

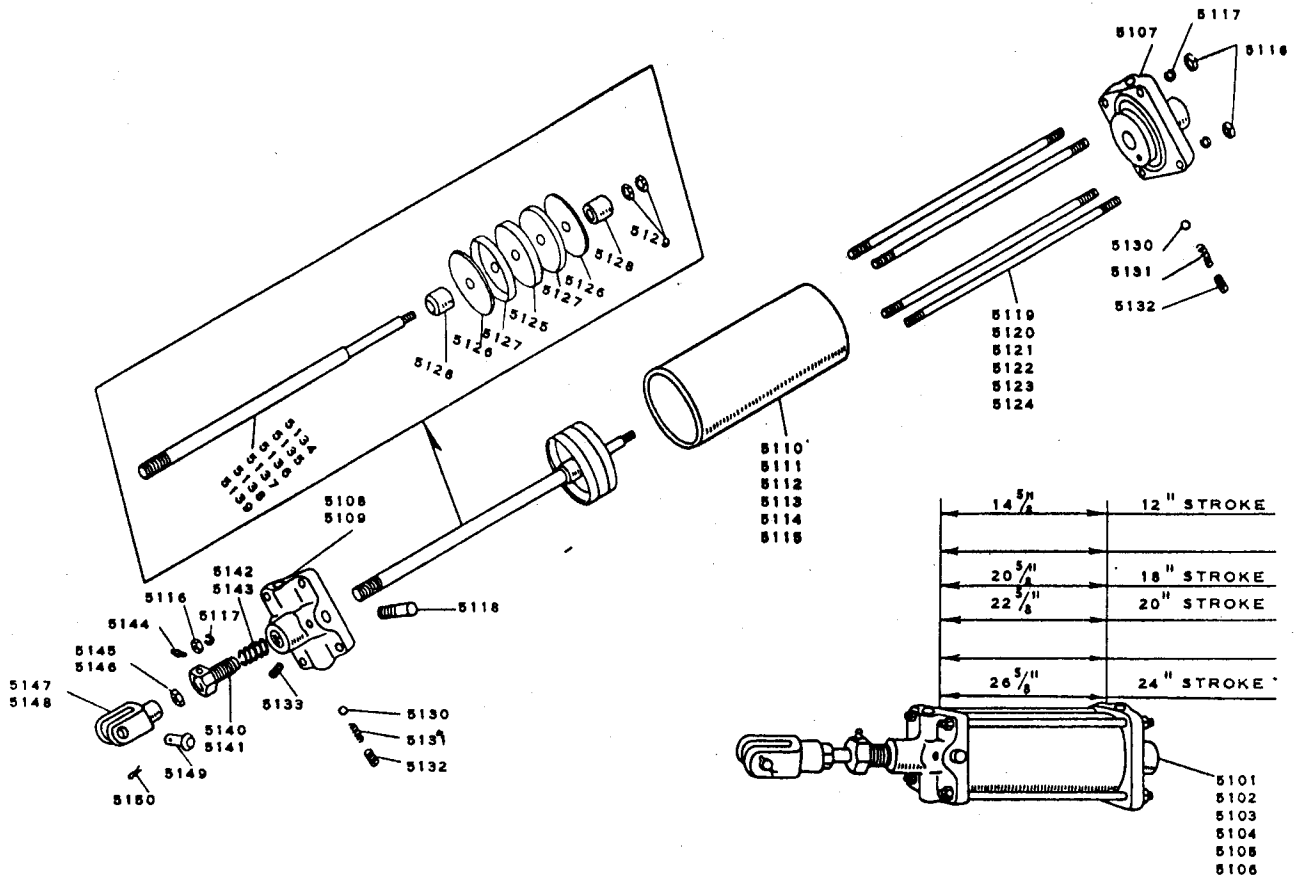
8"	6" STROKE
9 1/2"	7 1/2" STROKE
11"	9" STROKE
14"	12" STROKE
17"	15" STROKE

