International Aero Engines

SERVICE BULLETIN

ENGINE - HP COMPRESSOR - CONTROLLED SERVICE USE OF INSTRUMENTATION FOR HP COMPRESSOR, HANDLING BLEED VALVES AND CABIN AIR PRESSURE MONITORING CHECKS - NOT APPLICABLE - MOD.ENG-72-0210

1. Planning Information

A. Effectivity

(1) Aircraft: Airbus A320

(2) Engine: V2500-A1 Engines, IAE to advise engine serial number and aircraft. This Service Bulletin must be incorporated only on one engine per aircraft. Do this Service Bulletin before you do Service Bulletin V2500-ENG-72-0209.

B. Reason

These checks are introduced to access the operational pressure pulses in the HP Compressor, the operation of the handling bleed valves and the operations of the cabin air conditioning valves for service engines during service type operation testing with Dragonair.

C. Compliance

Not applicable

This Service Bulletin is released for the purpose of controlled service introduction.

D. Approval

The 'compliance' statement and the procedures described in paragraph F of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the Engine Model listed.

E. References

(1) Internal Reference No.

94VR061

94VR061A

94VR061B

(2) Other References

A320 Aircraft Maintenance Manual

Standard Practices Manual

F. Action

(1) On the aircraft panel 115Vu put a warning notice to tell persons not to start the engine.

(2) Make sure that the engine has been shutdown for at least 5 minutes.

(3) On the aircraft panel 50Vu make sure that the ON legend of the ENG FADEC GND PWR push button switch is OFF and install a warning notice.

(4) Open the left and right fan cowl doors with the instructions given in the A320 Aircraft Maintenance Manual, TASK 71-13-00-010-010.

(5) Open the left and right thrust reverser halves with the instructions given in the A320 Aircraft Maintenance Manual, TASK 78-32-00-010-010.

(6) Remove the HP Compressor stage 7 lower left hand bleed valve as instructed in the A320 Aircraft Maintenance Manual, TASK 75-32-52-000-012.

(7) Remove the V-clamp from the air off-take duct and check valve

(8) Remove the stage 7 lower left hand air off-take duct.

(a) Remove the two existing clipping points hardware.

(b) Remove the 12 bolts and the two brackets that attach the stage 7 air off-take duct to the HP compressor case.

(9) Install the instrumented stage 7 lower left hand air off-take duct. Refer to Figures 5, 13 and 14.

(a) Position the air off-take duct on the HP compressor case with the angled duct to the top and align the bolt holes.

(b) Install the 12 bolts together with the two brackets. Torque the bolts to 85 to 105 lbfin (10 to 12 Nm).

(c) Install the two existing clipping points hardware. Torque the bolts to 36 to 45 lbfin (4 to 5 Nm).

(10) Install the V-clamp to the air off-take duct and check valve.

(11) Install the HP Compressor stage 7 lower left hand bleed valve as instructed in the A320 Aircraft Maintenance Manual, TASK 75-32-52-400-012.

STAGE 7 BLEED VALVES (3 OFF) & STAGE 10 BLEED VALVE (1 OFF)

(12) Stage 7 lower left hand bleed valve, remove 4W1486 bolts (2 off), install 2 thermocouples thru one bolt hole location and secure at the other bolt hole location using AS62201 clamp and 4W1486 bolt. Retain other 4W1486 bolt. Refer to Figures 1, 2, 5 and 13.

(13) Stage 7 upper right hand bleed valve, remove 4W0002 nuts (2 off) and AS 21012 bolts (2 off), install 2 thermocouples thru one bolt hole location and secure at the other bolt hole location using AS 62201 clamp, AS21012 bolt and 4W0002 nut. Retain other AS21012 bolt and 4W0002 nut. Refer to Figures 1, 2, 5 and 10.

(14) Stage 7 lower right hand bleed valve, remove 4W0002 nuts (2 off) and AS 21010 bolts (2 off), install 2 thermocouples thru one bolt hole location and secure at the other bolt hole location using AS 62201 clamp, AS21010 bolt and 4W0002 nut. Retain other AS21010 bolt and 4W0002 nut. Refer to Figures 1, 2, 5 and 12.

(15) Stage 10 upper right hand bleed valve, remove 4W0002 nuts (2 off) and AS21012 bolts (2 off), install 2 thermocouples thru one bolt hole location and secure at the other bolt hole location using AS62201 clamp, AS21012 bolt and 4W0002 nut. Retain other AS 21012 bolt and 4W0002 nut. Refer to Figures 1, 2, 5 and 11.

(16) At all the 4 bleed valve positions ensure sufficient thermocouple cables are available to overhang the valve silencers. Secure thermocouples to bleed valves using 156407 adhesive tape. Refer to Figures 5, 10, 11 and 12.

WARNING WHEN YOU USE COMAT 01-001 INHIBITED AND STABILISED TRICHLORETHANE YOU MUST USE THE NECESSARY PROTECTIVE CLOTHING. DO NOT GET THE SOLVENT ON YOUR SKIN OR IN YOUR EYES. YOU MUST NOT SMOKE WHEN YOU USE THE SOLVENT AS THE VAPOUR CHANGES AND BECOMES TOXIC.

(17) With CoMat 01-001 inhibited and stabilised trichlorethane clean the thermocouple cables and bolt hole locations at the four bleed valves. Refer to Figures 5, 10, 11, 12 and 13.

(18) Apply a layer of CoMat 08-013 compound to the thermocouple cables in the bolt hole locations to seal and stop any air loss at the four bleed valves. Refer to Figures 5, 10, 11, 12 and 13.

(19) Cure the compound at 68 degrees F (20 degrees C) for 2 hrs. Do not apply a load during this time.

STAGE 3 BLANKS (3 OFF) & STAGE 5 BORESCOPE BLANK (1 OFF)

(20) Remove the HP Compressor Stage 3 blanks (3 off). Refer to Figures 1, 2, 3, 6, 7 and 8.

