

THREE STAGE FFL

CARRIAGE
THREE STAGE FFL
SIX ROLLER Page 312

FORKS
THREE STAGE FFL Page 320

FREE-LIFT CYLINDER
THREE STAGE FFL Page 310

FREE-LIFT
THREE STAGE FFL
H45-55XM Page 302

FREE-LIFT
THREE STAGE FFL
H60-65XM Page 304

HEADER HOSE
THREE STAGE FFL Page 318

INNER MAST
THREE STAGE FFL Page 298

INTERMEDIATE MAST
THREE STAGE FFL Page 296

LOAD BACKREST EXTENSION
THREE STAGE FFL Page 314

MAIN CYLINDER
THREE STAGE FFL
H45-55XM Page 306

MAIN CYLINDER
THREE STAGE FFL
H60-65XM Page 308

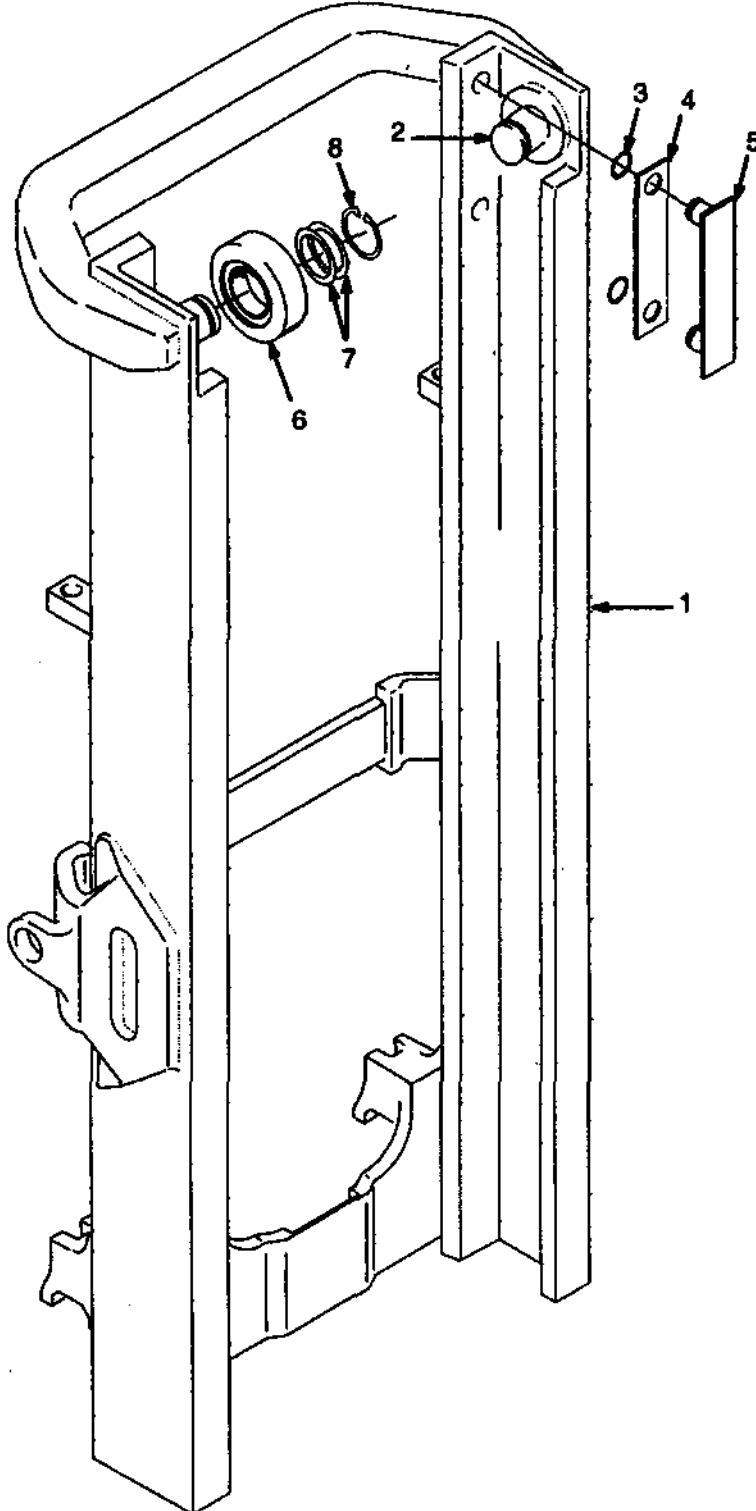
MAIN LIFT
THREE STAGE FFL Page 300

MAST INSTALLATION
THREE STAGE FFL Page 316

OUTER MAST
THREE STAGE FFL Page 294

OUTER MAST THREE STAGE FFL

(Figure 131)



**Outer Mast
Three-Stage Full Free-Lift**

H2.00-2.50XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4310 mm	4760 mm	5060 mm	5510 mm
	Mast	B508	B508	B508	B508
	Group No.	4310	4760	5060	5510
1	Outer Mast	1341004	1341007	1341010	1341013

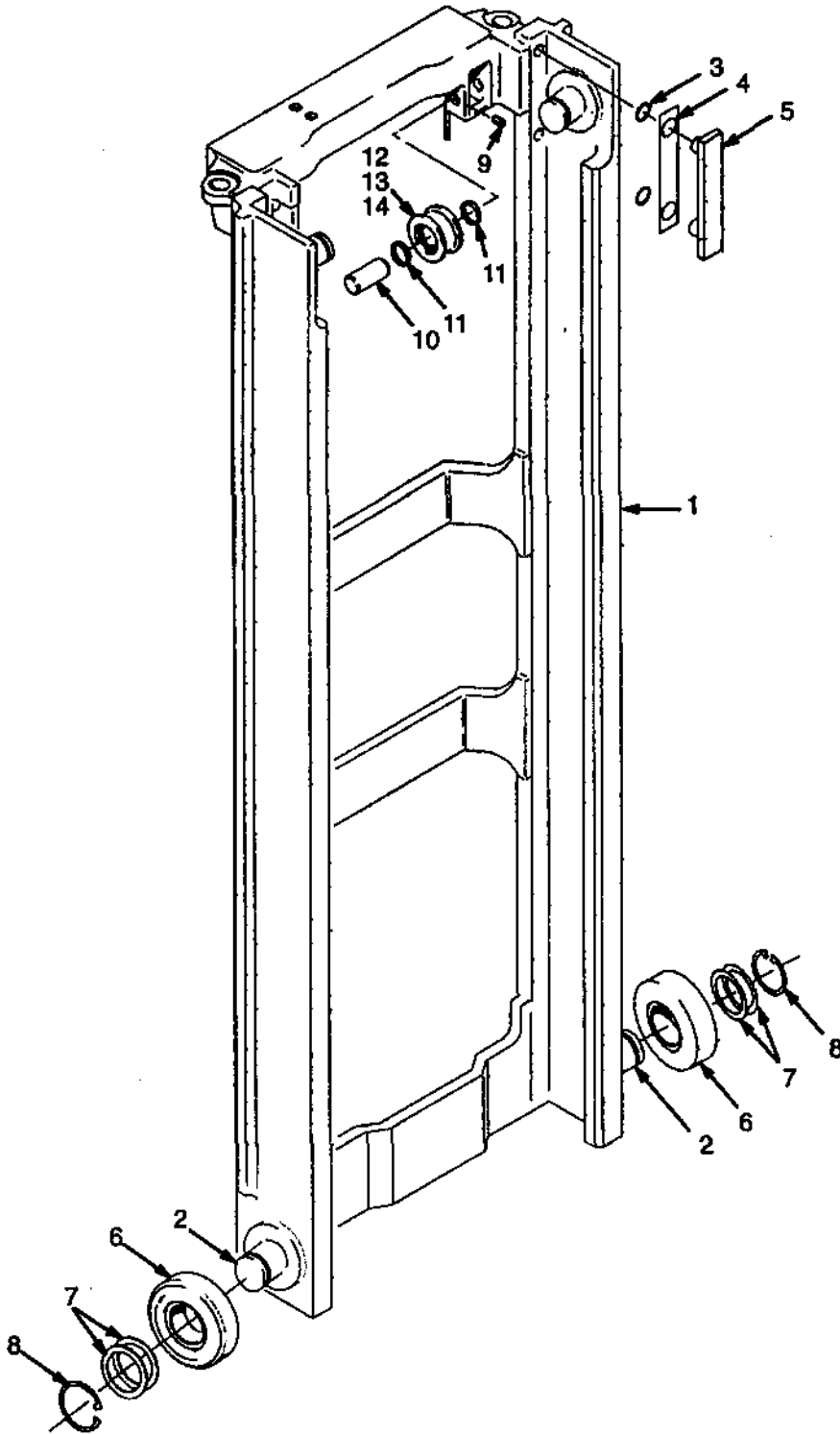
H3.00-3.20XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS			
		4118 mm	4568 mm	4868 mm	5318 mm
	Mast	B563	B563	B563	B563
	Group No.	4118	4568	4868	5318
1	Outer Mast	1341004	1341007	1341010	1341013

