

SHEET NO.

TITLE

DATE

R

DRILLING UNIT ARRANGEMENT

J. N. FLETCHER & CO.

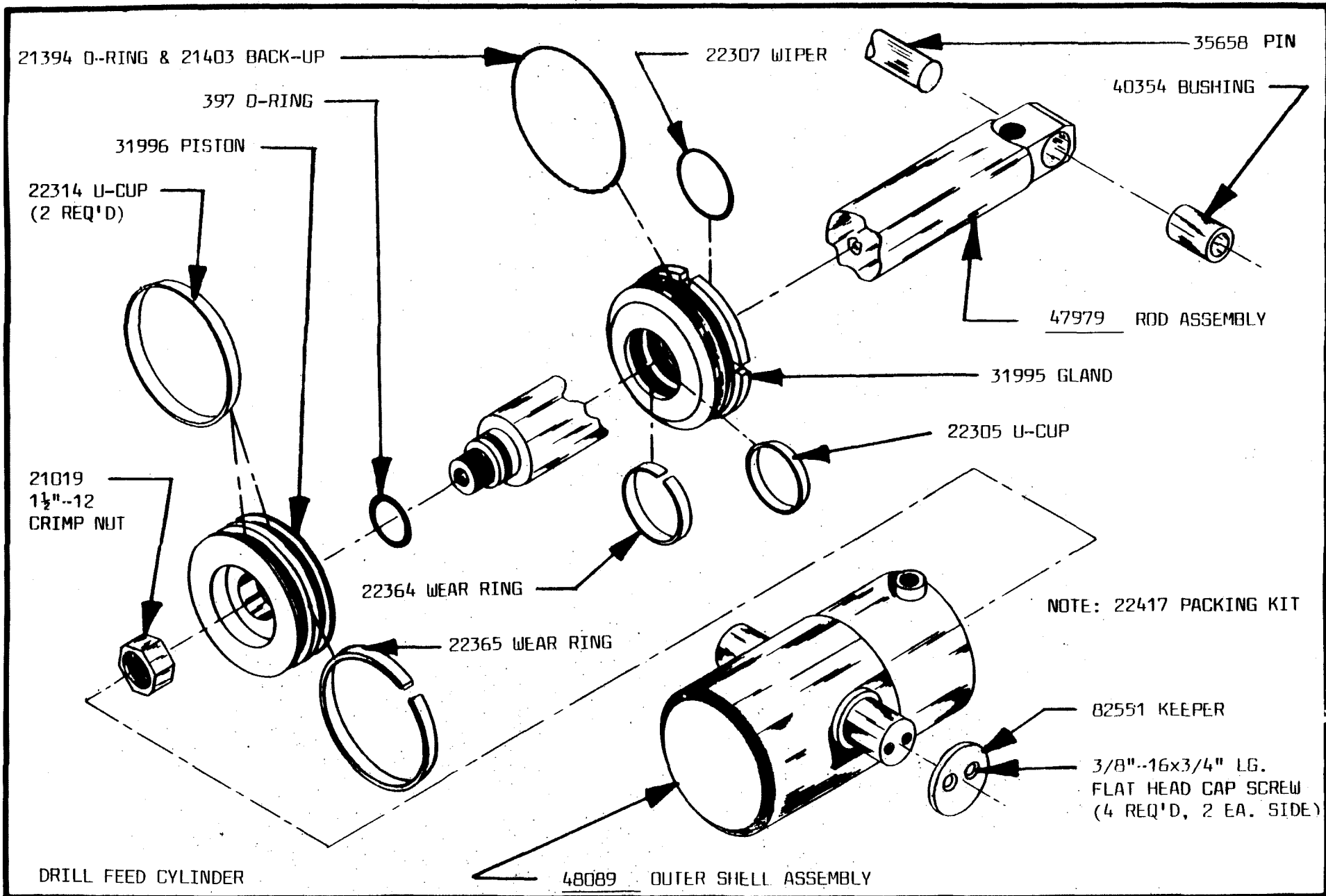
707 WEST 7TH STREET

HUNTINGTON, W. VA.

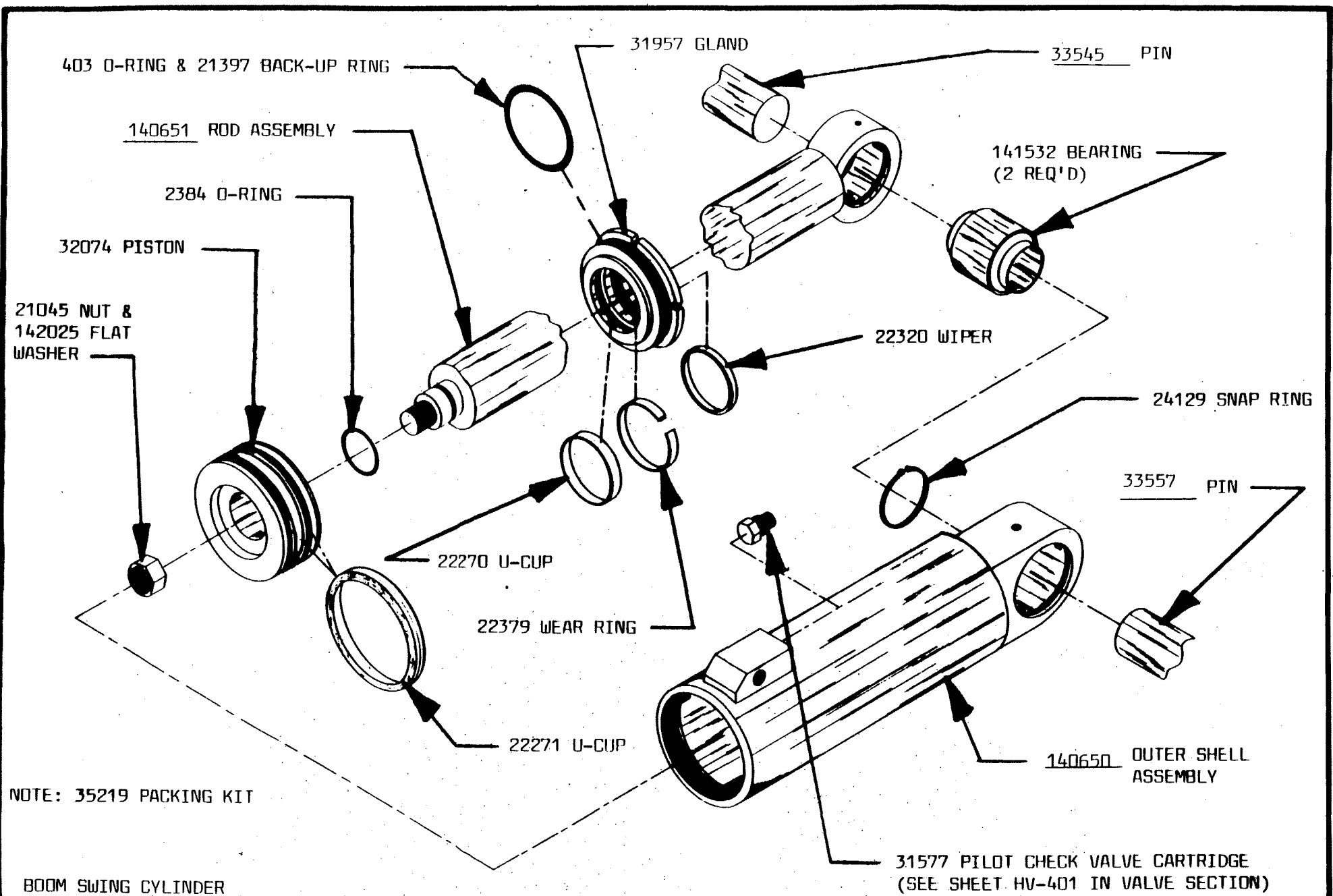
INDEX FOR DRILLING UNIT

90022

<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>SHEET NO.</u>	<u>NO. REQ'D</u>
DRILL FEED CYLINDER ASSEMBLY	54109	HC-332	2
BOOM SWING CYLINDER ASSEMBLY	56480	HC-462	2
BOOM EXTEND CYLINDER (LH.)	56545	HC-463	1
BOOM EXTEND CYLINDER (RH.)	56544	HC-463	1
BOOM FOOT CYLINDER ASSEMBLY	56478	HC-487	2
DRILLHEAD MOTOR	41926	EM-133	2
DRILLHEAD PIVOT ASSEMBLY		MB-122	2
BOOM PIVOT ARRANGEMENT		MB-172	2
BOOM ROLLER GUIDE ASSEMBLY		MB-393	2
BOOM ROLLER ASSEMBLY	188761	MB-458	2
INNER BOOM ASSEMBLY		MB-467	2
OUTER BOOM ASSEMBLY		MB-468B	2
BOOM ARM ARRANGEMENT		MB-476	2
DRILLHEAD ASSEMBLY	55716	MM-82	2
PANTOGRAPH SPROCKET GUARD	167033	MY-402	2
RETRACTING FOOT ASSEMBLY	202122	MY-635	2