(a) Arrow AG: Remove the 4W0001 nuts (2 off) and 4W0103 bolts (2 off) from the 6A3080 and 5W2065 bracket assembly.

Remove the AS21011 bolts (2 off) and remove the 6A3080 bracket. Withdraw the 6A1069 blank. Retain parts.

(b) Arrow AH: Remove the AS21011 bolts (2 off) and withdraw 6A1069 blank. Retain parts.

(c) Arrow AF: Disassemble clipping points 5672 and 5673. Remove the AS 21011 bolts (2 off) and the 6A3689 bracket. Withdraw the 6A1069 blank. Retain parts.

NOTE: Kulite matched asemblies are made up from a TJ12437 housing, XTE 16-190 transducer and a specially sized TJ10814 washer which is not interchangeable from one assembly to another. Assemblies must be installed as instructed.

(21) Install the Kulite matched assembly SD3HCT.C to the HP casing at arrow AF port using the AS21011 bolts (2 off) and 6A6424 bracket. Refer to Figures 3 and 6.

(22) Install the Kulite matched assembly SD3HCT.A to the HP casing at arrow AG port using the AS21011 bolts (2 off) and 6A6425 bracket. Refer to Figures 3 and 7.

(23) Install the Kulite matched assembly SD3HCT.B to the HP casing at arrow AH port using the AS21011 bolts (2 off). Refer to Figures 3 and 8.

(24) Remove the 6A3119 HP Compressor Stage 5 borescope access port cover (Port C) as instructed in the A320 Aircraft Maintenance Manual Task 72-00-00-200-010-A01. Refer to Figures 1, 2, 4 and 9.

NOTE: Kulite matched assembly is made up from a TJ12438 housing, XTE 16-190 transducer and a specially sized TJ10814 washer which is not interchangeable. Assembly must be installed as instructed.

(25) Install the Kulite matched assembly SD5 HCT.Y to the HP Compressor Stage 5 borescope access port cover (Port C) as instructed in the A320 Aircraft Maintenance Manual Task 72-00-00-200-010-A01. Refer to Figures 4 and 9. WARNING WHEN YOU USE COMAT 01-001 INHIBITED AND STABILISED TRICHLORETHANE YOU MUST USE THE NECESSARY PROTECTIVE CLOTHING. DO NOT GET THE SOLVENT ON YOUR SKIN OR IN YOUR EYES. YOU MUST NOT SMOKE WHEN YOU USE THE SOLVENT AS THE VAPOUR CHANGES AND BECOMES TOXIC.

(26) With CoMat 01-001 inhibited and stabilised trichlorethane clean the mating faces of the housings, transducers and washers (4 off). Refer to Figures 3, 4, 6, 7, 8 and 9.

(27) Apply a layer of CoMat 08-013 compound around transducers and washers (4 off) to ensure seal. Refer to Figures 3, 4, 6, 7, 8 and 9.

(28) Cure the compound at 68 degrees F (20 degrees C) for 2 hours. Do not apply a load during this time.

(29) Re-assemble clipping points 5672 and 5673 using parts removed at step 20(C).

(30) At Kulite Assembly Arrow AG lower right hand casing install 4W0103 bolts (2 off) and 4W0001 nuts (2 off) to brackets 6A6425 and 5W2065. Refer to Figures 3 and 7.

(31) Find 5A8777 tube, Install the transducers (2off) to the 5A8777 tube adjacent to fan case bottom dead centerline using AS62416 clamps (4 off) AS62412 clamps (2 off) AS21409 bolts (2 off) and AS20624 nuts (2 off). Refer to Figures 1, 25, 27 and 28.

(32) At the bifurication panel, disassemble 4W0163 (3 off) and 4W0002 nuts (3 off) at locations BG, BH and BJ, remove and hold parts. Refer to Figures 1, 18, 21, 23 and 24.

(33) At the HP valve, disconnect the HP blanking plug and remove the lanyard from the HP valve, hold part. Refer to Figures 1, 2, 5, 16 and 17.

(34) Install a length of hypo tube to the instrumented stage 7 lower left hand air off-take duct and transducer running the tubing through the bifuracation panel holes. When assembling the gyrolok fittings to hypo tubes insert the tubing, resting it in the bottom of the body counterbore. Make sure the nut is finger tight, tighten the nut a further 1 1/4 turns. Refer to Figures 1, 2, 5, 14, 18, 21, 23, 24, 25 and 27.

(35) Install a length of hypo tube to the HP valve and transducer running the tubing through the bifurcation panel holes. When assembling the gyrolok fittings to hypo tubes insert the tubing resting it in the bottom of the body counterbore. Make sure the nut is finger tight, tighten the nut a further 1 1/4 turns. Refer to Figures 1, 2, 5, 17, 18, 21, 23, 24, 25 and 27.

(36) Safety the hypo end connection at the HP valve using lockwire. Refer to Figure 17.

(37) Install the electrical cable end connectors (2 off) to the transducers (2 off). Refer to Figure 27.

(38) At new clipping point 3, wrap hypo tube sufficiently with 5A0418 tape to achieve required fit with AS62403 clamp. Assemble clipping point using 4W0104 bolt and 4W0001 nut. Refer to Figures 14 and 15.

(39) Secure loose lead to hypo tube using 5A0418 tape. Refer to Figures 14 and 15.

(40) At new clipping point 5, install AS62412 clamp to 5R8132 tube, install hypo tubes (2 off), to AS62404 clamp and secure using AS21407 bolt and AS20624 nut. Refer to Figures 14, 18 and 19.

WARNING WHEN ROUTING AND SECURING THE TRANSDUCER CABLES (4 OFF) AND THERMOCOUPLES (8 OFF) TO THE ENGINE, MAKE SURE CABLES AND THERMOCOUPLES WILL NOT GET CAUGHT IN THE HP COMPRESSOR MECHANICAL MECHANISM.