REF.	PART NO.	NAME OF PART	QTY	REF.	PART NO.	NAME OF PART	QTY
+		Mast	1	6	1333397	Load Roller (1.52 mm)	2
1+		Outer Mast	1	7	129387	Shim (0,50 mm)	AR
2	1345216	Stubshaft	2	8	58901	Circlip	2
3	104506	O-Ring	4				
4	131716	Shim (0,50 mm)	4				
5	215211	Bearing Strip	2				
						+ ⚙ (Table Above)	

INTERMEDIATE MAST THREE STAGE FFL

(Figure 132)



**INTERMEDIATE MAST
THREE STAGE FFL**

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3710 mm	
	Mast Group No.	B508 3710	
1	Intermediate Mast	1341710	

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		3518mm	
	Mast Group No.	B563 3518	
1	Intermediate Mast	1341710	

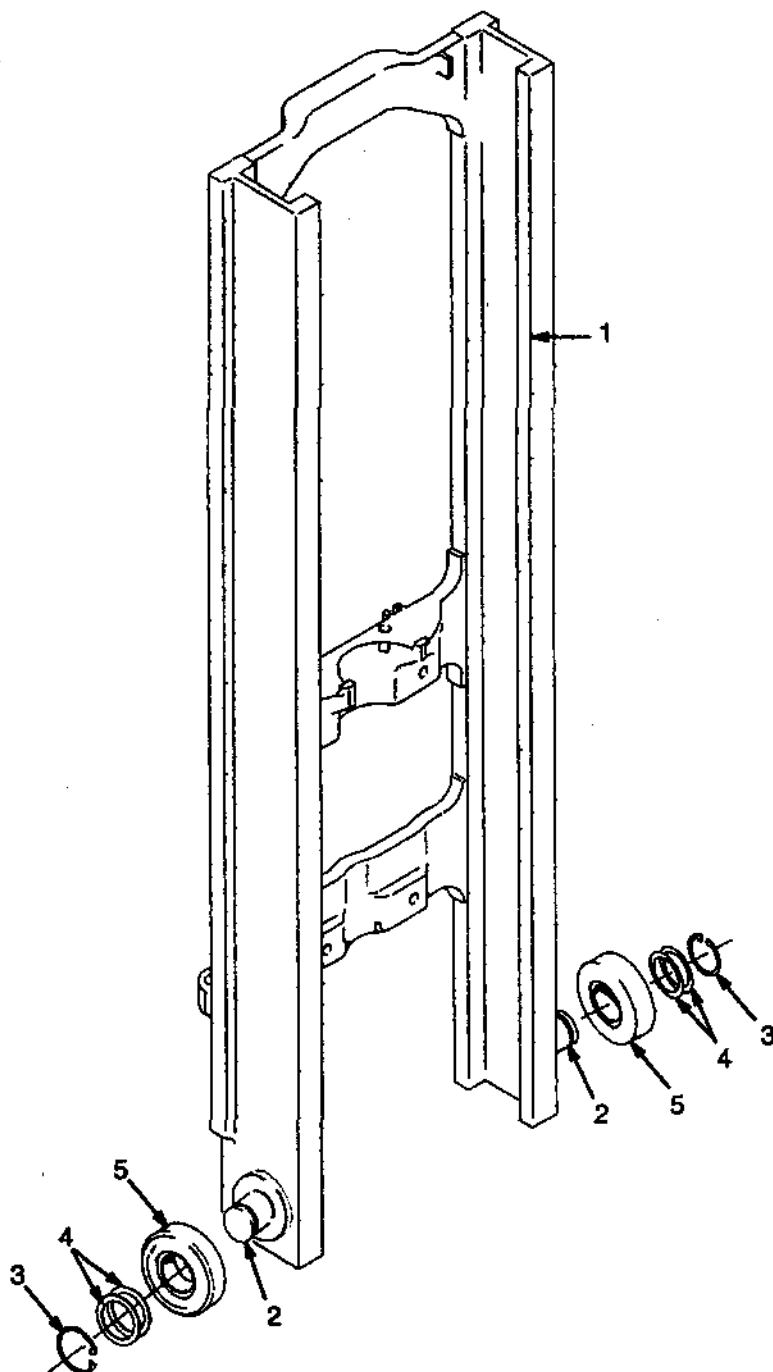
KEY:

A: H45-55XM
B: H60-65XM

REF.	PART NO.	NAME OF PART	QTY		REF.	PART NO.	NAME OF PART	QTY	
			A	B				A	B
a	....	Mast	1	1	11	1378691	Spacer	4	4
1 ^a	....	Intermediate Mast	1	1	12	1379685	Chain Sheave	2	..
2	13452	16 Stubshaft	4	4	12	1378698	Sheave	1	..
3	104506	O-Ring	4	4	12	37752	Circlip.	1	..
4	131716	Shim (0,020 in)	4	4	12	1378699	Bearing	1	..
5	215211	Bearing	2	2	13	1379684	Chain Sheave	2	..
6	1333396	Load Roller (Standard)	4	4	13	1378694	Sheave	1	..
6	1333397	Load Roller (1,52 mm)	4	4	13	37752	Circlip	1	..
7	129387	Shim	AR	AR	13	1378699	Bearing	1	..
8	58901	Circlip	4	4	a	☞ Table Above			
9	302462	Pin	2	2					
10	1368656	Pin	2	2					

INNER MAST THREE STAGE FFL

(Figure 133)



**INNER MAST
THREE STAGE FFL**

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3710mm
	Mast Group No.	B508 3710
1	Inner Mast	1341875

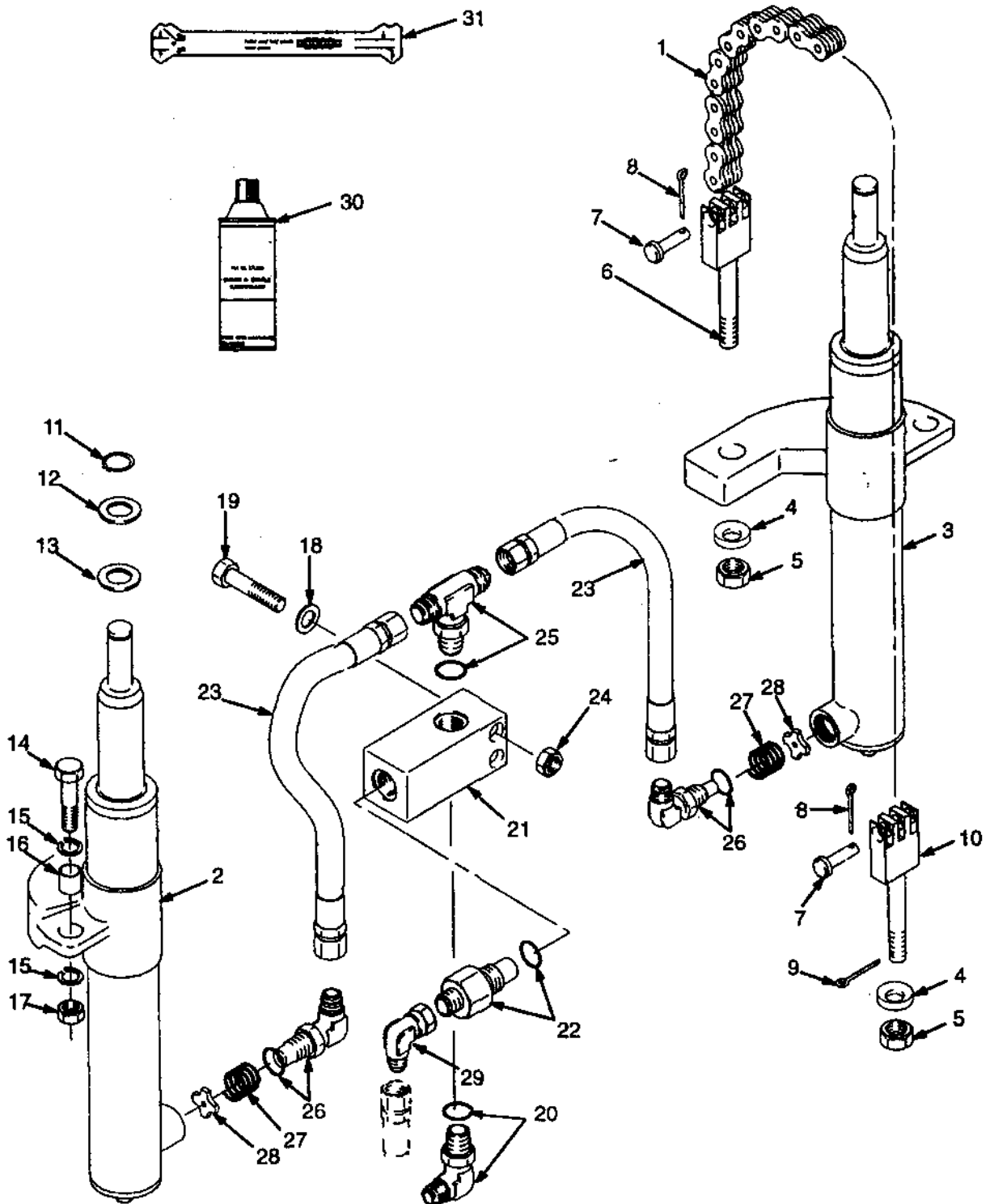
H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3518mm
	Mast Group No.	B563 3518
1	Inner Mast	1341875

