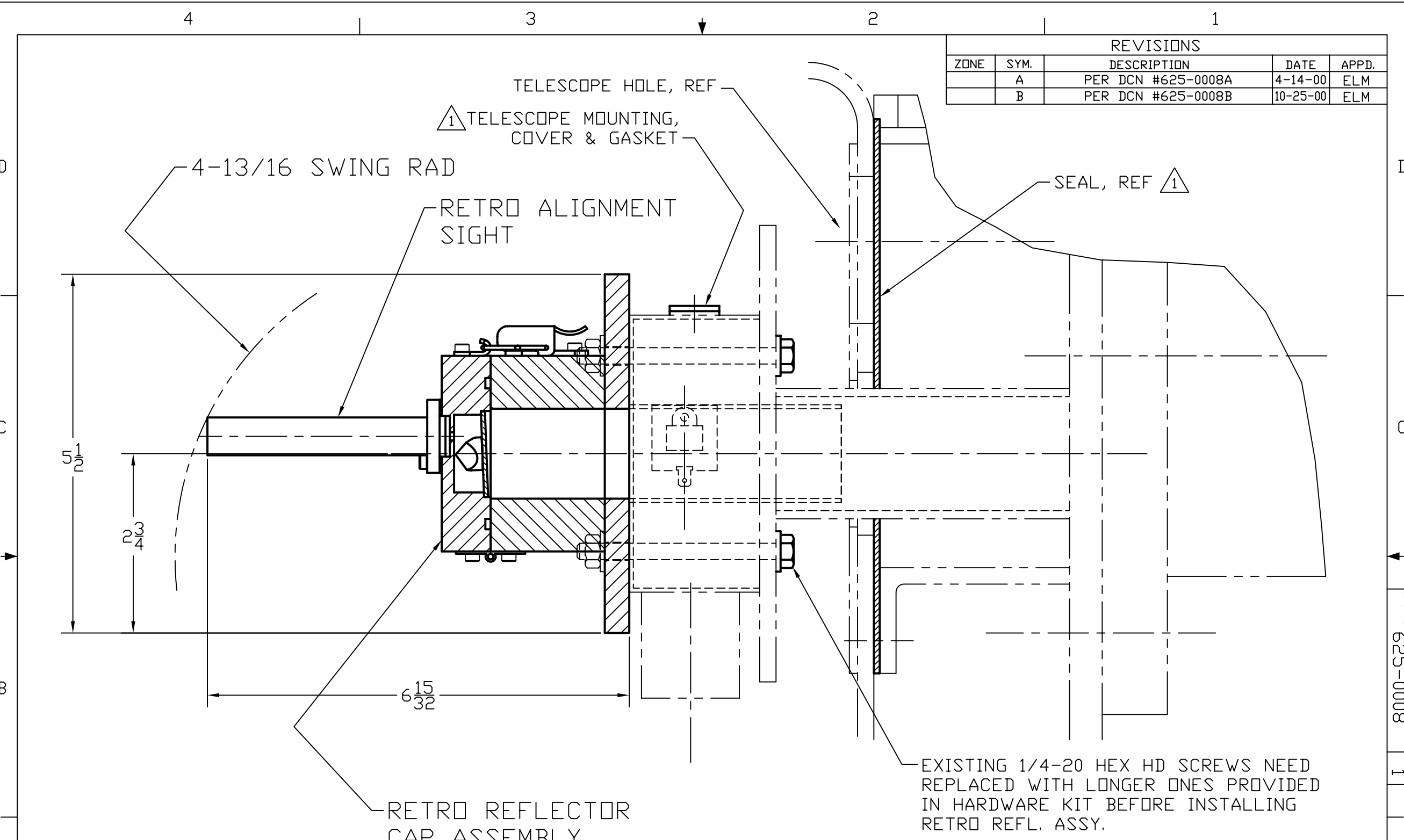


REVISIONS				
ZONE	SYM.	DESCRIPTION	DATE	APPD.
	A	PER DCN #625-0008A	4-14-00	ELM
	B	PER DCN #625-0008B	10-25-00	ELM



EXISTING 1/4-20 HEX HD SCREWS NEED REPLACED WITH LONGER ONES PROVIDED IN HARDWARE KIT BEFORE INSTALLING RETRO REFL. ASSY.

NOTE: 1. REPLACE SEAL IF WORN OR IF TELESCOPE EXISTS. IF TELESCOPE EXISTS USE COVER & GASKET TO COVER TELESCOPE MOUNTING HOLES. SEAL, COVER & GASKET ARE IN HARDWARE KIT.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		
FRACTIONS	DECIMALS	ANGLES
0 TO 4 ±1/32	.XX ±.01	±0°30'
4 TO 8 ±1/16	.XXX ±.005	RMS FINISH
8 AND UP ±1/8		

USED ON	
DASH NO	NEXT ASSEMBLY
-01	560UPGRD

**TELEDYNE INSTRUMENTS**  
Monitor Labs  
THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY AND CONFIDENTIAL TO TELEDYNE INSTRUMENTS LABS AND IS FURNISHED UPON THE EXPRESS CONDITION THAT THE INFORMATION CONTAINED HEREIN WILL NOT BE DUPLICATED, REPRODUCED, DISCLOSED OR DISSEMINATED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN IN CONJUNCTION WITH THE EVALUATION THEREOF WITHOUT THE PRIOR WRITTEN CONSENT OF TELEDYNE INSTRUMENTS LABS.

