

**VOGUE**

*Miracle Tread* ®

**TWIN-AIR  
CHAMBER**

**SAFETY TIRE**

**SIDEWALL INFLATING VALVE**

**MOUNTING AND SERVICE  
INSTRUCTIONS**

**KEEP IN CAR FOR  
CONVENIENT REFERENCE**

**VOGUE RUBBER COMPANY  
CHICAGO, ILLINOIS**

**FORM E-15V**

*Miracle*  
TWIN  
*Tread*®

TWIN-AIR  
CHAMBER

MOUNTING AND  
SERVICE  
INSTRUCTIONS

Keep in glove compartment of your car.

# **VOGUE MIRACLE TREAD**

## ***Twin-Air Chamber***

### **SAFETY TYRE**

Vogue's revolutionary Twin-Air Chamber Tyre has a "spare" right inside. Should you have a flat, the Life-Saving protection of the reserve air chamber in the tire permits you to ride on to a service station without a dangerous, inconvenient road-side tire change stop.

In addition, the Twin-Air Chamber Tyre gives you the superior dependability of Super Nylon Tire construction, superior puncture and blowout protection, and cushion-smooth, cushion-quiet running.

# MOUNTING PROCEDURE

## RIM PREPARATION

Scrape off all rust flakes and clean rim flanges and bead seats with wire brush or steel wool (Fig.1).

To prevent leakage, badly rust pitted rims should be heavily coated with vulcanizing cement to fill the rust cavities. Apply tubeless tire valve to hole in rim (See Fig. 2).

## APPLICATION OF INNER CHAMBER TO TIRE

Note: Tires are shipped with Inner Chamber installed. If, for any reason, the Inner Chamber is removed, it should be re-installed in the following manner:

Lay the tire down flat and insert the Inner Chamber as you would an inner tube (Fig. 3). Set the molded channel-shaped edges of the Inner Chamber over the tire beads (Fig. 4). Smooth out wrinkles by working and rubbing the bead channels by hand.



Fig. 1

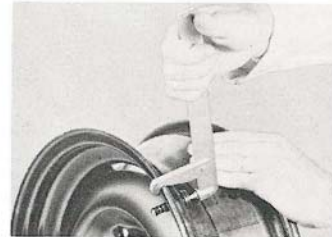


Fig. 2



Fig. 3



Fig. 4



## MOUNTING PROCEDURE

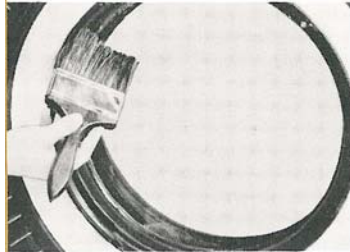


Fig. 5

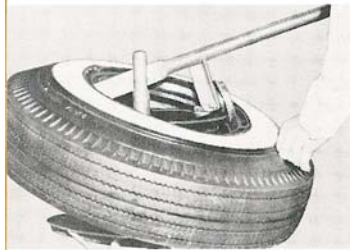


Fig. 6



Fig. 7

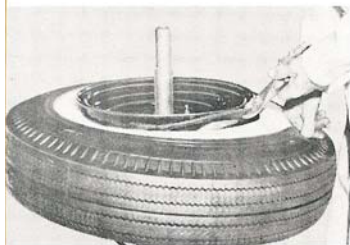


Fig. 8

### LUBRICATION

Apply a liberal coating of mounting lubricant (made of soap flakes or vegetable oil soap and water) to the *outer* bead surfaces (flange and base) of the Inner Chamber (Fig. 5) and to the rim. **DO NOT USE DETERGENTS OR ANY SUBSTANCE THAT MIGHT BE HARMFUL TO RUBBER OR RIM SURFACE. DO NOT APPLY LUBRICANT TO TIRE BEADS OR IN INNER CHAMBER CHANNELS.**

