



ALIGNMENT LOCKS PERFORMANCE TESTING

Progressive Components regularly tests products through independent testing facilities nationwide.

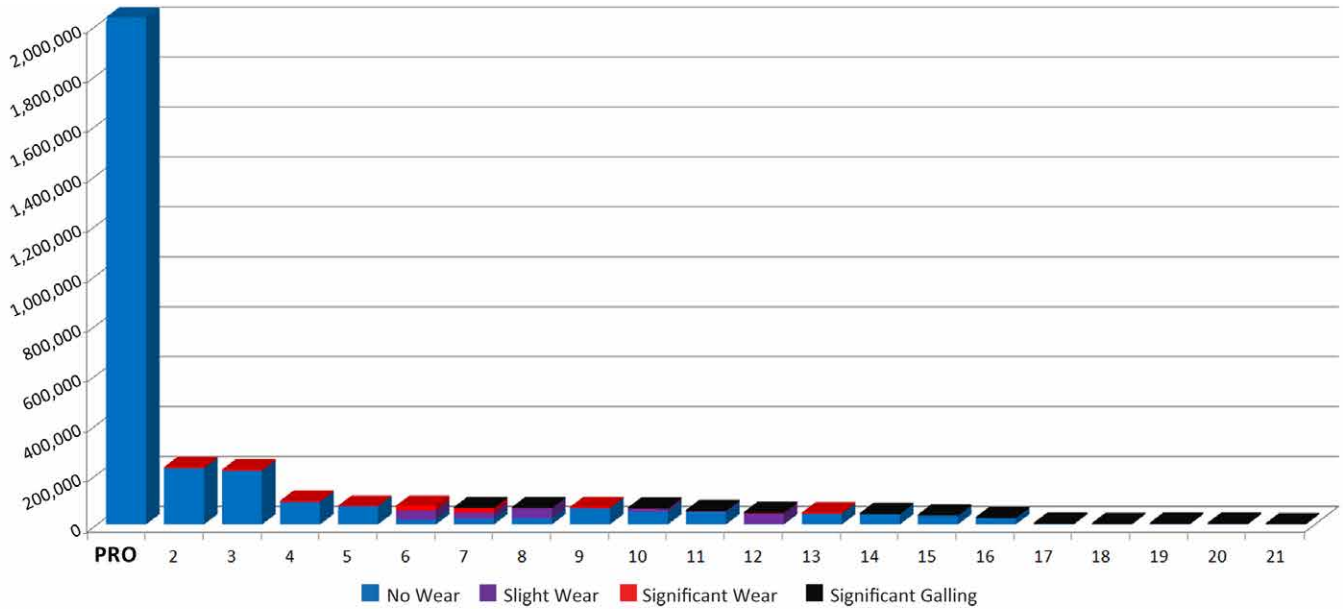
Before launching of the Z-Series® Alignment Locks, Progressive contracted Element Materials Technology to provide a thorough mold lock Performance Evaluation:

“Element Materials Technology has conducted independent life cycle testing of mold interlocks since 1999. The processes with fixtures and cycling were established to simulate use in the molding environment, but more severe loads were used to accelerate the failures at 4400 lbs of pressure. The locks tested have been from Progressive as well as other standard lock distributors in the US and Asia, plus several additional material and treatment combinations were tested for comparison.”

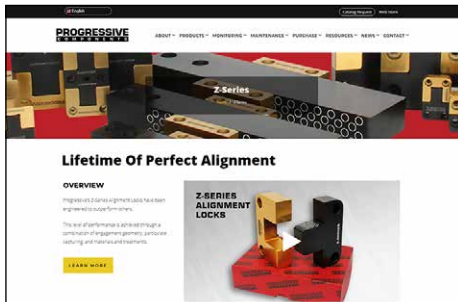
It was determined that the Progressive Components Z-Series Alignment Locks exceeded the 2-million cycle mark, and still displayed no measurable signs of wear of any type.

“During the past few years, over 21 different tests were performed with the purpose of cycling until failure occurred. At no time during our tests over the years have we seen cycle performance at the level of this new design, represented as PRO in the chart below.”