TITLE DYNATRON UPGRADE  
RETRO REFL. ASSY,  
560 INSTALLATION

AUTHORIZATION		
	BY	DATE
DRAWN	EAS	2-8-00
CHECKED	EAS	5-00
DESIGNED	EAS	JAN-00
ENGINEERED	ELM	5-16-00
PRODUCTION	MAR	5/16/00
Q.A.	AS	5-16-00

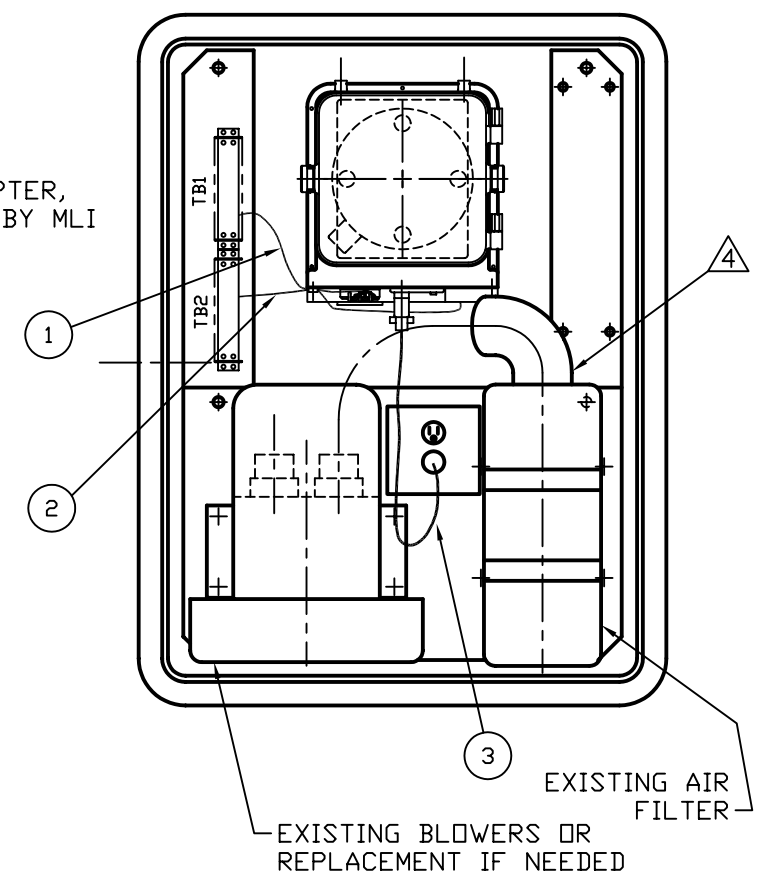
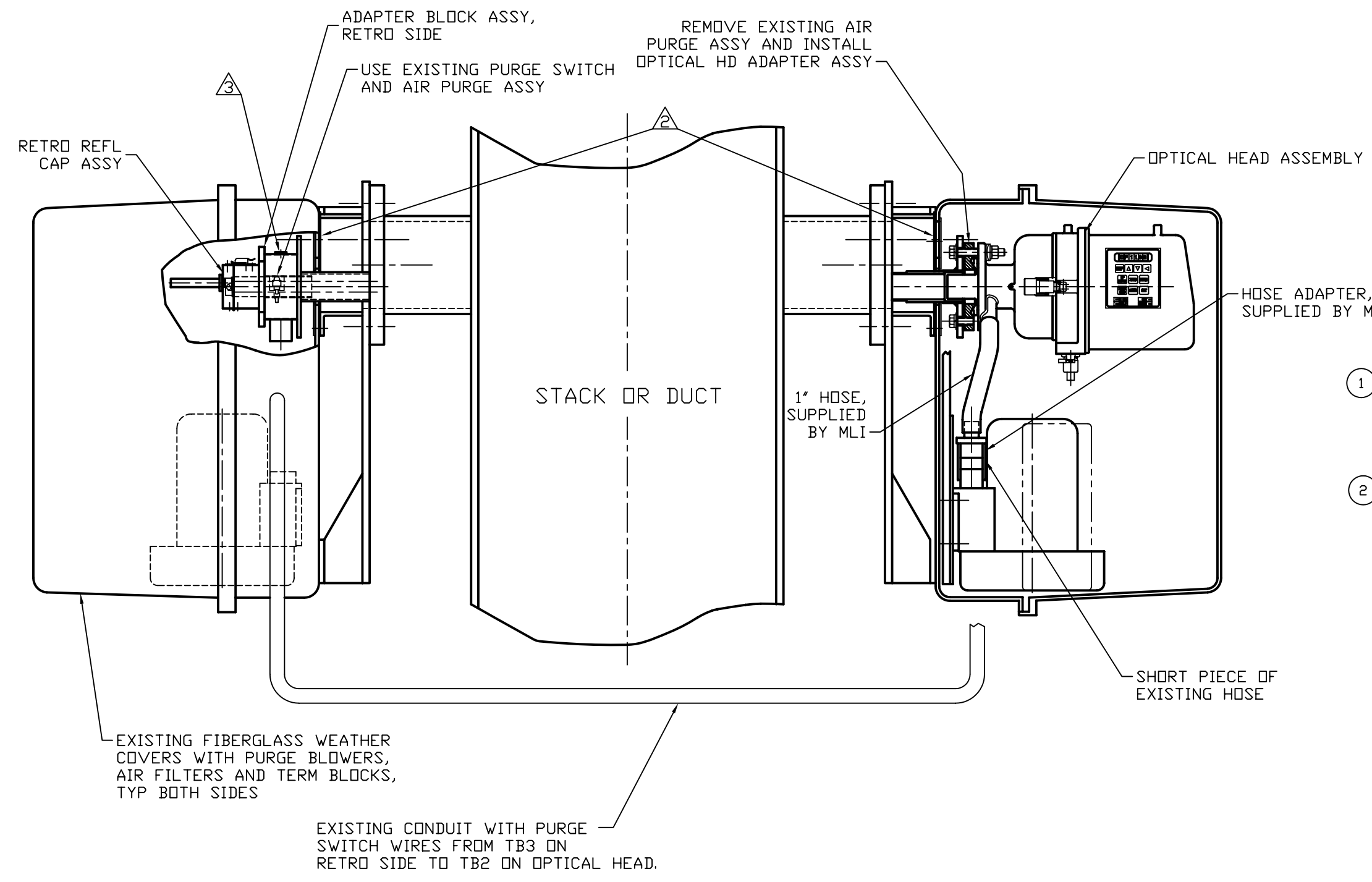
MATERIAL	
JIG NO.	SCALE
	1:1
	SHEET 1 OF 1

