

# SOA ECM Reprogramming

Logic Change Order	Condition	Vehicle Model/Model Year	Calibration Identification Number (CID)	Appropriate Service Manual
<b>LEGACY</b>				
Logic Change	1) Hard Engine Start Cold (Step1) 2) P0464 H-6	01MY Legacy 3.0L	D6JM102B	01MY
Logic Change	1) Hard Engine Start Cold (Step2) 2) P0464 H-6	01MY Legacy 3.0L	D6JP000B	01MY
Logic Change #3	P1443 H-6 <b>Includes Logic Change #1~2</b>	01MY Legacy 3.0L	D6HE000B	02MY
Logic Change #4	P030X* H-6 <b>Includes Logic Change #1~3</b>	01~02MY Legacy 3.0L	D6HE100B	02MY
Logic Change #5	1) Hard starting (long crank time) 2) Hesitation <b>Includes Logic Change #1~4</b>	01 MY Legacy 3.0L	D6JR000B	By Year
		02 MY Legacy 3.0L	D6HH000B	
		03 MY Legacy 3.0L	D6QK000B	
		04 MY Legacy 3.0L	D6PC000B	
Logic Change #1	P1507	00~01MY Legacy 2.5L M/T	Not Available	01MY
Logic Change #6	1) P0172 2) P0065 <b>Includes Logic Change #1~5 from dealer sheet</b>	00~01MY Legacy 2.5L	DU2IHL0C	01MY
		00~01MY Legacy OBK 2.5L	DU2IHK0C	
Logic Change #6	1) P0172 2) P0065 <b>Includes Logic Change #1~5 from dealer sheet</b>	02MY Legacy 2.5L	DU450L05	02MY
		02MY Legacy OBK 2.5L	DU450K05	
Logic Change #1	1) P0172 2) Hesitation	03MY Legacy 2.5L	D6WQ2GT9	03MY
		03MY Legacy OBK 2.5L	D6WQ2OB9	
Logic Change #2	1) P030X* with M/T ONLY 2) Cold Engine Start/Black Smoke <b>Includes Logic Change #1</b>	03MY Legacy 2.5L	D6YQ2GTB	03MY
		03MY Legacy OBK 2.5L	D6YQ2OBB	
Logic Change #3	1) P0172 <b>Includes Logic Change #1~2</b>	03MY Legacy 2.5L	D6YQ2GTC	03MY
		03MY Legacy OBK 2.5L	D6YQ2OBC	
Logic Change #1	1) P0172 (U6) Federal emission specification only 2) P0464 (U6) Federal emission specification only <b>Includes Logic Change #1</b>	04MY Legacy 2.5L	D91P2GT2	04MY
		04MY Legacy OBK & Baja 2.5L	D91P2OB2	
Logic Change #2		04MY Legacy 2.5L	D91P2GT3	04MY
		04MY Legacy OBK & Baja 2.5L	D91P2OB3	

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Logic Change #1	(U6) Federal emission specification only 1) P1160 2) P2097 3) Cruise Control Intermittently shuts off	05MY Legacy 2.5L M/T	E2ZJ133B	05MY
		05MY Outback 2.5L M/T	E2ZJ133B	
Logic Change #2	(U6) Federal emission specification only 1) Vehicle surge with cruise control on going downhill.	05MY Legacy 2.5L M/T	E2ZJ143B	05MY
		05MY Outback 2.5L M/T	E2ZJ143B	
Logic Change #1	(U5) California emission specification only 1) P1160 2) Cruise Control Intermittently shuts off	05MY Legacy 2.5L M/T	E2ZJ133A	05MY
		05MY Outback 2.5L M/T	E2ZJ133A	
Logic Change #2	(U5) California emission specification only 1) Vehicle surge with cruise control on going downhill.	05MY Legacy 2.5L M/T	E2ZJ143A	05MY
		05MY Outback 2.5L M/T	E2ZJ143A	
Logic Change #1	(U6) Federal emission specification only 1) P1160 2) P2097	05MY Legacy 2.5L A/T	E2ZJ131B	05MY
		05MY Outback 2.5L A/T	E2ZJ132B	
Logic Change #2	(U6) Federal emission specification only 1) Vehicle surge with cruise control on going downhill.	05MY Legacy 2.5L A/T	E2ZJ141B	05MY
		05MY Outback 2.5L A/T	E2ZJ142B	
Logic Change #1	(U5) California emission specification only 1) P1160 2) P2097 3) Vehicle surge with cruise control on going downhill.	05MY Legacy 2.5L A/T	E2ZJ141A	05MY
		05MY Outback 2.5L A/T	E2ZJ142A	
Logic Change #1	1) Surge during moderate acceleration 2) P2097	05MY Legacy Turbo M/T	ECM A2WC521N ETC AD3A104J	05MY
		05MY Outback Turbo M/T	ECM A2WC521S ETC AD3A104J	
Logic Change #1	1) Surge during moderate acceleration 2) P2097	05MY Legacy Turbo A/T	ECM A2WC521C ETC AD3A104J	05MY
		05MY Outback Turbo A/T	ECM A2WC521R ETC AD3A104J	

