

December 6, 2004

XL883 Ignition module calibration changes

The XL883 Sportster calibrations have been changed to improve drivability and to reduce a slight dip in performance accompanied by a coughing sound heard in the air cleaner on tip in. (initial roll on, just off idle) The new calibrations will be available, for dealer installation, in Digital Technician starting with release 14.06 scheduled for delivery during the first week of December.

Note: This is a new update developed since the release of Service Bulletin M-1162 and is only applicable to 2004-2005 XL883 models produced prior to 12/01/2004. This update should be applied even if the update from M-1162 has already been performed.

Dealers should install the new calibration when the motorcycle is presented for service. Dealers should mark the ICM with the addition of a "B" on the part number label of the ICM to indicate to others that the update has been completed.

Dealers can submit a warranty claim using labor code 7933 for .2 hours labor when doing this update on motorcycles that have not been updated. The condition code will also be 7933.

ICM part number shown in Digital Technician	Calibration ID	Date of manufacture	Action required
32478-04	32867-04A	Prior to 11/2004	Download calibration 32867-04B
32622-04A	32864-04A	Prior to 11/2004	Download calibration 32867-04B
32622-04A	32867-04B	ANY	No action, return to service
		12/2004 and later	No action, return to service

This update SHOULD NOT be applied to motorcycles that have the Ignition Race Tuner installed. See page 2 if an Ignition Race Tuner is installed.

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If XL883 models with the Ignition Race Tuner installed, are experiencing undesirable drivability characteristics in the RPM range just off idle, technicians can try increasing the values highlighted below (shown to be 0 degrees) to a value of between 3 and 5 degrees of total timing advance. This recommendation is only a starting point; your particular state of tune may dictate different values.

The screenshot shows the 'Spark Table Editor' window for a 32124-04.130.0 engine. It contains two tables: 'Front Spark Table' and 'Rear Spark Table'. Both tables have MAP on the y-axis (0, 38, 42, 46, 52, 60, 80, 94, 103) and RPM on the x-axis (600, 1200, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 6000, 7000). In the front table, the 600 RPM column has 0 degrees for MAP 60, 80, 94, and 103. In the rear table, the 600 RPM column has 10 degrees for MAP 0 and 38, and 0 degrees for MAP 60, 80, 94, and 103. The interface includes control buttons for 'Set Value', 'Rev. Limit' (5500), 'Ignition Coil' (SE High Energy Coil), 'Cal Rev.' (0), 'Copy', 'Paste', 'View Graph Front Spark', 'View Graph Rear Spark', 'Load from PC', 'Save to PC', 'Download', 'Upload', and 'Close'. A 'Modify both tables' checkbox is also present.

MAP	600	1200	1500	2000	2500	3000	3500	4000	4500	5000	6000	7000
0	10	10	20	29	30	30	50	50	50	50	50	50
38	10	10	20	29	30	30	50	50	50	50	50	50
42	10	10	20	29	30	30	40	48	50	50	50	50
46	10	10	20	27	29	30	35	42	48	50	50	50
52	10	10	20	25	26	28	33	40	40	42	50	50
60	0	0	12	20	23	28	30	32	33	36	46	50
80	0	0	10	20	23	28	29	30	31	35	37	40
94	0	0	5	20	23	28	29	30	31	32	33	34
103	0	0	5	20	23	28	29	30	31	32	33	34

MAP	600	1200	1500	2000	2500	3000	3500	4000	4500	5000	6000	7000
0	10	10	20	30	30	33	50	50	50	50	50	50
38	10	10	20	30	30	33	50	50	50	50	50	50
42	10	10	20	30	30	33	40	48	50	50	50	50
46	10	10	20	29	29	31	35	43	45	50	50	50
52	10	10	20	25	26	30	33	39	40	46	50	50
60	0	0	12	25	25	27	29	33	34	39	45	50
80	0	0	10	25	25	27	28	30	34	35	36	40
94	0	0	5	25	22	27	28	30	34	34	35	35
103	0	0	5	25	25	27	28	30	34	34	35	35