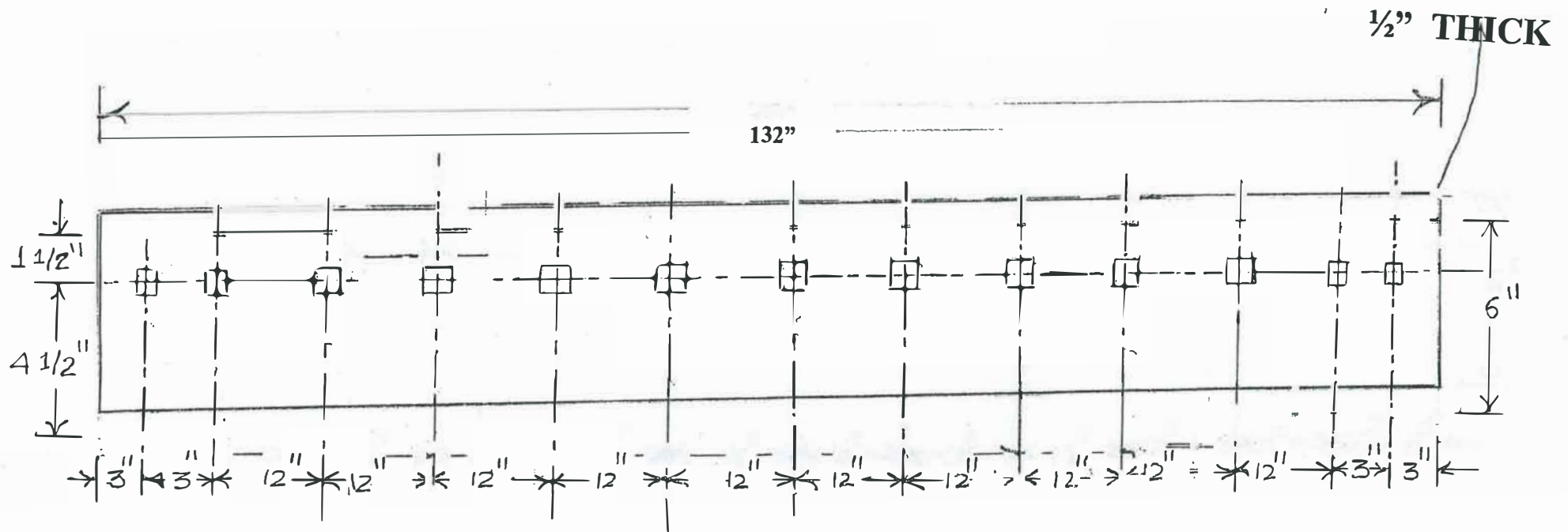


T1495S Attachment A - NJDOT Specific Snow Plow Drawings

BLADE "Z"

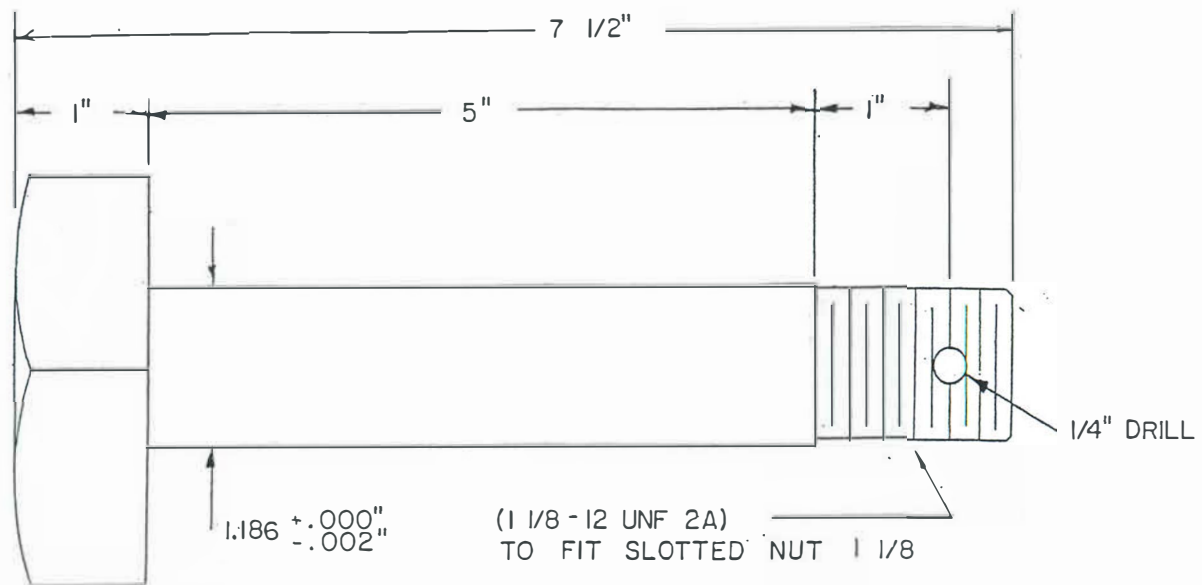
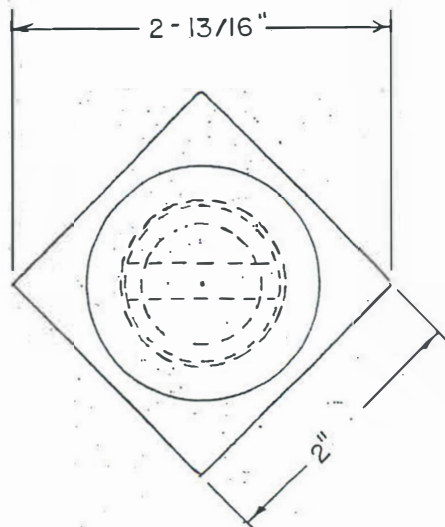
13 HOLES, 11/16" SQUARE



1/2" x 6" x 132"

"MATERIAL: HIGH CARBON ABRASIVE RESISTANT
STEEL SAE1091"

MATERIAL FOR AXLE
CARBON STEEL C-1020 C-1040

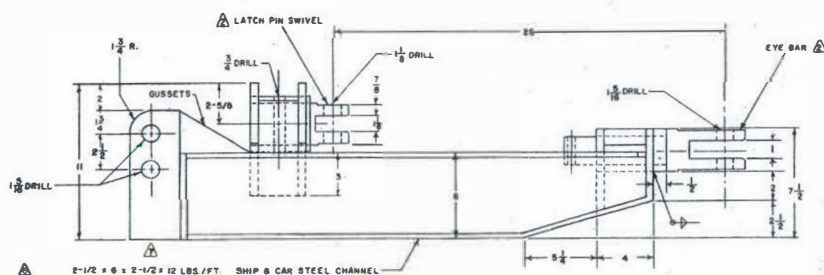
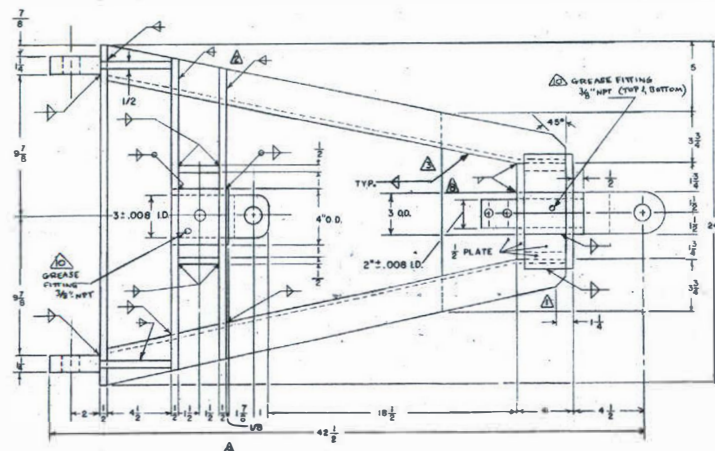


NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

SNOW PLOW AXLE
FOR 8" OR 10" WHEEL

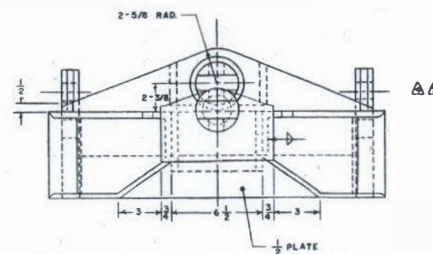
REV 2	A.P.S.	11-25-74	CHANGE TITLE	SUBMITTED BY <i>LLW</i>	DRAWN BY MARTIN PILCH	SCALE FULL	DWG. NO. 1060
REV 1	M.P.	7-27-73	ADDITION OF HOLE CHANGED 1.187 TO 1.186	APPROVED BY <i>J. Beepel</i>	JOB NO <i>---</i>	DATE JUNE 11, 1973	4-121

1. ALL WELDS TO BE CONTINUOUS
2. EYE BAR AND LATCH PIN SWIVEL FOUND IN GREATER DETAIL ON
OWB NO. 4-154

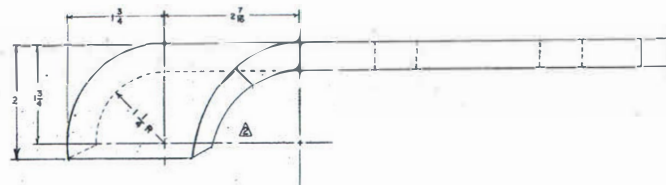


2 MAT'L:

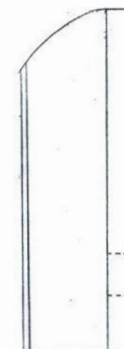
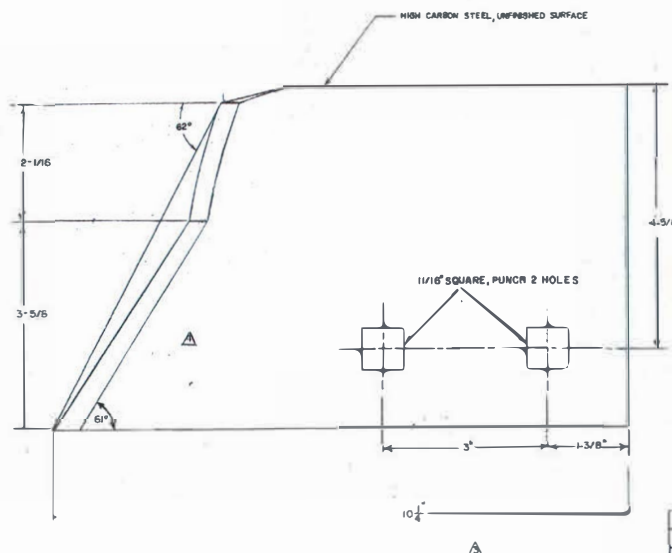
CHANNEL _____ SHIP & CAR STEEL CHANNEL
PLATE _____ HOT ROLLED STRUCTURAL STEEL QUALITY
TUBING _____ COLD DRAWN SEAMLESS CARBON STEEL



4/1/85	JWB	ADDED 3 GREASE FITTINGS							
4/2/85	A.R.S	SHORTER LATCH PIN SWIVEL RECEIVER							
3/5/86	JWB	ADD WELD SYMBOLS							
4/11/86	A.P.S	ADD HOLE, RADIUS, & DIMS.							
3/9/86	A.P.S	CHG. NOM. OF CHANNEL							
4/27/86	A.P.S	REDUCE HEIGHT OF REAR 1/2" PLATE & CHG. POS. OF GUSSETS							
4/10/86	A.P.S	CLARIFY REAR SECTION OF P.B. & CHG. DIMS.	77- GHE-0024		0-R. 11.25-(24.42)-(13.81)-1 MOD.				
4/28/86	A.P.S	CHANGE FRONT SECTION OF P.B.	78- GHE-0009		M.R.D.- 32'-15'-1 MOD.				
4/28/86	A.P.S	ADD 1/2" TO ADTER, NOTE 3, TYPE OF HAT L. WELD, PART FRAMES, NO DEADLY	75- GHE-0049		M.R. (1'-38'-1)				
4/28/86	A.P.S	MADE ADDITION TO FRONT SECTION OF PUSH BAR	75- GHE-0045		0-R. 12.75-(32.53)-1475.22.75-1				
REV DATE	BY	REMARKS	ORDER SPECIFY NO.		APPLICABLE SHOW FLOW				
						NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
						LARGE SNOW FLOW PUSH BAR			
						SUBMITTED BY: <i>[Signature]</i> APPROVED BY: <i>[Signature]</i>	DRAWN BY: A.J. CERVENKA	SCALE: NONE	DWS. N. 1076-1
						JOB NO. <i>[Signature]</i>	DATE: OCTOBER 23, 1977		



MATL:
HIGH CARBON STEEL

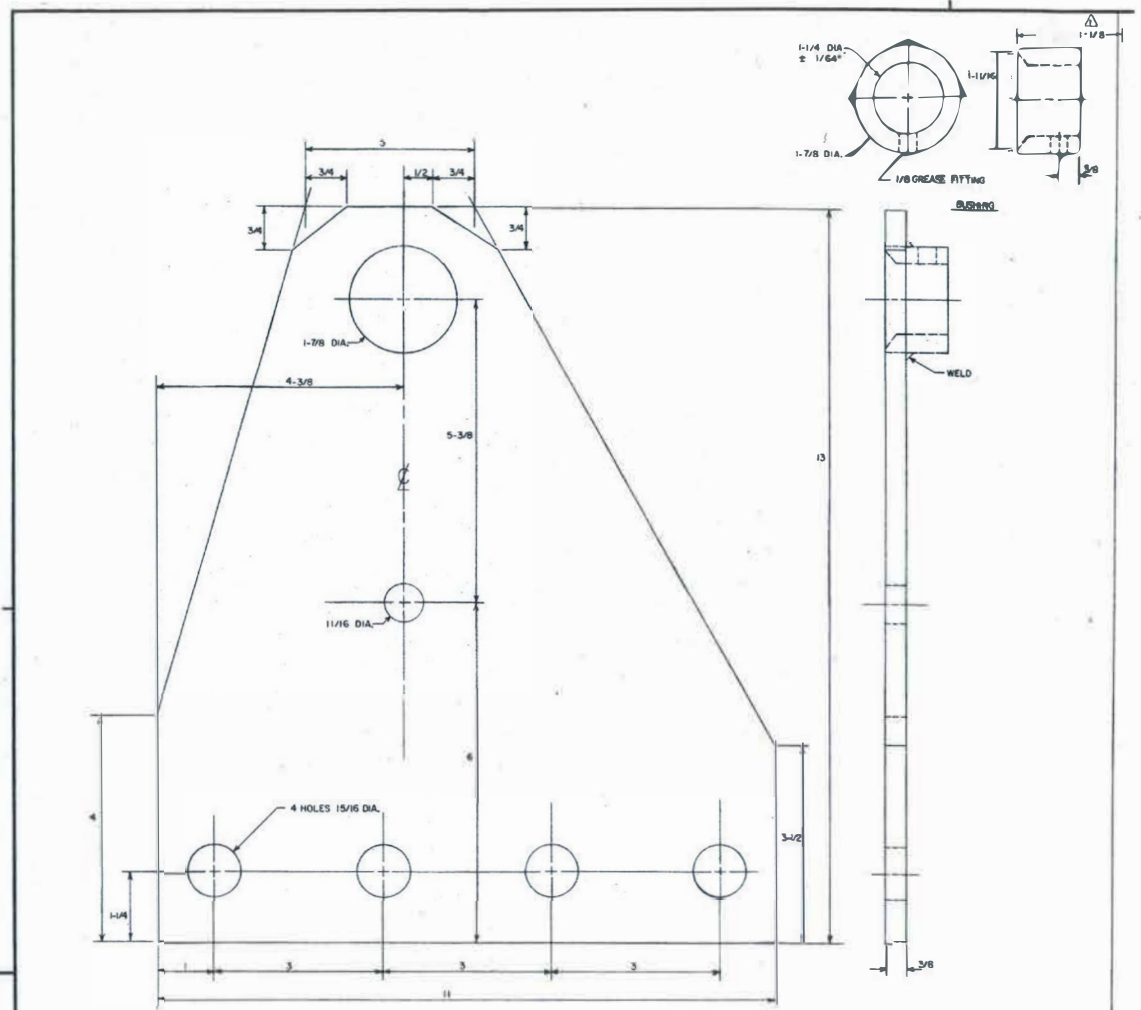


NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CURB BUMPER GUARD			
4	SHYUJWG	1-CURV. LEFT END	
4	WVH SB	CHANGE HOLES DIMENSIONS	77-GHE-0024
4	WVH APS	REVISE TOP VIEW	75-GHE-0049
4	WVH APS	CHANGE HOLE LOCATION	75-GHE-0045
REV	DATE	BY	REMARKS
			ORDER REQUEST NO.
			APPLICABLE SNOW PLOWS
SUBMITTED BY		DRAWN BY	SCALE
A. J. CERVONEA		A. J. CERVONEA	FULL SCALE
APPROVED BY		JOB NO.	DATE
F. D. B. B.			OCTOBER 29, 1973
DWG. NO.			1077
			4-133

VENDOR REF.
GOOD ROADS CURB BUMPER GUARD NO. 62100431

REVISION
Drawn by
Checked by

1000 1000



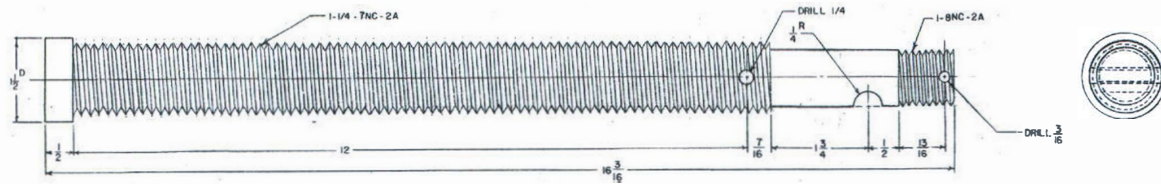
NOTES

1. 3/8" STD. THICK. HOT ROLLED PLATE, STEEL
2. ALL OTHER DIMENSIONS ± 1/16"
3. BUSHING WELDED IN TRUNNION PLATE
4. POSITION BUSHING WITH CHAMFER DOWN
5. WELD BUSHING IN OPPOSITE SIDE OF PLATE FOR STREET SIDE TRUNNION PLATE
6. TRUNNION PLATES TO BE BOLTED TO SEMI-CIRCLE W/ 7/8" - 9UNC BOLTS, NUTS, & LOCKWASHERS
7. TRUNNION PLATES TO BE WELDED TOGETHER W/ PIPE SPACER & 5/8" - 11UNC BOLT, NUT & LOCKWASHER.
8. BUSHING MATERIAL: COLD FINISHED STEEL

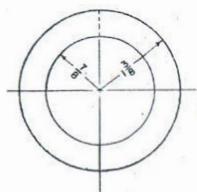
TRUNNION PLATE (CLAMP SIDE)

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
TRUNNION PLATE			
77-GHE-0024	0-R.11.25-(24,42)-(13,18)-1 MOD.	SUBMITTED BY:	STEVE TOTH
76-GHE-0009	M.R.10-32-15-1 MOD.	SCALE:	FULL SIZE
75-GHE-0049	M.R.11-36-15-1	APPROVED BY:	JOB NOT
75-GHE-0045	0-R.12.75-(32,53)-(14,75,22,75)-1	DATE:	FEB. 27, 1974
REV. DATE	REMARKS	ORDER REQUEST	APPLICABLE SNOW PLOWS

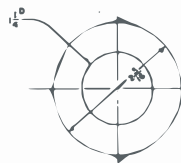
REVISION
Drawn by:
Checked by:



