# GIANT HOOKLESS TIRE TEST PROTOCOL



### WHAT TIRES CAN I USE?

Giant WheelSystems are built to be used as a system and Giant and CADEX tires are always the best choice. However, should you prefer to run a non-Giant or CADEX tire, here are the tires with an indicated maximum pressure above 72.5psi (5 bar) that have passed the Giant test protocol for use with Giant hookless rims:

BRAND AND MODEL	TIRE SIZE (700C)						
GIANT GAVIA COURSE 0 TUBELESS		25C	28C				
GIANT GAVIA COURSE 1 TUBELESS		25C	28C				
GIANT GAVIA FONDO 0 TUBELESS			28C		32C		
GIANT GAVIA FONDO 1 TUBELESS			28C		32C		
GIANT GAVIA RACE 0 TUBELESS		25C	28C				
GIANT GAVIA RACE 1 TUBELESS		25C	28C				
GIANT GAVIA AC 0 TUBELESS		25C	28C				
GIANT GAVIA AC 1 TUBELESS		25C	28C				
CADEX RACE TUBELESS	23C	25C	28C				
SCHWALBE PRO ONE		25C	28C	30C			
MAXXIS HIGH ROAD		25C	28C				
MAXXIS ALL TERRANE						33C	
MAXXIS VELOCITA AR							40C

### WHAT TIRES SHOULD I NOT USE?

The following tires have failed the Giant test protocol and currently do not function properly with Giant hookless WheelSystems:

BRAND AND MODEL	TIRE SIZE (700C)		
VITTORIA RUBINO PRO TLR		25C	
VITTORIA CORSA TLR		25C	
CONTINENTAL GP5000 TL		25C	
PIRELLI CINTURATO	24C		26C

For tires that have failed the Giant test protocol, we are working with the tire brands so updates can be made to make them ready for our hookless rims as soon as possible.

PLEASE BE AWARE THAT IF YOU CHOOSE TO USE A TIRE WITH AN INDICATED MAXIMUM PRESSURE ABOVE 72.5PSI (5 BAR) THAT IS NOT ON THE LIST OF TIRES THAT HAVE PASSED THE GIANT TEST PROTOCOL, YOU DO SO AT YOUR OWN RISK, AS THE TIRE MAY NOT FUNCTION PROPERLY WITH THE GIANT HOOKLESS WHEELSYSTEM.

If the maximum pressure indicated on the sidewall of the tire is below 72.5psi (5 bar) **and the tire is hookless rim compatible as per the tire manufacturer's recommendation,** the tire can be used with Giant hookless WheelSystems and does not have to appear on the "WHAT TIRES CAN I USE?" chart.

ALTHOUGH GIANT TIRES ARE DESIGNED FOR BEST USE WITH A GIANT HOOKLESS RIM, IT IS POSSIBLE TO USE A GIANT OR CADEX TIRE ON A HOOKED BEAD RIM.

If necessary, you may use an inner tube on a Giant hookless rim, so long as the tire you are using has passed the Giant test protocol. However, please note that Giant hookless rims are designed to perform best when set up as tubeless and used without an inner tube.

Please read on for a detailed explanation of the test protocol for tires on Giant hookless rims, as well as for more information on the test results of the individual tires themselves.

### THE GIANT TEST PROTOCOL

If the maximum pressure indicated on the sidewall of the tire is above 72.5psi (5 bar) and the tire is hookless rim compatible as per the tire manufacturer's recommendation, then the tire enters into the Giant test protocol. This will ensure it functions properly with Giant Hookless WheelSystems. If the tire passes the protocol it will be listed on the "WHAT TIRES CAN I USE?" chart.

The Giant test protocol consists of two tests:

### HIGH PRESSURE TOLERANCE TEST

First, the tire is inflated to 72.5 psi (5 bar), an average minimum pressure for most riders on 25c tires, and must withstand this pressure for 24 hours without blowing off. Next, the tire is inflated to its recommended maximum pressure and must withstand this pressure for 24 hours without blowing off. After that, the tire is inflated to 1.2 times the recommended maximum pressure and must withstand this pressure for 24 hours without blowing off. Finally, the tire is inflated to 1.5 times the recommended maximum pressure and must withstand this pressure for 24 hours without blowing off. The final number of 1.5 times the recommended maximum pressure is intended to simulate such extreme conditions as hitting a square edge or a pothole at high speed causing the tire pressure to increase suddenly. If the tire has been able to withstand the four pressures for 24 hours respectively without blowing off, it passes the Giant high pressure tolerance test.



FOR YOUR OWN SAFETY, PLEASE DO NOT INFLATE THE TIRE OVER THE RECOMMENDED MAXIMUM PRESSURE OR ATTEMPT TO REPLICATE THIS TEST.

### **HIGH PRESSURE BRAKING TEST**

The tire is inflated to 1.2 times the recommended maximum pressure, mounted on a disc brake wheel and must withstand braking forces without blowing off or experiencing a shift in position of more than 3mm. This test is used to simulate accidental high-speed uncontrolled braking causing excessive friction between road and tire and possible movement of the tire on the rim resulting in blow-off.



FOR YOUR OWN SAFETY, PLEASE DO NOT INFLATE THE TIRE OVER THE RECOMMENDED MAXIMUM PRESSURE OR ATTEMPT TO REPLICATE THIS TEST.

NOTE: If the maximum pressure indicated on the sidewall of the tire is below 72.5psi (5 bar) and the tire is hookless rim compatible as per the tire manufacturer's recommendation, the tire can be used with Giant hookless WheelSystems and does not have to appear on the "WHAT TIRES CAN I USE?" chart.

