

55723 DRILLHEAD ASSEMBLY
(SEE SHEET MM- 72)

DROPMAST ASSEMBLY
(SEE SHEET MN- 256)

54953 MAST TILT CYLINDER
(SEE SHEET HC- 455)

277176 STAB JACK ASSEMBLY
(SEE SHEET MY- 124P)

152419 BOOM SWING CYLINDER
(SEE SHEET HC- 533)

BOOM PIVOT ARRGN'T
(SEE SHEET MB- 415)

152428 MAST SWING CYLINDER
(SEE SHEET HC- 465A)

MAST PIVOT ARRANGEMENT
(SEE SHEET MB- 343)

SUPPORT POST & STAB JACK
MOUNT ASSEMBLY (SEE SHEET
MN- 257)

152361 DROPMAST CYLINDER
(SEE SHEET HC- 465A)

54702 STAB JACK CYLINDER
(SEE SHEET HC- 270)

INNER BOOM ASSEMBLY
(SEE SHEET MB- 674)

54111 BOOM EXTEND/SUMP CYLINDER
(SEE SHEET HC- 331)

OUTER BOOM ASSEMBLY
(SEE SHEET MB- 646)

SHEET NO.

1 OF 2

TITLE

LOCATIONS FOR DRILL UNIT

DATE

J.H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W.VA.

INDEX FOR DRILLING UNIT

<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>SHEET NO.</u>	<u>NO. REQ'D</u>
BOOM EXTEND CYLINDER	54111	HC-331	2
STAB JACK CYLINDER	54702	HC-451	2
MAST TILT CYLINDER	54953	HC-455	2
MAST PIVOT CYLINDER	152428	HC-465A	2
DROPMAST CYLINDER	152361	HC-465A.1	2
DRILL FEED CYLINDER	56897 / 53328	HC-510	2
BOOM SWING CYLINDER	152419	HC-533	2
HYDRAULIC DRILLHEAD MOTOR	41849	HM-89	2
MAST PIVOT ARRANGEMENT		MB-343	2
BOOM PIVOT ARRANGEMENT		MB-415	2
OUTER BOOM ASSEMBLY		MB-646	2
INNER BOOM ASSEMBLY		MB-674	2
CARRIAGE ASSEMBLY		MF-165	2
CROSSHEAD ASSEMBLY	44291	MK-25	4
HYDRAULIC DRILLGUIDE	83355	ML-40	2
DRILLHEAD ASSEMBLY	55723	MM-72	2
DROPMAST ASSEMBLY		MN-256	2
SUPPORT POST & STAB JACK MOUNT		MN-257	2
OUTER MAST ASSEMBLY	57006	MS-105	2
INNER MAST ASSEMBLY	57007	MS-106	2
STAB JACK ASSEMBLY	277176	MY-124P	2

INDEX FOR DRILLING UNIT

<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>SHEET NO.</u>	<u>NO. REQ'D</u>
FOOT HOSE GUARD ASSEMBLY	205964	MY-866	2

SHEET NO.

TITLE

DATE

J.H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W.VA.

HC-331

54111 HYDRAULIC CYLINDER ASSEMBLY

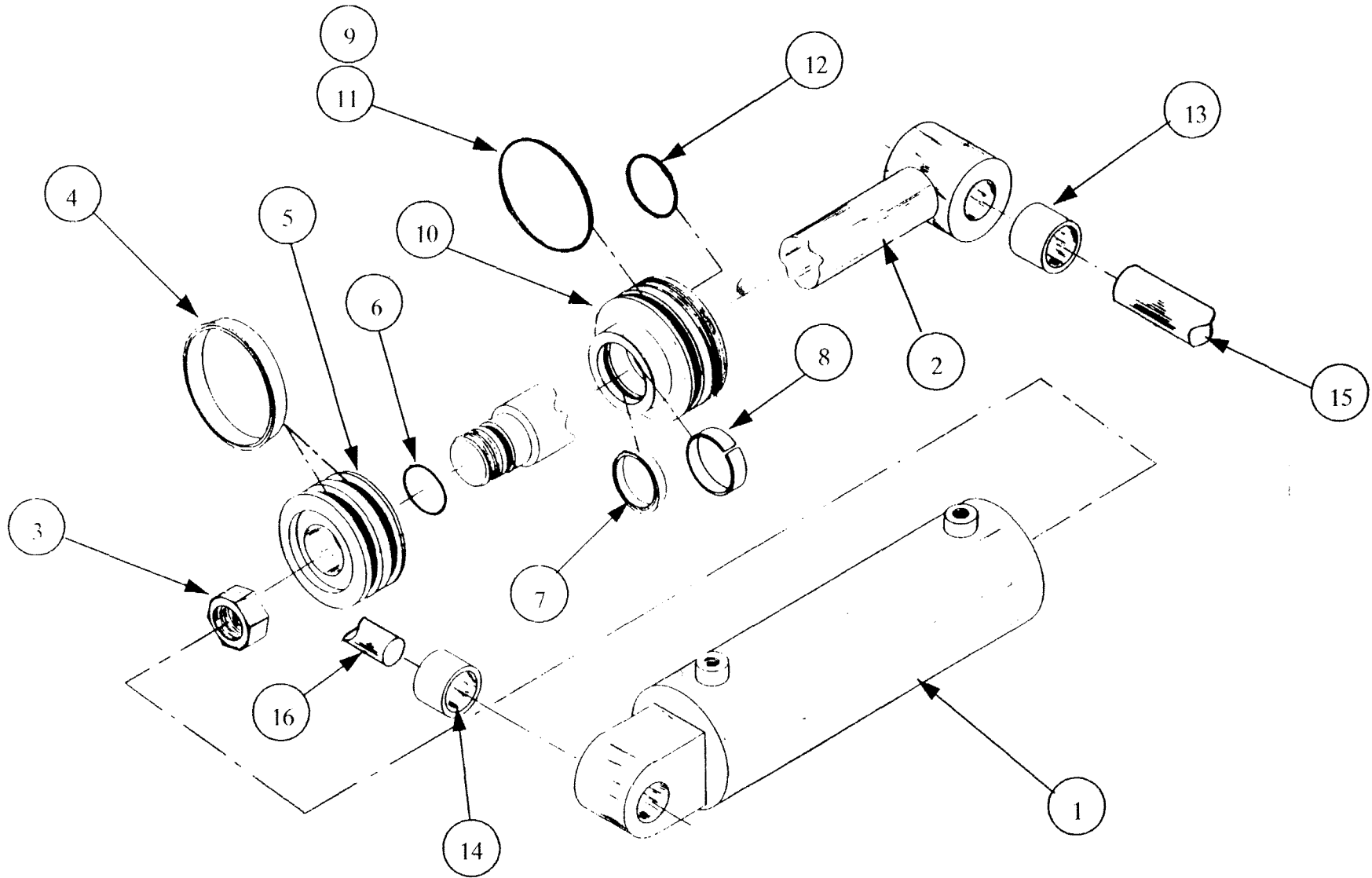
9/8/92

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>NO. REQ'D</u>
1	OUTER SHELL ASSEMBLY	<u>41481</u>	1
2	ROD ASSEMBLY	<u>48080</u>	1
3	NUT W/ 30424 ROLL PIN	20908	1
* 4	U-CUP	22271	2
5	PISTON	31873	1
* 6	O-RING	389	1
* 7	U-CUP	22270	1
* 8	WEAR RING	22379	1
* 9	BACK-UP RING	21397	1
10	GLAND	31957	1
* 11	O-RING	403	1
* 12	WIPER	22320	1
13	BUSHING	2744	1
14	BUSHING	52	1
15	PIN (ROD END)	<u>33334</u>	1
16	PIN (SHELL END)	<u>36349</u>	1

NOTE: * INDICATES PARTS INCLUDED IN 22415 PACKING KIT

NOT SHOWN: 33552 1/4" X 1-1/2" COTTER PIN
(FOR THE ROD END PIN)

NOT SHOWN: 170653 KEEPER, 20176 1/4"-20 X
1/2" HEX HEAD CAP SCREW, & 22011
LOCKWASHER (FOR THE SHELL END PIN)



BOOM EXTEND/SUMP CYLINDER

SHEET NO.

HC-331

TITLE

54111 HYDRAULIC CYLINDER ASSEMBLY

DATE

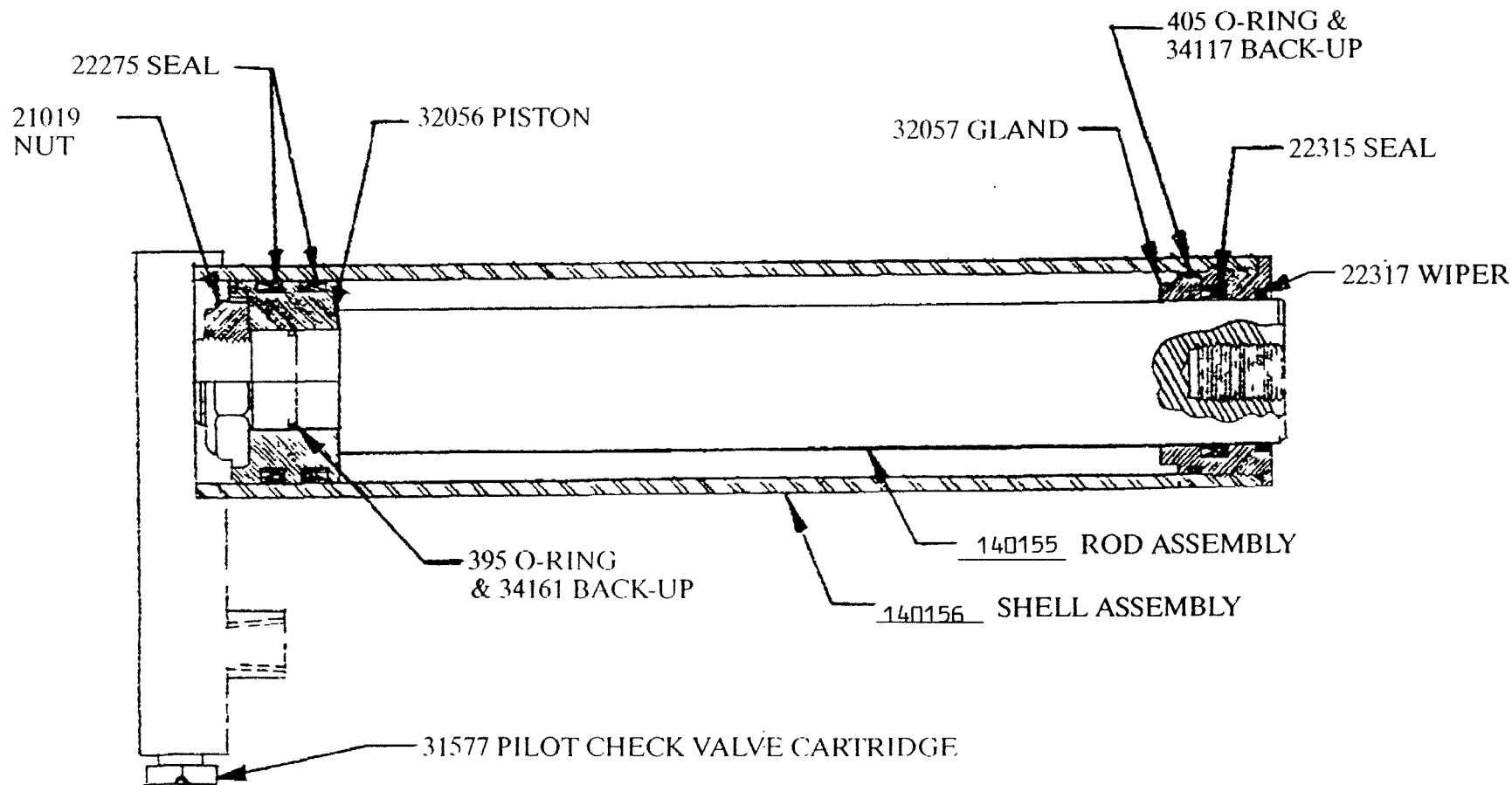
9/8/92

J.H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W.VA.

