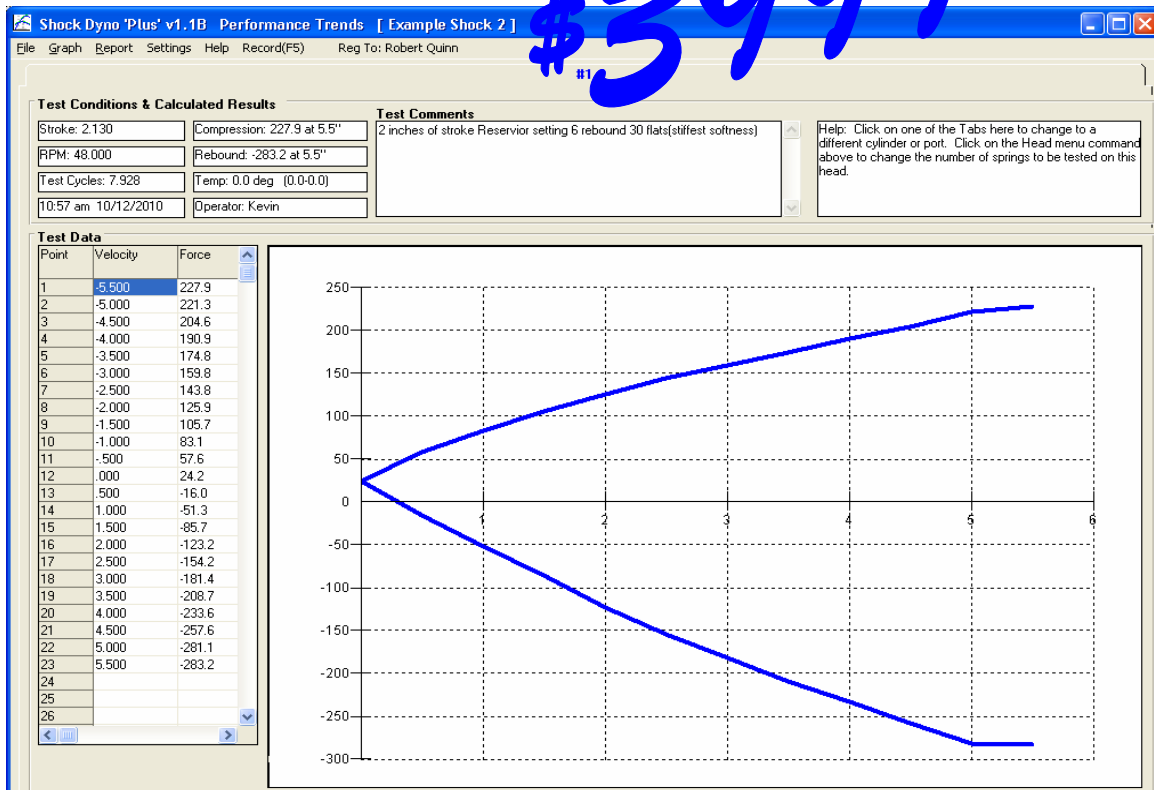# Shock Dyno

Starting at **$3999**

Shock Dyno

has been released for 2014:

- 1.5HP, 110 VAC motor (ideal for most trailers and generators), or an optional 2.0 HP 220 VAC motor.
- **Up to 3" stroke and 20"/second shock velocity.**
- **Measures forces to 1500 lbs.**
- Optional shock infra-red temperature sensor.
- USB computer interface
- Software compatible with Win XP, Vista, Windows 7, Windows 8.
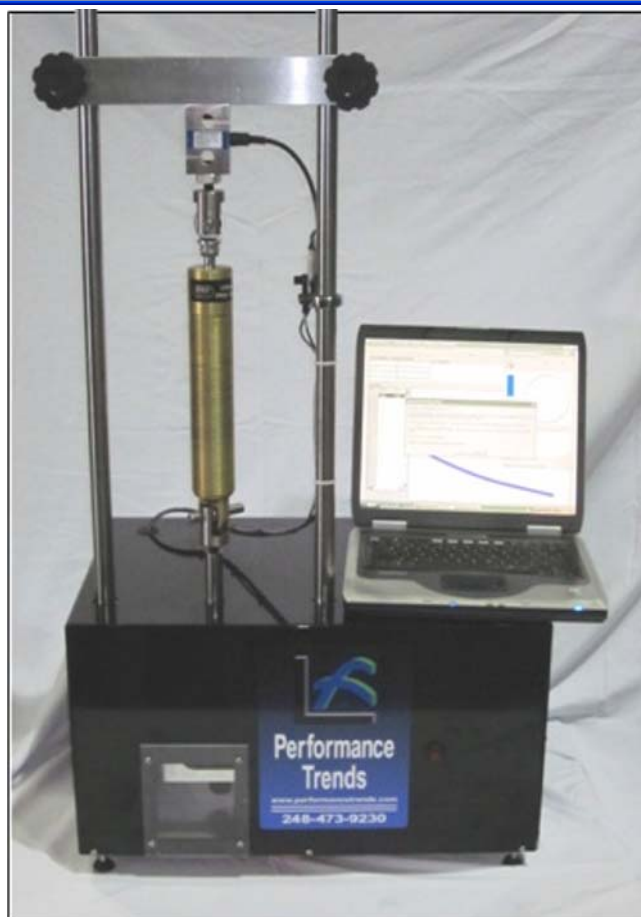
Visit our website for more info.

