TWO-STAGE FFL

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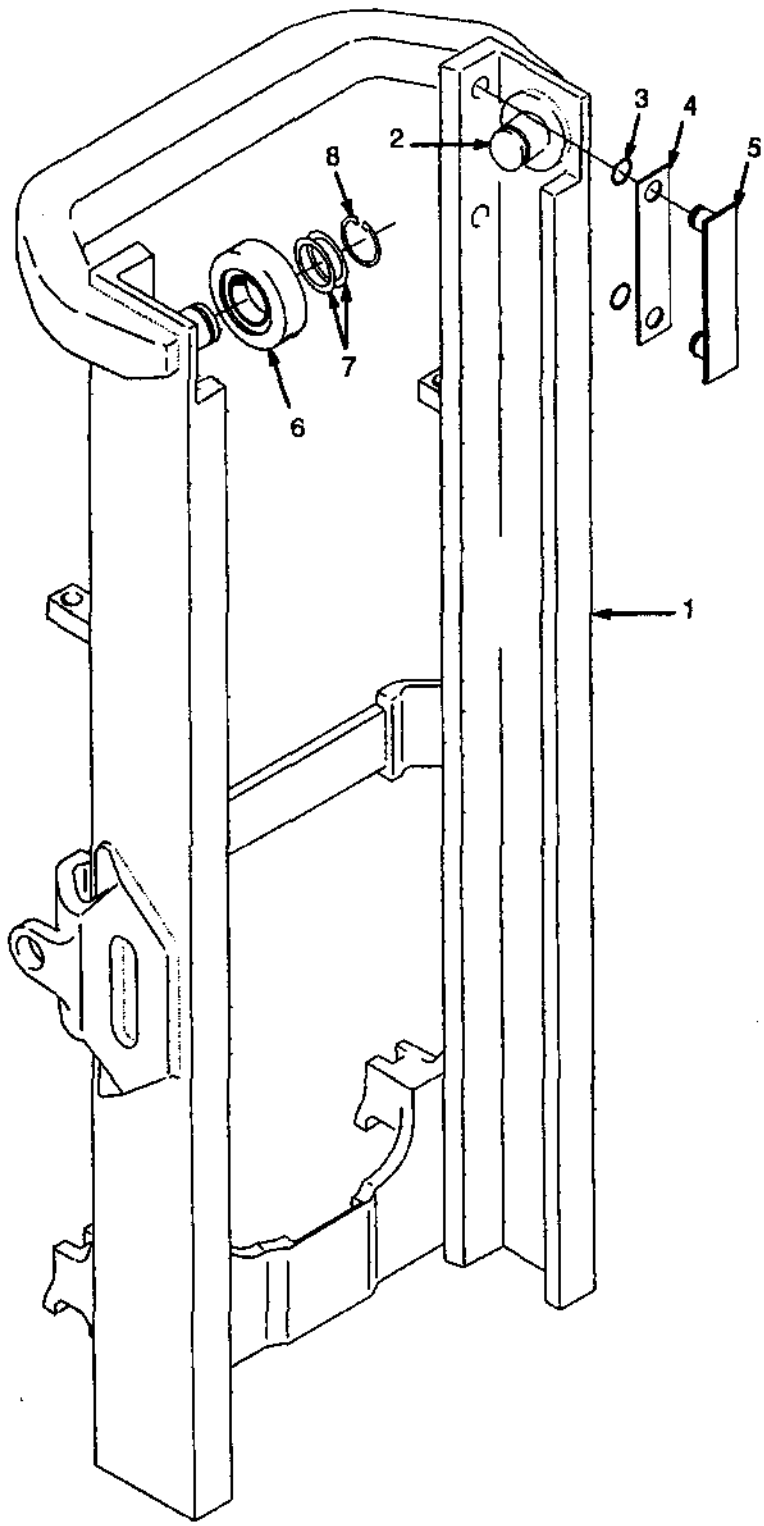
OUTER MAST
TWO-STAGE FFL

(Figure 145)



OUTER MAST
TWO-STAGE FFL

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2482 mm	2582 mm
	Mast Group No.	**B509 2482**	**B509 2582**
1	Outer Mast	1341000	1341001

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2360 mm	2460 mm
	Mast Group No.	**B564 2360**	**B564 2460**
1	Outer Mast	1341000	1341001

REF	PART NO.	NAME OF PART	QTY
[a]	....	Mast	1
1[a]	....	Outer Mast	1
2	1345216	Stubshaft	2
3	104506	O-Ring	4
4	131716	Shim (0,020 in	4
5	215211	Bearing Strip	2
6	1333396	Load Roller (Standard)	2
6	1333397	Load Roller (1,52 mm)	2
7	129387	Shim (0,020 in.)	AR
8	58901	Circlip	2

[a] ☛Table Above

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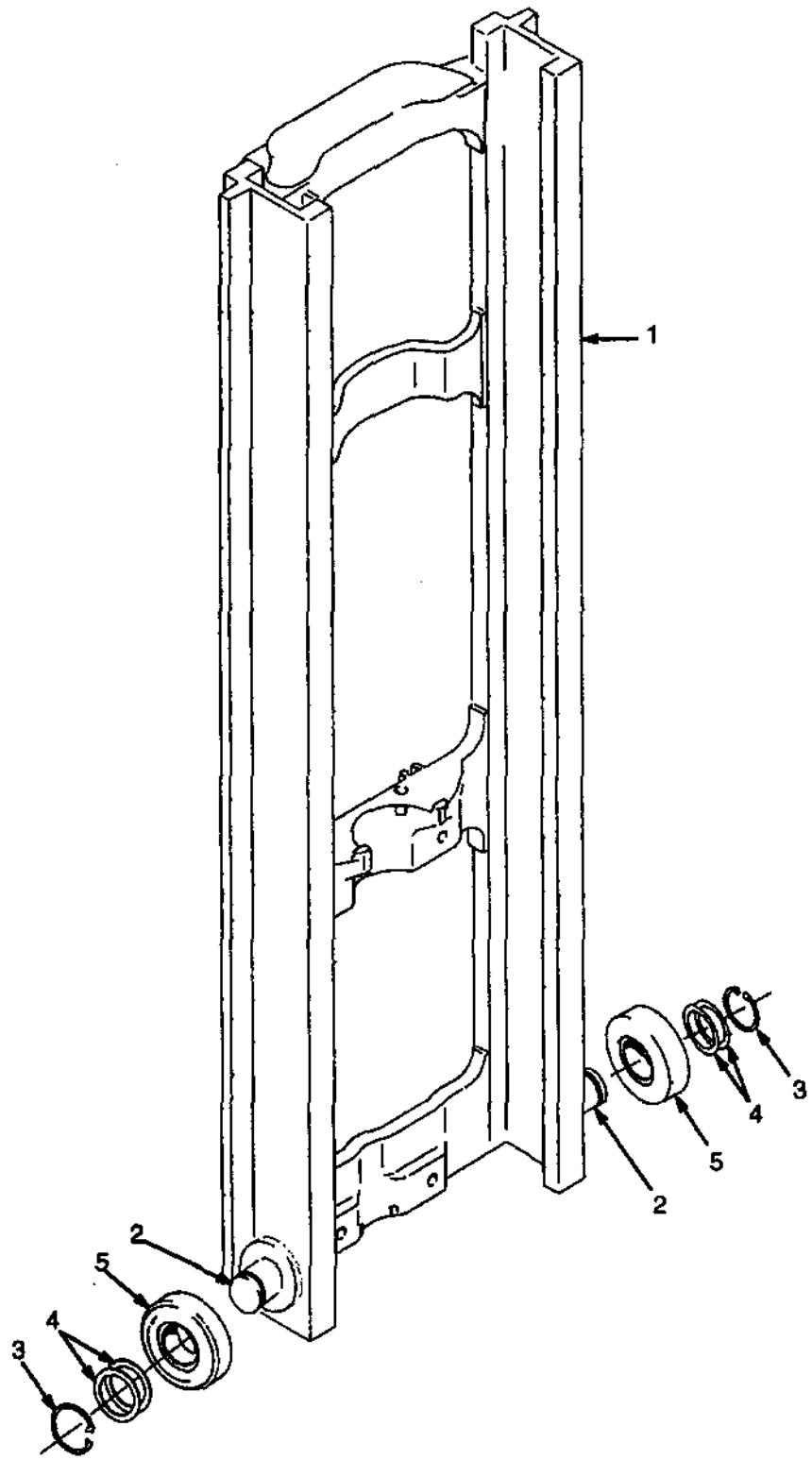
INNER MAST
TWO-STAGE FFL

