

Product Bulletin August 2021

# 100% Testing Delivered 100% of the Time

Plews & Edelmann is delivering on a promise to produce the highest quality power steering system components to the aftermarket. But it isn't good enough for us to just say we are going to, we want to show it. As a result, we are being fully transparent with our line of NEW Racks, Pumps, and Gears by including a 100% test report in the packaging of every part, every single time. To see exactly what we test and what we show on our test reports, check out our video link below as we dive into the specifics of each part type.



https://youtu.be/e9MULc9JICc

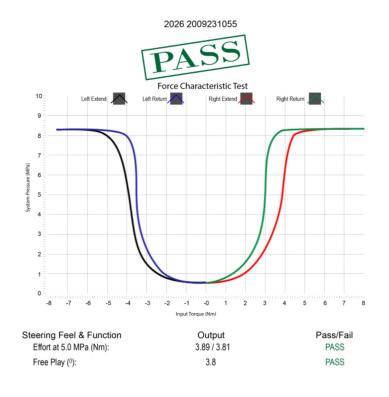


#### DESIGNATED NUMERIC ASSET (D.N.A.)

Every part has a unique number etched onto the unit to identify the part and the corresponding test report. This number identifies the part number, the date the part was tested, the sequence it was tested in, and the unique test bench number that it was tested on. We aren't shy about sharing just how well our hard parts perform and how confident technicians and end-users can be that the part they are installing won't fail.

## TYPE SPECIFIC TESTING

### RACK TESTING



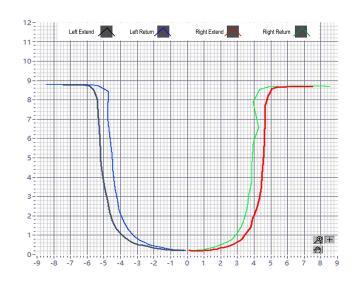
#### Visually Smooth

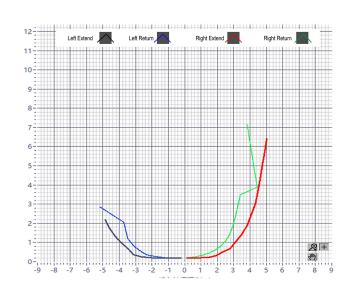
The smooth transition from left to right is critical in depicting the smooth steering feel experienced with this rack and pinion. As you can see from the graph on the left, as the unit moves through a turn to the right and left, there is a a smooth and consistent use of pressure from the steering system. This makes for a smooth and predictable steering experience.

### RACK COMPARISON

To provide a better visual understanding of the difference: In the above picture, the left graph is a real test report for one of our new racks. The graph on the right is the results from the same test but on a random remanufactured sample taken straight from actual inventory at a retail location. You can clearly see that the turning experience from the rack on the left would feel far superior to that of the rack on the right.

VS





# TYPE SPECIFIC TESTING PUMP TESTING

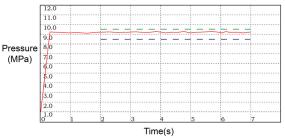
MAX - - -

MIN - - -

Power Steering Pump Performance Test Report with *DESIGNATED NUMERIC ASSET* ™

6038PX 200926103





@ 500 RPM(L/min)	4. 88	Pass
@ 3000 RPM(L/min)	10. 83	Pass
Pressure Relief Valve Test		
Max Pressure (MPa)	9. 23	Pass
Noise Test		
@ 1500 RPM(dB)	<82. 0	Pass

Pass

**Function Test** 

Post Test Leak Check

#### Min/Max

Since the pump is responsible for all the pressure being generated in the power steering system, it is important for that pressure to be delivered within a specific range all the time. Our pumps are tested at low and high RPM's to validate that the pump will continue to generate pressure in the expected ways at any speed. This is depicted visually by the graph to the right which is included on every pump test report.

## **GEAR TESTING**

## Consistent Steering Feel

This graph shows the correlation of input torque, or "turning the wheel", and the subsequent use of pressure in the system being generated by the pump. A nice smooth bell curve indicates a smooth and consistent feel while turning the steering wheel both entering and exiting a turn.

