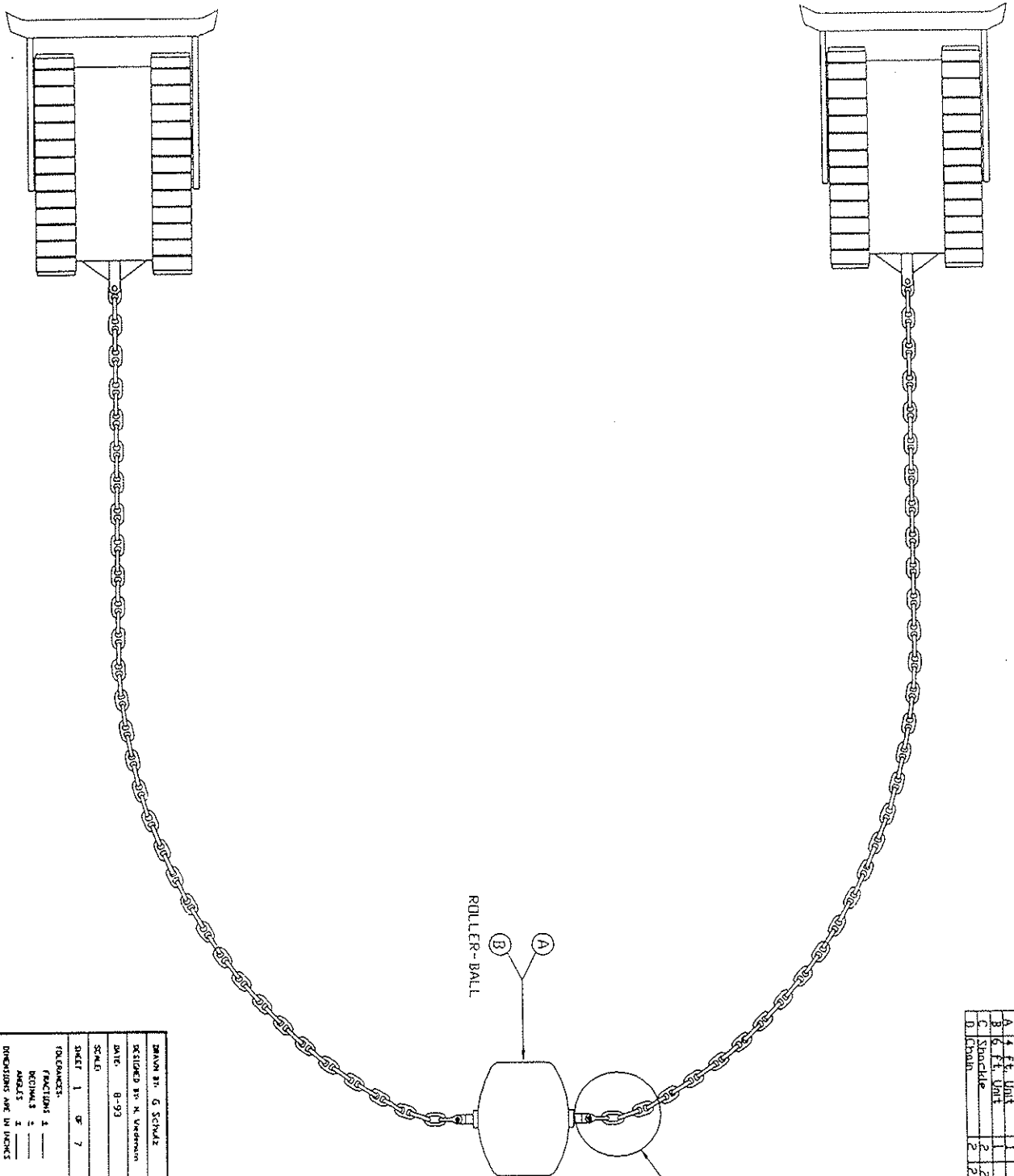