(Figure 146)



INNER MAST
TWO-STAGE FFL

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2482 mm	2582 mm
	Mast Group No.	**B509 2482**	**B509 2582**
1	Inner Mast	1342469	1342470

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2360 mm	2460 mm
	Mast Group No.	**B564 2360**	**B564 2460**
1	Inner Mast	1342469	1342470

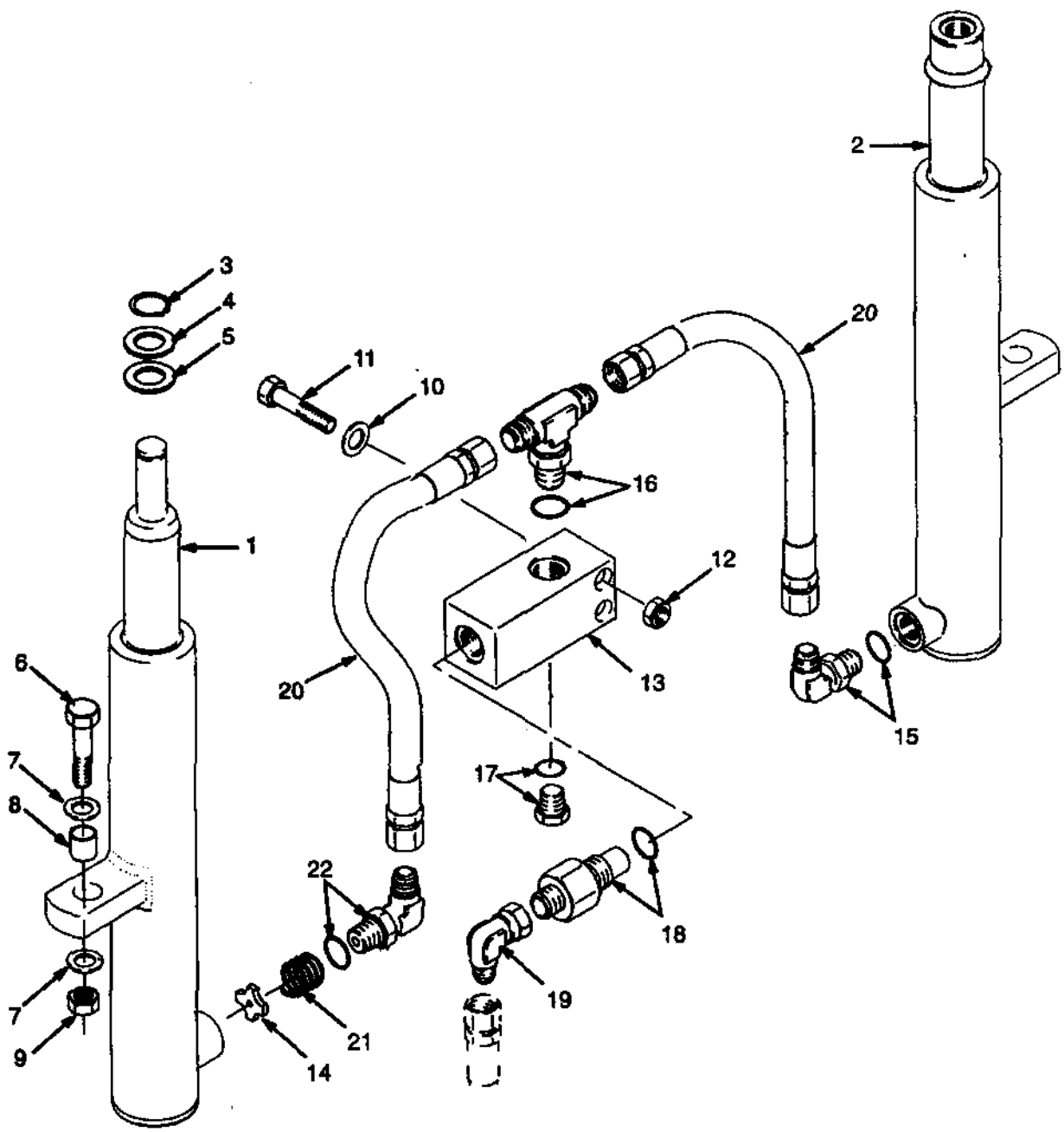
REF	PART NO.	NAME OF PART	QTY
a	....	Mast	1
1 a	....	Inner Mast	1
2	1345216	Stubshaft	2
3	58901	Circlip	2
4	129387	Shim	AR

REF	PART NO.	NAME OF PART	QTY
5	1333396	Load Roller (Standard)	2
5	1333397	Load Roller (1,52 mm)	2

a ☞Table Above

MAIN LIFT
TWO-STAGE FFL

(Figure 147)



MAIN LIFT
TWO-STAGE FFL

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

REF	PART NO.	NAME OF PART	QTY A	QTY B
1	....	Lift Cylinder (RH)	1	1
		☛Figure 149		
2	....	Lift Cylinder (LH)	1	1
		☛Figure 148		
3	131358	Circlip	1	1
4	1333382	Washer	1	1
5	1354915	Washer	AR	AR
5	1354916	Washer	AR	AR
5	1354917	Washer	AR	AR
6	292532	Hex Head Bolt	2	2
7	296422	Washer	4	4
8	323090	Spacer	2	2
9	300937	Nut	2	2
10	320157	Washer	2	2
11	214364	Hex Head Bolt	2	2
12	313828	Nut	2	2
13	1379687	Valve Housing	1	1
13 [a]	1333392	Valve Housing	1	1
14	357749	Washer	1	1
15	16560	Fitting	1	1
15	16485	O-Ring	1	1
16	16578	Fitting	1	1
16	16485	O-Ring	1	1
17 [a]	14603	Fitting	1	1
17 [a]	16486	O-Ring	1	1
18	8620050	Lowering Control Valve	1	..
18	316306	Lowering Control Valve	..	1
18	16982	O-Ring	1	1
19	16882	Fitting	1	1
20	1345403	Hose	2	2
21	337179	Spring	1	1
22	189595	Fitting	1	1
22	16485	O-Ring	1	1