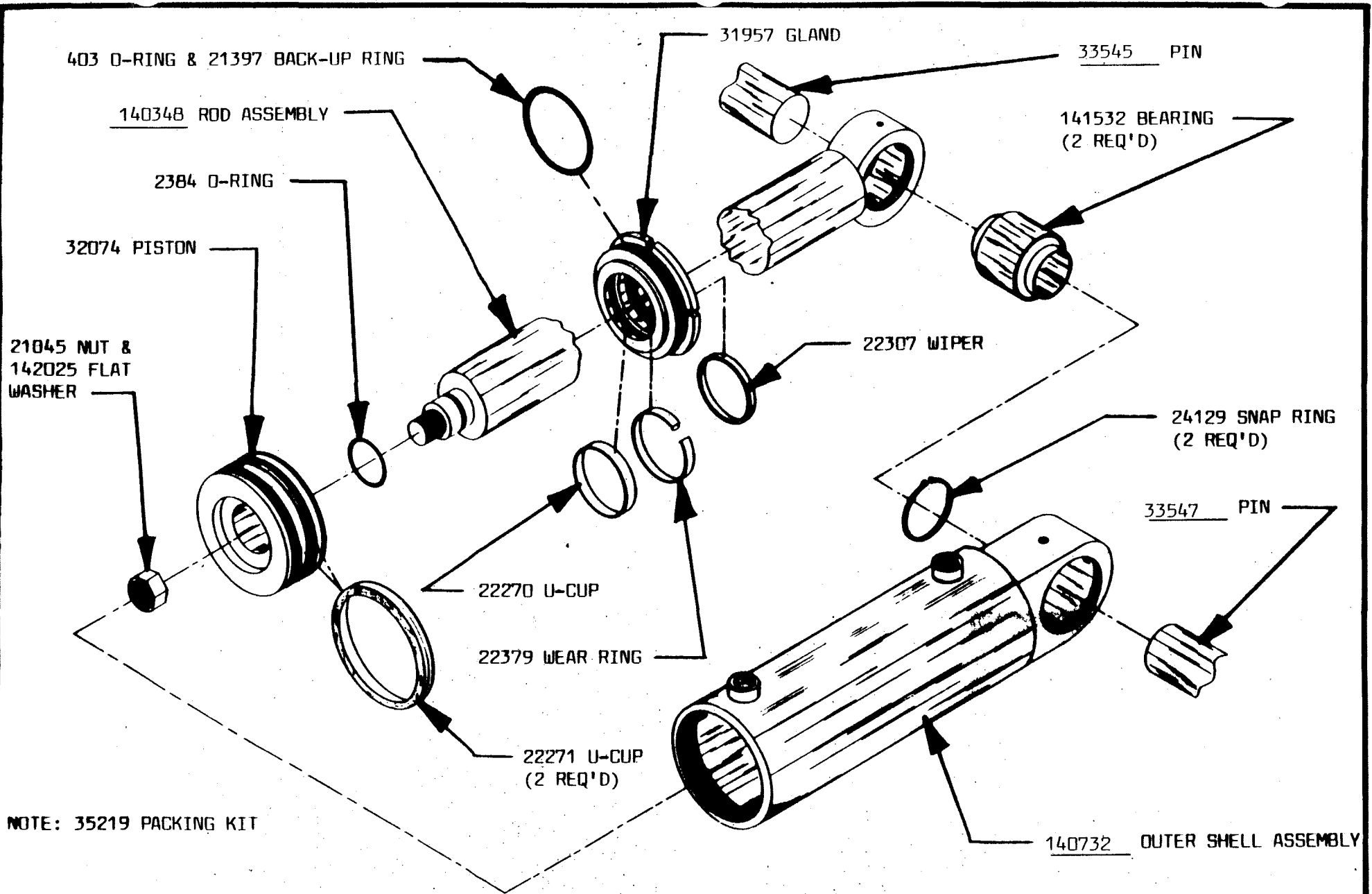


SHEET NO.	TITLE	DATE	R	J. N. FLETCHER & CO.
HC-332	54109 DRILL FEED CYLINDER ASSEMBLY	3-13-72		707 WEST 7TH STREET HUNTINGTON, W VA



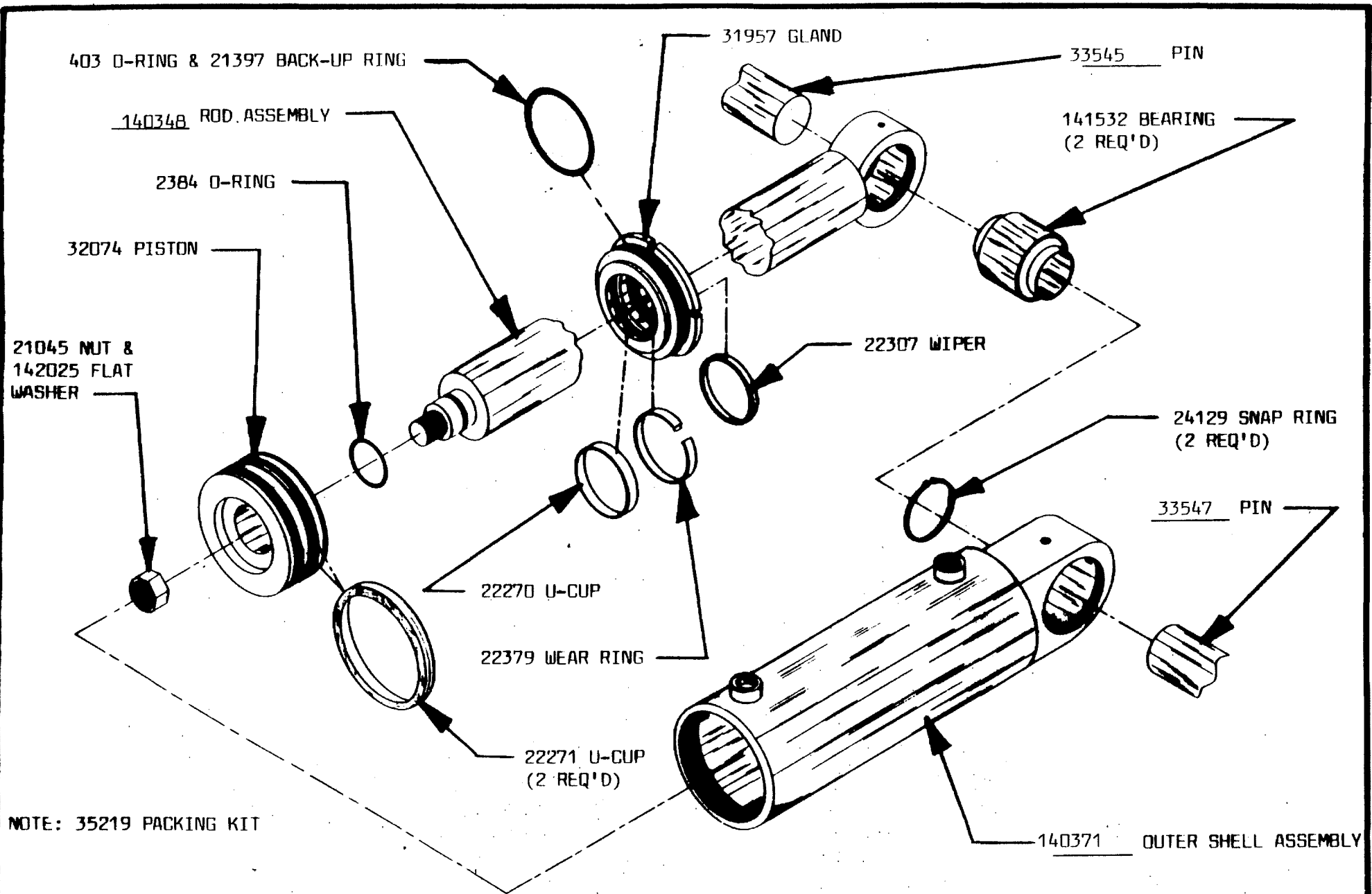
BOOM SWING CYLINDER

SHEET NO.	TITLE	DATE	R	J. H. FLETCHER & CO.
HC-462	56480 HYDRAULIC CYLINDER ASSEMBLY	10-28-80		707 WEST 7TH STREET HUNTINGTON, W. VA.



L.H. BOOM EXTEND CYLINDER

<p>SHEET NO. HC-463</p>	<p>TITLE 56545 HYDRAULIC CYLINDER ASSEMBLY</p>	<p>DATE 10/11/84</p>	<p>R</p>	<p>J. N. FLETCHER & CO. 707 WEST 7TH STREET HUNTINGTON, W. VA.</p>
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R.H. BOOM EXTEND CYLINDER

SHEET NO.