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Logic Change #1	1) P0464 (U6) Federal emission specification only	05MY Baja 2.5L	DC0N2OB4	05MY
Logic Change #1	1) Surge at 50~80MPH on acceleration 2) P1160 3) Cold Rough Idle in High Attitudes (below 32degF and above 4900 ft)	05MY Baja TURBO	ECM A2WC500K ETC AD3A104D	05MY
Logic Change #1	P0137	06MY Baja 2.5L	D02M2U02	06MY
<b>WRX</b>				
Logic Change #1	1) P1443 2) P0457 3) P0340	02MY Impreza WRX 2.0L Turbo	A4SGA00C	02MY
Logic Change #2	P0303 <b>Includes Logic Change #1</b>	02MY Impreza WRX 2.0L Turbo	A4SGC00C	02MY
Logic Change #3	Pinging at high rpm (6000) <b>Includes Logic Change #1~2</b>	02MY Impreza WRX 2.0L Turbo	A4SGD10C	02MY
Logic Change #4	Misfire codes during hot restart with engine Temp above 158 deg. F <b>Includes Logic Change #1~3</b>	02MY Impreza WRX 2.0L Turbo M/T	A4SGE00C	02MY
Logic Change #5	Misfire codes during hot restart with engine Temp <b>below</b> 158 deg. F <b>Includes Logic Change #1~4</b>	02MY Impreza WRX 2.0L Turbo M/T	A4SGE01C	02MY
Logic Change #1	Misfire codes during hot restart with engine Temp above 158 deg. F	03MY Impreza WRX 2.0L Turbo M/T	A4TC400L	03MY
Logic Change #2	Misfire codes during hot restart with engine Temp <b>below</b> 158 deg. F <b>Includes Logic Change #1</b>	03MY Impreza WRX 2.0L Turbo M/T	A4TC401L	03MY
Logic Change #1	Misfire codes during hot restart with engine Temp above 158 deg. F	04MY Impreza WRX 2.0L Turbo M/T	A4TF500F	04MY
Logic Change #2	1) P0139 2) Misfire codes during hot restart with engine Temp <b>below</b> 158 deg. F <b>Includes Logic Change #1</b>	04MY Impreza WRX 2.0L Turbo <b>M/T</b>	A4TF510F	04MY
Logic Change #3	Pinging during full throttle acceleration around 5000RPM	04MY Impreza WRX 2.0L Turbo <b>M/T</b>	A4TF520F	04MY
Logic Change #1	P0139	04MY Impreza WRX 2.0L Turbo <b>Automatic</b>	A4TF510E	04MY
Logic Change #2	Pinging during full throttle acceleration around 5000RPM	04MY Impreza WRX 2.0L Turbo <b>Automatic</b>	A4TF520E	04MY

