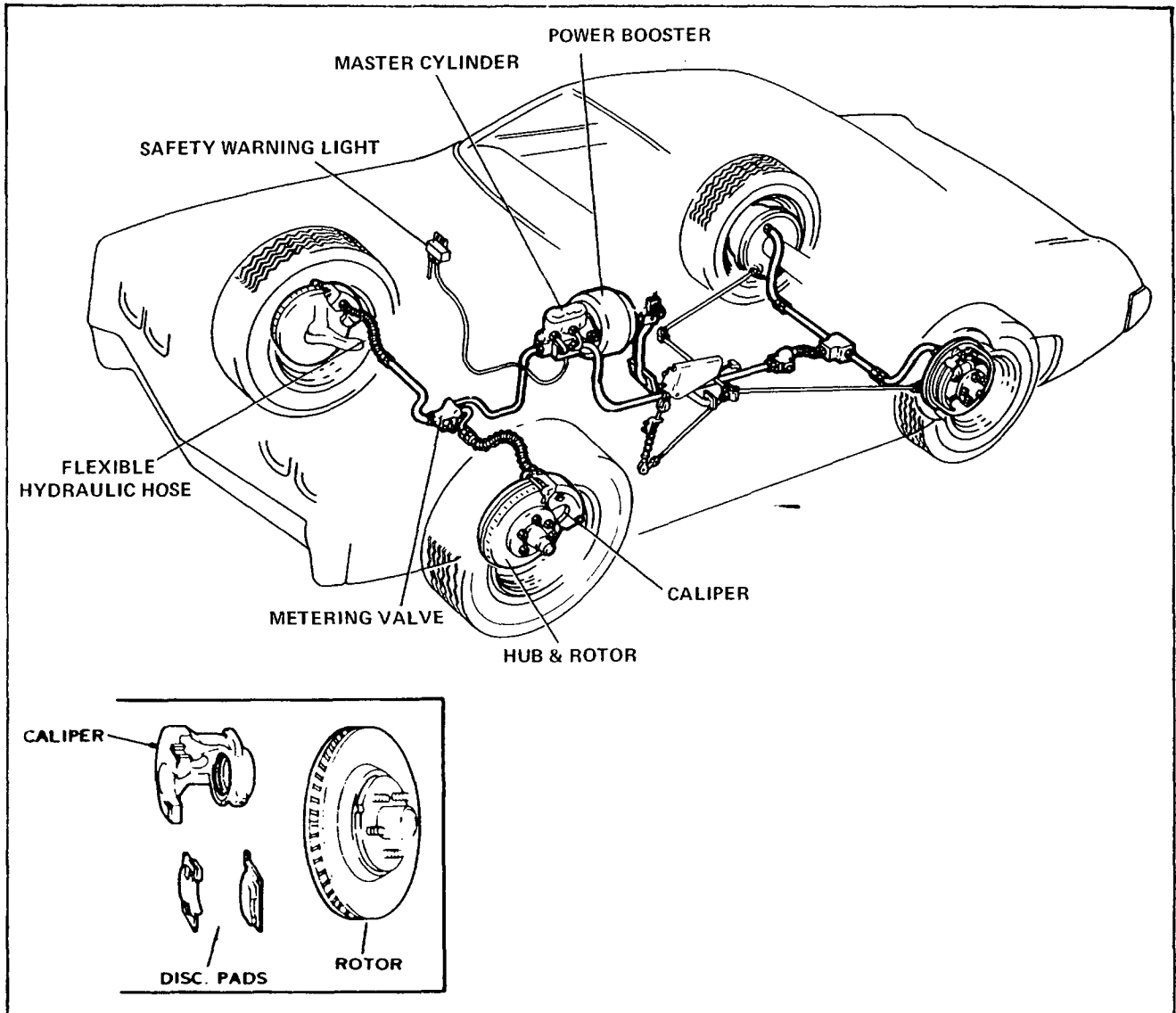


BRAKE SYSTEM

DISC BRAKES

Disc Brake Assembly



Background History

The first patent design for a disc brake was back in 1902, although the first American car so equipped was the 1949 Crosley Hotshot. Since the early units were never improved from an engineering standpoint, vehicle applications ceased. In late 1962 a Dunlop Bendix disc brake was standard equipment on the Studebaker Avanti, and in 1963 was made optional throughout the Studebaker line. American Motors introduced disc brakes on their Ambassador and Classic models in 1965. General Motors offered disc brakes as standard equipment on the 1965 Corvette. In the same year, Ford made them standard on the Thunderbird and Lincoln, as well as an option for the Mustang. To illustrate the growth of the disc brake market, all popular models now offer disc brakes as standard or optional equipment.

On American made cars disc brakes are usually front wheel applications, with conventional drums on the rear. (Exceptions are the Corvette and one model of the Camaro, which have disc brakes on all four wheels).

Advantages

Since most of the surface of the disc rotor is exposed to the air, disc brakes can cool much faster than drum brakes, preventing fade. Disc brakes are not affected by water and moisture. The higher operating temperature of the disc dries the surface almost immediately. Dust and dirt are wiped off by the brake pads which lightly contact the disc at all times. Since the brake pads directly oppose each other on the rotor faces, great pressure can be applied without distorting the rotor. Disc brakes require no adjustment and the pads are easy to replace.