### APPLICATION TO WHEEL

When mounting the tire on the wheel with tire changing machine (Fig. 6) use care to avoid wrinkling, cutting or tearing the Inner Chamber bead channels. When mounting by hand with tire irons, work the beads over the rim flange carefully in short sections (Fig. 7). Should the Inner Chamber slip off first tire bead while mounting, it should be repositioned around bead before the second bead is applied to rim. If the Inner Chamber slips off second bead during application, it must be repositioned before inflation. Use pliers, if necessary, for gripping Inner Chamber flange to reposition on tire bead (Fig. 8). To make it easier to inflate tires when on car, locate sidewall valve next to rim valve by sliding tire around on rim until both valves are in line.

## MOUNTING PROCEDURE

### INFLATION

**IMPORTANT:** Before inflating Inner Chamber, remove inflating needle (Fig. 9) from case and insert into tire sidewall valve full length (Fig. 10).

With valve core in place, apply air chuck to rim valve. If beads do not contact the rim ledge sufficiently to catch the pressure, use a bead expanding device (Fig. 11). Remove bead expander when pressure starts to build up. Continue inflating Inner Chamber through rim valve until *desired tire operating pressure is reached*. (See car manufacturer's instructions for recommended tire operating pressure.)

**NOTE:** *The Inner Chamber, or inner compartment, must be inflated FIRST in all cases to prevent collapse of Inner Chamber.*

Next, start to inflate outer compartment through sidewall valve using previously applied inflating needle (Fig. 12).

**NOTE:** When inflating outer compartment, tilt threaded end of inflating needle toward rim if necessary in order to clear the Inner Chamber.



Fig. 9



Fig. 10

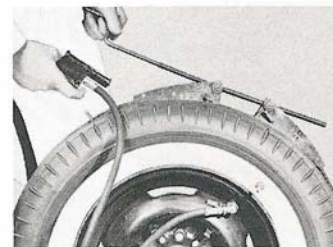


Fig. 11



Fig. 12

## MOUNTING PROCEDURE

Continue inflating outer compartment slowly, checking pressure continuously until beads seat or until 40 pounds pressure is reached.

**Caution:** Because of the danger of breaking tire beads, do not use more than 40 lbs. inflation pressure for seating the tire beads against the rim flanges.

In case tire beads do not seat against the rim flange at 40 lbs. inflation pressure, deflate the tire, re-lubricate Inner Chamber and rim and re-adjust tire for better centering to remove any binding action that may have taken place. After beads are seated, adjust pressure in outer compartment as follows:

**NEW TIRES:** Set pressure at 5 LBS. OVER DESIRED TIRE OPERATING PRESSURE. (This additional pressure in outer compartment of New Twin-Air Chamber Tyres is required to compensate for pressure drop due to tire growth.)

**USED TIRES:** (Over 500 miles service) Set pressure at *desired tire operating pressure*.

**NOTE:** Above inflation procedure may result in a slightly higher pressure in Inner Chamber. This is a normal condition and no attempt should be made to equalize or bleed pressures.

When Inner Chambers are properly mounted and seated on

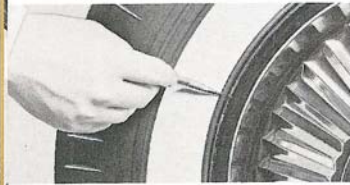


Fig. 13

the rim, the small beaded edges or "visible mounting guides" on the edges of the Inner Chamber will be visible and uniform around both sides of the tire at the top edge of the rim flanges (Fig. 13).

If these mounting guides are not visible and uniform around both sides of the tire, partially deflate tire and Inner Chamber, re-lubricate section causing trouble and

## MOUNTING PROCEDURE

pound tire sidewall with a mallet until mounting guides pop into place.

### TESTING FOR LEAKS:

Follow the procedure as outlined in shop service manual for tubeless tires.

**NOTE:** When tire is submerged in water or treated with soap and water solution, occasionally a small amount of air trapped between the Inner Chamber flanges and the tire beads will escape for a short period while the beads are seating against the rim flanges.

