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(54) EXHAUST GAS PURIFICATION SYSTEM FOR INTERNAL COMBUSTION ENGINE

An exhaust purification system of an internal combustion engine is provided with an exhaust purification catalyst which removes NO_x and a post treatment device. The exhaust purification catalyst has the property of reducing NOx if making the concentration of hydrocarbons vibrate by within a predetermined range of amplitude and within a predetermined range of period and furthermore has the function of oxidizing hydrocarbons. The exhaust purification system feeds hydrocarbons to the exhaust purification catalyst and raises the temperature of the post treatment device as temperature elevation control. The exhaust purification catalyst has a high purification rate range where the NO_x purification rate becomes higher than a predetermined rate. In the temperature elevation control, the total feed amount of hydrocarbons is set and the feed period of hydrocarbons is set in the high purification rate range in a region at the end at the short side of feed period of hydrocarbons.

