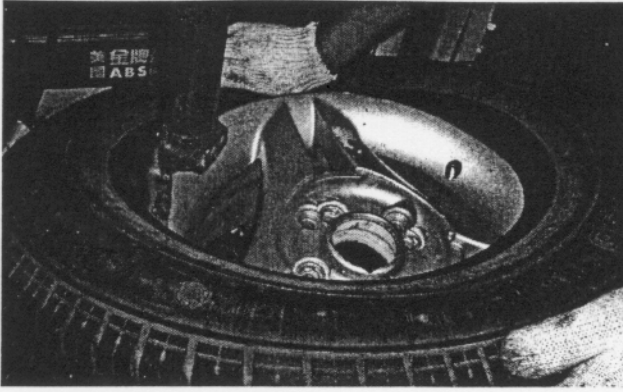


STEP8:

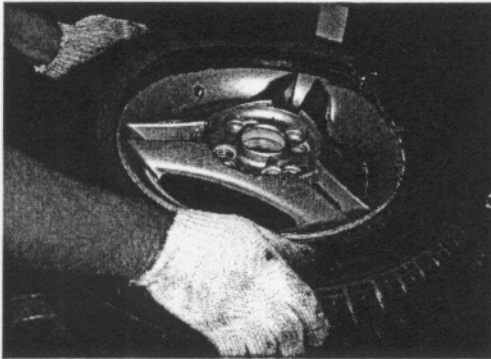


Position lower bead on mount head. Rotate and lock lower bead to rim traction point by hand.

STEP9:

Mount bottom bead by rotating wheel and tire together "as a single unit".

STEP10:



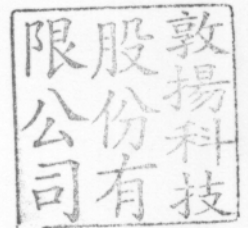
Position upper bead on mount head. Install drop center and traction device.

STEP11:

Rotate tire with wheel, maintaining traction. The Tire and wheel must rotate WITHOUT SLIPPAGE.

STEP12:

Remove the tire and wheel from the tire changer for inflation in approved safety cage.

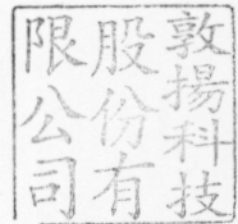


B. Install Display

SELECT A MOUNTING LOCATION FOR THE DISPLAY MODULE

- a. Warning display must be visible to the driver
- b. Location should provide neat placement or hiding of wires

NOTE: Good visibility are usually found above the dashboard. Other locations in, on, and under the dash may provide suitable performance. Display Module ORANGE wire connect V_{IGN} , RED wire connect $V_{BATTERY}$, BLACK wire connect Ground.



C. Install Antenna

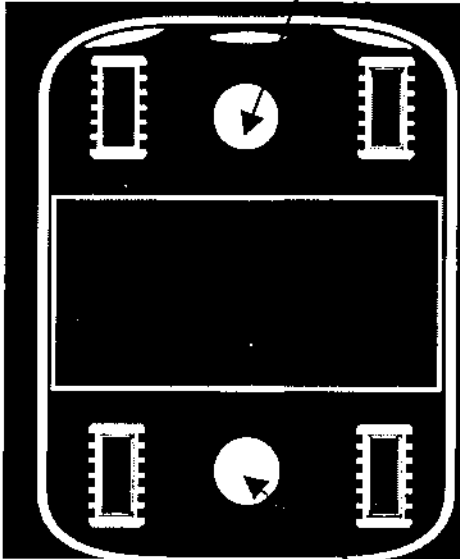
RECEIVERS ANTENNA INSTALLATION

There are two antennas, one is short about 2.5 meters which install underneath the center of two front tire, one is long about 5 meters which install underneath the center of two rear tire.

STEP1:

Looking for existing hole underneath vehicle which is near the center of front wheel and rear wheel .

