

# POWER BRAKE UNIT FUNCTION

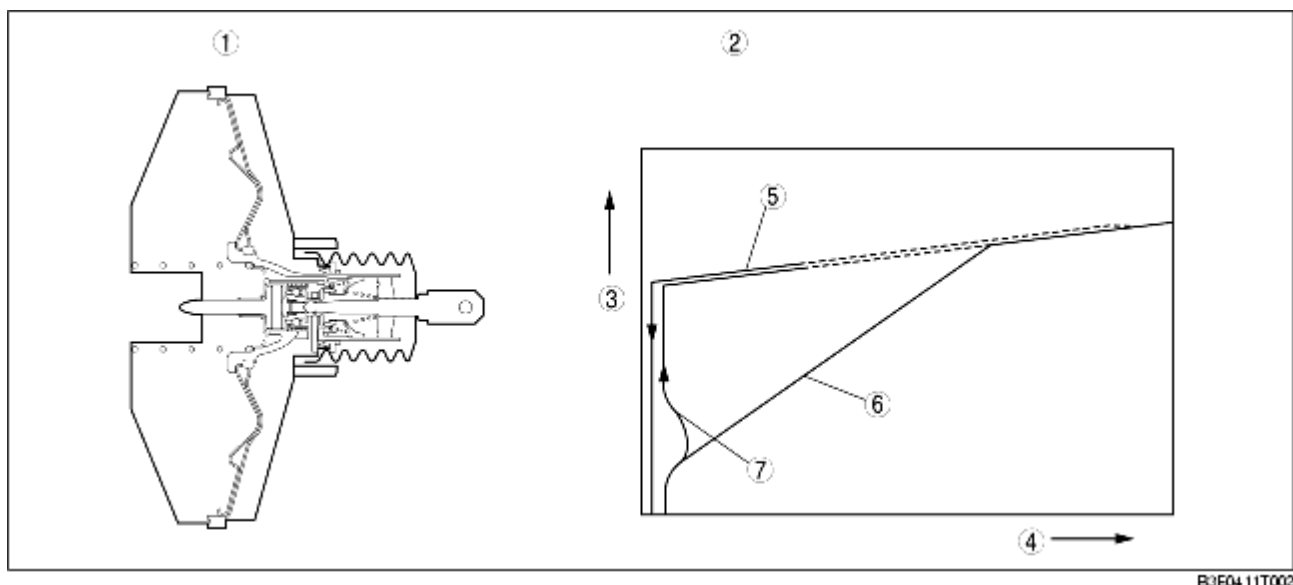
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## Function

- A 10-inch, single diaphragm type power brake unit has been adopted for all models, achieving compatibility between high braking performance and excellent brake feeling.
- With the adoption of a brake assist function for ABS and DSC equipped vehicles, brake system (including ABS during emergency braking) effectiveness has been further improved.
  - The brake assist function operates by aiding braking operation during emergency braking or other times when a high amount of brake power is required.
  - Inexperienced drivers or drivers who panic during emergency braking may apply the brakes quickly but without sufficient force, or they may apply sufficient force but cannot maintain it for a continuous period. In these cases, the normal vehicle braking performance cannot exert sufficient force.
  - The brake assist function determines, based on brake pedal depression speed and force, if emergency braking is occurring. If it occurs, the power brake unit applies maximum braking power.
- The structure of the brake assist function, built into the power brake unit, is simple and mechanical, to ensure a high level of reliability.

## Note

- When the brake pedal is depressed, the following effects may be felt. These are normal effects of the brake assist operation and do not indicate an abnormality.
  - When the brake pedal is depressed strongly or depressed at higher speeds, the pedal will feel softer but the brakes will be applied strongly.
  - When the brake pedal is depressed strongly or depressed at higher speeds, a clicking noise from the brake booster may be heard.
- The brake assist equipment does not supersede the functionality of the main braking system.



1	Cross-sectional view
2	Output characteristics

3	Output
4	Input
5	During brake assist operation
6	During normal braking
7	Operation characteristic (change according to pedal force)