NOTE: 22475 PACKING KIT



STAB JACK CYLINDER

SHEET NO.

HC-451

TITLE

54702 HYDRAULIC CYLINDER ASSEMBLY

DATE

5/10/82

J.H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W.VA.

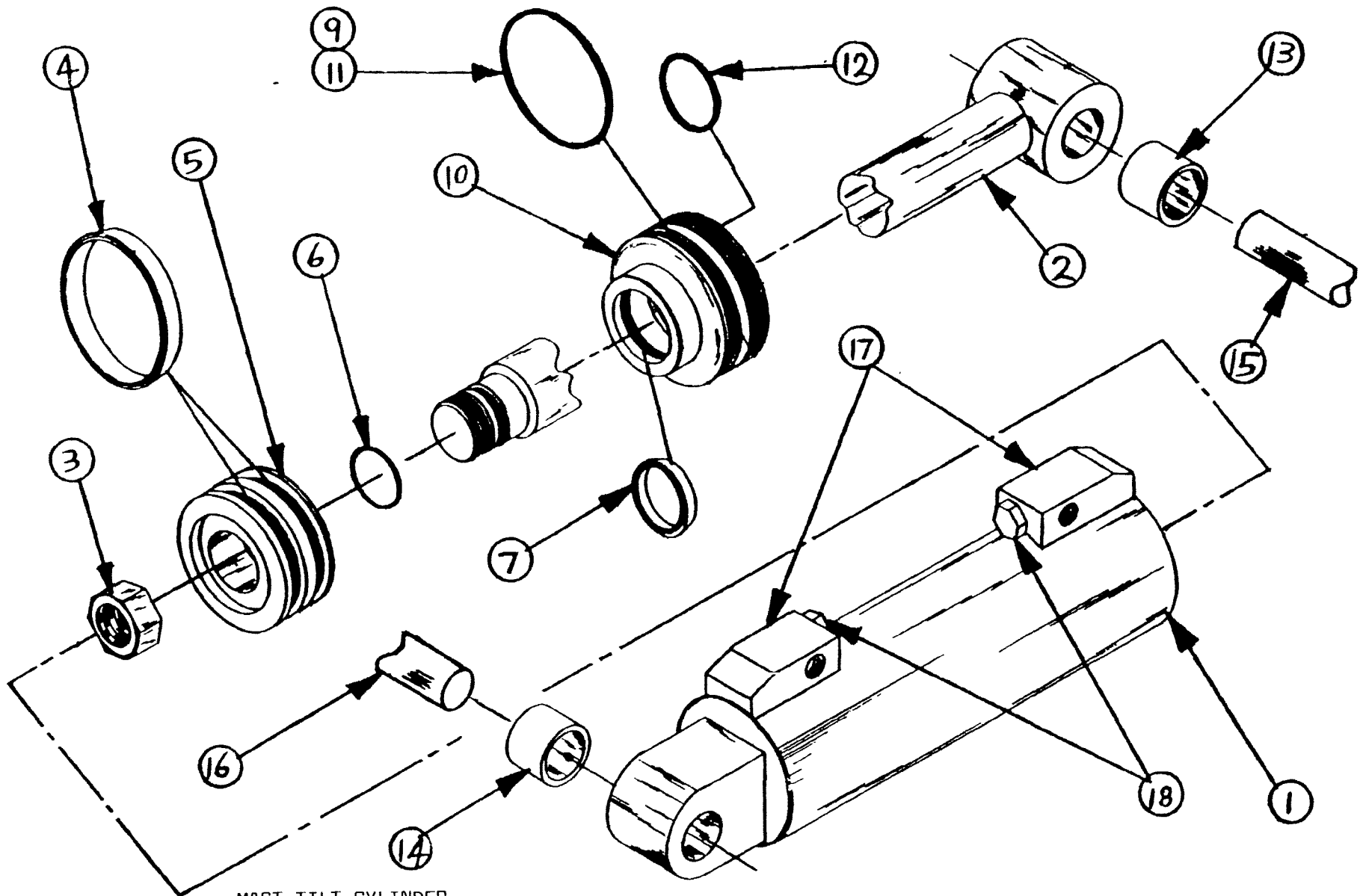
<i>SHEET NO.</i>	<i>TITLE</i>	<i>DATE</i>	J.H. FLETCHER & CO.	
HC-455	<u>54953</u> HYDRAULIC CYLINDER ASSEMBLY	2-8-83	402 HIGH STREET	HUNTINGTON, W.VA.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>NO. REQ'D</u>
1	OUTER SHELL ASSEMBLY	140489	1
2	ROD ASSEMBLY	140490	1
3	NUT W/22200 WASHER	20952	1
4	U-CUP	22275	2
5	PISTON	32184	1
6	O-RING & (2) 25104 BACK-UP RINGS	25103	1
7	U-CUP	22309	1
9	BACK-UP RING	34117	1
10	GLAND	32051	1
11	O-RING	405	1
12	WIPER	22308	1
13	BUSHING	2744	1
14	BUSHING	52	1
15	PIN (ROD END)	35623	1
16	PIN (SHELL END)	33210	1
17	CHECK VALVE BLOCK	163239	2
18	PILOT CHECK VALVE CARTRIDGE (SEE SHEET HV-401 IN VALVE SECTION)	31577	2

NOTE: 35300 PACKING KIT

NOT SHOWN: 33552 1/4" X 1-1/2" COTTER PIN
(FOR SHELL END PINS)

NOT SHOWN: 176794 KEEPER, 34366 3/8"-16 X 1/2"
HEX HEAD CAP SCREW, & 22010 LOCK-
WASHER (FOR ROD END PINS)



MAST TILT CYLINDER

SHEET NO.

