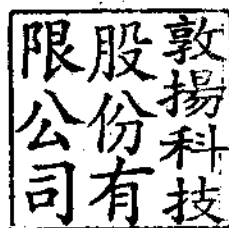


LITE-ON AUTOMOTIVE CORPORATION

T P M S

**TYRE PRESSURE MONITOR SYSTEM
INSTALLATION MANUAL**



PRELIMINARY

SEPTEMBER 2001

Notice: The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



TPMS

TYRE PRESSURE/TEMPERATURE MONITORING SYSTEM

(PATENT PENDING)

INSTALLATION MANUAL

1. Specifications

A. Pressure Sensor

Pressure Range: 0 - 90 PSI

Input Voltage: 2.5~3.3V(BATTERY)

Temperature Measuring Range: -40°C to 125°C (SENSOR)

Work Temperature: -40°C to 125°C

Life: 7 YEARS Min

Frequency: 433.92MHz, 315 MHz(OPTION)

Speed limit:300Km/hr

B. Display Unit

Input voltage: 9~16V

Standby Current:4mA Max

Frequency: 433.92MHz, 315 MHz(OPTION)

Work Temperature: -40°C to 85°C

Display: temperature, pressure status indicator, Audio Alarm

2.Installation Preparation

A. Component Description

Electronic Sensors

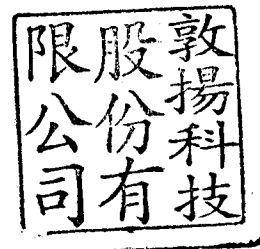
The sensors measure the air pressure/temperature in vehicle tyre and transmitter measuring data by RF in periodically.

Display Unit

The display unit converts the electronic signals from sensors into digital display. This allows the appropriate tyre pressure/ temperature can be shown on 7 segment digital.

