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Directory			
Libref	WORK		
Engine	V9		
Physical Name	E:\SAS Temporary Files\PCG180000_TD5956_SMVSASCLASSC_		
Filename	E:\SAS Temporary Files\PCG180000_TD5956_SMVSASCLASSC_		
Owner Name	CAMPUS\PCG180000		
File Size	48KB		
File Size (bytes)	49152		

#	Name	Member Type	File Size	Last Modified
1	SASGOPT	CATALOG	5KB	07/29/2019 21:28:13
2	SASMAC3	CATALOG	13KB	07/30/2019 04:55:27

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The CONTENTS Procedure

Data Set Name	WORK.VEHICLES_RAW	Observations	1723065
Member Type	DATA	Variables	26
Engine	V9	Indexes	0
Created	07/30/2019 04:55:27	Observation Length	386
Last Modified	07/30/2019 04:55:27	Deleted Observations	0
Protection		Compressed	NO
Data Set Type		Sorted	NO
Label			
Data Representation	WINDOWS_64		
Encoding	wlatin1 Western (Windows)		

Engine/Host Dependent Information			
Data Set Page Size	65536		
Number of Data Set Pages	10196		
First Data Page	1		
Max Obs per Page	169		
Obs in First Data Page	160		
Number of Data Set Repairs	0		
ExtendObsCounter	YES		
Filename	E:\SAS Temporary Files\PCG180000_TD5956_SMVSASCLASSC_\vehicles_raw.sas7bdat		
Release Created	9.0401M4		
Host Created	X64_SR12R2		
Owner Name	CAMPUS\PCG180000		
File Size	637MB		
File Size (bytes)	668270592		

	Variables in Creation Order						
#	Variable	Туре	Len	Format	Informat		
1	url	Char	85	\$85.	\$85.		
2	city	Char	10	\$10.	\$10.		
3	price	Char	7	\$7.	\$7.		
4	year	Char	6	\$6.	\$6.		
5	manufacturer	Char	11	\$11.	\$11.		
6	make	Char	23	\$23.	\$23.		
7	condition	Char	11	\$11.	\$11.		
8	cylinders	Char	14	\$14.	\$14.		
9	fuel	Char	10	\$10.	\$10.		
10	odometer	Char	8	\$8.	\$8.		
11	title_status	Char	9	\$9.	\$9.		
12	transmission	Char	11	\$11.	\$11.		
13	vin	Char	19	\$19.	\$19.		
14	drive	Char	5	\$5.	\$5.		
15	size	Char	13	\$13.	\$13.		
16	type	Char	8	\$8.	\$8.		
17	paint_color	Char	7	\$7.	\$7.		
18	image_url	Char	61	\$61.	\$61.		
19	lat	Char	11	\$11.	\$11.		
20	long	Char	13	\$13.	\$13.		
21	county_fips	Char	7	\$7.	\$7.		
22	county_name	Char	11	\$11.	\$11.		
23	state_fips	Char	4	\$4.	\$4.		
24	state_code	Char	4	\$4.	\$4.		
25	state_name	Char	14	\$14.	\$14.		
26	weather	Char	4	\$4.	\$4.		

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The UNIVARIATE Procedure Variable: price

Moments					
N	1723065	Sum Weights	1723065		
Mean	11998.9699	Sum Observations	2.0675E10		
Std Deviation	71760.883	Variance	5149624323		
Skewness	105.622505	Kurtosis	13188.6776		
Uncorrected SS	9.12121E15	Corrected SS	8.87313E15		
Coeff Variation	598.058695	Std Error Mean	54.668473		

Basic Statistical Measures					
Location Variability					
Mean	11998.97	Std Deviation	71761		
Median	7000.00	Variance	5149624323		
Mode	2500.00	Range	9999998		
		Interquartile Range	11704		

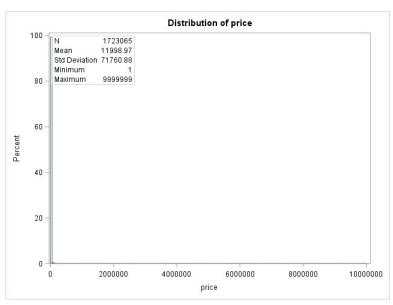
Tests for Location: Mu0=0					
Test Statistic		Statistic	p Val	ue	
Student's t	t	219.4861	Pr > t	<.0001	
Sign	М	861532.5	Pr >= M	<.0001	
Signed Rank	s	7.422E11	Pr >= S	<.0001	

Quantiles (Definition 5)			
Level	Quantile		
100% Max	9999999		
99%	51999		
95%	32950		
90%	25000		
75% Q3	14999		
50% Median	7000		
25% Q1	3295		
10%	1500		
5%	850		
1%	1		
0% Min	1		

Extreme Observations				
Lov	Lowest		est	
Value	Obs	Value	Obs	
1	1.72E6	9999999	1.38E6	
1	1.72E6	9999999	1.53E6	
1	1.72E6	9999999	1.55E6	
1	1.72E6	9999999	1.63E6	
1	1.72E6	9999999	1.64E6	

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The UNIVARIATE Procedure Variable: year

Moments					
N	1716750	Sum Weights	1716750		
Mean	2004.84084	Sum Observations	3441810513		
Std Deviation	12.0877163	Variance	146.112885		
Skewness	-4.9795921	Kurtosis	315.319101		
Uncorrected SS	6.90053E12	Corrected SS	250839149		
Coeff Variation	0.60292648	Std Error Mean	0.00922552		

	Basic Statistical Measures					
Location Variability						
Mean	2004.841	Std Deviation	12.08772			
Median	2007.000	Variance	146.11288			
Mode	2007.000	Range	1717			
		Interquartile Range	10.00000			

Tests for Location: Mu0=0					
Test		Statistic	p Va	lue	
Student's t	t 217314.7		Pr > t	<.0001	
Sign	М	858375	Pr >= M	<.0001	
Signed Rank	s	7.368E11	Pr >= S	<.0001	

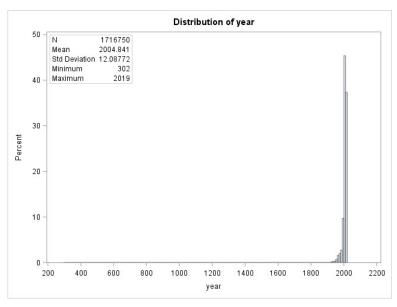
Quantiles (Definition 5)		
Level	Quantile	
100% Max	2019	
99%	2018	
95%	2017	
90%	2015	
75% Q3	2012	
50% Median	2007	
25% Q1	2002	
10%	1994	
5%	1980	
1%	1955	
0% Min	302	

Ex	Extreme Observations				
Lo	Lowest		hest		
Value	Value Obs		Obs		
302	7039	2019	1.72E6		
718	614121	2019	1.72E6		
1553	86238	2019	1.72E6		
1740	1.3E6	2019	1.72E6		
1796	354711	2019	1.72E6		

Missing Values				
Missing		Pe	rcent Of	
	Count	All Obs	Missing Obs	
	6315	0.37	100.00	

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The UNIVARIATE Procedure Variable: odometer

Moments				
N	1159011	Sum Weights	1159011	
Mean	113638.653	Sum Observations	1.31708E11	
Std Deviation	136860.29	Variance	1.87307E10	
Skewness	35.0466154	Kurtosis	2157.41688	
Uncorrected SS	3.66763E16	Corrected SS	2.17091E16	
Coeff Variation	120.434629	Std Error Mean	127.125793	

Basic Statistical Measures				
Location Variability				
Mean	113638.7	Std Deviation	136860	
Median	107000.0	Variance	1.87307E10	
Mode	150000.0	Range	10000000	
		Interquartile Range	94000	

Tests for Location: Mu0=0					
Test		Statistic	p Va	lue	
Student's t	t	893.9071	Pr > t	<.0001	
Sign	М	576775.5	Pr >= M	<.0001	
Signed Rank	s	3.327E11	Pr >= S	<.0001	

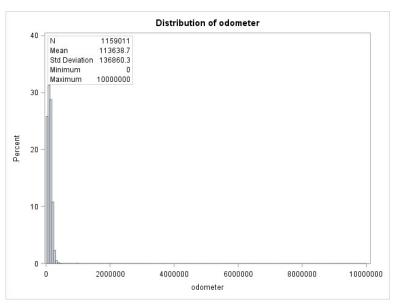
Quantiles (Definition 5		
Level	Quantile	
100% Max	10000000	
99%	300000	
95%	222000	
90%	194000	
75% Q3	152000	
50% Median	107000	
25% Q1	58000	
10%	23456	
5%	8000	
1%	41	
0% Min	0	

Е	Extreme Observations				
Lov	west	Highest			
Value	Obs	Value	Obs		
0	1.72E6	10000000	1.43E6		
0	1.72E6	10000000	1.47E6		
0	1.72E6	10000000	1.58E6		
0	1.72E6	10000000	1.6E6		
0	1.72E6	10000000	1.72E6		

Missing Values				
Missing Percent			rcent Of	
Value	Count	All Obs	Missing Obs	
	564054	32.74	100.00	

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The UNIVARIATE Procedure Variable: price

Moments				
N	1636227	Sum Weights	1636227	
Mean	10802.471	Sum Observations	1.76753E10	
Std Deviation	10268.4302	Variance	105440658	
Skewness	1.75919055	Kurtosis	3.79078232	
Uncorrected SS	3.63462E14	Corrected SS	1.72525E14	
Coeff Variation	95.0563081	Std Error Mean	8.02753627	

Basic Statistical Measures				
Location Variability				
Mean	10802.47	Std Deviation 1		
Median	7300.00	Variance	105440658	
Mode	2500.00	Range	69898	
		Interquartile Range	11499	

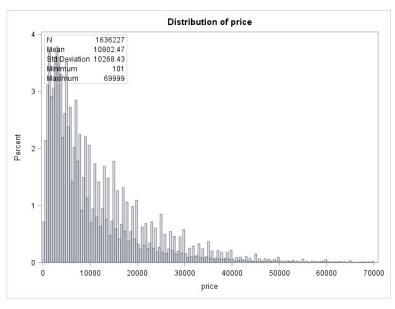
Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t	1345.677	Pr > t	<.0001
Sign	М	818113.5	Pr >= M	<.0001
Signed Rank	s	6.693E11	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	69999	
99%	47000	
95%	31987	
90%	24995	
75% Q3	14999	
50% Median	7300	
25% Q1	3500	
10%	1600	
5%	1000	
1%	495	
0% Min	101	

Extreme Observations				
Lo	Lowest Highest			
Value	Obs	Value	Obs	
101	1.45E6	69999	1.34E6	
101	1.45E6	69999	1.41E6	
101	1.45E6	69999	1.41E6	
101	1.19E6	69999	1.43E6	
101	668053	69999	1.43E6	

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The UNIVARIATE Procedure Variable: age

Moments						
N 1630255 Sum Weights 163025						
Mean	14.5860691	Sum Observations	23779012			
Std Deviation	10.3596211	Variance	107.321749			
Skewness	2.10509727	Kurtosis	5.86185929			
Uncorrected SS	521804022	Corrected SS	174961711			
Coeff Variation	71.0240783	Std Error Mean	0.00811365			

Basic Statistical Measures					
Location Variability					
Mean	14.58607	Std Deviation 10.35			
Median	13.00000	Variance	107.32175		
Mode	13.00000	Range	68.00000		
		Interquartile Range	10.00000		

Tests for Location: Mu0=0				
Test :		Statistic	p Va	lue
Student's t	t	1797.72	Pr > t	<.0001
Sign	М	815127.5	Pr >= M	<.0001
Signed Rank	s	6.644E11	Pr >= S	<.0001

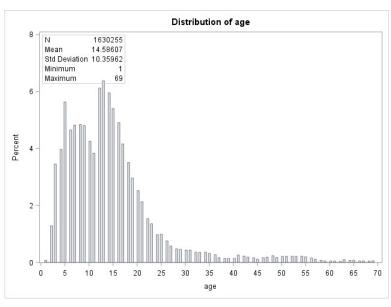
Quantiles (Definition 5)		
Level	Quantile	
100% Max	69	
99%	56	
95%	35	
90%	25	
75% Q3	18	
50% Median	13	
25% Q1	8	
10%	5	
5%	4	
1%	2	
0% Min	1	

Ex	Extreme Observations				
Lov	west	Hig	hest		
Value	Obs	Value	Obs		
1	1.63E6	69	1.63E6		
1	1.63E6	69	1.63E6		
1	1.63E6	69	1.63E6		
1	1.63E6	69	1.64E6		
1	1.63E6	69	1.64E6		

Missing Values				
Missing		Pe	rcent Of	
	Count	All Obs	Missing Obs	
	5972	0.36	100.00	

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The UNIVARIATE Procedure Variable: odometer

Moments				
N	1102004	Sum Weights	1102004	
Mean	113100.588	Sum Observations	1.24637E11	
Std Deviation	63244.8342	Variance	3999909054	
Skewness	0.56953899	Kurtosis	0.6161862	
Uncorrected SS	1.85045E16	Corrected SS	4.40791E15	
Coeff Variation	55.9191029	Std Error Mean	60.2467291	

Basic Statistical Measures					
Location Variability					
Mean	113100.6	.6 Std Deviation 63			
Median	110000.0	Variance	3999909054		
Mode	150000.0	Range	499497		
		Interquartile Range	89166		

Tests for Location: Mu0=0				
Test Statistic		Statistic	p Va	lue
Student's t	t	1877.29	Pr > t	<.0001
Sign	М	551002	Pr >= M	<.0001
Signed Rank	s	3.036E11	Pr >= S	<.0001

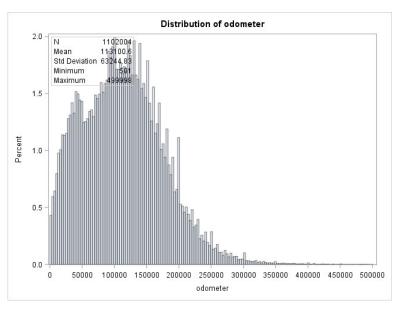
Quantiles (Definition 5)			
Level	Quantile		
100% Max	499998		
99%	283000		
95%	220014		
90%	194344		
75% Q3	153823		
50% Median	110000		
25% Q1	64657		
10%	31863		
5%	19400		
1%	5836		
0% Min	501		

Extreme Observations			
Lowest		Highest	
Value	Value Obs		Obs
501	18572	499453	277293
502	1.4E6	499453	448142
502	996230	499595	744148
502	158690	499936	540285
504	1.06E6	499998	1.27E6

Missing Values			
Missing		Pe	rcent Of
Value	Count	All Obs	Missing Obs
	534223	32.65	100.00

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The UNIVARIATE Procedure



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The UNIVARIATE Procedure Variable: log_price

Moments			
N 1636227 Sum Weights 1636			
Mean	8.82132672	Sum Observations	14433693
Std Deviation	1.05212507	Variance	1.10696717
Skewness	-0.4650401	Kurtosis	-0.0240436
Uncorrected SS	129135570	Corrected SS	1811248.46
Coeff Variation	11.9270616	Std Error Mean	0.00082252

Basic Statistical Measures				
Location Variability				
Mean	8.821327	Std Deviation	1.05213	
Median	8.895630	Variance	1.10697	
Mode	7.824046	Range	6.54112	
		Interquartile Range	1.45522	

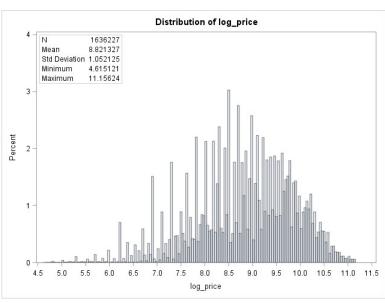
Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 10724.78		Pr > t	<.0001
Sign	М	818113.5	Pr >= M	<.0001
Signed Rank	s	S 6.693E11 Pr>		<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.75790	
95%	10.37308	
90%	10.12643	
75% Q3	9.61574	
50% Median	8.89563	
25% Q1	8.16052	
10%	7.37776	
5%	6.90776	
1%	6.20456	
0% Min	4.61512	

Ex	Extreme Observations				
Lowest		Highest			
Value	Value Obs		Obs		
4.61512	1.45E6	11.1562	1.34E6		
4.61512	1.45E6	11.1562	1.41E6		
4.61512	1.45E6	11.1562	1.41E6		
4.61512	1.19E6	11.1562	1.43E6		
4.61512	668053	11.1562	1.43E6		

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The UNIVARIATE Procedure Variable: log_age

Moments				
N 1630255 Sum Weights 1630				
Mean	2.4651533	Sum Observations	4018828.49	
Std Deviation	0.6691238	Variance	0.44772666	
Skewness	-0.2238893	Kurtosis	0.20730163	
Uncorrected SS	10636936.5	Corrected SS	729908.173	
Coeff Variation	27.1432936	Std Error Mean	0.00052406	

Basic Statistical Measures				
Location		Variability		
Mean	2.465153	Std Deviation	0.66912	
Median	2.564949	Variance	0.44773	
Mode	2.564949	Range	4.23411	
		Interquartile Range	0.81093	

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 4703.977		Pr > t	<.0001
Sign	М	814460.5	Pr >= M	<.0001
Signed Rank	s	6.633E11	Pr >= S	<.0001

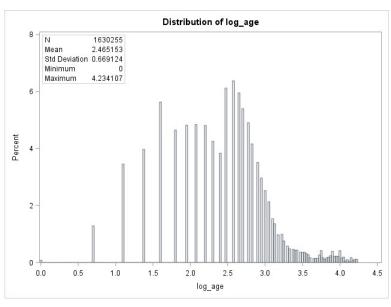
Quantiles (Definition 5)		
Level	Quantile	
100% Max	4.234107	
99%	4.025352	
95%	3.555348	
90%	3.218876	
75% Q3	2.890372	
50% Median	2.564949	
25% Q1	2.079442	
10%	1.609438	
5%	1.386294	
1%	0.693147	
0% Min	0.000000	

Extreme Observations						
Lowest		Highest				
Value	Obs	Value Ob				
0	1.63E6	4.23411	1.63E6			
0	1.63E6	4.23411	1.63E6			
0	1.63E6	4.23411	1.63E6			
0	1.63E6	4.23411	1.64E6			
0	1.63E6	4.23411	1.64E6			

Missing Values						
Missing		Percent Of				
	Count	All Obs	Missing Obs			
	5972	0.36	100.00			

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The UNIVARIATE Procedure Variable: log_odometer

Moments						
N 1102004 Sum Weights 1102						
Mean	11.4110594	Sum Observations	12575033.1			
Std Deviation	0.79336625	Variance	0.62943001			
Skewness	-1.6257042	Kurtosis	4.10205556			
Uncorrected SS	144188084	Corrected SS	693633.761			
Coeff Variation	6.9526082	Std Error Mean	0.00075576			

Basic Statistical Measures						
Location Variability						
Mean	11.41106	6 Std Deviation 0.793				
Median	11.60824	Variance	0.62943			
Mode	11.91839	Range	6.90575			
		Interquartile Range	0.86671			

Tests for Location: Mu0=0						
Test		Statistic	p Va	lue		
Student's t	t	15098.85	Pr > t	<.0001		
Sign	М	551002	Pr >= M	<.0001		
Signed Rank	s	3.036E11	Pr >= S	<.0001		

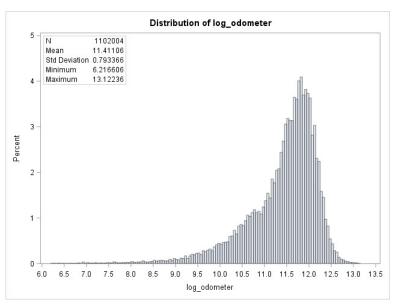
Quantiles (Definition 5)				
Level	Quantile			
100% Max	13.12236			
99%	12.55320			
95%	12.30145			
90%	12.17739			
75% Q3	11.94356			
50% Median	11.60824			
25% Q1	11.07685			
10%	10.36920			
5%	9.87303			
1%	8.67180			
0% Min	6.21661			

Extreme Observations						
Lowest		Highest				
Value Obs		Value	Obs			
6.21661	18572	13.1213	277293			
6.21860	1.4E6	13.1213	448142			
6.21860	996230	13.1216	744148			
6.21860	158690	13.1222	540285			
6.22258	1.06E6	13.1224	1.27E6			

Missing Values						
Missing		Percent Of				
Value	Count	All Obs	Missing Obs			
	534223	32.65	100.00			

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The FREQ Procedure

fuel	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	9915	0.61	9915	0.61
diesel	114241	6.98	124156	7.59
electric	2181	0.13	126337	7.72
gas	1456237	89.00	1582574	96.72
hybrid	10553	0.64	1593127	97.37
other	43100	2.63	1636227	100.00

title_status	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	2515	0.15	2515	0.15
clean	1523614	93.12	1526129	93.27
lien	20845	1.27	1546974	94.55
missing	8870	0.54	1555844	95.09
parts onl	3558	0.22	1559402	95.30
rebuilt	46617	2.85	1606019	98.15
salvage	30208	1.85	1636227	100.00

transmission	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	8736	0.53	8736	0.53
automatic	1411711	86.28	1420447	86.81
manual	185549	11.34	1605996	98.15
other	30231	1.85	1636227	100.00

manufacturer	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	120818	7.38	120818	7.38
acura	17416	1.06	138234	8.45
alfa	73	0.00	138307	8.45
alfa-romeo	130	0.01	138437	8.46
aston	33	0.00	138470	8.46
aston-marti	39	0.00	138509	8.47
audi	14524	0.89	153033	9.35
bmw	41732	2.55	194765	11.90
buick	21789	1.33	216554	13.23
cadillac	24167	1.48	240721	14.7
chev	788	0.05	241509	14.76
chevrolet	208882	12.77	450391	27.53
chevy	38067	2.33	488458	29.8
chrysler	30330	1.85	518788	31.7
datsun	577	0.04	519365	31.74
dodge	72392	4.42	591757	36.17
ferrari	57	0.00	591814	36.1
fiat	1882	0.12	593696	36.2
ford	277397	16.95	871093	53.2
gmc	67145	4.10	938238	57.3
harley	227	0.01	938465	57.3
harley-davi	515	0.03	938980	57.3
hennessey	1	0.00	938981	57.3
honda	86023	5.26	1025004	62.64
hyundai	32286	1.97	1057290	64.62
infiniti	11594	0.71	1068884	65.3
infinity	499	0.03	1069383	65.3
jaguar	3997	0.24	1073380	65.6
jeep	72333	4.42	1145713	70.0
kia	24266	1.48	1169979	71.5
land rover	62	0.00	1170041	71.5

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landrover	39	0.00	1170080	71.51
lexus	19601	1.20	1189681	72.71
lincoln	12365	0.76	1202046	73.46
mazda	22674	1.39	1224720	74.85
mercedes	6810	0.42	1231530	75.27
mercedes-be	22974	1.40	1254504	76.67
mercedesben	4	0.00	1254508	76.67
mercury	9713	0.59	1264221	77.26
mini	6265	0.38	1270486	77.65
mitsubishi	10470	0.64	1280956	78.29
morgan	8	0.00	1280964	78.29
nissan	76920	4.70	1357884	82.99
noble	2	0.00	1357886	82.99
pontiac	21384	1.31	1379270	84.30
porche	109	0.01	1379379	84.30
ram	54540	3.33	1433919	87.64
rover	5154	0.31	1439073	87.95
saturn	8973	0.55	1448046	88.50
subaru	28601	1.75	1476647	90.25
toyota	112361	6.87	1589008	97.11
volkswagen	32440	1.98	1621448	99.10
volvo	10507	0.64	1631955	99.74
vw	4272	0.26	1636227	100.00

condition	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	666626	40.74	666626	40.74
excellent	422244	25.81	1088870	66.55
fair	69834	4.27	1158704	70.82
good	360895	22.06	1519599	92.87
like new	105124	6.42	1624723	99.30
new	6271	0.38	1630994	99.68
salvage	5233	0.32	1636227	100.00

cylinders	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	654185	39.98	654185	39.98
10 cylinders	4383	0.27	658568	40.25
12 cylinders	651	0.04	659219	40.29
3 cylinders	1700	0.10	660919	40.39
4 cylinders	281654	17.21	942573	57.61
5 cylinders	10025	0.61	952598	58.22
6 cylinders	346366	21.17	1298964	79.39
8 cylinders	303249	18.53	1602213	97.92
other	34014	2.08	1636227	100.00

drive	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	620627	37.93	620627	37.93
4wd	429128	26.23	1049755	64.16
fwd	358030	21.88	1407785	86.04
rwd	228442	13.96	1636227	100.00

size	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	1066052	65.15	1066052	65.15
compact	89148	5.45	1155200	70.60
full-size	305165	18.65	1460365	89.25
mid-size	164189	10.03	1624554	99.29
sub-compact	11673	0.71	1636227	100.00

Cumulative Cumulative

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type	Frequency	Percent	Frequency	Percent
	658700	40.26	658700	40.26
SUV	237461	14.51	896161	54.77
bus	1952	0.12	898113	54.89
converti	29267	1.79	927380	56.68
coupe	67229	4.11	994609	60.79
hatchbac	37066	2.27	1031675	63.05
mini-van	24108	1.47	1055783	64.53
offroad	4712	0.29	1060495	64.81
other	21141	1.29	1081636	66.11
pickup	118086	7.22	1199722	73.32
sedan	260127	15.90	1459849	89.22
truck	127399	7.79	1587248	97.01
van	24427	1.49	1611675	98.50
wagon	24552	1.50	1636227	100.00

paint_color	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	652376	39.87	652376	39.87
black	191832	11.72	844208	51.59
blue	111105	6.79	955313	58.39
brown	25803	1.58	981116	59.96
custom	23860	1.46	1004976	61.42
green	40712	2.49	1045688	63.91
grey	96722	5.91	1142410	69.82
orange	6658	0.41	1149068	70.23
purple	3627	0.22	1152695	70.45
red	110222	6.74	1262917	77.18
silver	142611	8.72	1405528	85.90
white	220399	13.47	1625927	99.37
yellow	10300	0.63	1636227	100.00