TITLE

DATE

HC-455

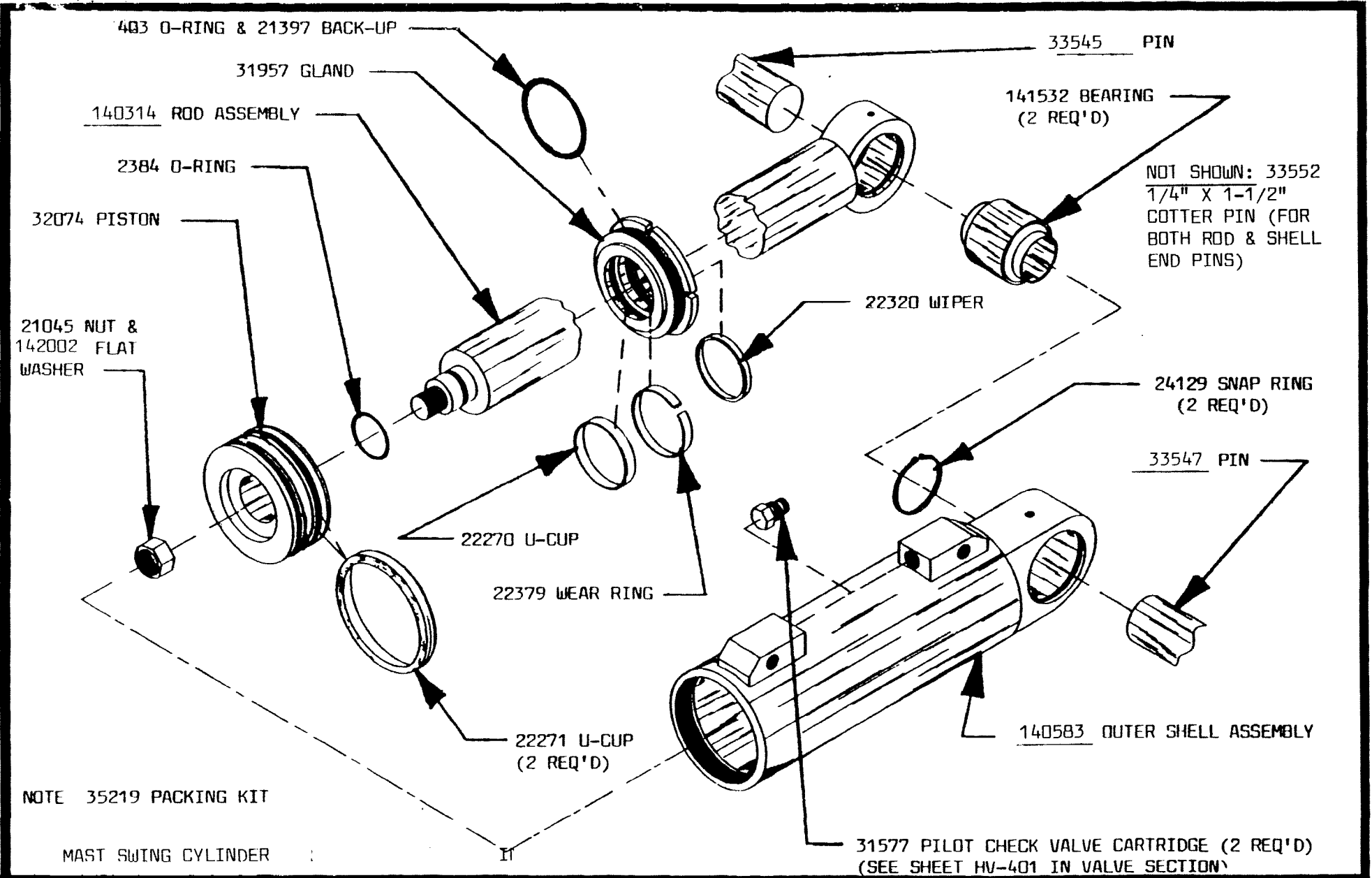
54953 HYDRAULIC CYLINDER ASSEMBLY

2-8-83

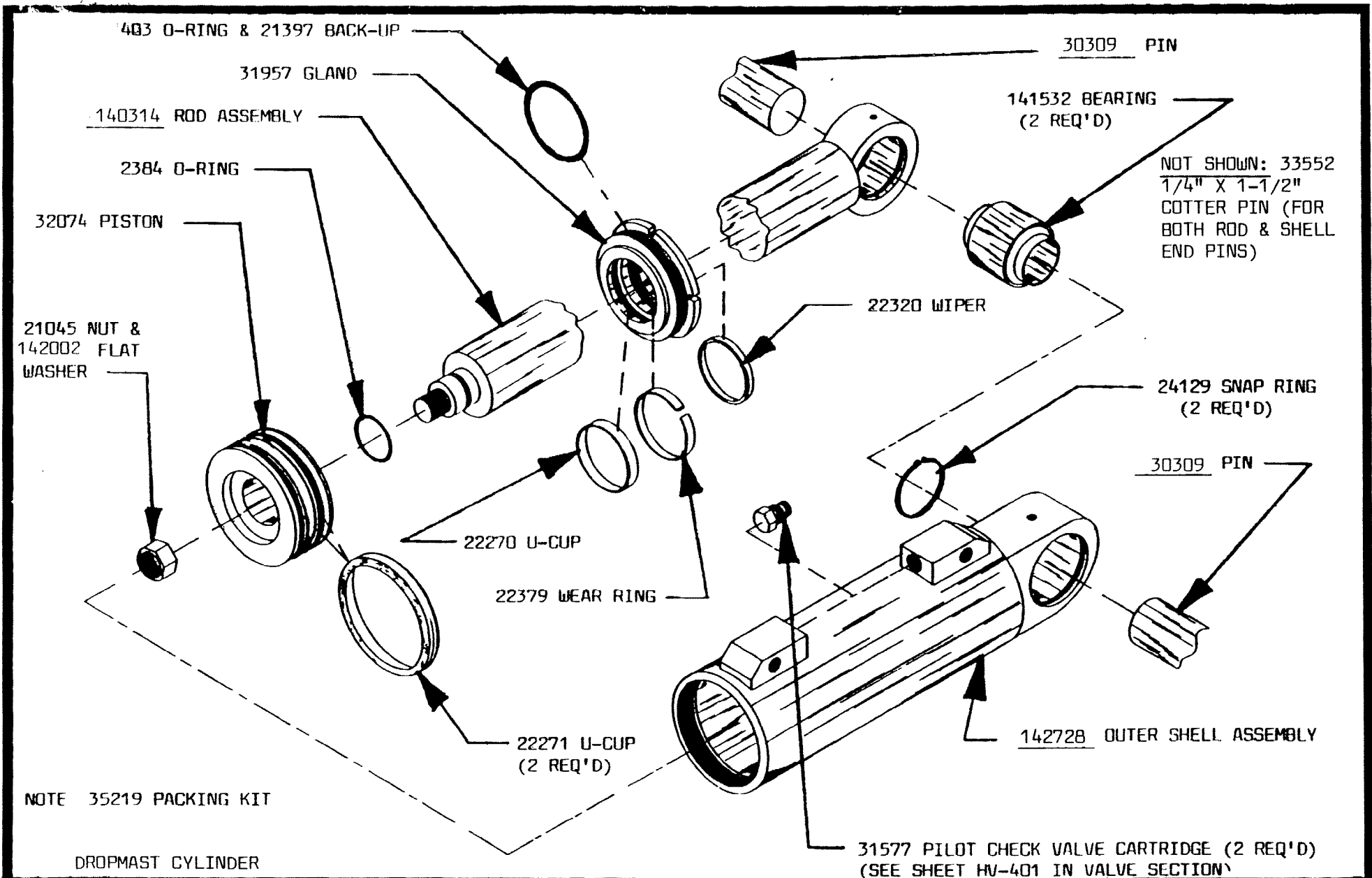
J.H. FLETCHER & CO.

402 HIGH STREET

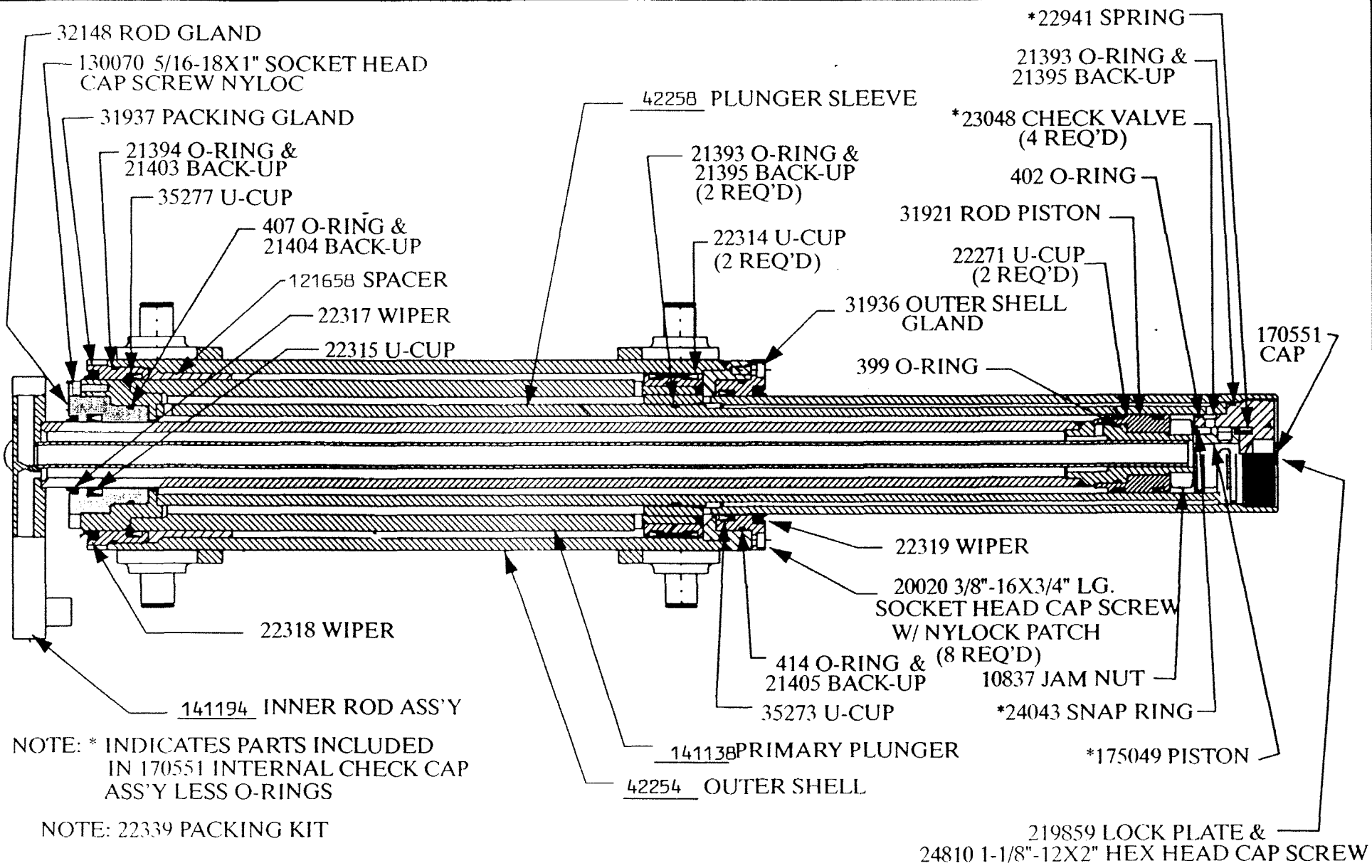
HUNTINGTON, W.VA.



SHEET NO.	TITLE	DATE	J.H. FLETCHER & CO.
HC-465A	152428 HYDRAULIC CYLINDER ASSEMBLY	1-10-85	402 HIGH STREET HUNTINGTON, W.VA.



SHEET NO.	TITLE	DATE	J.H. FLETCHER & CO.
HC-465A .1	152361 HYDRAULIC CYLINDER ASSEMBLY	1-10-85	402 HIGH STREET HUNTINGTON, W.VA.



NOTE: * INDICATES PARTS INCLUDED IN 170551 INTERNAL CHECK CAP ASS'Y LESS O-RINGS

NOTE: 22339 PACKING KIT

SHEET NO.	TITLE	DATE	J.H. FLETCHER & CO.
HC-510	152328 DRILL FEED CYLINDER	3/9/92	402 HIGH STREET HUNTINGTON, W.VA.

405 O-RING & 34117 BACK-UP RING

395 O-RING

32050 PISTON

21018 NUT &
14223U WASHER

22309 U-CUP

22308 WIPER

22275 U-CUP
(2 REQ'D)

NOTE: USE 22448 PACKING KIT

BOOM SWING CYLINDER

32051 GLAND

35943 PIN

40401 BEARING
(2 REQ'D)

ROD ASSEMBLY

NOT SHOWN: 33552
1/4" X 1-1/2"
COTTER PIN (FOR
BOTH ROD & SHELL
END PINS)

24043 SNAP RING
(4 REQ'D)

36006 PIN

142795 OUTER SHELL ASSEMBLY

31577 PILOT CHECK VALVE CARTRIDGE
(SEE SHEET HV-401 IN VALVE SECTION)

SHEET NO.

HC-533

TITLE

152419 HYDRAULIC CYLINDER ASSEMBLY

DATE

3-9-93

R

J. N. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA

SHEET NO.