DRAWING NO.	LATEST REVISION
C 625-0008	B



DWG. NO. 625-0008  
 SH. 1  
 ACAD2002 FILE 6250008

REVISIONS				
ZONE	SYM.	DESCRIPTION	DATE	APPD.
	A	PER DCN #625-0006A	4-14-00	ELM
	B	PER DCN #625-0006B	10-24-00	ELM
	C	PER DCN #625-0006C	2-6-01	ELM
	D	NO CHANGE THIS SHEET	1-10-05	DMB



- △4 TO MINIMIZE INTERFERENCE WITH OPT. HEAD SWING CLEARANCE TRIM 1" OFF RUBBER ELBOW ON AIR CLEANER END AND REINSTALL.
- △3 IF HOLES EXIST FROM ALIGNMENT TELESCOPE MOUNTING, INSTALL SEAL & PLATE PROVIDED IN HARDWARE KIT
- △2 IF HOLES EXIST FROM ALIGNMENT TELESCOPE, INSTALL NEW SEALS IN HARDWARE KIT

1 FOR WIRING SEE DRAWING 0625-0002 SHT-3

NOTES:

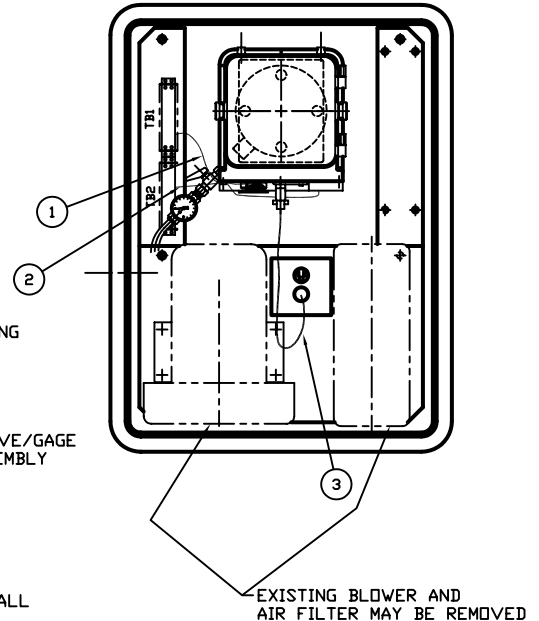
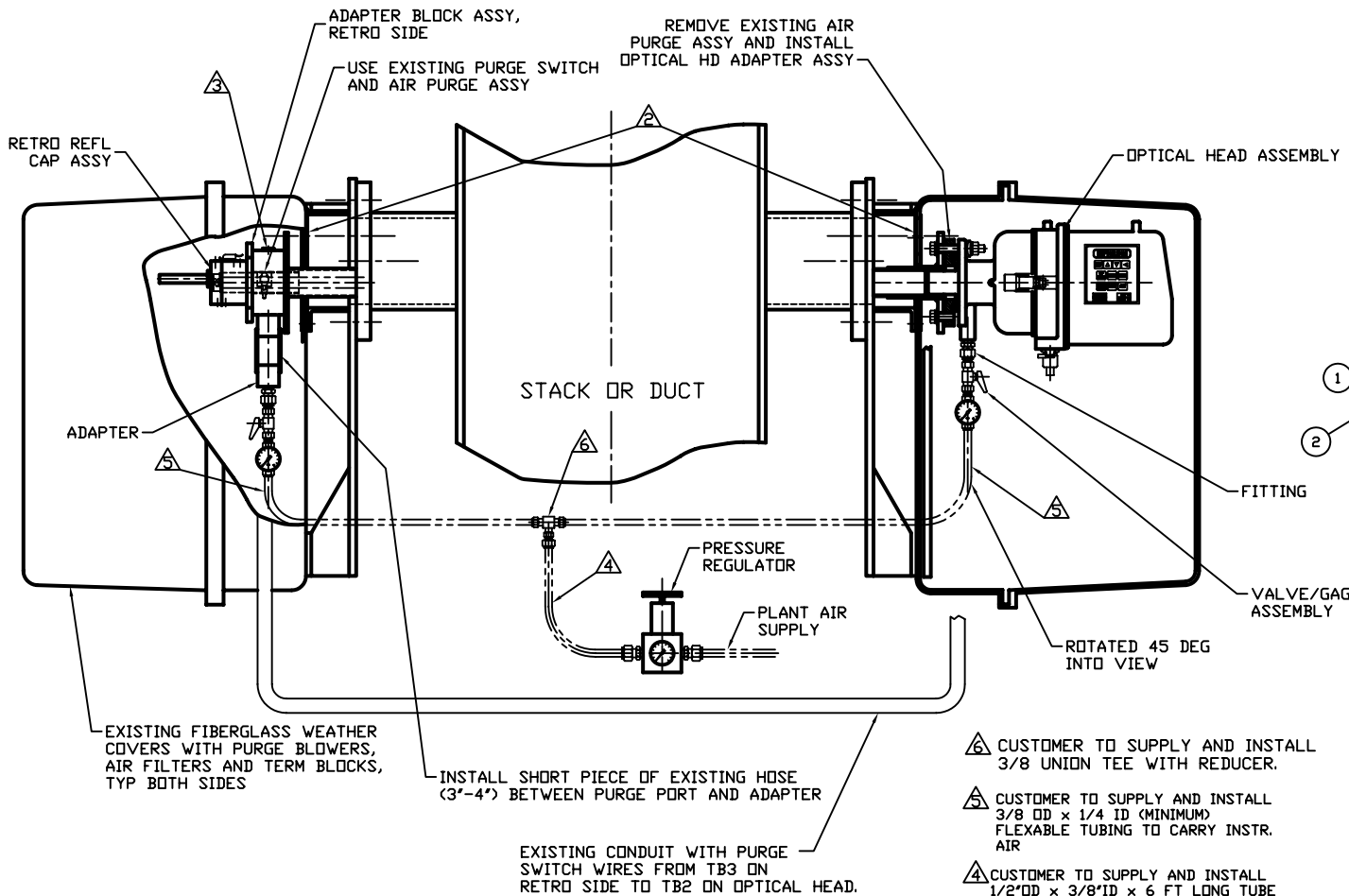
CABLE DESIGNATIONS:

- ① DATA CABLE FROM OPTICAL HEAD ASSY TO TB1
- ② PURGE FAIL CABLE FROM OPTICAL HEAD TO TB2. (RETRO PURGE FAIL).
