

COSWORTH

Advanced Technologies  Evolving Performance

PERFORMANCE ENGINEERED PISTONS

2009/10



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Advanced Technologies  *Evolving Performance*

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Introduction

Cosworth Performance Engineered Pistons

Considering the environment pistons exist in with constant directional changes, massive acceleration and deceleration forces, enormous pressures and extreme temperatures, the need for performance and reliability is vitally important.

Developed over 50 years in motorsport, our high quality pistons are manufactured to world-class standards to meet customer requirements.

Cosworth has the expertise to design, develop and manufacture pistons for a broad range of petrol and diesel engines. We specialise in supplying pistons for engines used in motorsport, performance cars, aviation, commercial vehicles, rail traction, power generation and marine. Our product range covers both high and medium speed applications.

Cosworth appreciates today's market requirements, not only for increased power output but also maximum economy and service life with minimum emissions.

Our products are designed using the latest parametric modelling technology, and are validated using Finite Element Analysis for stress distribution patterns.

Flexibility is our watch word in manufacturing, offering both small and high volume batch sizes.



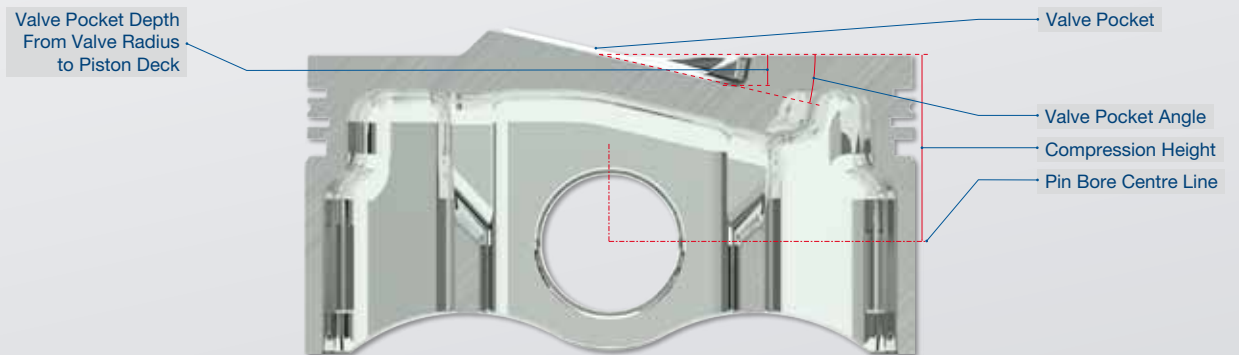
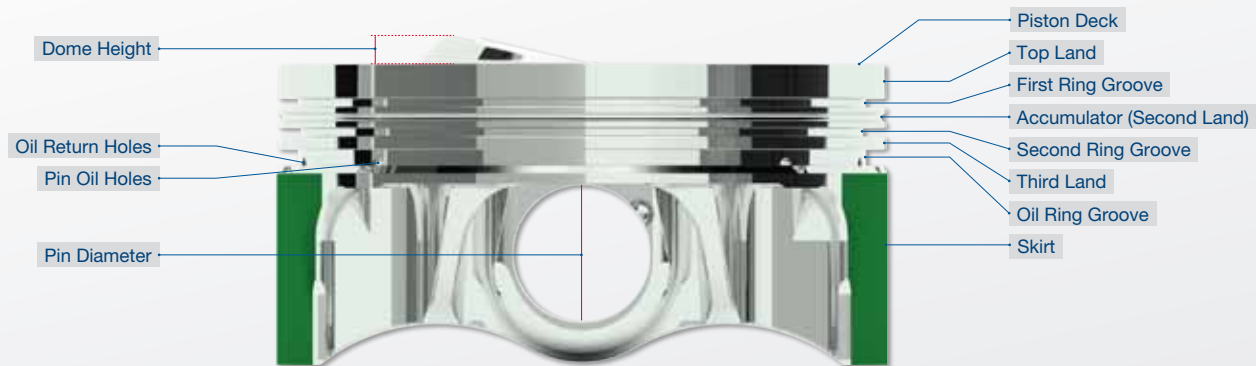
**AS/EN 9100
FM 22201**



**ISO 14001
EMS 87074**

Piston Tech

Anatomy of a Piston



Pins

Cosworth pistons feature ultra strong, lightweight and durable pins designed for the higher stress and elevated loads found in high performance engines. They are also available with DLC coating and manufactured in the UK using EN39B steel for high core strength and durability.