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	Directory
Libref	WORK
Engine	V9
Physical Name	E:\SAS Temporary Files\PCG180000_TD5956_SMVSASCLASSC_
Filename	E:\SAS Temporary Files\PCG180000_TD5956_SMVSASCLASSC_
Owner Name	CAMPUS\PCG180000
File Size	48KB
File Size (bytes)	49152

#	Name	Member Type	File Size	Last Modified
1	SASGOPT	CATALOG	5KB	07/29/2019 21:28:13
2	SASMAC1	CATALOG	13KB	07/30/2019 04:56:25
3	SASMAC3	CATALOG	13KB	07/30/2019 04:55:27
4	VEHICLES_4CAT	DATA	114MB	07/30/2019 04:57:29
5	VEHICLES_9CAT	DATA	57MB	07/30/2019 04:57:30
6	VEHICLES_RAW	DATA	645MB	07/30/2019 04:56:03
7	VEHICLES_TMP	DATA	238MB	07/30/2019 04:57:20

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The UNIVARIATE Procedure Variable: log_price

Moments					
N	1493278	Sum Weights	1493278		
Mean	8.83475458	Sum Observations	13192744.7		
Std Deviation	1.03572573	Variance	1.07272779		
Skewness	-0.4646812	Kurtosis	-0.0124669		
Uncorrected SS	118156541	Corrected SS	1601879.74		
Coeff Variation	11.7233107	Std Error Mean	0.00084757		

	Basic Statistical Measures					
Location Variability						
Mean	8.834755	Std Deviation	1.03573			
Median	8.921991	Variance	1.07273			
Mode 7.824046		Range	6.54112			
		Interquartile Range	1.45522			

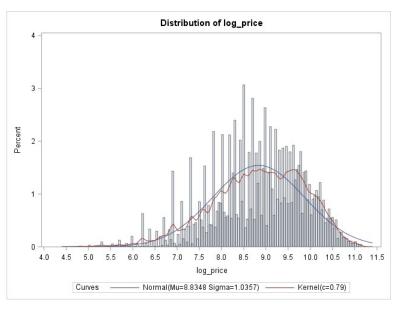
Tests for Location: Mu0=0				
Test S		Statistic	p Va	lue
Student's t	t	10423.66	Pr > t	<.0001
Sign	М	746639	Pr >= M	<.0001
Signed Rank	s	5.575E11	Pr >= S	<.0001

Quantiles (Definition 5)			
Level	Quantile		
100% Max	11.15624		
99%	10.73637		
95%	10.35946		
90%	10.12623		
75% Q3	9.61574		
50% Median	8.92199		
25% Q1	8.16052		
10%	7.46737		
5%	6.90776		
1%	6.21461		
0% Min	4.61512		

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
4.61512	1.32E6	11.1562	696850	
4.61512	1.32E6	11.1562	1.28E6	
4.61512	1.32E6	11.1562	1.29E6	
4.61512	1.08E6	11.1562	1.3E6	
4.61512	608170	11.1562	1.3E6	

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The UNIVARIATE Procedure Fitted Normal Distribution for log_price

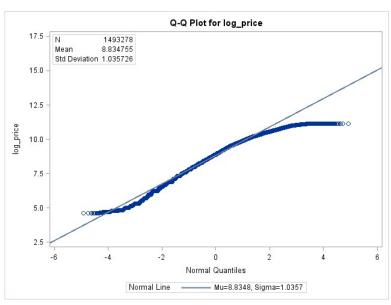
Parameters for Normal Distribution				
Parameter Symbol Estimate				
Mean	Mu	8.834755		
Std Dev	Sigma	1.035726		

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic p Value			
Kolmogorov-Smirnov	D	0.04364	Pr > D	<0.010
Cramer-von Mises	W-Sq	702.46446	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	4899.49095	Pr > A-Sq	<0.005

Quantiles for Normal Distribution			
	Qua	ntile	
Percent	Observed	Estimated	
1.0	6.21461	6.42530	
5.0	6.90776	7.13114	
10.0	7.46737	7.50742	
25.0	8.16052	8.13617	
50.0	8.92199	8.83475	
75.0	9.61574	9.53334	
90.0	10.12623	10.16209	
95.0	10.35946	10.53837	
99.0	10.73637	11.24421	

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The UNIVARIATE Procedure Variable: log_age

Moments						
N 1493278 Sum Weights 14932						
Mean	2.44708586	Sum Observations	3654179.48			
Std Deviation	0.65817142	Variance	0.43318961			
Skewness	-0.239101	Kurtosis	0.18490611			
Uncorrected SS	9588963.05	Corrected SS	646872.089			
Coeff Variation	26.8961309	Std Error Mean	0.0005386			

Basic Statistical Measures				
Location Variability				
Mean	2.447086	Std Deviation	0.65817	
Median	2.564949	Variance	0.43319	
Mode	2.564949	Range	4.23411	
		Interquartile Range	0.75377	

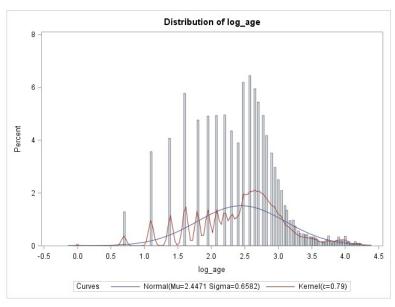
Tests for Location: Mu0=0				
Test	Statistic p Value			
Student's t	t 4543.395		Pr > t	<.0001
Sign	М	746243	Pr >= M	<.0001
Signed Rank	s	5.569E11	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	4.234107	
99%	4.007333	
95%	3.496508	
90%	3.178054	
75% Q3	2.833213	
50% Median	2.564949	
25% Q1	2.079442	
10%	1.609438	
5%	1.386294	
1%	0.693147	
0% Min	0.000000	

Extreme Observations			
Lowest		High	est
Value	Obs	Value	Obs
0	1.49E6	4.23411	1.49E6
0	1.49E6	4.23411	1.49E6
0	1.49E6	4.23411	1.49E6
0	1.48E6	4.23411	1.49E6
0	1.48E6	4.23411	1.49E6

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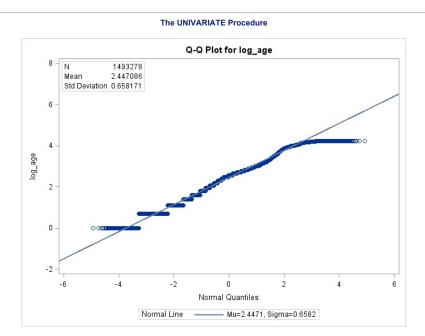
The UNIVARIATE Procedure Fitted Normal Distribution for log_age

Parameters for Normal Distribution				
Parameter Symbol Estimate				
Mean	Mu	2.447086		
Std Dev	Sigma	0.658171		

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic p Value			
Kolmogorov-Smirnov	D	0.0975	Pr > D	<0.010
Cramer-von Mises	W-Sq	1901.8862	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	10138.0011	Pr > A-Sq	<0.005

Quantiles for Normal Distribution			
	Quantile		
Percent	Observed	Estimated	
1.0	0.69315	0.91595	
5.0	1.38629	1.36449	
10.0	1.60944	1.60361	
25.0	2.07944	2.00316	
50.0	2.56495	2.44709	
75.0	2.83321	2.89102	
90.0	3.17805	3.29057	
95.0	3.49651	3.52968	
99.0	4.00733	3.97822	

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The UNIVARIATE Procedure Variable: log_price

Moments				
N	441328	Sum Weights	441328	
Mean	8.88085539	Sum Observations	3919370.15	
Std Deviation	0.95354226	Variance	0.90924285	
Skewness	-0.4272486	Kurtosis	0.1376484	
Uncorrected SS	35208632.9	Corrected SS	401273.42	
Coeff Variation	10.7370543	Std Error Mean	0.00143535	

Basic Statistical Measures				
Location		Variability		
Mean	8.880855	Std Deviation	0.95354	
Median	8.922658	Variance	0.90924	
Mode	7.824046	Range	6.53126	
		Interquartile Range	1.31406	

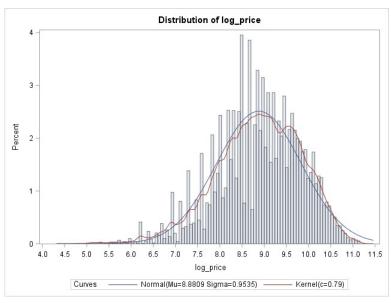
Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	6187.22	Pr > t	<.0001
Sign	М	220664	Pr >= M	<.0001
Signed Rank	s	4.869E10	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.71440	
95%	10.30892	
90%	10.08539	
75% Q3	9.59553	
50% Median	8.92266	
25% Q1	8.28147	
10%	7.60090	
5%	7.24423	
1%	6.39526	
0% Min	4.62497	

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
4.62497	365541	11.1562	345237	
4.70953	159856	11.1562	347087	
4.74493	91598	11.1562	55891	
4.74493	85116	11.1562	56794	
4.75359	359837	11.1562	199801	

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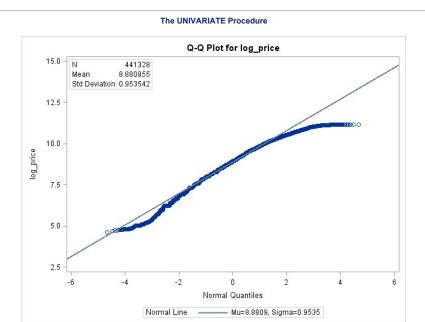
The UNIVARIATE Procedure Fitted Normal Distribution for log_price

Parameters for Normal Distribution			
Parameter Symbol Estimate			
Mean	Mu	8.880855	
Std Dev	Sigma	0.953542	

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic		p Value	
Kolmogorov-Smirnov	D	0.032166	Pr > D	<0.010
Cramer-von Mises	W-Sq	118.614154	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	882.986089	Pr > A-Sq	<0.005

Quantiles for Normal Distribution			
	Quantile		
Percent	Observed	Estimated	
1.0	6.39526	6.66258	
5.0	7.24423	7.31242	
10.0	7.60090	7.65884	
25.0	8.28147	8.23770	
50.0	8.92266	8.88086	
75.0	9.59553	9.52401	
90.0	10.08539	10.10287	
95.0	10.30892	10.44929	
99.0	10.71440	11.09913	

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The UNIVARIATE Procedure Variable: log_age

Moments				
N	441328	Sum Weights	441328	
Mean	2.43961694	Sum Observations	1076671.27	
Std Deviation	0.59721099	Variance	0.35666097	
Skewness	-0.3909869	Kurtosis	0.31551385	
Uncorrected SS	2784069.58	Corrected SS	157404.116	
Coeff Variation	24.4797035	Std Error Mean	0.00089897	

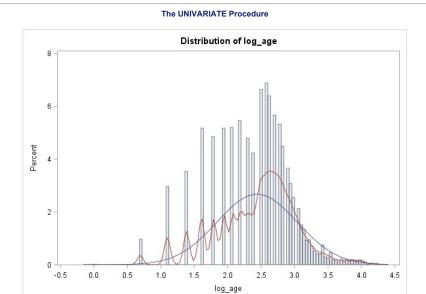
	Basic Statistical Measures				
Location Variability					
Mean	2.439617	Std Deviation	0.59721		
Median	2.564949	Variance	0.35666		
Mode	2.564949	Range	4.23411		
		Interquartile Range	0.75377		

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 2713.78		Pr > t	<.0001
Sign	М	220619.5	Pr >= M	<.0001
Signed Rank	s	4.867E10	Pr >= S	<.0001

Quantiles (Definition 5)			
Level	Quantile		
100% Max	4.23411		
99%	3.87120		
95%	3.29584		
90%	3.09104		
75% Q3	2.83321		
50% Median	2.56495		
25% Q1	2.07944		
10%	1.60944		
5%	1.38629		
1%	1.09861		
0% Min	0.00000		

Е	Extreme Observations				
Lo	Lowest		nest		
Value	Obs	Value	Obs		
0	436421	4.23411	413677		
0	435803	4.23411	414276		
0	435175	4.23411	421223		
0	434416	4.23411	427865		
0	432270	4.23411	433379		

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Curves — Normal(Mu=2.4396 Sigma=0.5972) — Kernel(c=0.79)

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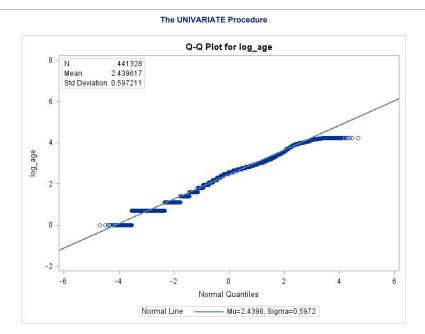
The UNIVARIATE Procedure Fitted Normal Distribution for log_age

Parameters for Normal Distribution				
Parameter	Symbol	Estimate		
Mean	Mu	2.439617		
Std Dev	Sigma	0.597211		

Goodness-of-Fit Tests for Normal Distribution				
Test	Statistic p Value			ue
Kolmogorov-Smirnov	D	0.10632	Pr > D	<0.010
Cramer-von Mises	W-Sq	689.47853	Pr > W-Sq	<0.005
Anderson-Darling	A-Sq	3717.83189	Pr > A-Sq	<0.005

Quantiles for Normal Distribution			
	Quantile		
Percent	Observed	Estimated	
1.0	1.09861	1.05030	
5.0	1.38629	1.45729	
10.0	1.60944	1.67426	
25.0	2.07944	2.03680	
50.0	2.56495	2.43962	
75.0	2.83321	2.84243	
90.0	3.09104	3.20497	
95.0	3.29584	3.42194	
99.0	3.87120	3.82894	

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The UNIVARIATE Procedure Variable: log_odometer

Moments				
N	441328	Sum Weights	441328	
Mean	11.5099709	Sum Observations	5079672.44	
Std Deviation	0.74909932	Variance	0.56114979	
Skewness	-1.831209	Kurtosis	5.30995693	
Uncorrected SS	58714532.4	Corrected SS	247650.552	
Coeff Variation	6.50826422	Std Error Mean	0.00112761	

Basic Statistical Measures			
Location Variability			
Mean	11.50997	Std Deviation	0.74910
Median	11.69525	Variance	0.56115
Mode	11.91839	Range	6.90575
		Interquartile Range	0.75473

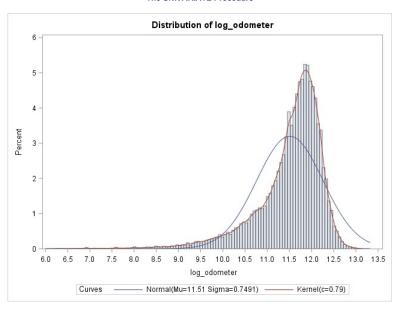
Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 10207.41		Pr > t	<.0001
Sign	М	220664	Pr >= M	<.0001
Signed Rank	s	4.869E10	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	13.12236	
99%	12.57764	
95%	12.34218	
90%	12.21006	
75% Q3	11.99322	
50% Median	11.69525	
25% Q1	11.23849	
10%	10.55347	
5%	10.04325	
1%	8.85066	
0% Min	6.21661	

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
6.21661	5185	13.1204	111963	
6.22456	248727	13.1213	72706	
6.22456	248708	13.1213	119052	
6.22456	248475	13.1222	143388	
6.22456	242617	13.1224	333314	

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The UNIVARIATE Procedure Fitted Normal Distribution for log_odometer

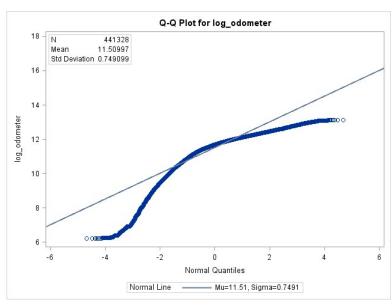
Parameters	Parameters for Normal Distribution			
Parameter Symbol Estimate				
Mean	Mu	11.50997		
Std Dev	Sigma	0.749099		

Goodness-of-Fit Tests for Normal Distribution					
Test	Statistic p Value			ue	
Kolmogorov-Smirnov	D	0.1265	Pr > D	<0.010	
Cramer-von Mises	W-Sq	2556.5039	Pr > W-Sq	<0.005	
Anderson-Darling	A-Sq	14569.5933	Pr > A-Sq	<0.005	

Quantiles for Normal Distribution				
	Quantile			
Percent	Observed	Estimated		
1.0	8.85066	9.76731		
5.0	10.04325	10.27781		
10.0	10.55347	10.54996		
25.0	11.23849	11.00471		
50.0	11.69525	11.50997		
75.0	11.99322	12.01523		
90.0	12.21006	12.46998		
95.0	12.34218	12.74213		
99.0	12.57764	13.25264		

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The UNIVARIATE Procedure Variable: log_price fuel = diesel

Moments					
N	96724	Sum Weights	96724		
Mean	9.66526717	Sum Observations	934863.302		
Std Deviation	0.83676533	Variance	0.70017621		
Skewness	-1.0139988	Kurtosis	1.74142485		
Uncorrected SS	9103426.73	Corrected SS	67723.1439		
Coeff Variation	8.65744643	Std Error Mean	0.00269052		

Basic Statistical Measures				
Location Variability				
Mean	9.665267	Std Deviation	0.83677	
Median	9.769956	Variance	0.70018	
Mode 9.615805		Range	6.44671	
		Interquartile Range	1.06454	

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t	3592.339	Pr > t	<.0001
Sign	М	48362	Pr >= M	<.0001
Signed Rank	s	2.3389E9	Pr >= S	<.0001

Quantiles (Definition 5)			
Level	Quantile		
100% Max	11.15624		
99%	11.00210		
95%	10.78932		
90%	10.62128		
75% Q3	10.27488		
50% Median	9.76996		
25% Q1	9.21034		
10%	8.55641		
5%	8.15909		
1%	7.09008		
0% Min	4.70953		

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
4.70953	979434	11.1562	191188	
4.70953	226032	11.1562	1.28E6	
4.74493	818210	11.1562	1.29E6	
4.74493	295048	11.1562	1.3E6	
4.78749	1.33E6	11.1562	1.3E6	

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The UNIVARIATE Procedure Variable: log_price fuel = electric

Moments					
N	1218	Sum Weights	1218		
Mean	9.30468868	Sum Observations	11333.1108		
Std Deviation	0.82769509	Variance	0.68507916		
Skewness	-1.9857136	Kurtosis	6.46831128		
Uncorrected SS	106284.809	Corrected SS	833.741335		
Coeff Variation	8.89546244	Std Error Mean	0.02371629		

Basic Statistical Measures					
Location Variability					
Mean	9.304689	Std Deviation	0.82770		
Median	9.392245	Variance	0.68508		
Mode	9.797849	Range	6.04501		
		Interquartile Range	0.70563		

Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t 392.3332		Pr > t	<.0001
Sign	М	609	Pr >= M	<.0001
Signed Rank	s	371185.5	Pr >= S	<.0001

Quantiles (Definition 5)				
Level	Quantile			
100% Max	10.87332			
99%	10.75769			
95%	10.30226			
90%	10.02127			
75% Q3	9.79256			
50% Median	9.39225			
25% Q1	9.08693			
10%	8.47637			
5%	7.71869			
1%	5.85793			
0% Min	4.82831			

Extreme Observations					
Lowest		Highest			
Value Obs		Value	Obs		
4.82831	824440	10.7643	196296		
4.82831	714032	10.7975	177008		
4.96284	25058	10.7975	196159		
4.96981	928571	10.8198	1.49E6		
5.29832	481641	10.8733	43475		

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The UNIVARIATE Procedure Variable: log_price fuel = gas

Moments					
N	1348019				
Mean	8.76078486	Sum Observations	11809704.4		
Std Deviation	1.02144539	Variance	1.04335068		
Skewness	-0.4204588	Kurtosis	-0.0701855		
Uncorrected SS	104868735	Corrected SS	1406455.49		
Coeff Variation	11.6592908	Std Error Mean	0.00087977		

Basic Statistical Measures					
Location Variability					
Mean	8.760785	Std Deviation	1.02145		
Median	8.838552	Variance	1.04335		
Mode 7.824046 Range 6.5411					
Interquartile Range 1.44629					

Tests for Location: Mu0=0				
Test	Statistic p Value			
Student's t	t	9958.086	Pr > t	<.0001
Sign	М	674009.5	Pr >= M	<.0001
Signed Rank	s	4.543E11	Pr >= S	<.0001

Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.15624			
99%	10.64542			
95%	10.27505			
90%	10.04303			
75% Q3	9.54646			
50% Median	8.83855			
25% Q1	8.10016			
10%	7.37776			
5%	6.90776			
1%	6.21461			
0% Min	4.61512			

Extreme Observations					
Lowest		Highest			
Value	Obs	Value	Obs		
4.61512	1.08E6	11.1562	1.23E6		
4.61512	608170	11.1562	152431		
4.61512	238902	11.1562	187687		
4.62497	1.26E6	11.1562	695988		
4.62497	1.08E6	11.1562	696850		

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The UNIVARIATE Procedure Variable: log_price fuel = hybrid

Moments					
N	10092				
Mean	9.01597926	Sum Observations	90989.2627		
Std Deviation	0.75941945	Variance	0.57671791		
Skewness	-1.1100428	Kurtosis	3.48433981		
Uncorrected SS	826176.965	Corrected SS	5819.66041		
Coeff Variation	8.42303906	Std Error Mean	0.0075595		

Basic Statistical Measures					
Location Variability					
Mean	9.015979	Std Deviation	0.75942		
Median	9.088173	Variance	0.57672		
Mode 8.612503 Range 6					
Interquartile Range 0.93295					

Tests for Location: Mu0=0				
Test	Statistic p Value			
Student's t	t 1192.669		Pr > t	<.0001
Sign	М	5046	Pr >= M	<.0001
Signed Rank	S 25464639 Pr >= S <.00			

Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.15482			
99%	10.51325			
95%	10.06900			
90%	9.85193			
75% Q3	9.54528			
50% Median	9.08817			
25% Q1	8.61232			
10%	8.16052			
5%	7.82405			
1%	6.39693			
0% Min	4.81218			

Extreme Observations					
Lowest		Highest			
Value Obs		Value	Obs		
4.81218	154401	11.0744	529182		
4.94876	1.47E6	11.0818	527452		
4.97673	1.11E6	11.0821	1.45E6		
5.01064	1.41E6	11.1548	813351		
5.01064	1.11E6	11.1548	814007		

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The UNIVARIATE Procedure Variable: log_price fuel = other

Moments				
N	37225			
Mean	9.29092085	Sum Observations	345854.529	
Std Deviation	1.01844698	Variance	1.03723424	
Skewness	-1.9219998	Kurtosis	4.84215054	
Uncorrected SS	3251917.06	Corrected SS	38610.0075	
Coeff Variation	10.9617442	Std Error Mean	0.00527863	

Basic Statistical Measures			
Location Variability			
Mean 9.290921 Std Deviation 1.			1.01845
Median	9.472320	Variance	1.03723
Mode 9.209840		Range	6.53953
		Interquartile Range	0.92862

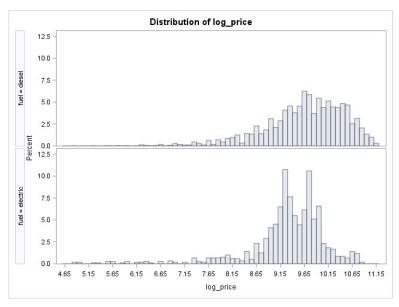
Tests for Location: Mu0=0				
Test	Statistic p Value			
Student's t	t	1760.101	Pr > t	<.0001
Sign	М	18612.5	Pr >= M	<.0001
Signed Rank	s	3.4643E8	Pr >= S	<.0001

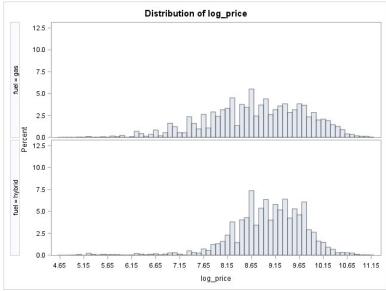
Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15465	
99%	10.68965	
95%	10.45737	
90%	10.29215	
75% Q3	9.90324	
50% Median	9.47232	
25% Q1	8.97462	
10%	8.29280	
5%	7.30653	
1%	5.29832	
0% Min	4.61512	

Extreme Observations				
Lowest		High	nest	
Value	Obs	Value	Obs	
4.61512	1.32E6	11.1404	741314	
4.61512	1.32E6	11.1418	1.04E6	
4.61512	1.32E6	11.1418	1.05E6	
4.61512	323245	11.1491	213387	
4.61512	228941	11.1546	612927	

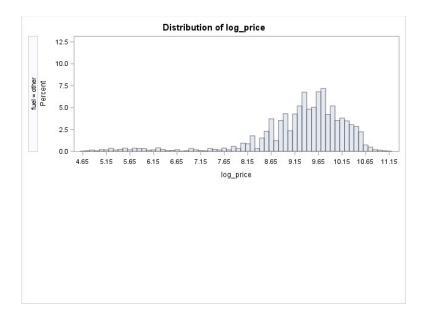
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The UNIVARIATE Procedure Variable: log_price title_status = clean

Moments				
N	1392304	Sum Weights	1392304	
Mean	8.84437826	Sum Observations	12314063.2	
Std Deviation	1.03217477	Variance	1.06538476	
Skewness	-0.4487876	Kurtosis	-0.0443961	
Uncorrected SS	110393572	Corrected SS	1483338.4	
Coeff Variation	11.6704051	Std Error Mean	0.00087475	

Basic Statistical Measures			
Location Variability			
Mean 8.844378 Std Deviation 1.032			
Median	8.922658	Variance	1.06538
Mode	7.824046	Range	6.54112
		Interquartile Range	1.45529

