

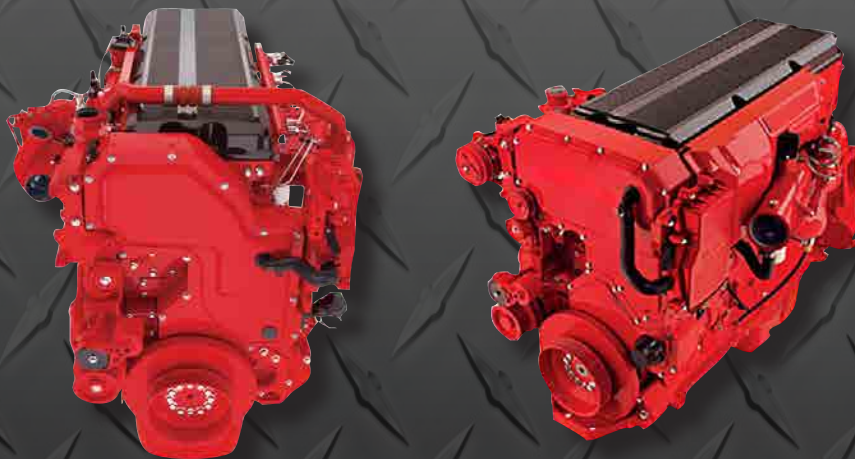


# INTERSTATE-McBEE



## New Replacement Parts for **CUMMINS®**

# ISX-QSX-X15 Engine Applications



September 2019

**INTERSTATE-McBEE, LLC**

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## ISX-QSX-X15 CPL LISTING

CPL #	MODEL	Liner OD	IN-FRAME KIT Non-APR	APR IN-FRAME KIT (In Development)	LOWER GASKET SET	FUEL INJECTOR
927	ISX 07	150mm	N/A	M-4376174	M-4955591	
		152mm	N/A	M-4376428		
1434	ISX 07	150mm	N/A	M-4376174	M-4955591	R-4954888
		152mm	N/A	M-4376428		
1437	ISX 870	150mm	N/A	M-4376175	M-4955591	
		152mm	N/A	M-5405988		
1732	QSX 07	150mm	M-4352291	In Development	M-4955590	R-4928260
1771	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088301
		152mm	N/A	M-4376429		
2440	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4010292
		152mm	N/A	M-4376429		
2441	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4062567
		152mm	N/A	M-4376429		
2442	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2483	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2627	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4010292
		152mm	N/A	M-4376429		
2628	ISX 400/450	150mm	N/A	M-4376171	M-4955590	R-4010292
		152mm	N/A	M-4376429		
2629	ISX500/475 ST2	150mm	N/A	M-4376171	M-4955590	R-4088301
		152mm	N/A	M-4376429		
2630	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2631	ISX 450	150mm	N/A	M-4376171	M-4955590	R-4010292
		152mm	N/A	M-4376429		
2632	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088301
		152mm	N/A	M-4376429		
2633	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2732	ISX 07	150mm	N/A	M-4376175	M-4955591	R-4954434
		152mm	N/A	M-5405988		
2733	ISX 07	150mm	N/A	M-4376174	M-4955591	R-4954888
		152mm	N/A	M-4376428		

NOTE: The In-Frame kit numbers specified here are for use in engines that were originally built with one piece steel pistons or those that have been already updated to one piece steel pistons. These kits do not include connecting rods.

## ISX-QSX-X15 CPL LISTING

CPL #	MODEL	Liner OD	IN-FRAME KIT Non-APR	APR IN-FRAME KIT (In Development)	LOWER GASKET SET	FUEL INJECTOR
2734	ISX 07	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
2801	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2803	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4010292
		152mm	N/A	M-4376429		
2814	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4062567
		152mm	N/A	M-4376429		
2816	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2825	Industrial / GenSet	150mm	M-4352288	In Development	M-4955590	R-4062569
2834	Signature 600/565	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2835	Signature 600/565	150mm	M-4352288	In Development	M-4955590	R-4062568
2836	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2837	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2900	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
2919	ISX 07	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
2933	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088301
		152mm	N/A	M-4376429		
2934	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088301
		152mm	N/A	M-4376429		
2965	ISX 07	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
3087	QSX 07	150mm	M-4352291	In Development	M-4955590	R-4928260
3088	QSX 07	150mm	M-4352291	In Development	M-4955590	R-4928260
3167	ISX 07	150mm	N/A	M-4376174	M-4955591	
		152mm	N/A	M-4376428		
3229	ISX 07	150mm	N/A	M-4376175	M-4955591	R-4954434
		152mm	N/A	M-5405988		

NOTE: The In-Frame kit numbers specified here are for use in engines that were originally built with one piece steel pistons or those that have been already updated to one piece steel pistons. These kits do not include connecting rods.

## ISX-QSX-X15 CPL LISTING

CPL #	MODEL	Liner OD	IN-FRAME KIT Non-APR	APR IN-FRAME KIT (In Development)	LOWER GASKET SET	FUEL INJECTOR
3320	ISX 07	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
3348	ISX10	150mm	N/A	M-5473065	M-2881766	
		152mm	N/A	M-4376427		
3349	ISX10	150mm	N/A	M-5473065	M-2881766	
		152mm	N/A	M-5473066		
3350	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3356	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3376	ISX10	150mm	N/A	M-5473065	M-2881766	
		152mm	N/A	M-4376427		
3458	ISX 07	150mm	N/A	M-4376174	M-4955591	
		152mm	N/A	M-4376428		
3459	ISX 07	150mm	N/A	M-4376175	M-4955591	
		152mm	N/A	M-5405988		
3490	ISX10	150mm	N/A	M-5473065	M-2881766	
		152mm	N/A	M-5473066		
3491	ISX10	150mm	N/A	M-5473065	M-2881766	
		152mm	N/A	M-5473066		
3566	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3567	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		
3606	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3657	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		
3687	ISX10	150mm	N/A	M-5473065	M-2881766	
		152mm	N/A	M-5473066		
3688	ISX10	150mm	N/A	M-5473065	M-2881766	
		152mm	N/A	M-5473066		
3719	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		

NOTE: The In-Frame kit numbers specified here are for use in engines that were originally built with one piece steel pistons or those that have been already updated to one piece steel pistons. These kits do not include connecting rods.

## ISX-QSX-X15 CPL LISTING

CPL #	MODEL	Liner OD	IN-FRAME KIT Non-APR	APR IN-FRAME KIT (In Development)	LOWER GASKET SET	FUEL INJECTOR
3724	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		
3765	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3766	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3775	ISX 07	150mm	N/A	M-4376175	M-4955591	
		152mm	N/A	M-5405988		
3794	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3797	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
3937	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		
3938	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5405987		
3939	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
4262	QSX 07	150mm	M-4352291	In Development	M-4955590	R-4928260
4495	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5405987		
4583	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		
4584	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
4585	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
4586	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		
4587	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
4588	ISX10	150mm	N/A	M-5473069	M-2881766	
		152mm	N/A	M-5473070		
4761	ISX10	150mm	N/A	M-5473074	M-2881766	
		152mm	N/A	M-5473075		

NOTE: The In-Frame kit numbers specified here are for use in engines that were originally built with one piece steel pistons or those that have been already updated to one piece steel pistons. These kits do not include connecting rods.