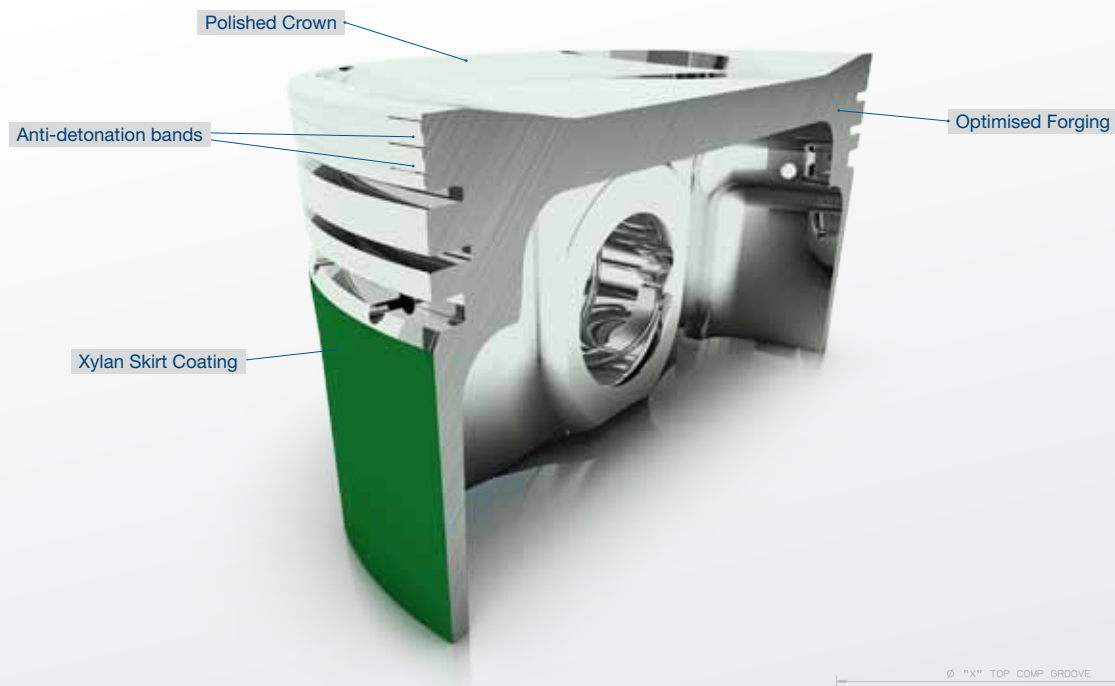


Rings



Developed using the latest technologies and highest quality materials, Cosworth Performance Ring Sets are designed to meet the demands of modern high power performance engines for higher output, improved sealing, lower friction and longer life.

