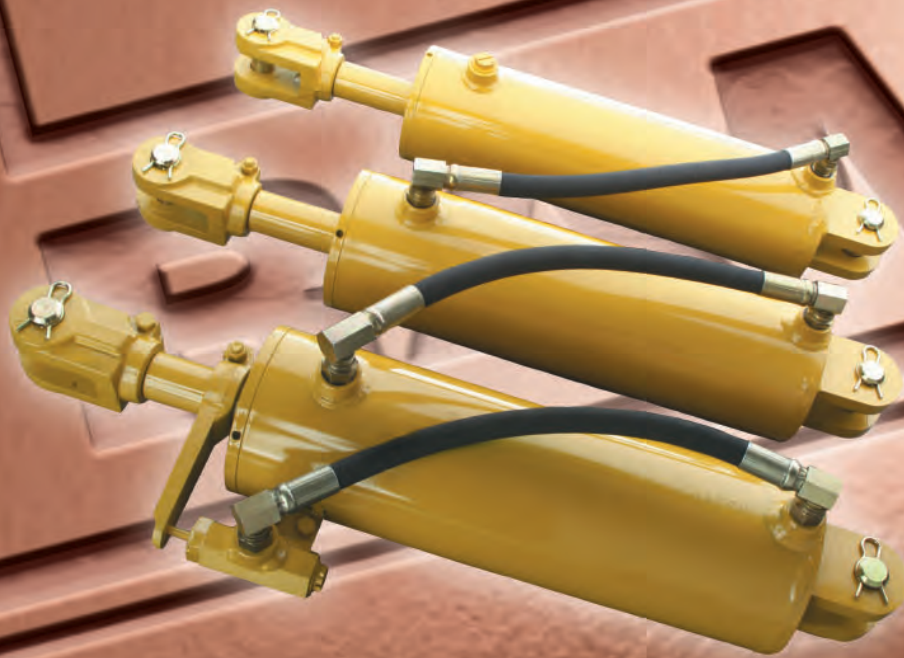




# SYNCHRONIZING CYLINDERS

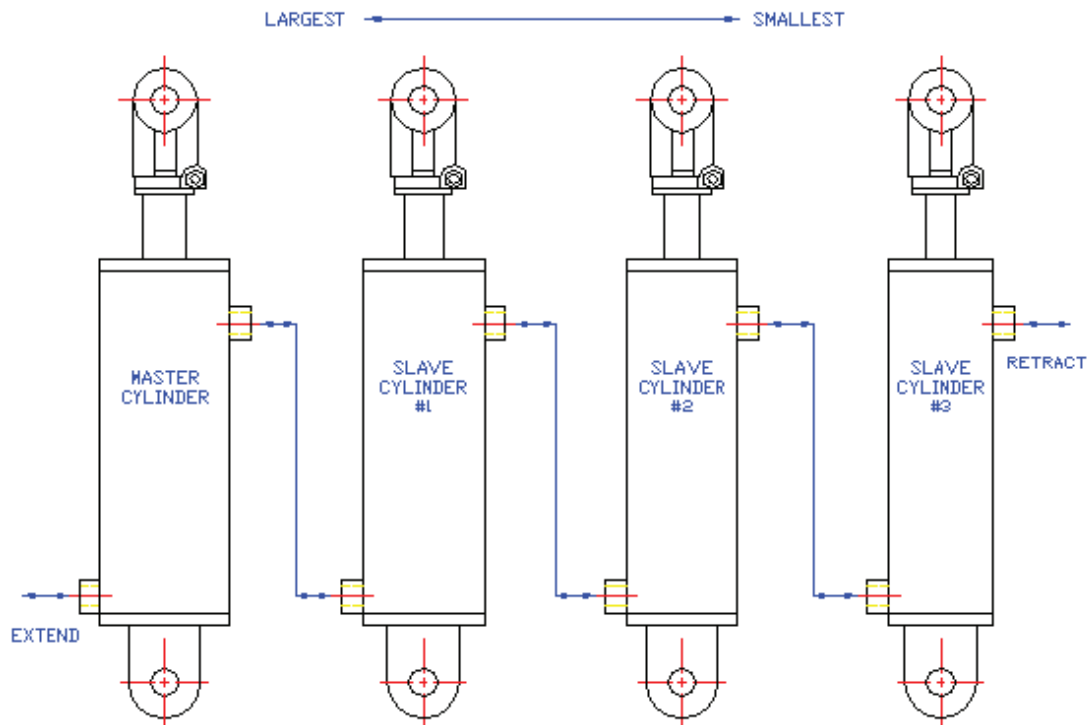


**OEM HYDRAULIC CYLINDER SPECIALISTS**



# SYNCHRONIZING (REPHASING)

**RAM** Synchronizing cylinders consist of one master and one or more slave cylinder(s) with a built in rephasing provision. They are utilized in applications where multiple operations must operate in tandem. These hydraulic cylinders are pressure rated up to 3000 PSI. An optional depth control valve assembly is available to provide precise infinite control of the rod movement. Contact RAM for determining specific size requirements for your application.