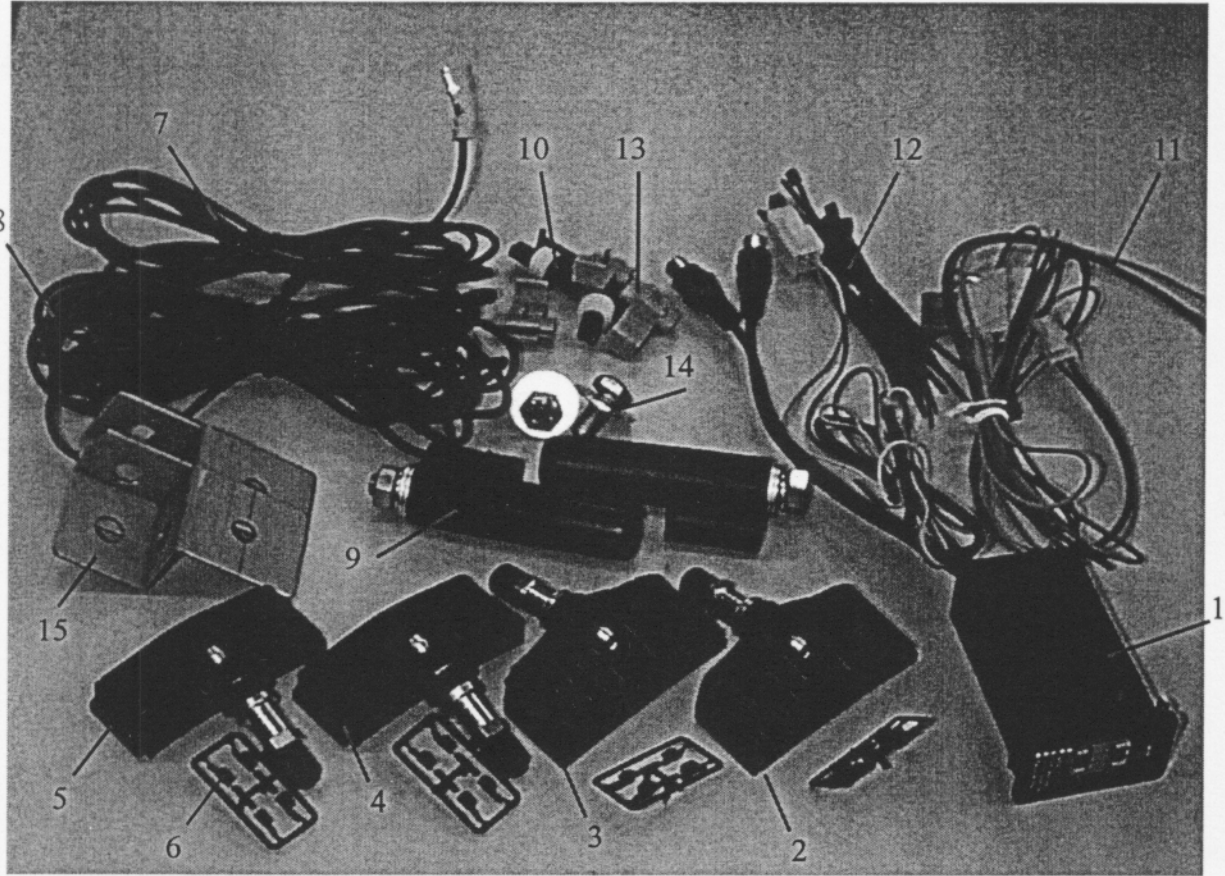
Antenna With Cable

Two antenna are used to receive sensor signal and deliver the RF signal to display unit.



B. Part List

Check the parts you need in the columns corresponding to the kit you will be installing. If the parts you need are not in the kit, stop and contact your supplier AS SOON AS POSSIBLE.



Part description and part number	QTY
#1 -Display unit	1
#2,3,4,5- Tx Valve FL(Front Left Wheel) Tx Valve FR(Front Right Wheel) Tx Valve RR(Rear Right Wheel) Tx Valve RL(Rear Left Wheel)	4
#6- Slide pad	4
#7- Receiver's antenna(Front Wheel) Cable Wire about 2.5 meter	1
#8- Receiver's antenna(Rear Wheel) Cable Wire about 5 meter	1
#9- Receiver's antenna	2
#10- Antenna connector	2
#11- Main harness	1
#12- Wire tire	20
#13- wire connector	3
#14- Screw	2
#15- Bracket	2

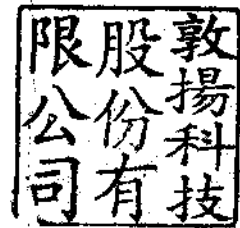
C. For Best Installation Results

WHAT YOU NEED TO KNOW

- The location of the most accessible mounting hole underneath vehicle you will be installing the antenna.

RECOMMENDATIONS

- Be caution to prevent the valve core from shooting out of the stem, during deflating TYRE.
- Be careful to avoid getting hands caught between the tire bead & wheel.
- Run-Flat tire sidewalls are very stiff and require safe tire iron prying techniques.
- Use proper technique to avoid a back strain when lifting.
- Due to potentially high inflating pressure required to seat some Run-Flat tire beads, ask your tire manufacturer if this is required for your set of tires.
- Observe and follow equipment safety decal instructions.
- Always follow equipment operation procedures and safety instructions.



3. Installation Procedure

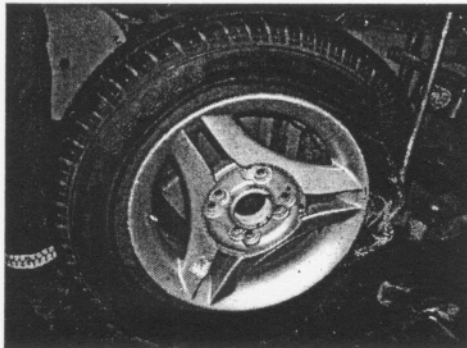
A. Install Sensor

A1. Dismounting tyre

STEP1:

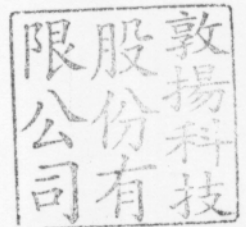
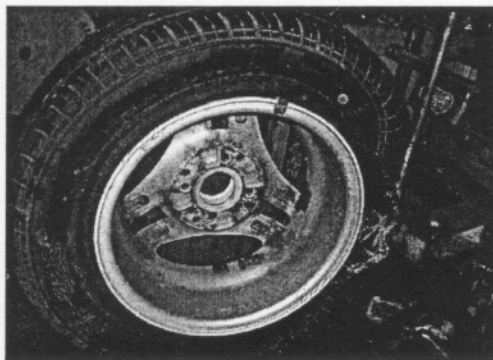
Remove the valve core and deflate the tire.

STEP2:



Using the bead buster, bust the inner bead of the tire ensuring no contact is made with the TPMS valve.

STEP3:



Using the bead buster, bust the outer bead of the tire at the furthest point from the valve stem.

Using the tyre lever, ease the remaining bead off the rim, ensuring no contact is made with TPMS valve.

STEP4:

Properly clamp and secure the wheel on the changer.