Features & Benefits

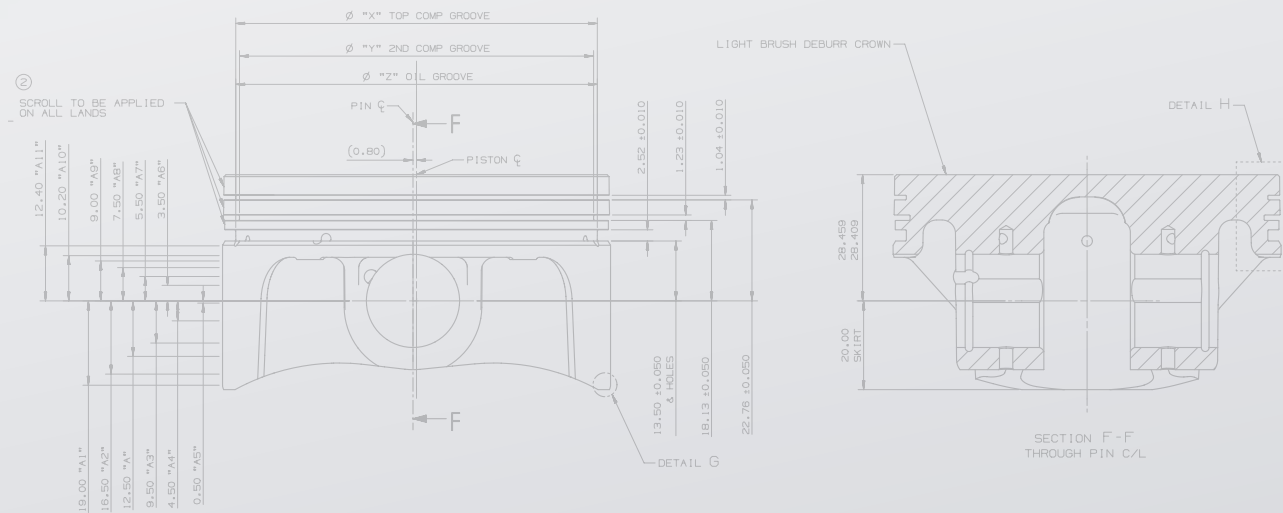


- **Skirt profile & ovality technology** - reduces engine noise, increases life & performance
- **Oil and combustion gas control features** - reduced blow-by and oil consumption
- **Offset pin bores** - for reduced engine noise
- **Xylan Coated Skirts** – for anti-friction and also aids bed in
- **Polished crowns** – reduces carbon build up, minimising the effect of hot spots causing detonation
- **Anti-detonation bands** – Minimises crevice volume reducing the effect of unburned fuel between the piston and the bore
- **Accumulator groove** – Aids compression ring sealing under high cylinder pressures
- **Fully formed forgings** – Optimised forging shape for minimum weight, increased strength and durability

Custom Pistons

Cosworth produce pistons for a diverse range of engines and applications and are keen to discuss your requirements for limited production runs. Our Sales and Design teams are ready to solve your high performance piston problems.

Visit www.cosworth.com/pistons to download a custom piston order form.



Performance Aftermarket

YB

Ford Sierra RS Cosworth, Ford Sapphire RS Cosworth, Ford Escort RS Cosworth

- Forged from 2618 high tensile strength aluminium
- Valve pocket cut-out to suit high lift cams
- Anti-scuff bands
- Anti-detonation bands
- Accumulator groove
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Standard OE replacement
- Smooth blended barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001418	2WD OE replacement	8:1	90.820	PA2095	PA2066	23.997	PP0207	24.000	PR1050 PR1051 PR1052	1.5 1.75 3.00	KK1017
10001419	2WD OE replacement (1 st oversize)	8:1	91.320	PA2095+050	PA2066	23.997	PP0207	24.000	PR1056 PR1057 PR1058	1.50 1.75 3.00	KK0367
10001420	2WD OE replacement (2 nd oversize)	8:1	91.820	PA2095+100	PA2066	23.997	PP0207	24.000	20008344 20008345 20008346	1.50 1.75 3.00	N/A
10001421	2WD Group A (1 st oversize)	7.2:1	91.070	PA1167+025	PA1923	23.997	PP0207	24.000	PR1053 PR1054 PR1055	1.50 1.75 3.00	KK0637
10001422	4WD OE replacement	8:1	90.820	PA2062	PA2066	23.997	PP0207	24.000	PR1050 PR1051 PR1052	1.5 1.75 3.00	KK1017
10001423	4WD OE replacement (1 st oversize)	8:1	91.320	PA2062+050	PA2066	23.997	PP0207	24.000	PR1056 PR1057 PR1058	1.50 1.75 3.00	KK0637
10001424	4WD OE replacement (2 nd oversize)	8:1	91.820	PA2062+100	PA2066	23.997	PP0207	24.000	20008344 20008345 20008346	1.50 1.75 3.00	N/A
10001425	4WD Group A YBG Rally	7.2:1	90.820	PA1314	PA1923	23.997	PP0207	24.000	PP2525 PR1051 PR1052	1.00 1.75 3.00	KK0508

continued...

YB continued

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001426	4WD Group A YBG Rally (1 st oversize)	7.2:1	91.070	PA1314+025	PA1923	23.997	PP0207	24.000	PP3192 PR1054 PR1055	1.00 1.75 3.00	KK0755
10001427	Naturally Aspirated YBM	12:1	90.820	PA1249	PA1858	23.997	PP0207	24.000	PP2525 PR1051 PR1052	1.00 1.75 3.00	KK0508
10001428	Naturally Aspirated YBM	12:1	91.070	PA1249+025	PA1858	23.997	PP0207	24.000	PP3192 PR1054 PR1055	1.00 1.75 3.00	KK0755
10001429	Naturally Aspirated YBM	14:1	94.000	PA1401	PA2019	23.997	PA1598	Thrust Button	PP2111 PP2111 PP2112	1.00 1.00 4.00	20003469

Duratec

Ford Fiesta ST, Ford Focus, Ford Mondeo, Caterham

- Forged from 4032 high tensile strength aluminium
- Anti-scuff bands
- Anti-detonation bands
- Oil drain holes
- Smooth blended barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
KK3706 (4 Pistons)	2.0L Piston Set	12:1	87.500	YD0280	YD0602	20.998	PP2720	21.000	PP5919 YD0376 YD8007	1.18 1.00 2.415	KK3462
KK3703 (4 Pistons)	2.3L Piston Set	13:1	87.500	YD0347	YD0602	20.998	PP2720	21.000	PP5919 YD0376 YD8007	1.18 1.00 2.415	KK3462
KK3731 (4 Pistons)	2.0L/2.3L Piston Set	13:1 (2.0L) 14:1 (2.3L)	87.500	YD0394	YD0602	20.998	PP2720	21.000	PP5919 YD0376 YD8007	1.18 1.00 2.415	KK3462

