

The GLMSELECT Procedure

Data Set	MYDATA.CARS4
Dependent Variable	LogPrice
Selection Method	None

Number of Observations Read	81
Number of Observations Used	81

Dimensions	
Number of Effects	7
Number of Parameters	7

The GLMSELECT Procedure

Least Squares Summary			
Step	Effect Entered	Number Effects In	SBC
0	Intercept	1	-126.0611
1	s_Citympg	2	-185.8867
2	s_Citympg^2	3	-212.1869
3	EngineSize	4	-208.0982
4	s_Horsepower	5	-227.9738
5	s_Horsepower^2	6	-231.7604
6	Weight	7	-234.9139*
* Optimal Value of Criterion			

The GLMSELECT Procedure Least Squares Model (No Selection)

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	13.13371	2.18895	53.14	<.0001
Error	74	3.04807	0.04119		
Corrected Total	80	16.18179			

Root MSE	0.20295
Dependent Mean	2.82388
R-Square	0.8116
Adj R-Sq	0.7964
AIC	-168.67506
AICC	-166.67506
SBC	-234.91391

Parameter Estimates					
Parameter	DF	Estimate	Standard Error	t Value	Pr > t
Intercept	1	2.022247	0.377586	5.36	<.0001
s_Citympg	1	-0.038770	0.012692	-3.05	0.0031
s_Citympg^2	1	0.001968	0.000587	3.35	0.0013
EngineSize	1	-0.170680	0.060525	-2.82	0.0062
s_Horsepower	1	0.004417	0.001233	3.58	0.0006
s_Horsepower^2	1	-0.000014810	0.000007506	-1.97	0.0522
Weight	1	0.000409	0.000152	2.69	0.0089

The REG Procedure Model: MODEL1 Dependent Variable: LogPrice

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Number of Observations Read	81
Number of Observations Used	81

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	13.13371	2.18895	53.14	<.0001
Error	74	3.04807	0.04119		
Corrected Total	80	16.18179			

Root MSE	0.20295	R-Square	0.8116
Dependent Mean	2.82388	Adj R-Sq	0.7964
Coeff Var	7.18705		

Parameter Estimates							
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Variance Inflation
Intercept	Intercept	1	2.02225	0.37759	5.36	<.0001	0
s_Citympg	s_Citympg	1	-0.03877	0.01269	-3.05	0.0031	9.84600
s_Citympg^2	s_Citympg^2	1	0.00197	0.00058731	3.35	0.0013	3.68546
EngineSize	EngineSize	1	-0.17068	0.06052	-2.82	0.0062	7.22881
s_Horsepower	s_Horsepower	1	0.00442	0.00123	3.58	0.0006	7.56525
s_Horsepower^2	s_Horsepower^2	1	-0.00001481	0.00000751	-1.97	0.0522	2.17676
Weight	Weight	1	0.00040871	0.00015203	2.69	0.0089	14.39378

Collinearity Diagnostics									
Number	Eigenvalue	Condition Index	Proportion of Variation						
			Intercept	s_Citympg	s_Citympg^2	EngineSize	s_Horsepower	s_Horsepower^2	Weight
1	3.52397	1.00000	0.00025068	0.00021217	0.00308	0.00136	0.00102	0.01385	0.00017953
2	2.10685	1.29330	0.00003113	0.02045	0.02815	0.00002193	0.01841	0.00051501	9.091122E-7
3	0.94125	1.93492	0.00031176	0.00368	0.04111	0.00084716	0.03194	0.13926	0.00016684
4	0.32804	3.27760	0.00013715	0.00981	0.26124	0.00140	0.05853	0.43599	5.483234E-7
5	0.08149	6.57589	0.00133	0.56438	0.38326	0.00029441	0.48108	0.26639	0.00060632
6	0.01699	14.40302	0.04826	0.28778	0.26876	0.67853	0.04849	0.02861	0.00815
7	0.00142	49.76137	0.94968	0.11368	0.01439	0.31754	0.36054	0.11538	0.99090

Collinearity Diagnostics (intercept adjusted)								
Number	Eigenvalue	Condition Index	Proportion of Variation					
			s_Citympg	s_Citympg^2	EngineSize	s_Horsepower	s_Horsepower^2	Weight
1	3.70756	1.00000	0.00612	0.00459	0.00813	0.00782	0.00349	0.00465
2	1.39299	1.63144	0.00608	0.07396	0.00070578	0.00690	0.15059	0.00002773
3	0.63975	2.40734	0.00167	0.14757	0.04033	0.00116	0.27162	0.00773
4	0.14132	5.12198	0.00181	0.02510	0.34592	0.47190	0.37294	0.00578
5	0.07131	7.21067	0.93818	0.74613	0.16736	0.08397	0.02964	0.00883
6	0.04707	8.87522	0.04614	0.00264	0.43756	0.42826	0.17171	0.97298

The REG Procedure
Model: MODEL1
Dependent Variable: LogPrice

Test of First and Second Moment Specification		
DF	Chi-Square	Pr > ChiSq
25	30.71	0.1989