[a] Optional

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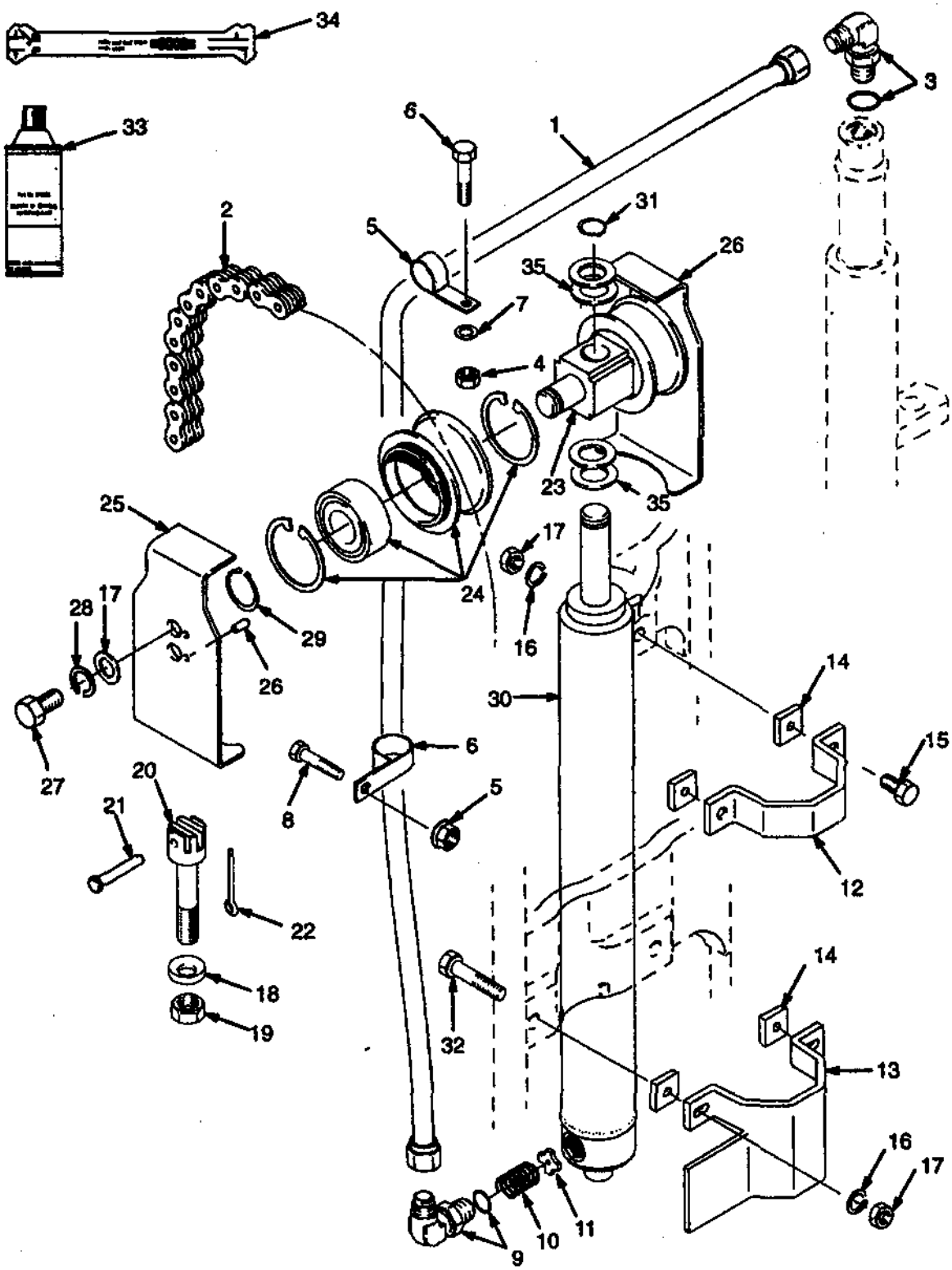
FREE-LIFT
TWO-STAGE FFL

(Figure 148)



FREE-LIFT
TWO-STAGE FFL

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2482 mm	2582 mm
	Mast Group No.	**B509 2482**	**B509 2582**
1	Tube	1345306	1345307
2	Lift Chain	182333	180030

H60-65XM

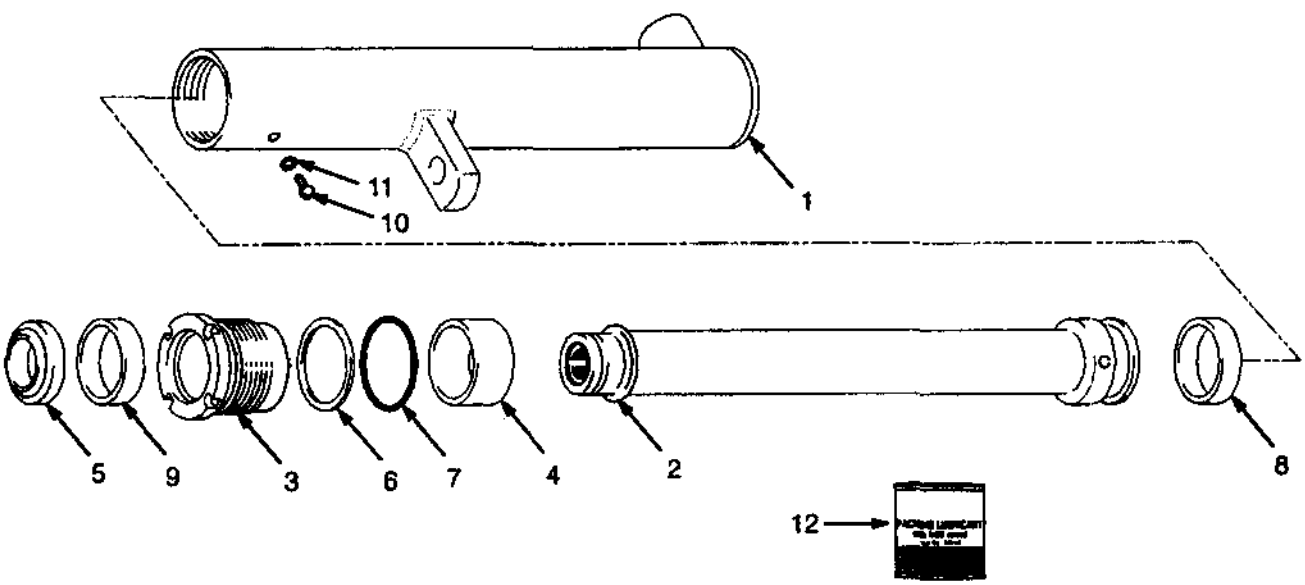
REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2360 mm	2460 mm
	Mast Group No.	**B564 2360**	**B564 2460**
1	Tube	1345306	1345307
2	Lift Chain	1342390	1342370

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

REF	PART NO.	NAME OF PART	QTY A	QTY B
a	....	Mast	1	1
1 a	....	Tube	1	1
2 a	....	Chain	2	2
3	1380036	Fitting	1	1
3	16485	0-Ring	1	1
4	316826	Nut	2	2
5	178119	Clamp	2	2
6	296028	Hex Head Bolt	1	1
7	320159	Washer	1	1
8	136985	Hex Head Bolt	1	1
9	1354956	Fitting	1	1
9	16485	0-Ring	1	1
10	154355	Spring	1	1
11	356505	Washer	1	1
12	1360387	Clamp	1	1
13	1354967	Bracket	1	1
14	1354902	Spacer		4
15	292529	Hex Head Bolt	2	2
16	320161	Washer	6	6
17	300937	Nut	4	4
18	297649	Base Ring	2	2
19	161003	Nut	2	2
20	1369357	Chain Anchor	2	2
21	323161	Pin	2	2
22	15200	Split Pin	2	2
23	1378690	Crosshead	1	1
24	1379682	Chain Sheave	2	2
24	1378692	Sheave	1	1
24	37752	Circlip	1	1
24	1378699	Bearing	1	1
25	1395285	Chain Guard	2	2
26	302461	Pin	2	2
27	292527	Hex Head Bolt	2	2
28	292683	Lockwasher	2	2
29	304526	Circlip	3	3
30	....	Free-Lift Cylinder ☞Figure 150	1	1
31	131358	Circlip	1	1
32	287837	Hex Head Bolt	2	2
33	171350	Chain Lubricant	AR	AR
34	599737	Chain Wear Scale	AR	AR
35	1362433	Spacer	4	4

a ☞Table Above

LIFT CYLINDER
TWO-STAGE FFL
LEFT HAND
(Figure 149)



LIFT CYLINDER
TWO-STAGE FFL
LEFT HAND

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2482 mm	2582 mm
	Mast Group No.	**B509 2482**	**B509 2582**
	Group No. Lift Cylinder (LH)	8600701 13422171	8600709 342218
1	Shell	1355874	1355886
2	Rod	1355875	1355887