HC-463

TITLE

56544 HYDRAULIC CYLINDER ASSEMBLY

DATE

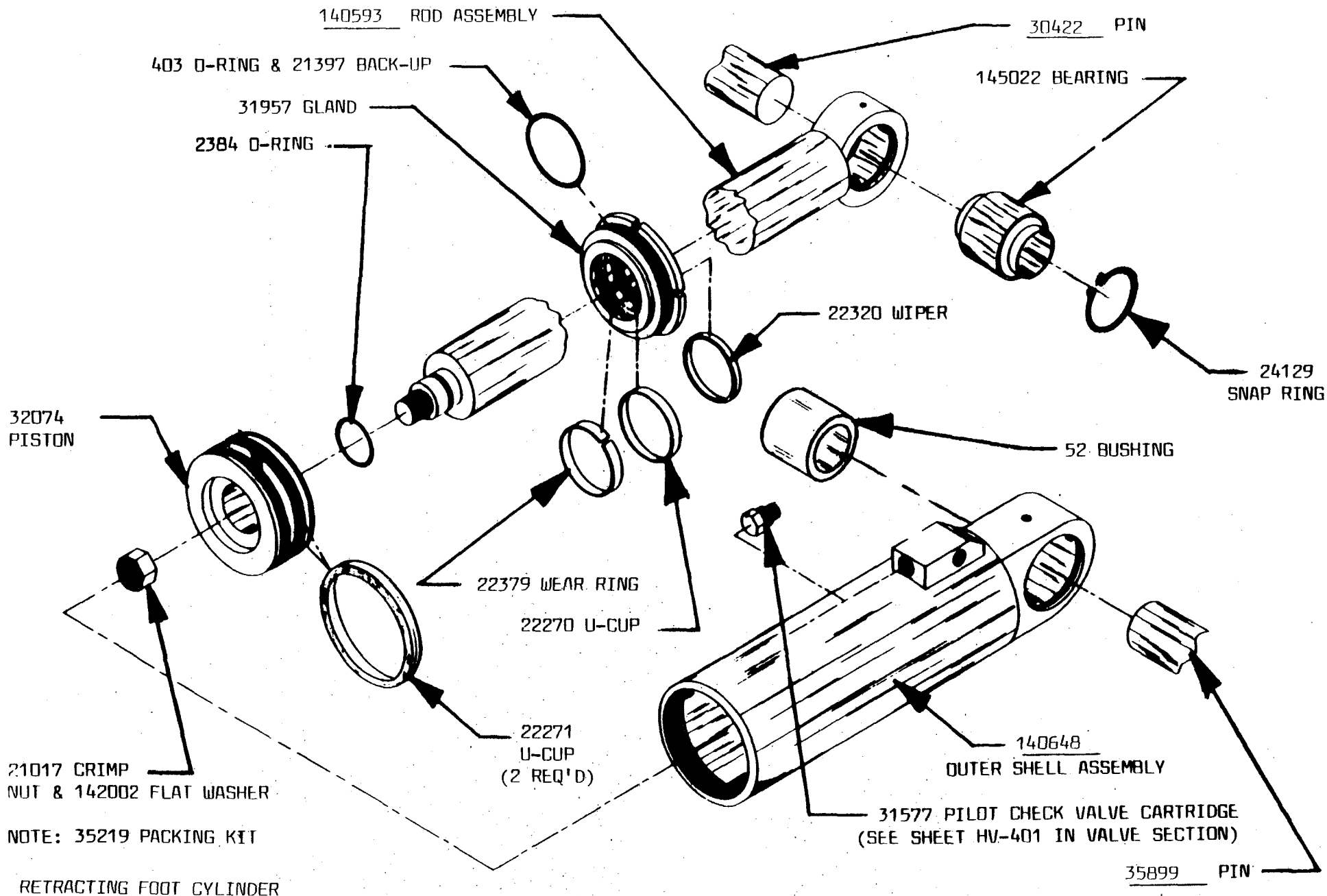
10/11/84

R

J. N. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA



RETRACTING FOOT CYLINDER

SHEET NO.	TITLE	DATE	R	J. N. FLETCHER & CO.
HC-487	56478 HYDRAULIC CYLINDER ASSEMBLY	1/10/85		707 WEST 7TH STREET HUNTINGTON, W. VA

SHEET NO.

HM-89

TITLE

41849 HYDRAULIC MOTOR

DATE

4-17-72

R

J. H. FLETCHER & CO.

707 WEST 7TH STREET

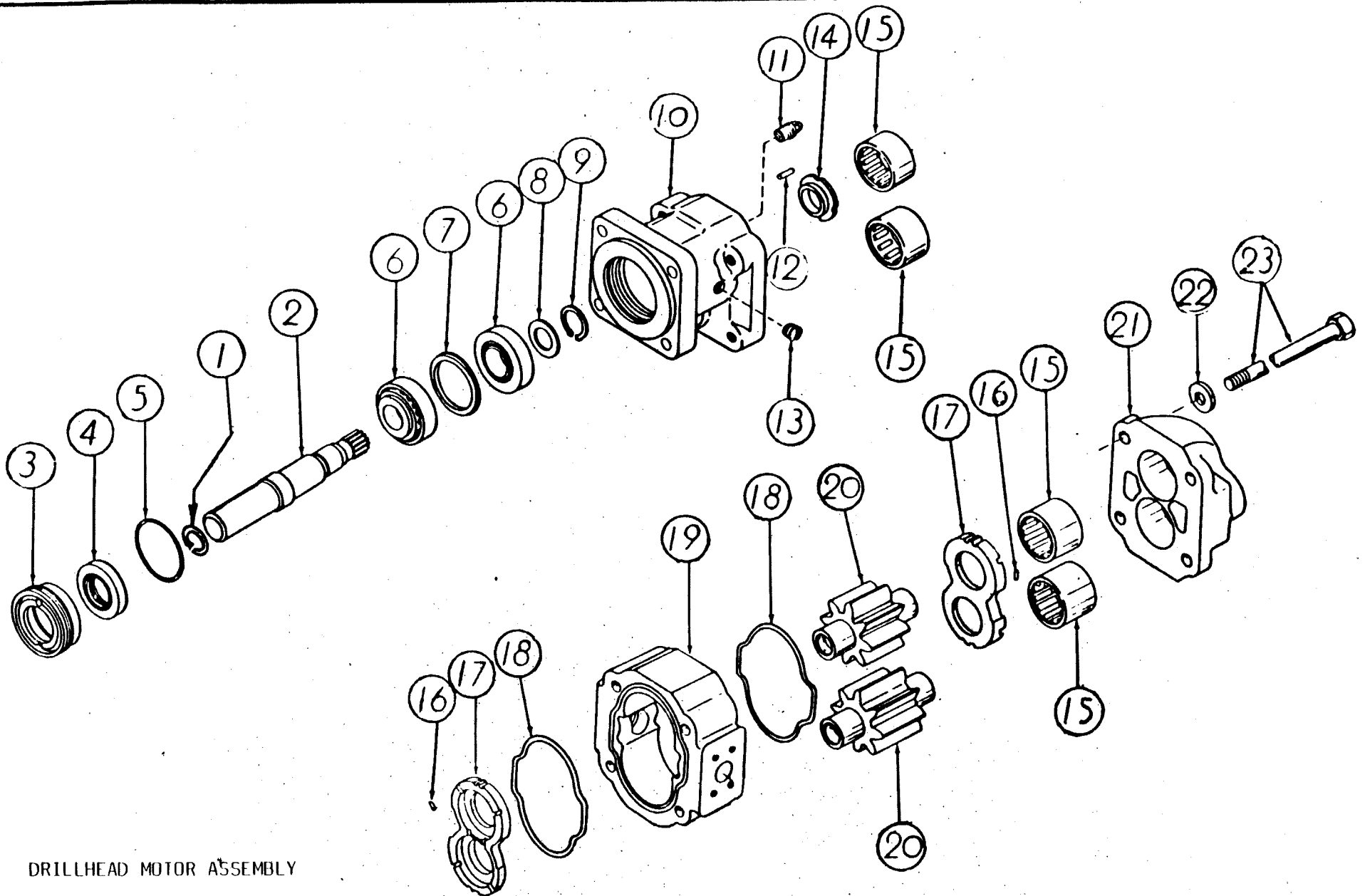
HUNTINGTON, W. VA.

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>NO. REQ'D.</u>
1.	2442	SNAP RING	1
2.	30588	SHAFT	1
3.	23045	RETAINING RING	1
4.	24250	HI-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	THURST PLATE	2
18.	409	"O" RING SEAL	2
19.	47261	GEAR HOUSING	1
20.	41257	GEAR SET	1
21.	47460	PORT END COVER	1
22.	22035	WASHER	4
23.	31754	BOLT	2

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

NOTE: BULKHEAD FITTINGS USED ON MOTOR ARE: 20382 45 degree
20379 90 degree

NOT SHOWN: 23758 SHAFT KEY



DRILLHEAD MOTOR ASSEMBLY

SHEET NO.

