

TOP VIEW

SEE TOP VI
VIEW FOR TRUE ORIENTATION

MK.	LOC.	DESCRIPTION	SERVICE	QTY.	CLAMP	CAP	GSKT	DESCRIPTION/(ITEM NO.)
T	SIDE	1/2 FNPT THERMOWELL	RECORDER WELL	1				DCI P/N 089124(26)
S1A	TOP	1-1/2 TRI-CLAMP	CIP CONNECTION	1				
S1	TOP	3 TRI-CLAMP	CIP MOUNT	1	70	69		MTG TUBE(66), BALL(67), PIN(68)
M	TOP	24 PV-1000 MANWAY (5) LUGS	TANK ACCESS	1				O-RING (36)
J2	SIDE	3/4 NPT MALE PIPE	DIMPLE JACKET OUTLET	1				
J1	SIDE	3/4 NPT MALE PIPE	DIMPLE JACKET INLET	1				
H	TOP	2 TRI-CLAMP	SPARE	1				
G	TOP	1/2 TRI-CLAMP	SPARE	1				
F	TOP	2 TRI-CLAMP	RUPTURE DISK	1				
E	TOP	1 TRI-CLAMP	SPARE	1				
D	BTM	1 TRI-CLAMP	OUTLET	1				ASEPCC #TF-10-200-1-PN10-EP10(21,22,23)
C	TOP	2 TRI-CLAMP	INLET	1				
B	TOP	2 TRI-CLAMP	INLET	1				
A	TOP	6 TRI-CLAMP	AGITATOR	1	103	102		

NOZZLE SCHEDULE

- NOTES:
- ALL CUSTOMER SUPPLIED PARTS MUST HAVE PROPER IDENTIFICATION, PARTIAL DATA, AND MILL TEST REPORTS BEFORE BEING WELDED TO VESSEL.
 - IF THIS EQUIPMENT IS USED IN CONTACT WITH CORROSIVE MATERIALS (SALT, CHLORIDES, HALOGENS OR OTHER CORRODENTS) DCI, INC. WILL NOT BE RESPONSIBLE FOR THE CORROSION RESISTANCE, OR THE RESULTING DAMAGE, WITHOUT WRITTEN ACCEPTANCE OF SUCH CORROSIVE CONDITIONS BY DCI, INC. BASED UPON A SPECIFIC INTENDED USE AND/OR SERVICE.
 - ALL TOLERANCES ARE IN ACCORDANCE WITH THE LATEST EDITION OF THE "ASME" BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1, JULY 1, 2002 ADDENDUM, AND DCI STANDARD VESSEL TOLERANCES DRAWING 020000.
 - ALL ASME WELDING TO BE DONE BY ASME CERTIFIED WELDERS.
 - ALL ASME WELDING PROCEDURES ARE IN ACCORDANCE WITH ASME CODE UW-28.
 - ASME CODE JURISDICTION ENDS AT THE FIRST SEALING SURFACE EXCLUDING MANWAY.
 - ALL FLANGES WILL HAVE BOLT LINES STRADDLE THE 0°-180° & 90°-270° CENTERLINES, UNLESS SPECIFIED OTHERWISE.
 - VESSEL AND/OR HEAT TRANSFER SURFACE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "ASME" BOILER AND PRESSURE VESSEL CODE, SECTION VIII, DIVISION 1, JULY 1, 2002 ADDENDUM.
 - VESSEL AND/OR HEAT TRANSFER SURFACE TO BE HYDROSTATICALLY TESTED PER UG-99 AND DCI PROCEDURE X-7033-4. CHECK FOR DEFECTS, REPAIR AND RETEST IF NECESSARY.
 - SUITABLE PRESSURE AND/OR VACUUM RELIEF DEVICES MUST BE INSTALLED BY CUSTOMER FOR OPERATION OF VESSEL AND/OR HEAT TRANSFER SURFACE.
 - PRODUCTION TO PROVIDE PROTECTION FOR ALL NOZZLES AND FITTINGS PRIOR TO SHIPMENT. VESSEL MUST BE ADEQUATELY VENTED.
 - WELD SEAMS IN VESSEL HEAD AND SHELL SHOULD BE LOCATED WHERE POSSIBLE TO AVOID ALL NOZZLES, ACCESS OPENINGS, AND REINFORCEMENT PADS.
 - ALL REINFORCEMENT PADS MUST BE PROVIDED WITH (1) 1/8" DIA. WEEP HOLE LOCATED AT THE LOWEST POINT WHEN THE VESSEL IS IN ITS NORMAL OPERATING POSITION.
 - REAM ALL 25MM INGOLD FITTINGS ID TO .985"-.988" AFTER WELDING. (WHEN APPLICABLE)
 - NOZZLE END I.D. SURFACES HAVE A MINIMUM 1/16" RADIUS.
 - DCI SURFACE FINISH DEFINITIONS:
AI = AS IS WELD OR MATERIAL
CC = COLOR CLEANED WELD
BB = BEAD BLASTED WELD OR MATERIAL
HRAP = HOT ROLLED PLATE MATERIAL
2B = COLD ROLLED MILL MATERIAL
NUMERIC VALUE + "E" = RA AFTER FINAL ELECTRO-POLISH
NUMERIC VALUE + "E" = RA MAXIMUM
 - APPROXIMATE TURNOVER RATE = 6.
 - DCI TO PERFORM THE FOLLOWING TESTS AND PROCEDURES:
X-7036-3 - STANDARD CIP CLEANING TEST
 - AGITATOR LOADING DATA:
WEIGHT = 300 LBS
TORQUE = 90 IN-LBS
BENDING MOMENT = 378 IN-LBS

