

**OTR APPLICATION CHART INSTRUCTIONS FOR USE***IMPORTANT- DO NOT LEAVE VULCANISING EQUIPMENT UNATTENDED DURING OPERATION*

The OTR Application chart has been developed as a simple guide to help users of the Monaflex Tyre Repair System select the correct components when repairing OTR tyres. The following document gives a detailed description on how to follow the chart and ensure that the correct components are always selected.

**METHOD**

The Monaflex system works on knowing the section width of the tyre, the build of the tyre (i.e. Radial or Bias) and the size of the patch being installed inside the tyre over the injury.

Combining this information with the tyre size will help you choose the correct components needed for the repair.

A complete Monaflex system will comprise of the following parts-

QUANTITY	ITEM	DESCRIPTION
x1	Cylinder Airbag	Inflates spherically to fill the section void within the tyre and applies outwards pressure to the Patch used on the repair area.
x2	Heat Pads	<ul style="list-style-type: none"> <li>• One Heat Pad used inside the tyre covering and applying heat to the Patch.</li> <li>• One Heat Pad used outside the tyre covering and applying heat to the repair.</li> </ul>
x1	External Pack	A Flat Airbag secured by straps to the outside of the tyre for applying inward pressure over the outside Heat Pad and repair area.
<b>WHERE REQUIRED:</b>		
x1	Inside Flat Airbag	Where an extra Flat Airbag is specified, this can be used inside the tyre to extend the size range that a Cylinder Airbag can cover.

Use the Application Chart by finding the row which applies to the tyre being repaired and select the components which are recommended across that row.

The first column indicates Tractor sizes leading into Wide Base and Super Wide Base OTR sizes. The second column has the corresponding tyre section widths for normal OTR tyres.

Working across the row please note the following important points:

1. Where a box is empty that component is not required.  
E.G. When repairing a 14.00R24 tyre, an inside Flat Airbag is not required as the TR1315/20W Cylinder Airbag has enough capacity to expand sufficiently to fill the inside tyre section void.
2. Due to a large variation in Patch dimensions between Radial and Bias tyres, different Heat Pads shapes are used on each tyre design. Under the Heat Pad column there are two options- select the correct column for the tyre construction being repaired.
3. Where there is more than one option for a Heat Pad, choose the one which covers the Patch being used by at least 2" in each direction (there is little point using a very large Heat Pad when only working on a small repair area).
4. Where there is an option of two Inside Flat Airbags, the larger of the two is usually for use when repairing Bias tyres which require the use of a wider Heatpad and therefore the Flat Airbag needs to be wider to get the full coverage.

*Please note that the Application Chart is a guide- if you feel the chosen components do not fit in your tyre correctly, seek immediate advice from your nearest Monaflex dealer*

### RADIAL TYRE EXAMPLE 1

Tyre Size: 14.00 R 24

Section width of this tyre is 14" so using the following row from the Chart we can see which items are required:

Tractor/Wide Base	Tyre Section	Cylinder Bag	Inside Flat Bag	Inside Heat Pad		Outside Heat Pad	External Pack With Flat Bag & Straps
				Bias	Radial		
14.4-24 to 16.9-38	13.00 to 17.5	<a href="#">TR1315/20W</a>		M2519H	<a href="#">M3015H</a>	<a href="#">TR2621H</a>	<a href="#">TR2621E with TROC5XL Straps</a>

### RADIAL TYRE EXAMPLE 2

Tyre Size: 16.00 R 25

Section width of this tyre is 16" so using the following row from the Chart we can see which items are required:

Tractor/Wide Base	Tyre Section	Cylinder Bag	Inside Flat Bag	Inside Heat Pad		Outside Heat Pad	External Pack With Flat Bag & Straps
				Bias	Radial		
14.4-24 to 16.9-38	13.00 to 17.5	<a href="#">TR1315/20W</a>		M2519H	<a href="#">M3015H</a>	<a href="#">TR2621H</a>	<a href="#">TR2621E with TROC5XL Straps</a>

### RADIAL TYRE EXAMPLE 3

Tyre Size: 29.5 R 29

Patch Size: 28" x 13"

Section width of this tyre is 29.5" so using the following row from the Chart we can see which items are required:

Tractor/Wide Base	Tyre Section	Cylinder Bag	Inside Flat Bag	Inside Heat Pad		Outside Heat Pad	External Pack With Flat Bag & Straps
				Bias	Radial		
25/65-25	27.00 to 29.5	<a href="#">M1721/24W</a>	<a href="#">M4824W</a> OR <a href="#">M5432W</a>	M2519H OR M2626H	<a href="#">M3015H</a> OR M4220H	<a href="#">TR2621H</a>	<a href="#">TR2621E with TROC5XL Straps</a>

The size of this tyre's inside section width requires the use of an Inside Flat Airbag. Owing to the narrow size of the Patch used in the repair the M4824W was selected.