QTY.	PART NO.	NAME OF PART	SUGGESTED QTY. SPARE PARTS	NO. REQ.	UNIT PRICE
101	42101	AIR RAM COMPLETE - FOR LOUVRE GATE - AGGREGATE BIN GATES - 6" STROKE			
102	42102	AIR RAM COMPLETE - FOR AGGREGATE BIN GATES - 7 1/2" STROKE			
103	42103	AIR RAM COMPLETE - FOR CEMENT DUMP GATE - 9" STROKE			
104	42104	AIR RAM COMPLETE - FOR AGGREGATE DUMP GATE 12" STROKE			
105	42105	AIR RAM COMPLETE - FOR AGGREGATE BIN SLIDE GATES - 15" STROKE			
106	42112	RAM BACK - 4"		1	
107	42114	RAM HEAD - 4"		1	
108	42117	RAM CYLINDER - 6" STROKE		1	
109	42118	RAM CYLINDER - 7 1/2" STROKE		1	
110	42119	RAM CYLINDER - 9" STROKE		1	
111	42120	RAM CYLINDER - 12" STROKE		1	
112	42121	RAM CYLINDER - 15" STROKE		1	
113		3/16" - 14 HEX NUT		8	
114		3/16" - LOCKWASHER		8	
115	42111	RAM MOUNTING STUD		2	
116	42131	TIE ROD - 6" STROKE		4	
117	42132	TIE ROD - 7 1/2" STROKE		4	
118	42133	TIE ROD - 9" STROKE		4	
119	42134	TIE ROD - 12" STROKE		4	
120	42135	TIE ROD - 15" STROKE		4	

NOTE: REFER TO INSTRUCTION SHEET BEFORE ORDERING PARTS.



REF. NO.	PART NO.	NAME OF PART	SUGGESTED QTY. SPARE PARTS	NO. REQ.	UNIT PRICE
121	42141	NEOPRENE DISC		1	
122	42147	STEEL DISC		2	
123	42148	CUP <del>XXXXXXXX</del> Urethane		2	
124	42144	CUSHION SLEEVE		2	
125		½"-13 JAM NUT		2	
126	42145	STEEL BALL		2	
127	42146	BRASS SPRING		2	
128		¼" SQUARE HEAD PLUG		2	
129					
130		½"-20 X ¾" LG. SOCKET SET SCREW		2	
131	42151	PISTON ROD - 6" STROKE		1	
132	42152	PISTON ROD - 7½" STROKE		1	
133	42153	PISTON ROD - 9" STROKE		1	
134	42154	PISTON ROD - 12" STROKE		1	
135	42155	PISTON ROD - 15" STROKE		1	
136	42164	RAM PACKING NUT		1	
137	42165	PACKING RINGS - NO. 333		5	
138		¼" GREASE FITTING		1	
139		¾"-10 JAM NUT		1	
*140	42166	RAM YOKE		1	
141	42168	RAM YOKE PIN		1	
142		⅜" X 1½" COTTER PIN		1	
*143	51066	BIN GATE LEVER ADJUSTING SCREW		1	
<p>* RAM YOKE PART NO. A180 WILL BE FURNISHED WHEN A COMPLETE AIR RAM ASSEMBLY IS ORDERED UNLESS PART NO. G41, BIN GATE LEVER ADJUSTING SCREW IS SPECIFIED.</p>					



REF. NO.	PART NO.	NAME OF PART	SUGGESTED QTY.	NO. REQ.	UNIT PRICE
5101		AIR RAM COMPLETE - 12" STROKE	1		
5102		AIR RAM COMPLETE - 14" STROKE	1		
5103		AIR RAM COMPLETE - 18" STROKE	1		
5104		AIR RAM COMPLETE - 20" STROKE			
5105		AIR RAM COMPLETE -			
5106		AIR RAM COMPLETE - 24" STROKE			
5107	42210	RAM BACK - 5" ⓐ			
5108	42212	RAM HEAD - 5" ⓐ			
5109		RAM HEAD - 5" ⓑ			
5110		RAM CYLINDER - 12" STROKE			
5111		RAM CYLINDER - 14" STROKE			
5112		RAM CYLINDER - 18" STROKE			
5113		RAM CYLINDER - 20" STROKE			
5114		RAM CYLINDER -			
5115		RAM CYLINDER - 24" STROKE			
5116		1/2" - 13 HEX NUT			
5117		1/2" - LOCKWASHER			
5118	42110	RAM MOUNTING STUD			

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REF. NO.	PART NO.	NAME OF PART	SUGGESTED QTY.	NO. REQ.	UNIT PRICE
5119		TIE ROD - 12" STROKE			
5120		TIE ROD -			
5121		TIE ROD - 18" STROKE			
5122		TIE ROD - 20" STROKE			
5123		TIE ROD -			
5124		TIE ROD - 24" STROKE			
5125	42236	NEOPRENE DISC			
5126	42242	STEEL DISC			
5127	42243	CUP <del>XXXXXX</del> Urethane			
5128	42239	CUSHION SLEEVE			
5129		7/8" - 13 NUT			
5130	42240	STEEL BALL			
5131	42241	BRASS SPRING			
5132		SQUARE HEAD PLUG			
5133		1/4" - 20 x 3/4" LG. SOCKET SET SCREW			
5134		PISTON ROD - 12" STROKE			
5135		PISTON ROD - 14" STROKE			
5136		PISTON ROD - 18" STROKE			
5137		PISTON ROD - 20" STROKE			
5138		PISTON ROD -			
5139		PISTON ROD - 24" STROKE			
5140	42252	RAM PACKING NUT (a)			
5141		RAM PACKING NUT (b)			
5142	42253	PACKING RINGS - (a)			
5143		PACKING RINGS - (b)			
5144		1/8" GREASE FITTING			
5145		JAM NUT (a)			
5146		JAM NUT (b)			
5147	42254	RAM YOKE (a)			
5148		RAM YOKE (b)			
5149		RAM YOKE PIN			
5150		3/16" x 1 1/2" COTTER PIN			

(a) --- For Air Rams 20" stroke and less.