We've got through a lot of development on the durability of our scotch yoke design, to make sure it can handle the high rate shocks popular is some classes of circle track racing.

Plus Version

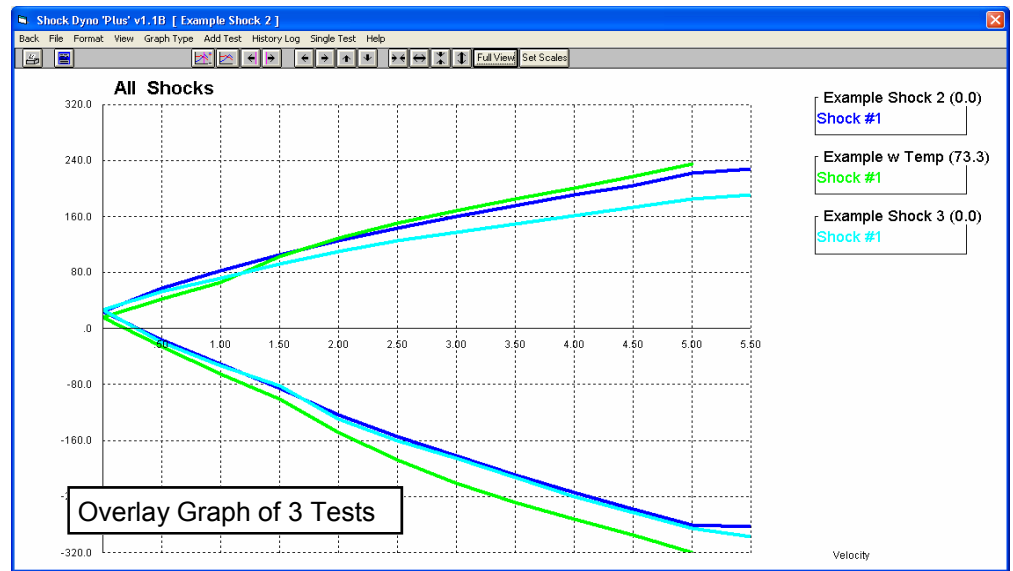The Plus Version of the software offers additional features, including:

- Will read shock body temperature.
- Will cycle shock until up to a user specified temperature when testing will then start.
- Advanced graph

The picture below shows that the weakest link in our dyno design is the shock itself, not the dyno!

Shock Dyno 'Plus' v1.1B Performance Trends [Example Shock 2]

File Graph Report Settings Help Record(F5)   Reg To: Robert Quinn

Test Conditions & Calculated Results

Stroke: 2.130	Compression: 227.9 at 5.5"
RPM: 48.000	Rebound: -283.2 at 5.5"
Test Cycles: 7.928	Temp: 0.0 deg (0.0-0.0)
10:57 am 10/12/2010	Operator: Kevin

Test Comments

2 inches of stroke Reservior setting 6 rebound 30 flats(stiffest softness)

Help: Click on one of the Tabs here to change to a different cylinder or port. Click on the Head menu command above to change the number of springs to be tested on this head.