ITEM	MATERIAL DESCRIPTION	MATERIAL SPEC	INTERIOR RA FINISH	EXTERIOR RA FINISH
SHELL	SHT 10 GA	SA240.316/316L	40	N/A
TOP HEAD	PLY 1/4	SA240.316/316L	40	40
BTM HEAD	SHT 8 GA	SA240.316/316L	40	N/A
SHELL HEAT TRANS	SHT 16 GA	SA240.304	N/A	N/A
HEAD HEAT TRANS	N/A	N/A	N/A	N/A
SHELL SHEATHING	SHT 12 GA	SA240.304	N/A	40
TOP HD SHEATHING	N/A	N/A	N/A	N/A
BTM HD SHEATHING	SHT 12 GA	SA240.304	N/A	40
BREAST RING	SHT 10 GA	SA240.316/316L	N/A	40
LEGS	N/A	N/A	N/A	N/A
FITTING GASKETS	FDA COMPLIANT	WHITE SILICONE	N/A	N/A
MANWAY GASKET	FDA COMPLIANT	RED SILICONE	N/A	N/A
SUPPORT LUGS	SHT 7 GA	SA240.304	N/A	BB
LUG REPAD	SHT 7 GA	SA240.316/316L	N/A	BB

CIP DATA: (1) 2-1/2" DCI SPRAYBALL
CIP FLOW RATE: 19 G.P.M. AT 25 P.S.I. (APPROX.)

INSULATION
SHELL: 2" CHLORIDE-FREE CERAMIC FIBER
BTM HEAD: 2" CHLORIDE-FREE CERAMIC FIBER
TOP HEAD: N/A

SURFACES COVERED WITH INSULATION TO RECEIVE A 5 MIL. COATING OF THURMALOX- ALL: HEAT TRANSFER: NONE: PAINT, EXT: N/A

HEAD DIMENSIONAL INFORMATION
TOP INNER HD: 24 ID, 24 DR, 1.5 KR, 25 SF
BTM INNER HD: 24 ID, 24 DR, 1.5 KR, 25 SF
TOP OUTER HD: N/A
BTM OUTER HD: 29.062 ID, 29 DR, 2 KR, 5 SF

HEAT TRANSFER SURFACE INFORMATION
DIMPLE JACKET ON THIS JOB IS DESIGNED FOR
 NON-THERMAL SHOCK LOADING N/A
 THERMAL SHOCK LOADING
"ONE BOX MUST BE CHECKED"
SHELL: DIMPLED HALF PIPE N/A
 CONVENTIONAL OTHER
HEAD: DIMPLED HALF PIPE N/A
 CONVENTIONAL OTHER
AREA SHELL: 12 SF HEAD: N/A
DIMPLE PATTERN TYPE: 2-1/4 X 2-1/4 (AF)
HEATING MEDIUM: UNKNOWN
COOLING MEDIUM: UNKNOWN

NON-DESTRUCTIVE EXAMINATION				
RADIOGRAPHY-VESSEL				
TOP HEAD TO SHELL	TOP HEAD TO LONG SEAM	SHELL HEAD	BOTTOM HEAD TO SHELL	BTM HEAD TO SHELL
<input type="checkbox"/> SEAMLESS	<input type="checkbox"/> NONE	<input type="checkbox"/> NONE	<input type="checkbox"/> SEAMLESS	<input type="checkbox"/> NONE
<input type="checkbox"/> NONE	<input type="checkbox"/> NONE	<input type="checkbox"/> NONE	<input type="checkbox"/> NONE	<input type="checkbox"/> NONE
OTHER:				

CERTIFIED BY
W RT-
ST. CLOUD, MINNESOTA

VESEL M.A.W.P. 35/-15 P.S.I. AT 250 °F
MIN. DESIGN METAL TEMP. -20 °F AT 35 P.S.I.
VESEL VOLUME 70 GAL
JACKET M.A.W.P. 135/-15 P.S.I. AT 358 °F
MIN. DESIGN METAL TEMP. -20 °F AT 150 P.S.I.
JACKET VOLUME 1.4 GAL
MFRS. SERIAL NO. JS2161
YEAR BUILT 2003

VESEL TEST PRESSURE: 46 PSI
JACKET TEST PRESSURE: 195 PSI

PRODUCT DATA: DETERGENT & DE-FOAMING AGENTS
VISCOSITY: 50 CPS SPECIFIC GRAVITY: 1.01
EST. EMPTY WEIGHT: 602 LBS
EST. OPERATING WEIGHT: 1192 LBS (DESIGN)
EST. FULL FLOODED WEIGHT: 1312
SEISMIC ZONE: I

REV	REVISION DESCRIPTION	REV BY/DATE
E		
D		
C	SET UP FOR PROD PER SIGNED APPROV DWG DATED 12-5-02	AWL 12-18-02
B	ADDED BAFFLE PER CHANGE ORDER #2.	RDB 12-4-02
A	MADE CHANGES PER CUSTOMER REQUEST. RESUBMITTED FOR APPROVAL	RDB 11-18-02