(b) --- For Air Rams over 20" stroke

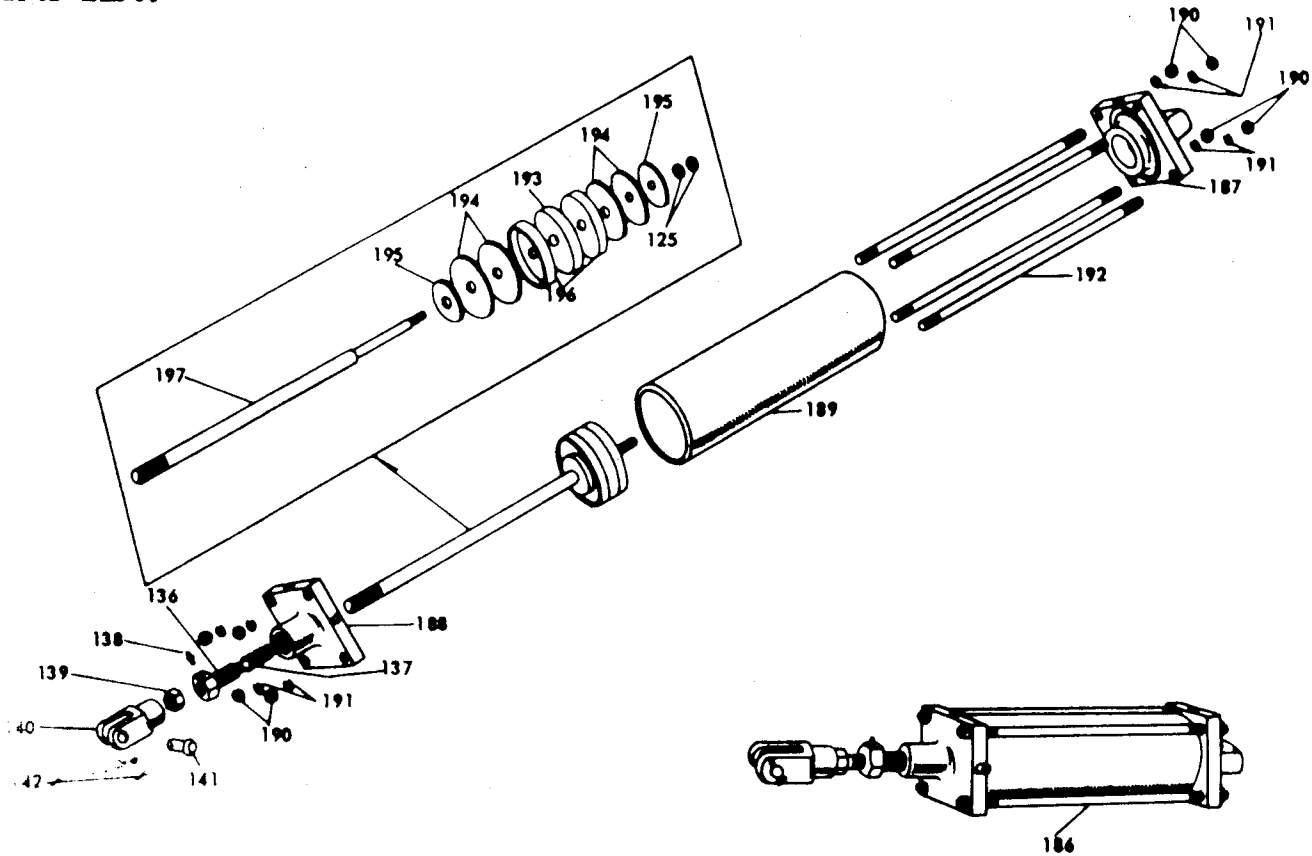
PARTS LIST



2 1/4" DIA. AIR RAM

Trunnion Mount

To Order Parts, Specify "Trunnion Mount",  
And Length Of Stroke As Listed On  
Parts List.