(41) Secure cables and thermocouples to engine external parts using 5A0418 glass tape. Where possible route cables and thermocouples together down to clipping point 6. Refer to Figure 18.

(42) At new clipping point 6, install AS62412 clamp to 5R8132 tube, install hypo tubes (2 off) cables and thermcouples to AS62406 clamp and secure using AS21408 bolt and AS20624 nut. Refer to Figures 18 and 20.

(43) At the bifurcation panel split the bundle into three groupings and feed through the panel holes (3 off). Refer to Figures 18,21,22,23, and 24.

(44) At new clipping point 8, install AS62412 clamp to 5A9356 tube, intall hypo tubes (2 off), cables and thermocouples to AS62406 clamp and secure using AS21408 bolt and AS20624 nut. Refer to Figures 18 and 20.

(45) At new clipping point 9, install AS62412 clamp to 5A8777 tube, install hypo tubes (2 off) to AS62404 clamp and secure using AS21408 bolt and AS20624 nut. Refer to Figures 25 and 26.

(46) Run the cables and thermcouples down and along the EEC harness, introduce the transducer cables to the EEC harness prior to clipping point 11. Tie the cables to the harness using 718G tape. Refer to Figures 18,25,29,30,31,32,33 and 34.

(47) Secure the cable bundles or hypo tubes to the harness or tube(s) using 5A0418 tape. Refer to Figure 34.

WARNING: When you use CoMat 01-001 inhibited and stabilised trichlorethane you must use the necessary protective clothing. Do not get the solvent on your skin or in your eyes you must not smoke when you use the solvent as the vapour changes and becomes toxic.

(48) With CoMat 01-001 inhibited and stabilised trichlorethane clean the 3 bundles and bifurcation panel faces. Refer to Figures 18,21,22,23 and 24.

(49) Apply a layer of CoMat 08-013 compound to the bundles and bifurcation panel faces. Refer to Figures 18,21,22,23 and 24.

(50) Cure the compound at 68 degrees F (20 degrees C) for 2 hours. Do not apply a load during this time.

(51) After completion of testing, remove all the instrumentation hardware from the engine.

(52) After removal of tape from affected areas of fuel/oil tubes and bleed valves, locally clean to remove any adhesive glue as instructed in Standard Practices Manual, TASK 70-11-26-300-503.

(53) Remove the cold curing silicone compound from the bleed valve bolt holes (4 off) using a scraper. Locally clean if required as instructed in Standard Practices Manual, TASK 70-11-26-300-503.

(54) Re-install all existing production parts with the instructions given in the A320 Aircraft Maintenance Manual.

(55) Close the left and right thrust reverser halves with the instructions given in the A320 Aircraft Maintenance Manual, TASK 78-32-00-410-010.

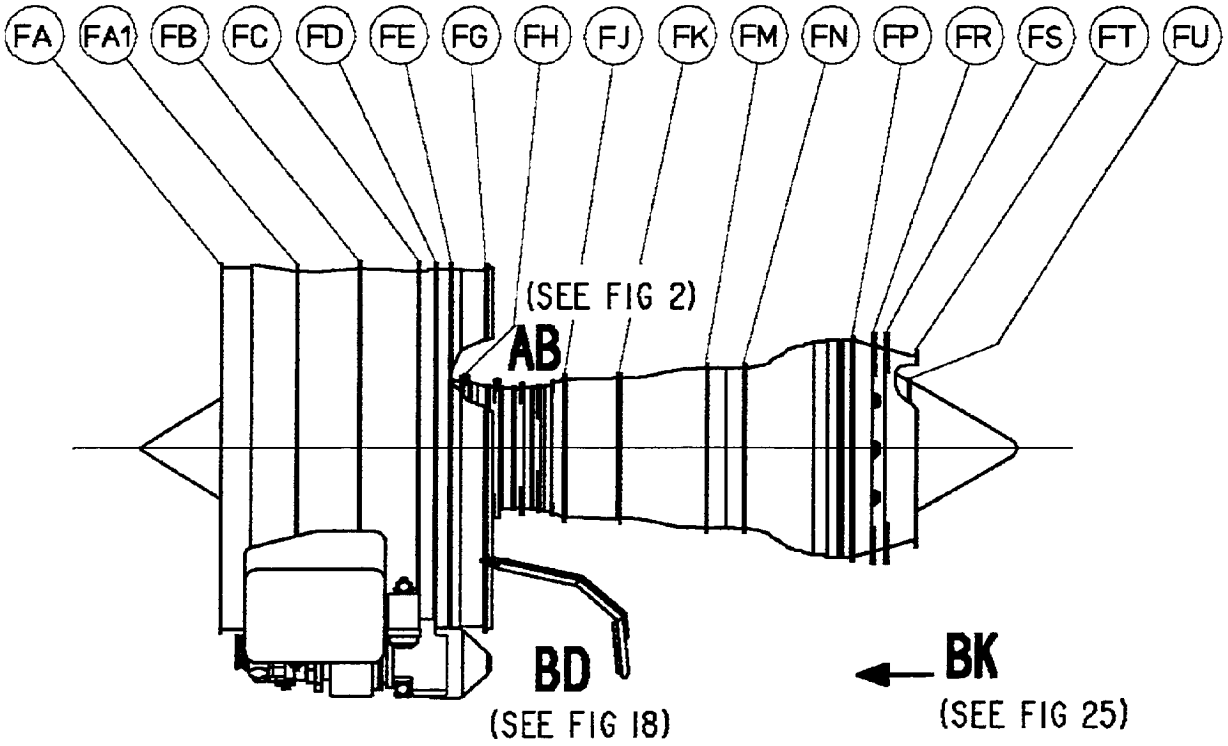
(56) Close the left and right fan cowl doors with the instructions given in the A320 Aircraft Maintenance Manual, TASK 71-13-00-410-010.