Tests for Location: Mu0=0				
Test	Statistic p Value			lue
Student's t	t	10110.7	Pr > t	<.0001
Sign	М	696152	Pr >= M	<.0001
Signed Rank	s	4.846E11	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.74721	
95%	10.37036	
90%	10.12651	
75% Q3	9.61581	
50% Median	8.92266	
25% Q1	8.16052	
10%	7.49554	
5%	6.95655	
1%	6.21461	
0% Min	4.61512	

Extreme Observations				
Low	est	High	nest	
Value	Obs	Value	Obs	
4.61512	1.32E6	11.1562	696850	
4.61512	1.32E6	11.1562	1.28E6	
4.61512	1.32E6	11.1562	1.29E6	
4.61512	323245	11.1562	1.3E6	
4.61512	228941	11.1562	1.3E6	

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The UNIVARIATE Procedure Variable: log_price title_status = lien

Moments				
N	19408	Sum Weights	19408	
Mean	9.49416864	Sum Observations	184262.825	
Std Deviation	0.88240323	Variance	0.77863546	
Skewness	-1.3829685	Kurtosis	2.95825766	
Uncorrected SS	1764533.31	Corrected SS	15110.9783	
Coeff Variation	9.29416004	Std Error Mean	0.00633398	

Basic Statistical Measures				
Location Variability				
Mean	9.494169	194169 Std Deviation 0.8824		
Median	9.615805	Variance	0.77864	
Mode 9.615805 Ran		Range	6.32651	
		Interquartile Range	0.98083	

Tests for Location: Mu0=0				
Test		Statistic	p Val	lue
Student's t	t	1498.926	Pr > t	<.0001
Sign	М	9704	Pr >= M	<.0001
Signed Rank	s	94172468	Pr >= S	<.0001

Quantiles (Definition 5)			
Level	Quantile		
100% Max	11.15482		
99%	10.87805		
95%	10.59663		
90%	10.44871		
75% Q3	10.08581		
50% Median	9.61581		
25% Q1	9.10498		
10%	8.46590		
5%	7.82405		
1%	6.21461		
0% Min	4.82831		

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
4.82831	824440	11.1419	1.27E6	
5.01064	1.36E6	11.1419	1.31E6	
5.01064	262540	11.1491	424504	
5.01064	120577	11.1491	1.07E6	
5.01064	79056	11.1548	228314	

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The UNIVARIATE Procedure Variable: log_price title_status = missing

Moments				
N	6916	Sum Weights	6916	
Mean	7.28792521	Sum Observations	50403.2907	
Std Deviation	0.99697092	Variance	0.99395102	
Skewness	0.48516562	Kurtosis	0.11989059	
Uncorrected SS	374208.584	Corrected SS	6873.17133	
Coeff Variation	13.6797634	Std Error Mean	0.01198823	

Basic Statistical Measures				
Location Variability				
Mean	7.287925	Std Deviation	0.99697	
Median	7.237059	Variance	0.99395	
Mode	6.214608	Range	6.37261	
		Interquartile Range	1.38629	

Tests for Location: Mu0=0				
Test	Statistic		p Val	lue
Student's t	t	607.9235	Pr > t	<.0001
Sign	М	3458	Pr >= M	<.0001
Signed Rank	s	11959493	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.08214	
99%	9.90349	
95%	9.09381	
90%	8.61250	
75% Q3	7.93737	
50% Median	7.23706	
25% Q1	6.55108	
10%	6.21461	
5%	5.85793	
1%	5.29832	
0% Min	4.70953	

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
4.70953	646318	10.9151	430340	
4.81218	1.47E6	10.9151	1.13E6	
4.81218	1.35E6	11.0268	430216	
4.81218	486376	11.0268	434138	
4.81218	475997	11.0821	813359	

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The UNIVARIATE Procedure Variable: log_price title_status = parts onl

Moments				
N	2745	Sum Weights	2745	
Mean	6.69352543	Sum Observations	18373.7273	
Std Deviation	0.95068269	Variance	0.90379758	
Skewness	0.79806632	Kurtosis	1.13897317	
Uncorrected SS	125465.031	Corrected SS	2480.02056	
Coeff Variation	14.2030191	Std Error Mean	0.01814531	

	Basic Statistical Measures			
Location		Variability		
Mean	6.693525	Std Deviation	0.95068	
Median	6.551080	Variance	0.90380	
Mode	6.214608	Range	6.31001	
		Interquartile Range	1.02165	

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 368.8846		Pr > t	<.0001
Sign	М	1372.5	Pr >= M	<.0001
Signed Rank	s	1884443	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	10.92513	
99%	9.54681	
95%	8.51719	
90%	7.97247	
75% Q3	7.13090	
50% Median	6.55108	
25% Q1	6.10925	
10%	5.61677	
5%	5.29832	
1%	4.82831	
0% Min	4.61512	

Extreme Observations					
Lowest		Highest			
Value	Obs	Value	Obs		
4.61512	238902	10.2400	1.45E6		
4.70048	1.42E6	10.2751	90212		
4.70048	1E6	10.4773	83317		
4.70953	1.4E6	10.8198	115562		
4.70953	1.06E6	10.9251	867695		

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The UNIVARIATE Procedure Variable: log_price title_status = rebuilt

Moments					
N	43940	Sum Weights	43940		
Mean	8.86304664	Sum Observations	389442.269		
Std Deviation	0.79200381	Variance	0.62727003		
Skewness	-0.5234545	Kurtosis	0.73723485		
Uncorrected SS	3479206.61	Corrected SS	27561.6179		
Coeff Variation	8.93602211	Std Error Mean	0.00377831		

Basic Statistical Measures				
Location Variability				
Mean	8.863047	Std Deviation 0.79		
Median	8.921991	Variance	0.62727	
Mode	8.612503	Range	6.53970	
		Interquartile Range	1.02157	

Tests for Location: Mu0=0					
Test		Statistic	p Va	lue	
Student's t	t	2345.772	Pr > t	<.0001	
Sign	М	21970	Pr >= M	<.0001	
Signed Rank	s	4.8269E8	Pr >= S	<.0001	

Quantiles (Definition 5)			
Level	Quantile		
100% Max	11.15482		
99%	10.43412		
95%	10.08539		
90%	9.82553		
75% Q3	9.43340		
50% Median	8.92199		
25% Q1	8.41183		
10%	7.82405		
5%	7.49554		
1%	6.68461		
0% Min	4.61512		

Extreme Observations					
Lowest		Highest			
Value	Obs	Value	Obs		
4.61512	1.08E6	11.1419	246113		
4.62497	1.08E6	11.1419	760075		
4.70953	1.11E6	11.1419	1.34E6		
4.70953	1.06E6	11.1548	269915		
4.81218	1.34E6	11.1548	1.26E6		

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The UNIVARIATE Procedure Variable: log_price title_status = salvage

Moments					
N	27965	Sum Weights	27965		
Mean	8.4462474	Sum Observations	236199.309		
Std Deviation	0.93712549	Variance	0.87820418		
Skewness	-0.3982401	Kurtosis	0.02919644		
Uncorrected SS	2019555.9	Corrected SS	24558.1016		
Coeff Variation	11.0951698	Std Error Mean	0.0056039		

Basic Statistical Measures				
Location Variability				
Mean	ean 8.446247 Std Deviation 0.9		0.93713	
Median	8.517193	Variance	0.87820	
Mode	7.824046	Range	6.53396	
Interquartile Range 1.27536				

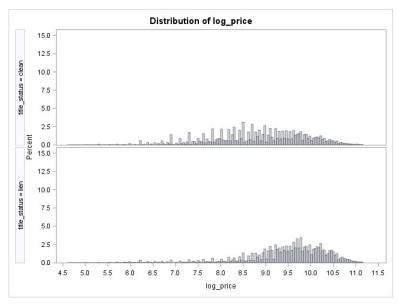
Tests for Location: Mu0=0					
Test		Statistic	p Va	lue	
Student's t	t	1507.209	Pr > t	<.0001	
Sign	М	13982.5	Pr >= M	<.0001	
Signed Rank	s	1.9552E8	Pr >= S	<.0001	

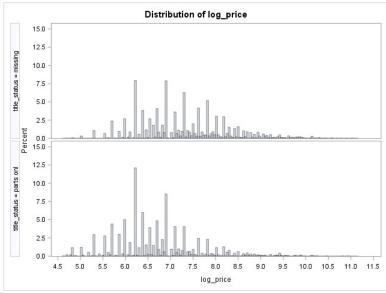
Quantiles (Definition 5)			
Level	Quantile		
100% Max	11.14908		
99%	10.30879		
95%	9.85214		
90%	9.60912		
75% Q3	9.09941		
50% Median	8.51719		
25% Q1	7.82405		
10%	7.17012		
5%	6.74524		
1%	6.10925		
0% Min	4.61512		

Extreme Observations					
Lowest		Highest			
Value	Obs	Value	Obs		
4.61512	608170	11.1491	13095		
4.78749	1.12E6	11.1491	86107		
4.78749	559335	11.1491	97457		
4.81218	1.1E6	11.1491	897222		
4.81218	1.06E6	11.1491	1.49E6		

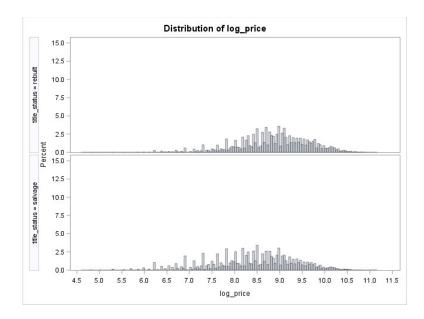
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The UNIVARIATE Procedure Variable: log_price transmission = automatic

Moments					
N	1310215	Sum Weights	1310215		
Mean	8.8573327	Sum Observations	11605010.2		
Std Deviation	1.02666533	Variance	1.0540417		
Skewness	-0.475595	Kurtosis	0.01519697		
Uncorrected SS	104170456	Corrected SS	1381020.19		
Coeff Variation	11.5911343	Std Error Mean	0.00089693		

Basic Statistical Measures					
Location Variability					
Mean	8.857333	Std Deviation 1.02			
Median	8.922658	Variance	1.05404		
Mode 7.824046		Range	6.54112		
		Interquartile Range	1.43269		

Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t	9875.187	Pr > t	<.0001
Sign	М	655107.5	Pr >= M	<.0001
Signed Rank	s	4.292E11	Pr >= S	<.0001

Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.15624			
99%	10.74074			
95%	10.37318			
90%	10.12655			
75% Q3	9.61581			
50% Median	8.92266			
25% Q1	8.18312			
10%	7.49554			
5%	6.99393			
1%	6.21461			
0% Min	4.61512			

Extreme Observations					
Low	est	High	nest		
Value	Value Obs		Obs		
4.61512	1.32E6	11.1562	696850		
4.61512	1.32E6	11.1562	1.28E6		
4.61512	1.32E6	11.1562	1.29E6		
4.61512	1.08E6	11.1562	1.3E6		
4.61512	608170	11.1562	1.3E6		

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The UNIVARIATE Procedure Variable: log_price transmission = manual

Moments					
N	158561 Sum Weights				
Mean	8.59155465	Sum Observations	1362285.5		
Std Deviation	1.03492399	Variance	1.07106767		
Skewness	-0.2167112	Kurtosis	-0.2006338		
Uncorrected SS	11873978.8	Corrected SS	169828.49		
Coeff Variation	12.0458291	Std Error Mean	0.00259902		

Basic Statistical Measures					
Location Variability					
Mean	8.591555	Std Deviation 1.03			
Median	8.612503	Variance	1.07107		
Mode 7.824046		Range	6.54112		
		Interquartile Range	1.44910		

Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t	3305.685	Pr > t	<.0001
Sign	М	79280.5	Pr >= M	<.0001
Signed Rank	s	6.2854E9	Pr >= S	<.0001

Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.15624			
99%	10.71442			
95%	10.22915			
90%	9.94750			
75% Q3	9.35010			
50% Median	8.61250			
25% Q1	7.90101			
10%	7.27932			
5%	6.85646			
1%	6.10925			
0% Min	4.61512			

Extreme Observations					
Low	est	High	nest		
Value	Value Obs		Obs		
4.61512	238902	11.1562	869522		
4.70953	646318	11.1562	1.23E6		
4.74493	315672	11.1562	152431		
4.78749	1.2E6	11.1562	187687		
4.78749	1.07E6	11.1562	695988		

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The UNIVARIATE Procedure Variable: log_price transmission = other

Moments					
N	N 24502 Sum Weights				
Mean	9.20124845	Sum Observations	225448.99		
Std Deviation	1.24034679	Variance	1.53846015		
Skewness	-1.4666941	Kurtosis	1.55232183		
Uncorrected SS	2112105.98	Corrected SS	37693.8121		
Coeff Variation	13.480201	Std Error Mean	0.00792396		

	Basic Statistical Measures				
Location Variability					
Mean	9.201248	Std Deviation 1.24			
Median	9.680031	Variance	1.53846		
Mode 6.214608		Range	6.44138		
		Interquartile Range	1.30833		

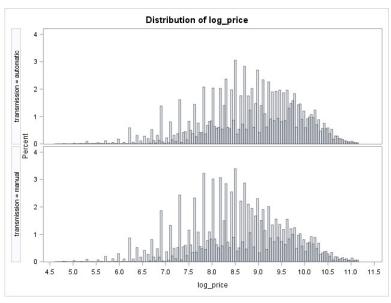
Tests for Location: Mu0=0				
Test S		Statistic	p Va	lue
Student's t	t	1161.193	Pr > t	<.0001
Sign	М	12251	Pr >= M	<.0001
Signed Rank	s	1.5009E8	Pr >= S	<.0001

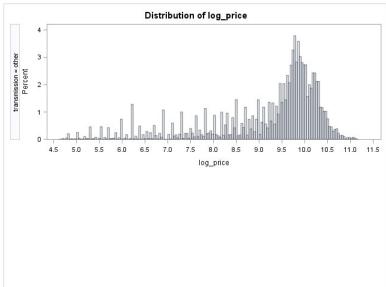
Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.14186			
99%	10.71431			
95%	10.42754			
90%	10.28534			
75% Q3	10.00785			
50% Median	9.68003			
25% Q1	8.69951			
10%	7.31322			
5%	6.21461			
1%	5.29832			
0% Min	4.70048			

Extreme Observations						
Lowest		Highest				
Value	Obs	Value	Obs			
4.70048	1.42E6	11.1124	265854			
4.70048	1.34E6	11.1124	275766			
4.70048	1.04E6	11.1124	1.12E6			
4.70048	1E6	11.1415	587755			
4.70048	666937	11.1419	63196			

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The UNIVARIATE Procedure Variable: log_price condition = excellent

Moments					
N	201812	Sum Weights	201812		
Mean	9.17064483	Sum Observations	1850746.17		
Std Deviation	0.78403596	Variance	0.61471238		
Skewness	-0.6439586	Kurtosis	1.75319265		
Uncorrected SS	17096591.5	Corrected SS	124055.721		
Coeff Variation	8.54940926	Std Error Mean	0.00174527		

Basic Statistical Measures				
Location Variability				
Mean	9.170645	Std Deviation	0.78404	
Median	9.208338	Variance	0.61471	
Mode	8.411833	Range	6.41125	
Interquartile Range 1.0522				

Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t	5254.572	Pr > t	<.0001
Sign	М	100906	Pr >= M	<.0001
Signed Rank	s	1.018E10	Pr >= S	<.0001

Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.15618			
99%	10.71442			
95%	10.35774			
90%	10.13630			
75% Q3	9.73495			
50% Median	9.20834			
25% Q1	8.68271			
10%	8.21609			
5%	7.93737			
1%	7.09008			
0% Min	4.74493			

Extreme Observations					
Lowest		Highest			
Value	Obs	Value	Obs		
4.74493	91598	11.1562	104849		
4.77912	433279	11.1562	144595		
4.77912	18383	11.1562	298038		
4.79579	430337	11.1562	345237		
4.81218	430791	11.1562	347087		

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The UNIVARIATE Procedure Variable: log_price condition = fair

Moments					
N	26164				
Mean	7.50067685	Sum Observations	196247.709		
Std Deviation	0.78367213	Variance	0.614142		
Skewness	0.29235374	Kurtosis	0.00975693		
Uncorrected SS	1488058.44	Corrected SS	16067.7973		
Coeff Variation	10.4480188	Std Error Mean	0.00484487		

Basic Statistical Measures			
Location Variability			
Mean	7.500677	Std Deviation	0.78367
Median	7.494708	Variance	0.61414
Mode	7.313220	Range	6.26996
		Interquartile Range	1.09861

Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t	1548.168	Pr > t	<.0001
Sign	М	13082	Pr >= M	<.0001
Signed Rank	s	1.7115E8	Pr >= S	<.0001

Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.08214			
99%	9.47232			
95%	8.85367			
90%	8.51719			
75% Q3	8.00637			
50% Median	7.49471			
25% Q1	6.90776			
10%	6.55108			
5%	6.21461			
1%	5.85793			
0% Min	4.81218			

treme Ob	servation	10					
	Extreme Observations						
Lowest		nest					
Obs	Value	Obs					
370741	10.6573	356284					
277716	10.7144	60990					
433798	11.0021	256093					
332714	11.0021	349188					
271456	11.0821	34165					
	Obs 370741 277716 433798 332714	Obs Value 370741 10.6573 277716 10.7144 433798 11.0021					

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The UNIVARIATE Procedure Variable: log_price condition = good

Moments				
N	158320	158320		
Mean	8.54807139	Sum Observations	1353330.66	
Std Deviation	0.8398736	Variance	0.70538766	
Skewness	-0.0147621	Kurtosis	-0.0696211	
Uncorrected SS	11680043.4	Corrected SS	111676.27	
Coeff Variation	9.82529932	Std Error Mean	0.00211079	

Basic Statistical Measures			
Location Variability			
Mean 8.548071 Std Deviation 0.833		0.83987	
Median	8.516993	Variance	0.70539
Mode	7.824046	Range	6.53126
		Interquartile Range	1.10687

Tests for Location: Mu0=0				
Test	Statistic p Value			lue
Student's t	t	4049.693	Pr > t	<.0001
Sign	М	79160	Pr >= M	<.0001
Signed Rank	s	6.2663E9	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.40411	
95%	9.97581	
90%	9.68003	
75% Q3	9.10487	
50% Median	8.51699	
25% Q1	7.99800	
10%	7.49554	
5%	7.20786	
1%	6.62007	
0% Min	4.62497	

Extreme Observations				
Lowest Highest				
Value	Obs	Value	Obs	
4.62497	365541	11.1411	377999	
4.70953	159856	11.1419	71326	
4.74493	85116	11.1419	218406	
4.75359	359837	11.1505	78990	
4.77912	82681	11.1562	55891	

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The UNIVARIATE Procedure Variable: log_price condition = like new

Moments				
N	51552			
Mean	9.50449285	Sum Observations	489975.615	
Std Deviation	0.83004809	Variance	0.68897983	
Skewness	-0.9377766	Kurtosis	1.89271164	
Uncorrected SS	4692487.33	Corrected SS	35517.5991	
Coeff Variation	8.73321808	Std Error Mean	0.00365578	

Basic Statistical Measures				
Location Variability				
Mean	9.504493	Std Deviation	0.83005	
Median	9.615405	Variance	0.68898	
Mode 9.047821		Range	6.34405	
		Interquartile Range	1.13555	

Tests for Location: Mu0=0				
Test	Statistic p Value			lue
Student's t	t	2599.851	Pr > t	<.0001
Sign	М	25776	Pr >= M	<.0001
Signed Rank	s	6.6442E8	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.96820	
95%	10.64531	
90%	10.46296	
75% Q3	10.12262	
50% Median	9.61541	
25% Q1	8.98707	
10%	8.47637	
5%	8.10016	
1%	6.90776	
0% Min	4.81218	

Extreme Observations				
Low	est	High	nest	
Value	Obs	Value	Obs	
4.81218	375525	11.1562	236142	
4.81218	69614	11.1562	239235	
4.96981	269973	11.1562	239416	
4.99721	91595	11.1562	252610	
5.01064	406090	11.1562	56794	

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The UNIVARIATE Procedure Variable: log_price condition = new

Moments				
N	1761	Sum Weights	1761	
Mean	9.50391397	Sum Observations	16736.3925	
Std Deviation	1.08017289	Variance	1.16677348	
Skewness	-0.9775142	Kurtosis	1.00290607	
Uncorrected SS	161114.756	Corrected SS	2053.52133	
Coeff Variation	11.3655584	Std Error Mean	0.0257403	

Basic Statistical Measures			
Location Variability			
Mean 9.503914 Std Deviation 1.08		1.08017	
Median	9.729134	Variance	1.16677
Mode	8.698681	Range	6.14560
		Interquartile Range	1.53016

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 369.2231		Pr > t	<.0001
Sign	М	880.5	Pr >= M	<.0001
Signed Rank	s	775720.5	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	11.08214	
95%	10.86952	
90%	10.70324	
75% Q3	10.30895	
50% Median	9.72913	
25% Q1	8.77879	
10%	8.15909	
5%	7.31322	
1%	6.07074	
0% Min	5.01064	

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
5.01064	373760	11.1491	432054	
5.19296	193599	11.1491	434416	
5.26269	9304	11.1491	435803	
5.29832	73215	11.1548	65808	
5.52146	368891	11.1562	199801	

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The UNIVARIATE Procedure Variable: log_price condition = salvage

Moments				
N	1719	Sum Weights	1719	
Mean	7.17486631	Sum Observations	12333.5952	
Std Deviation	1.03646369	Variance	1.07425698	
Skewness	0.68845436	Kurtosis	-0.1046446	
Uncorrected SS	90337.4701	Corrected SS	1845.57349	
Coeff Variation	14.4457561	Std Error Mean	0.02499863	

	Basic Statistical Measures				
Location Variability					
Mean	7.174866	Std Deviation	1.03646		
Median	6.907755	Variance	1.07426		
Mode	6.214608	Range	6.15601		
		Interquartile Range	1.42712		

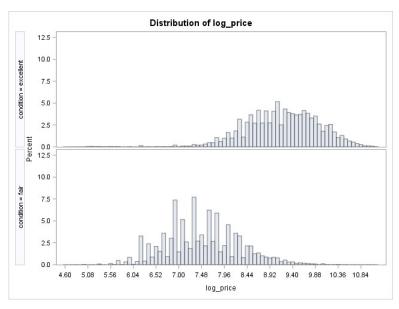
Tests for Location: Mu0=0				
Test	Statistic		p Val	ue
Student's t	t 287.0104		Pr > t	<.0001
Sign	М	859.5	Pr >= M	<.0001
Signed Rank	s	739170	Pr >= S	<.0001

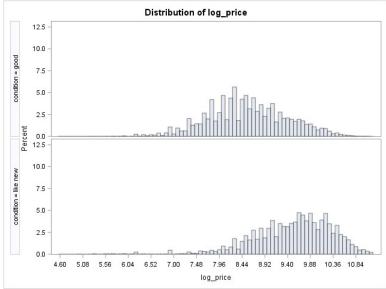
Quantiles (Definition 5)		
Level	Quantile	
100% Max	10.96820	
99%	9.76996	
95%	9.20533	
90%	8.69951	
75% Q3	7.82405	
50% Median	6.90776	
25% Q1	6.39693	
10%	5.99146	
5%	5.85793	
1%	5.29832	
0% Min	4.81218	

Extreme Observations				
Lowest		Highest		
Value	Obs	Value	Obs	
4.81218	196141	10.1064	231651	
4.81218	192870	10.1266	307112	
5.01064	214203	10.2400	102782	
5.01064	209442	10.4043	146134	
5.01064	98665	10.9682	167661	

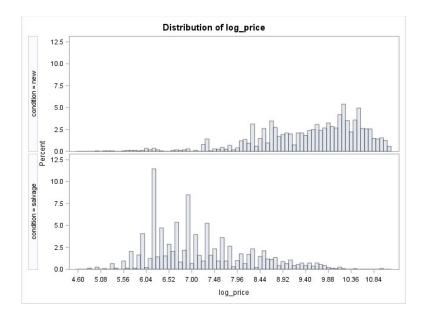
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The UNIVARIATE Procedure Variable: log_price cylinders = 10 cylinders

Moments				
N	2248	Sum Weights	2248	
Mean	9.20258287	Sum Observations	20687.4063	
Std Deviation	0.81576213	Variance	0.66546785	
Skewness	-0.2574251	Kurtosis	0.44173576	
Uncorrected SS	191872.877	Corrected SS	1495.30625	
Coeff Variation	8.86449096	Std Error Mean	0.01720542	

Basic Statistical Measures				
Location		Variability		
Mean	9.202583	Std Deviation	0.81576	
Median	9.185023	Variance	0.66547	
Mode	8.612503	Range	5.72676	
		Interquartile Range	1.11737	

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 534.8652		Pr > t	<.0001
Sign	М	1124	Pr >= M	<.0001
Signed Rank	s	1263938	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.09739	
99%	10.80973	
95%	10.54402	
90%	10.30892	
75% Q3	9.76996	
50% Median	9.18502	
25% Q1	8.65259	
10%	8.23616	
5%	7.97247	
1%	7.17012	
0% Min	5.37064	

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
5.37064	77347	11.0509	367063
5.52146	61328	11.0666	394578
5.85793	113855	11.0700	242258
5.91080	341960	11.0744	394823
6.21461	297529	11.0974	287054

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The UNIVARIATE Procedure Variable: log_price cylinders = 12 cylinders

Moments				
N	281	Sum Weights	281	
Mean	9.08169517	Sum Observations	2551.95634	
Std Deviation	0.88502133	Variance	0.78326275	
Skewness	-0.0853058	Kurtosis	-0.2111983	
Uncorrected SS	23395.4032	Corrected SS	219.313571	
Coeff Variation	9.74511159	Std Error Mean	0.05279595	

Basic Statistical Measures			
Location Variability			
Mean 9.081695 Std Deviation 0.8			
Median	9.047821	Variance	0.78326
Mode 8.699515 Range 4.74		4.74493	
		Interquartile Range	1.31464