Subaru EJ20/25

WRX Sti 2.0l and 2.5l

- Forged from 4032 high tensile strength aluminium
- Anti-scurf bands
- Anti-detonation bands
- Accumulator groove
- Fully formed forging
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001430	Subaru WRX STi EJ25 (2.5L)	8.2:1	99.500	PA2667	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001515
10001431	Subaru WRX STi EJ25 (2.5L) 1 st oversize	8.2:1	99.750	PA2667+025	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001516
10001432	Subaru WRX STi EJ25 (2.5L) 2 nd oversize	8.2:1	100.000	PA2667+050	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001517
10001433	Subaru WRX STi EJ25 (2.6L) for use with 81mm crankshaft	8.2:1	99.500	20002428	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001515
10001434	Subaru WRX STi EJ25 (2.6L) 1 st oversize for use with 81mm crankshaft	8.2:1	99.750	20002429	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001516
10001435	Subaru WRX STi EJ25 (2.6L) 2 nd oversize for use with 81mm crankshaft	8.2:1	100.000	20002430	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001517
10001436	Subaru WRX STi EJ25 (2.5L)	9.2:1	99.500	20004519	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001515
10001437	Subaru WRX STi EJ25 (2.5L) 1 st oversize	9.2:1	99.750	20004520	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001516
10001438	Subaru WRX STi EJ25 (2.5L) 2 nd oversize	9.2:1	100.000	20004521	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001517
10001439	Subaru WRX STi EJ25 (2.6L) for use with 81mm crankshaft	9.2:1	99.500	20004525	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001515
10001440	Subaru WRX STi EJ25 (2.6L) 1 st oversize for use with 81mm crankshaft	9.2:1	99.750	20004526	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001516

continued...

Subaru EJ20/25 continued

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001441	Subaru WRX STi EJ25 (2.6L) 2 nd oversize for use with 81mm crankshaft	9.2:1	100.000	20004527	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20001517
10001442	Subaru WRX EJ20 (2.2L) for use with 79mm crankshaft	8.5:1	92.000	20002486	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20003605
10001443	Subaru WRX EJ20 (2.2L) 1 st oversize for use with 79mm crankshaft	8.5:1	92.250	20002487	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20003606
10001444	Subaru WRX EJ20 (2.2L) 2 nd oversize for use with 79mm crankshaft	8.5:1	92.500	20002488	PA2674	22.998	PP5433	23.000	N/A	1.2 1.2 2.0	20003607
10001445	Subaru WRX EJ20 (2.0L)	8:1	92.000	PA2690	PA2674	22.998	PP5433	23.000	N/A	1.5 1.48 3.00	20005160
10001446	Subaru WRX EJ20 (2.0L) 1 st oversize	8:1	92.500	PA2690+050	PA2674	22.998	PP5433	23.000	N/A	1.5 1.48 3.00	20005161
10001447	Subaru WRX EJ20 (2.0L) 2 nd oversize	8:1	93.000	PA2690+100	PA2674	22.998	PP5433	23.000	N/A	1.48 1.48 3.00	PR7322