HM 130

TITLE

41917 INTERNAL MOTOR

DATE

10-14-85

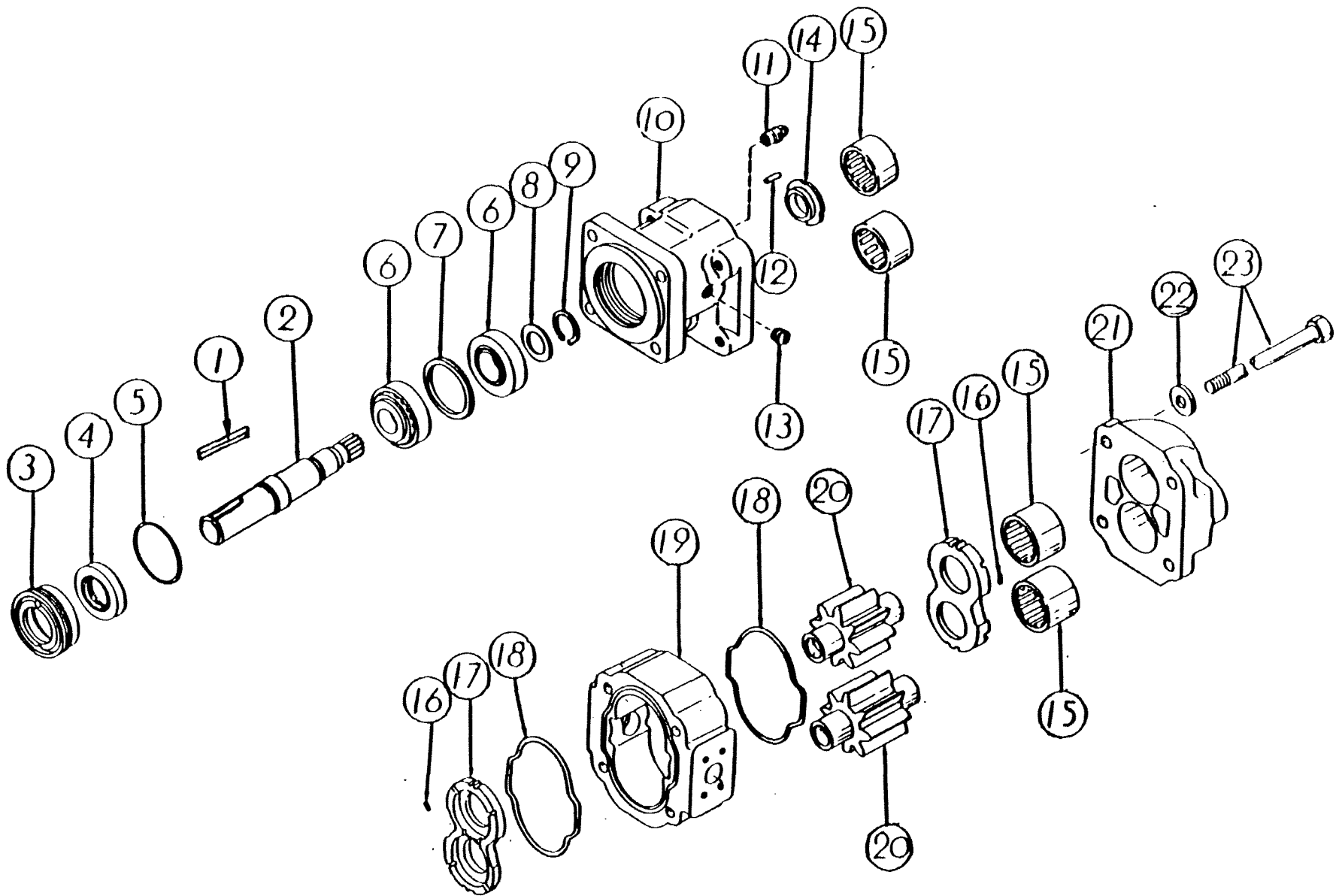
R

J. W. FLETCHER & CO.

707 WEST 7TH STREET HUNTINGTON, W. VA.

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>NO. REQ'D</u>
1.	24037	SNAP RING	1
2.	30588	SHAFT	1
3.	23045	RETAINING RING	1
4.	24250	HT-PRESSURE SEAL	1
5.	402	"O" RING SEAL	1
6.	40008	ROLLER BEARING	2
7.	21504	BEARING SPACER	1
8.	21505 (**)	SPACER	1
9.	1316	SNAP RING	1
10.	47001	SHAFT END COVER	1
11.	23048	CHECK ASSEMBLY	2
12.	30397	ROLL PIN	1
13.	20267	PLUG	1
14.	40255	SHAFT BUSHING	1
15.	40009	NEEDLE BEARING	4
16.	21266	POCKET SEAL	12
17.	23035	THRUST PLATE	2
18.	409	"O" RING SEAL	2
19.	47264	GEAR HOUSING	1
20.	41260	GEAR SET	1
21.	47457	PORT END COVER	1
22.	22035	WASHER	4
23.	20148	BOLT	4

(**) IF THIS SPACER DOES NOT ALLOW THE SNAP RING TO FIT THE BOLT USE 21508 SPACER.



SHEET NO.

HM-130

TITLE

41917 HYDRAULIC MOTOR ASSEMBLY

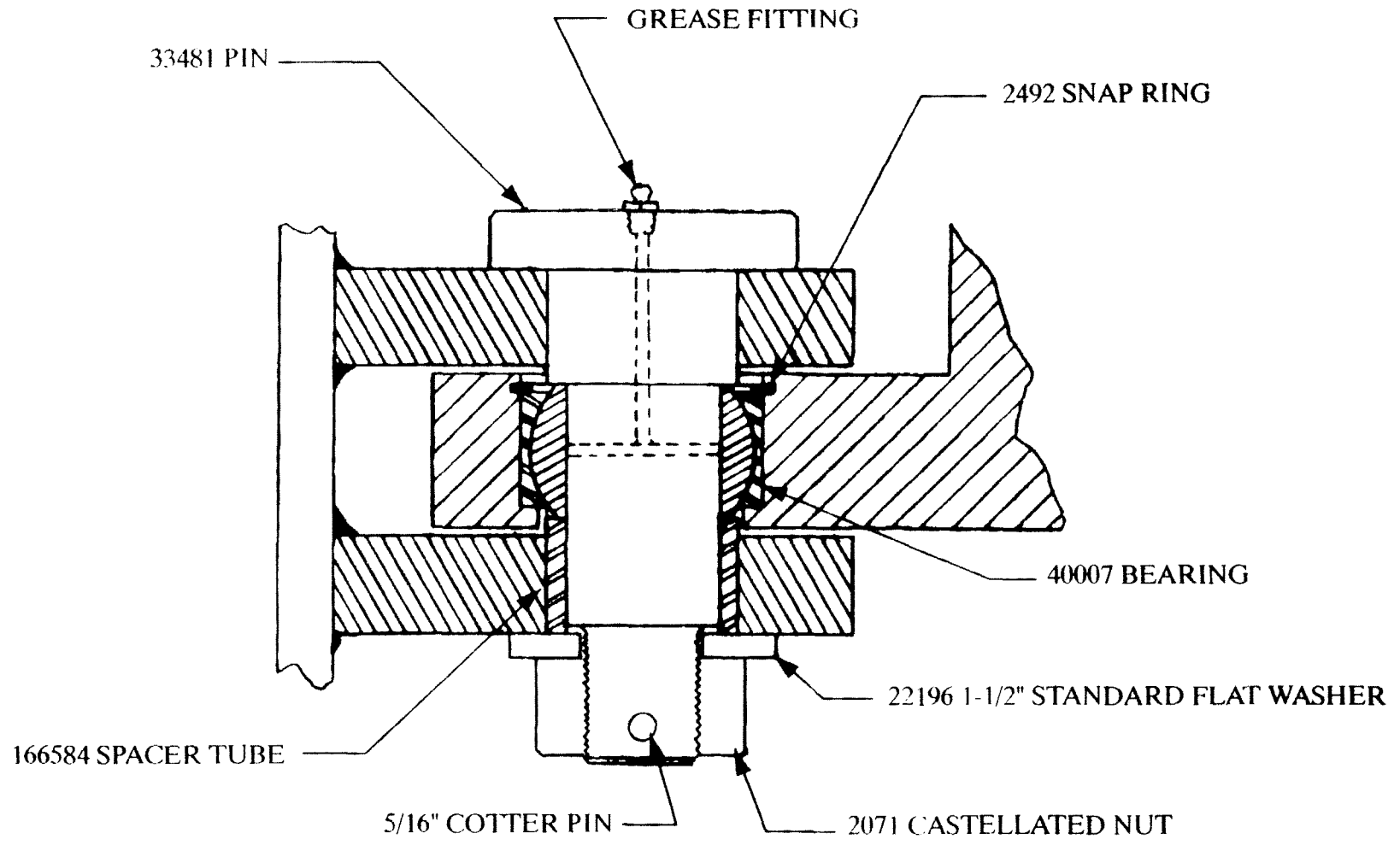
DATE

R

J. W. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.



SHEET NO.

MB-343

TITLE

MAST PIVOT ARRANGEMENT

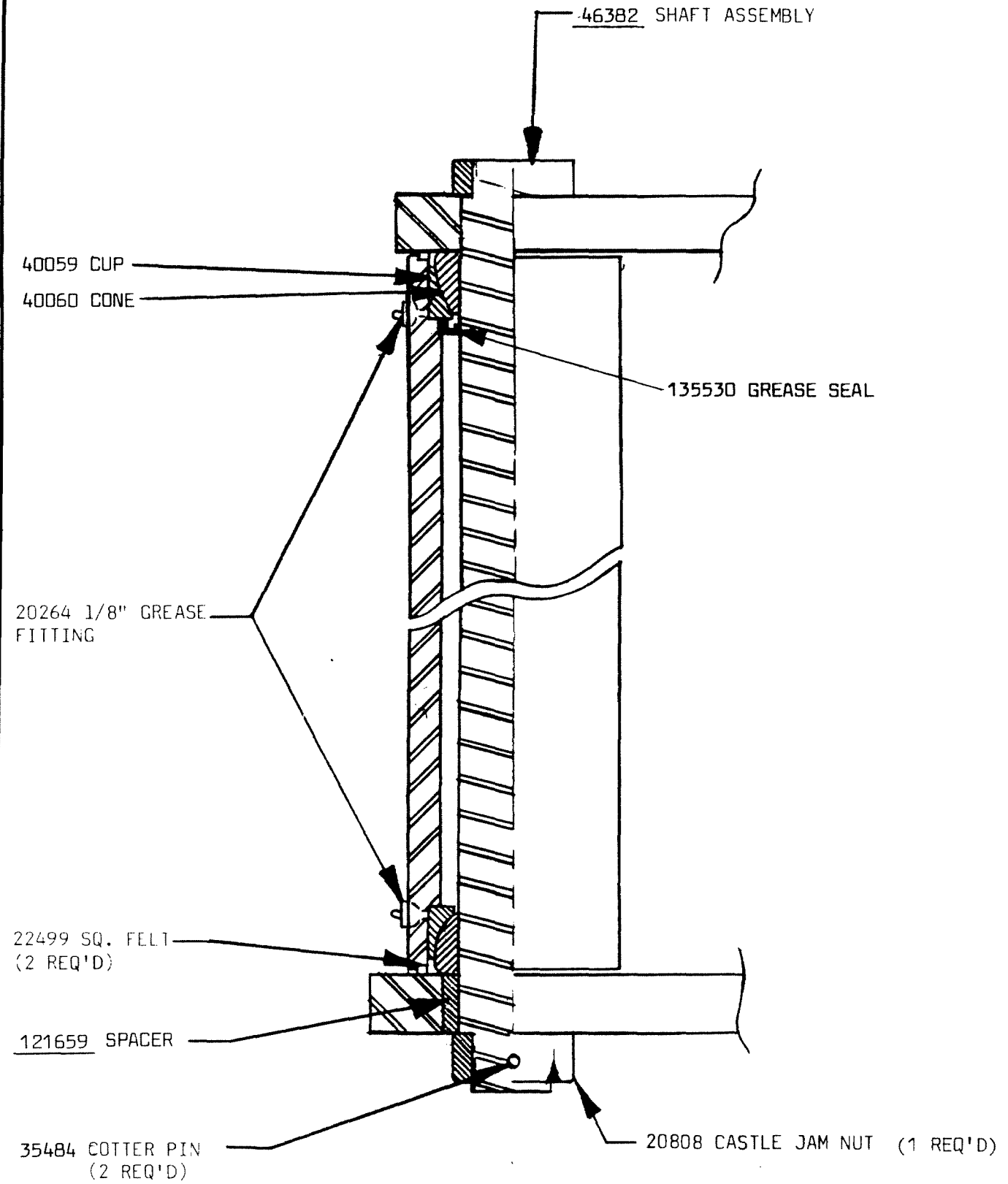
DATE

8/3/81

J.H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W.VA.



TITLE

BOOM PIVOT ARRANGEMENT

J. H. FLETCHER & CO.

707 WEST 7TH STREET

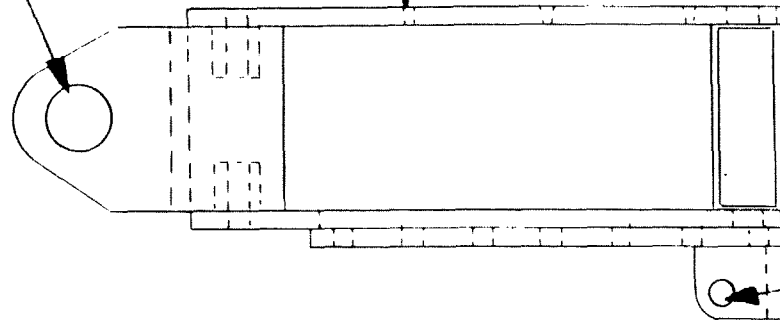
HUNTINGTON W VA

SHEET NO.