## PRESSURE ADJUSTMENT

### NEW TIRES:

It is recommended that pressure in both compartments of new Twin-Air Chamber Tyres be checked and reset to the desired operating pressure 400 to 500 miles after initial mounting so as to adjust for pressure drop due to tire growth. This adjustment should be made when tire is "cold."

### NORMAL SERVICE INFLATION PROCEDURE:

1. First, inflate inner compartment through rim valve to desired tire operating pressure (22 lbs. or more depending on car manufacturer's instructions and whether tires are hot or cold).
2. Lubricate inflating needle with lubricant contained in the padding inside the inflating needle case.
3. Work needle slowly into opening in sidewall valve.
4. Inflate outer compartment through sidewall valve to desired tire operating pressure. **NO FURTHER PRESSURE ADJUSTMENTS ARE REQUIRED, TIRE IS NOW READY TO OPERATE.**

### EXAMPLE:

If pressure is down to 20 lbs. and the desired tire operating pressure is 24 lbs., first inflate the inner compartment through rim valve to 24 lbs., then inflate the outer compartment through sidewall valve to 24 lbs.



## DE-MOUNTING PROCEDURE

**AIR REMOVAL:** Remove the valve core from the rim valve to release air from Inner Chamber or inner compartment. Deflation of the outer compartment will not be required for demounting after the Inner Chamber has been deflated, as only a few pounds of air pressure will remain in outer compartment.

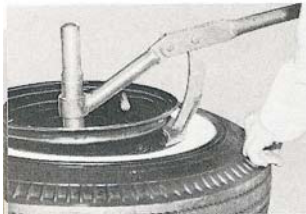


Fig. 14

1. After unseating tire beads, loosen Inner Chamber from top tire bead, then tuck flange of Inner Chamber under tire bead by hand.
2. Apply soap solution to rim flange and tire bead, then pry top tire bead over rim flange in normal manner using either tire irons or tire changing machine.



Fig. 15

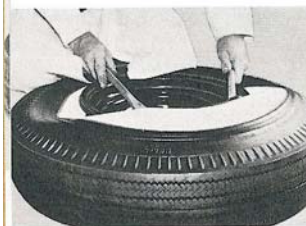


Fig. 16

**BEAD UNSEATING:** Use standard bead unseating tools (do not use hammer or tire irons) to loosen the tire beads from the bead seats (Fig. 14).

**REMOVAL FROM WHEEL: PREFERRED METHOD** (Can be used on all types of wheels)

3. Loosen Inner Chamber from bottom bead, then pull entire Inner Chamber out from between tire and rim (Fig. 15).
4. Remove bottom bead in normal manner.

**ALTERNATE METHOD** (Can be used on most 15" wheels and some 14" wheels)

Apply soap solution. Remove tire and Inner Chamber from the rim as a unit with tire irons (Fig. 16). When using a tire changing machine, use care to avoid damaging the Inner Chamber or tire beads.

## REPAIRING AND REPLACEMENT

### REPAIRING:

If Twin-Air Chamber Tyres are punctured by objects (nails, etc.) of considerable length, continued operation with the puncturing object remaining in the tire may result in puncture or damage to the Inner Chamber.

It is recommended that Twin-Air Chamber Tyres (or any other tires) be inspected periodically and any puncturing objects or foreign material removed (a good time to have tires inspected is when car is being lubricated). Injuries should be repaired using the same repair procedures as for standard tubeless tires.

When making inside repairs to tire, the Anti-Friction treatment (the special lubricant on the tire) should be removed, first with a scraper and then with rubber solvent before proceeding with buffing operation.

**NOTE:** When using the Plug method of repair, both compartments should be deflated to avoid damage to the Inner Chamber by inserting tool.

In case of sidewall valve damage, replace with new valve.

If a long puncturing object is removed from tire, the Inner Chamber should be inspected for possible damage which would require repair in order to restore complete protection.

