



**COORDINATING RESEARCH COUNCIL, INC.**

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April 24, 2006

CRC Project No. CD-16

To The Participants of the  
CRC Light-Duty Rating Workshop

The 2006 CRC Light-Duty Workshop was held Sunday, April 2, 2006, through Thursday, April 6, 2006. Enclosed are the minutes for the workshop and a copy of all of the data generated. Also enclosed is your certificate of participation.

I would like to take this opportunity to thank you for your participation in this workshop. It is the full participation of the entire rating community that allows the CRC rating method to be the vital industry tool that it is. The input of each and every rater is a valued component of that tool.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Parke', is written over a light gray circular stamp. The signature is fluid and cursive.

Scott Parke  
CRC Workshop Coordinator

Enclosure

**MINUTES**  
**CRC LIGHT-DUTY RATING WORKSHOP**  
**SAN ANTONIO, TX**

April 2-6, 2006

CRC Workshop Coordinator: Scott Parke  
CRC Deposit Rating Panel Leader: Tony Barrera

*Sunday, April 2, 2006* – Workshop equipment was set up between 07:00 and 09:00 by CRC workshop coordinator Scott Parke and Frank Farber of the TMC. Volunteers from among the attendees also lent a hand. The equipment had been collected from storage and brought to the hotel by Scott and Frank the day before. Some of the parts that were expected to be available were not thus requiring alternate arrangements. This caused some delay in the set up but did not affect the conduct of the workshop.

Hardware available for rating included Sequence III and Sequence V pistons, Sequence V sludge and varnish parts, and valves, piston tops, combustion chambers, and intake runners for Induction/Combustion rating.

As is customary, the session began with distribution of a new CRC rust/varnish rating scale to each rater. Each rater then rated both of the composite Sequence III calibration pistons. Once the last rater finished the calibration pistons, the data was reviewed by the group and any discrepancies, or misunderstandings, or misapplication of definitions was discussed with the goal being for each rater to make whatever adjustments were necessary. Basic descriptive statistics (the so-called “Yi” data) were used to aid in evaluating the data generated. These tools have been used in the workshop in various incarnations since 1997.

After a break for lunch, raters went through a comparable calibration exercise for Sequence V and Induction/Combustion. All raters were encouraged to rate as many parts as their interest and available time allowed. When rating concluded for the day (approximately 17:00), a total of 82 ratings were completed.

*Monday, April 3, 2006* – Rating began at approximately 08:00 and continued throughout the day until approximately 17:30. The rating total by midday was 226; 293 were completed by the end of the day.

*Tuesday, April 4, 2006* – Rating again began at approximately 08:00. Data was collected until 10:00. In order to avoid the delay printing and copying require, the group elected to forgo hardcopy distribution of the preliminary data and use projection alone for the data review (raters retain their own data in the form of worksheets, after all). This allowed data review to begin immediately and worked very well. It will likely be the method used for data review in future workshops. The data review concluded at 11:45. A total of 296 ratings were completed by the first group.

At 13:00, the second group session began with rating of the calibration parts. The data from these ratings was reviewed and discussion closed out the day at approximately 17:00 with a total of 66 ratings.

***Wednesday, April 5, 2006*** – Rating began at approximately 08:00 and continued throughout the day until approximately 17:00. The rating total by midday was 191; 322 were completed by the end of the day.

***Thursday, April 6, 2006*** – Rating again began at approximately 08:00; some raters began earlier. Data was collected until 09:00. After a break to allow data printout and copying, data review began at 10:00 and continued until approximately 12:00; 345 ratings were completed by the second session group. Rater color grouping was presented and discussed. The familiarity the raters have gained with this tool over the past few workshops has deepened their understanding of how it can help them.

## **DISCUSSIONS**

***Alternate calibration part configurations*** – During the discussion period following data review, training was again a topic (as it was in October). One of the points made was that not all areas of all parts are equally difficult to rate. That being the case, it was suggested that during the calibration exercise (where composite parts are used), there is no reason why a piston couldn't have, say, three skirts if skirts are an area requiring additional concentration.

***Intermediate data reviews*** – Another idea suggested was that in addition to the calibration and final data reviews there could be intermediate data reviews. Raters could all be required to rate, say, piston set A first. There could then be a review before anyone moved on to piston set B. B could then be reviewed before anyone moved on to sludge parts and so on. It is uncertain if time constraints would permit this but it could be tried.

***Use of merit rating exclusively*** – Differences between the rating methods used at the diesel workshop and gasoline workshop were discussed. The principle difference between diesel ratings and gasoline ratings is that after a merit value is assigned it is mathematically converted to a demerit value for diesel tests. Considering this, the participants agreed that there ought to be no technical obstacle to using merit-only worksheets and methods for all workshops. Doing so would help to eliminate a frequent source of calculation error.

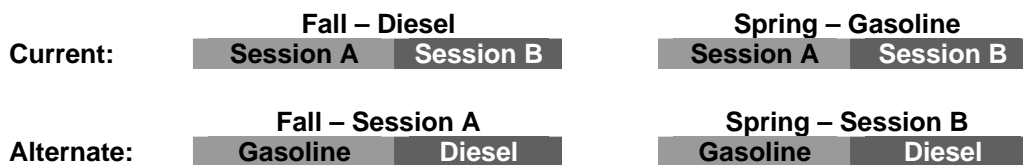
***Workshop configuration/scheduling*** – Currently, two workshops are held annually; a heavy-duty diesel workshop in the fall and a light-duty gasoline workshop in the spring. Each workshop is divided into two identical two-and-a-half day sessions so as to allow participating companies to divide their raters between the sessions thus minimizing the time the company is without a rater. This configuration still, unfortunately, requires one day (Tuesday) when all a lab's raters are either traveling to or from the workshop. Furthermore, it means that part types are only available once a year.

A possible alternate configuration was discussed. If diesel and gasoline parts could be combined at the same workshop, it would allow the fall/spring split to be rater-based instead of hardware-based. Adding parts to a workshop, of course, lengthens it. At this workshop, two and a half days were required to look at all the gasoline parts; adding diesel parts would lengthen this (possibly by as much as another two and a half days). However, a rater who spent these five days at a workshop in the spring would not have to spend any time at a diesel workshop the following fall. His co-worker could then attend an identical gas/diesel workshop in the fall. This configuration would eliminate the one day where raters pass each other in the airport and leave a lab unable to rate a test. It would also make parts of every type available every six months instead of annually.

Time usage efficiencies could well mean that combining a two-and-a-half day diesel session with a two-and-a-half day gasoline session might well equal less than the five days suggested by simple math. For example, it may be that in a combined diesel/gas workshop it is not necessary to rate 12 gasoline pistons *and* 18 diesel pistons; perhaps some lesser number of each would suffice if *both* types are available at the same time. Another example, currently if session A finishes early session B can't begin because they have not yet arrived; under the alternate configuration when session A finishes the workshop ends.

At this point, there are no apparent technical obstacles to using the alternate configuration. In today's rating community, most raters already rate a mix of hardware types and, as previously discussed, both diesel and gas use the same rating scales and methods. The workshop participants agreed this alternate workshop configuration would offer advantages to all parties concerned and should be seriously considered.

The chart below summarizes the current workshop configuration and the suggested alternate configuration.



For this workshop, both sessions finished rating earlier than scheduled. This was almost certainly a consequence of the parts available. Most of the parts available for this workshop were uncharacteristically clean and thus, generally, less time consuming to rate. This is not typically the case and should not be relied upon as a predictor for future workshops.

## **Notes on the Data**

Following is the data produced during the April 2-6, 2006, CRC Gasoline Engine Deposits Rating Workshop.

The statistics presented include the data from all participants including novice, field, and standardized engine test raters. It is important to have some knowledge of the raters involved when comparing results.

Some of the CRC evaluation techniques are destructive and, therefore, do not easily allow repeated measurement (measurable sludge deposits, ring sticking, carbon probing, and parts wiping for example). Every effort is made to limit the destructive impact of repeated measurement of these deposits but repeatability and reproducibility cannot help but be adversely affected. This must be a consideration when reviewing data from deposits of this type.

Light Duty Rating Workshop

Rater/Parts Crosstab

	Total parts rated	Seq_III_Calibration_C1	Seq_III_Calibration_C2	Seq_III_Piston_A1	Seq_III_Piston_A2	Seq_III_Piston_A3	Seq_III_Piston_A4	Seq_III_Piston_A5	Seq_III_Piston_A6	Seq_III_Piston_B1	Seq_III_Piston_B2	Seq_III_Piston_B3	Seq_III_Piston_B4	Seq_III_Piston_B5	Seq_III_Piston_B6	Seq_V_Calibration_Pistons	Seq_V_Calibration_Sludge	Seq_V_Calibration_Varnish	Seq_V_Piston_SetD	Seq_V_Piston_SetE	Seq_V_Sludge	Seq_V_Varnish	Seq_V_Clogging	Ind-Comb_Calibration	Ind-Comb_Valve_SetF	Ind-Comb_Valve_SetG	Ind-Comb_Valve_SetH	Ind-Comb_Valve_SetI	Ind-Comb_Piston_Tops	Ind-Comb_Comb_Chamber	Ind-Comb_Intake_Runner
<b>Adams, Pat</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Avis, Steve</b>	23	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Borland, Robert</b>	14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Cales, Jonathon</b>	22	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Caproni, David</b>	27	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Castillo, George</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Cole, Steve</b>	14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Foecking, Brian</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Garcia, Orlando</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<b>Hills, Barry</b>	23	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
<i>Kirkpatrick, John</i>	11																														
<b>Kobrinez, Jack</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Lopez, Frank</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Lowsky, John</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Pansza, Mike</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Pawczuk, Greg</b>	27	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Radonich, Pete</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Ramirez, Robert</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Rodriguez, Jesse</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Sanchez, Art</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Seiz, Ray</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Tschirhart, Garland</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Viera, Ralph</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Yanchar, Paul</b>	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Total Ratings</b>	641	23	23	23	23	23	23	23	23	23	23	23	23	23	23	20	21	21	21	21	21	21	22	22	20	19	19	19	18	18	18

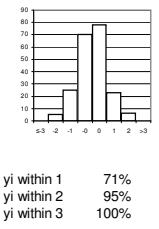
MIN RATINGS/RATER 11 MIN RATINGS/PART 18  
 MAX RATINGS/RATER 30 MAX RATINGS/PART 23  
 AVG RATINGS/RATER 27 AVG RATINGS/PART 21

Light Duty Rating Workshop

PART ID = Sequence III Calibration C1

RATED VALUES

Table with 16 columns: Groove 1, Groove 2, Groove 3, Land 2, Land 3, Under-crown, Thrust, Anti-thrust, Average Skirt, UWPD, WPD. Includes individual operator data and summary statistics like MAXIMUM, MINIMUM, RANGE, MEAN, and STD.



PART ID = Sequence III Calibration C1

YI VALUES

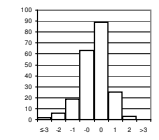
Table with 16 columns: Groove 1, Groove 2, Groove 3, Land 2, Land 3, Under-crown, Thrust, Anti-thrust, Average Skirt, UWPD, WPD, MEAN, STD. Includes individual operator data and summary statistics for YI values.

Light Duty Rating Workshop

PART ID = Sequence III Calibration C2

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt						UWPD	WPD
Tschirhart, Garland	0.75	0.60	9.90	0.68	4.46	3.70	9.61	9.78	9.70						29.79	4.86
Sanchez, Art	0.75	0.19	9.80	0.68	4.94	3.07	9.49	9.70	9.60						29.03	4.87
Kobrinetz, Jack	0.75	0.37	9.90	0.75	4.64	2.16	9.54	9.86	9.70						28.27	4.75
Foeking, Brian	0.80	0.26	9.83	0.81	4.24	2.95	9.30	9.75	9.53						28.42	4.67
Radonich, Pete	0.66	0.40	9.90	0.75	3.72	2.50	8.95	9.73	9.34						27.27	4.47
Lopez, Frank	0.75	0.75	9.80	0.75	4.48	2.00	9.05	9.80	9.43						27.96	4.67
Hills, Barry	0.79	0.25	9.86	0.75	5.12	1.85	9.55	9.84	9.70						28.32	4.84
Garcia, Orlando	0.68	0.41	9.72	0.89	3.89	2.63	9.33	9.72	9.53						27.75	4.54
Cales, Jonathon	0.65	0.26	9.79	0.83	3.41	2.82	9.31	9.90	9.61						27.37	4.41
Panza, Mike	0.85	0.63	9.62	0.72	4.75	2.82	9.26	9.44	9.35						28.74	4.78
Adams, Pat	0.92	0.28	9.71	0.67	3.89	2.60	9.05	9.73	9.39						27.46	4.48
Rodriguez, Jesse	1.10	0.30	9.82	0.88	4.07	2.48	9.30	9.78	9.54						28.19	4.60
Yanchar, Paul	0.80	0.30	9.85	0.82	4.24	2.10	9.35	9.80	9.58						27.69	4.60
Ramirez, Robert	0.75	0.64	9.65	1.05	3.96	3.11	8.77	9.67	9.22						28.38	4.61
Castillo, George	0.60	0.30	9.89	0.82	4.28	2.88	9.27	9.82	9.55						28.32	4.69
Caproni, David	0.94	0.91	9.80	0.73	4.55	3.16	9.37	9.70	9.54						29.63	4.84
Avis, Steve	0.59	0.49	9.85	0.83	3.84	2.90	9.25	9.76	9.51						28.01	4.57
Borland, Robert	0.68	0.44	9.90	0.80	3.30	1.70	9.07	9.62	9.35						26.17	4.27
Seiz, Ray	0.38	0.67	9.57	0.84	4.74	3.55	9.40	9.65	9.53						29.28	4.86
Lowsky, John	0.83	0.34	9.15	0.83	5.10	3.65	8.97	9.12	9.05						28.95	4.83
Viera, Ralph	0.31	0.30	9.98	0.84	4.89	3.01	9.52	9.76	9.64						28.97	4.90
Cole, Steve	0.64	0.42	9.70	0.63	4.15	2.44	9.00	9.70	9.35						27.33	4.53
Pawczuk, Greg	0.95	0.75	9.80	0.75	4.50	3.30	8.73	9.48	9.10						29.15	4.79
MAXIMUM	1.10	0.91	9.98	1.05	5.12	3.70	9.61	9.90	9.70						29.79	4.90
MINIMUM	0.31	0.19	9.15	0.63	3.30	1.70	8.73	9.12	9.05						26.17	4.27
RANGE (MAX-MIN)	0.79	0.72	0.83	0.42	1.82	2.00	0.88	0.78	0.65						3.62	0.63
MEAN	0.74	0.45	9.77	0.79	4.31	2.76	9.24	9.70	9.47						28.28	4.67
STD	0.17	0.20	0.17	0.09	0.51	0.55	0.25	0.17	0.18						0.86	0.17



yi within 1 73%  
 yi within 2 95%  
 yi within 3 99%

PART ID = Sequence III Calibration C2

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt						UWPD	WPD	MEAN	STD
Tschirhart, Garland	0.08	-0.78	0.75	-1.19	0.29	1.71	1.52	0.48	1.27						1.75	1.10	0.78	0.86
Sanchez, Art	0.08	-1.30	0.16	-1.19	1.24	0.57	1.03	0.00	0.71						0.87	1.15	0.30	0.87
Kobrinetz, Jack	0.08	-0.39	0.75	-0.41	0.65	-1.08	1.23	0.96	1.30						-0.01	0.44	0.32	0.75
Foeking, Brian	0.37	-0.94	0.33	0.26	-0.14	0.35	0.26	0.30	0.32						0.16	0.02	0.12	0.39
Radonich, Pete	-0.44	-0.23	0.75	-0.41	-1.17	-0.46	-1.16	0.18	-0.72						-1.17	-1.20	-0.55	0.63
Lopez, Frank	0.08	1.54	0.16	-0.41	0.33	-1.37	-0.76	0.60	-0.24						-0.37	0.01	-0.04	0.75
Hills, Barry	0.31	-0.99	0.51	-0.41	1.60	-1.64	1.27	0.84	1.27						0.04	0.99	0.35	1.02
Garcia, Orlando	-0.32	-0.18	-0.32	1.14	-0.83	-0.23	0.38	0.12	0.32						-0.62	-0.79	-0.12	0.58
Cales, Jonathon	-0.49	-0.94	0.10	0.48	-1.78	0.12	0.30	1.20	0.77						-1.06	-1.54	-0.26	0.97
Panza, Mike	0.66	0.93	-0.91	-0.74	0.87	0.12	0.10	-1.56	-0.66						0.54	0.64	0.00	0.84
Adams, Pat	1.06	-0.84	-0.38	-1.30	-0.83	-0.28	-0.76	0.18	-0.44						-0.95	-1.10	-0.51	0.67
Rodriguez, Jesse	2.10	-0.74	0.28	1.03	-0.48	-0.50	0.26	0.48	0.40						-0.10	-0.39	0.21	0.82
Yanchar, Paul	0.37	-0.74	0.45	0.37	-0.14	-1.19	0.46	0.60	0.60						-0.69	-0.40	-0.03	0.63
Ramirez, Robert	0.08	0.98	-0.73	2.92	-0.70	0.64	-1.89	-0.18	-1.39						0.12	-0.35	-0.04	1.29
Castillo, George	-0.78	-0.74	0.69	0.37	-0.06	0.22	0.14	0.72	0.43						0.04	0.10	0.10	0.49
Caproni, David	1.18	2.35	0.16	-0.63	0.47	0.73	0.54	0.00	0.37						1.57	1.01	0.70	0.81
Avis, Steve	-0.84	0.22	0.45	0.48	-0.93	0.26	0.05	0.36	0.21						-0.32	-0.61	-0.06	0.52
Borland, Robert	-0.32	-0.03	0.75	0.14	-2.00	-1.91	-0.68	-0.48	-0.69						-2.46	-2.33	-0.91	1.09
Seiz, Ray	-2.05	1.14	-1.20	0.59	0.85	1.44	0.66	-0.30	0.32						1.16	1.09	0.34	1.09
Lowsky, John	0.54	-0.54	-3.69	0.48	1.56	1.62	-1.08	-3.49	-2.37						0.78	0.94	-0.48	1.93
Viera, Ralph	-2.45	-0.74	1.22	0.59	1.15	0.46	1.15	0.36	0.96						0.81	1.35	0.44	1.12
Cole, Steve	-0.55	-0.13	-0.43	-1.74	-0.32	-0.57	-0.96	0.00	-0.66						-1.10	-0.81	-0.66	0.49
Pawczuk, Greg	1.23	1.54	0.16	-0.41	0.37	0.98	-2.06	-1.35	-2.05						1.02	0.68	0.01	1.30
Yi MAXIMUM	-2.45	2.35	-3.69	2.92	-2.00	-1.91	-2.06	-3.49	-2.37						-2.46	-2.33	-0.91	1.93
Yi MINIMUM	0.08	-0.03	0.10	-0.41	-0.06	-0.23	0.05	0.00	-0.24						-0.01	0.01	0.00	0.39
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						1.00	1.00		
Ratings MEAN	0.74	0.45	9.77	0.79	4.31	2.76	9.24	9.70	9.47						28.28	4.67		
Ratings STD	0.17	0.20	0.17	0.09	0.51	0.55	0.25	0.17	0.18						0.86	0.17		







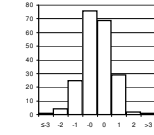


Light Duty Rating Workshop

PART ID = Sequence III Piston A4

RATED VALUES

Table with columns: Groove 1, Groove 2, Groove 3, Land 2, Land 3, Under-crown, Thrust, Anti-thrust, Average Skirt, UWPD, WPD. Lists individual operator ratings and summary statistics (MAXIMUM, MINIMUM, RANGE, MEAN, STD).



yi within 1 70%
yi within 2 96%
yi within 3 99%

PART ID = Sequence III Piston A4

YI VALUES

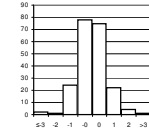
Table with columns: Groove 1, Groove 2, Groove 3, Land 2, Land 3, Under-crown, Thrust, Anti-thrust, Average Skirt, UWPD, WPD, MEAN, STD. Lists individual operator YI values and summary statistics.

Light Duty Rating Workshop

PART ID = Sequence III Piston A5

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt						UWPD	WPD
Hills, Barry	2.86	0.75	6.65	0.58	0.77	1.00	8.82	9.89	9.36						21.97	2.90
Foecking, Brian	3.42	0.74	7.20	0.54	0.82	0.98	7.85	9.85	8.85						22.55	3.00
Cales, Jonathon	3.50	0.74	6.36	0.71	0.88	1.20	7.74	9.90	8.82						22.21	2.89
Garcia, Orlando	3.75	0.74	6.69	0.58	0.75	1.03	7.48	9.64	8.56						22.10	2.87
Pansza, Mike	2.79	0.75	7.22	0.81	0.78	1.00	7.13	9.52	8.33						21.68	2.95
Lopez, Frank	2.59	0.75	6.71	0.80	0.75	1.00	7.95	9.90	8.93						21.53	2.88
Kobrinetz, Jack	3.80	0.74	6.47	0.45	0.80	0.77	8.19	9.80	9.00						22.03	2.84
Radonich, Pete	3.40	0.75	6.83	0.84	0.76	1.00	7.70	9.90	8.80						22.38	2.95
Sanchez, Art	4.42	0.75	6.99	0.56	0.77	1.00	8.00	9.86	8.93						23.42	3.00
Tschirhart, Garland	3.25	0.75	6.13	0.56	0.78	1.00	7.80	9.80	8.80						21.27	2.76
Yanchar, Paul	2.60	0.75	6.40	0.44	0.78	1.00	7.60	9.75	8.68						20.65	2.75
Ramirez, Robert	3.59	0.75	6.88	0.79	0.81	0.93	8.37	9.82	9.10						22.85	2.99
Caproni, David	4.24	0.74	6.19	0.74	0.87	0.99	7.45	9.87	8.66						22.43	2.86
Adams, Pat	3.63	0.75	6.70	0.66	0.90	0.90	7.30	9.60	8.45						21.99	2.90
Lowsky, John	4.78	0.75	6.83	0.84	0.75	1.60	7.84	9.46	8.65						24.20	3.06
Pawczuk, Greg	3.50	0.75	6.23	0.64	0.98	0.98	7.18	9.75	8.47						21.55	2.83
Cole, Steve	4.07	0.75	6.28	0.64	0.78	1.00	8.20	9.97	9.09						22.61	2.87
Avis, Steve	4.65	0.75	6.51	0.60	0.78	1.00	8.53	9.12	8.83						23.12	2.92
Borland, Robert	2.35	0.64	6.43	0.70	0.81	1.15	7.65	9.88	8.77						20.85	2.81
Viera, Ralph	3.62	0.75	6.74	0.44	0.79	1.00	8.05	9.90	8.98						22.32	2.90
Rodriguez, Jesse	3.72	0.75	6.65	0.55	0.78	1.00	7.91	9.86	8.89						22.34	2.90
Seiz, Ray	5.49	0.75	6.92	0.46	0.90	1.00	8.44	9.50	8.97						24.49	3.07
Castillo, George	3.98	0.74	6.50	0.77	0.77	0.96	8.10	9.82	8.96						22.68	2.91
MAXIMUM	5.49	0.75	7.22	0.84	0.98	1.60	8.82	9.97	9.36						24.49	3.07
MINIMUM	2.35	0.64	6.13	0.44	0.75	0.77	7.13	9.12	8.33						20.65	2.75
RANGE (MAX-MIN)	3.14	0.11	1.09	0.40	0.23	0.83	1.69	0.85	1.03						3.85	0.32
MEAN	3.65	0.74	6.63	0.64	0.81	1.02	7.88	9.75	8.82						22.31	2.90
STD	0.75	0.02	0.30	0.13	0.06	0.15	0.43	0.20	0.23						0.92	0.08



yi within 1 74%  
 yi within 2 96%  
 yi within 3 99%

PART ID = Sequence III Piston A5

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt						UWPD	WPD	MEAN	STD
Hills, Barry	-1.05	0.32	0.06	-0.45	-0.62	-0.14	2.18	0.68	2.29						-0.38	-0.04	0.26	1.08
Foecking, Brian	-0.31	-0.11	1.88	-0.75	0.22	-0.28	-0.07	0.48	0.14						0.26	1.10	0.23	0.73
Cales, Jonathon	-0.20	-0.11	-0.90	0.54	1.23	1.21	-0.33	0.73	0.01						-0.11	-0.14	0.17	0.67
Garcia, Orlando	0.13	-0.11	0.20	-0.45	-0.96	0.06	-0.93	-0.58	-1.10						-0.23	-0.42	-0.40	0.46
Pansza, Mike	-1.14	0.32	1.95	1.30	-0.45	-0.14	-1.75	-1.18	-2.10						-0.69	0.51	-0.31	1.25
Lopez, Frank	-1.41	0.32	0.26	1.22	-0.96	-0.14	0.16	0.73	0.45						-0.85	-0.26	-0.04	0.78
Kobrinetz, Jack	0.20	-0.11	-0.53	-1.44	-0.12	-1.70	0.72	0.23	0.75						-0.31	-0.77	-0.28	0.79
Radonich, Pete	-0.33	0.32	0.66	1.53	-0.79	-0.14	-0.42	0.73	-0.08						0.07	0.49	0.19	0.65
Sanchez, Art	1.02	0.32	1.19	-0.60	-0.62	-0.14	0.27	0.53	0.48						1.20	1.19	0.44	0.68
Tschirhart, Garland	-0.53	0.32	-1.66	-0.60	-0.45	-0.14	-0.19	0.23	-0.08						-1.13	-1.76	-0.54	0.70
Yanchar, Paul	-1.39	0.32	-0.76	-1.51	-0.45	-0.14	-0.65	-0.02	-0.61						-1.80	-1.87	-0.81	0.74
Ramirez, Robert	-0.08	0.32	0.83	1.15	0.05	-0.62	1.13	0.33	1.18						0.58	1.10	0.54	0.60
Caproni, David	0.78	-0.11	-1.46	0.77	1.06	-0.21	-1.00	0.58	-0.67						0.13	-0.54	-0.06	0.81
Adams, Pat	-0.03	0.32	0.23	0.16	1.57	-0.82	-1.35	-0.78	-1.57						-0.35	-0.05	-0.24	0.88
Lowsky, John	1.49	0.32	0.66	1.53	-0.96	3.90	-0.10	-1.48	-0.72						2.05	1.85	0.78	1.58
Pawczuk, Greg	-0.20	0.32	-1.33	0.01	2.92	-0.28	-1.63	-0.02	-1.51						-0.83	-0.91	-0.31	1.26
Cole, Steve	0.55	0.32	-1.16	0.01	-0.45	-0.14	0.74	1.08	1.14						0.32	-0.39	0.18	0.70
Avis, Steve	1.32	0.32	-0.40	-0.30	-0.45	-0.14	1.51	-3.19	0.03						0.87	0.14	-0.03	1.25
Borland, Robert	-1.73	-4.50	-0.67	0.46	0.05	0.87	-0.54	0.63	-0.23						-1.59	-1.20	-0.77	1.51
Viera, Ralph	-0.04	0.32	0.36	-1.51	-0.29	-0.14	0.39	0.73	0.67						0.00	-0.01	0.04	0.61
Rodriguez, Jesse	0.09	0.32	0.06	-0.68	-0.45	-0.14	0.07	0.53	0.28						0.03	-0.11	0.00	0.34
Seiz, Ray	2.44	0.32	0.96	-1.36	1.57	-0.14	1.30	-1.28	0.65						2.36	2.02	0.80	1.33
Castillo, George	0.43	-0.11	-0.43	0.99	-0.62	-0.41	0.51	0.33	0.60						0.40	0.08	0.16	0.50
Yi MAXIMUM	2.44	-4.50	1.95	1.53	2.92	3.90	2.18	-3.19	2.29						2.36	2.02	-0.81	1.58
Yi MINIMUM	-0.03	-0.11	0.06	-0.30	-0.12	-0.14	-0.07	-0.02	0.01						-0.11	-0.01	0.00	0.34
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						1.00	1.00		
Ratings MEAN	3.65	0.74	6.63	0.64	0.81	1.02	7.88	9.75	8.82						22.31	2.90		
Ratings STD	0.75	0.02	0.30	0.13	0.06	0.15	0.43	0.20	0.23						0.92	0.08		









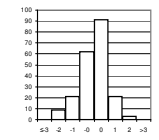


Light Duty Rating Workshop

PART ID = Sequence III Piston B4

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt							UWPD	WPD
Hills, Barry	0.67	0.73	5.45	0.80	1.33	1.60	9.37	9.90	9.64							20.22	2.84
Lopez, Frank	0.70	0.70	5.60	0.71	1.62	1.45	9.15	9.90	9.53							20.31	2.92
Sanchez, Art	0.56	0.67	5.53	0.75	1.62	1.21	9.41	9.80	9.61							19.95	2.88
Cales, Jonathon	0.75	0.72	4.77	0.87	1.10	1.37	8.78	9.90	9.34							18.92	2.60
Garcia, Orlando	0.71	0.68	5.60	0.99	1.41	1.83	8.91	9.80	9.36							20.58	2.91
Foecking, Brian	0.69	0.71	5.38	0.65	1.56	1.58	8.98	9.88	9.43							20.00	2.85
Tschirhart, Garland	0.71	0.71	5.55	0.38	0.68	1.20	9.00	9.90	9.45							18.68	2.54
Panza, Mike	0.71	0.75	5.74	0.81	2.52	1.57	8.64	9.62	9.13							21.23	3.21
Kobrinetz, Jack	0.75	0.71	4.73	0.52	1.41	1.65	9.22	9.80	9.51							19.28	2.67
Radonich, Pete	0.75	0.72	4.95	0.79	1.50	1.80	9.25	9.95	9.60							20.11	2.81
Avis, Steve	0.68	0.60	5.30	0.50	1.62	1.39	9.02	9.86	9.44							19.53	2.80
Yanchar, Paul	0.75	0.70	5.20	0.57	1.30	1.34	9.10	9.75	9.43							19.29	2.70
Cole, Steve	0.67	0.71	5.15	0.78	1.79	1.69	9.40	10.00	9.70							20.49	2.93
Adams, Pat	0.62	0.71	5.70	0.84	1.33	1.50	9.34	9.60	9.47							20.17	2.86
Ramirez, Robert	0.75	0.75	5.70	1.03	1.33	2.01	9.01	9.63	9.32							20.89	2.94
Caproni, David	0.75	0.72	5.24	0.87	1.27	1.99	9.10	9.90	9.50							20.34	2.82
Lowsky, John	0.75	0.75	5.30	0.93	1.63	3.06	8.88	9.45	9.17							21.59	3.02
Viera, Ralph	0.71	0.70	5.99	0.60	1.63	2.94	9.39	9.99	9.69							22.26	3.15
Rodriguez, Jesse	0.69	0.72	5.39	0.80	1.54	1.36	8.90	9.74	9.32							19.82	2.83
Seiz, Ray	0.56	0.67	5.87	0.82	1.59	2.32	9.44	9.60	9.52							21.35	3.05
Borland, Robert	0.71	0.64	4.30	0.62	1.44	1.65	8.81	9.72	9.27							18.63	2.58
Castillo, George	0.72	0.73	5.70	0.86	1.57	1.80	9.30	9.90	9.60							20.98	2.99
Pawczuk, Greg	0.75	0.68	4.87	0.60	2.23	1.84	8.50	9.56	9.03							19.99	2.92
MAXIMUM	0.75	0.75	5.99	1.03	2.52	3.06	9.44	10.00	9.70							22.26	3.21
MINIMUM	0.56	0.60	4.30	0.38	0.68	1.20	8.50	9.45	9.03							18.63	2.54
RANGE (MAX-MIN)	0.19	0.15	1.69	0.65	1.84	1.86	0.94	0.55	0.67							3.64	0.66
MEAN	0.70	0.70	5.35	0.74	1.52	1.75	9.08	9.79	9.44							20.20	2.86
STD	0.06	0.04	0.41	0.16	0.36	0.48	0.26	0.15	0.18							0.92	0.17



yi within 1 74%  
 yi within 2 94%  
 yi within 3 100%

PART ID = Sequence III Piston B4

YI VALUES

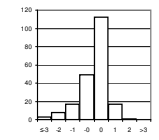
	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt							UWPD	WPD	MEAN	STD
Hills, Barry	-0.54	0.76	0.25	0.35	-0.54	-0.30	1.10	0.74	1.13							0.02	-0.13	0.26	0.61
Lopez, Frank	-0.01	-0.09	0.61	-0.20	0.27	-0.62	0.26	0.74	0.50							0.11	0.32	0.17	0.39
Sanchez, Art	-2.51	-0.94	0.44	0.04	0.27	-1.12	1.25	0.07	0.96							-0.28	0.12	-0.15	1.05
Cales, Jonathon	0.89	0.47	-1.41	0.77	-1.19	-0.78	-1.15	0.74	-0.54							-1.39	-1.58	-0.47	0.99
Garcia, Orlando	0.17	-0.66	0.61	1.51	-0.32	0.18	-0.66	0.07	-0.46							0.41	0.31	0.11	0.63
Foecking, Brian	-0.19	0.19	0.08	-0.57	0.11	-0.35	-0.39	0.60	-0.03							-0.22	-0.08	-0.08	0.32
Tschirhart, Garland	0.17	0.19	0.49	-2.22	-2.37	-1.14	-0.32	0.74	0.08							-1.65	-1.89	-0.72	1.16
Panza, Mike	0.17	1.32	0.95	0.41	2.81	-0.37	-1.69	-1.12	-1.73							1.12	2.04	0.36	1.48
Kobrinetz, Jack	0.89	0.19	-1.51	-1.36	-0.32	-0.20	0.52	0.07	0.42							-1.00	-1.13	-0.31	0.82
Radonich, Pete	0.89	0.47	-0.97	0.29	-0.06	0.11	0.64	1.07	0.93							-0.10	-0.32	0.27	0.61
Avis, Steve	-0.37	-2.92	-0.12	-1.48	0.27	-0.74	-0.24	0.47	0.02							-0.72	-0.38	-0.56	0.95
Yanchar, Paul	0.89	-0.09	-0.36	-1.06	-0.63	-0.85	0.07	-0.26	-0.06							-0.99	-0.96	-0.39	0.59
Cole, Steve	-0.54	0.19	-0.48	0.23	0.75	-0.12	1.21	1.40	1.50							0.32	0.39	0.44	0.71
Adams, Pat	-1.44	0.19	0.86	0.59	-0.54	-0.51	0.98	-1.25	0.19							-0.03	0.02	-0.09	0.79
Ramirez, Robert	0.89	1.32	0.86	1.75	-0.54	0.55	-0.28	-1.06	-0.66							0.75	0.46	0.37	0.89
Caproni, David	0.89	0.47	-0.26	0.77	-0.71	0.51	0.07	0.74	0.36							0.15	-0.26	0.25	0.50
Lowsky, John	0.89	1.32	-0.12	1.14	0.30	2.74	-0.77	-2.25	-1.53							1.50	0.96	0.38	1.45
Viera, Ralph	0.17	-0.09	1.56	-0.87	0.30	2.49	1.17	1.33	1.44							2.23	1.69	1.04	1.04
Rodriguez, Jesse	-0.19	0.47	0.10	0.35	0.05	-0.80	-0.70	-0.33	-0.66							-0.41	-0.16	-0.21	0.42
Seiz, Ray	-2.51	-0.94	1.27	0.47	0.19	1.20	1.36	-1.25	0.48							1.25	1.14	0.24	1.28
Borland, Robert	0.17	-1.79	-2.55	-0.75	-0.23	-0.20	-1.04	-0.46	-0.97							-1.70	-1.69	-1.02	0.83
Castillo, George	0.35	0.76	0.86	0.71	0.13	0.11	0.83	0.74	0.93							0.85	0.76	0.64	0.29
Pawczuk, Greg	0.89	-0.80	-1.18	-0.87	1.99	0.20	-2.22	-1.52	-2.30							-0.23	0.37	-0.52	1.32
Yi MAXIMUM	-2.51	-2.92	-2.55	-2.22	2.81	2.74	-2.22	-2.25	-2.30							2.23	2.04	1.04	1.48
Yi MINIMUM	-0.01	-0.09	0.08	-0.20	-0.06	-0.12	-0.24	0.07	-0.03							0.02	-0.08	-0.08	0.29
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							1.00	1.00		
Ratings MEAN	0.70	0.70	5.35	0.74	1.52	1.75	9.08	9.79	9.44							20.20	2.86		
Ratings STD	0.06	0.04	0.41	0.16	0.36	0.48	0.26	0.15	0.18							0.92	0.17		