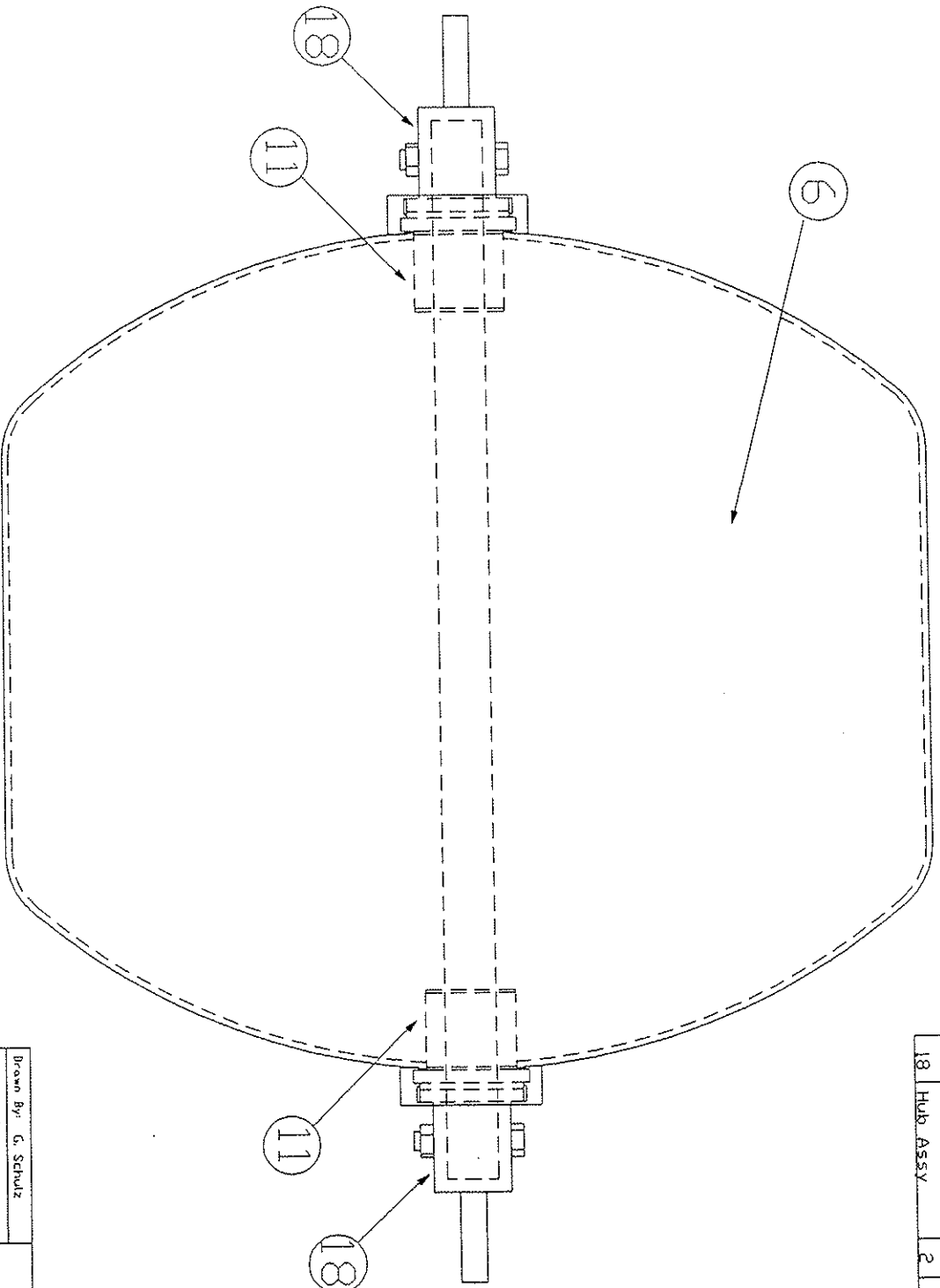


