BACK PRESSURE SAFETY STOP

The function of this mechanism (shown in Figure 1) is to shut down the turbine by closing the throttle valve if, for any reason, the turbine exhaust pressure should rise above a certain predetermined value.

The diaphragm "4" is clamped between the discs "3" and "5" at the center and between the safety stop body "1" and cover "6" at the outer edge. The chamber below this diaphragm is connected to the turbine exhaust as shown. The motion of this diaphragm is transmitted to the overspeed trip lever through a series of rods and levers as shown. If the exhaust pressure becomes great enough to overcome the compression of the spring "10" the rod "11" is raised by the action of stem "2" against lever "8" causing the rod end "14" to strike the overspeed trip lever, thereby closing the throttle valve and shutting down the turbine.

The pressure at which the back pressure safety stop operates is determined by the compression of the spring "10". The desired spring compression can be readily obtained by adjusting the nuts "13".

The following list has been compiled to facilitate ordering spare or renewal parts by item number and name together with the serial number of the turbine:

Item No.	Name
1	Back Pressure Safety Stop Body
2	Pin
3	Back Pressure Safety Stop Diaphragm Disc (Lower)
4	Back Pressure Safety Stop Diaphragm
5	Back Pressure Safety Stop Diaphragm Disc (Upper)
6	Back Pressure Safety Stop Body Cover
7	Fulcrum Pin
8	Back Pressure Safety Stop Lever
9	Back Pressure Safety Stop Trip Rod End
10	Back Pressure Safety Stop Spring
11	Back Pressure Safety Stop Trip Rod
12	Spring Seat
13	Locknut
14	Trip Rod End

Back Pressure Safety Stop

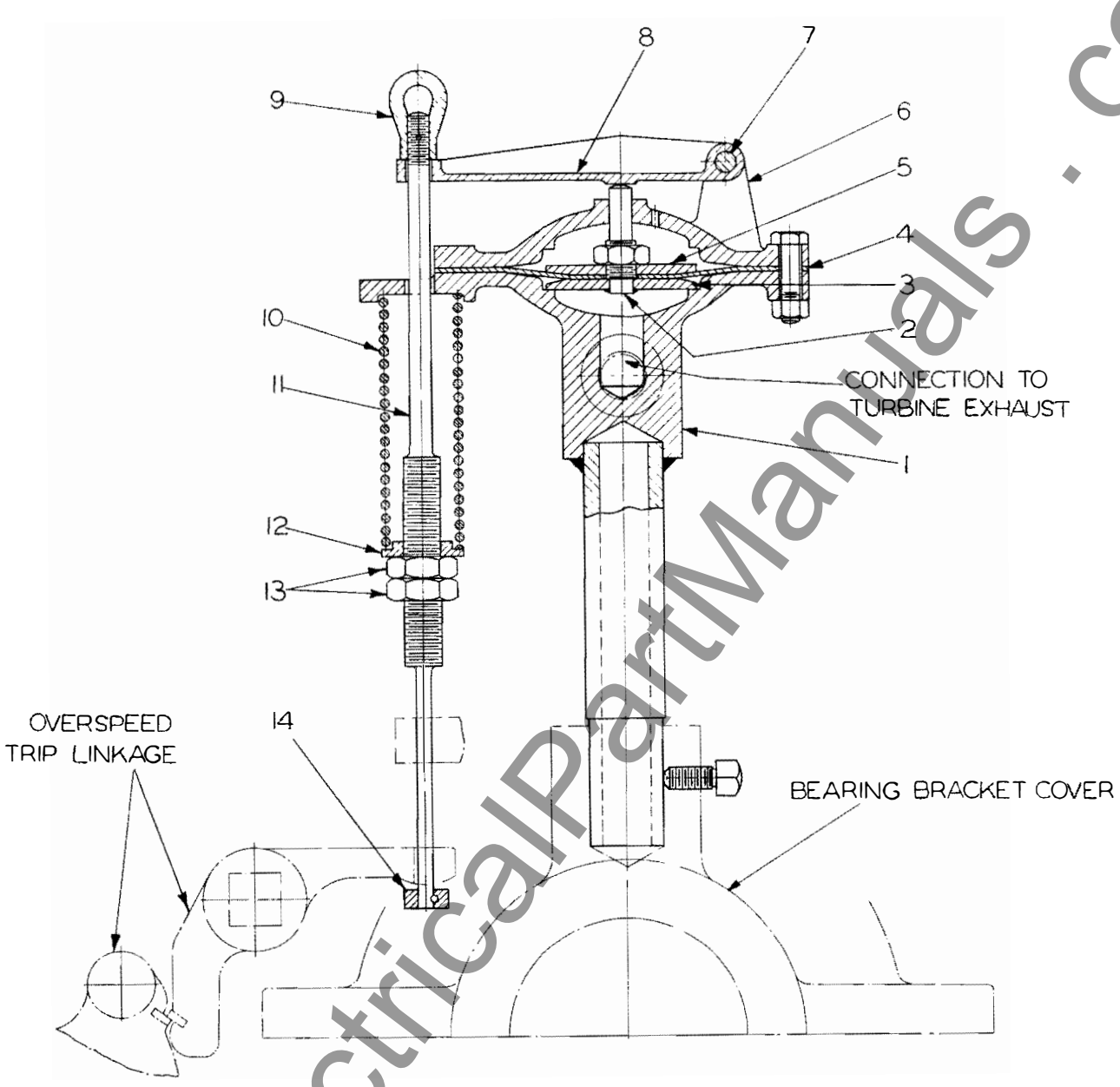

Figure 1

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