Light Duty Rating Workshop

PART ID = Sequence III Piston B5

RATED VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt							UWPD	WPD
Hills, Barry	0.71	9.56	9.90	7.92	9.20	9.58	9.89	9.90	9.90							56.77	8.87
Lopez, Frank	0.75	9.48	9.90	7.88	9.06	9.63	9.83	9.90	9.87							56.57	8.82
Sanchez, Art	0.75	9.45	9.90	8.18	9.45	9.38	9.79	9.90	9.85							56.96	8.95
Cales, Jonathon	0.75	9.55	9.90	8.03	9.25	9.02	9.90	10.00	9.95							56.45	8.85
Garcia, Orlando	0.75	9.44	9.80	7.87	9.26	9.40	9.90	10.00	9.95							56.47	8.84
Foecking, Brian	0.75	9.58	9.90	7.46	9.16	9.28	9.85	9.95	9.90							56.03	8.76
Tschirhart, Garland	0.75	9.45	9.90	8.24	9.45	9.75	9.88	9.94	9.91							57.45	9.00
Pansza, Mike	0.75	9.17	9.96	7.72	9.25	9.01	9.66	9.90	9.78							55.64	8.76
Kobrinetz, Jack	0.75	9.57	9.90	7.76	9.21	9.44	9.90	9.90	9.90							56.53	8.84
Radonich, Pete	0.75	9.60	9.95	7.83	9.17	9.42	9.90	10.00	9.95							56.67	8.85
Cole, Steve	0.72	9.62	9.62	7.65	9.41	9.65	10.00	10.00	10.00							56.67	8.86
Seiz, Ray	0.75	9.42	9.48	7.98	8.99	9.00	9.46	9.70	9.58							55.20	8.63
Avis, Steve	0.75	9.48	9.90	7.54	8.97	9.19	9.89	9.90	9.90							55.73	8.70
Yanchar, Paul	0.75	9.45	9.90	7.70	9.20	9.40	9.80	10.00	9.90							56.30	8.81
Adams, Pat	0.75	9.36	9.80	8.00	8.68	9.25	9.50	9.80	9.65							55.49	8.63
Ramirez, Robert	0.75	9.46	9.90	7.50	8.87	9.39	9.84	9.90	9.87							55.74	8.68
Caproni, David	0.75	9.66	9.90	8.48	9.41	9.39	9.90	10.00	9.95							57.54	9.01
Lowsky, John	0.75	9.13	9.50	8.06	8.93	9.00	9.45	9.50	9.48							54.85	8.59
Viera, Ralph	0.75	9.57	9.99	7.75	9.43	8.92	9.98	10.00	9.99							56.40	8.88
Rodriguez, Jesse	0.75	9.59	9.90	7.85	9.18	9.34	9.85	9.90	9.88							56.49	8.83
Castillo, George	0.75	9.58	10.00	7.35	9.25	9.02	9.90	10.00	9.95							55.90	8.77
Borland, Robert	0.68	9.46	9.90	8.26	9.37	8.06	9.55	9.67	9.61							55.34	8.78
Pawczuk, Greg	0.75	9.45	9.90	7.80	9.04	9.44	9.85	10.00	9.93							56.31	8.78
MAXIMUM	0.75	9.66	10.00	8.48	9.45	9.75	10.00	10.00	10.00							57.54	9.01
MINIMUM	0.68	9.13	9.48	7.35	8.68	8.06	9.45	9.50	9.48							54.85	8.59
RANGE (MAX-MIN)	0.07	0.53	0.52	1.13	0.77	1.69	0.55	0.50	0.53							2.70	0.43
MEAN	0.74	9.48	9.86	7.86	9.18	9.26	9.80	9.90	9.85							56.24	8.80
STD	0.02	0.13	0.14	0.28	0.20	0.35	0.16	0.13	0.14							0.68	0.11



yi within 1 78%  
 yi within 2 94%  
 yi within 3 99%

PART ID = Sequence III Piston B5

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	Average Skirt							UWPD	WPD	MEAN	STD
Hills, Barry	-1.97	0.60	0.32	0.21	0.09	0.92	0.54	-0.02	0.30							0.78	0.59	0.22	0.78
Lopez, Frank	0.35	-0.01	0.32	0.07	-0.61	1.06	0.17	-0.02	0.09							0.48	0.12	0.18	0.40
Sanchez, Art	0.35	-0.25	0.32	1.16	1.33	0.35	-0.08	-0.02	-0.06							1.06	1.32	0.50	0.60
Cales, Jonathon	0.35	0.53	0.32	0.61	0.34	-0.68	0.60	0.76	0.70							0.31	0.43	0.39	0.39
Garcia, Orlando	0.35	-0.32	-0.41	0.03	0.39	0.40	0.60	0.76	0.70							0.34	0.30	0.29	0.38
Foecking, Brian	0.35	0.76	0.32	-1.46	-0.11	0.06	0.29	0.37	0.34							-0.31	-0.38	0.02	0.59
Tschirhart, Garland	0.35	-0.25	0.32	1.38	1.33	1.40	0.48	0.29	0.41							1.79	1.80	0.85	0.70
Pansza, Mike	0.35	-2.41	0.75	-0.51	0.34	-0.71	-0.88	-0.02	-0.52							-0.88	-0.39	-0.44	0.85
Kobrinetz, Jack	0.35	0.68	0.32	-0.37	0.14	0.52	0.60	-0.02	0.34							0.43	0.31	0.30	0.30
Radonich, Pete	0.35	0.91	0.68	-0.11	-0.06	0.46	0.60	0.76	0.70							0.64	0.44	0.49	0.33
Cole, Steve	-1.39	1.07	-1.72	-0.77	1.13	1.12	1.22	0.76	1.05							0.64	0.51	0.33	1.09
Seiz, Ray	0.35	-0.48	-2.74	0.43	-0.95	-0.74	-2.12	-1.59	-1.95							-1.53	-1.59	-1.17	1.00
Avis, Steve	0.35	-0.01	0.32	-1.17	-1.05	-0.20	0.54	-0.02	0.30							-0.76	-0.96	-0.24	0.63
Yanchar, Paul	0.35	-0.25	0.32	-0.59	0.09	0.40	-0.02	0.76	0.34							0.09	0.05	0.14	0.36
Adams, Pat	0.35	-0.94	-0.41	0.50	-2.49	-0.03	-1.87	-0.81	-1.45							-1.10	-1.59	-0.89	0.94
Ramirez, Robert	0.35	-0.17	0.32	-1.31	-1.55	0.37	0.23	-0.02	0.12							-0.73	-1.15	-0.32	0.73
Caproni, David	0.35	1.38	0.32	2.25	1.13	0.37	0.60	0.76	0.70							1.92	1.92	1.06	0.70
Lowsky, John	0.35	-2.72	-2.59	0.72	-1.25	-0.74	-2.18	-3.16	-2.70							-1.96	-1.96	-1.66	1.29
Viera, Ralph	0.35	0.68	0.97	-0.40	1.23	-0.97	1.09	0.76	0.98							0.24	0.67	0.51	0.67
Rodriguez, Jesse	0.35	0.84	0.32	-0.04	-0.01	0.23	0.29	-0.02	0.16							0.36	0.25	0.25	0.25
Castillo, George	0.35	0.76	1.04	-1.86	0.34	-0.68	0.60	0.76	0.70							-0.50	-0.29	0.11	0.86
Borland, Robert	-3.70	-0.17	0.32	1.45	0.93	-3.43	-1.57	-1.83	-1.74							-1.32	-0.23	-1.03	1.66
Pawczuk, Greg	0.35	-0.25	0.32	-0.22	-0.70	0.52	0.29	0.76	0.52							0.10	-0.19	0.14	0.43
Yi MAXIMUM	-3.70	-2.72	-2.74	2.25	-2.49	-3.43	-2.18	-3.16	-2.70							-2.05	-1.96	-1.66	1.66
Yi MINIMUM	-1.39	-0.01	0.32	0.03	-0.01	-0.03	-0.02	-0.02	-0.06							-0.31	0.05	0.02	0.25
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00							0.00	0.00		
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							1.00	1.00		
Ratings MEAN	0.74	9.48	9.86	7.86	9.18	9.26	9.80	9.90	9.85							56.24	8.80		
Ratings STD	0.02	0.13	0.14	0.28	0.20	0.35	0.16	0.13	0.14							0.68	0.11		

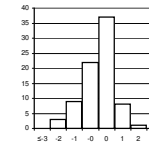


### Light Duty Rating Workshop

PART ID = Sequence V Calibration - Piston Set C

#### RATED VALUES

	Piston 1	Piston 2	Piston 3	Piston 4															
Tschirhart, Garland	8.61	9.90	9.88	9.81															
Radonich, Pete	8.51	9.65	9.58	9.30															
Sanchez, Art	8.65	9.76	9.69	9.57															
Kobrinetz, Jack	8.66	9.70	9.70	9.40															
Kirkpatrick, John	9.20	9.50	9.50	9.40															
Foeking, Brian	8.50	9.85	9.85	9.60															
Cales, Jonathon	8.31	9.80	9.80	9.67															
Hills, Barry	9.00	9.80	9.80	9.68															
Lopez, Frank	8.33	9.23	9.53	9.21															
Garcia, Orlando	8.06	9.42	9.35	8.51															
Pansza, Mike	8.50	9.80	9.80	9.60															
Ramirez, Robert	7.87	9.62	9.50	9.23															
Caproni, David	8.46	9.60	9.70	8.97															
Yanchar, Paul	8.70	9.65	9.75	9.45															
Adams, Pat	8.43	9.50	9.20	8.97															
Castillo, George	8.62	9.64	9.72	9.32															
Rodriguez, Jesse	8.36	9.71	9.53	8.77															
Seiz, Ray	8.48	9.57	9.67	9.13															
Viera, Ralph	8.31	9.39	9.41	9.38															
Lowsky, John	7.98	9.10	9.16	8.85															
MAXIMUM	9.20	9.90	9.88	9.81															
MINIMUM	7.87	9.10	9.16	8.51															
RANGE (MAX-MIN)	1.33	0.80	0.72	1.30															
MEAN	8.48	9.61	9.61	9.29															
STD	0.31	0.21	0.21	0.34															



yi within 1    74%  
yi within 2    95%  
yi within 3    100%

PART ID = Sequence V Calibration - Piston Set C

#### YI VALUES

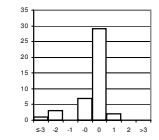
	Piston 1	Piston 2	Piston 3	Piston 4																MEAN	STD	
Tschirhart, Garland	0.43	1.41	1.33	1.52																1.17	0.50	
Radonich, Pete	0.11	0.20	-0.13	0.03																0.05	0.14	
Sanchez, Art	0.56	0.73	0.41	0.82																0.63	0.18	
Kobrinetz, Jack	0.59	0.44	0.45	0.32																0.45	0.11	
Kirkpatrick, John	2.33	-0.53	-0.51	0.32																0.40	1.34	
Foeking, Brian	0.07	1.17	1.18	0.91																0.83	0.52	
Cales, Jonathon	-0.54	0.92	0.94	1.11																0.61	0.77	
Hills, Barry	1.68	0.92	0.94	1.14																1.17	0.36	
Lopez, Frank	-0.47	-1.84	-0.37	-0.24																-0.73	0.75	
Garcia, Orlando	-1.34	-0.92	-1.24	-2.29																-1.45	0.59	
Pansza, Mike	0.07	0.92	0.94	0.91																0.71	0.42	
Ramirez, Robert	-1.95	0.05	-0.51	-0.18																-0.65	0.90	
Caproni, David	-0.05	-0.05	0.45	-0.94																-0.15	0.58	
Yanchar, Paul	0.72	0.20	0.70	0.47																0.52	0.24	
Adams, Pat	-0.15	-0.53	-1.96	-0.94																-0.90	0.78	
Castillo, George	0.46	0.15	0.55	0.09																0.31	0.23	
Rodriguez, Jesse	-0.38	0.49	-0.37	-1.53																-0.45	0.83	
Seiz, Ray	0.01	-0.19	0.31	-0.47																-0.09	0.33	
Viera, Ralph	-0.54	-1.06	-0.95	0.26																-0.57	0.60	
Lowsky, John	-1.60	-2.47	-2.16	-1.29																-1.88	0.53	
Yi MAXIMUM	2.33	-2.47	-2.16	-2.29																	-1.88	1.34
Yi MINIMUM	-0.05	-0.05	-0.13	0.03																	0.05	0.11
Yi MEAN	0.00	0.00	0.00	0.00																		
Yi STD	1.00	1.00	1.00	1.00																		
Ratings MEAN	8.48	9.61	9.61	9.29																		
Ratings STD	0.31	0.21	0.21	0.34																		

Light Duty Rating Workshop

PART ID = Sequence V Calibration - Varnish

RATED VALUES

	Rocker Cover Baffle L	Rocker Cover Baffle R																		
Tschirhart, Garland	9.50	9.80																		
Radonich, Pete	9.65	9.80																		
Sanchez, Art	9.60	9.90																		
Kobrinetz, Jack	9.60	9.80																		
Kirkpatrick, John	9.00	9.20																		
Foecking, Brian	9.68	9.78																		
Cales, Jonathon	9.62	9.82																		
Hills, Barry	9.80	9.83																		
Lopez, Frank	9.70	9.90																		
Garcia, Orlando	9.55	9.73																		
Pansza, Mike	9.62	9.76																		
Caproni, David	9.68	9.80																		
Yanchar, Paul	9.72	9.85																		
Adams, Pat	9.70	9.90																		
Castillo, George	9.72	9.83																		
Ramirez, Robert	9.39	9.62																		
Rodriguez, Jesse	9.80	9.70																		
Seiz, Ray	9.40	9.60																		
Viera, Ralph	9.60	9.74																		
Avis, Steve	9.70	9.80																		
Lowsky, John	8.91	8.96																		
MAXIMUM	9.80	9.90																		
MINIMUM	8.91	8.96																		
RANGE (MAX-MIN)	0.89	0.94																		
MEAN	9.57	9.72																		
STD	0.23	0.23																		



yi within 1 86%  
 yi within 2 90%  
 yi within 3 98%

PART ID = Sequence V Calibration - Varnish

YI VALUES

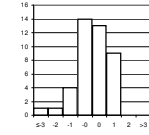
	Rocker Cover Baffle L	Rocker Cover Baffle R																			MEAN	STD
Tschirhart, Garland	-0.30	0.35																			0.03	0.46
Radonich, Pete	0.35	0.35																			0.35	0.00
Sanchez, Art	0.14	0.78																			0.46	0.46
Kobrinetz, Jack	0.14	0.35																			0.24	0.15
Kirkpatrick, John	-2.46	-2.26																			-2.36	0.14
Foecking, Brian	0.48	0.26																			0.37	0.16
Cales, Jonathon	0.22	0.43																			0.33	0.15
Hills, Barry	1.00	0.48																			0.74	0.37
Lopez, Frank	0.57	0.78																			0.68	0.15
Garcia, Orlando	-0.08	0.04																			-0.02	0.09
Pansza, Mike	0.22	0.17																			0.20	0.03
Caproni, David	0.48	0.35																			0.42	0.10
Yanchar, Paul	0.66	0.57																			0.61	0.06
Adams, Pat	0.57	0.78																			0.68	0.15
Castillo, George	0.66	0.48																			0.57	0.13
Ramirez, Robert	-0.77	-0.43																			-0.60	0.24
Rodriguez, Jesse	1.00	-0.09																			0.46	0.77
Seiz, Ray	-0.73	-0.52																			-0.63	0.15
Viera, Ralph	0.14	0.09																			0.11	0.03
Avis, Steve	0.57	0.35																			0.46	0.16
Lowsky, John	-2.85	-3.30																			-3.08	0.32
YI MAXIMUM	-2.85	-3.30																			-3.08	0.77
YI MINIMUM	-0.08	0.04																			-0.02	0.00
YI MEAN	0.00	0.00																				
YI STD	1.00	1.00																				
Ratings MEAN	9.57	9.72																				
Ratings STD	0.23	0.23																				

Light Duty Rating Workshop

PART ID = Sequence V Calibration - Sludge

RATED VALUES

	Rocker Cover Baffle L	Rocker Cover Baffle R														
Tschirhart, Garland	7.80	9.65														
Radonich, Pete	8.20	9.50														
Sanchez, Art	8.70	9.52														
Kobrinetz, Jack	8.35	9.39														
Kirkpatrick, John	7.50	9.00														
Foecking, Brian	8.70	9.48														
Cales, Jonathon	8.64	9.67														
Hills, Barry	9.06	9.68														
Lopez, Frank	7.89	9.70														
Garcia, Orlando	7.87	9.55														
Pansza, Mike	8.46	9.60														
Caproni, David	8.10	9.47														
Yanchar, Paul	8.30	9.50														
Adams, Pat	8.05	9.45														
Castillo, George	7.89	9.47														
Ramirez, Robert	8.59	9.60														
Rodriguez, Jesse	8.00	9.49														
Seiz, Ray	8.20	9.35														
Viera, Ralph	8.41	9.70														
Avis, Steve	8.70	9.37														
Lowsky, John	8.70	9.34														
MAXIMUM	9.06	9.70														
MINIMUM	7.50	9.00														
RANGE (MAX-MIN)	1.56	0.70														
MEAN	8.29	9.50														
STD	0.39	0.16														



yi within 1 64%  
 yi within 2 95%  
 yi within 3 98%

PART ID = Sequence V Calibration - Sludge

YI VALUES

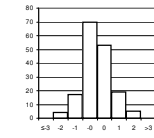
	Rocker Cover Baffle L	Rocker Cover Baffle R															MEAN	STD	
Tschirhart, Garland	-1.25	0.94															-0.16	1.55	
Radonich, Pete	-0.23	0.01															-0.11	0.17	
Sanchez, Art	1.04	0.13															0.59	0.65	
Kobrinetz, Jack	0.15	-0.68															-0.26	0.59	
Kirkpatrick, John	-2.02	-3.10															-2.56	0.77	
Foecking, Brian	1.04	-0.12															0.46	0.82	
Cales, Jonathon	0.89	1.06															0.98	0.12	
Hills, Barry	1.96	1.12															1.54	0.59	
Lopez, Frank	-1.02	1.25															0.11	1.60	
Garcia, Orlando	-1.07	0.32															-0.38	0.98	
Pansza, Mike	0.43	0.63															0.53	0.14	
Caproni, David	-0.49	-0.18															-0.33	0.22	
Yanchar, Paul	0.02	0.01															0.01	0.01	
Adams, Pat	-0.61	-0.30															-0.46	0.22	
Castillo, George	-1.02	-0.18															-0.60	0.59	
Ramirez, Robert	0.76	0.63															0.69	0.10	
Rodriguez, Jesse	-0.74	-0.06															-0.40	0.48	
Seiz, Ray	-0.23	-0.93															-0.58	0.49	
Viera, Ralph	0.30	1.25															0.78	0.67	
Avis, Steve	1.04	-0.80															0.12	1.30	
Lowsky, John	1.04	-0.99															0.03	1.44	
Yi MAXIMUM	-2.02	-3.10															-2.56	1.60	
Yi MINIMUM	-0.23	0.01															-0.11	0.01	
Yi MEAN	0.00	0.00																	
Yi STD	1.00	1.00																	
Ratings MEAN	8.29	9.50																	
Ratings STD	0.39	0.16																	

Light Duty Rating Workshop

PART ID = Sequence V Calibration - Piston Set D

RATED VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8									
Tschirhart, Garland	9.25	8.71	9.41	7.88	8.88	8.20	9.80	8.50									
Foecking, Brian	9.15	8.88	9.00	8.27	9.02	8.77	9.90	8.70									
Pansza, Mike	8.59	8.26	8.43	7.72	8.36	8.42	9.63	8.24									
Hills, Barry	9.14	9.00	9.25	8.41	9.25	8.88	9.80	8.98									
Radonich, Pete	8.90	8.50	8.60	8.20	8.90	8.50	9.80	8.40									
Sanchez, Art	9.25	9.13	9.03	8.52	8.92	9.06	9.76	8.94									
Kirkpatrick, John	9.40	9.50	9.50	9.20	9.50	9.30	9.80	9.50									
Garcia, Orlando	8.56	8.45	8.52	8.10	8.53	8.28	9.72	8.37									
Kobrinetz, Jack	8.68	8.60	8.60	8.32	8.70	8.45	9.70	8.48									
Cales, Jonathon	8.80	8.50	8.74	8.30	8.23	8.18	9.85	8.22									
Lopez, Frank	8.22	8.00	8.28	7.46	9.53	8.38	9.60	8.16									
Castillo, George	8.69	8.36	8.50	7.81	8.60	8.40	9.55	8.22									
Ramirez, Robert	8.78	8.50	8.61	7.98	8.43	8.31	9.69	8.28									
Viera, Ralph	8.49	8.58	8.31	8.08	8.44	8.35	9.36	8.59									
Yanchar, Paul	8.90	8.50	8.70	8.00	8.50	8.30	9.60	8.60									
Adams, Pat	8.56	8.91	9.07	8.37	8.71	8.70	9.60	9.10									
Seiz, Ray	8.96	8.77	9.11	8.13	9.38	9.29	9.00	9.70									
Pawczuk, Greg	8.68	7.72	8.12	7.45	7.87	7.87	9.60	8.00									
Caproni, David	8.91	8.92	8.88	8.56	8.98	8.84	9.70	8.58									
Lowsky, John	9.00	8.66	8.79	8.25	9.06	8.66	9.64	8.53									
Rodriguez, Jesse	8.37	8.47	8.22	7.82	8.34	8.08	9.19	8.08									
MAXIMUM	9.40	9.50	9.50	9.20	9.53	9.30	9.90	9.70									
MINIMUM	8.22	7.72	8.12	7.45	7.87	7.87	9.00	8.00									
RANGE (MAX-MIN)	1.18	1.78	1.38	1.75	1.66	1.43	0.90	1.70									
MEAN	8.82	8.62	8.75	8.13	8.77	8.53	9.63	8.58									
STD	0.31	0.38	0.39	0.39	0.44	0.38	0.22	0.45									



yi within 1 73%  
 yi within 2 95%  
 yi within 3 100%

PART ID = Sequence V Calibration - Piston Set D

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8										MEAN	STD
Tschirhart, Garland	1.38	0.25	1.71	-0.65	0.26	-0.88	0.77	-0.18										0.33	0.92
Foecking, Brian	1.06	0.69	0.65	0.34	0.58	0.62	1.23	0.27										0.68	0.33
Pansza, Mike	-0.75	-0.92	-0.81	-1.05	-0.94	-0.30	-0.01	-0.76										-0.69	0.35
Hills, Barry	1.03	1.00	1.30	0.70	1.11	0.91	0.77	0.90										0.96	0.19
Radonich, Pete	0.25	-0.30	-0.38	0.17	0.30	-0.09	0.77	-0.40										0.04	0.41
Sanchez, Art	1.38	1.34	0.73	0.98	0.35	1.38	0.58	0.81										0.94	0.39
Kirkpatrick, John	1.87	2.30	1.94	2.70	1.68	2.01	0.77	2.06										1.92	0.56
Garcia, Orlando	-0.85	-0.43	-0.58	-0.09	-0.55	-0.67	0.40	-0.47										-0.40	0.39
Kobrinetz, Jack	-0.46	-0.04	-0.38	0.47	-0.16	-0.22	0.31	-0.22										-0.09	0.32
Cales, Jonathon	-0.07	-0.30	-0.02	0.42	-1.23	-0.93	1.00	-0.80										-0.24	0.74
Lopez, Frank	-1.95	-1.60	-1.20	-1.71	1.75	-0.41	-0.15	-0.94										-0.78	1.20
Castillo, George	-0.43	-0.66	-0.63	-0.82	-0.39	-0.35	-0.38	-0.80										-0.56	0.20
Ramirez, Robert	-0.14	-0.30	-0.35	-0.39	-0.78	-0.59	0.26	-0.67										-0.37	0.33
Viera, Ralph	-1.08	-0.09	-1.12	-0.14	-0.75	-0.48	-1.25	0.02										-0.61	0.51
Yanchar, Paul	0.25	-0.30	-0.12	-0.34	-0.61	-0.62	-0.15	0.05										-0.23	0.30
Adams, Pat	-0.85	0.77	0.83	0.60	-0.13	0.44	-0.15	1.16										0.33	0.66
Seiz, Ray	0.44	0.40	0.94	-0.01	1.40	1.99	-2.91	2.51										0.60	1.65
Pawczuk, Greg	-0.46	-2.33	-1.61	-1.74	-2.06	-1.75	-0.15	-1.30										-1.42	0.76
Caproni, David	0.28	0.79	0.34	1.08	0.49	0.80	0.31	0.00										0.51	0.35
Lowsky, John	0.57	0.12	0.11	0.29	0.67	0.33	0.03	-0.11										0.25	0.27
Rodriguez, Jesse	-1.47	-0.38	-1.35	-0.80	-0.98	-1.19	-2.03	-1.12										-1.17	0.49
Yi MAXIMUM	-1.95	-2.33	1.94	2.70	-2.06	2.01	-2.91	2.51										1.92	1.65
Yi MINIMUM	-0.07	-0.04	-0.02	-0.01	-0.13	-0.09	-0.01	-0.11										0.04	0.19
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00											
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00											
Ratings MEAN	8.82	8.62	8.75	8.13	8.77	8.53	9.63	8.58											
Ratings STD	0.31	0.38	0.39	0.39	0.44	0.38	0.22	0.45											

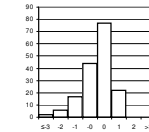


Light Duty Rating Workshop

PART ID = Sequence V - Piston Set E

RATED VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8										
Tschirhart, Garland	9.80	9.80	9.80	9.80	8.60	9.70	9.70	9.70										
Pansza, Mike	9.62	9.76	9.46	9.56	8.34	9.41	9.52	9.43										
Hills, Barry	9.84	9.84	9.72	9.80	9.00	9.73	9.65	9.79										
Radonich, Pete	9.65	9.80	9.54	9.70	8.55	9.47	9.52	9.52										
Foecking, Brian	9.84	9.87	9.83	9.82	8.70	9.66	9.72	9.68										
Sanchez, Art	9.66	9.66	9.60	9.66	8.94	9.60	9.48	9.60										
Kirkpatrick, John	9.80	9.80	9.70	9.70	9.40	9.40	9.40	9.70										
Garcia, Orlando	9.73	9.74	9.67	9.67	8.26	9.55	9.69	9.56										
Kobrinetz, Jack	9.70	9.70	9.60	9.70	8.60	9.50	9.60	9.60										
Cales, Jonathon	9.70	9.80	9.60	9.70	7.95	9.60	9.67	9.50										
Lopez, Frank	9.53	9.53	9.35	9.42	8.04	9.21	9.42	9.24										
Castillo, George	9.50	9.46	9.30	9.47	8.16	9.12	9.27	9.24										
Ramirez, Robert	9.48	9.52	9.36	9.49	9.20	9.19	9.32	9.40										
Viera, Ralph	9.67	8.90	9.13	9.45	8.63	9.63	9.32	9.29										
Yanchar, Paul	9.50	9.60	9.20	9.40	8.50	9.20	9.20	9.20										
Adams, Pat	9.26	9.30	9.11	9.20	8.86	9.42	9.14	9.53										
Seiz, Ray	9.60	9.60	9.40	9.30	9.06	9.53	9.56	9.46										
Pawczuk, Greg	9.50	9.60	9.30	9.40	7.70	9.03	9.20	8.88										
Caproni, David	9.50	9.60	9.10	9.40	8.60	9.50	9.50	9.10										
Lowsky, John	9.54	9.64	9.48	9.54	8.59	9.39	9.41	9.35										
Rodriguez, Jesse	8.89	8.85	8.69	8.78	7.80	8.69	8.86	8.63										
MAXIMUM	9.84	9.87	9.83	9.82	9.40	9.73	9.72	9.79										
MINIMUM	8.89	8.85	8.69	8.78	7.70	8.69	8.86	8.63										
RANGE (MAX-MIN)	0.95	1.02	1.14	1.04	1.70	1.04	0.86	1.16										
MEAN	9.59	9.59	9.43	9.52	8.55	9.41	9.44	9.40										
STD	0.21	0.28	0.28	0.24	0.45	0.26	0.22	0.28										



yi within 1 72%  
 yi within 2 95%  
 yi within 3 99%

PART ID = Sequence V - Piston Set E

YI VALUES

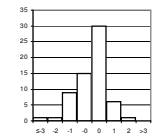
	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8											MEAN	STD
Tschirhart, Garland	1.00	0.76	1.34	1.14	0.12	1.15	1.20	1.05											0.97	0.38
Pansza, Mike	0.16	0.62	0.12	0.16	-0.46	0.01	0.38	0.11											0.14	0.31
Hills, Barry	1.18	0.91	1.05	1.14	1.00	1.27	0.98	1.37											1.11	0.16
Radonich, Pete	0.30	0.76	0.41	0.73	0.01	0.25	0.38	0.42											0.41	0.25
Foecking, Brian	1.18	1.02	1.45	1.23	0.34	0.99	1.29	0.98											1.06	0.33
Sanchez, Art	0.34	0.26	0.62	0.57	0.87	0.76	0.20	0.70											0.54	0.25
Kirkpatrick, John	1.00	0.76	0.98	0.73	1.89	-0.02	-0.16	1.05											0.78	0.65
Garcia, Orlando	0.67	0.55	0.87	0.61	-0.63	0.56	1.16	0.56											0.54	0.52
Kobrinetz, Jack	0.53	0.40	0.62	0.73	0.12	0.37	0.75	0.70											0.53	0.22
Cales, Jonathon	0.53	0.76	0.62	0.73	-1.32	0.76	1.07	0.35											0.44	0.74
Lopez, Frank	-0.26	-0.21	-0.27	-0.42	-1.12	-0.77	-0.07	-0.56											-0.46	0.34
Castillo, George	-0.40	-0.47	-0.45	-0.21	-0.86	-1.12	-0.75	-0.56											-0.60	0.29
Ramirez, Robert	-0.49	-0.25	-0.24	-0.13	1.45	-0.85	-0.53	0.00											-0.13	0.69
Viera, Ralph	0.39	-2.50	-1.06	-0.30	0.18	0.88	-0.53	-0.39											-0.41	1.03
Yanchar, Paul	-0.40	0.04	-0.81	-0.50	-0.10	-0.81	-1.07	-0.70											-0.54	0.38
Adams, Pat	-1.52	-1.05	-1.13	-1.33	0.69	0.05	-1.35	0.46											-0.65	0.90
Seiz, Ray	0.06	0.04	-0.09	-0.91	1.14	0.49	0.57	0.21											0.19	0.59
Pawczuk, Greg	-0.40	0.04	-0.45	-0.50	-1.87	-1.47	-1.07	-1.83											-0.95	0.72
Caproni, David	-0.40	0.04	-1.17	-0.50	0.12	0.37	0.29	-1.05											-0.29	0.59
Lowsky, John	-0.22	0.18	0.19	0.07	0.10	-0.06	-0.12	-0.18											0.00	0.16
Rodriguez, Jesse	-3.24	-2.68	-2.63	-3.05	-1.65	-2.81	-2.62	-2.70											-2.67	0.47
Yi MAXIMUM	-3.24	-2.68	-2.63	-3.05	1.89	-2.81	-2.62	-2.70											-2.67	1.03
Yi MINIMUM	0.06	-0.21	-0.09	-0.13	0.01	0.01	-0.07	0.00											0.00	0.16
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Ratings MEAN	9.59	9.59	9.43	9.52	8.55	9.41	9.44	9.40												
Ratings STD	0.21	0.28	0.28	0.24	0.45	0.26	0.22	0.28												

Light Duty Rating Workshop

PART ID = Sequence V - Varnish

RATED VALUES

	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R															
Tschirhart, Garland	8.83	9.50	9.70															
Pansza, Mike	8.46	9.54	9.72															
Hills, Barry	9.08	9.85	9.85															
Radonich, Pete	8.73	9.80	9.80															
Foecking, Brian	8.96	9.68	9.78															
Kirkpatrick, John	9.46	9.50	9.00															
Garcia, Orlando	8.57	9.74	9.63															
Kobrinetz, Jack	8.69	9.80	9.80															
Sanchez, Art	9.07	9.90	9.70															
Cales, Jonathon	8.60	9.80	9.70															
Lopez, Frank	8.28	9.80	9.77															
Ramirez, Robert	8.57	9.72	9.61															
Castillo, George	8.52	9.92	9.88															
Viera, Ralph	8.53	9.81	9.67															
Yanchar, Paul	8.64	9.75	9.65															
Adams, Pat	8.88	9.90	9.80															
Seiz, Ray	9.04	9.35	9.50															
Pawczuk, Greg	8.16	9.86	9.85															
Lowsky, John	8.82	9.50	9.50															
Caproni, David	8.92	9.70	9.80															
Rodriguez, Jesse	8.32	9.80	9.80															
MAXIMUM	9.46	9.92	9.88															
MINIMUM	8.16	9.35	9.00															
RANGE (MAX-MIN)	1.30	0.57	0.88															
MEAN	8.72	9.72	9.69															
STD	0.31	0.16	0.19															



yi within 1 71%  
 yi within 2 95%  
 yi within 3 98%

PART ID = Sequence V - Varnish

YI VALUES

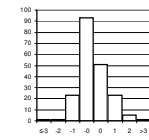
	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R																MEAN	STD
Tschirhart, Garland	0.35	-1.42	0.05																-0.34	0.95
Pansza, Mike	-0.84	-1.17	0.15																-0.62	0.69
Hills, Barry	1.16	0.79	0.84																0.93	0.20
Radonich, Pete	0.03	0.48	0.57																0.36	0.29
Foecking, Brian	0.77	-0.28	0.47																0.32	0.54
Kirkpatrick, John	2.38	-1.42	-3.63																-0.89	3.04
Garcia, Orlando	-0.49	0.10	-0.32																-0.24	0.30
Kobrinetz, Jack	-0.10	0.48	0.57																0.32	0.36
Sanchez, Art	1.13	1.11	0.05																0.76	0.62
Cales, Jonathon	-0.39	0.48	0.05																0.05	0.43
Lopez, Frank	-1.42	0.48	0.42																-0.18	1.08
Ramirez, Robert	-0.49	-0.03	-0.43																-0.31	0.25
Castillo, George	-0.65	1.24	0.99																0.53	1.02
Viera, Ralph	-0.61	0.54	-0.11																-0.06	0.58
Yanchar, Paul	-0.26	0.16	-0.22																-0.10	0.23
Adams, Pat	0.51	1.11	0.57																0.73	0.33
Seiz, Ray	1.03	-2.37	-1.00																-0.78	1.71
Pawczuk, Greg	-1.81	0.86	0.84																-0.04	1.53
Lowsky, John	0.32	-1.42	-1.00																-0.70	0.91
Caproni, David	0.64	-0.16	0.57																0.35	0.44
Rodriguez, Jesse	-1.29	0.48	0.57																-0.08	1.05
Yi MAXIMUM	2.38	-2.37	-3.63																0.93	3.04
Yi MINIMUM	0.03	-0.03	0.05																-0.04	0.20
Yi MEAN	0.00	0.00	0.00																	
Yi STD	1.00	1.00	1.00																	
Ratings MEAN	8.72	9.72	9.69																	
Ratings STD	0.31	0.16	0.19																	