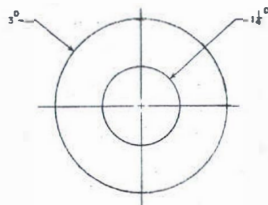
ADJUSTING BOLT
NO. 62100642
MATERIAL: COLD FINISHED,
MEDIUM CARBON STEEL
HEAT TREATED



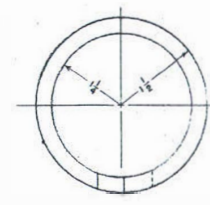
SPRING
NO. 62100637
MATERIAL: SPRING STEEL



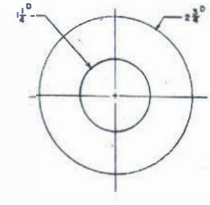
THRUST BEARING
NO. 62100637
TIMKEN NO. T-126, OR
APPROVED EQUAL



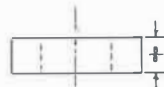
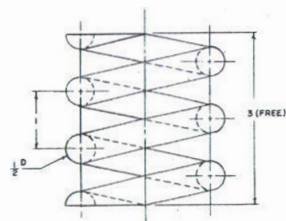
BEARING WASHER
NO. 62100638
STD. STEEL WASHER



RETAINING RING
NO. 62100638
MATERIAL: SPRING STEEL



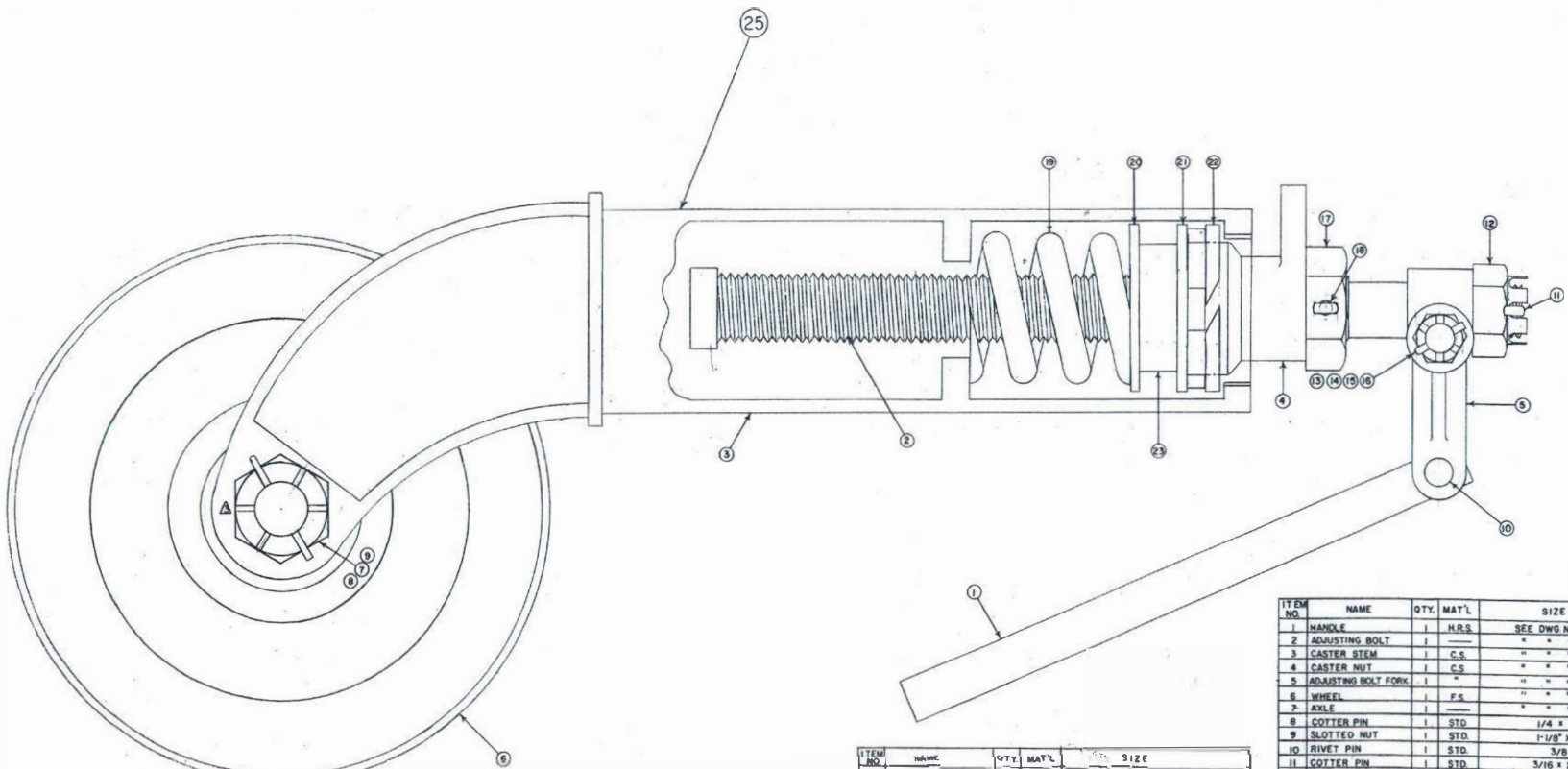
WASHER
NO. 62100638
STD. STEEL WASHER



NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY			
76-GHE-0009	Q-R. 11.25-(24,42)-03,18)-1 MOD.	SUBMITTED BY	DATE
75-GHE-0049	M.R. 10-32-15-1 MOD.	DRAWN BY	DATE
75-GHE-0045	M.R. 11-36-15-1	APPROVED BY	DATE
75-GHE-0045	Q-R. 12.75-(32,53)-04,75,22,75)-1	JOB NO.	SCALE
ORDER REQUEST NO.	APPLICABLE SNOW PLOWS	1" = 1"	DWG. NO.
REV. DATE BY	REMARKS		
0-9-75 A.P.S.	CHANGE THICKNESS OF WASHER		
0-22-75 A.P.S.	CHANGE 1/2" OF THRUST BEARING		
	ADDED 1/2" OF WASHER TO 1/2" BEARING		

VENOOR REF. GOOD ROADS

REVISION
Drawn by
Checked by



ITEM NO.	NAME	QTY.	MAT'L	SIZE
23	BEARING (THRUST)	1		SEE DWG NO. 4-144-2
24				
25	COMPLETE CASTER ASSEMBLY - 2 REQ'D FOR EA. SNOW PLOW ASSY.			

ITEM NO.	NAME	QTY.	MAT'L	SIZE
1	HANDLE	1	H.R.S.	SEE DWG NO. 4-144-3
2	ADJUSTING BOLT	1	"	" " 4-144-2
3	CASTER STEM	1	C.S.	" " " 4-144-1
4	CASTER NUT	1	C.S.	" " " 4-144-3
5	ADJUSTING BOLT FORK	1	"	" " " 4-144-3
6	WHEEL	1	F.S.	" " " 4-155
7	AXLE	1	"	" " " 4-121
8	COTTER PIN	1	STD.	1/4 X 2
9	SLOTTED NUT	1	STD.	1-1/8" X 12 UNF
10	RIVET PIN	1	STD.	3/8
11	COTTER PIN	1	STD.	3/16 X 2
12	SLOTTED NUT-HEX	1	STD.	1"-8NC
13	BOLT-HEX HD.	1	STD.	1/2" X 20 UNF
14	WASHER	1	STD.	1/2
15	SLOTTED NUT-HEX	1	STD.	1/2" X 20 UNF
16	COTTER PIN	1	STD.	1/8" X 1-1/4"
17	HEX NUT	1	STD.	1-1/4" X 7 NC
18	COTTER PIN	1	STD.	1/4"
19	SPRING	1	SPG. STL	SEE DWG NO. 4-144-2
20	BEARING WASHER	1	STD.	" " " 4-144-2
21	WASHER	1	STD.	" " " 4-144-2
22	RETAINING RING	1	SPG. STL	" " " 4-144-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

CASTER ASSEMBLY

0-A. 11.25-(24,42)-(13,18)-1-1/2" MOD. M.R. 10-32-15-1 MOD. M.R. 11-34-15-1 O.R. 12-75-132,931-14-75,22751-1 APPLICABLE SNOW PLOWS		SUBMITTED BY <i>[Signature]</i> APPROVED BY <i>[Signature]</i>	DRAWN BY A.J. CERYNKA Jr. JOB NO. SCALE 1" = 1"	DATE FEBRUARY 28, 1974	DWG. NO. 1093 4-144-2
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VENDOR REF. GOOD ROADS NO. 62100635

REVISION
Drawn by
Checked by

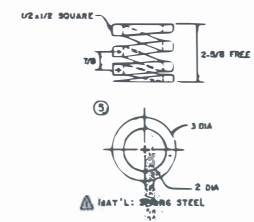
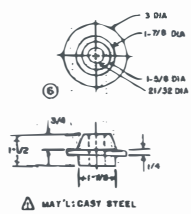
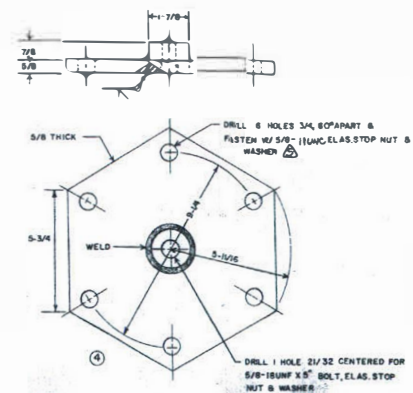
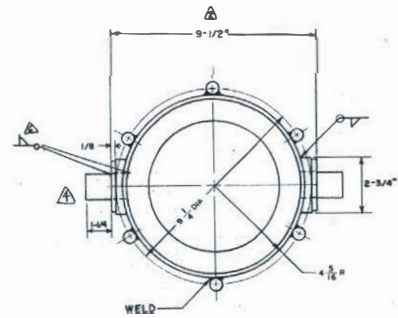
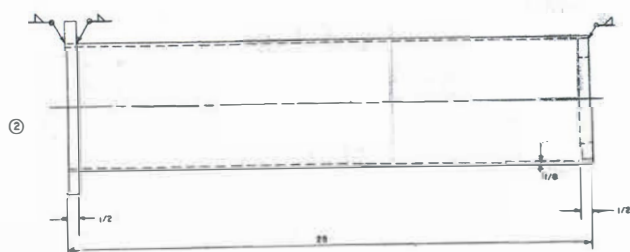
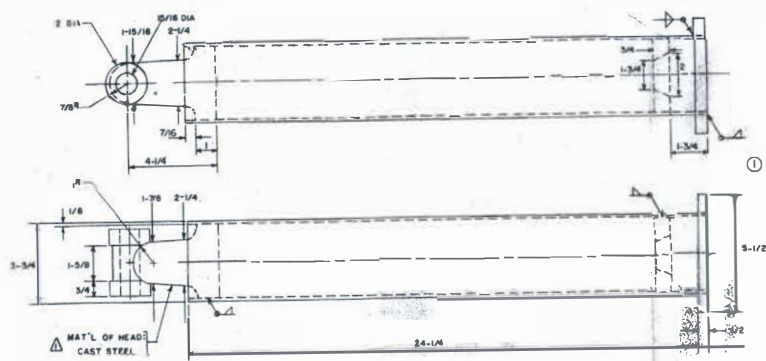
Technical drawing of a mechanical part, likely a valve or plug, showing a cross-section with various dimensions and tolerances. The part has a central circular feature with a 1.250 ± 0.03 DIA hole. The overall length is 24 inches. The drawing includes a section line A-A and a note (3) indicating a specific material or finish.

Dimensions and Tolerances:

- 1.250 ± 0.03 DIA (Central Hole)
- 1.318 (Top Flange Thickness)
- 1/2" (Top Flange Radius)
- 11-1/2" (Distance from Section Line A-A to Center)
- 5" (Distance from Center to Right Flange)
- 24" (Overall Length)
- 1 1/2" (Right Flange Thickness)
- 1 1/2" (Right Flange Radius)

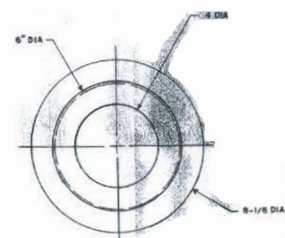
Section Line A-A is indicated on the left side of the drawing.

Note (3) is located at the bottom left of the drawing.



UNLESS OTHERWISE SPECIFIED ELSEWHERE ON THIS
DRAWING, THE FOLLOWING MAY BE USED

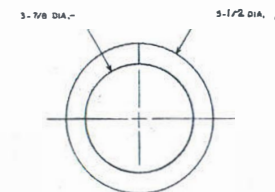
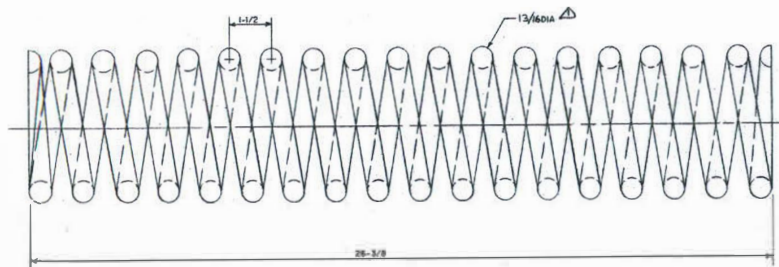
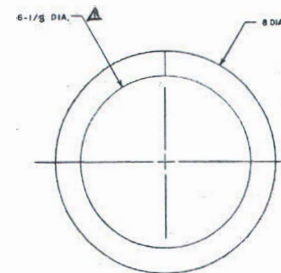
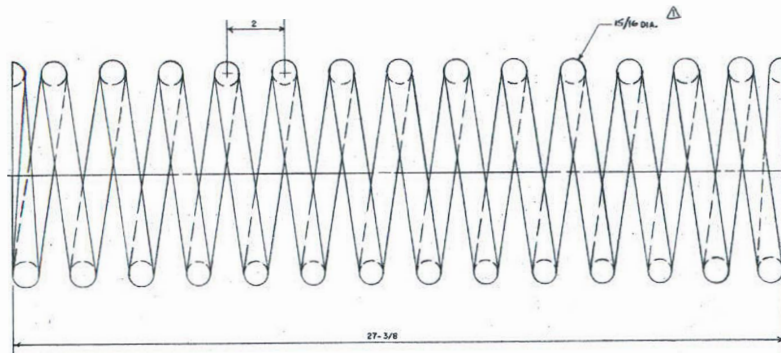
TUBING _____	COLD DRAWN SEAMLESS CARBON STEEL
PLATE _____	HEAVY WOLVED STRUCTURAL STEEL QUALITY
ROUND STOCK _____	COLD FINISHED MEDIUM CARBON STEEL



ITEM NO.	NAME
1	CENTER TUBE ASSEMBLY
2	TURNING ASSEMBLY
3	OUTSIDE TUBE ASSEMBLY
4	COVER PLATE ASSEMBLY
5	RECOIL SPRING
6	SPRING BOSS

			NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT		
			TRIP SPRING ASSEMBLY		
A	1-87	JWB CHANGED DRIVE DIAMETER	SUBMITTED BY:	DRAWN BY:	CHECKED BY:
B	2-84	JWB ADDED WELLS	<i>E. G. Smith Jr.</i>	STEVE TOTH	MAR 61
C	3-86	JWB CHANGED TO CORSET THREAD	APPROVED BY:	JOB NO:	DATE:
D	7-86	JWB SHAFT EXTENDED TO BORE	<i>F. Siefert</i>	<i>W</i>	MARCH 5, 1970
E	2-87	JWB ADDED GRADE 8'S			
F	1-87	JWB 75-GH-Q049			
G	2-87	JWB 75-GH-Q045			
H	REV DATE BY ORDER REQUEST				
			DEC 80		

REVISION _____
 Drawn by _____
 Checked by _____

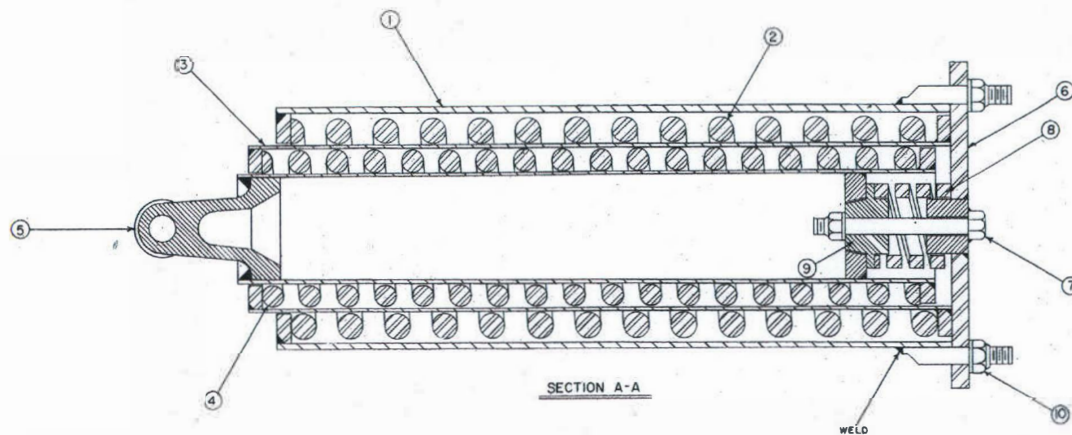


NOTES:
1. ENDS OF SPRINGS TO BE TAPERED DOWN AND SQUARED

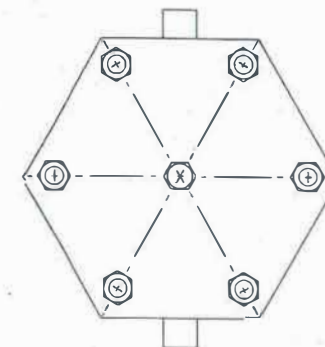
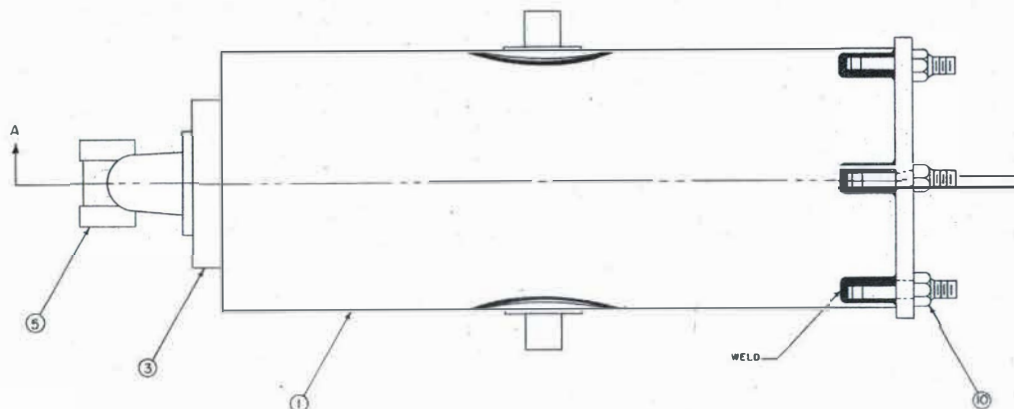
MAT'L
ALLOY SPRING STEEL-S150H-HOT WOUND
TO BE MANUFACTURED TO ASTM SPEC
A-228 LR MAT'L EQUAL OR GREATER
THAN ASTM A-689, A-29 AND A-304

REVISION	Drawn by	Checked by

				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
				TRIP SPRING ASSEMBLY			
				77-GHE-0024	SUBMITTED BY:	DRAWN BY:	SCALE:
				75-GHE-0049	DR. G. G. G.	STEVE TOOTH	1/2"=1"
				75-GHE-0045	APPROVED BY:	JOB NO:	DATE:
				DR. 12.75-138	DR. 12.75-138	331-114,75,22,75-1	MARCH 8, 1974
				APPLICABLE	SNOW PLOWS		
REV	DATE	BY	REMARKS	ORDER REQUEST NO.			