TITLE 70 GALLON ROUND VERTICAL TANK

DCI ORDER NO.: CS8018 QTY. RECD.: 2

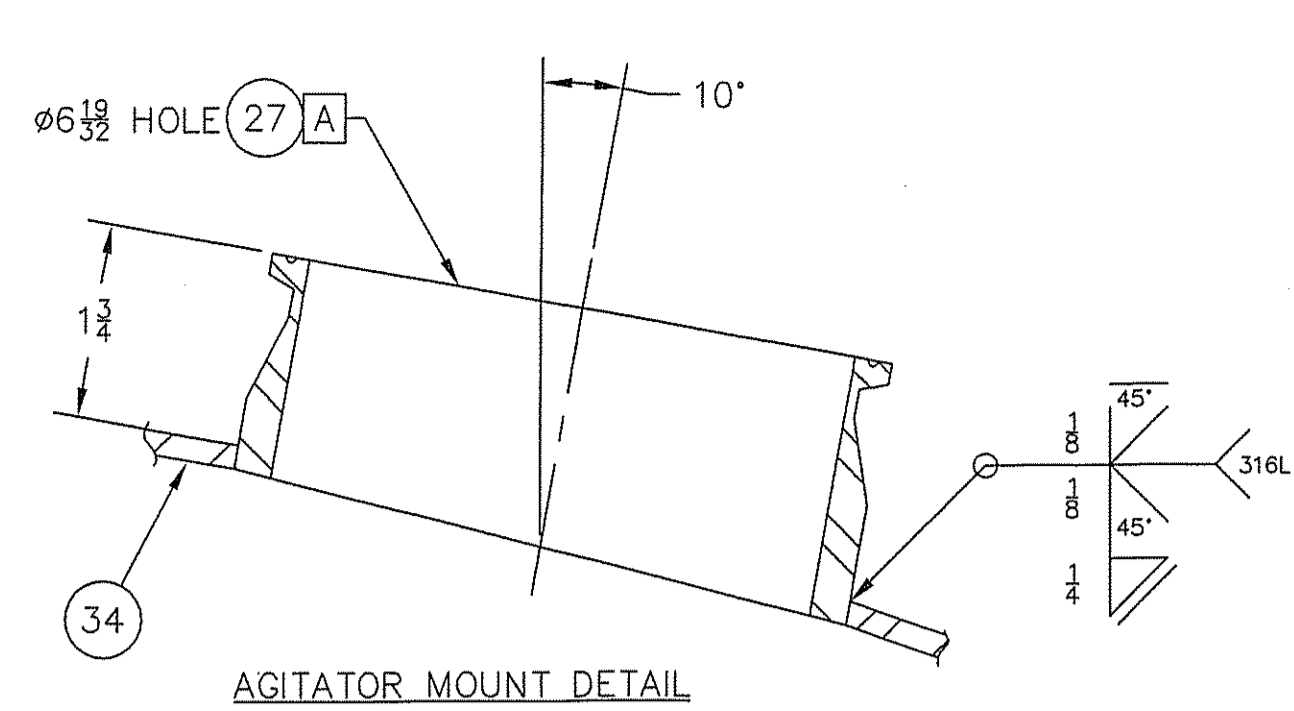
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DIMENSIONS ARE IN INCHES UNLESS SPECIFIED

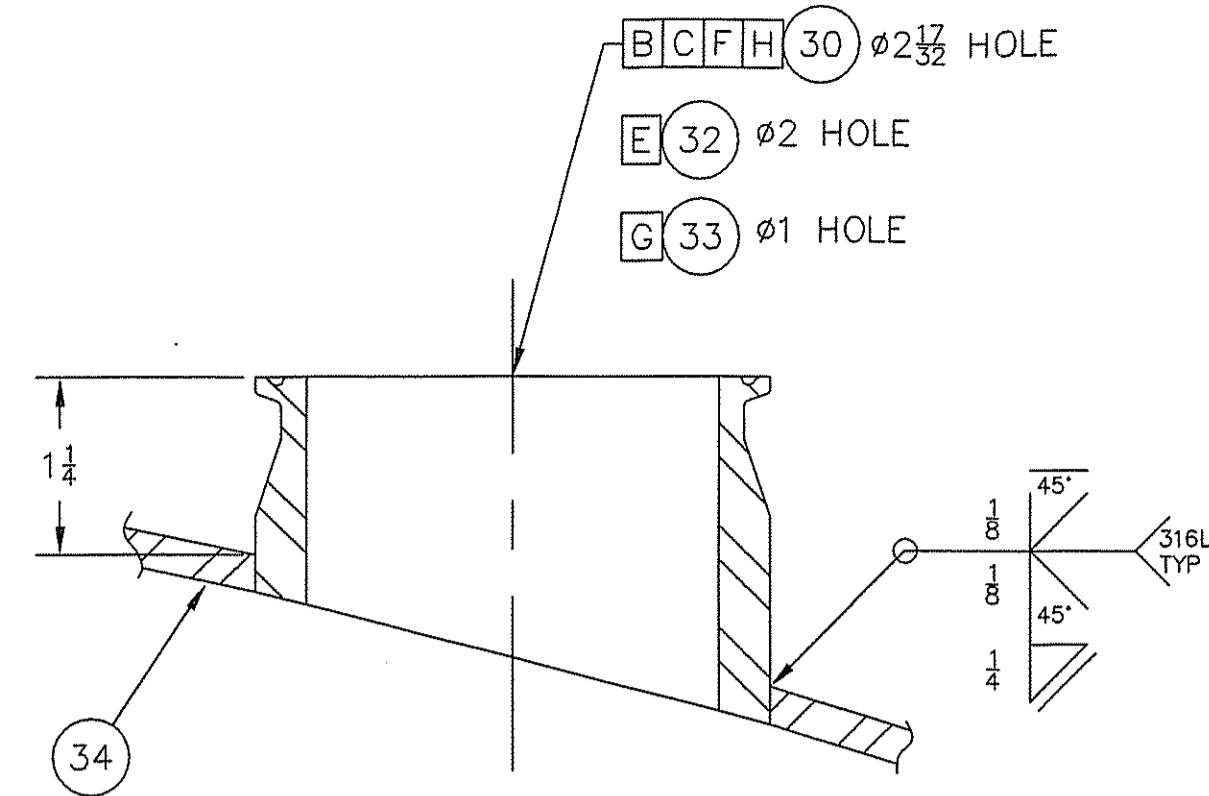
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PRODUCTION AWL	APPROVAL RDB	PROJ. ENG. MDR
DATE 12-18-02	DATE 10/10/02	SALES TDB
PREFIX 014-04	DRAWING NO. JS2161	REV C

