



# AUTOMATIC TIRE INFLATION CAGE

Models:  
90422 - 90423 - 90424

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**Instruction Manual**

*The Proper Tools To Keep Your Equipment Moving*

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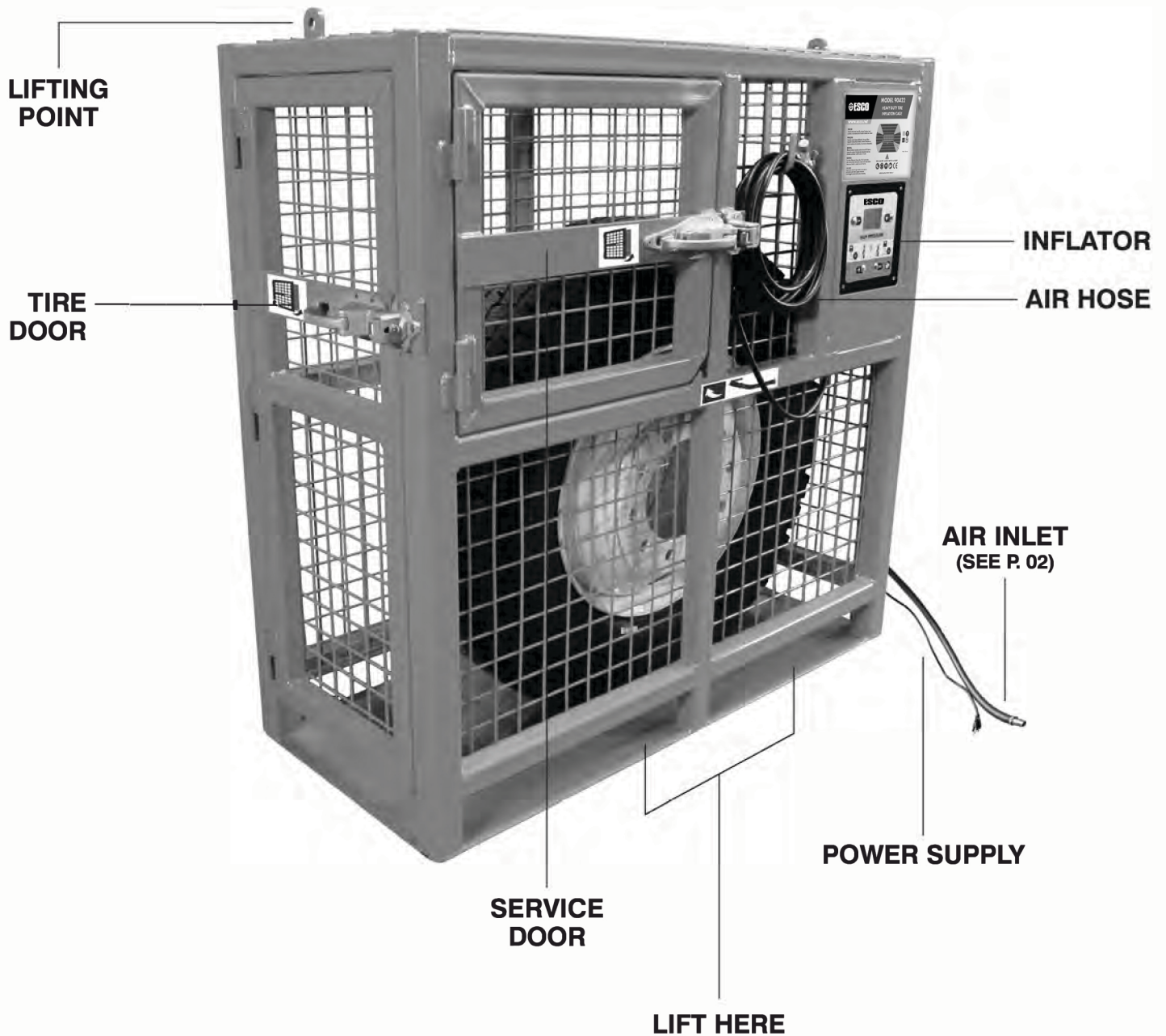
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## WARRANTY

The ESCO Tire Inflation Cages includes a 1-year warranty from the billing date, but is null and void if the cage has been damaged through misuse, faulty installation, improper maintenance or accidental damage, or unauthorized modifications or repairs.