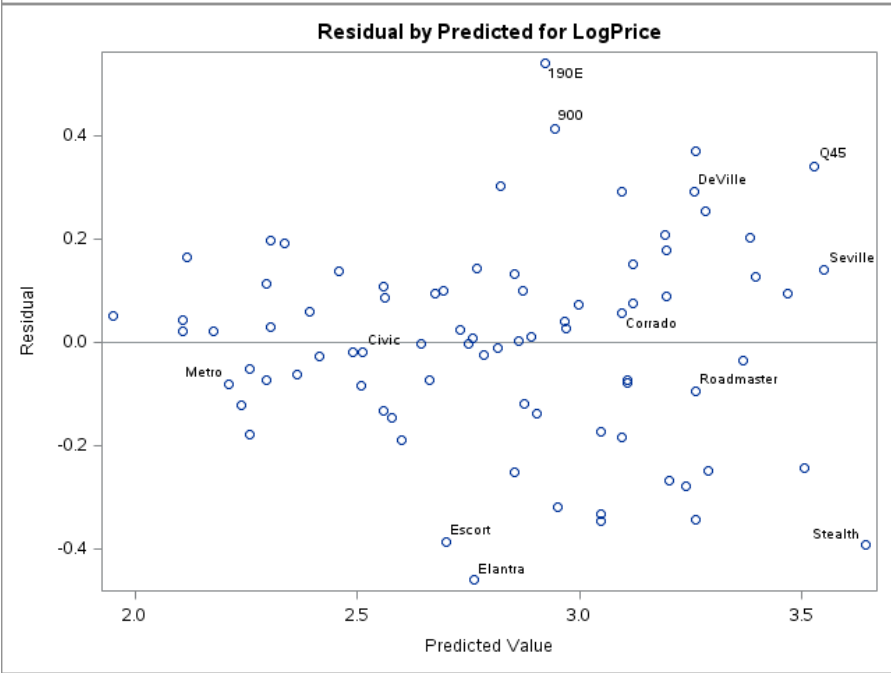
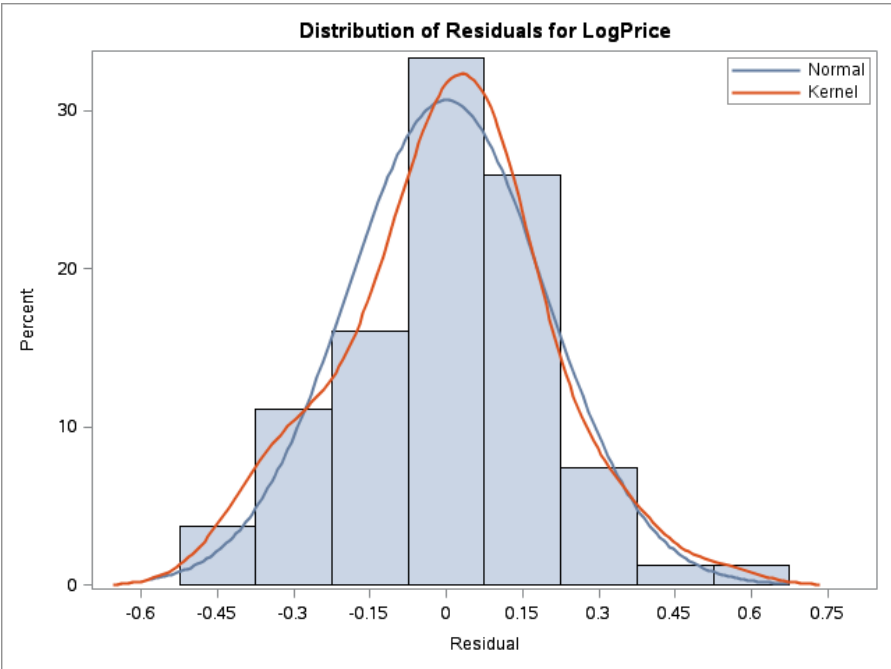
The REG Procedure
Model: MODEL1
Dependent Variable: LogPrice

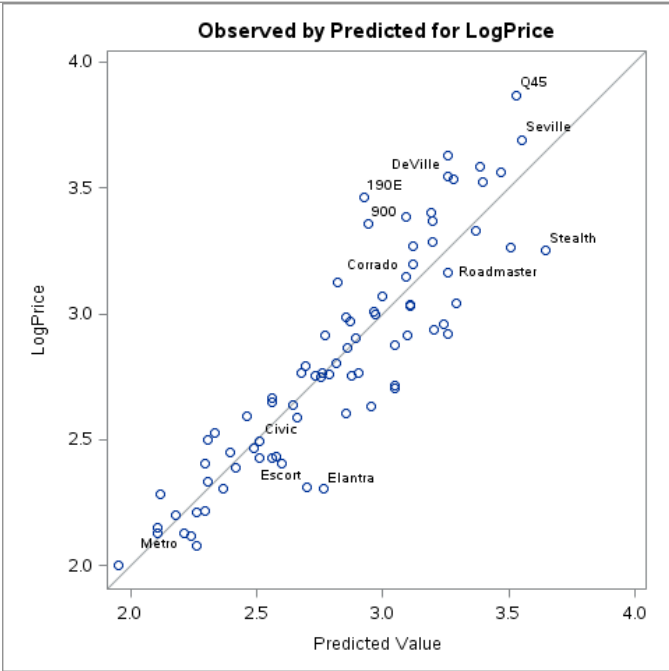
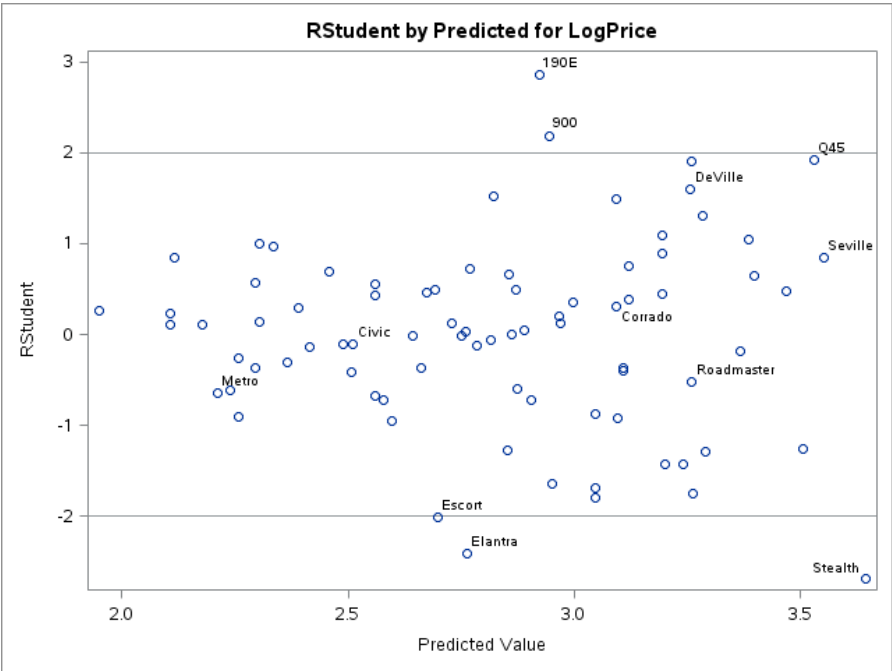
Output Statistics							
Obs	Model	Residual	RStudent	Hat Diag	Cov Ratio	DFFITS	DFBETAS