HM-89

TITLE

41849 HYDRAULIC MOTOR

DATE

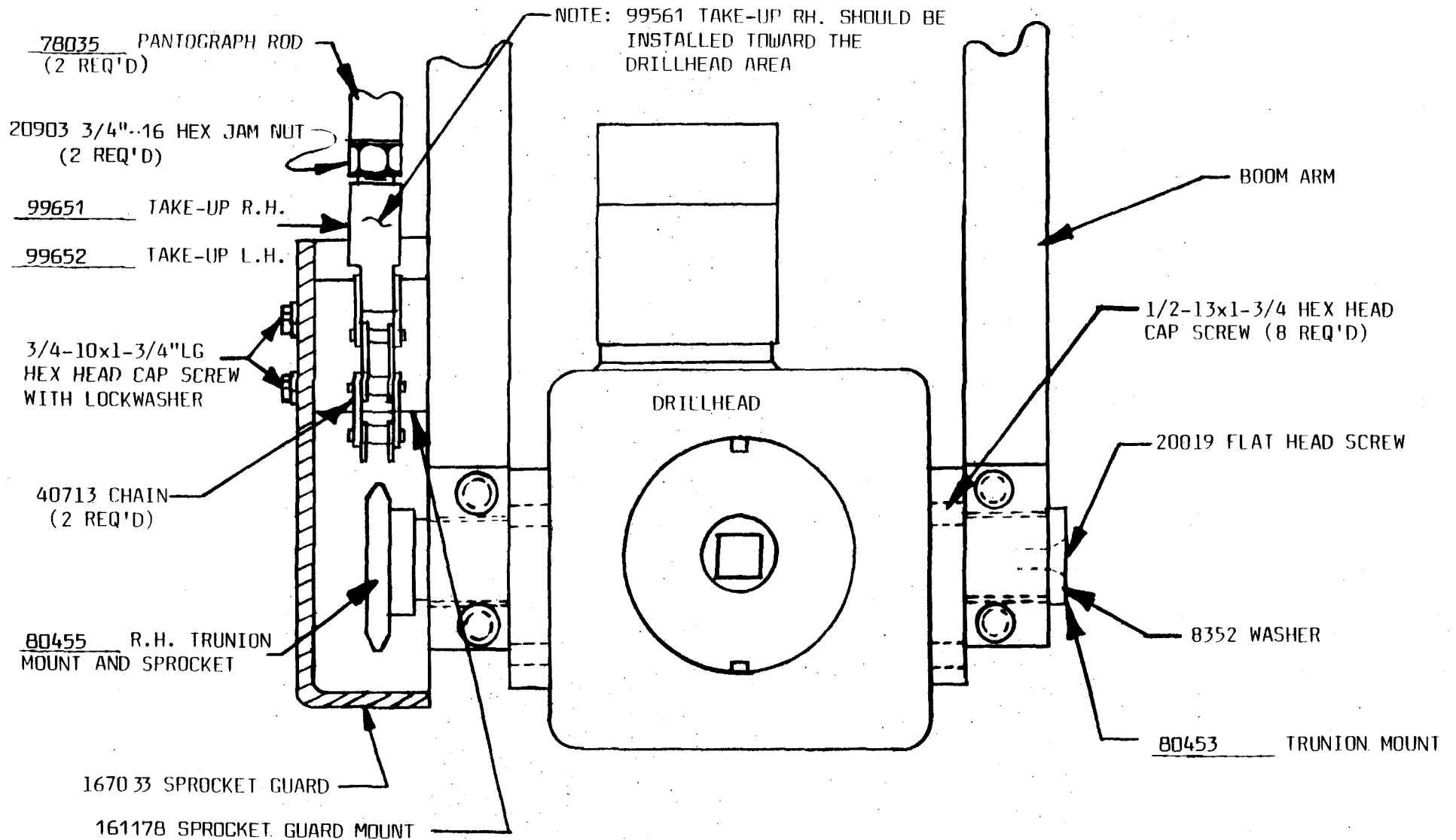
3-3-76

R

J. H. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.



NOTE: WHEN IMPACTOR IS USED THE TRUNION MOUNTS ARE WELDED TO THE IMPACTOR BOX.

SHEET NO.

MB-122

TITLE

DRILLHEAD PIVOT ARRANGEMENT

DATE

R

J. W. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.

40060 Cone
2 req'd

20808 Nut
2 req'd

2693 Cotter Pin
2 req'd

46341 Pin

21919 Spacer
2 req'd

REF:
INNER BOOM
ASSEMBLY

40059 Cup
2 req'd

1/4" x 20" Felt
2 req'd

CHASSIS

SHEET NO.
MB-172

TITLE
BOOM PIVOT ARRANGEMENT

DATE
1-3-73

R

J. M. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.

SHEET NO.

MB-393 E

TITLE

BOOM ROLLER GUIDE ARRANGMENT

DATE

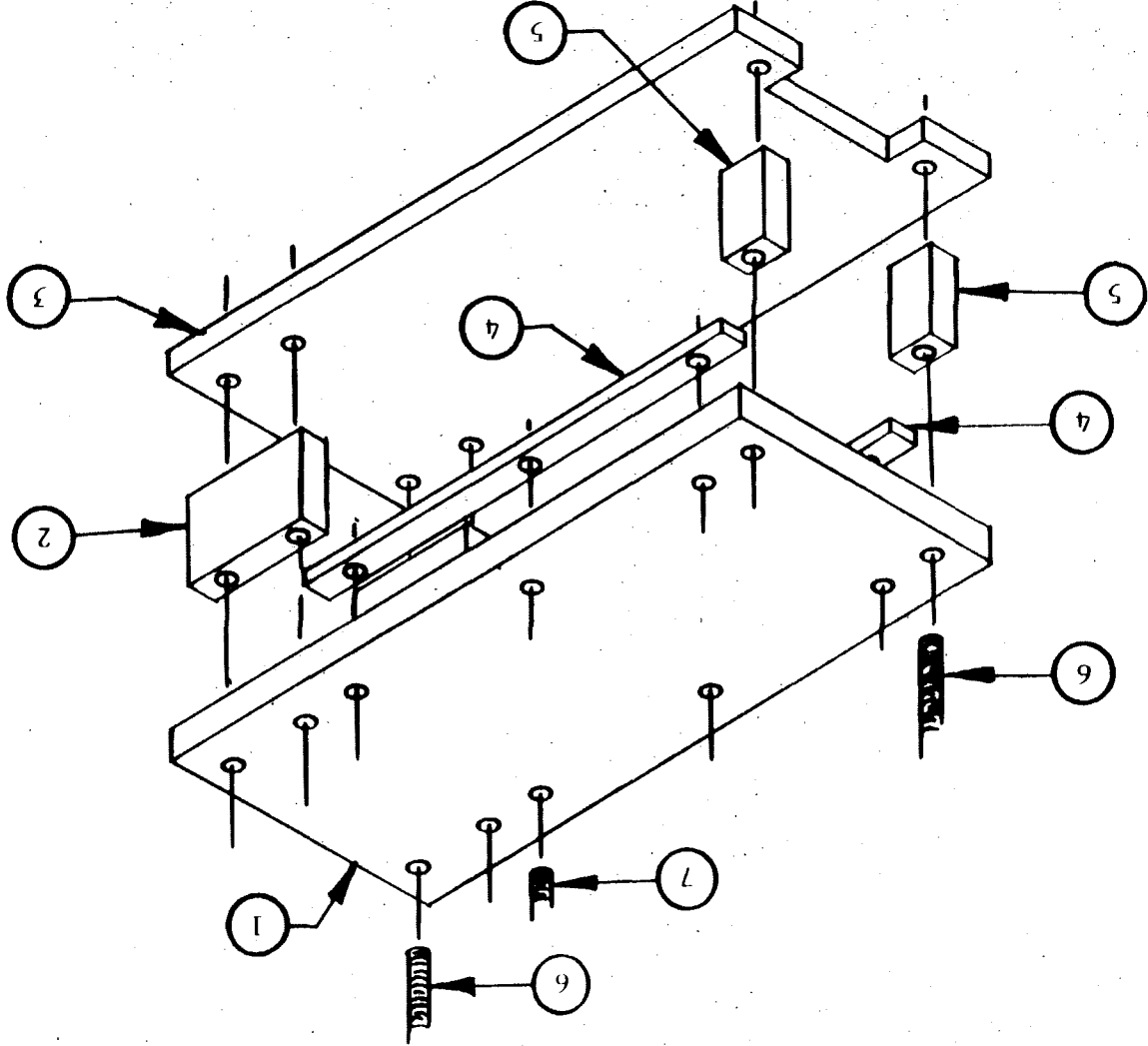
4/11/85

R

J. H. FLETCHER & CO.

707 WEST 7TH STREET HUNTINGTON, W. VA.

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>NO. REQ'D</u>
1	TOP PLATE ASSEMBLY	<u>94007</u>	1
2	MOUNTING BLOCK ASSEMBLY	<u>82905</u>	2
3	BOTTOM PLATE ASSEMBLY	<u>94008</u>	1
4	GUIDE BAR ASSEMBLY	<u>94009</u>	2
5	MOUNTING BLOCK ASSEMBLY	<u> </u>	2
6	HEX SOCKET HEAD CAP SCREW	20228 (5/8"-11x5½")	6
7	HEX SOCKET HEAD CAP SCREW	20050 (5/8"-11x1")	6



SHEET NO.