MB-415

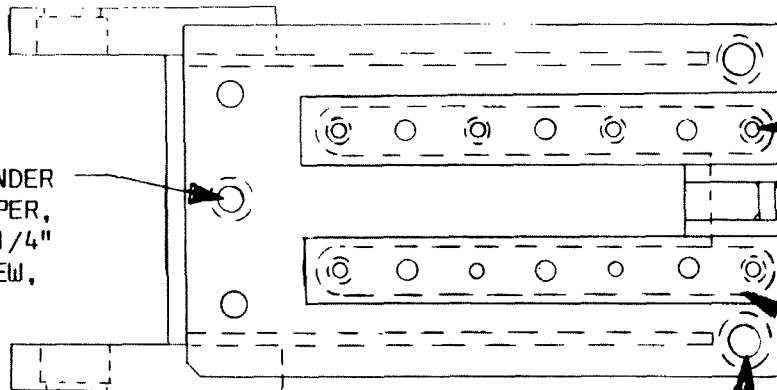
MAST PIVOT ARRANGEMENT
(SEE SHEET MB-343)

20264 GREASE FITTING
(12 REQ'D)



33547 MAST PIVOT CYLINDER (SHELL
END) PIN, & 33552 1/4" X 1-1/2"
COTTER PIN

36349 BOOM SUMP/EXTEND CYLINDER
(SHELL END) PIN, 170653 KEEPER,
170655 KEEPER MOUNT, 20176 1/4"
-20 X 1/2" HEX HEAD CAP SCREW,
& 22021 LOCKWASHER



34313 1"-8 X 1-1/2" COTTER PIN
& 20838 HEX NUT (8 EA. REQ'D)

175040 WEAR PAD
(2 REQ'D)

45838 ROLLER ASSEMBLY, 33327
PIN, & 20854 NUT (2 EA. REQ'D)

SHEET NO.

MB-646

TITLE

OUTER BOOM ASSEMBLY

DATE

6/6/94

R

J. H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W. VA

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>NO. REQ'D</u>
1	SWING CYLINDER ANCHOR	224387	1
2	WEAR BAR	<u>93148</u>	4
3	PIN ASSEMBLY	33333	2
4	FLAT HEAD CAP SCREW (BRASS)	18336	16
5	ROLLER ASSEMBLY WITH BUSHING	45839	2
6	*SWING CYLINDER PIN(SHELL END)	36006	1
7	BEARING CUP	40059	2
8	*1/4" SQUARE FELT X 19-1/2" LONG	22499	2
9	*BEARING CONE		2
10	*PIVOT PIN		1
11	*NUT		1
12	*SPACER		1
13	*SUMP/EXTEND CYLINDER PIN (ROD END)	<u>33334</u>	1
14	*COTTER PIN (SEE SHEET MB-415)		2

(SEE SHEET MB-415)

*INDICATES ITEMS NOT PART OF ASSEMBLY

SHEET NO.

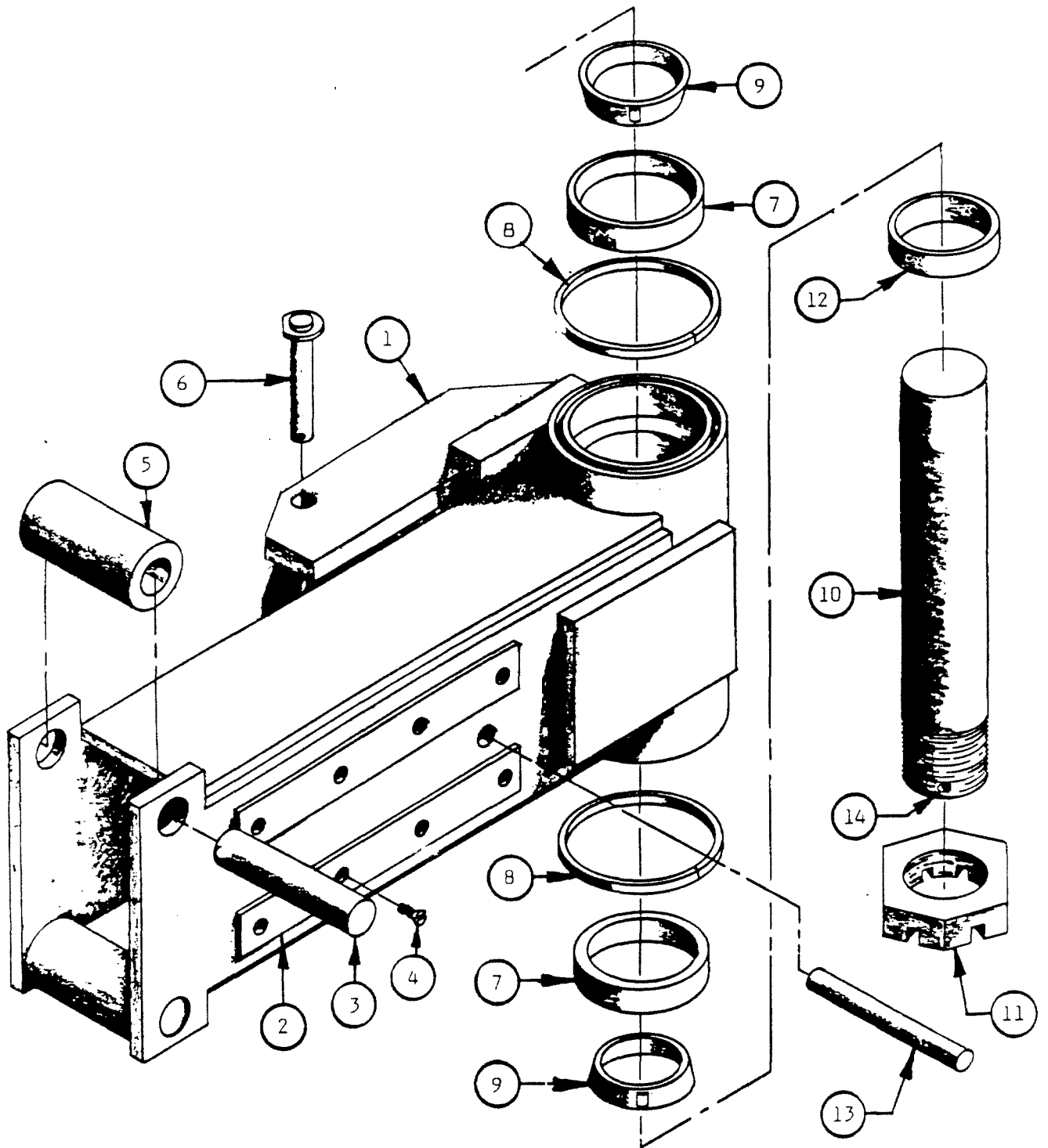
MB-674

DESCRIPTION

277162 L.H. INNER BOOM ASSEMBLY
277163 R.H.

J.H. FLETCHER & CO.

402 HIGH STREET HUNTINGTOWN, W.VA.



TITLE

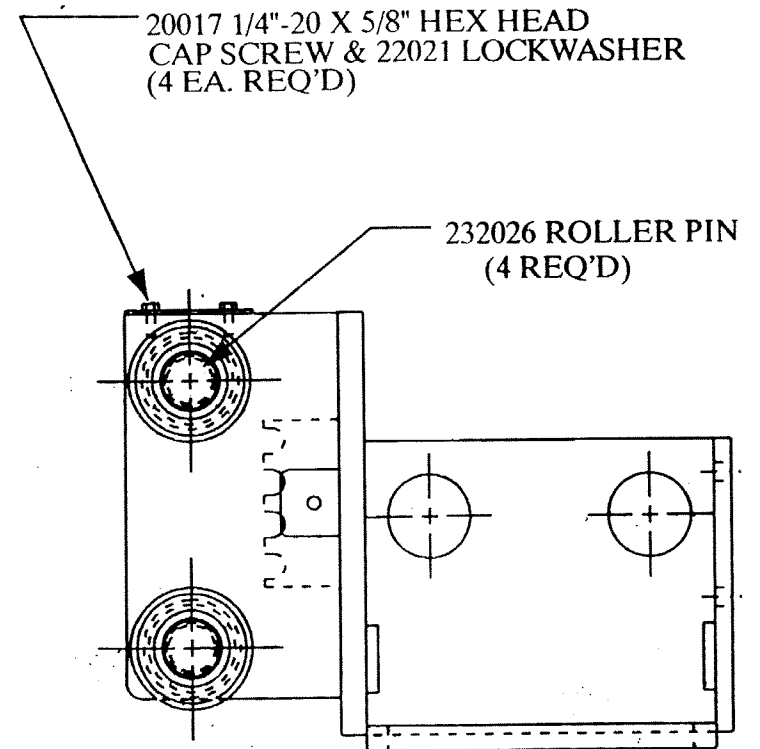
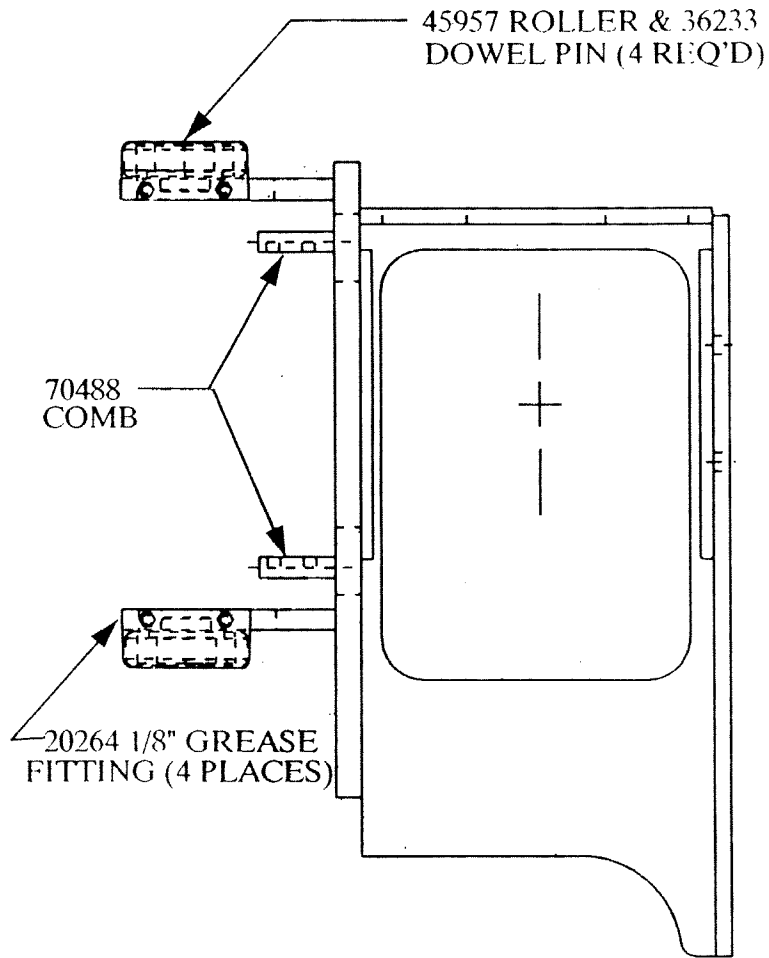
INNER BOOM ASSEMBLY

J. H. FLETCHER & CO.

HUNTINGTON W. VA.

SHEET NO.

MB-674



SHEET NO.

