

SECTION "A-A"

INDICATES CHANGE FROM PREVIOUS ISSUE

SHIP PC	MARK	ASSM PC	DESCRIPTION	FT	IN	SPEC	QTY
	101-2-A	9	TYPE "B" PUMP PORT HARDWARE				
			SECTION "A-A" ASSEMBLY				
			(SHOP ASSEMBLY TO 101-4-A)				
	101-2-1	9	HALF NIPPLE 2.75 DIA CF	0	2.46	SS	PA
	101-2-2	115	BOLT 1/4-28 (INCLUDES 7 SPARES)	0	1 1/2	*	PE
	101-2-3	60	PLATE NUT 1/4-28 UNF			SS	PE
			(INCLUDES 6 SPARES)				
	101-2-4	20	GSKT 2.75 DIA CF (INCLUDES 2 SPARES)			COPPER	PA
	101-2-5	115	WASHER 1/4 DIA (INCLUDES 7 SPARES)			SS	PE
	101-2-6	10**	HPS COLD CATHODE GAGE				PC
			* = SILVER PLATED SS				
			** = ONE SPARE PROVIDED. SPARE TO SHIP WITH SKIDS.				

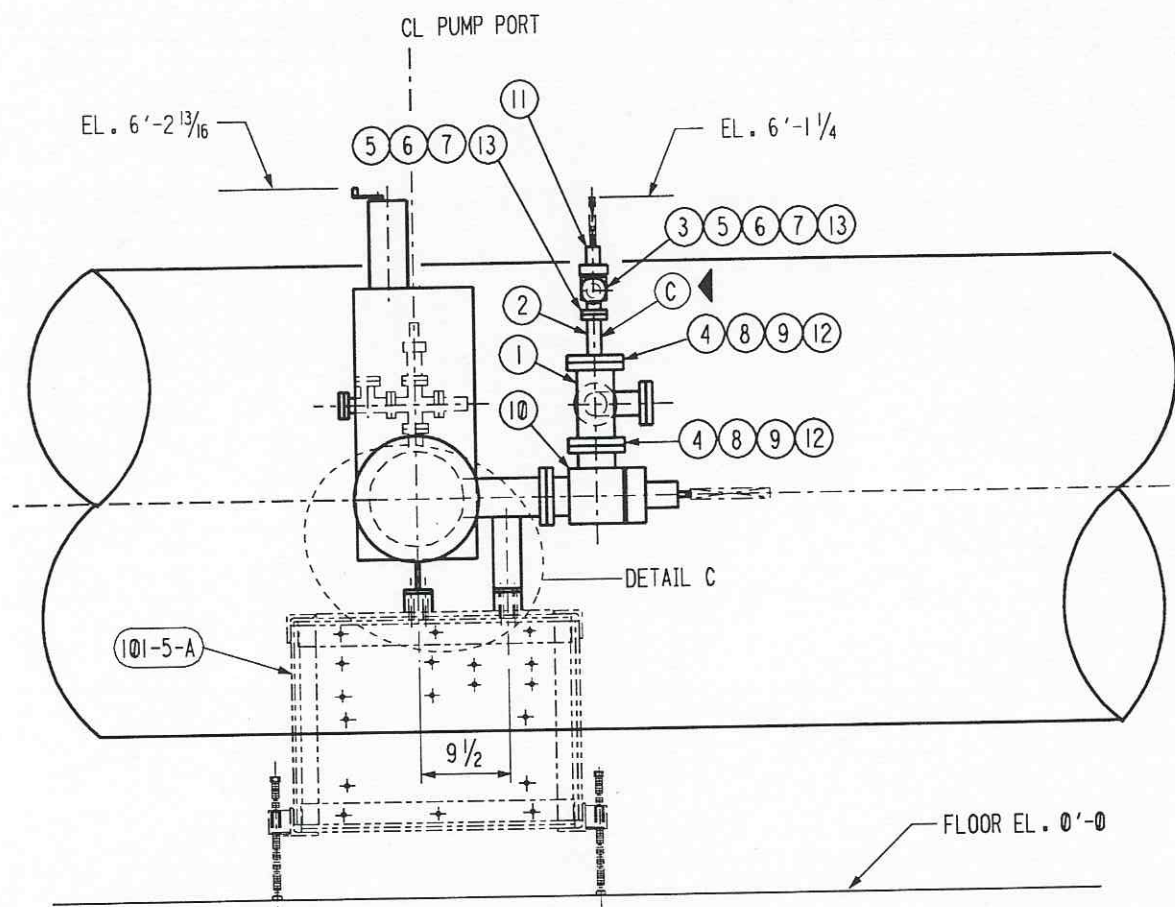
NOTES:
1. USE WITH DRAWINGS 101 SH. 1, 3 - 6

