		
FEATURE "FACEOFF"	**Geodyna OPTIMA**	**GSP9700/9712**
Design Philosophy	**How can we make a start to finish determination about a tire and rim combination with extremely accurate, fully automatic, non intrusive, measurement devices, and limit the man machine interface.**	**How can we add lateral and radial measurement to a standard, high-end wheel balancer?**
Fully Automatic	OPTIMA is fully automatic: Close the hood.	GSP9712 combines automatic and manual entry. Many menu's and steps required to even begin the balance process.
NON Touch	Optical sensors measure all wheel parameters without touching the tire and the rim.	Force Roller and mechanical gauges must touch the tire and the rim flanges to measure data.
Wheel Clamping	Automatic clamping for even pressure to the wheel and centering system.	Manual hand nut (operator hand tighten).

FEATURE "FACEOFF"	Geodyna OPTIMA	GSP9700/9712
Operator Interface	The OPTIMA starts with automatic clamping (even force). All data inputs for width distance and diameter, wheel type (steel, aluminum, spoke), are done without operator input. Just close the hood.	The wheel balancer portion of the GSP 9712 mirrors a JBC System III unit. Manual hand nut, operator entry of the wheel parameters. TDC locations for weight placement, specialty modes for ALU, and Spoke functions, all manually activated by the technician.
Measurement Method	Lateral and radial decisions are also automatic as part of the single measurement cycle that determines weight imbalance and the optimum combination of tire and rim positioning. Weight placement location via laser pointer for aluminum and spoke limit operator error. Since OPTIMA does everything "non intrusive" variables in the spring rate of a tire are not a factor and we achieve maximum tire and rim compatibility without diagnosis of the tire composition that are not consistent with tire manufacturer's recognized methods.	The GSP 9712 is a wheel balancer with a force roller. The force roller applies pressure to the tire face to look at a differential in the tire during rotation. The difference depends on the tire construction and in part to the spring effect of the tire in a 360 degree rotation. The force roller is complimented by two mechanical data arms the technician touches to the rim flanges during a low speed tire rotation sequence. The data set arms have the dual purpose of inputting distance and width information and provide lateral rim runout data.
Data Inputs	Automatic data inputs: Tire width and diameter are automatically inputted.	Double data set arms (operator input), are required to input the width and diameter.
Wheel Recognition	Wheel type, steel, aluminum, spoke, is automatically determined	No recognition. Operator must manually input weight placement choice.
Measurement Cycle	Automatic, single spin two cycle method. High speed spin cycle for data entry, weight measurement, and spoke count, low speed spin cycle for radial and lateral tire and rim measurements.	Three spin method. Single spin for weight measurements only. Second low speed spin for total wheel runout using the roller. Third low speed spin required with manual gauges applied to the rim flanges to measure lateral and radial rim data input.

Change Weight Locations with the Touch of a Button	F2 Key function allows the technician to toggle the weight positions for optimum placement on the rim. Automatic re-calculation of the weight amounts, no re-spin required.	Technician must return to the setup menu, re set the weight placement mode and re-spin the tire to re-calculate the weight location. Not Automatic.
Measurement of lateral and radial rim runout	Fully automatic “non touch” measurements.	Second step combining automatic (wheel rotation), and manual data entry using the data set arms contacting the rim flange for lateral measurements
Automatic Spoke Count	Yes, during the spin cycle, automatic split weight behind the spoke function. Laser pointer for weight location.	Manual entry required during the input mode, manual gauge required for weight location.
Wheel Assembly Runout Measurement	Tire and wheel runout measurement is “non intrusive” using CCD optics and a laser pointer.	Tire and wheel runout measurement requires mechanical contact via a force roller.
Weight Placement Modes	Data set arm automatically locks the wheel and screen indicators precisely locate the weight position.	Mechanical gauge arm for inner and outer tape weight locations.
Technician Friendly	Close the hood and go	Difficult to use