

# MF102 Series Hydraulic Simulators

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## UNPACKING YOUR SIMULATOR

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Model MF102D-H-TSE shown

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**Read this unpacking document carefully.  
Photo shown here may not represent contents of this package.**

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**This unpacking document covers the following simulator models:**

**MF102-H / MF102-H-TS / MF102-H-TSE**

**!!! IMPORTANT !!!**

**PLEASE CHECK BOX  
FOR DAMAGE BEFORE  
SIGNING OFF FROM  
FREIGHT CARRIER**

## 2.0 Unpacking Your Simulator

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### SAFETY INSTRUCTIONS:

- a. Before unpacking the simulator, make sure the shipping container is standing on a smooth, level surface.
- b. At least two people must be in attendance when the simulator is being unpacked. While there is no need to lift the simulator, the people who unpack it must be strong enough to hold it as it is rolled off the pallet.
- c. Wear safety glasses and steel-toe boots when unpacking the simulator.

### TOOLS REQUIRED:

- a. Flat-head screwdriver or prying tool.
- b. Scissors.
- c. Two 3/4" wrenches.

**Step 1:** Using a flat-head screwdriver, remove the retainers from around the base of the cardboard container (Figure 2-1).



Figure 2-1

**Step 2:** With a person positioned on either side of the cardboard container, carefully lift it up and over the top of the simulator. If there is no evidence of damage to the simulator, fold the cardboard container and please recycle.

**NOTE:** *IF THE SHIPPING CONTAINER IS DAMAGED KEEP IT INTACT UNTIL THE FREIGHT COMPANY HAS COMPLETED ITS INVESTIGATION.*

**Step 3:** Carefully remove the protective plastic wrap from the simulator. DO NOT use a sharp instrument as the cutting tool may damage the simulator. Please recycle the plastic wrap!

**Step 4:** Carefully remove the boxes (if any), and the pre-fabricated ramp which are stowed below the simulator.

## 2.0 Unpacking Your Simulator - *cont'd.*

### CAUTION

*Before removing the bolts and straps, make sure the pallet is standing on a smooth, level surface. Make sure the caster brakes are applied, and have another person hold onto the simulator to prevent it from rolling.*



### CAUTION

*At least two (2) people must be in attendance when rolling the simulator off the pallet (one on either side of the simulator).*



### CAUTION

*The simulator is heavy. DO NOT place feet or hands in the path of the casters. If the casters roll over your feet or hands, it could cause severe injury.*

**Step 5:** Make sure all caster brakes are applied. To apply the brakes, push down firmly on the individual brake levers (Figure 2-2).



Figure 2-2

**Step 6:** Loosen and remove all ratchet straps, which secure the simulator to the pallet (Figure 2-3)



Figure 2-3

## 2.0 Unpacking Your Simulator - *cont'd.*

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**Step 7:** Place the ramp on the OPPOSITE side of the pallet from the casters that are being held in place with bolts on the caster track (Figure 2-4).

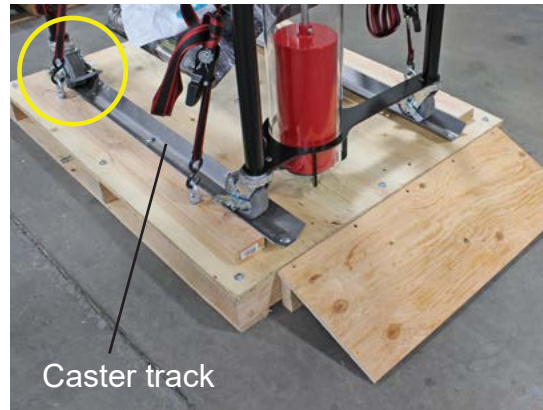


Figure 2-4

**Step 8:** While one person holds the simulator securely, use a 3/4" wrench to loosen and remove the bolts that secure the caster to the caster track. Repeat this Step on both casters (Figure 2-5).