- ③ POWER CORD FROM POWER SOURCE TO OPTICAL HEAD.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONS DECIMALS ANGLES 0 TO 4 41/32 XXX X.X1 40°30' 4 TO 8 41/16 .XXX X.XX5 RMS FINISH 8 AND UP 41/8 ✓		USED ON DASH NO NEXT ASSEMBLY -01	TELEDYNE INSTRUMENTS Monitor Labs THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY AND CONFIDENTIAL TO TELETYPE MONITOR LABS AND IS FURNISHED UPON THE EXPRESS CONDITION THAT THE INFORMATION CONTAINED HEREIN WILL NOT BE REPRODUCED, REWARDED, DISCLOSED OR ASSOCIATED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH THE EVALUATION THEREOF WITHOUT THE PRIOR WRITTEN CONSENT OF TELETYPE MONITOR LABS. <b>TITLE LightHawk 560 DYNATRON UPGRADE SYSTEM INSTALL.</b>
AUTHORIZATION BY DATE DRAWN EAS 1-10-00 CHECKED EAS 5-00 DESIGNED EAS JAN-00 ENGINEERED ELM 5-16-00 PRODUCTION MAR 5/16/00 Q.A. AS 5-16-00		MAT'L. FINISH	
ALL DIMENSIONS ARE IN INCHES DO NOT SCALE THIS DRAWING		SCALE SHEET 1/4 1 OF 2	1-10-05