APPROVED
M. Tellalian 10-2-96
CBI DATE
CALTECH DATE

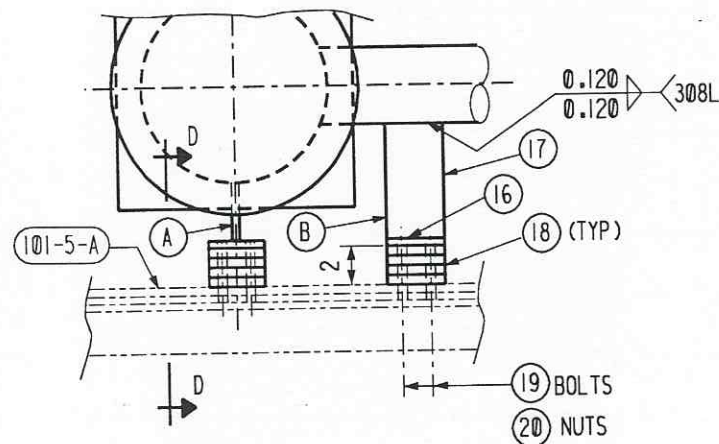
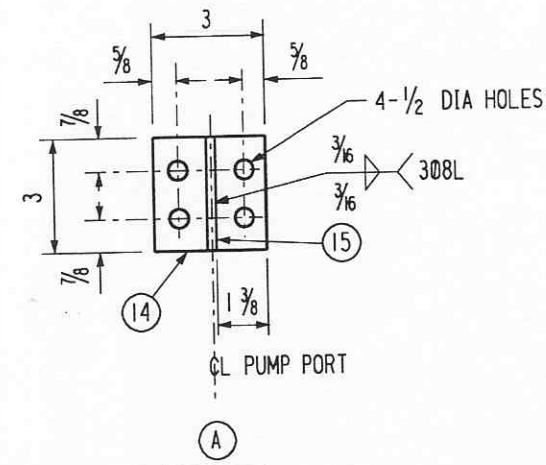
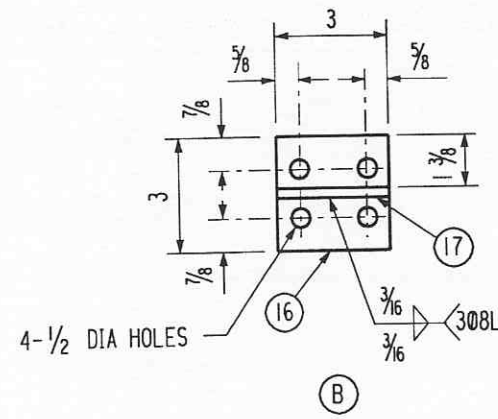
CBI		SUPPLIER'S / PURCHASER'S NO	
LIGO BEAM TUBE HANFORD, WA AND LIVINGSTON, LA			
PUMP PORT HARDWARE TYPE "B" SECTION "A-A"			
CUSTOMER'S NO		CONTRACT NO	
BY RKZ_CHKD WAC DATE 3/11/96		953571	
M. L. TELLALIAN		DWG 101	REV 2D
ENGINEERING ASSIGNED		SHT 2	