## ISX-QSX-X15 CPL LISTING

CPL #	MODEL	Liner OD	IN-FRAME KIT Non-APR	APR IN-FRAME KIT (In Development)	LOWER GASKET SET	FUEL INJECTOR
8046	ISX 450 ST2	150mm	N/A	M-4376171	M-4955590	R-4062567
		152mm	N/A	M-4376429		
8047	ISX 450 ST2	150mm	N/A	M-4376171	M-4955590	R-4062567
		152mm	N/A	M-4376429		
8048	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4062567
		152mm	N/A	M-4376429		
8081	Industrial / GenSet	150mm	M-4352288	In Development	M-4955590	R-4062569
8083	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4062569
		152mm	N/A	M-4376429		
8125	ISX2 / ISX3 EGR	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8142	Industrial / GenSet	150mm	M-4352288	In Development	M-4955590	R-4062569
8242	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4062569
		152mm	N/A	M-4376429		
8243	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088327
		152mm	N/A	M-4376429		
8244	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088301
		152mm	N/A	M-4376429		
8246	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
8247	ISX3 / Signature	150mm	N/A	M-4376172	M-4955590	R-4062568
		152mm	N/A	In Development		
8255	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088327
		152mm	N/A	M-4376429		
8257	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088327
		152mm	N/A	M-4376429		
8258	ISX1 / ISX2	150mm	N/A	M-4376171	M-4955590	R-4088327
		152mm	N/A	M-4376429		
8281	ISX2 / ISX3 EGR	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8282	ISX2 / ISX3 EGR	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8283	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		

NOTE: The In-Frame kit numbers specified here are for use in engines that were originally built with one piece steel pistons or those that have been already updated to one piece steel pistons. These kits do not include connecting rods.



# ISX-QSX-X15 CPL LISTING

CPL #	MODEL	Liner OD	IN-FRAME KIT Non-APR	APR IN-FRAME KIT (In Development)	LOWER GASKET SET	FUEL INJECTOR
8284	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8285	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8286	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8287	ISX 870	150mm	N/A	M-4376175	M-4955591	R-4088665
		152mm	N/A	M-5405988		
8288	ISX 870	150mm	N/A	M-4376175	M-4955591	R-4088665
		152mm	N/A	M-5405988		
8469	QSX15	150mm	M-4352288	In Development	M-4955590	R-4062569
8518	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8519	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8520	ISX 870	150mm	N/A	M-4376175	M-4955591	R-4088665
		152mm	N/A	M-5405988		
8521	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8522	ISX 870 HHP	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8523	ISX 870	150mm	N/A	M-4376175	M-4955591	R-4088665
		152mm	N/A	M-5405988		
8571	QSX15	150mm	M-4352288	In Development	M-4955590	R-4062569
8587	QSX15	150mm	M-4352288	In Development	M-4955590	R-4062569
8588	QSX15-C440	150mm	M-4352288	In Development	M-4955590	R-4062569
8660	ISX 07	150mm	N/A	M-4376174	M-4955591	R-4088665
		152mm	N/A	M-4376428		
8760	QSX 07	150mm	M-4352291	In Development	M-4955590	R-4928260
8761	QSX 07	150mm	M-4352291	In Development	M-4955590	R-4928260
8762	QSX 07	150mm	M-4352291	In Development	M-4955590	R-4928262
8764	QSX 07	150mm	M-4352291	In Development	M-4955590	

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# ISX-QSX-X15

## IN-FRAME ENGINE KITS

Model	Piston	Skirt Type	Top Ring Location	Top Land Diameter	Liner OD Size	In-Frame Engine Kit	Scraper Ring In-Frame Kit
ISX CM570	2863938	Closed	High	Large	150mm	N/A	M-4376171
					152mm		M-4376429
	2863939	Closed	High	Large	150mm	N/A	M-4376172
					152mm		N/A
	2882635	Closed	High	Reduced	150mm	N/A	M-4376171
					152mm		M-4376429
	2882636	Closed	High	Reduced	150mm	N/A	M-4376172
					152mm		N/A
QSX CM570	3104186	Open	High	Large	150mm	M-4352291	IN DEVELOPMENT
					152mm	N/A	
	4298991	Open	High	Reduced	150mm	M-4352291	
					152mm	N/A	
	4298992	Open	High	Reduced	150mm	M-4352288	
					152mm	N/A	
	4923744	Open	High	Large	150mm	M-4352288	
					152mm	N/A	
ISX CM870 CM871	2882630	Closed	High	Reduced	150mm	N/A	M-4376175
					152mm		M-5405988
	2882631	Closed	High	Reduced	150mm	N/A	M-4376174
					152mm		M-4376428
	3684467	Closed	High	Large	150mm	N/A	M-4376174
					152mm		M-4376428
	3684472	Closed	High	Large	150mm	N/A	M-4376175
					152mm		M-5405988
ISX15 QSX15 CM2250 CM2350	3686366	Closed	Low	Large	150mm	N/A	M-5473065
					152mm		M-5473066
	3687177	Closed	Low	Large	150mm	N/A	M-5473069
					152mm		M-5473070
	3687605	Closed	Low	Large	150mm	N/A	M-5473074
					152mm		M-5473075
	3687897	Closed	Low	Reduced	150mm	N/A	M-5473074
					152mm		M-5473075
	3688099	Closed	Low	Reduced	150mm	N/A	M-5473065
					152mm		M-5473066
	3688100	Closed	Low	Reduced	150mm	N/A	M-5473069
					152mm		M-5473070
	3688405	Closed	Low	Reduced	150mm	N/A	M-5473074
					152mm		M-5473075

All manufacturer's names, symbols and descriptions are used for reference only and it is not implied that any part is the product of these manufacturers.

# ISX-QSX-X15

## RE-RING ENGINE KITS - TWIN CAM MODELS

Part #	Qty	Description	Note
MCB4025214	1	Inframe Kit - Re-Ring - 2pc Articulated	150mm Non-APR
MCB4309389-2	1	Inframe Kit - Re-Ring - 1pc Steel	150mm Non-APR
MCB4376392-2	1	Inframe Kit - Re-Ring - 1pc Steel	152mm Non-APR with loose shim
MCB4309389-1	1	Inframe Kit - Re-Ring - 1pc Steel	150mm Non-APR with EGR
MCB4376392-1	1	Inframe Kit - Re-Ring - 1pc Steel	152mm Non-APR with EGR
MCB4376168-1	1	Inframe Kit - Re-Ring - 1pc Steel	150mm APR
MCB4376391-1	1	Inframe Kit - Re-Ring - 1pc Steel	152mm APR with loose shim

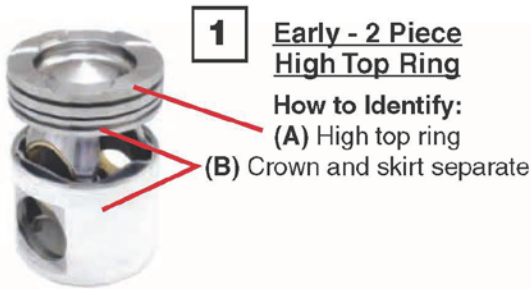
## RE-RING ENGINE KITS - SINGLE CAM MODELS

Part #	Qty	Description	Note
MCB4309389	1	Inframe Kit - Re-Ring - 1pc Steel - HPCR	150mm Non-APR
MCB4376392	1	Inframe Kit - Re-Ring - 1pc Steel - HPCR	152mm Non-APR with loose shim
MCB4376168	1	Inframe Kit - Re-Ring - 1pc Steel - HPCR	150mm APR
MCB4376391	1	Inframe Kit - Re-Ring - 1pc Steel - HPCR	152mm APR with loose shim