DRAWING NO. 625-0009		REV 1	
REVISIONS			
ZONE	SYM.	DESCRIPTION	DATE APPD.
	A	PER DCN #625-0009A	3-18-03



- △ CUSTOMER TO SUPPLY AND INSTALL 3/8 UNION TEE WITH REDUCER.
- △ CUSTOMER TO SUPPLY AND INSTALL 3/8 OD x 1/4 ID (MINIMUM) FLEXABLE TUBING TO CARRY INSTR. AIR
- △ CUSTOMER TO SUPPLY AND INSTALL 1/2"OD x 3/8"ID x 6 FT LONG TUBE TO CARRY INSTRUMENT AIR FROM THE REGULATOR TO THE TEE. PLANT AIR SYSTEM TO SUPPLY A TOTAL FLOW OF 25 CFM MINIMUM AT A DYNAMIC PRESSURE OF 30PSI OR HIGHER @ THE REGULATOR. PRESSURE AT THE ON/OFF VALVES SHOULD BE THE SAME AS THE REGULATOR PRESSURE WITH THE VALVES CLOSED. PLANT PRESSURE MAY NEED TO BE HIGHER IF THERE ARE RESTRICTIONS UPSTREAM IN THE PLANT AIR SYSTEM. THE REGULATOR SHOULD BE RATED FOR HIGH FLOW.

- △ IF HOLES EXIST FROM ALIGNMENT TELESCOPE MOUNTING, INSTALL SEAL & PLATE PROVIDED IN HARDWARE KIT
  - △ IF HOLES EXIST FROM ALIGNMENT TELESCOPE, INSTALL NEW SEALS IN HARDWARE KIT
- 1 FOR WIRING SEE DRAWING 0625-0002 SHT-3

**CABLE DESIGNATIONS:**

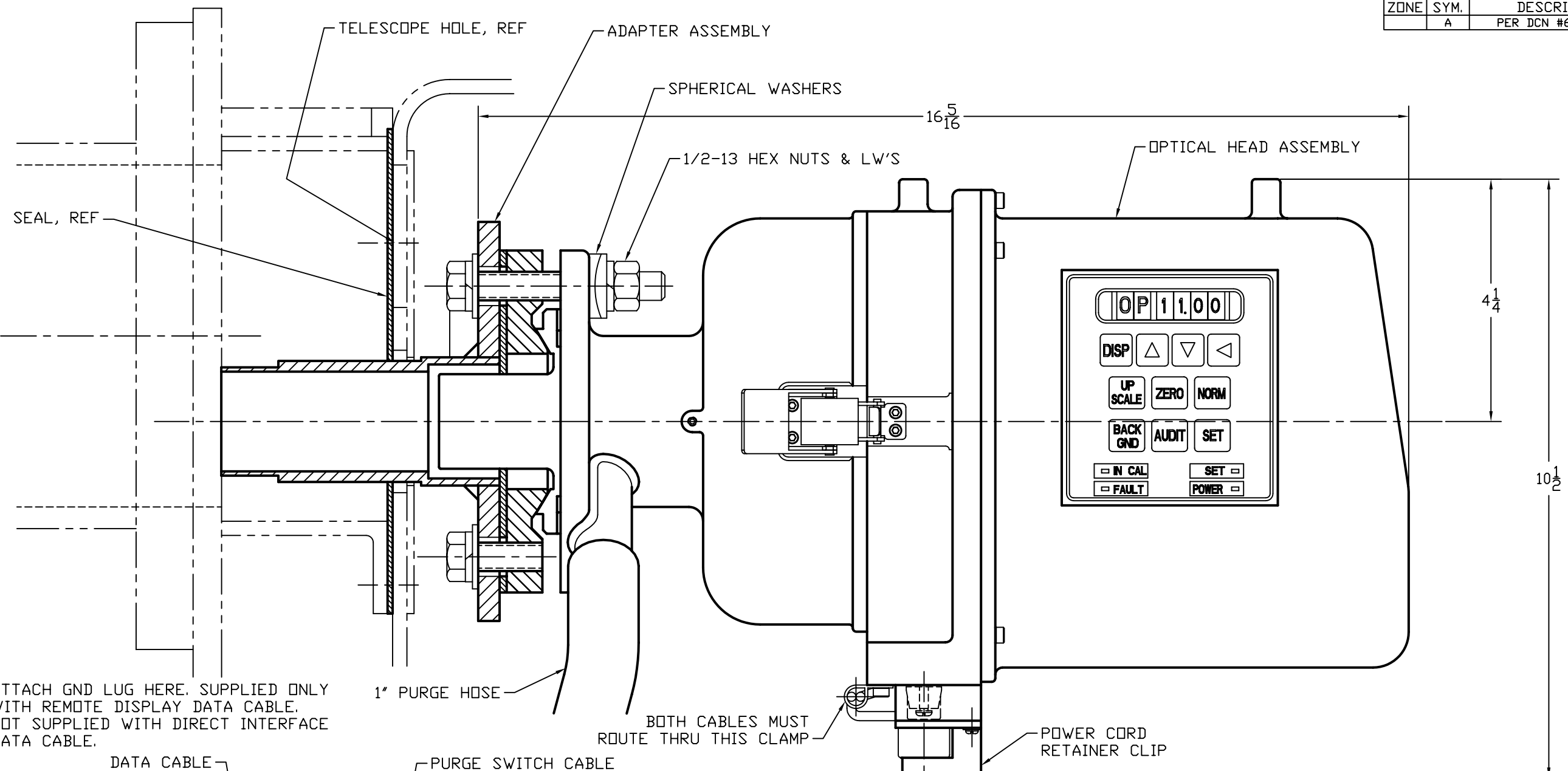
- ① DATA CABLE FROM OPTICAL HEAD ASSY TO TB1
- ② PURGE FAIL CABLE FROM OPTICAL HEAD TO TB2. (RETRO PURGE FAIL).
- ③ POWER CORD FROM POWER SOURCE TO OPTICAL HEAD.