Tests for Location: Mu0=0				
Test	est Statistic p Value			
Student's t	t 172.015		Pr > t	<.0001
Sign	М	140.5	Pr >= M	<.0001
Signed Rank	s	19810.5	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.14186	
99%	11.10646	
95%	10.46310	
90%	10.25766	
75% Q3	9.76996	
50% Median	9.04782	
25% Q1	8.45532	
10%	7.93737	
5%	7.60090	
1%	7.00307	
0% Min	6.39693	

Extreme Observations					
Low	est	High	hest		
Value	Obs	Value	Obs		
6.39693	381490	11.0509	7113		
6.85646	388788	11.0821	171431		
7.00307	354804	11.1065	355796		
7.09008	357381	11.1419	156439		
7.24423	360859	11.1419	368399		

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The UNIVARIATE Procedure Variable: log_price cylinders = 3 cylinders

Moments				
N	530	Sum Weights	530	
Mean	8.45711165	Sum Observations	4482.26917	
Std Deviation	1.01177256	Variance	1.02368371	
Skewness	-0.7160143	Kurtosis	0.7851244	
Uncorrected SS	38448.5795	Corrected SS	541.528684	
Coeff Variation	11.963571	Std Error Mean	0.04394859	

Basic Statistical Measures			
Location Variability			
Mean 8.457112 Std Deviation 1.01			
Median	8.612503	Variance	1.02368
Mode	7.090077	Range	5.71775
		Interquartile Range	1.13118

Tests for Location: Mu0=0				
Test	Statistic p Value			
Student's t	t 192.4319		Pr > t	<.0001
Sign	М	265	Pr >= M	<.0001
Signed Rank	s	70357.5	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	10.75471	
99%	10.35774	
95%	10.03889	
90%	9.61574	
75% Q3	9.10365	
50% Median	8.61250	
25% Q1	7.97247	
10%	7.09008	
5%	6.55108	
1%	5.16479	
0% Min	5.03695	

Extreme Observations				
Lowest Highest				
Value	Obs	Value	Obs	
5.03695	430437	10.4602	40478	
5.11799	437809	10.5051	310274	
5.11799	433175	10.5187	76874	
5.11799	18388	10.5941	83198	
5.12396	430368	10.7547	10965	

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The UNIVARIATE Procedure Variable: log_price cylinders = 4 cylinders

Moments				
N	128419	Sum Weights	128419	
Mean	8.68497185	Sum Observations	1115315.4	
Std Deviation	0.88585885	Variance	0.78474591	
Skewness	-0.6665132	Kurtosis	0.62787152	
Uncorrected SS	9787258.35	Corrected SS	100775.5	
Coeff Variation	10.1999047	Std Error Mean	0.00247201	

Basic Statistical Measures			
Location Variability			
Mean 8.684972 Std Deviation 0.885		0.88586	
Median	8.779557	Variance	0.78475
Mode 7.824046 Range		Range	6.53126
		Interquartile Range	1.16315

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 3513.327		Pr > t	<.0001
Sign	М	64209.5	Pr >= M	<.0001
Signed Rank	s	4.1229E9	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.30862	
95%	9.92818	
90%	9.73979	
75% Q3	9.32367	
50% Median	8.77956	
25% Q1	8.16052	
10%	7.52294	
5%	7.09008	
1%	6.21461	
0% Min	4.62497	

Extreme Observations				
Low	Lowest		nest	
Value	Obs	Value	Obs	
4.62497	365541	11.1346	371222	
4.74493	91598	11.1419	433106	
4.77912	18383	11.1548	235208	
4.78749	61480	11.1548	235436	
4.79579	430337	11.1562	55891	

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The UNIVARIATE Procedure Variable: log_price cylinders = 5 cylinders

Moments				
N	4543	Sum Weights	4543	
Mean	8.4828423	Sum Observations	38537.5526	
Std Deviation	0.7505778	Variance	0.56336703	
Skewness	-0.5018728	Kurtosis	0.88872165	
Uncorrected SS	329466.794	Corrected SS	2558.81307	
Coeff Variation	8.84818759	Std Error Mean	0.01113587	

Basic Statistical Measures				
Location Variability				
Mean	8.482842	Std Deviation	0.75058	
Median	8.517193	Variance	0.56337	
Mode	7.824046	Range	5.64837	
		Interquartile Range	0.91504	

Note: The mode displayed is the smallest of 2 modes with a count of 110.

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 761.758		Pr > t	<.0001
Sign	М	2271.5	Pr >= M	<.0001
Signed Rank	s	5160848	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.00023	
99%	10.18490	
95%	9.58190	
90%	9.30556	
75% Q3	8.98595	
50% Median	8.51719	
25% Q1	8.07091	
10%	7.49554	
5%	7.09008	
1%	6.30992	
0% Min	5.35186	

Extreme Observations				
Low	Lowest		nest	
Value	Obs	Value	Obs	
5.35186	360706	10.7144	91396	
5.35186	354210	10.7144	139321	
5.35186	354068	10.7364	370046	
5.50939	155417	10.9151	9114	
5.52146	275154	11.0002	433671	

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The UNIVARIATE Procedure Variable: log_price cylinders = 6 cylinders

Moments				
N	158218	Sum Weights	158218	
Mean	8.79071325	Sum Observations	1390849.07	
Std Deviation	0.98135741	Variance	0.96306237	
Skewness	-0.2959257	Kurtosis	-0.1372369	
Uncorrected SS	12378928.2	Corrected SS	152372.84	
Coeff Variation	11.1635698	Std Error Mean	0.00246717	

Basic Statistical Measures				
Location Var		Variability		
Mean	8.790713	Std Deviation	0.98136	
Median	8.809564	Variance	0.96306	
Mode	7.824046	Range	6.37711	
		Interquartile Range	1.38544	

Tests for Location: Mu0=0				
Test	Statistic		p Va	lue
Student's t	t 3563.074		Pr > t	<.0001
Sign	М	79109	Pr >= M	<.0001
Signed Rank	s	6.2583E9	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.65726	
95%	10.30561	
90%	10.08560	
75% Q3	9.54596	
50% Median	8.80956	
25% Q1	8.16052	
10%	7.54961	
5%	7.09008	
1%	6.21461	
0% Min	4.77912	

Extreme Observations					
Low	est	Highest			
Value	Obs	Value	Obs		
4.77912	433279	11.1491	326587		
4.77912	82681	11.1548	171189		
4.80402	169606	11.1562	104504		
4.80402	155614	11.1562	104849		
4.81218	430791	11.1562	56794		

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The UNIVARIATE Procedure Variable: log_price cylinders = 8 cylinders

Moments					
N	133876	Sum Weights	133876		
Mean	9.13416851	Sum Observations	1222845.94		
Std Deviation	0.93430502	Variance	0.87292587		
Skewness	-0.4907605	Kurtosis	0.06762066		
Uncorrected SS	11286543.9	Corrected SS	116862.951		
Coeff Variation	10.2286816	Std Error Mean	0.00255351		

Basic Statistical Measures				
Location Variability				
Mean	9.134169	Std Deviation	0.93431	
Median	9.209840	Variance	0.87293	
Mode	8.160518	Range	6.44671	
		Interquartile Range	1.30853	

Tests for Location: Mu0=0				
Test	Statistic p Value			lue
Student's t	t	3577.105	Pr > t	<.0001
Sign	М	66938	Pr >= M	<.0001
Signed Rank	s	4.4807E9	Pr >= S	<.0001

Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.15624	
99%	10.83958	
95%	10.50507	
90%	10.27505	
75% Q3	9.82553	
50% Median	9.20984	
25% Q1	8.51699	
10%	7.88796	
5%	7.49554	
1%	6.68461	
0% Min	4.70953	

Extreme Observations					
Low	High	nest			
Value	Obs	Value	Obs		
4.70953	159856	11.1562	252610		
4.74493	85116	11.1562	298038		
4.75359	359837	11.1562	345237		
4.78749	202298	11.1562	347087		
4.81218	217430	11.1562	199801		

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The UNIVARIATE Procedure Variable: log_price cylinders = other

Moments					
N	13213	Sum Weights	13213		
Mean	9.39230693	Sum Observations	124100.551		
Std Deviation	0.73453463	Variance	0.53954112		
Skewness	-0.8068939	Kurtosis	2.00651351		
Uncorrected SS	1172718.89	Corrected SS	7128.41724		
Coeff Variation	7.82059862	Std Error Mean	0.00639016		

Basic Statistical Measures				
Location Variability				
Mean	9.392307	Std Deviation	0.73453	
Median	9.470780	Variance	0.53954	
Mode 9.209840		Range	5.93778	
		Interquartile Range	0.91315	

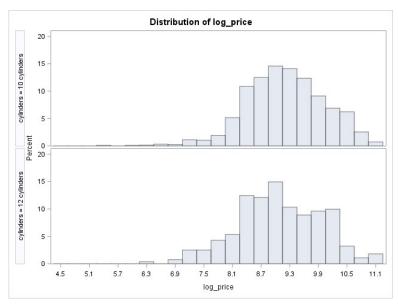
Tests for Location: Mu0=0					
Test	Statistic p Value				
Student's t	t 1469.808		Pr > t	<.0001	
Sign	М	6606.5	Pr >= M	<.0001	
Signed Rank	s	43649146	Pr >= S	<.0001	

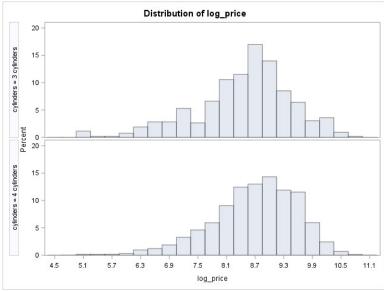
Quantiles (Definition 5)		
Level	Quantile	
100% Max	11.14179	
99%	10.81968	
95%	10.49114	
90%	10.23992	
75% Q3	9.89848	
50% Median	9.47078	
25% Q1	8.98532	
10%	8.51519	
5%	8.18730	
1%	7.16627	
0% Min	5.20401	

Extreme Observations					
Low	est	Highest			
Value	Obs	Value	Obs		
5.20401	30154	11.0898	125786		
5.21494	30153	11.1418	64175		
5.24175	358605	11.1418	70604		
5.28827	356272	11.1418	317013		
5.42935	356476	11.1418	318519		

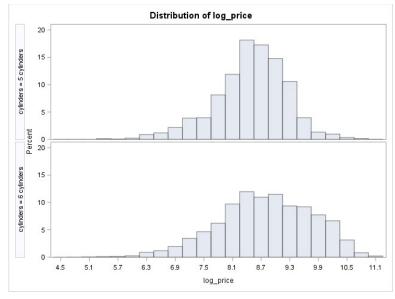
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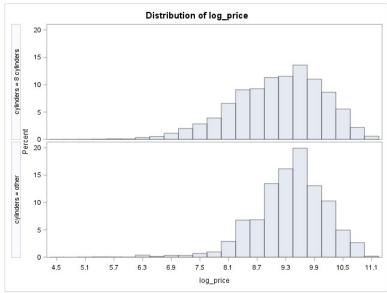






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The UNIVARIATE Procedure Variable: log_price drive = 4wd

Moments					
N	180454	Sum Weights	180454		
Mean	9.19098056	Sum Observations	1658549.21		
Std Deviation	0.9308303	Variance	0.86644505		
Skewness	-0.6206143	Kurtosis	0.30095242		
Uncorrected SS	15400046.1	Corrected SS	156352.61		
Coeff Variation	10.1276496	Std Error Mean	0.00219123		

Basic Statistical Measures				
Location Variability				
Mean	9.190981	Std Deviation 0.93		
Median	9.301095	Variance	0.86645	
Mode	8.160518	Range	6.44671	
		Interquartile Range	1.28939	

Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t	4194.446	Pr > t	<.0001
Sign	М	90227	Pr >= M	<.0001
Signed Rank	s	8.141E9	Pr >= S	<.0001

Quantiles (Definition 5)			
Level	Quantile		
100% Max	11.15624		
99%	10.81778		
95%	10.49127		
90%	10.30728		
75% Q3	9.90098		
50% Median	9.30109		
25% Q1	8.61159		
10%	7.97247		
5%	7.54961		
1%	6.68461		
0% Min	4.70953		

Extreme Observations				
Lowest Highest				
Value	Obs	Value	Obs	
4.70953	159856	11.1562	236142	
4.74493	85116	11.1562	239235	
4.77912	433279	11.1562	239416	
4.78749	61480	11.1562	298038	
4.81218	375544	11.1562	56794	

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The UNIVARIATE Procedure Variable: log_price drive = fwd

Moments					
N	Sum Weights	161004			
Mean	8.5401619	Sum Observations	1375000.23		
Std Deviation	0.87163919	Variance	0.75975488		
Skewness	-0.5569099	Kurtosis	0.42516481		
Uncorrected SS	11865047.4	Corrected SS	122322.815		
Coeff Variation	10.2063544	Std Error Mean	0.00217229		

Basic Statistical Measures				
Location Variability				
Mean	ean 8.540162 Std Deviation 0.8		0.87164	
Median	8.612503	Variance	0.75975	
Mode 7.824046		Range	6.53126	
		Interquartile Range	1.15335	

Tests for Location: Mu0=0				
Test		Statistic	p Va	lue
Student's t	t	3931.404	Pr > t	<.0001
Sign	М	80502	Pr >= M	<.0001
Signed Rank	s	6.4806E9	Pr >= S	<.0001

Quantiles (Definition 5)			
Level	Quantile		
100% Max	11.15624		
99%	10.18490		
95%	9.79807		
90%	9.61414		
75% Q3	9.15905		
50% Median	8.61250		
25% Q1	8.00570		
10%	7.37776		
5%	6.90776		
1%	6.21461		
0% Min	4.62497		

Extreme Observations				
Low	High	nest		
Value	Value Obs		Obs	
4.62497	365541	11.1491	279727	
4.74493	91598	11.1491	432054	
4.77912	82681	11.1491	434416	
4.77912	18383	11.1491	435803	
4.79579	430337	11.1562	55891	

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The UNIVARIATE Procedure Variable: log_price drive = rwd

Moments					
N	Sum Weights	99870			
Mean	8.86973782	Sum Observations	885820.716		
Std Deviation	0.93088919	Variance	0.86655468		
Skewness	-0.376743	Kurtosis	0.06369345		
Uncorrected SS	7943539.45	Corrected SS	86541.9494		
Coeff Variation	10.495115	Std Error Mean	0.00294565		

Basic Statistical Measures				
Location Variability				
Mean	8.869738	Std Deviation 0.93		
Median	8.922658	Variance	0.86655	
Mode 8.160518		Range	6.40265	
		Interquartile Range	1.27808	

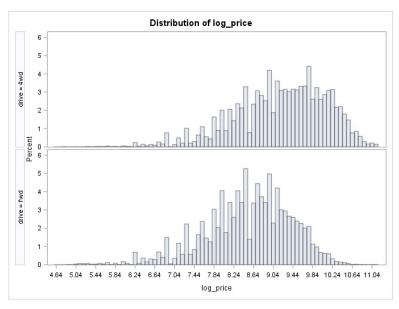
Tests for Location: Mu0=0					
Test	Statistic p V			Value	
Student's t	t	3011.136	Pr > t	<.0001	
Sign	М	49935	Pr >= M	<.0001	
Signed Rank	s	2.4935E9	Pr >= S	<.0001	

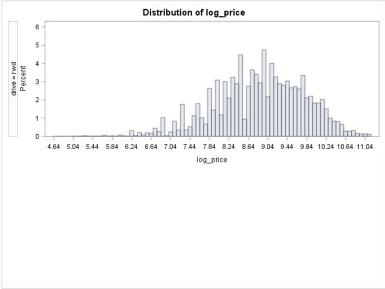
Quantiles (Definition 5)				
Level	Quantile			
100% Max	11.15624			
99%	10.71442			
95%	10.27160			
90%	10.04297			
75% Q3	9.54681			
50% Median	8.92266			
25% Q1	8.26873			
10%	7.60090			
5%	7.31322			
1%	6.47697			
0% Min	4.75359			

Extreme Observations						
Low	Lowest		nest			
Value	Obs	Value	Obs			
4.75359	359837	11.1562	232297			
4.78749	202298	11.1562	252610			
4.80402	169606	11.1562	345237			
4.80402	155614	11.1562	347087			
4.81218	430791	11.1562	199801			

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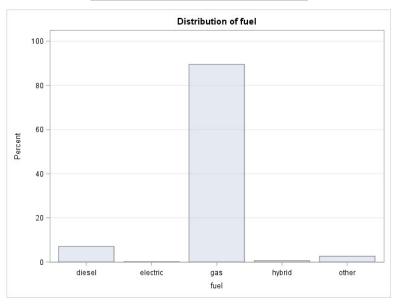




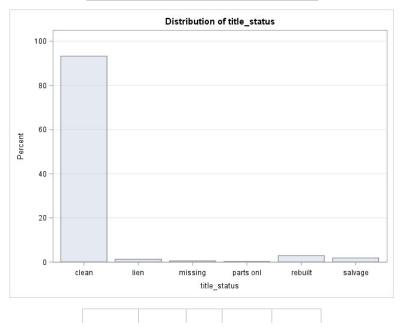
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The FREQ Procedure

fuel	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
diesel	114241	7.02	114241	7.02	
electric	2181	0.13	116422	7.16	
gas	1456237	89.54	1572659	96.70	
hybrid	10553	0.65	1583212	97.35	
other	43100	2.65	1626312	100.00	
Frequency Missing = 9915					

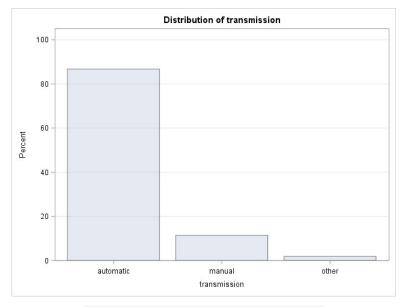


title_status	Frequency	Percent	Cumulative Frequency	Cumulative Percent		
clean	1523614	93.26	1523614	93.26		
lien	20845	1.28	1544459	94.54		
missing	8870	0.54	1553329	95.08		
parts onl	3558	0.22	1556887	95.30		
rebuilt	46617	2.85	1603504	98.15		
salvage	30208	1.85	1633712	100.00		
	Frequency Missing = 2515					



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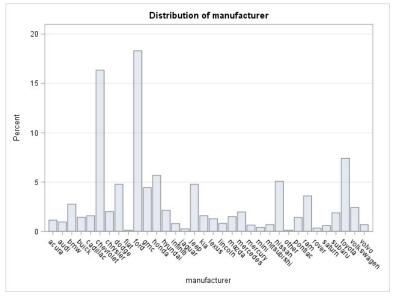
transmission	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
automatic	1411711	86.74	1411711	86.74	
manual	185549	11.40	1597260	98.14	
other	30231	1.86	1627491	100.00	
Frequency Missing = 8736					



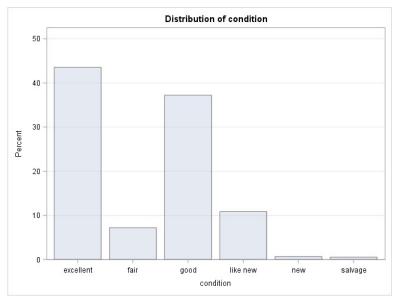
manufacturer	Frequency	Percent	Cumulative Frequency	Cumulative Percent
acura	17416	1.15	17416	1.15
audi	14524	0.96	31940	2.11
bmw	41732	2.75	73672	4.86
buick	21789	1.44	95461	6.30
cadillac	24167	1.59	119628	7.89
chevrolet	247737	16.35	367365	24.24
chrysler	30330	2.00	397695	26.24
dodge	72392	4.78	470087	31.02
fiat	1882	0.12	471969	31.14
ford	277397	18.31	749366	49.45
gmc	67145	4.43	816511	53.88
honda	86023	5.68	902534	59.56
hyundai	32286	2.13	934820	61.69
infiniti	12093	0.80	946913	62.49
jaguar	3997	0.26	950910	62.75
jeep	72333	4.77	1023243	67.52
kia	24266	1.60	1047509	69.12
lexus	19601	1.29	1067110	70.42
lincoln	12365	0.82	1079475	71.23
mazda	22674	1.50	1102149	72.73
mercedes	29788	1.97	1131937	74.70
mercury	9713	0.64	1141650	75.34
mini	6265	0.41	1147915	75.75
mitsubishi	10470	0.69	1158385	76.44
nissan	76920	5.08	1235305	81.52
other	1872	0.12	1237177	81.64
pontiac	21384	1.41	1258561	83.05
ram	54540	3.60	1313101	86.65
rover	5154	0.34	1318255	86.99
saturn	8973	0.59	1327228	87.58
subaru	28601	1.89	1355829	89.47

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	7.41	1468190	96.88
36712	2.42	1504902	99.31
10507	0.69	1515409	100.00



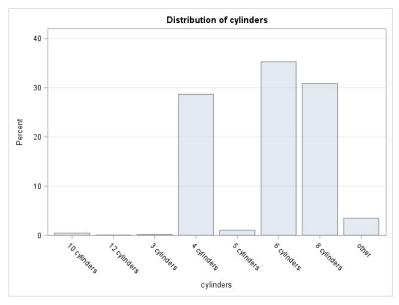
Frequency	Percent	Cumulative Frequency	Cumulative Percent
422244	43.55	422244	43.55
69834	7.20	492078	50.75
360895	37.22	852973	87.97
105124	10.84	958097	98.81
6271	0.65	964368	99.46
5233	0.54	969601	100.00
	422244 69834 360895 105124 6271	422244 43.55 69834 7.20 360895 37.22 105124 10.84 6271 0.65	Frequency Percent Frequency 422244 43.55 422244 69834 7.20 492078 360895 37.22 852973 105124 10.84 958097 6271 0.65 964368



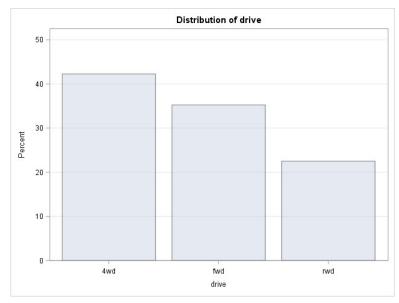
cylinders	Frequency	Percent	Cumulative Frequency	Cumulative Percent
10 cylinders	4383	0.45	4383	0.45
12 cylinders	651	0.07	5034	0.51
3 cylinders	1700	0.17	6734	0.69
4 cylinders	281654	28.68	288388	29.37

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Frequency Missing = 654185						
other	34014	3.46	982042	100.00		
8 cylinders	303249	30.88	948028	96.54		
6 cylinders	346366	35.27	644779	65.66		
5 cylinders	10025	1.02	298413	30.39		



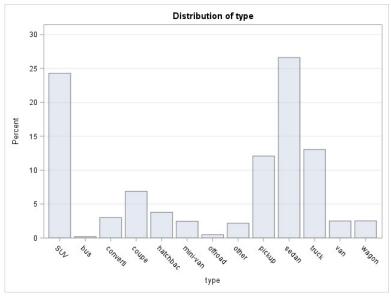
drive	Frequency	Percent	Cumulative Frequency	Cumulative Percent	
4wd	429128	42.25	429128	42.25	
fwd	358030	35.25	787158	77.51	
rwd	228442	22.49	1015600	100.00	
Frequency Missing = 620627					



type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
SUV	237461	24.29	237461	24.29
bus	1952	0.20	239413	24.49
converti	29267	2.99	268680	27.49
coupe	67229	6.88	335909	34.36
hatchbac	37066	3.79	372975	38.15
mini-van	24108	2.47	397083	40.62

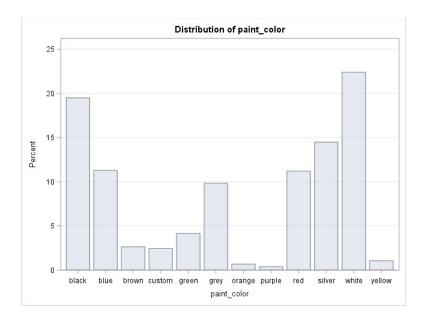
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	Frequency Missing = 658700										
wagon	24552	2.51	977527	100.00							
van	24427	2.50	952975	97.49							
truck	127399	13.03	928548	94.99							
sedan	260127	26.61	801149	81.96							
pickup	pickup 118086 12.08 541022 5										
other	21141	2.16	422936	43.27							
offroad	4712	0.48	401795	41.10							



paint_color	Frequency	Percent	Cumulative Frequency	Cumulative Percent
black	191832	19.50	191832	19.50
blue	111105	11.29	302937	30.79
brown	25803	2.62	328740	33.41
custom	23860	2.43	352600	35.84
green	40712	4.14	393312	39.98
grey	96722	9.83	490034	49.81
orange	6658	0.68	496692	50.48
purple	3627	0.37	500319	50.85
red	110222	11.20	610541	62.06
silver	142611	14.50	753152	76.55
white	220399	22.40	973551	98.95
yellow	10300	1.05	983851	100.00
	Frequenc	y Missing	j = 652376	

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The CORR Procedure

2 Variables: log_price log_age

Pearson Correl	ation Coefficient	s, N = 1493278									
Prob	Prob > r under H0: Rho=0										
	log_price	log_age									
log_price	1.00000	-0.57035 <.0001									
log_age	-0.57035 <.0001	1.00000									

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The CORR Procedure

3 Variables: log_price log_age log_odometer

Pearson Correlation Coefficients, N = 441328 Prob > r under H0: Rho=0											
log_price log_age log_odome											
log_price	1.00000	-0.60279 <.0001	-0.51291 <.0001								
log_age	-0.60279 <.0001	1.00000	0.55334 <.0001								
log_odometer	-0.51291 <.0001	0.55334 <.0001	1.00000								