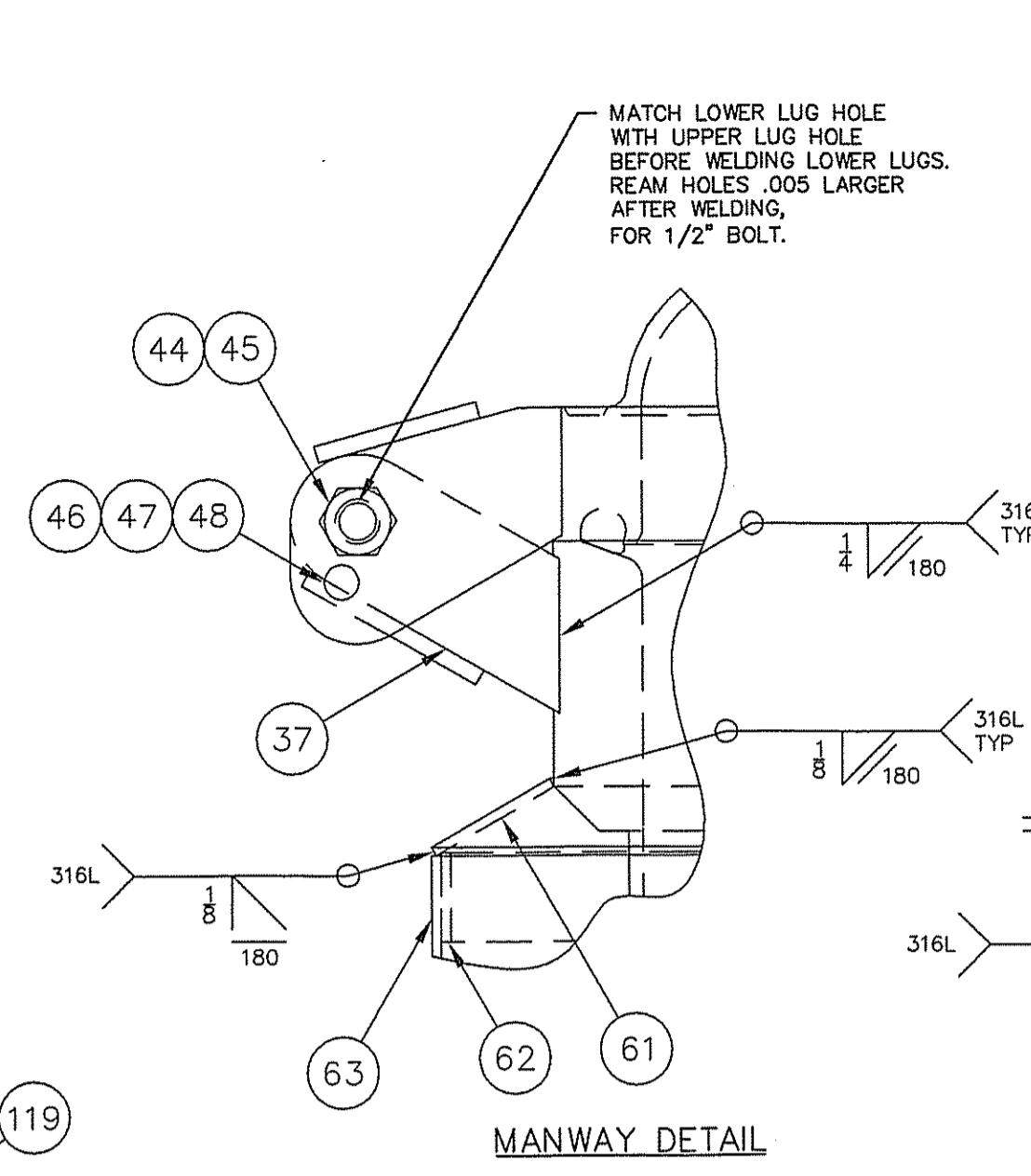
ST. CLOUD, MN SHEET 1 OF 2



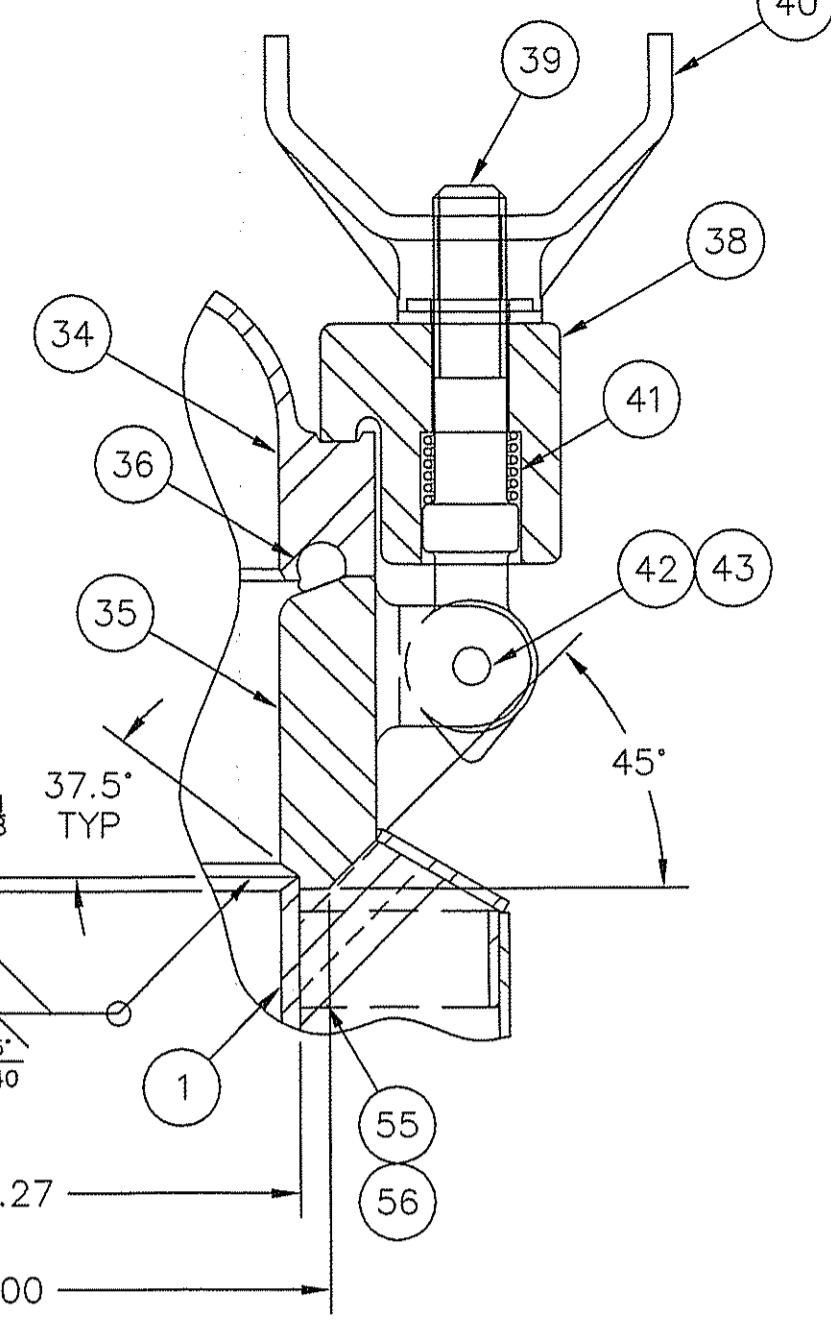
AGITATOR MOUNT DETAIL



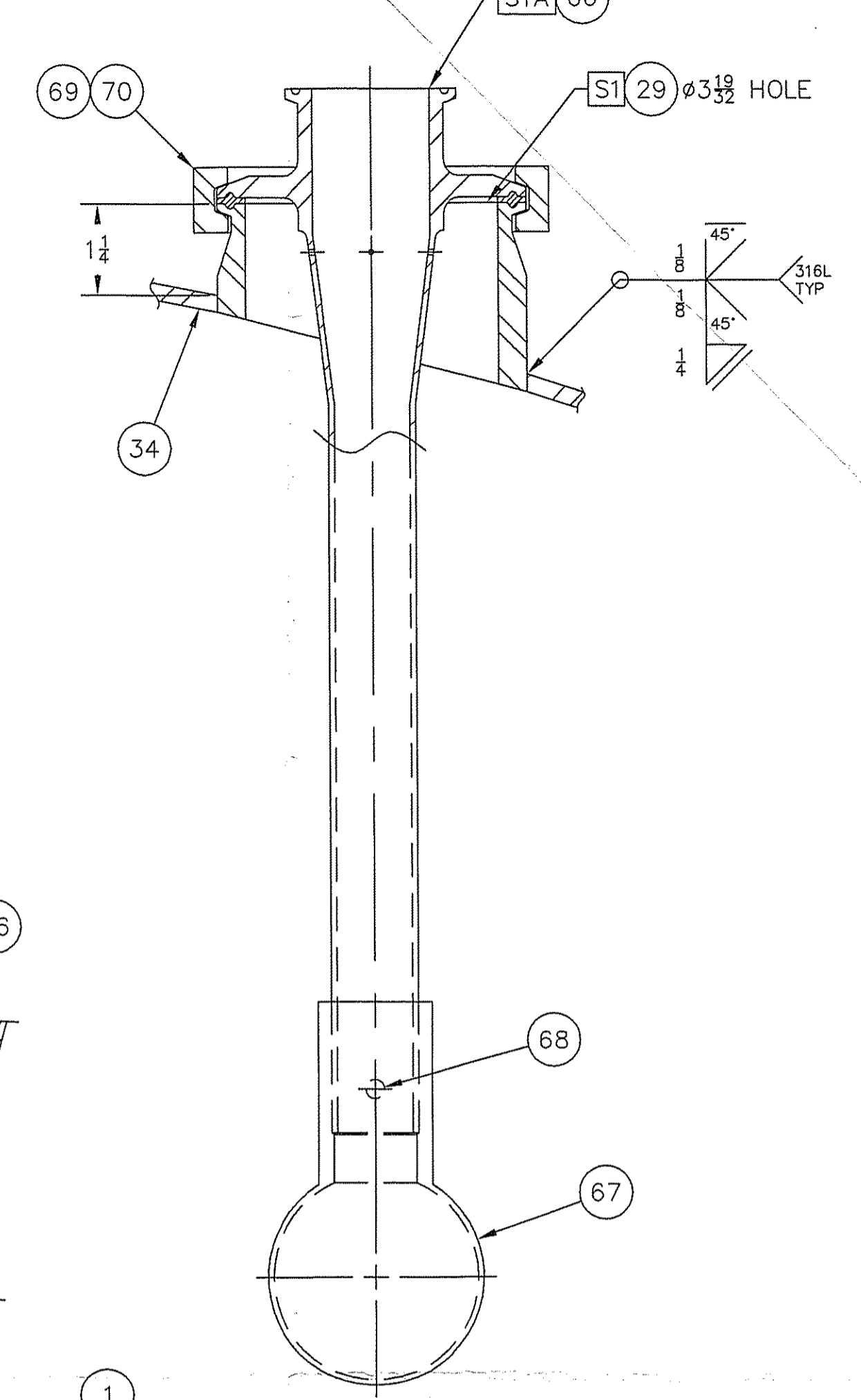