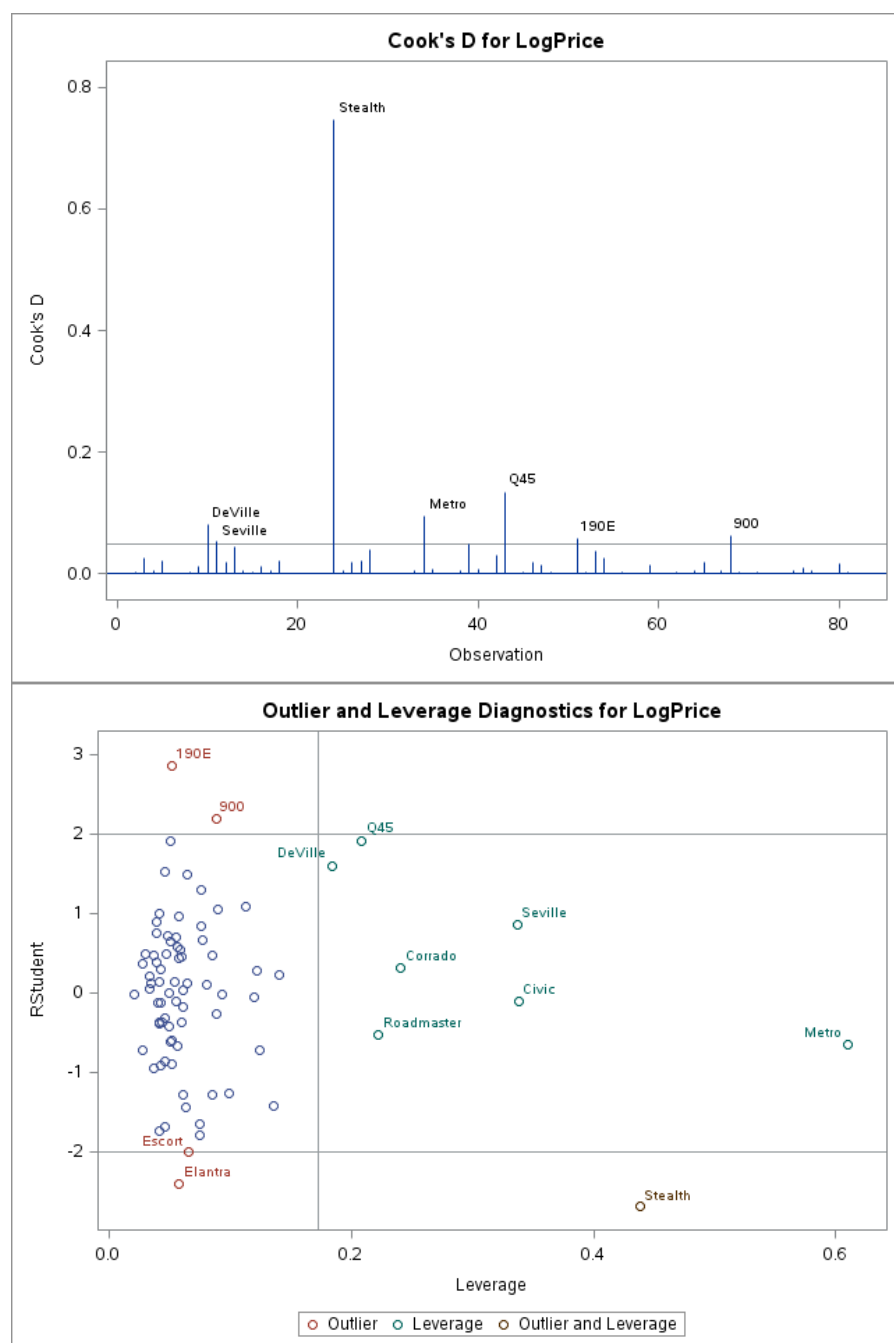
				H			Intercept		s_Citympg	s_Citympg^2	EngineSize	s_Horsepower	s_Horsepower^2	Weight
Obs	Model	Residual	RStudent	Hat Diag H	Cov Ratio	DFFITS	DFBETAS							
							Intercept	s_Citympg	s_Citympg^2	EngineSize	s_Horsepower	s_Horsepower^2	Weight	
1	Integra	0.006769	0.0342	0.0611	1.1713	0.0087	0.0033	0.0026	-0.0025	-0.0014	0.0063	-0.0053	-0.0017	
2	Legend	0.1270	0.6397	0.0508	1.1143	0.1479	0.0131	-0.0510	0.0663	-0.0710	0.0473	-0.0381	0.0162	
3	100	0.3700	1.9040	0.0505	0.8252	0.4392	-0.0371	-0.1478	0.1931	-0.2903	0.0572	-0.1367	0.1397	
4	90	0.1764	0.8859	0.0397	1.0628	0.1801	-0.0254	-0.0028	0.0269	-0.1019	0.0493	-0.0738	0.0633	
5	535i	0.2078	1.0885	0.1131	1.1080	0.3888	-0.1229	0.3165	-0.2478	0.0349	0.1427	-0.0706	0.1097	
6	Century	0.0238	0.1185	0.0342	1.1373	0.0223	-0.0050	-0.0091	0.0046	-0.0091	-0.0133	0.0068	0.0075	
7	LeSabre	-0.0736	-0.3684	0.0414	1.1326	-0.0766	-0.0145	-0.0026	0.0014	-0.0441	-0.0143	0.0277	0.0240	
8	Riviera	0.1508	0.7557	0.0394	1.0842	0.1530	0.0160	0.0097	-0.0041	0.0812	0.0211	-0.0523	-0.0347	
9	Roadmaster	-0.0947	-0.5265	0.2222	1.3772	-0.2814	0.0458	-0.0151	-0.0024	-0.1867	0.0856	-0.0161	0.0237	
10	DeVille	0.2901	1.5996	0.1846	1.0599	0.7611	0.4083	-0.2268	0.1744	0.5625	0.1678	-0.1318	-0.5257	
11	Seville	0.1405	0.8485	0.3369	1.5486	0.6048	0.0597	-0.0584	-0.0049	0.1131	0.0030	0.3871	-0.0990	
12	Camaro	-0.3317	-1.6943	0.0460	0.8802	-0.3720	-0.2183	0.1415	-0.1028	-0.1728	-0.1202	0.1650	0.2290	
13	Caprice	-0.2677	-1.4286	0.1355	1.0490	-0.5656	0.1202	-0.0276	-0.0103	-0.3333	0.1855	-0.0140	0.0073	
14	Cavalier	0.1368	0.6912	0.0558	1.1129	0.1680	0.1127	0.0131	-0.0566	0.1080	0.0602	-0.0372	-0.1234	
15	Corsica	-0.1454	-0.7244	0.0280	1.0763	-0.1229	0.0376	-0.0630	0.0729	-0.0085	0.0292	-0.0113	-0.0349	
16	Lumina	-0.1375	-0.7218	0.1248	1.1958	-0.2726	0.1832	0.0565	-0.0589	0.1871	0.1965	-0.1035	-0.2146	
17	Concorde	-0.1831	-0.9215	0.0431	1.0601	-0.1957	0.1274	-0.0447	0.0142	0.0425	0.0704	0.0137	-0.1272	
18	Imperial	0.2910	1.4944	0.0642	0.9519	0.3915	-0.3032	0.0840	-0.0226	-0.1181	-0.2023	0.0281	0.3015	
19	LeBaron	-0.0251	-0.1258	0.0425	1.1470	-0.0265	-0.0011	-0.0164	0.0163	-0.0145	-0.0076	0.0103	0.0041	
20	Colt	-0.0748	-0.3746	0.0433	1.1343	-0.0797	-0.0232	-0.0288	0.0373	-0.0213	-0.0132	-0.0028	0.0231	
21	Dynasty	-0.004095	-0.0211	0.0936	1.2135	-0.0068	0.0038	0.0020	-0.0013	0.0024	0.0060	-0.0037	-0.0039	
22	Shadow	-0.0840	-0.4222	0.0499	1.1381	-0.0968	0.0020	0.0344	-0.0026	-0.0093	0.0635	-0.0520	0.0014	
23	Spirit	-0.0734	-0.3711	0.0603	1.1552	-0.0940	0.0466	0.0178	-0.0026	0.0151	0.0815	-0.0525	-0.0439	
24	Stealth	-0.3932	-2.6930	0.4386	1.0095	-2.3801	0.3425	0.0557	0.0526	0.9121	-0.0155	-1.4640	-0.5602	