TITLE

DATE

R

J. H. FLETCHER & CO.

MB-458

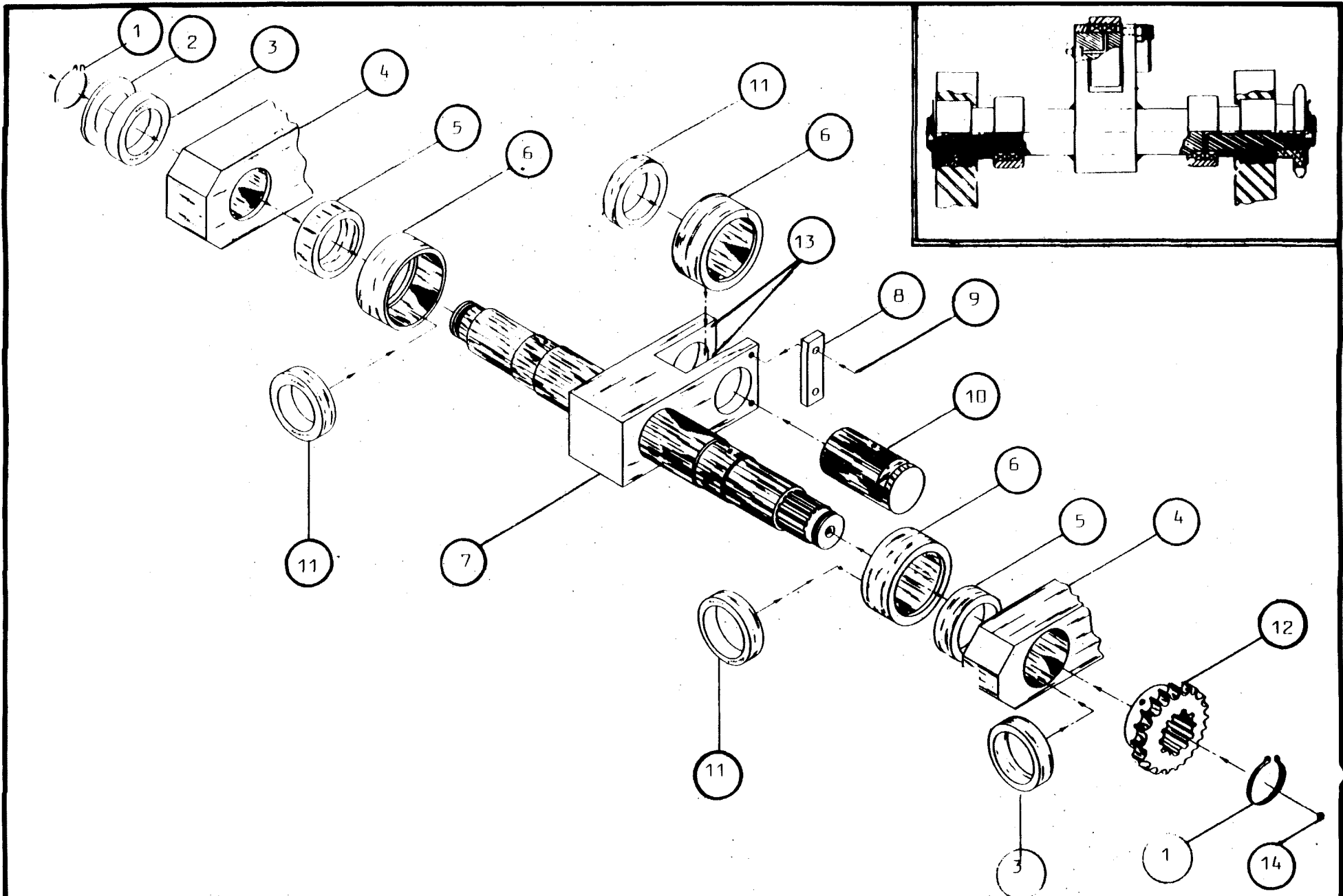
188761 BOOM ROLLER ASSEMBLY

3-2-87

707 WEST 7TH STREET

HUNTINGTON, W. VA

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>NO. REQ'D</u>
1	SNAP RING	24082	2
2	FLAT WASHER & (2) 20176 $\frac{1}{4}$ "-20x $\frac{1}{2}$ " H.H.C.S.	202049	1
3	BEARING	40156	2
4	BOOM ARM (SEE SHEET MB-476)		2
5	SPACER	21631	2
6	ROLLER	45814	2
7	SHAFT & BLOCK ASSEMBLY	188762	1
8	KEEPER	174025	1
9	3/8-16 x 7/8" S.H.H.C.S. (NOT SHOWN:)	24866	2
10	PIN	33569	1
11	BEARING	40167	3
12	SPROCKET	43209	1
13	SPACER (NOT SHOWN:)	21844	2
14	GREASE FITTING	20264	1



<p>SHEET NO. MB-458</p>	<p>TITLE 188761 BOOM ROLLER ASSEMBLY</p>	<p>DATE 3-2-87</p>	<p>R J. H. FLETCHER & CO. 707 WEST 7TH STREET HUNTINGTON, W. VA</p>
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SHEET NO.

MB-467

TITLE

194006 L.H. INNER BOOM ASSEMBLY
194007 R.H. INNER BOOM ASSEMBLY

DATE

4-28-87

R

J. H. 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	40398	BUSHING	2
2	45839	ROLLER ASSEMBLY w/BUSHINGS	1
3	33333	PIN ASSEMBLY	1
4	20264	1/8" GREASE FITTING	1
5	40060	*BEARING CONE	2
6	40059	BEARING CUP	2
7		1/4" SQUARE FELT X 19-1/2" Lg.	2
8	33557	SWING CYLINDER PIN (SHELL END)	1
9	33545	BOOM EXTEND CYLINDER PIN (SHELL END)	1
10	21919	*SPACER	1
11	46341	*BOOM PIVOT PIN	1
12	33555	*COTTER PIN	1
13	20808	*NUT	1
NOT SHOWN	45427	DOCK BUMPER	1
	20100	3/4"-10x3" LG. HEX HEAD CAP SCREW	1
	20758	3/4"-10 FINISHED HEX NUT	1
	22022	3/4" LOCKWASHER	1