TYPICAL FERRULE INST DETAIL



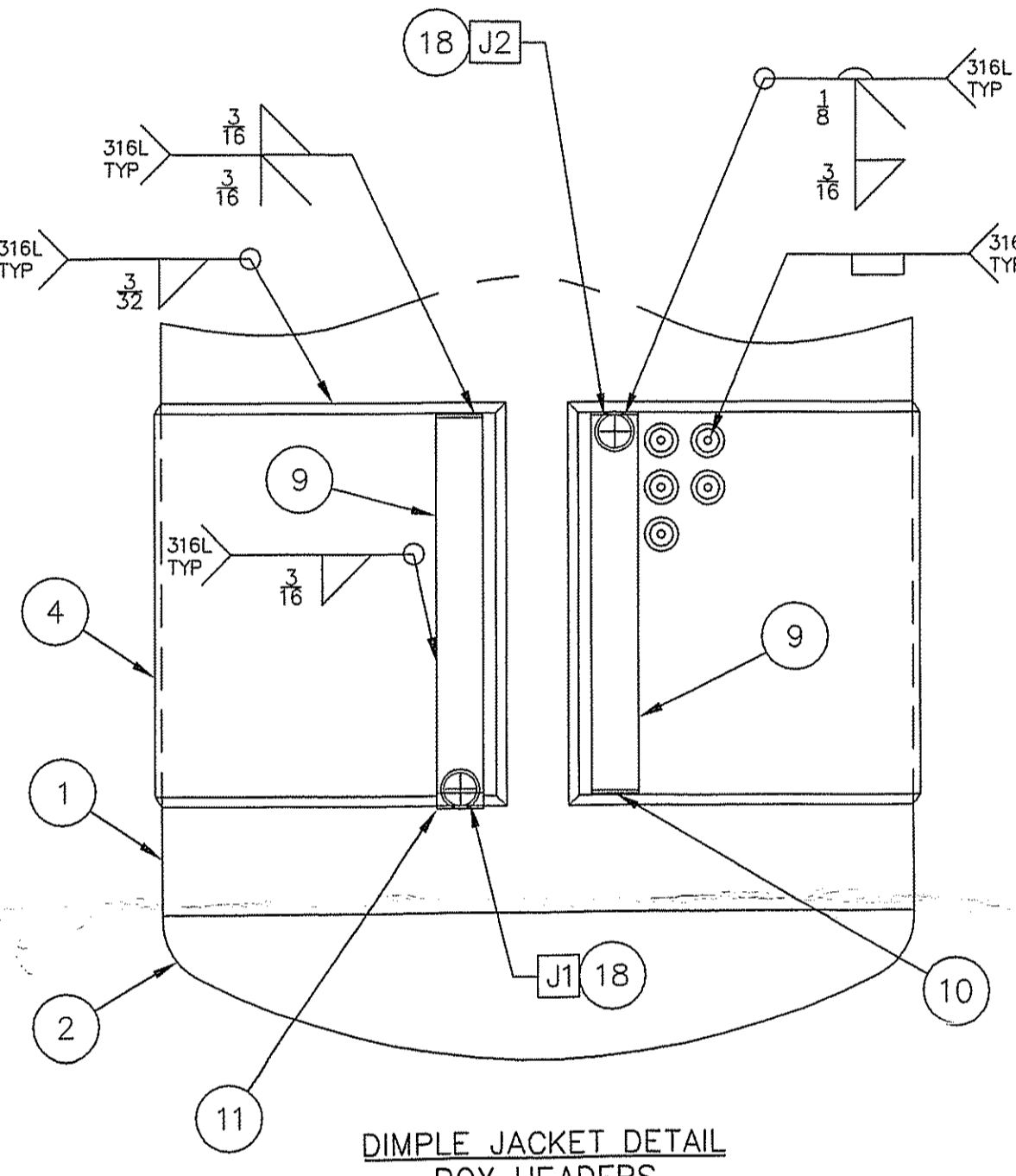
MANWAY DETAIL



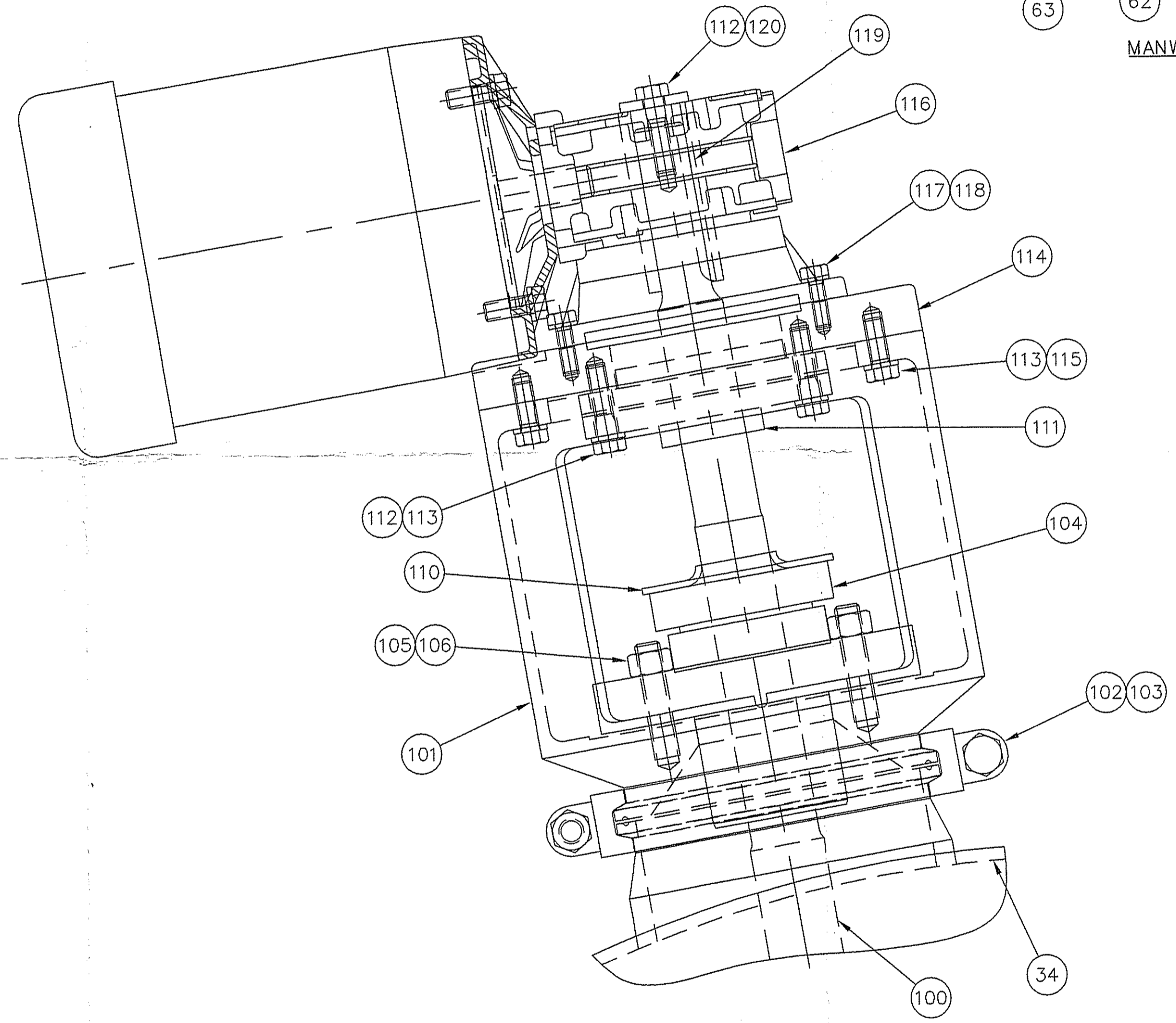
SUPPORT LUG DETAIL



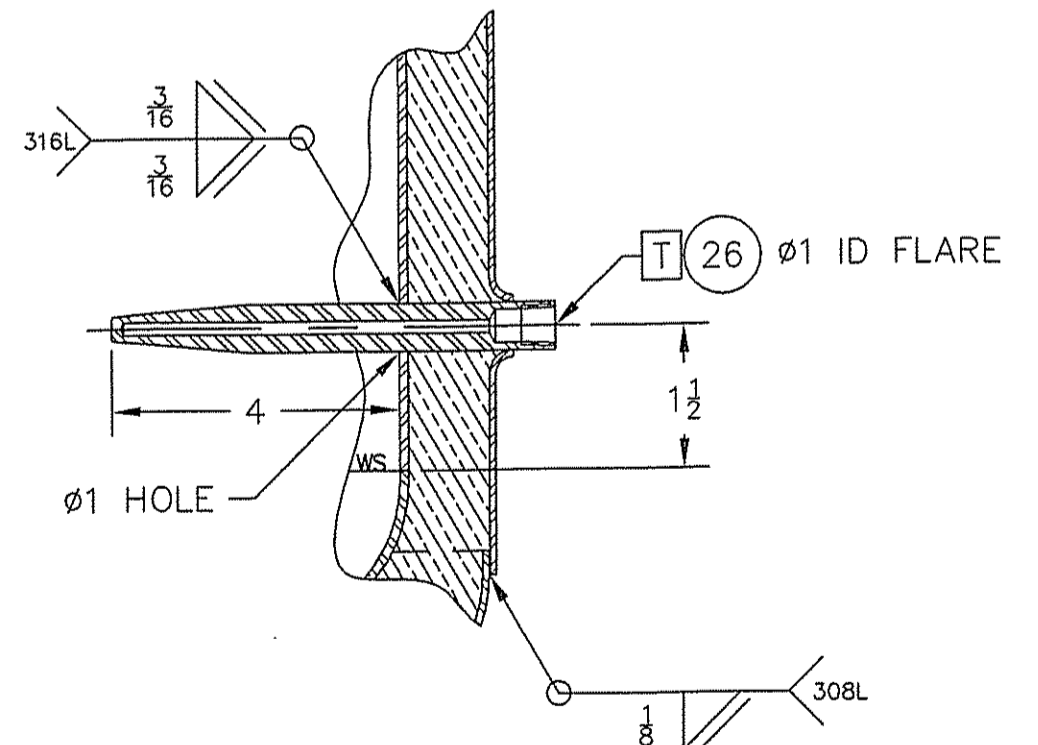