If an outside repair is made, the Inner Chamber may be tested by inflating inner compartment to a higher pressure than outer compartment. If pressure differential holds, Inner Chamber is undamaged, but if pressures equalize after a short time, tire should be demounted to check for possible damage to the Inner Chamber.

Damaged Inner Chambers with  $\frac{1}{2}$ " or smaller injuries may be repaired by the following procedure:

1. Wash all dirt and foreign material off area around puncture with rubber solvent.
2. Trim the ragged edges of the injury so that all corners have a rounded shape.
3. Buff lightly with hand wire brush or medium grit emery cloth and wash again with rubber solvent, 3 inches

## REPAIRING AND REPLACEMENT

in all directions, from the edges of the injury on both inside and outside surfaces of the Inner Chamber.

4. Apply one coat of Quick Cure Vulcanizing Cement 3 inches in all directions from the edges of the injury on the inside surface of the Inner Chamber and 2 inches from the edges of the injury on the outside surface.
5. Permit cement to dry 15 to 20 minutes, then apply a Nylon Repair Patch to the inside surface and stitch tightly to the Inner Chamber.
6. Fill in cavity with one layer of 1/16" gauge Quick Cure Tube Repair Gum.
7. Apply a patch of 1/16" gauge Quick Cure Tube Repair Gum to the outside surface of the Inner Chamber. Cut gum to extend 1/2 inch in all directions from the edges of the injury and stitch tightly to the Inner Chamber.

Vulcanizing procedures are similar to those for curing inner tubes. Clamp repaired Inner Chamber onto holland-covered hot plate and cure 30 minutes at 307 degrees F. (60 lbs. steam), with inside of the Inner Chamber against the hot plate.

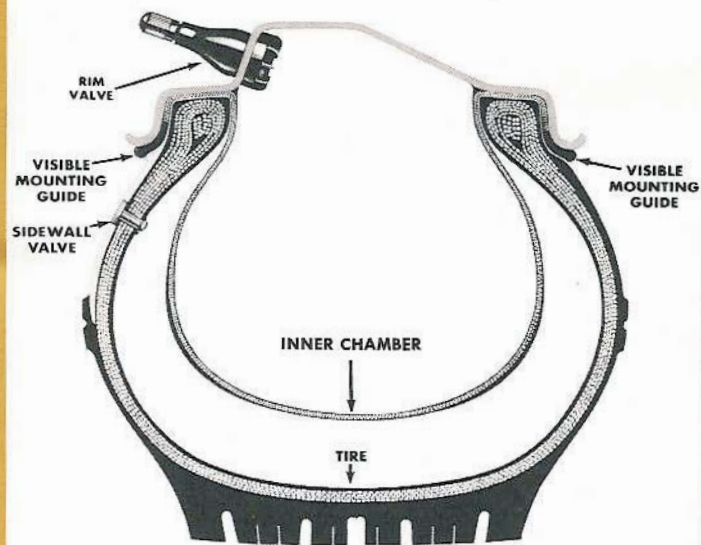
### REPLACEMENT:

When Inner Chambers are removed for tire recapping, etc., inspect the bead channels and flange surface for chafing or excessive wear. If no fabric chafing is apparent, Inner Chamber may be reapplied for further use; otherwise, they should be removed from service and replaced with new ones.

### OPERATION IN CASE OF A FLAT:

In the event of an injury such as a cut, blow-out or puncture causing loss of air in the outer compartment, the flat tire will be evident to the driver both through noise (tire will rumble or flutter especially on turns) and through feel in the steering and the handling of the car.

In such cases, drivers should slow down (to under 50 MPH) and then continue on to a convenient service station for repair.



**VOGUE**  
**TWIN-AIR**  
**CHAMBER**  
**SAFETY TYRE**



**VOGUE RUBBER COMPANY**  
CHICAGO, ILL.

VTAC-58

Litho in U.S.A.