REF.	PART NO.	NAME OF PART	QTY	REF.	PART NO.	NAME OF PART	QTY
*	....	Mast	1	5	1333396	Load Roller (Standard)	2
1*	....	Inner Mast	1	5	1333397	Load Roller (1,52 mm)	2
2	1345216	Stubshaft	2	* Table Above			
3	58901	Gil-clip	2				
4	129387	Shim	AR				

MAIN LIFT THREE STAGE FFL

(Figure 134)



**MAIN LIFT
THREE STAGE FFL**

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3710mm
	Mast Group No.	B508 3710
1	Lift Mast	161029

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS
		3518mm
	Mast Group No.	B563 3518
1	Lift Mast	1342116

KEY:

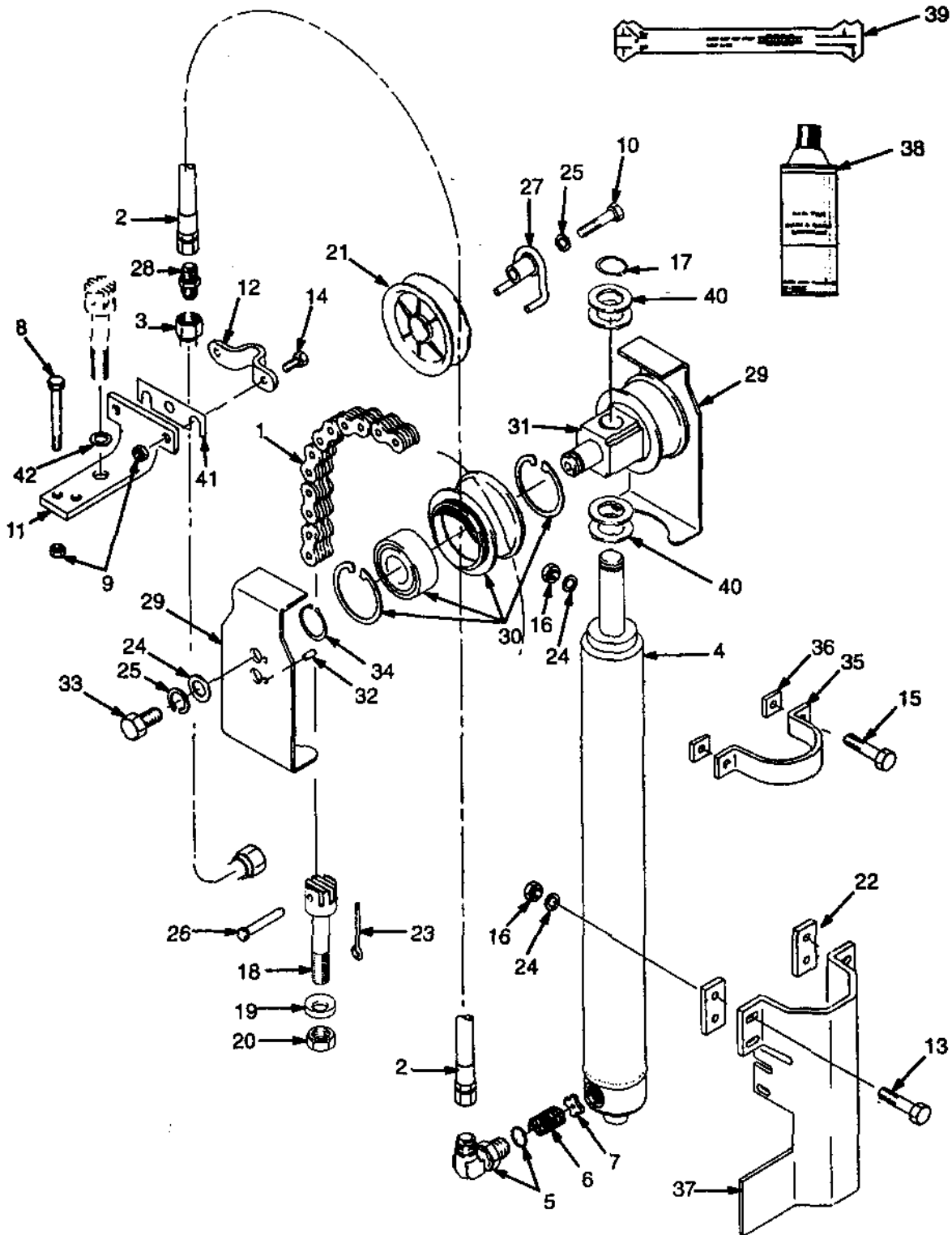
A: H45-55XM

B: H60-65XM

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
		Mast	1	1	16	323090	Spacer	2	2
1 ^a		Chain	2	2	17	300937	Nut	2	2
2		Cylinder (RH)	1	1	18	320157	Washer	2	2
		☛ Figure 136			19	214364	Hex Head Bolt	2	2
3		Cylinder (LH)	1	1	20	184761	Fitting	1	1
		☛ Figure 136			20	16486	O-Ring	1	1
4	297649	Base Ring	4	4	21	1333392	Valve Housing	1	1
5	161003	Nut	4	4	22	2309766	Lowering Control Valve	1	..
6	1369357	Chain Anchor	2	..	22	316306	Lowering Control Valve	1	..
6	1369356	Chain Anchor .....	..	2	22	16982	O-Ring	1	1
7	323161	Pin	4	4	23	1345403	Hose	2	2
8	15200	Split Pin	4	4	24	313828	Nut	2	2
9	15223	Split Pin	2	2	25	16578	Fitting	1	1
10	1365140	Chain Anchor	2	..	25	16485	O-Ring	1	1
10	1333329	Chain Anchor .....	..	2	26	189595	Fitting	2	2
11	13158	Circlip	2	2	26	16485	O-Ring	1	1
12	1333382	Washer	2	2	27	337179	Spring	2	2
13	1354915	Washer	AR	AR	28	357749	Special (Washer)	2	2
13	1354916	Washer	AR	AR	29	16882	Fitting	1	1
14	292532	Hex Head Bolt	2	2	30	171350	Chain Lubricant	AR	AR
15	296422	Washer	4	4	31	599737	Chain Wear Scale	AR	AR
					a		☛ Table Above		

FREE-LIFT THREE STAGE FFL H45-55XM

(Figure 135)



