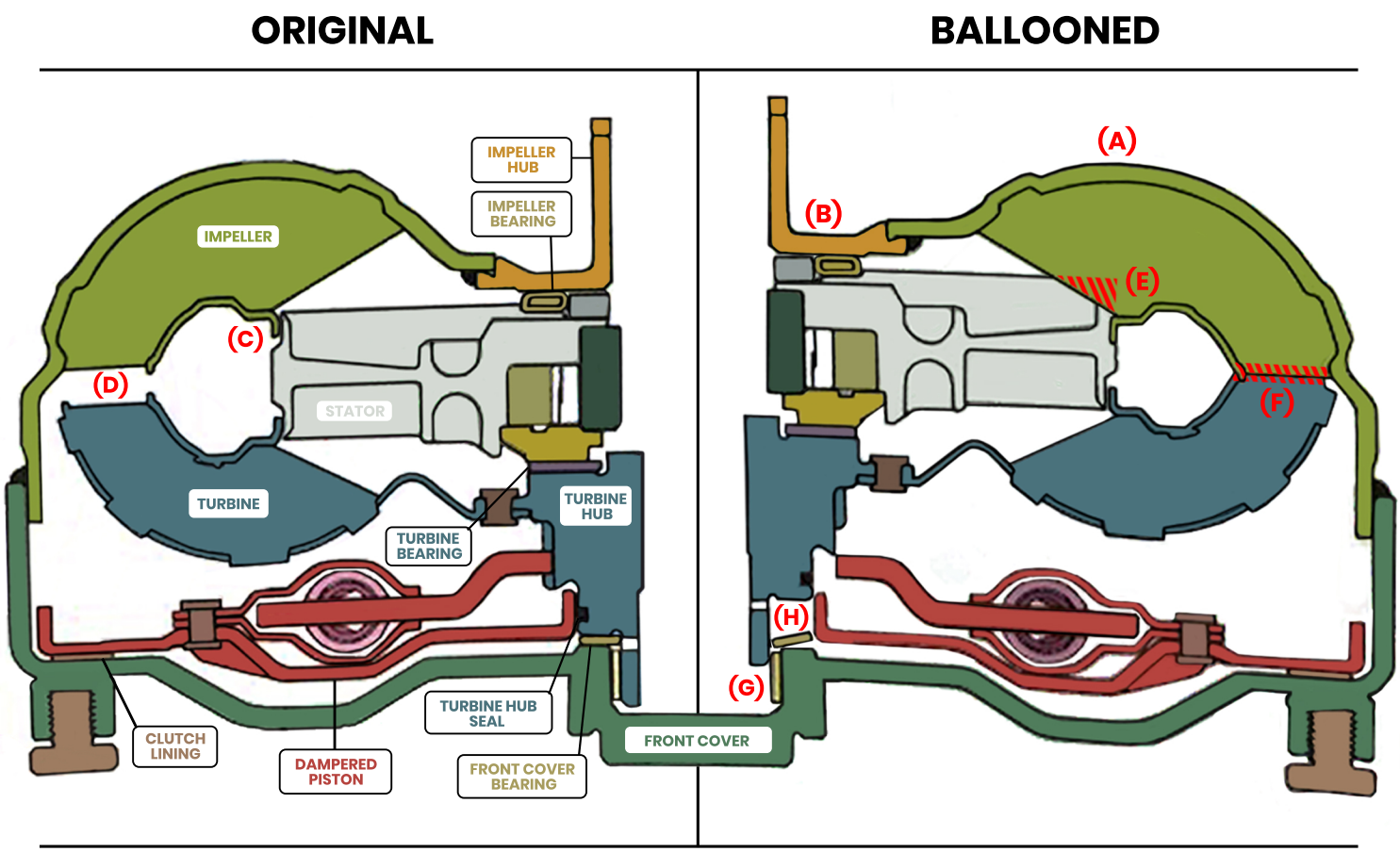
TORQUE CONVERTER BALLOONING BASICS

The pressure inside a lockup torque converter is controlled by valve systems that are located outside the torque converter. Torque converter ballooning is not caused by the converter itself.



One way to check if a converter is ballooned would be to measure the total height of the assembled converter. Each type of converter should be a specific height. You can see in the above diagram that the converter has a taller height after ballooning.

You can also see that the height from the crest of the **impeller** **(A)** to the bottom surface of the **impeller hub** **(B)** decreases when the converter is ballooned.

The original converter has clearance between both the **impeller** and the **stator** **(C)** , and also between the **impeller** and **turbine** **(D)**.

The ballooned converter has sustained catastrophic damage. This happens when the **impeller**, **stator** **(E)**, and **turbine** **(F)** make contact with each other. This damage occurs because these three components are all rotating at different speeds.

In the ballooned scenario above, the **turbine hub** has moved away from the **dampered piston** and **front cover**, and has created excessive clearance between itself and the **front cover** **(G)** . This can dislodge the **front cover bearing** **(H)** , which may be able to be seen when looking into the converter.

In an alternate ballooned scenario, not pictured, the **turbine hub** does not move away from the **front cover**. Rather, the **stator** moves away from the **impeller**, creating excessive clearance between itself and the **impeller**. This can dislodge the **impeller bearing**, which may be able to be seen when looking into the converter.