**NOTES:**

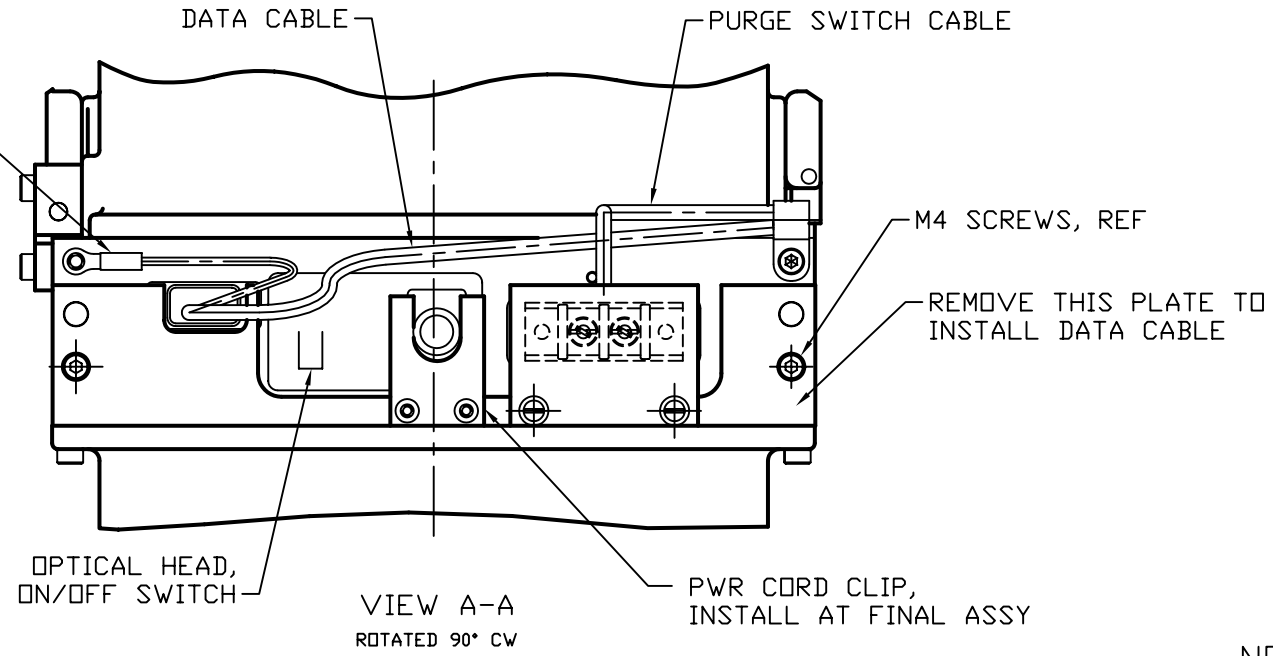
**INSTRUMENT AIR**

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		USED ON		TELEDYNE INSTRUMENTS Monitor Labs	
FRACTIONS	DECIMALS	DRAWING	ASSEMBLY	<small>TELEDYNE INSTRUMENTS AND MONITOR LABS ARE NOT RESPONSIBLE FOR THE CONSTRUCTION OF THE INSTRUMENT OR THE INSTALLATION OF THE INSTRUMENT. THE USER SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF THE INSTRUMENT. THE USER SHALL BE RESPONSIBLE FOR THE PROPER SELECTION OF THE INSTRUMENT AND THE PROPER SELECTION OF THE HARDWARE KIT.</small>	
0 TO 4 INCHES	0.005	BY	DATE		
4 TO 8 INCHES	0.010	CHECKED	DATE		
8 INCHES UP	0.015	DESIGNED	DATE		
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		ENGINEERED	DATE	TITLE LightHawk 560 DYNATRON UPGRADE SYSTEM INSTALL.	
DO NOT SCALE THIS DRAWING		PRODUCTION	DATE	FINISH	
AUTHORIZATION		QA	DATE	DRAWING NO. 625-0009	
		AS	DATE	LAYER NO. A	
			DATE	SCALE 1/4" = 1"	
			DATE	SHEET 1 of 1	