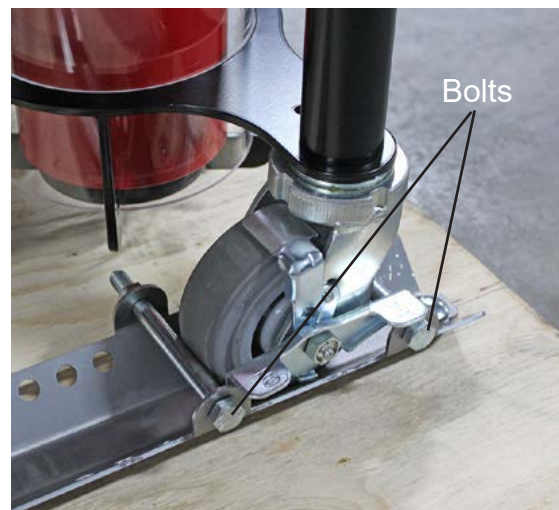


Figure 2-5

**Step 9:** When all of the straps and bolts have been removed, and the ramp has been properly placed, make sure that there is still at least one person holding the simulator securely. You may now release the brakes on all four casters (Figure 2-6).



Figure 2-6

## 2.0 Unpacking Your Simulator - *cont'd.*

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**Step 10:** With at least two people holding onto the simulator, one on each end, begin pushing the simulator towards the ramp along the caster track. Slowly guide the simulator down the ramp until it is completely off the pallet (Figure 2-7).



Figure 2-7

**Step 11:** Once the simulator is off the pallet, remove the locking bolts from the four casters to allow them to swivel ( Figure 2-8).

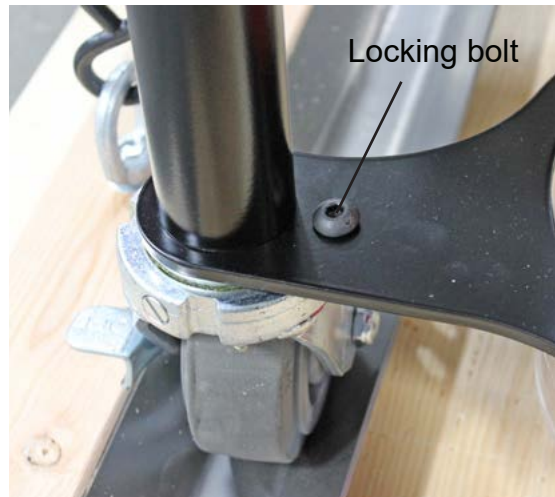


Figure 2-8

**Step 12:** Apply the brakes and proceed with familiarizing yourself with the simulator by reading through this owner's manual.



### 3.0 Parts and Accessories Checklist

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#### 3.1 MF102 Model Simulators - *Single-station and Dual-station*

Parts and accessories are contained in the boxes which are stored on the shipping crate below the simulator and can also be found on the tray.

We recommend that you inspect the contents for damage. Although we exercise care in packing the parts, we recommend that you check each item, and quantity, against the following parts list.

MF102S		MF102D		DESCRIPTION of ITEM
<input type="checkbox"/>	4	<input type="checkbox"/>	8	1/4"x 60" hydraulic hoses w/quick-connect couplings (6.35mm x 152cm)
<input type="checkbox"/>	8	<input type="checkbox"/>	16	1/4"x 42" hydraulic hoses w/quick-connect couplings (6.35mm x 107cm)
<input type="checkbox"/>	6	<input type="checkbox"/>	12	1/4"x 28" hydraulic hoses w/quick-connect couplings (6.35mm x 71cm)
<input type="checkbox"/>	8	<input type="checkbox"/>	16	"T"s" with quick-connect couplings.
<input type="checkbox"/>	3	<input type="checkbox"/>	6	0-1500 PSI pressure gauges marked P1, P2, and P3. (0-103.4 bar)
<input type="checkbox"/>	1	<input type="checkbox"/>	2	Set of laminated hydraulic schematic activities. (Not included with MF102-H-TSE models).
<input type="checkbox"/>	1	<input type="checkbox"/>	1	Oil funnel with 3/8" NPT male connector.
<input type="checkbox"/>	4	<input type="checkbox"/>	4	Laminated instructor switch setting cards. (TS models only)

#### Recommended diagnostic accessories (not included):

<input type="checkbox"/>	1	<input type="checkbox"/>	2	Flow meter kit with pressure gauge, adjustable load-cell, and quick-couplers.
<input type="checkbox"/>	1	<input type="checkbox"/>	2	0-30" Hg vacuum gauge.
<input type="checkbox"/>	1	<input type="checkbox"/>	2	0-100 PSI pressure gauge. (0-6.9 bar)
<input type="checkbox"/>	1	<input type="checkbox"/>	2	Hand-held, non-contact/contact laser tachometer.

**NOTE:** Report damages or missing components to the Fluid Power Training Institute™ immediately. Damaged components must be returned to the manufacturer.

If you have any questions that this document does not address, please contact us immediately for assistance.



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