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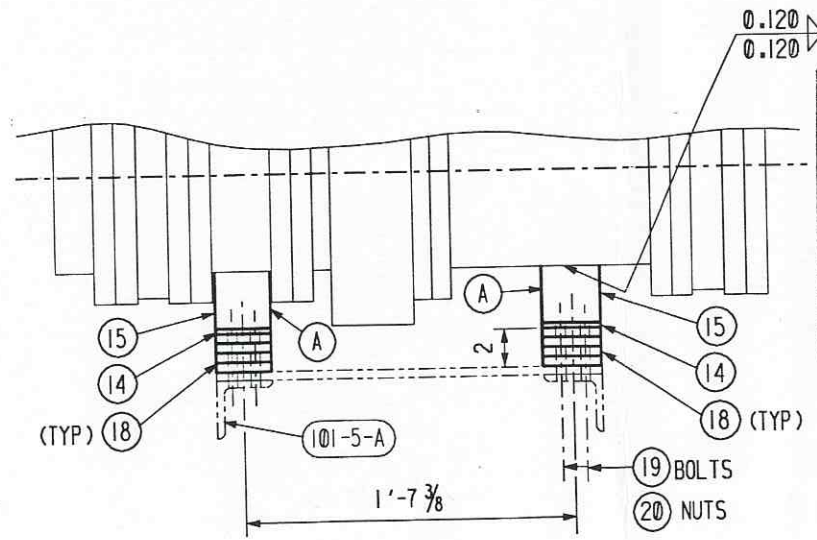
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SECTION "B-B"

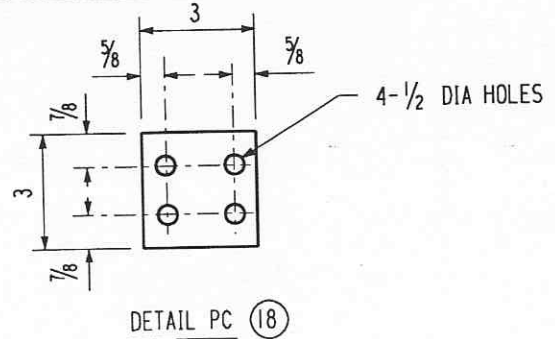


DETAIL "C"



VIEW "D-D"

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M. Tellalian 10-2-96
 CBI DATE
 CALTECH DATE



DETAIL PC (B)