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2360 mm	2460 mm
	Mast Group No.	**B564 2360**	**B564 2460**
	Group No. Lift Cylinder (LH)	8609901 1342275	8600902 1342276
1	Shell	1355874	1355886
2	Rod	1355875	1355887

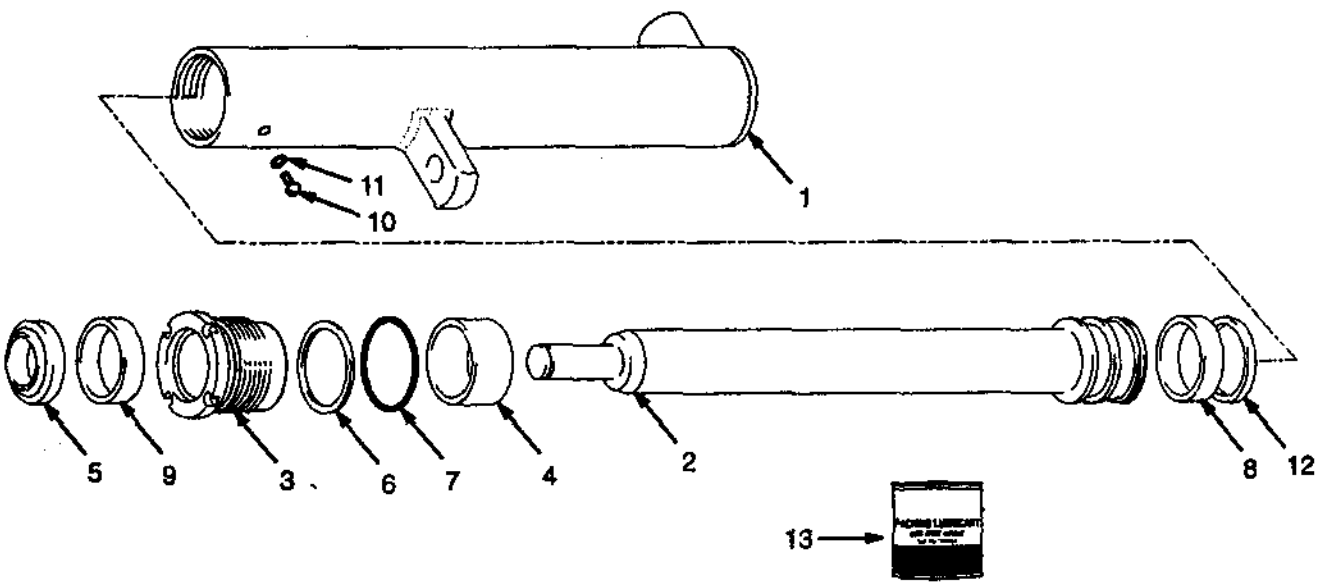
KEY:
A: H45-55XM
B: H60-65XM

REF	PART NO.	NAME OF PART	QTY A	QTY B
a	....	Mast	1	1
a	....	Lift Cylinder (Main)	1	1
1 [a]	....	Shell	1	1
2 [a]	....	Piston Rod	1	1
3	1355284	Retainer	1	1
4	1356058	Spacer		1
5 [b]	1319668	Rod Wiper	1	1
6 [b]	147972	Back-UpRing	1	1
7 [b]	59229	O-Ring	1	1
8 [b]	1356747	Wear Ring	1	1
9 [b]	1356749	Seal	1	1
10	295649	Screw	1	1
11 [b]	190887	Seal	1	1
12	186061	Packing Lube	AR	AR

[a] ☞Table Above
[b] Included In Seal Kit 1358963

LIFT CYLINDER
TWO-STAGE FFL
RIGHT HAND

(Figure 150)



LIFT CYLINDER
TWO-STAGE FFL
RIGHT HAND

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2482 mm	2582 mm
	Mast Group No.	**B509 2482**	**B509 2582**
	Group No. Lift Cylinder (RH)	8600801 1356754	8600709 1356755
1	Shell	1356778	1356779
2	Rod	1358932	1358933

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2360 mm	2460 mm
	Mast Group No.	**B564 2360**	**B564 2460**
	Group No. Lift Cylinder (RH)	8609901 1342275	8600902 1342276
1	Shell	1355874	1355886
2	Rod	1355875	1355887

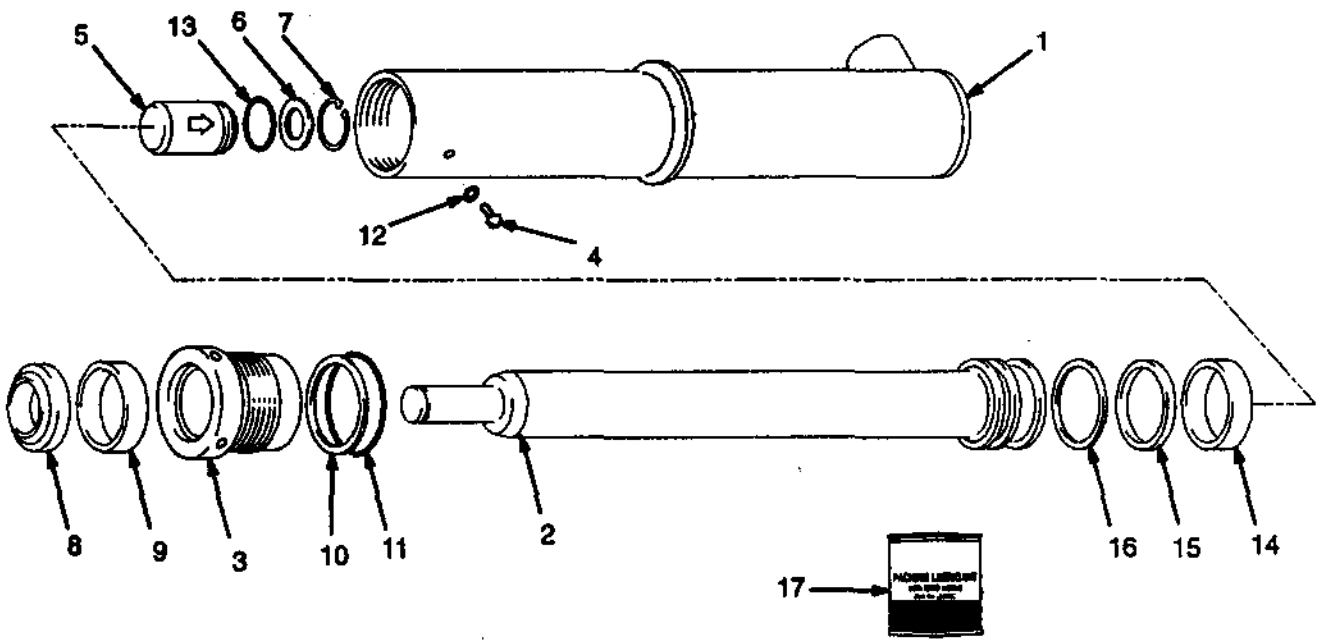
KEY:
A: H45-55XM
B: H60-65XM

REF	PART NO.	NAME OF PART	QTY A	QTY B
[a]	....	Mast	1	1
[a]	....	Lift Cylinder (Main)	1	1
1 [a]	....	Shell	1	1
2 [a]	....	Piston Rod	1	1
3	1355284	Retainer	1	1
4	1356058	Spacer	1	
5 [b]	1319668	Rod Wiper	1	1
6 [b]	147972	Back-Up Ring	1	1
7 [b]	59229	O-Ring	1	1
8 [b]	1356747	Wear Ring	1	1
9 [b]	1356749	Seal	1	1
10	295649	Screw	1	1
11 [b]	190887	Seal	1	1
12 [b]	1356748	Piston Ring	1	1
13	186061	Packing Lube	AR	AR

[a] ☞Table Above
[b] Included In Seal Kit 1360142

FREE LIFT CYLINDER
TWO-STAGE FFL

(Figure 151)