Mitsubishi 4G63 and 4B11T

Evo IV - IX, Evo X

- Forged from 4032 high tensile strength aluminium
- Anti-scuff bands
- Anti-detonation bands
- Accumulator groove
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001448	Mitsubishi Evo 4-9 (4G63 2.0L)	8.8:1	85.000	PA2689	PA1846	21.998	PP2371	22.000	N/A	1.18 1.18 2.00	PR7317
10001449	Mitsubishi Evo 4-9 (4G63 2.0L) 1 st oversize	8.8:1	85.500	PA2689+050	PA1846	21.998	PP2371	22.000	N/A	1.18 1.18 2.00	PR7318
10001450	Mitsubishi Evo 4-9 (4G63 2.0L) 2 nd oversize	8.8:1	86.000	PA2689+100	PA1846	21.998	PP2371	22.000	N/A	1.18 1.18 2.00	PR7319
10001451	Mitsubishi Evo 4-9 (4G63 2.2L Stroker) for use with 94mm crankshaft	8.8:1	85.000	PA2701	PA1846	21.998	PP2371	22.000	N/A	1.18 1.18 2.00	PR7317
10001452	Mitsubishi Evo 4-9 (4G63 2.2L Stroker) 1 st oversize for use with 94mm crankshaft	8.8:1	85.500	PA2701+050	PA1846	21.998	PP2371	22.000	N/A	1.18 1.18 2.00	PR7318
10001453	Mitsubishi Evo 4-9 (4G63 2.2L Stroker) 2 nd oversize for use with 94mm crankshaft	8.8:1	86.000	PA2701+100	PA1846	21.998	PP2371	22.000	N/A	1.18 1.18 2.00	PR7319
10001454	Mitsubishi Evo X (4B11T 2.0L)	9.2:1	86.000	20004487	PA2674	22.997	PP5433	23.000	N/A	1.20 1.20 2.00	20002246
10001455	Mitsubishi Evo X (4B11T 2.0L) 1 st oversize	9.2:1	86.500	20004670	PA2674	22.997	PP5433	23.000	N/A	1.20 1.20 2.00	20005705
10001456	Mitsubishi Evo X (4B11T 2.0L) 2 nd oversize	9.2:1	87.000	20004672	PA2674	22.997	PP5433	23.000	N/A	1.20 1.20 2.00	20005706
10001457	Mitsubishi Evo X (4B11T 2.2L Stroker) for use with 94mm crankshaft	9.2:1	86.000	20005780	20006624	20.997	PP2720	21.000	N/A	1.20 1.20 2.00	20002246
10001458	Mitsubishi Evo X (4B11T 2.2L Stroker) 1 st oversize for use with 94mm crankshaft	9.2:1	86.500	20005781	20006624	20.997	PP2720	21.000	N/A	1.20 1.20 2.00	20005705

continued...

Mitsubishi 4G63 and 4B11T continued

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001459	Mitsubishi Evo X (4B11T 2.2L Stroker) 2 nd oversize for use with 94mm crankshaft	9.2:1	87.000	20005782	20006624	20.997	PP2720	21.000	N/A	1.20 1.20 2.00	20005706
10001460	Mitsubishi Evo X (4B11T 2.2L Stroker) for use with 94mm crankshaft	10:1	86.000	20009267	20006624	20.997	PP2720	21.000	N/A	1.20 1.20 2.00	20002246
10001461	Mitsubishi Evo X (4B11T 2.2L Stroker) 1 st oversize for use with 94mm crankshaft	10:1	86.500	20009268	20006624	20.997	PP2720	21.000	N/A	1.20 1.20 2.00	20005705
10001462	Mitsubishi Evo X (4B11T 2.2L Stroker) 2 nd oversize for use with 94mm crankshaft	10:1	87.000	20009269	20006624	20.997	PP2720	21.000	N/A	1.20 1.20 2.00	20005706



Honda K20A

Civic Type-R, Integra Type-R, Accord Euro-R, Acura Type-R

- Forged from 4032 high tensile strength aluminium
- Anti-scuff bands
- Anti-detonation bands
- Accumulator groove
- Xylan anti-friction skirt coating
- Oil drain holes
- Smooth blended barrel form and optimised cam profile
- Fully formed forging



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001463	Honda K20A	12:1	86.000	20005796	20009902	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20002246
10001464	Honda K20A 1 st oversize	12:1	86.250	20005797	20009902	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20006615
10001465	Honda K20A 2 nd oversize	12:1	86.500	20005798	20009902	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20005705
20006695	Honda K20A (for forced induction engines)	9:1	86.000	20006689	20009912	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20002246
20006696	Honda K20A 1 st oversize (for forced induction engines)	9:1	86.500	20006690	20009912	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20005705
20006697	Honda K20A 2 nd oversize (for forced induction engines)	9:1	87.000	20006691	20009912	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20005706

Nissan VQ35 and SR20

350Z, 180SX, 200SX, Pulsar

- Forged from 4032 high tensile strength aluminium
- Anti-scuff bands
- Anti-detonation bands
- Accumulator groove
- Fully formed forging
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001466	Nissan VQ35 (3.5L)	11:1	95.500	20000329 (LH) 20002031 (RH)	PA1251	21.997	PP2371	22.000	N/A	1.20 1.20 2.50	20001512
10001467	Nissan VQ35 (3.5L) 1 st oversize	11:1	96.000	20000331 (LH) 20002033 (RH)	PA1251	21.997	PP2371	22.000	N/A	1.20 1.20 2.50	20001514
10001468	Nissan VQ35 (3.5L) (for forced induction engines)	8.8:1	95.500	PA2687	PA1251	21.997	PP2371	22.000	N/A	1.20 1.20 2.50	20001512
10001469	Nissan VQ35 (3.5L) 1 st oversize (for forced induction engines)	8.8:1	96.000	PA2687+050	PA1251	21.997	PP2371	22.000	N/A	1.20 1.20 2.50	20001514
10001470	Nissan SR20DET (2.0L)	8.5:1	86.000	20006683	20006633	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20002246
10001471	Nissan SR20DET (2.0L) 1 st oversize	8.5:1	86.500	20006684	20006633	21.997	PP2371	22.000	N/A	1.20 1.20 2.00	20005705