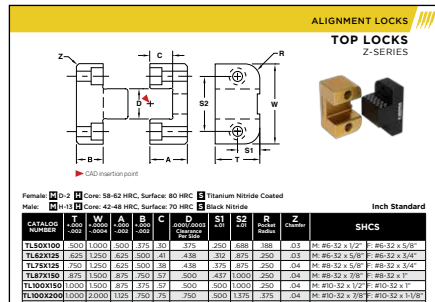
With the industry’s widest selection of sizes in stock and competitively priced, specifying alignment locks from Progressive Components means your molds will have unmatched protection from damage and downtime.



ONLINE DATA



Learn more at procomps.com/z-series.



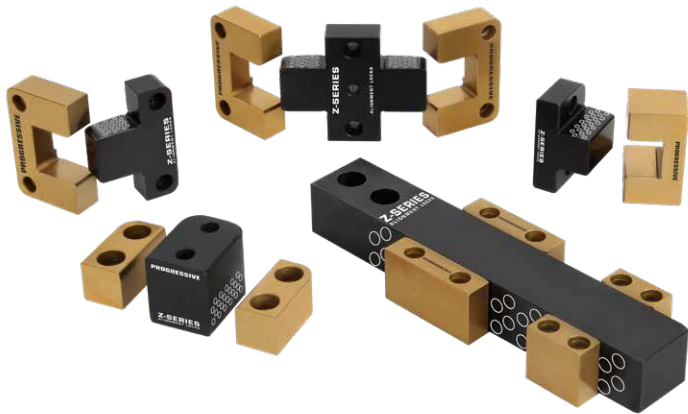
All catalog pages are online for forwarding to suppliers, customers, etc.

Sample ID	Material	Coating	Core Hardness	Material	Coating	Core Hardness	Lube	Cycles	Figure
PRO Z-Series	D-2	TiN	58-62 HRC	H-13	Nitro Carburized	42-48 HRC	Serol INT/300	2000000	3
PCS Top Lock	A-2	Black Oxide	58-60 HRC	A-2	Black Oxide	58-60 HRC	PCS Nano	225000	4
DMS	S-7	TiN	58-60 HRC	O-6	Black Oxide	58-60 HRC	INT/300	215000	5
Sofl Label	S-7	TiN	60-52 HRC	O-6	Black Oxide	60-62 HRC	Serol INT/300	150000	6
PCS B&G	A-2	TiN	58-62 HRC	H-13	Makrolon	40-44 HRC	Lithium	80000	7
DMS B&G	8620	TiN	58-62 HRC	H-13	Makrolon	40-44 HRC	Lithium	48000	8
PCS Clad	8620	Armorclad	54-56 HRC	O-6	Black Oxide	40-42 HRC	PCS Nano	80000	9
China Brand	D-2	TiN	58-62 HRC	YC30	Black Oxide	50-52 HRC	Lithium	400	10

View the entire independent testing report online.