FREE LIFT CYLINDER
TWO-STAGE FFL

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2482 mm	2582 mm
	Mast Group No.	**B509 2482**	**B509 2582**
	Group No. *Lift Cylinder*	860240 *1370749*	8603402 *1366729*
1	Shell	2307457	2308980
2	Rod	1356295	1356298

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2360 mm	2460 mm
	Mast Group No.	**B564 2360**	**B564 2460**
	Group No. Lift Cylinder	8603501 1369843	8603502 1369544
1	Shell	2309136	2307201
2	Rod	1356658	1356667

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

REF	PART NO.	NAME OF PART	QTY A	QTY B
a	....	Mast	1	1
a	....	Free-Lift Cylinder	1	1
1 [a]	....	Shell	1	1
2 [a]	....	Rod	1	1
3	1356292	Retainer	1	..
3	*1356661*	*Retainer*	..	*1*
4	1361302	Screw	1	1
5	257913	Check Valve	1	1
6	297531	Washer	1	1
7	187388	Circlip	1	1
8 [bc]	2013099	Rod Wiper	1	1
9 [bc]	1358970	Rod Wiper	1	1
10 [b]	147973	Back-UpRing	1	..
10 [c]	164840	Back-UpRing	..	1
11 [b]	90263	0-Ring	1	..
11 [c]	15880	0-Ring	..	1
12 [bc]	1 90887	Seal	1	1
13 [bc]	39348	0-Ring	1	1
14 [b]	1358972	Wear Ring	1	..
14 [c]	*636941*	Wear Ring	..	*1*
15 [b]	2013088	Seal	1	..
15 [c]	309062	Seal	..	1
16 [b]	2013089	Back-UpRing	1	..
16 [c]	637565	Back-UpRing	..	1
17	186061	Packing Lubricant	AR	AR

[a] ☞Table Above
[b] Included In Seal Kit 1358969
[c] Included In Seal Kit 1356662

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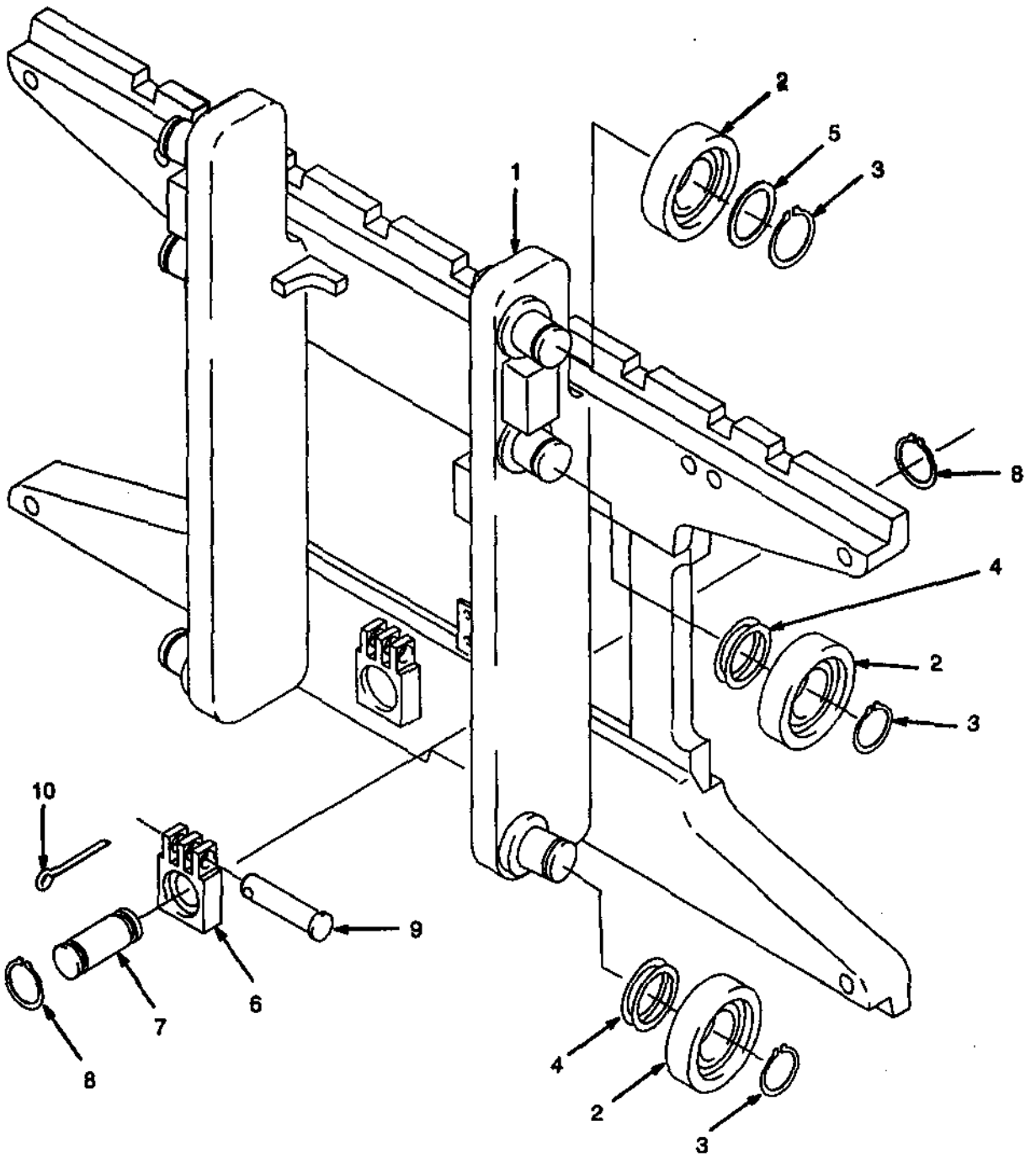
CARRIAGE
TWO-STAGE FFL
SIX ROLLER
(Figure 152)



CARRIAGE
TWO-STAGE FFL
SIX ROLLER

	H45-55XM 1067mm	H45-55XM 1219mm	H60-65XM 1067mm	H60-65XM 1219mm
Group No.	8500011	8500152	8500012	8500157
Carriae	1343844	1360637	1343845	1360633