**FREE-LIFT
THREE STAGE FFL
H45-55XM**

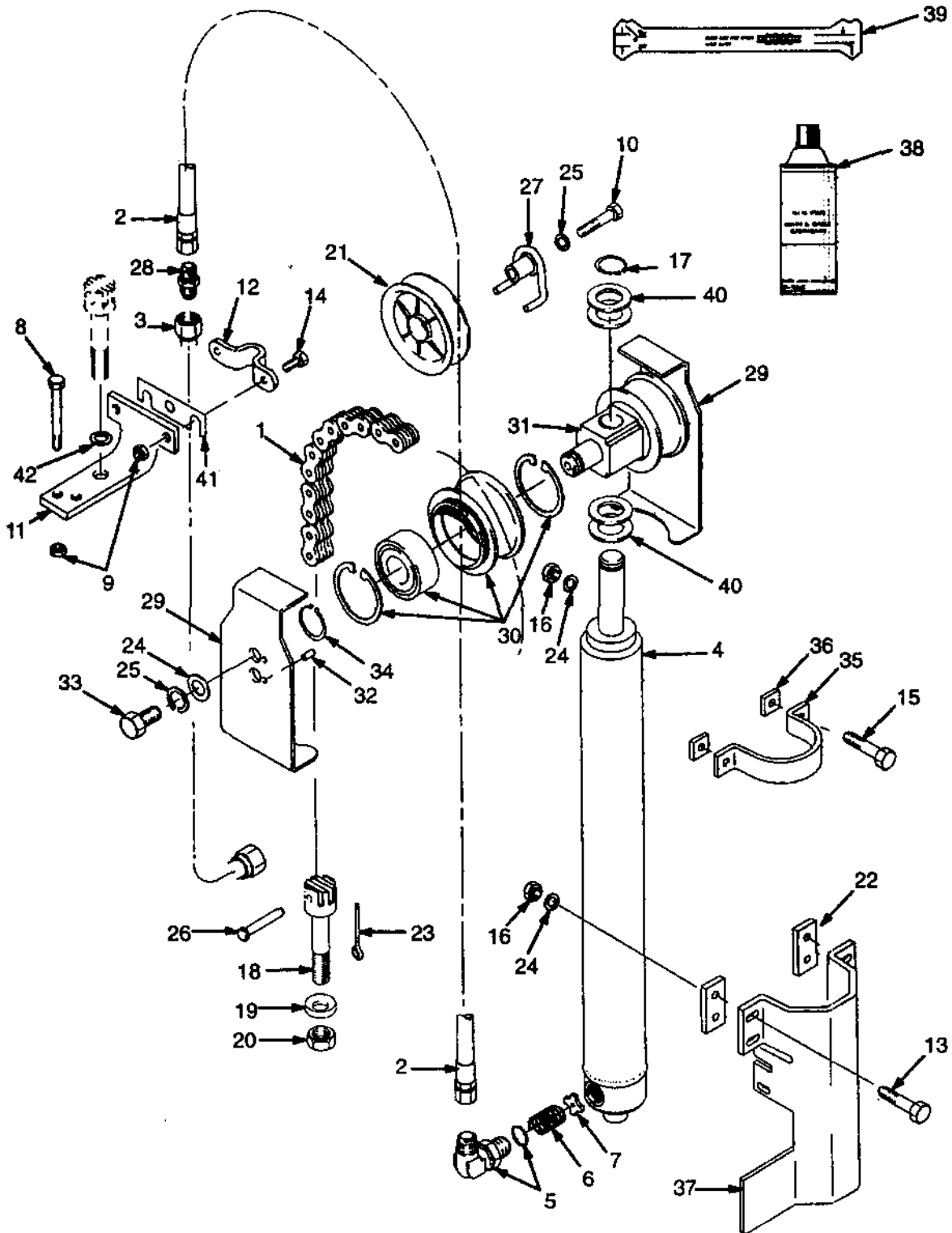
REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
			3710mm
	Mast Group No.	B508	3710
1	Lift Chain	180030	
2	Hose	1342403	
3	Tube	1345355	

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
	....	Mast	1	23	15200	Split Pin	2
1 ^a	....	Chain	2	24	320161	Washer	8
2 ^a	....	Hose	1	25	292683	Lockwasher	3
3 ^a	....	Tube	1	26	323161	Pin	2
4	....	Free-Lift Cylinder	1	27	1360534	Stubshaft	1
		☛ Figure 138		28	17635	Fitting	1
5	238637	Fitting	1	29	1395285	Chain Guard	2
5	16485	O-Ring	1	30	1379682	Chain Sheave	2
6	154355	Spring	1	30	1378692	Sheave	1
7	356505	Special Washer	1	30	37752	Circlip	1
8	136704	Hex Head Bolt	2	30	1378699	Bearing	1
9	313828	Nut	4	31	1378690	Crosshead	1
10	292533	Hex Head Bolt	1	32	302461	Pin	2
11	1362390	Bracket	1	33	292527	Hex Head Bolt	2
12	1345401	Clamp	1	34	304526	Circlip	2
13	287837	Hex Head Bolt	4	35	1360387	Clamp	1
14	136681	Hex Head Bolt	2	36	....	Spacer	2
15	292529	Hex Head Bolt	2	37	1354962	Bracket	1
16	300937	Nut	6	38	171350	Chain Lubricant	AR
17	131358	Circlip	1	39	599737	Chain Wear Scale	AR
18	320313	Chain Anchor	2	40 ^b	1362433	Spacer	4
19	297649	Base Ring	2	41	325616	Spacer	AR
20	161003	Nut	2	42	320165	Washer	1
21	1343989	Hose Sheave	1				
22	....	Spacer	2				

^a ☛ Table Above

FREE-LIFT THREE STAGE FFL H60-65XM

(Figure 136)

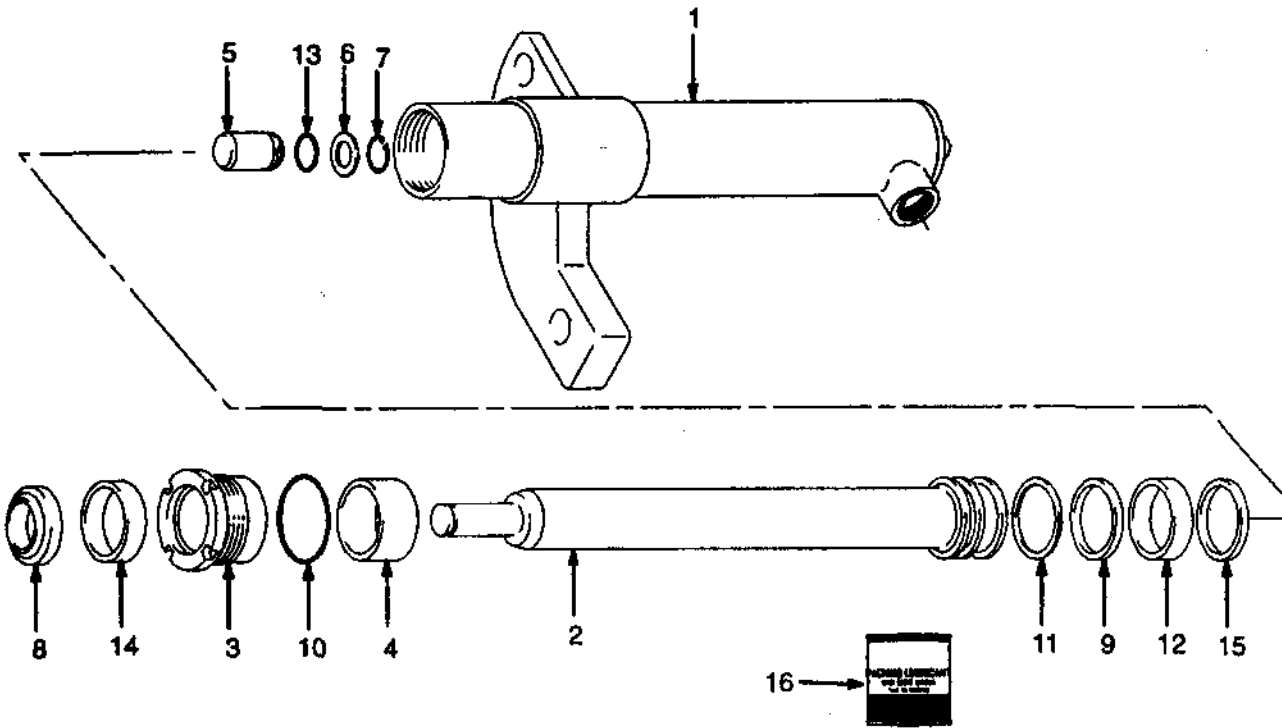


**FREE-LIFT
THREE STAGE FFL
H60-65XM**

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
			3518mm
	Mast Group No.	B563	3518
1	Lift Chain		136925
2	Hose		1342403
3	Tube		1345355

REF.	PART NO.	NAME OF PART	QTY	REF.	PART NO.	NAME OF PART	QTY
		Mast	1	22	1354903	Spacer	2
1*		Chain	2	23	15200	Split Pin	2
2*		Hose	1	24	320161	Washer	8
3*		Tube	1	25	292683	Lockwasher	3
4		Free-Lift Cylinder	1	26	323161	Pin	2
		☛ Figure 138		27	1360534	Stubshaft	1
5	238637	Fitting	1	28	17635	Fitting	1
5	16485	O-Ring	1	29	1395285	Chain Guard	2
6	154355	Spring	1	30	1379683	Chain Sheave	2
7	356505	Special Washer	1	30	1378693	Sheave	1
8	136704	Hex Head Bolt	2	30	37752	Circlip	1
9	313828	Nut	4	30	1378699	Bearing	1
10	292533	Hex Head Bolt	1	31	1378690	Crosshead	1
11	1362390	Bracket	1	32	302461	Pin	2
12	1345401	Clamp	1	33	292527	Hex Head Bolt	2
13	287837	Hex Head Bolt	4	34	304526	Circlip	2
14	136681	Hex Head Bolt	2	35	1360387	Clamp	1
15	292530	Hex Head Bolt	2	36	1354902	Spacer	2
16	300937	Nut	6	37	1354962	Bracket	1
17	131358	Circlip	1	38	171350	Chain Lubricant	AR
18	1333328	Chain Anchor	2	39	599737	Chain Wear Scale	AR
18	1369356	Chain Anchor	2	40	1362433	Spacer	4
19	297649	Base Ring	2	41	325616	Spacer	AR
20	161003	Nut	2	42	320165	Washer	1
21	1343989	Hose Sheave	1	*		☛ Table Above	