ALIGNMENT LOCKS

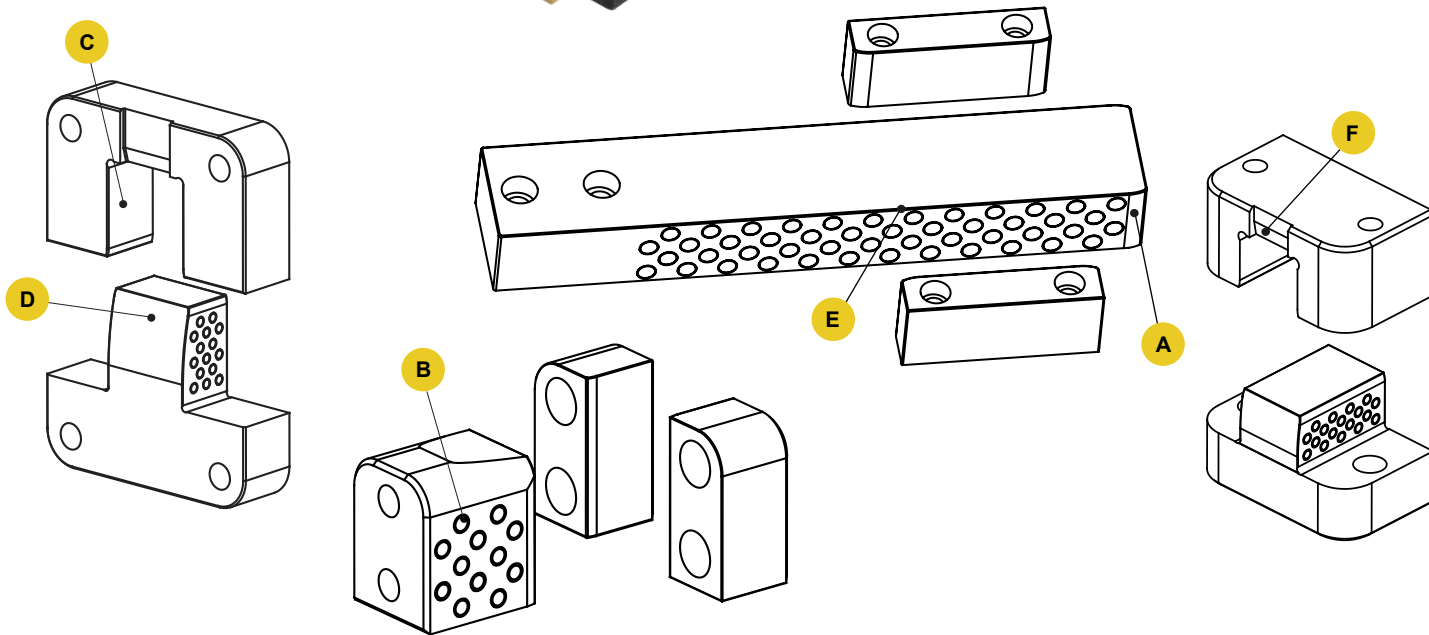
Z-SERIES®



Progressive's Alignment Locks have been advanced to outperform other styles. This is achieved through a combination of engagement geometry, particulate capturing rings, materials and treatments, and lubrication.

Benefits of the Z-Series Alignment Locks include:

- Longevity that far surpasses others, confirmed by extensive independent lab testing as well as monitoring performance in harsh, 'real world' conditions.
- Exclusive features maintain clean and consistent lubrication.
- Bar Lock, Guide Lock, Side Lock, X-Style Side Lock and Top Lock styles available with the features below, and Cavity Locks (Round and Flat), Tapered Bar Locks, and C'Bored Taper Locks are also available with the Z-Series treatments.



A Engagement Ramp: A fine finish radial lead-in for smooth lifting upon engagement of the mold halves.

B Particle Rings: Particle rings on the width of the male locks trap material and debris to avoid "picking up" or galling of the alignment surface.

C Longer Engagement: Using the maximum allowable engagement area on all locks surpasses previously-established industry standards.

D Arced Relief: Reduces the possibility of parts sticking to the lock at the bottom of the mold.

E Rounded Edges: A larger radius for all protruding surfaces to eliminate operator "reach in" injury.

F Pry Slot Lead-In: Expanded the entry of pry slots to ease removal.

Premium Materials: Males: H-13, 42-48 HRC, Surface: 70 HRC; Females: D-2, 58-62 HRC, Surface: 80 HRC.

Note: 500°F (260°C) max operating temperature.

Lubrication & Maintenance:

- Non-drying, non-hardening food grade grease is applied to all areas, including the particle rings.
- For production, install the locks and wipe down the outside of the locks only; maintain the grease on the mating surfaces and within the rings as provided.



SIDE/TOP/GUIDE LOCK SELECTION GUIDE

Refer to the chart below to match the correct alignment lock for the corresponding mold size and weight of the B-Side and press platen, using four locks per mold.

Clean and lubricate lock every 100,000 cycles, and prevent corrosion during mold storage.