25	Summit	0.1972	0.9924	0.0414	1.0446	0.2061	0.0433	0.0819	-0.1004	0.0444	0.0242	0.0132	-0.0423	
26	Vision	-0.2801	-1.4356	0.0628	0.9658	-0.3717	-0.1024	-0.1448	0.1270	-0.0998	-0.2635	0.1154	0.1016	
27	Crown Victoria	-0.2495	-1.2913	0.0852	1.0265	-0.3939	0.1719	-0.1381	0.0749	-0.1591	0.0834	-0.0008	-0.0988	
28	Escort	-0.3867	-2.0113	0.0657	0.8071	-0.5333	-0.4447	0.2026	-0.0803	-0.0111	-0.3137	0.2450	0.3557	
29	Festiva	0.0515	0.2690	0.1216	1.2436	0.1001	0.0398	-0.0048	-0.0173	0.0472	-0.0142	0.0427	-0.0489	
30	Mustang	0.0925	0.4623	0.0375	1.1196	0.0912	-0.0158	-0.0383	0.0153	-0.0172	-0.0621	0.0375	0.0195	
31	Probe	-0.002861	-0.0141	0.0208	1.1233	-0.0021	-0.0004	-0.0001	0.0005	0.0003	-0.0001	0.0003	0.0001	
32	Taurus	0.0403	0.2008	0.0333	1.1335	0.0373	-0.0227	0.0093	-0.0059	-0.0074	-0.0143	-0.0020	0.0229	
33	Tempo	-0.1336	-0.6751	0.0567	1.1163	-0.1655	-0.0241	0.0900	-0.0327	-0.0205	0.0949	-0.0737	0.0277	
34	Metro	-0.0828	-0.6504	0.6100	2.7082	-0.8133	-0.0389	0.2208	-0.5896	0.0965	0.0652	-0.0186	0.0179	
35	Storm	0.1904	0.9659	0.0574	1.0676	0.2384	-0.1032	0.1584	-0.1327	-0.0120	-0.0575	0.0585	0.0985	
36	Accord	0.000603	0.003028	0.0494	1.1571	0.0007	-0.0002	0.0004	-0.0003	-0.0003	0.0001	-0.0002	0.0003	
37	Civic	-0.0186	-0.1120	0.3378	1.6590	-0.0800	0.0136	-0.0243	-0.0239	0.0128	-0.0168	0.0263	-0.0166	
38	Prelude	0.1309	0.6687	0.0774	1.1423	0.1937	0.0914	0.0746	-0.0718	0.0267	0.1638	-0.1286	-0.0732	
39	Elantra	-0.4602	-2.4106	0.0575	0.6827	-0.5953	-0.4062	0.3616	-0.2183	0.1395	-0.2029	0.1878	0.2774	
40	Excel	-0.1795	-0.9071	0.0516	1.0722	-0.2115	0.0492	-0.0715	0.0916	-0.0063	0.0869	-0.1052	-0.0432	
41	Scoupe	-0.0623	-0.3125	0.0457	1.1419	-0.0684	-0.0362	0.0155	0.0078	-0.0097	-0.0015	-0.0110	0.0319	
42	Sonata	-0.3187	-1.6511	0.0745	0.9194	-0.4684	-0.1232	0.3632	-0.2962	0.2676	0.0302	0.0497	0.0108	
43	Q45	0.3403	1.9184	0.2084	0.9848	0.9843	-0.0645	0.0997	-0.1382	0.1583	0.0202	0.5829	-0.0078	
44	ES300	-0.0354	-0.1790	0.0608	1.1675	-0.0455	0.0006	0.0207	-0.0254	0.0283	-0.0062	0.0115	-0.0107	
45	SC300	0.0929	0.4759	0.0849	1.1762	0.1449	0.0382	-0.0447	0.0492	-0.0664	0.0699	-0.0160	-0.0075	
46	Continental	0.2531	1.3034	0.0758	1.0131	0.3732	-0.1212	-0.1661	0.2011	-0.0629	-0.1784	0.0119	0.1216	
47	Town Car	0.2019	1.0431	0.0894	1.0891	0.3269	-0.1720	0.1504	-0.0889	0.0869	-0.0507	0.0346	0.1215	
48	323	-0.1236	-0.6223	0.0505	1.1163	-0.1434	0.0141	-0.0515	0.0685	-0.0302	0.0456	-0.0624	-0.0050	
49	626	-0.0123	-0.0643	0.1203	1.2498	-0.0238	-0.0030	-0.0176	0.0145	-0.0050	-0.0163	0.0129	0.0027	
50	Protege	0.0590	0.2951	0.0425	1.1392	0.0621	0.0148	0.0336	-0.0375	0.0219	0.0178	-0.0095	-0.0163	
51	190E	0.5395	2.8592	0.0518	0.5518	0.6681	0.2594	-0.5306	0.4087	-0.2384	-0.0167	-0.1098	-0.1296	