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The FREQ Procedure

Frequency Percent Row Pct Col Pct	fuel	
	diesel	
	electric	

		Tal	ble of fuel	by title_sta	atus						
		title_status									
fuel	clean	lien	missing	parts onl	rebuilt	salvage	Tota				
diesel	91183	2594	165	111	1573	1098	96724				
	6.11	0.17	0.01	0.01	0.11	0.07	6.48				
	94.27	2.68	0.17	0.11	1.63	1.14					
	6.55	13.37	2.39	4.04	3.58	3.93					
electric	1144	41	7	2	10	14	1218				
	0.08	0.00	0.00	0.00	0.00	0.00	0.0				
	93.92	3.37	0.57	0.16	0.82	1.15					
	0.08	0.21	0.10	0.07	0.02	0.05					
gas	1254312	16551	6525	2328	41818	26485	1348019				
	84.00	1.11	0.44	0.16	2.80	1.77	90.2				
	93.05	1.23	0.48	0.17	3.10	1.96					
	90.09	85.28	94.35	84.81	95.17	94.71					
hybrid	9134	183	8	11	435	321	10092				
	0.61	0.01	0.00	0.00	0.03	0.02	0.68				
	90.51	1.81	0.08	0.11	4.31	3.18					
	0.66	0.94	0.12	0.40	0.99	1.15					
other	36531	39	211	293	104	47	3722				
	2.45	0.00	0.01	0.02	0.01	0.00	2.49				
	98.14	0.10	0.57	0.79	0.28	0.13					
	2.62	0.20	3.05	10.67	0.24	0.17					
Total	1392304	19408	6916	2745	43940	27965	1493278				
	93.24	1.30	0.46	0.18	2.94	1.87	100.00				

Statistics for Table of fuel by title_status

Statistic	DF	Value	Prob
Chi-Square	20	5781.8500	<.0001
Likelihood Ratio Chi-Square	20	6632.9706	<.0001
Mantel-Haenszel Chi-Square	1	26.4642	<.0001
Phi Coefficient		0.0622	
Contingency Coefficient		0.0621	
Cramer's V		0.0311	

Sample Size = 1493278

Frequency		Table of fue	l by trans	missio	n					
Percent Row Pct		transmission								
Col Pct	fuel	automatic	manual	other	Total					
	diesel	84167	11675	882	96724					
		5.64	0.78	0.06	6.48					
		87.02	12.07	0.91						
		6.42	7.36	3.60						
	electric	977	37	204	1218					
		0.07	0.00	0.01	0.08					
		80.21	3.04	16.75						
		0.07	0.02	0.83						
	gas	1183570	144243	20206	1348019					
		79.26	9.66	1.35	90.27					
		87.80	10.70	1.50						
		90.33	90.97	82.47						
	hybrid	9681	194	217	10092					
		0.65	0.01	0.01	0.68					
		95.93	1.92	2.15						
		0.74	0.12	0.89						
	other	31820	2412	2993	37225					
		2.13	0.16	0.20	2.49					
		85.48	6.48	8.04						
		2.43	1.52	12.22						
	Total	1310215	158561	24502	1493278					
		87.74	10.62	1.64	100.00					

Statistics for Table of fuel by transmission

Statistic	DF	Value	Prob	

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Chi-Square	8	13178.6336	<.0001
Likelihood Ratio Chi-Square	8	8073.7620	<.0001
Mantel-Haenszel Chi-Square	1	355.8534	<.0001
Phi Coefficient		0.0939	
Contingency Coefficient		0.0935	
Cramer's V		0.0664	

Sample Size = 1493278

equency																	T	able of t	fuel by r	manı
rcent w Pct																			man	ıufad
l Pct	fuel	acura	audi	bmw	buick	cadillac	chevrolet	chrysler	dodge	fiat	ford	gmc	honda	hyundai	infiniti	jaguar	jeep	kia	lexus	line
	diesel	17	329	1104	28	27	13757	42	5457	0	38112	7263	99	29	18	4	471	18	25	
		0.00	0.02	0.07	0.00	0.00	0.92	0.00	0.37	0.00	2.55	0.49	0.01	0.00	0.00	0.00	0.03	0.00	0.00	
		0.02	0.34	1.14	0.03	0.03	14.22	0.04	5.64	0.00	39.40	7.51	0.10	0.03	0.02	0.00	0.49	0.02	0.03	
		0.10	2.30	2.68	0.13	0.11	5.62	0.14	7.62	0.00	13.94	10.99	0.12	0.09	0.15	0.10	0.66	0.08	0.13	(
	electric	1	0	183	1	1	269	3	3	96	105	5	5	1	1	0	4	22	1	
		0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- (
		0.08	0.00	15.02	0.08	0.08	22.09	0.25	0.25	7.88	8.62	0.41	0.41	0.08	0.08	0.00	0.33	1.81	0.08	1
		0.01	0.00	0.44	0.00	0.00	0.11	0.01	0.00	5.17	0.04	0.01	0.01	0.00	0.01	0.00	0.01	0.09	0.01	1
	gas	16785	13656	38788	21047	23142	223782	29199	64308	1724	226375	56697	81779	30578	11558	3901	68540	23085	18144	11
		1.12	0.91	2.60	1.41	1.55	14.99	1.96	4.31	0.12	15.16	3.80	5.48	2.05	0.77	0.26	4.59	1.55	1.22	1
		1.25	1.01	2.88	1.56	1.72	16.60	2.17	4.77	0.13	16.79	4.21	6.07	2.27	0.86	0.29	5.08	1.71	1.35	- 1
		97.33	95.30	94.19	97.63	97.10	91.50	97.32	89.84	92.79	82.77	85.77	96.46	96.19	96.78	98.56	96.28	96.79	93.79	91
	hybrid	17	15	86	55	35	536	19	17	0	1259	140	1034	243	43	0	17	179	621	
		0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.08	0.01	0.07	0.02	0.00	0.00	0.00	0.01	0.04	(
		0.17	0.15	0.85	0.54	0.35	5.31	0.19	0.17	0.00	12.48	1.39	10.25	2.41	0.43	0.00	0.17	1.77	6.15	
		0.10	0.10	0.21	0.26	0.15	0.22	0.06	0.02	0.00	0.46	0.21	1.22	0.76	0.36	0.00	0.02	0.75	3.21	- (
	other	426	329	1020	428	628	6239	741	1799	38	7634	1999	1866	937	323	53	2154	546	554	
		0.03	0.02	0.07	0.03	0.04	0.42	0.05	0.12	0.00	0.51	0.13	0.12	0.06	0.02	0.00	0.14	0.04	0.04	1
		1.14	0.88	2.74	1.15	1.69	16.76	1.99	4.83	0.10	20.51	5.37	5.01	2.52	0.87	0.14	5.79	1.47	1.49	1
		2.47	2.30	2.48	1.99	2.64	2.55	2.47	2.51	2.05	2.79	3.02	2.20	2.95	2.70	1.34	3.03	2.29	2.86	:
	Total	17246	14329	41181	21559	23833	244583	30004	71584	1858	273485	66104	84783	31788	11943	3958	71186	23850	19345	12
		1.15	0.96	2.76	1.44	1.60	16.38	2.01	4.79	0.12	18.31	4.43	5.68	2.13	0.80	0.27	4.77	1.60	1.30	1

Statistics for Table of fuel by manufacturer

Statistic	DF	Value	Prob
Chi-Square	132	200966	<.0001
Likelihood Ratio Chi-Square	132	165398	<.0001
Mantel-Haenszel Chi-Square	1	12.59120	0.0004
Phi Coefficient		0.36685	
Contingency Coefficient		0.34441	
Cramer's V		0.18343	

Sample Size = 1493278

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The FREQ Procedure

Frequency	Table	of title_stat	us by tra	nsmissi	on
Percent Row Pct			transmis	ssion	
Col Pct	title_status	automatic	manual	other	Total
	clean	1223915	145447	22942	1392304
		81.96	9.74	1.54	93.24
		87.91	10.45	1.65	
		93.41	91.73	93.63	
	lien	16613	2610	185	19408
		1.11	0.17	0.01	1.30
		85.60	13.45	0.95	
		1.27	1.65	0.76	
	missing	4215	2203	498	6916
		0.28	0.15	0.03	0.46
		60.95	31.85	7.20	
		0.32	1.39	2.03	
	parts onl	1704	528	513	2745
		0.11	0.04	0.03	0.18
		62.08	19.23	18.69	
		0.13	0.33	2.09	
	rebuilt	39546	4214	180	43940
		2.65	0.28	0.01	2.94
		90.00	9.59	0.41	
		3.02	2.66	0.73	
	salvage	24222	3559	184	27965
		1.62	0.24	0.01	1.87
		86.62	12.73	0.66	
		1.85	2.24	0.75	
	Total	1310215	158561	24502	1493278
		87.74	10.62	1.64	100.00

Statistics for Table of title_status by transmission

Statistic	DF	Value	Prob
Chi-Square	10	11082.7679	<.0001
Likelihood Ratio Chi-Square	10	6420.7090	<.0001
Mantel-Haenszel Chi-Square	1	25.8547	<.0001
Phi Coefficient		0.0861	
Contingency Coefficient		0.0858	
Cramer's V		0.0609	

Frequency																	Table o	f title_s	tatus b
Percent Row Pct																			mai
Col Pct	title_status	acura	audi	bmw	buick	cadillac	chevrolet	chrysler	dodge	fiat	ford	gmc	honda	hyundai	infiniti	jaguar	jeep	kia	lexus
	clean	15780	13230	38204	20297	22480	228333	28126	66557	1644	257286	62683	76956	29770	10574	3667	66738	22255	18105
		1.06	0.89	2.56	1.36	1.51	15.29	1.88	4.46	0.11	17.23	4.20	5.15	1.99	0.71	0.25	4.47	1.49	1.21
		1.13	0.95	2.74	1.46	1.61	16.40	2.02	4.78	0.12	18.48	4.50	5.53	2.14	0.76	0.26	4.79	1.60	1.30
		91.50	92.33	92.77	94.15	94.32	93.36	93.74	92.98	88.48	94.08	94.82	90.77	93.65	88.54	92.65	93.75	93.31	93.59
	lien	125	198	467	138	219	3429	299	1052	34	3935	1147	693	325	129	38	1364	263	189
		0.01	0.01	0.03	0.01	0.01	0.23	0.02	0.07	0.00	0.26	0.08	0.05	0.02	0.01	0.00	0.09	0.02	0.01
		0.64	1.02	2.41	0.71	1.13	17.67	1.54	5.42	0.18	20.28	5.91	3.57	1.67	0.66	0.20	7.03	1.36	0.97
		0.72	1.38	1.13	0.64	0.92	1.40	1.00	1.47	1.83	1.44	1.74	0.82	1.02	1.08	0.96	1.92	1.10	0.98
	missing	33	27	83	122	115	1788	117	440	28	1548	236	240	34	12	21	347	33	30
		0.00	0.00	0.01	0.01	0.01	0.12	0.01	0.03	0.00	0.10	0.02	0.02	0.00	0.00	0.00	0.02	0.00	0.00
		0.48	0.39	1.20	1.76	1.66	25.85	1.69	6.36	0.40	22.38	3.41	3.47	0.49	0.17	0.30	5.02	0.48	0.43
		0.19	0.19	0.20	0.57	0.48	0.73	0.39	0.61	1.51	0.57	0.36	0.28	0.11	0.10	0.53	0.49	0.14	0.16
	parts onl	22	12	52	38	31	623	48	170	6	576	88	140	31	10	9	148	12	18
		0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.04	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00
		0.80	0.44	1.89	1.38	1.13	22.70	1.75	6.19	0.22	20.98	3.21	5.10	1.13	0.36	0.33	5.39	0.44	0.66
		0.13	0.08	0.13	0.18	0.13	0.25	0.16	0.24	0.32	0.21	0.13	0.17	0.10	0.08	0.23	0.21	0.05	0.09
	rebuilt	734	554	1413	616	635	6519	905	2201	102	6135	1230	3720	1071	800	129	1668	845	583
		0.05	0.04	0.09	0.04	0.04	0.44	0.06	0.15	0.01	0.41	0.08	0.25	0.07	0.05	0.01	0.11	0.06	0.04
		1.67	1.26	3.22	1.40	1.45	14.84	2.06	5.01	0.23	13.96	2.80	8.47	2.44	1.82	0.29	3.80	1.92	1.33
		4.26	3.87	3.43	2.86	2.66	2.67	3.02	3.07	5.49	2.24	1.86	4.39	3.37	6.70	3.26	2.34	3.54	3.01
	salvage	552	308	962	348	353	3891	509	1164	44	4005	720	3034	557	418	94	921	442	420
		0.04	0.02	0.06	0.02	0.02	0.26	0.03	0.08	0.00	0.27	0.05	0.20	0.04	0.03	0.01	0.06	0.03	0.03
		1.97	1.10	3.44	1.24	1.26	13.91	1.82	4.16	0.16	14.32	2.57	10.85	1.99	1.49	0.34	3.29	1.58	1.50
		3.20	2.15	2.34	1.61	1.48	1.59	1.70	1.63	2.37	1.46	1.09	3.58	1.75	3.50	2.37	1.29	1.85	2.17

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Total	17246	14329	41181	21559	23833	244583	30004	71584	1858	273485	66104	84783	31788	11943	3958	71186	23850	19345	
	1.15	0.96	2.76	1.44	1.60	16.38	2.01	4.79	0.12	18.31	4.43	5.68	2.13	0.80	0.27	4.77	1.60	1.30	

Statistics for Table of title_status by manufacturer

Statistic	DF	Value	Prob
Chi-Square	165	12775.3827	<.0001
Likelihood Ratio Chi-Square	165	11944.4375	<.0001
Mantel-Haenszel Chi-Square	1	155.8603	<.0001
Phi Coefficient		0.0925	
Contingency Coefficient		0.0921	
Cramer's V		0.0414	

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The FREQ Procedure

Frequency																T	able of t	transmi	ssion
Percent Row Pct																			ma
Col Pct	transmission	acura	audi	bmw	buick	cadillac	chevrolet	chrysler	dodge	fiat	ford	gmc	honda	hyundai	infiniti	jaguar	jeep	kia	lexu
	automatic	15398	11998	35270	21041	23209	220308	28985	64101	1076	239023	62456	72568	28487	11020	3808	55419	21304	1895
		1.03	0.80	2.36	1.41	1.55	14.75	1.94	4.29	0.07	16.01	4.18	4.86	1.91	0.74	0.26	3.71	1.43	1.2
		1.18	0.92	2.69	1.61	1.77	16.81	2.21	4.89	0.08	18.24	4.77	5.54	2.17	0.84	0.29	4.23	1.63	1.4
		89.28	83.73	85.65	97.60	97.38	90.07	96.60	89.55	57.91	87.40	94.48	85.59	89.62	92.27	96.21	77.85	89.32	97.9
	manual	1626	2126	5021	223	408	19540	719	5955	716	30449	2583	11588	2421	704	116	14475	1883	24
		0.11	0.14	0.34	0.01	0.03	1.31	0.05	0.40	0.05	2.04	0.17	0.78	0.16	0.05	0.01	0.97	0.13	0.0
		1.03	1.34	3.17	0.14	0.26	12.32	0.45	3.76	0.45	19.20	1.63	7.31	1.53	0.44	0.07	9.13	1.19	0.1
		9.43	14.84	12.19	1.03	1.71	7.99	2.40	8.32	38.54	11.13	3.91	13.67	7.62	5.89	2.93	20.33	7.90	1.2
	other	222	205	890	295	216	4735	300	1528	66	4013	1065	627	880	219	34	1292	663	14:
		0.01	0.01	0.06	0.02	0.01	0.32	0.02	0.10	0.00	0.27	0.07	0.04	0.06	0.01	0.00	0.09	0.04	0.0
		0.91	0.84	3.63	1.20	0.88	19.32	1.22	6.24	0.27	16.38	4.35	2.56	3.59	0.89	0.14	5.27	2.71	0.5
		1.29	1.43	2.16	1.37	0.91	1.94	1.00	2.13	3.55	1.47	1.61	0.74	2.77	1.83	0.86	1.81	2.78	0.7
	Total	17246	14329	41181	21559	23833	244583	30004	71584	1858	273485	66104	84783	31788	11943	3958	71186	23850	1934
		1.15	0.96	2.76	1.44	1.60	16.38	2.01	4.79	0.12	18.31	4.43	5.68	2.13	0.80	0.27	4.77	1.60	1.3

Statistics for Table of transmission by manufacturer

Statistic	DF	Value	Prob
Chi-Square	66	76708.8443	<.0001
Likelihood Ratio Chi-Square	66	68250.3476	<.0001
Mantel-Haenszel Chi-Square	1	4326.6619	<.0001
Phi Coefficient		0.2266	
Contingency Coefficient		0.2210	
Cramer's V		0.1603	

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The FREQ Procedure

Frequency Percent Row Pct Col Pct

			Table of	f condition by	y cylinders				
				cyli	nders				
condition	10 cylinders	12 cylinders	3 cylinders	4 cylinders	5 cylinders	6 cylinders	8 cylinders	other	Total
excellent	792 0.18 0.39 35.23	117 0.03 0.06 41.64	194 0.04 0.10 36.60	58844 13.33 29.16 45.82	2109 0.48 1.05 46.42	70075 15.88 34.72 44.29	57188 12.96 28.34 42.72	12493 2.83 6.19 94.55	201812 45.73
fair	182 0.04 0.70 8.10	19 0.00 0.07 6.76	44 0.01 0.17 8.30	6720 1.52 25.68 5.23	301 0.07 1.15 6.63	9518 2.16 36.38 6.02	9288 2.10 35.50 6.94	92 0.02 0.35 0.70	26164 5.93
good	1053 0.24 0.67 46.84	115 0.03 0.07 40.93	166 0.04 0.10 31.32	42557 9.64 26.88 33.14	1801 0.41 1.14 39.64	59260 13.43 37.43 37.45	52934 11.99 33.43 39.54	434 0.10 0.27 3.28	158320 35.87
like new	211 0.05 0.41 9.39	29 0.01 0.06 10.32	113 0.03 0.22 21.32	19006 4.31 36.87 14.80	304 0.07 0.59 6.69	18111 4.10 35.13 11.45	13614 3.08 26.41 10.17	164 0.04 0.32 1.24	51552 11.68
new	3 0.00 0.17 0.13	1 0.00 0.06 0.36	6 0.00 0.34 1.13	652 0.15 37.02 0.51	6 0.00 0.34 0.13	601 0.14 34.13 0.38	483 0.11 27.43 0.36	9 0.00 0.51 0.07	1761 0.40
salvage	7 0.00 0.41 0.31	0 0.00 0.00 0.00	7 0.00 0.41 1.32	640 0.15 37.23 0.50	22 0.00 1.28 0.48	653 0.15 37.99 0.41	369 0.08 21.47 0.28	21 0.00 1.22 0.16	1719 0.39
Total	2248 0.51	281 0.06	530 0.12	128419 29.10	4543 1.03	158218 35.85	133876 30.33	13213 2.99	441328 100.00

Statistics for Table of condition by cylinders

Statistic	DF	Value	Prob
Chi-Square	35	16092.8445	<.0001
Likelihood Ratio Chi-Square	35	18192.1653	<.0001
Mantel-Haenszel Chi-Square	1	1298.1592	<.0001
Phi Coefficient		0.1910	
Contingency Coefficient		0.1876	
Cramer's V		0.0854	

Frequency	Та	ble of co	ndition b	y drive	
Percent Row Pct			dri	ve	
Col Pct	condition	4wd	fwd	rwd	Total
	excellent	85143	74328	42341	201812
		19.29	16.84	9.59	45.73
		42.19	36.83	20.98	
		47.18	46.17	42.40	
	fair	10068	9067	7029	26164
		2.28	2.05	1.59	5.93
		38.48	34.65	26.87	
		5.58	5.63	7.04	
	good	62656	56402	39262	158320
		14.20	12.78	8.90	35.87
		39.58	35.63	24.80	
		34.72	35.03	39.31	
	like new	21367	19773	10412	51552
		4.84	4.48	2.36	11.68
		41.45	38.36	20.20	
		11.84	12.28	10.43	
	new	660	675	426	1761
		0.15	0.15	0.10	0.40
		37.48	38.33	24.19	
		0.37	0.42	0.43	
	salvage	560	759	400	1719
	_	0.13	0.17	0.09	0.39
		32.58	44.15	23.27	
		0.31	0.47	0.40	

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Total	180454	161004	99870	441328	
	40.89	36.48	22.63	100.00	

Statistics for Table of condition by drive

Statistic	DF	Value	Prob
Chi-Square	10	1283.1305	<.0001
Likelihood Ratio Chi-Square	10	1273.3594	<.0001
Mantel-Haenszel Chi-Square	1	238.2943	<.0001
Phi Coefficient		0.0539	
Contingency Coefficient		0.0538	
Cramer's V		0.0381	

Sample Size = 441328

Frequency						Ta	ble of cond	lition by 1	ype						
Percent Row Pct								type							
Col Pct	condition	SUV	bus	converti	coupe	hatchbac	mini-van	offroad	other	pickup	sedan	truck	van	wagon	Tota
	excellent	52931 11.99 26.23 49.33	169 0.04 0.08 32.69	6615 1.50 3.28 50.64	13432 3.04 6.66 43.26	8095 1.83 4.01 45.78	5721 1.30 2.83 44.73	882 0.20 0.44 36.67	1191 0.27 0.59 33.84	20981 4.75 10.40 44.92	57017 12.92 28.25 47.17	26547 6.02 13.15 41.17	4084 0.93 2.02 35.87	4147 0.94 2.05 43.35	201812 45.73
	fair	4689 1.06 17.92 4.37	46 0.01 0.18 8.90	581 0.13 2.22 4.45	2124 0.48 8.12 6.84	949 0.22 3.63 5.37	899 0.20 3.44 7.03	219 0.05 0.84 9.11	301 0.07 1.15 8.55	3701 0.84 14.15 7.92	6441 1.46 24.62 5.33	4759 1.08 18.19 7.38	795 0.18 3.04 6.98	660 0.15 2.52 6.90	26164 5.93
	good	35342 8.01 22.32 32.94	250 0.06 0.16 48.36	4057 0.92 2.56 31.06	11337 2.57 7.16 36.52	6021 1.36 3.80 34.05	4821 1.09 3.05 37.69	993 0.23 0.63 41.29	1746 0.40 1.10 49.62	17480 3.96 11.04 37.42	40624 9.20 25.66 33.61	26559 6.02 16.78 41.19	5234 1.19 3.31 45.97	3856 0.87 2.44 40.31	158320 35.87
	like new	13684 3.10 26.54 12.75	51 0.01 0.10 9.86	1680 0.38 3.26 12.86	3806 0.86 7.38 12.26	2443 0.55 4.74 13.81	1286 0.29 2.49 10.05	275 0.06 0.53 11.43	246 0.06 0.48 6.99	4227 0.96 8.20 9.05	15666 3.55 30.39 12.96	6189 1.40 12.01 9.60	1182 0.27 2.29 10.38	817 0.19 1.58 8.54	51552 11.68
	new	364 0.08 20.67 0.34	0 0.00 0.00 0.00	81 0.02 4.60 0.62	160 0.04 9.09 0.52	80 0.02 4.54 0.45	30 0.01 1.70 0.23	14 0.00 0.80 0.58	12 0.00 0.68 0.34	145 0.03 8.23 0.31	572 0.13 32.48 0.47	236 0.05 13.40 0.37	46 0.01 2.61 0.40	21 0.00 1.19 0.22	1761 0.40
	salvage	284 0.06 16.52 0.26	1 0.00 0.06 0.19	49 0.01 2.85 0.38	188 0.04 10.94 0.61	96 0.02 5.58 0.54	33 0.01 1.92 0.26	22 0.00 1.28 0.91	23 0.01 1.34 0.65	176 0.04 10.24 0.38	549 0.12 31.94 0.45	189 0.04 10.99 0.29	44 0.01 2.56 0.39	65 0.01 3.78 0.68	1719 0.39
	Total	107294 24.31	517 0.12	13063 2.96	31047 7.03	17684 4.01	12790 2.90	2405 0.54	3519 0.80	46710 10.58	120869 27.39	64479 14.61	11385 2.58	9566 2.17	441328 100.00

Statistics for Table of condition by type

Statistic	DF	Value	Prob
Chi-Square	60	5529.9988	<.0001
Likelihood Ratio Chi-Square	60	5534.1236	<.0001
Mantel-Haenszel Chi-Square	1	238.2314	<.0001
Phi Coefficient		0.1119	
Contingency Coefficient		0.1112	
Cramer's V		0.0501	

Sample Size = 441328

Frequency Percent Row Pct Col Pct		Table of condition by paint_color															
	condition		paint_color														
		black	blue	brown	custom	green	grey	orange	purple	red	silver	white	yellow	Total			
	excellent	39312	22246	5421	4008	6442	24118	1198	647	22173	32094	42466	1687	201812			
		8.91	5.04	1.23	0.91	1.46	5.46	0.27	0.15	5.02	7.27	9.62	0.38	45.73			
		19.48	11.02	2.69	1.99	3.19	11.95	0.59	0.32	10.99	15.90	21.04	0.84				
		48.43	44.13	40.79	37.63	34.24	48.81	45.14	37.46	44.14	48.56	45.58	45.45				
	fair	4032	3586	1067	571	2379	2100	132	203	3689	3103	5015	287	26164			
		0.91	0.81	0.24	0.13	0.54	0.48	0.03	0.05	0.84	0.70	1.14	0.07	5.93			
		15.41	13.71	4.08	2.18	9.09	8.03	0.50	0.78	14.10	11.86	19.17	1.10				