RECOMMENDED MAX MOLD SIZE (LXWXH)	SIDE LOCKS	METRIC SIDE LOCKS	GUIDE LOCKS	TOP LOCKS	TOTAL MAX WEIGHT B SIDE + PRESS PLATEN (LBS/KG)
RTI AND MOLDS 8 X 8 X 8 AND SMALLER	SL37X100, SL50X125 SL50X150, SL50X200 SLS62X150, SLS62X200 SLR50X125, SLR50X150	SLM16X50, SLPM16X20 SLPM16X40, SLPM20X25 SLPM20X50, SLSM13X38 SLSM16X50	GL100X150 GLM25X45	TL75X75, TLM20X20 TL50X100, TL62X125 TL75X125, TLM26X35 TLR87X150	2,000 / 900
11 X 16 X 10	SL50X125, SL50X150 SL50X200, SLS62X150 SLS62X200, SLS75X300 SLS75X400, SLR50X150 SLR50X200	SLM16X50, SLSM19X75 SLPM25X32, SLPM25X63 SLPM32X40, SLPM32X80 SLPM40X50, SLPM40X100 SLSM19X100	GL100X150 GL150X250 GLM25X45	TL62X125, TL75X125 TL100X100, TLM25X25 TLM26X35 TLR87X150, TLR112X200	5,000 / 2,300
16 X 24 X 16	SL50X150, SL50X200 SL75X300, SLS112X500 SLS75X300, SLS75X400 SLR75X300, SLR100X400	SLM19X75, SLM19X100 SLSM25X125 SLPM50X56, SLPM50X112 SLRM32X63 SLRM40X100	GL150X250 GLM40X65	TL75X125, TL87X150 TL137X137, TLM32X32 TLM26X35, TLM30X45 TLR112X200 TLR150X250	7,000 / 3,200
28 X 34 X 24	SL75X300, SLS112X500	SLM19X75, SLM19X100	GL200X350 GL150X250 GLM40X65	TL100X150, TL100X200 TL112X200, TL112X300 TLM26X35, TLM30X45	10,000 / 4,500
32 X 40 X 28	SL100X400	SLM25X125	GL200X350 GLM40X65	TL112X200, TL112X300 TLM36X55, TLM36X75	15,000 / 6,800
42 X 48 X 34	SL125X500		GL250X450 GLM50X90	TL150X250, TL175X300 TLM36X55, TLM36X75	20,000 / 9,000
48 X 52 X 38	SL150X600		GL250X450	TL175X300, TL200X350 TLM45X100	26,000 / 11,800

BAR LOCK SELECTION GUIDE

MALE BAR CATALOG NUMBER	GUIDE CATALOG NUMBER	BAR LOCK ENGAGEMENT	TOTAL MAX WEIGHT SUPPORTED (LBS/KG)
BLB100L4	BLG100L1.3, BLG100L1.8 BLG100L2.3, BLG100L2.8	2.50	10,000 / 4,500
BLBX137L5	BLGT137L1.3, BLGT137L1.8	3.00	
BLB100L6	BLG100L1.3, BLG100L1.8 BLG100L2.3, BLG100L2.8	4.50	
BLBT137L6	BLGT137L1.3, BLGT137L1.8		
BLBM25L125	BLGM25L27, BLGM25L36	89mm	
BLB125L5	BLG125L1.3, BLG125L1.8 BLG125L2.3, BLG125L2.8	3.00	15,000 / 6,800
BLBX162L6	BLGT162L1.3, BLGT162L2.3	3.50	
BLB125L9	BLG125L1.3, BLG125L1.8 BLG125L2.3, BLG125L2.8	7.00	
BLBT162L9	BLGT162L1.3, BLGT162L2.3		
BLBM32L160	BLGM32L36, BLGM32L46	114mm	
BLB137L6	BLG137L1.8, BLG137L2.3 BLG137L2.8, BLG137L3.3, BLG137L3.8	3.50	20,000 / 9,000
BLBX200L7	BLGT200L1.8 & BLGT200L2.8	4.50	
BLB137L11	BLG137L1.8, BLG137L2.3 BLG137L2.8, BLG137L3.3, BLG137L3.8	8.50	
BLBT200L11	BLGT200L1.8 & BLGT200L2.8		
BLBM38L250	BLGM38L46, BLGM38L76	194 mm	26,000 / 11,800
BLB150L8	BLG150L1.8, BLG150L2.3	4.50	
BLB150L16	BLG150L2.8, BLG150L3.3, BLG150L3.8	12.50	
BLN150L8	BLG150L1.8, BLG150L2.3 BLG150L2.8, BLG150L3.3, BLG150L3.8	3.75	
BLN250L10	BLG250L4.3	5.00	
BLN350L13	BLG350L4.8	6.00	75,000 / 34,000