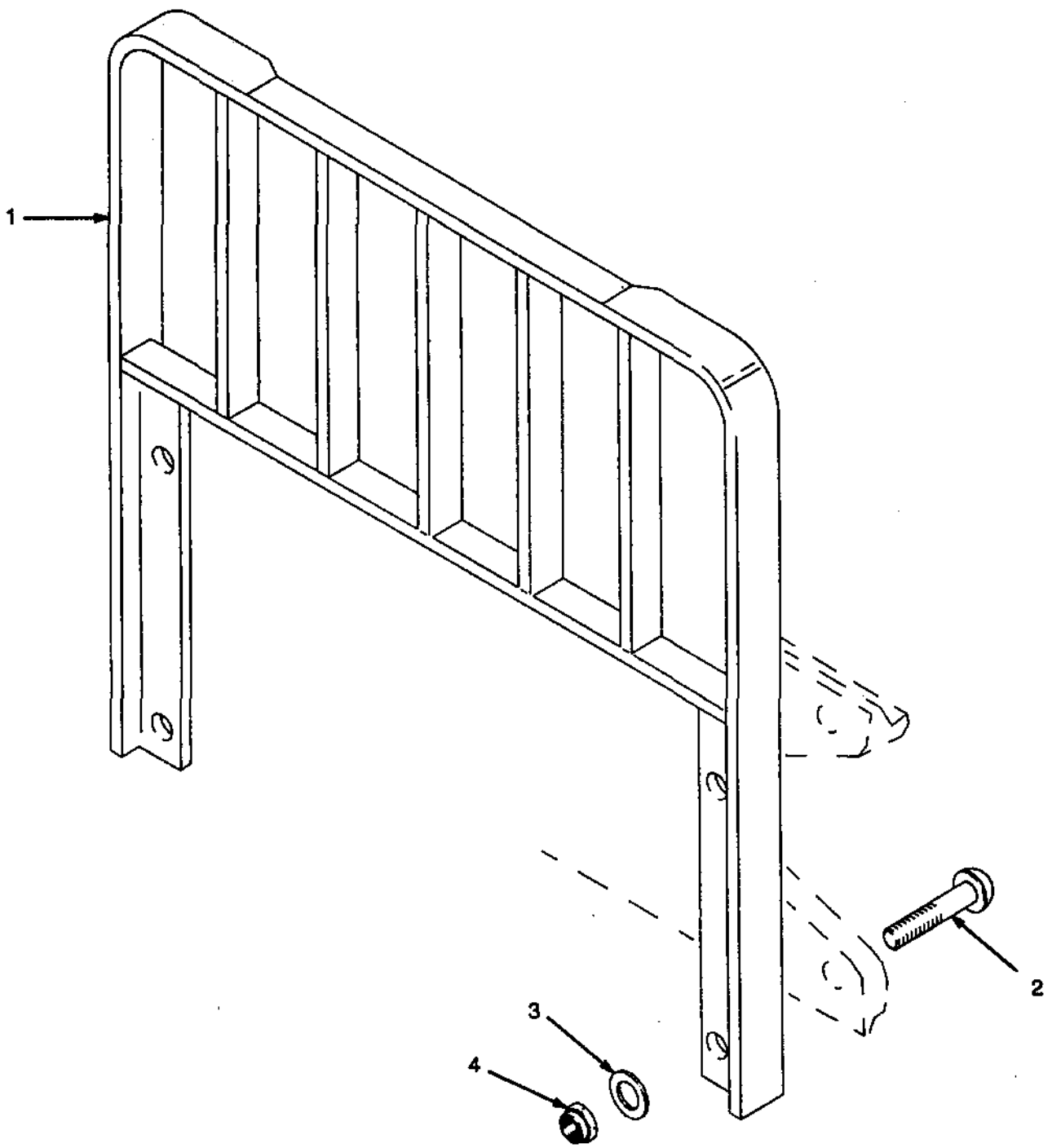
KEY:
A: H45-55XM
B: H60-65XM

REF	PART NO.	NAME OF PART	QTY A	QTY B
[a]	....	Carriage Assy	1	..
[a]	....	Carriage Assy	..	1
1	1345239	Frame	1	..
1	1345240	Frame	..	1
1	1345216	Stubshaft	6	6
2	1345219	Load Roller (Standard)	6	6
2	1345220	Load Roller (1,52 mm)	6	6
3	12891	Circlip	6	6
4	1345263	Shim	AR	AR
5	366116	Spacer	2	2
6	1369345	Chain Anchor	2	..
6	1369344	Chain Anchor	..	2
7	317735	Pin	2	2
8	131358	Circlip	4	4
9	323161	Pin	2	2
10	15200	Split Pin	2	2

[a] ☞Table Above

LOAD BACKREST EXTENSION
TWO-STAGE FFL

(Figure 153)



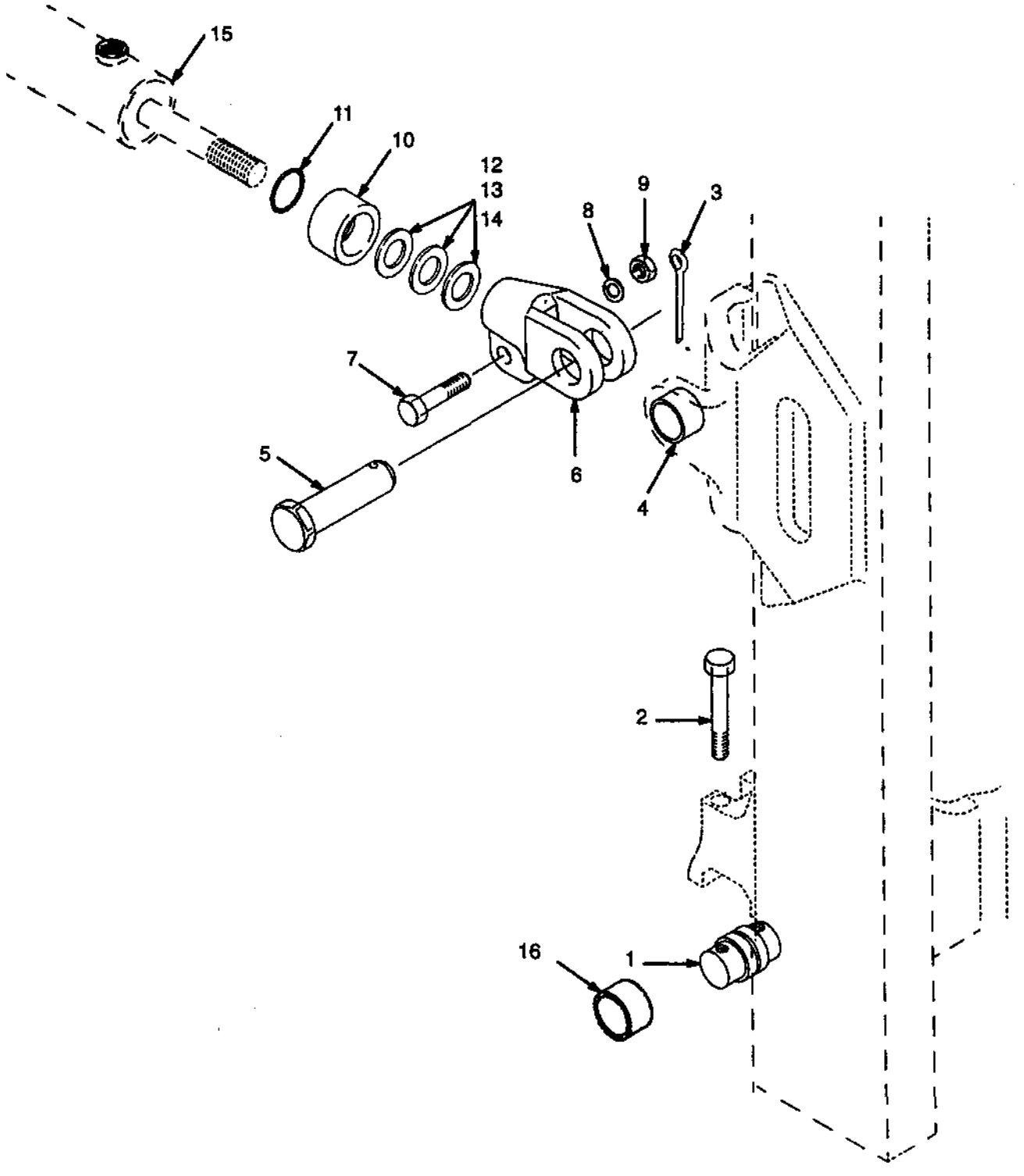
LOAD BACKREST EXTENSION
TWO-STAGE FFL

KEY:
A: H45-S5XM
B: H60-65XM

REF	PART NO.	NAME OF PART	QTY A	QTY B
1 [c]	1338642	Load Backrest Extension	1	..
1 [c]	1338645	Load Backrest Extension	..	1
1 [d]	1376338	Load Backrest Extension	1	..
1 [a]	1345267	Load Backrest Extension	..	1
2	1343990	Hex Head Bolt	4	..
2	1354923	Hex Head Bolt	..	4
3	221771	Washer	4	4
3 [b]	296423	Washer	4	4
4	300937	Nut	4	4

[a] Polished Fork With Full Bottom Taper
[b] Optional
[c] 42 in.
[d] 48 in.