Light Duty Rating Workshop

PART ID = Sequence V - Sludge

RATED VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R									
Tschirhart, Garland	9.75	7.87	9.50	7.50	6.80	9.60	8.88	9.50	3.00									
Pansza, Mike	9.75	6.88	9.44	7.02	7.56	9.64	8.42	9.58	2.57									
Hills, Barry	9.70	7.57	9.54	7.63	7.50	9.59	9.00	9.00	2.44									
Radonich, Pete	9.70	7.32	9.50	7.60	6.67	9.50	8.86	9.50	2.44									
Foecking, Brian	9.72	7.37	9.52	7.70	6.77	9.66	9.18	9.55	2.40									
Kirkpatrick, John	9.62	6.97	9.75	9.15	6.55	9.62	8.21	9.55	2.40									
Garcia, Orlando	9.51	7.18	9.48	7.89	6.67	9.55	8.68	9.41	2.49									
Kobrinetz, Jack	9.60	7.12	9.21	8.14	6.61	9.50	8.40	9.35	2.42									
Sanchez, Art	9.77	7.40	9.70	8.10	6.80	9.78	9.07	9.73	2.45									
Cales, Jonathon	9.73	7.23	9.55	7.81	6.74	9.49	9.13	9.61	2.40									
Lopez, Frank	9.80	6.85	9.70	7.78	6.70	9.75	8.64	9.55	2.42									
Ramirez, Robert	9.71	7.03	9.65	7.84	6.71	9.70	8.67	9.66	2.41									
Castillo, George	9.63	7.04	9.50	7.63	6.70	9.56	9.03	9.61	2.42									
Viera, Ralph	9.73	7.61	9.70	7.22	6.66	9.57	8.83	9.46	2.39									
Yanchar, Paul	9.68	7.17	9.45	7.80	6.77	9.56	8.70	9.51	2.42									
Adams, Pat	9.59	6.74	9.35	7.45	7.48	9.48	8.39	9.44	2.50									
Seiz, Ray	9.84	7.40	9.43	8.17	6.90	9.74	8.87	9.72	2.42									
Pawczuk, Greg	9.64	6.80	9.45	8.20	6.65	9.54	8.75	9.48	2.45									
Lowsky, John	9.52	6.99	9.43	7.13	6.69	9.50	8.46	9.60	2.45									
Caproni, David	9.50	7.18	9.50	8.07	6.63	9.48	8.43	9.47	2.42									
Avis, Steve	9.69	7.23	9.61	7.46	6.62	9.73	8.39	9.60	2.42									
Rodriguez, Jesse	9.64	7.07	9.51	7.10	6.61	9.71	8.42	9.64	2.42									
MAXIMUM	9.84	7.87	9.75	9.15	7.56	9.78	9.18	9.73	3.00									
MINIMUM	9.50	6.74	9.21	7.02	6.55	9.48	8.21	9.00	2.39									
RANGE (MAX-MIN)	0.34	1.13	0.54	2.13	1.01	0.30	0.97	0.73	0.61									
MEAN	9.67	7.18	9.52	7.75	6.81	9.60	8.70	9.52	2.46									
STD	0.09	0.28	0.13	0.47	0.30	0.10	0.28	0.15	0.13									



yi within 1 73%  
 yi within 2 96%  
 yi within 3 99%

PART ID = Sequence V - Sludge

YI VALUES

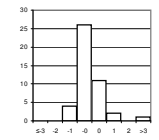
	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R										MEAN	STD
Tschirhart, Garland	0.83	2.46	-0.17	-0.52	-0.03	-0.02	0.64	-0.16	4.24										0.81	1.56
Pansza, Mike	0.83	-1.08	-0.64	-1.54	2.53	0.39	-0.99	0.37	0.86										0.08	1.27
Hills, Barry	0.29	1.38	0.15	-0.24	2.33	-0.13	1.06	-3.47	-0.17										0.13	1.60
Radonich, Pete	0.29	0.49	-0.17	-0.31	-0.47	-1.05	0.57	-0.16	-0.17										-0.11	0.50
Foecking, Brian	0.51	0.67	-0.01	-0.10	-0.13	0.59	1.70	0.17	-0.48										0.32	0.64
Kirkpatrick, John	-0.59	-0.76	1.80	2.98	-0.87	0.18	-1.74	0.17	-0.48										0.08	1.46
Garcia, Orlando	-1.79	-0.01	-0.33	0.31	-0.47	-0.54	-0.07	-0.75	0.23										-0.38	0.63
Kobrinetz, Jack	-0.80	-0.22	-2.46	0.84	-0.67	-1.05	-1.06	-1.15	-0.33										-0.77	0.88
Sanchez, Art	1.05	0.78	1.41	0.75	-0.03	1.82	1.31	1.37	-0.09										0.93	0.65
Cales, Jonathon	0.62	0.17	0.23	0.14	-0.23	-1.15	1.52	0.57	-0.48										0.15	0.75
Lopez, Frank	1.38	-1.19	1.41	0.07	-0.37	1.51	-0.21	0.17	-0.33										0.27	0.95
Ramirez, Robert	0.40	-0.55	1.02	0.20	-0.33	1.00	-0.11	0.90	-0.40										0.24	0.63
Castillo, George	-0.48	-0.51	-0.17	-0.24	-0.37	-0.43	1.17	0.57	-0.33										-0.09	0.57
Viera, Ralph	0.62	1.53	1.41	-1.11	-0.50	-0.33	0.46	-0.42	-0.56										0.12	0.93
Yanchar, Paul	0.07	-0.05	-0.56	0.12	-0.13	-0.43	0.00	-0.09	-0.33										-0.16	0.23
Adams, Pat	-0.91	-1.58	-1.35	-0.63	2.26	-1.25	-1.10	-0.55	0.30										-0.54	1.19
Seiz, Ray	1.82	0.78	-0.72	0.90	0.31	1.41	0.60	1.30	-0.33										0.67	0.82
Pawczuk, Greg	-0.37	-1.37	-0.56	0.97	-0.53	-0.64	0.18	-0.29	-0.09										-0.30	0.64
Lowsky, John	-1.68	-0.69	-0.72	-1.31	-0.40	-1.05	-0.85	0.51	-0.09										-0.70	0.65
Caproni, David	-1.90	-0.01	-0.17	0.69	-0.60	-1.25	-0.96	-0.35	-0.33										-0.54	0.75
Avis, Steve	0.18	0.17	0.70	-0.60	-0.63	1.31	-1.10	0.51	-0.33										0.02	0.76
Rodriguez, Jesse	-0.37	-0.40	-0.09	-1.37	-0.67	1.10	-0.99	0.77	-0.33										-0.26	0.78
Yi MAXIMUM	-1.90	2.46	-2.46	2.98	2.53	1.82	-1.74	-3.47	4.24										0.93	1.60
Yi MINIMUM	0.07	-0.01	-0.10	-0.10	-0.03	-0.02	0.00	-0.09	-0.09										0.02	0.23
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00											
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00											
Ratings MEAN	9.67	7.18	9.52	7.75	6.81	9.60	8.70	9.52	2.46											
Ratings STD	0.09	0.28	0.13	0.47	0.30	0.10	0.28	0.15	0.13											

Light Duty Rating Workshop

PART ID = Sequence V - Oil Screen Clogging

RATED VALUES

	% Sludge	% Debris																	
Tschirhart, Garland	60.00	0.00																	
Pansza, Mike	70.00	1.00																	
Hills, Barry	70.00	0.00																	
Radonich, Pete	75.00	0.00																	
Foecking, Brian	65.00	1.00																	
Kirkpatrick, John	80.00	1.00																	
Garcia, Orlando	63.00	2.00																	
Kobrinetz, Jack	60.00	5.00																	
Sanchez, Art	60.00	0.00																	
Cales, Jonathon	80.00	1.00																	
Lopez, Frank	65.00	0.00																	
Ramirez, Robert	76.00	2.00																	
Castillo, George	70.00	1.00																	
Viera, Ralph	70.00	0.00																	
Yanchar, Paul	74.00	1.00																	
Adams, Pat	73.00	2.00																	
Seiz, Ray	72.00	1.00																	
Pawczuk, Greg	74.00	1.00																	
Lowsky, John	70.00	1.00																	
Caproni, David	75.00	1.00																	
Avis, Steve	70.00	0.00																	
Rodriguez, Jesse	75.00	1.00																	
MAXIMUM	80.00	5.00																	
MINIMUM	60.00	0.00																	
RANGE (MAX-MIN)	20.00	5.00																	
MEAN	70.32	1.00																	
STD	5.99	1.11																	



yi within 1 84%  
 yi within 2 98%  
 yi within 3 98%

PART ID = Sequence V - Oil Screen Clogging

YI VALUES

	% Sludge	% Debris																	MEAN	STD
Tschirhart, Garland	-1.72	-0.90																	-1.31	0.58
Pansza, Mike	-0.05	0.00																	-0.03	0.04
Hills, Barry	-0.05	-0.90																	-0.48	0.60
Radonich, Pete	0.78	-0.90																	-0.06	1.19
Foecking, Brian	-0.89	0.00																	-0.44	0.63
Kirkpatrick, John	1.62	0.00																	0.81	1.14
Garcia, Orlando	-1.22	0.90																	-0.16	1.50
Kobrinetz, Jack	-1.72	3.59																	0.94	3.76
Sanchez, Art	-1.72	-0.90																	-1.31	0.58
Cales, Jonathon	1.62	0.00																	0.81	1.14
Lopez, Frank	-0.89	-0.90																	-0.89	0.01
Ramirez, Robert	0.95	0.90																	0.92	0.04
Castillo, George	-0.05	0.00																	-0.03	0.04
Viera, Ralph	-0.05	-0.90																	-0.48	0.60
Yanchar, Paul	0.61	0.00																	0.31	0.43
Adams, Pat	0.45	0.90																	0.67	0.32
Seiz, Ray	0.28	0.00																	0.14	0.20
Pawczuk, Greg	0.61	0.00																	0.31	0.43
Lowsky, John	-0.05	0.00																	-0.03	0.04
Caproni, David	0.78	0.00																	0.39	0.55
Avis, Steve	-0.05	-0.90																	-0.48	0.60
Rodriguez, Jesse	0.78	0.00																	0.39	0.55
Yi MAXIMUM	-1.72	3.59																	-1.31	3.76
Yi MINIMUM	-0.05	-0.90																	-0.03	0.01
Yi MEAN	0.00	0.00																		
Yi STD	1.00	1.00																		
Ratings MEAN	70.32	1.00																		
Ratings STD	5.99	1.11																		

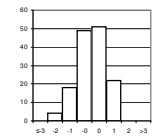


Light Duty Rating Workshop

PART ID = Induction/Combustion - Piston Tops (J)

RATED VALUES

	1	2	3	4	5	6	7	8										
Tschirhart, Garland	9.19	9.44	9.47	9.41	9.41	9.59	9.49	9.69										
Pansza, Mike	8.60	8.80	8.90	8.90	8.90	9.12	9.22	9.30	9.41									
Radonich, Pete	9.05	9.16	9.21	9.32	9.27	9.30	9.44	9.58										
Lopez, Frank	8.22	8.50	8.88	9.40	9.22	9.22	9.25	9.37										
Foecking, Brian	9.13	9.40	9.48	9.52	9.50	9.50	9.57	9.60										
Kirkpatrick, John	7.90	8.60	9.10	8.90	8.90	8.90	9.10	9.10										
Kobrinetz, Jack	8.42	8.74	8.85	9.10	9.04	9.20	9.19	9.37										
Garcia, Orlando	8.44	8.56	8.76	9.06	9.00	9.12	9.12	9.24										
Sanchez, Art	8.92	9.01	9.06	9.27	9.22	9.42	9.32	9.58										
Rodriguez, Jesse	8.88	8.76	8.64	9.18	9.17	9.14	9.39	9.31										
Yanchar, Paul	8.90	9.10	9.20	9.20	9.20	9.30	9.30	9.40										
Castillo, George	9.06	9.05	9.14	9.16	9.24	9.32	9.28	9.48										
Ramirez, Robert	8.61	8.64	8.75	8.72	9.08	8.82	9.13	9.34										
Pawczuk, Greg	8.50	8.73	8.98	9.18	9.31	9.36	9.24	9.35										
Adams, Pat	8.16	8.60	9.15	8.39	9.42	9.64	9.54	9.56										
Seiz, Ray	8.03	7.65	9.20	9.02	9.26	9.34	9.28	9.61										
Lowsky, John	8.47	8.63	8.88	9.19	8.98	9.47	9.33	9.48										
Viera, Ralph	8.82	8.62	8.61	9.31	9.40	9.48	9.34	9.59										
MAXIMUM	9.19	9.44	9.48	9.52	9.50	9.64	9.57	9.69										
MINIMUM	7.90	7.65	8.61	8.39	8.90	8.82	9.10	9.10										
RANGE (MAX-MIN)	1.29	1.79	0.87	1.13	0.60	0.82	0.47	0.59										
MEAN	8.62	8.78	9.01	9.12	9.21	9.30	9.31	9.45										
STD	0.39	0.40	0.25	0.27	0.17	0.22	0.14	0.15										



yi within 1 69%  
 yi within 2 97%  
 yi within 3 100%

PART ID = Induction/Combustion - Piston Tops (J)

YI VALUES

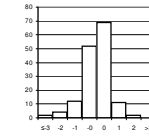
	1	2	3	4	5	6	7	8											MEAN	STD
Tschirhart, Garland	1.49	1.65	1.80	1.06	1.22	1.36	1.31	1.58											1.43	0.24
Pansza, Mike	-0.04	0.06	-0.45	-0.83	-0.53	-0.36	-0.09	-0.25											-0.31	0.29
Radonich, Pete	1.12	0.95	0.77	0.72	0.37	0.02	0.94	0.86											0.72	0.36
Lopez, Frank	-1.03	-0.69	-0.53	1.02	0.07	-0.36	-0.45	-0.51											-0.31	0.62
Foecking, Brian	1.33	1.55	1.84	1.46	1.76	0.94	1.90	0.99											1.47	0.36
Kirkpatrick, John	-1.86	-0.44	0.34	-0.83	-1.85	-1.84	-1.55	-2.27											-1.29	0.89
Kobrinetz, Jack	-0.51	-0.09	-0.65	-0.09	-1.01	-0.45	-0.89	-0.51											-0.52	0.33
Garcia, Orlando	-0.46	-0.54	-1.00	-0.24	-1.25	-0.82	-1.41	-1.36											-0.88	0.44
Sanchez, Art	0.79	0.58	0.18	0.54	0.07	0.57	0.06	0.86											0.46	0.31
Rodriguez, Jesse	0.16	-0.04	-1.48	0.21	-0.23	-0.73	0.58	-0.90											-0.30	0.68
Yanchar, Paul	0.74	0.80	0.73	0.28	-0.05	0.02	-0.09	-0.31											0.27	0.44
Castillo, George	1.15	0.68	0.50	0.13	0.19	0.11	-0.23	0.21											0.34	0.42
Ramirez, Robert	-0.02	-0.34	-1.04	-1.49	-0.77	-2.21	-1.33	-0.70											-0.99	0.69
Pawczuk, Greg	-0.30	-0.12	-0.14	0.21	0.61	0.29	-0.53	-0.64											-0.08	0.43
Adams, Pat	-1.19	-0.44	0.54	-2.71	1.28	1.59	1.68	0.73											0.18	1.53
Seiz, Ray	-1.52	-2.81	0.73	-0.38	0.31	0.20	-0.23	1.06											-0.33	1.27
Lowsky, John	-0.38	-0.37	-0.53	0.24	-1.37	0.80	0.13	0.21											-0.16	0.66
Viera, Ralph	0.53	-0.39	-1.60	0.69	1.16	0.85	0.21	0.93											0.30	0.90
Yi MAXIMUM	-1.86	-2.81	1.84	-2.71	-1.85	-2.21	1.90	-2.27											1.47	1.53
Yi MINIMUM	-0.02	-0.04	-0.14	-0.09	-0.05	-0.36	-0.09	-0.25											-0.08	0.24
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Ratings MEAN	8.62	8.78	9.01	9.12	9.21	9.30	9.31	9.45												
Ratings STD	0.39	0.40	0.25	0.27	0.17	0.22	0.14	0.15												

Light Duty Rating Workshop

PART ID = Induction/Combustion - Valve Set F

RATED VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8									
Tschirhart, Garland	6.50	9.10	7.00	8.00	9.70	6.00	9.70	7.00									
Pansza, Mike	7.30	8.60	8.00	8.20	9.70	7.70	9.60	7.60									
Radonich, Pete	6.80	9.10	7.80	8.20	9.90	6.40	9.50	7.70									
Lopez, Frank	7.50	9.10	8.00	7.90	9.70	6.40	9.70	7.60									
Garcia, Orlando	7.70	9.20	8.00	7.90	9.90	7.30	9.60	7.50									
Kobrinetz, Jack	7.00	8.80	8.00	7.90	9.90	6.80	9.70	7.60									
Foecking, Brian	6.90	9.20	7.80	8.30	9.80	6.80	9.70	7.30									
Sanchez, Art	7.20	8.40	7.70	8.00	9.00	7.00	9.50	7.50									
Rodriguez, Jesse	7.00	9.00	7.70	8.30	9.70	6.70	9.70	7.40									
Castillo, George	7.60	9.10	7.60	8.40	9.70	6.50	9.70	8.00									
Yanchar, Paul	6.90	9.10	8.00	8.10	9.70	6.00	9.70	6.50									
Pawczuk, Greg	6.50	9.60	7.80	7.70	9.90	6.70	9.70	7.20									
Adams, Pat	7.30	9.20	7.80	7.60	9.80	7.10	9.60	7.10									
Ramirez, Robert	6.70	9.30	7.50	7.90	9.80	6.40	9.50	7.20									
Lowsky, John	8.10	9.30	7.80	8.60	9.98	6.50	9.65	7.25									
Seiz, Ray	6.90	9.00	7.10	7.00	9.80	6.10	9.20	7.10									
Caproni, David	7.80	9.10	8.00	8.30	9.90	6.50	9.70	7.60									
Avis, Steve	8.10	9.53	8.15	7.75	9.90	6.85	9.70	7.35									
Viera, Ralph	7.50	8.20	8.80	7.80	9.80	5.80	9.50	6.20									
MAXIMUM	8.10	9.60	8.80	8.60	9.98	7.70	9.70	8.00									
MINIMUM	6.50	8.20	7.00	7.00	9.00	5.80	9.20	6.20									
RANGE (MAX-MIN)	1.60	1.40	1.80	1.60	0.98	1.90	0.50	1.80									
MEAN	7.23	9.05	7.82	7.99	9.77	6.61	9.61	7.30									
STD	0.49	0.35	0.38	0.36	0.21	0.47	0.13	0.42									



yi within 1 80%  
 yi within 2 95%  
 yi within 3 99%

PART ID = Induction/Combustion - Valve Set F

YI VALUES

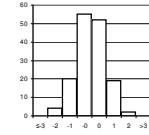
	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8										MEAN	STD
Tschirhart, Garland	-1.48	0.15	-2.14	0.02	-0.33	-1.28	0.67	-0.72										-0.64	0.95
Pansza, Mike	0.15	-1.30	0.47	0.59	-0.33	2.31	-0.10	0.72										0.31	1.03
Radonich, Pete	-0.87	0.15	-0.05	0.59	0.64	-0.44	-0.88	0.96										0.01	0.70
Lopez, Frank	0.56	0.15	0.47	-0.26	-0.33	-0.44	0.67	0.72										0.19	0.48
Garcia, Orlando	0.97	0.44	0.47	-0.26	0.64	1.46	-0.10	0.48										0.51	0.55
Kobrinetz, Jack	-0.46	-0.72	0.47	-0.26	0.64	0.41	0.67	0.72										0.18	0.57
Foecking, Brian	-0.67	0.44	-0.05	0.87	0.16	0.41	0.67	0.00										0.23	0.48
Sanchez, Art	-0.05	-1.88	-0.31	0.02	-3.70	0.83	-0.88	0.48										-0.69	1.48
Rodriguez, Jesse	-0.46	-0.14	-0.31	0.87	-0.33	0.19	0.67	0.24										0.09	0.49
Castillo, George	0.76	0.15	-0.57	1.15	-0.33	-0.23	0.67	1.67										0.41	0.79
Yanchar, Paul	-0.67	0.15	0.47	0.30	-0.33	-1.28	0.67	-1.91										-0.32	0.91
Pawczuk, Greg	-1.48	1.59	-0.05	-0.82	0.64	0.19	0.67	-0.24										0.06	0.95
Adams, Pat	0.15	0.44	-0.05	-1.10	0.16	1.04	-0.10	-0.48										0.01	0.63
Ramirez, Robert	-1.07	0.73	-0.83	-0.26	0.16	-0.44	-0.88	-0.24										-0.35	0.60
Lowsky, John	1.78	0.73	-0.05	1.71	1.03	-0.23	0.29	-0.12										0.64	0.81
Seiz, Ray	-0.67	-0.14	-1.88	-2.79	0.16	-1.07	-3.20	-0.48										-1.26	1.24
Caproni, David	1.17	0.15	0.47	0.87	0.64	-0.23	0.67	0.72										0.56	0.43
Avis, Steve	1.78	1.39	0.87	-0.68	0.64	0.51	0.67	0.12										0.66	0.75
Viera, Ralph	0.56	-2.45	2.56	-0.54	0.16	-1.71	-0.88	-2.63										-0.62	1.72
Yi MAXIMUM	1.78	-2.45	2.56	-2.79	-3.70	2.31	-3.20	-2.63										-1.26	1.72
Yi MINIMUM	-0.05	-0.14	-0.05	0.02	-0.33	-0.23	-0.10	-0.12										-0.32	0.43
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00											
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00											
Ratings MEAN	7.23	9.05	7.82	7.99	9.77	6.61	9.61	7.30											
Ratings STD	0.49	0.35	0.38	0.36	0.21	0.47	0.13	0.42											

Light Duty Rating Workshop

PART ID = Induction/Combustion - Valve Set G

RATED VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8											
Tschirhart, Garland	8.00	5.70	9.30	6.70	7.00	6.50	6.60	9.30											
Pansza, Mike	8.50	7.80	9.30	7.70	8.00	7.40	7.60	9.40											
Radonich, Pete	9.10	6.00	9.40	7.00	7.40	6.60	6.80	9.10											
Lopez, Frank	9.00	6.20	9.10	7.00	8.00	7.50	7.70	9.30											
Garcia, Orlando	9.00	6.60	9.40	7.30	7.90	7.80	8.20	9.20											
Kobrinetz, Jack	8.40	6.00	9.00	7.00	7.80	7.30	7.10	9.50											
Foecking, Brian	9.60	6.50	9.20	7.20	7.50	7.00	7.70	9.00											
Sanchez, Art	8.80	7.00	8.60	7.20	7.50	7.00	7.20	9.00											
Rodriguez, Jesse	9.00	6.40	9.30	7.00	7.30	7.00	7.60	9.30											
Castillo, George	9.00	6.70	9.40	6.90	7.40	7.00	7.90	9.40											
Yanchar, Paul	9.50	7.20	9.30	6.70	7.90	7.00	7.00	9.10											
Pawczuk, Greg	8.50	6.50	9.60	7.00	7.50	6.50	7.50	8.70											
Adams, Pat	9.00	7.50	9.50	7.00	7.20	6.80	7.00	9.20											
Ramirez, Robert	9.50	6.20	9.10	6.90	7.80	7.30	7.50	9.60											
Lowsky, John	9.25	6.50	9.50	7.00	6.80	6.80	7.80	9.60											
Seiz, Ray	9.70	7.10	9.60	7.60	8.50	6.50	5.70	9.20											
Caproni, David	9.80	7.20	9.00	7.10	8.00	7.50	6.70	9.30											
Avis, Steve	9.50	7.30	9.50	7.25	8.50	7.00	7.00	9.70											
Viera, Ralph	9.20	6.80	8.80	6.50	8.00	6.80	6.30	9.50											
MAXIMUM	9.80	7.80	9.60	7.70	8.50	7.80	8.20	9.70											
MINIMUM	8.00	5.70	8.60	6.50	6.80	6.50	5.70	8.70											
RANGE (MAX-MIN)	1.80	2.10	1.00	1.20	1.70	1.30	2.50	1.00											
MEAN	9.07	6.69	9.26	7.06	7.68	7.02	7.21	9.28											
STD	0.48	0.56	0.27	0.29	0.46	0.37	0.62	0.25											



yi within 1 70%  
 yi within 2 96%  
 yi within 3 100%

PART ID = Induction/Combustion - Valve Set G

YI VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8												MEAN	STD
Tschirhart, Garland	-2.23	-1.77	0.16	-1.24	-1.50	-1.38	-0.98	0.06												-1.11	0.84
Pansza, Mike	-1.19	1.97	0.16	2.25	0.69	1.03	0.64	0.47												0.75	1.07
Radonich, Pete	0.06	-1.24	0.53	-0.19	-0.62	-1.11	-0.66	-0.75												-0.50	0.60
Lopez, Frank	-0.15	-0.88	-0.59	-0.19	0.69	1.30	0.80	0.06												0.13	0.74
Garcia, Orlando	-0.15	-0.17	0.53	0.85	0.47	2.10	1.62	-0.34												0.61	0.88
Kobrinetz, Jack	-1.40	-1.24	-0.96	-0.19	0.25	0.76	-0.17	0.88												-0.26	0.87
Foecking, Brian	1.10	-0.35	-0.21	0.50	-0.40	-0.04	0.80	-1.16												0.03	0.73
Sanchez, Art	-0.56	0.54	-2.44	0.50	-0.40	-0.04	-0.01	-1.16												-0.45	0.98
Rodriguez, Jesse	-0.15	-0.53	0.16	-0.19	-0.84	-0.04	0.64	0.06												-0.11	0.45
Castillo, George	-0.15	0.01	0.53	-0.54	-0.62	-0.04	1.13	0.47												0.10	0.59
Yanchar, Paul	0.89	0.90	0.16	-1.24	0.47	-0.04	-0.33	-0.75												0.01	0.76
Pawczuk, Greg	-1.19	-0.35	1.27	-0.19	-0.40	-1.38	0.48	-2.38												-0.52	1.13
Adams, Pat	-0.15	1.43	0.90	-0.19	-1.06	-0.58	-0.33	-0.34												-0.04	0.81
Ramirez, Robert	0.89	-0.88	-0.59	-0.54	0.25	0.76	0.48	1.29												0.21	0.79
Lowsky, John	0.37	-0.35	0.90	-0.19	-1.94	-0.58	0.97	1.29												0.06	1.05
Seiz, Ray	1.31	0.72	1.27	1.90	1.79	-1.38	-2.45	-0.34												0.35	1.59
Caproni, David	1.52	0.90	-0.96	0.16	0.69	1.30	-0.82	0.06												0.36	0.92
Avis, Steve	0.89	1.08	0.90	0.68	1.79	-0.04	-0.33	1.69												0.83	0.74
Viera, Ralph	0.27	0.19	-1.70	-1.93	0.69	-0.58	-1.47	0.88												-0.46	1.12
Yi MAXIMUM	-2.23	1.97	-2.44	2.25	-1.94	2.10	-2.45	-2.38												-1.11	1.59
Yi MINIMUM	-0.15	-0.17	0.16	-0.19	-0.40	-0.04	-0.01	0.06												-0.04	0.45
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00													
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00													
Ratings MEAN	9.07	6.69	9.26	7.06	7.68	7.02	7.21	9.28													
Ratings STD	0.48	0.56	0.27	0.29	0.46	0.37	0.62	0.25													



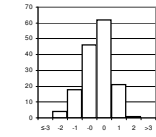


Light Duty Rating Workshop

PART ID = Induction/Combustion - Valve Set I

RATED VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8									
Tschirhart, Garland	9.70	9.00	7.00	5.50	9.20	8.70	9.00	9.90									
Pansza, Mike	9.60	8.60	7.80	6.20	9.20	8.10	8.60	9.80									
Radonich, Pete	9.70	9.00	7.60	5.70	9.40	8.00	9.70	9.90									
Lopez, Frank	9.60	9.00	7.20	6.00	8.70	7.80	8.00	9.80									
Garcia, Orlando	9.60	9.30	7.30	6.60	9.30	8.40	9.00	9.90									
Kobrinetz, Jack	9.70	9.20	7.60	5.40	9.30	8.20	8.30	9.90									
Foecking, Brian	9.70	8.70	7.80	5.70	9.40	8.20	9.80	10.00									
Sanchez, Art	9.60	8.00	7.40	6.00	9.00	7.60	8.80	9.90									
Rodriguez, Jesse	9.70	8.70	7.70	5.90	9.30	7.80	9.10	9.90									
Castillo, George	9.60	9.00	7.60	6.30	9.50	8.00	9.00	9.90									
Yanchar, Paul	9.70	9.00	7.30	6.20	9.50	8.40	9.50	9.90									
Pawczuk, Greg	9.90	9.10	7.50	5.70	9.40	8.60	8.50	9.90									
Adams, Pat	9.40	9.10	7.30	6.00	9.30	8.00	8.20	9.80									
Ramirez, Robert	9.70	8.90	8.50	6.00	9.10	8.10	9.20	9.80									
Lowsky, John	9.80	9.10	7.75	5.70	9.50	8.00	9.25	9.98									
Seiz, Ray	9.20	9.00	8.40	5.20	9.40	8.60	9.20	9.70									
Caproni, David	9.70	8.60	8.00	7.00	9.30	8.30	9.80	9.90									
Avis, Steve	9.80	8.90	8.40	7.30	9.40	8.75	9.50	9.70									
Viera, Ralph	9.60	8.00	7.80	6.20	9.00	7.80	9.40	9.80									
MAXIMUM	9.90	9.30	8.50	7.30	9.50	8.75	9.80	10.00									
MINIMUM	9.20	8.00	7.00	5.20	8.70	7.60	8.00	9.70									
RANGE (MAX-MIN)	0.70	1.30	1.50	2.10	0.80	1.15	1.80	0.30									
MEAN	9.65	8.85	7.68	6.03	9.27	8.18	9.04	9.86									
STD	0.15	0.35	0.42	0.52	0.21	0.33	0.53	0.08									



yi within 1 71%  
 yi within 2 97%  
 yi within 3 100%

PART ID = Induction/Combustion - Valve Set I

YI VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8									MEAN	STD
Tschirhart, Garland	0.35	0.42	-1.64	-1.02	-0.36	1.58	-0.08	0.47									-0.04	0.99
Pansza, Mike	-0.31	-0.71	0.28	0.32	-0.36	-0.23	-0.83	-0.76									-0.33	0.45
Radonich, Pete	0.35	0.42	-0.20	-0.64	0.62	-0.53	1.23	0.47									0.21	0.63
Lopez, Frank	-0.31	0.42	-1.16	-0.06	-2.80	-1.14	-1.96	-0.76									-0.97	1.04
Garcia, Orlando	-0.31	1.26	-0.92	1.09	0.13	0.68	-0.08	0.47									0.29	0.73
Kobrinetz, Jack	0.35	0.98	-0.20	-1.22	0.13	0.07	-1.40	0.47									-0.10	0.82
Foecking, Brian	0.35	-0.43	0.28	-0.64	0.62	0.07	1.42	1.70									0.42	0.81
Sanchez, Art	-0.31	-2.40	-0.68	-0.06	-1.33	-1.74	-0.46	0.47									-0.82	0.95
Rodriguez, Jesse	0.35	-0.43	0.04	-0.25	0.13	-1.14	0.10	0.47									-0.09	0.51
Castillo, George	-0.31	0.42	-0.20	0.52	1.10	-0.53	-0.08	0.47									0.17	0.54
Yanchar, Paul	0.35	0.42	-0.92	0.32	1.10	0.68	0.85	0.47									0.41	0.60
Pawczuk, Greg	1.68	0.70	-0.44	-0.64	0.62	1.28	-1.02	0.47									0.33	0.95
Adams, Pat	-1.64	0.70	-0.92	-0.06	0.13	-0.53	-1.58	-0.76									-0.58	0.82
Ramirez, Robert	0.35	0.13	1.97	-0.06	-0.85	-0.23	0.29	-0.76									0.10	0.88
Lowsky, John	1.01	0.70	0.16	-0.64	1.10	-0.53	0.38	1.45									0.46	0.76
Seiz, Ray	-2.97	0.42	1.73	-1.60	0.62	1.28	0.29	-1.99									-0.28	1.69
Caproni, David	0.35	-0.71	0.77	1.86	0.13	0.37	1.42	0.47									0.58	0.79
Avis, Steve	1.01	0.13	1.73	2.44	0.62	1.73	0.85	-1.99									0.82	1.35
Viera, Ralph	-0.31	-2.40	0.28	0.32	-1.33	-1.14	0.67	-0.76									-0.58	1.03
Yi MAXIMUM	-2.97	-2.40	1.97	2.44	-2.80	-1.74	-1.96	-1.99									-0.97	1.69
Yi MINIMUM	-0.31	0.13	-0.20	-0.06	-0.36	-0.23	-0.83	0.47									-0.04	0.45
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00										
Ratings MEAN	9.65	8.85	7.68	6.03	9.27	8.18	9.04	9.86										
Ratings STD	0.15	0.35	0.42	0.52	0.21	0.33	0.53	0.08										

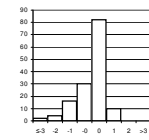


Light Duty Rating Workshop

PART ID = Induction/Combustion - Intake Manifold Runner (L)

