## **Descriptive Statistics Results**

**Figure 1**Histogram with Inset Statistics for RPM

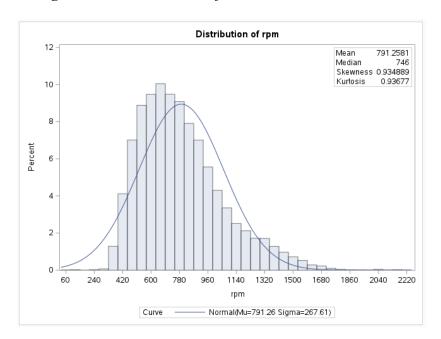
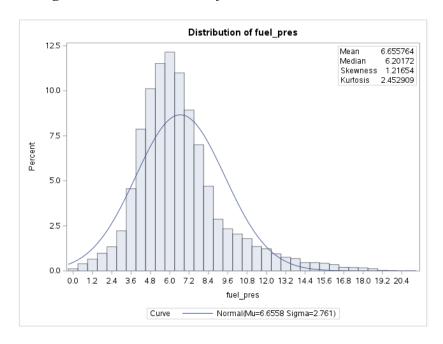
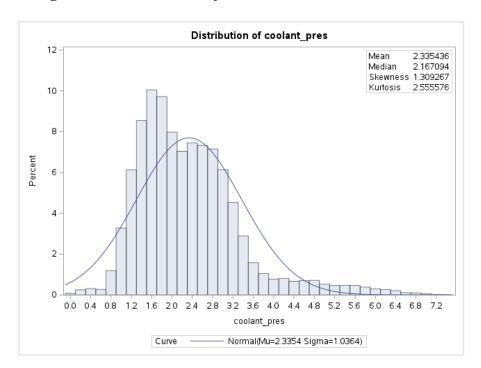


Figure 2

Histogram with Inset Statistics for Fuel Pressure



**Figure 3**Histogram with Inset Statistics for Coolant Pressure



**Figure 4**Histogram with Inset Statistics for Coolant Temperature

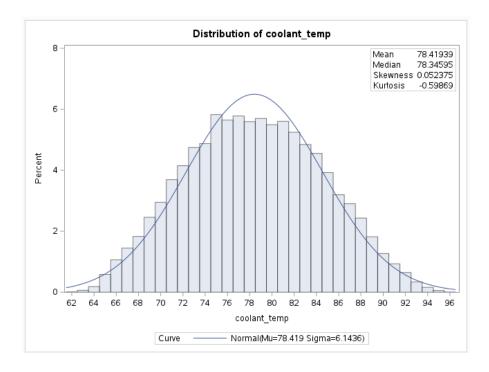
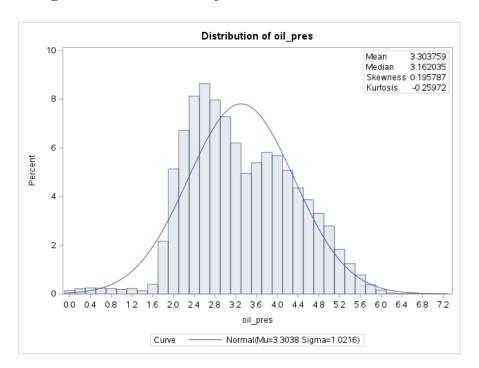


Figure 5

Histogram with Inset Statistics for Oil Pressure



**Figure 6**Histogram with Inset Statistics for Oil Temperature

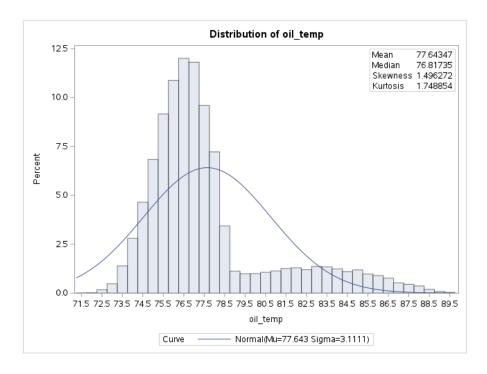


Figure 7

Correlation Matrix

Pearson Correlation Coefficients, N = 19533						
	rpm	oil_pres	fuel_pres	coolant_pres	oil_temp	coolant_temp
rpm	1.00000	0.02498	-0.00155	-0.02503	0.05211	0.03113
oil_pres	0.02498	1.00000	0.04394	-0.00936	-0.00806	-0.06083
fuel_pres	-0.00155	0.04394	1.00000	0.03324	-0.02533	-0.04335
coolant_pres	-0.02503	-0.00936	0.03324	1.00000	-0.02077	0.03466
oil_temp	0.05211	-0.00806	-0.02533	-0.02077	1.00000	0.07400
coolant_temp	0.03113	-0.06083	-0.04335	0.03466	0.07400	1.00000