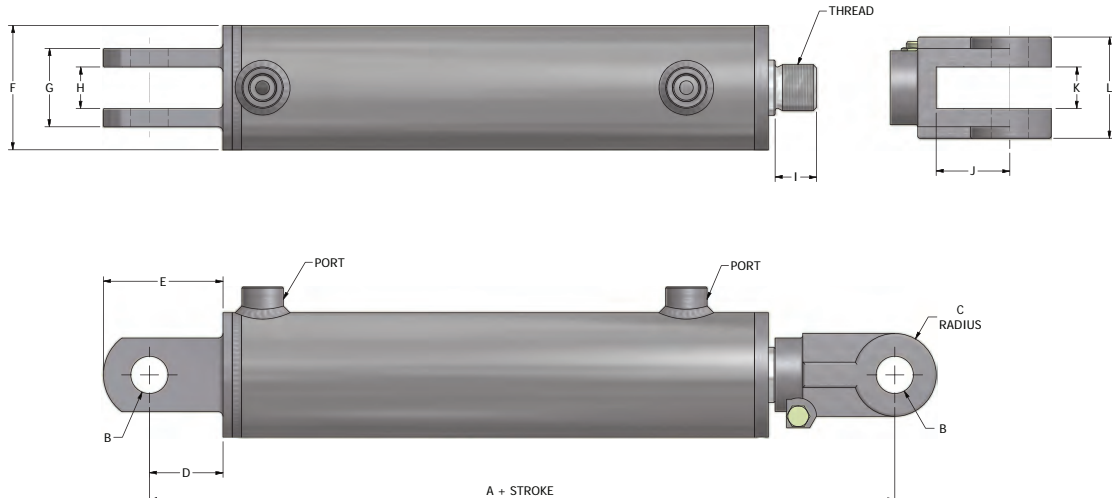
## STANDARD FEATURES

**Intended Use:** Double acting applications  
**Rated Pressure:** 3000 PSI  
**Rod Material:** High tensile SAE C1045, ground and polished hard chrome plated  
**Barrel Material:** High tensile SAE C1026/St52.3 cold drawn tube precision honed for extended seal life  
**Gland Material:** Ductile iron 65-45-12 (ASTM A536)  
**Piston Material:** Ductile iron 65-45-12 (ASTM A536)

**Piston Locknut:** High tensile grade C  
**End Mounts:** Female clevis  
**Clevis Clamp:** Grade 8 bolt and nut  
**Ports:** SAE  
**Port Plugs:** High quality steel  
**Internal Seals:** North American  
**Paint Finish:** 2 part urethane black  
**Testing:** 100% full cycle tested



**SYNCHRONIZING  
CYLINDERS**



Bore (inches)	A	B	C	D	E	F	G	H	I	J	K	L	Ports	Threads
2.50	12.25	1.02	1.13	2.00	3.25	2.38	2.13	1.13	1.13	2.00	1.13	2.75	SAE-8	1.125-12 UNF
2.75	12.25	1.02	1.13	2.00	3.25	3.13	2.13	1.13	1.13	2.00	1.13	2.75	SAE-8	1.125-12 UNF
3.00	12.25	1.02	1.13	2.00	3.25	3.38	2.13	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
3.25	12.25	1.02	1.13	2.00	3.25	3.63	2.38	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
3.50	12.25	1.02	1.13	2.00	3.25	3.88	2.38	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
3.75	12.25	1.02	1.13	2.00	3.25	4.25	2.63	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
4.00	12.25	1.02	1.13	2.00	3.25	4.50	2.63	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
4.25	12.25	1.02	1.13	2.00	3.25	4.75	2.63	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
4.50	12.25	1.02	1.13	2.00	3.25	5.00	2.63	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
4.75	12.25	1.02	1.13	2.00	3.25	5.25	2.63	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF
5.00	12.25	1.02	1.13	2.00	3.25	5.50	2.63	1.13	1.13	2.00	1.13	2.75	SAE-8	1.250-12 UNF

Measurements for A, B, C, D, E, F, G, H, I, J, K, L are in inches.

All specifications are subject to change without notice.