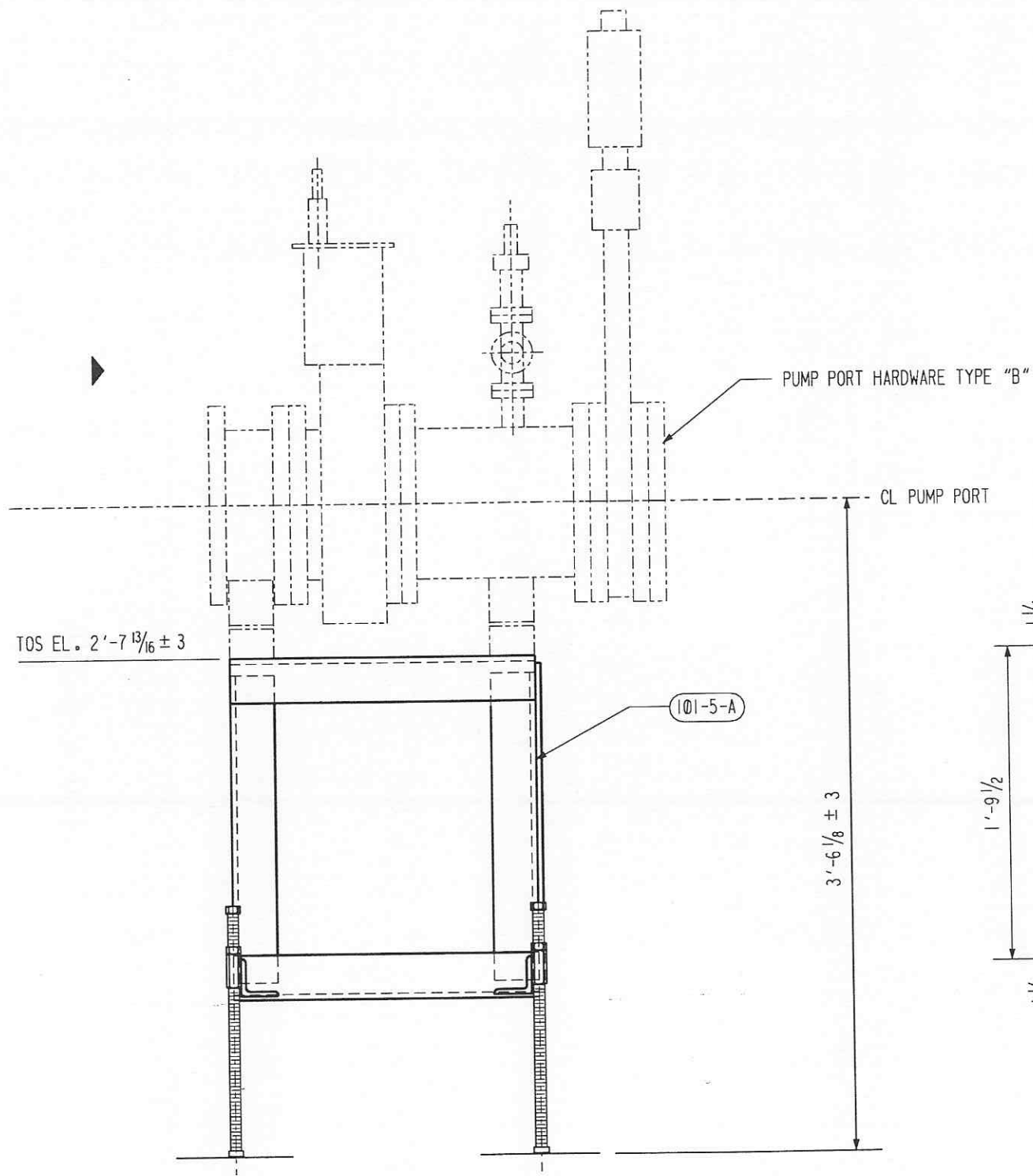
SHIP PC	MARK	ASSM PC	DESCRIPTION	LENGTH		SPEC	ID
				FT	IN		
101-3-A	18		ASSEMBLY A (SHOP ATTACH TO 101-4-A)				
101-3-14	18		PL 3 X 1/4 X SK	0	3	SS	PE
101-3-15	18		PL 3 X 1/4	0	3	SS	PE
101-3-B	9		ASSEMBLY B (SHOP ATTACH TO 101-4-A)				
101-3-16	9		PL 3 X 1/4 X SK	0	3	SS	PE
101-3-17	9		PL 3 X 1/4	0	5	SS	PE
101-3-C	9		TYPE "B" PUMP PORT HARDWARE SECTION "B-B" ASSEMBLY (SHOP ATTACH TO 101-4-A)				
101-3-1	9		6 X 4 1/2 CF REDUCING TEE	0	8.64	SS	PA
101-3-2	9		6 X 2.75 CF REDUCING NIPPLE	0	5	SS	PA
101-3-3	9		BLD FLG 2.75 DIA CF			SS	PA
101-3-4	300		BOLT 5/16-24 (INCLUDES 12 SPARES)	0	2 1/4	*	PE
101-3-5	115		BOLT 1/4-28 (INCLUDES 7 SPARES)	0	1 1/2	*	PE
101-3-6	60		PLATE NUT 1/4-28 UNF (INCLUDES 6 SPARES)			SS	PE
101-3-7	20		GSKT 2.75 DIA CF (INCLUDES 2 SPARES)			COPPER	PA
101-3-8	149		PLATE NUT 5/16-24 UNF (INCLUDES 5 SPARES)			SS	PE
101-3-9	20		GSKT 6 DIA CF (INCLUDES 2 SPARES)			COPPER	PA
101-3-10	10**		100 MM VAT ANGLE VALVE WITH 6 DIA CF FLG			SS	PC
101-3-11	10**		40 MM NOR-CAL ANGLE VALVE OR EQUAL WITH 2.75 DIA CF FLG			SS	PC
101-3-12	303		WASHER 5/16 DIA (INCLUDES 15 SPARES)			SS	PE
101-3-13	115		WASHER 1/4 DIA (INCLUDES 7 SPARES)			SS	PE
101-3-18	108		SILICONE BLOCKS 3 X 1/2 X SK MCMASTER-CARR CATALOGUE NO. 8632K48, 40 DUROMETER	0	3		PE
101-3-19	110		BOLT 3/8-16 HEX (INCLUDES 2 SPARES)	0	3 1/2	A307B GALV	PE
101-3-20	110		NUT 3/8-16 HEX (INCLUDES 2 SPARES)			A307B GALV	PE