Antenna(with short cable) in this area inside 30cm circle area

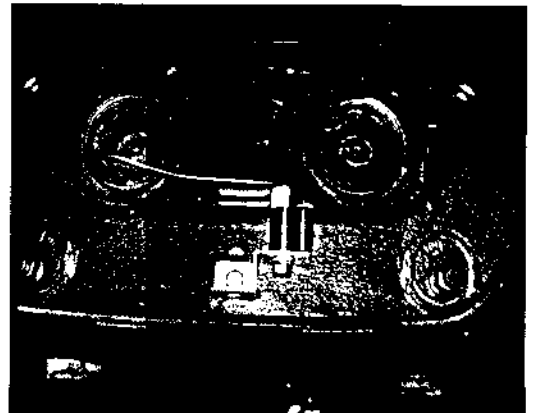


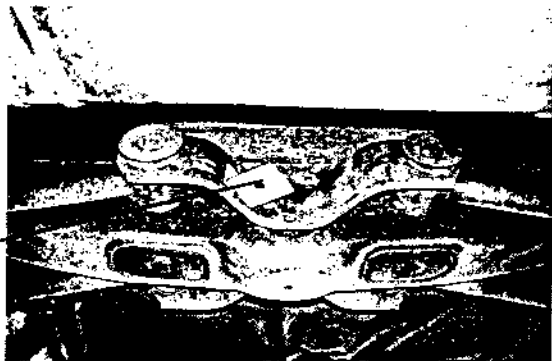
Antenna(with long cable) in this area inside 30cm circle area

NOTE: 1. Antenna must install vertical not horizontal, otherwise it will effect receiver's sensitivity.

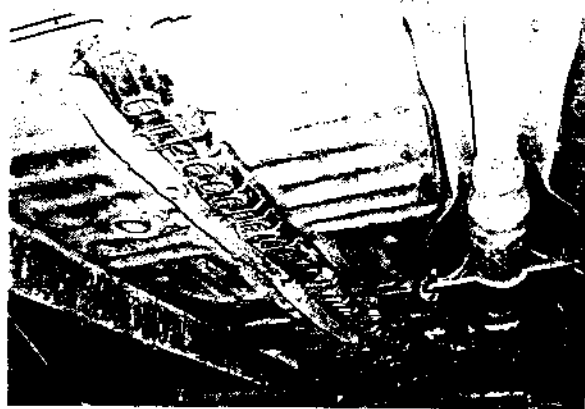
2. Install two antenna cable wire through the firewall of the vehicle and route the cable along the chassis by wire tie.