RATED VALUES

	1	2	3	4	5	6	7	8										
Tschirhart, Garland	9.39	9.49	9.69	9.79	9.40	9.01	9.40	9.30										
Panza, Mike	9.22	9.36	9.54	9.43	9.36	9.48	9.52	9.36										
Radonich, Pete	9.30	9.42	9.82	9.86	9.32	9.27	9.40	9.22										
Lopez, Frank	9.12	9.34	9.76	9.80	9.24	8.88	9.20	8.94										
Foecking, Brian	9.38	9.41	9.76	9.75	9.30	9.15	9.35	9.05										
Kirkpatrick, John	8.70	8.80	9.10	9.20	8.50	8.30	8.90	9.10										
Kobrinetz, Jack	8.94	9.08	9.58	9.68	8.64	8.78	9.03	8.48										
Garcia, Orlando	9.12	9.16	9.59	9.58	8.89	8.92	9.08	8.84										
Sanchez, Art	9.35	9.05	9.75	9.79	9.38	9.46	9.35	9.24										
Rodriguez, Jesse	9.23	9.30	9.70	9.70	9.28	9.20	9.18	9.06										
Yanchar, Paul	9.20	9.30	9.70	9.70	9.20	9.00	9.20	9.00										
Castillo, George	9.37	9.45	9.65	9.74	9.28	9.24	9.36	9.14										
Pawczuk, Greg	9.32	9.28	9.60	9.70	9.13	8.80	8.87	8.40										
Ramirez, Robert	8.28	8.70	9.62	9.68	9.36	8.89	9.25	9.03										
Adams, Pat	8.95	9.24	9.77	9.72	8.69	8.65	8.63	8.47										
Lowsky, John	8.83	9.20	9.68	9.73	9.04	9.04	9.16	8.82										
Seiz, Ray	8.89	9.10	9.68	9.80	8.54	8.61	8.72	8.44										
Viera, Ralph	9.27	9.39	9.56	9.54	9.44	9.26	9.33	9.57										
MAXIMUM	9.39	9.49	9.82	9.86	9.44	9.48	9.52	9.57										
MINIMUM	8.28	8.70	9.10	9.20	8.50	8.30	8.63	8.40										
RANGE (MAX-MIN)	1.11	0.79	0.72	0.66	0.94	1.18	0.89	1.17										
MEAN	9.10	9.23	9.64	9.68	9.11	9.00	9.16	8.97										
STD	0.29	0.22	0.16	0.16	0.32	0.31	0.25	0.34										


























yi within 1 78%  
 yi within 2 96%  
 yi within 3 99%

PART ID = Induction/Combustion - Intake Manifold Runner (L)

YI VALUES

	1	2	3	4	5	6	7	8											MEAN	STD
Tschirhart, Garland	0.98	1.22	0.31	0.72	0.91	0.04	0.96	0.97											0.76	0.39
Panza, Mike	0.40	0.62	-0.65	-1.57	0.79	1.58	1.44	1.15											0.47	1.08
Radonich, Pete	0.67	0.90	1.14	1.16	0.66	0.89	0.96	0.74											0.89	0.19
Lopez, Frank	0.06	0.53	0.75	0.78	0.41	-0.38	0.15	-0.09											0.28	0.41
Foecking, Brian	0.95	0.85	0.75	0.46	0.60	0.50	0.75	0.24											0.64	0.23
Kirkpatrick, John	-1.38	-1.97	-3.45	-3.03	-1.93	-2.28	-1.06	0.38											-1.84	1.19
Kobrinetz, Jack	-0.56	-0.68	-0.39	0.02	-1.49	-0.71	-0.54	-1.44											-0.72	0.51
Garcia, Orlando	0.06	-0.31	-0.33	-0.62	-0.70	-0.25	-0.33	-0.38											-0.36	0.23
Sanchez, Art	0.84	-0.81	0.69	0.72	0.85	1.52	0.75	0.80											0.67	0.66
Rodriguez, Jesse	0.43	0.34	0.37	0.14	0.54	0.66	0.07	0.27											0.35	0.20
Yanchar, Paul	0.33	0.34	0.37	0.14	0.28	0.01	0.15	0.09											0.22	0.13
Castillo, George	0.91	1.04	0.05	0.40	0.54	0.80	0.79	0.50											0.63	0.32
Pawczuk, Greg	0.74	0.25	-0.27	0.14	0.06	-0.64	-1.18	-1.68											-0.32	0.80
Ramirez, Robert	-2.81	-2.43	-0.14	0.02	0.79	-0.35	0.35	0.18											-0.55	1.33
Adams, Pat	-0.52	0.06	0.82	0.27	-1.33	-1.13	-2.15	-1.47											-0.68	1.01
Lowsky, John	-0.93	-0.12	0.24	0.34	-0.22	0.14	-0.01	-0.44											-0.13	0.41
Seiz, Ray	-0.73	-0.58	0.24	0.78	-1.80	-1.26	-1.78	-1.56											-0.84	0.96
Viera, Ralph	0.57	0.76	-0.52	-0.87	1.04	0.86	0.67	1.77											0.54	0.85
Yi MAXIMUM	-2.81	-2.43	-3.45	-3.03	-1.93	-2.28	-2.15	1.77											-1.84	1.33
Yi MINIMUM	0.06	-0.12	0.05	0.02	0.06	0.01	-0.01	-0.09											-0.13	0.13
Yi MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00												
Yi STD	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00												
Ratings MEAN	9.10	9.23	9.64	9.68	9.11	9.00	9.16	8.97												
Ratings STD	0.29	0.22	0.16	0.16	0.32	0.31	0.25	0.34												

## Light Duty Rating Workshop - Sequence III

	Number of Parts Rated	-1 < yi ≤ 1	-2 < yi ≤ 2	-3 < yi ≤ 3	>3	Yi STD	Group	
Adams, Pat	14	74.1%	96.4%	100.0%	0.0%	0.89	White	
Avis, Steve	14	83.0%	98.2%	99.1%	0.9%	0.81	Red	
Borland, Robert	14	58.0%	85.7%	92.0%	8.0%	1.38	Yellow	
Cales, Jonathon	14	76.8%	98.2%	100.0%	0.0%	0.83	White	
Caproni, David	14	79.5%	97.3%	100.0%	0.0%	0.79	White	
Castillo, George	14	87.5%	100.0%	100.0%	0.0%	0.63	Blue	
Cole, Steve	14	62.5%	94.6%	98.2%	1.8%	1.13	White	
Foecking, Brian	14	88.4%	100.0%	100.0%	0.0%	0.64	Blue	
Garcia, Orlando	14	82.1%	95.5%	100.0%	0.0%	0.84	Red	
Hills, Barry	14	69.6%	96.4%	100.0%	0.0%	0.94	White	
Kobrinetz, Jack	14	86.6%	100.0%	100.0%	0.0%	0.71	Blue	
Lopez, Frank	14	84.8%	100.0%	100.0%	0.0%	0.68	Red	
Lowsky, John	14	45.5%	80.4%	92.9%	7.1%	1.65	Yellow	
Pansza, Mike	14	62.5%	94.6%	100.0%	0.0%	1.07	White	
Pawczuk, Greg	14	64.3%	90.2%	99.1%	0.9%	1.22	Yellow	
Radonich, Pete	14	90.2%	100.0%	100.0%	0.0%	0.59	Blue	
Ramirez, Robert	14	75.9%	97.3%	100.0%	0.0%	0.85	White	
Rodriguez, Jesse	14	90.2%	97.3%	99.1%	0.9%	0.69	Red	
Sanchez, Art	14	67.9%	92.9%	99.1%	0.9%	1.04	White	
Seiz, Ray	14	46.4%	87.5%	100.0%	0.0%	1.32	Yellow	
Tschirhart, Garland	14	73.2%	96.4%	100.0%	0.0%	0.88	White	
Viera, Ralph	14	57.1%	92.0%	98.2%	1.8%	1.11	Yellow	
Yanchar, Paul	14	91.1%	100.0%	100.0%	0.0%	0.54	Blue	

	Minimum Number of Parts Rated	Minimum Yi's within 1 STD of mean	Minimum Yi's within 2 STD of mean	Maximum Overall Yi STD	Group Total	
White	6	60%	90%	1.20	9	39%
Red	6	80%	95%	0.85	4	17%
Blue	6	85%	98%	0.75	5	22%
Yellow	-	-	-	-	5	22%

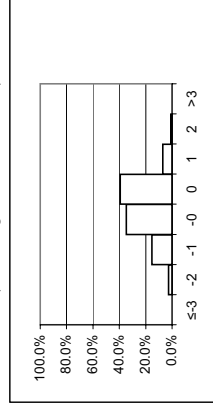
Light Duty Rating Workshop - Sequence III

Rater = Adams, Pat

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.72	0.88	-0.40	0.26	-1.35	0.26	-2.15	0.39	-1.27	-1.35	-0.55	0.98
Seq. III Calibration_C2	1.06	-0.84	-0.38	-1.30	-0.83	-0.28	-0.76	0.18	-0.95	-1.10	-0.52	0.70
Seq. III Piston_A1	0.30	1.11	-0.01	-0.57	0.73	-0.37	-1.61	-1.87	0.24	0.32	-0.17	0.96
Seq. III Piston_A2	-1.11	0.90	0.63	0.10	-0.35	-1.05	-0.77	0.23	-0.19	0.26	-0.14	0.69
Seq. III Piston_A3	-0.07	-0.86	-0.11	-0.59	0.58	-0.76	0.66	0.15	-0.24	0.13	-0.11	0.62
Seq. III Piston_A4	0.63	0.46	1.05	0.04	1.36	-0.94	-0.73	-1.30	0.66	1.03	0.23	0.92
Seq. III Piston_A5	-0.03	0.32	0.23	0.16	1.57	-0.82	-1.35	-0.78	-0.35	-0.05	-0.11	0.80
Seq. III Piston_A6	-2.83	0.24	0.81	-0.29	0.24	-0.13	0.09	1.12	0.03	0.41	-0.03	1.07
Seq. III Piston_B1	-0.07	0.27	-1.27	-1.54	0.40	-0.61	-0.35	0.11	-1.28	-1.35	-0.57	0.74
Seq. III Piston_B2	-1.35	0.31	0.66	0.11	-0.87	0.06	-1.21	2.46	-0.35	-0.52	-0.07	1.11
Seq. III Piston_B3	1.09	0.33	0.28	-1.67	0.02	0.18	-0.01	-0.54	-0.22	-0.33	-0.09	0.71
Seq. III Piston_B4	-1.44	0.19	0.86	0.59	-0.54	-0.51	0.98	-1.25	-0.03	0.02	-0.11	0.83
Seq. III Piston_B5	0.35	-0.94	-0.41	0.50	-2.49	-0.03	-1.87	-0.81	-1.10	-1.59	-0.84	0.97
Seq. III Piston_B6	-1.18	-0.16	1.00	-0.59	0.35	-0.43	0.09	0.95	0.19	0.56	0.08	0.69
YI MAXIMUM	-2.83	1.11	-1.27	-1.67	-2.49	-1.05	-2.15	2.46	-1.28	-1.59	-0.84	1.11
YI MINIMUM	-0.38	-0.16	-0.01	0.04	0.02	-0.03	-0.01	0.11	0.03	0.02	-0.03	0.52
YI MEAN	-0.38	0.16	0.21	-0.34	-0.09	-0.39	-0.64	-0.07	-0.35	-0.25	-0.03	0.52
YI STD	1.11	0.65	0.68	0.74	1.09	0.42	0.94	1.13	0.59	0.81	0.08	0.69

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	3	2.7%
-1	17	15.2%
0	39	34.8%
1	44	39.3%
2	8	7.1%
3	1	0.9%
total	112	100.0%

Group: White

Overall Yi STD 0.89  
Parts Rated 14

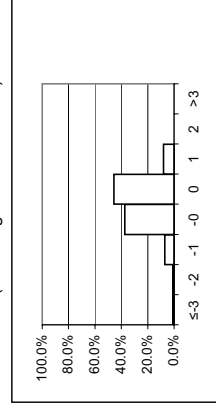
Light Duty Rating Workshop - Sequence III

Rater = Avis, Steve

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.19	0.54	-0.34	0.14	-0.70	0.38	0.83	0.24	-0.22	-0.47	0.02	0.48
Seq. III Calibration_C2	-0.84	0.22	0.45	0.48	-0.93	0.26	0.05	0.36	-0.32	-0.61	-0.09	0.54
Seq. III Piston_A1	-0.97	-0.63	0.16	-0.14	-0.34	-0.84	-0.60	-0.77	-0.50	-0.34	-0.50	0.34
Seq. III Piston_A2	1.03	0.90	0.05	0.21	0.75	0.01	0.58	0.42	0.62	0.35	0.49	0.35
Seq. III Piston_A3	-0.07	0.05	0.40	-0.67	-1.84	-0.22	1.36	0.04	-0.54	-1.32	-0.28	0.89
Seq. III Piston_A4	0.63	-0.20	0.71	0.23	0.37	-0.48	1.22	0.54	0.77	0.70	0.45	0.50
Seq. III Piston_A5	1.32	0.32	-0.40	-0.30	-0.14	1.51	1.51	<b>-3.19</b>	0.87	0.14	-0.03	1.31
Seq. III Piston_A6	0.03	0.89	-0.25	0.21	-1.64	-1.60	1.20	1.00	-0.59	-0.76	-0.15	1.02
Seq. III Piston_B1	-0.07	0.27	-1.05	-0.95	-0.22	0.04	-0.12	0.39	-0.58	-0.93	-0.32	0.52
Seq. III Piston_B2	1.82	-0.06	0.01	-1.02	0.25	-0.07	0.81	0.82	0.54	0.33	0.34	0.74
Seq. III Piston_B3	-0.98	1.09	0.33	0.01	0.49	0.31	0.41	0.28	0.76	0.74	0.34	0.55
Seq. III Piston_B4	-0.37	<b>-2.92</b>	-0.12	-1.48	0.27	-0.74	-0.24	0.47	-0.72	-0.38	-0.62	0.98
Seq. III Piston_B5	0.35	-0.01	0.32	-1.17	-1.05	-0.20	0.54	-0.02	-0.76	-0.96	-0.30	0.64
Seq. III Piston_B6	-0.20	-0.16	-0.78	-0.85	0.35	-0.09	1.62	-0.31	-0.07	-0.45	-0.09	0.70
YI MAXIMUM	1.82	<b>-2.92</b>	-1.05	-1.48	-1.84	-1.60	1.62	<b>-3.19</b>	0.87	-1.32	-0.62	1.31
YI MINIMUM	0.03	-0.01	0.01	0.01	-0.22	0.01	0.05	-0.02	-0.07	0.14	0.02	0.34
YI MEAN	0.11	0.02	-0.04	-0.38	-0.33	-0.24	0.65	0.02	-0.05	-0.28		
YI STD	0.84	0.97	0.49	0.63	0.81	0.53	0.69	1.03	0.62	0.64		

Yi distribution (excluding shaded columns)



Yi	count	percent	Overall Yi STD	Parts Rated
-3	1	0.9%		
-2	1	0.9%		
-1	8	7.1%		
0	42	37.5%		
1	51	45.5%		
2	9	8.0%		
3	0	0.0%		
total	112	100.0%	0.81	14

Group: Red

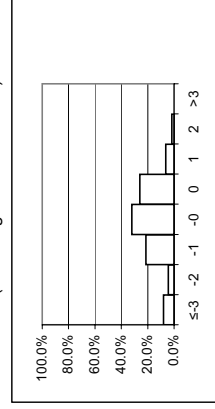
Light Duty Rating Workshop - Sequence III

Rater = Borland, Robert

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.79	-0.31	-1.29	-0.80	-1.30	0.94	0.90	-1.32	-1.27	-1.55	-0.68	0.92
Seq. III Calibration_C2	-0.32	-0.03	0.75	0.14	<b>-2.00</b>	-1.91	-0.68	-0.48	<b>-2.46</b>	<b>-2.33</b>	-0.93	1.15
Seq. III Piston_A1	0.76	-0.55	-1.72	-0.94	<b>-2.25</b>	0.90	-1.11	-0.85	-1.59	-1.92	-0.93	1.06
Seq. III Piston_A2	<b>2.05</b>	-1.45	-1.52	1.28	0.02	0.06	-1.09	0.49	-0.62	-1.12	-0.19	1.20
Seq. III Piston_A3	1.77	0.96	1.47	-1.00	-0.35	-0.32	0.34	0.64	0.53	0.48	0.45	0.84
Seq. III Piston_A4	<b>-3.13</b>	-1.92	-1.32	0.38	-1.79	1.07	1.80	-0.67	-1.25	-1.43	-0.83	1.50
Seq. III Piston_A5	-1.73	<b>-4.50</b>	-0.67	0.46	0.05	0.87	-0.54	0.63	-1.59	-1.20	-0.82	1.58
Seq. III Piston_A6	1.93	<b>-2.36</b>	-1.99	-0.36	0.68	-0.59	<b>2.26</b>	0.45	-0.14	-0.62	-0.08	1.49
Seq. III Piston_B1	-0.95	<b>-4.29</b>	0.05	-0.72	-0.72	-0.43	0.77	-0.56	-0.79	-0.84	-0.85	1.31
Seq. III Piston_B2	-1.01	<b>-3.02</b>	-0.07	-1.16	-1.07	-0.20	0.94	-0.54	-1.31	-1.36	-0.88	1.04
Seq. III Piston_B3	-1.60	<b>-3.26</b>	0.75	-0.34	-1.86	<b>-2.34</b>	0.06	-0.05	<b>-2.88</b>	<b>-2.53</b>	-1.41	1.41
Seq. III Piston_B4	0.17	-1.79	<b>-2.55</b>	-0.75	-0.23	-0.20	-1.04	-0.46	-1.70	-1.69	-1.02	0.88
Seq. III Piston_B5	<b>-3.70</b>	-0.17	0.32	1.45	0.93	<b>-3.43</b>	-1.57	-1.83	-1.32	-0.23	-0.95	1.73
Seq. III Piston_B6	<b>-3.49</b>	-0.44	-0.25	-1.18	<b>-3.72</b>	-0.03	0.35	0.95	-0.82	-0.64	-0.93	1.53
YI MAXIMUM	<b>-3.70</b>	<b>-4.50</b>	<b>-2.55</b>	1.45	<b>-3.72</b>	<b>-3.43</b>	<b>2.26</b>	-1.83	<b>-2.88</b>	<b>-2.53</b>	-1.41	1.73
YI MINIMUM	0.17	-0.03	0.05	0.14	0.02	-0.03	0.06	-0.05	-0.14	-0.23	-0.08	0.84
YI MEAN	-0.72	-1.65	-0.57	-0.25	-0.97	-0.40	0.10	-0.26	-1.23	-1.21	-0.68	1.06
YI STD	1.93	1.67	1.19	0.87	1.28	1.33	1.16	0.81	0.87	0.81	0.81	1.21

Yi distribution (excluding shaded columns)



Yi	count	percent
-3 lt yi ≤ -2	9	8.0%
-2 lt yi ≤ -1	5	4.5%
-1 lt yi ≤ 0	24	21.4%
0 lt yi ≤ 1	36	32.1%
1 lt yi ≤ 2	29	25.9%
2 lt yi ≤ 3	7	6.3%
3 lt yi	2	1.8%
total	0	0.0%
	112	100.0%

Overall Yi STD 1.38  
Parts Rated 14



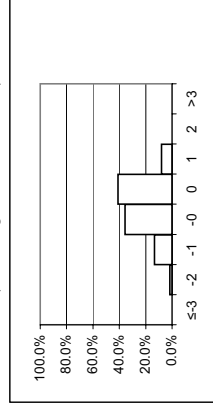
Light Duty Rating Workshop - Sequence III

Rater = Cales, Jonathon

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	0.22	-1.16	-1.61	0.38	0.21	0.38	-0.35	0.44	-0.38	-0.59	-0.25	0.71
Seq. III Calibration_C2	-0.49	-0.94	0.10	0.48	-1.78	0.12	0.30	1.20	-1.06	-1.54	-0.36	0.96
Seq. III Piston_A1	0.03	-0.29	-1.89	-0.37	-0.28	-0.64	1.19	1.05	-0.76	-0.79	-0.28	0.90
Seq. III Piston_A2	-1.57	-1.45	-0.62	-0.54	0.02	-0.39	-0.89	0.42	-1.32	-0.97	-0.73	0.64
Seq. III Piston_A3	-0.07	0.51	-0.06	0.57	0.11	0.00	-0.97	-0.18	-0.15	-0.01	-0.02	0.42
Seq. III Piston_A4	0.34	-0.11	-0.07	-1.03	-0.50	-0.88	-0.97	0.61	-0.94	-0.80	-0.43	0.59
Seq. III Piston_A5	-0.20	-0.11	-0.90	0.54	1.23	1.21	-0.33	0.73	-0.11	-0.14	0.19	0.70
Seq. III Piston_A6	0.79	0.67	0.23	-0.58	0.41	-0.52	-1.03	0.39	-0.41	-0.18	-0.02	0.61
Seq. III Piston_B1	-0.07	0.27	-1.56	0.81	-0.79	-0.31	1.30	1.16	-0.52	-1.18	-0.09	0.97
Seq. III Piston_B2	0.49	0.43	-0.90	0.81	0.08	-0.20	-2.77	-0.21	-1.45	-0.84	-0.46	1.07
Seq. III Piston_B3	1.30	-0.10	0.75	-0.36	-0.04	-1.30	-0.01	0.68	-0.48	-0.35	0.01	0.74
Seq. III Piston_B4	0.89	0.47	-1.41	0.77	-1.19	-0.78	-1.15	0.74	-1.39	-1.58	-0.46	1.04
Seq. III Piston_B5	0.35	0.53	0.32	0.61	0.34	-0.68	0.60	0.76	0.31	0.43	0.36	0.40
Seq. III Piston_B6	0.53	-0.30	-1.20	1.18	0.35	-0.18	-2.00	-1.44	-1.70	-1.57	-0.63	1.10
YI MAXIMUM	-1.57	-1.45	-1.89	1.18	-1.78	-1.30	-2.77	-1.44	-1.70	-1.58	-0.73	1.10
YI MINIMUM	0.03	-0.10	-0.06	-0.36	0.02	0.00	-0.01	-0.18	-0.11	-0.01	0.01	0.40
YI MEAN	0.18	-0.11	-0.63	0.23	-0.13	-0.30	-0.51	0.45	-0.74	-0.72		
YI STD	0.69	0.67	0.84	0.67	0.75	0.61	1.14	0.69	0.59	0.62		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	2	1.8%
-1	15	13.4%
0	40	35.7%
1	46	41.1%
2	9	8.0%
3	0	0.0%
total	112	100.0%

Yi	Overall Yi STD	Parts Rated
-1 < yi ≤ 1	0.83	14
-2 < yi ≤ 2		
-3 < yi ≤ 3		
>3		

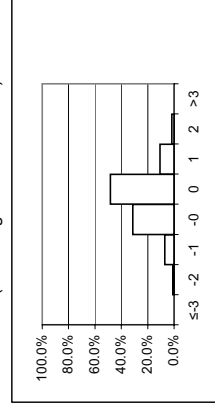
Light Duty Rating Workshop - Sequence III

Rater = Caproni, David

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.72	0.54	-0.43	-0.56	0.26	0.38	0.97	0.94	-0.26	-0.03	0.11	0.61
Seq. III Calibration_C2	1.18	<b>2.35</b>	0.16	-0.63	0.47	0.73	0.54	0.00	1.57	1.01	0.74	0.85
Seq. III Piston_A1	-0.42	0.63	-0.30	-0.23	-0.21	-0.84	0.63	0.32	-0.07	-0.16	-0.07	0.47
Seq. III Piston_A2	0.27	0.43	-0.09	1.06	1.49	0.01	-0.99	0.42	0.13	0.14	0.29	0.67
Seq. III Piston_A3	-0.68	0.96	-1.42	1.15	1.21	0.08	-1.04	-0.45	-0.19	0.23	-0.01	0.92
Seq. III Piston_A4	-0.43	1.03	0.55	0.16	1.23	-0.48	-0.94	-0.03	0.60	0.88	0.26	0.72
Seq. III Piston_A5	0.78	-0.11	-1.46	0.77	1.06	-0.21	-1.00	0.58	0.13	-0.54	0.00	0.83
Seq. III Piston_A6	0.03	<b>-2.14</b>	0.10	0.93	0.06	0.75	-0.59	0.33	0.33	0.31	0.01	0.86
Seq. III Piston_B1	-0.07	0.27	0.60	1.74	-0.22	0.70	-1.39	0.61	0.73	0.77	0.37	0.82
Seq. III Piston_B2	-0.51	0.43	-1.30	0.88	0.12	-0.20	-0.82	0.73	-0.79	-0.58	-0.20	0.72
Seq. III Piston_B3	-0.56	0.37	0.75	0.22	-0.04	-0.72	0.61	0.28	0.09	0.16	0.11	0.46
Seq. III Piston_B4	0.89	0.47	-0.26	0.77	-0.71	0.51	0.07	0.74	0.15	-0.26	0.24	0.53
Seq. III Piston_B5	0.35	1.38	0.32	<b>2.25</b>	1.13	0.37	0.60	0.76	1.92	1.92	1.10	0.73
Seq. III Piston_B6	-1.18	-0.16	-0.69	1.25	0.35	-0.40	-1.14	-0.43	-1.16	-0.89	-0.44	0.77
YI MAXIMUM	-1.18	<b>2.35</b>	-1.46	<b>2.25</b>	1.49	-0.84	-1.39	0.94	1.92	1.92	1.10	0.92
YI MINIMUM	0.03	-0.11	-0.09	0.16	-0.04	0.01	0.07	0.00	-0.07	-0.03	0.00	0.46
YI MEAN	-0.08	0.46	-0.25	0.70	0.44	0.05	-0.32	0.34	0.23	0.21	0.00	0.46
YI STD	0.69	0.98	0.74	0.83	0.67	0.54	0.84	0.44	0.81	0.74	0.10	0.46

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	1	0.9%
-1	8	7.1%
0	35	31.3%
1	54	48.2%
2	12	10.7%
3	2	1.8%
total	112	100.0%

Overall Yi STD 0.79  
Parts Rated 14

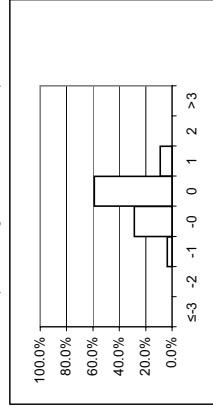
### Light Duty Rating Workshop - Sequence III

Rater = Castillo, George

#### YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust						UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.41	0.54	0.41	0.85	-0.81	-0.19	-0.20	-0.06						-0.33	-0.35	-0.05	0.50
Seq. III Calibration_C2	-0.78	-0.74	0.69	0.37	-0.06	0.22	0.14	0.72						0.04	0.10	0.07	0.51
Seq. III Piston_A1	-1.42	-0.35	-1.12	0.38	-0.57	0.29	0.63	0.69						-0.50	-0.56	-0.25	0.73
Seq. III Piston_A2	0.06	-0.04	0.27	1.12	0.38	-0.17	-0.28	0.19						0.42	0.45	0.24	0.40
Seq. III Piston_A3	-0.07	0.05	0.69	1.89	0.39	1.31	0.71	0.26						1.96	1.71	0.89	0.77
Seq. III Piston_A4	-0.34	0.90	0.39	0.83	0.53	0.21	1.10	0.22						1.16	0.98	0.60	0.48
Seq. III Piston_A5	0.43	-0.11	-0.43	0.99	-0.62	-0.41	0.51	0.33						0.40	0.08	0.12	0.51
Seq. III Piston_A6	0.03	0.67	0.23	1.65	-0.12	0.86	0.70	1.36						1.35	1.00	0.77	0.59
Seq. III Piston_B1	-0.07	0.27	0.66	1.16	-0.47	0.28	-0.09	0.00						0.55	0.54	0.28	0.47
Seq. III Piston_B2	-0.01	0.43	0.76	0.67	0.85	-0.43	0.49	-0.16						1.13	1.31	0.50	0.56
Seq. III Piston_B3	-0.56	-0.96	0.99	0.17	-1.30	0.16	1.17	0.60						-0.31	-0.49	-0.05	0.81
Seq. III Piston_B4	0.35	0.76	0.86	0.71	0.13	0.11	0.83	0.74						0.85	0.76	0.61	0.29
Seq. III Piston_B5	0.35	0.76	1.04	-1.86	0.34	-0.68	0.60	0.76						-0.50	-0.29	0.05	0.89
Seq. III Piston_B6	0.41	-0.30	0.05	1.12	0.35	-0.34	0.68	0.57						0.60	0.52	0.37	0.45
YI MAXIMUM	-1.42	-0.96	-1.12	1.89	-1.30	1.31	1.17	1.36						1.96	1.71	0.89	0.89
YI MINIMUM	-0.01	-0.04	0.05	0.17	-0.06	0.11	-0.09	0.00						0.04	0.08	-0.05	0.29
YI MEAN	-0.14	0.13	0.39	0.72	-0.07	0.09	0.50	0.44						0.49	0.41		
YI STD	0.52	0.58	0.59	0.88	0.61	0.53	0.45	0.41						0.75	0.70		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3 lt yi	0	0.0%
-2 lt yi	0	0.0%
-1 lt yi	4	3.6%
0 lt yi	32	28.6%
1 lt yi	66	58.9%
2 lt yi	10	8.9%
3 lt yi	0	0.0%
total	112	100.0%

Overall Yi STD 0.63  
Parts Rated 14

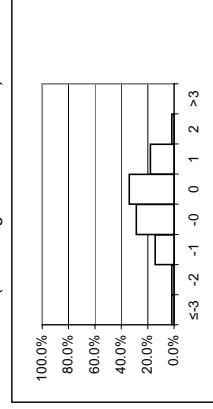
Light Duty Rating Workshop - Sequence III

Rater = Cole, Steve

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.83	0.37	1.00	-0.80	-0.29	0.49	0.37	-2.58	-0.40	0.01	-0.27	1.00
Seq. III Calibration_C2	-0.55	-0.13	-0.43	-1.74	-0.32	-0.57	-0.96	0.00	-1.10	-0.81	-0.66	0.51
Seq. III Piston_A1	-0.89	-1.97	-1.37	-0.43	-1.54	0.90	1.19	1.05	-1.47	-1.50	-0.58	1.21
Seq. III Piston_A2	0.27	-0.04	-3.76	0.90	0.02	-0.30	1.74	-3.73	-3.03	-3.43	-1.14	2.11
Seq. III Piston_A3	1.46	1.27	-1.45	-0.01	0.47	-0.98	1.23	0.58	-0.54	-0.51	-0.15	1.01
Seq. III Piston_A4	0.05	0.24	0.50	2.55	0.30	-0.14	0.95	0.61	1.71	1.40	0.82	0.84
Seq. III Piston_A5	0.55	0.32	-1.16	0.01	-0.45	-0.14	0.74	1.08	0.32	-0.39	0.09	0.66
Seq. III Piston_A6	0.31	0.89	-0.32	-0.29	1.04	0.18	0.44	-1.20	0.20	0.21	0.15	0.64
Seq. III Piston_B1	-1.96	0.84	0.18	-0.37	0.53	-0.31	1.43	1.44	0.31	0.56	0.26	1.00
Seq. III Piston_B2	-0.01	-2.15	-1.65	-1.31	-1.38	0.85	1.39	0.82	-1.24	-1.97	-0.67	1.30
Seq. III Piston_B3	-1.29	0.01	-0.67	-0.57	0.46	2.91	0.31	1.09	1.00	0.75	0.40	1.17
Seq. III Piston_B4	-0.54	0.19	-0.48	0.23	0.75	-0.12	1.21	1.40	0.32	0.39	0.33	0.65
Seq. III Piston_B5	-1.39	1.07	-1.72	-0.77	1.13	1.12	1.22	0.76	0.64	0.51	0.26	1.12
Seq. III Piston_B6	-1.30	-0.30	1.48	0.00	-1.68	-0.09	0.57	0.51	0.98	1.34	0.15	1.05
YI MAXIMUM	-1.96	-2.15	-3.76	2.55	-1.68	2.91	1.74	-3.73	-3.03	-3.43	-1.14	2.11
YI MINIMUM	-0.01	0.01	0.18	0.00	0.02	-0.09	0.31	0.00	0.20	0.01	0.09	0.51
YI MEAN	-0.42	0.04	-0.70	-0.19	-0.07	0.27	0.84	0.13	-0.17	-0.25		
YI STD	0.92	1.01	1.32	1.02	0.93	0.96	0.68	1.56	1.23	1.34		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	2	1.8%
-2	2	1.8%
-1	16	14.3%
0	32	28.6%
1	38	33.9%
2	20	17.9%
3	2	1.8%
total	112	100.0%

Group: White

-1 < yi ≤ 1      62.5%  
 -2 < yi ≤ 2      94.6%  
 -3 < yi ≤ 3      98.2%  
 > 3              1.8%

Overall Yi STD      1.13  
 Parts Rated        14



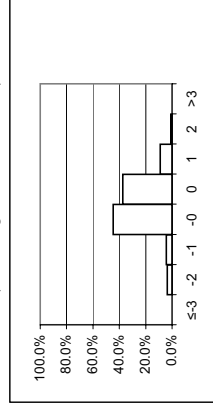
Light Duty Rating Workshop - Sequence III

Rater = Garcia, Orlando

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	0.73	-0.99	1.05	0.85	-0.29	-0.86	-0.94	0.29	0.54	0.36	0.07	0.78
Seq. III Calibration_C2	-0.32	-0.18	-0.32	1.14	-0.83	-0.23	0.38	0.12	-0.62	-0.79	-0.16	0.60
Seq. III Piston_A1	0.87	1.07	0.26	0.28	0.20	0.49	0.35	1.05	0.89	0.48	0.56	0.31
Seq. III Piston_A2	-0.35	-0.98	0.38	-1.08	0.02	-0.61	-0.01	-0.15	-0.26	-0.02	-0.31	0.46
Seq. III Piston_A3	<b>2.07</b>	-0.10	-0.43	-0.26	0.44	-0.72	-0.91	0.09	-0.70	-0.33	-0.08	0.86
Seq. III Piston_A4	0.14	0.77	<b>-2.80</b>	-0.56	-0.73	-0.14	-1.38	0.16	-1.84	-1.94	-0.83	1.13
Seq. III Piston_A5	0.13	-0.11	0.20	-0.45	-0.96	0.06	-0.93	-0.58	-0.23	-0.42	-0.33	0.41
Seq. III Piston_A6	1.07	-0.19	-0.06	-0.87	1.04	0.36	-0.99	-0.22	-0.08	0.04	0.01	0.68
Seq. III Piston_B1	-0.07	0.27	0.08	-0.48	-0.22	0.63	<b>-2.18</b>	-0.06	-0.15	-0.19	-0.24	0.75
Seq. III Piston_B2	0.99	0.43	-1.84	1.52	-0.21	-0.33	-0.17	0.77	-0.85	-0.96	-0.06	1.01
Seq. III Piston_B3	1.30	-1.74	<b>-2.41</b>	-0.53	-1.15	-1.00	<b>-2.85</b>	1.09	<b>-2.16</b>	<b>-2.19</b>	-1.17	1.43
Seq. III Piston_B4	0.17	-0.66	0.61	1.51	-0.32	0.18	-0.66	0.07	0.41	0.31	0.16	0.64
Seq. III Piston_B5	0.35	-0.32	-0.41	0.03	0.39	0.40	0.60	0.76	0.34	0.30	0.24	0.37
Seq. III Piston_B6	0.53	-0.44	-0.58	-0.32	0.35	-0.40	0.42	0.57	-0.37	-0.55	-0.08	0.48
YI MAXIMUM	<b>2.07</b>	-1.74	<b>-2.80</b>	1.52	-1.15	-1.00	<b>-2.85</b>	1.09	<b>-2.16</b>	<b>-2.19</b>	-1.17	1.43
YI MINIMUM	-0.07	-0.10	-0.06	0.03	0.02	0.06	-0.01	-0.06	-0.08	-0.02	0.01	0.31
YI MEAN	0.53	-0.23	-0.45	0.06	-0.16	-0.15	-0.66	0.28	-0.38	-0.42	0.01	0.31
YI STD	0.87	0.74	1.14	0.87	0.62	0.53	1.02	0.50	0.83	0.82	0.82	0.82