MAST INSTALLATION
TWO-STAGE FFL
(Figure 154)



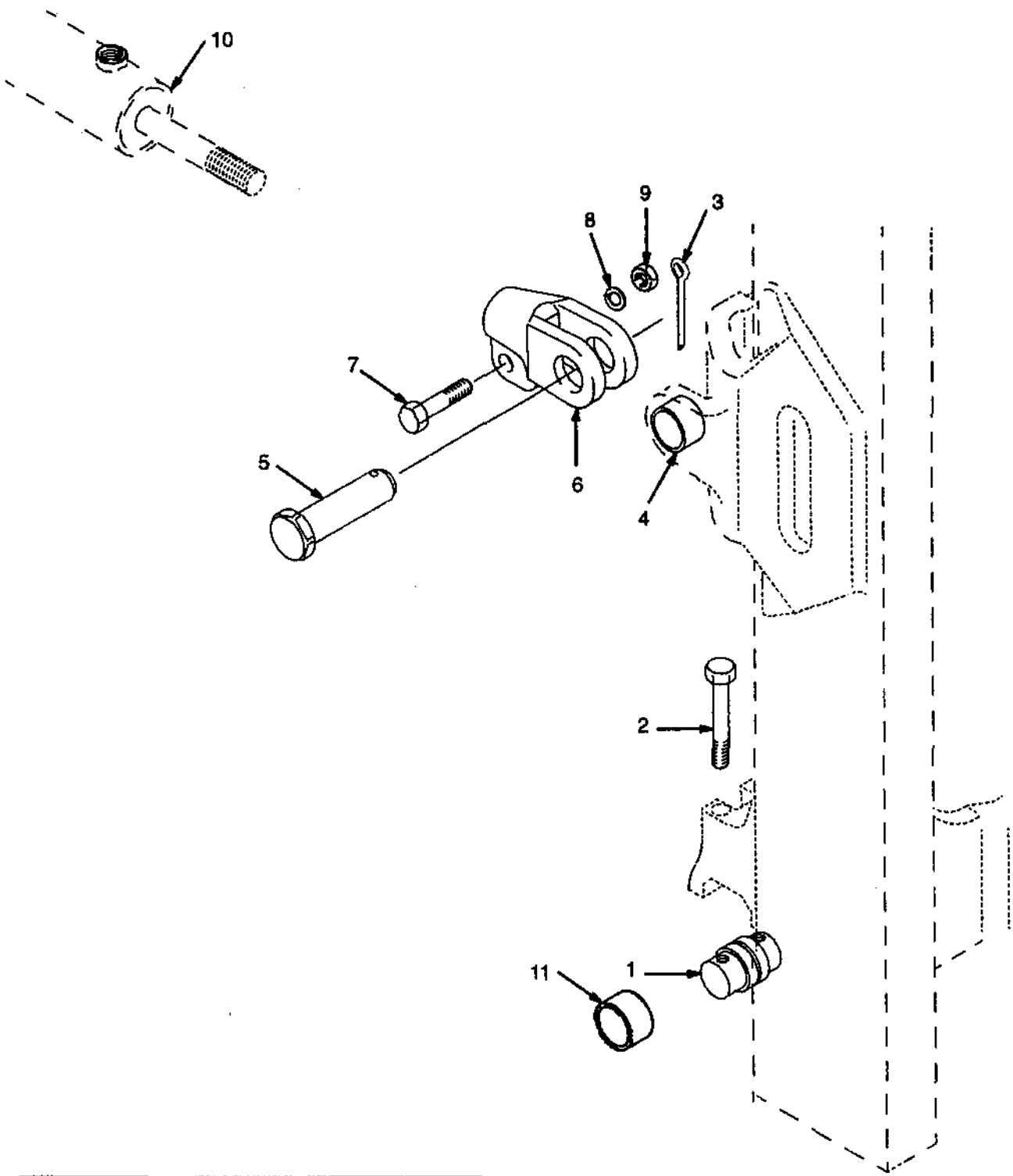
MAST INSTALLATION
TWO-STAGE FFL

KEY:
A: 6° Forward Tilt/10° Back Til
B: 6° Forward Tilt/6° Back Tilt
C: 6° Forward Tilt/5° Back Tilt

REF	PART NO.	NAME OF PART	QTY A	B	C
1	1376424	Pin	2	2	2
2	1376423	Hex Head Bolt	4	4	4
3	15236	Split Pin	2	2	2
4	300982	Bush	2	2	2
5	1345354	Pin	2	2	2
6	1307641	Rod End	2	2	2
7	293650	Hex Head Bolt	2	2	2
8	292683	Lockwasher	2	2	2
9	216877	Nut	2	2	2
10	1451788	Spacer		2	..

REF	PART NO.	NAME OF PART	QTY A	B	C
10	384101	Spacer	..	..	2
11	55434	0-Ring	..	2	2
12	134675	Shim	..	AR	AB
13	1325119	Shim	..	AR	AR
14	1361948	Shim		..	AR
15	....	Tilt Cylinder. ☞Figure 114	2	2	2
16	1333385	Bush		2	..
16	1380115	Bush (Optional)		2	2

MAST INSTALLATION
TWO-STAGE FFL
(Figure 155)



