

ABSTRACT

INTERNAL COMBUSTION ENGINE AND CONTROL METHOD FOR INTERNAL COMBUSTION ENGINE

At a time of an abnormality diagnosis for a NOx storage reduction catalyst (6), a predetermined fuel addition process is started when the temperature of the NOx storage reduction catalyst (6) is lower than a predetermined temperature and a NOx storage amount in the NOx storage reduction catalyst (6) is equal to or more than a predetermined storage amount. Then, the abnormality diagnosis for the NOx storage reduction catalyst (6) is performed based on a comparison between an integrated value of a NOx outflow amount after the predetermined fuel addition process is started and before the temperature of the NOx storage reduction catalyst (6) reaches the predetermined temperature and an integrated value of the NOx outflow amount after the temperature of the NOx storage reduction catalyst (6) reaches the predetermined temperature during the execution of the predetermined fuel addition process.

Selected drawing: FIG. 6