MATERIALS LIST		SHEET
NO.	PART NAME	RECD
A	4 FT. UNIT	1
B	6 FT. UNIT	2
C	Shackle	2
D	Chain	2




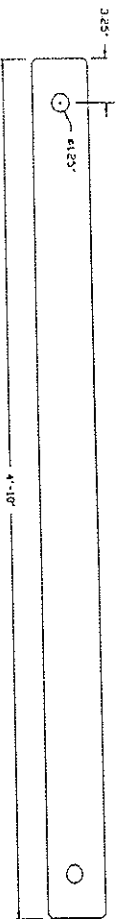
DESIGNED BY: G. SCHWAB	<p>TEXAS A&M UNIVERSITY AGRICULTURAL RESEARCH AND EXTENSION CENTER AT CHILLICOTHE - VERNON P.O. BOX 1629 VERNON, TX 75694</p>
DATE: 8-93	
STATE: _____	TITLE: ROLLER-BALL CHAIN
SHEET: 1 OF 7	
PROFICIENCY: _____	
NO. OF: _____	
SCALE: _____	
REVISIONS: _____	
INCHES: _____	
FRAMES: _____	

MATERIALS LIST				
NO.	PART NAME	QTY.	MATERIAL - DESCRIPTION	SHEET
B	6 ft. Unit	1	Parts 6, 11, 18	
6	Roller Assy	1		5
11	Bearing Assy	2		6
18	Hub Assy	2		7



ⓑ 6 FT. DIA. UNIT

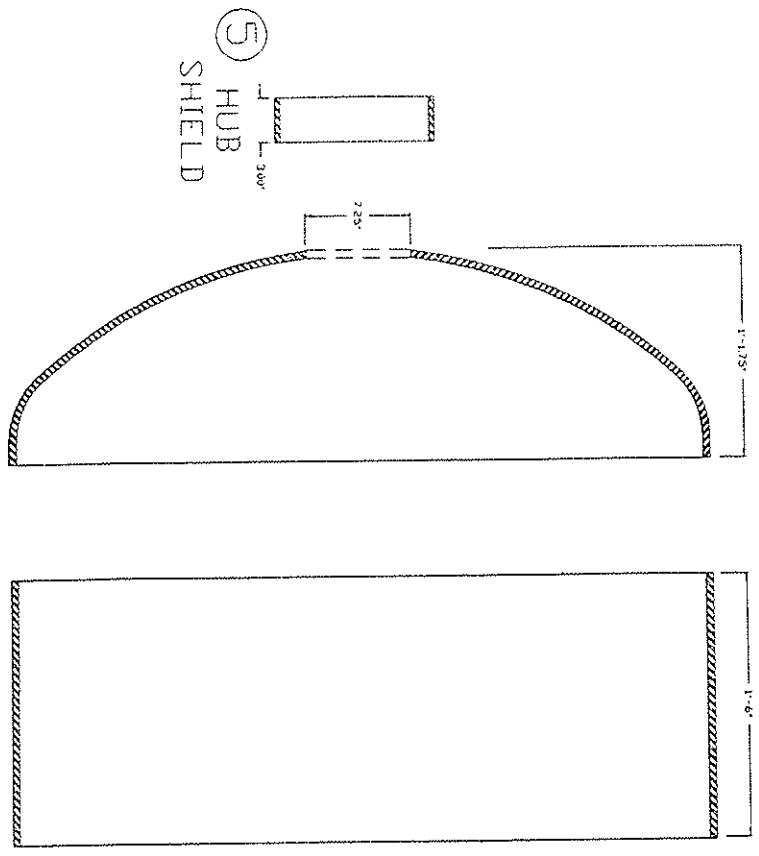
Drawn By: G. Schulz Designed By: H. Wiederann Date: 8-93 Scale: Sheet 3 Of 7 Tolerances Fractions ± 1/32" Decimals ± .005" Angles ± 1/20th Measured In Inches	 TEXAS A&M UNIVERSITY AGRICULTURAL RESEARCH AND EXTENSION CENTER AT CHILLICOTHE-VERNON P.O. BOX 1678 VERNON, TX 76384
TITLE:	ROLLER-BALL CHAIN
	6 FT. DIAMETER UNIT



NOTE: SHAFT LENGTH MAY VARY WITH HEAD DIMS.

