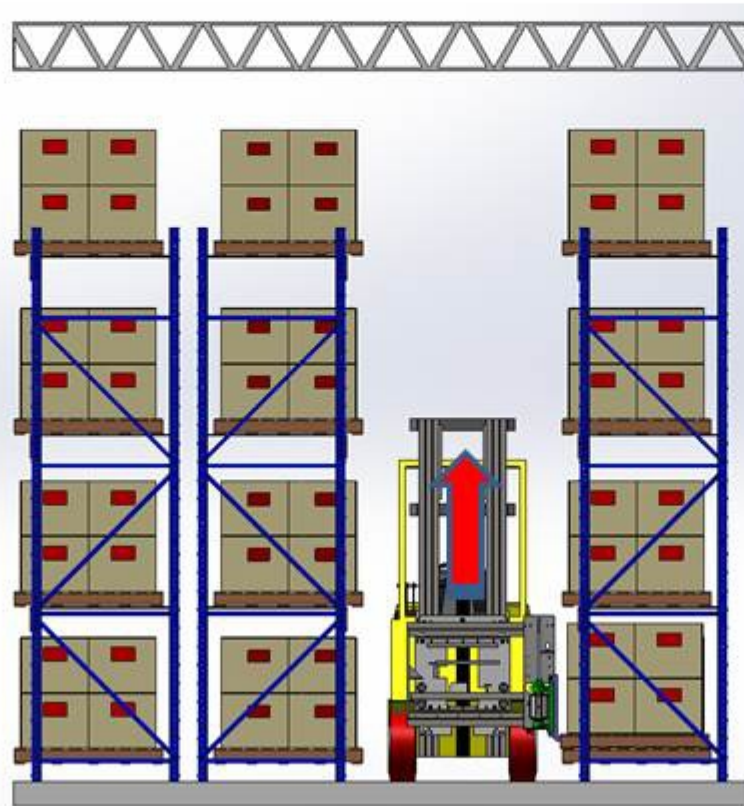
5. Lift the load vertically and with enough height to get the front and the rear of the pallet off of the racking surface.



How to do it. (Low Level)

How to Store and Retrieve: Continued.

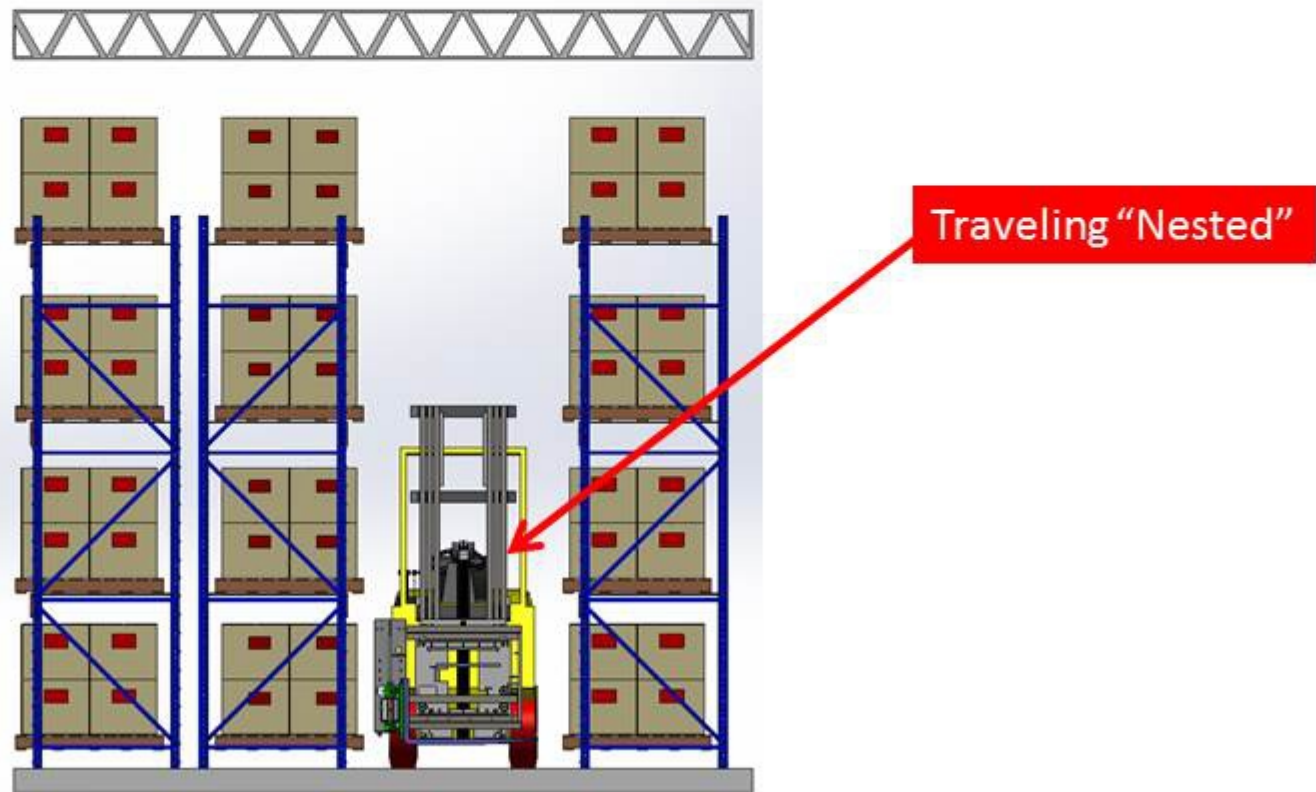
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How to do it. (High Level)