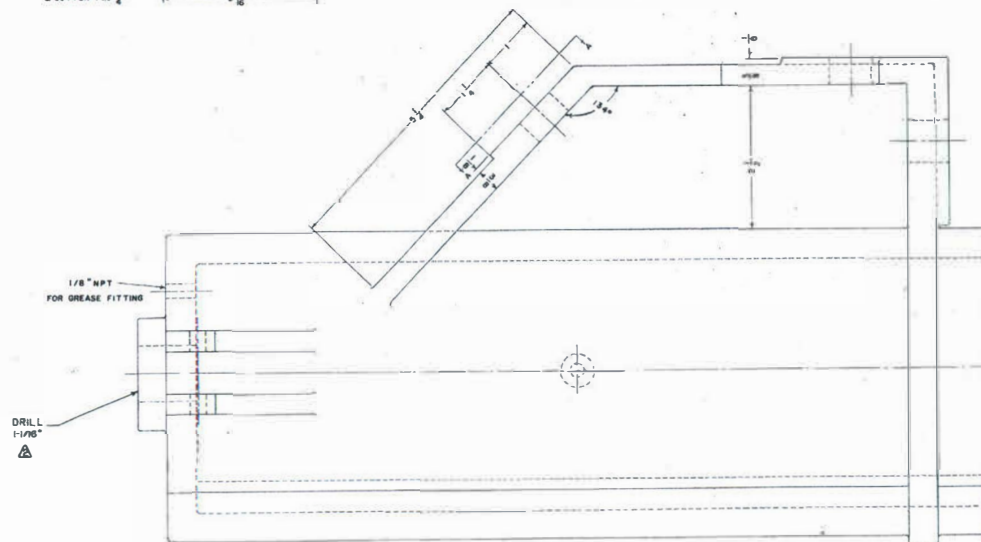
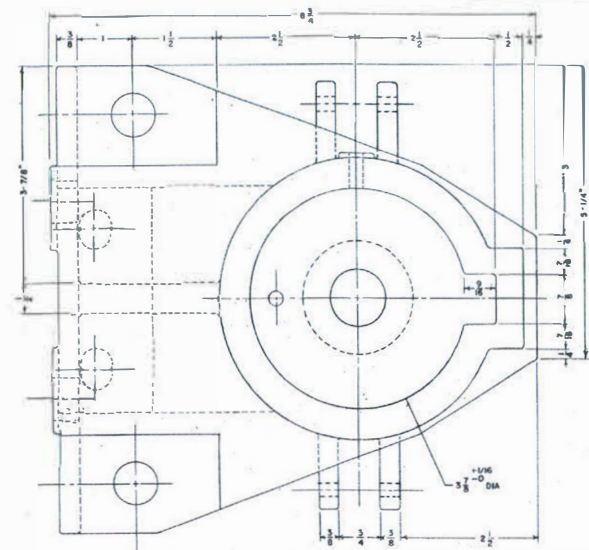
ITEM	NAME	QTY	DWG. NO.
1	OUTSIDE TUBE ASSEMBLY	1	4-145-1, ITEM 3
2	OUTSIDE SPRING	1	4-145-2
3	TUBING ASSEMBLY	1	4-145-1, ITEM 2
4	INSIDE SPRING	1	4-145-2
5	CENTER TUBE ASSEMBLY	1	4-145-1, ITEM 1
6	COVER PLATE ASSEMBLY	1	4-145-1, ITEM 4
7	5/8" X 18 UNF X 5" BOLT	1	
8	RECOIL SPRING	1	4-145-1, ITEM 5
9	SPRING BOSS	1	4-145-1, ITEM 6
10	5/8" X 18 UNF ELAS STOP NUT & WASHER	7EA	



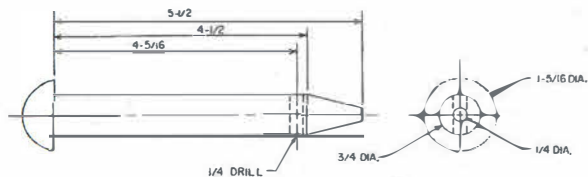
NOTES

- 1 SECTION LING DOES NOT REPRESENT TYPE OF MATERIAL. ONLY CLARIFICATION BETWEEN PARTS.
- 2 MATERIAL SPECIFIED ON DWG. NO. 4-145-1 & 4-145-2.
- 3 DO NOT SCALE

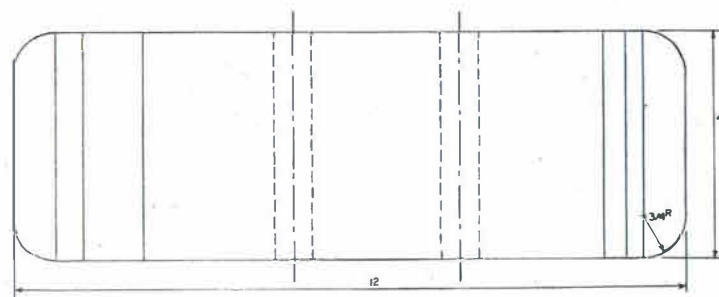
				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
				TRIP SPRING ASSEMBLY			
				SUBMITTED BY	DRAWN BY	SCALE	DWG. NO.
				71-ONE-0024	A. P. SMITH	NONE	4-145
				75-ONE-0049		DATE	
				0-14275-153 (1475, 2275)		NOV 11, 1974	
REV	DATE	BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW FLOW		



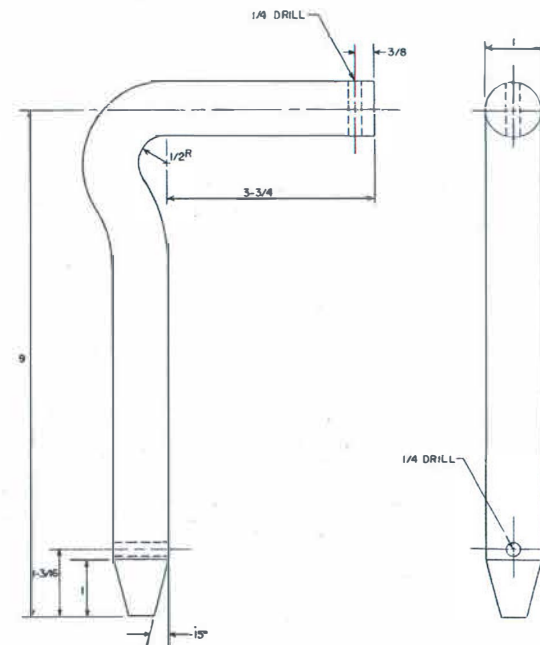
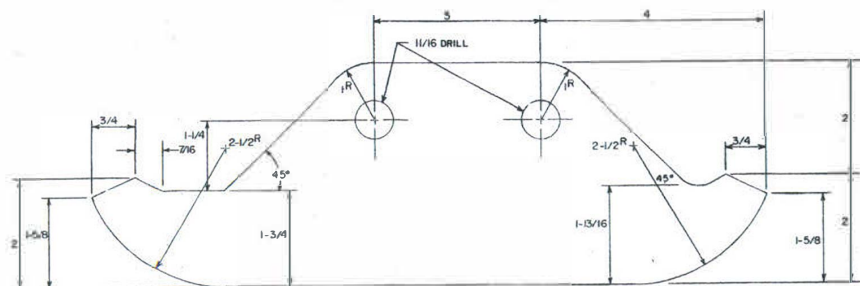
				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
3-14-64.0 SPEC. WELD TYPE				CASTER HOUSING			
77- GHE-0024				0-B-14.25-(14,42)-(13,18)-1 MOD.			
78- GHE-0009				H-10-32-15-1 MOD.			
75- GHE-0049				H-11-38-15-1			
78- GHE-0045				0-R-12.75-32-(32,33)-(14.75,22.75)-1			
ORDER REQUEST NO.				APPLICABLE SNOW PLOWS			
REV. DATE BY REMARKS				SUBMITTED BY <i>W. J. [Signature]</i> APPROVED <i>[Signature]</i> D-146			
3-14-64.0 SPEC. WELD TYPE				DRAWN BY A. C. CRYSTAN JR. FULL J.C.D.			
77- GHE-0024				SCALE FULL D-146			
78- GHE-0009				D-146			
75- GHE-0049				D-146			
78- GHE-0045				D-146			
ORDER REQUEST NO.				D-146			
APPLICABLE SNOW PLOWS				D-146			



HINGE PIN & LIFT ARM CHAIN RIVET PIN
BT. HEAD RIVET 3/4 DIA. 5-1/2 LG.
MAT'L: HRS
62100240



SHOE 62100794 MAT'L: CAST IRON



LOCKING PIN 62100501 MAT'L: MILD STEEL
1" DIA. 13" LG

NOTES

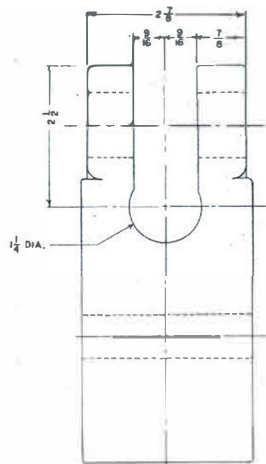
- 1 DRILLED HOLES (1/16) IN SHOE MUST BE DRILLED STRAIGHT AND PARALLEL.
- 2 SHOE TO BE CONNECTED TO MOLDBOARD ANGLE BY 2-5/8" x 6" LG BOLTS W/ LOCKWASHERS & NUTS.
- 3 1/4" COTTER PIN TO BE PLACED THRU HINGE PIN AND L.A.C. RIVET PIN AFTER INSTALLATION.
- 4 SHOE USED ONLY ON MODEL(S) O-R 12.75-(32.53)-84.75, 22.75-1 & O-R 11.25-(24.42)-(13.18)-1 MOD. Δ
- 5 1/4" COTTER PIN TO BE INSERTED THRU LOWER 1/4" HOLE OF LOCKING PIN AFTER INSTALLATION.

*Moldboard shoe not applicable

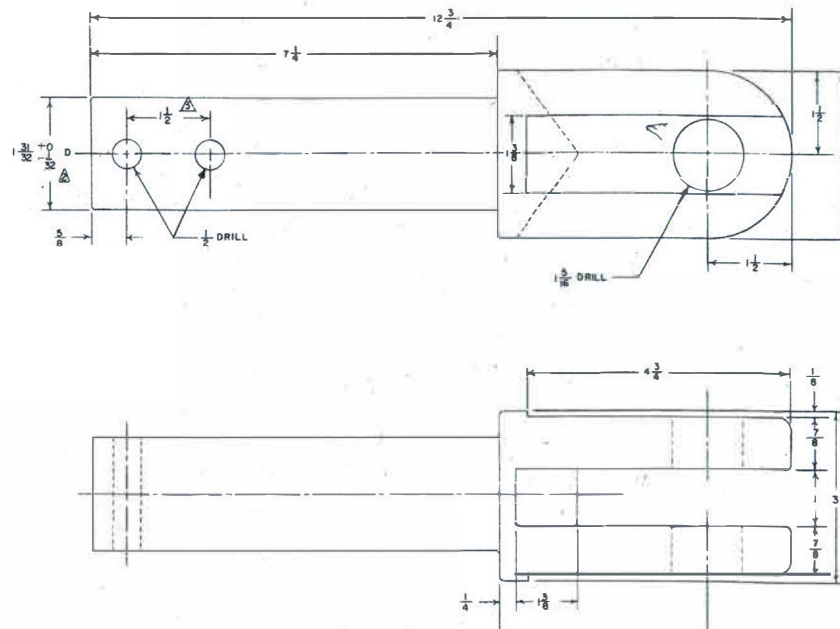
REVISION
Drawn by
Checked by

VENDOR REFERENCE GOOD ROADS

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SHOE, LOCKING PIN, AND RIVET PIN			
77-GHE-0024	O-R 11.25-(24.42)-(13.18)-1 MOD.	SUBMITTED BY:	STEVE TOOTH
76-GHE-0009	M.R. 10-32-15-1 MOD.	DRAWN BY:	STEVE TOOTH
75-GHE-0049	M.R. 11-36-15-1	APPROVED BY:	JOHN J. JOHNSON
75-GHE-0045	O-R 12.75-(32.53)-(84.75, 22.75)-1	DATE:	MARCH 2, 1974
REV	DATE	BY	REMARKS
1	11/16	APPS	CHANGED NOTE NO. 4
2	11/16	APPS	CHANGED NOTE NO. 4
3	11/16	APPS	CHANGED NOTE NO. 4
4	11/16	APPS	CHANGED NOTE NO. 4
5	11/16	APPS	CHANGED NOTE NO. 4
6	11/16	APPS	CHANGED NOTE NO. 4
7	11/16	APPS	CHANGED NOTE NO. 4
8	11/16	APPS	CHANGED NOTE NO. 4
9	11/16	APPS	CHANGED NOTE NO. 4
10	11/16	APPS	CHANGED NOTE NO. 4
11	11/16	APPS	CHANGED NOTE NO. 4
12	11/16	APPS	CHANGED NOTE NO. 4
13	11/16	APPS	CHANGED NOTE NO. 4
14	11/16	APPS	CHANGED NOTE NO. 4
15	11/16	APPS	CHANGED NOTE NO. 4
16	11/16	APPS	CHANGED NOTE NO. 4
17	11/16	APPS	CHANGED NOTE NO. 4
18	11/16	APPS	CHANGED NOTE NO. 4
19	11/16	APPS	CHANGED NOTE NO. 4
20	11/16	APPS	CHANGED NOTE NO. 4
21	11/16	APPS	CHANGED NOTE NO. 4
22	11/16	APPS	CHANGED NOTE NO. 4
23	11/16	APPS	CHANGED NOTE NO. 4
24	11/16	APPS	CHANGED NOTE NO. 4
25	11/16	APPS	CHANGED NOTE NO. 4
26	11/16	APPS	CHANGED NOTE NO. 4
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96	11/16	APPS	CHANGED NOTE NO. 4
97	11/16	APPS	CHANGED NOTE NO. 4
98	11/16	APPS	CHANGED NOTE NO. 4
99	11/16	APPS	CHANGED NOTE NO. 4
100	11/16	APPS	CHANGED NOTE NO. 4



 MAT'L: CAST STEEL



EYE BAR

△ MAT'L - STEEL WELDMENT

NOTES

- 1 EYE BAR HELD INTO POSITION IN PUSH BAR BY 1/2" COTTER PIN.
2 LATCH PIN SWIVEL TO BE HELD INTO POSITION IN PUSH BAR BY 5/8"-
II UNC BOLT, NUT, & LOCKWASHER

3420 JWS 80198 JWS 80198 JWS		DELETED CAST MODEL ADDED SECOND HOLE CHANGE TOLERANCE	77-GHE-0024 78-GHE-0009 75-GHE-0049 75-GHE-0045	O-R. 11.25-(24.42)-(13.18)-1 MOD. N.R. 10-32-15 MOD. N.R. 11-36-15-1 O-R. 12.75-(32.53)-(44.75,22.5)-1	NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT		LATCH PIN SWIVEL AND EYE BAR		SUBMITTED BY A. J. CERVINKA		DRAWN BY A. J. CERVINKA	SCALE FULL	DATE APR 19, 1974	DWG. NO. 15-4
4 4 4	W274.A.P.S. REV DATE BY	ADDED TYPE OF MAT'L REMARKS	ORDER NUMBER NO.	APPLICABLE SNOW FLOWS										

REVISION

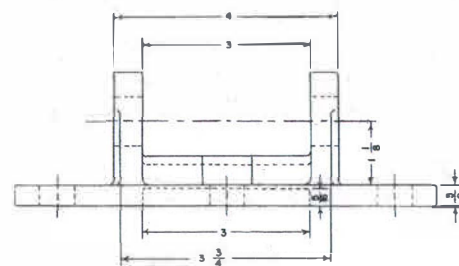
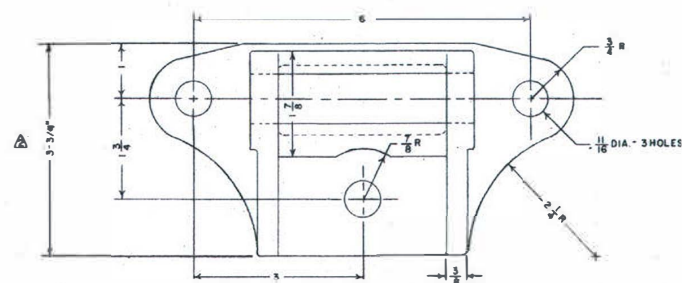
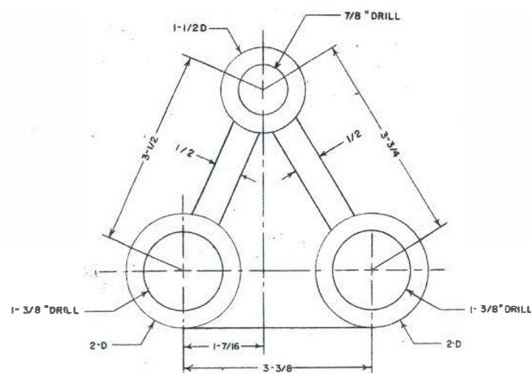
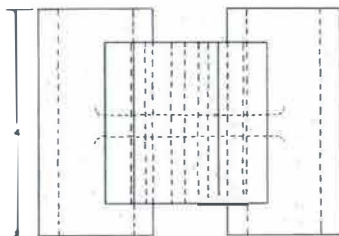
Drawn by _____
Checked by _____

Overhead by—

1. MATERIAL TO BE CAST STEEL.

2. SEMICIRCLE HINGE TO BE MOUNTED TO SEMICIRCLE WITH 5/8" RIVETS OR 5/8" FINE THREADED BOLTS, NUTS & LOCK WASHERS, WITH 1" LOW TACK WELDS & ROUNDS AND FILLETS TO BE 1/8".

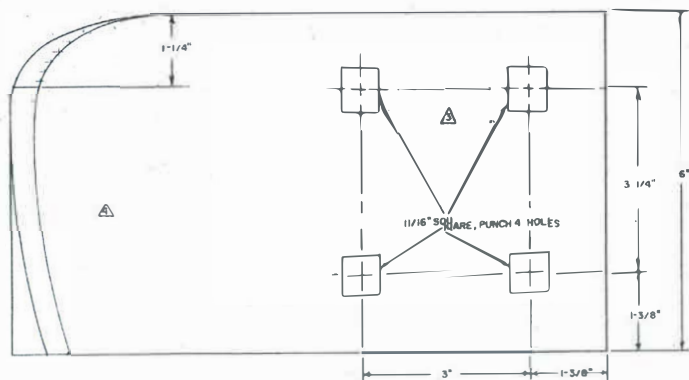
3. FASTEN MOLDBOARD HINGE TO MOLDBOARD W/ 1-1/4"x 7 UNC X 6-1/2" BOLTS, NUTS, AND LOCK WASHERS, 2 OF EA PER HINGE.