3. Avoid cable antenna to touch the exhaust pipe of the underneath vehicle.





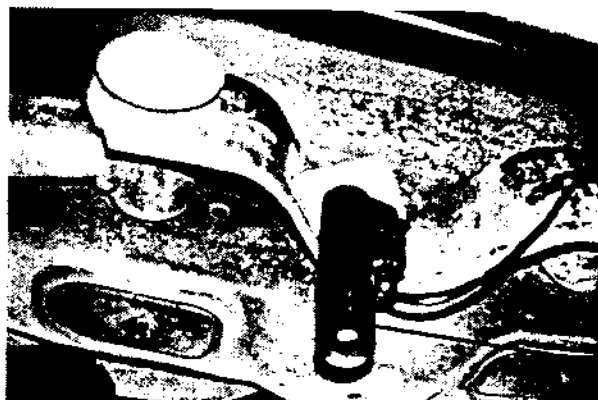
bracket



antenna



antenna

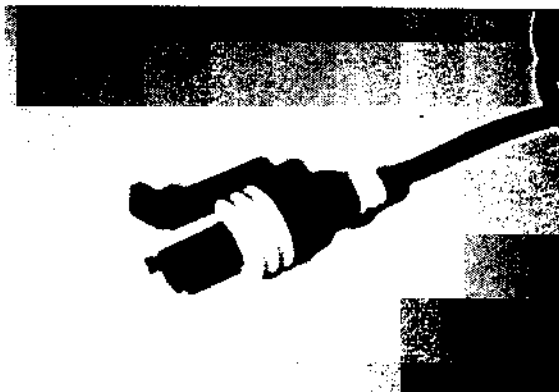


antenna



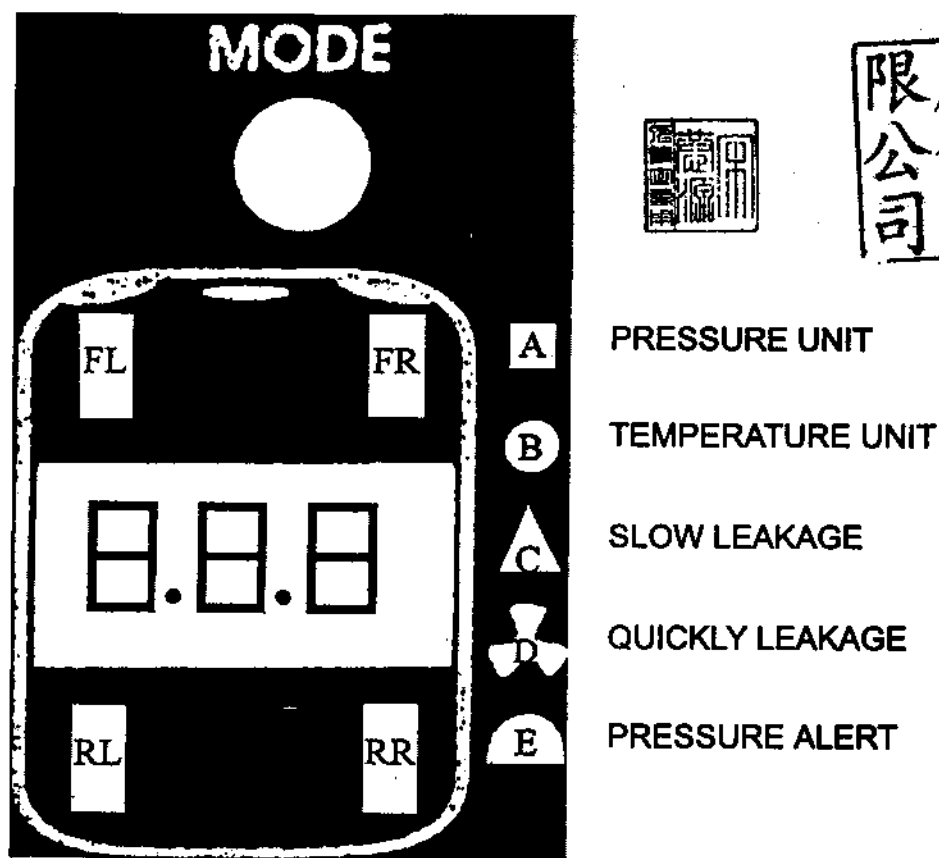
Antenna connector

Cable wire



4.Operation

TPMS illustration



a. POWER/IGN ON SELF TEST

- when the driver turn the key ON, the light-emitting diodes and a three digit seven-segment light-emitting diode will be lighted after 4 seconds and the buzzer will buzz for 0.3 second so as to test the light-emitting diodes and the buzzer by themselves.
- The E/M will receive the signal of the condition of the tires transmitted by the sensor modules and lighting the light-emitting diodes in turn, and the pressure follow by temperature data of the front-left tire, front-right tire, rear-left tire, rear-right tire will be shown by the three digit seven-segment light-emitting diode.
- If the light-emitting diodes are showing green, then the conditions of the tires pressure are normal, the seven-segment light-emitting diode is showing SAF, i.e. SAFE.
- If the pressure of any individual tire is abnormal, then the display device and the buzzer to show a variety of the abnormal states.

b. HIGH PRESSURE ALERT

- If the pressure is higher than 44 PSI(3.03BAR;3.03Kgf/cm²), the pressure of the tire is too high, then the light-emitting diode of the abnormal tire will turn red and quickly flash for 5 seconds, the seven-segment light-emitting diode will show the pressure value, the pressure unit & pressure alert LED will be lighted, and the buzzer will alarm every two minutes until the abnormal state is disengaged.



c. LOW PRESSURE ALERT - I

- If the pressure is between 24 PSI(1.66BAR;1.66Kgf/cm²) to 15 PSI(1.03BAR;1.03Kgf/cm²), the pressure of the tire is slightly low, then the light-emitting diode of the abnormal tire will turn orange and slowly flash for 5 seconds, the seven-segment light-emitting diode will show the pressure value, the light-emitting diodes pressure unit and pressure alert will be lighted and the buzzer will alarm once.

d. LOW PRESSURE ALERT - II

- If the pressure is between 16 PSI(1.1BAR;1.1Kgf/cm²) to 9 PSI(0.62BAR;0.62Kgf/cm²), the pressure of the tire is too low, then the light-emitting diode of the abnormal tire will turn red and quickly flash for 5 seconds, the seven-segment light-emitting diode will show the pressure value, the light-emitting diodes pressure unit and pressure alert will be lighted and the buzzer will alarm every two minutes until the abnormal state is disengaged.

e. LOW PRESSURE ALERT - III

- If the pressure is lower than 9 PSI(0.62BAR;0.62Kgf/cm²), the pressure of the tire is seriously low, then the light-emitting diode of the abnormal tire will turn red and quickly flash for 30 seconds, the seven-segment light-emitting diode will show the pressure value, the light-emitting diodes pressure unit and pressure alert are lighted and the buzzer will alarm. In that case the abnormal tire should be changed with the spare tire, so the buzzer will alarm just once to avoid intruding upon the driver.
- If the above mentioned four states are not disengaged, the monitoring device according to the present invention will warn the driver again that the problem of the tire still present when the vehicle is turned on every time.