REVISIONS				
ZONE	SYM.	DESCRIPTION	DATE	APPD.
	A	PER DCN #625-0007A	10-24-00	ELM



ATTACH GND LUG HERE. SUPPLIED ONLY WITH REMOTE DISPLAY DATA CABLE. NOT SUPPLIED WITH DIRECT INTERFACE DATA CABLE.



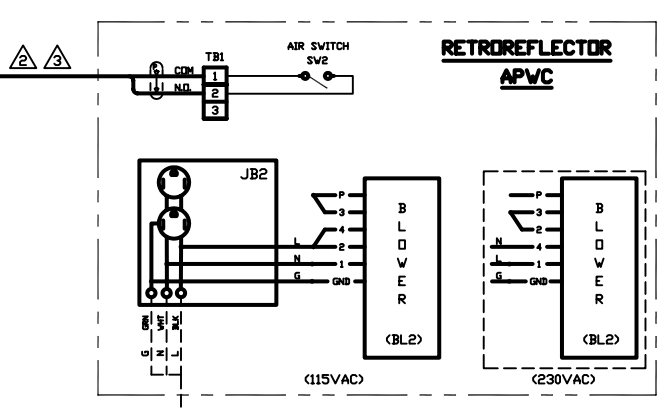
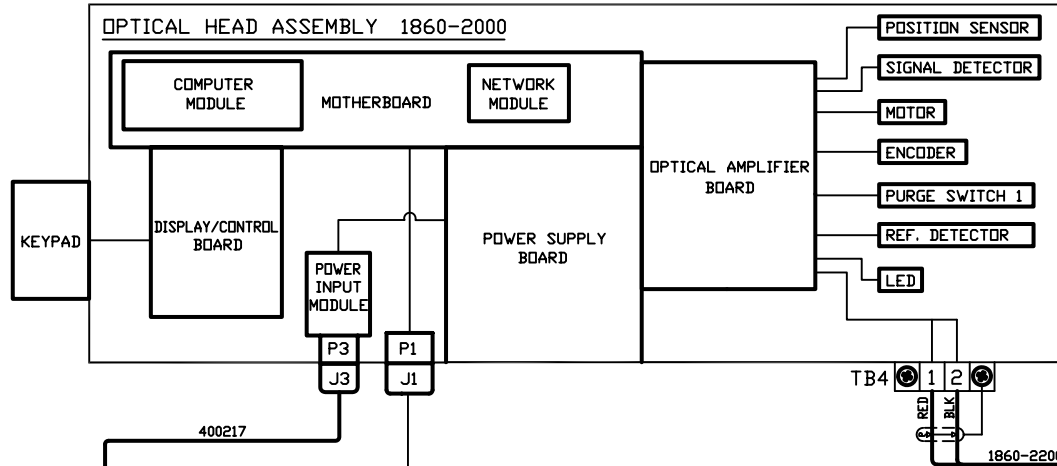
BOTH CABLES MUST ROUTE THRU THIS CLAMP

1. TO INSTALL OPTICAL HEAD ASSY, REMOVE EXISTING PURGE AIR HOUSING AND SWITCH. REPLACE SEAL IF WORN OR HOLE EXISTS FOR TELESCOPE. SEAL SUPPLIED IN HARDWARE KIT. INSTALL NEW ADAPTER ASSEMBLY. INSTALL 560 OPTICAL HEAD OVER STUDS ON ADAPTER ASSEMBLY. RETAIN WITH SPHERICAL WASHERS, LOCK WASHERS AND NUTS.
2. POWER CORD, DATA & PURGE CABLES, RETAINER CLIP WITH SCREWS, ADAPTER ASSY HOSE & HOSE ADAPTERS ARE IN HARDWARE KIT.

NOTES:

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		USED ON		<p>THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY AND CONFIDENTIAL TO TELETYPE MONITOR LABS AND IS FURNISHED UPON THE EXPRESS CONDITION THAT THE INFORMATION CONTAINED HEREIN SHALL NOT BE REPRODUCED, REPIKED, COPIED OR DISSEMINATED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH THE EVALUATION THEREOF WITHOUT THE PRIOR WRITTEN CONSENT OF TELETYPE MONITOR LABS.</p> <p>TITLE DYNATRON UPGRADE 560 OPTICAL HEAD ASSY INSTALLATION</p>
FRACTIONS	DECIMALS	DASH NO	NEXT ASSEMBLY	
0 TO 4 1/32	.001	-01	560UPGRD	
4 TO 8 1/16	.002			
8 AND UP 1/8	.005			
ALL DIMENSIONS ARE IN INCHES DO NOT SCALE THIS DRAWING		MATERIAL		
AUTHORIZATION		FINISH		
BY	DATE			
DRAWN EAS	2-8-00			
CHECKED EAS	5-00			
DESIGNED EAS	JAN-00			
ENGINEERED ELM	5-16-00			
PRODUCTION MAR	5/16/00			
Q.A. AS	5-16-00			
SCALE		SHEET		
1:1		1 OF 1		
DRAWING NO.			LATEST REVISION	
D 625-0007			A	