Technical drawing of a mechanical part with the following dimensions and labels:

- Top left dimension: $\frac{7}{8} R$
- Top right dimension: $\frac{7}{8} \text{ DIA.} \cdot 2 \text{ HOLES}$
- Left side dimension: $2 \frac{1}{16}$
- Bottom left dimension: $\frac{3}{8} R$
- Bottom center dimension: $\frac{1}{4}$
- Bottom right dimension: $1 \frac{1}{4}$
- Right side dimension: $1 \frac{1}{4}$

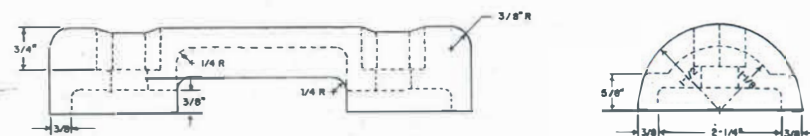
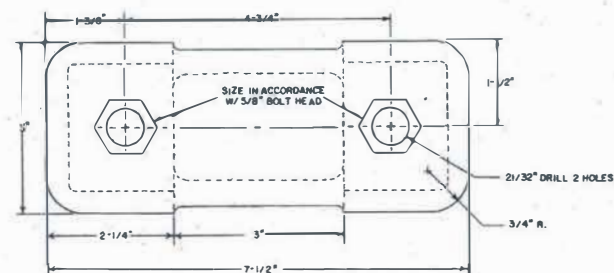
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT		MOLDBOARD AND SEMICIRCLE HINGES	
12-8613JD ARREG BUREAU TO REG. 2 4-2-8613CS CHG. NOTE NO. 2 4-2-8613PS ADDED DM 4-8-8613PS ADDED NOTE NO. 4 REV DATE BY REMARKS		77-GHE-0024 75-GHE-0049 75-GHE-0045 ORDER REQUEST NO	
SUBMITTED BY <i>Galton</i> APPROVED BY <i>J. Smith</i>		D-R 11.23-(24.42)-(13.01) 1 MOD. D-R 12.75-(32.53)-(14.75, 22.75) APPLICABLE SNOW PLOWS	
DRAWN BY J. SMITH JOB NO. <i>~~~~~</i>		SCALE SCALE DATE JULY 18, 1974	
		DWG. NO. Q-156	



WRAP AROUND - RIGHT SIDE
MATL: HIGH CARBON STEEL

NOTES

1. UNLESS OTHERWISE SPECIFIED, FILETS AND ROUNDS ARE TO HAVE 1/8" R
2. ALL SHARP EDGES AND BURRS TO BE REMOVED
3. FASTEN CURB BUMPERS TO MOLDBOARD W/ 5/8" X 11 UNC BOLDS, NUTS, AND LOCKWASHERS.
4. FASTEN WRAP AROUND TO MOLDBOARD W/ 5/8" X 11 UNC 2-1/2" CARRIAGE BOLDS, NUTS, LOCKWASHERS.



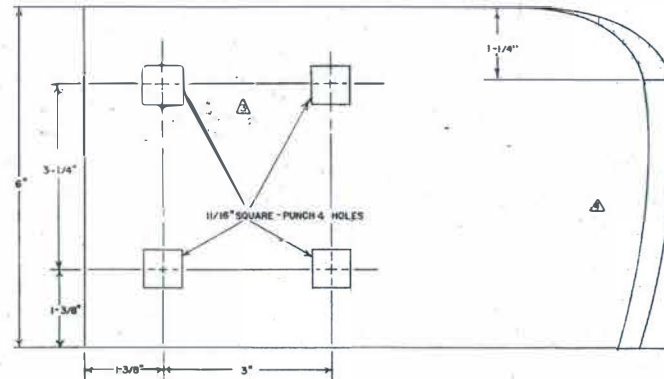
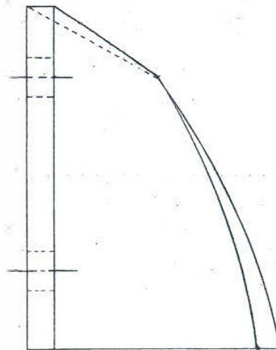
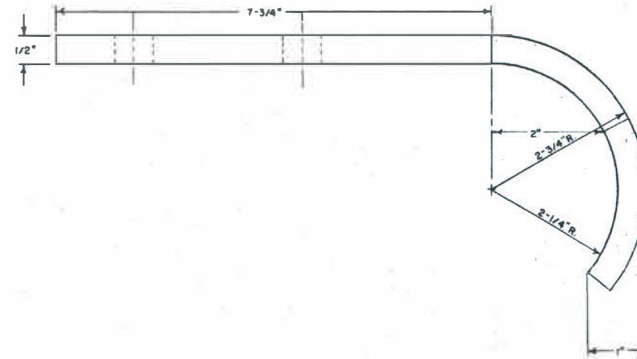
CURB BUMPER

~~HAZ/EXP/STC~~
MNTL: STEEL WELDMENT

										NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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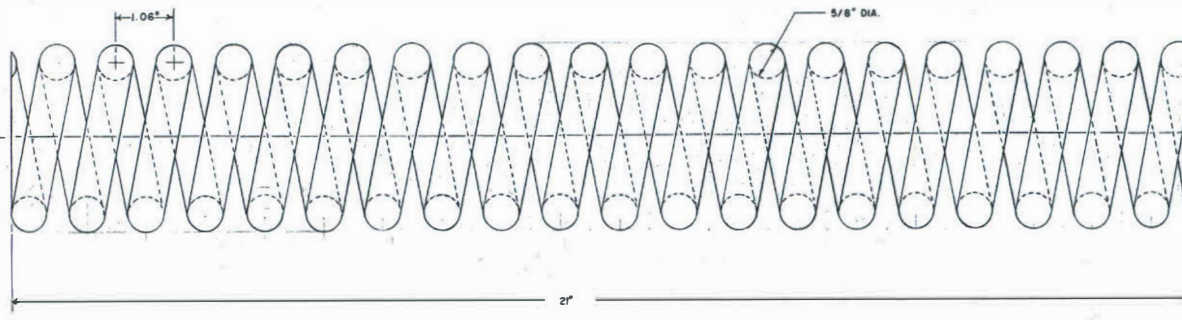
NOTES

- 1 SHARP EDGES AND BURRS TO BE REMOVED.
- 2 FASTEN WRAP AROUND TO MOLDBOARD W/ 5/8" x 11UNC x 2-1/2" CARRIAGE BOLTS, NUTS, AND LOCKWASHERS.

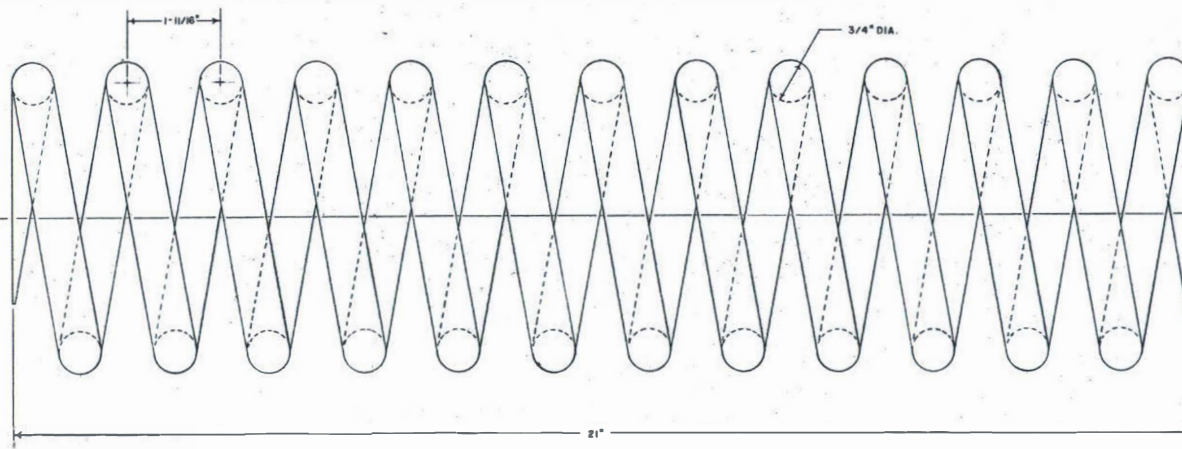


WRAP AROUND-LEFT SIDE
MATL: HIGH CARBON STEEL

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
WRAP AROUND-LEFT SIDE			
4 3/16" JWB	MODIFY RIGHT DTD	SUBMITTED BY	DRAWN BY
3-15007 B	ADD 2 TOP HOLES	APPROVED BY	A.P. SMITH
7-188APS	ADD TO NOTE 2	JOB NO.	SCALE
2-3-18 APS	ADD INCH MARKS	DATE	FULL
REVISION BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS
		M.R. 10-32-15-1 MOD.	4-159
		M.R. 11-36-15-1	NOV 15, 1974



INSIDE SPRING



OUTSIDE SPRING

NOTES

1. ENDS OF SPRINGS TO BE TAPERED ROUND AND SQUARED

MATL:

ALLOY SPRING STEEL-5160H, HOT WOUND,
TO BE MANUFACTURED TO ASTM SPEC
A-1251R MAT'L EQUAL OR GREATER
THAN ASTM-A689, A-29 AND A-304

NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

TRIP SPRING ASSEMBLY

DESIGNED BY <i>thor</i>	DRAWN BY A.P. SMITH	SCALE FULL
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JOB NO.	DATE DEC 6, 1974
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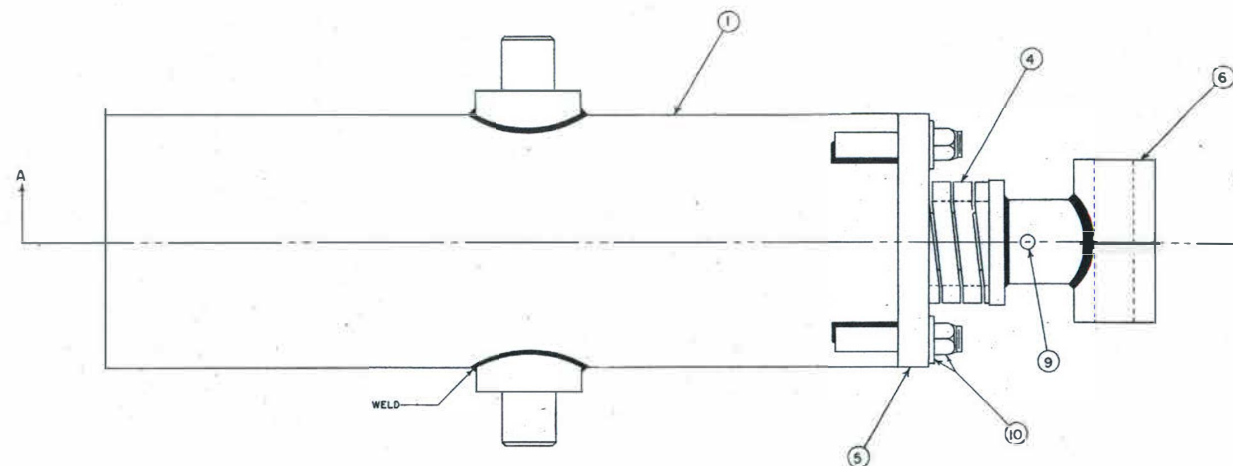
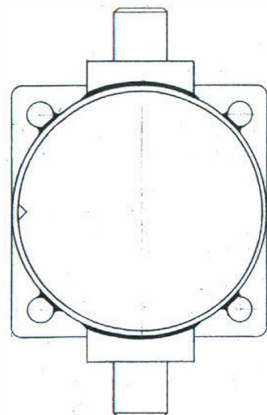
DEC 6, 1974

100

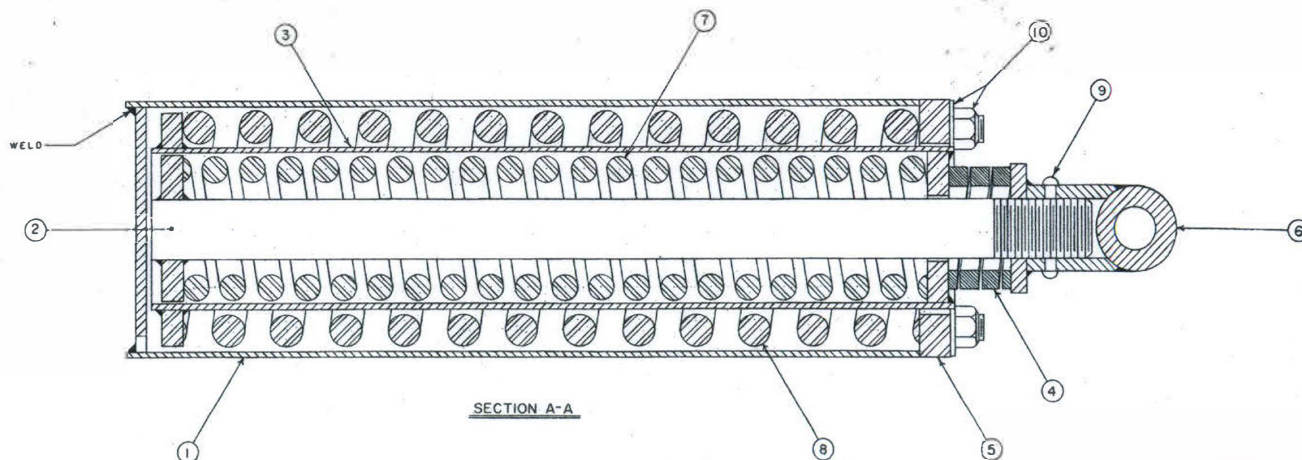
DWG. NO.

4-160
-2

[illegible]



ITEM	NAME	QTY.	DWG. NO.
(1)	OUTSIDE TUBE ASSEMBLY	1	4-160-1, ITEM (1)
(2)	TENSION ROD	1	4-160-1, ITEM (2)
(3)	INSIDE TUBE ASSEMBLY	1	4-160-1, ITEM (3)
(4)	RECOIL SPRING	1	4-160-1, ITEM (4)
(5)	COVER PLATE	1	4-160-1, ITEM (5)
(6)	FLOW COUPLING	1	4-160-1, ITEM (6)
(7)	INSIDE SPRING	1	4-160-2
(8)	OUTSIDE SPRING	1	4-160-2
(9)	5/16" B.H. RIVET	1	STD.
(10)	5/8" X 18 UNF ELAS. STOP NUT & WASHER	4 EA.	STD.

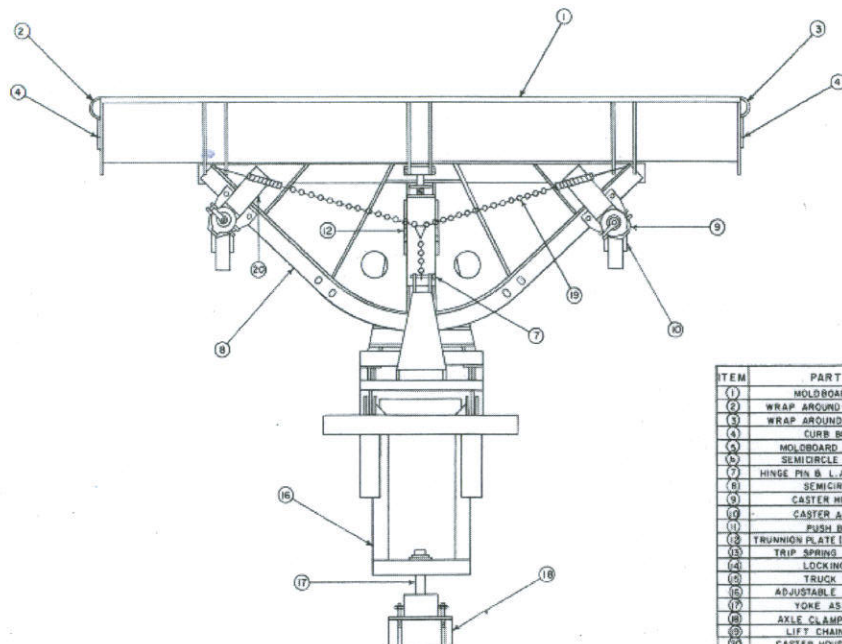


NOTES

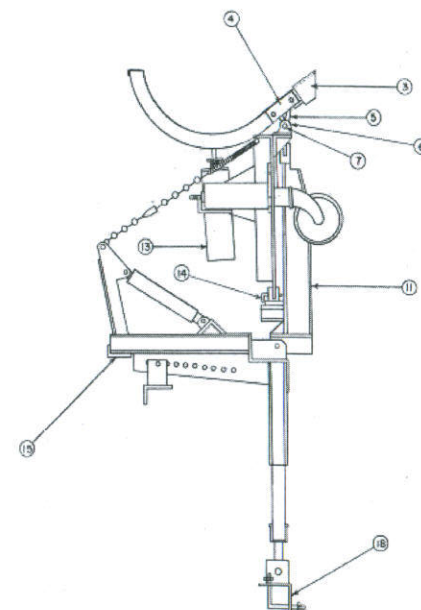
1. SECTION LINING DOES NOT REPRESENT TYPE OF MATERIAL, ONLY CLARIFICATION BETWEEN PARTS.
2. MATERIAL SPECIFIED ON DWG. NO. 4-160-1 & 4-160-2.
3. DO NOT SCALE.
4. FASTEN FLOW COUPLING TO MOLDBOARD W/ 7/8", 9UNC BOLT, NUT, AND LOCKWASHER.