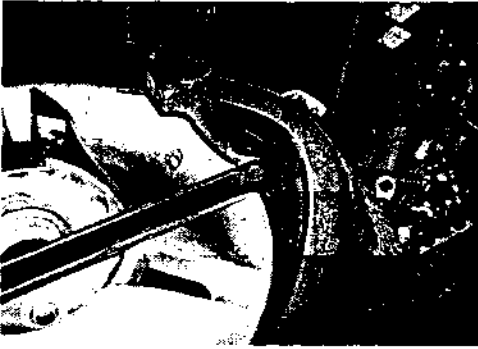
STEP5:

Position the Tx valve before the head of the tire change, not directly under the head or near the point where the tire lever will be inserted.

STEP6:

Position upper bead into the drop centre opposite dismount head with drop centre tools or techniques.

STEP7:



Insert lead lever avoiding contact with the Tx valve and pry top bead onto dismount head.

STEP8:

As required, briefly rotate counter clockwise to unfurl the toe of the bead on the dismount head.

STEP9:

Carefully rotate clockwise to remove the upper bead. Remove drop center tools.

STEP10:



Position lower bead opposite dismount head into drop centre. Insert bead lever.

STEP11:

Carefully rotate to dismount lower bead and remove tire from rim.

STEP12:

Position the tire away from the rim to reach the Tx valve.

STEP13:

Unscrew the nut from the unit using Torque wrench #11(11mm) easy out.

STEP14:

Carefully pull the unit from the valve stem hole.

A2. Mounting tyre

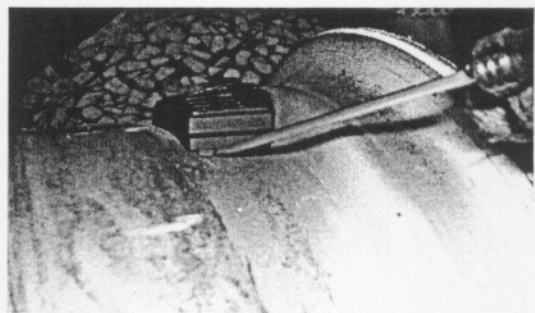
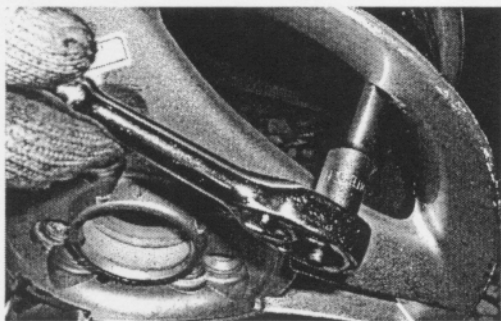
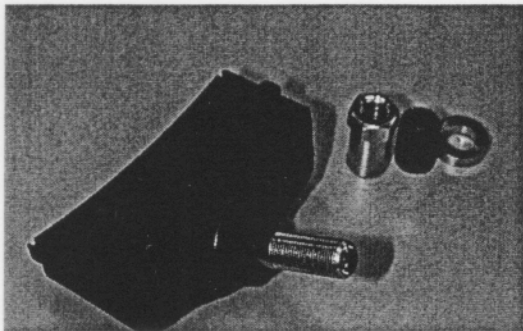
STEP1:

Inspect the wheel for safe serviceability.

STEP2:

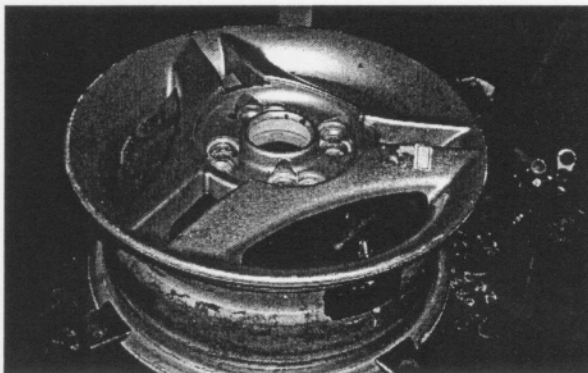
Verify the tire is the correct size for the wheel if changing tires.

STEP3:



Select suitable slide pad to put on the Tx Valve, Insert the Tx Valve into the valve stem hole. Using Torque wrench #11(11mm) to screw the nut with 30kgf.cm

STEP4:



Properly position and secure wheel on tire changer.

STEP5:

Lube wheel flange area, bead seats and drop center balcony.

STEP6:

Fully lubricate the inner and outer portion of both beads of the tire.

STEP7:

Verify the direction of rotation for directional tires.