MF-165

TITLE

234270 (AS SHOWN)
~~234271~~ (OPP. HAND) CARRIAGE ASSEMBLY

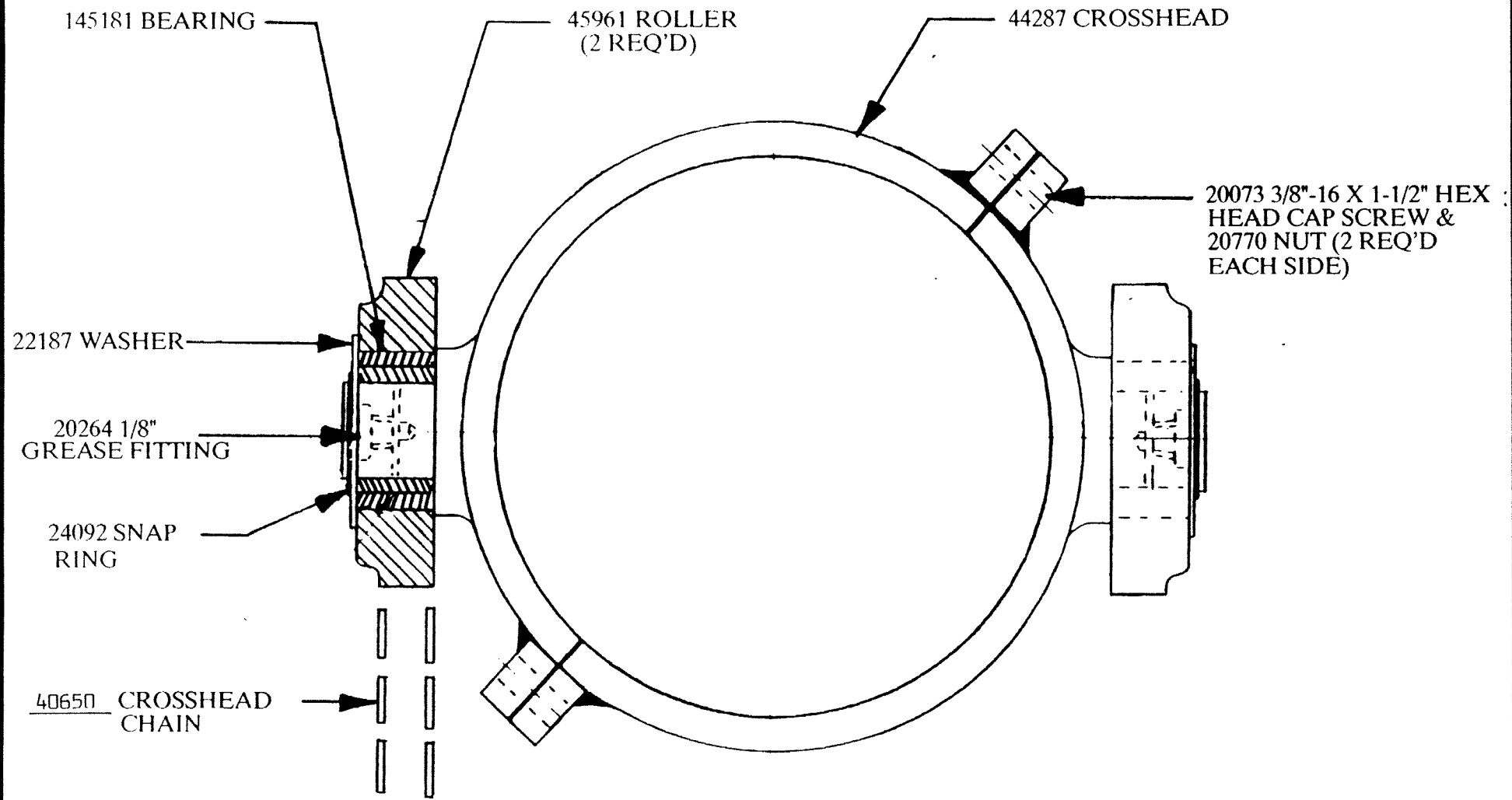
DATE

10-24-95

J.H. FLETCHER & CO.

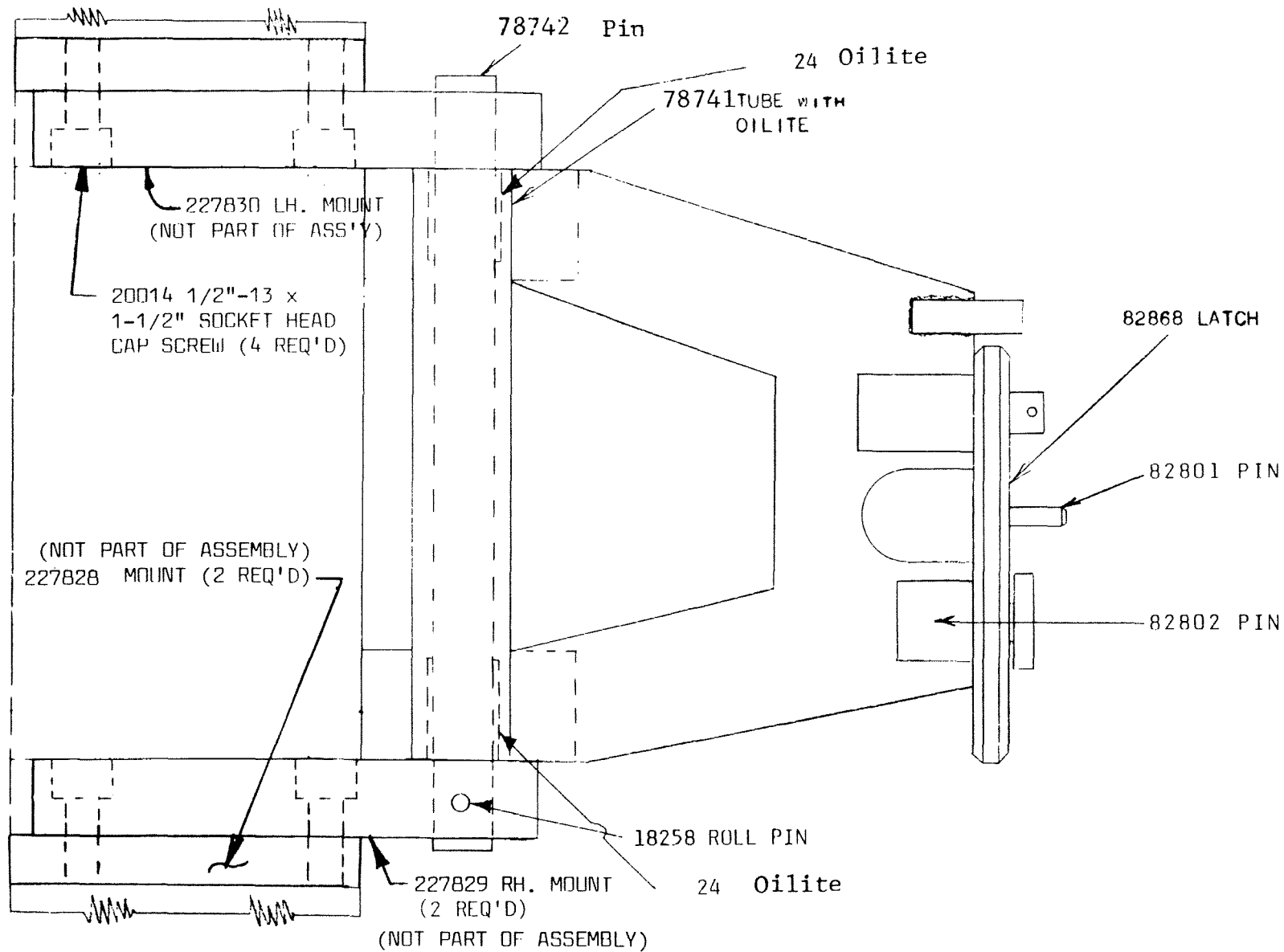
402 HIGH STREET

HUNTINGTON, W.VA.



NOTE: (2) CROSSHEADS REQUIRED PER DRILLING UNIT

SHEET NO.	TITLE	DATE	J.H. FLETCHER & CO.
MK 25	44291 CROSSHEAD ASSEMBLY		402 HIGH STREET HUNTINGTON, W.VA.



SHEET NO.

ML 40

TITLE

83355 DRILLGUIDE ASSEMBLY

DATE

6-16-72

R

J. H. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.

SHEET NO.

TITLE

DATE

J.H. FLETCHER & CO.

MM-72

DRILLHEAD ASSEMBLY

10/1/85

402 HIGH STREET

HUNTINGTON, W.VA.

ITEM	DESCRIPTION	PART NO.	NO. REQ'D	ITEM	DESCRIPTION	PART NO.	NO. REQ'D
1	Δ * SEAL	24393	1	26	1/8" NPT GREASE FTG.	20264	2
2	Δ * SPEEDI SLEEVE	24395	1	27	TOP COVER	94376	1
3	3/8"-16x3/4" S.H.C.S.	20186	12	28	FLINGER	161022	1
4	3/8" LOCKWASHER	22046	12	29	SOCKET	172512	1
5	DRILLHEAD BOX	94346	1	31	Δ * SEAL	24393	1
6	Δ * BEARING	45464	1	32	Δ * SPACER	63905	1
7	RING GEAR & PINION SET	41268	1	33	Δ * SPACER	60996	1
8	Δ SOCKET SHAFT	181350	1	34	Δ * SNAP RING	24037	1
9	3/8"-24x3/4" H.H.C.S.	20026	10	35	DRILLHEAD MOTOR (SEE SHEET HM- <u>130</u>)	41917	1
10	3/8" LOCKWASHER	22010	10	36	GREASE RING	121508	1
11	1" NPT FLUSH PIPE PLUG	32627	3				
12	Δ SEAL ADAPTOR RING	181397	1				
13	Δ SEAL RETAINER KIT	35052	1				
14	Δ 1/2"-13 X 1" S.H.C.S.	20163	4				
15	Δ 1/2" LOCKWSHER	22046	4				
16	3/4" NPT SQUARE SOCKET PLUG	32606	1				
17	Δ BOTTOM COVER ASS'Y	181349	1				
18	Δ * DUST HOSE NIPPLE	20352	1				
19	3/4" FLUSH GREASE FITTING	20548	1				
20	1"X3/4" NPT HEX. PIPE BUSHING	20546	1				
21	Δ * SEAL KIT	35050	1				
22	Δ * O-RING	35327	1				
23	Δ * BEARING	2501	1				
24	Δ THRUST BEARING	40217	1				
25	FLUSH GREASE FITTING	120727	1				

NOTES: #32 & #33 SPACERS NOT SHOWN -USED FOR HYDRAULIC MOTOR.