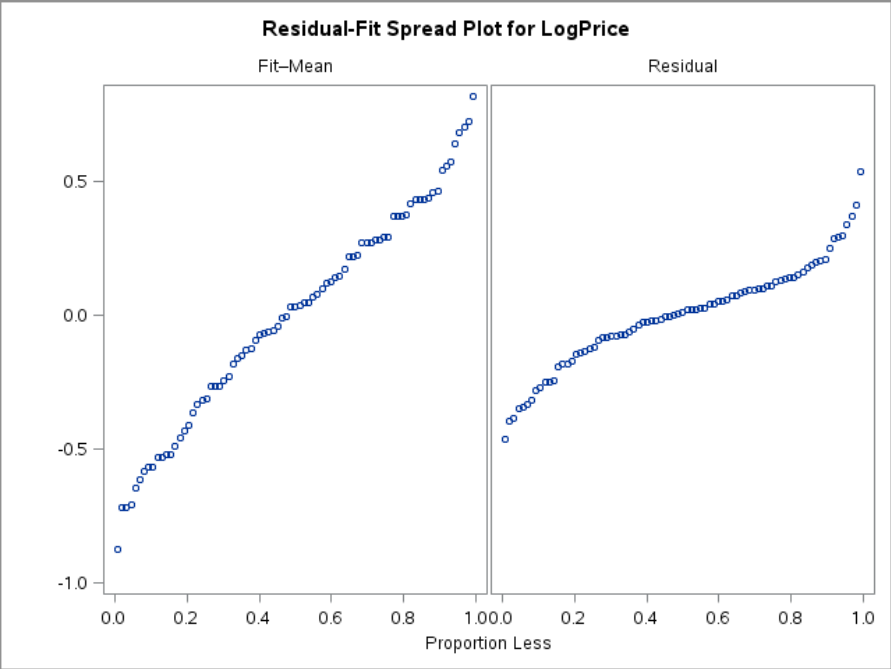
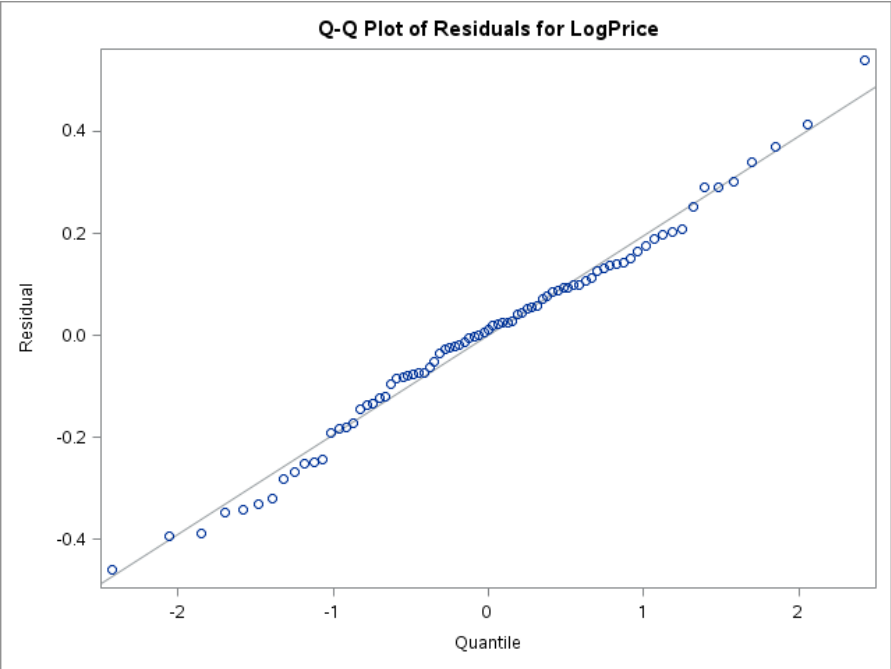
Output Statistics													
Obs	Model	Residual	RStudent	Hat Diag H	Cov Ratio	DFFITS	DFBETAS						
							Intercept	s_Citympg	s_Citympg^2	EngineSize	s_Horsepower	s_Horsepower^2	Weight
52	Capri	0.0852	0.4300	0.0581	1.1473	0.1068	0.0541	-0.0718	0.0343	-0.0198	-0.0104	0.0140	-0.0377
53	Cougar	-0.3461	-1.8003	0.0753	0.8776	-0.5135	0.3112	-0.0223	-0.0158	-0.0484	0.3350	-0.0897	-0.2485
54	Diamante	-0.2433	-1.2679	0.0989	1.0481	-0.4201	0.1583	0.0690	-0.1438	0.3305	0.0037	0.0184	-0.2482
55	Mirage	0.0279	0.1396	0.0414	1.1452	0.0290	0.0061	0.0115	-0.0141	0.0062	0.0034	0.0019	-0.0059
56	Altima	-0.1203	-0.6061	0.0520	1.1202	-0.1420	0.0151	-0.0917	0.0737	0.0175	-0.0679	0.0714	-0.0280
57	Maxima	0.0720	0.3575	0.0279	1.1178	0.0606	0.0184	0.0129	-0.0125	0.0147	0.0337	-0.0382	-0.0163
58	Sentra	-0.0210	-0.1057	0.0556	1.1634	-0.0256	0.0036	-0.0183	0.0145	0.0027	-0.0073	0.0062	-0.0054
59	Achieva	-0.2512	-1.2831	0.0614	1.0025	-0.3282	-0.1087	-0.1496	0.1358	-0.0171	-0.2524	0.2124	0.0748
60	Cutlass Ciera	0.0985	0.4902	0.0301	1.1082	0.0863	-0.0376	-0.0036	-0.0081	-0.0319	-0.0517	0.0262	0.0443
61	Eighty- Eight	-0.0785	-0.3925	0.0414	1.1306	-0.0816	-0.0154	-0.0028	0.0015	-0.0470	-0.0152	0.0295	0.0256
62	Laser	0.1082	0.5471	0.0591	1.1359	0.1371	-0.0183	-0.0651	0.0272	-0.0478	-0.0905	0.0731	0.0307
63	Bonneville	0.0758	0.3788	0.0394	1.1294	0.0767	0.0080	0.0049	-0.0021	0.0407	0.0106	-0.0262	-0.0174
64	Firebird	-0.1728	-0.8704	0.0460	1.0726	-0.1911	-0.1121	0.0727	-0.0528	-0.0888	-0.0618	0.0848	0.1176
65	Grand_Prix	-0.3425	-1.7480	0.0418	0.8615	-0.3652	-0.1580	0.0089	-0.0208	-0.0488	-0.2511	0.1645	0.1325
66	LeMans	0.0205	0.1045	0.0804	1.1949	0.0309	-0.0133	0.0148	-0.0138	0.0030	-0.0155	0.0169	0.0105
67	Sunbird	-0.1911	-0.9592	0.0371	1.0464	-0.1882	-0.1235	0.0910	-0.0241	-0.0255	-0.0194	0.0149	0.1066
68	900	0.4136	2.1880	0.0881	0.7733	0.6803	0.4817	-0.4976	0.3728	-0.1432	0.2502	-0.2539	-0.3436
69	SL	0.1130	0.5705	0.0565	1.1301	0.1397	-0.0431	0.0627	-0.0768	0.0326	-0.0647	0.0667	0.0282
70	Justy	0.0220	0.1113	0.0645	1.1744	0.0292	0.0016	0.0093	-0.0073	0.0054	-0.0036	0.0096	-0.0026
71	Legacy	0.0984	0.4943	0.0470	1.1274	0.1097	-0.0628	0.0306	-0.0203	-0.0691	-0.0229	-0.0071	0.0801
72	Loyale	-0.0265	-0.1325	0.0403	1.1442	-0.0271	-0.0018	0.0048	0.0042	-0.0014	0.0128	-0.0132	0.0016
73	Swift	0.0434	0.2292	0.1403	1.2730	0.0926	-0.0009	0.0205	0.0197	0.0121	-0.0013	0.0056	-0.0031
74	Camry	0.0107	0.0531	0.0337	1.1379	0.0099	-0.0031	-0.0010	0.0009	-0.0068	-0.0018	-0.0011	0.0053
75	Celica	0.1432	0.7214	0.0489	1.1004	0.1636	-0.0427	0.1124	-0.0917	-0.0309	0.0470	-0.0602	0.0565
76	Tercel	0.1652	0.8452	0.0761	1.1120	0.2425	0.0932	0.0857	-0.0891	0.1291	0.0493	0.0094	-0.1141
77	Corrado	0.0549	0.3084	0.2404	1.4349	0.1735	0.1603	-0.1029	0.0745	0.0407	0.1034	-0.0747	-0.1455
78	Fox	-0.0508	-0.2606	0.0883	1.1986	-0.0811	-0.0386	0.0287	0.0030	-0.0322	0.0186	-0.0309	0.0429
79	Passat	0.0255	0.1284	0.0543	1.1612	0.0308	-0.0004	-0.0142	0.0128	-0.0235	-0.0012	-0.0052	0.0089
80	240	0.3006	1.5301	0.0461	0.9245	0.3366	-0.0912	-0.1714	0.1229	-0.1702	-0.2067	0.0925	0.1344
81	850	0.0892	0.4509	0.0597	1.1473	0.1137	0.0038	-0.0296	0.0379	-0.0805	0.0341	-0.0442	0.0275