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	4	3.6%
-1	5	4.5%
0	50	44.6%
1	42	37.5%
2	10	8.9%
3	1	0.9%
total	112	100.0%

Group: Red

-1 < yi ≤ 1 82.1%  
 -2 < yi ≤ 2 95.5%  
 -3 < yi ≤ 3 100.0%  
 > 3 0.0%

Overall Yi STD 0.84  
 Parts Rated 14

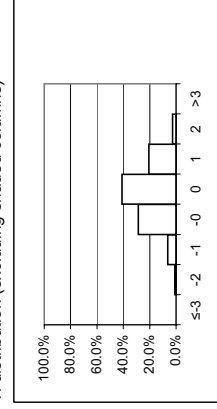
Light Duty Rating Workshop - Sequence III

Rater = Hills, Barry

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.88	0.20	-0.29	-0.56	-0.86	0.71	1.49	0.44	-0.59	-0.64	-0.10	0.79
Seq. III Calibration_C2	0.31	-0.99	0.51	-0.41	1.60	-1.64	1.27	0.84	0.04	0.99	0.25	1.02
Seq. III Piston_A1	0.58	0.26	1.16	-0.06	-0.53	-0.44	0.63	0.32	0.25	0.11	0.23	0.50
Seq. III Piston_A2	-0.50	1.37	0.79	-0.76	0.38	0.06	<b>2.25</b>	0.72	1.09	0.99	0.64	0.89
Seq. III Piston_A3	-0.37	0.51	1.09	-0.92	-1.07	-0.02	1.93	1.46	0.64	0.05	0.33	0.99
Seq. III Piston_A4	-0.43	-0.07	-1.53	-0.39	-1.43	-0.82	1.93	1.11	-1.01	-1.39	-0.40	1.14
Seq. III Piston_A5	-1.05	0.32	0.06	-0.45	-0.62	-0.14	<b>2.18</b>	0.68	-0.38	-0.04	0.06	0.89
Seq. III Piston_A6	-0.16	0.67	0.17	-1.15	0.41	0.42	1.42	1.85	0.91	0.64	0.52	0.83
Seq. III Piston_B1	-0.07	0.27	<b>2.41</b>	0.81	<b>-2.60</b>	-0.90	1.68	1.05	0.43	0.28	0.34	1.38
Seq. III Piston_B2	0.65	0.80	1.57	0.25	-0.85	-0.72	1.12	1.43	0.78	0.23	0.53	0.82
Seq. III Piston_B3	0.57	0.87	0.75	0.01	1.30	0.68	1.42	0.28	1.27	1.35	0.85	0.48
Seq. III Piston_B4	-0.54	0.76	0.25	0.35	-0.54	-0.30	1.10	0.74	0.02	-0.13	0.17	0.57
Seq. III Piston_B5	-1.97	0.60	0.32	0.21	0.09	0.92	0.54	-0.02	0.78	0.59	0.21	0.82
Seq. III Piston_B6	0.41	-0.16	1.12	-0.92	0.35	0.03	1.21	1.64	1.36	1.29	0.63	0.82
YI MAXIMUM	-1.97	1.37	<b>2.41</b>	-1.15	<b>-2.60</b>	-1.64	<b>2.25</b>	1.85	1.36	-1.39	0.85	1.38
YI MINIMUM	-0.07	-0.07	0.06	0.01	0.09	-0.02	0.54	-0.02	0.02	-0.04	0.06	0.48
YI MEAN	-0.25	0.39	0.60	-0.29	-0.31	-0.16	1.44	0.90	0.40	0.31		
YI STD	0.74	0.56	0.92	0.57	1.10	0.72	0.52	0.56	0.71	0.75		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3 lt yi ≤ -2	0	0.0%
-2 lt yi ≤ -1	1	0.9%
-1 lt yi ≤ 0	7	6.3%
0 lt yi ≤ 1	32	28.6%
1 lt yi ≤ 2	46	41.1%
2 lt yi ≤ 3	23	20.5%
3 lt yi	3	2.7%
total	112	100.0%

Group: White

-1 < yi ≤ 1      69.6%  
 -2 < yi ≤ 2      96.4%  
 -3 < yi ≤ 3      100.0%  
 >3                  0.0%

Overall Yi STD      0.94  
 Parts Rated        14

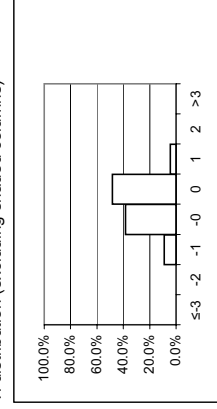
Light Duty Rating Workshop - Sequence III

Rater = Kobrinetz, Jack

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.06	-0.82	-1.04	-0.09	-0.78	-1.88	1.08	0.44	-0.58	-0.94	-0.47	0.84
Seq. III Calibration_C2	0.08	-0.39	0.75	-0.41	0.65	-1.08	1.23	0.96	-0.01	0.44	0.22	0.72
Seq. III Piston_A1	-0.42	-1.64	-1.03	0.18	-1.26	-0.84	0.07	0.32	-1.23	-1.19	-0.70	0.69
Seq. III Piston_A2	0.88	-0.04	0.03	-0.97	0.02	-0.74	0.63	0.42	0.03	-0.10	0.02	0.56
Seq. III Piston_A3	-0.07	0.05	0.93	-0.09	-0.55	-0.44	1.09	1.13	0.36	0.17	0.26	0.61
Seq. III Piston_A4	0.82	-0.16	-0.02	-0.99	-0.56	-0.42	0.59	0.61	-0.46	-0.57	-0.12	0.60
Seq. III Piston_A5	0.20	-0.11	-0.53	-1.44	-0.12	-1.70	0.72	0.23	-0.31	-0.77	-0.38	0.75
Seq. III Piston_A6	0.12	-0.19	0.71	-0.51	0.24	-0.75	0.87	0.20	0.20	0.33	0.12	0.50
Seq. III Piston_B1	-0.07	0.27	-0.59	0.22	-0.66	-0.23	0.92	0.61	-0.24	-0.61	-0.04	0.54
Seq. III Piston_B2	0.15	0.43	0.68	-0.88	-0.87	-0.33	0.75	0.77	-0.10	-0.47	0.01	0.64
Seq. III Piston_B3	0.37	-0.01	0.28	0.88	0.97	-0.90	0.56	0.28	0.26	0.60	0.33	0.52
Seq. III Piston_B4	0.89	0.19	-1.51	-1.36	-0.32	-0.20	0.52	0.07	-1.00	-1.13	-0.38	0.83
Seq. III Piston_B5	0.35	0.68	0.32	-0.37	0.14	0.52	0.60	-0.02	0.43	0.31	0.30	0.31
Seq. III Piston_B6	0.65	-0.44	-0.90	-0.72	0.35	-0.58	0.20	1.08	-0.82	-1.04	-0.22	0.74
YI MAXIMUM	0.89	-1.64	-1.51	-1.44	-1.26	-1.88	1.23	1.13	-1.23	-1.19	-0.70	0.84
YI MINIMUM	-0.06	-0.01	-0.02	-0.09	0.02	-0.20	0.07	-0.02	-0.01	-0.10	0.01	0.31
YI MEAN	0.28	-0.16	-0.14	-0.47	-0.20	-0.68	0.70	0.51	-0.25	-0.35		
YI STD	0.40	0.57	0.79	0.65	0.63	0.61	0.33	0.37	0.51	0.63		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	0	0.0%
-1	10	8.9%
0	43	38.4%
1	54	48.2%
2	5	4.5%
3	0	0.0%
total	112	100.0%

Overall Yi STD     0.71

Parts Rated             14



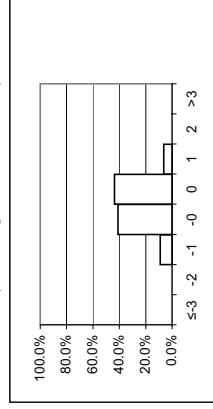
Light Duty Rating Workshop - Sequence III

Rater = Lopez, Frank

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-1.44	-1.33	0.07	-1.04	-0.83	0.38	-0.86	0.39	-1.35	-0.96	-0.70	0.71
Seq. III Calibration_C2	0.08	1.54	0.16	-0.41	0.33	-1.37	-0.76	0.60	-0.37	0.01	-0.02	0.79
Seq. III Piston_A1	0.21	-0.22	1.07	1.89	0.49	-1.44	-0.77	-0.12	0.76	0.86	0.27	0.96
Seq. III Piston_A2	-0.19	0.43	-0.14	0.42	0.38	0.06	-0.51	0.57	-0.05	-0.04	0.09	0.35
Seq. III Piston_A3	-0.07	0.05	0.10	-0.42	-0.85	-1.21	-0.79	-0.45	-1.52	-1.40	-0.66	0.60
Seq. III Piston_A4	-0.43	-0.38	-0.02	-0.34	-1.36	-1.16	0.37	0.61	-0.80	-0.89	-0.44	0.64
Seq. III Piston_A5	-1.41	0.32	0.26	1.22	-0.96	-0.14	0.16	0.73	-0.85	-0.26	-0.09	0.81
Seq. III Piston_A6	0.03	0.89	-0.48	0.35	0.95	-0.88	0.34	-0.47	-0.34	-0.13	0.03	0.60
Seq. III Piston_B1	-0.07	0.27	-0.14	-0.37	-0.22	-0.92	-0.96	0.22	-1.19	-1.06	-0.44	0.54
Seq. III Piston_B2	-0.35	0.43	0.66	-1.23	-0.14	-0.62	0.23	0.17	0.21	-0.07	-0.11	0.54
Seq. III Piston_B3	-0.56	-0.13	0.18	0.55	1.09	-0.72	-0.47	0.28	0.00	0.43	0.06	0.56
Seq. III Piston_B4	-0.01	-0.09	0.61	-0.20	0.27	-0.62	0.26	0.74	0.11	0.32	0.14	0.40
Seq. III Piston_B5	0.35	-0.01	0.32	0.07	-0.61	1.06	0.17	-0.02	0.48	0.12	0.19	0.42
Seq. III Piston_B6	0.65	-0.59	1.30	0.46	0.35	0.03	-0.77	0.83	0.73	1.06	0.41	0.67
YI MAXIMUM	-1.44	1.54	1.30	1.89	-1.36	-1.44	-0.96	0.83	-1.52	-1.40	-0.70	0.96
YI MINIMUM	-0.01	-0.01	-0.02	0.07	-0.14	0.03	0.16	-0.02	0.00	0.01	-0.02	0.35
YI MEAN	-0.23	0.09	0.28	0.07	-0.08	-0.54	-0.31	0.29	-0.33	-0.14		
YI STD	0.59	0.68	0.48	0.83	0.75	0.73	0.53	0.43	0.74	0.72		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	0	0.0%
-1	0	0.0%
0	46	84.8%
1	46	84.8%
2	49	89.9%
3	7	13.0%
total	112	100.0%

Group: Red

-1 < yi ≤ 1 84.8%  
 -2 < yi ≤ 2 100.0%  
 -3 < yi ≤ 3 100.0%  
 >3 0.0%  
 Overall Yi STD 0.68  
 Parts Rated 14

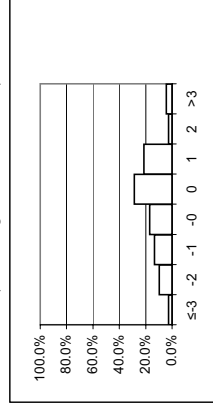
Light Duty Rating Workshop - Sequence III

Rater = **Lowsky, John**

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	2.21	1.22	0.84	1.79	0.05	1.95	-0.26	-2.58	1.75	0.98	0.80	1.44
Seq. III Calibration_C2	0.54	-0.54	-3.69	0.48	1.56	1.62	-1.08	-3.49	0.78	0.94	-0.29	1.93
Seq. III Piston_A1	-0.42	0.43	0.01	0.79	0.58	-0.24	-2.29	-2.97	0.26	0.40	-0.34	1.27
Seq. III Piston_A2	1.80	1.84	0.76	1.12	0.38	4.31	-1.04	-1.36	2.14	1.54	1.15	1.63
Seq. III Piston_A3	-0.07	1.42	-1.45	2.39	1.65	1.01	-1.04	-2.14	0.69	1.06	0.35	1.48
Seq. III Piston_A4	0.82	1.17	-0.75	0.38	1.03	3.13	-1.12	-2.26	0.65	0.52	0.36	1.47
Seq. III Piston_A5	1.49	0.32	0.66	1.53	-0.96	3.90	-0.10	-1.48	2.05	1.85	0.93	1.58
Seq. III Piston_A6	0.60	0.89	0.91	1.72	1.76	1.22	-0.70	-0.89	1.47	1.62	0.86	0.96
Seq. III Piston_B1	-0.07	0.27	-1.01	1.74	0.78	0.55	-1.24	-2.83	-0.31	-0.22	-0.23	1.26
Seq. III Piston_B2	0.49	0.43	-1.17	1.80	1.32	3.87	-0.76	-1.62	2.39	1.74	0.85	1.71
Seq. III Piston_B3	0.57	0.33	-1.94	0.32	-0.64	0.73	-1.32	-2.97	-0.12	-0.45	-0.55	1.20
Seq. III Piston_B4	0.89	1.32	-0.12	1.14	0.30	2.74	-0.77	-2.25	1.50	0.96	0.57	1.38
Seq. III Piston_B5	0.35	-2.72	-2.59	0.72	-1.25	-0.74	-2.18	-3.16	-2.05	-1.96	-1.56	1.31
Seq. III Piston_B6	0.65	-0.44	-0.19	1.71	0.35	4.50	-0.55	-1.50	2.65	1.85	0.90	1.79
YI MAXIMUM	2.21	-2.72	-3.69	2.39	1.76	4.50	-2.29	-3.49	2.65	-1.96	-1.56	1.93
YI MINIMUM	-0.07	0.27	0.01	0.32	0.05	-0.24	-0.10	-0.89	-0.12	-0.22	-0.23	0.96
YI MEAN	0.70	0.42	-0.70	1.26	0.49	2.04	-1.03	-2.25	0.99	0.77		
YI STD	0.72	1.14	1.39	0.64	0.95	1.72	0.62	0.79	1.28	1.07		

Yi distribution (excluding shaded columns)



Group: Yellow

Yi	count	percent
-3	3	2.7%
-2	11	9.8%
-1	15	13.4%
0	19	17.0%
1	32	28.6%
2	24	21.4%
3	3	2.7%
total	112	100.0%

Overall Yi STD 1.65  
Parts Rated 14

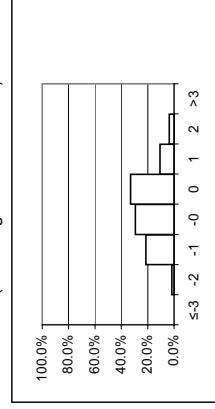
Light Duty Rating Workshop - Sequence III

Rater = Pansza, Mike

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	0.91	0.37	0.82	0.26	<b>2.13</b>	-1.09	-0.64	0.04	1.34	1.78	0.59	1.02
Seq. III Calibration_C2	0.66	0.93	-0.91	-0.74	0.87	0.12	0.10	-1.56	0.54	0.64	0.06	0.85
Seq. III Piston_A1	-0.69	0.65	0.82	-1.36	1.50	-0.17	0.07	-0.41	0.45	0.77	0.16	0.85
Seq. III Piston_A2	0.06	-0.43	0.62	0.48	0.38	0.06	-0.03	-1.43	0.42	-0.57	0.15	0.60
Seq. III Piston_A3	-0.07	1.42	-1.32	1.31	1.02	-1.33	-0.95	-1.81	-1.21	-0.46	-0.34	1.20
Seq. III Piston_A4	-0.34	0.19	-0.25	-0.32	1.30	-0.59	-1.43	<b>-2.38</b>	-0.44	0.10	-0.42	0.98
Seq. III Piston_A5	-1.14	0.32	1.95	1.30	-0.45	-0.14	-1.75	-1.18	-0.69	0.51	-0.13	1.16
Seq. III Piston_A6	-0.45	0.46	-1.61	1.58	-1.11	-1.19	-0.63	-1.50	-1.68	-1.61	-0.77	1.06
Seq. III Piston_B1	-0.07	0.27	0.70	1.39	<b>2.59</b>	-1.37	-0.68	-0.95	-0.41	0.92	0.24	1.20
Seq. III Piston_B2	-0.35	0.43	-1.03	0.81	0.12	-0.99	-1.12	-1.43	-1.56	-0.88	-0.60	0.81
Seq. III Piston_B3	-0.77	1.58	0.09	<b>2.02</b>	-1.68	0.58	-1.60	-0.37	0.94	0.40	0.12	1.24
Seq. III Piston_B4	0.17	1.32	0.95	0.41	<b>2.81</b>	-0.37	-1.69	-1.12	1.12	<b>2.04</b>	0.56	1.38
Seq. III Piston_B5	0.35	<b>-2.41</b>	0.75	-0.51	0.34	-0.71	-0.88	-0.02	-0.88	-0.39	-0.44	0.89
Seq. III Piston_B6	0.29	-1.59	-0.31	1.31	0.35	-0.24	-0.32	-0.93	-0.43	-0.30	-0.22	0.77
YI MAXIMUM	-1.14	<b>-2.41</b>	1.95	<b>2.02</b>	<b>2.81</b>	-1.37	-1.75	<b>-2.38</b>	-1.68	<b>2.04</b>	-0.77	1.38
YI MINIMUM	0.06	0.19	0.09	0.26	0.12	0.06	-0.03	-0.02	-0.41	0.10	0.06	0.60
YI MEAN	-0.10	0.31	0.09	0.57	0.73	-0.53	-0.83	-1.08	-0.18	0.29		
YI STD	0.57	1.09	1.03	1.00	1.31	0.60	0.64	0.69	0.99	0.98		

Yi distribution (excluding shaded columns)



Overall Yi STD 1.07  
Parts Rated 14

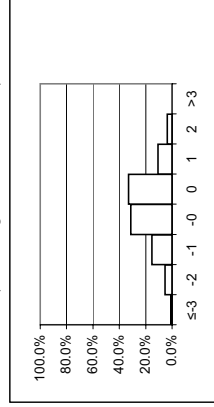
Light Duty Rating Workshop - Sequence III

Rater = Pawczuk, Greg

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.51	-0.14	-1.52	0.97	1.48	0.15	0.70	0.44	-0.17	0.26	0.17	0.83
Seq. III Calibration_C2	1.23	1.54	0.16	-0.41	0.37	0.98	-2.06	-1.35	1.02	0.68	0.22	1.17
Seq. III Piston_A1	2.21	-0.44	0.28	-0.06	0.17	0.76	0.63	0.83	0.25	0.18	0.48	0.72
Seq. III Piston_A2	-1.42	1.84	-0.17	-2.26	-3.66	0.06	-0.71	0.61	-1.17	-0.95	-0.78	1.52
Seq. III Piston_A3	-0.07	-2.83	-1.45	-1.33	2.14	0.71	-0.36	-0.56	0.15	0.85	-0.27	1.39
Seq. III Piston_A4	0.77	0.13	-0.80	-1.80	1.07	1.94	-1.02	-0.35	-0.59	-0.38	-0.10	1.10
Seq. III Piston_A5	-0.20	0.32	-1.33	0.01	2.92	-0.28	-1.63	-0.02	-0.83	-0.91	-0.20	1.26
Seq. III Piston_A6	0.03	-0.63	-1.95	-0.97	-0.84	0.80	-2.72	-1.81	-2.01	-2.05	-1.21	1.09
Seq. III Piston_B1	0.19	0.27	0.02	-0.48	1.72	1.21	-0.30	-0.78	1.24	1.54	0.46	0.90
Seq. III Piston_B2	1.82	0.43	-0.98	-1.23	2.69	-0.20	-0.45	-1.38	0.72	1.70	0.31	1.41
Seq. III Piston_B3	-0.56	0.36	-0.19	1.81	0.91	-0.18	-1.62	-0.13	0.57	0.88	0.18	0.94
Seq. III Piston_B4	0.89	-0.80	-1.18	-0.87	1.99	0.20	-2.22	-1.52	-0.23	0.37	-0.34	1.24
Seq. III Piston_B5	0.35	-0.25	0.32	-0.22	-0.70	0.52	0.29	0.76	0.10	-0.19	0.10	0.44
Seq. III Piston_B6	0.65	0.13	-1.74	1.71	0.35	-0.03	-0.45	-2.63	-1.12	-1.36	-0.45	1.28
YI MAXIMUM	2.21	-2.83	-1.95	-2.26	-3.66	1.94	-2.72	-2.63	-2.01	-2.05	-1.21	1.52
YI MINIMUM	0.03	0.13	0.02	0.01	0.17	-0.03	0.29	-0.02	0.10	0.18	0.10	0.44
YI MEAN	0.38	0.00	-0.75	-0.37	0.76	0.47	-0.85	-0.56	-0.15	0.04	0.10	0.44
YI STD	0.97	1.09	0.80	1.21	1.71	0.64	1.07	1.06	0.92	1.09	0.10	0.44

Yi distribution (excluding shaded columns)



Group: Yellow

Yi	count	percent
-3	1	0.9%
-2	6	5.4%
-1	17	15.2%
0	35	31.3%
1	37	33.0%
2	12	10.7%
3	4	3.6%
total	112	100.0%

Overall Yi STD 1.22  
Parts Rated 14

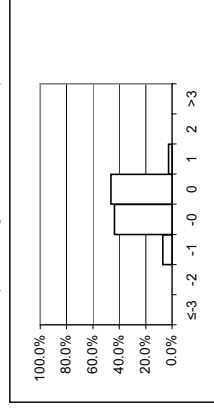
Light Duty Rating Workshop - Sequence III

Rater = Radonich, Pete

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.84	0.54	-0.27	0.26	-1.09	-0.19	-1.34	0.34	-1.13	-1.09	-0.48	0.70
Seq. III Calibration_C2	-0.44	-0.23	0.75	-0.41	-1.17	-0.46	-1.16	0.18	-1.17	-1.20	-0.53	0.66
Seq. III Piston_A1	-0.51	-1.13	0.28	-0.77	-0.81	0.36	0.63	0.32	-0.71	-0.65	-0.30	0.62
Seq. III Piston_A2	-0.35	0.43	0.40	0.58	0.38	0.06	-1.04	0.72	0.27	0.42	0.19	0.52
Seq. III Piston_A3	-0.07	0.05	0.48	0.16	-1.45	-0.46	-0.59	0.58	-0.85	-1.21	-0.34	0.69
Seq. III Piston_A4	-0.43	-0.29	0.16	-0.39	-1.13	-0.36	-0.51	0.29	-0.71	-0.73	-0.41	0.41
Seq. III Piston_A5	-0.33	0.32	0.66	1.53	-0.79	-0.14	-0.42	0.73	0.07	0.49	0.21	0.68
Seq. III Piston_A6	-0.35	0.67	-0.32	1.00	-0.66	-0.65	-0.32	0.14	-0.52	-0.47	-0.15	0.57
Seq. III Piston_B1	-0.07	0.27	0.34	-0.02	-0.29	-0.43	-0.15	-0.17	-0.34	-0.24	-0.11	0.25
Seq. III Piston_B2	-0.18	0.43	0.63	0.81	-0.41	0.20	-0.48	0.35	0.15	0.02	0.08	0.45
Seq. III Piston_B3	-0.15	0.50	0.75	-0.65	-0.43	0.16	0.44	0.68	0.17	-0.01	0.15	0.47
Seq. III Piston_B4	0.89	0.47	-0.97	0.29	-0.06	0.11	0.64	1.07	-0.10	-0.32	0.20	0.61
Seq. III Piston_B5	0.35	0.91	0.68	-0.11	-0.06	0.46	0.60	0.76	0.64	0.44	0.47	0.33
Seq. III Piston_B6	0.53	-0.30	0.26	0.20	0.35	-0.12	-0.75	-0.31	-0.23	-0.05	-0.04	0.38
YI MAXIMUM	0.89	-1.13	-0.97	1.53	-1.45	-0.65	-1.34	1.07	-1.17	-1.21	-0.53	0.70
YI MINIMUM	-0.07	0.05	0.16	-0.02	-0.06	0.06	-0.15	0.14	0.07	-0.01	-0.04	0.25
YI MEAN	-0.14	0.19	0.27	0.18	-0.54	-0.10	-0.32	0.36	-0.32	-0.33		
YI STD	0.45	0.53	0.49	0.65	0.57	0.34	0.67	0.43	0.55	0.59		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	0	0.0%
-1	8	7.1%
0	49	43.8%
1	52	46.4%
2	3	2.7%
3	0	0.0%
total	112	100.0%

Group: Blue

Overall Yi STD 0.59  
Parts Rated 14

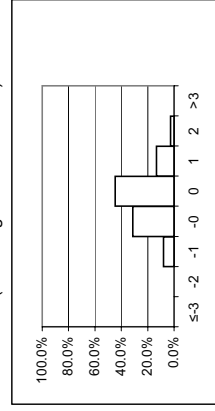
Light Duty Rating Workshop - Sequence III

Rater = Ramirez, Robert

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.45	-0.65	-0.95	2.26	0.10	-1.54	-1.12	0.14	-0.75	-0.54	-0.35	1.05
Seq. III Calibration_C2	0.08	0.98	-0.73	2.92	-0.70	0.64	-1.89	-0.18	0.12	-0.35	0.09	1.27
Seq. III Piston_A1	0.30	0.22	0.07	-0.43	0.44	1.10	-0.38	-0.41	0.19	0.22	0.13	0.46
Seq. III Piston_A2	0.93	-0.98	0.16	1.39	0.38	-0.92	0.90	0.08	0.65	0.49	0.31	0.77
Seq. III Piston_A3	-0.07	0.05	-0.51	1.07	-0.66	1.53	0.07	0.09	0.65	-0.10	0.21	0.68
Seq. III Piston_A4	-0.43	-0.38	-0.14	0.83	-1.03	0.15	0.22	-0.48	-0.12	-0.33	-0.17	0.50
Seq. III Piston_A5	-0.08	0.32	0.83	1.15	0.05	-0.62	1.13	0.33	0.58	1.10	0.48	0.59
Seq. III Piston_A6	-0.16	0.24	0.84	1.72	1.49	0.00	0.06	1.06	1.09	1.34	0.77	0.68
Seq. III Piston_B1	-0.07	0.27	-0.76	1.04	0.28	1.48	-0.09	-0.11	1.09	0.73	0.39	0.69
Seq. III Piston_B2	1.15	0.43	-0.28	1.66	0.83	-0.01	0.38	-0.40	1.00	0.99	0.57	0.67
Seq. III Piston_B3	2.12	0.09	-0.19	-1.32	0.13	0.05	0.29	-1.35	-0.23	-0.33	-0.07	0.96
Seq. III Piston_B4	0.89	1.32	0.86	1.75	-0.54	0.55	-0.28	-1.06	0.75	0.46	0.47	0.86
Seq. III Piston_B5	0.35	-0.17	0.32	-1.31	-1.55	0.37	0.23	-0.02	-0.73	-1.15	-0.37	0.75
Seq. III Piston_B6	0.65	0.99	0.91	0.86	0.35	-0.55	0.63	-0.43	0.97	1.09	0.55	0.59
YI MAXIMUM	2.12	1.32	-0.95	2.92	-1.55	-1.54	-1.89	-1.35	1.09	1.34	0.77	1.27
YI MINIMUM	-0.07	0.05	0.07	-0.43	0.05	0.00	0.06	-0.02	0.12	-0.10	-0.07	0.46
YI MEAN	0.37	0.20	0.03	0.97	-0.03	0.16	0.01	-0.20	0.38	0.26		
YI STD	0.71	0.63	0.65	1.23	0.79	0.88	0.78	0.58	0.64	0.75		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3 It yi	0	0.0%
-2 It yi	0	0.0%
-1 It yi	9	8.0%
0 It yi	35	31.3%
1 It yi	50	44.6%
2 It yi	15	13.4%
3 It yi	3	2.7%
total	112	100.0%

Group: White

Overall Yi STD 0.85  
Parts Rated 14

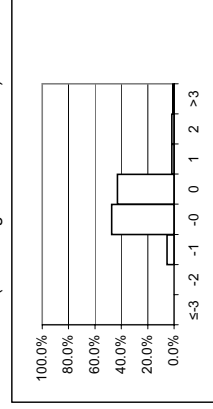
Light Duty Rating Workshop - Sequence III

Rater = Rodriguez, Jesse

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	0.93	<b>2.42</b>	0.55	-0.18	-0.18	-1.88	-0.15	0.44	0.74	0.38	0.39	1.07
Seq. III Calibration_C2	<b>2.10</b>	-0.74	0.28	1.03	-0.48	-0.50	0.26	0.48	-0.10	-0.39	0.19	0.86
Seq. III Piston_A1	0.85	-0.48	-0.05	-0.39	0.29	-0.91	0.52	0.25	-0.17	-0.04	-0.01	0.51
Seq. III Piston_A2	0.06	-0.51	0.13	0.53	-1.45	0.06	0.55	0.11	0.35	0.24	0.01	0.59
Seq. III Piston_A3	-0.07	0.05	-1.05	-0.01	-0.71	-0.54	0.69	0.69	-1.03	-1.35	-0.36	0.68
Seq. III Piston_A4	0.34	-0.11	-0.36	-0.15	-0.83	-0.31	-0.12	0.67	-0.50	-0.65	-0.20	0.45
Seq. III Piston_A5	0.09	0.32	-0.06	-0.68	-0.45	-0.14	0.07	0.53	0.03	-0.11	-0.03	0.35
Seq. III Piston_A6	-0.16	0.02	-0.06	0.00	-0.75	-0.18	-0.06	0.51	-0.23	-0.31	-0.12	0.31
Seq. III Piston_B1	<b>3.35</b>	0.27	-0.63	-0.95	0.03	-0.73	-0.07	-0.45	-0.71	-0.94	-0.08	1.28
Seq. III Piston_B2	-1.35	0.43	1.03	-1.02	-0.50	-0.20	0.19	-0.21	-0.12	-0.13	-0.19	0.68
Seq. III Piston_B3	-0.56	-0.20	0.18	-0.57	0.19	-0.32	0.14	-0.54	-0.37	-0.23	-0.23	0.30
Seq. III Piston_B4	-0.19	0.47	0.10	0.35	0.05	-0.80	-0.70	-0.33	-0.41	-0.16	-0.16	0.42
Seq. III Piston_B5	0.35	0.84	0.32	-0.04	-0.01	0.23	0.29	-0.02	0.36	0.25	0.26	0.26
Seq. III Piston_B6	0.41	-0.01	-1.32	-0.39	0.35	-0.46	-0.10	0.32	-1.16	-1.40	-0.38	0.70
YI MAXIMUM	<b>3.35</b>	<b>2.42</b>	-1.32	1.03	-1.45	-1.88	-0.70	0.69	-1.16	-1.40	0.39	1.28
YI MINIMUM	0.06	-0.01	-0.05	0.00	-0.01	0.06	-0.06	-0.02	0.03	-0.04	0.01	0.26
YI MEAN	0.44	0.20	-0.06	-0.12	-0.32	-0.48	0.09	0.18	-0.24	-0.35		
YI STD	1.15	0.77	0.62	0.60	0.51	0.51	0.32	0.42	0.53	0.56		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3 It yi	0	0.0%
-2 It yi	0	0.0%
-1 It yi	6	5.4%
0 It yi	53	47.3%
1 It yi	48	42.9%
2 It yi	2	1.8%
3 It yi	2	1.8%
total	112	100.0%

Group: Red

Overall Yi STD 0.69  
Parts Rated 14

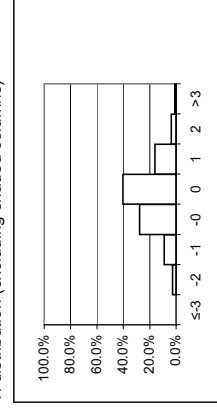
Light Duty Rating Workshop - Sequence III

Rater = Sanchez, Art

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	1.49	-0.82	-1.06	-2.21	0.39	-0.75	-0.62	0.39	0.37	-0.20	-0.30	1.02
Seq. III Calibration_C2	0.08	-1.30	0.16	-1.19	1.24	0.57	1.03	0.00	0.87	1.15	0.26	0.91
Seq. III Piston_A1	-1.69	<b>2.88</b>	<b>2.45</b>	<b>3.51</b>	<b>2.26</b>	<b>2.90</b>	0.46	0.32	<b>3.46</b>	<b>3.21</b>	1.98	1.72
Seq. III Piston_A2	-0.45	-0.04	0.79	-0.86	-1.09	0.06	1.92	0.00	0.78	0.74	0.19	0.90
Seq. III Piston_A3	-0.07	-0.86	0.88	0.49	0.00	0.71	<b>-2.27</b>	-0.61	0.17	0.39	-0.12	0.93
Seq. III Piston_A4	-0.43	0.06	1.48	1.00	0.70	0.72	0.08	0.80	1.50	1.49	0.74	0.67
Seq. III Piston_A5	1.02	0.32	1.19	-0.60	-0.62	-0.14	0.27	0.53	1.20	1.19	0.44	0.72
Seq. III Piston_A6	0.12	-1.49	-0.35	-0.15	-0.12	1.24	-0.06	-1.08	0.25	0.02	-0.16	0.74
Seq. III Piston_B1	-0.07	-0.87	1.86	-1.30	-0.72	0.21	0.69	0.61	0.92	1.03	0.24	0.98
Seq. III Piston_B2	-0.18	0.43	1.35	0.39	-0.03	-0.33	1.09	0.12	1.13	0.89	0.49	0.60
Seq. III Piston_B3	1.40	-0.13	0.28	1.69	0.91	0.31	1.14	0.28	1.08	1.22	0.82	0.59
Seq. III Piston_B4	<b>-2.51</b>	-0.94	0.44	0.04	0.27	-1.12	1.25	0.07	-0.28	0.12	-0.26	1.04
Seq. III Piston_B5	0.35	-0.25	0.32	1.16	1.33	0.35	-0.08	-0.02	1.06	1.32	0.55	0.61
Seq. III Piston_B6	0.16	-0.44	1.80	-0.52	0.35	0.03	-1.07	0.01	0.44	1.01	0.18	0.81
YI MAXIMUM	<b>-2.51</b>	<b>2.88</b>	<b>2.45</b>	<b>3.51</b>	<b>2.26</b>	<b>2.90</b>	<b>-2.27</b>	-1.08	<b>3.46</b>	<b>3.21</b>	1.98	1.72
YI MINIMUM	-0.07	-0.04	0.16	0.04	0.00	0.03	-0.06	0.00	0.17	0.02	-0.12	0.59
YI MEAN	-0.05	-0.25	0.83	0.10	0.35	0.34	0.27	0.10	0.93	0.97		
YI STD	1.07	1.07	0.96	1.45	0.90	0.96	1.08	0.48	0.88	0.83		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3 lt yi ≤ -2	0	0.0%
-2 lt yi ≤ -1	3	2.7%
-1 lt yi ≤ 0	10	8.9%
0 lt yi ≤ 1	31	27.7%
1 lt yi ≤ 2	45	40.2%
2 lt yi ≤ 3	18	16.1%
3 lt yi	4	3.6%
total	112	100.0%