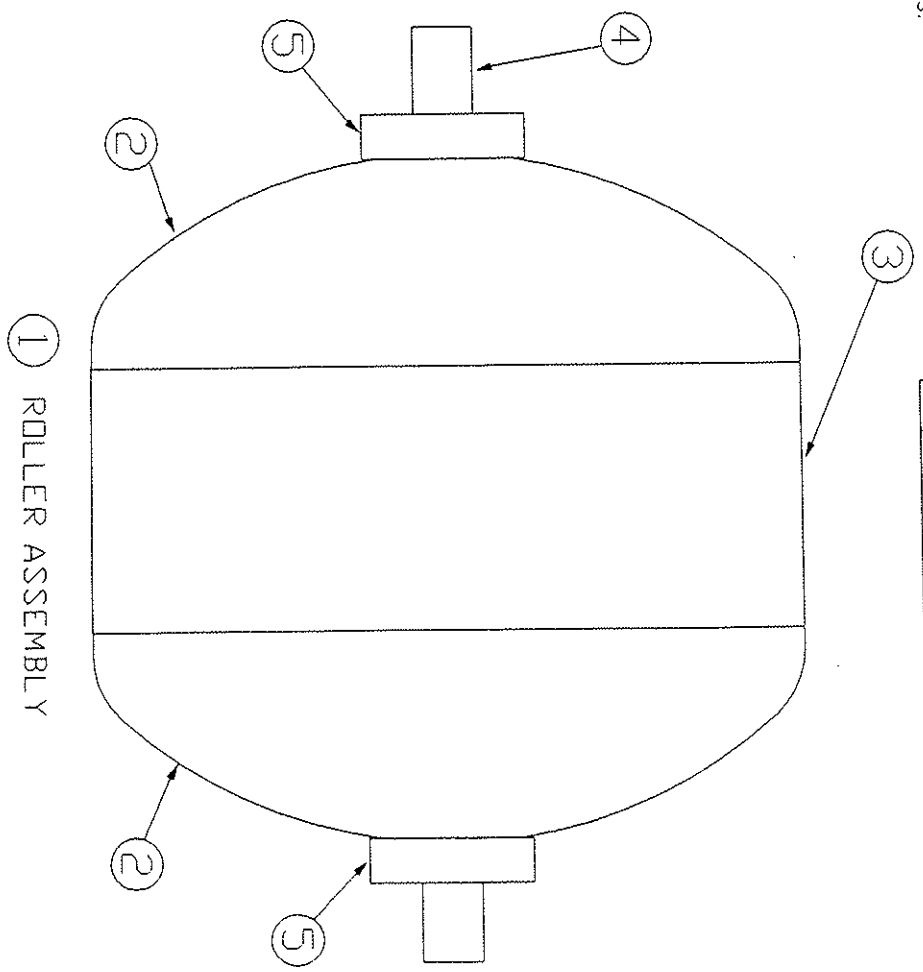
④ SHAFT

MATERIALS LIST			
NO.	PART NAME	QTY	MATERIAL - DESCRIPTION
1	Roller	1	Parts 2-5
2	Elliptical Tank Head	2	48"OD x 0.5" wall
3	Spacer	1	12'-6.8125' x 0.5" Plate Steel Rolled to 48" OD
4	Shaft	1	4" Cold Rolled Steel
5	Hub Shield	2	11' x 0.375" wall Tubing