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	4.97	7.11	8.03	5.36	12.65	4.25	4.97	11.75	7.34	4.69	5.38	7.73	
good	26849	19353	5434	4835	8761	15476	973	700	18392	23139	33054	1354	158320
	6.08	4.39	1.23	1.10	1.99	3.51	0.22	0.16	4.17	5.24	7.49	0.31	35.87
	16.96	12.22	3.43	3.05	5.53	9.78	0.61	0.44	11.62	14.62	20.88	0.86	
	33.08	38.39	40.89	45.40	46.57	31.32	36.66	40.53	36.61	35.01	35.48	36.48	
like new	10289	4803	1306	1089	1067	7346	327	161	5559	7280	11981	344	51552
	2.33	1.09	0.30	0.25	0.24	1.66	0.07	0.04	1.26	1.65	2.71	0.08	11.68
	19.96	9.32	2.53	2.11	2.07	14.25	0.63	0.31	10.78	14.12	23.24	0.67	
	12.68	9.53	9.83	10.23	5.67	14.87	12.32	9.32	11.07	11.01	12.86	9.27	
new	424	175	18	97	34	208	9	2	186	257	340	11	1761
	0.10	0.04	0.00	0.02	0.01	0.05	0.00	0.00	0.04	0.06	0.08	0.00	0.40
	24.08	9.94	1.02	5.51	1.93	11.81	0.51	0.11	10.56	14.59	19.31	0.62	
	0.52	0.35	0.14	0.91	0.18	0.42	0.34	0.12	0.37	0.39	0.36	0.30	
salvage	267	252	44	50	129	163	15	14	232	220	304	29	1719
	0.06	0.06	0.01	0.01	0.03	0.04	0.00	0.00	0.05	0.05	0.07	0.01	0.39
	15.53	14.66	2.56	2.91	7.50	9.48	0.87	0.81	13.50	12.80	17.68	1.69	
	0.33	0.50	0.33	0.47	0.69	0.33	0.57	0.81	0.46	0.33	0.33	0.78	
Total	81173	50415	13290	10650	18812	49411	2654	1727	50231	66093	93160	3712	441328
	18.39	11.42	3.01	2.41	4.26	11.20	0.60	0.39	11.38	14.98	21.11	0.84	100.00

Statistics for Table of condition by paint_color

Statistic	DF	Value	Prob
Chi-Square	55	7070.8815	<.0001
Likelihood Ratio Chi-Square	55	6807.0878	<.0001
Mantel-Haenszel Chi-Square	1	0.3827	0.5362
Phi Coefficient		0.1266	
Contingency Coefficient		0.1256	
Cramer's V		0.0566	

Sample Size = 441328

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The FREQ Procedure

Frequency
Percent
Row Pct
Col Pct

Tak	le of cyli	nders by	drive	
		driv	ve	
cylinders	4wd	fwd	rwd	Total
10 cylinders	1241 0.28 55.20 0.69	61 0.01 2.71 0.04	946 0.21 42.08 0.95	2248 0.51
12 cylinders	38 0.01 13.52 0.02	15 0.00 5.34 0.01	228 0.05 81.14 0.23	281 0.06
3 cylinders	58 0.01 10.94 0.03	395 0.09 74.53 0.25	77 0.02 14.53 0.08	530 0.12
4 cylinders	25872 5.86 20.15 14.34	92210 20.89 71.80 57.27	10337 2.34 8.05 10.35	128419 29.10
5 cylinders	1343 0.30 29.56 0.74	2636 0.60 58.02 1.64	564 0.13 12.41 0.56	4543 1.03
6 cylinders	68090 15.43 43.04 37.73	55119 12.49 34.84 34.23	35009 7.93 22.13 35.05	158218 35.85
8 cylinders	78147 17.71 58.37 43.31	5268 1.19 3.93 3.27	50461 11.43 37.69 50.53	133876 30.33
other	5665 1.28 42.87 3.14	5300 1.20 40.11 3.29	2248 0.51 17.01 2.25	13213 2.99
Total	180454 40.89	161004 36.48	99870 22.63	441328 100.00

Statistics for Table of cylinders by drive

Statistic	DF	Value	Prob
Chi-Square	14	135371	<.0001
Likelihood Ratio Chi-Square	14	154404	<.0001
Mantel-Haenszel Chi-Square	1	1189	<.0001
Phi Coefficient		0.55384	
Contingency Coefficient		0.48449	
Cramer's V		0.39162	

Frequency
Percent
Row Pct
Col Pct

					o o. o,	ers by ty	PC							
type														
SUV	bus	converti	coupe	hatchbac	mini-van	offroad	other	pickup	sedan	truck	van	wagon	Total	
350	104	80	48	6	0	7	44	386	136	974	100	13	2248	
0.08	0.02	0.02	0.01	0.00	0.00	0.00	0.01	0.09	0.03	0.22	0.02	0.00	0.51	
15.57	4.63	3.56	2.14	0.27	0.00	0.31	1.96	17.17	6.05	43.33	4.45	0.58		
0.33	20.12	0.61	0.15	0.03	0.00	0.29	1.25	0.83	0.11	1.51	0.88	0.14		
10	0	56	79	1	0	0	3	6	106	18	2	0	281	
0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.06	
3.56	0.00	19.93	28.11	0.36	0.00	0.00	1.07	2.14	37.72	6.41	0.71	0.00		
0.01	0.00	0.43	0.25	0.01	0.00	0.00	0.09	0.01	0.09	0.03	0.02	0.00		
37	1	17	52	215	15	3	15	13	130	18	10	4	530	
0.01	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.12	
6.98	0.19	3.21	9.81	40.57	2.83	0.57	2.83	2.45	24.53	3.40	1.89	0.75		
0.03	0.19	0.13	0.17	1.22	0.12	0.12	0.43	0.03	0.11	0.03	0.09	0.04		
24343	51	3688	9728	14657	822	341	826	2505	62058	2636	872	5892	128419	
5.52	0.01	0.84	2.20	3.32	0.19	0.08	0.19	0.57	14.06	0.60	0.20	1.34	29.10	
18.96	0.04	2.87	7.58	11.41	0.64	0.27	0.64	1.95	48.32	2.05	0.68	4.59		
22.69	9.86	28.23	31.33	82.88	6.43	14.18	23.47	5.36	51.34	4.09	7.66	61.59		
	350 0.08 15.57 0.33 10 0.00 3.56 0.01 37 0.01 6.98 0.03 24343 5.52 18.96	350 104 0.08 0.02 15.57 4.63 0.33 20.12 10 0 0.00 0.00 3.56 0.00 0.01 0.00 37 1 0.01 0.00 6.98 0.19 0.03 0.19 24343 51 5.52 0.01 18.96 0.04	350 104 80 0.08 0.02 0.02 15.57 4.63 3.56 0.33 20.12 0.61 10 0 56 0.00 0.00 0.01 3.56 0.00 19.93 0.01 0.00 0.43 37 1 17 0.01 0.00 0.00 6.98 0.19 3.21 0.03 0.19 0.13 24343 51 3688 1.552 0.01 0.84 18.96 0.04 2.87	350 104 80 48 0.08 0.02 0.02 0.01 15.57 4.63 3.56 2.14 0.33 20.12 0.61 0.15 10 0 56 79 0.00 0.00 0.01 0.02 3.56 0.00 19.93 28.11 0.01 0.00 0.43 0.25 37 1 17 52 0.01 0.00 0.00 0.01 6.98 0.19 3.21 9.81 0.03 0.19 0.13 0.17 24343 51 3688 9728 5.52 0.01 0.84 2.20 18.96 0.04 2.87 7.58	350 104 80 48 6 0.08 0.02 0.02 0.01 0.00 15.57 4.63 3.56 2.14 0.27 0.33 20.12 0.61 0.15 0.03 10 0 56 79 1 0.00 0.00 0.01 0.02 0.00 3.56 0.00 19.93 28.11 0.36 0.01 0.00 0.43 0.25 0.01 37 1 17 52 215 0.01 0.00 0.00 0.01 0.05 6.98 0.19 3.21 9.81 40.57 0.03 0.19 0.13 0.17 1.22 24343 51 3688 9728 14657 5.52 0.01 0.84 2.20 3.32 18.96 0.04 2.87 7.58 11.41	350 104 80 48 6 0 0.08 0.02 0.02 0.01 0.00 0.00 15.57 4.63 3.56 2.14 0.27 0.00 0.33 20.12 0.61 0.15 0.03 0.00 10 0 56 79 1 0 0.00 0.00 0.01 0.02 0.00 0.00 3.56 0.00 19.93 28.11 0.36 0.00 0.01 0.00 0.43 0.25 0.01 0.00 37 1 17 52 215 15 0.01 0.00 0.00 0.01 0.05 0.00 6.98 0.19 3.21 9.81 40.57 2.83 0.03 0.19 0.13 0.17 1.22 0.12 24343 51 3688 9728 14657 822 5.52 0.01 0.84 2.20 3.32 0.19 18.96 0.04 2.87 7.58 11.41 0.64	SUV bus converti coupe hatchbac mini-van offroad 350 104 80 48 6 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.00 0.00 0.01 0.02 0.00 0.0	SUV bus converti coupe hatchbac mini-van offroad other 350 104 80 48 6 0 7 44 0.08 0.02 0.01 0.00 0.00 0.00 0.01 15.57 4.63 3.56 2.14 0.27 0.00 0.31 1.96 0.33 20.12 0.61 0.15 0.03 0.00 0.29 1.25 10 0 56 79 1 0 0 0 0 0.00	SUV bus converti coupe hatchbac mini-van offroad other pickup 350 104 80 48 6 0 7 44 386 0.08 0.02 0.02 0.01 0.00 0.00 0.00 0.01 0.09 15.57 4.63 3.56 2.14 0.27 0.00 0.31 1.96 17.17 0.33 20.12 0.61 0.15 0.03 0.00 0.29 1.25 0.83 10 0 56 79 1 0 0 3 6 0.00 0.00 0.01 0.02 0.00	SUV bus converti coupe hatchbac mini-van offroad other pickup sedan 350 104 80 48 6 0 7 44 386 136 0.08 0.02 0.02 0.01 0.00 0.00 0.00 0.01 0.09 0.03 15.57 4.63 3.56 2.14 0.27 0.00 0.31 1.96 17.17 6.05 0.33 20.12 0.61 0.15 0.03 0.00 0.29 1.25 0.83 0.11 10 0 56 79 1 0 0 3 6 106 0.00 0.00 0.01 0.02 0.00	SUV bus converti coupe hatchbac mini-van offroad other pickup sedan truck 350 104 80 48 6 0 7 44 386 136 974 0.08 0.02 0.01 0.00 0.00 0.00 0.01 0.09 0.03 0.22 15.57 4.63 3.56 2.14 0.27 0.00 0.31 1.96 17.17 6.05 43.33 0.33 20.12 0.61 0.15 0.03 0.00 0.29 1.25 0.83 0.11 1.51 10 0 56 79 1 0 0 3 6 106 18 0.00 0.00 0.01 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 <	SUV bus converti coupe hatchbac mini-van offroad other pickup sedan truck van 350 104 80 48 6 0 7 44 386 136 974 100 0.08 0.02 0.02 0.01 0.00 0.00 0.01 0.09 0.03 0.22 0.02 15.57 4.63 3.56 2.14 0.27 0.00 0.31 1.96 17.17 6.05 43.33 4.45 0.33 20.12 0.61 0.15 0.03 0.00 0.29 1.25 0.83 0.11 1.51 0.88 10 0 56 79 1 0 0 3 6 106 18 2 0.00 0.00 0.01 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	SUV bus converti coupe hatchbac mini-van offroad other pickup sedan truck van wagon 350 104 80 48 6 0 7 44 386 136 974 100 13 0.08 0.02 0.02 0.01 0.00 0.00 0.00 0.01 0.09 0.03 0.22 0.02 0.00 15.57 4.63 3.56 2.14 0.27 0.00 0.31 1.96 17.17 6.05 43.33 4.45 0.58 0.33 20.12 0.61 0.15 0.03 0.00 0.29 1.25 0.83 0.11 1.51 0.88 0.14 10 0 56 79 1 0 0 3 6 106 18 2 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 </td	

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5 cylinders	297	2	160	207	313	35	8	12	325	2047	524	82	531	4543
· • • • • • • • • • • • • • • • • • • •	0.07	0.00	0.04	0.05	0.07	0.01	0.00	0.00	0.07	0.46	0.12	0.02	0.12	1.03
	6.54	0.04	3.52	4.56	6.89	0.77	0.18	0.26	7.15	45.06	11.53	1.80	11.69	
	0.28	0.39	1.22	0.67	1.77	0.27	0.33	0.34	0.70	1.69	0.81	0.72	5.55	
6 cylinders	53292	48	4620	10432	1255	11463	1566	1223	11067	40924	14813	5226	2289	158218
	12.08	0.01	1.05	2.36	0.28	2.60	0.35	0.28	2.51	9.27	3.36	1.18	0.52	35.85
	33.68	0.03	2.92	6.59	0.79	7.25	0.99	0.77	6.99	25.87	9.36	3.30	1.45	
	49.67	9.28	35.37	33.60	7.10	89.62	65.11	34.75	23.69	33.86	22.97	45.90	23.93	
8 cylinders	26254	305	4206	9822	569	54	470	1203	28504	11797	44991	5078	623	133876
	5.95	0.07	0.95	2.23	0.13	0.01	0.11	0.27	6.46	2.67	10.19	1.15	0.14	30.33
	19.61	0.23	3.14	7.34	0.43	0.04	0.35	0.90	21.29	8.81	33.61	3.79	0.47	
	24.47	58.99	32.20	31.64	3.22	0.42	19.54	34.19	61.02	9.76	69.78	44.60	6.51	
other	2711	6	236	679	668	401	10	193	3904	3671	505	15	214	13213
	0.61	0.00	0.05	0.15	0.15	0.09	0.00	0.04	0.88	0.83	0.11	0.00	0.05	2.99
	20.52	0.05	1.79	5.14	5.06	3.03	0.08	1.46	29.55	27.78	3.82	0.11	1.62	
	2.53	1.16	1.81	2.19	3.78	3.14	0.42	5.48	8.36	3.04	0.78	0.13	2.24	
Total	107294	517	13063	31047	17684	12790	2405	3519	46710	120869	64479	11385	9566	441328
	24.31	0.12	2.96	7.03	4.01	2.90	0.54	0.80	10.58	27.39	14.61	2.58	2.17	100.00

Statistics for Table of cylinders by type

Statistic	DF	Value	Prob
Statistic	ы	value	FIUD
Chi-Square	84	191688	<.0001
Likelihood Ratio Chi-Square	84	189312	<.0001
Mantel-Haenszel Chi-Square	1	85.97904	<.0001
Phi Coefficient		0.65905	
Contingency Coefficient		0.55029	
Cramer's V		0.24910	

Sample Size = 441328

Frequency					Tab	le of cy	inders	by paint_	color					
Percent Row Pct							p	aint_colo	or					
Col Pct	cylinders	black	blue	brown	custom	green	grey	orange	purple	red	silver	white	yellow	Tota
	10 cylinders	362 0.08 16.10 0.45	225 0.05 10.01 0.45	82 0.02 3.65 0.62	46 0.01 2.05 0.43	148 0.03 6.58 0.79	101 0.02 4.49 0.20	13 0.00 0.58 0.49	5 0.00 0.22 0.29	224 0.05 9.96 0.45	131 0.03 5.83 0.20	890 0.20 39.59 0.96	21 0.00 0.93 0.57	2248 0.51
	12 cylinders	108 0.02 38.43 0.13	38 0.01 13.52 0.08	2 0.00 0.71 0.02	10 0.00 3.56 0.09	12 0.00 4.27 0.06	24 0.01 8.54 0.05	0.00 0.36 0.04	0 0.00 0.00 0.00	22 0.00 7.83 0.04	32 0.01 11.39 0.05	30 0.01 10.68 0.03	2 0.00 0.71 0.05	281 0.06
	3 cylinders	69 0.02 13.02 0.09	64 0.01 12.08 0.13	6 0.00 1.13 0.05	5 0.00 0.94 0.05	22 0.00 4.15 0.12	74 0.02 13.96 0.15	8 0.00 1.51 0.30	9 0.00 1.70 0.52	73 0.02 13.77 0.15	84 0.02 15.85 0.13	108 0.02 20.38 0.12	8 0.00 1.51 0.22	530 0.12
	4 cylinders	22181 5.03 17.27 27.33	16721 3.79 13.02 33.17	3265 0.74 2.54 24.57	2395 0.54 1.86 22.49	5076 1.15 3.95 26.98	17601 3.99 13.71 35.62	1070 0.24 0.83 40.32	564 0.13 0.44 32.66	14739 3.34 11.48 29.34	22888 5.19 17.82 34.63	20891 4.73 16.27 22.42	1028 0.23 0.80 27.69	128419 29.10
	5 cylinders	825 0.19 18.16 1.02	568 0.13 12.50 1.13	90 0.02 1.98 0.68	64 0.01 1.41 0.60	187 0.04 4.12 0.99	557 0.13 12.26 1.13	51 0.01 1.12 1.92	15 0.00 0.33 0.87	525 0.12 11.56 1.05	856 0.19 18.84 1.30	741 0.17 16.31 0.80	64 0.01 1.41 1.72	4543 1.03
	6 cylinders	29220 6.62 18.47 36.00	17550 3.98 11.09 34.81	5295 1.20 3.35 39.84	4193 0.95 2.65 39.37	7172 1.63 4.53 38.12	18554 4.20 11.73 37.55	746 0.17 0.47 28.11	659 0.15 0.42 38.16	16943 3.84 10.71 33.73	26569 6.02 16.79 40.20	30261 6.86 19.13 32.48	1056 0.24 0.67 28.45	158218 35.85
	8 cylinders	25370 5.75 18.95 31.25	13685 3.10 10.22 27.14	4507 1.02 3.37 33.91	3889 0.88 2.90 36.52	5892 1.34 4.40 31.32	11006 2.49 8.22 22.27	712 0.16 0.53 26.83	440 0.10 0.33 25.48	16351 3.70 12.21 32.55	13518 3.06 10.10 20.45	37022 8.39 27.65 39.74	1484 0.34 1.11 39.98	133876 30.33
	other	3038 0.69 22.99 3.74	1564 0.35 11.84 3.10	43 0.01 0.33 0.32	48 0.01 0.36 0.45	303 0.07 2.29 1.61	1494 0.34 11.31 3.02	53 0.01 0.40 2.00	35 0.01 0.26 2.03	1354 0.31 10.25 2.70	2015 0.46 15.25 3.05	3217 0.73 24.35 3.45	49 0.01 0.37 1.32	13213 2.99
	Total	81173 18.39	50415 11.42	13290 3.01	10650 2.41	18812 4.26	49411 11.20	2654 0.60	1727 0.39	50231 11.38	66093 14.98	93160 21.11	3712 0.84	441328 100.00

Statistics for Table of cylinders by paint_color

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Statistic	DF	Value	Prob
Chi-Square	77	13034.0112	<.0001
Likelihood Ratio Chi-Square	77	13515.4863	<.0001
Mantel-Haenszel Chi-Square	1	163.9275	<.0001
Phi Coefficient		0.1719	
Contingency Coefficient		0.1694	
Cramer's V		0.0650	

Sample Size = 441328

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The FREQ Procedure

Frequency
Percent
Row Pct
Col Pct

						Table of	drive by 1	type						
type														
drive	SUV	bus	converti	coupe	hatchbac	mini-van	offroad	other	pickup	sedan	truck	van	wagon	Total
4wd	77374	14	623	1241	1938	564	2265	994	32387	12643	44852	658	4901	180454
	17.53	0.00	0.14	0.28	0.44	0.13	0.51	0.23	7.34	2.86	10.16	0.15	1.11	40.89
	42.88	0.01	0.35	0.69	1.07	0.31	1.26	0.55	17.95	7.01	24.86	0.36	2.72	
	72.11	2.71	4.77	4.00	10.96	4.41	94.18	28.25	69.34	10.46	69.56	5.78	51.23	
fwd	20226	41	3260	12172	14500	11703	59	1125	1071	87367	1589	4094	3797	161004
	4.58	0.01	0.74	2.76	3.29	2.65	0.01	0.25	0.24	19.80	0.36	0.93	0.86	36.48
	12.56	0.03	2.02	7.56	9.01	7.27	0.04	0.70	0.67	54.26	0.99	2.54	2.36	
	18.85	7.93	24.96	39.21	82.00	91.50	2.45	31.97	2.29	72.28	2.46	35.96	39.69	
rwd	9694	462	9180	17634	1246	523	81	1400	13252	20859	18038	6633	868	99870
	2.20	0.10	2.08	4.00	0.28	0.12	0.02	0.32	3.00	4.73	4.09	1.50	0.20	22.63
	9.71	0.46	9.19	17.66	1.25	0.52	0.08	1.40	13.27	20.89	18.06	6.64	0.87	
	9.03	89.36	70.27	56.80	7.05	4.09	3.37	39.78	28.37	17.26	27.97	58.26	9.07	
Total	107294	517	13063	31047	17684	12790	2405	3519	46710	120869	64479	11385	9566	441328
	24.31	0.12	2.96	7.03	4.01	2.90	0.54	0.80	10.58	27.39	14.61	2.58	2.17	100.00

Statistics for Table of drive by type

Statistic	DF	Value	Prob
Chi-Square	24	266314	<.0001
Likelihood Ratio Chi-Square	24	290685	<.0001
Mantel-Haenszel Chi-Square	1	9507	<.0001
Phi Coefficient		0.77681	
Contingency Coefficient		0.61347	
Cramer's V		0.54929	

Sample Size = 441328

Frequency						Table of drive by paint_color										
Percent Row Pct		paint_color														
Col Pct	drive	black	blue	brown	custom	green	grey	orange	purple	red	silver	white	yellow	Total		
	4wd	36879	19693	5669	3963	8709	19605	918	589	20262	24336	38787	1044	180454		
		8.36 20.44	4.46 10.91	1.28 3.14	0.90 2.20	1.97 4.83	4.44 10.86	0.21 0.51	0.13 0.33	4.59 11.23	5.51 13.49	8.79 21.49	0.24 0.58	40.89		
		45.43	39.06	42.66	37.21	46.29	39.68	34.59	34.11	40.34	36.82	41.63	28.13			
	fwd	26874	20139	4943	3866	5835	21637	938	778	17470	30311	27223	990	161004		
		6.09	4.56	1.12	0.88	1.32	4.90	0.21	0.18	3.96	6.87	6.17	0.22	36.48		
		16.69 33.11	12.51 39.95	3.07 37.19	2.40 36.30	3.62 31.02	13.44 43.79	0.58 35.34	0.48 45.05	10.85 34.78	18.83 45.86	16.91 29.22	0.61 26.67			
	rwd	17420	10583	2678	2821	4268	8169	798	360	12499	11446	27150	1678	99870		
		3.95	2.40	0.61	0.64	0.97	1.85	0.18	0.08	2.83	2.59	6.15	0.38	22.63		
		17.44 21.46	10.60 20.99	2.68 20.15	2.82 26.49	4.27 22.69	8.18 16.53	0.80 30.07	0.36 20.85	12.52 24.88	11.46 17.32	27.19 29.14	1.68 45.20			
	Total	81173 18.39	50415 11.42	13290 3.01	10650 2.41	18812 4.26	49411 11.20	2654 0.60	1727 0.39	50231 11.38	66093 14.98	93160 21.11	3712 0.84	441328 100.00		

Statistics for Table of drive by paint_color

Statistic	DF	Value	Prob
Chi-Square	22	10150.7946	<.0001
Likelihood Ratio Chi-Square	22	9928.4219	<.0001
Mantel-Haenszel Chi-Square	1	871.7726	<.0001
Phi Coefficient		0.1517	
Contingency Coefficient		0.1499	
Cramer's V		0.1072	

