WHAT IS CLAIMED IS:

[Claim 1] ~~(amended)~~ A wire bonding device for bonding a wire to a target, the wire bonding device comprising:

a prediction part which acquires time-series data of a diagnosis result regarding an operation of the wire bonding device, calculates a function that approximates a transition of a change from the diagnosis result in an initial state, and predicts the transition of the change from the diagnosis result in the initial state; and

a setting part which sets a time point at which the prediction part predicts that an amount of change from the diagnosis result in the initial state reaches a first threshold value as a time point for performing maintenance of the wire bonding device.

[Claim 2] ~~(amended)~~ The wire bonding device according to claim 1, wherein the diagnosis result comprises a plurality of maintenance items,

the prediction part acquires the time-series data of the diagnosis result regarding the operation of the wire bonding device for the plurality of maintenance items, and

the setting part sets a time point at which the prediction part predicts that an amount of change from the diagnosis result in the initial state for the plurality of maintenance items reaches the first threshold value as the time point for performing the maintenance of the wire bonding device for each of the plurality of maintenance items.

[Claim 3] The wire bonding device according to claim 1 or 2, wherein the time-series data of the diagnosis result comprises time-series data acquired after a previous maintenance of the wire bonding device.

[Claim 4] The wire bonding device according to any one of claims 1 to 3, wherein the first threshold value is set based on the diagnosis result of the wire bonding device

immediately after the previous maintenance is performed.

[Claim 5] The wire bonding device according to any one of claims 1 to 4, wherein the first threshold value is less than a second threshold value, which is a threshold value of the diagnosis result when the operation of the wire bonding device is stopped.

[Claim 6] The wire bonding device according to any one of claims 1 to 5, further comprising an operation reception part for receiving a predetermined operation,

wherein at the time point at which the prediction part predicts that the amount of change from the diagnosis result in the initial state reaches the first threshold value, the setting part switches between performing an error stop of the wire bonding device or notifying information regarding the maintenance of the wire bonding device based on whether the predetermined operation is received through the operation reception part.

[Claim 7] The wire bonding device according to claim 2, further comprising a display part which displays a maintenance time point set for each of the plurality of maintenance items as a scheduled maintenance date.

[Claim ~~7~~8] ~~(amended)~~ A maintenance method for notifying information regarding maintenance of a wire bonding device, the maintenance method comprising:

a step of acquiring time-series data of a diagnosis result regarding an operation of the wire bonding device, calculating a function that approximates a transition of a change from the diagnosis result in an initial state, and predicting the –transition of the change from the diagnosis result in the initial state; and

a step of setting a time point at which it is predicted that an amount of change from the diagnosis result in the initial state reaches a first threshold value as a time point for performing the maintenance of the wire bonding device.

[Claim ~~8~~9] The maintenance method according to claim ~~7~~8, further comprising a step of notifying the set time point for performing the maintenance of the wire bonding

device.

[Claim ~~9~~10] ~~(amended)~~ A program for causing one or a plurality of computers to perform:

a process of acquiring time-series data of a diagnosis result regarding an operation of a wire bonding device, calculating a function that approximates a transition of a change from the diagnosis result in an initial state, and predicting the transition of the change from the diagnosis result in the initial state; and

a process of setting a time point at which it is predicted that an amount of change from the diagnosis result in the initial state reaches a first threshold value as a time point for performing maintenance of the wire bonding device.

~~[Claim 10](new) The wire bonding device according to claim 2, further comprising a display part which displays a maintenance time point set for each of the plurality of maintenance items as a scheduled maintenance date.~~