## SPECIFICATIONS



<b>CAGES</b>	<b>90422</b>	<b>90423</b>	<b>90424</b>
Dimensions (L x W x H)	1422 x 610 x 1372 mm 55 11/16" x 24" x 54"	2083 x 1016 x 1982 mm 91" x 51" x 78"	2134 x 1423 x 2083 mm 84" x 56" x 82"
Weight	263 KG / 578 LB	523 KG / 1150 LB	602 KG / 1324 LB
Color	Orange	Orange	Orange

<b>INFLATORS</b>	<b>HIGH PRESSURE</b>	<b>90419</b>	<b>HIGH FLOW</b>
Max outlet air pressure	1600 kPa / 16 BAR / 232 PSI / 16.3 kg/cm <sup>2</sup>	1000 kPa / 10 BAR / 145 PSI / 10.2 kg/cm <sup>2</sup>	1000 kPa / 10 BAR / 145 PSI / 10.2 kg/cm <sup>2</sup>
Max inlet air pressure	1344.5 kPa / 13.4 BAR / 195 PSI / 13.7 kg/cm <sup>2</sup>	1035 kPa / 10.5 BAR / 150 PSI / 10.5 kg/cm <sup>2</sup>	1035 kPa / 10.5 BAR / 150 PSI / 10.5 kg/cm <sup>2</sup>
Accuracy	+/- 1.99 kPa +/- 0.02 BAR +/- 0.2 PSI +/- 0.02 kg/cm <sup>2</sup>	+/- 1.99 kPa +/- 0.02 BAR +/- 0.2 PSI +/- 0.02 kg/cm <sup>2</sup>	+/- 1.99 kPa +/- 0.02 BAR +/- 0.2 PSI +/- 0.02 kg/cm <sup>2</sup>
Inlet connector size	1/4" NPT	1/2" NPT	1/2" NPT
CFM	2600 L / min = 92 CFM MAX	2600 L / min = 92 CFM MAX	3600 L / min = 128 CFM MAX
Supply voltage	AC 110 ~ 240 V / 50 ~ 60 Hz	AC 110 ~ 240 V / 50 ~ 60 Hz	AC 110 ~ 240 V / 50 ~ 60 Hz
Watt	10 Watt Max 800 mA Max	10 Watt Max 800 mA Max	10 Watt Max 800 mA Max
Temperature range	-10 °C ~ 50 °C / 14 °F ~ 122 °F	-10 °C ~ 50 °C / 14 °F ~ 122 °F	-10 °C ~ 50 °C / 14 °F ~ 122 °F
Relative Humidity	up to 95 % RH non-condensing	up to 95 % RH non-condensing	up to 95 % RH non-condensing
Material	Die cast Aluminum Enclosure	Die cast Aluminum Enclosure	Die cast Aluminum Enclosure
Degree of Protection	IP66	IP66	IP66
Meet & Exceed	CE / CSA, EC-86/217 BS-EN 12645:1999	CE / CSA, EC-86/217 BS-EN 12645:1999	CE / CSA, EC-86/217 BS-EN 12645:1999

## SAFETY



**BEFORE using this product, read this manual and follow all its Safety and Operating instructions. Failure to do so may result in personal injury and/or property damage. Retain these instructions for future reference.**



Use a lift truck or a hoist with the necessary capacity (see p.02 for height and weight specifications).

Inspect before each use. Do not use if broken, bent, cracked, or damaged parts (including labels) are noted.

Do not modify or use this product for any other application than what it has been designed for.

Ensure that the product is connected to the correct power and air supply; refer to rating label and general specifications.

Important compressed air contains water and oil, use proper air filter between the source and device. Failure to do so will void the guaranty.

Do not exceed MAX inlet air pressure ( see specs. p. 02 )

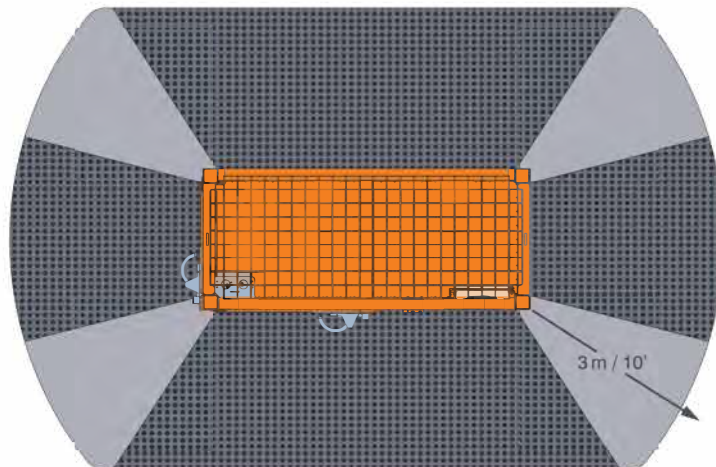
Keep the compressed air inlet pressure within 1035 kPa / 10.5 BAR / 150 PSI / 10.5 kg/cm<sup>2</sup> (90419 & High Flow) and within 1344.5 kPa / 13.4 BAR / 195 PSI / 13.7 kg/cm<sup>2</sup> (High Pressure).

