What's the difference betwen Twin Tube (GS), IMS and MRR 3-Way Adjustable Shocks

Twin-Tube Shocks (Gas Shocks):

Twin-tube shocks, also known as gas shocks, feature a separate inner and outer cylinder. The inner cylinder holds most of the oil and is where the piston moves up and down, while the outer cylinder contains low-pressure nitrogen gas and some oil. The nitrogen gas helps prevent aeration of the oil, which can degrade shock performance. However, one drawback of twin-tube shocks is that they have a smaller piston compared to monotube shocks, which limits their ability to provide consistent damping and can lead to quicker shock fade under heavy use.

Monotube Shocks (IMS Shocks):

Monotube shocks, such as IMS shocks, have a single tube construction and feature an internal floating piston that separates the oil and nitrogen gas chambers. In a monotube shock, the oil chamber holds all the shock oil, while the second chamber, separated by the floating piston, holds the high-pressure nitrogen gas. This setup allows for more efficient heat dissipation and improved damping during rapid compression. The larger piston diameter and increased surface area of monotube shocks provide better damping performance compared to twin-tube shocks, and the additional oil volume helps with cooling.

MRR 3-Way Adjustable Shocks:

MRR 3-way adjustable shocks are also monotube in design, but they come with a remote reservoir for improved oil cooling and increased oil volume. These shocks offer three adjustable settings: High-speed compression, Low-speed compression, and Rebound, giving you the ability to fine-tune the shock performance for specific driving conditions. The remote reservoir houses the internal floating piston, which separates the oil from the high-pressure nitrogen gas, further enhancing performance and heat dissipation. With the added adjustability and cooling benefits, MRR shocks allow for precise control of damping characteristics, making them ideal for varying off-road conditions and providing the ultimate in suspension performance.