(57) Remove the warning notices from the aircraft panels 115Vu and 50Vu.

(58) Do a test of the HP Compresor Stage 7 Bleed Valve. Refer to the A320 Aircraft Maintenance Manual, TASK 71-00-00-710-017.

G. Recording Instructions

(1) A record of accomplishment is necessary.



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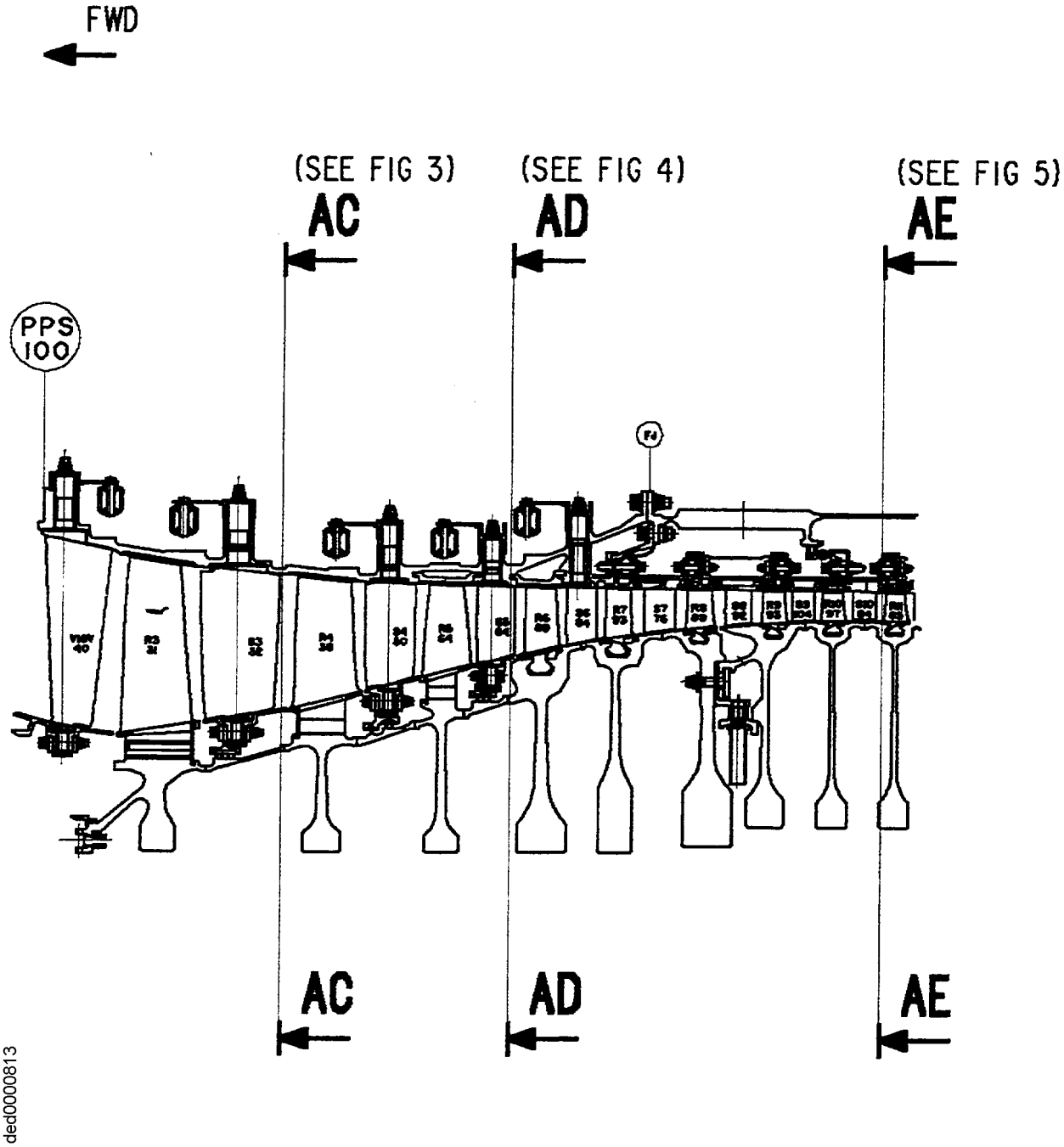
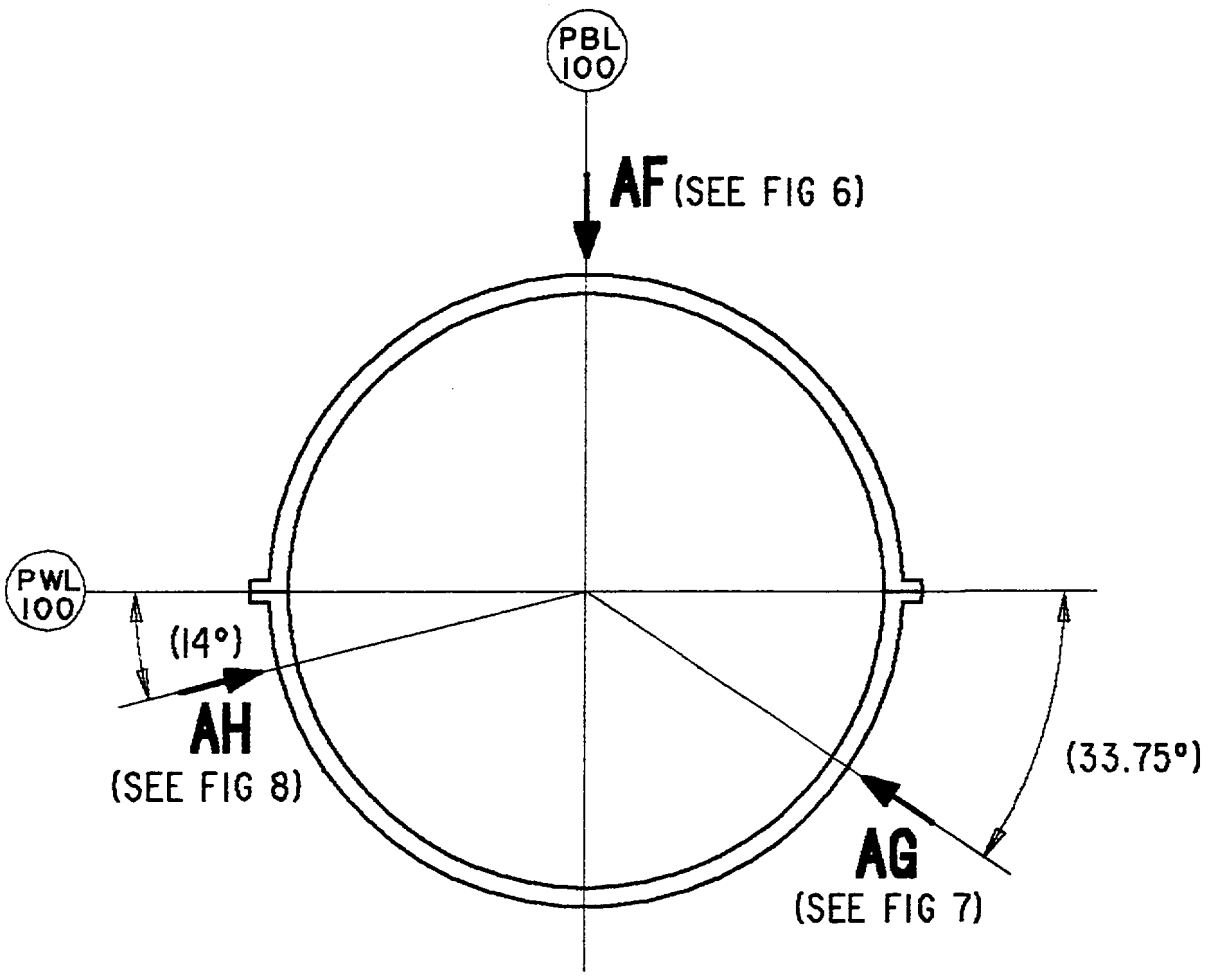
View on Engine Exterior
Fig.1