Group: White

Yi	count	percent
-1 < yi ≤ 1	67.9%	
-2 < yi ≤ 2	92.9%	
-3 < yi ≤ 3	99.1%	
>3	0.9%	
Overall Yi STD	1.04	
Parts Rated	14	



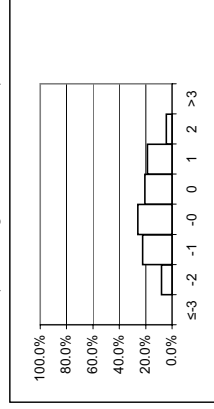
Light Duty Rating Workshop - Sequence III

Rater = Seitz, Ray

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.82	1.84	1.43	1.64	-0.72	-1.48						
Seq. III Calibration_C2	<b>-2.05</b>	1.14	-1.20	0.59	0.85	1.44	0.66	-0.30	1.16	1.09	0.34	1.15
Seq. III Piston_A1	<b>2.48</b>	0.65	0.64	-0.57	1.27	1.36	<b>-2.18</b>	-1.14	0.74	0.82	0.41	1.35
Seq. III Piston_A2	1.44	-0.04	-0.49	-1.02	1.12	-0.08	0.07	-0.15	-0.27	-0.51	0.01	0.74
Seq. III Piston_A3	-0.07	-0.55	-0.54	-1.33	0.00	0.30	0.57	<b>-2.03</b>	-0.42	-0.47	-0.45	0.76
Seq. III Piston_A4	1.98	<b>2.31</b>	0.57	1.98	-0.30	-0.48	0.95	-1.24	1.78	1.14	0.87	1.21
Seq. III Piston_A5	<b>2.44</b>	0.32	0.96	-1.36	1.57	1.30	-1.28	1.30	<b>2.36</b>	<b>2.02</b>	0.82	1.40
Seq. III Piston_A6	<b>-2.59</b>	-0.73	-0.58	-1.51	-1.96	1.92	-0.72	-1.14	-0.65	-0.94	-0.89	1.18
Seq. III Piston_B1	1.96	-0.87	-1.43	-1.66	1.28	0.63	-1.24	-1.89	-0.43	-0.53	-0.42	1.30
Seq. III Piston_B2	-1.85	-1.91	-0.63	-0.32	0.63	1.11	-1.19	-1.80	-0.53	0.01	-0.65	1.05
Seq. III Piston_B3	1.11	-0.71	<b>-2.56</b>	0.17	-1.24	0.21	0.51	<b>-2.16</b>	-0.74	-1.15	-0.65	1.17
Seq. III Piston_B4	<b>-2.51</b>	-0.94	1.27	0.47	0.19	1.20	1.36	-1.25	1.25	1.14	0.22	1.35
Seq. III Piston_B5	0.35	-0.48	<b>-2.74</b>	0.43	-0.95	-0.74	<b>-2.12</b>	-1.59	-1.53	-1.59	-1.10	1.02
Seq. III Piston_B6	-0.32	<b>2.71</b>	-1.14	-1.64	0.35	-0.12	<b>2.30</b>	-0.31	0.16	-0.51	0.15	1.38
YI MAXIMUM	<b>-2.59</b>	<b>2.71</b>	<b>-2.74</b>	1.98	-1.96	1.92	<b>2.30</b>	<b>-2.16</b>	<b>2.36</b>	<b>2.02</b>	-1.10	1.40
YI MINIMUM	-0.07	-0.04	-0.49	0.17	0.00	-0.08	0.07	-0.15	0.16	0.01	0.01	0.74
YI MEAN	0.11	0.05	-0.43	-0.49	0.30	0.60	-0.03	-1.27	0.23	0.14		
YI STD	1.85	1.28	1.36	1.09	1.09	0.87	1.36	0.64	1.10	1.11		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	9	8.0%
-1	25	22.3%
0	29	25.9%
1	23	20.5%
2	21	18.8%
3	5	4.5%
total	112	100.0%

Group: Yellow

-1 < yi ≤ 1 46.4%  
 -2 < yi ≤ 2 87.5%  
 -3 < yi ≤ 3 100.0%  
 >3 0.0%

Overall Yi STD 1.32  
 Parts Rated 14

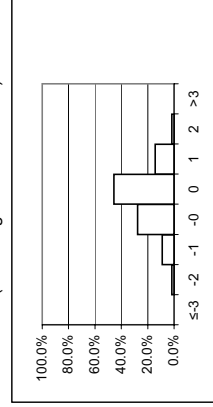
Light Duty Rating Workshop - Sequence III

Rater = Tschirhart, Garland

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	2.29	1.22	0.64	-0.80	2.13	0.04	1.56	0.44	2.60	2.29	1.24	1.13
Seq. III Calibration_C2	0.08	0.78	0.75	-1.19	0.29	1.71	1.52	0.48	1.75	1.10	0.73	0.89
Seq. III Piston_A1	-0.97	0.06	0.11	0.26	-0.91	-1.11	0.35	-0.04	-0.31	-0.42	-0.30	0.54
Seq. III Piston_A2	-0.04	-1.45	0.25	-1.08	0.38	-0.17	-0.41	0.04	-0.23	-0.07	-0.28	0.57
Seq. III Piston_A3	-0.07	-1.61	0.58	-0.67	-0.63	1.13	1.00	0.91	0.89	0.31	0.19	0.91
Seq. III Piston_A4	-0.43	0.68	1.25	-1.13	0.37	-0.65	-1.04	0.73	0.03	0.32	0.01	0.80
Seq. III Piston_A5	-0.53	0.32	-1.66	-0.60	-0.45	-0.14	-0.19	0.23	-1.13	-1.76	-0.59	0.72
Seq. III Piston_A6	0.03	0.02	1.84	-0.94	-0.84	-0.41	0.06	0.75	0.38	0.53	0.14	0.81
Seq. III Piston_B1	-0.07	0.27	-0.24	-0.02	-0.22	0.11	0.87	1.05	0.33	0.09	0.22	0.44
Seq. III Piston_B2	1.15	0.43	0.79	-0.95	0.23	-1.06	0.82	0.35	0.34	0.44	0.25	0.72
Seq. III Piston_B3	-0.56	0.94	0.52	0.94	0.97	1.05	0.51	0.28	1.45	1.49	0.76	0.61
Seq. III Piston_B4	0.17	0.19	0.49	-2.22	-2.37	-1.14	-0.32	0.74	-1.65	-1.89	-0.80	1.19
Seq. III Piston_B5	0.35	-0.25	0.32	1.38	1.33	1.40	0.48	0.29	1.79	1.80	0.89	0.73
Seq. III Piston_B6	0.65	-0.44	1.06	-0.98	0.35	-0.27	0.94	1.20	0.92	0.95	0.44	0.75
YI MAXIMUM	2.29	-1.61	1.84	-2.22	-2.37	1.71	1.56	1.20	2.60	2.29	1.24	1.19
YI MINIMUM	0.03	0.02	0.11	-0.02	-0.22	0.04	0.06	0.04	0.03	-0.07	0.01	0.44
YI MEAN	0.15	0.08	0.48	-0.57	0.04	0.03	0.44	0.53	0.51	0.37	0.19	0.44
YI STD	0.81	0.82	0.80	0.93	1.09	0.95	0.75	0.38	1.16	1.19	0.44	0.75

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	2	1.8%
-1	10	8.9%
0	31	27.7%
1	51	45.5%
2	16	14.3%
3	2	1.8%
total	112	100.0%

Overall Yi STD 0.88  
Parts Rated 14

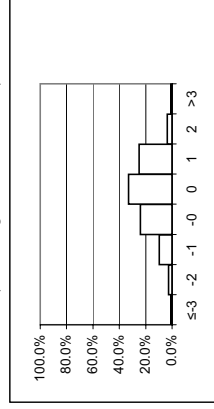
Light Duty Rating Workshop - Sequence III

Rater = Viera, Ralph

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.01	-2.02	1.57	0.14	0.57	0.49	-0.18	1.15	0.71	1.09	0.35	1.00
Seq. III Calibration_C2	-2.45	-0.74	1.22	0.59	1.15	0.46	1.15	0.36	0.81	1.35	0.39	1.17
Seq. III Piston_A1	-0.33	0.11	-0.64	-0.25	0.37	-0.71	1.19	1.05	-0.07	-0.02	0.07	0.64
Seq. III Piston_A2	-1.21	-1.45	1.33	0.80	0.02	0.06	-0.59	1.02	0.96	1.31	0.22	1.03
Seq. III Piston_A3	-3.43	-1.16	1.63	-0.75	1.21	2.44	-0.29	1.57	2.76	2.87	0.68	2.04
Seq. III Piston_A4	-1.11	-2.19	1.18	0.35	1.33	1.01	-0.07	1.24	0.74	1.17	0.37	1.18
Seq. III Piston_A5	-0.04	0.32	0.36	-1.51	-0.29	-0.14	0.39	0.73	0.00	-0.01	-0.02	0.61
Seq. III Piston_A6	0.69	-1.28	2.10	0.14	1.04	1.66	0.66	0.33	2.34	2.26	0.99	1.14
Seq. III Piston_B1	-1.46	0.27	1.12	-0.25	-0.35	2.90	0.97	1.05	3.15	2.74	1.01	1.53
Seq. III Piston_B2	-1.35	-0.92	0.72	-0.18	1.58	-0.59	0.86	0.12	0.90	1.49	0.20	1.00
Seq. III Piston_B3	-0.98	0.43	0.70	-1.71	1.21	0.62	-0.19	1.09	0.22	0.43	0.18	0.91
Seq. III Piston_B4	0.17	-0.09	1.56	-0.87	0.30	2.49	1.17	1.33	2.23	1.69	1.00	1.08
Seq. III Piston_B5	0.35	0.68	0.97	-0.40	1.23	-0.97	1.09	0.76	0.24	0.67	0.46	0.69
Seq. III Piston_B6	-0.69	3.00	0.64	-0.19	-1.68	0.03	-1.35	0.39	0.02	0.28	0.05	1.28
YI MAXIMUM	-3.43	3.00	2.10	-1.71	-1.68	2.90	-1.35	1.57	3.15	2.87	1.01	2.04
YI MINIMUM	-0.01	-0.09	0.12	0.14	0.02	0.03	-0.07	0.12	0.00	-0.01	-0.02	0.61
YI MEAN	-0.85	-0.36	0.99	-0.29	0.55	0.70	0.35	0.87	1.07	1.24		
YI STD	1.13	1.34	0.71	0.73	0.90	1.25	0.80	0.43	1.09	0.93		

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	1	0.9%
-2	3	2.7%
-1	11	9.8%
0	27	24.1%
1	37	33.0%
2	28	25.0%
3	4	3.6%
total	112	100.0%

Group: Yellow

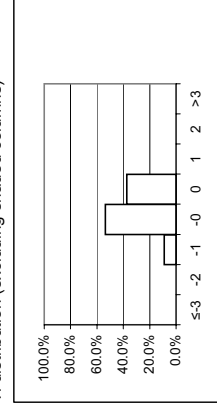
Light Duty Rating Workshop - Sequence III

Rater = Yanchar, Paul

YI VALUES

	Groove 1	Groove 2	Groove 3	Land 2	Land 3	Under-crown	Thrust	Anti-thrust	UWPD	WPD	MEAN	STD
Seq. III Calibration_C1	-0.31	-0.82	-0.63	-0.80	0.00	0.38	0.15	0.44	-0.41	-0.38	-0.24	0.46
Seq. III Calibration_C2	0.37	-0.74	0.45	0.37	-0.14	-1.19	0.46	0.60	-0.69	-0.40	-0.09	0.63
Seq. III Piston_A1	-0.06	-0.66	0.95	-0.10	0.19	0.03	0.07	0.32	0.10	0.24	0.11	0.40
Seq. III Piston_A2	-1.21	-0.51	0.05	-0.33	0.02	0.06	-0.92	-0.15	-0.60	-0.25	-0.38	0.43
Seq. III Piston_A3	-0.07	0.05	0.75	-0.42	-0.41	-1.23	-0.13	-0.50	-0.81	-0.52	-0.33	0.53
Seq. III Piston_A4	-0.14	-0.42	-0.52	-0.87	-0.46	-0.36	-0.02	-0.35	-0.97	-0.88	-0.50	0.32
Seq. III Piston_A5	-1.39	0.32	-0.76	-1.51	-0.45	-1.14	-0.65	-0.02	-1.80	-1.87	-0.83	0.78
Seq. III Piston_A6	0.31	0.67	0.17	-0.44	-0.12	-1.76	0.06	-1.20	-1.03	-0.67	-0.40	0.76
Seq. III Piston_B1	-0.07	0.27	0.02	-0.25	0.21	-1.27	-0.35	-0.50	-1.23	-0.87	-0.40	0.56
Seq. III Piston_B2	-0.51	0.43	0.76	-0.46	-1.07	-0.46	-0.30	-0.35	-0.84	-0.89	-0.37	0.57
Seq. III Piston_B3	-0.15	-0.34	-0.19	-0.36	0.91	0.00	0.06	0.28	-0.08	0.16	0.03	0.37
Seq. III Piston_B4	0.89	-0.09	-0.36	-1.06	-0.63	-0.85	0.07	-0.26	-0.99	-0.96	-0.42	0.61
Seq. III Piston_B5	0.35	-0.25	0.32	-0.59	0.09	0.40	-0.02	0.76	0.09	0.05	0.12	0.37
Seq. III Piston_B6	0.65	0.13	-0.49	-0.52	0.35	-0.21	-0.36	-0.43	-0.71	-0.77	-0.24	0.47
YI MAXIMUM	-1.39	-0.82	0.95	-1.51	-1.07	-1.76	-0.92	-1.20	-1.80	-1.87	-0.83	0.78
YI MINIMUM	-0.06	0.05	0.02	-0.10	0.00	0.00	-0.02	-0.02	-0.08	0.05	0.03	0.32
YI MEAN	-0.10	-0.14	0.04	-0.52	-0.11	-0.47	-0.13	-0.10	-0.71	-0.57	0.03	0.32
YI STD	0.64	0.47	0.56	0.45	0.48	0.68	0.35	0.53	0.52	0.55	0.03	0.32

Yi distribution (excluding shaded columns)
























Yi distribution (excluding shaded columns)

Group: Blue

Overall Yi STD 0.54

Parts Rated 14

## Light Duty Rating Workshop - Seq V Varnish

	Number of Parts Rated	-1 < yi ≤ 1	-2 < yi ≤ 2	-3 < yi ≤ 3	>3	Yi STD	Group	
Adams, Pat	5	65.2%	100.0%	100.0%	0.0%	0.96	White	
Cales, Jonathon	5	82.6%	100.0%	100.0%	0.0%	0.71	Red	
Caproni, David	5	87.0%	100.0%	100.0%	0.0%	0.58	Blue	
Castillo, George	5	95.7%	100.0%	100.0%	0.0%	0.62	Blue	
Foecking, Brian	5	60.9%	100.0%	100.0%	0.0%	0.45	White	
Garcia, Orlando	5	82.6%	95.7%	100.0%	0.0%	0.81	Red	
Hills, Barry	5	43.5%	100.0%	100.0%	0.0%	0.24	Yellow	
Kirkpatrick, John	5	39.1%	65.2%	95.7%	4.3%	1.72	Yellow	
Kobrinetz, Jack	5	100.0%	100.0%	100.0%	0.0%	0.36	Blue	
Lopez, Frank	5	65.2%	100.0%	100.0%	0.0%	0.92	White	
Lowsky, John	5	65.2%	82.6%	95.7%	4.3%	1.16	Yellow	
Pansza, Mike	5	91.3%	100.0%	100.0%	0.0%	0.67	Blue	
Pawczuk, Greg	3	47.1%	88.2%	100.0%	0.0%	0.99	Yellow	
Radonich, Pete	5	100.0%	100.0%	100.0%	0.0%	0.33	Blue	
Ramirez, Robert	5	91.3%	100.0%	100.0%	0.0%	0.57	Blue	
Rodriguez, Jesse	5	39.1%	69.6%	91.3%	8.7%	1.25	Yellow	
Sanchez, Art	5	82.6%	100.0%	100.0%	0.0%	0.36	Red	
Seiz, Ray	5	69.6%	87.0%	100.0%	0.0%	1.15	Yellow	
Tschirhart, Garland	5	56.5%	100.0%	100.0%	0.0%	0.78	Yellow	
Viera, Ralph	5	73.9%	95.7%	100.0%	0.0%	0.69	White	
Yanchar, Paul	5	95.7%	100.0%	100.0%	0.0%	0.50	Blue	

	Minimum Number of Parts Rated	Minimum Yi's within 1 STD of mean	Minimum Yi's within 2 STD of mean	Maximum Overall Yi STD	Group Total	
White	0	60%	90%	1.20	4	19%
Red	0	80%	95%	0.85	3	14%
Blue	0	85%	98%	0.75	7	33%
Yellow	-	-	-	-	7	33%

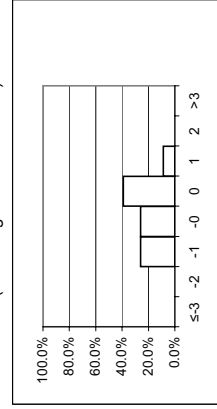
Light Duty Rating Workshop - Seq V Varnish

Rater = Adams, Pat

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R			MEAN	STD
Seq_V_Calibration_Pis	-0.15	-0.53	-1.96	-0.94										-0.90	0.78
Seq_V_Piston_SetD	-0.85	0.77	0.83	0.60	-0.13		-0.15	1.16						0.32	0.71
Seq_V_Piston_SetE	-1.52	-1.05	-1.13	-1.33	0.69		-1.35	0.46						-0.75	0.92
Seq_V_Calibration_Va									0.51	0.57	0.78			0.68	0.15
Seq_V_Varnish									0.51	1.11	0.57			0.73	0.33
YI MAXIMUM		-1.52	-1.96	-1.33	0.69		-1.35	1.16	0.51	1.11	0.78				
YI MINIMUM	-0.15	-0.53	0.83	0.60	-0.13		-0.15	0.46	0.51	0.57	0.57				
YI MEAN	-0.84	-0.27	-0.75	-0.56	0.28		-0.75	0.81	0.51	0.84	0.68				
YI STD	0.88	0.93	1.44	1.02	0.58		0.85	0.50	0.38	0.38	0.15				

Yi distribution (excluding shaded columns)



Yi	count	percent
-1 < yi ≤ 1	65.2%	
-2 < yi ≤ -1	100.0%	
-3 < yi ≤ -2	100.0%	
>3	0.0%	
Overall YI STD	0.96	
Parts Rated	5	

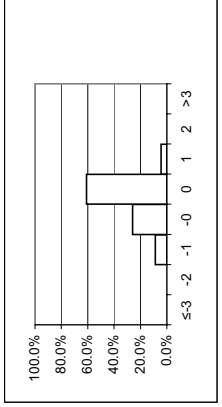


Ratee = Caproni, David

Y<sub>i</sub> VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	-0.05	-0.05	0.45	-0.94								-0.15	0.58
Seq_V_Piston_SetD	0.28	0.79	0.34	1.08	0.49		0.31	0.00				0.47	0.36
Seq_V_Piston_SetE	-0.40	0.04	-1.17	-0.50	0.12		0.29	-1.05				-0.38	0.57
Seq_V_Calibration_Va									0.64	0.48	0.35	0.42	0.10
Seq_V_Varnish										-0.16	0.57	0.35	0.44
Y1 MAXIMUM	-0.40	0.79	-1.17	1.08	0.49		0.31	-1.05	0.64	0.48	0.57	0.47	0.58
Y1 MINIMUM	-0.05	0.04	0.34	-0.50	0.12		0.29	0.00	0.64	-0.16	0.35	-0.15	0.10
Y1 MEAN	-0.06	0.26	-0.12	-0.12	0.30		0.30	-0.53	0.64	0.16	0.46		
Y1 STD	0.34	0.46	0.91	1.06	0.26		0.01	0.75		0.45	0.16		

Y<sub>i</sub> distribution (excluding shaded columns)



Y <sub>i</sub> Range	count	percent	Overall Y <sub>i</sub> STD
-1 < Y <sub>i</sub> ≤ 1	87.0%	0.58	
-2 < Y <sub>i</sub> ≤ 2	100.0%		
-3 < Y <sub>i</sub> ≤ 3	100.0%		
>3	0.0%		
Parts Rated	5		



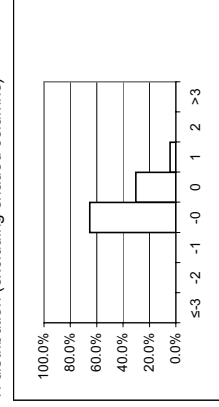
Light Duty Rating Workshop - Seq V Varnish

Rater = Castillo, George

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	0.46	0.15	0.55	0.09								0.31	0.23
Seq_V_Piston_SetD	-0.43	-0.66	-0.63	-0.82	-0.39		-0.38	-0.80				-0.59	0.19
Seq_V_Piston_SetE	-0.40	-0.47	-0.45	-0.21	-0.86		-0.75	-0.56				-0.53	0.22
Seq_V_Calibration_Va									-0.65	0.66	0.48	0.57	0.13
Seq_V_Varnish									-0.65	1.24	0.99	0.53	1.02
YI MAXIMUM	0.46	-0.66	-0.63	-0.82	-0.86		-0.75	-0.80	-0.65	1.24	0.99	-0.59	1.02
YI MINIMUM	-0.40	0.15	-0.45	0.09	-0.39		-0.38	-0.56	-0.65	0.66	0.48	0.31	0.13
YI MEAN	-0.12	-0.33	-0.18	-0.32	-0.62		-0.57	-0.68	-0.65	0.95	0.74		
YI STD	0.51	0.42	0.64	0.46	0.33		0.26	0.17	0.41	0.36			

Yi distribution (excluding shaded columns)



Yi Range	count	percent
-1 < yi ≤ 1	95.7%	
-2 < yi ≤ 2	100.0%	
-3 < yi ≤ 3	100.0%	
>3	0.0%	
Overall Yi STD	0.62	
Parts Rated	5	

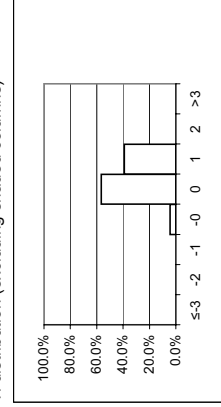
Light Duty Rating Workshop - Seq V Varnish

Rater = Foeking, Brian

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	0.07	1.17	1.18	0.91								0.83	0.52
Seq_V_Piston_SetD	1.06	0.69	0.65	0.34	0.58		1.23	0.27				0.69	0.35
Seq_V_Piston_SetE	1.18	1.02	1.45	1.23	0.34		1.29	0.98				1.07	0.36
Seq_V_Calibration_Va									0.77	0.48	0.26	0.37	0.16
Seq_V_Varnish										-0.28	0.47	0.32	0.54
YI MAXIMUM	1.18	1.17	1.45	1.23	0.58		1.29	0.98	0.77	0.48	0.47	1.07	0.54
YI MINIMUM	0.07	0.69	0.65	0.34	0.34		1.23	0.27	0.77	-0.28	0.26	0.32	0.16
YI MEAN	0.77	0.96	1.09	0.83	0.46		1.26	0.63	0.77	0.10	0.36		
YI STD	0.61	0.24	0.40	0.45	0.17		0.05	0.50		0.54	0.15		

Yi distribution (excluding shaded columns)



Group: White

	count	percent
yi le -3	0	0.0%
-3 lt yi le -2	0	0.0%
-2 lt yi le -1	0	0.0%
-1 lt yi le 0	1	4.3%
0 lt yi le 1	13	56.5%
1 lt yi le 2	9	39.1%
2 lt yi le 3	0	0.0%
3 lt yi	0	0.0%
total	23	100.0%

Overall YI STD 0.45

Parts Rated 5

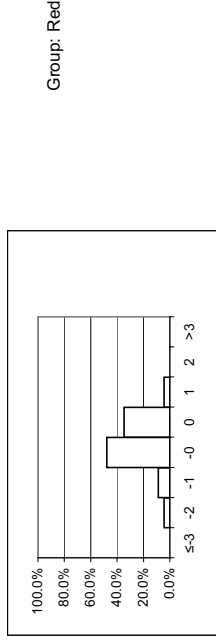
Light Duty Rating Workshop - Seq V Varnish

Rater = Garcia, Orlando

Y1 VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R						MEAN	STD
Seq_V_Calibration_Pis	-1.34	-0.92	-1.24	-2.29													-1.45	0.59
Seq_V_Piston_SetD	-0.85	-0.43	-0.58	-0.09	-0.55		0.40	-0.47									-0.37	0.41
Seq_V_Piston_SetE	0.67	0.55	0.87	0.61	-0.63		1.16	0.56									0.54	0.56
Seq_V_Calibration_Val									-0.49	-0.08	0.04						-0.02	0.09
Seq_V_Varnish										0.10	-0.32						-0.24	0.30
Y1 MAXIMUM	-1.34	-0.92	-1.24	-2.29	-0.63		1.16	0.56	-0.49	0.10	-0.32						-1.45	0.59
Y1 MINIMUM	0.67	-0.43	-0.58	-0.09	-0.55		0.40	-0.47	-0.49	-0.08	0.04						-0.02	0.09
Y1 MEAN	-0.51	-0.27	-0.32	-0.59	-0.59		0.78	0.05	-0.49	0.01	-0.14						-0.02	0.09
Y1 STD	1.05	0.75	1.08	1.51	0.06		0.54	0.73		0.13	0.26							

Y1 distribution (excluding shaded columns)



count	percent
0	0.0%
1	4.3%
2	8.7%
11	47.8%
8	34.8%
1	4.3%
0	0.0%
0	0.0%
23	100.0%

-1 < y1 <= 1	82.6%
-2 < y1 <= 2	95.7%
-3 < y1 <= 3	100.0%
>3	0.0%
Overall Y1 STD	0.81
Parts Rated	5

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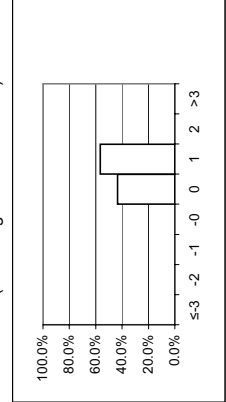
Light Duty Rating Workshop - Seq V Varnish

Rater =

Hills, Barry

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R					MEAN	STD
Seq_V_Calibration_Pis	1.68	0.92	0.94	1.14												1.17	0.36
Seq_V_Piston_SetD	1.03	1.00	1.30	0.70	1.11		0.77	0.90								0.97	0.20
Seq_V_Piston_SetE	1.18	0.91	1.05	1.14	1.00		0.98	1.37								1.09	0.16
Seq_V_Calibration_Va									1.16	0.79	1.00	0.48				0.74	0.37
Seq_V_Varnish											0.84					0.93	0.20
YI MAXIMUM	1.68	1.00	1.30	1.14	1.11		0.98	1.37	1.16	1.00	0.84					1.17	0.37
YI MINIMUM	1.03	0.91	0.94	0.70	1.00		0.77	0.90	1.16	0.79	0.48					0.74	0.16
YI MEAN	1.30	0.94	1.10	0.99	1.05		0.87	1.13	1.16	0.90	0.66						
YI STD	0.34	0.05	0.18	0.26	0.07		0.15	0.34	0.15	0.15	0.25						



YI distribution (excluding shaded columns)

	count	percent
yile -3	0	0.0%
-3 lt yile -2	0	0.0%
-2 lt yile -1	0	0.0%
-1 lt yile 0	0	0.0%
0 lt yile 1	10	43.5%
1 lt yile 2	13	56.5%
2 lt yile 3	0	0.0%
3 lt yile	0	0.0%
total	23	100.0%

-1 < yil ≤ 1	43.5%
-2 < yil ≤ 2	100.0%
-3 < yil ≤ 3	100.0%
>3	0.0%
Overall YI STD	0.24
Parts Rated	5

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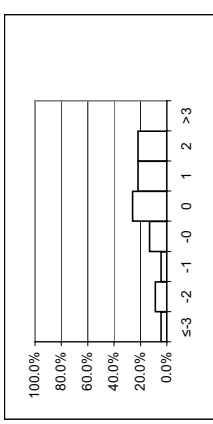
Light Duty Rating Workshop - Seq V Varnish

Rater = Kirkpatrick, John

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	2.33	-0.53	-0.51	0.32								0.40	1.34
Seq_V_Piston_SetD	1.87	2.30	1.94	2.70	1.68		0.77	2.06				1.90	0.60
Seq_V_Piston_SetE	1.00	0.76	0.98	0.73	1.89		-0.16	1.05				0.89	0.60
Seq_V_Calibration_Va									2.38	-2.46	-2.26	-2.36	0.14
Seq_V_Varnish										-1.42	-3.63	-0.89	3.04
YI MAXIMUM	2.33	2.30	1.94	2.70	1.89		0.77	2.06	2.38	-2.46	-3.63	-2.36	3.04
YI MINIMUM	1.00	-0.53	-0.51	0.32	1.68		-0.16	1.05	2.38	-1.42	-2.26	0.40	0.14
YI MEAN	1.73	0.85	0.80	1.25	1.78		0.30	1.56	2.38	-1.94	-2.95	0.40	0.14
YI STD	0.68	1.42	1.24	1.27	0.15		0.66	0.71		0.73	0.97		

Yi distribution (excluding shaded columns)



Overall Yi STD 1.72

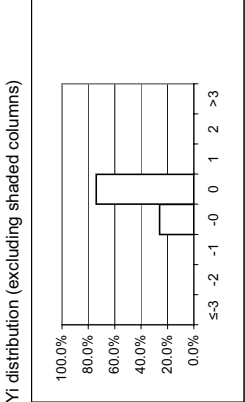
Parts Rated 5

Light Duty Rating Workshop - Seq V Varnish

Rater = Kobrinetz, Jack

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq V Calibration_Pis	0.59	0.44	0.45	0.32								0.45	0.11
Seq V Piston_SetD	-0.46	-0.04	-0.38	0.47	-0.16		0.31	-0.22				-0.07	0.35
Seq V Piston_SetE	0.53	0.40	0.62	0.73	0.12		0.75	0.70				0.55	0.23
Seq V Calibration_Va									-0.10	0.14	0.35	0.24	0.15
Seq V Varnish									-0.10	0.48	0.57	0.32	0.36
YI MAXIMUM	0.59	0.44	0.62	0.73	-0.16			0.70	-0.10	0.48	0.57	0.55	0.36
YI MINIMUM	-0.46	-0.04	-0.38	0.32	0.12		0.31	-0.22	-0.10	0.14	0.35	-0.07	0.11
YI MEAN	0.22	0.27	0.23	0.51	-0.02		0.53	0.24	-0.10	0.31	0.46		
YI STD	0.59	0.27	0.54	0.21	0.19		0.31	0.65		0.24	0.16		



YI distribution (excluding shaded columns)

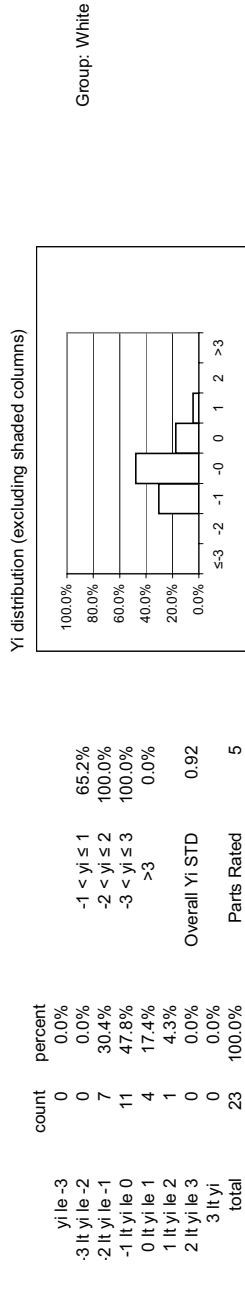
Bin	count	percent
-1 < yi ≤ 1	0	0.0%
-2 < yi ≤ 2	0	0.0%
-3 < yi ≤ 3	6	26.1%
>3	17	73.9%
Overall YI STD	0.36	
Parts Rated	5	

Light Duty Rating Workshop - Seq V Varnish

Rater = Lopez, Frank

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	-0.47	-1.84	-0.37	-0.24								-0.73	0.75
Seq_V_Piston_SetD	-1.95	-1.60	-1.20	-1.71	1.75		-0.15	-0.94				-0.83	1.28
Seq_V_Piston_SetE	-0.26	-0.21	-0.27	-0.42	-1.12		-0.07	-0.56				-0.42	0.35
Seq_V_Calibration_Va									-1.42	0.57	0.78	0.68	0.15
Seq_V_Varnish										0.48	0.42	-0.18	1.08
YI MAXIMUM	-1.95	-1.84	-1.20	-1.71	1.75		-0.15	-0.94	-1.42	0.57	0.78	-0.83	1.28
YI MINIMUM	-0.26	-0.21	-0.27	-0.42	-1.12		-0.07	-0.56	-1.42	0.48	0.42	-0.18	0.15
YI MEAN	-0.90	-1.22	-0.61	-0.79	0.31		-0.11	-0.75	-1.42	0.52	0.60	-0.18	0.15
YI STD	0.92	0.88	0.51	0.80	2.03		0.06	0.27		0.07	0.26		

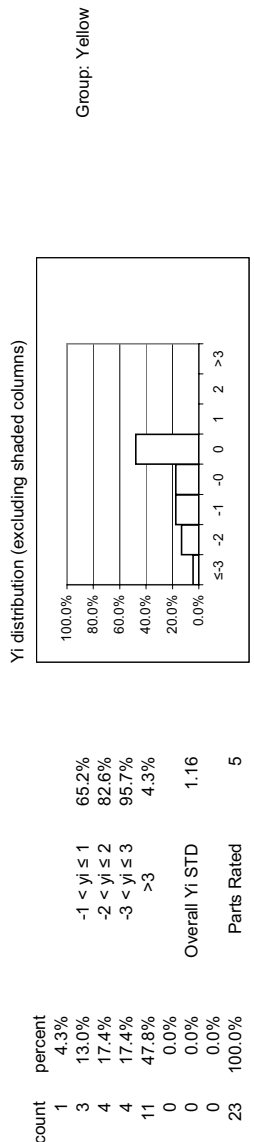


Rater =

Lowsky, John

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	-1.60	<b>-2.47</b>	<b>-2.16</b>	-1.29								-1.88	0.53
Seq_V_Piston_SetD	0.57	0.12	0.11	0.29	0.67	0.03	0.03	-0.11				0.24	0.29
Seq_V_Piston_SetE	-0.22	0.18	0.19	0.07	0.10	-0.12	-0.18	-0.18				0.01	0.17
Seq_V_Calibration_Va									0.32	<b>-2.85</b>	<b>-3.30</b>	<b>-3.08</b>	0.32
Seq_V_Varnish										-1.42	-1.00	-0.70	0.91
YI MAXIMUM	-1.60	<b>-2.47</b>	<b>-2.16</b>	-1.29	0.67				0.32	<b>-2.85</b>	<b>-3.30</b>	<b>-3.08</b>	0.91
YI MINIMUM	-0.22	0.12	0.11	0.07	0.10				0.32	-1.42	-1.00	0.01	0.17
YI MEAN	-0.41	-0.72	-0.62	-0.31	0.38				0.32	<b>-2.14</b>	<b>-2.15</b>	0.01	0.17
YI STD	1.10	1.51	1.33	0.86	0.41				0.11	1.01	1.63		