LIFT LUG DETAIL



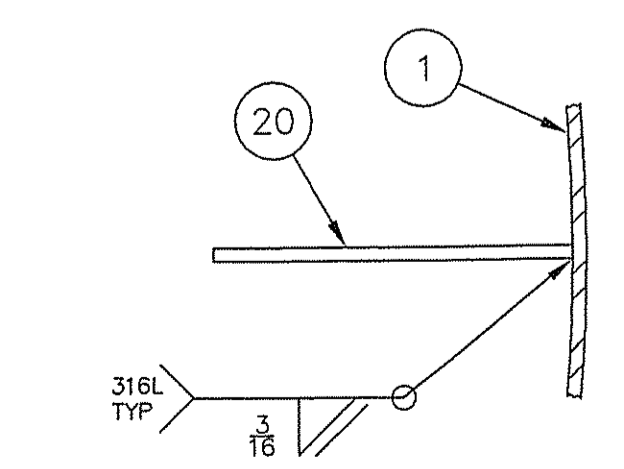
DIMPLE JACKET DETAIL BOX HEADERS



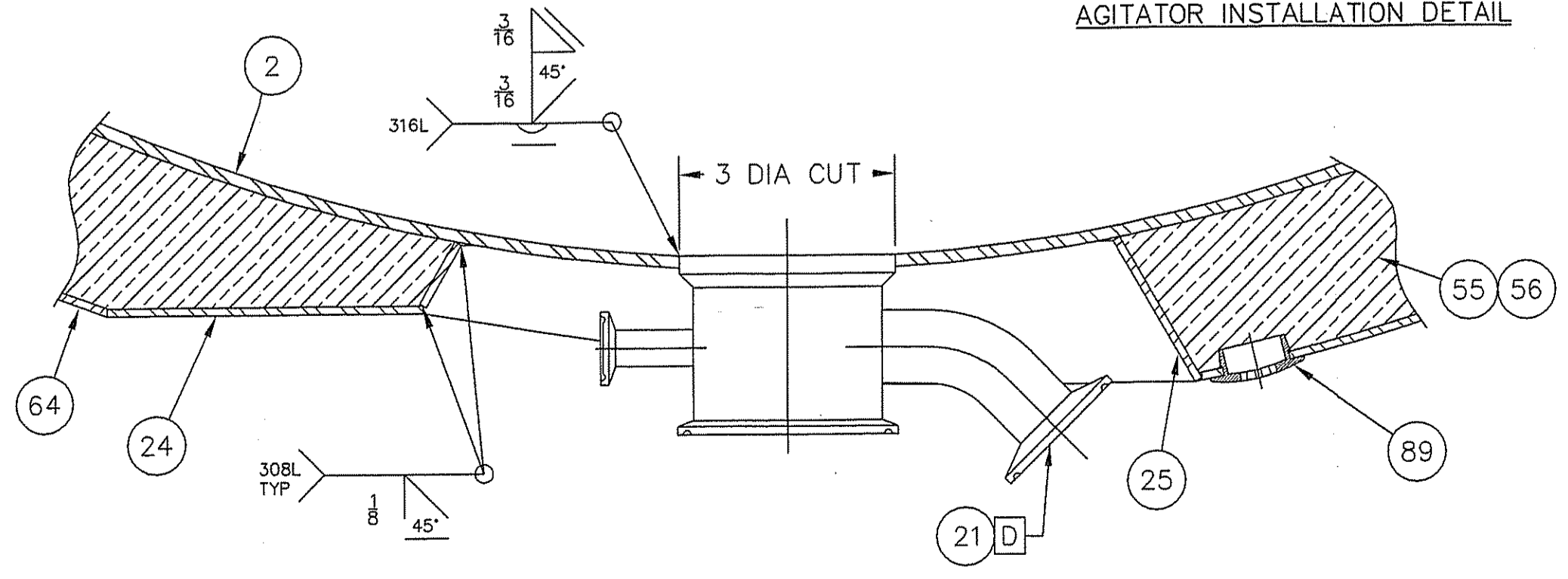
AGITATOR INSTALLATION DETAIL