RAM Synchronizing Cylinder Seal Kits		
Bore (inches)	RAM Part Number	Rod Diameter (inches)
2.50	R3607582	1.125
2.75	R3607583	1.125
3.00	R3607584	1.250
3.25	R3607585	1.250
3.50	R3607586	1.250
3.75	R3607587	1.375
4.00	R3607588	1.375
4.25	R3607589	1.500
4.50	R3607590	1.500
4.75	R3607591	1.500
5.00	R3607592	1.500

RAM Synchronizing Cylinder Components			
RAM Part Number	Item	Size	Shipping Weight (lbs)
R7600456	Shaft Clevis	Fits 1 1/8" Shaft	3.3
R7600455	Shaft Clevis	Fits 1 1/4" Shaft	3.3
R7600455	Shaft Clevis	Fits 1 3/8" Shaft	3.3
R7600455	Shaft Clevis	Fits 1 1/2" Shaft	3.3
R3006631	Pin	1" x 2 7/8"	0.8
R3006632	Pin	1" x 2 1/4"	0.6
R3006300	Clip	Hairpin Clip	0.02
R3000530	Hydraulic Depth Control Valve Repair Kit		

All specifications are subject to change without notice.  
All weights are approximate shipping weights.

# SYNCHRONIZING (REPHASING)

Bore (inches)	RAM Part Number	Stroke (inches)	Rod Diameter (inches)	Retracted Length	Ports	Pin Diameter (inches)
2.50	R4507582	8	1.125	20.25	SAE-8	1.000
	R4507593	10	1.125	22.25		
	R4507681	12	1.125	24.25		
	R4507692	16	1.125	28.25		
2.75	R4507583	8	1.125	20.25	SAE-8	1.000
	R4507594	10	1.125	22.25		
	R4507682	12	1.125	24.25		
	R4507693	16	1.125	28.25		
3.00	R4507584	8	1.250	20.25	SAE-8	1.000
	R4507595	10	1.250	22.25		
	R4507683	12	1.250	24.25		
	R4507694	16	1.250	28.25		
3.25	R4507585	8	1.250	20.25	SAE-8	1.000
	R4507596	10	1.250	22.25		
	R4507684	12	1.250	24.25		
	R4507695	16	1.250	28.25		
3.50	R4507586	8	1.250	20.25	SAE-8	1.000
	R4507597	10	1.250	22.25		
	R4507685	12	1.250	24.25		
	R4507696	16	1.250	28.25		
3.75	R4507587	8	1.375	20.25	SAE-8	1.000
	R4507675	10	1.375	22.25		
	R4507686	12	1.375	24.25		
	R4507697	16	1.375	28.25		

All specifications are subject to change without notice.

<b>Bore</b> (inches)	<b>RAM</b> <b>Part Number</b>	<b>Stroke</b> (inches)	<b>Rod</b> <b>Diameter</b> (inches)	<b>Retracted</b> <b>Length</b>	<b>Ports</b>	<b>Pin</b> <b>Diameter</b> (inches)
<b>4.00</b>	R4507588	8	1.375	20.25	SAE-8	1.000
	R4507676	10	1.375	22.25		
	R4507687	12	1.375	24.25		
	R4507698	16	1.375	28.25		
<b>4.25</b>	R4507589	8	1.500	20.25	SAE-8	1.000
	R4507677	10	1.500	22.25		
	R4507688	12	1.500	24.25		
	R4507699	16	1.500	28.25		
<b>4.50</b>	R4507590	8	1.500	20.25	SAE-8	1.000
	R4507678	10	1.500	22.25		
	R4507689	12	1.500	24.25		
	R4507747	16	1.500	28.25		
<b>4.75</b>	R4507591	8	1.500	20.25	SAE-8	1.000
	R4507679	10	1.500	22.25		
	R4507690	12	1.500	24.25		
	R4507748	16	1.500	28.25		
<b>5.00</b>	R4507592	8	1.500	20.25	SAE-8	1.000
	R4507680	10	1.500	22.25		
	R4507691	12	1.500	24.25		
	R4507749	16	1.500	28.25		

All specifications are subject to change without notice.



## **RAM** INDUSTRIES INC.

PO Box 5007 33 York Rd E Yorkton, SK S3N3Z4 Canada

T: 1-877-799-1005 • F: (306) 786-2651

[www.ramindustries.com](http://www.ramindustries.com) • [sales@ramindustries.com](mailto:sales@ramindustries.com)

[www.linkedin.com/company/ram-industries-inc](http://www.linkedin.com/company/ram-industries-inc)



[www.ramindustries.com](http://www.ramindustries.com)

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