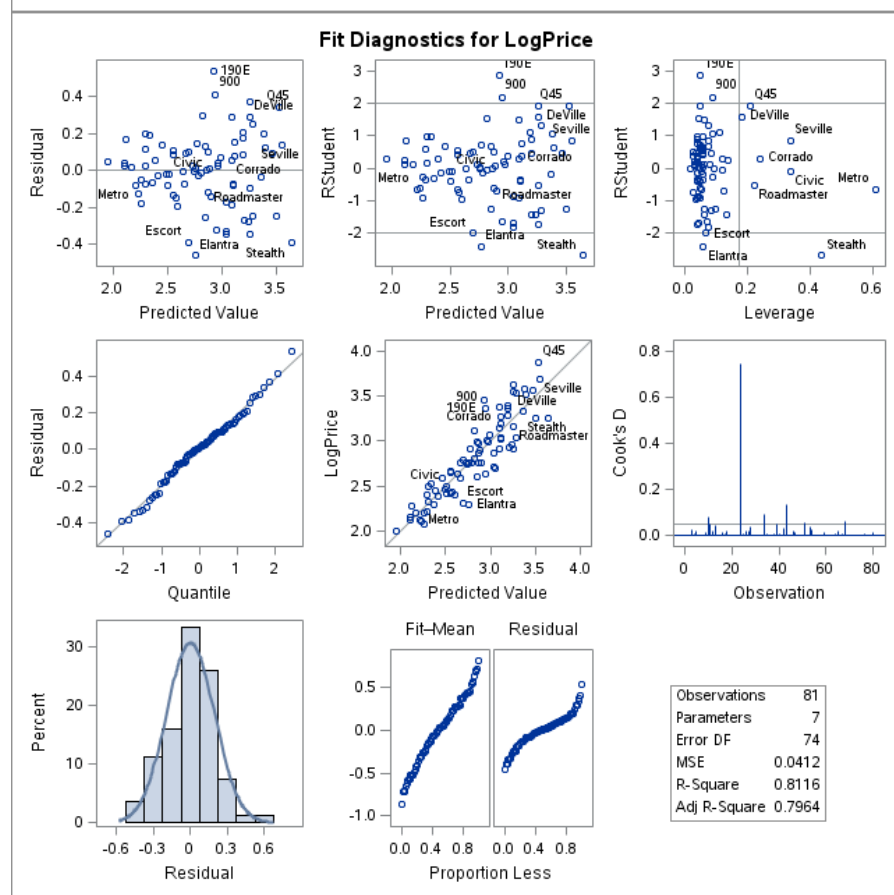
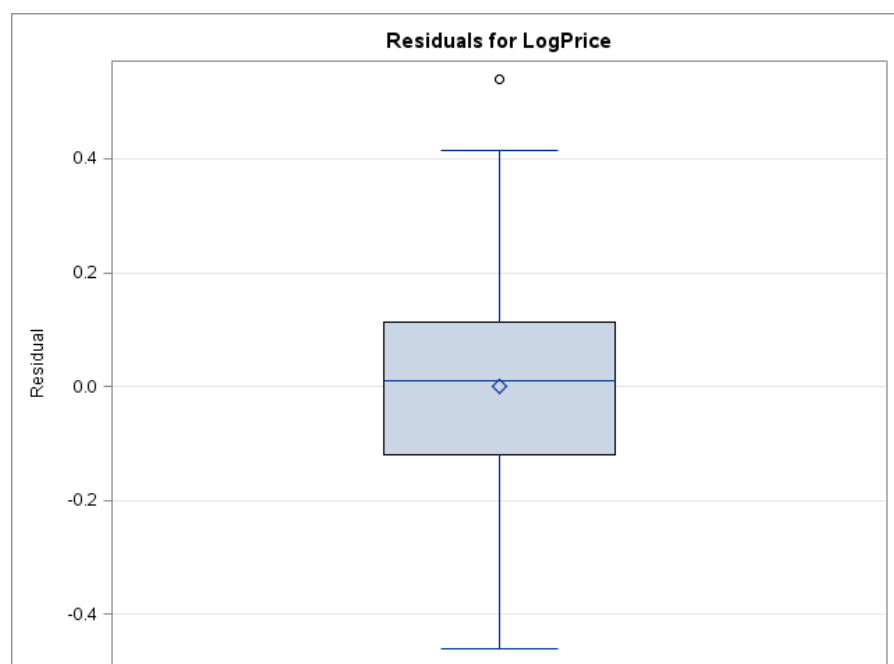
Sum of Residuals	0
Sum of Squared Residuals	3.04807
Predicted Residual SS (PRESS)	3.94580