View at AB
Fig.2



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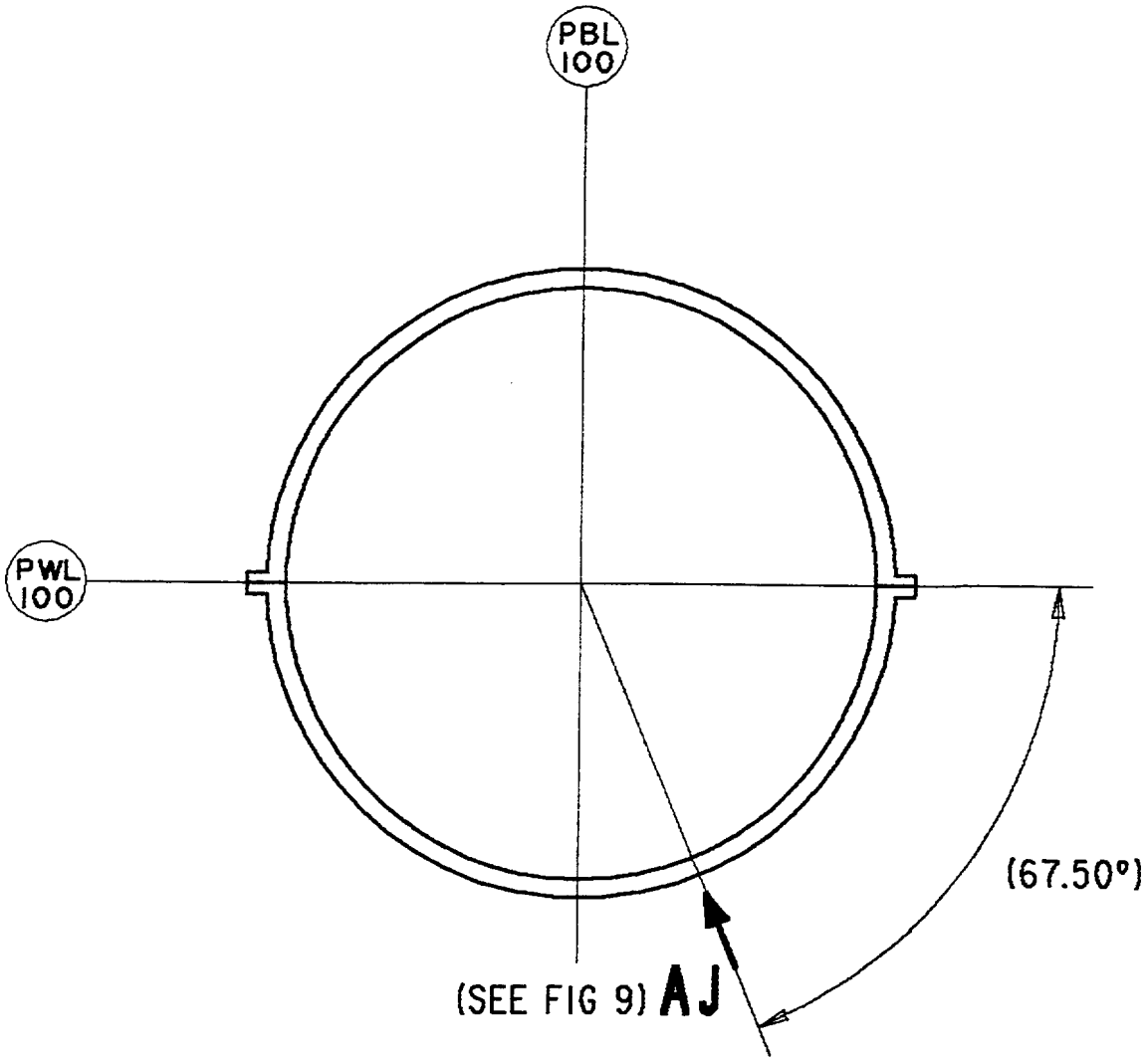
Section AC Locating Stage 3 Blanking Plates
Fig.3