Sample Size = 441328

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The FREQ Procedure

Frequency						Table o	f type b	y paint_c	color					
Percent Row Pct							р	aint_col	or					
Col Pct	type	black	blue	brown	custom	green	grey	orange	purple	red	silver	white	yellow	Total
	SUV	22838 5.17 21.29 28.13	11463 2.60 10.68 22.74	3962 0.90 3.69 29.81	2620 0.59 2.44 24.60	5054 1.15 4.71 26.87	12471 2.83 11.62 25.24	624 0.14 0.58 23.51	410 0.09 0.38 23.74	9934 2.25 9.26 19.78	17350 3.93 16.17 26.25	20001 4.53 18.64 21.47	567 0.13 0.53 15.27	107294 24.31
	bus	23 0.01 4.45 0.03	24 0.01 4.64 0.05	9 0.00 1.74 0.07	13 0.00 2.51 0.12	12 0.00 2.32 0.06	9 0.00 1.74 0.02	12 0.00 2.32 0.45	0.00 0.19 0.06	12 0.00 2.32 0.02	7 0.00 1.35 0.01	354 0.08 68.47 0.38	41 0.01 7.93 1.10	517 0.12
	converti	2559 0.58 19.59 3.15	1555 0.35 11.90 3.08	158 0.04 1.21 1.19	336 0.08 2.57 3.15	585 0.13 4.48 3.11	813 0.18 6.22 1.65	123 0.03 0.94 4.63	72 0.02 0.55 4.17	2700 0.61 20.67 5.38	1949 0.44 14.92 2.95	1783 0.40 13.65 1.91	430 0.10 3.29 11.58	13063 2.96
	coupe	6755 1.53 21.76 8.32	3785 0.86 12.19 7.51	416 0.09 1.34 3.13	648 0.15 2.09 6.08	1191 0.27 3.84 6.33	2909 0.66 9.37 5.89	523 0.12 1.68 19.71	185 0.04 0.60 10.71	5404 1.22 17.41 10.76	4110 0.93 13.24 6.22	4271 0.97 13.76 4.58	850 0.19 2.74 22.90	31047 7.03
	hatchbac	2988 0.68 16.90 3.68	2637 0.60 14.91 5.23	204 0.05 1.15 1.53	205 0.05 1.16 1.92	741 0.17 4.19 3.94	2260 0.51 12.78 4.57	295 0.07 1.67 11.12	125 0.03 0.71 7.24	2552 0.58 14.43 5.08	2857 0.65 16.16 4.32	2580 0.58 14.59 2.77	240 0.05 1.36 6.47	17684 4.01
	mini-van	1081 0.24 8.45 1.33	2275 0.52 17.79 4.51	539 0.12 4.21 4.06	288 0.07 2.25 2.70	553 0.13 4.32 2.94	1682 0.38 13.15 3.40	10 0.00 0.08 0.38	57 0.01 0.45 3.30	1197 0.27 9.36 2.38	2591 0.59 20.26 3.92	2483 0.56 19.41 2.67	34 0.01 0.27 0.92	12790 2.90
	offroad	482 0.11 20.04 0.59	248 0.06 10.31 0.49	82 0.02 3.41 0.62	86 0.02 3.58 0.81	262 0.06 10.89 1.39	163 0.04 6.78 0.33	50 0.01 2.08 1.88	8 0.00 0.33 0.46	394 0.09 16.38 0.78	192 0.04 7.98 0.29	355 0.08 14.76 0.38	83 0.02 3.45 2.24	2405 0.54
	other	649 0.15 18.44 0.80	330 0.07 9.38 0.65	97 0.02 2.76 0.73	189 0.04 5.37 1.77	186 0.04 5.29 0.99	211 0.05 6.00 0.43	34 0.01 0.97 1.28	19 0.00 0.54 1.10	408 0.09 11.59 0.81	385 0.09 10.94 0.58	919 0.21 26.12 0.99	92 0.02 2.61 2.48	3519 0.80
	pickup	7599 1.72 16.27 9.36	4991 1.13 10.69 9.90	1441 0.33 3.08 10.84	844 0.19 1.81 7.92	2349 0.53 5.03 12.49	4288 0.97 9.18 8.68	231 0.05 0.49 8.70	139 0.03 0.30 8.05	6792 1.54 14.54 13.52	4481 1.02 9.59 6.78	13282 3.01 28.44 14.26	273 0.06 0.58 7.35	46710 10.58
	sedan	23954 5.43 19.82 29.51	13953 3.16 11.54 27.68	3787 0.86 3.13 28.50	3207 0.73 2.65 30.11	3918 0.89 3.24 20.83	17256 3.91 14.28 34.92	345 0.08 0.29 13.00	499 0.11 0.41 28.89	10602 2.40 8.77 21.11	23077 5.23 19.09 34.92	19782 4.48 16.37 21.23	489 0.11 0.40 13.17	120869 27.39
	truck	10354 2.35 16.06 12.76	6593 1.49 10.23 13.08	1995 0.45 3.09 15.01	1545 0.35 2.40 14.51	2793 0.63 4.33 14.85	5546 1.26 8.60 11.22	326 0.07 0.51 12.28	156 0.04 0.24 9.03	8751 1.98 13.57 17.42	6239 1.41 9.68 9.44	19696 4.46 30.55 21.14	485 0.11 0.75 13.07	64479 14.61
	van	586 0.13 5.15 0.72	1070 0.24 9.40 2.12	291 0.07 2.56 2.19	415 0.09 3.65 3.90	439 0.10 3.86 2.33	651 0.15 5.72 1.32	29 0.01 0.25 1.09	24 0.01 0.21 1.39	612 0.14 5.38 1.22	1026 0.23 9.01 1.55	6169 1.40 54.19 6.62	73 0.02 0.64 1.97	11385 2.58
	wagon	1305 0.30 13.64 1.61	1491 0.34 15.59 2.96	309 0.07 3.23 2.33	254 0.06 2.66 2.38	729 0.17 7.62 3.88	1152 0.26 12.04 2.33	52 0.01 0.54 1.96	32 0.01 0.33 1.85	873 0.20 9.13 1.74	1829 0.41 19.12 2.77	1485 0.34 15.52 1.59	55 0.01 0.57 1.48	9566 2.17
	Total	81173 18.39	50415 11.42	13290 3.01	10650 2.41	18812 4.26	49411 11.20	2654 0.60	1727 0.39	50231 11.38	66093 14.98	93160 21.11	3712 0.84	441328 100.00

Statistics for Table of type by paint_color

Statistic	DF	Value	Prob
Chi-Square	132	36600.8363	<.0001
Likelihood Ratio Chi-Square	132	33884.4508	<.0001
Mantel-Haenszel Chi-Square	1	1231.0941	<.0001
Phi Coefficient		0.2880	
Contingency Coefficient		0.2767	
Cramer's V		0.0868	

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	The GLM Procedure							
	Class Level Information							
Class	Levels	Values						
fuel 5 diesel electric gas hybrid o								
Num	ber of O	bservations Read	1493278					
Num	ber of O	1493278						

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The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	4	5239.6104	1309.9026	3048.54	<.0001
Error	1.49E6	641632.4781	0.4297		
Corrected Total	1.49E6	646872.0885			

R-Square	Coeff Var	Root MSE	log_age Mean
0.008100	26.78702	0.655501	2.447086

Sc	ource	DF	Type I SS	Mean Square	F Value	Pr > F
fu	el	4	5239.610384	1309.902596	3048.54	<.0001

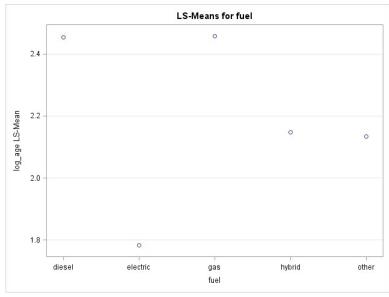
	Source	DF	Type III SS	Mean Square	F Value	Pr > F	
	fuel	4	5239.610384	1309.902596	3048.54	<.0001	

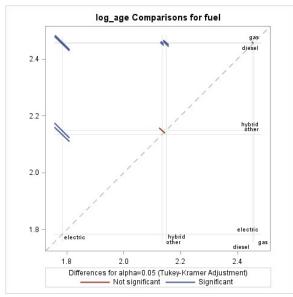
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The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

fuel	log_age LSMEAN	LSMEAN Number
diesel	2.45344230	1
electric	1.78272009	2
gas	2.45809471	3
hybrid	2.14840613	4
other	2.13462157	5

Least Squares Means for effect fuel Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_age							
i/j	1	2	3	4	5		
1		<.0001	0.2064	<.0001	<.0001		
2	<.0001		<.0001	<.0001	<.0001		
3	0.2064	<.0001		<.0001	<.0001		
4	<.0001	<.0001	<.0001		0.3315		
5	<.0001	<.0001	<.0001	0.3315			





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The GLM Procedure					
	С	lass Level Information	n		
Class	Levels	Values			
title_status	6	rts onl rebu	ilt salvage		
N	lumber o	f Observations Read	1493278		
N	lumber o	f Observations Used	1493278		

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The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	12562.2469	2512.4494	5914.73	<.0001
Error	1.49E6	634309.8416	0.4248		
Corrected Total	1.49E6	646872.0885			

R-Square	Coeff Var	Root MSE	log_age Mean
0.019420	26.63373	0.651750	2.447086

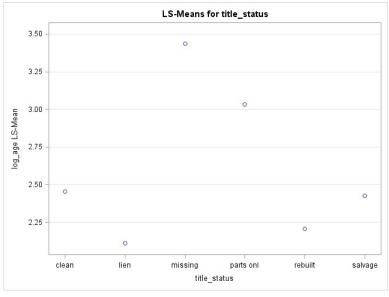
Source	DF	Type I SS	Mean Square	F Value	Pr > F
title_status	5	12562.24688	2512.44938	5914.73	<.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F

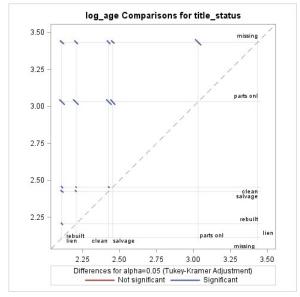
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The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

title_status	log_age LSMEAN	LSMEAN Number
clean	2.45379181	1
lien	2.10996123	2
missing	3.43577407	3
parts onl	3.03109515	4
rebuilt	2.20452100	5
salvage	2.42647507	6

Least Squares Means for effect title_status Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_age						
i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		<.0001	<.0001	<.0001	<.0001
3	<.0001	<.0001		<.0001	<.0001	<.0001
4	<.0001	<.0001	<.0001		<.0001	<.0001
5	<.0001	<.0001	<.0001	<.0001		<.0001
6	<.0001	<.0001	<.0001	<.0001	<.0001	





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Т	he GLM	Procedure	
Cla	ss Level	Information	n
Class	Levels	Values	
transmission	3	automatic r	nanual oth
Number of	Observa	tions Read	1493278
Number of	Observa	tions Used	1493278

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The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	34783.6218	17391.8109	42429.7	<.0001
Error	1.49E6	612088.4667	0.4099		
Corrected Total	1.49E6	646872.0885			

R-Square	Coeff Var	Root MSE	log_age Mean
0.053772	26.16303	0.640232	2.447086

transmission 2 347	793 62195	17391.81092	40 400 7	
transmission 2 047	703.02 103	17391.61092	42429.7	<.0001
Source DF T	una III ee	Mean Square	E Value	Dr > E

transmission

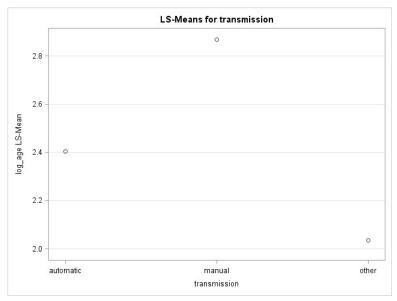
2 34783.62185 17391.81092 42429.7 <.0001

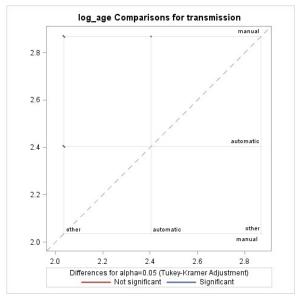
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The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

transmission	log_age LSMEAN	LSMEAN Number
automatic	2.40374044	1
manual	2.86872344	2
other	2.03636612	3

	r > t for H0:	ns for effect t LSMean(i)=LS Variable: log	SMean(j)
i/j	1	2	3
1		<.0001	<.0001
2	<.0001		<.0001
3	<.0001	<.0001	





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	The GLM Procedure									
	Class Level Information									
Class	Levels	Values								
manufacturer	34	acura audi bmw buick cadillac chevrolet chrysler dodge fiat ford gmc honda hyundai infiniti jaguar jeep kia lexus lincoln mazda mercedes mercury mini mitsubishi nissan other pontiac ram rover saturn subaru toyota volkswagen volvo								

Number of Observations Read 1493278 Number of Observations Used 1493278 SAS Output Page 118 of 167

The GLM Procedure Dependent Variable: log_age DF Sum of Squares Mean Square F Value Pr > F Source Model 33 32668.8610 989.9655 2406.79 <.0001 Error 1.49E6 614203.2276 0.4113 Corrected Total 1.49E6 646872.0885 R-Square | Coeff Var | Root MSE | log_age Mean 0.050503 26.20846 0.641343 Type I SS | Mean Square | F Value | Pr > F Source DF manufacturer | 33 | 32668.86096 989.96548 2406.79 < .0001 Source Type III SS | Mean Square | F Value | Pr > F manufacturer 33 32668.86096 989.96548 2406.79 <.0001 Distribution of log_age

0 0

manufacturer

1.08E6 95123 1.11E6 0 01.25126 0 0 03077008 0

807707 802110

0 0 0 07795490

600950 600950 600815 0 1.11 366745 1.11

F 2406.79 Prob > F <.0001 a

log_age

312 0 0 0 0 0 0 0 1 694 1E6 SAS Output Page 119 of 167

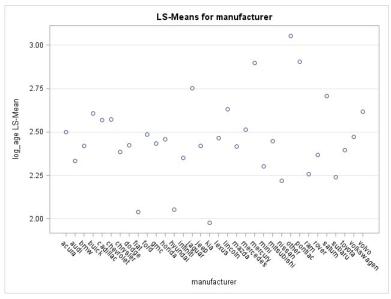
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

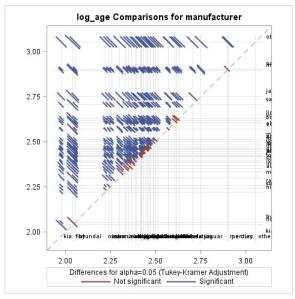
manufacturer	log_age LSMEAN	LSMEAN Number
acura	2.49969801	1
audi	2.33443291	2
bmw	2.41919516	3
buick	2.60631282	4
cadillac	2.56925391	5
chevrolet	2.57185015	6
chrysler	2.38555961	7
dodge	2.42298831	8
fiat	2.03904381	9
ford	2.48745098	10
gmc	2.43234650	11
honda	2.45817279	12
hyundai	2.05453063	13
infiniti	2.35181365	14
jaguar	2.75163488	15
jeep	2.41965391	16
kia	1.97646757	17
lexus	2.46506935	18
lincoln	2.63157714	19
mazda	2.41765477	20
mercedes	2.51342468	21
mercury	2.89659636	22
mini	2.30116133	23
mitsubishi	2.44779143	24
nissan	2.21995218	25
other	3.05327619	26
pontiac	2.90488004	27
ram	2.25638443	28
rover	2.36747572	29
saturn	2.70619776	30
subaru	2.23964700	31
toyota	2.39459431	32
volkswagen	2.47110437	33
volvo	2.61716492	34

																> t for H Depende					
i/j	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	2
1		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.8709	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0001	<.0001	<.0001	0.950
2	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9610	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.000
3	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	0.2493	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	1.0000	<.000
4	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.1410	<.0001	<.000
5	<.0001	<.0001	<.0001	<.0001		1.0000	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.000
6	<.0001	<.0001	<.0001	<.0001	1.0000		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.000
7	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0006	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.000
8	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	0.6867	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	1.0000	<.000
9	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	0.0208	<.0001	<.0001	<.0001	<.000
10	0.8709	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0013	<.0001	<.0001	<.000
11	<.0001	<.0001	0.2493	<.0001	<.0001	<.0001	<.0001	0.6867	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	0.0811	<.0001	<.0001	<.0001	0.4711	<.000
12	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.000
13	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.000
14	<.0001	0.9610	<.0001	<.0001	<.0001	<.0001	0.0006	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.000
15	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.000
16	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	0.0811	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	1.0000	<.000

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17	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0208	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001
18	0.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0013	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001
19	<.0001	<.0001	<.0001	0.1410	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001
20	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	0.4711	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001		<.0001
21	0.9500	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	
22	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
23	<.0001	0.1758	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0003	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
24	<.0001	<.0001	0.0212	<.0001	<.0001	<.0001	<.0001	0.0800	<.0001	<.0001	0.9378	0.9999	<.0001	<.0001	<.0001	0.0136	<.0001	0.9560	<.0001	0.0308	<.0001
25	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
26	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
27	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
28	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
29	<.0001	0.3239	<.0001	<.0001	<.0001	<.0001	0.9966	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001	<.0001	0.0003	<.0001
30	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0700	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
31	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
32	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9660	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0005	<.0001
33	0.0007	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0025	<.0001	0.2840	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001
34	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9994	<.0001	<.0001





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		The GLM Procedure		
	С	lass Level Information	1	
Class	Levels	Values		
condition	6	excellent fair good like	new new	salvage
	Number o	of Observations Read	441328	
	Number c	441328		

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The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	29575.3017	5915.0603	20421.4	<.0001
Error	441322	127828.8143	0.2896		
Corrected Total	441327	157404.1160			

	R-Square		Coeff Var	Root MSE log		age Mea	n
	0.187894		22.06048	0.538191		2.439617	
Sourc	•	DF	Type I SS	Mean Squ	ıaro	F Value	Dr N E

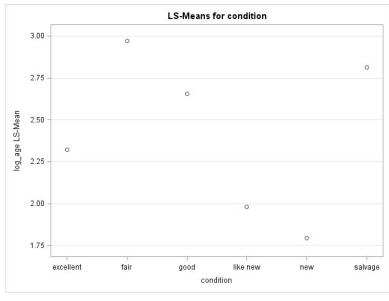
condition 5		29575.30171	5915.06034	20421.4	<.0001	
Source	DF	Type III SS	Mean Square	F Value	Pr > F	
condition	5	29575.30171	5915.06034	20421.4	<.0001	

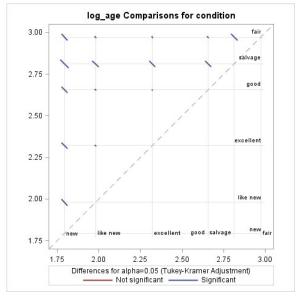
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The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

condition	log_age LSMEAN	LSMEAN Number
excellent	2.32068316	1
fair	2.97271131	2
good	2.65597653	3
like new	1.97983764	4
new	1.79294201	5
salvage	2.81289864	6

	Least Squares Means for effect condition Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_age												
i/j	1	2	3	4	5	6							
1		<.0001	<.0001	<.0001	<.0001	<.0001							
2	<.0001		<.0001	<.0001	<.0001	<.0001							
3	<.0001	<.0001		<.0001	<.0001	<.0001							
4	<.0001	<.0001	<.0001		<.0001	<.0001							
5	<.0001	<.0001	<.0001	<.0001		<.0001							
6	<.0001	<.0001	<.0001	<.0001	<.0001								





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		The GLM Procedure		
		Class Level Information		
Class	Levels	Values		
cylinders	vilinders 8 10 cylinders 12 cylinders 3 cylinders 4 cylinders 5 cylinders 6 cylinders 8 cylinders 0			
		Number of Observations Read 441328		
		Number of Observations Used 441328		

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The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	9055.7878	1293.6840	3848.57	<.0001
Error	441320	148348.3282	0.3361		
Corrected Total	441327	157404.1160			

R-Square	Coeff Var	Root MSE	log_age Mean
0.057532	23.76528	0.579782	2.439617

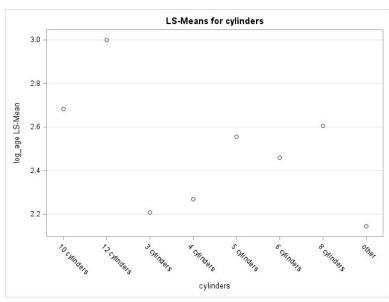
Source	DF	Type I SS	Mean Square	F Value	Pr > F
cylinders	7	9055.787797	1293.683971	3848.57	<.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F

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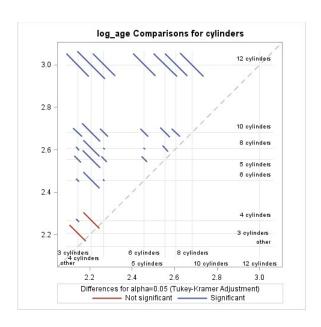
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

cylinders	log_age LSMEAN	LSMEAN Number
10 cylinders	2.68120737	1
12 cylinders	3.00000399	2
3 cylinders	2.20731222	3
4 cylinders	2.26681171	4
5 cylinders	2.55603747	5
6 cylinders	2.45700713	6
8 cylinders	2.60585431	7
other	2.14282596	8

	Least Squares Means for effect cylinders Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_age								
i/j	i/j 1 2 3 4 5 6 7 8								
1		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	
2	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	
3	<.0001	<.0001		0.2625	<.0001	<.0001	<.0001	0.1907	
4	<.0001	<.0001	0.2625		<.0001	<.0001	<.0001	<.0001	
5	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	
6	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	
7	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	
8	<.0001	<.0001	0.1907	<.0001	<.0001	<.0001	<.0001		



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Class Level Information
Class Levels Values
drive 3 4wd fwd rwd

Number of Observations Read 441328

Number of Observations Used 441328

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The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	8556.1667	4278.0834	12684.3	<.0001
Error	441325	148847.9493	0.3373		
Corrected Total	441327	157404.1160			

R-Square	Coeff Var	Root MSE	log_age Mean
0.054358	23.80513	0.580754	2.439617

S	Source	DF	Type III SS	Mean Square	F Value	Pr > F
d	drive	2	8556.166704	4278.083352	12684.3	<.0001
S	Source	DF	Type I SS	Mean Square	F Value	Pr > F

2 8556.166704 4278.083352 12684.3 <.0001

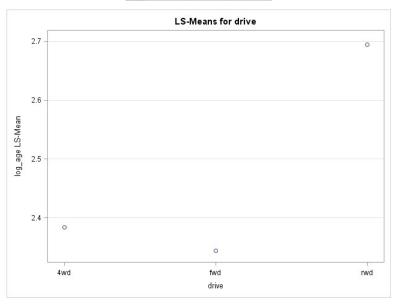
drive

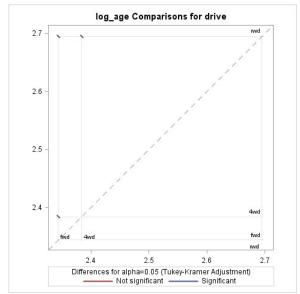
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The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

drive	log_age LSMEAN	LSMEAN Number
4wd	2.38398796	1
fwd	2.34356757	2
rwd	2.69497697	3

Least Squares Means for effect drive Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_age						
i/j	1	2	3			
1		<.0001	<.0001			
2	<.0001		<.0001			
3	<.0001	<.0001				





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			The GLM Procedure				
			Class Level Information	1			
Class	Levels	Values					
type	13	SUV bus co	SUV bus converti coupe hatchbac mini-van offroad other pickup sedan truck van wagor				
			Number of Observations Read	441328			
			Number of Observations Used	441328			

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The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	12	6407.8752	533.9896	1560.69	<.0001
Error	441315	150996.2409	0.3422		
Corrected Total	441327	157404.1160			

R-Square	Coeff Var	Root MSE	log_age Mean
0.040710	23.97657	0.584937	2.439617

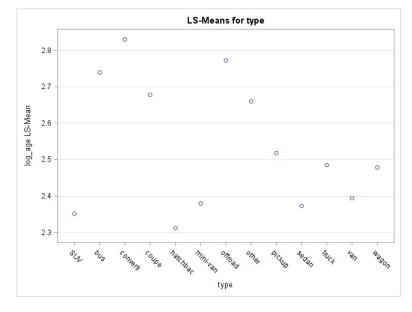
Source	DF	Type I SS	Mean Square	F Value	Pr > F
type	12	6407.875171	533.989598	1560.69	<.0001
0	DE	T III 00	M 0	E Wales	D
Source	urce DF Type III SS		Mean Square	F value	Pr > F

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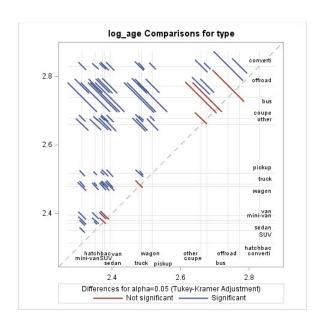
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

type	log_age LSMEAN	LSMEAN Number
SUV	2.35114013	1
bus	2.73886174	2
converti	2.82998057	3
coupe	2.67739945	4
hatchbac	2.31263375	5
mini-van	2.37896140	6
offroad	2.77228895	7
other	2.65929381	8
pickup	2.51741844	9
sedan	2.37219899	10
truck	2.48561779	11
van	2.39363273	12
wagon	2.47901463	13

	Least Squares Means for effect type Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_age														
i/j	i/j 1 2 3 4 5 6 7 8 9 10 11 1										12	13			
1		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
2	<.0001		0.0297	0.4658	<.0001	<.0001	0.9942	0.1636	<.0001	<.0001	<.0001	<.0001	<.0001		
3	<.0001	0.0297		<.0001	<.0001	<.0001	0.0006	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
4	<.0001	0.4658	<.0001		<.0001	<.0001	<.0001	0.8783	<.0001	<.0001	<.0001	<.0001	<.0001		
5	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
6	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	0.9906	<.0001	0.7676	<.0001		
7	<.0001	0.9942	0.0006	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
8	<.0001	0.1636	<.0001	0.8783	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001		
9	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001		
10	<.0001	<.0001	<.0001	<.0001	<.0001	0.9906	<.0001	<.0001	<.0001		<.0001	0.0118	<.0001		
11	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	0.9984		
12	<.0001	<.0001	<.0001	<.0001	<.0001	0.7676	<.0001	<.0001	<.0001	0.0118	<.0001		<.0001		
13	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9984	<.0001			



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The	GL	M P	ro	ced	ur	E
-----	----	-----	----	-----	----	---

Class Level Information							
Class	Levels	Values					
paint_color	12	black blue brown custom green grey orange purple red silver white yellow					

Number of Observations Read 441328 Number of Observations Used 441328 SAS Output Page 137 of 167

The GLM Procedure

Dependent Variable: log_age

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	7961.5169	723.7743	2137.36	<.0001
Error	441316	149442.5991	0.3386		
Corrected Total	441327	157404.1160			

R-Square	Coeff Var	Root MSE	log_age Mean
0.050580	23.85287	0.581919	2.439617

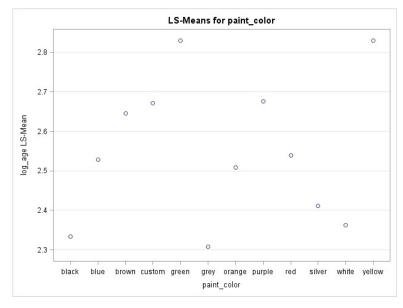
Source	DF	Type I SS	Mean Square	F Value	Pr > F
paint_color	11	7961.516914	723.774265	2137.36	<.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F

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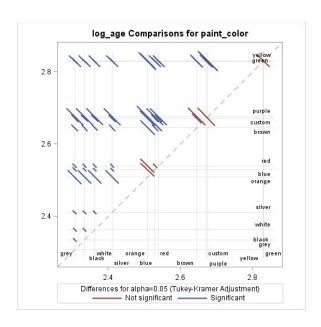
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

paint_color	log_age LSMEAN	LSMEAN Number
black	2.33438464	1
blue	2.52935677	2
brown	2.64545887	3
custom	2.67146728	4
green	2.83034080	5
grey	2.30741280	6
orange	2.50884163	7
purple	2.67609105	8
red	2.53973672	9
silver	2.41101608	10
white	2.36250553	11
yellow	2.82964146	12