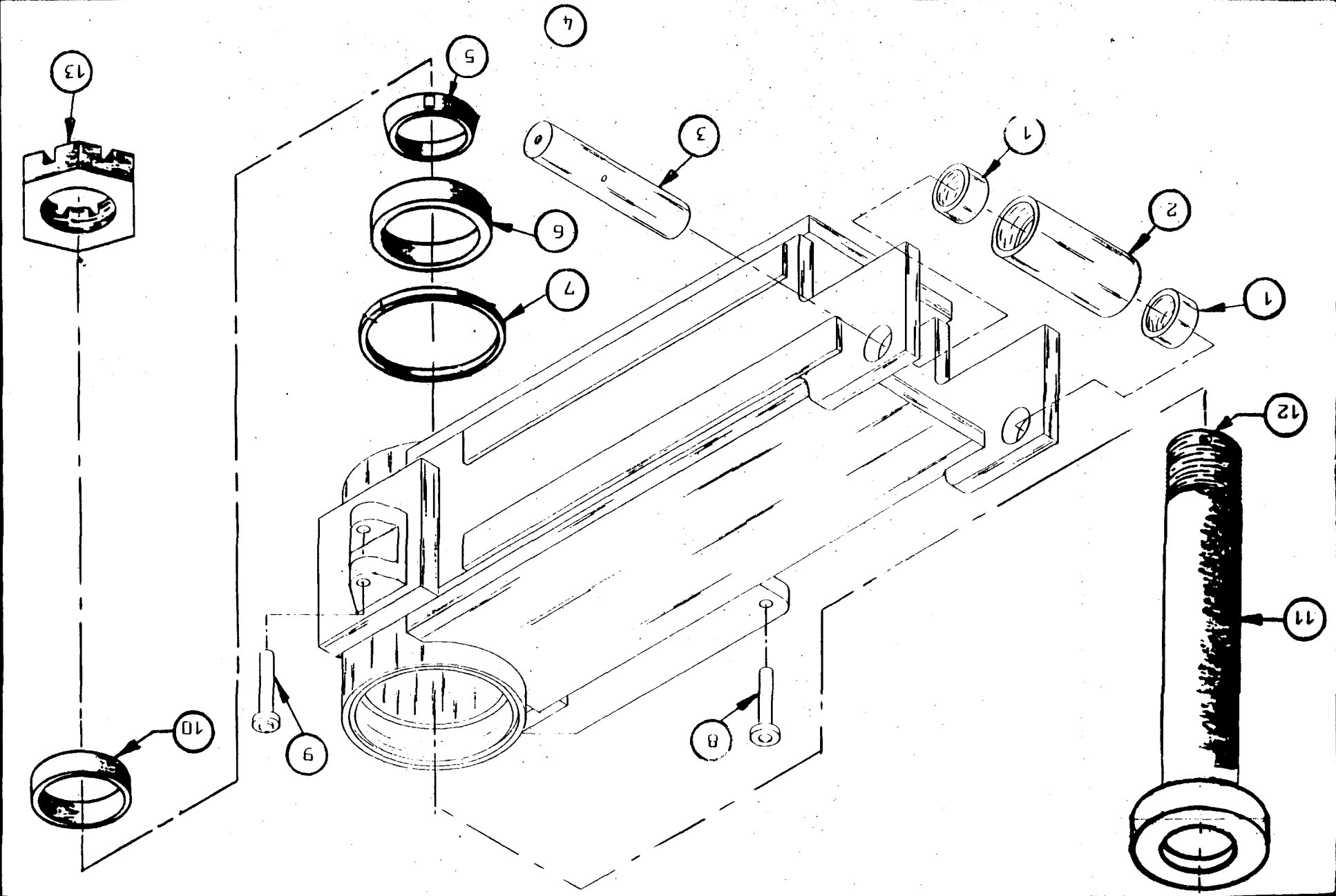
* INDICATES ITEM NOT PART OF ASSEMBLY

SHEET NO. MB-467

TITLE INNER ROOM ASSEMBLY

DATE 4-28-87

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



SHEET NO.

MB-468 B

TITLE

194001 L.H. OUTER BOOM ASSEMBLY
194002 R.H. OUTER BOOM ASSEMBLY

DATE

4-28-87

R

J. H. FLETCHER & CO.

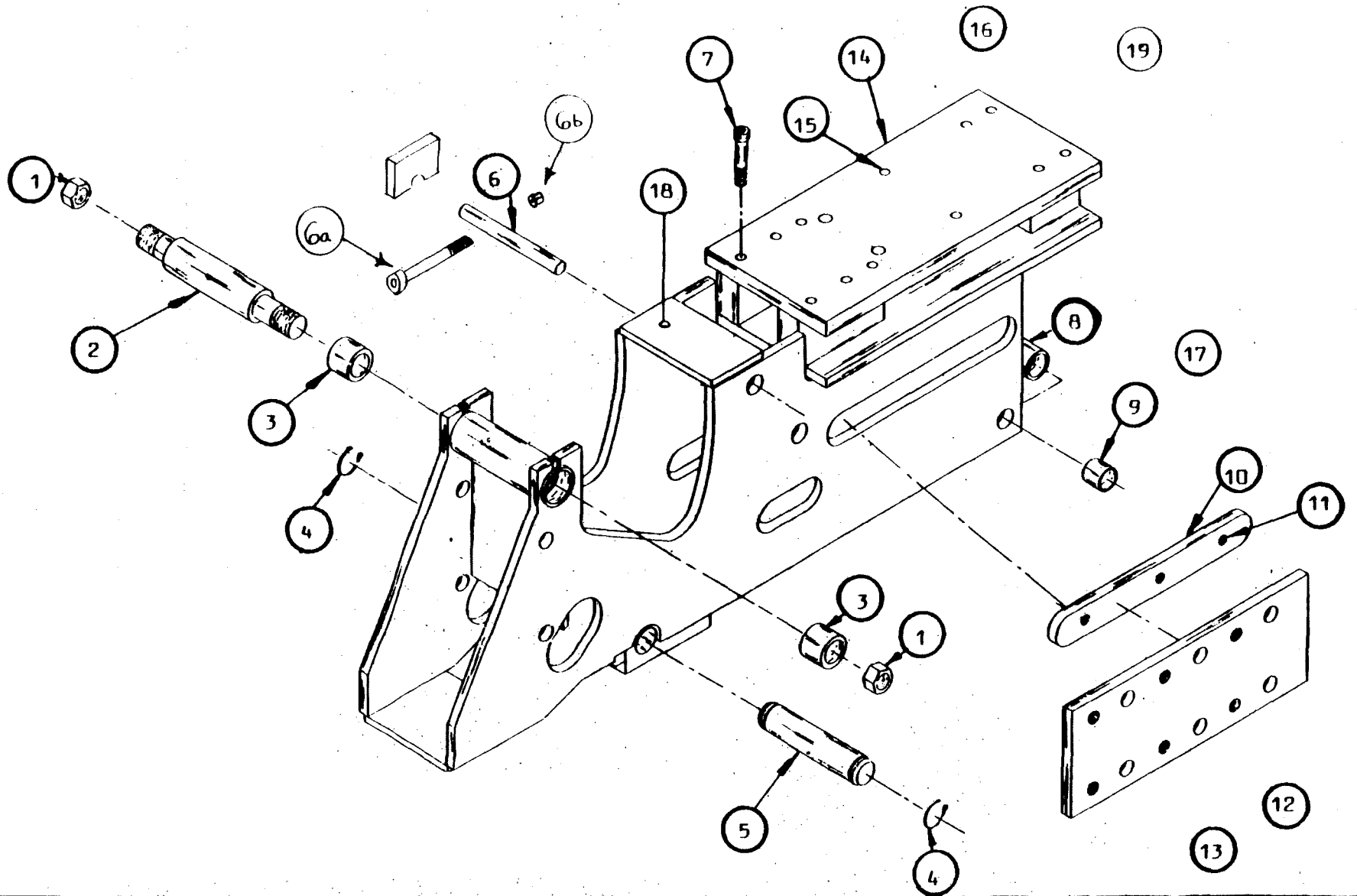
707 WEST 7TH STREET

HUNTINGTON, W. VA

<u>ITEM</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>NO. REQ'D</u>
1	20904	NUT	2
2	30682	PIN	1
3	40155	BEARING	2
4	24073	SNAP RING	2
5	35658	PIN	1
6	35899	PIN (FOOT CYLINDER SHELL END)	1
7	24895	5/8"-11 x 5" Lg. H.S.H.C.S.	6
8	45838	ROLLER ASSEMBLY	1
9	40155	BEARING	2
10	194008	WEAR BAR	1
11	20264	1/8" GREASE FITTING (NOT SHOWN)	6
12	23557	SET SCREW (NOT SHOWN)	6
13	20989	HEX JAM NUT (NOT SHOWN)	6
14		*ROLLER GUIDE ARRANGEMENT (SEE SHEET MB-393)	
15	20050	5/8"-11 x 1" Lg. H.S.H.C.S.	6
16	22008	5/8" LOCKWASHER	12
17	35659	PIN w/NUT (SEE SHEET MY-635)	1
18		1/4"-20 x 3" Lg. w/NYLOCK NUT	1
19	33545	BOOM EXTEND CYLINDER PIN (NOT SHOWN)	1

6a 34259 Socket Head Cap Screw-Grade 8, 1/4" -20 x 3"
 6b 20986 Hex Nylock Nut, 1/4" - 20
 6c 33572 Cotter Pin, Hammerlock Style, 3/16" x 1 1/2"

* INDICATES PARTS NOT PART OF ASSEMBLY



SHEET NO.	TITLE	DATE	R	J. N. FLETCHER & CO.
M7-468 B	OUTER BOOM ASSEMBLY	4-28-87		707 WEST 7TH STREET HUNTINGTON, W. VA.

SHEET NO.