REF. NO.	PART NO.	NAME OF PART	NO. REQ.	UNIT PRICE
186		AIR RAM COMPLETE 2 1/4" DIA.		
187		RAM BACK 2 1/4"	1	
188		RAM HEAD 2 1/4"	1	
189		RAM CYLINDER	1	
190		1/2" - 16 HEX NUT	8	
191		3/8" LOCKWASHER	8	
192		TIE ROD	4	
193	42050	NEOPRENE DISC 2 1/2" DIA.	1	
194	42052	STEEL DISC 2" DIA.	4	
195	42051	STEEL DISC	2	
196		CUP	1	
125		1/2" - 13 JAM NUT	2	
197		PISTON ROD	1	
136	42164	RAM PACKING NUT	1	
137	42165	PACKING RINGS NO. 333	5	
138	69001	1/4" GREASE FITTING	1	
139		1/2" - 10 JAM NUT	1	
140	42166	RAM YOKE	1	
141	42168	RAM YOKE PIN	1	
142		3/16" x 1 1/2" COTTER PIN	1	

421003

NOTE: REFER TO INSTRUCTION SHEET BEFORE ORDERING PARTS.

421003

## AIR RAM MAINTENANCE AND REPAIR DATA

The air rams used on the NOBLE Batching Plants are of the air cushion type. The piston of the ram is made up of a hard oil-resisting neoprene disc which serves as the piston guide, and two ~~TEXT~~ Urethane Cups supported by steel discs. Graphite asbestos packing rings are used in the packing gland.

The packing nut should be turned in tight at all times. If packing gland is not kept tight, there will be an excessive air leak around piston rod when pressure is put to head end of ram. The gland should be kept well greased. The ram piston rod should not be allowed to run dry.

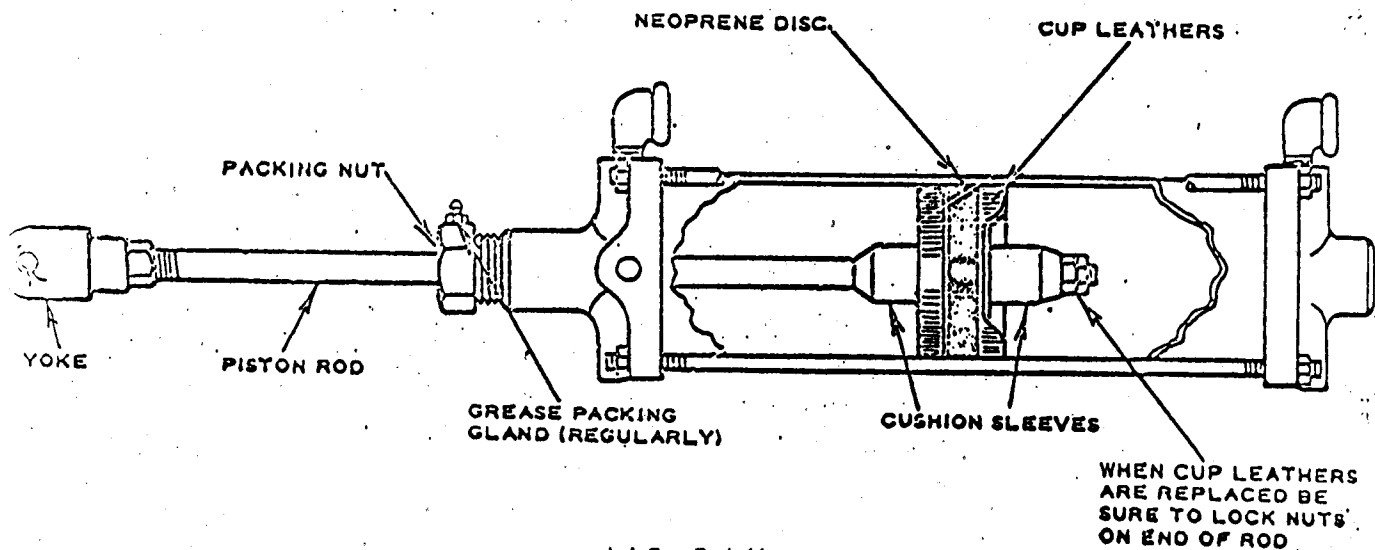
If the ram becomes sluggish, check for blow-by at the piston by disconnecting air hose at one end of ram and putting pressure to opposite end. Reverse connections to check for leak in opposite direction.

If air blows out disconnected end, a leak through the piston is indicated. Cup leathers should be replaced. Also check hard rubber disc. It may be worn considerably out of "round" and should also be replaced. When ram piston is re-assembled, be sure jam nuts holding assembly on piston rod are locked tight.

(SEE DRAWING OF RAM)

If ram is sluggish in certain position of stroke and piston has been checked, ram rod is probably bent and should be replaced.

Be sure the proper length piston rod is used.



AIR RAM