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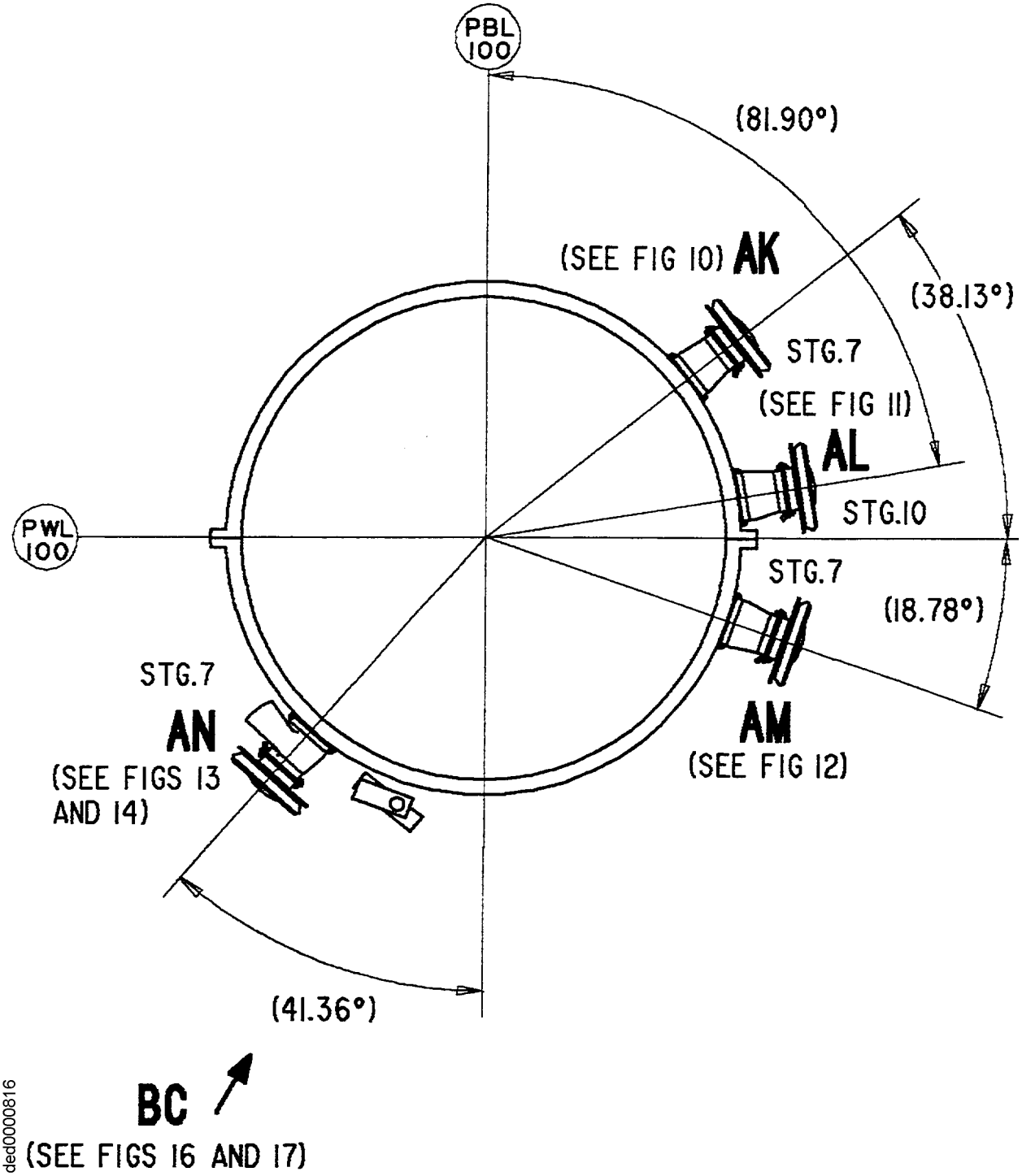
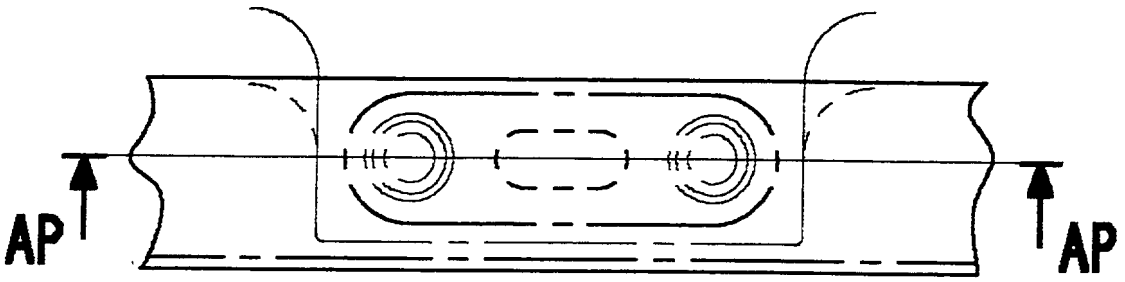
Section AD Locating Stage 5 Blanking Plate
Fig.4