### GIANT & CADEX TIRES TEST RESULTS

Please consult the table below for the test results of Giant and CADEX tires on Giant hookless rims:

BRAND AND MODEL TIRE SIZE (700C)		HIGH PRESSURE BRAKING TEST	HIGH PRESSURE TOLERANCE TEST				
			72.5 PSI (5 BAR)*	MAX PRESSURE X 1.0**	MAX PRESSURE X 1.2***	MAX PRESSURE X1.5****	
GIANT GAVIA COURSE 0 TUBELESS	25C 28C	PASS	PASS	PASS	PASS	PASS	
GIANT GAVIA COURSE 1 TUBELESS	25C 28C	PASS	PASS	PASS	PASS	PASS	
GIANT GAVIA FONDO 0 TUBELESS	28C 32C	PASS	PASS	PASS	PASS	PASS	
GIANT GAVIA FONDO 1 TUBELESS	28C 32C	PASS	PASS	PASS	PASS	PASS	
GIANT GAVIA RACE 0 TUBELESS	25C 28C	PASS	PASS	PASS	PASS	PASS	
GIANT GAVIA RACE 1 TUBELESS	25C 28C	PASS	PASS	PASS	PASS	PASS	
GIANT GAVIA AC 0 TUBELESS	25C 28C	PASS	PASS	PASS	PASS	PASS	
GIANT GAVIA AC 1 TUBELESS	25C 28C	PASS	PASS	PASS	PASS	PASS	
CADEX RACE TUBELESS	23C 25C 28C	PASS	PASS	PASS	PASS	PASS	



FOR YOUR OWN SAFETY, NEVER INFLATE TIRES OVER THE RECOMMENDED MAXIMUM PRESSURE OR ATTEMPT TO REPLICATE TESTS.

- \* The tire is inflated to 72.5psi (5 bar) and must stand for 24 hours without blowing off
- \*\* The tire is inflated to the recommended maximum pressure and must stand for 24 hours without blowing off
- \*\*\* The tire is inflated to 1.2 times the recommended maximum pressure and must stand for 24 hours without blowing off
- \*\*\*\* The tire is inflated to 1.5 times the recommended maximum pressure and must stand for 24 hours without blowing off

### OTHER BRAND TIRES TEST RESULTS

Although Giant components are designed to be used as a system and Giant and CADEX tires are the best choice for use with Giant wheels, other tire options are possible. Please consult the table below for other brand tires that passed the Giant test protocol for use with Giant hookless rims:

		HIGH	HIGH PRESSURE TOLERANCE TEST				
BRAND AND MODEL	TIRE SIZE (700C)	PRESSURE BRAKING TEST	72.5 PSI (5 BAR)*	MAX PRESSURE X 1.0**	MAX PRESSURE X 1.2***	MAX PRESSURE X1.5****	
SCHWALBE PRO ONE	25C 28C 30C	PASS	PASS	PASS	PASS	PASS	
MAXXIS HIGH ROAD	25C 28C	PASS	PASS	PASS	PASS	PASS	
MAXXIS ALL TERRANE	33C	PASS	PASS	PASS	PASS	PASS	
MAXXIS VELOCITA AR	40C	PASS	PASS	PASS	PASS	PASS	



FOR YOUR OWN SAFETY, NEVER INFLATE TIRES OVER THE RECOMMENDED MAXIMUM PRESSURE OR ATTEMPT TO REPLICATE TESTS.

All tests are performed on the samples received from the respective tire brands. Because tolerances among mass produced tires can vary, test results cannot 100% represent the results of all production tires. Test results only show the outcome of the Giant tests, they do not reflect the tire's performance or quality.

Production batch numbers of tested tire samples:

- Schwalbe Pro One 25c & 30c:
  - 611-RC38-8010105C05
- Schwalbe Pro One 28c:
  - 611-RC38-07059104C58
- Maxxis High Road:
  - 25C: 060206599-15218
  - 28C: 100202074-18218
- Maxxis All Terrane
  - 271299-623
- Maxxis Velocita AR
  - 041199801
- \* The tire is inflated to 72.5psi (5 bar) and must stand for 24 hours without blowing off
- \*\* The tire is inflated to the recommended maximum pressure and must stand for 24 hours without blowing off
- \*\*\* The tire is inflated to 1.2 times the recommended maximum pressure and must stand for 24 hours without blowing off
- \*\*\*\* The tire is inflated to 1.5 times the recommended maximum pressure and must stand for 24 hours without blowing off

## TEST RESULTS FOR TIRES THAT FAILED THE GIANT TEST PROTOCOL

The following tires did not pass the Giant test protocol and currently do not function properly with Giant hookless WheelSystems:

BRAND AND MODEL	TIRE SIZE (700C)	RESULT
VITTORIA RUBINO PRO TLR	25C	FAIL
VITTORIA CORSA TLR	25C	FAIL
CONTINENTAL GP5000 TL	25C	FAIL
PIRELLI CINTURATO	24C	FAIL
PIRELLI CINTURATO	26C	FAIL

- The tires in this table all failed one or more of the tests in the Giant test protocol.
- Giant is working with the brands of the tires listed in this table so that updates can be made to ensure future readiness for use with Giant hookless rims.

Production batch numbers of tested tire samples:

- Vittoria Rubino TLR:
  - 382908191-5925622
- Vittoria Corsa TLR:
  - 46080719-190619-5515
- Continental GP5000 TL:
  - Not Available
- Pirelli CINTURATO:
  - 24C: 1191NRM1-090519/104251
  - 26C: 1191/040208/014854/NRM1