REVISIONS				
ZONE	SYM.	DESCRIPTION	DATE	APPD.
F		ADDED THIS SMT FOR 560D.I.	10-25-00	ELM
G		NO CHANGE THIS SHEET	2-22-02	ELM
H		NO CHANGE THIS SHEET	9-3-02	DWB



115/230VAC, 1Ø, ±10%  
50 HZ, 1.7 FLA, 6.5 LRA  
60 HZ, 3.4 FLA, 10.0 LRA

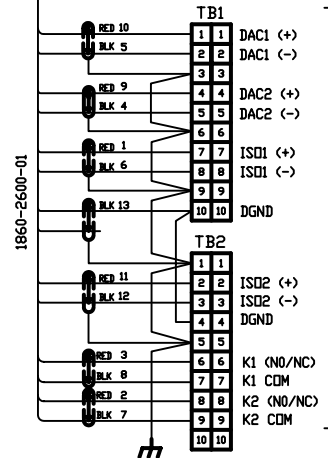
- ⚠ CONNECTOR 'P1' PROVIDED WITH 1860-2200-02 CABLE CABLE ASSY.
- ⚠ ALL SHIELDS TO BE LEFT FLOATING AT CUSTOMER'S END. SHIELDS EARTHED IN TRANSCIEVER BOX BY MLI.
- ⚠ REMOVE EXISTING POWER CORD AND REPLACE WITH CORD AND PLUG PROVIDED
- ⚠ ISD1 AND ISD2 SHOWN IN DRY CONTACT CONFIGURATION. THEY ARE JUMPER SELECTABLE ON 6 PT. I/O PC BOARD. TERMINAL WIRING CONNECTIONS MAY BE AFFECTED. SEE USER'S MANUAL.

DRY	+5V
TB1-8 [ISD1 (-)]	TB1-7 [ISD1 (+)]
TB1-10 [DGND]	TB1-8 [ISD1 (-)]
TB2-3 [ISD2 (-)]	TB2-2 [ISD2 (+)]
TB2-4 [DGND]	TB2-3 [ISD2 (-)]

- ⚠ RELAY CONTACTS ARE JUMPER SELECTABLE ON 6 POINT I/O PC BOARD (N.D. OR N.C.). SEE USER'S MANUAL.
- ⚠ TERMINATED AT SITE DURING FINAL INSTALLATION.
- ⚠ EXISTING CABLE IS BELDEN 9773 OR EQUIVALENT.

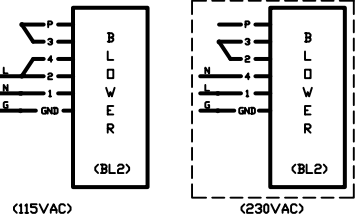
NOTES:  
1. THIS DWG IS TO REWIRE DYNATRONS FOR 560 OPACITY DIRECT INTERFACE.

DIMENSIONAL TOLERANCES UNLESS OTHERWISE SPECIFIED		USED ON		TELEDYNE INSTRUMENTS MONITOR LABS
FRACTION	DECIMAL	DRAWING NO.	REV.	
0 TO <math>1/16</math>	.005	625-0000		TITLE WIRING DIAGRAM, DYNATRON TO 560 OPACITY DIRECT INTERFACE CONVERSION FINISH
1 TO <math>1/8</math>	.010			
1 TO <math>1/4</math>	.020			
1 TO <math>1/2</math>	.040			
1 TO <math>3/4</math>	.075			
1 TO <math>1</math>	.125			
1 TO <math>2</math>	.250			
1 TO <math>3</math>	.500			
1 TO <math>4</math>	1.000			
1 TO <math>6</math>	2.000			
ALL DIMENSIONS ARE IN INCHES DO NOT SCALE THIS DRAWING		AUTHORIZATION		
		BY	DATE	
		DCH	10-26-00	
		CHECKED	ELM	11-9-00
		DESIGNED	ELM	11-9-00
		ENGINEERED	ELM	11-9-00
		PRODUCTION	MAR	11-9-00
		PRODUCTION	A.S.	11-9-00



⚠ DIRECT INTERFACE TO CUSTOMER EQUIPMENT

115/230VAC, 1Ø, ±10%  
50 HZ, 2.2 FLA, 7.0 LRA  
60 HZ, 3.9 FLA, 10.5 LRA



SCALE	SHEET	D	625-0002	H
---	4 of 4			