In BIAS tyres the M5432W inside Flat Airbag would be used to cover the larger M2626H Heat Pad.

The Patch used is 28"x13" therefore the M3015H (30" x 15") can be used inside the tyre as it comfortably covers the Patch.

### RADIAL TYRE EXAMPLE 4

Tyre Size: 55/80 R 63

Patch Size: 50" x 22"

Size of this Super Wide Base tyre places it in the following row:

Tractor/Wide Base	Tyre Section	Cylinder Bag	Inside Flat Bag	Inside Heat Pad		Outside Heat Pad	External Pack With Flat Bag & Straps
				Bias	Radial		
53.5/85-57 53.5/85-63 55.5/80-57 55.5/85-57 55.5/85-63		<a href="#">M4447/32W</a>	M7532W OR <a href="#">M9032W</a>	M3132H OR M2626H	M4220H OR M4224H OR M4824H OR <a href="#">M5224H</a>	<a href="#">M2626H</a> OR M3132H	<a href="#">M4832E with M45/6/7 (1HG) 6 Straps</a>

When using a long Patch like this in a Radial tyre, the only Heat Pad which will cover it completely is the M5224H.

Both the M7532W and the M9032W inside Flat Bag can fit but where such a long Heat Pad is in use, the M9032W offers more complete coverage.

**BIAS TYRE EXAMPLE 1**

Tyre Size: 16.00 – 25

The section measurement of this tyre is 16” so the following row from the table applies:

Tractor/Wide Base	Tyre Section	Cylinder Bag	Inside Flat Bag	Inside Heat Pad		Outside Heat Pad	External Pack With Flat Bag & Straps
				Bias	Radial		
14.4-24 to 16.9-38	13.00 to 17.5	<a href="#">TR1315/20W</a>		<a href="#">M2519H</a>	<a href="#">M3015H</a>	<a href="#">TR2621H</a>	<a href="#">TR2621E with TROC5XL Straps</a>

**BIAS TYRE EXAMPLE 2**

Tyre Size: 37.25 – 35

Patch Size: 20” x 20”

The section measurement of this tyre is 37.25” so the following row from the table applies:

Tractor/Wide Base	Tyre Section	Cylinder Bag	Inside Flat Bag	Inside Heat Pad		Outside Heat Pad	External Pack With Flat Bag & Straps
				Bias	Radial		
35/65-33 to 45/65-45	30.00 to 37.5	<a href="#">M2732/32W</a>	<a href="#">M5432W</a>	<a href="#">M3132H</a> OR <a href="#">M2626H</a>	<a href="#">M4220H</a> OR <a href="#">M4224H</a>	<a href="#">M2626H</a> OR <a href="#">M3132H</a>	<a href="#">M4832E with M45/6/7 (1HG) 6 Straps</a>

The M2626H inside Heat Pad was chosen as this will suitably cover the Patch being used in the repair.

The M3132H is being used on the outside as well as this will also cover the entire outside repair area.

**BIAS TYRE EXAMPLE 3**

Tyre Size: 70/70 - 57

Patch Size: 29” x 29”

This super wide base OTR tyre falls into the following row on the Application Chart:

Tractor/Wide Base	Tyre Section	Cylinder Bag	Inside Flat Bag	Inside Heat Pad		Outside Heat Pad	External Pack With Flat Bag & Straps
				Bias	Radial		
59/80-63 60/80-57 70/70-57		<a href="#">M5054/32W</a>	<a href="#">M9032W</a>	<a href="#">M3132H</a> OR <a href="#">M2626H</a>	<a href="#">M4220H</a> OR <a href="#">M4224H</a> OR <a href="#">M4824H</a> OR <a href="#">M5224H</a>	<a href="#">M2626H</a> OR <a href="#">M3132H</a>	<a href="#">M4832E with M45/6/7 (1HG) 6 Straps</a>

The Heat Pad chosen for the inside of the tyre is the M3132H, which at 37” x 33” will comfortably cover the large Patch. With a Patch of this size it is likely the injury site on the outside of the tyre may be similarly sized. In these circumstances it is advisable to use another available Heat Pad which will cover the repair area.

In this example as we have used the M2626H.

*Please note that the Application Chart is a guide- if you feel the chosen components do not fit in your tyre correctly, seek immediate advice from your nearest Monaflex dealer*