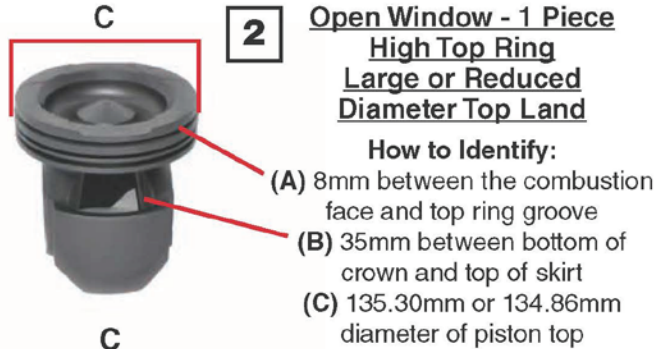




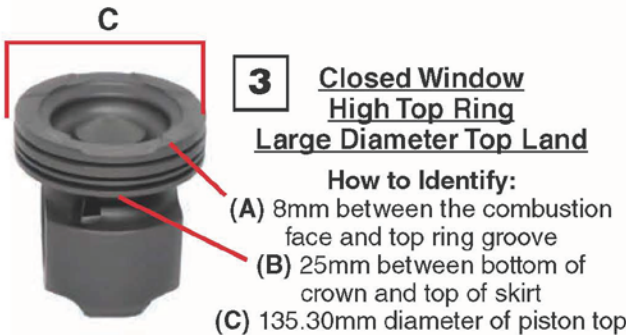
## Piston Progression



**1** Early - 2 Piece High Top Ring  
**How to Identify:**  
 (A) High top ring  
 (B) Crown and skirt separate



**2** Open Window - 1 Piece High Top Ring Large or Reduced Diameter Top Land  
**How to Identify:**  
 (A) 8mm between the combustion face and top ring groove  
 (B) 35mm between bottom of crown and top of skirt  
 (C) 135.30mm or 134.86mm diameter of piston top



**3** Closed Window High Top Ring Large Diameter Top Land  
**How to Identify:**  
 (A) 8mm between the combustion face and top ring groove  
 (B) 25mm between bottom of crown and top of skirt  
 (C) 135.30mm diameter of piston top



**4** Closed Window High Top Ring Reduced Diameter Top Land  
**How to Identify:**  
 (A) 8mm between the combustion face and top ring groove  
 (B) 25mm between bottom of crown and top of skirt  
 (C) 134.86mm diameter of piston top



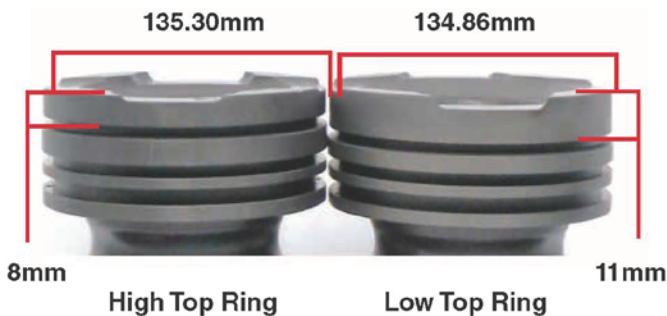
**5** Closed Window Low Top Ring Large Diameter Top Land  
**How to Identify:**  
 (A) 11mm between the combustion face and top ring groove  
 (B) 25mm between bottom of crown and top of skirt  
 (C) 135.30mm diameter of piston top



**6** Closed Window Low Top Ring Reduced Diameter Top Land  
**How to Identify:**  
 (A) 11mm between the combustion face and top ring groove  
 (B) 25mm between bottom of crown and top of skirt  
 (C) 134.86mm diameter of piston top

\*\*Please note: Piston types cannot be mixed in the same engine. Mixing piston types will lead to catastrophic engine failure.

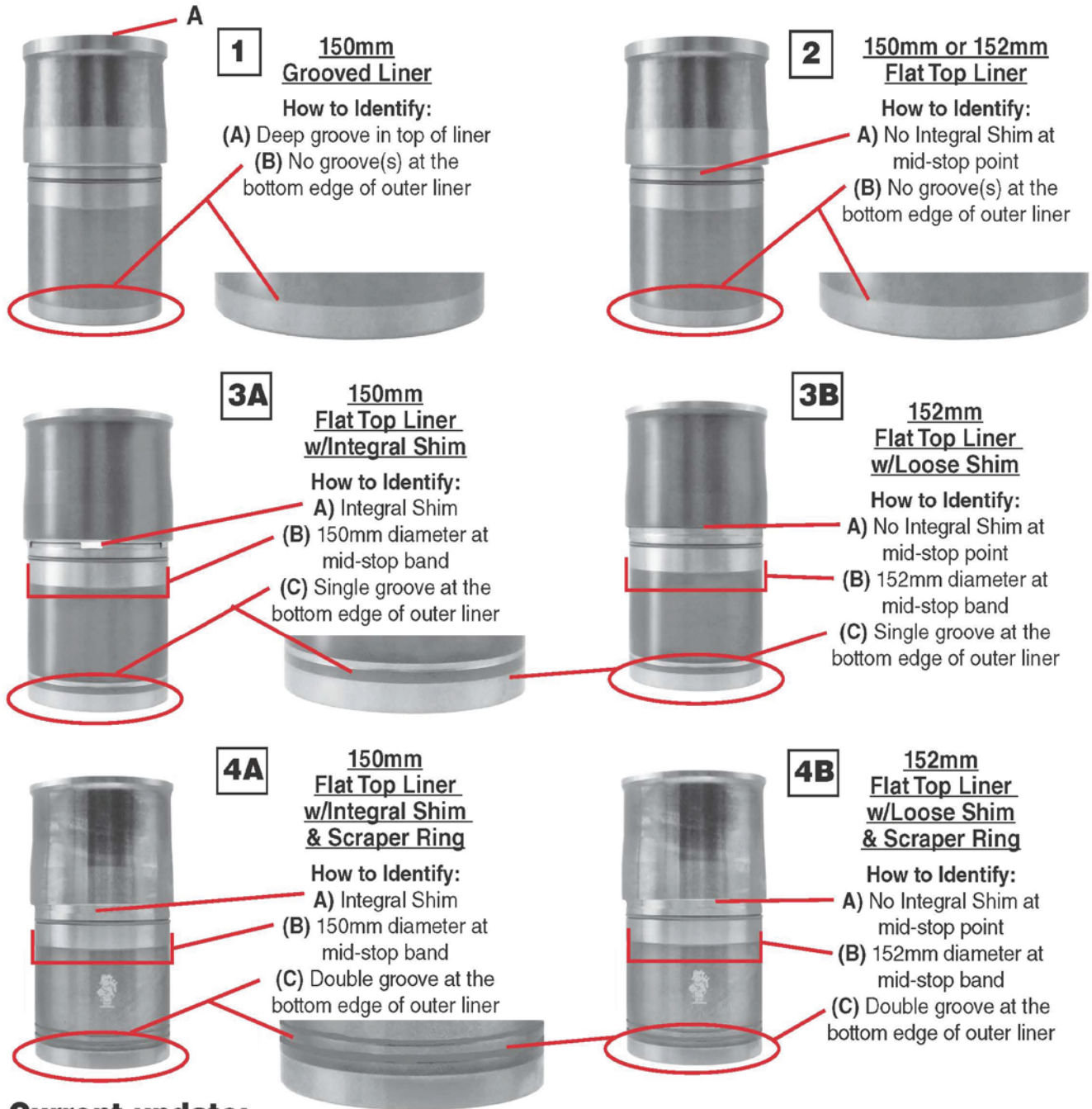
### Top Ring Identification



### Window Identification



## Cylinder Liner Progression



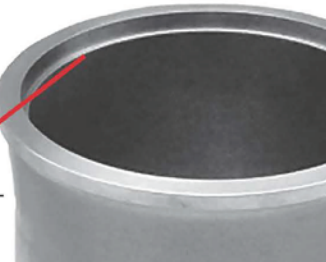
### Current update:

The current update refers to the introduction of the carbon scraper ring cylinder liner commonly known as an APR (Anti-Polishing Ring) liner. This liner contains a counter bore at the top in which a removable steel ring is inserted to remove the carbon from the sides of the piston preventing it from contact with the liner walls.

