



"Tires are becoming the second most expensive thing on a tractor, farmers should protect that investment."



# Tires are an important investment!

- Proper tire inflation pressures play a key role in optimum traction and long tire life.
- Protect your investment by monitoring those crucial proper inflation pressures.

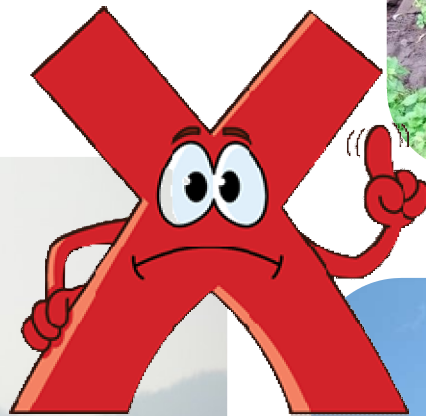


- More friction means more wear.
- Fuel prices are extremely high.
- Reduced rolling resistance is less fuel consumption.



# Economy

- Improper tire inflation pressures will:
  - Increase tire wear.
  - Increase fuel consumption.





# Ecology



- Improper tire pressures do cause soil compaction.
  - Soil compaction decreases crop yields.

# Safety



- Incorrect tire pressures will cause :
  - An uncomfortable ride.
  - Tire overheating.
  - Tire casing damage.
  - Tire rotation on the rim.
  - Less steering control, braking control and cornering stability.
- The wrong tire pressure is dangerous and may cause rim failures !
- Down times due to tire punctures, tire blowouts or rim failures can be prevented !



# Daily tire pressure check.

POV of the tire manufacturers and dealers



- Tire manufacturers – distributors recommend their customers to check tire pressures regularly. The more often you monitor your tire pressures the longer your tires will last !
- Fact:
  - Tire pressures and temperatures change significantly when working !
  - 30 % under-inflation is nearly invisible to the naked eye !

# Low pressure tires : Stay Alert !

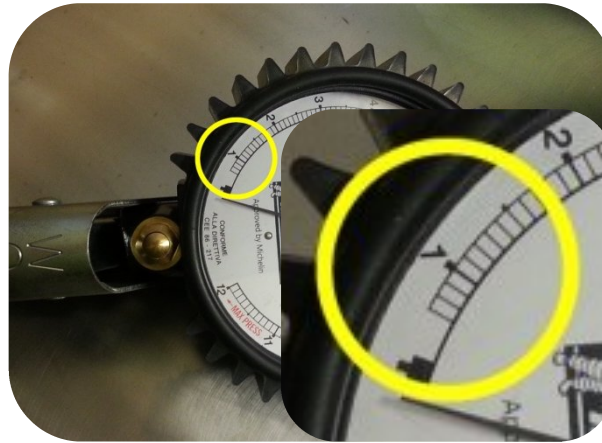


Operating pressure here is 15 psi.  
Which tire is 5 psi low ?



- 30% under-inflation is nearly visible with the naked eye!
- Minimum inflation pressures are very close to the point of causing damage to the tires, hence operating tires at the minimum inflation pressures requires closer tire management.

# Tire management today : Standard pressure gauge.



- The high range scale on a standard pressure gauge makes it virtually impossible to accurately read the crucial low pressures of the ultra flex tires.
- Checking pressures with a standard pressure gauge is too much of a hassle and very often “forgotten” by the operators as they are mostly in a hurry.



# Tire Pressure Monitoring Systems for AG tires?

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# Tire pressure monitoring?

## What's in it for me ?

- A correct tire inflation pressure will:
  - Decrease tire wear.
  - Save up to 20% in fuel.
  - Enhance handling.
  - Prevent soil compaction.
  - Increase crop yields.





# Commercial vehicle TPMS Systems?



## e.g. Valve cap-end sensors

- Not calibrated/designed to monitor those crucial low operating pressures.
- Inflating tires is more elaborate due to the small safety screws.
- The valve cap-end mounted sensors are easily damaged by corrosive materials or heavy use, causing malfunctions.
- Conclusion/Experience : these commercial grade systems are rather not suitable for the working conditions in the agricultural industry.

# A TPMS system solely designed for AG Tires?



- Designed for agricultural wheels as the valve stem mounted sensor perfectly fits the universal ETRTO V5.01.1 - TR618A rim hole found on agricultural equipment worldwide.
- The internal sensors are installed on the inside of the rim :
  - Excellent protection against corrosion and hazardous elements.
  - Cold inflation operating pressure : 0.4 bar ~ 7.0 bar / 5.8 psi ~ 101 psi.
  - Operating temperature : - 40 °C ~ + 125 °C. / - 40 °F ~ + 257 °F.
  - Inflating the tires is as easy as before.

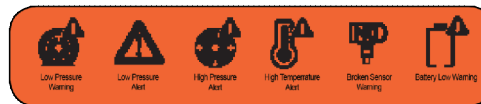


# The Comatra ONBOARD Tire Pressure Monitoring System.

## How does it work ?



- The preprogrammed internal sensors wirelessly transmits data (pressure and temperature) to the dash-mounted display inside the tractor cab.
- The operator gets a real-time digital tire pressure and temperature information on all of his tires.



- Visual and audible alarms warn the operator in case of leaks, pressure drops, high temperatures and high pressure.  
Our system does measure pressures from 0.4 bar to 7 bar ( 6 psi to 101 psi ).

# Easy to install ? Yes !

Thanks to the Pre-programmed sensors

- Push the tire bead backwards (method A, B or C ) and replace the existing valve by our valve stem mounted sensor in the correct numerical order.



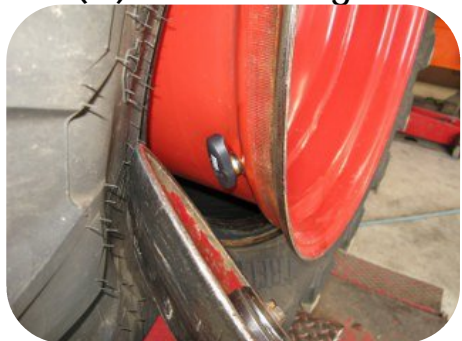
(A) Tire Changer



(B) DIY



(C) Bead Breaker





# How to install the monitor – display?



- Thanks to the pre-programmed sensors the monitor is simply plugged into a cigar jack or any other electric power contact in the cab, just set the cold operating pressures and you're ready to go !

# Composition Kits

## Composition Tractor Kit :

- Number of sensors according chosen kit : 4 or 6.
- One monitor – display 12V-24V with plug socket.
- One 12V-24V cable with plug adapter.
- One mount bracket.



## Composition Trailer Kit :

- Number of sensors according chosen kit : 4 or 6.
- One monitor – display 12V-24V with plug socket.
- One 12V-24V cable with plug adapter.
- One mount bracket.
- One 12V-24V waterproof repeater complete with :
- One open end outdoor power cable 5 m long.
- One waterproof fuse box with fuse.