Historic

Cosworth DF Engine Range

1960's Formula One onwards

- Forged from 2618 high tensile strength aluminium
- Oil drain holes
- Tapered barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001474	DFV Stage 1A	11:1	85.674	DA1964	PA2034	20.630	PP0339	20.620	PA0344 PA0387 PP3034	0.75 1.00 4.00	20003059
10001475	DFV short stroke (for aluminium liners)	Custom	90.000	PA0640	PA0846	23.812	PP0207	24.000	PP0398 PP0398 PP1168	1.00 1.00 4.00	N/A
10001476	DFR4 (3.5L) V8	Custom	90.000	PA1154	PA0987	23.810	PP0207	23.810	PP4967 PP4968 PP2400	1.00 1.00 3.00	N/A
10001477	V3000 short stroke, long rod	Custom	90.000	PA1335	PA1885	20.630	PP2426	20.620	PA0398 PP2400	1.00 3.00	N/A



Lotus Twin Cam

Lotus Ford Cortina, Lotus Elan

- Forged from 2618 high tensile strength aluminium
- Oil drain holes
- Tapered barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001478	Lotus Twin Cam 1594cc F3	12:1	83.500	TA0081	TA0082	20.630	PP1673	21.000	PP0740 PP0740 PP0908	1.00 1.00 4.00	N/A
20010917	Lotus Twin Cam 1594cc F3 (1 st oversize)	12:1	84.000	TA0081+050	PA2570	20.630	PP2426	21.000	PP1902 PP1902 PP1904	1.00 1.00 4.00	N/A

BD

Ford Escort RS Mk1 and Mk2

- Forged from 2618 high tensile strength aluminium
- Oil drain holes
- Tapered barrel form and optimised cam profile



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001479	BDA 1600cc Rally to suit standard Ford rod length	11.8:1	80.962	BA0125	PA2033	20.630	PP0339	20.630	PP1052 PP1053 PP1033	1.00 1.00 4.00	KK0399
10001480	BDA 1700cc Rally to suit standard crank and rods	11.4:1	83.500	PA0003	PA2033	20.630	PP0339	20.630	PP0740 PP0740 PP0908	1.00 1.00 4.00	KK0140
10001481	BDB and BDC 1700cc to suit Cosworth crank and rods	11.4:1	83.500	BA0198	PA1922	20.630	PP0339	20.630	PP0740 PP0740 PP0908	1.00 1.00 4.00	KK0140
10001482	BDD 1600cc Atlantic	11.4:1	80.950	PA0092	PA2034	20.630	PP0339	20.630	PP0683 PP0683 PP1033	1.00 1.00 4.00	KK0209

continued...

BD continued

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001483	BDD 1600cc Atlantic high comp	Custom	80.950	PA0204	FA2040	20.630	PP0339	20.630	PP0683 PP0683 PP1033	1.00 1.00 4.00	KK0209
10001484	BDH 1295cc	12.5:1	80.950	PA0058	PA2140	20.630	PP1673	21.000	PP0683 PP0683 PP1033	1.00 1.00 4.00	KK0209
10001485	BDG 1995cc	11.7:1	90.000	PA0112	PA1838	20.630	PP0339	20.630	PP1166 PP1166 PP1168	1.00 1.00 4.00	KK0174
10001486	BDG 1995cc Rally alloy block	11.7:1	90.335	PA0237	FA0240	20.630	PP1673	21.000	PP1967 PP1967 PP1968	1.00 1.00 4.00	KK0245
10001487	BDG 1995cc alloy block/hoyle	11.7:1	90.335	PA0278	PA2140	20.630	PP1673	21.000	PP1967 PP1967 PP1968	1.00 1.00 4.00	KK0245
10001488	BDG 1995cc - oversize	11.7:1	90.424	PA0152	PA2034	20.630	PP0339	20.620	PP1169 PP1169 PP1900	1.00 1.00 4.00	KK0247