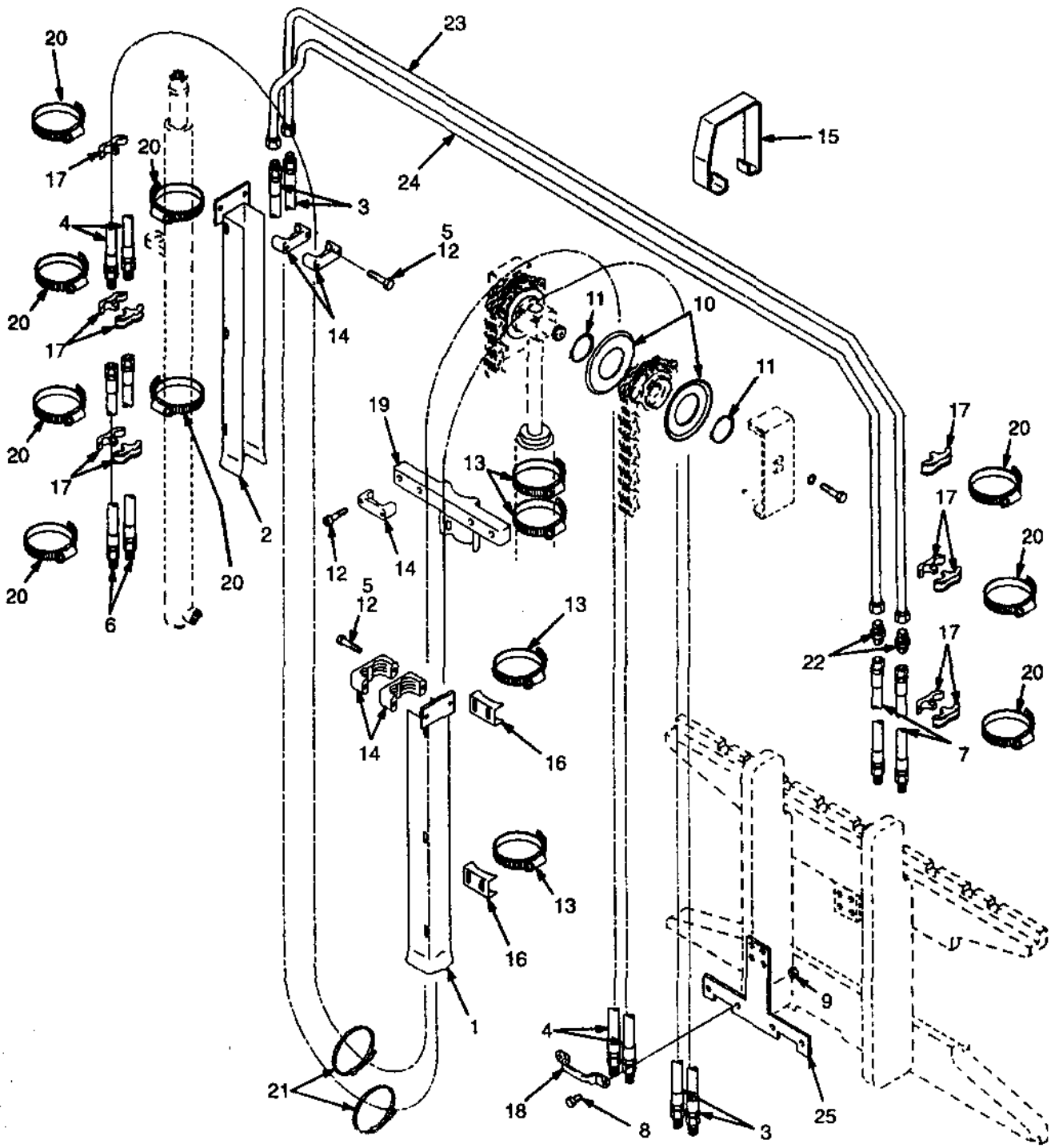
MAST INSTALLATION
TWO-STAGE FFL

REF	PART NO.	NAME OF PART	QTY
1	1376424	Pin	2
2	1376423	Hex Head Bolt	4
3	15236	Split Pin	2
4	300982	Bush	2
5	1345354	Pin	2
6	1356318	Rod End	2
7	293650	Hex Head Bolt	2
8	292683	Lockwasher	2
9	216877	Nut	2
10	....	Tilt Cylinder ☞*Figure 114*	2
11	1333385	Bush	2
11	1380115	Bush (Optional)	2

HEADER HOSE

TWO-STAGE FFL

(Figure156)



HEADER HOSE
TWO-STAGE FFL

H45-55XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2482 mm	2582 mm
	Mast Group No.	B509 2482	B509 2582
1	Channel	1365500	1365500
2	Channel	1365504	1365506
3	Hose	1390420	1390421
4	Hose	1390426	1369633
23	Tube	1360326	1360327
24	Tube	1360356	1360357
25	Bracket	1381771	1381771

H60-65XM

REF.	NAME OF PART 1 2 3 4	LIFT HEIGHT TO BOTTOM OF FORKS	
		2360 mm	2460 mm
	Mast Group No.	B564 2360	B564 2460
1	Channel	1365500	1365500
2	Channel	1365504	1365506
3	Hose	1390420	1390421
4	Hose	1390426	1369633
23	Tube	1360326	1360334
24	Tube	1360356	1360357
25	Bracket	1381772	1381772

HEADER HOSE
TWO-STAGE FFL

KEY:
A: Three Function
B: Four Function

REF	PART NO.	NAME OF PART	QTY A	QTY B
a	....	Mast	1	1
1 a	....	Channel	1	1
2 a	....	Channel	1	1
3 a	....	Hose	2	2
4 a	....	Hose		2
5	293799	Hex Head Bolt		4
6	1390411	Hose		2
7	1390410	Hose	2	2
8	136749	Hex Head Bolt	6	8
9	313828	Nut	6	8
10	1345199	Hose Guide.	2	4
11	1345204	Circlip	2	4
12	293796	Hex Head Bolt	6	6
13	1360508	Clamp	4	4
14	1360386	Clamp	3	6
15	1365062	Clip	1	1
16	1345423	Clamp	2	2
17	1353530	Clamp	5	10
18	1369333	Clamp	1	2
19	1354918	Bracket	1	1
20	1360507	Clamp	8	8
21	2004005	Strap Clamp	1	2
22	14692	Fitting	2	2
23 a	....	Tube	1	1
24 a	....	Tube	1	1
25 a	....	Bracket	1	1

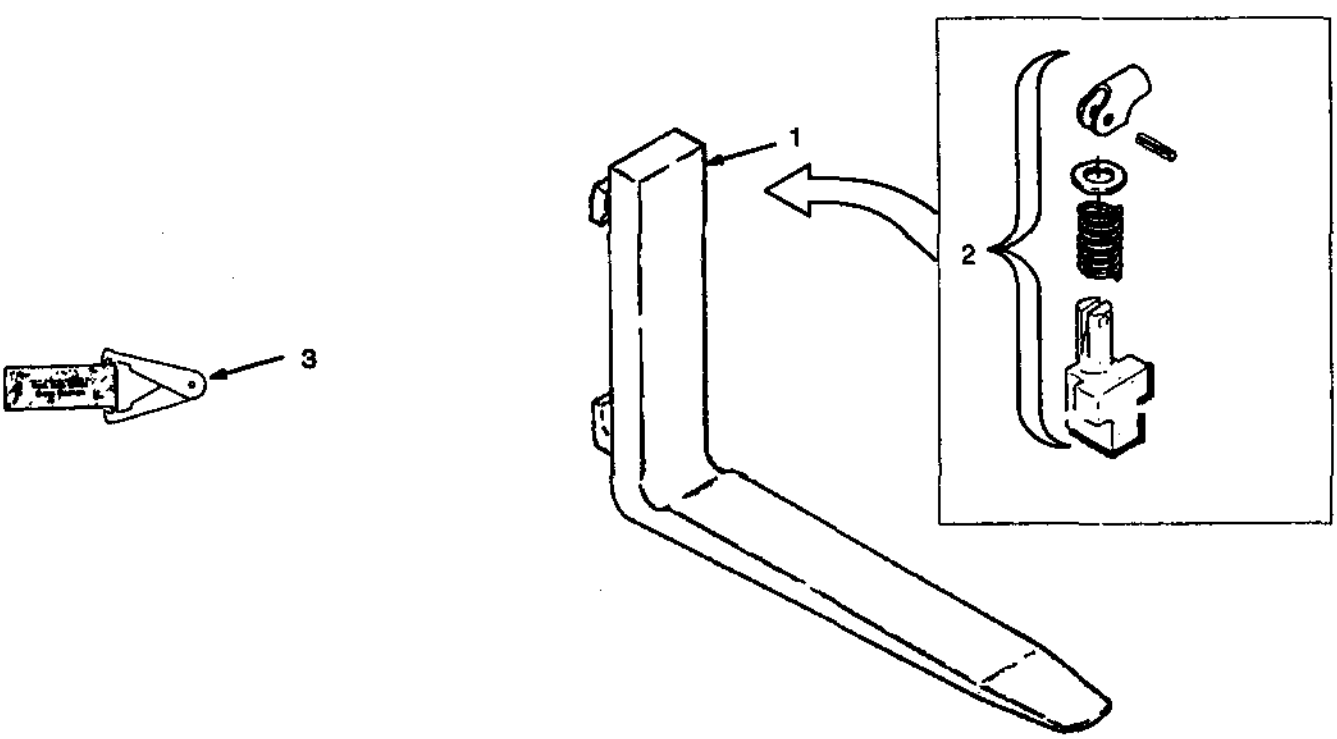
a ☞Table

NOTES

FORKS

TWO-STAGE FFL

(Figure 157)



FORKS
TWO-STAGE FFL

H45-55XM

	1 2 3 4	Standard Taper		Full Bottom Taper	Qty
1	Fork	125 mm x 40 mm	100 mm x 40 mm	125 mm x 40 mm	
	762mm	1326660	384210	....	2
	914mm	1326661	384211	1338087	
	1067mm	1326663	384213	1338088	
	1219mm	1326664	384214	1338089	
	1372mm	1326665	384215	....	
	1524mm	1326666	384216	....	
2	Latch	369795	369795	369795	1
3	Fork Tool	3020387	3020387	3020387	AR

H45-55XM

REF	NAME OF PART 1 2 3 4	Standard Taper		Full Bottom Taper	Qty
1	Fork	100 mm x 45 mm	100 mm x 40 mm	125 mm x 40 mm	
	914mm	1333018	384210	....	2
	1076 mm	1333020	367420	1338097	
	1207mm	....	....	1338098	
	1219mm	1333021	367421	....	
	1372mm	1333022	367422	1332745	
	1524mm	1333023	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