The SURVEYSELECT Procedure

Selection Method	Simple Random Sampling

Input Data Set	CARS
Random Number Seed	123
Sampling Rate	0.7
Sample Size	299
Selection Probability	0.701878
Sampling Weight	0
Output Data Set	TRAINTEST

The GLMSELECT Procedure

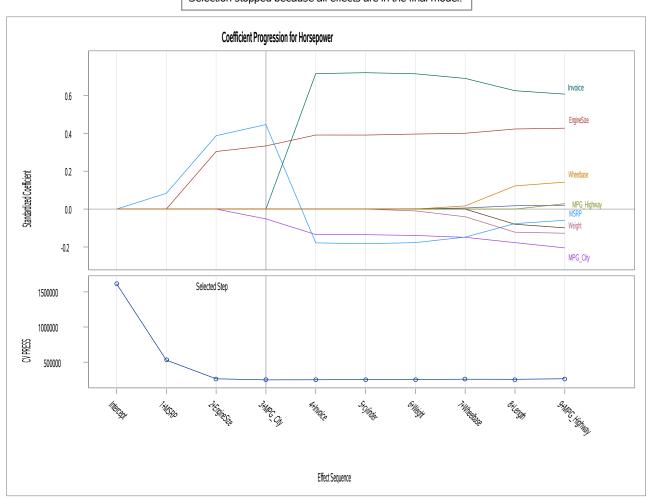| Data Set	WORK.TRAINTEST
Dependent Variable	Horsepower
Selection Method	LAR
Stop Criterion	None
Choose Criterion	Cross Validation
Cross Validation Method	Random
Cross Validation Fold	10
Effect Hierarchy Enforced	None
Random Number Seed	123

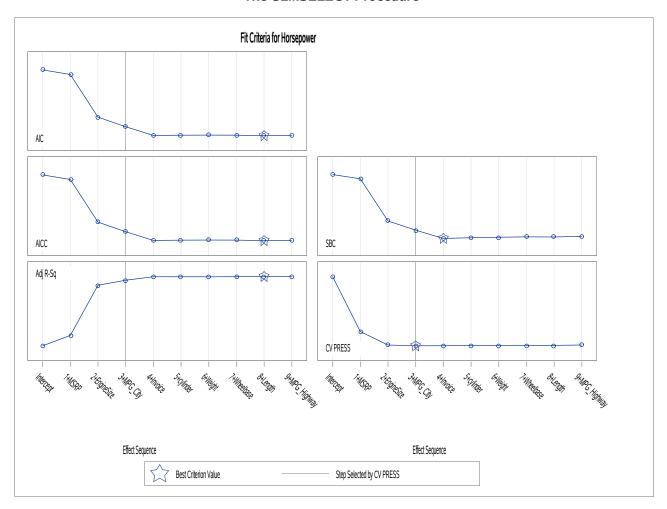|	
Number of Observations Read	426
Number of Observations Used	426
Number of Observations Used for Training	299
Number of Observations Used for Testing	127

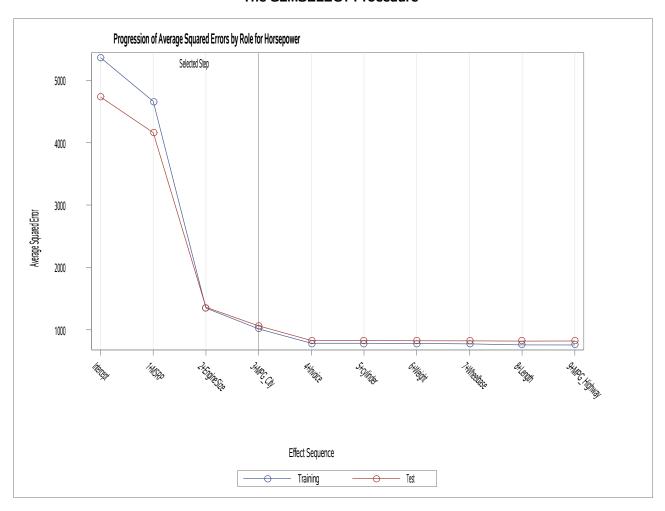| Class Level Information		
Class	**Levels**	**Values**
DriveTrain	3	All Front Rear
Origin	3	Asia Europe USA
Type	6	Hybrid SUV Sedan Sports Truck Wagon

Dimensions	
Number of Effects	10
Number of Parameters	10

The GLMSELECT Procedure

	LAR Selection Summary				
Step	Effect Entered	Number Effects In	ASE	Test ASE	CV PRESS
0	Intercept	1	5365.3324	4733.4760	1615581.81
1	MSRP	2	4662.2535	4161.9722	529610.01
2	EngineSize	3	1347.0238	1360.3105	264156.61
3	MPG_City	4	1013.4237	1061.9422	248508.37*
4	Invoice	5	782.9323	827.1902	250034.24
5	cylinder	6	782.6959	826.4583	253729.43
6	Weight	7	780.1028	822.8315	254848.47
7	Wheelbase	8	772.8975	821.4755	257978.75
8	Length	9	756.2722	817.3331	256676.47
9	MPG_Highway	10	755.6004	819.0470	264686.31
	* Optimal Value of Criterion				

Selection stopped because all effects are in the final model.

The GLMSELECT Procedure

Fit Criteria for Horsepower

The GLMSELECT Procedure

Progression of Average Squared Errors by Role for Horsepower

The GLMSELECT Procedure
Selected Model

The selected model, based on Cross Validation, is the model at Step 3.

Effects:	Intercept EngineSize MPG_City MSRP

Analysis of Variance				
Source	**DF**	**Sum of Squares**	**Mean Square**	**F Value**
Model	3	1301221	433740	422.27
Error	295	303014	1027.16499	
Corrected Total	298	1604234		

Root MSE	32.04941
Dependent Mean	218.41137
R-Square	0.8111
Adj R-Sq	0.8092
AIC	2378.40580
AICC	2378.61058
SBC	2092.20757
ASE (Train)	1013.42365
ASE (Test)	1061.94219
CV PRESS	248508

The GLMSELECT Procedure
Selected Model

Parameter Estimates		
Parameter	**DF**	**Estimate**
Intercept	1	108.041578
EngineSize	1	21.421851
MPG_City	1	-0.676045
MSRP	1	0.001615