Historic Cosworth Engines

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20011019	SCA 997cc	12.5:1	80.962	PA0087	FA0240	20.630	PP1673	21.000	PP0683 PP1033	1.00 4.00	KK0151
20011020	Mk XI 1098cc - 105E based	Custom	85.000	PA0050	PA1922	20.630	PP0339	20.620	PP1097 PP1098	1.00 4.00	KK0213
20011022	MAE 997cc	12.5:1	80.950	PA0598	DA0674	20.630	PP1673	21.000	PP0683 PP0683 PP1033	1.00 1.00 4.00	KK0209
20011028	MAE 997cc (1 st oversize)	12.5:1	81.712	PA0598+0762	DA0674	20.630	PP1673	21.000	PP2244 PP2244 PP2245	1.00 1.00 4.00	N/A
20011026	Clubman 1700cc (cylinders 2 and 4) Clubman 1700cc (cylinders 1 and 3)	Custom	83.500	PA2385 PA2386	PA1922	20.630	PP1673	21.000	PP0740 PP0740 PP0908	1.00 1.00 4.00	N/A

Jaguar 4.2l V8

3.4l 6 cyl, 3.8l 6 cyl, XJ220

- Large range of custom design applications - Call us for specific information

Aston 4.2l V8

4.2l 6 cyl, 4.2l V8

- Large range of custom design applications - Call us for specific information



Sports Bike



Yamaha

YZF R1 '09

For use with Cosworth Rods - Race use only

- Forged from 2618 high tensile strength aluminium
- Anti-scuff bands
- Anti-detonation bands
- Accumulator groove
- Gas ports
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile
- Ultra light weight (for race use only)



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001472	Yamaha YZF R1	13:1	78.000	20008857	PA2721	15.997	PP3395	16.000	20009440 20009449	0.833 1.50	N/A

Kawasaki

ZX10R '09

For use with Cosworth Rods - Race use only

- Forged from 2618 high tensile strength aluminium
- Anti-scuff bands
- Anti-detonation bands
- Accumulator groove
- Gas ports
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile
- Ultra light weight (for race use only)



Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
10001473	Kawasaki ZX10R	14.5:1	76.000	20009309	PA2721	15.997	PP3395	16.000	20009436 20009446	0.78 1.50	N/A

Honda

- Forged from 2618 high tensile strength aluminium
- Anti-scuff bands
- Anti-detonation bands
- Accumulator groove
- Gas ports
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile
- DLC coated pin



250cc 2004-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20009738	Honda CRF250R race spec	13.5:1	78.000	20009725	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009449
20009736	Honda CRF250X	13.2:1	78.000	20009716	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009449

450cc 2002-2008

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010528	Honda CRF450X	12.5:1	96.000	20010313	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524
20010584	Honda CRF450R race spec	13.5:1	96.000	20010328	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524

450cc 2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010651	Honda CRF 450X	12.2:1	96.000	20010653	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524
20010652	Honda CRF 450R	13.5:1	96.000	20010654	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524



- Forged from 2618 high tensile strength aluminium
- Anti-scurf bands
- Anti-detonation bands
- Accumulator groove
- Gas ports
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile
- DLC coated pin



250cc 2005-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010171	Yamaha YZ250F race spec	13.9:1	77.000	20010111	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009447
20010170	Yamaha WR250F	12.9:1	77.000	20010110	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009447

450cc 2005-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010587	Yamaha YZ/WR450F	13:1	95.000	20010397	20009426	17.997	PP2721	18.000	N/A	1.0 2.0	20010523
20010589	Yamaha YZ450F	13.75:1	95.000	20010370	20009426	17.997	PP2721	18.000	N/A	1.0 2.0	20010523



Kawasaki

- Forged from 2618 high tensile strength aluminium
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- Anti-detonation bands
- Accumulator groove
- Gas ports
- Xylan anti-friction skirt coating
- Oil drain holes
- Bright polished crown (to reduce carbon build up)
- Smooth blended barrel form and optimised cam profile
- DLC coated pin



250cc 2006-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010167	Kawasaki KX250F race spec	14.2:1	77.000	20009834	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009447
20010166	Kawasaki KX250F	13.5:1	77.000	20009833	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009447

450cc 2006-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010585	Kawasaki KX450	12.5:1	96.000	20010491	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524
20010586	Kawasaki KX450	13.5:1	96.000	20010492	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524



- Forged from 2618 high tensile strength aluminium
- Anti-scurf bands
- Anti-detonation bands
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- Gas ports
- Xylan anti-friction skirt coating
- Oil drain holes
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- Smooth blended barrel form and optimised cam profile
- DLC coated pin