How to Store and Retrieve: The following is a step by step demonstration on how to store and retrieve a load at low levels and then at high levels.

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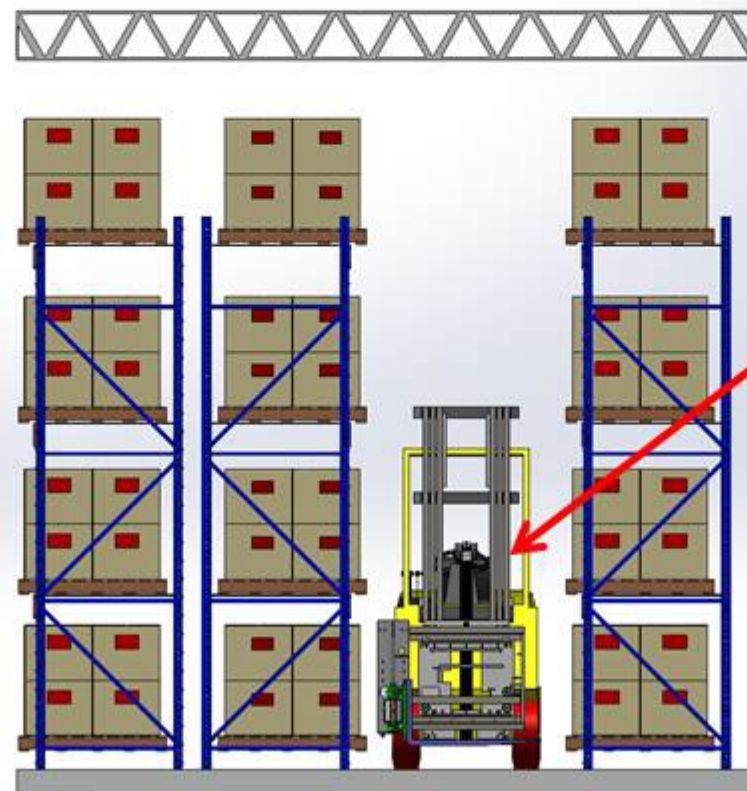