② TANK HEAD

③ SPACER



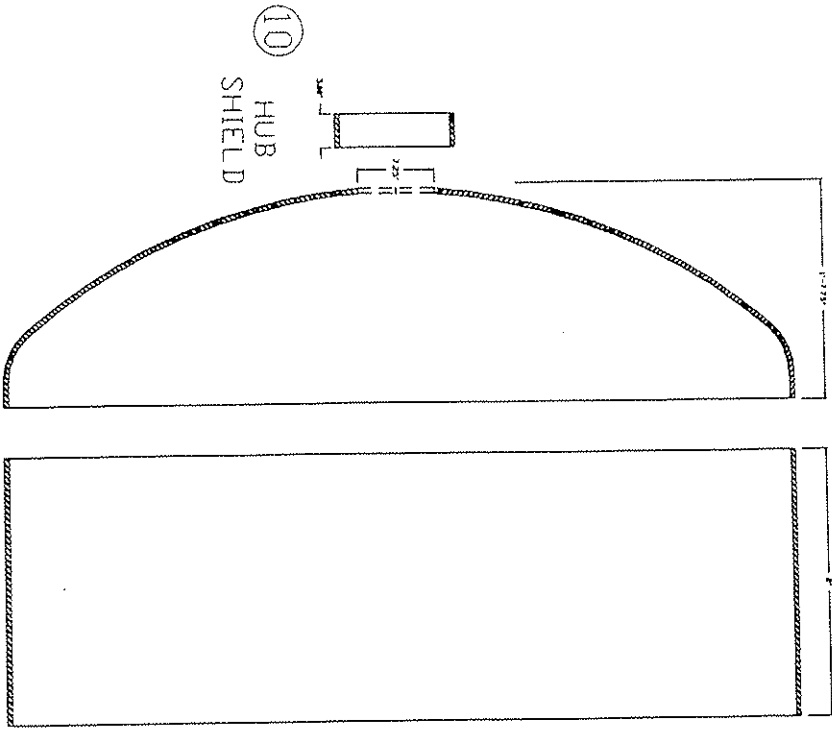
① ROLLER ASSEMBLY

Drawn By: G. Schulz Designed By: H.L. Wiedemann Date: 8-93 Scale: Sheet 4 of 7 Tolerances Fractions ± 1/32" Decimals ± .005" Angles ± 1/2 deg Measured In Inches	 TEXAS A&M UNIVERSITY AGRICULTURAL RESEARCH AND EXTENSION CENTER AT CHILLICHOPE-VERNON P.O. BOX 1658 VERNON, TX 76384
TITLE: ROLLER-BALL CHAIN ROLLER ASSEMBLY	



NOTE: SHAFT LENGTH MAY VARY WITH HEAD DIMS.