	Least Squares Means for effect paint_color Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_age													
i/j	1	2	3	4	5	6	7	8	9	10	11	12		
1		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
2	<.0001		<.0001	<.0001	<.0001	<.0001	0.8344	<.0001	0.1675	<.0001	<.0001	<.0001		
3	<.0001	<.0001		0.0292	<.0001	<.0001	<.0001	0.6531	<.0001	<.0001	<.0001	<.0001		
4	<.0001	<.0001	0.0292		<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001		
5	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000		
6	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
7	<.0001	0.8344	<.0001	<.0001	<.0001	<.0001		<.0001	0.2436	<.0001	<.0001	<.0001		
8	<.0001	<.0001	0.6531	1.0000	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001		
9	<.0001	0.1675	<.0001	<.0001	<.0001	<.0001	0.2436	<.0001		<.0001	<.0001	<.0001		
10	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001		
11	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001		
12	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001			



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		The GLM Procedure			
	С	lass Level Information	1		
Class	Levels	Values			
condition	6	excellent fair good like new new salvage			
N	lumber c	of Observations Read	441328		
N	Number of Observations Used				

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The GLM Procedure

Dependent Variable: log_odometer

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	41734.7018	8346.9404	17889.3	<.0001
Error	441322	205915.8507	0.4666		
Corrected Total	441327	247650.5524			

	R-Squa	are	Coeff Var	Roo	ot MSE	log_oc	lometer N	lean
	0.168523		5.934619	0.0	683073		11.50	997
So	urce	DF	Type I	SS	Mean S	Square	F Value	Pr > F

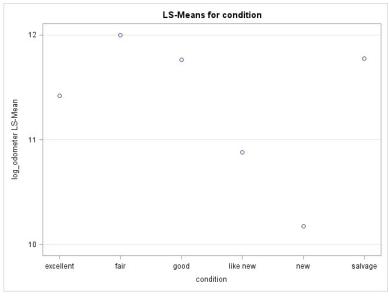
condition	5	41734.70179	8346.94036	17889.3	<.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F
condition	5	41734.70179	8346.94036	17889.3	<.0001

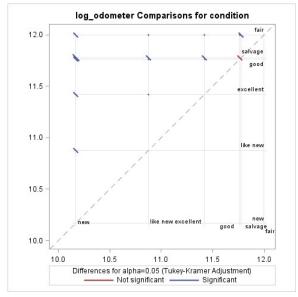
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The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

condition	log_odometer LSMEAN	LSMEAN Number
excellent	11.4206148	1
fair	11.9966477	2
good	11.7614603	3
like new	10.8772583	4
new	10.1718037	5
salvage	11.7764288	6

Least Squares Means for effect condition Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_odometer						
i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		<.0001	<.0001	<.0001	<.0001
3	<.0001	<.0001		<.0001	<.0001	0.9457
4	<.0001	<.0001	<.0001		<.0001	<.0001
5	<.0001	<.0001	<.0001	<.0001		<.0001
6	<.0001	<.0001	0.9457	<.0001	<.0001	





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		The GLM Procedure	
		Class Level Information	
Class	Levels	Values	
cylinders	8	10 cylinders 12 cylinders 3 cylinders 4 cylinders 5 cylinders 6 cylinders 8 cylinders	s other
		Number of Observations Read 441328	
		Number of Observations Used 441328	

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The GLM Procedure

Dependent Variable: log_odometer

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	4004.7456	572.1065	1036.27	<.0001
Error	441320	243645.8069	0.5521		
Corrected Total	441327	247650.5524			

	R-Square		Coeff Var	Roo	ot MSE	log_oc	lometer N	lean
	0.0161	71	6.455479	0.743024		11.5099		997
80	urce	DF	Type I	SS	Mean S	Square	F Value	Pr > F

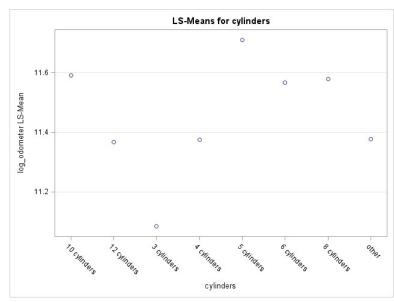
cylinders	7	4004.745567	572.106510	1036.27	<.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F
cylinders	7	4004.745567	572.106510	1036 27	< 0001

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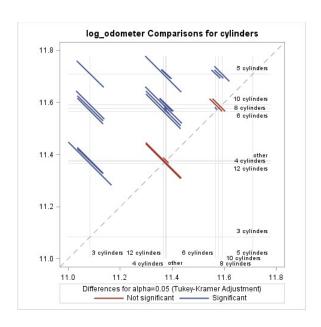
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

cylinders	log_odometer LSMEAN	LSMEAN Number
10 cylinders	11.5911121	1
12 cylinders	11.3662656	2
3 cylinders	11.0845124	3
4 cylinders	11.3752447	4
5 cylinders	11.7099553	5
6 cylinders	11.5672556	6
8 cylinders	11.5783664	7
other	11.3780070	8

	Least Squares Means for effect cylinders Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_odometer													
i/j	i/j 1 2 3 4 5 6 7													
1		<.0001	<.0001	<.0001	<.0001	0.8015	0.9928	<.0001						
2	<.0001		<.0001	1.0000	<.0001	0.0002	<.0001	1.0000						
3	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001						
4	<.0001	1.0000	<.0001		<.0001	<.0001	<.0001	0.9999						
5	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001						
6	0.8015	0.0002	<.0001	<.0001	<.0001		0.0015	<.0001						
7	0.9928	<.0001	<.0001	<.0001	<.0001	0.0015		<.0001						
8	<.0001	1.0000	<.0001	0.9999	<.0001	<.0001	<.0001							



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Class Level Information
Class Levels Values
drive 3 4wd fwd rwd

Number of Observations Read
Number of Observations Used 441328

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The GLM Procedure

Dependent Variable: log_odometer

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1076.2094	538.1047	963.11	<.0001
Error	441325	246574.3431	0.5587		
Corrected Total	441327	247650.5524			

	R-Squar	re	Coeff Var	R	oot MSE	log_odometer Mea		
	0.00434	46	6.494122 0.		.747472		50997	
S	ource [)F	Type I S	SS	Mean S	quare	F Value	Pr > F

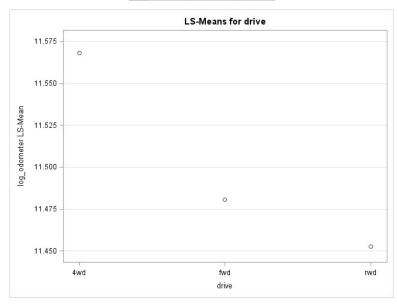
drive	2	1076.209379	538.104689	963.11	<.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F

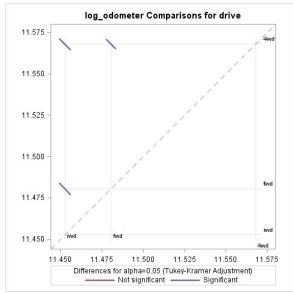
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The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

drive	log_odometer LSMEAN	LSMEAN Number
4wd	11.5680122	1
fwd	11.4804815	2
rwd	11.4526376	3

Least Squares Means for effect drive Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_odometer									
i/j	1 2 3								
1		<.0001	<.0001						
2	<.0001		<.0001						
3	<.0001	<.0001							





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			The GLM Procedure		
			Class Level Information	1	
Class	Levels	Values			
type	13	SUV bus co	onverti coupe hatchbac mini-van offro	ad other	pickup sedan truck van wagon
			Number of Observations Read	441328	
			Number of Observations Used	441328	

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The GLM Procedure

Dependent Variable: log_odometer

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	12	5151.9242	429.3270	781.32	<.0001
Error	441315	242498.6283	0.5495		
Corrected Total	441327	247650.5524			

	R-Square		Coeff Var	R	oot MSE	log_c	dometer	Mean
	0.020803		6.440300	0	.741277		11.5	0997
S	Source DF		Type I S	ss	Mean S	nuare	F Value	Pr > F

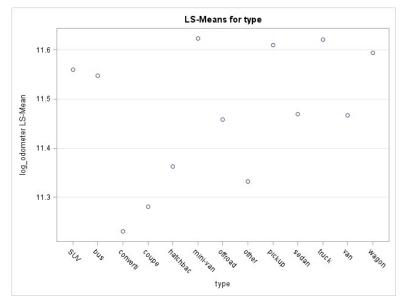
type		0101.02-1100	120.027010	701.02	0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F
type	12	5151.924153	429.327013	781.32	<.0001

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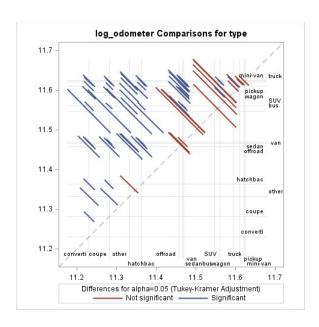
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

type	log_odometer LSMEAN	LSMEAN Number
SUV	11.5601979	1
bus	11.5472499	2
converti	11.2302263	3
coupe	11.2810839	4
hatchbac	11.3625969	5
mini-van	11.6237393	6
offroad	11.4577764	7
other	11.3316429	8
pickup	11.6103281	9
sedan	11.4691208	10
truck	11.6215251	11
van	11.4667378	12
wagon	11.5941745	13

	Least Squares Means for effect type Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_odometer														
i/j	1	2	3	4	5	6	7	8	9	10	11	12	13		
1		1.0000	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0012		
2	1.0000		<.0001	<.0001	<.0001	0.5167	0.3811	<.0001	0.7814	0.4500	0.5397	0.4328	0.9743		
3	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
4	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	0.0082	<.0001	<.0001	<.0001	<.0001	<.0001		
5	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	0.5449	<.0001	<.0001	<.0001	<.0001	<.0001		
6	<.0001	0.5167	<.0001	<.0001	<.0001		<.0001	<.0001	0.8437	<.0001	1.0000	<.0001	0.1399		
7	<.0001	0.3811	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	0.9999	<.0001	1.0000	<.0001		
8	<.0001	<.0001	<.0001	0.0082	0.5449	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001		
9	<.0001	0.7814	<.0001	<.0001	<.0001	0.8437	<.0001	<.0001		<.0001	0.3837	<.0001	0.7706		
10	<.0001	0.4500	<.0001	<.0001	<.0001	<.0001	0.9999	<.0001	<.0001		<.0001	1.0000	<.0001		
11	<.0001	0.5397	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	0.3837	<.0001		<.0001	0.0421		
12	<.0001	0.4328	<.0001	<.0001	<.0001	<.0001	1.0000	<.0001	<.0001	1.0000	<.0001		<.0001		
13	0.0012	0.9743	<.0001	<.0001	<.0001	0.1399	<.0001	<.0001	0.7706	<.0001	0.0421	<.0001			



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The	GLM	Proced	lure
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Class Level Information							
Class	Levels	Values					
paint_color	12	black blue brown custom green grey orange purple red silver white yellow					

Number of Observations Read	441328	
Number of Observations Used	441328	

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The GLM Procedure

Dependent Variable: log_odometer

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	2433.7737	221.2522	398.19	<.0001
Error	441316	245216.7788	0.5556		
Corrected Total	441327	247650.5524			

R-Square	Coeff Var	Root MSE	log_odometer Mean
0.009827	6.476286	0.745419	11.50997

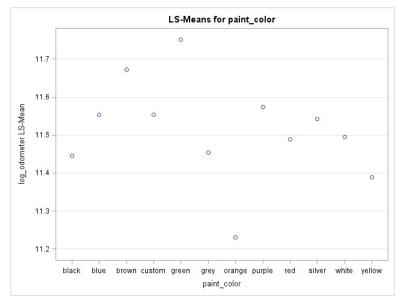
Source	DF	Type I SS	Mean Square	F Value	Pr > F
paint_color	11	2433.773670	221.252152	398.19	<.0001
Source	DF	Type III SS	Mean Square	F Value	Pr > F

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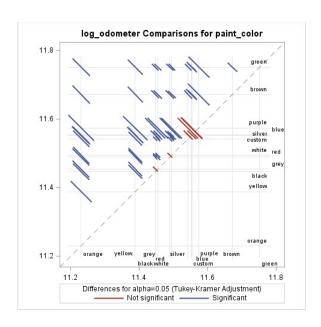
The GLM Procedure Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer

paint_color	log_odometer LSMEAN	LSMEAN Number
black	11.4462007	1
blue	11.5541385	2
brown	11.6718375	3
custom	11.5529754	4
green	11.7515647	5
grey	11.4540691	6
orange	11.2297919	7
purple	11.5735919	8
red	11.4888015	9
silver	11.5424597	10
white	11.4945138	11
yellow	11.3880944	12

	Least Squares Means for effect paint_color Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: log_odometer													
i/j	1	2	3	4	5	6	7	8	9	10	11	12		
1		<.0001	<.0001	<.0001	<.0001	0.7901	<.0001	<.0001	<.0001	<.0001	<.0001	0.0002		
2	<.0001		<.0001	1.0000	<.0001	<.0001	<.0001	0.9960	<.0001	0.2520	<.0001	<.0001		
3	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
4	<.0001	1.0000	<.0001		<.0001	<.0001	<.0001	0.9960	<.0001	0.9722	<.0001	<.0001		
5	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
6	0.7901	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		
7	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001	<.0001	<.0001	<.0001		
8	<.0001	0.9960	<.0001	0.9960	<.0001	<.0001	<.0001		0.0002	0.8625	0.0008	<.0001		
9	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0002		<.0001	0.9667	<.0001		
10	<.0001	0.2520	<.0001	0.9722	<.0001	<.0001	<.0001	0.8625	<.0001		<.0001	<.0001		
11	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0008	0.9667	<.0001		<.0001		
12	0.0002	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001			



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The GLM Procedure

Class Level Information					
Class	Levels	Values			
fuel	5	diesel electric gas hybrid other			
title_status	6	clean lien missing rebuilt salvage parts onl			
transmission	3	automatic manual other			

Number of Observations Read 1493278 Number of Observations Used 1493278 SAS Output Page 160 of 167

The GLM Procedure

Dependent Variable: log_price

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	12	615985.178	51332.098	77749.1	<.0001
Error	1.49E6	985894.560	0.660		
Corrected Total	1.49E6	1601879.738			

R-Square	Coeff Var	Root MSE	log_price Mean
0.384539	9.197130	0.812544	8.834755

Source	DF	Type I SS	Mean Square	F Value	Pr > F
log_age	1	521096.7980	521096.7980	789269	<.0001
fuel	4	74424.0306	18606.0076	28181.2	<.0001
title_status	5	17138.0637	3427.6127	5191.56	<.0001
transmission	2	3326.2856	1663.1428	2519.05	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
log_age	1	481193.7959	481193.7959	728830	<.0001
fuel	4	71929.7263	17982.4316	27236.7	<.0001
title_status	5	17401.7723	3480.3545	5271.45	<.0001
transmission	2	3326.2856	1663.1428	2519.05	<.0001

Parameter	Estimate		Standard Error	t Value	Pr > t
Intercept	9.612392773	В	0.01664976	577.33	<.0001
log_age	-0.898533306		0.00105250	-853.72	<.0001
fuel diesel	0.641082792	В	0.00498403	128.63	<.0001
fuel electric	-0.316091499	В	0.02366759	-13.36	<.0001
fuel gas	-0.244395652	В	0.00429852	-56.86	<.0001
fuel hybrid	-0.252637438	В	0.00912867	-27.68	<.0001
fuel other	0.000000000	В			
title_status clean	1.652348549	В	0.01556788	106.14	<.0001
title_status lien	1.934548839	В	0.01663475	116.30	<.0001
title_status missing	0.977651556	В	0.01834601	53.29	<.0001
title_status rebuilt	1.481138926	В	0.01604784	92.30	<.0001
title_status salvage	1.255873236	В	0.01630047	77.05	<.0001
title_status parts onl	0.000000000	В			
transmission automatic	-0.052636951	В	0.00528566	-9.96	<.0001
transmission manual	0.103643411	В	0.00567423	18.27	<.0001
transmission other	0.000000000	В			

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

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,	The GLM Procedure						
	Class Level Information						
Class	Levels	Values					
manufacturer		acura audi bmw buick cadillac chevrolet chrysler dodge fiat ford gmc honda hyundai infiniti jaguar jeep kia lexus lincoln mazda mercedes mercury mini mitsubishi nissan pontiac ram rover saturn subaru toyota volkswagen volvo other					

Number of Observations Read 1493278 Number of Observations Used 1493278 SAS Output Page 162 of 167

The GLM Procedure

Dependent Variable: log_price

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	34	619030.784	18206.788	27661.6	<.0001
Error	1.49E6	982848.954	0.658		
Corrected Total	1.49E6	1601879.738			

R-Square	Coeff Var	Root MSE	log_price Mean		
0.386440	9.182980	0.811294	8.834755		

Source	DF	Type I SS	Mean Square	F Value	Pr > F
log_age	1	521096.7980	521096.7980	791703	<.0001
manufacturer	33	97933.9858	2967.6965	4508.82	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F	
log_age	1	510626.1385	510626.1385	775795	<.0001	
manufacturer	33	97933.9858	2967.6965	4508.82	<.0001	

Parameter	Estimate		Standard Error	t Value	Pr > t	
Intercept	11.67998703	В	0.01934005	603.93	<.0001	
log_age	-0.91179136		0.00103519	-880.79	<.0001	
manufacturer acura	-0.86742663	В	0.02006342	-43.23	<.0001	
manufacturer audi	-0.55984240	В	0.02026168	-27.63	<.0001	
manufacturer bmw	-0.46365622	В	0.01950542	-23.77	<.0001	
manufacturer buick	-0.89020379	В	0.01986936	-44.80	<.0001	
manufacturer cadillac	-0.47306003	В	0.01979686	-23.90	<.0001	
manufacturer chevrolet	-0.47596619	В	0.01915690	-24.85	<.0001	
manufacturer chrysler	-1.02437091	В	0.01965864	-52.11	<.0001	
manufacturer dodge	-0.78151840	В	0.01933049	-40.43	<.0001	
manufacturer fiat	-0.94782378	В	0.02682164	-35.34	<.0001	
manufacturer ford	-0.49559572	В	0.01915195	-25.88	<.0001	
manufacturer gmc	-0.28737663	В	0.01934987	-14.85	<.0001	
manufacturer honda	-0.94177631	В	0.01929223	-48.82	<.0001	
manufacturer hyundai	-1.04862674	В	0.01964236	-53.39	<.0001	
manufacturer infiniti	-0.57187957	В	0.02048624	-27.92	<.0001	
manufacturer jaguar	-0.49632065	В	0.02303129	-21.55	<.0001	
manufacturer jeep	-0.43443853	В	0.01933194	-22.47	<.0001	
manufacturer kia	-1.05157563	В	0.01982138	-53.05	<.0001	
manufacturer lexus	-0.39497382	В	0.01996102	-19.79	<.0001	
manufacturer lincoln	-0.68051203	В	0.02044438	-33.29	<.0001	
manufacturer mazda	-0.95731289	В	0.01984601	-48.24	<.0001	
manufacturer mercedes	-0.32901687	В	0.01966647	-16.73	<.0001	
manufacturer mercury	-1.10232235	В	0.02078932	-53.02	<.0001	
manufacturer mini	-0.70779579	В	0.02171974	-32.59	<.0001	
manufacturer mitsubishi	-1.07686045	В	0.02069795	-52.03	<.0001	
manufacturer nissan	-0.94655933	В	0.01932818	-48.97	<.0001	
manufacturer pontiac	-0.92643823	В	0.01987464	-46.61	<.0001	
manufacturer ram	-0.03984956	В	0.01941631	-2.05	0.0401	
manufacturer rover	-0.13645735	В	0.02223451	-6.14	<.0001	
manufacturer saturn	-1.41639493	В	0.02092782	-67.68	<.0001	
manufacturer subaru	-0.72266733	В	0.01970657	-36.67	<.0001	
manufacturer toyota	-0.61944080	В	0.01924773	-32.18	<.0001	
manufacturer volkswagen	-0.81911298	В	0.01956001	-41.88	<.0001	
manufacturer volvo	-0.91483996	В	0.02067453	-44.25	<.0001	
manufacturer other	0.00000000	В				

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

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The GLM Procedure

	Class Level Information				
Class	Levels	Values			
condition	6	excellent fair good like new new salvage			
cylinders	8	10 cylinders 12 cylinders 3 cylinders 4 cylinders 5 cylinders 6 cylinders 8 cylinders other			
drive	3	fwd rwd 4wd			

Number of Observations Read 441328 Number of Observations Used 441328 SAS Output Page 165 of 167

The GLM Procedure

Dependent Variable: log_price

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	16	253396.0195	15837.2512	47263.2	<.0001
Error	441311	147877.4001	0.3351		
Corrected Total	441327	401273.4197			

R-Square	Coeff Var	Root MSE	log_price Mean
0.631480	6.518141	0.578867	8.880855

Source	DF	Type I SS	Mean Square	F Value	Pr > F
log_age	1	145804.0439	145804.0439	435123	<.0001
log_odometer	1	18605.6277	18605.6277	55524.8	<.0001
condition	5	32753.2641	6550.6528	19549.1	<.0001
cylinders	7	40269.5719	5752.7960	17168.1	<.0001
drive	2	15963.5120	7981.7560	23820.0	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
log_age	1	43881.38498	43881.38498	130955	<.0001
log_odometer	1	11849.27691	11849.27691	35361.8	<.0001
condition	5	29544.41793	5908.88359	17633.9	<.0001
cylinders	7	11866.83760	1695.26251	5059.18	<.0001
drive	2	15963.51200	7981.75600	23820.0	<.0001

Parameter	Estimate		Standard Error	t Value	Pr > t
Intercept	12.82102336	В	0.02155361	594.84	<.0001
log_age	-0.70050183		0.00193574	-361.88	<.0001
log_odometer	-0.27698836		0.00147297	-188.05	<.0001
condition excellent	1.46748612	В	0.01405023	104.45	<.0001
condition fair	0.39144406	В	0.01441897	27.15	<.0001
condition good	1.16247241	В	0.01404423	82.77	<.0001
condition like new	1.44691340	В	0.01427400	101.37	<.0001
condition new	1.12326102	В	0.01975394	56.86	<.0001
condition salvage	0.00000000	В			
cylinders 10 cylinders	0.31015242	В	0.01329205	23.33	<.0001
cylinders 12 cylinders	0.38009359	В	0.03495810	10.87	<.0001
cylinders 3 cylinders	-0.61063134	В	0.02568106	-23.78	<.0001
cylinders 4 cylinders	-0.32594400	В	0.00540527	-60.30	<.0001
cylinders 5 cylinders	-0.26402011	В	0.01001218	-26.37	<.0001
cylinders 6 cylinders	-0.18016605	В	0.00533035	-33.80	<.0001
cylinders 8 cylinders	0.15128080	В	0.00544797	27.77	<.0001
cylinders other	0.00000000	В			
drive fwd	-0.49930729	В	0.00229314	-217.74	<.0001
drive rwd	-0.13494144	В	0.00238495	-56.58	<.0001
drive 4wd	0.00000000	В			

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

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The GLM Procedure

	Class Level Information					
Class	Levels	Values				
type	13	SUV bus converti coupe hatchbac mini-van offroad pickup sedan truck van wagon other				
paint_color	12	black blue brown green grey orange purple red silver white yellow custom				

Number of Observations Read	441328	
Number of Observations Used	441328	

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The GLM Procedure

Dependent Variable: log_price

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	25	210097.4023	8403.8961	19399.2	<.0001
Error	441302	191176.0173	0.4332		
Corrected Total	441327	401273.4197			

R-Square	Coeff Var	Root MSE	log_price Mean
0.523577	7.411293	0.658186	8.880855

Source	DF	Type I SS	Mean Square	F Value	Pr > F
log_age	1	145804.0439	145804.0439	336567	<.0001
log_odometer	1	18605.6277	18605.6277	42948.4	<.0001
type	12	43969.8856	3664.1571	8458.17	<.0001
paint_color	11	1717.8451	156.1677	360.49	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
log_age	1	56460.50868	56460.50868	130331	<.0001
log_odometer	1	17356.60834	17356.60834	40065.2	<.0001
type	12	42323.63850	3526.96987	8141.50	<.0001
paint_color	11	1717.84510	156.16774	360.49	<.0001

Parameter	Estimate		Standard Error	t Value	Pr > t
Intercept	14.68913103	В	0.02042256	719.26	<.0001
log_age	-0.77123760		0.00213631	-361.01	<.0001
log_odometer	-0.33074449		0.00165238	-200.16	<.0001
type SUV	-0.01912623	В	0.01131892	-1.69	0.0911
type bus	0.37551053	В	0.03102759	12.10	<.0001
type converti	0.26779246	В	0.01251803	21.39	<.0001
type coupe	-0.03582146	В	0.01171610	-3.06	0.0022
type hatchbac	-0.43384369	В	0.01218340	-35.61	<.0001
type mini-van	-0.37052350	В	0.01257901	-29.46	<.0001
type offroad	0.37621092	В	0.01742038	21.60	<.0001
type pickup	0.33788954	В	0.01153014	29.30	<.0001
type sedan	-0.42728121	В	0.01129058	-37.84	<.0001
type truck	0.40331506	В	0.01142219	35.31	<.0001
type van	-0.10845854	В	0.01273539	-8.52	<.0001
type wagon	-0.29423580	В	0.01300717	-22.62	<.0001
type other	0.00000000	В			
paint_color black	0.00435113	В	0.00681937	0.64	0.5234
paint_color blue	-0.11978805	В	0.00703158	-17.04	<.0001
paint_color brown	-0.13654849	В	0.00856618	-15.94	<.0001
paint_color green	-0.24409450	В	0.00799297	-30.54	<.0001
paint_color grey	-0.04522703	В	0.00706922	-6.40	<.0001
paint_color orange	0.00812714	В	0.01430908	0.57	0.5701
paint_color purple	-0.23734662	В	0.01707889	-13.90	<.0001
paint_color red	-0.12058141	В	0.00704129	-17.12	<.0001
paint_color silver	-0.08364177	В	0.00689901	-12.12	<.0001
paint_color white	-0.02182426	В	0.00677128	-3.22	0.0013
paint_color yellow	0.08264198	В	0.01258758	6.57	<.0001
paint_color custom	0.00000000	В			

Note: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.