Test Data

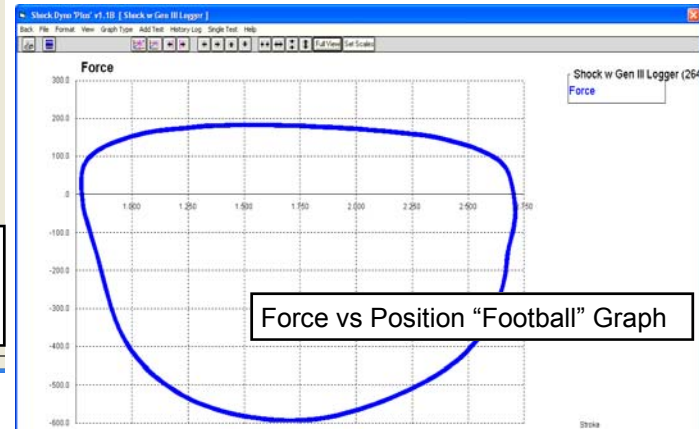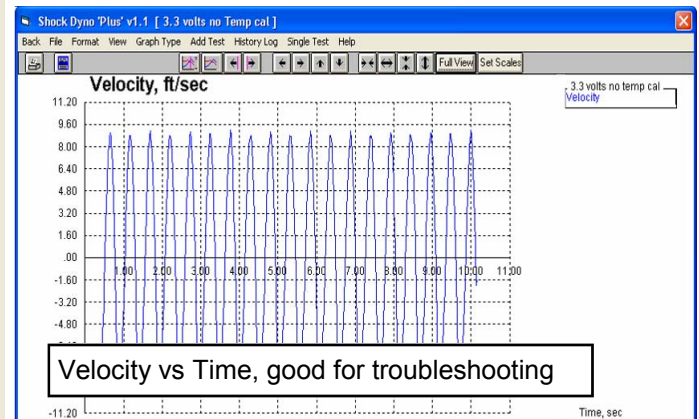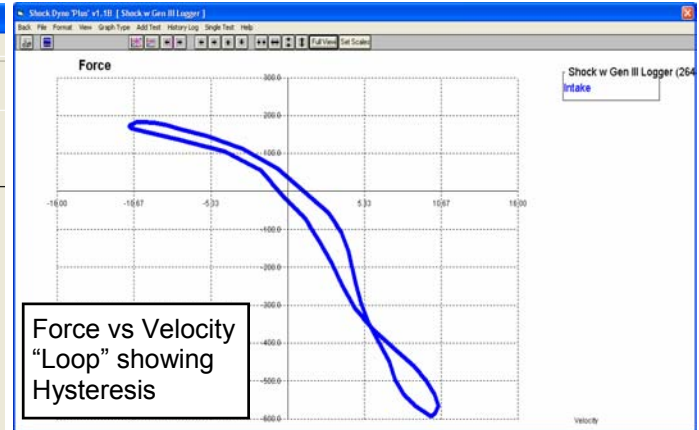| Point	Velocity	Force
1	-5.500	227.9
2	-5.000	221.3
3	-4.500	204.6
4	-4.000	190.9
5	-3.500	174.8
6	-3.000	159.8
7	-2.500	143.8
8	-2.000	125.9
9	-1.500	105.7
10	-1.000	83.1
11	-.500	57.6
12	.000	24.2
13	.500	-16.0
14	1.000	-51.3
15	1.500	-85.7
16	2.000	-123.2
17	2.500	-154.2
18	3.000	-181.4
19	3.500	-208.7
20	4.000	-233.6
21	4.500	-257.6
22	5.000	-281.1
23	5.500	-283.2
24		
25		
26		

features, including:
- Force vs Time
- Stroke vs Time
- Velocity vs Time
- Force vs Stroke
- Force vs Velocity Loop
- Allow for reversing the motor via computer interface.
- Real time graphing of the current force and position over the previously recorded run.
- More report types, including "Comparison Reports with Difference" as shown below.

Overlay Graph of 3 Tests

Force vs Velocity "Loop" showing Hysteresis

Velocity vs Time, good for troubleshooting

Force vs Position "Football" Graph

Velocity	Example Shock 2 Force	Shock w Gen III Logger Force	Dif.
-10.5		171.62	
-10.0		169.84	
-9.5		166.95	
-9.0		163.51	
-8.5		159.61	
-8.0		154.99	
-7.5		150.01	
-7.0		144.98	
-6.5		139.97	
-6.0		134.95	
-5.5	227.94	129.76	-98.18
-5.0	221.30	123.98	-97.32
-4.5	204.57	118.09	-86.48
-4.0	190.88	110.44	-80.44
-3.5	174.84	101.93	-72.91
-3.0	159.76	92.932	-66.828
-2.5	143.82	82.548	-61.272
-2.0	125.89	71.986	-53.904
-1.5	105.68	57.442	-48.238
-1.0	83.086	40.867	-42.219
-0.5	57.641	23.244	-34.397
0.0	24.248	4.838	-19.41
0.5	-16.042	-12.194	3.848
1.0	-51.281	-29.709	21.572
1.5	-85.653	-50.191	35.462
2.0	-123.19	-73.446	49.744
2.5	-154.16	-97.921	56.239
3.0	-181.42	-125.77	55.65
3.5	-208.72	-160.40	48.32
4.0	-233.57	-199.46	34.11
4.5	-257.65	-249.55	8.1
5.0	-281.10	-301.08	-19.98
5.5	-283.20	-339.17	-55.97
6.0		-369.51	
6.5		-396.06	
7.0		-423.12	
7.5		-456.79	
8.0		-482.67	
8.5		-502.09	
9.0		-520.52	
9.5			
10.0			
10.5			

Force vs Velocity "Comparison Report with Difference" showing results being compared for 2 different shocks which were run a 2 different strokes.

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