This cage is equipped with an automatic air system shutdown. If a door is open during inflation or deflation, the inflation cycle will automatically stop.

## OPERATIONS



**Do not connect a tire already inflated above the MAX outlet pressure.**



# HIGH PRESSURE

SET  
PRESSURE  
UNIT



Kpa  
Bar  
Psi  
kg/cm<sup>2</sup>  
SET

SET  
NITROGEN  
FUNCTION

2X



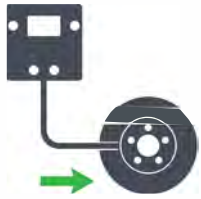
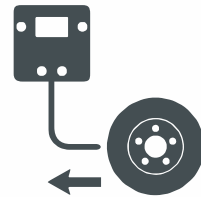
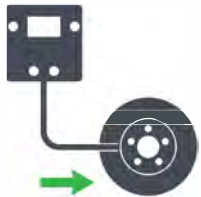
18.8.8  
N2

SET  
INFLATING  
PRESSURE

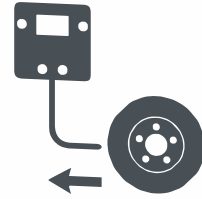


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## INFLATE TIRE



3 SEC.



# 90419

**SET  
PRESSURE  
UNIT**



Kpa  
Bar  
Psi  
kg/cm²  
SET

**SET OVER  
PRESSURE  
SYSTEMS**

2X



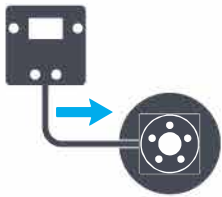
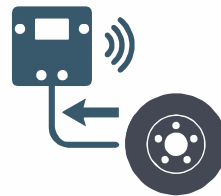
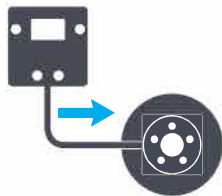
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OPS

**SET  
INFLATING  
PRESSURE**

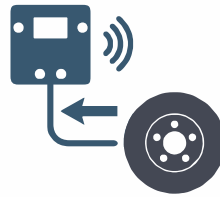


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**INFLATE TIRE**



3 SEC.



## HIGH FLOW

SET  
PRESSURE  
UNIT



Kpa  
Bar  
Psi  
kg/cm²  
SET

SET OVER  
PRESSURE  
SYSTEMS

2X



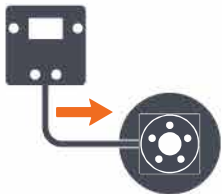
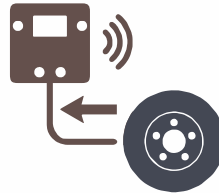
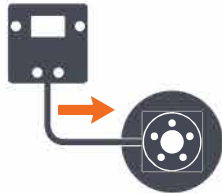
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OPS

SET  
INFLATING  
PRESSURE

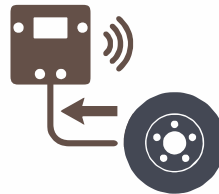


18.8.8

### INFLATE TIRE



3 SEC.



## TROUBLE SHOOTING

PROBLEMS	POSSIBLE CAUSE	SOLUTIONS
Er1	The pressure sensor is broken.	The inflator must be replaced.
Er2	Unstable pressure, faulty hose connector.	Replace hose connector or re-connect hose to the tire.
Er3	Connected tire pressure is too high pressure.	Stop inflating the tire.
Er4	Wrong connections in air inlet and outlet.	Refer to wiring diagram and connect magnetic valve accordingly.
Er5	Low voltage.	Check the electrical power source.
Er6 and Er7	Calibration error.	The automatic inflator needs to be calibrated, contact Martins Industries.
Er8	The air source is lower than the set pressure.	Stop inflating the tire - refer to inlet pressure specifications.





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