Flat Top Liner  
 No Counter Bore



Scraper Ring Liner  
 Counter Bore

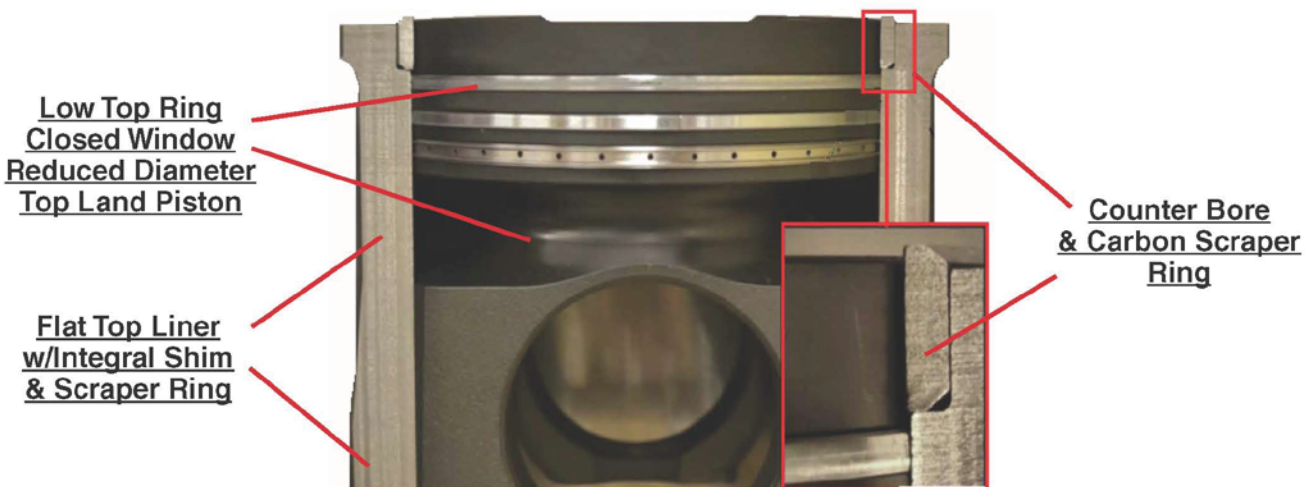




## Power Cylinder Update

Current Power Cylinder components incorporate the use of a Carbon Scraper Ring cylinder liner commonly known as an APR (Anti-Polishing Ring) liner and a Low Top Ring, Reduced Diameter Top Land Piston. The liner contains a counter bore at the top in which a removable steel ring is inserted. This ring scrapes the carbon from the sides of the piston and aids in reducing carbon polishing of the cylinder liner walls.

The Carbon Scraper Liner is designed to only be used with Low Top Ring and Reduced Diameter Pistons. These improvements are designed to aid in decreasing oil consumption, oil filter flow and DPF regeneration.



### Compatibility Cylinder Liner – Piston – Connecting Rod

- Open Skirt Pistons cannot be used with Carbon Scraper Ring (APR) Cylinder Liners.
- High Top Ring Pistons cannot be used with Carbon Scraper Ring (APR) Cylinder Liners.
- Carbon Scraper Ring Cylinder Liners must use a Closed Window, Reduced Diameter, Low Top Ring Pistons
- All six cylinder liners installed must be of the same type.
- Liner Shims must be replaced with new shims upon installation.
- Service Tool 5299448 is required for Scraper Ring Liner piston installation.
- All one piece pistons require drilled connecting rods and drilled bearings.
- Machined (saw cut) connecting rods and fractured-split connecting rods require different bearings which are not interchangeable.



# INTERSTATE-McBEE





# ISX-QSX-X15

## CYLINDER COMPONENTS

Part #	Qty	Description	Note
M-2881758	6	Piston Kit APR - X15 Tier 4	3688099 body
M-2881873	6	Piston Kit - ISX1 / ISX2	2882635 body
M-2881876	6	Piston Kit - ISX3 / Signature	2882636 body
M-2882023	6	Piston Kit APR - X15 Tier 4	3688100 body
M-2882080	6	Piston Kit APR - X15 Tier 4	3687897 body
M-2882118	6	Piston Kit - QSX Tier 3	4298991 body
M-2882120	6	Piston Kit - QSX Tier 2	4298992 body
M-4376241	6	Piston Kit APR - ISX 570	4357150 body
M-4376242	6	Piston Kit APR - ISX 570 - HHP	4367126 body
M-4376243	6	Piston Kit APR - ISX 870/1	4367161 body
M-4376244	6	Piston Kit APR - ISX 870/1 - HHP	4357173 body
M-4309442	6	Piston Ring Set	2pc Articulated piston
M-4309441	6	Piston Ring Set	1pc Steel piston (5405717)
M-2881756	6	Piston Ring Set	ISX15 HPCR (5405718,4376565)
M-3689296	6	Piston Pin	1pc Steel piston
M-3064305	12	Piston Pin Retainer	
M-3800453	N/A	Cylinder Liner Kit - Grooved Top	Obsolete - Not available
M-4089153	N/A	Cylinder Liner Kit - Non-APR	150mm - Obsolete use 4309389
M-4309389	6	Cylinder Liner Kit - Non-APR	150mm w/ Integral Shim (4376430)
M-4376168	6	Cylinder Liner Kit - APR	150mm w/ Integral Shim (5472970)
M-4376392	6	Cylinder Liner Kit - Non-APR	152mm w/ Loose Shim
M-4376391	6	Cylinder Liner Kit - APR	152mm w/ Loose Shim (5473000)
M-3678738	6	Cylinder Liner Seal Ring	150mm - Pink
M-3685234	6	Cylinder Liner Seal Ring	152mm - Blue
M-3687058	6	Piston Cooling Nozzle	1pc Piston (Liner located type)
M-4059429	6	Connecting Rod	Drilled machined rod
M-3678574	24	--Connecting Rod Bolt	Machined rod
M-3689108	6	Connecting Rod	Fractured rod
M-3678574	24	--Connecting Rod Bolt	Fractured rod
M-5298564	AR	Counterbore Shim - .020"	Ref #2892402
M-5298565	AR	Counterbore Shim - .032"	Ref #2892403