f. QUICKLY LEAKAGE ALERT

- If the pressure decreases rapidly (the pressure drops more than about 3 PSI(0.2BAR;0.2Kgf/cm²) within one minute), the light-emitting diode of the abnormal tire will turn red and quickly flash for 30 seconds, the seven-segment light-emitting diode will show the pressure data, the light-emitting diodes pressure unit and pressure alert will be lighted and the buzzer will alarm, and after 30 seconds, if the pressure drops more than 1 PSI(0.15BAR;0.15Kgf/cm²), the buzzer will keep alarm until the pressure stop decreasing.

g. SLOW LEAKAGE ALERT

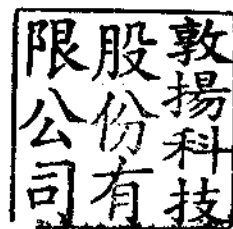
- If the pressure decreases slowly (for example, the pressure drops more than 1 PSI(0.145BAR;0.145Kgf/cm²) per 10 minutes, and/or the pressure drops after the vehicle turned on more than 1.5 PSI(0.22BAR;0.22Kgf/cm²)), then the light-emitting diode of the abnormal tire will turn orange, and the seven-segment light-emitting diode will show the pressure value, the light-emitting diodes pressure unit, slow leakage and pressure alert will be lighted to indicate that the tire is leaking slowly and the buzzer will alarm.

h. TEMPERATURE ALERT

- If the temperature is higher than 85°C, the temperature of the tire is too high, then the light-emitting diode of the abnormal tire will turn red and quickly flash for 5 seconds, the seven-segment light-emitting diode will show the temperature value, the light-emitting diodes temperature unit will be lighted, and the buzzer will alarm every two minutes until the abnormal temperature state is disengaged.

i. NO SIGNAL DISPLAY

- If the E/M dose not receive the signal which is sent by the individual sensor modules for ten times, then the E/M will show NOS by means of the seven-segment light-emitting diode to indicate the state of "no signal", i.e. no signal sent from the tire, thus the tire has some kind of problems or the electric cell is dead.



5. Trouble Shooting

- **CHECK TIRE PRESSURE Always ON Green Monitoring LED Light:**

Messages are not being received from one of the Tx Valves. Stop at the nearest LITEON TPMS dealer to verify proper system installation. Visually inspect your tires and wheels for damage. Check pressure of each tire with a tire gauge. The LITEON TPMS is a very rugged device. If the valve is physically damaged by road hazards such as potholes or debris, damage to the tire and rim is likely. If no damage is evident, return to the dealer where you purchased your TPMS and have it serviced.

- **Green Monitoring LED Never Comes ON:**

Your system is disabled. Power to the receiver may be disrupted. The LED should illuminate for our seconds each time power is applied. Check each of these points. If you can not bring the LED on by disconnecting and reconnecting the power, return to your TPMS dealer for service. Check the appropriate fuse in your car or have a technician check it for you. Refer to your vehicle owners manual for assistance identifying and locating the fuse.

- **"I have a flat or low tire, but get no warning from the system":**

Display module will show "nos", means no signal from Tx VALVE.

- **"DISPLAY MODULE SHOW LOW TIRE PRESSURE is displayed at the beginning of drive, but goes away after a few miles.":**

Tire pressure varies by a few pounds in response to temperatures and loading changes experienced in normal driving. Typical passenger car tires will rise 2 to 4 psi after you begin driving. The Tx Valve accurately measures these changes just as if you stopped and checked with a tire gauge. Your tire pressure may be just below 24 psi with the car parked and tires cool. Thus causing the LITEON TPMS Valve receiver to display low tire pressure when you begin driving. A few miles later the tires warm, the pressure rises above 24 psi, and the LITE-ON TPMS Valve sends a signal turning off the warning light. Check and inflate the offending tire at the next safe opportunity. **YOU SHOULD ALWAYS INFLATE YOUR TIRES "PRE-SET PRESSURE" 32PSI WHILE THEY ARE COOL TO THE TOUCH. MAINTAIN TIRE PRESSURE AT THE TIRE MAN-UFACTURER'S RECOMMENDED PRESSURE.**



6.Support

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