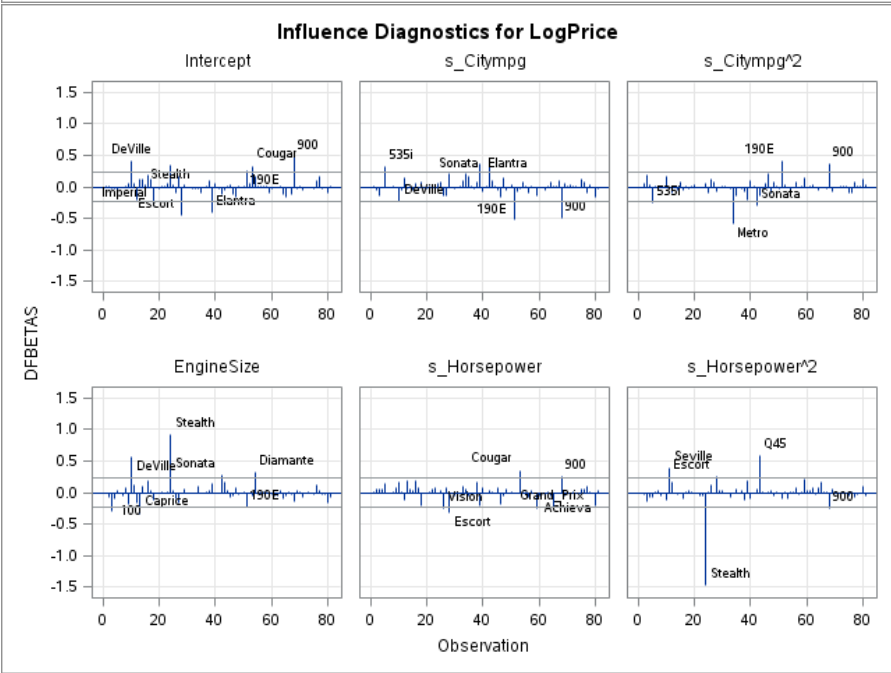
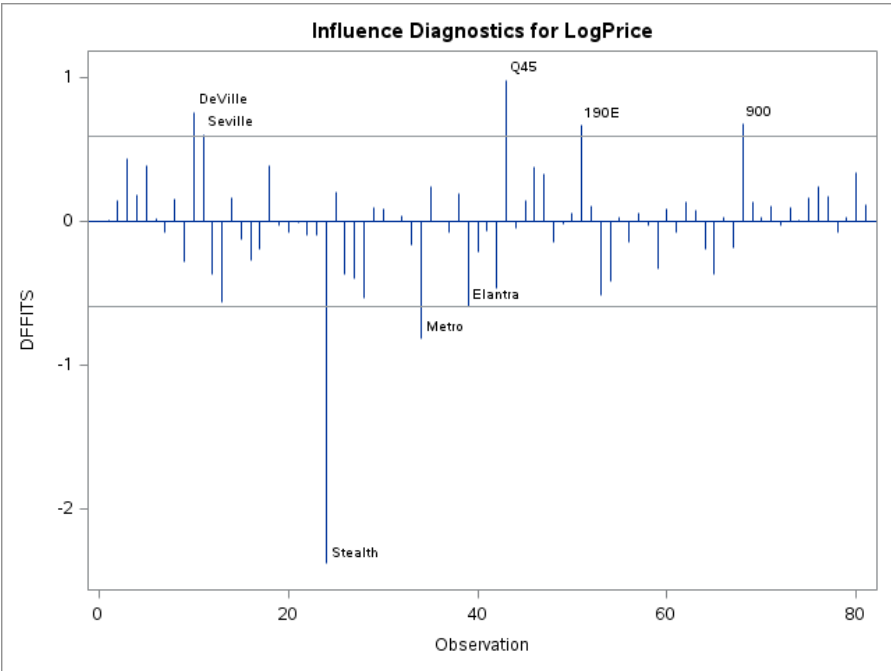