Figure 8
Summary Statistics

Variable	Mean	Std Dev	Minimum	Maximum	Median	N Miss
rpm	791.2580761	267.6139855	61.0000000	2239.00	746.0000000	0
oil_pres	3.3037592	1.0215889	0.0033841	7.2655655	3.1620347	0
fuel pres	6.6557645	2.7609968	0.0031871	21.1383255	6.2017196	0
coolant_pres	2.3354356	1.0364140	0.0024827	7.4785049	2.1670941	0
oil temp	77.6434658	3.1111324	71.3219737	89.5807955	76.8173504	0
coolant_temp	78.4193930	6.1436042	61.6733247	95.8552834	78.3459548	0

Figure 9
Summary Statistics Grouped by Engine Condition

engine_condition	N Obs	Variable	Mean	Std Dev	Minimum	Maximum	Median	N Miss
0	7217	rpm	885.0123320	271.7376569	351.0000000	2239.00	843.0000000	0
		oil_pres	3.2222632	1.0102289	0.0078911	7.0513223	3.0670816	0
		fuel_pres	6.2368146	2.6813878	0.0031871	19.8589172	5.8241562	0
		coolant_pres	2.3680196	1.0872088	0.0024827	7.1684095	2.1818098	0
		oil_temp	78.0239545	3.2320304	72.2445544	89.5807955	77.0897425	0
		coolant_temp	78.7975470	5.9505925	62.4459553	94.7843922	78.7678377	0
1	12316	rpm	736.3194219	249.2993937	61.0000000	2172.00	690.0000000	0
		oil_pres	3.3515147	1.0252221	0.0033841	7.2655655	3.2146600	0
		fuel_pres	6.9012631	2.7774915	0.0507029	21.1383255	6.4209206	0
		coolant_pres	2.3163418	1.0050116	0.0156652	7.4785049	2.1580082	0
		oil_temp	77.4205048	3.0159611	71.3219737	89.2863016	76.6602498	0
		coolant_temp	78.1978002	6.2435429	61.6733247	95.8552834	78.1004904	0

Figure 10

One-way Frequency for Engine Condition

engine_condition	Frequency	Percent
0	7217	36.95
1	12316	63.05

**Figure 11**Scatterplot for RPM and Fuel Pressure Grouped by Engine Condition

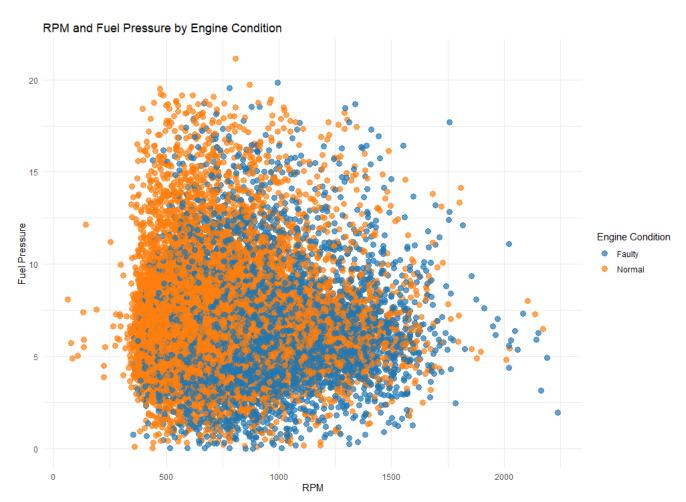


Figure 12

Scatterplot for Coolant Pressure and Coolant Temperature Grouped by Engine Condition

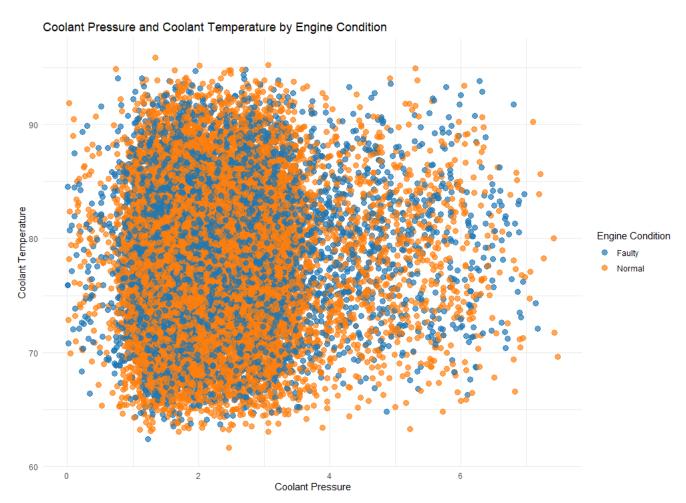


Figure 13
Scatterplot for Oil Pressure and Oil Temperature Grouped by Engine Condition