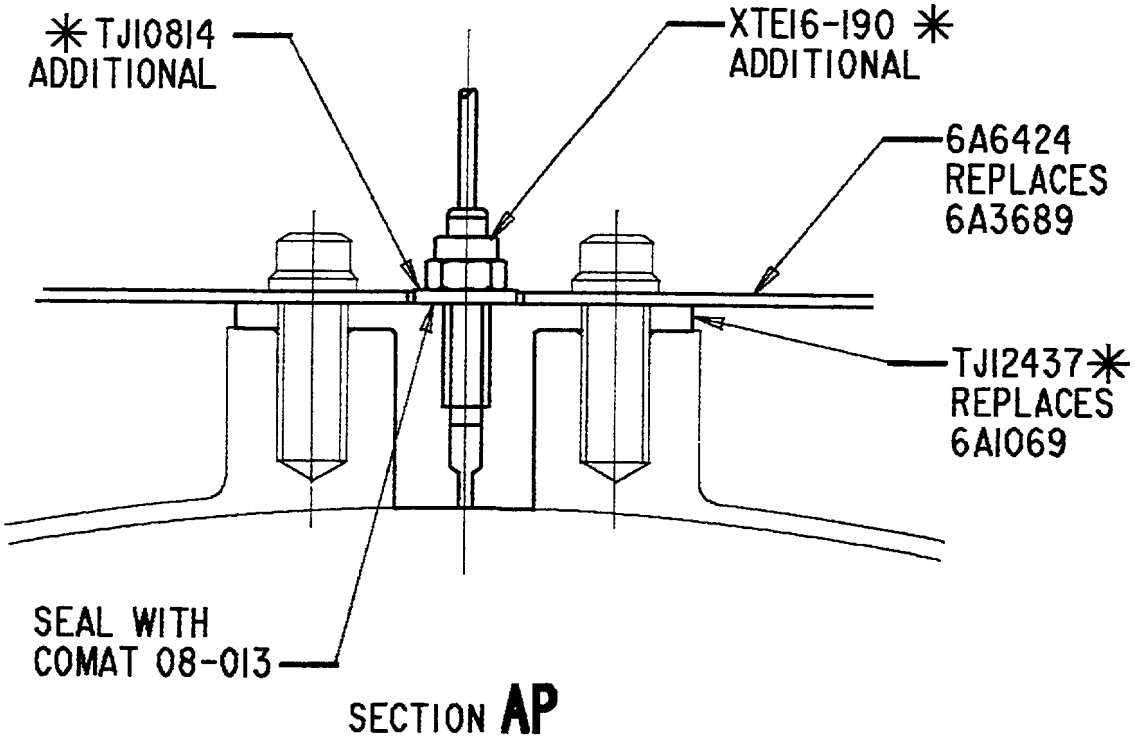


Section AE Locating Bleed Valves
Fig.5



VIEW ON ARROW **AF** (SEE FIG 3)

✳ KULITE ASSEMBLY SD3 HCT-C



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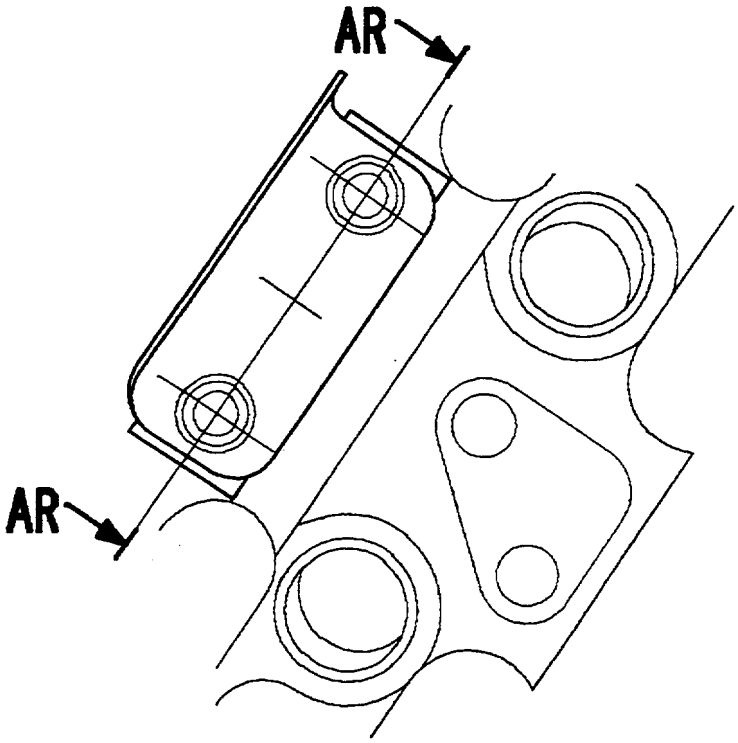
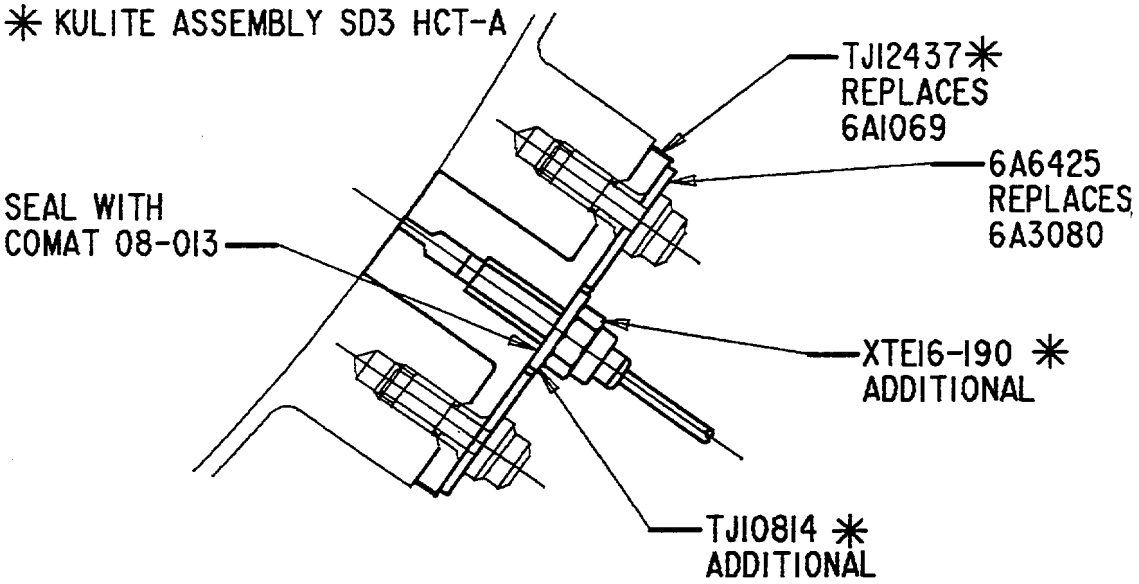
SECTION **AP**