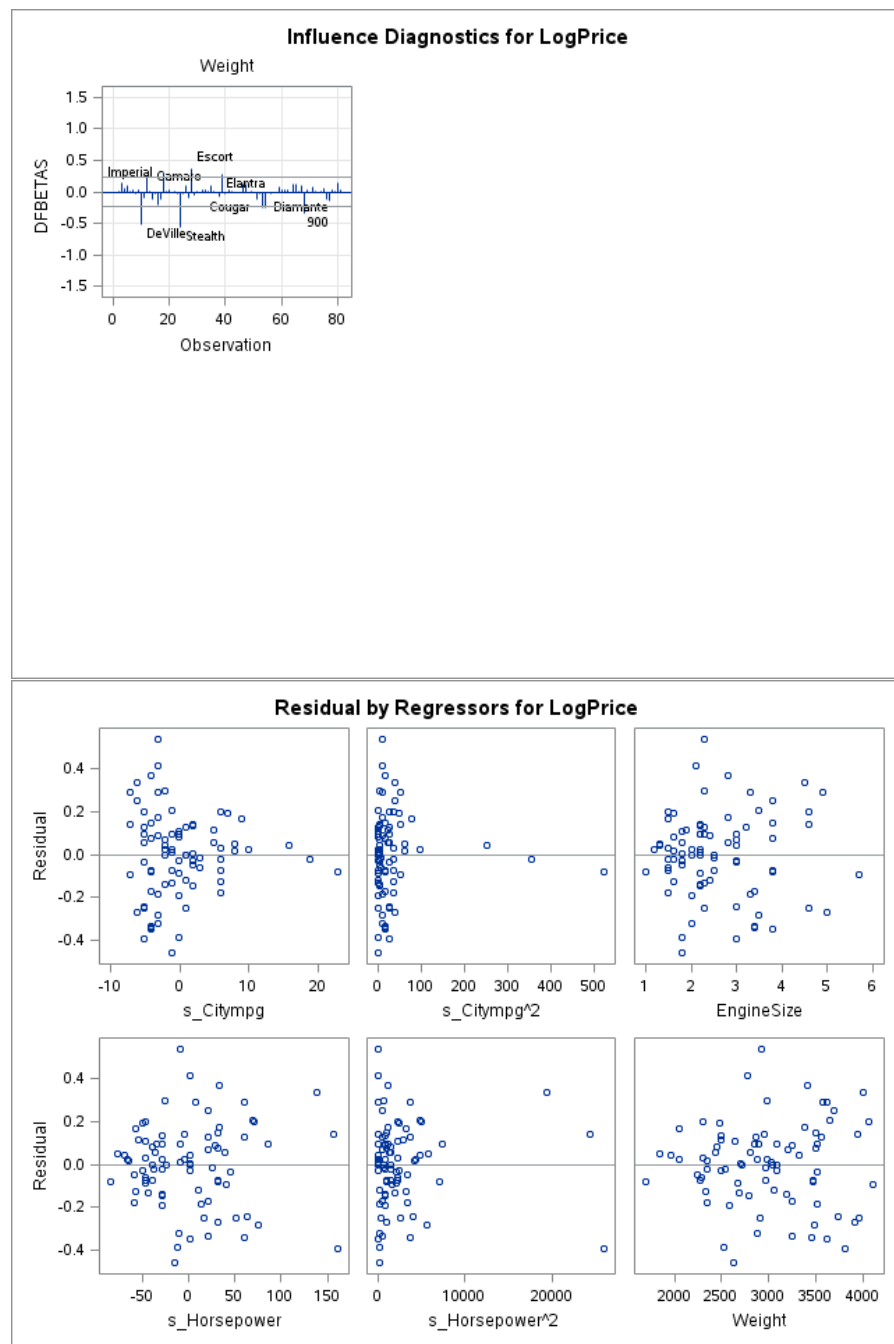




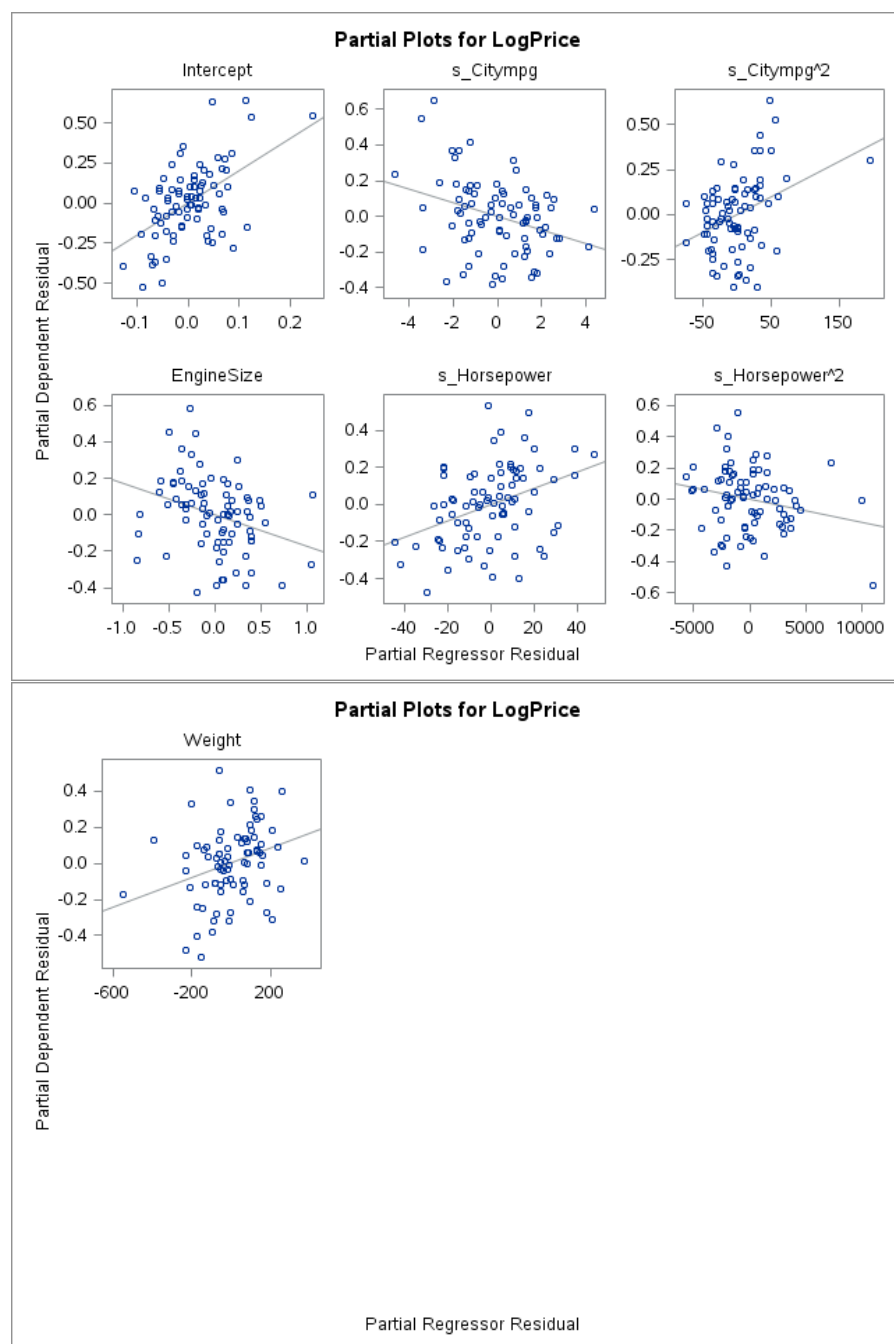








The REG Procedure
Model: MODEL1
Partial Regression Residual Plot



The CORR Procedure

2 Variables: abserror Pred

Spearman Correlation Coefficients, N = 81 Prob > r under H0: Rho=0		
	abserror	Pred
abserror	1.00000	0.41820 0.0001
Pred Predicted Value of LogPrice	0.41820 0.0001	1.00000