SECTION A-A

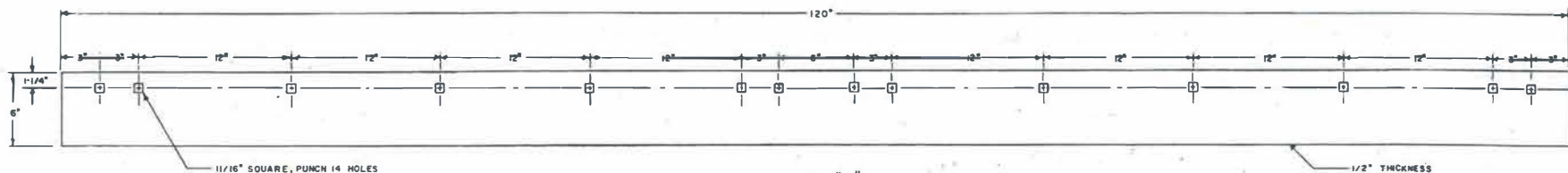
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
TRIP SPRING ASSEMBLY			
O-R. 11-25-(24,42)-(13,18)-1 MOD.		SUBMITTED BY	DRAWN BY
M.R. 10-32-15-1 MOD.		<i>[Signature]</i>	A.P. SMITH
M.R. 11-36-15-1		APPROVED BY	JOB NO.
APPLICABLE SNOW PLOWS		<i>[Signature]</i>	DATE
REV DATE BY	CHG NAME OF ITEM (2)	ORDER REQUEST NO.	SCALE
	EMA/15		NONE
			DATE
			DEC 13, 1974
			DWG. NO.
			1



ITEM	PART	QTY
(1)	MOLDBOARD	1
(2)	WRAP AROUND - LEFT SIDE	1
(3)	WRAP AROUND - RIGHT SIDE	1
(4)	CURB BUMPER	2
(5)	MOLDBOARD HINGE	3
(6)	SEMICIRCLE HINGE	3
(7)	HINGE PIN & L.A.C. RIVET PIN	4
(8)	SEMICIRCLE	1
(9)	CASTER HOUSING	2
(10)	CASTER ASSEMBLY	2
(11)	PUSH BAR	1
(12)	TRUNNION PLATE (ST. & CURB SIDE)	2
(13)	TRIP SPRING ASSEMBLY	1
(14)	LOCKING PIN	1
(15)	TRUCK HITCH	1
(16)	ADJUSTABLE EXTENSION	1
(17)	YOKE ASSEMBLY	1
(18)	AXLE CLAMP PLATE	1
(19)	LIFT CHAIN ASSEMBLY	1
(20)	CASTER HOUSING BRACE	2



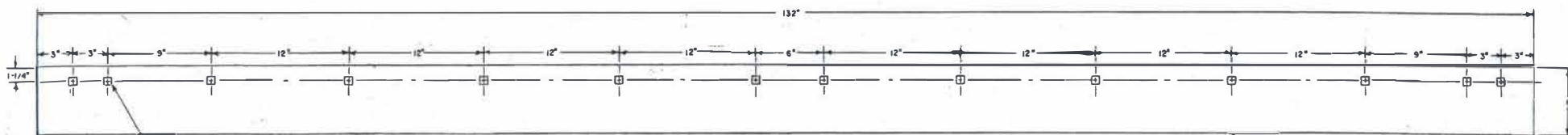
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW ASSEMBLY			
SUBMITTED BY <i>[Signature]</i>	DRAWN BY A.P. SMITH	SCALE 3/32" = 1"	DWG. NO. 18-165
APPROVED BY <i>[Signature]</i>	JOB NO.	DATE DEC 24, 1974	
REVDATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS



BLADE "A"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

11/16" SQUARE, PUNCH 14 HOLES

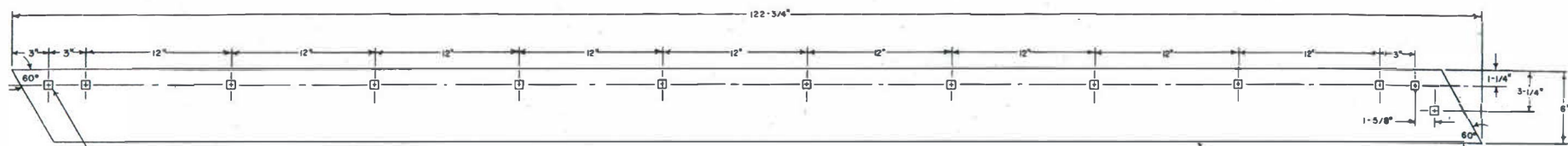
1/2" THICKNESS



BLADE "B"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

11/16" SQUARE, PUNCH 14 HOLES

1/2" THICKNESS

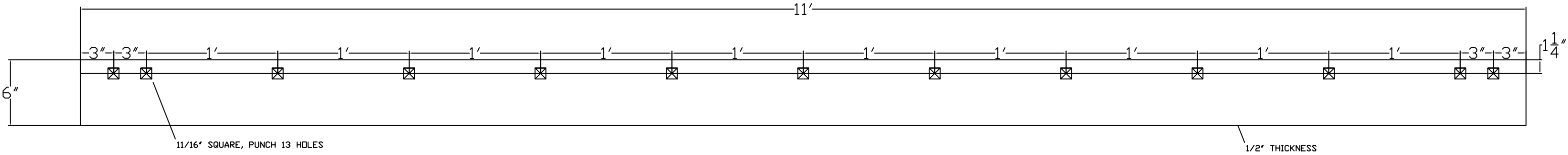


BLADE "C"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

11/16" SQUARE, PUNCH 13 HOLES

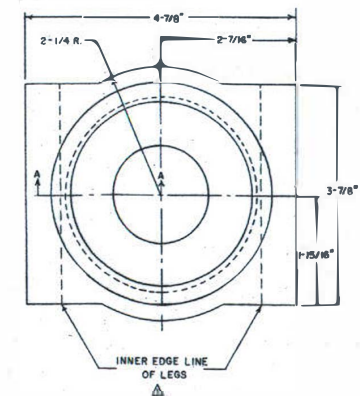
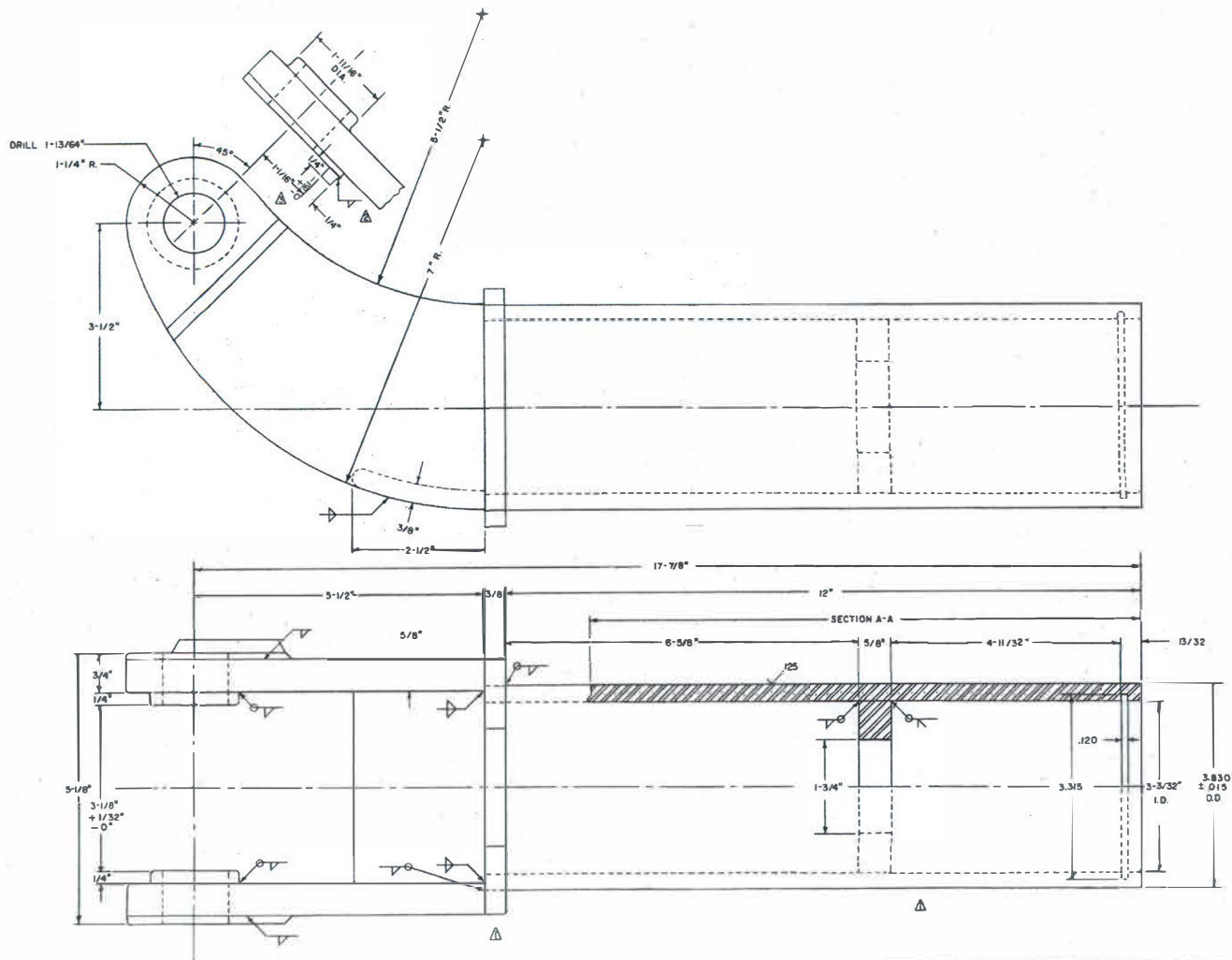
1/2" THICKNESS

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW BLADES			
SUBMITTED BY J. P. SMITH	DRAWN BY A. P. SMITH	SCALE 1/4" = 1'	DWG. NO. 14-155
APPROVED BY	JOB NO.	DATE APRIL 8, 1975	
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS



BLADE "Z"
MAT'L: HIGH CARBON ABRASIVE
RESISTANT STEEL
SAE 1091

						NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF MAINTENANCE BUREAU OF EQUIPMENT			
						SNOW PLOW BLADES			
						SUBMITTED BY:	DRAWN BY: ALS	SCALE	DWG. NO.
						APPROVED BY:	JOB NO.	DATE 3/23/10	4-169A
REV	DATE	BY		REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS			



NOTES

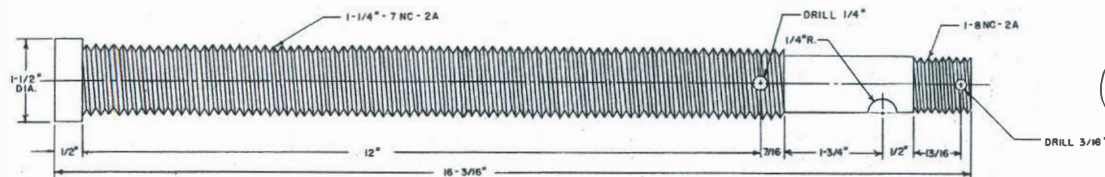
1. ALL WELDS TO BE CONTINUOUS.
2. REMOVE ALL BURRS AND SHARP EDGES.
3. DO NOT SCALE.

CASTER STEM

MAT'L:

PLATE _____ STRUCTURAL STEEL QUALITY
TUBING _____ COLD DRAWN SEAMLESS CARBON STEEL

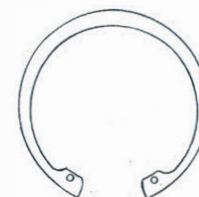
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY			
(FABRICATION)			
O-R 11-25-(24,42)-(13,18)-1 MOD		SUBMITTED BY	DRAWN BY
M.R. 10-32-15-1 MOD		202/10/10	A.P. SMITH
M.R. 11-36-15-1		APPROVED BY	JOB NO.
O-R 12-75-(32,53)-(14,75,22,75)-1		DATE	AUG. 29/97S
REV	DATE	BY	REMARKS
1			ORDER REQUEST NO.
2			APPLICABLE SNOW PLOWS



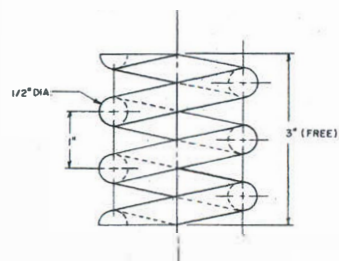
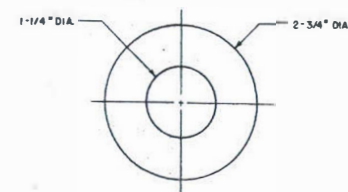
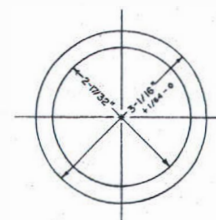
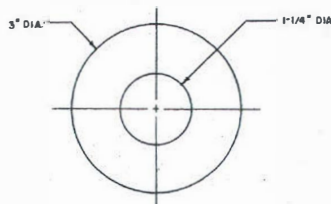
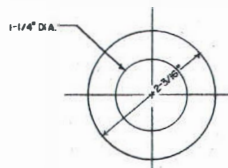
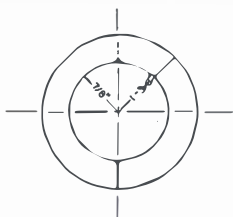
ADJUSTING BOLT
MAT'L: COLD FINISHED,
MEDIUM CARBON STEEL
HEAT TREATED



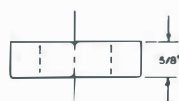
DRILL 3/16"



RETAINING RING
TRUARC NO. W5000-312



SPRING
MAT'L: SPRING STEEL



THRUST BEARING
TIMKEN NO. T-125, OR
APPROVED EQUAL



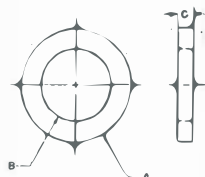
BEARING WASHER
STD. STEEL WASHER



SPACER
MAT'L: HOT ROLLED
STEEL



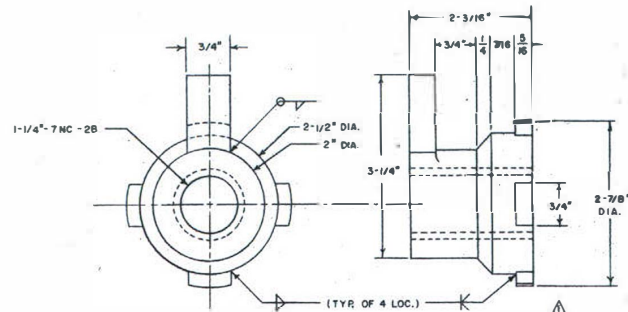
WASHER
STD. STEEL WASHER



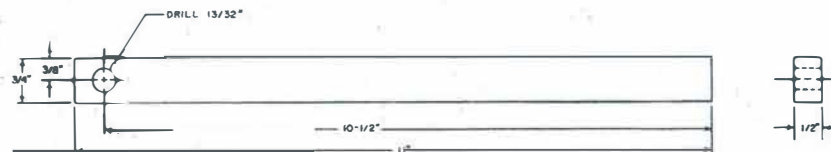
SNOWPLOW WHEEL SPACERS
MAT'L: SAE 1040 STEEL

PART NO.	A	B	C
WBS 125	2" O.D.	1-3/16" I.D.	1/8"
WBS 260	2" O.D.	1-3/16" I.D.	1/4"
WBS 500	2" O.D.	1-3/16" I.D.	1/2"
WBS 625	2" O.D.	1-3/16" I.D.	5/8"

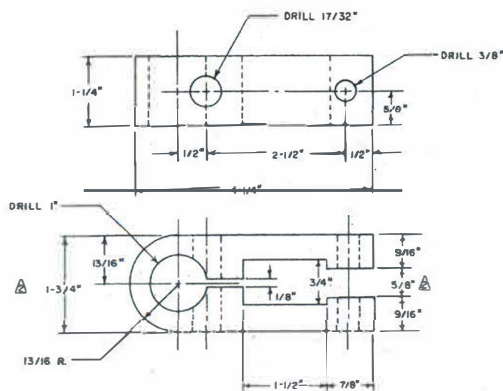
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY (FABRICATION)			
1-R. 11.25-128 (22)-(13.18)-1 MOD. M.R. 10-32-15-1 MOD. M.R. 11-36-15-1		SUBMITTED BY K. A. Smith	SCALE FULL
O-R. 12.75-132 (53)-(14.75, 22.75)-1		APPROVED BY J. R. Smith	DATE SEPT 4, 1975
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS



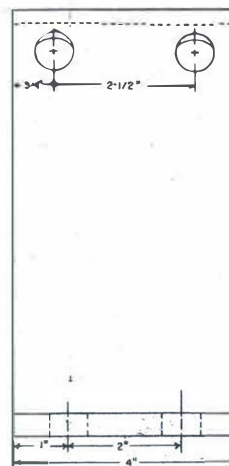
CASTER NUT
MAT'L: MEDIUM CARBON STEEL



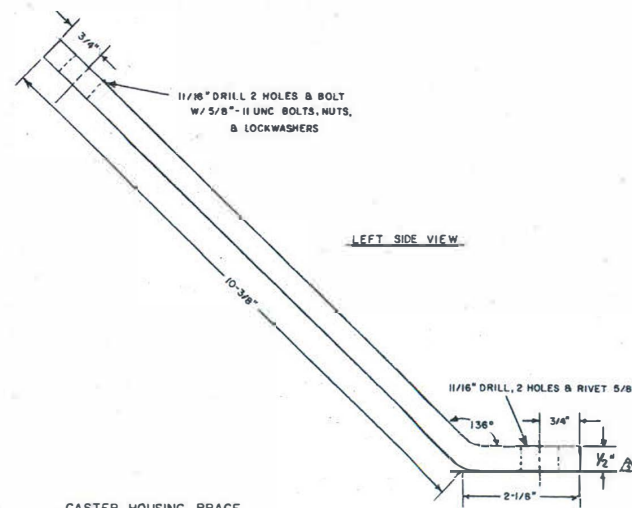
HANDLE
MAT'L: HOT ROLLED STEEL



ADJUSTING BOLT FORK
MAT'L: MEDIUM CARBON STEEL

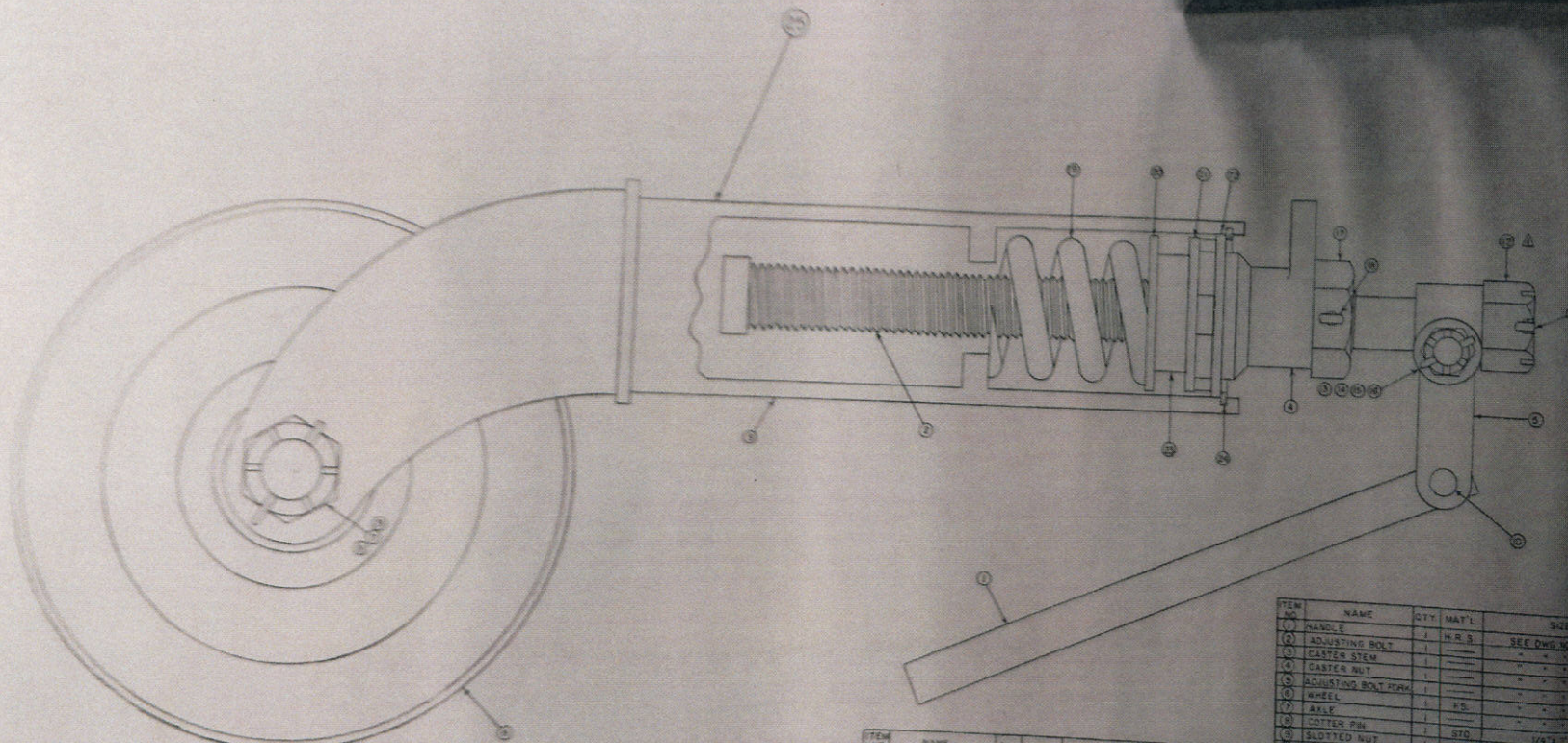


CASTER HOUSING BRACE
MAT'L: STRUCTURAL STEEL



LEFT SIDE VIEW

				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
				CASTER ASSEMBLY			
				(FABRICATION)			
				SUBMITTED BY	DRAWN BY	SCALE	DWG. NO.
					A. P. SMITH	FULL	
				APPROVED BY	JOB NO.	DATE	
						SEPT. 5, 1975	
REV	DATE	BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW FLOWS		
1	3-5-75	JMS	INCREASE THICKNESS TO 1/2"				
2	9-16-75	JMS	CHANGE DIMENSION OF OPENING				
3	5-17-78	APS	REMOVE DIMS. & ADD DIA.'S	77-6NE-0024			
				0-R.11.25-(24,42)-(13,18)-1 MOD.			
				M.R.10-32-15-1 MOD.			
				M.R.11-36-15-1			
				0-R.12.75-(32,63)-(14,75,22,75)-1			