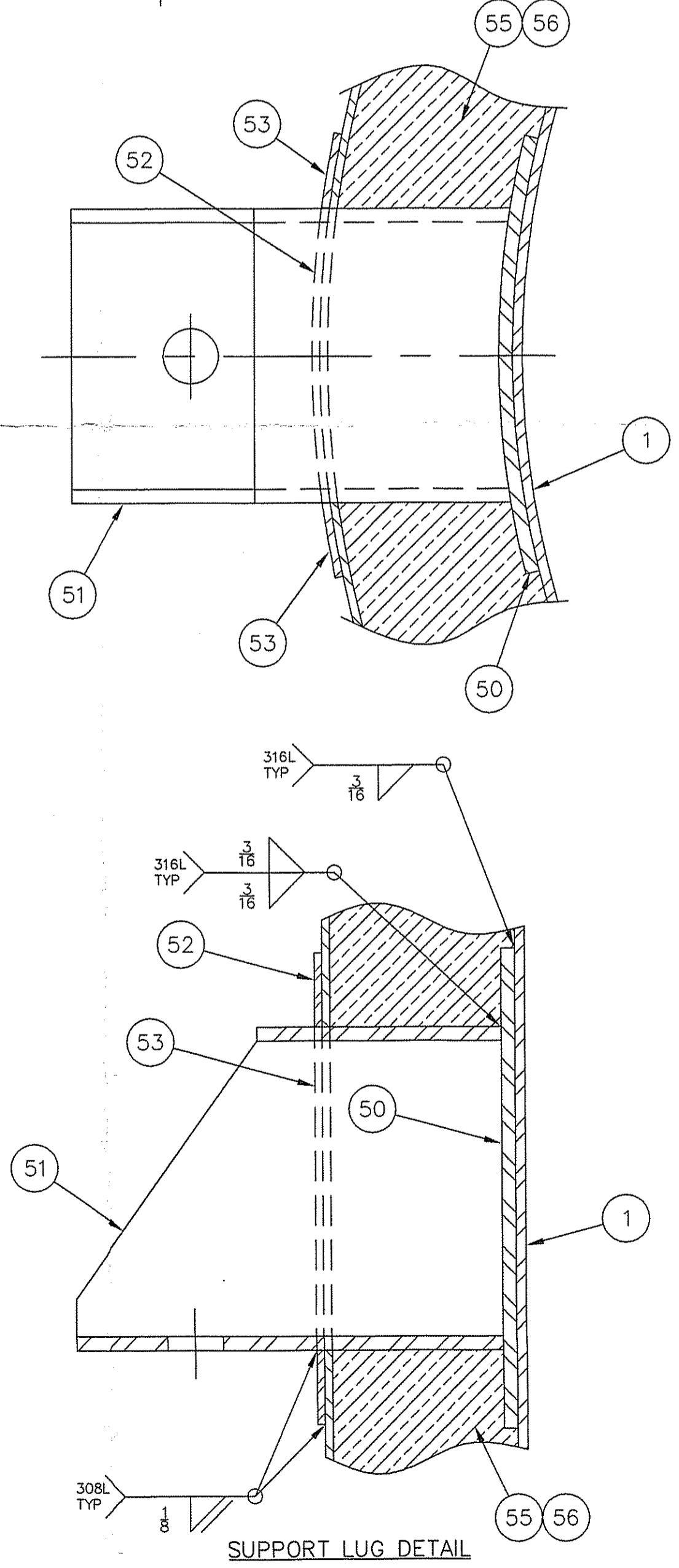
THERMOWELL INST DETAIL



BAFFLE DETAIL



OUTLET AREA INSTALLATION DETAIL



SUPPORT LUG DETAIL

TITLE			
70 GALLON ROUND VERTICAL TANK			
DCI ORDER NO.: CS8018	QTY. REQ.: 2		
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DATE 12-18-02	DATE 12/10/02	SALES TDB	
PREFIX 014-04	DRAWING NO. JS2161	REV C	
SHEET 2 OF 2			