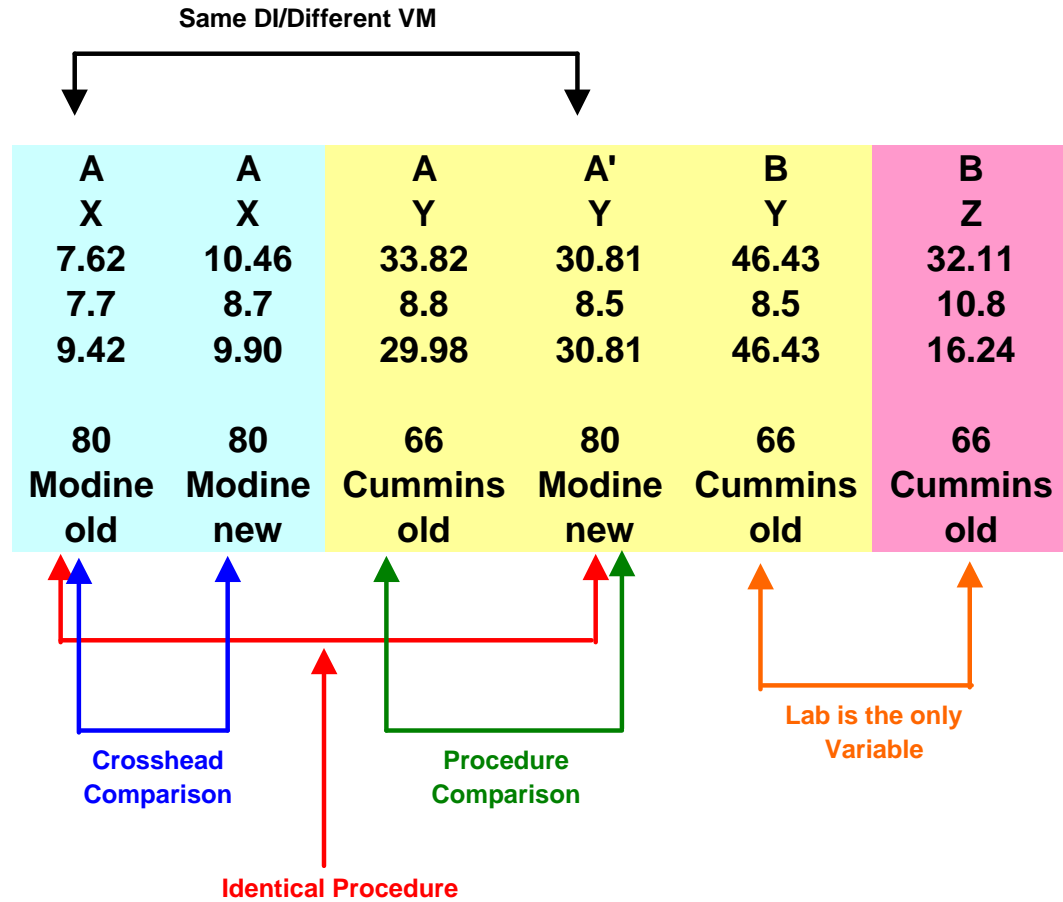


OIL
 LAB
 Avg. CrossHead (RAW)
 Soot @ 250 Hours
 Avg. CrossHead at 8.5% Soot
 Procedures
 Intake Manifold Temp Degrees C
 Aftercooler
 Crossheads



OS Number	155609	155609	155609	159257	152587	152587
Oil	A	A	A	A'	B	B
LAB	X	X	Y	Y	Y	Z
EOT Date			Jul-00	Oct-00	Jun-00	Jul-00
Soot @ 250 hours	7.7	8.7	8.8	8.5	8.5	10.8
Avg. CrossHead at 8.5% Soot	9.42	9.90	29.98	30.81	46.43	16.24
Oil Filter Delta P (kPa)	171.3	402.0	442.0	173.0		430.0
EOT Vis	28.83	34.8	38.5	22.4		95.5
EOT Wear Metals						
Fe	206	236	356	204	321	359
Pb	0	9	9	4	9	10
Al	0	3	81	4		10
Procedure differences						
Intake Manifold Temp Degrees C	80	80	66	80	66	66
Aftercooler	Modine	Modine	Cummins	Modine	Cummins	Cummins
Crossheads	old	new	Old	new	Old	Old

The DI packages in OS 155609 and 159257 are identical. The VMs are different.

OS Number	155609	155609	155609	159257	152587	152587
Oil	A	A	A	A'	B	B
LAB	X	X	Y	Y	Y	Z
1E	5.69		29.73	14.67	42.73	41.5
1I	10.17		30.14	46.03	70.17	33.4
2I	10.33		83.15	47.22	55.67	40.5
2E	10.15		23.51	67.44	45.36	40.5
3E	8.77		15.75	6.96	18.83	27.6
3I	5.56		40.96	23.96	71.51	31.2
4I	5.50		24.29	14.44	53.42	5.4
4E	6.46		37.5	42.14	19.51	35.1
5E	4.79		15.81	6.49	36.04	16.9
5I	6.05		17.17	15.58	65.30	51.9
6I	12.95		62.55	32.17	47.61	35.2
6E	5.09		25.27	52.65	31.05	26.1
Avg. CrossHead weight loss (mg)	7.62	10.46	33.82	30.81	46.43	32.11
Soot @ 250 hours	7.7	8.7	8.8	8.5	8.5	10.8
Avg. CrossHead at 8.5% Soot	9.42	9.90	29.98	30.81	46.43	16.24
Procedure differences						
Intake Manifold Temp Degrees C	80	80	66	80	66	66
Aftercooler	Modine	Modine	Cummins	Modine	Cummins	Cummins
Crossheads	old	new	Old	new	Old	Old

The DI packages in OS 155609 and 159257 are identical. The VMs are different.

OS Number	155609	155609	155609	159257	152587	152587
Oil	A	A	A	A'	B	B
LAB	X	X	Y	Y	Y	Z
Hours	% Soot	% Soot	% Soot	% Soot	% Soot	% Soot
0	0.1	0.1	0.2	0.2	0.2	0
25	1.6	1.5	1.9	1.4	1.5	2.2
50	2.9	2.8	3.4	3.0	2.9	4.4
75	3.1	2.9	3.4	3.1	3.1	4.5
100	3.2	3.0	3.4	3.0	3.1	4.7
125	4.5	4.5	4.7	4.5	4.4	7
150	5.6	6.0	6.4	5.8	5.5	8.6
175	5.6	5.8	6.2	5.9	5.6	8.8
200	5.5	5.8	6.2	6.0	5.7	8.8
225	6.8	7.5	7.7	7.5	7.1	9.9
250	7.7	8.7	8.8	8.5	8.5	10.8
275	7.6	8.6	8.8	8.2	8.4	10.6
300	7.4	8.5	8.5	8.1	8.3	10.5
Procedure differences						
Intake Manifold Temp Degrees C	80	80	66	80	66	66
Aftercooler	Modine	Modine	Cummins	Modine	Cummins	Cummins
Crossheads	old	new	Old	new	Old	Old

The DI packages in OS 155609 and 159257 are identical. The VMs are different.

M11 EGR Soot Generation Rates