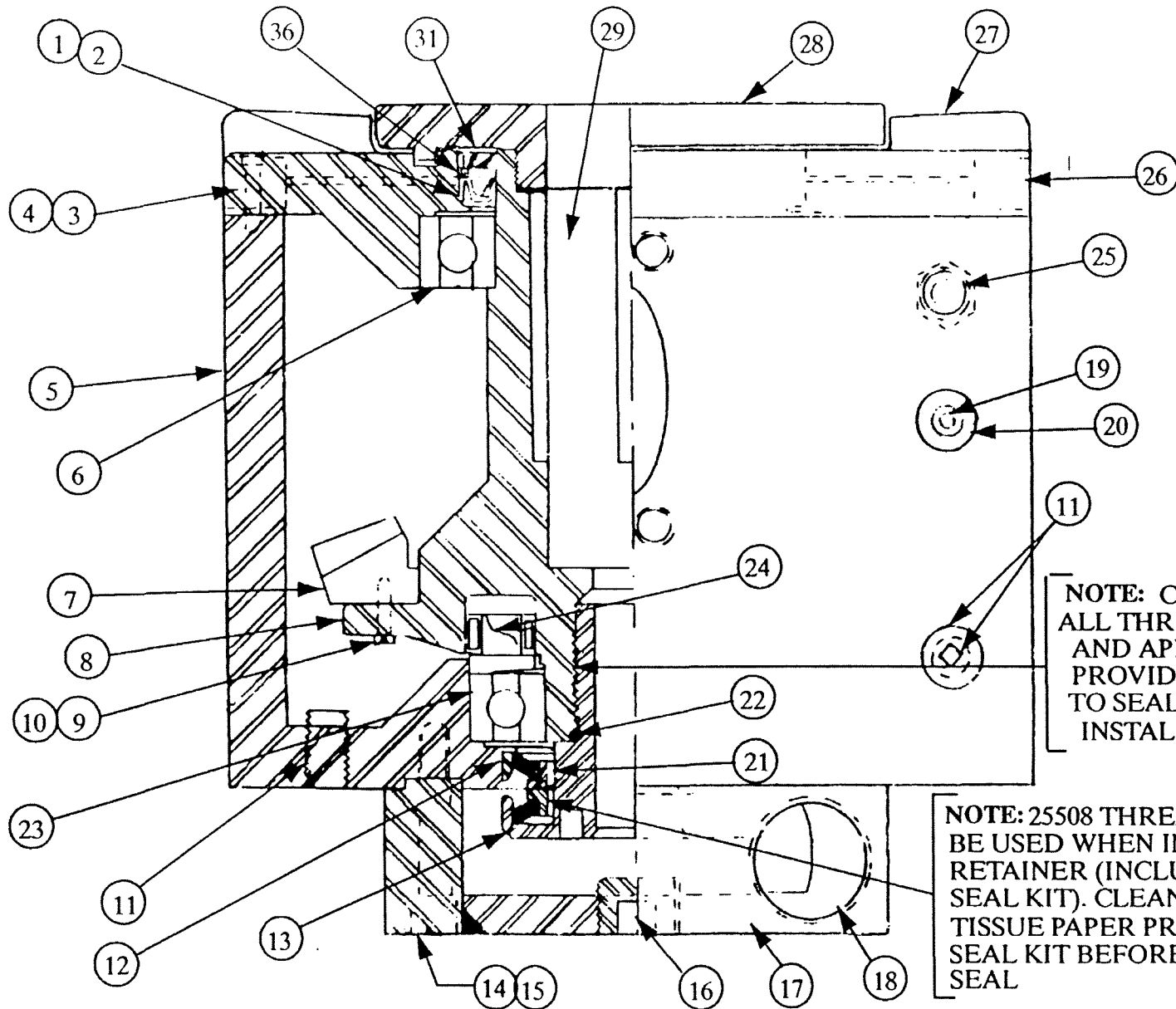
*INDICATES PARTS INCLUDED IN 55647 REBUILD KIT

Δ INDICATES PARTS INCLUDED IN 55646 CONVERSION KIT (CONVERTS OLD DRILLHEAD TO NEW DRILLHEAD)

55634 DRILLHEAD ASSEMBLY ONLY

55723 DRILLHEAD ASSEMBLY WITH MOTOR

ORDER 55900 WATER DRILLHEAD CONVERSION KIT TO CONVERT A CAT SEAL DEEP SOCKET DRILLHEAD TO A WET DRILLHEAD (DEUBLIN UNION TYPE).



NOTE: CLEAN OIL FROM ALL THREADED SURFACES AND APPLY LOCTITE PROVIDED W/ SEAL KIT TO SEAL RETAINER WHEN INSTALLING

NOTE: 25508 THREAD LOCKER MUST BE USED WHEN INSTALLING SEAL RETAINER (INCLUDED IN 35050 SEAL KIT). CLEAN SURFACES WITH TISSUE PAPER PROVIDED WITH SEAL KIT BEFORE INSTALLING SEAL

SHEET NO.

MM-72

TITLE

DRILLHEAD ASSEMBLY

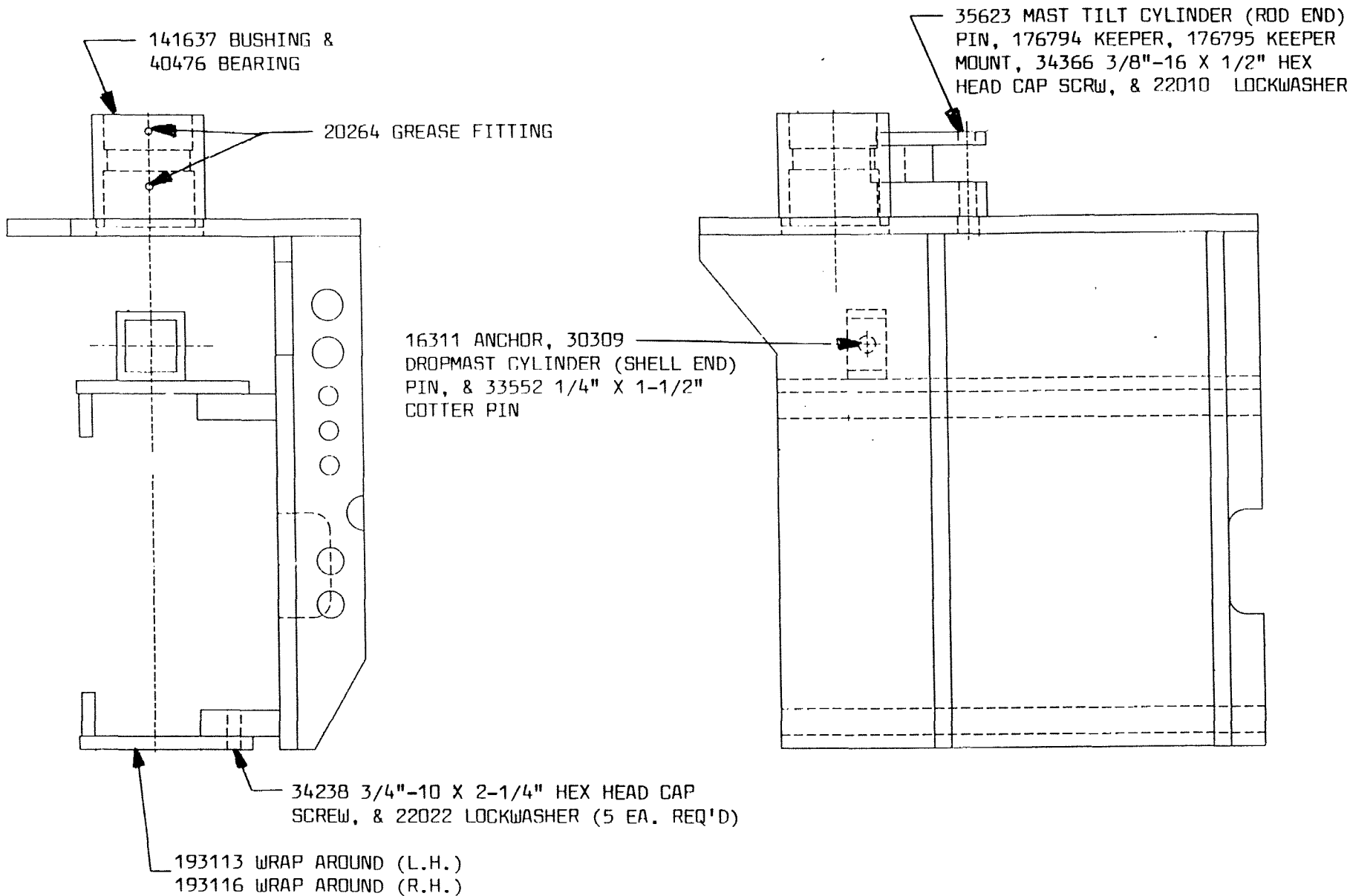
DATE

10/1/85

J.H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W.VA.



SHEET NO.

MN-256

TITLE

277056 L.H. DROPMAST ASSEMBLY
277057 R.H.

DATE

3-22-95

R

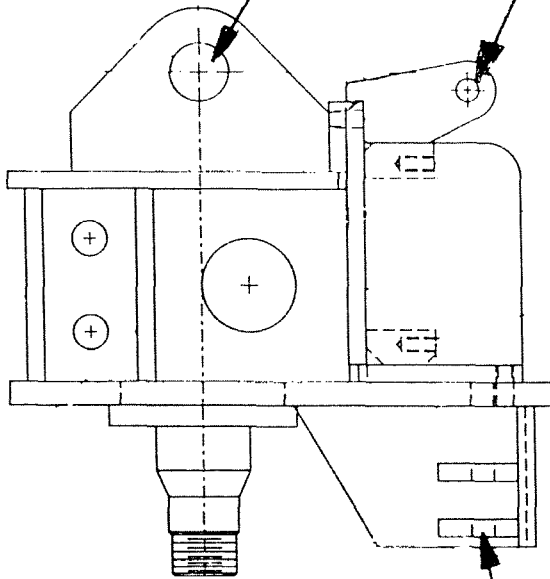
J. H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W. VA

33545 MAST SWING CYLINDER (ROD
END) PIN, & 33552 1/4" X 1-1/2"
COTTER PIN

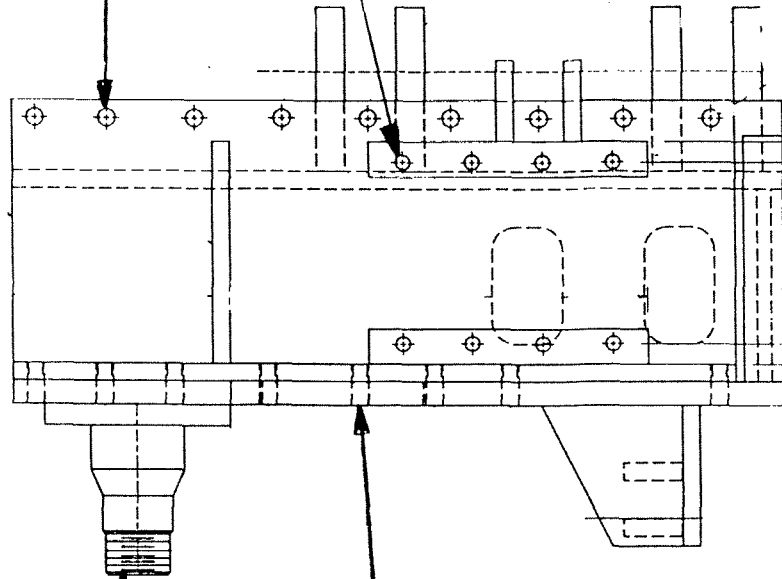
MAST PIVOT ARRANGEMENT
(SEE SHEET MB-343)



33210 MAST TILT CYLINDER
(SHELL END) PIN & 33552
1/4" X 1-1/2" COTTER PIN

34341 3/4"-10 X 1-5/8" HEX HEAD CAP
SCREW & 22022 LOCKWASHER (9 EA. REQ'D)

20008 5/8"-11 X 2" HEX HEAD CAP
SCREW & 22008 5/8" LOCKWASHER
(8 EA. REQ'D)



34341 3/4"-10 X 1-5/8" HEX
HEAD CAP SCREW & 22022 LOCK-
WASHER (8 EA. REQ'D)

46376 SHAFT, 40476 BEARING, 20939 NUT,
20940 LOCKWASHER, 141637 BUSHING, &
22181 FLAT WASHER

SHEET NO.