**CAUTION:** The Interstate-McBee piston kits above must be used in full engine sets and cannot be mixed in an engine.

# ISX-QSX-X15

## ENGINE BEARINGS

Part #	Qty	Description	Note
M-4089405	6	Connecting Rod Bearing - STD	Drilled machined Rod
M-4090016	6	Connecting Rod Bearing - .25mm	
M-4090017	6	Connecting Rod Bearing - .50mm	
M-2882087	6	Connecting Rod Bearing - STD	Fractured rod
M-4376360	6	Connecting Rod Bearing - .25mm	
M-4376361	6	Connecting Rod Bearing - .50mm	
M-4089139	6	Connecting Rod Bearing - STD	Non-Drilled rod ONLY
M-3800298	1	Main Bearing Set - STD	(5406110)
M-4089845	1	Main Bearing Set - .25mm	(5406111)
M-4089846	1	Main Bearing Set - .50mm	(5406112)
MCB7107	1	Camshaft Bushing Kit - STD	Twin-Cam
--M-3680580	4	--Injector Camshaft Bushing	
--M-3680581	3	--Injector Camshaft Bushing	
--M-4026423	7	--Valve Camshaft Bushing	
MCB7108	1	Camshaft Bushing Kit - 1.0mm	Twin-Cam
--MCB7105	4	--Injector Camshaft Bushing	
--MCB7106	3	--Injector Camshaft Bushing	
--MCB7114	7	--Valve Camshaft Bushing	
M-4026423	7	Valve Camshaft Bushing - STD	Single-Cam (3685690)
MCB7114	7	Valve Camshaft Bushing - 1.0mm	
M-4059448	6	Connecting Rod Bushing	Drilled machined rod
M-2882581	6	Connecting Rod Bushing	Fractured rod

## CYLINDER BLOCK

Part #	Qty	Description	Note
M-3015865	4	Expansion Plug	
M-3007632	2	Expansion Plug	
M-3901846	2	Dowel Pin	
M-3678506	14	Main Cap Bolt	

# ISX-QSX-X15

## GASKET SETS

Part #	Qty	Description	Note
M-4352144	1	Upper Gasket Set	Non-EGR engines
M-4352145	1	Upper Gasket Set	EGR engines
M-4376104	1	Upper Gasket Set	ISX HPCR engines
M-4376220	1	Upper Gasket Set	QSX HPCR engines
M-4955590	1	Lower Gasket Set	Non-EGR engines
M-4955591	1	Lower Gasket Set	EGR engines
M-2881766	1	Lower Gasket Set	ISX HPCR engines
M-4376221	1	Lower Gasket Set	QSX HPCR engines
MCBISX0007	1	Gear Cover Gasket Set - HPI	
MCBISX0017	1	Gear Cover Gasket Set - MCRS	
MCBISX0027	1	Gear Cover Gasket Set - HPI	Includes housing to block gasket
MCBISX0037	1	Gear Cover Gasket Set - MCRS	Includes housing to block gasket
M-4025062	6	HPI Injector O-Ring Kit	External seals
MCBISXINJ-1	6	HPI Injector O-Ring Kit	External seals & screens
M-4025063	1	HPI Injector Seal Kit	O-rings, seal & retainer pin
M-4025063-OH	1	HPI Injector Seal - O/H Kit	O-rings, seal, retainer pin & screens
MCBISXINJ-2	6	HPCR Injector O-Ring Kit	External seals
MCBISX005	1	Turbocharger Gasket Set	Automotive - general coverage
M-4022516	1	Turbocharger Gasket Set	ISX/QSX w/ HX60W turbocharger
MCBISX0015	1	EGR Supplemental Gasket Set	HPI engines

## CRANKSHAFT SEALS & DAMPER

Part #	Qty	Description	Note
M-4925762	1	Crankshaft Assembly	w/Gear, tone wheel & adaptor
M-4955383	1	Front Seal Kit	
M-4965569	1	Rear Seal Kit	
M-4101884	A/R	Vibration Damper	1 or 2 per unit



# ISX-QSX-X15

## FLYWHEEL HOUSING

Part #	Qty	Description	Note
M-3102196	1	Flywheel Housing	
M-4965688	1	Flywheel Housing Gasket	To cylinder block
M-3026134	1	Flywheel Housing Gasket	Access cover

## CYLINDER HEAD COMPONENTS TWIN CAM

Part #	Qty	Description	Note
M-4965868	12	Intake Valve	
M-3685996	12	Intake Valve	
M-3104445	12	Intake Valve Seat	
M-4101454	12	Exhaust Valve	
M-3679537	12	Exhaust Valve Seat	ISX570 / QSX570 / Power Gen
M-3679659	12	Exhaust Valve Seat	ISX870 / QSX07
M-3680883	48	Valve Lock	
M-4026657	24	Valve Guide	
M-4312008	N/A	Valve Stem Seal - Int & Exh	Use 4356366
M-4356366	24	Valve Stem Seal - Int & Exh	"Top Hat" design
M-3679551	24	Valve Spring	
M-3680884	24	Valve Spring Retainer	
M-3679487PR	12	Pin & Roller Kit - Valve Rocker	14mm
--M-3679487	12	--Pin	
--M-3679336	12	--Roller	
--M-3679504	12	--Lock Pin	
M-4026780PR	6	Pin & Roller Kit - Valve Rocker	15mm - Intake Front / Exhaust Rear
--M-4319030	6	--Pin	
--M-4059322	6	--Roller	
--M-3679504	6	--Lock Pin	
M-4026779PR	6	Pin & Roller Kit - Valve Rocker	15mm - Intake Rear / Exhaust Front
--M-4319029	6	--Pin	
--M-4059322	6	--Roller	
--M-3679504	6	--Lock Pin	
M-4319030PR	6	Pin & Roller Kit - Valve Rocker	17mm - Intake Front / Exhaust Rear
--M-4319030	6	--Pin	
--M-4319026	6	--Roller	
--M-3679504	6	--Lock Pin	

# ISX-QSX-X15

## CYLINDER HEAD COMPONENTS TWIN CAM (cont.)

Part #	Qty	Description	Note
M-4319029PR	6	Pin & Roller Kit - Valve Rocker	17mm - Intake Rear / Exhaust Front
--M-4319029	6	--Pin	
--M-4319026	6	--Roller	
--M-3679504	6	--Lock Pin	
M-4312003PR	6	Pin & Roller Kit - Injector Rocker	
--M-4312003	6	--Pin	
--M-4319027	6	--Roller	
--M-3679504	6	--Lock Pin	
MCB3680873	6	Injector Tube Kit	Includes seal
--M-3680873	6	--Injector Sleeve	
--M-3678536	6	--Injector Seal Ring	
MCB7141	6	Injector Sleeve - Optional	Copper alloy
M-3678536	6	Injector Seal Ring	
MCB7107	1	Camshaft Bushing Kit - STD	Twin-Cam
--M-3680580	4	--Injector Camshaft Bushing	
--M-3680581	3	--Injector Camshaft Bushing	
--M-4026423	7	--Valve Camshaft Bushing	
MCB7108	1	Camshaft Bushing Kit - 1.0mm	Twin-Cam
--MCB7105	4	--Injector Camshaft Bushing	
--MCB7106	3	--Injector Camshaft Bushing	
--MCB7114	7	--Valve Camshaft Bushing	
M-3015865	7	Expansion Plug	
M-3813247	21	Expansion Plug	
M-3901846	2	Dowel Pin	
M-3678506	22	Cylinder Head Bolt	
M-3678804	4	Cylinder Head Bolt	
M-4026507	1	Valve Cover Gasket	
M-3104392	1	Valve Cover Gasket	ISX07 - Groove in cover
M-4026511	8	Valve Cover Noise Isolator	ISX/QSX15
M-3100895	8	Valve Cover Noise Isolator	ISX/QSX15
M-3104388	8	Valve Cover Noise Isolator	ISX07