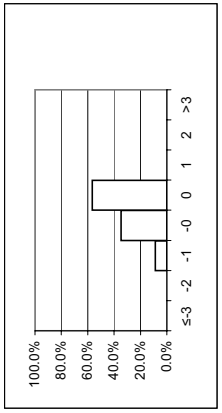
# Light Duty Rating Workshop - Seq V Varnish

Rater = Pansza, Mike

## YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	0.07	0.92	0.94	0.91								0.71	0.42
Seq_V_Piston_SetD	-0.75	-0.92	-0.81	-1.05	-0.94		-0.01	-0.76				-0.75	0.34
Seq_V_Piston_SetE	0.16	0.62	0.12	0.16	-0.46		0.38	0.11				0.16	0.33
Seq_V_Calibration_Val									-0.84	0.22	0.17	0.20	0.03
Seq_V_Varnish									-0.84	-1.17	0.15	-0.62	0.69
YI MAXIMUM	-0.75	-0.92	0.94	-1.05	-0.94		0.38	-0.76	-0.84	-1.17	0.17	-0.75	0.69
YI MINIMUM	0.07	0.62	0.12	0.16	-0.46		-0.01	0.11	-0.84	0.22	0.15	0.16	0.03
YI MEAN	-0.17	0.21	0.08	0.00	-0.70		0.19	-0.33	-0.84	-0.47	0.16	0.16	0.03
YI STD	0.50	0.99	0.88	0.99	0.34		0.28	0.61		0.98	0.01		

Yi distribution (excluding shaded columns)



Group: Blue

Overall YI STD: 0.67

Parts Rated: 5

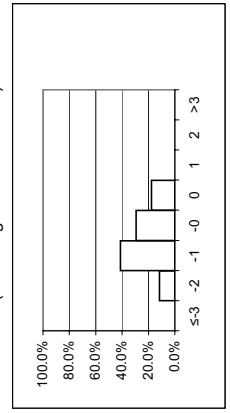
Light Duty Rating Workshop - Seq V Varnish

Rater = Pawczuk, Greg

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	-0.46	-2.33	-1.61	-1.74	-2.06	-0.15	-1.30	-1.30				-1.38	0.81
Seq_V_Piston_SetD	-0.40	0.04	-0.45	-0.50	-1.87	-1.07	-1.83	-1.83				-0.87	0.74
Seq_V_Piston_SetE													
Seq_V_Calibration_Val									-1.81	0.86	0.84	-0.04	1.53
Seq_V_Varnish													
YI MAXIMUM	-0.46	-2.33	-1.61	-1.74	-2.06	-1.07	-1.83	-1.83	-1.81	0.86	0.84	-1.38	1.53
YI MINIMUM	-0.40	0.04	-0.45	-0.50	-1.87	-1.07	-1.83	-1.83	-1.81	0.86	0.84	-0.04	0.74
YI MEAN	-0.43	-1.14	-1.03	-1.12	-1.97	-0.61	-1.56	-1.56	-1.81	0.86	0.84		
YI STD	0.04	1.67	0.82	0.87	0.13	0.65	0.38	0.38					

Yi distribution (excluding shaded columns)



Group: Yellow

Yi	count	percent
Yi < -3	0	0.0%
-3 < Yi < -2	2	11.8%
-2 < Yi < -1	7	41.2%
-1 < Yi < 0	5	29.4%
0 < Yi < 1	3	17.6%
1 < Yi < 2	0	0.0%
2 < Yi < 3	0	0.0%
3 < Yi	0	0.0%
total	17	100.0%

Overall Yi STD 0.99  
Parts Rated 3



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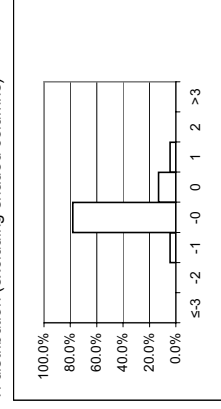
# Light Duty Rating Workshop - Seq V Varnish

Rater = Ramirez, Robert

## YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	-1.95	0.05	-0.51	-0.18								-0.65	0.90
Seq_V_Piston_SetD	-0.14	-0.30	-0.35	-0.39	-0.78		0.26	-0.67				-0.34	0.34
Seq_V_Piston_SetE	-0.49	-0.25	-0.24	-0.13	1.45		-0.53	0.00				-0.03	0.68
Seq_V_Calibration_Val									-0.49	-0.77	-0.43	-0.60	0.24
Seq_V_Varnish									-0.43	-0.03	-0.43	-0.31	0.25
YI MAXIMUM	-1.95	-0.30	-0.51	-0.39	1.45		-0.53	-0.67	-0.49	-0.77	-0.43	-0.65	0.90
YI MINIMUM	-0.14	0.05	-0.24	-0.13	-0.78		0.26	0.00	-0.49	-0.03	-0.43	-0.03	0.24
YI MEAN	-0.86	-0.17	-0.37	-0.23	0.34		-0.13	-0.33	-0.49	-0.40	-0.43	-0.03	0.24
YI STD	0.96	0.19	0.14	0.14	1.57		0.56	0.47	0.53	0.01			

YI distribution (excluding shaded columns)



YI Range	Count	Percent
-1 < yi ≤ 1	18	91.3%
-2 < yi ≤ 2	21	100.0%
-3 < yi ≤ 3	22	100.0%
>3	0	0.0%
Overall YI STD	0.57	
Parts Rated	5	

# Light Duty Rating Workshop - Seq V Varnish

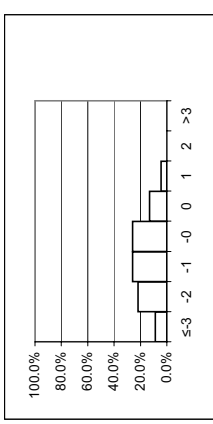
April 2-6, 2006

Rater = **Rodriguez, Jesse**

## Yi VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R							MEAN	STD
Seq_V_Calibration_Pis	-0.38	0.49	-0.37	-1.53														-0.45	0.83
Seq_V_Piston_SetD	-1.47	-0.38	-1.35	-0.80	-0.98		<b>-2.03</b>	-1.12										-1.16	0.53
Seq_V_Piston_SetE	<b>-3.24</b>	<b>-2.68</b>	<b>-2.63</b>	<b>-3.05</b>	-1.65		<b>-2.62</b>	<b>-2.70</b>										<b>-2.66</b>	0.50
Seq_V_Calibration_Va									-1.29	1.00	-0.09							0.46	0.77
Seq_V_Varnish									-1.29	0.48	0.57							-0.08	1.05
YI MAXIMUM	<b>-3.24</b>	<b>-2.68</b>	<b>-2.63</b>	<b>-3.05</b>	-1.65		<b>-2.62</b>	<b>-2.70</b>	-1.29	1.00	0.57						<b>-2.66</b>	1.05	
YI MINIMUM	-0.38	-0.38	-0.37	-0.80	-0.98		<b>-2.03</b>	-1.12	-1.29	0.48	-0.09						-0.08	0.50	
YI MEAN	-1.70	-0.86	-1.45	-1.79	-1.32		<b>-2.33</b>	-1.91	-1.29	0.74	0.24								
YI STD	1.45	1.64	1.14	1.15	0.47		0.42	1.12		0.37	0.47								

Yi distribution (excluding shaded columns)



count	2	5	6	6	3	1	0	0	23
percent	8.7%	21.7%	26.1%	26.1%	13.0%	4.3%	0.0%	0.0%	100.0%
Yi range	-3 to -2	-2 to -1	-1 to 0	0 to 1	1 to 2	2 to 3			total

Overall Yi STD	1.25
Parts Rated	5



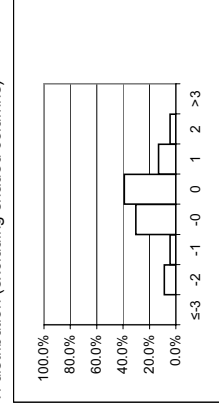
### Light Duty Rating Workshop - Seq V Varnish

Rater = Seitz, Ray

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	0.01	-0.19	0.31	-0.47								-0.09	0.33
Seq_V_Piston_SetD	0.44	0.40	0.94	-0.01	1.40		<b>-2.91</b>	<b>2.51</b>				0.40	1.67
Seq_V_Piston_SetE	0.06	0.04	-0.09	-0.91	1.14		0.57	0.21				0.14	0.63
Seq_V_Calibration_Va									1.03	-0.73	-0.52	-0.63	0.15
Seq_V_Varnish										<b>-2.37</b>	-1.00	-0.78	1.71
YI MAXIMUM	0.44	0.40	0.94	-0.91	1.40		<b>-2.91</b>	<b>2.51</b>	1.03	<b>-2.37</b>	-1.00	-0.78	1.71
YI MINIMUM	0.01	0.04	-0.09	-0.01	1.14		0.57	0.21	1.03	-0.73	-0.52	-0.09	0.15
YI MEAN	0.17	0.08	0.38	-0.47	1.27		-1.17	1.36	1.03	-1.55	-0.76	-0.09	0.15
YI STD	0.24	0.30	0.52	0.45	0.19		2.45	1.62	1.03	1.16	0.34		

Yi distribution (excluding shaded columns)



Yi Range	Count	Percent
-1 < Yi <= 1	69.6%	69.6%
-2 < Yi <= 2	87.0%	87.0%
-3 < Yi <= 3	100.0%	100.0%
>3	0.0%	0.0%
Overall Yi STD	1.15	
Parts Rated	5	



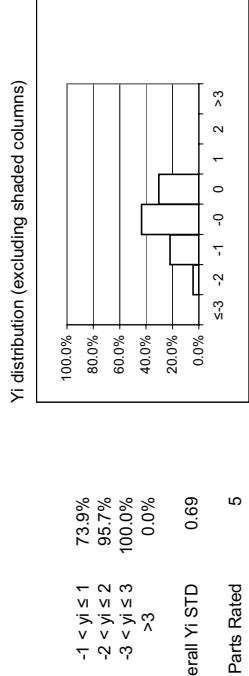


Light Duty Rating Workshop - Seq V Varnish

Rater = Viera, Ralph

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	-0.54	-1.06	-0.95	0.26								-0.57	0.60
Seq_V_Piston_SetD	-1.08	-0.09	-1.12	-0.14	-0.75		-1.25	0.02				-0.63	0.55
Seq_V_Piston_SetE	0.39	<b>-2.50</b>	-1.06	-0.30	0.18		-0.53	-0.39				-0.60	0.96
Seq_V_Calibration_Va									-0.61	0.14	0.09	0.11	0.03
Seq_V_Varnish										0.54	-0.11	-0.06	0.58
YI MAXIMUM	-1.08	<b>-2.50</b>	-1.12	-0.30	-0.75		-1.25	-0.39	-0.61	0.54	-0.11	-0.63	0.96
YI MINIMUM	0.39	-0.09	-0.95	-0.14	0.18		-0.53	0.02	-0.61	0.14	0.09	-0.06	0.03
YI MEAN	-0.41	-1.22	-1.04	-0.06	-0.28		-0.89	-0.18	-0.61	0.34	-0.01	-0.06	0.03
YI STD	0.74	1.21	0.09	0.29	0.66		0.51	0.29	0.29	0.14			



Light Duty Rating Workshop - Seq V Varnish

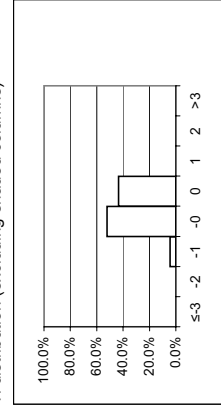
Rater =

Yanchar, Paul

YI VALUES

	Piston 1	Piston 2	Piston 3	Piston 4	Piston 5	Piston 6	Piston 7	Piston 8	Piston Skirt (Set D)	Rocker Cover Baffle L	Rocker Cover Baffle R	MEAN	STD
Seq_V_Calibration_Pis	0.72	0.20	0.70	0.47								0.52	0.24
Seq_V_Piston_SetD	0.25	-0.30	-0.12	-0.34	-0.61		-0.15	0.05				-0.18	0.28
Seq_V_Piston_SetE	-0.40	0.04	-0.81	-0.50	-0.10		-1.07	-0.70				-0.51	0.39
Seq_V_Calibration_Va									-0.26	0.66	0.57	0.61	0.06
Seq_V_Varnish									-0.26	0.16	-0.22	-0.10	0.23
YI MAXIMUM	0.72	-0.30	-0.81	-0.50	-0.61		-1.07	-0.70	-0.26	0.66	0.57	0.61	0.39
YI MINIMUM	0.25	0.04	-0.12	-0.34	-0.10		-0.15	0.05	-0.26	0.16	-0.22	-0.10	0.06
YI MEAN	0.19	-0.02	-0.08	-0.13	-0.36		-0.61	-0.33	-0.26	0.41	0.17	-0.10	0.06
YI STD	0.56	0.25	0.75	0.52	0.36		0.65	0.53		0.35	0.55		

Yi distribution (excluding shaded columns)



Yi Range	count	percent
-1 < yi ≤ 1	22	95.7%
-2 < yi ≤ 2	12	100.0%
-3 < yi ≤ 3	10	100.0%
>3	0	0.0%
Overall Yi STD	0.50	
Parts Rated	5	

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## Light Duty Rating Workshop - Seq V Sludge

	Number of Parts Rated	-1 < yi ≤ 1	-2 < yi ≤ 2	-3 < yi ≤ 3	>3	Yi STD	Group	
Adams, Pat	2	54.5%	90.9%	100.0%	0.0%	1.06	Yellow	Yellow
Avis, Steve	2	72.7%	100.0%	100.0%	0.0%	0.79	White	White
Cales, Jonathon	2	72.7%	100.0%	100.0%	0.0%	0.75	White	White
Caproni, David	2	81.8%	100.0%	100.0%	0.0%	0.68	Red	Red
Castillo, George	2	81.8%	100.0%	100.0%	0.0%	0.58	Red	Red
Foecking, Brian	2	81.8%	100.0%	100.0%	0.0%	0.63	Red	Red
Garcia, Orlando	2	81.8%	100.0%	100.0%	0.0%	0.65	Red	Red
Hills, Barry	2	45.5%	81.8%	90.9%	9.1%	1.55	Yellow	Yellow
Kirkpatrick, John	2	54.5%	72.7%	90.9%	9.1%	1.70	Yellow	Yellow
Kobrinetz, Jack	2	63.6%	90.9%	100.0%	0.0%	0.84	White	White
Lopez, Frank	2	45.5%	100.0%	100.0%	0.0%	0.99	Yellow	Yellow
Lowsky, John	2	63.6%	100.0%	100.0%	0.0%	0.79	White	White
Pansza, Mike	2	72.7%	90.9%	100.0%	0.0%	1.15	White	White
Pawczuk, Greg	1	88.9%	100.0%	100.0%	0.0%	0.64	Blue	Blue
Radonich, Pete	2	90.9%	100.0%	100.0%	0.0%	0.45	Blue	Blue
Ramirez, Robert	2	81.8%	100.0%	100.0%	0.0%	0.59	Red	Red
Rodriguez, Jesse	2	81.8%	100.0%	100.0%	0.0%	0.72	Red	Red
Sanchez, Art	2	45.5%	100.0%	100.0%	0.0%	0.63	Yellow	Yellow
Seiz, Ray	2	72.7%	100.0%	100.0%	0.0%	0.91	White	White
Tschirhart, Garland	2	72.7%	81.8%	90.9%	9.1%	1.53	Yellow	Yellow
Viera, Ralph	2	63.6%	100.0%	100.0%	0.0%	0.90	White	White
Yanchar, Paul	2	100.0%	100.0%	100.0%	0.0%	0.22	Blue	Blue

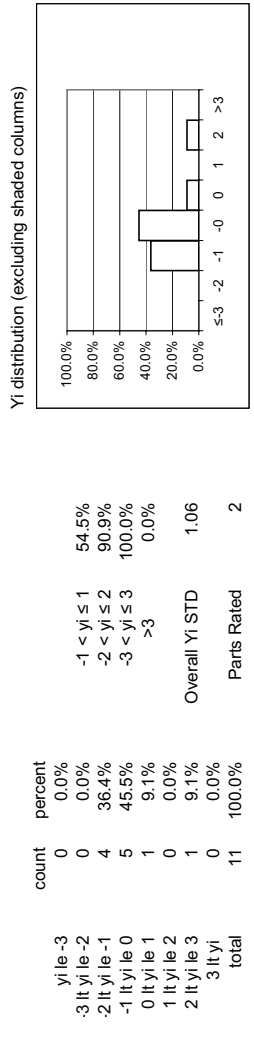
	Minimum Number of Parts Rated	Minimum Yi's within 1 STD of mean	Minimum Yi's within 2 STD of mean	Maximum Overall Yi STD	Group Total	
White	0	60%	90%	1.20	7	32%
Red	0	80%	95%	0.85	6	27%
Blue	0	85%	98%	0.75	3	14%
Yellow	-	-	-	-	6	27%

# Light Duty Rating Workshop - Seq V Sludge

Rater = Adams, Pat

## YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu	-0.91	-1.58	-0.61	-0.63	2.26	-1.25	-1.10	-0.55	0.30	-0.46	0.22
Seq_V_Sludge			-1.35	-0.63						-0.54	1.19
YI MAXIMUM	-0.91	-1.58	-1.35	-0.63	2.26	-1.25	-1.10	-0.55	0.30	-0.54	1.19
YI MINIMUM	-0.91	-1.58	-0.61	-0.30	2.26	-1.25	-1.10	-0.55	0.30	-0.46	0.22
YI MEAN	-0.91	-1.58	-0.98	-0.47	2.26	-1.25	-1.10	-0.55	0.30	-0.46	0.22
YI STD			0.52	0.23							



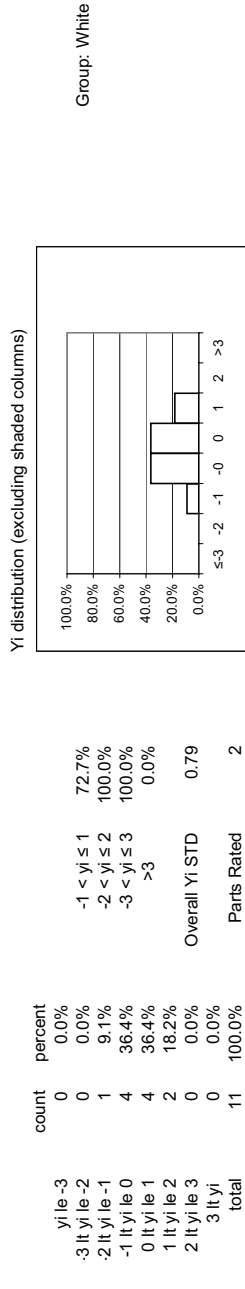
Overall Yi STD: 1.06  
Parts Rated: 2

### Light Duty Rating Workshop - Seq V Sludge

Rater = **Avis, Steve**

#### YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu	0.18	0.17	1.04	-0.80	-0.63	1.31	-1.10	0.51	-0.33	0.12	1.30
Seq_V_Sludge			0.70	-0.60						0.02	0.76
YI MAXIMUM	0.18	0.17	1.04	-0.80	-0.63	1.31	-1.10	0.51	-0.33	0.12	1.30
YI MINIMUM	0.18	0.17	0.70	-0.60	-0.63	1.31	-1.10	0.51	-0.33	0.02	0.76
YI MEAN	0.18	0.17	0.87	-0.70	-0.63	1.31	-1.10	0.51	-0.33		
YI STD			0.24	0.14							





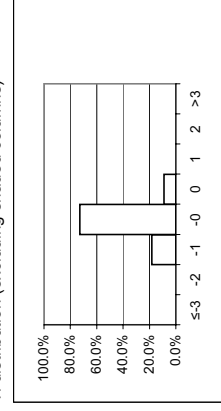
Light Duty Rating Workshop - Seq V Sludge

Rater = Caproni, David

YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R								MEAN	STD
Seq_V_Calibration_Slu	-1.90	-0.01	-0.49	-0.18	-0.60	-1.25	-0.96	-0.35	-0.33								-0.33	0.22
Seq_V_Sludge			-0.17	0.69													-0.54	0.75
YI MAXIMUM	-1.90	-0.01	-0.49	0.69	-0.60	-1.25	-0.96	-0.35	-0.33								-0.54	0.75
YI MINIMUM	-1.90	-0.01	-0.17	-0.18	-0.60	-1.25	-0.96	-0.35	-0.33								-0.33	0.22
YI MEAN	-1.90	-0.01	-0.33	0.25	-0.60	-1.25	-0.96	-0.35	-0.33								-0.33	0.22
YI STD			0.22	0.62														

YI distribution (excluding shaded columns)



count	percent
0	0.0%
0	0.0%
2	18.2%
8	72.7%
1	9.1%
0	0.0%
0	0.0%
0	0.0%
11	100.0%

Overall YI STD	Parts Rated
0.68	2

# Light Duty Rating Workshop - Seq V Sludge

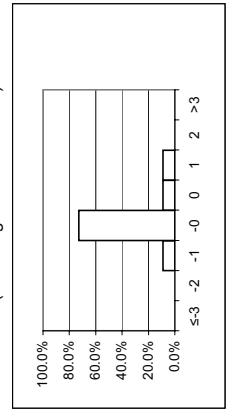
April 2-6, 2006

Rater = Castillo, George

Y1 VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R									MEAN	STD
Seq_V_Calibration_Slu			-1.02	-0.18	-0.37	-0.43	1.17	0.57	-0.33									-0.60	0.59
Seq_V_Sludge	-0.48	-0.51	-0.17	-0.24														-0.09	0.57
Y1 MAXIMUM	-0.48	-0.51	-1.02	-0.24	-0.37	-0.43	1.17	0.57	-0.33									-0.60	0.59
Y1 MINIMUM	-0.48	-0.51	-0.17	-0.18	-0.37	-0.43	1.17	0.57	-0.33									-0.09	0.57
Y1 MEAN	-0.48	-0.51	-0.60	-0.21	-0.37	-0.43	1.17	0.57	-0.33									-0.09	0.57
Y1 STD			0.60	0.05															

Y1 distribution (excluding shaded columns)



Group: Red

Overall Y1 STD 0.58

Parts Rated 2

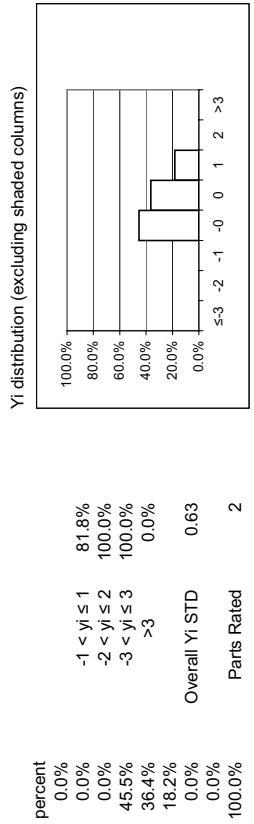


## Light Duty Rating Workshop - Seq V Sludge

Rater = Foecking, Brian

### YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu	0.51	0.67	1.04	-0.10	-0.13	0.59	1.70	0.17	-0.48	0.46	0.82
Seq_V_Sludge			-0.01	-0.10						0.32	0.64
YI MAXIMUM	0.51	0.67	1.04	-0.12	-0.13	0.59	1.70	0.17	-0.48	0.46	0.82
YI MINIMUM	0.51	0.67	-0.01	-0.10	-0.13	0.59	1.70	0.17	-0.48	0.32	0.64
YI MEAN	0.51	0.67	0.52	-0.11	-0.13	0.59	1.70	0.17	-0.48	0.32	0.64
YI STD			0.74	0.02							

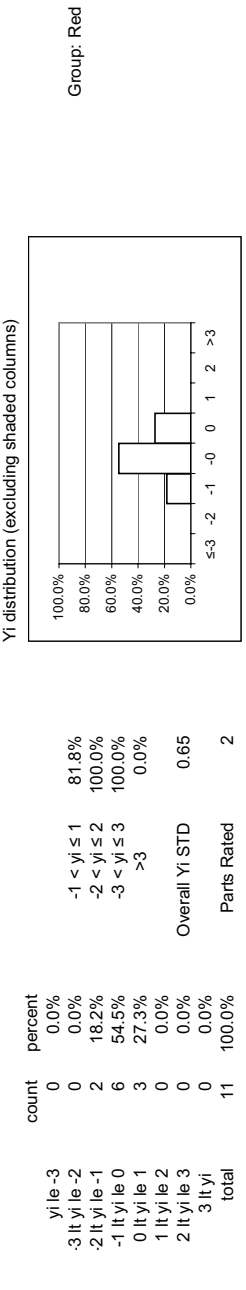


Light Duty Rating Workshop - Seq V Sludge

Rater = Garcia, Orlando

YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R									MEAN	STD
Seq_V_Calibration_Slu	-1.79	-0.01	-1.07	0.32	-0.47	-0.54	-0.07	-0.75	0.23									-0.38	0.98
Seq_V_Sludge			-0.33	0.31														-0.38	0.63
YI MAXIMUM	-1.79	-0.01	-1.07	0.32	-0.47	-0.54	-0.07	-0.75	0.23									-0.38	0.98
YI MINIMUM	-1.79	-0.01	-0.33	0.31	-0.47	-0.54	-0.07	-0.75	0.23									-0.38	0.63
YI MEAN	-1.79	-0.01	-0.70	0.31	-0.47	-0.54	-0.07	-0.75	0.23									-0.38	0.63
YI STD			0.53	0.01															



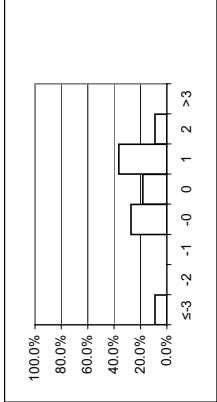
### Light Duty Rating Workshop - Seq V Sludge

Rater = Hills, Barry

#### YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R									MEAN	STD
Seq_V_Calibration_Slu	0.29	1.38	1.96	1.12	1.96	1.12	-0.13	1.06	-3.47	-0.17								1.54	0.59	
Seq_V_Sludge			0.15	-0.24	0.15	2.33												0.13	1.60	
YI MAXIMUM	0.29	1.38	1.96	1.12	1.96	2.33	-0.13	1.06	-3.47	-0.17								1.54	1.60	
YI MINIMUM	0.29	1.38	0.15	-0.24	0.15	2.33	-0.13	1.06	-3.47	-0.17								0.13	0.59	
YI MEAN	0.29	1.38	1.05	0.44	1.05	2.33	-0.13	1.06	-3.47	-0.17								0.13	0.59	
YI STD			1.28	0.97	1.28															

Yi distribution (excluding shaded columns)



Group: Yellow

Overall Yi STD 1.55

Parts Rated 2

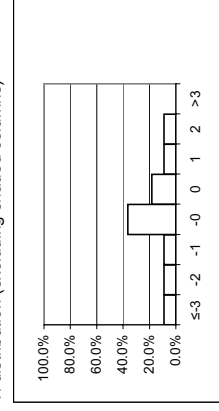
Light Duty Rating Workshop - Seq V Sludge

Rater = Kirkpatrick, John

YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu	-0.59	-0.76	-2.02	1.80	-0.87	0.18	-1.74	0.17	-0.48	-2.56	0.77
Seq_V_Sludge										0.08	1.46
YI MAXIMUM	-0.59	-0.76	-2.02	1.80	-0.87	0.18	-1.74	0.17	-0.48	-2.56	1.46
YI MINIMUM	-0.59	-0.76	1.80	2.98	-0.87	0.18	-1.74	0.17	-0.48	0.08	0.77
YI MEAN	-0.59	-0.76	-0.11	-0.06	-0.87	0.18	-1.74	0.17	-0.48	0.08	0.77
YI STD			2.70	4.30							

Yi distribution (excluding shaded columns)



Yi Value	count	percent
yile -3	1	9.1%
-3 it yile -2	1	9.1%
-2 it yile -1	1	9.1%
-1 it yile 0	4	36.4%
0 it yile 1	2	18.2%
1 it yile 2	1	9.1%
2 it yile 3	1	9.1%
3 it yi	0	0.0%
total	11	100.0%

Overall Yi STD 1.70  
Parts Rated 2

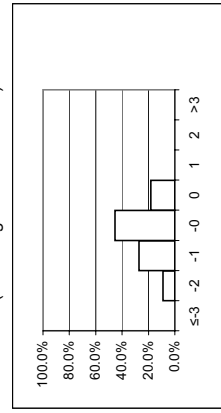
Light Duty Rating Workshop - Seq V Sludge

Rater = Kobrinetz, Jack

YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R					MEAN	STD
Seq_V_Calibration_Slu	-0.80	-0.22	0.15	-0.68	-0.67	-1.05	-1.06	-1.15	-0.33					-0.26	0.59
Seq_V_Sludge			-2.46	0.84										-0.77	0.88
YI MAXIMUM	-0.80	-0.22	-2.46	0.84	-0.67	-1.05	-1.06	-1.15	-0.33					-0.77	0.88
YI MINIMUM	-0.80	-0.22	0.15	-0.68	-0.67	-1.05	-1.06	-1.15	-0.33					-0.26	0.59
YI MEAN	-0.80	-0.22	-1.15	0.08	-0.67	-1.05	-1.06	-1.15	-0.33					-0.26	0.59
YI STD			1.84	1.07											

Yi distribution (excluding shaded columns)



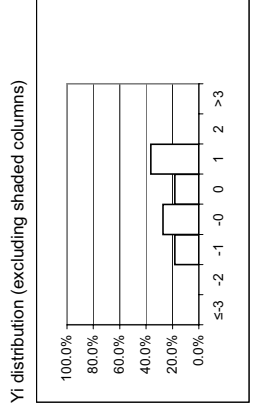
yi	count	percent
yile -3	0	0.0%
-3 lt yile -2	1	9.1%
-2 lt yile -1	3	27.3%
-1 lt yile 0	5	45.5%
0 lt yile 1	2	18.2%
1 lt yile 2	0	0.0%
2 lt yile 3	0	0.0%
3 lt yi	0	0.0%
total	11	100.0%

### Light Duty Rating Workshop - Seq V Sludge

Rater = Lopez, Frank

YI VALUES

Seq_V_Calibration_Slu	Seq_V_Sludge	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
		1.38	-1.19	-1.02	1.41	0.07	1.51	-0.21	0.17	-0.33	0.11	1.60
											0.27	0.95
YI MAXIMUM		1.38	-1.19	1.41		1.25	1.51	-0.21	0.17	-0.33	0.27	1.60
YI MINIMUM		1.38	-1.19	-1.02		0.07	1.51	-0.21	0.17	-0.33	0.11	0.95
YI MEAN		1.38	-1.19	0.19		0.66	1.51	-0.21	0.17	-0.33	0.11	0.95
YI STD				1.72		0.83						



Yi	count	percent
yile -3	0	0.0%
-3 lt yi le -2	0	0.0%
-2 lt yi le -1	2	18.2%
-1 lt yi le 0	3	27.3%
0 lt yi le 1	2	18.2%
1 lt yi le 2	4	36.4%
2 lt yi le 3	0	0.0%
3 lt yi	0	0.0%
total	11	100.0%

Bin	Overall Yi STD	Parts Rated
-1 < yi ≤ 1	0.99	2
-2 < yi ≤ 2		
-3 < yi ≤ 3		
>3		







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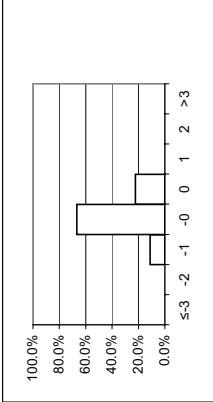
### Light Duty Rating Workshop - Seq V Sludge

Rater = Pawczuk, Greg

#### Yi VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu	-0.37	-1.37	-0.56	0.97	-0.53	-0.64	0.18	-0.29	-0.09	-0.30	0.64
Seq_V_Sludge											
Y1 MAXIMUM	-0.37	-1.37	-0.56	0.97	-0.53	-0.64	0.18	-0.29	-0.09	-0.30	0.64
Y1 MINIMUM	-0.37	-1.37	-0.56	0.97	-0.53	-0.64	0.18	-0.29	-0.09	-0.30	0.64
Y1 MEAN	-0.37	-1.37	-0.56	0.97	-0.53	-0.64	0.18	-0.29	-0.09	-0.30	0.64
Y1 STD											

Yi distribution (excluding shaded columns)



Group: Blue

Yi Range	Count	Percent
-1 < Yi ≤ 1	8	88.9%
-2 < Yi ≤ 2	7	100.0%
-3 < Yi ≤ 3	9	100.0%
> 3	0	0.0%
<b>Overall Yi STD</b>	<b>0.64</b>	
<b>Parts Rated</b>	<b>1</b>	

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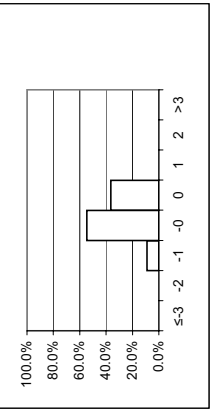
Light Duty Rating Workshop - Seq V Sludge

Rater = Radonich, Pete

YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R										MEAN	STD
Seq_V_Calibration_Slu	0.29	0.49	-0.23	0.01	-0.47	-1.05	0.57	-0.16	-0.17										-0.11	0.17
Seq_V_Sludge			-0.17	-0.31															-0.11	0.50
YI MAXIMUM	0.29	0.49	-0.23	-0.31	-0.47	-1.05	0.57	-0.16	-0.17										-0.11	0.50
YI MINIMUM	0.29	0.49	-0.17	0.01	-0.47	-1.05	0.57	-0.16	-0.17										-0.11	0.17
YI MEAN	0.29	0.49	-0.20	-0.15	-0.47	-1.05	0.57	-0.16	-0.17										-0.11	0.17
YI STD			0.04	0.22																

Yi distribution (excluding shaded columns)



Yi	count	percent
-3	0	0.0%
-2	0	0.0%
-1	1	9.1%
0	6	54.5%
1	4	36.4%
2	0	0.0%
3	0	0.0%
total	11	100.0%

Group: Blue

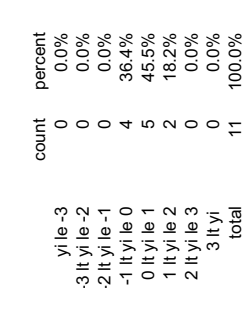
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Light Duty Rating Workshop - Seq V Sludge