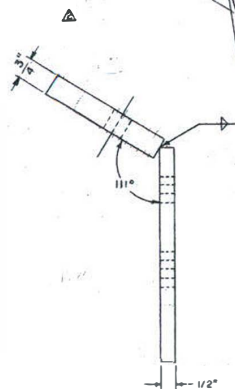
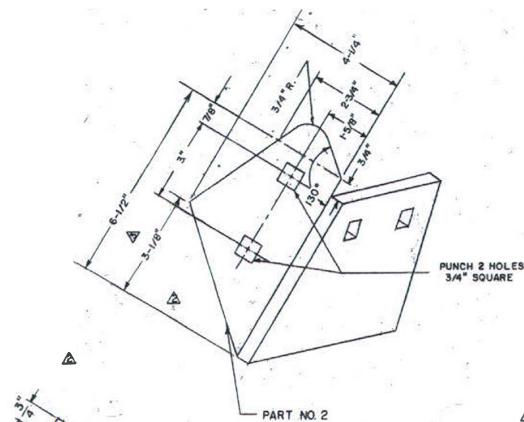


ITEM NO.	NAME	QTY	MAT'L	SIZE
13	BEARING (THRUST)	1		SEE DWG. NO. 4-182-2
14	RETAINING RING	1		4-182-2
22	COMPLETE CASTER ASSEMBLY - 2 REQ'D FOR EACH SNOW PLOW ASSY			

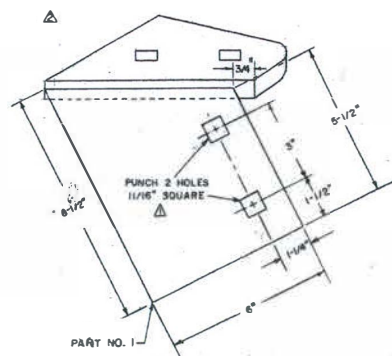
ITEM NO.	NAME	QTY	MAT'L	SIZE
1	HANDLE	1	H.R.S.	SEE DWG. NO. 4-182-3
2	ADJUSTING BOLT	1		" " " 4-182-2
3	CASTER STEM	1		" " " 4-182-1
4	CASTER NUT	1		" " " 4-182-3
5	ADJUSTING BOLT W/KEY	1		" " " 4-182-3
6	WHEEL	1		" " " 4-182-3
7	AXLE	1	P.S.	" " " 4-182-3
8	COTTER PIN	1		" " " 4-182-3
9	SLOTTED NUT	1	STD.	1/4"x2"
10	RIVET PIN	1	STD.	1/16"x2 1/2"
11	COTTER PIN	1	STD.	3/16"
12	SLOTTED HEX NUT	1	STD.	3/8"x2"
13	BOLT - HEX. HD.	1	STD.	1/2"x2"
14	WASHER	1	STD.	1/2"x2"
15	SLOTTED HEX NUT	1	STD.	1/2"x2"
16	COTTER PIN	1	STD.	1/8"x2 1/2"
17	HEX NUT	1	STD.	1/8"x2 1/2"
18	COTTER PIN	1	STD.	1/16"x2 1/2"
19	SPRING	1	SPD. ST.	1/4"
20	BEARING WASHER	1	STD.	SEE DWG. NO. 4-182-2
21	WASHER	1	STD.	" " " 4-182-2
22	SPACER	1	H.R.S.	" " " 4-182-2

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
CASTER ASSEMBLY			
(FABRICATION)			
D.R. 1106 (24-24-24-24) MOD. M.B. 10-32-10-1 MOD.		SUBMITTED BY K. A. [Signature]	SCALE 1/4" = 1"
M.B. 11-32-10-1		DRAWN BY K. A. [Signature]	DATE SEPT 2, 1978
D.R. 11-32-10-1 (24-24-24-24) MOD.		APPROVED BY [Signature]	JOB NO. [Blank]
APPLICABLE SNOW FLOW			
REV. DATE BY	REMARKS	ORDER REQUEST NO.	
A	REPAIRS CNG SHAPE OF ITEM 12	77-DNE JCBM	

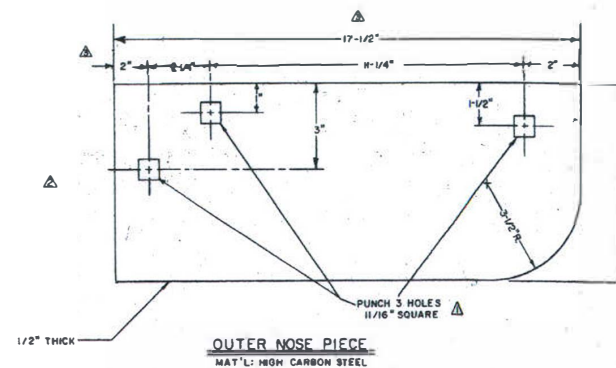
4-182-4



INNER NOSE PIECE
MAT'L: HIGH CARBON STEEL



PART NO. 1



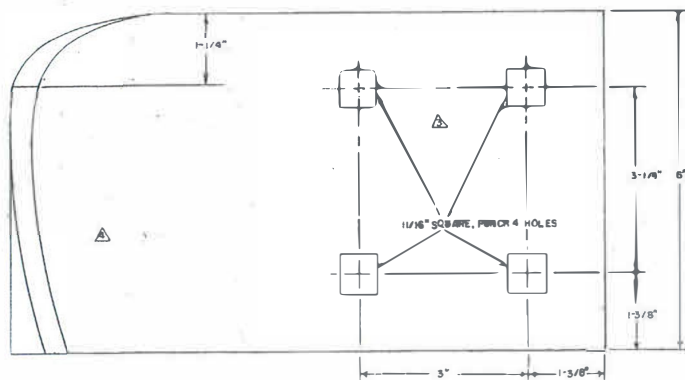
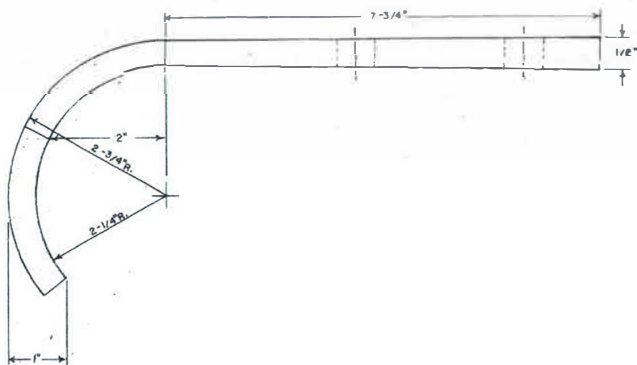
OUTER NOSE PIECE
MAT'L: HIGH CARBON STEEL

NOTES

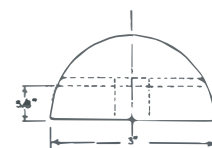
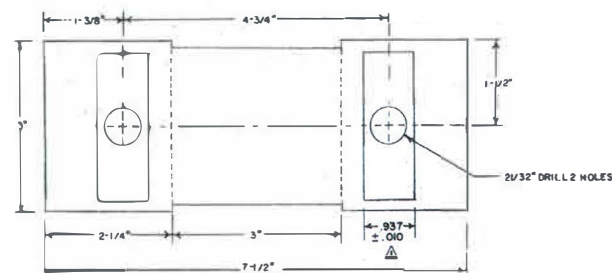
1. THIS DRAWING SUPERSEDES DWS NO. 4-134.
2. REMOVE ALL BURRS AND SHARP EDGES.
3. ALL WELDS TO BE CONTINUOUS.
4. INNER NOSE PIECE - PLANE OF MEASURED ANGLE TO BE PERPENDICULAR TO PLANE OF PART 1 AND PART 2.
5. FASTEN INNER & OUTER NOSE PIECE TO MOLDBOARD END PLATE W/ 5/8" X 11 UNC BOLTS, ONE 2" LG. TWO 2-1/2" LG.

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
INNER & OUTER NOSE PIECE			
7-1-88 APS ADD NOTE	SUBMITTED BY	DRAWN BY	SCALE
2-27-84 E.J.D. CHANGE OF DIMENSION	<i>Handwritten Signature</i>	A. P. SMITH	1/2" = 1"
3-9-82 UWB DELETED LIFTING EYE	APPROVED BY	JOB NO.	DATE
8-27-83 APS CHG SIZE OF PUNCHED HOLE	<i>Handwritten Signature</i>	<i>Handwritten</i>	NOV 21, 1975
REV DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW FLOWS





WRAP AROUND - RIGHT SIDE
MATL: HIGH CARBON STEEL



CURB BUMPER
MATL: MEDIUM CARBON STEEL

- NOTES
1. ALL SHARP EDGES AND BURRS TO BE REMOVED.
 2. FASTEN CURB BUMPERS TO MOLDBOARD W/ 5/8" X 11 UNC BOLTS, NUTS AND LOCKWASHERS.
 3. FASTEN WRAP AROUND TO MOLDBOARD W/ 5/8" X 11 UNC 2-1/2" CARRIAGE BOLTS, NUTS, LOCKWASHERS.

				NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
				WRAP AROUND - RIGHT SIDE			
				CURB BUMPER			
4	2/10/96	JWB	MODIFY LEFT END	SUBMITTED BY		DRAWN BY	SCALE
3	8/19/96	JWB	ADD 2 TOP HOLES	9. P. 2		SATISH BAHL	FULL
2	7/1/96	ARS	ADD TO NOTE 3	APPROVED BY		JOB NO.	DATE
1	4/17/95	ARS	CHG. TOLERANCES				JULY 26, 1976
REV. DATE BY				ORDER REQUEST NO.		APPLICABLE SNOW PLANS	

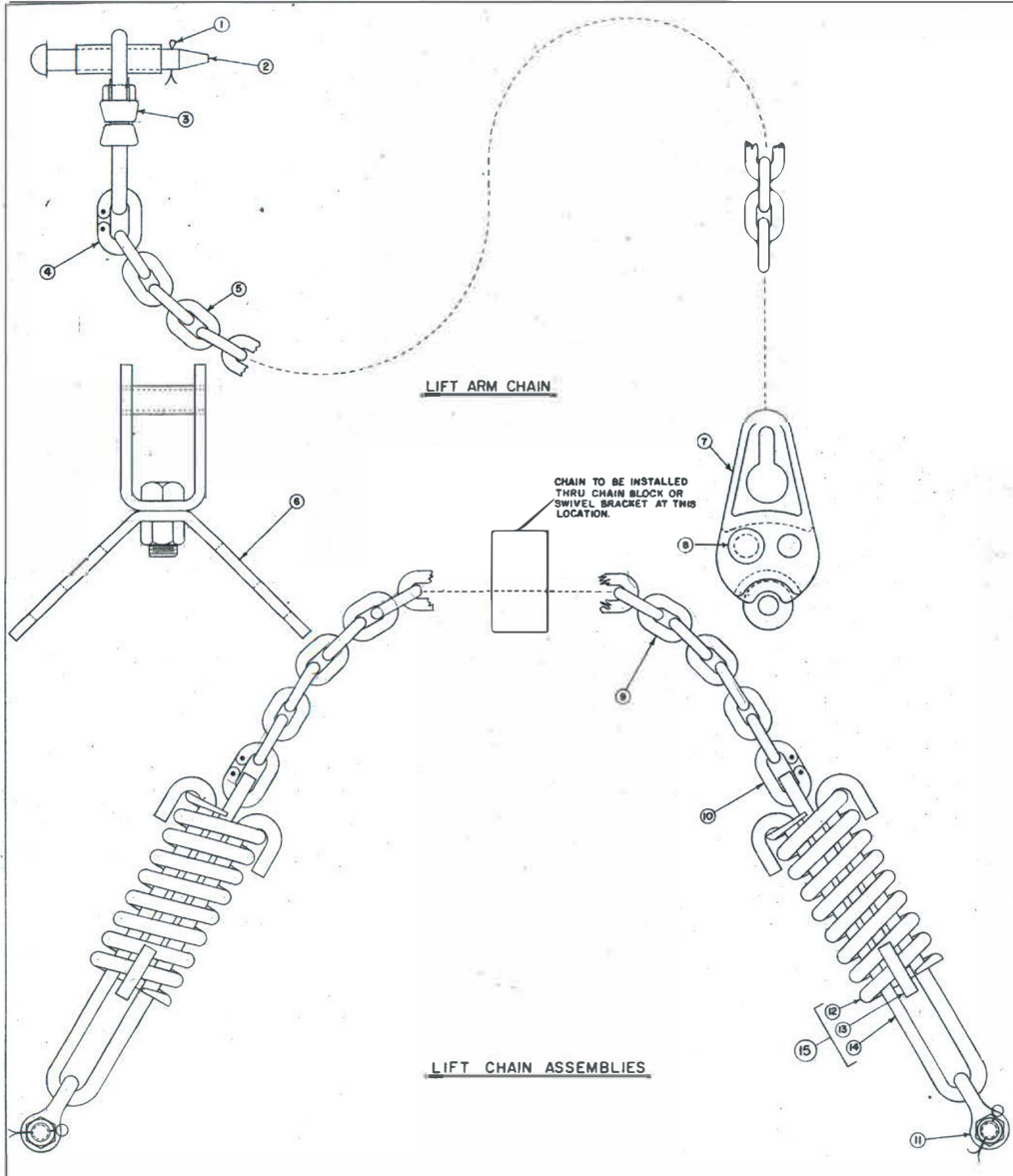


CHART NO. 1
LIFT ARM CHAIN

ITEM NO.	DESCRIPTION	QTY.	MATL.	SIZE
1	COTTER PIN	1	STD.	1/4" x 2" LG.
2	LIFT ARM CHAIN RIVET PIN	1	---	SEE DWG. NO. 4-192-2
3	PIPE WELDMENT	1	---	" " " 4-192-2
4	CONNECTING LINK	1	STD.	7/16"
5	3/8" HI-TEST STEEL CHAIN	1	STD.	16' LG.

LIFT CHAIN ASSEMBLIES				
6	SWIVEL BRACKET	1	---	SEE DWG. NO. 4-192-3
7	CHAIN BLOCK	1	---	" " " 4-192-2
8	RIVET PIN	1	---	" " " 4-192-2
9	CHAIN	1	---	SEE CHART NO. 2
10	CONNECTING LINK	2	STD.	7/16"
11	FORGED AND/OR TYPE SAFETY SHOCKLE	2	STD.	1/2" BOW SIZE
12	SPRING	2	---	SEE DWG. NO. 4-192-2
13	SHORT SPRING HOOK	2	---	" " " 4-192-2
14	LONG SPRING HOOK	2	---	" " " 4-192-2

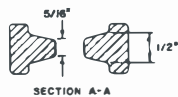
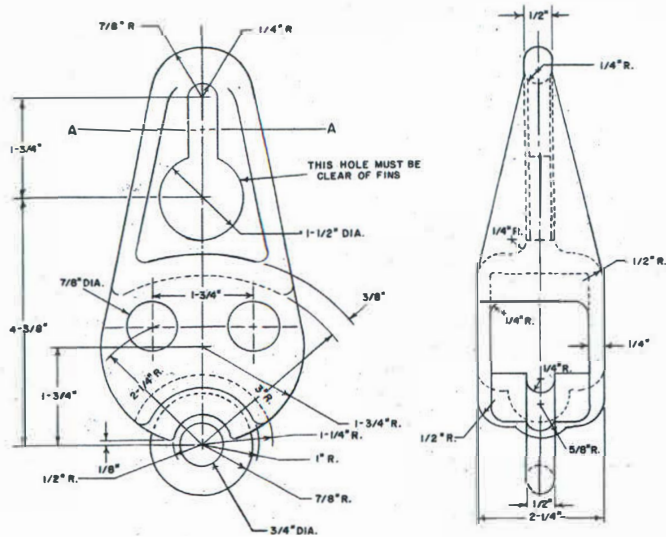
CHART NO. 2
LIFT CHAIN ASSEMBLY

TYPE	W/SPRINGS	W/O SPRINGS	ASSY. CONSISTS OF ITEMS	LENGTH OF ITEM 9	TYPE OF CHAIN	LIFT ARM CHAIN REQ'D FOR OPERATION?
A	X		(7) (8) (9) (10) (11) (12) (13) (14)	2' - 0"	3/8" HI-TEST STEEL CHAIN	YES
B	X		(7) (8) (9) (10) (11) (12) (13) (14)	5' - 6"	" " " " " "	YES
C		X	(7) (8) (9) (10) (11) (12) (13) (14)	7' - 6"	" " " " " "	YES
D	X		(6) (9) (10) (11) (12) (13) (14)	8' - 0"	7/16" PROOF COIL CHAIN	NO
E		X	(6) (9) (10) (11)	10' - 0"	" " " " " "	NO
F	X		(7) (8) (9) (10) (11) (12) (13) (14)	7' - 0"	3/8" HI-TEST STEEL CHAIN	YES
G		X	(7) (8) (9) (10) (11)	9' - 0"	" " " " " "	YES

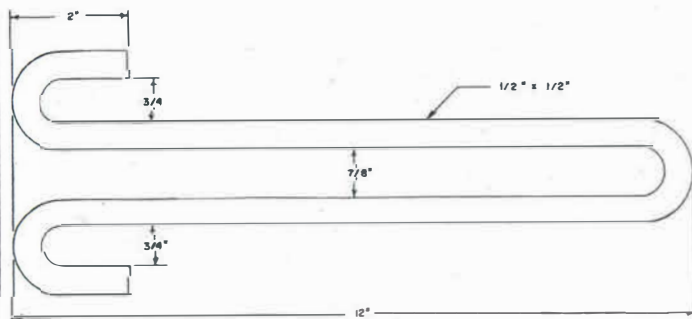
NOTES

- SEE SPECIFICATIONS OR PURCHASE ORDER FOR TYPE OF LIFT CHAIN ASSEMBLY DESIRED. REFER TO CHART NO. 2 FOR ITEMS TO BE ASSEMBLED.
- REFER TO CHART NO. 1 FOR DESCRIPTION AND QUANTITY OF ITEMS MENTIONED IN CHART NO. 2 FOR SPECIFIED TYPE.
- ALL CHAIN TO BE PLATED WITH A CORROSION RESISTANT METAL.
- ITEM NO. 10 MUST ACCOMPANY LIFT SPRING ASSEMBLY (ITEM 15) WHEN PURCHASED SEPARATELY.
- DWG. NO.'S 4-192-1, 4-192-2, & 4-192-3 SUPERSEDES DWG. NO. 4-151.