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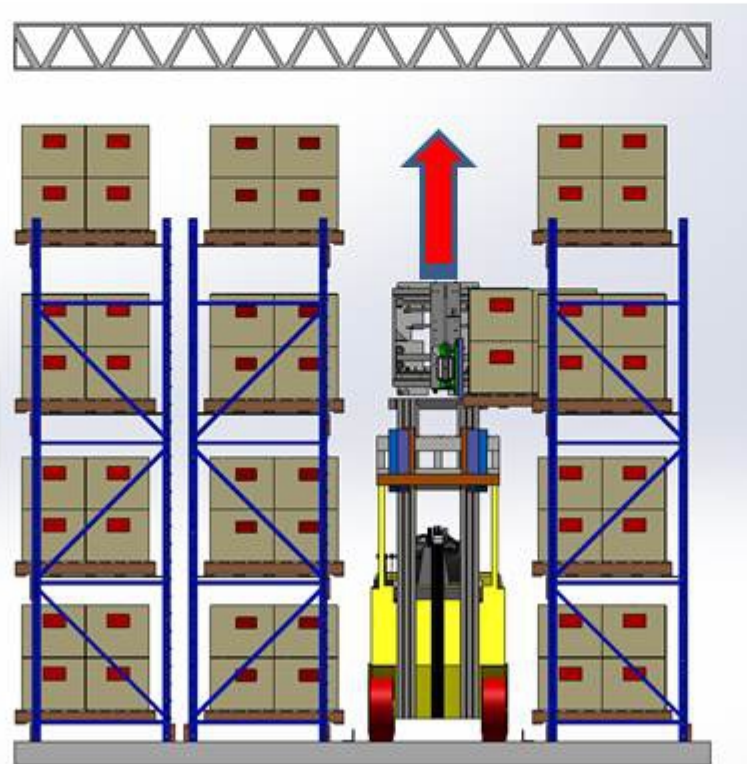


Traveling "Nested"

How to do it. (High Level)

How to Store and Retrieve: Continued.

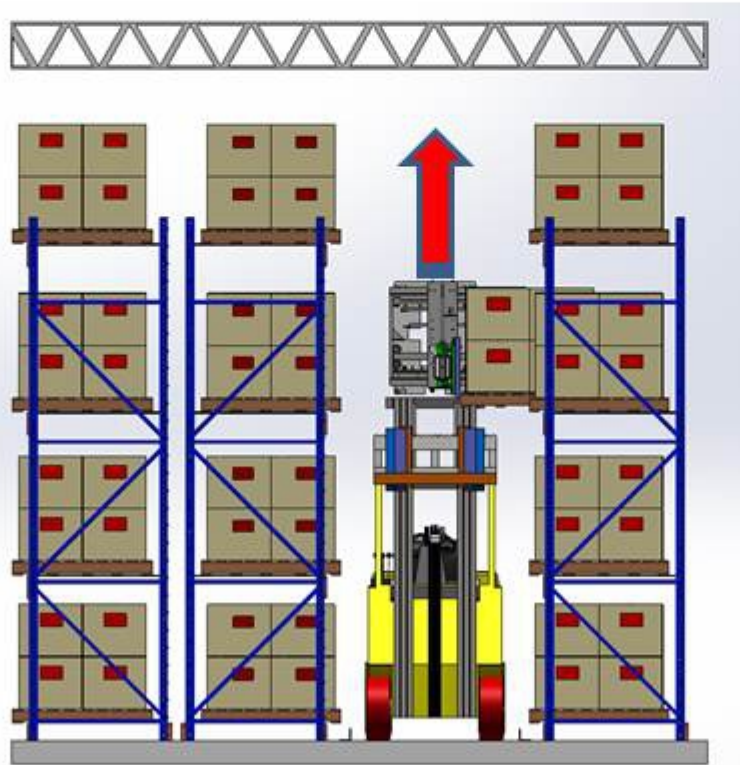
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How to do it. (High Level)

How to Store and Retrieve: Continued.