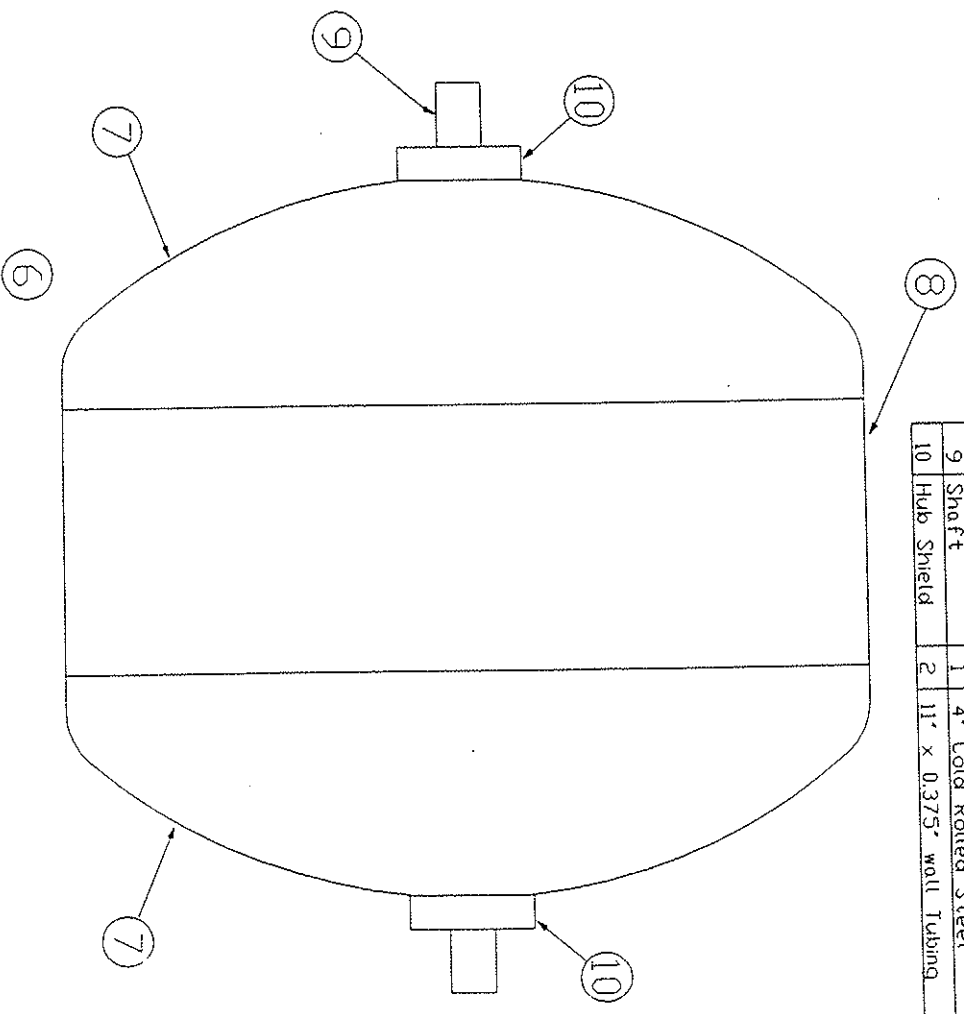
⑨ SHAFT



⑦ TANK HEAD

⑧ SPACER

⑩ HUB SHIELD



ROLLER ASSEMBLY

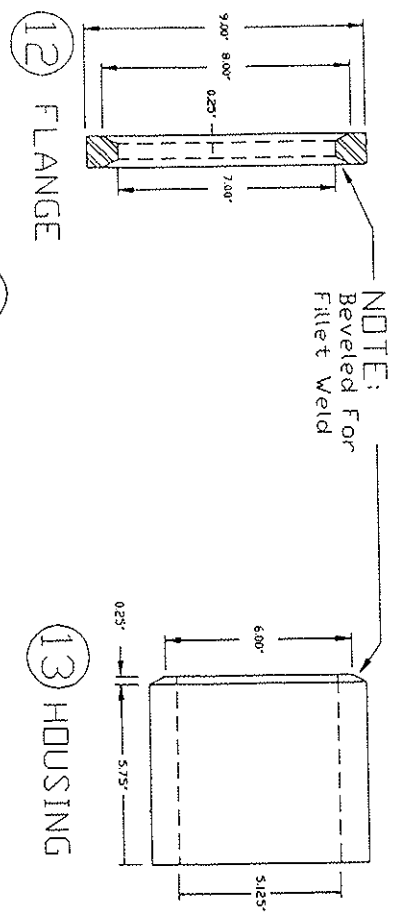
MATERIALS LIST			
NO.	PART NAME	QTY.	MATERIAL - DESCRIPTION
6	Roller Assy	1	Parts 7-10
7	Elliptical Tank Head	2	72"OD x 0.5" wall
8	Spacer	1	18"-10.1875" x 0.5" Plate Steel Rolled to 72" OD
9	Shaft	1	4" Cold Rolled Steel
10	Hub Shield	2	11" x 0.375" wall Tubing

Drawn By: G. Schulz
 Designed by: H.T. Wiedemann
 Date: 8-93
 Scale:
 Sheet 5 of 7
 Tolerances
 Fractions ± 1/32"
 Decimals ± .005"
 Angles ± 1/2°
 Measured in Inches

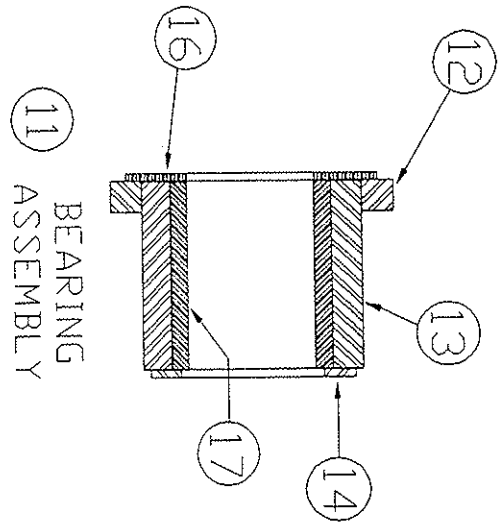
Texas A&M University
 Agricultural Research
 and Extension Center
 AT CHILLICOTHE-VERNOH
 P O BOX 1658 VERNON, TX 76384