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Logic Change #1	Pinging during full throttle acceleration around 5000RPM	05MY Impreza WRX 2.0L Turbo <b>M/T</b>	A4TF810F	05MY
Logic Change #1	Pinging during full throttle acceleration around 5000RPM	05MY Impreza WRX 2.0L Turbo <b>Automatic</b>	A4TF810E	05MY
Logic Change #1	1) Pinging during wide open throttle acceleration engine RPM's between 3000~4000	04MY Impreza WRX STi 2.5L Turbo	A2ZJ700J	04MY
Logic Change #2	P0139 <b>Includes Logic Change #1</b>	04MY Impreza WRX STi 2.5L Turbo	A2ZJ710J	04MY
<b>Impreza</b>				
Logic Change #1	P1507	99~01MY Impreza 2.2L M/T	Not Available	01MY
Logic Change #6	1) P0172 2) P0065 <b>Includes Logic Change #1~5 from dealer sheet</b>	00~01MY Impreza 2.5L	DU2HGB3	01MY
Logic Change #6	1) P0172 2) P0065 <b>Includes Logic Change #1~5 from dealer sheet</b>	02MY Impreza 2.5L	DU2HGS3	02MY
Logic Change #1	1) P0172 2) Hesitation	03MY Impreza 2.5L	D6VR2U06	03MY
Logic Change #2	1) P030X* with M/T 2) Cold Engine Start/Black Smoke <b>Includes Logic Change #1</b>	03MY Impreza 2.5L	D6XR2U0B	03MY
Logic Change #3	1) P0172 <b>Includes Logic Change #1~3</b>	03MY Impreza 2.5L	D6XR2U0C	03MY
Logic Change #1	1) Cold Engine Start/Black Smoke	04MY Impreza 2.5L	D86T2U04	04MY
Logic Change #2	1) P0172 <b>Includes Logic Change #1~2</b>	04MY Impreza 2.5L	D86T2U05	04MY
Logic Change #3	1) P2097 <b>Includes Logic Change #1~3</b>	04MY Impreza 2.5L	D86T2U06	04MY
Logic Change #1	1) P2097	05MY Impreza 2.5L NA M/T	E2ZJ133G	05MY

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Logic Change #1	1) P2097	05MY Impreza 2.5L NA A/T	E2ZJ131G	05MY
<b>Forester</b>				
Logic Change #7	1) P0172 2) P0065 <b>Includes Logic Change #1~6 from dealer sheet</b>	00~02MY Forester 2.5L M/T 00~02MY Forester 2.5L M/T	DU2HSMD DU2HSAD	02MY
Logic Change #1	1) P0172 2) Hesitation	03MY Forester 2.5L	D6VA2U09	03MY
Logic Change #2	1) P030X* with M/T 2) Cold Engine Start/Black Smoke <b>Includes Logic Change #1</b>	03MY Forester 2.5L	D6XA2U0B	03MY
Logic Change #3	1) P0172 <b>Includes Logic Change #1~3</b>	03MY Forester 2.5L	D6XA2UOC	03MY
Logic Change #1	1) P0172	04MY Forester 2.5L	D86B2U06	04MY
Logic Change #1	1) P2097	05MY Forester 2.5L NA M/T	E2ZJ133H	05MY
Logic Change #1	1) P2097	05MY Forester 2.5L NA A/T	E2ZJ131H	05MY
Logic Change #1	1) P2097	06MY Forester 2.5L NA MT	E2VG222D	06MY
Logic Change #1	1) P2097	06MY Forester 2.5L NA AT	E2VG221D	06MY
Logic Change #1	1) Cold Rough Idle in High Attitudes (below 32degF and above 4900 ft)	04MY Forester Turbo A/T	ECM A2ZJ211D ETC AD3A101D	04MY
Logic Change #1	1) Cold Rough Idle in High Attitudes (below 32degF and above 4900 ft)	04MY Forester Turbo M/T	ECM A2ZJ511I ETC AD3A101D	04MY

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Logic Change #1	1) P1160 Cold Rough Idle in High Attitudes (below 32degF and above 4900 ft)2)	05MY Forester Turbo A/T	ECM A2WC412D ETC AD3A104K	05MY
Logic Change #1	1) P1160 Cold Rough Idle in High Attitudes (below 32degF and above 4900 ft)2)	05MY Forester Turbo M/T	ECM A2WC412I ETC AD3A104K	05MY

\* X=1~4 or 1~6