MN-257

TITLE

277234 L.H.
277235 R.H. SUPPORT POST & STAB JACK MOUNT

DATE

3-22-95

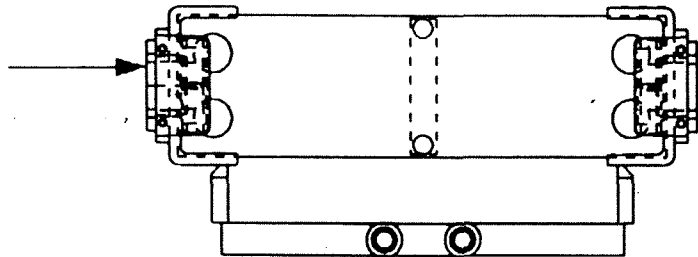
R

J. H. FLETCHER & CO.

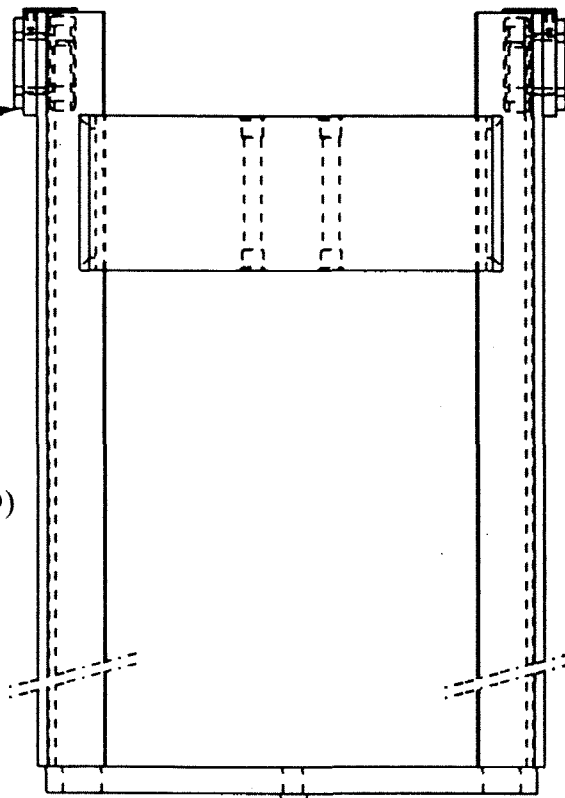
402 HIGH STREET

HUNTINGTON, W. VA

231911 SCRAPER, 34356 1/4"-20 X 1/2"
 SOCKET HEAD CAP SCREW, 22191
 WASHER, & 22021 LOCKWASHER



231908 ROLLER PIN (4 REQ'D), 20065
 3/8"-16 X 1-1/4" HEX HEAD CAP SCREW,
 & 22010 LOCKWASHER (8 EA. REQ'D)



45957 ROLLER & 36233 DOWEL
 PIN (2 EA. REQ'D)

NOT SHOWN: 163112 ANCHOR, 30309 PIN, &
 33552 1/4" X 1-1/2" COTTER PIN
 (FOR DROPMAST CYL.-ROD END)

SHEET NO.

MS-105

TITLE

57006 OUTER MAST ASSEMBLY

DATE

10-2-95

J.H. FLETCHER & CO.

402 HIGH STREET

HUNTINGTON, W.VA.

232004 TOP PLATE

20092 1/2"-13 x 1-1/4"
SOCKET HEAD CAP SCREW,
& 22011 LOCKWASHER
(6 REQ'D)

70488 COMB
(2 REQ'D)

227220 WEAR PAD (4 REQ'D),
34256 1/4"-20 X 1/2" SOCKET
HEAD CAP SCREW, & 22021
LOCKWASHER (8 EA.
REQ'D)

232026 ROLLER PIN, 45957
ROLLER, & 36233 DOWEL
PIN (2 EA. REQ'D)

SHEET NO.

TITLE

DATE

J.H. FLETCHER & CO.

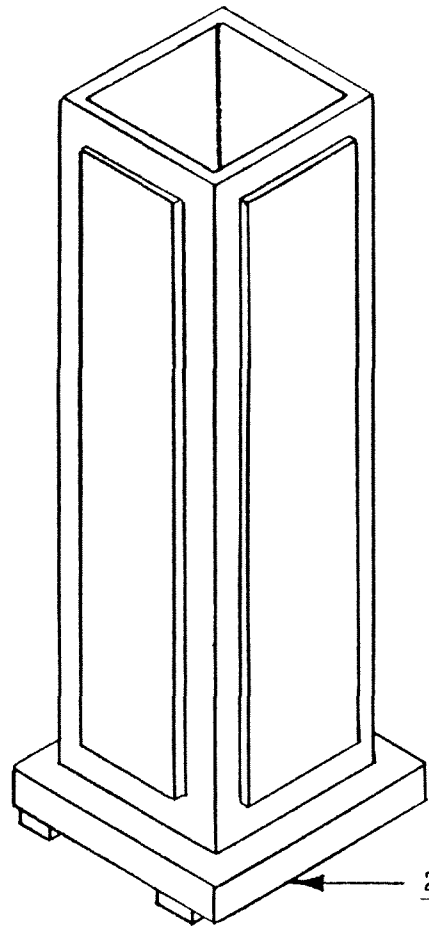
MS-106

57007

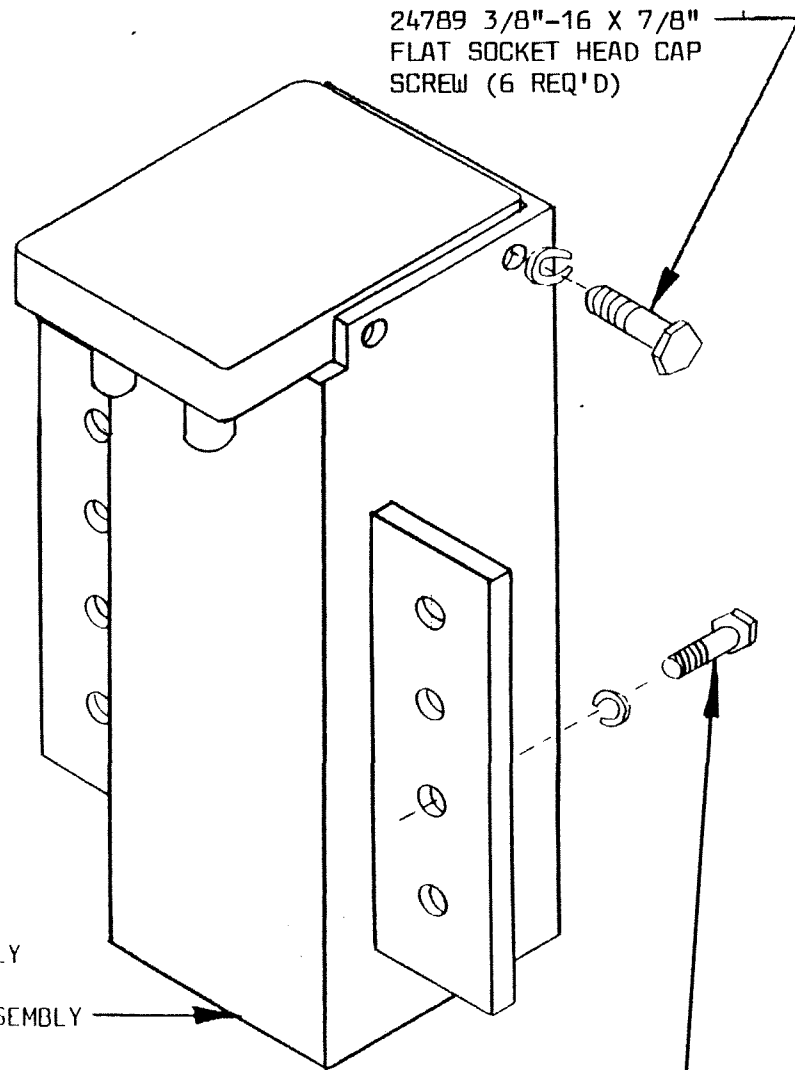
INNER MAST ASSEMBLY

402 HIGH STREET

HUNTINGTON, W.VA.



277180 INNER TUBE ASSEMBLY



24789 3/8"-16 X 7/8"
FLAT SOCKET HEAD CAP
SCREW (6 REQ'D)

277207 OUTER TUBE ASSEMBLY

20008 5/8"-11 X 2" HEX
HEAD CAP SCREW & 22008
LOCKWASHER (8 EA. REQ'D)

SHEET NO.

MY-124P

TITLE

277176 STAB JACK ASSEMBLY

DATE

8/21/79

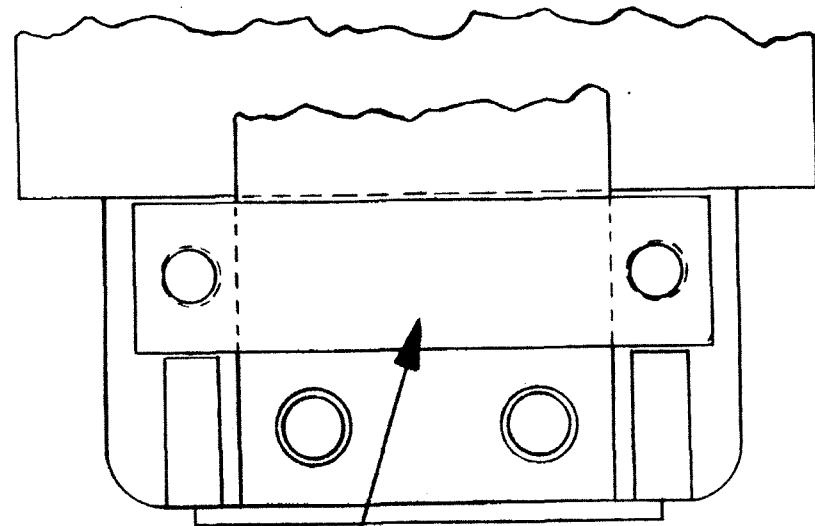
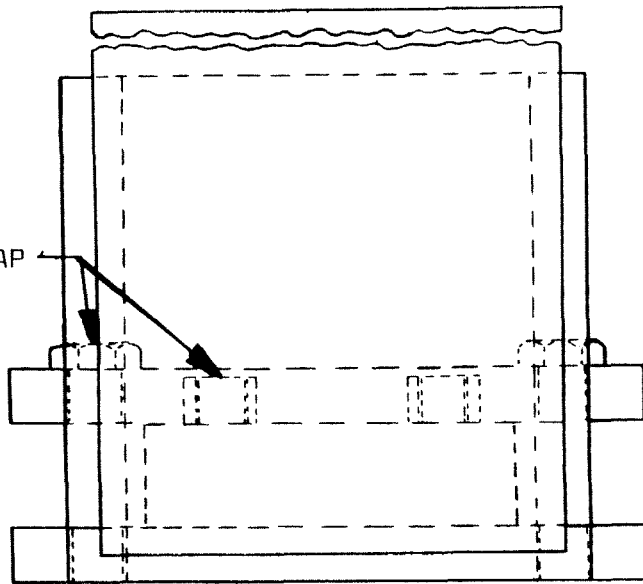
R

J. H. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.

34238 HEX HEAD CAP
SCREW W/ 22022
LOCKWASHER
(4 REQ'D)



176675 BAR

SHEET NO.
MY-866

TITLE
205964 FOOT HOSE GUARD ASSEMBLY

DATE
8-26-91

R

J. H. FLETCHER & CO.
707 WEST 7TH STREET HUNTINGTON, W. VA.