Rater = Ramirez, Robert

Yi VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu			0.76	0.63		1.00					0.10
Seq_V_Sludge	0.40	-0.55	1.02	0.20	-0.33		-0.11	0.90	-0.40	0.24	0.63
Y1 MAXIMUM	0.40	-0.55	1.02	0.63	-0.33	1.00	-0.11	0.90	-0.40	0.69	0.63
Y1 MINIMUM	0.40	-0.55	0.76	0.20	-0.33	1.00	-0.11	0.90	-0.40	0.24	0.10
Y1 MEAN	0.40	-0.55	0.89	0.41	-0.33	1.00	-0.11	0.90	-0.40		
Y1 STD			0.18	0.30							



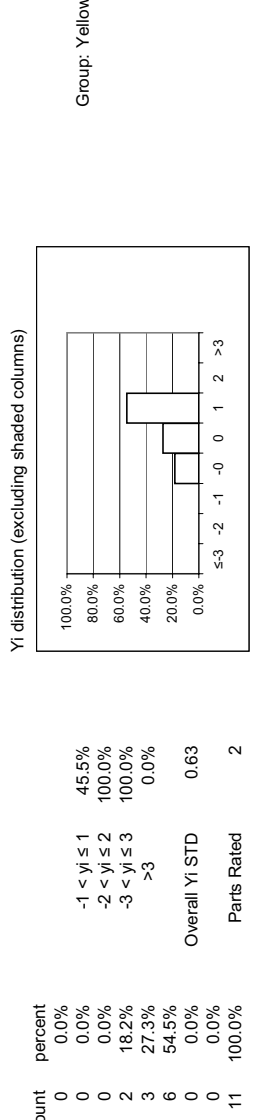
Yi distribution (excluding shaded columns)



Rater = Sanchez, Art

Y1 VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R							MEAN	STD
Seq_V_Calibration_Slu	1.05	0.78	1.04	0.13	0.75	-0.03	1.82	1.31	1.37	-0.09						0.59	0.65
Seq_V_Sludge			1.41													0.93	0.65
Y1 MAXIMUM	1.05	0.78	1.41	0.75	-0.03	1.82	1.31	1.37	-0.09							0.93	0.65
Y1 MINIMUM	1.05	0.78	1.04	0.13	-0.03	1.82	1.31	1.37	-0.09							0.59	0.65
Y1 MEAN	1.05	0.78	1.23	0.44	-0.03	1.82	1.31	1.37	-0.09								
Y1 STD			0.26	0.44													



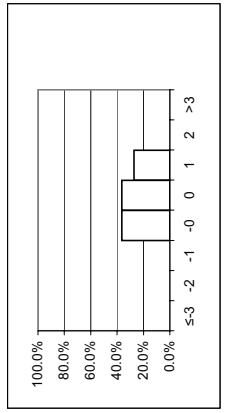
Light Duty Rating Workshop - Seq V Sludge

Rater = Seitz, Ray

YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu	1.82	0.78	-0.23	-0.93	0.31	1.41	0.60	1.30	-0.33	-0.58	0.49
Seq_V_Sludge			-0.72	0.90	0.31					0.67	0.82
YI MAXIMUM	1.82	0.78	-0.72	-0.93	0.31	1.41	0.60	1.30	-0.33	0.67	0.82
YI MINIMUM	1.82	0.78	-0.23	0.90	0.31	1.41	0.60	1.30	-0.33	-0.58	0.49
YI MEAN	1.82	0.78	-0.48	-0.01	0.31	1.41	0.60	1.30	-0.33	-0.58	0.49
YI STD			0.35	1.29							

Yi distribution (excluding shaded columns)



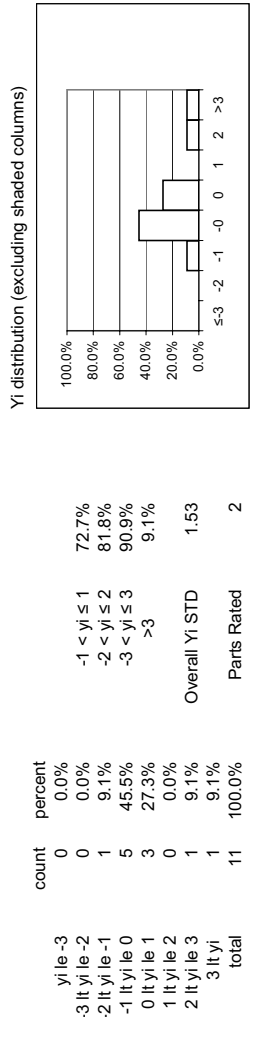
count	percent	-1 < yi ≤ 1	-2 < yi ≤ 2	-3 < yi ≤ 3	>3	Overall Yi STD	Parts Rated
0	0.0%						2
0	0.0%	72.7%	100.0%	100.0%	0.91		
0	0.0%	100.0%	100.0%	0.0%			
4	36.4%						
4	36.4%						
3	27.3%						
0	0.0%						
0	0.0%						
11	100.0%						

Light Duty Rating Workshop - Seq V Sludge

Rater = Tschirhart, Garland

YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R							MEAN	STD
Seq_V_Calibration_Slu	0.83	2.46	-1.25	0.94	-0.03	-0.02	0.64	-0.16	4.24							-0.16	1.55
Seq_V_Sludge			-0.17	-0.52												0.81	1.56
YI MAXIMUM	0.83	2.46	-1.25	0.94	-0.03	-0.02	0.64	-0.16	4.24							0.81	1.56
YI MINIMUM	0.83	2.46	-0.17	-0.52	-0.03	-0.02	0.64	-0.16	4.24							-0.16	1.55
YI MEAN	0.83	2.46	-0.71	0.21	-0.03	-0.02	0.64	-0.16	4.24								
YI STD			0.77	1.03													



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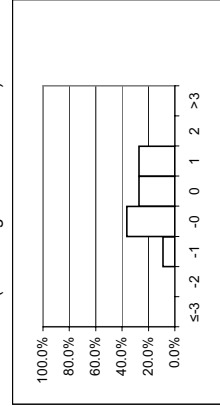
### Light Duty Rating Workshop - Seq V Sludge

Rater = Viera, Ralph

#### YI VALUES

	Rocker Cover L	Rocker Cover R	Rocker Cover Baffle L	Rocker Cover Baffle R	Timing Chain Cover	Oil Pan Baffle	Oil Pan	Valve Deck Area L	Valve Deck Area R	MEAN	STD
Seq_V_Calibration_Slu	0.82	1.53	0.30	1.41	-1.11	-0.50	0.46	-0.42	-0.56	0.78	0.67
Seq_V_Sludge										0.12	0.93
YI MAXIMUM	0.62	1.53	1.41	1.25	-0.50	-0.33	0.46	-0.42	-0.56	0.78	0.93
YI MINIMUM	0.62	1.53	0.30	-1.11	-0.50	-0.33	0.46	-0.42	-0.56	0.12	0.67
YI MEAN	0.62	1.53	0.86	0.07	-0.50	-0.33	0.46	-0.42	-0.56		
YI STD			0.78	1.67							

Yi distribution (excluding shaded columns)



count	percent	
0	0.0%	-1 < yi ≤ 1
0	0.0%	-2 < yi ≤ 2
1	9.1%	-3 < yi ≤ 3
4	36.4%	>3
3	27.3%	Overall Yi STD
3	27.3%	0.90
0	0.0%	Parts Rated
0	0.0%	2
11	100.0%	

Group: White





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## Light Duty Workshop - Ind/Comb Valves

	Number of Parts Rated	-1 < yi ≤ 1	-2 < yi ≤ 2	-3 < yi ≤ 3	>3	Yi STD	Group	
Adams, Pat	4	78.1%	100.0%	100.0%	0.0%	0.75	White	▨
Avis, Steve	4	59.4%	90.6%	100.0%	0.0%	0.95	Yellow	■
Caproni, David	4	78.1%	96.9%	100.0%	0.0%	0.85	White	▨
Castillo, George	4	81.3%	100.0%	100.0%	0.0%	0.70	Red	■
Foecking, Brian	4	78.1%	96.9%	100.0%	0.0%	0.76	White	▨
Garcia, Orlando	4	78.1%	96.9%	100.0%	0.0%	0.65	White	▨
Kobrinetz, Jack	4	84.4%	100.0%	100.0%	0.0%	0.71	Red	■
Lopez, Frank	4	78.1%	96.9%	100.0%	0.0%	0.90	White	▨
Lowsky, John	4	68.8%	100.0%	100.0%	0.0%	0.83	White	▨
Pansza, Mike	4	78.1%	93.8%	100.0%	0.0%	0.86	White	▨
Pawczuk, Greg	4	71.9%	96.9%	100.0%	0.0%	0.91	White	▨
Radonich, Pete	4	84.4%	100.0%	100.0%	0.0%	0.74	Red	■
Ramirez, Robert	4	75.0%	100.0%	100.0%	0.0%	0.96	White	▨
Rodriguez, Jesse	4	90.6%	100.0%	100.0%	0.0%	0.63	Blue	■
Sanchez, Art	4	68.8%	84.4%	93.8%	6.3%	1.20	Yellow	■
Seiz, Ray	4	43.8%	84.4%	96.9%	3.1%	1.49	Yellow	■
Tschirhart, Garland	4	53.1%	90.6%	100.0%	0.0%	1.00	Yellow	■
Viera, Ralph	4	59.4%	87.5%	100.0%	0.0%	1.24	Yellow	■
Yanchar, Paul	4	84.4%	100.0%	100.0%	0.0%	0.78	Red	■

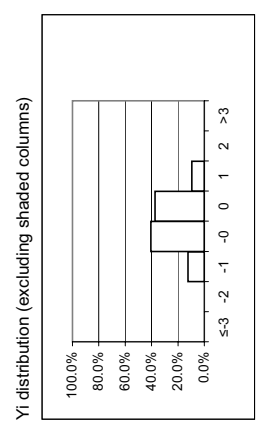
	Minimum Number of Parts Rated	Minimum Yi's within 1 STD of mean	Minimum Yi's within 2 STD of mean	Maximum Overall Yi STD	Group Total	
White	0	60%	90%	1.20	9	47%
Red	0	80%	95%	0.85	4	21%
Blue	0	85%	98%	0.75	1	5%
Yellow	-	-	-	-	5	26%

Light Duty Workshop - Ind/Comb Valves

Rater = Adams, Pat

Yi VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8					MEAN	STD
Ind-Comb_Valve_SetF	0.15	0.44	-0.05	-1.10	0.16	1.04	-0.10	-0.48					0.01	0.63
Ind-Comb_Valve_SetG	-0.15	1.43	0.90	-0.19	-1.06	-0.58	-0.33	-0.34					-0.04	0.81
Ind-Comb_Valve_SetH	0.33	0.37	1.14	0.61	0.50	-0.18	0.16	0.66					0.45	0.39
Ind-Comb_Valve_SetI	-1.64	0.70	-0.92	-0.06	0.13	-0.53	-1.58	-0.76					-0.58	0.82
YI MAXIMUM	-1.64	1.43	1.14	-1.10	-1.06	1.04	-1.58	-0.76					-0.58	0.82
YI MINIMUM	-0.15	0.37	-0.05	-0.06	0.13	-0.18	-0.10	-0.34					0.01	0.39
YI MEAN	-0.33	0.74	0.27	-0.19	-0.07	-0.06	-0.46	-0.23						
YI STD	0.90	0.49	0.94	0.70	0.68	0.76	0.77	0.62						



count	percent	
0	0.0%	-1 < yi ≤ 1
0	0.0%	-2 < yi ≤ 2
4	12.5%	-3 < yi ≤ 3
13	40.6%	>3
12	37.5%	
3	9.4%	Overall Yi STD
0	0.0%	0.75
0	0.0%	Parts Rated
32	100.0%	4







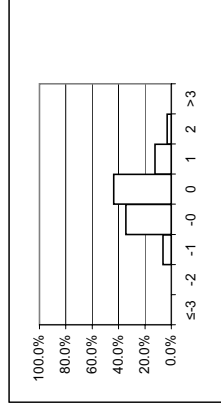
Light Duty Workshop - Ind/Comb Valves

Rater = Foecking, Brian

Y<sub>i</sub> VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8				MEAN	STD
Ind-Comb_Valve_SetF	-0.67	0.44	-0.05	0.87	0.16	0.41	0.67	0.00				0.23	0.48
Ind-Comb_Valve_SetG	1.10	-0.35	-0.21	0.50	-0.40	-0.04	0.80	-1.16				0.03	0.73
Ind-Comb_Valve_SetH	0.33	-1.01	-0.58	0.21	0.05	1.29	-0.57	2.01				0.21	1.01
Ind-Comb_Valve_SetI	0.35	-0.43	0.28	-0.64	0.62	0.07	1.42	1.70				0.42	0.81
Y <sub>i</sub> MAXIMUM	1.10	-1.01	-0.58	0.87	0.62	1.29	1.42	2.01				0.42	1.01
Y <sub>i</sub> MINIMUM	0.33	-0.35	-0.05	0.21	0.05	-0.04	-0.57	0.00				0.03	0.48
Y <sub>i</sub> MEAN	0.28	-0.34	-0.14	0.23	0.11	0.43	0.58	0.64					
Y <sub>i</sub> STD	0.72	0.60	0.36	0.64	0.42	0.60	0.83	1.49					

Y<sub>i</sub> distribution (excluding shaded columns)



Y <sub>i</sub> Bin	count	percent	Bin Range	Overall Y <sub>i</sub> STD	Parts Rated
yi ≤ -3	0	0.0%	-1 < yi ≤ 1	0.76	4
-3 < yi ≤ -2	0	0.0%	-2 < yi ≤ 2		
-2 < yi ≤ -1	2	6.3%	-3 < yi ≤ 3		
-1 < yi ≤ 0	11	34.4%	> 3		
0 < yi ≤ 1	14	43.8%			
1 < yi ≤ 2	4	12.5%			
2 < yi ≤ 3	1	3.1%			
3 < yi ≤ 4	0	0.0%			
total	32	100.0%			



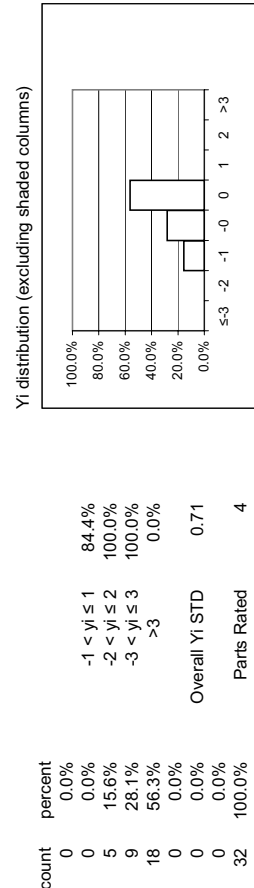


Light Duty Workshop - Ind/Comb Valves

Rater = Kобрinetz, Jack

Yi VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8			MEAN	STD
Ind-Comb_Valve_SetF	-0.46	-0.72	0.47	-0.26	0.64	0.41	0.67	0.72			0.18	0.57
Ind-Comb_Valve_SetG	-1.40	-1.24	-0.96	-0.19	0.25	0.76	-0.17	0.88			-0.26	0.87
Ind-Comb_Valve_SetH	0.33	-0.09	0.28	-0.19	0.27	0.18	-1.49	0.21			-0.06	0.61
Ind-Comb_Valve_SetI	0.35	0.98	-0.20	-1.22	0.13	0.07	-1.40	0.47			-0.10	0.82
Yi MAXIMUM	-1.40	-1.24	-0.96	-1.22	0.64	0.76	-1.49	0.88			-0.26	0.87
Yi MINIMUM	0.33	-0.09	-0.20	-0.19	0.13	0.07	-0.17	0.21			-0.06	0.57
Yi MEAN	-0.30	-0.27	-0.10	-0.47	0.32	0.36	-0.60	0.57				
Yi STD	0.83	0.95	0.64	0.50	0.22	0.30	1.04	0.29				



April 2-6, 2006

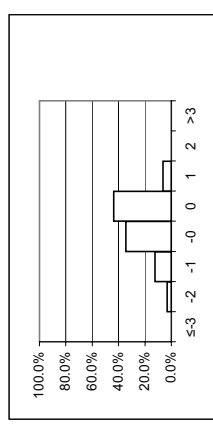
# Light Duty Workshop - Ind/Comb Valves

Rater = Lopez, Frank

## Yi VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8									MEAN	STD
Ind-Comb_Valve_SetF	0.56	0.15	0.47	-0.26	-0.33	-0.44	0.67	0.72									0.19	0.48
Ind-Comb_Valve_SetG	-0.15	-0.88	-0.59	-0.19	0.69	1.30	0.80	0.06									0.13	0.74
Ind-Comb_Valve_SetH	0.33	0.37	0.28	0.01	-1.72	-0.18	0.16	1.11									0.04	0.81
Ind-Comb_Valve_SetI	-0.31	0.42	-1.16	-0.06	-2.80	-1.14	-1.96	-0.76									-0.97	1.04
Yi MAXIMUM	0.56	-0.88	-1.16	-0.26	-2.80	1.30	-1.96	1.11									-0.97	1.04
Yi MINIMUM	-0.15	0.15	0.28	0.01	-0.33	-0.18	0.16	0.06									0.04	0.48
Yi MEAN	0.11	0.01	-0.25	-0.13	-1.04	-0.12	-0.08	0.28										
Yi STD	0.41	0.61	0.76	0.12	1.53	1.02	1.28	0.82										

Yi distribution (excluding shaded columns)



Group: White

count	percent
0	0.0%
1	3.1%
4	12.5%
11	34.4%
14	43.8%
2	6.3%
0	0.0%
0	0.0%
32	100.0%

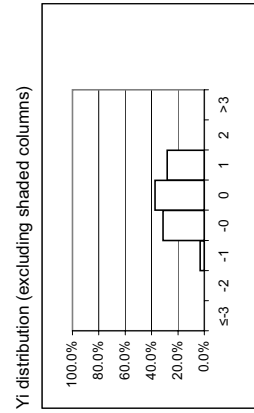
Yi	count	percent	Overall Yi STD	Parts Rated
-3	0	0.0%	0.90	4
-2	1	3.1%		
-1	4	12.5%		
0	11	34.4%		
1	14	43.8%		
2	2	6.3%		
3	0	0.0%		
total	32	100.0%		

Light Duty Workshop - Ind/Comb Valves

Rater = Lowsky, John

Yi VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8											MEAN	STD
Ind-Comb_Valve_SetF	1.78	0.73	-0.05	1.71	1.03	-0.23	0.29	-0.12											0.64	0.81
Ind-Comb_Valve_SetG	0.37	-0.35	0.90	-0.19	-1.94	-0.58	0.97	1.29											0.06	1.05
Ind-Comb_Valve_SetH	0.33	0.84	0.42	0.21	1.05	-0.73	-0.57	1.11											0.33	0.69
Ind-Comb_Valve_SetI	1.01	0.70	0.16	-0.64	1.10	-0.53	0.38	1.45											0.46	0.76
YI MAXIMUM	1.78	0.84	0.90	1.71	-1.94	-0.73	0.97	1.45										0.64	1.05	
YI MINIMUM	0.33	-0.35	-0.05	-0.19	1.03	-0.23	0.29	-0.12										0.06	0.69	
YI MEAN	0.87	0.48	0.36	0.27	0.31	-0.52	0.27	0.93												
YI STD	0.88	0.55	0.41	1.02	1.50	0.21	0.63	0.71												



Yi distribution (excluding shaded columns)

count	percent
0	0.0%
0	0.0%
1	3.1%
10	31.3%
12	37.5%
9	28.1%
0	0.0%
0	0.0%
32	100.0%

yi	count	percent
yi < -3	0	0.0%
-3 <= yi < -2	0	0.0%
-2 <= yi < -1	1	3.1%
-1 <= yi < 0	10	31.3%
0 <= yi < 1	12	37.5%
1 <= yi < 2	9	28.1%
2 <= yi < 3	0	0.0%
3 <= yi	0	0.0%
total	32	100.0%

Bin	Count	Percent
-1 < yi <= 1	16	68.8%
-2 < yi <= 2	32	100.0%
-3 < yi <= 3	32	100.0%
>3	0	0.0%

Statistic	Value
Overall Yi STD	0.83
Parts Rated	4

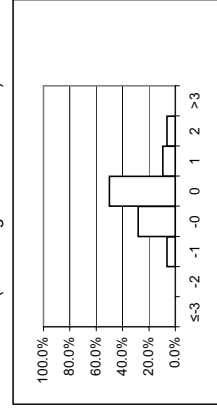
Light Duty Workshop - Ind/Comb Valves

Rater = Pansza, Mike

Yi VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8	MEAN	STD
Ind-Comb_Valve_SetF	0.15	-1.30	0.47	0.59	-0.33	<b>2.31</b>	-0.10	0.72	0.31	1.03
Ind-Comb_Valve_SetG	-1.19	1.97	0.16	<b>2.25</b>	0.69	1.03	0.64	0.47	0.75	1.07
Ind-Comb_Valve_SetH	0.33	0.84	0.28	1.20	0.27	0.18	0.72	-0.01	0.48	0.40
Ind-Comb_Valve_SetI	-0.31	-0.71	0.28	0.32	-0.36	-0.23	-0.83	-0.76	-0.33	0.45
YI MAXIMUM	-1.19	1.97	0.47	<b>2.25</b>	0.69	<b>2.31</b>	-0.83	-0.76	0.75	1.07
YI MINIMUM	0.15	-0.71	0.16	0.32	0.27	0.18	-0.10	-0.01	0.31	0.40
YI MEAN	-0.26	0.20	0.30	1.09	0.07	0.82	0.11	0.10		
YI STD	0.68	1.48	0.13	0.85	0.51	1.12	0.73	0.65		

Yi distribution (excluding shaded columns)



Yi Value	count	percent
yi le -3	0	0.0%
-3 lt yi le -2	0	0.0%
-2 lt yi le -1	2	6.3%
-1 lt yi le 0	9	28.1%
0 lt yi le 1	16	50.0%
1 lt yi le 2	3	9.4%
2 lt yi le 3	2	6.3%
3 lt yi	0	0.0%
total	32	100.0%

Bin Range	count	percent
-1 < yi ≤ 1	16	50.0%
-2 < yi ≤ 2	27	84.4%
-3 < yi ≤ 3	32	100.0%
>3	0	0.0%
Overall Yi STD		0.86
Parts Rated	4	

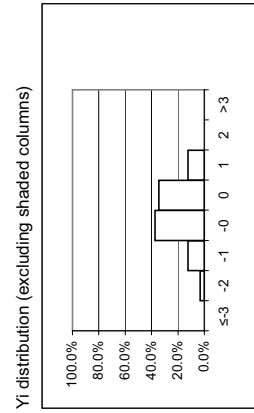
Group: White

Light Duty Workshop - Ind/Comb Valves

Rater = Pawczuk, Greg

YI VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8						MEAN	STD
Ind-Comb_Valve_SetF	-1.48	1.59	-0.05	-0.82	0.64	0.19	0.67	-0.24						0.06	0.95
Ind-Comb_Valve_SetG	-1.19	-0.35	1.27	-0.19	-0.40	-1.38	0.48	-2.38						-0.52	1.13
Ind-Comb_Valve_SetH	0.33	-0.09	0.57	0.61	0.05	0.00	-0.57	-0.01						0.11	0.38
Ind-Comb_Valve_SetI	1.68	0.70	-0.44	-0.64	0.62	1.28	-1.02	0.47						0.33	0.95
YI MAXIMUM	1.68	1.59	1.27	-0.82	0.64	-1.38	-1.02	-2.38						-0.52	1.13
YI MINIMUM	0.33	-0.09	-0.05	-0.19	0.05	0.00	0.48	-0.01						0.06	0.38
YI MEAN	-0.17	0.46	0.34	-0.26	0.23	0.02	-0.11	-0.54							
YI STD	1.46	0.87	0.75	0.64	0.50	1.09	0.82	1.26							



Yi distribution (excluding shaded columns)

Yi Range	count	percent
yi le -3	0	0.0%
-3 lt yi le -2	1	3.1%
-2 lt yi le -1	4	12.5%
-1 lt yi le 0	12	37.5%
0 lt yi le 1	11	34.4%
1 lt yi le 2	4	12.5%
2 lt yi le 3	0	0.0%
3 lt yi	0	0.0%
total	32	100.0%

Group: White

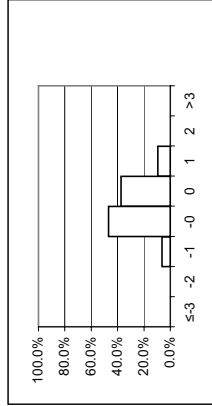
### Light Duty Workshop - Ind/Comb Valves

Rater = Radonich, Pete

#### Y<sub>i</sub> VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8	MEAN	STD
Ind-Comb_Valve_SetF	-0.87	0.15	-0.05	0.59	0.64	-0.44	-0.88	0.96	0.01	0.70
Ind-Comb_Valve_SetG	0.06	-1.24	0.53	-0.19	-0.62	-1.11	-0.66	-0.75	-0.50	0.60
Ind-Comb_Valve_SetH	1.06	0.84	0.57	-0.99	-0.61	1.10	-0.57	-0.91	0.06	0.91
Ind-Comb_Valve_SetI	0.35	0.42	-0.20	-0.64	0.62	-0.53	1.23	0.47	0.21	0.63
Y <sub>i</sub> MAXIMUM	1.06	-1.24	0.57	-0.99	0.64	-1.11	1.23	0.96	-0.50	0.91
Y <sub>i</sub> MINIMUM	0.06	0.15	-0.05	-0.19	-0.61	-0.44	-0.57	0.47	0.01	0.60
Y <sub>i</sub> MEAN	0.15	0.04	0.21	-0.31	0.01	-0.25	-0.22	-0.06		
Y <sub>i</sub> STD	0.80	0.90	0.39	0.68	0.72	0.95	0.97	0.91		

Y<sub>i</sub> distribution (excluding shaded columns)



Y <sub>i</sub> Category	count	percent
yi le -3	0	0.0%
-3 lt yi le -2	0	0.0%
-2 lt yi le -1	2	6.3%
-1 lt yi le 0	15	46.9%
0 lt yi le 1	12	37.5%
1 lt yi le 2	3	9.4%
2 lt yi le 3	0	0.0%
3 lt yi	0	0.0%
total	32	100.0%

Y <sub>i</sub> Range	Overall Y <sub>i</sub> STD	Parts Rated
-1 < yi ≤ 1	0.74	4
-2 < yi ≤ 2		
-3 < yi ≤ 3		
>3		

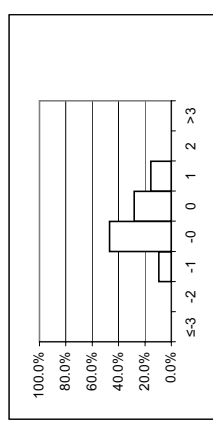
Light Duty Workshop - Ind/Comb Valves

Rater = Ramirez, Robert

Y<sub>i</sub> VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8							MEAN	STD
Ind-Comb_Valve_SetF	-1.07	0.73	-0.83	-0.26	0.16	-0.44	-0.88	-0.24							-0.35	0.60
Ind-Comb_Valve_SetG	0.89	-0.88	-0.59	-0.54	0.25	0.76	0.48	1.29							0.21	0.79
Ind-Comb_Valve_SetH	-1.87	-0.55	-0.29	1.60	-0.17	1.29	1.82	-1.81							0.00	1.45
Ind-Comb_Valve_SetI	0.35	0.13	1.97	-0.06	-0.85	-0.23	0.29	-0.76							0.10	0.88
Y <sub>i</sub> MAXIMUM	-1.87	-0.88	1.97	1.60	-0.85	1.29	1.82	-1.81							-0.35	1.45
Y <sub>i</sub> MINIMUM	0.35	0.13	-0.29	-0.06	0.16	-0.23	0.29	-0.24							0.00	0.60
Y <sub>i</sub> MEAN	-0.43	-0.14	0.06	0.19	-0.15	0.34	0.43	-0.38								
Y <sub>i</sub> STD	1.27	0.72	1.29	0.97	0.50	0.82	1.10	1.29								

Y<sub>i</sub> distribution (excluding shaded columns)



Y <sub>i</sub> Range	count	percent
y <sub>i</sub> ≤ -3	0	0.0%
-3 < y <sub>i</sub> ≤ -2	0	0.0%
-2 < y <sub>i</sub> ≤ -1	3	9.4%
-1 < y <sub>i</sub> ≤ 0	15	46.9%
0 < y <sub>i</sub> ≤ 1	9	28.1%
1 < y <sub>i</sub> ≤ 2	5	15.6%
2 < y <sub>i</sub> ≤ 3	0	0.0%
3 < y <sub>i</sub>	0	0.0%
total	32	100.0%

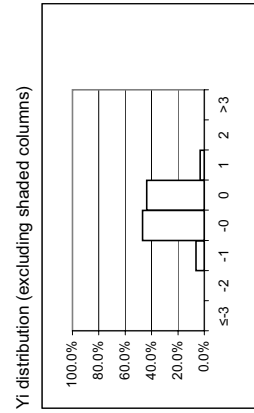
Group: White

# Light Duty Workshop - Ind/Comb Valves

Rater = Rodriguez, Jesse

## Yi VALUES

	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8									MEAN	STD
Ind-Comb_Valve_SetF	-0.46	-0.14	-0.31	0.87	-0.33	0.19	0.67	0.24									0.09	0.49
Ind-Comb_Valve_SetG	-0.15	-0.53	0.16	-0.19	-0.84	-0.04	0.64	0.06									-0.11	0.45
Ind-Comb_Valve_SetH	-1.87	-0.09	-0.29	0.61	-0.61	1.65	-0.57	0.21									-0.12	1.02
Ind-Comb_Valve_SetI	0.35	-0.43	0.04	-0.25	0.13	-1.14	0.10	0.47									-0.09	0.51
Yi MAXIMUM	-1.87	-0.53	-0.31	0.87	-0.84	1.65	0.67	0.47									-0.12	1.02
Yi MINIMUM	-0.15	-0.09	0.04	-0.19	0.13	-0.04	0.10	0.06									-0.09	0.45
Yi MEAN	-0.53	-0.30	-0.10	0.26	-0.41	0.17	0.21	0.25										
Yi STD	0.95	0.21	0.24	0.56	0.42	1.15	0.58	0.17										



Yi distribution (excluding shaded columns)

Bin Range	count	percent
yi < -3	0	0.0%
-3 <= yi < -2	0	0.0%
-2 <= yi < -1	2	6.3%
-1 <= yi < 0	15	46.9%
0 <= yi < 1	14	43.8%
1 <= yi < 2	1	3.1%
2 <= yi < 3	0	0.0%
3 <= yi < 4	0	0.0%
total	32	100.0%

Bin Range	count	percent
-1 < yi <= 1	30	93.8%
-2 < yi <= 2	32	100.0%
-3 < yi <= 3	32	100.0%
>3	0	0.0%

Statistic	Value
Overall Yi STD	0.63
Parts Rated	4











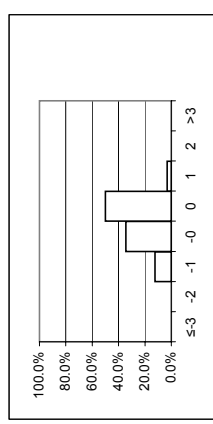
Light Duty Workshop - Ind/Comb Valves

Rater = Yanchar, Paul

YI VALUES



















	Valve 1	Valve 2	Valve 3	Valve 4	Valve 5	Valve 6	Valve 7	Valve 8							MEAN	STD
Ind-Comb_Valve_SetF	-0.67	0.15	0.47	0.30	-0.33	-1.28	0.67	-1.91							-0.32	0.91
Ind-Comb_Valve_SetG	0.89	0.90	0.16	-1.24	0.47	-0.04	-0.33	-0.75							0.01	0.76
Ind-Comb_Valve_SetH	0.33	0.37	-0.01	-0.59	-0.61	-1.84	-0.20	-0.01							-0.32	0.71
Ind-Comb_Valve_SetI	0.35	0.42	-0.92	0.32	1.10	0.88	0.85	0.47							0.41	0.60
YI MAXIMUM	0.89	0.90	-0.92	-1.24	1.10	-1.84	0.85	-1.91							0.41	0.91
YI MINIMUM	0.33	0.15	-0.01	0.30	-0.33	-0.04	-0.20	-0.01							0.01	0.60
YI MEAN	0.23	0.46	-0.07	-0.30	0.16	-0.62	0.25	-0.55								
YI STD	0.65	0.32	0.60	0.76	0.78	1.14	0.60	1.04								

Yi distribution (excluding shaded columns)



Yi Range	count	percent	Overall YI STD
yi ≤ -3	0	0.0%	0.78
-3 < yi ≤ -2	0	0.0%	
-2 < yi ≤ -1	4	12.5%	
-1 < yi ≤ 0	11	34.4%	
0 < yi ≤ 1	16	50.0%	Parts Rated
1 < yi ≤ 2	1	3.1%	
2 < yi ≤ 3	0	0.0%	
3 < yi ≤ 4	0	0.0%	
total	32	100.0%	4

## Light Duty Workshop - Ind/Comb Deposits

	Number of Parts Rated	-1 < yi ≤ 1	-2 < yi ≤ 2	-3 < yi ≤ 3	>3	Yi STD	Group	
Adams, Pat	3	45.5%	86.4%	100.0%	0.0%	1.25	Yellow	
Castillo, George	3	68.2%	100.0%	100.0%	0.0%	0.55	White	
Foecking, Brian	3	50.0%	100.0%	100.0%	0.0%	0.45	Yellow	
Garcia, Orlando	3	68.2%	100.0%	100.0%	0.0%	0.84	White	
Kirkpatrick, John	3	40.9%	81.8%	90.9%	9.1%	1.08	Yellow	
Kobrinetz, Jack	3	77.3%	100.0%	100.0%	0.0%	0.46	White	
Lopez, Frank	3	81.8%	100.0%	100.0%	0.0%	0.69	Red	
Lowsky, John	3	90.9%	100.0%	100.0%	0.0%	0.50	Blue	
Pansza, Mike	3	81.8%	100.0%	100.0%	0.0%	0.79	Red	
Pawczuk, Greg	3	90.9%	100.0%	100.0%	0.0%	0.58	Blue	
Radonich, Pete	3	81.8%	100.0%	100.0%	0.0%	0.51	Red	
Ramirez, Robert	3	54.5%	86.4%	100.0%	0.0%	1.32	Yellow	
Rodriguez, Jesse	3	72.7%	100.0%	100.0%	0.0%	0.81	White	
Sanchez, Art	3	95.5%	100.0%	100.0%	0.0%	0.52	Blue	
Seiz, Ray	3	59.1%	95.5%	100.0%	0.0%	1.15	Yellow	
Tschirhart, Garland	3	45.5%	100.0%	100.0%	0.0%	0.77	Yellow	
Viera, Ralph	3	72.7%	100.0%	100.0%	0.0%	0.98	White	
Yanchar, Paul	3	95.5%	100.0%	100.0%	0.0%	0.51	Blue	

	Minimum Number of Parts Rated	Minimum Yi's within 1 STD of mean	Minimum Yi's within 2 STD of mean	Maximum Overall Yi STD	Group Total	
White	0	60%	90%	1.20	5	28%
Red	0	80%	95%	0.85	3	17%
Blue	0	85%	98%	0.75	4	22%
Yellow	-	-	-	-	6	33%







