# ISX-QSX-X15

## CYLINDER HEAD COMPONENTS SINGLE CAM ISX2010 HPCR

Part #	Qty	Description	Note
M-3685996	12	Intake Valve	
M-3104445	12	Intake Valve Seat	
M-4101454	12	Exhaust Valve	
M-3679659	12	Exhaust Valve Seat	
M-3680883	48	Valve Lock	
M-4026657	24	Valve Guide	
M-4356366	24	Valve Stem Seal - Int & Exh	"Top Hat" design
M-3679551	24	Valve Spring	
M-3680884	24	Valve Spring Retainer	
M-4319030PR	6	Pin & Roller Kit - Valve Rocker	17mm - Intake Front / Exhaust Rear
M-4319029PR	6	Pin & Roller Kit - Valve Rocker	17mm - Intake Rear / Exhaust Front
MCB7243	6	Injector Tube Kit	Tube, retainer & seal
M-4026423	7	Valve Camshaft Bushing - STD	
MCB7114	7	Valve Camshaft Bushing - 1.0mm	
M-3678506	22	Cylinder Head Bolt	
M-3678804	4	Cylinder Head Bolt	
M-3104392	1	Valve Cover Gasket	
M-3104388	8	Valve Cover Noise Isolator	

## LUBRICATION SYSTEM

Part #	Qty	Description	Note
M-4309499	1	Lube Oil Pump Assy	QSX cast iron
M-2881757	1	Lube Oil Pump Assy	ISX aluminum
M-5532492	1	Lube Oil Pump Assy	Cast iron
M-3800751	1	Shim Kit	
M-2892304	AR	Oil Cooler Core	63mm 10-plate stainless steel
M-4966084	2	Oil Cooler O-Ring Seal	
M-4952629	1	Oil Cooler Thermostat	235°F
M-4952631	1	Oil Cooler Thermostat	215°F
M-4955778	1	Oil Cooler Installation Kit	
M-4965482	AR	Oil Cooler Core	83mm 13-plate stainless steel
M-4966084	2	Oil Cooler O-Ring Seal	
M-4952629	1	Oil Cooler Thermostat	235°F
M-4952631	1	Oil Cooler Thermostat	215°F

All manufacturer's names, symbols and descriptions are used for reference only and it is not implied that any part is the product of these manufacturers.

# ISX-QSX-X15

## COOLING SYSTEM

Part #	Qty	Description	Note
M-4318946	1	Thermostat - 160°F	ISX02 & up
M-4318947	1	Thermostat - 180°F	ISX02 & up
M-4318946	2	Thermostat - 160°F	ISX1/2
M-4336659	2	Thermostat - 180°F	ISX1/2
M-186780	A/R	Thermostat Seal	
M-4089908	1	Water Pump Assembly - 1-Piece	ISX 1&2 - 10 groove pulley (5473366)
M-4089909	1	Water Pump Assembly - 1-Piece	QSX15 (5473363)
M-4089910	1	Water Pump Assembly - 1-Piece	ISX02 / 870 - 12 groove pulley (5473364)
M-3684449	1	Water Pump Assembly - 2-Piece	ISX871 / 2250 EGR
M-3687130	1	Water Pump Assembly - 2-Piece	ISX871 / 2250 EGR - (4386570)
M-3684450	1	Water Pump Cartridge	Cartridge only (4386576)
M-3684384	1	Water Pump Cartridge Seal Ring	
M-4090022	1	Water Pump Minor Repair Kit	Snap ring, impeller cover & O-rings
M-3678724	1	Water Pump O-Ring	Included in M-4090022
M-3680410	1	Water Pump Cover	Included in M-4090022

## HPI FUEL INJECTORS

Part #	Qty	Description	Note
R-4010292	6	Fuel Injector - Reman	ISX1/ ISX2 / 400 / 450
R-4062567	6	Fuel Injector - Reman	ISX1 / ISX2 / 450 ST2
R-4062568	6	Fuel Injector - Reman	ISX3 / Signature / 600 / 565
R-4062569	6	Fuel Injector - Reman	ISX1 / ISX2 / QSX15 / QSX15-C440
R-4088301	6	Fuel Injector - Reman	ISX1 / ISX2 ISX500/475 ST2
R-4088327	6	Fuel Injector - Reman	ISX1 / ISX2
R-4088665	6	Fuel Injector - Reman	ISX 07 / ISX2 / ISX3 EGR / ISX 870/HHP
R-4928260	6	Fuel Injector - Reman	QSX 07
R-4928262	6	Fuel Injector - Reman	QSX 07
R-4954434	6	Fuel Injector - Reman	ISX 07
R-4954888	6	Fuel Injector - Reman	ISX 07

**SEE CPL MATRIX FOR EXACT APPLICATIONS**



# ISX-QSX-X15

## FUEL SYSTEM

Part #	Qty	Description	Note
M-4024808	1	Fuel Solenoid Kit	
M-3417141	6	Injector Follower Spring	HPI Injectors
M-4025062	6	Injector O-Ring Kit	External seals (Ref p/n MCBISXINJ)
MCBISXINJ-1	6	Injector Screen Kit	External screens
M-4025063	A/R	Injector Seal Kit	Seals, retaining pins, dust seal
M-4025063-OH	A/R	Injector Seal - O/H Kit	Seals, retaining pins, dust seal & screens
MCBISXINJ-2	6	Injector O-Ring Kit	External seals - HPCR engines
M-4089431RK	1	Gear Pump Repair Kit	HPI fuel system

## ENGINE CONTROL SYSTEM

Part #	Qty	Description	Note
M-3680284	1	ECM Isolator/Gasket	CM570
M-3682577	1	ECM Isolator/Gasket	CM870
M-4076493	1	Sensor - Pressure	Ambient Air
M-4921473	1	Sensor - Press/Temp	Intake Manifold
M-4921475	1	Sensor - Press/Temp	Oil
M-4921495	1	Sensor - Pressure	Fuel
M-4921499	1	Sensor - Pressure	Fuel
M-4921599	2	Sensor - Position	Camshaft & Crankshaft
M-4954905	1	Sensor - Temperature	Coolant/Oil/Fuel

## EXHAUST SYSTEM

Part #	Qty	Description	Note
M-4965698	12	Exhaust Manifold Bolt	
M-4965512	12	Exhaust Manifold Spacer	
MCBISX009	1	Exhaust Hardware Kit	ISX/QSX CM570 - ISX CM2250
MCBISX019	1	Exhaust Hardware Kit	ISX CM870 / CM871

## AFTERTREATMENT COMPONENTS

Part #	Qty	Description	Note
M-2871863	A/R	V-Band Clamp	13" diameter Aftertreatment Models
M-2871453	A/R	Aftertreatment Gasket	
M-2880215	A/R	Gasket - Inlet / Outlet Connection	6.25" O.D.
M-2866337	A/R	Gasket - Inlet / Outlet Connection	5.75" O.D.
MCBISX019	1	Exhaust Hardware Kit	ISX CM870 / CM871