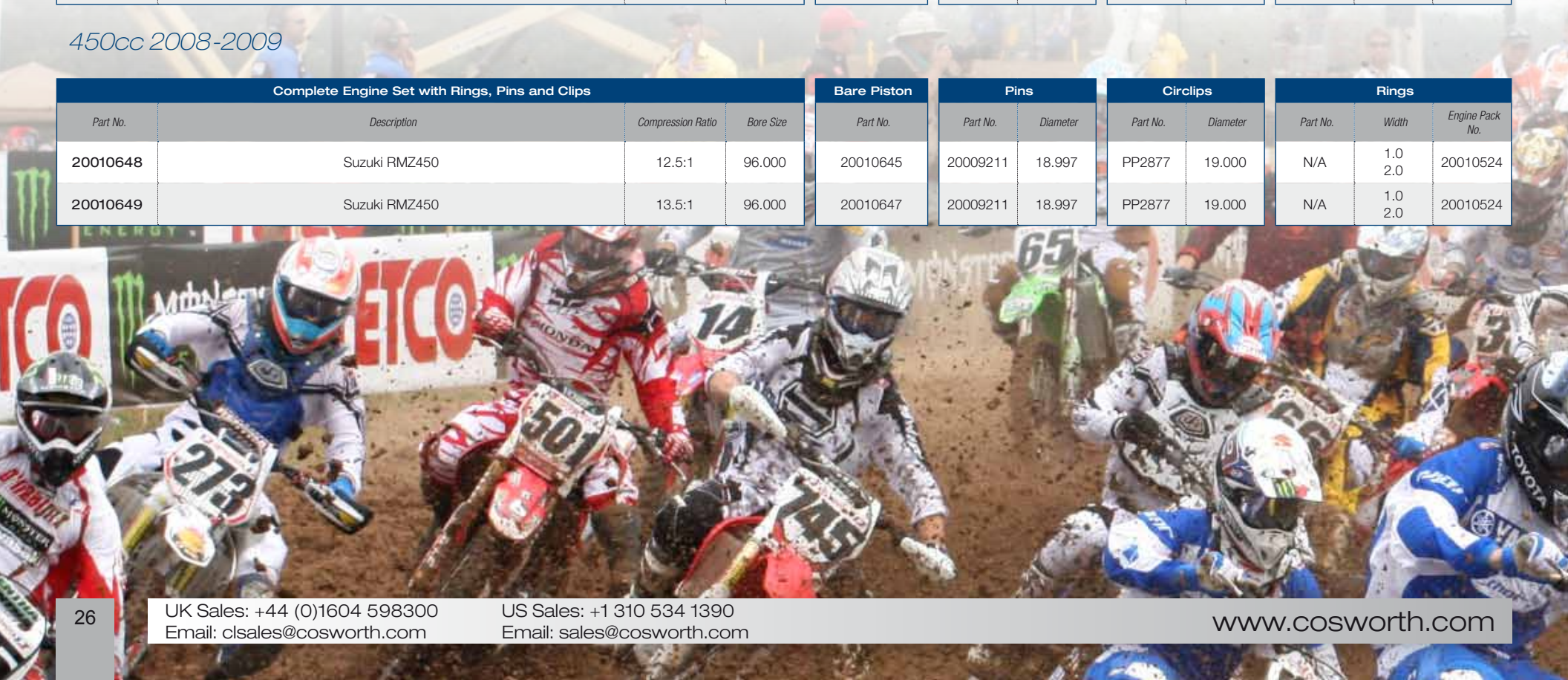


250cc 2007-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010169	Suzuki RMZ250 race spec	14.2:1	77.000	20009834	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009447
20010168	Suzuki RMZ250	13.5:1	77.000	20009833	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009447

450cc 2008-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010648	Suzuki RMZ450	12.5:1	96.000	20010645	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524
20010649	Suzuki RMZ450	13.5:1	96.000	20010647	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010524



KTM

- Forged from 2618 high tensile strength aluminium
- Anti-scurf bands
- Anti-detonation bands
- Accumulator groove
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- Oil drain holes
- Bright polished crown (to reduce carbon build up)
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- DLC coated pin



250cc KTM 2005-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010163	KTM 250SX-F	13.5:1	76.000	20010143	20009428	15.997	PP3395	16.000	N/A	0.8 1.5	20009446

450cc KTM 2007-2009

Complete Engine Set with Rings, Pins and Clips				Bare Piston	Pins		Circlips		Rings		
Part No.	Description	Compression Ratio	Bore Size	Part No.	Part No.	Diameter	Part No.	Diameter	Part No.	Width	Engine Pack No.
20010658	KTM 450SX-F	12.2:1	97.000	20010656	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010525
20010659	KTM 450SX-F	13.5:1	97.000	20010657	20009211	18.997	PP2877	19.000	N/A	1.0 2.0	20010525

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