MB-476

TITLE

BOOM ARM ARRANGEMENT

DATE

5/15/87

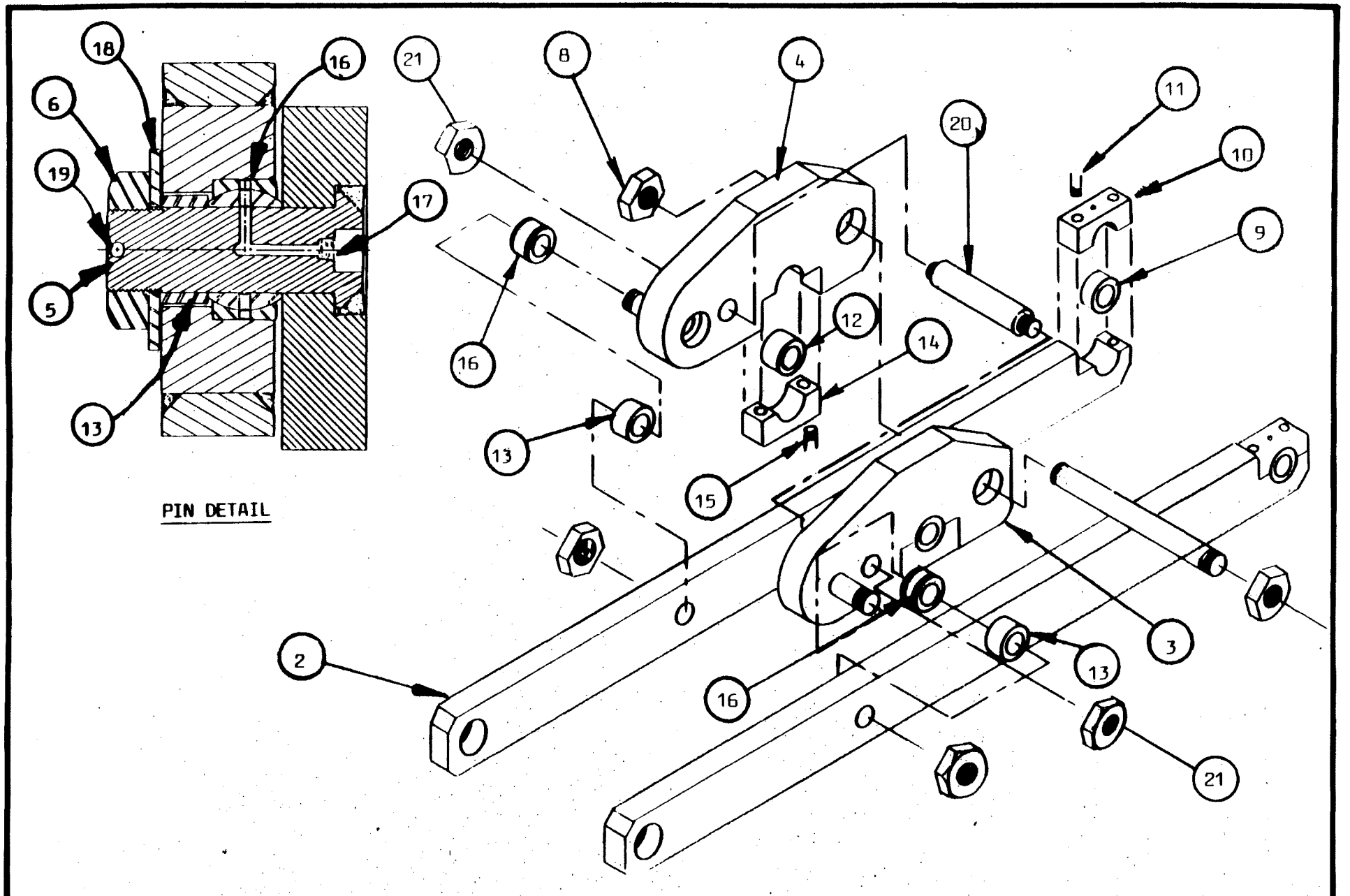
R

J. H. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>PART NO.</u>	<u>NO. REQ'D</u>
1	RIGHT HAND LONG ARM	191010	1
2	LEFT HAND LONG ARM	191009	1
3	RIGHT HAND SHORT ARM	191003	1
4	LEFT HAND SHORT ARM	191005	1
5	SHAFT (PART OF SHORT ARM)	34072	1
6	SLOTTED HEX JAM NUT	21025	1
7	SHAFT	30682	1
8	HEX NUT	20904	2
9	SPLIT BUSHING	40340	2
10	CAP	191012	2
11	SOCKET HEAD CAP SCREW (3/4-10x3")	20161	4
12	BEARING	40007	2
13	SPACER	21901	1
14	CAP	191007	2
15	SOCKET HEAD CAP SCREW (3/4-10x3 1/2")	20145	4
16	BEARING	40155	1
17	1/8" GREASE FITTING	20264	2
18	WASHER	22196	1
19	1/4"x3 COTTER	30443	2
20	SHAFT	46346	1
21	NUT	20854	2



PIN DETAIL

<p>SHEET NO. MB-476</p>	<p>TITLE BOOM ARM ARRANGEMENT</p>	<p>DATE 2-10-88</p>	<p>R J. N. FLETCHER & CO. 707 WEST 7TH STREET HUNTINGTON, W. VA</p>
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SHEET NO.

TITLE

DATE

R

J. H. FLETCHER & CO.

MM-82

DRILLHEAD ASSEMBLY

9-5-86

707 WEST 7TH STREET

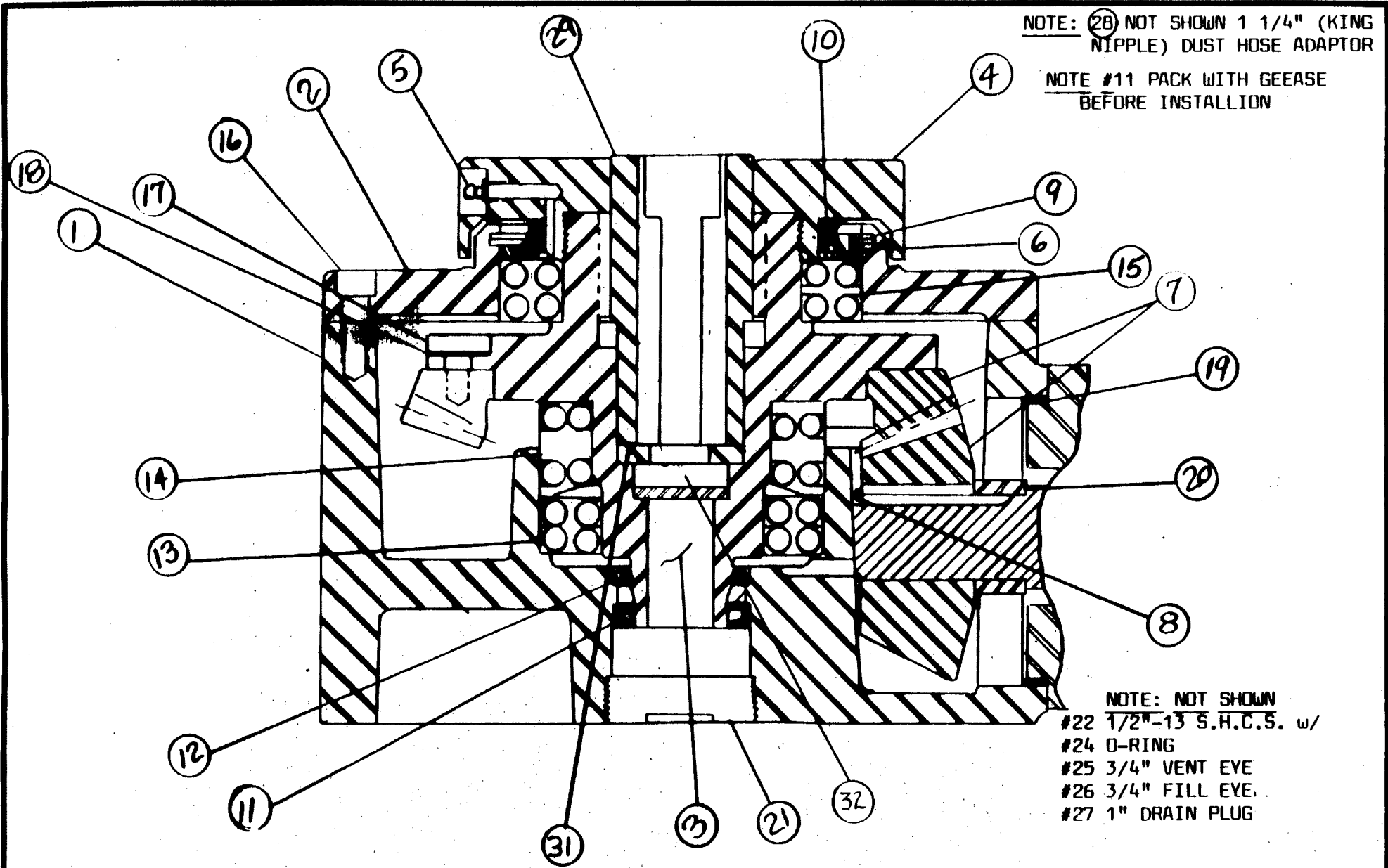
HUNTINGTON, W. VA

ITEM	DESCRIPTION	PART NO.	NO. REQ'D
1	DRILLHEAD BOX	188157	1
2	TOP COVER	80340	1
3	SOCKET SHAFT	194571	1
4	FLINGER	171372	1
5	GREASE FITTING	20296	1
6	* SEAL FACE RING	188201	1
7	RING GEAR & PINION SET	41268	1
8	SNAP RING	24037	1
9	SPIROLOX RING	24050	1
10	* SEAL	35073	1
11	* LIP SEAL (TEFLON)	35036	1
12	* SEAL	35072	1
13	* BEARING	2501	1
14	* THRUST BEARING	40117	1
15	* BEARING	40135	1
16	SOCKET HEAD CAP SCREW (GRADE 8)	20186	12
17	3/8"-24 x 3/4" H.H.C.S. (GRADE 5)	20026	10
18	LOCKWASHER	22010	10
19	SPACER	63905	1
20	SPACER (FOR HYDRAULIC MOTOR)	60996	1
21	PLUG ASSEMBLY	99486	1
22	1/2"-13 x 3/4" S.H.C.S. (GRADE 8)	20039	1
23	SQ. SOCKET PIPE PLUG	32606	1
24	O-RING	2377	1
25	FLUSH GREASE FITTING	18318	1
26	FLUSH GREASE FITTING	20548	1
27	SQ. SOCKET PIPE PLUG	32617	1
28	DUST HOSE NIPPLE	20352	1
29	SOCKET	191669	1
30	DRILLHEAD MOTOR (SEE SHEET <u>HM - 89</u>)	41849	
31	THRUST WASHER	191667	
32	SPACER - LOW PROFILE DRILLHEAD	121507	