# ISX-QSX-X15

## GASKETS - ISX/QSX HPI

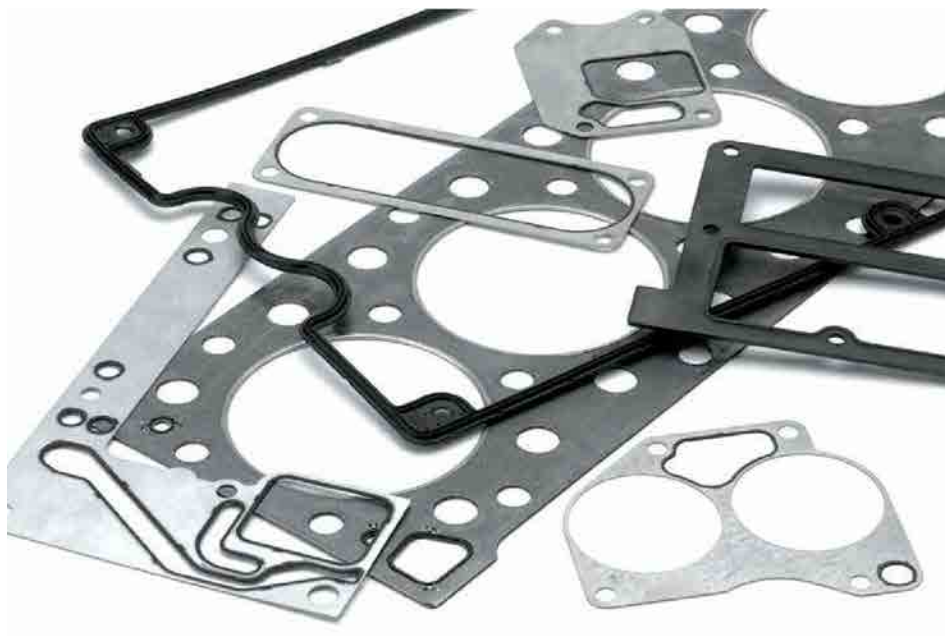
Part #	Qty	Description	Note
M-4965690	1	Air Comp. Mounting Gasket	
M-3680284	1	ECM Isolator/Gasket	CM570
M-3682577	1	ECM Isolator/Gasket	CM870/871
M-3682066	1	EGR Mixer Seal	
M-3682177	1	EGR Mixer Seal	
M-4907448	1	Exhaust Manifold Gasket	Composite
M-4907447	4	Exhaust Manifold Gasket	Composite
M-3682940	1	Exhaust Manifold Gasket	ISX02/07 - Steel
M-3682710	4	Exhaust Manifold Gasket	ISX02/07 (5486657) - Steel
M-4965688	1	Flywheel Housing Gasket	To cylinder block (4393176)
M-3026134	1	Flywheel Housing Gasket	Access cover
M-4962721	1	Front Cover Seal Strip	Upper
M-4962722	1	Front Cover Seal Strip	Lower
M-2872195	1	Fuel Pump Mounting Gasket	
M-3867481	1	Fuel Pump Mounting Seal	
M-4985562	1	Gear Housing Gasket	To cylinder block
M-3678770	1	Intake Connection Gasket	
M-3066211	1	Intake Connection Seal	
M-3033247	1	Intake Connection Seal	ISX02/07
M-4973532	4	Oil Cooler Core Gasket	
M-4955592	1	Oil Cooler Housing Gasket	(4376196)
M-3678606	1	Oil Pan Drain Plug Seal	
M-4026684	1	Oil Pan Gasket	
M-3678756	1	Oil Pickup Tube Seal	
M-3680602	1	Thermostat Cover Gasket	
M-3682673	1	Thermostat Cover Gasket	ISX02/07



# ISX-QSX-X15

## GASKETS - ISX/QSX HPI (cont.)

Part #	Qty	Description	Note
M-3684336	1	Thermostat Housing Gasket	
M-3678602	2	Thermostat Housing O-Ring	
M-186780	2	Thermostat Seal	
M-186780	1	Thermostat Seal	ISX02/07
M-3680324	1	Turbo Flange Gasket	
M-3101268	1	Turbo Flange Gasket	ISX02/07
M-4026884	1	Turbo Mounting Gasket	
M-3102314	1	Turbo Mounting Gasket	ISX02/07
M-3679139	1	Turbo Oil Supply O-Ring	
M-3066211	1	Turbo Outlet Seal	
M-3682177	1	Turbo Outlet Seal	ISX02
M-4026507	1	Valve Cover Gasket	
M-3104392	1	Valve Cover Gasket	ISX07 - grooved cover
M-3679937	1	Valve Cover Gasket	
M-3678724	1	Water Pump O-Ring	
M-3684384	1	Water Pump O-Ring	Cartridge to pump housing
M-4059172	1	Water Pump O-Ring	
M-3683814	2	Water Pump O-Ring	EGR coolant tube



# ISX-QSX-X15

## GASKETS - ISX15 HPCR

Part #	Qty	Description	Note
M-3685614	1	Air Comp. Mounting Gasket	
M-4907448	1	Exhaust Manifold Gasket	CM2250 - Composite
M-4907447	4	Exhaust Manifold Gasket	CM2250 - Composite
M-3682940	1	Exhaust Manifold Gasket	CM2350 - Steel
M-3682710	4	Exhaust Manifold Gasket	CM2350 (5486657) - Steel
M-4965688	1	Flywheel Housing Gasket	To cylinder block (4393176)
M-3026134	1	Flywheel Housing Gasket	Access cover
M-3687007	1	Front Cover Seal Strip	
M-3686758	1	Fuel Pump Mounting Gasket	(5414049)
M-4393089	1	Gear Housing Gasket	To cylinder block
M-3033247	1	Intake Connection Seal	
M-3688347	1	Intake Manifold Gasket	
M-4973532	2	Oil Cooler Core Gasket	
M-3104232	1	Oil Cooler Housing Gasket	(3689755)
M-3678606	1	Oil Pan Drain Plug Seal	
M-4026684	1	Oil Pan Gasket	
M-3678756	1	Oil Pickup Tube Seal	
M-3682673	1	Thermostat Cover Gasket	
M-3684336	1	Thermostat Housing Gasket	
M-186780	1	Thermostat Seal	
M-3685535	1	Turbo Mounting Gasket	(3695041)
M-3679139	1	Turbo Oil Supply O-Ring	
M-5264570	1	Turbo Drain Gasket	
M-3104392	1	Valve Cover Gasket	
M-3678724	1	Water Pump O-Ring	
M-4059172	1	Water Pump O-Ring	
M-3683814	2	Water Pump O-Ring	EGR coolant tube





# ISX-QSX-X15

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2882635	Piston	10
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3104186	Piston	10
3684467	Piston	10
3684472	Piston	10
3686366	Piston	10
3687177	Piston	10
3687605	Piston	10
3687897	Piston	10
3688099	Piston	10
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# **INTERSTATE-MCBEE, LLC LIMITED GENERAL PRODUCTS WARRANTY**

- All Fuel Injection. New & Remanufactured
- Engine Management Systems & Components

## **Coverage**

The parts furnished by Interstate-McBee are warranted to be free from defects in material and workmanship under normal use and service for a period of twelve (12) months (unlimited miles and hours), from date of first installation in an engine. This warranty applies to all owners in the chain of distribution, i.e. distributor, dealer, original owner, until the end of the respective periods of coverage and shall not apply to subsequent owners.

This warranty does not apply to parts provided by Interstate Interstate-McBee on a no-charge basis. In no event shall this warranty extend beyond twenty four (24) months from date of sale or manufacture.

## **INTERSTATE-MCBEE RESPONSIBILITIES**

The obligation of Interstate-McBee under this warranty, statutory or otherwise, is limited to the replacement or repair of Interstate-McBee parts, which our inspection discloses to our satisfaction to have been defective. Repair will be performed at our factory in Cleveland, OH or other Interstate-McBee approved facility. Proof of purchase is required.