TITLE:
 ROLLER-BALL CHAIN
 ROLLER ASSEMBLY

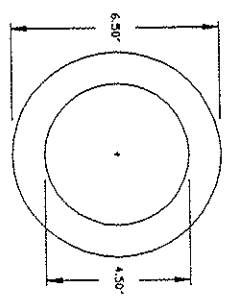
MATERIALS LIST				
NO.	PART NAME	REQ.	MATERIAL - DESCRIPTION	SHEET
11	Bearing Assy	4	Parts 12-17	
12	Flange	1	1" Plate Steel	
13	Housing	1	7"x 1" Wall Tubing Steel	
14	Retainer	1	0.25" Plate Steel	
15	Shim	A/R	14 Ga. Hot Rolled Steel	
16	Thrust Brng.	1	0.25" Nylontron® NSM	
17	Bushing	1	* 5"OD x 4"ID Tube Nylontron® NSM	



NOTE:
Beveled For
Fillet Weld

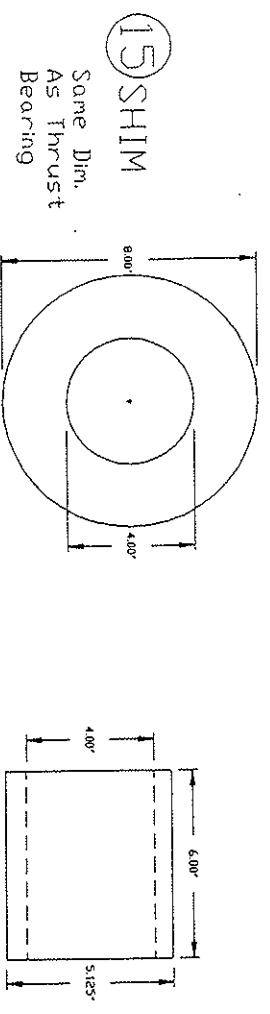


11 BEARING ASSEMBLY



14 BUSHING RETAINER


*NOTE: The Nylontron® NSM Tubing was oversized; Machine to a press fit in the housing, then bore to fit 4" shaft.

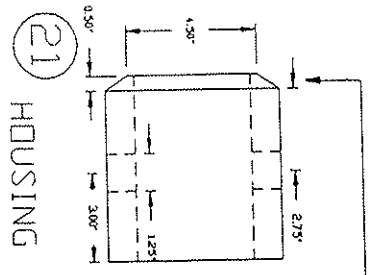


15 SHIM
Same Dim.
As Thrust
Bearing

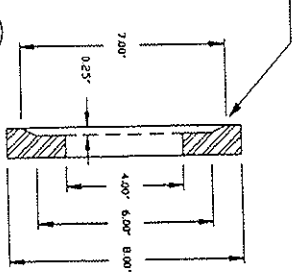
16 THRUST BEARING

17 BUSHING

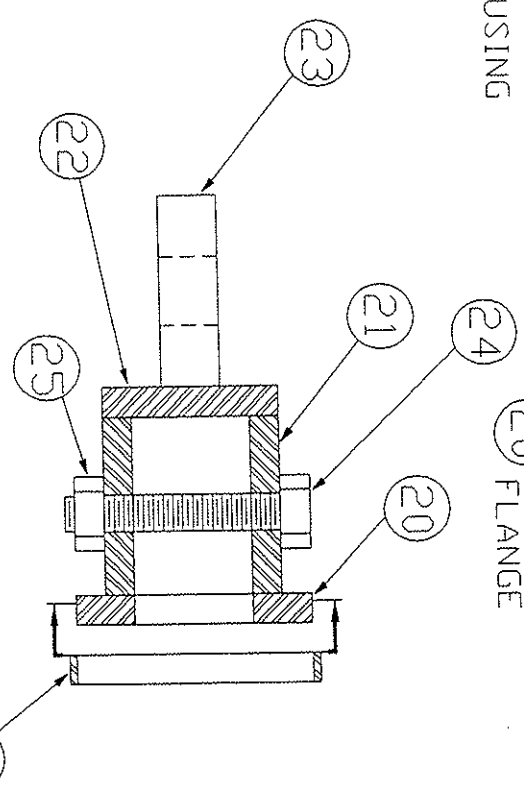
Drawn By: G. Schmitz Designed By: H.T. Veederman Date: 8-93 Scale: Sheet 6 of 7	 TEXAS A&M UNIVERSITY AGRICULTURAL RESEARCH AND EXTENSION CENTER AT CHILLICOTHE-VERNON P.O. BOX 1658 VERNON, TX 76384
Tolerances Fractions ± 1/32" Decimals ± .005" Angles ± 1/2deg Measured in Inches	TITLE: ROLLER-BALL CHAIN BEARING ASSEMBLY