MAIN CYLINDER THREE STAGE FFL H45-55XM (Figure137)



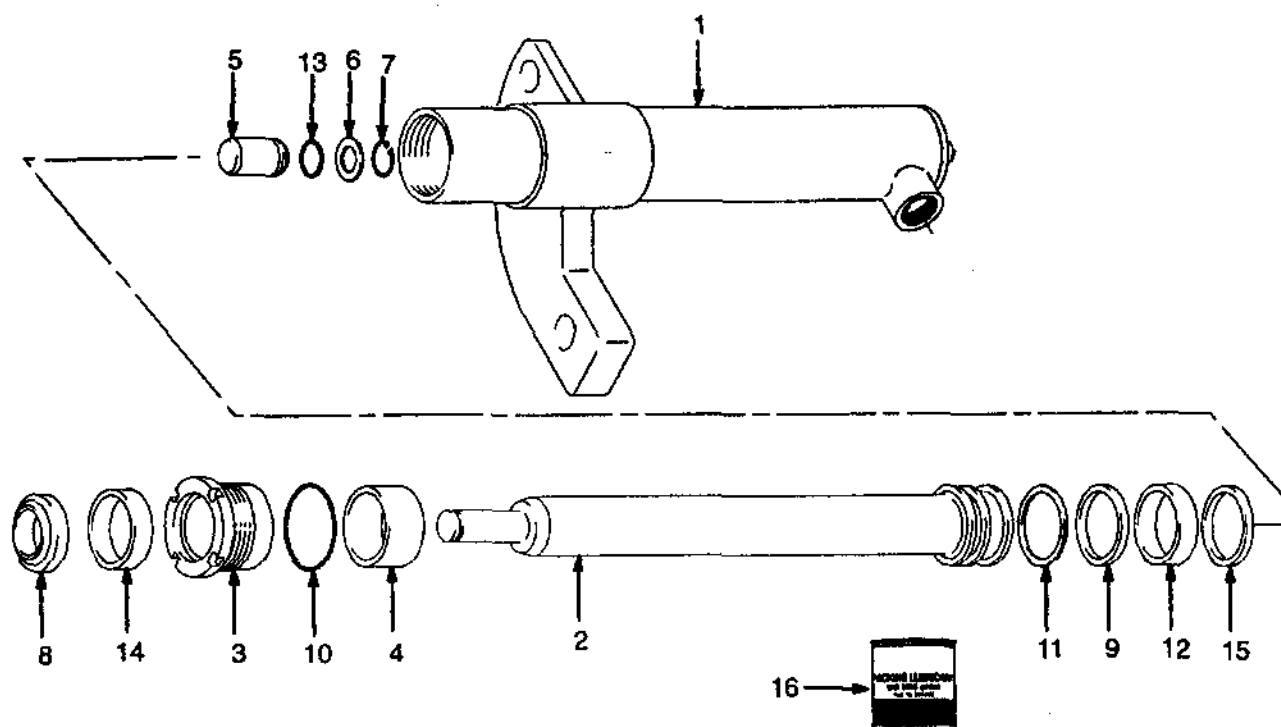
**MAIN CYLINDER
THREE STAGE FFL
H45-55XM**

REF NO.	NAME OF PART 1 2 3	LIFT HEIGHT TO BOTTOM OF FORKS	
			3710mm
	Mast Group No	B508	3710
	Group No. Lift Cylinder (RH)	8600451	1341538
1	Shell		1355498
2	Rod		1355495
	Group No. Lift Cylinder (LH)	8600401	1341571
1	Shell		1355492
2	Rod		1355493

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	....	Mast	1	10 ^b	92861	O-Ring	1
a	....	Lift Cylinder	1	11 ^b	638246	Back-Up Ring	1
1 ^a	....	Shell	1	12 ^b	1356750	Wear Ring	1
2 ^a	....	Piston Rod	1	13 ^b	39348	O-Ring	1
3	1355496	Retainer	1	14 ^b	1356749	Seal	1
4	....	Spacer	1	15 ^b	1360127	Piston Ring	1
5	257913	Check Valve	1	16	186061	Packing Lubricant	AR
6	297531	Washer	1	a		☞ Table Above	
7	187388	Circlip	1	b		Included In Seal Kit 1355497	
8 ^b	1319668	Wiper	1				
9 ^b	2013075	Seal	1				

MAIN CYLINDER THREE STAGE FFL H60-65XM

(Figure 138)



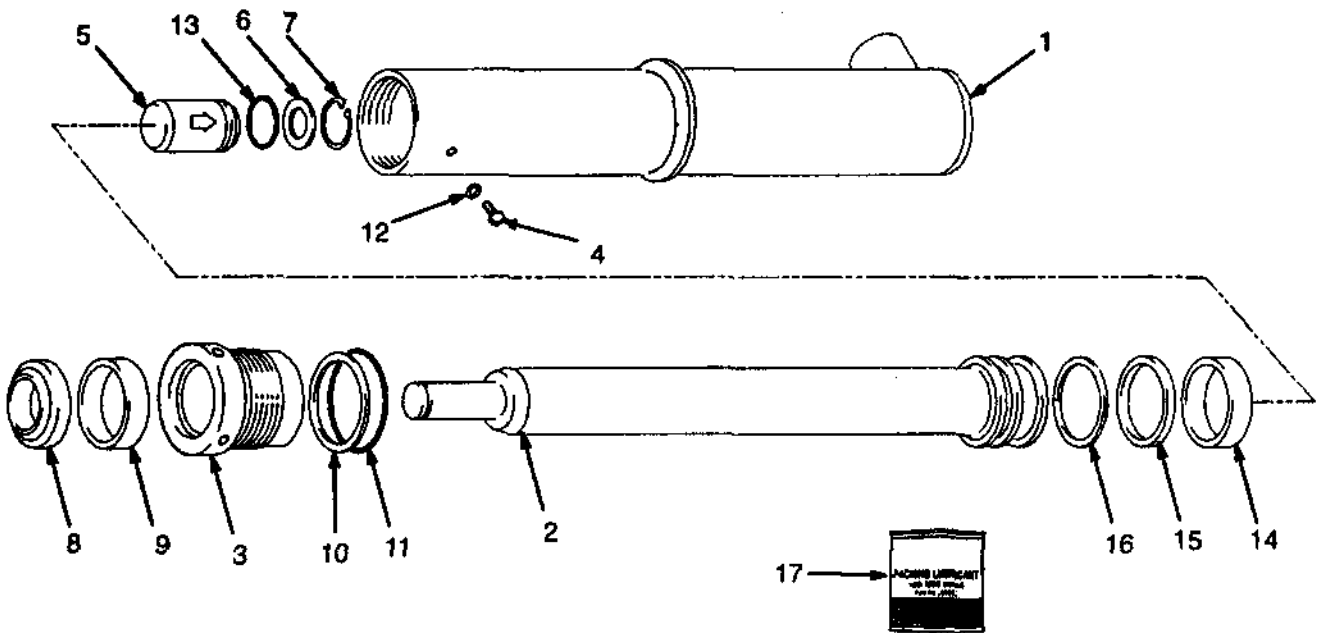
**MAIN CYLINDER
THREE STAGE FFL
H60-65XM**

REF NO.	NAME OF PART 1 2 3	LIFT HEIGHT TO BOTTOM OF FORKS	
			3518mm
	Mast Group No	B563	3518
	Group No. Lift Cylinder (RH)	8600551	1341538
1	Shell		1355715
2	Rod		1355709
	Group No. Lift Cylinder (LH)	8600501	1341571
1	Shell		1355708
2	Rod		1355709