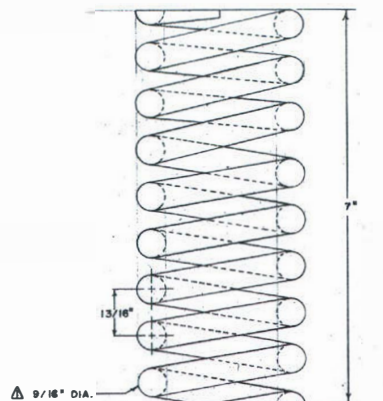
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW LIFTING CHAINS			
SUBMITTED BY: J. J. WILSON	DRAWN BY: A. P. SMITH	SCALE: NONE	DWG. NO. 4-192
APPROVED BY:	JOB NO.:	DATE: APR. 13, 1977	
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS



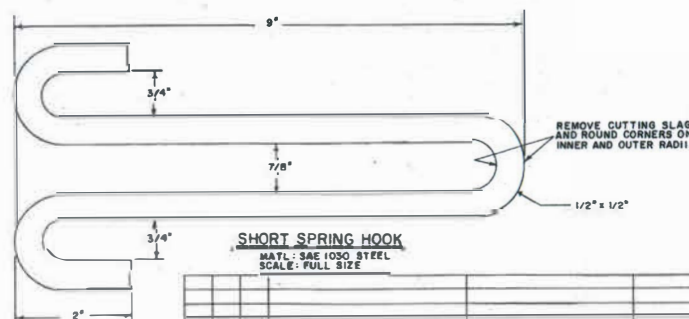
CHAIN BLOCK
MATL: CAST STEEL
SCALE: FULL SIZE



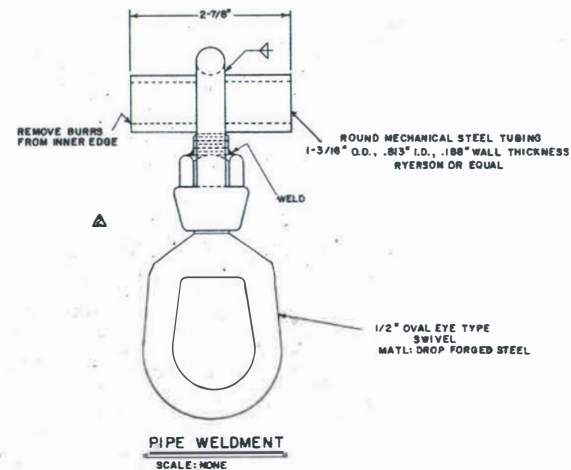
LONG SPRING HOOK
MATL: SAE 1050 STEEL
SCALE: FULL SIZE



SPRING
MATL: SPRING STEEL
SCALE: FULL SIZE

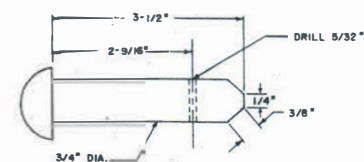


SHORT SPRING HOOK
MATL: SAE 1050 STEEL
SCALE: FULL SIZE



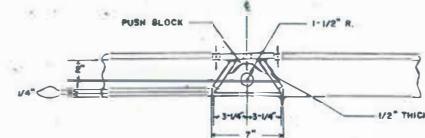
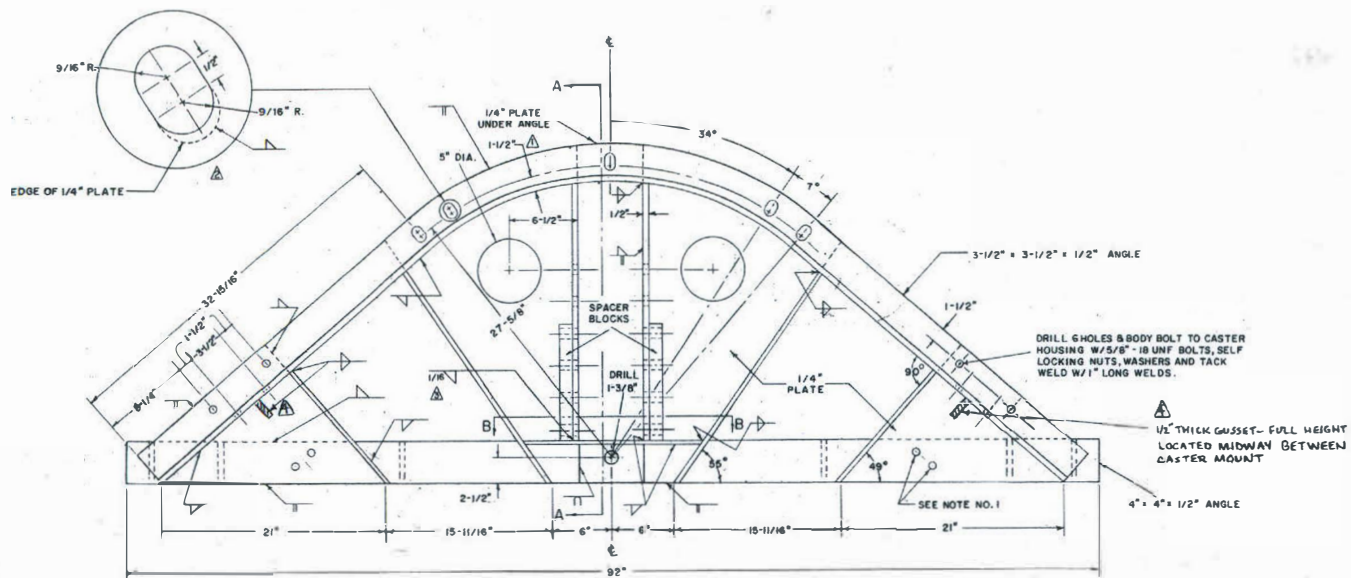
NOTES

1. REMOVE ALL BURRS.
2. CONSULT AGENCY FOR CHAIN BLOCK SAMPLE IF FULL MATERIAL COMPOSITION AND/OR TYPE MANUFACTURING PROCESS IS DESIRED FOR STRENGTH PURPOSES.
3. SPRING HOOKS ARE TO BE FLAME CUT FROM 1/2" PLATE STEEL.

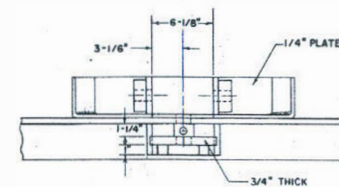


RIVET PIN
MATL: STEEL
SCALE: FULL SIZE

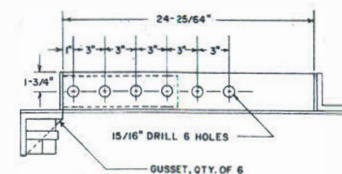
NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW LIFTING CHAINS			
SUBMITTED BY:	DRAWN BY:	SCALE:	DWG. NO.
APPROVED BY:	JOB NO.:	DATE:	4-192-2
REV. DATE BY:	REMARKS:	ORDER REQUEST NO.	APPLICABLE SNOW PLOW:



BOTTOM VIEW



SECTION B-B

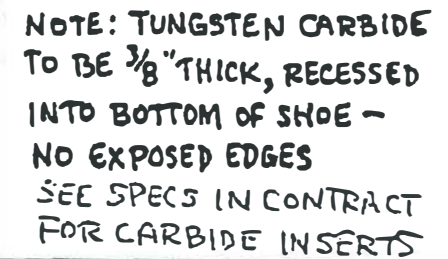
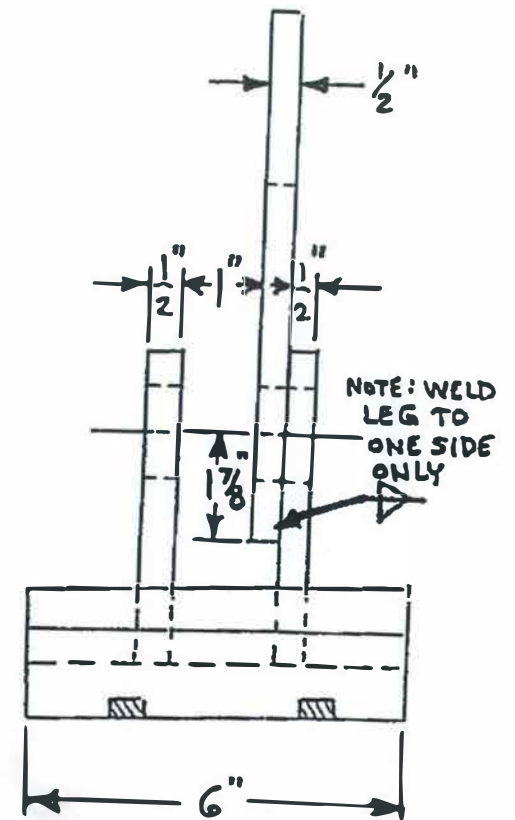


SECTION A-A

NOTES:

1. HOLES TO BE DRILLED WHEREVER CASTER HOUSING BRACKET MAY FALL.
2. CONNECT EYE BAR OF PUSH BAR TO SEMICIRCLE WITH 1-1/4" - 12 UNF x 5" LG. BOLT, SLOTTED NUT AND COTTER PIN.
3. ALL 1/4" AND 1/2" PLATE TO BE STRUCTURAL STEEL QUALITY, CUT AND SHAPED TO SIZE AND WELDED TO FRAME.
4. BOLTS AND NUTS TO BE MINIMUM GRADE 5 CORROSION RESISTANT.
5. SPACER BLOCKS TO BE 3"x1-1/4"x11" STRUCTURAL STEEL QUALITY W/ HOLES CENTERED LENGTHWISE. BLOCKS NOT TO BE WELDED TO FRAME, USE ONLY ON O-R. (2.75, 32.53, 14.75, 22.75) - 1 MODEL.
6. EYE BAR MUST BE CAPABLE OF ANGLING AT LEAST 82° WHEN ATTACHED TO PUSH BLOCK SECTION
7. GUSSETS TO BE WELDED INTO PLACE W/ FILLET WELDS.
8. ALL WELDS TO BE CONTINUOUS.

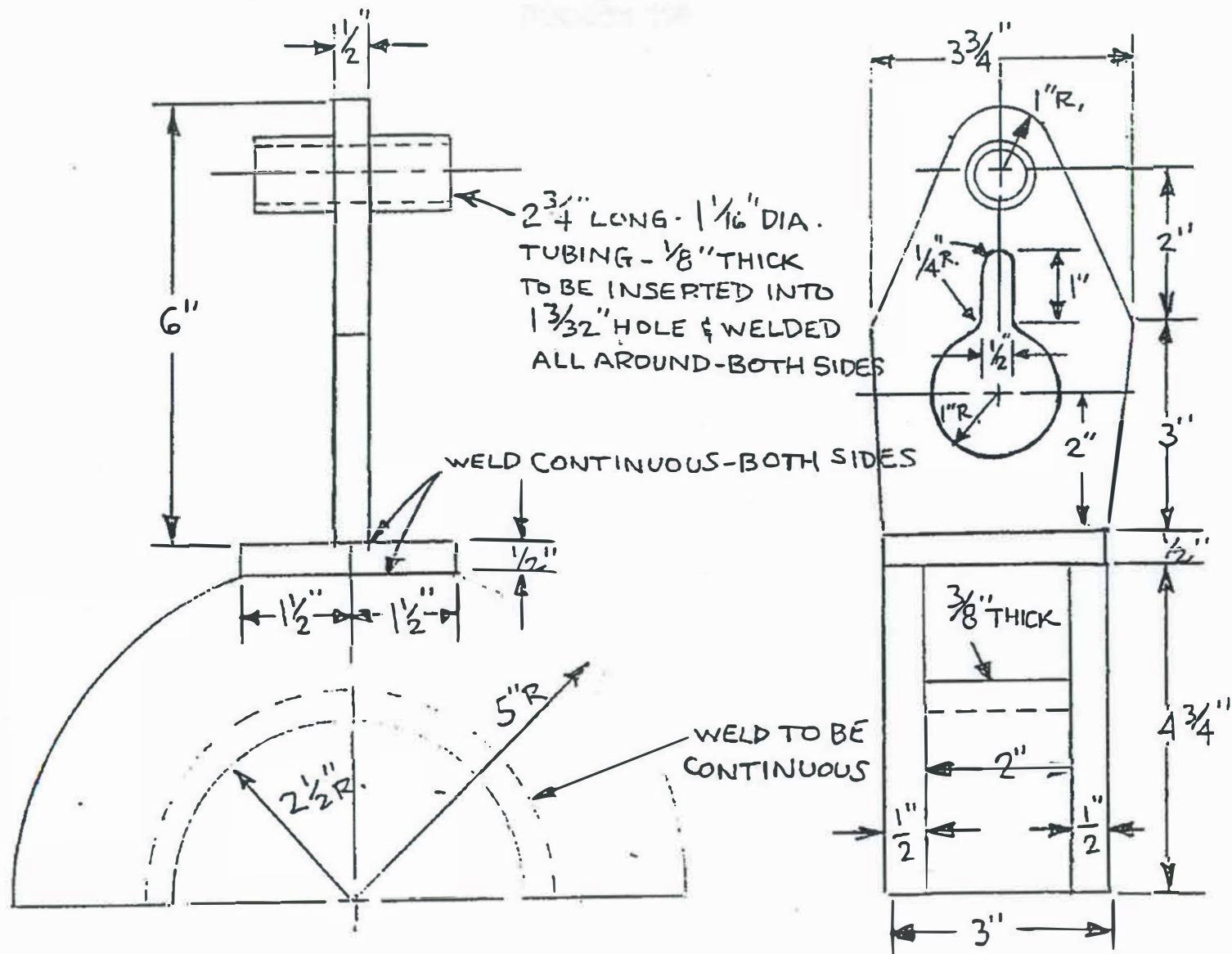
			NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT		
			LARGE SEMICIRCLE		
9/16" JWB	ADDED GUSSETS	O-R. 11.75-(24.42)-(15.18)-1 MOD.	SUBMITTED BY:	DRAWN BY:	SCALE:
3/16" TAPS	ADD WELD	M.R. 10-32-(15-1) MOD.		A.P. SMITH	3/16" - 1"
1/2" TAPS	ADD NOTE & HIDDEN LINE	M.R. 11-36-(15-1)	APPROVED BY:	JDB NO.	DATE:
10/88 JAPS	ADD DIM.	O-R. 12.75-(15.53)-(14.75) 22.75			MARCH 6, 1988
REV	DATE	BY	REMARKS	APPLICABLE SHOW PLOWS	



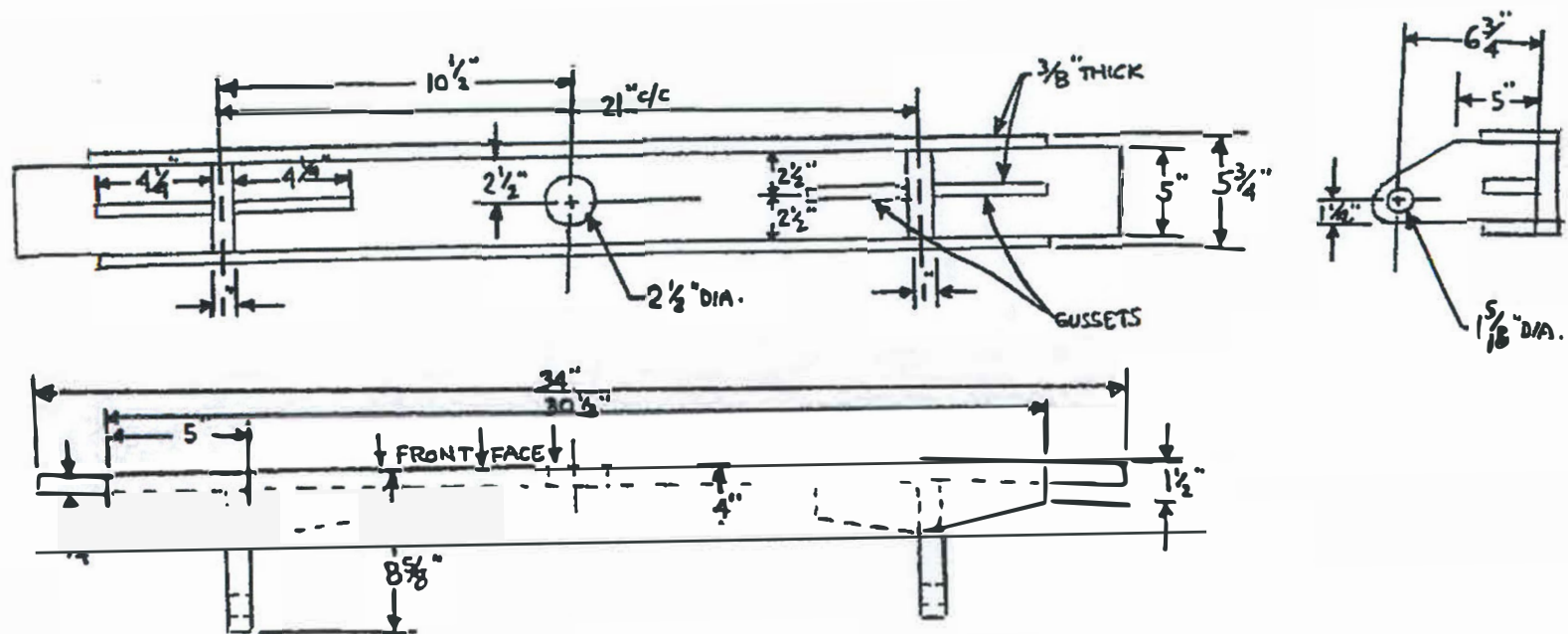
6" SNOW PLOW SHOE
with EXTENDED LEG

PWG. NO.: 4-205

DATE: 4/30/90



REV.		REV.		JWB	NEW JERSEY DEPT. OF TRAN.
2		1	DELETE CHAIN	4-209	LIFT CHAIN BLOCK-
	ADDED HOLE		HOLE, ADD WELDING	SCALE 1/2" = 1"	POWER REVERSING PLOW ...