NOTES :
 1. USE WITH DRAWINGS 101 SH. 1, 2, 4, 5 AND 6

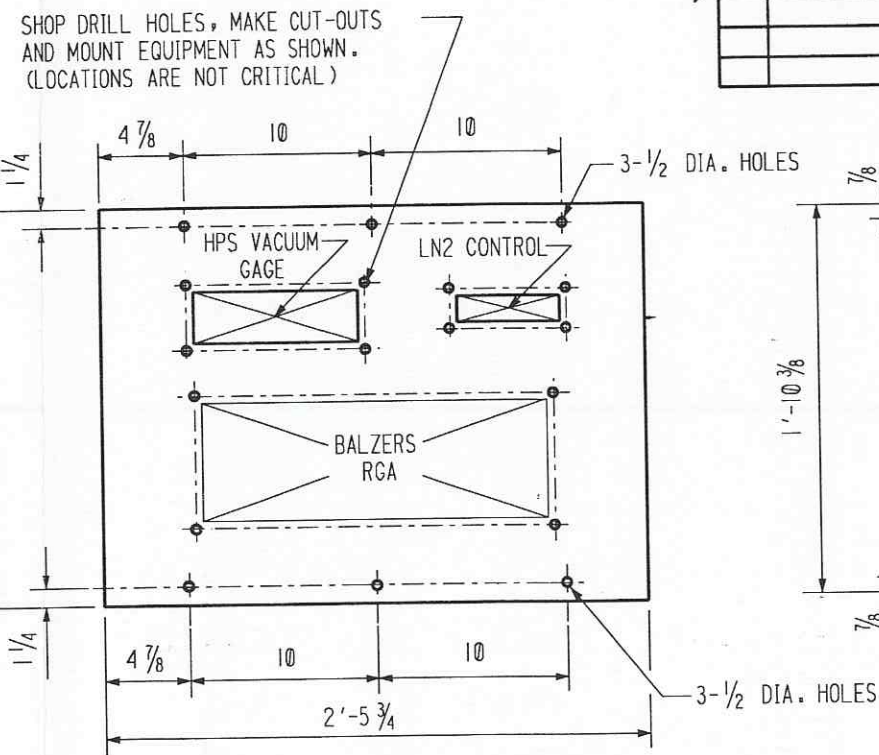
REV. BILLING, ADDED ASSY. C.		REMARKS	
BY	DATE	BY	DATE
DIR	9/20/96	FLG	7/22/96
CHKD	9/20/96	DIR	7/22/96
DATE	9/20/96	DATE	7/22/96
CBI		LIGO BEAM TUBE HANFORD, WA AND LIVINGSTON, LA PUMP PORT HARDWARE TYPE "B" SECTION "B-B"	
CUSTOMER'S NO		CONTRACT NO	
BY RKZ CHKD WAC DATE 3/11/96		953571	
M. L. TELLALIAN		DWG	REV
ENGINEERING ASSIGNED		101	2D
		SHT	3