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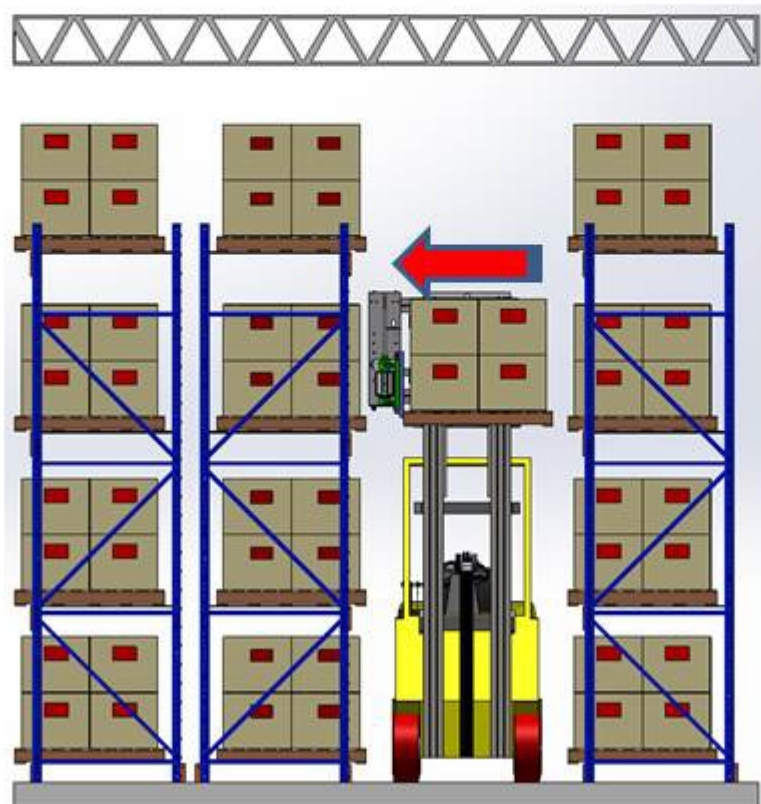


How to do it. (High Level)

How to Store and Retrieve: Continued.

6. Traverse the load out of the rack. Continue pulling the Side-Shift/Traverse lever until the boom movement and Intermediate frame movement stops. This should center the turret and load* equally on the center line of the truck.

*48 x 48 Load

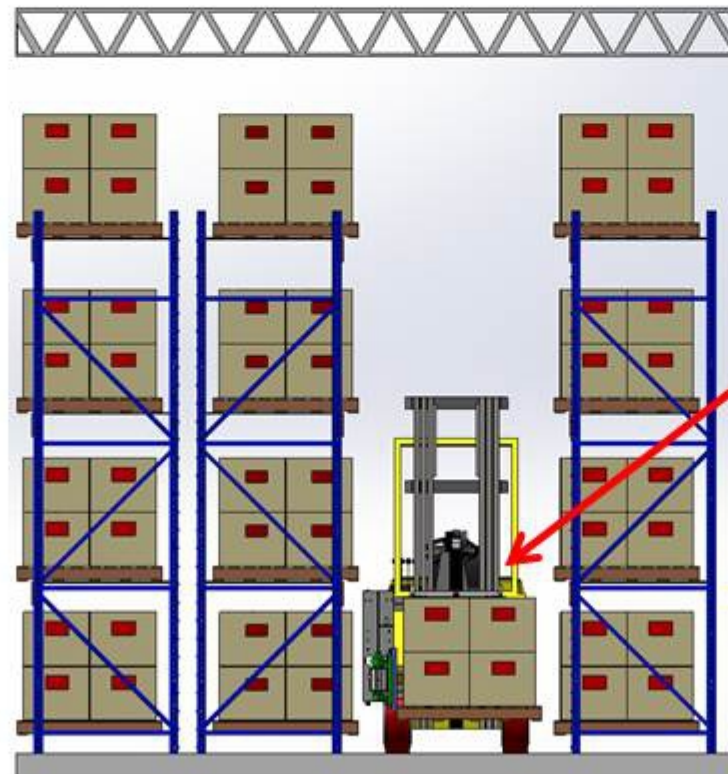


How to do it. (High Level)

How to Store and Retrieve: Continued.

7. Lower the unit to around 12" near ground level. Now you should be able to drive forward or backwards out of the aisle.

*48 x 48 Load



Traveling "Nested"

How to do it.

How to Store and Retrieve: If you are putting a load away, the step by step procedure is the same, yet in the reverse order..



4

Training Procedures

EXPERIENCE: There are five experience levels to be mastered before being released into the full time operation.

1. Non-Production. (Practice)

2. Aisles unloaded.

3. Narrow aisles operating at progressive levels.

4. Narrow aisle mock full production.

5. When the operator has attained proficiency within the rack, then the operator is now able to use the lift and Turret Master..



PART 1 OF 3 COMPLETED

Part 1 – Classroom - **Completed**

Part 2 – Hands on Supervised Review

Part 3 –Practice/Training

MOVE ON TO PART 2