REF	PART NO.	NAME OF PART	QTY	REF	PART NO.	NAME OF PART	QTY
a	....	Mast	1	10 ^b	59229	O-Ring	1
a	....	Lift Cylinder	1	11 ^b	335012	Back-Up Ring	1
1 ^a	....	Shell	1	12 ^b	1356751	Wear Ring	1
2 ^a	....	Piston Rod	1	13 ^b	39348	O-Ring	1
3	1355713	Retainer	1	14 ^b	1356749	Seal	1
4 ^b	1355711	Spacer	1	15 ^b	1356748	Piston Ring	1
5	257913	Check Valve	1	16	186061	Packing Lubricant	AR
6	297531	Washer	1			^a Table Above	
7	187388	Circlip	1			^b Included in Seal Kit 1355714	
8 ^b	1319668	Wiper	1				
9 ^b	334156	Seal	1				

FREE-LIFT CYLINDER THREE STAGE FFL

(Figure 139)



**FREE-LIFT CYLINDER
THREE STAGE FFL**

H45-55XM

REF N O.	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS
	1 2 3	4310mm
	Mast Group No	B508 4310
	Group No. Lift Cylinder (RH)	8600406 2309480
1	Shell	2303871
2	Rod	2306774

H60-65XM

REF N O.	NAME OF PART	LIFT HEIGHT TO BOTTOM OF FORKS
	1 2 3	3518mm
	Mast Group No	B563 318
	Group No. Lift Cylinder (RH)	8605507 2310270
1	Shell	2311691
2	Rod	2303824

KEY:

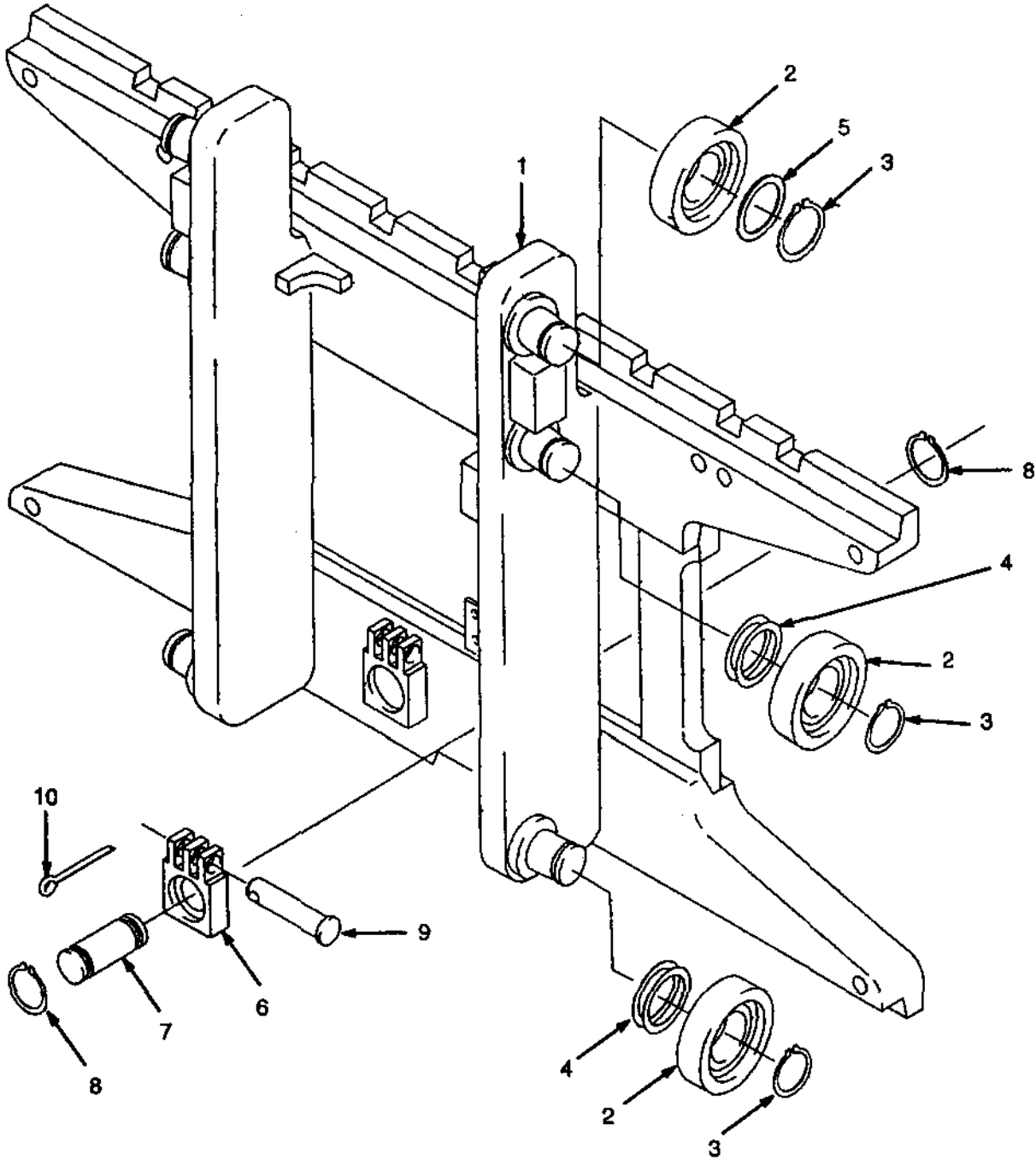
A: H45-55XM

B: H60-65XM

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
a	....	Mast	1	1	11 ^b	90263	O-Ring	1	..
a	....	Free-Lift Cylinder	1	1	11 ^c	15880	O-Ring	1	..
1 ^a	....	Shell	1	1	12 ^{bc}	190887	Seal	1	1
2 ^a	....	Rod	1	1	13 ^{bc}	39348	Seal	1	1
3	1356292	Retainer	1	..	14 ^b	1358972	Wear Ring	1	..
3	1356661	Retainer .....	..	1	14 ^c	636941	Wear Ring	1	..
4	1361302	Screw	1	1	15 ^b	2013088	Seal	1	..
5	257913	Check Valve	1	1	15 ^c	309062	Seal	1	..
6	297531	Washer	1	1	16 ^b	2013089	Back-UpRing	1	..
7	187388	Circlip	1	1	16 ^c	637565	Back-UpRing	1	..
8 ^{bc}	2013099	Rod Wiper	1	1	17	186061	Packing Lubricant	AR	AR
9 ^{bc}	1358970	Rod Wiper	1	1	^a Table Above ^b Included In Seal Kit 1358969 ^c Included In Seal Kit 1356662				
10 ^b	147973	Back-UpRing	1	..					
10 ^c	164840	Back-UpRing .....	..	1					

CARRIAGE THREE STAGE FFL SIX ROLLER

(Figure 140)



**CARRIAGE
 THREE STAGE FFL
 SIX ROLLER**

	H45-55XM 1067mm	H45-55XM 1219mm	H60-65XM 1067mm
Group No.	8500275	8500279	8500276
Carriage	1379459	1379463	1379460