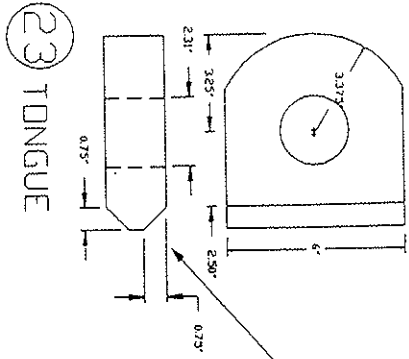
NOTE:
Beveled for
Fillet Weld



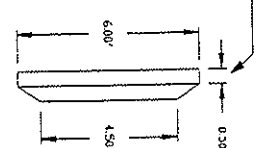
20 FLANGE



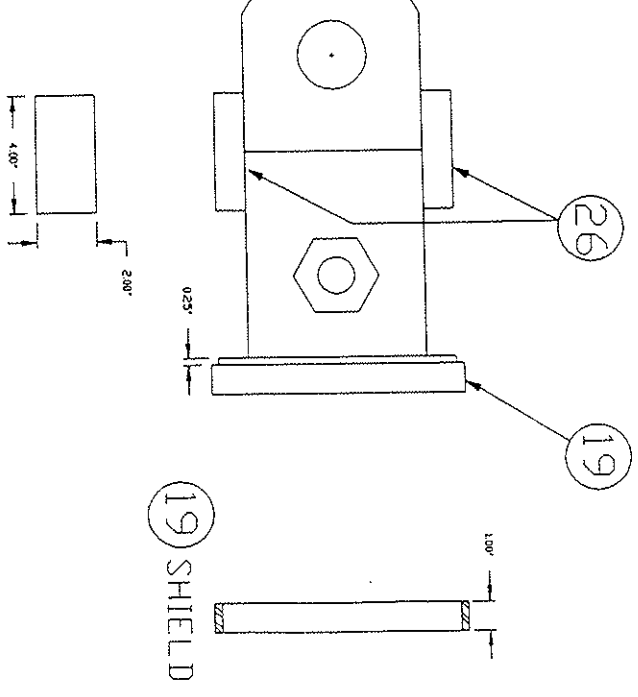
18 HUB ASSEMBLY



22 END PLATE



NOTE:
Beveled for
Fillet Weld



26 BRACE

19 SHIELD

MATERIALS LIST			
NO.	PART NAME	REQ.	MATERIAL - DESCRIPTION
18	Hub Assy	4	Parts 19-26
19	Shield	1	8.5" x .25" Wall Tubing
20	Flange	1	1" Plate Steel
21	Housing	1	6" x 1" Wall Tubing Steel
22	End Plate	1	1" Plate Steel
23	Tongue	1	2" Plate Steel
24	Lock Screw	1	8" x 1.25" x 12NF Grd 8
25	Locking Nut	1	1.25" x 12NF
26	Brace	2	1" Plate Steel

Drawn By: G. Schulz
 Designed By: H.T. Viedeman
 Date: 8-93
 Scale:
 Sheet 7 OF 7
 Tolerances
 Fractions ± 1/32"
 Decimals ± .005"
 Angles ± 1/2 deg
 Measured In Inches



TEXAS A&M UNIVERSITY
 AGRICULTURAL RESEARCH
 AND EXTENSION CENTER
 AT CHILLICOTHE-VERDON
 P.O. BOX 1658 VERDON, TX 76384

TITLE:
 ROLLER-BALL CHAIN
 TONGUE ASSEMBLY