INDICATES CHANGE FROM PREVIOUS ISSUE

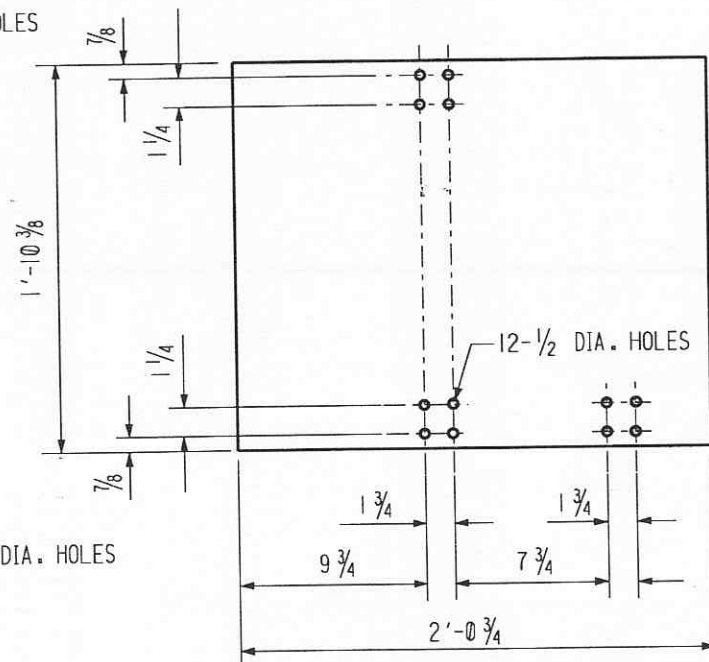
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ELEVATION



DETAIL PC 101-5-7



DETAIL PC 101-5-8

SHOP DRILL HOLES, MAKE CUT-OUTS AND MOUNT EQUIPMENT AS SHOWN. (LOCATIONS ARE NOT CRITICAL)

SHP PC	MARK	ASSM PC	DESCRIPTION	LENGTH		SPEC	ID
				FT	IN		
	101-5-A	9	PUMP PORT HARDWARE FRAME (SHOP ATTACH TO 101-4-A)				
	101-5-1	9	L 3 X 3 X 3/16 W/HOLES	2	6	A36 GALV	PE
	101-5-2	9	L 3 X 3 X 3/16 W/HOLES	2	6	A36 GALV	PE
	101-5-3	36	L 3 X 3 X 3/16	1	8 1/2	A36 GALV	PE
	101-5-4	9	L 3 X 3 X 3/16	2	6	A36 GALV	PE
	101-5-5	9	L 3 X 3 X 3/16 W/HOLES	2	6	A36 GALV	PE
	101-5-6	36	L 2 1/2 X 2 1/2 X 3/16	0	2 1/4	A36 GALV	PE
	101-5-7	9	PL 1'-9 1/2 X 1/4 X SK	2	5 3/4	ALUMINUM	PE
	101-5-8	9	PL 1'-10 3/8 X 1/4 X SK	2	0 3/4	ALUMINUM	PE
	101-5-9	36	COUPLING NUT 3/4-5 ACME THREAD			CS GALV	PE
			MCMaster-CARR CATALOGUE NO. 93023A664 OR EQUAL				
	101-5-10	36	ACME THREADED ROD 3/4-5 X SK	1	6	CS GALV	PE
			MCMaster-CARR CATALOGUE NO. 98935A218 OR EQUAL				
	101-5-11	72	NUT 3/4-5 ACME THREAD			CS GALV	PE
	101-5-12	36	BUMPER MCMaster-CARR CATALOGUE NO. 9310K14 OR EQUAL			RUBBER	PE
	101-5-13	54	BOLT 3/8-16 HEX	0	1	A307 GALV	PE
	101-5-14	54	NUT 3/8-16 HEX			A307 GALV	PE
	101-5-15	36	L 3 X 3 X 3/16	1	10 3/8	A36 GALV	PE

NOTES:

- 1. WORK THIS DWG. WITH DRAWING 101, SHT. 1-5

APPROVED	
<i>M. Tellalian</i>	10-2-96
CBI	DATE
CALTECH	DATE

CBI		SUPPLIER'S / PURCHASER'S NO	
LIGO BEAM TUBE HANFORD, WA AND LIVINGSTON, LA			
PUMP PORT HARDWARE TYPE "B" SUPPORT - ELEVATION			
CUSTOMER'S NO		CONTRACT NO	
BY RKZ CHKD WAC DATE 3/11/96		953571	
M. L. TELLALIAN		DWG 101	REV
ENGINEERING ASSIGNED		SHT 6	2D

INDICATES CHANGE FROM PREVIOUS ISSUE