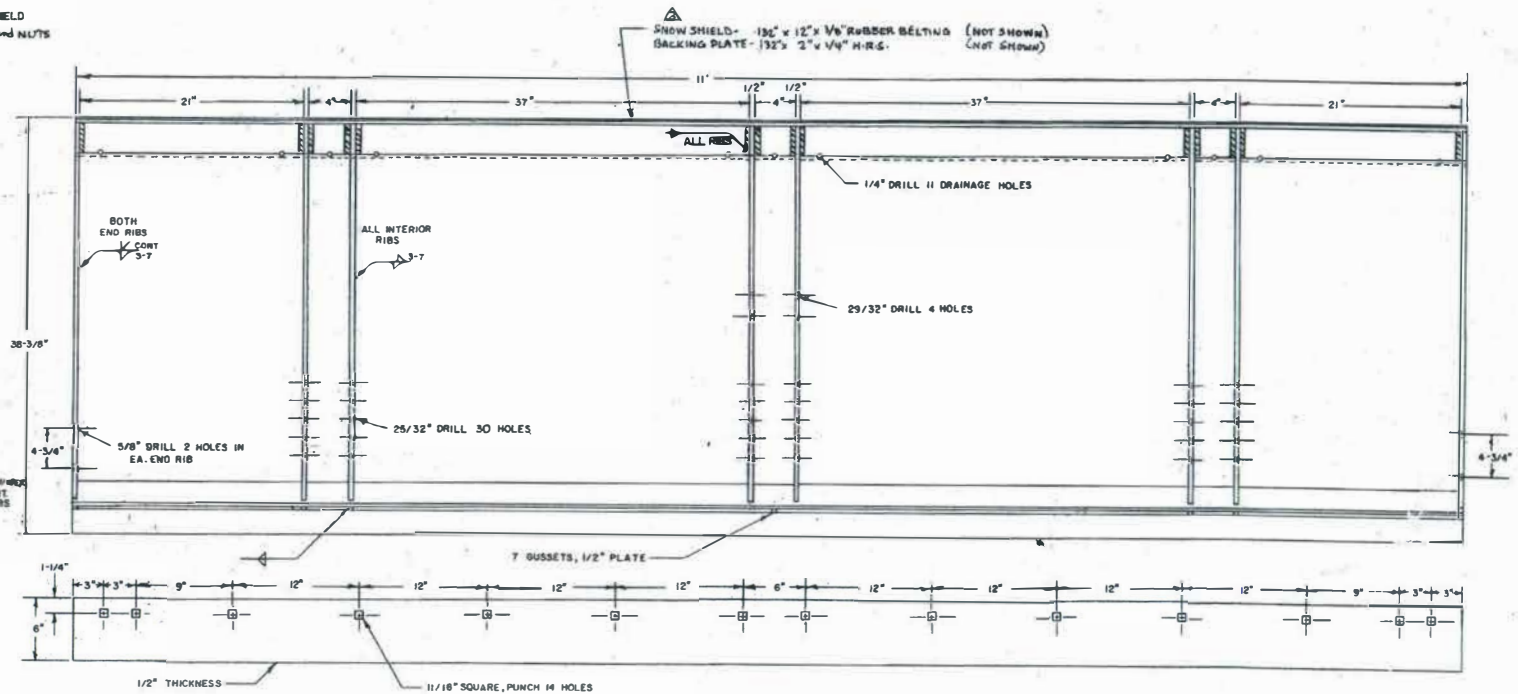
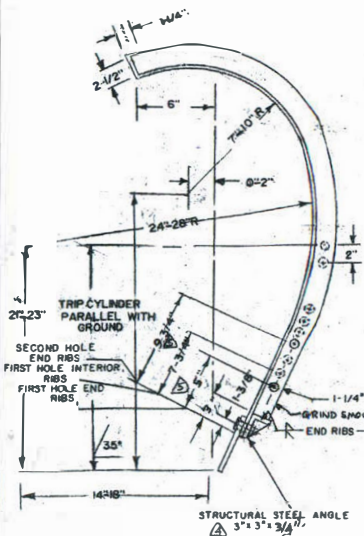
NOTE: ALL WELDS TO BE ALL-AROUND, CONTINUOUS
EXCEPT NO WELDS ON FRONT FACE

MATERIAL: HOT ROLLED
STRUCTURAL STEEL

NEW JERSEY DEPARTMENT OF TRANSPORTATION		
OSCILLATING DRIVE BAR POWER-REVERSING		
DRAWN by JW B	DATE: 5/9/94	DWG. NO 4-211

NOTES

1. THIS DRAWING SUPERSEDES DWG NO. 4-126.
2. ALL VERTICAL RIBS 1/2" x 2-1/2" STRUCTURAL STEEL QUALITY PLATE.
3. MOLDBOARD SKIN TO BE 3/16" STRUCTURAL STEEL QUALITY PLATE, SMOOTH ROLLED OR BRAKE FORMED.
4. MOLDBOARD SKIN TO EXTEND TO BOTTOM EDGE OF FRONT ANGLE, SKIN EDGE - TACK WELD ONLY.
5. BLADE TO BE HIGH CARBON ABRASIVE RESISTANT STEEL.
6. FOR CARBIDE EDGE (BLADE) SEE N.J.D.O.T. BUL. OF EQUIP. DWG. NO. 4-113.
7. BLADE TO BE ATTACHED TO MOLDBOARD W/ 5/8" x 11 UNC x 2" CARRIAGE BOLTS, NUTS & LOCKWASHERS (N/A LAST 2 BOLTS ON EACH SIDE).
8. BOLT HOLES IN RIBS FOR ATTACHING MOLDBOARD HINGE TO BE SPACED APART 1-3/4".
9. ALL WELDS TO BE 3/16" MIN.
10. HOLES IN BOTTOM BLADE ANGLE TO BE DRILLED 5/8" DIA.
11. 14 GUSSETS, 2" x 2-1/4" x 3/16" STEEL WELDED TO RIBS
12. DRILL FIVE (5) HOLES - 9/16" DIA TO MATE WITH SNOW SHIELD
13. SNOW SHIELD TO BE ATTACHED WITH 1/2" BOLTS AND NUTS

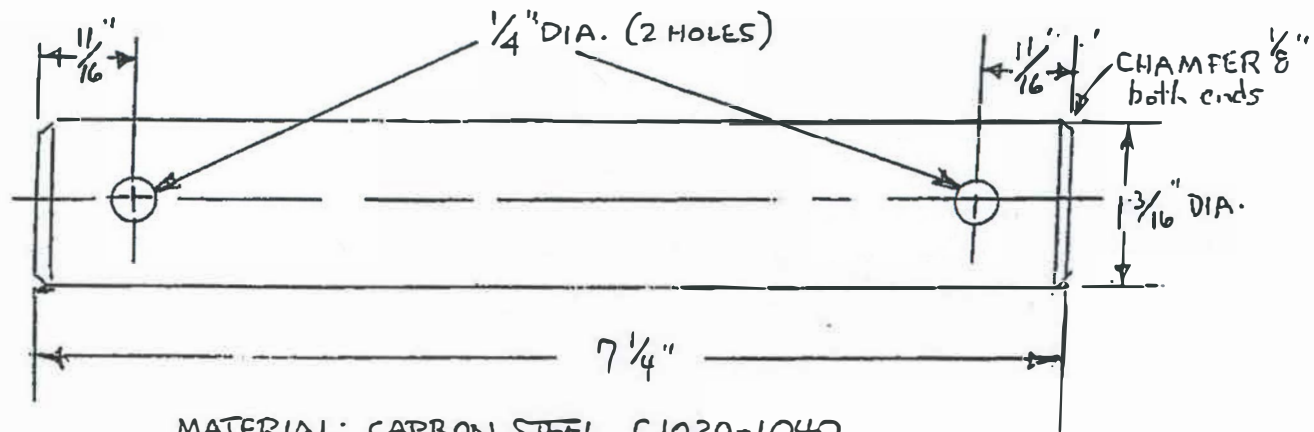


Blade Support Angle to be 4"x4"x3/4"

Blade used is Blade "Z"

Moldboard to have additional holes punched to accommodate 3 ft and 4 ft long carbide blades.

NEW JERSEY DEPARTMENT OF TRANSPORTATION DIVISION OF CONSTRUCTION AND MAINTENANCE BUREAU OF EQUIPMENT			
SNOW PLOW MODEL M.R. 11-38-4000-J			
SUBMITTED BY <i>W. J. Smith</i>	DRAWN BY A. P. SMITH	SCALE 3/16" = 1'	DWG. NO. 4-213
APPROVED BY <i>W. J. Smith</i>	JOB NO. _____	DATE JUNE 22, 1998	
REV. DATE BY	REMARKS	ORDER REQUEST NO.	APPLICABLE SNOW PLOWS

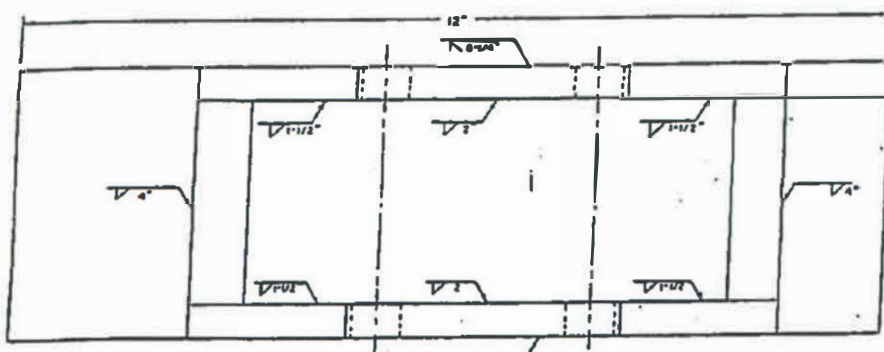


MATERIAL: CARBON STEEL C1020-1040

NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

AXLE-PIN TYPE

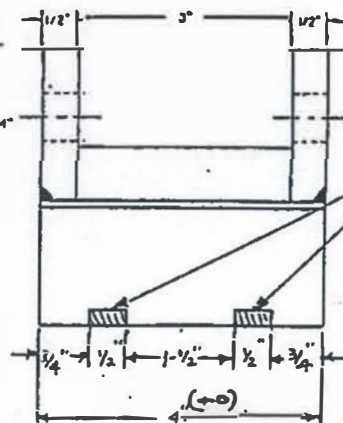
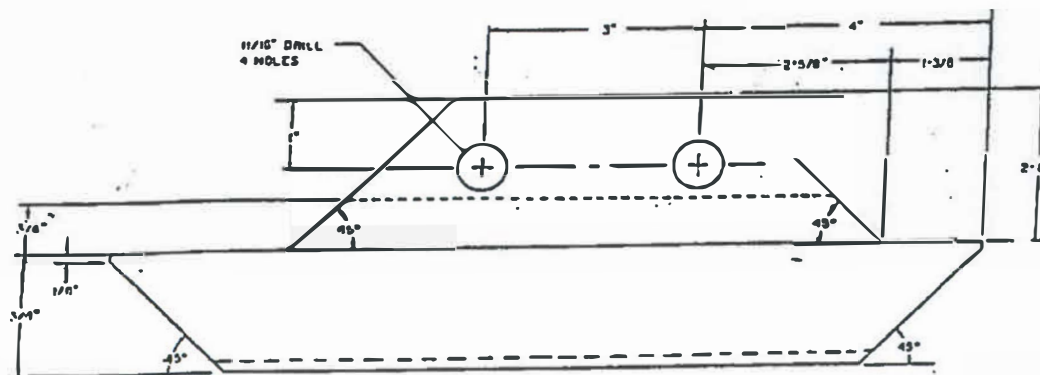
REV 2				SUBMITTED BY <i>[Signature]</i>	DRAWN BY JWB	SCALE FULL	DWG. NO.
REV 1				APPROVED BY	JOB NO	DATE 9-1-95	4-219



NOTES

1. ALL MAT'L TO BE MEDIUM CARBON STEEL.
2. ALL WELDS TO BE 3/16" WITH LENGTH AS NOTED.
3. DRILLED HOLES (1/16") IN SHOE MUST BE DRILLED STRAIGHT AND PARALLEL.
4. SHOE TO BE CONNECTED TO MOLDBOARD AND 2 BY TWO (2) 5/8" x 6" L6 BOLTS WITH LOCKWASHERS & NUTS.

8" - NOTE: EAR TO BE BEVELLED & WELDED
SO THAT THERE IS NO WELD
EXPOSED WELD EXCEEDING 4" MAXIMUM WIDTH



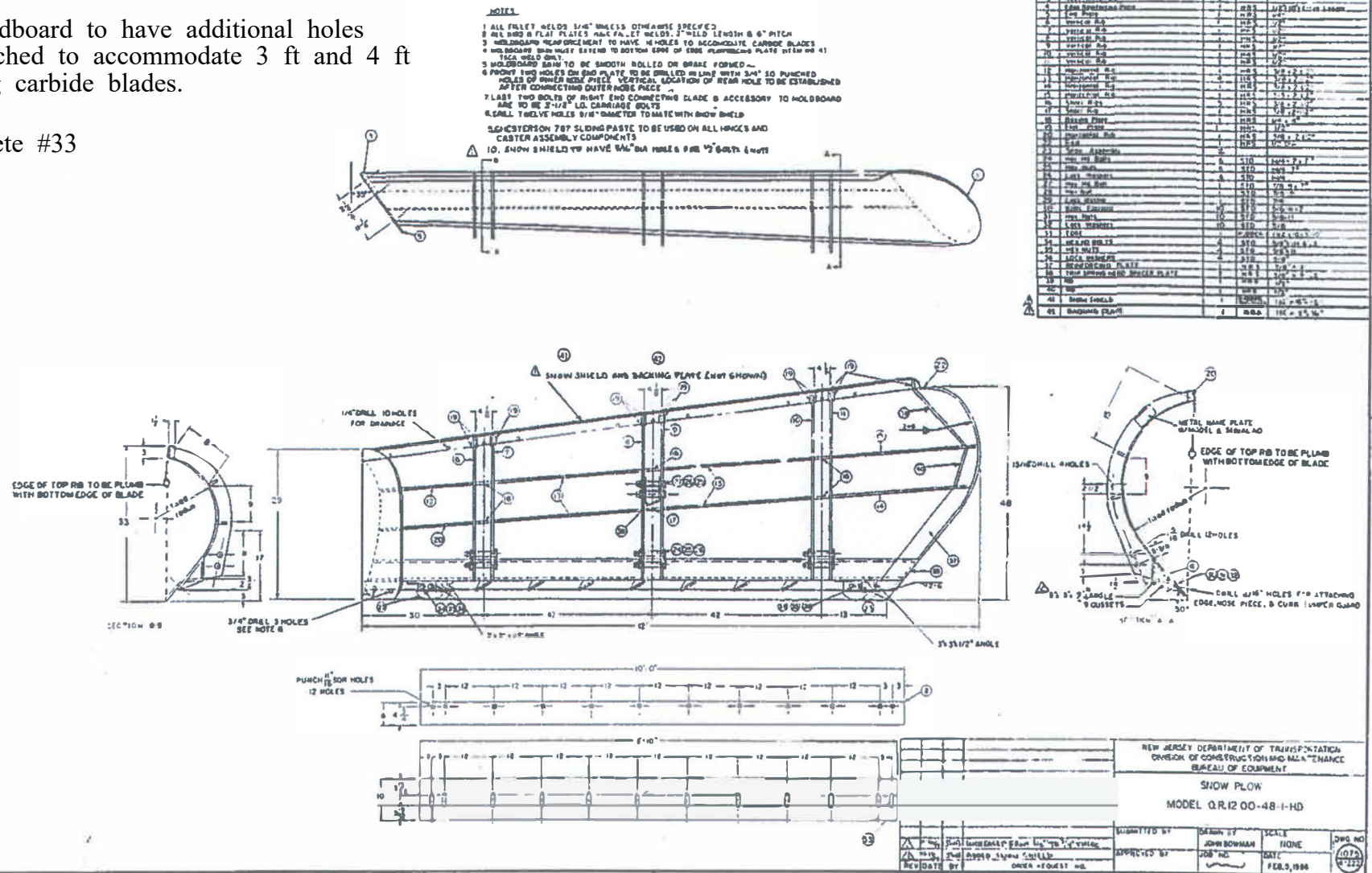
TUNGSTEN CARBIDE TO BE 3/8" THICK,
RECESSED INTO BOTTOM OF SHOES,
NO EXPOSED EDGES.
SEE CONTRACT FOR SPECS ON
CARBIDE INSERTS

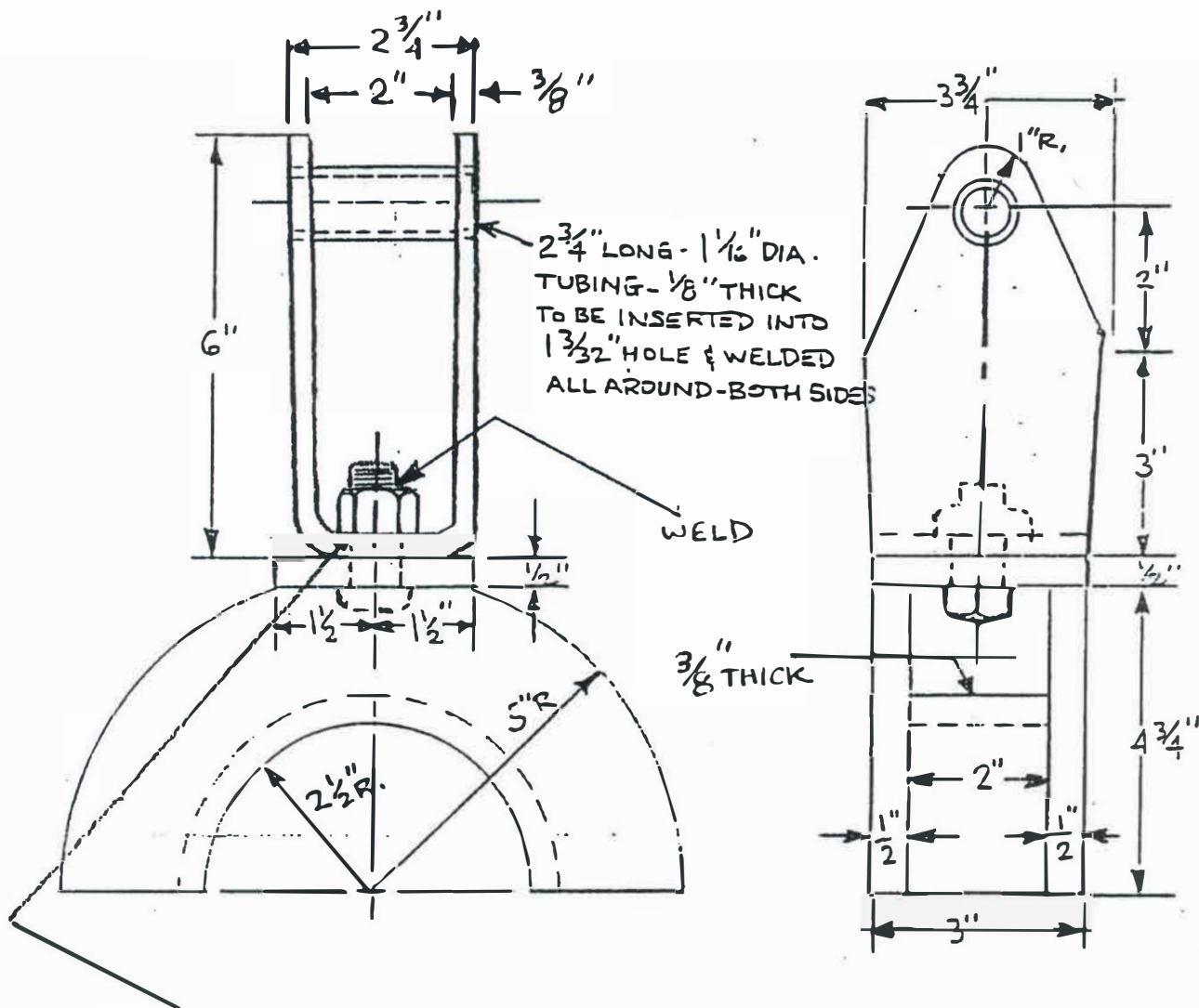
NEW JERSEY DEPARTMENT OF TRANSPORTATION
DIVISION OF CONSTRUCTION AND MAINTENANCE
BUREAU OF EQUIPMENT

MOLDBOARD SHOE with
TUNGSTEN CARBIDE INSERTS

REV				SUBMITTED BY	DRAWN BY	SCALE	DWG.
2							17
REV				APPROVED BY	JOB NO.	DATE	
1		3-23-91	ADDED WELD NOTE			2-14-96	221

Delete #33





DRILL $1"$, 2 HOLES, FASTEN UPPER & LOWER SECTIONS TOGETHER WITH $1" \times 12 \text{ UNF} \times 2"$ BOLT & NUT AND WELD

NEW JERSEY DEPT. OF TRANSPORTATION

SWIVEL CHAIN BLOCK - for P.R. PLOWS

DRAWN BY:

John Brown

DATE:

OCT. 20, 2000

DWG NO.

4-230