* INDICATES PARTS INCLUDED IN
55677 REBUILD KIT

55710 DRILLHEAD ASSEMBLY ONLY

55716 DRILLHEAD ASSEMBLY W/ MOTOR



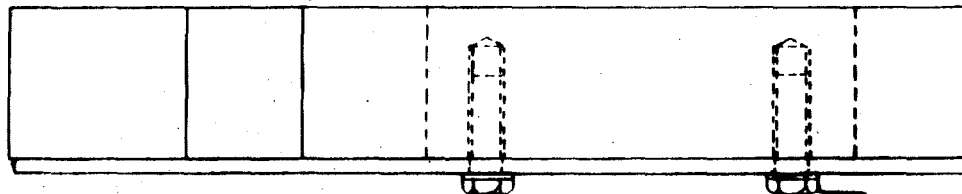
NOTE: (28) NOT SHOWN 1 1/4" (KING NIPPLE) DUST HOSE ADAPTOR

NOTE #11 PACK WITH GEEASE BEFORE INSTALLION

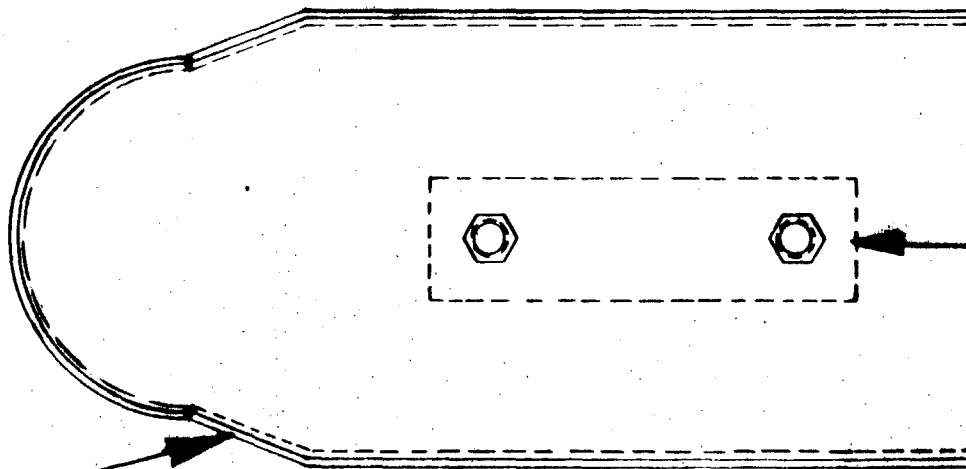
NOTE: NOT SHOWN
 #22 1/2"-13 S.H.C.S. w/
 #24 O-RING
 #25 3/4" VENT EYE
 #26 3/4" FILL EYE
 #27 1" DRAIN PLUG

NOTE: #15 INSTALL BEARING WITH SHIELD DOWN

<p>SHEET NO. MM-82</p>	<p>TITLE DRILLHEAD ASSEMBLY</p>	<p>DATE 9-5-86</p>	<p>R J. N. FLETCHER & CO. 707 WEST 7TH STREET HUNTINGTON, W. VA</p>
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3/4"-10 X 1-3/4" LG.
HEX HEAD CAP SCREW
3/4" LOCKWASHER
(2 REQ'D EACH)



161178 MOUNT

167033 GUARD

SHEET NO.

MY-402

TITLE

PANTOGRAPH SPROCKET GUARD

DATE

12/10/79

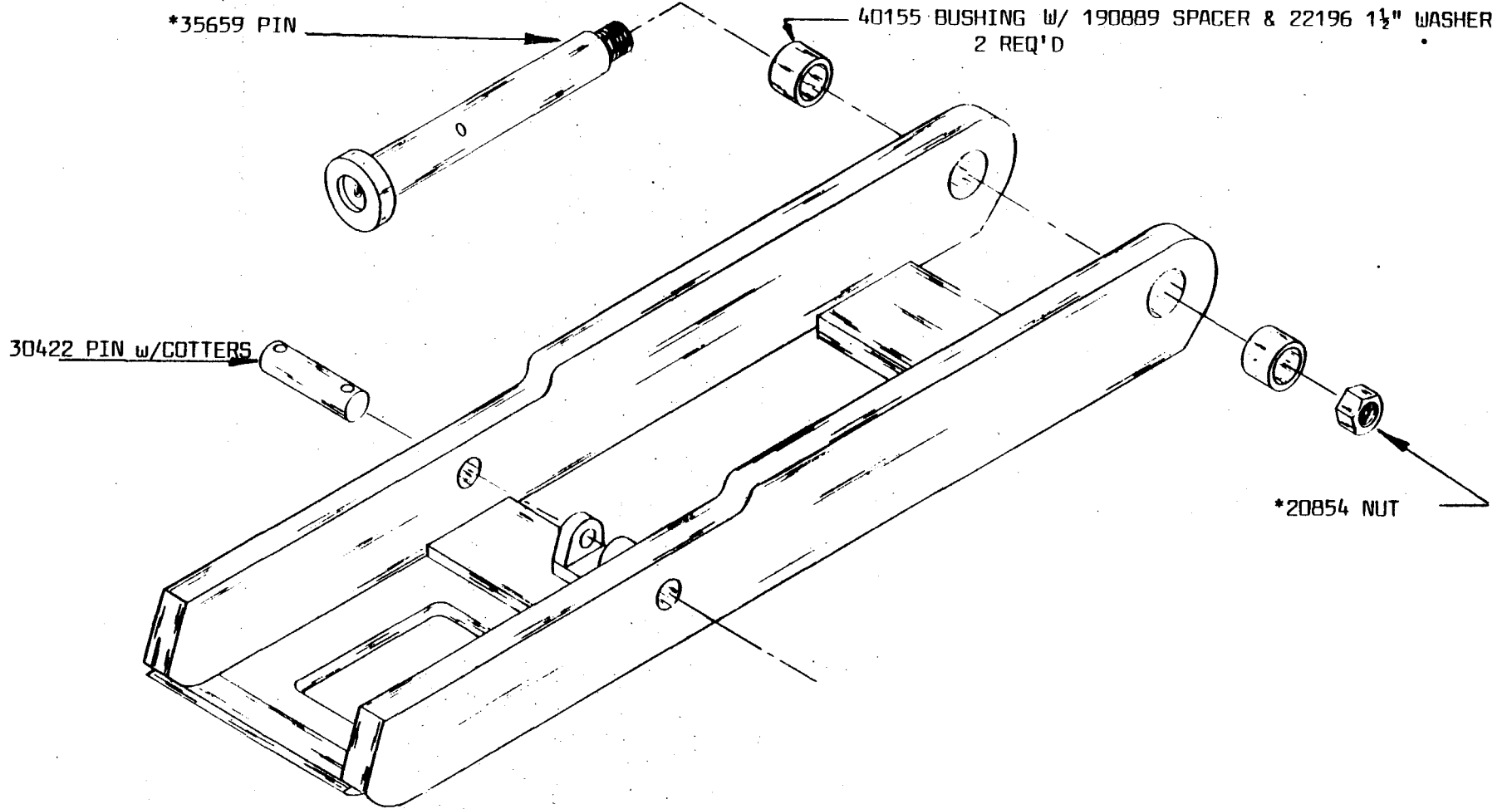
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J. W. FLETCHER & CO.

707 WEST 7TH STREET

HUNTINGTON, W. VA.

NOTE: * INDICATES PARTS
NOT PART OF ASSEMBLY



SHEET NO.

MY-635

TITLE

202122 FOOT ASSEMBLY (BOOM)

DATE

4-24-87

R

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