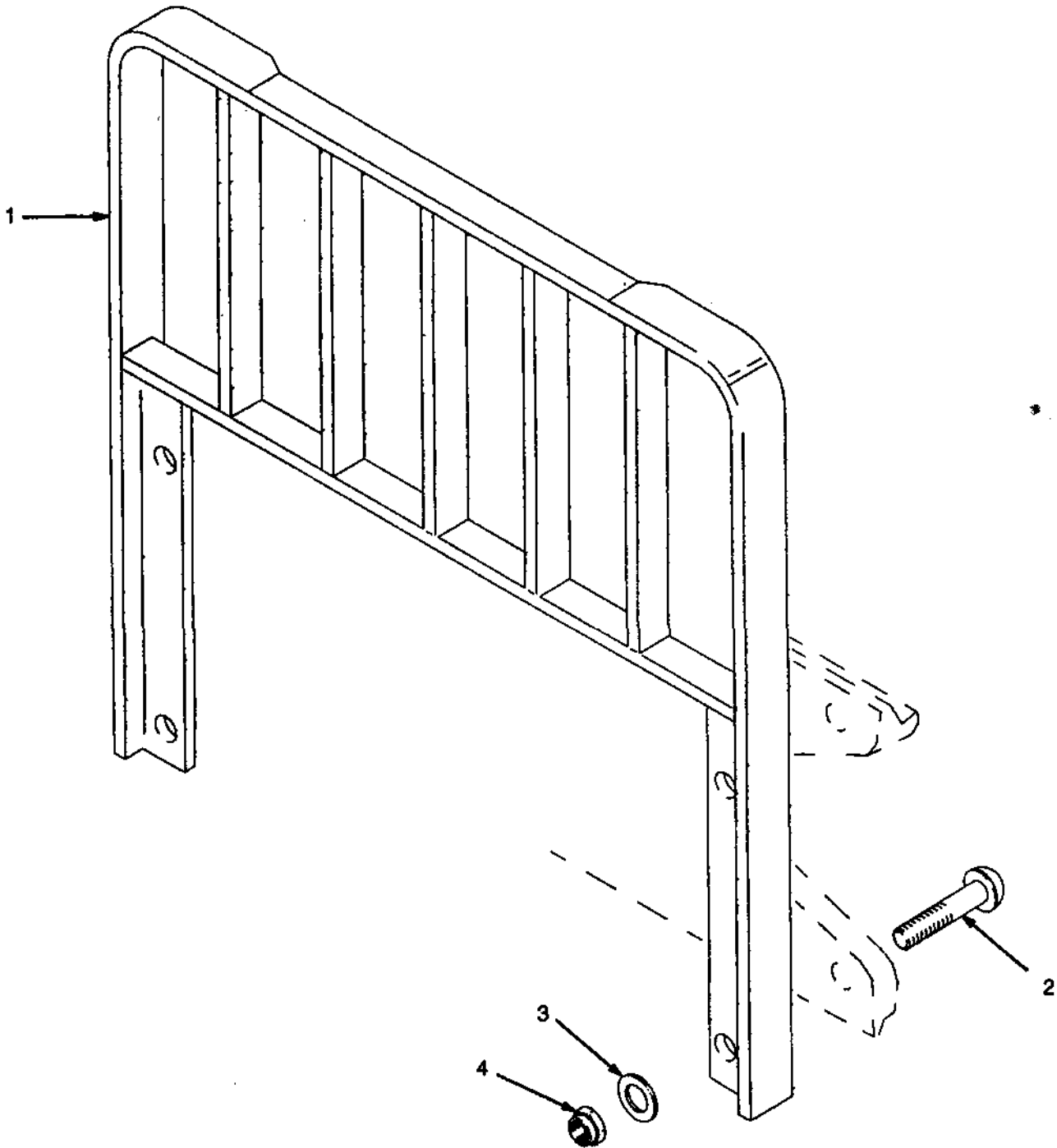
KEY:
 A: H45-55XM
 B: H60-65XM

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
*	....	Carriage Assy	1	..	5	366115	Spacer	2	2
*	....	Carriage Assy	1	1	6	1369345	Chain Anchor	2	..
1	1381560	Carriage	1	..	6	1369344	Chain Anchor	2	2
1	1381564	Carriage	1	..	7	317735	Pin	2	2
1	1381561	Carriage	1	1	8	131358	Circlip	4	4
1	1345216	Stubshaft	6	6	9	323161	Pin	2	2
2	1333399	Load Roller (Standard)	6	6	10	15200	Split Pin	2	2
2	1337900	Load Roller (1,52 mm)	6	6					
3	58901	Circlip	6	6					
4	129387	Shim	AR	AR					

* Table

LOAD BACKREST EXTENSION THREE STAGE FFL

(Figure 141)



**LOAD BACKREST EXTENSION
 THREE STAGE FFL**

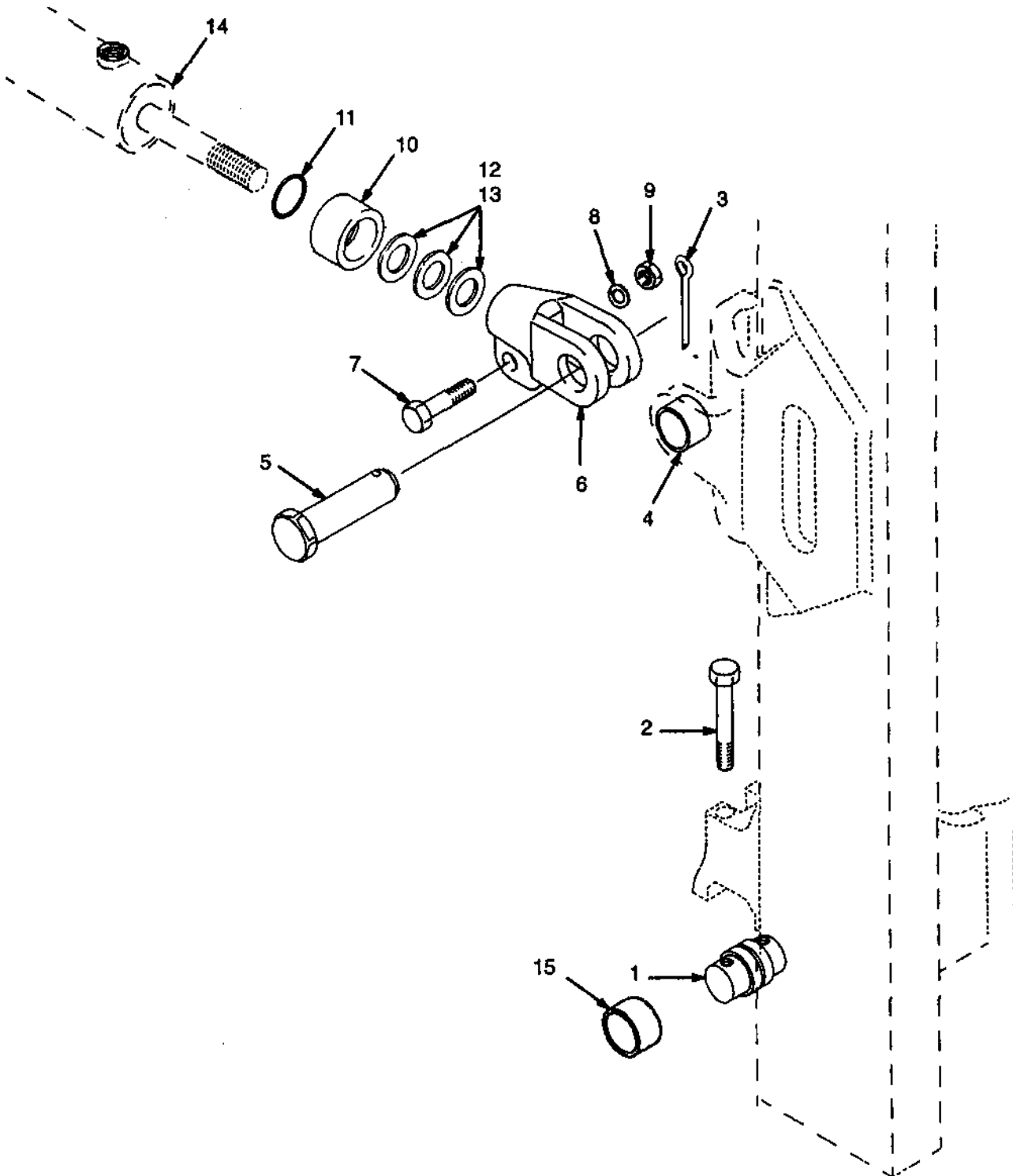
KEY:

A: H45-55XM
 B: H60-65XM

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
1	1338642	Load Backrest Extension	1	..	3 ^b	296423	Washer	4	4
1	1338645	Load Backrest Extension	1		4	300937	Nut	4	4
1 ^a	1345267	Load Backrest Extension	1				^a Polished Fork With Full Bottom Taper		
2	1343990	Hex Head Bolt	4	..			^b Optional		
2	1354923	Hex Head Bolt	4						
3	221771	Washer	4	4					

MAST INSTALLATION THREE STAGE FFL

(Figure 142)



**MAST INSTALLATION
THREE STAGE FFL**

KEY:

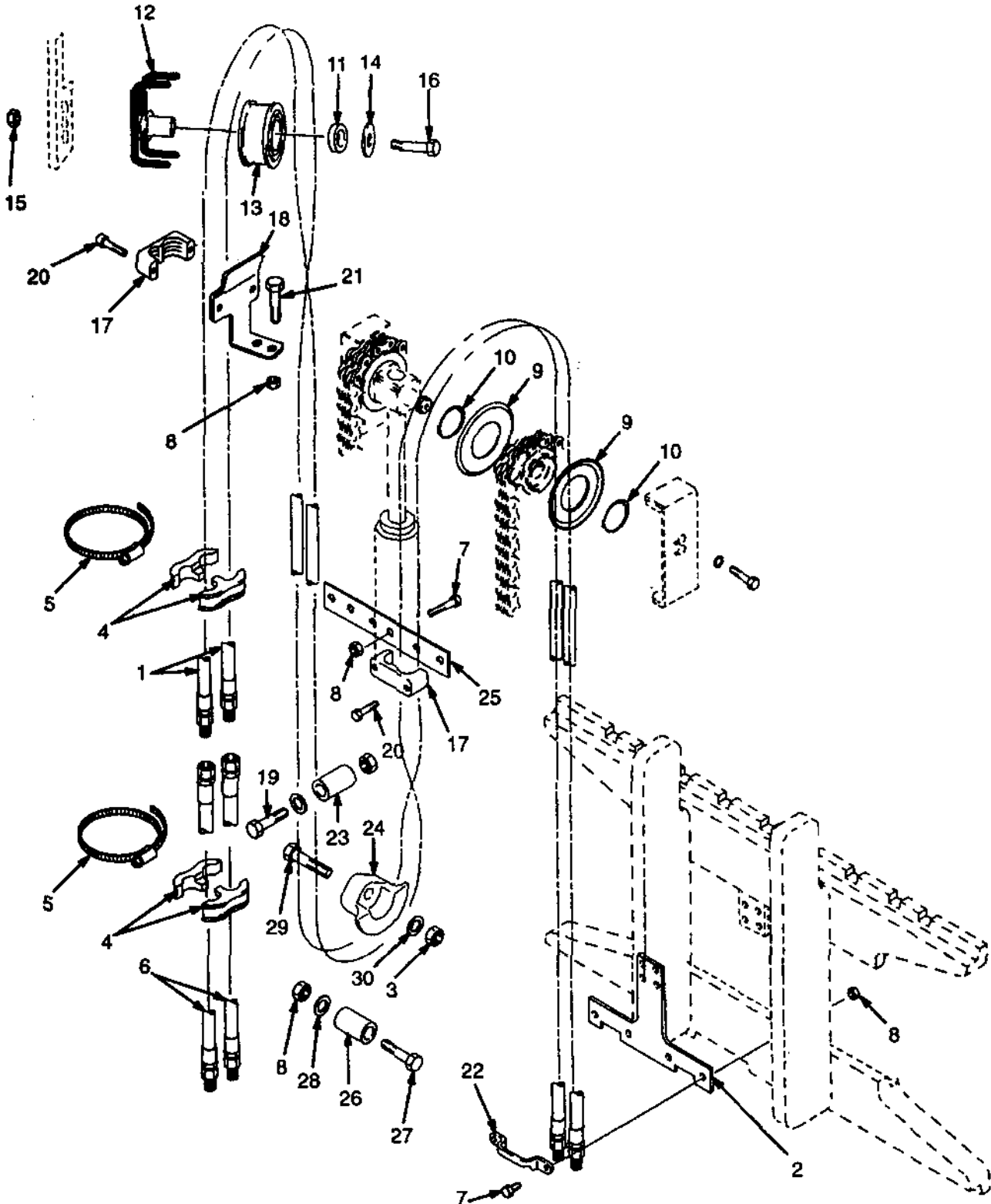
A: 6° Forward Tilt/10° Back Tilt

B: 6° Forward Tilt/6° Back Tilt

C: 6° Forward Tilt/5° Back Tilt

REF	PART NO.	NAME OF PART	QTY			REF	PART NO.	NAME OF PART	QTY		
			A	B	C				A	B	C
1 ^b	1376424	Pin	2	2	2	10	384101	Spacer .....	..	..	2
2 ^b	1376423	Hex Head Bolt	4	4	4	11	55434	O-Ring .....	..	2	2
3	15236	Split Pin	2	2	2	12	134675	Shim .....	..	AR	AR
4	300982	Bush	2	2	2	13	1325119	Shim .....	..	AR	AR
5	1345354	Pin	2	2	2	14	1361948	Shim .....	..	AR	AR
6	1307641	Rod End	2	2	2	15	....	Tilt Cylinder	2	2	2
7	293650	Hex Head Bolt	2	2	2			☞ Figure 114			
8	292683	Lockwasher	2	2	2	16	1333385	Bush	2	2	2
9	216877	Nut	2	2	2	16	1380115	Bush (Optional)	2	2	2
10	1451788	Spacer .....	..	2	..						

HEADER HOSE THREE STAGE FFL (Figure 143)



**HEADER HOSE
THREE STAGE FFL**

H45-55XM

REF N.O.	NAME OF PART 1 2 3	LIFT HEIGHT TO BOTTOM OF FORKS	
			3710mm
	Mast Group No		B508 3710
1	Hose		1390414
2	Bracket		1381771

H60-65XM

REF N.O.	NAME OF PART 1 2 3	LIFT HEIGHT TO BOTTOM OF FORKS	
			3518mm
	Mast Group No		B563 3518
1	Hose		1390414
2	Bracket		1381771

KEY:

A: Three Function

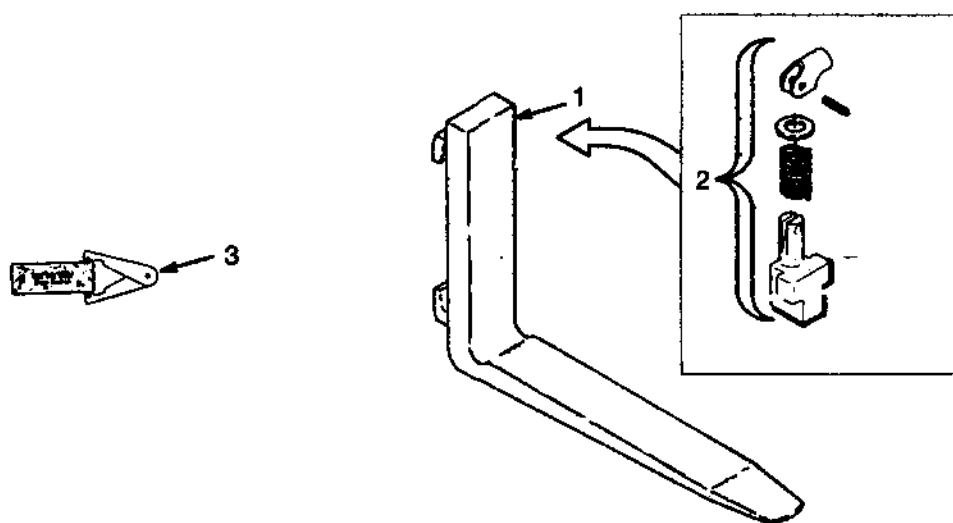
B: Four Function

REF	PART NO.	NAME OF PART	QTY		REF	PART NO.	NAME OF PART	QTY	
			A	B				A	B
		Mast	1	1	17	1360386	Clamp	2	4
1 ^a		Hose	2	4	18	1354906	Bracket (RH)	1	1
2 ^a		Bracket	1	1	18	1354907	Bracket (LH)	1	1
3	316826	Nut	1	2	19	292534	Hex Head Bolt	1	2
4	1353530	Clamp	4	8	20	293795	Hex Head Bolt	4	8
5	1360507	Clamp	2	4	21	136704	Hex Head Bolt	2	4
6	1354922	Hose (RH)	2	2	22	1369333	Clamp	1	2
6	1354904	Hose (LH)	2	2	23	1360538	Tube	1	2
7	136749	Hex Head Bolt	8	10	24	1360536	Hose Guide (RH)	1	1
8	313828	Lockout	9	12	24	1360537	Hose Guide (LH)	1	1
9	1345199	Hose Guide	2	4	25	1353464	Plate	1	1
10	1345204	Circlip	2	4	26	1354961	Hose Restraint	1	2
11	1360549	Spacer	1	2	27	214364	Hex Head Bolt	1	2
12	1362387	Stubshaft	1	2	28	320158	Washer	1	2
13	1381595	Hose Sheave	1	2	29	287860	Hex Head Bolt	1	2
14	1345190	Washer	1	2	30	320160	Washer	1	2
15	1390182	Nut	1	2					
16	292533	Hex Head Bolt	1	2					

^a Table Above

FORKS THREE STAGE FFL

(Figure 144)



**FORKS
THREE STAGE FFL
H45-55XM**

REF	NAME OF PART 1 2 3 4	Standard Taper		Full Bottom Taper	Qty
1	Fork	100 mm x 40 mm	125 mm x 40 mm	125 mm x 40 mm	2
	762mm	384210	384210	....
	914mm	384211	1326661	1338087	
	1067mm	384213	1326663	1338088	
	1219mm	384214	1326664	1338089	
	1372mm	384215	1326665	....
	1524mm	384216	1326666	....
2	Latch	369795	369795	369795	1
3	Fork Tool	3020387	3020387	3020387	AR

H60-65XM

REF	NAME OF PART 1 2 3 4	Standard Taper		Full Bottom Taper	Qty
1	Fork	100 mm x 45 mm	125 mm x 45 mm	180 mm x 40 mm	2
	914mm	1333018	384210	....
	1076 mm	1333020	367420	....
	1207mm	....	....	1338098
	1219mm	1333021	367421	....
	1372mm	....	367422	1332745
	1524mm	....	367423	....
	1829mm	1333024	367424	....
2	Latch	369796	369796	369796	1
3	Fork Tool	3020387	3020387	3020387	AR

Note: Other Fork Dimensions Available On Request, Contact Your Hyster Dealer