## **OWNER'S RESPONSIBILITIES**

Owner is responsible for the operation and maintenance of the engine as specified in the APPLICABLE O.E.M. OPERATION AND MAINTENANCE MANUALS. Owner must give notice within (30) days of any suspected failure and before expiration of applicable warranty to be considered warrantable. Owner will provide alleged defective and associated parts for examination by Interstate-McBee and, if requested, return same F.O.B. Cleveland, Ohio. Interstate-McBee further reserves the right to examine any engine subject to a claim under this warranty. Owner is responsible for all costs, including, but not limited to, repairs made to items other than the engine in which the parts are installed, "downtime" expenses and all business costs and losses resulting from a warrantable failure. Copies of all work orders and invoices for repairs to the engine must accompany the claim. Additionally, on electronically controlled engines a complete Electronic Control Module (ECM) report (Extraction, Download) must also accompany the claim. ALL CLAIMS MUST BE FILED ONLINE AT [WWW.INTERSTATE-MCBEE.COM](http://WWW.INTERSTATE-MCBEE.COM).

## **WARRANTY LIMITATIONS**

Interstate-McBee is not responsible for failure resulting from owner or operator abuse or neglect, such as, but not limited to: operation without adequate coolant, fuel or lubricants; over-speeding; lack of maintenance of lubricating system, coolant or air intake systems; improper storage, or starting. Interstate-McBee is not responsible for failures resulting from improper repair or installation, for parts that have been altered or for parts not approved by Interstate-McBee. This warranty does not apply to parts furnished on a no charge basis. Interstate-McBee does not warrant parts supplied by Interstate-McBee which bear the name and or trademark of another company. These parts are warranted by their manufacturers and not by Interstate-McBee. In no event shall this warranty extend beyond (twenty four (24) months from the date of sale. THERE ARE NO WARRANTIES EXPRESSED, IMPLIED OR STATUTORY, FOR THE PARTS NAMED HEREIN BEFORE, MADE BY INTERSTATE-MCBEE OTHER THAN SET FORTH HEREIN. We neither assume nor authorize any other persons to assume for us any other liability in connection with our products. INTERSTATE-MCBEE SHALL NOT BE RESPONSIBLE FOR ANY OTHER CONSEQUENTIAL DAMAGES OR CONTINGENT LIABILITIES. Further, in no event shall Interstate-McBee bear any responsibility for any damages, which exceed the then available aggregate coverage provided under the terms and conditions of its product liability policy.

This warranty shall be interpreted, governed and enforced in accordance with the laws of the State of Ohio, U.S.A. (For products not covered herein, see Interstate-McBee's Extended Warranty). Any actions or proceedings relating to this warranty must be filed or commenced within three (3) months of the alleged breach. If any of these warranty provisions or portions thereof is prohibited by law or by any court of competent jurisdiction, in any locality, its invalidity or unenforceability shall not affect the validity or the enforceability of any other warranty provisions or portions thereof.

# **INTERSTATE-MCBEE, LLC LIMITED EXTENDED WARRANTY**

## **• Engine Parts**

### **Diesel Engine**

New engine parts furnished by Interstate-McBee are warranted to be free from defects in material and workmanship under normal use and service for a period of twenty-four (24) months from the date of installation, without mileage or hour limitation. This warranty applies to all owners in the chain of distribution, i.e. distributor, dealer, original owner, until the end of the respective periods of coverage and shall not apply to subsequent owners.

### **Natural Gas or Methane Engine and Prime Power Generation**

New engine parts furnished by Interstate-McBee are warranted to be free from defects in material and workmanship under normal use and service, for a period of twenty four (24) months from the date of installation with the exception of valve train components which are warranted for twelve (12) months from the date of installation. This warranty applies to all owners in the chain of distribution, i.e. distributor, dealer, original owner, until the end of the respective periods of coverage and shall not apply to subsequent owners.

### **INTERSTATE-MCBEE RESPONSIBILITIES**

Interstate-McBee will pay only for parts, labor and fluids needed to repair damages directly resulting from an above defined warranty failure to the functional condition existing immediately prior to the failure, including progressive damage to the engine in which the warrantable part was installed, provided Interstate-McBee's inspection of said failed part or parts discloses to our satisfaction to have been defective. Labor cost will be paid but not to exceed published flat rates times at Interstate-McBee's standard hourly rate. No overtime or holiday rates will be allowed. Only new or rebuilt Interstate-McBee or Interstate-McBee approved parts will be used in making the repair.

### **OWNER'S RESPONSIBILITIES**

Owner is responsible for the operation and maintenance of the engine as specified in the APPLICABLE O.E.M. OPERATION AND MAINTENANCE MANUALS. Owner must give notice within (30) days of any suspected failure and before expiration of applicable warranty to be considered warrantable. Owner will provide alleged defective and associated parts for examination by Interstate-McBee and, if requested, return same F.O.B. Cleveland, Ohio. Additionally, a complete Electronic Control Module report must accompany the claim. Interstate-McBee further reserves the right to examine any engine subject to a claim under this warranty. Approved warranty work is to be performed by an authorized Interstate-McBee Distributor or Dealer or other Interstate-McBee approved facility. Copies of all work orders and invoices for repairs to the engine must accompany the claim. Owner is responsible for all costs, including, but not limited to, repairs made to items other than the engine in which the parts are installed, "downtime" expenses and all business costs and losses resulting from a warrantable failure. ALL CLAIMS MUST BE FILED ONLINE AT WWW.INTERSTATE-MCBEE.COM

### **WARRANTY LIMITATIONS**

Interstate-McBee is not responsible for failure resulting from owner or operator abuse or neglect, such as, but not limited to: operation without adequate coolant, fuel or lubricants; over fueling; over speeding; lack of maintenance of lubricating, coolant or air intake systems; improper storage, starting, warm-up, run-in or shut down practices. Interstate-McBee is not responsible for failures resulting from improper repair or installation, for parts that have been altered or for parts not approved by Interstate-McBee. This warranty does not apply to parts furnished on a no charge basis. Interstate-McBee does not warrant parts supplied by Interstate-McBee which bear the name and trademark of another company. These parts are warranted by their manufacturers and not Interstate-McBee. In no event shall this warranty extend beyond (36) months from the date of sale. THERE ARE NO WARRANTIES EXPRESSED, IMPLIED OR STATUTORY, FOR THE PARTS NAMED HEREIN BEFORE, MADE BY INTERSTATE-MCBEE OTHER THAN SET FORTH HEREIN. We neither assume nor authorize any other persons to assume for us any other liability in connection with our products. INTERSTATE-MCBEE SHALL NOT BE RESPONSIBLE FOR ANY OTHER CONSEQUENTIAL DAMAGES OR CONTINGENT LIABILITIES. Further, in no event shall Interstate-McBee bear any responsibility for any damages, which exceed the then available aggregate coverage provided under the terms and conditions of its product liability policy.

This warranty shall be interpreted, governed and enforced in accordance with the laws of the State of Ohio, U.S.A. (For products not covered herein, see Interstate-McBee's General Product Warranty.) Any actions or proceedings relating to this warranty must be filed or commenced within three (3) months of the alleged breach. If any of these warranty provisions or portions thereof prohibited by law or by any court of competent jurisdiction, in any locality, its invalidity or unenforceability shall not affect the validity or enforceability of any other warranty provisions or portions thereof.



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