Section AP Before and After Alteration
Fig.6



VIEW ON ARROW **AG** (SEE FIG 3)



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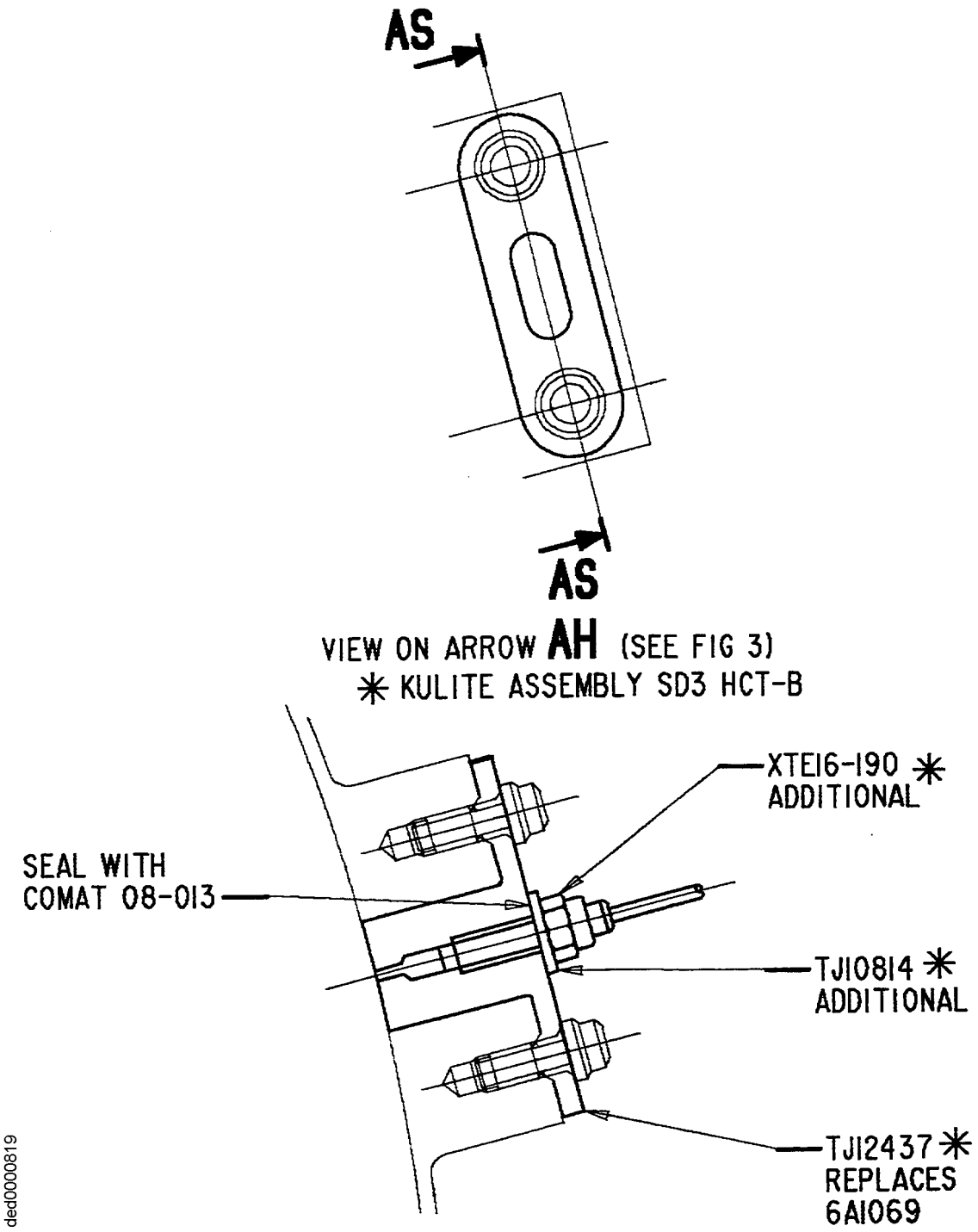
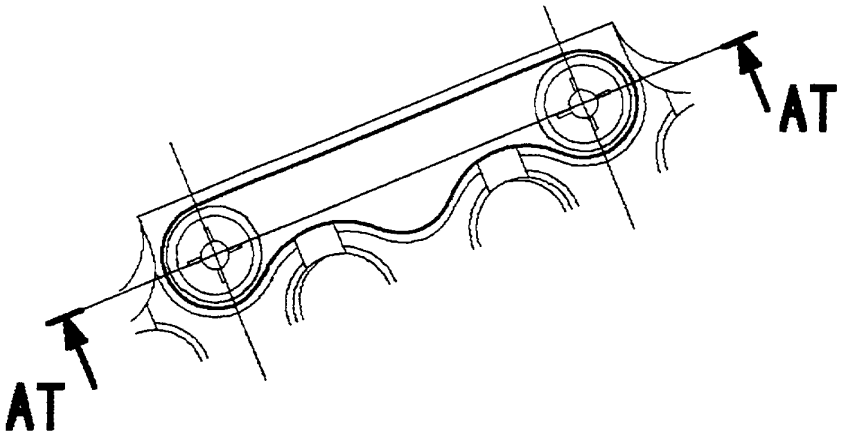
Section AR Before and After Alteration
Fig.7

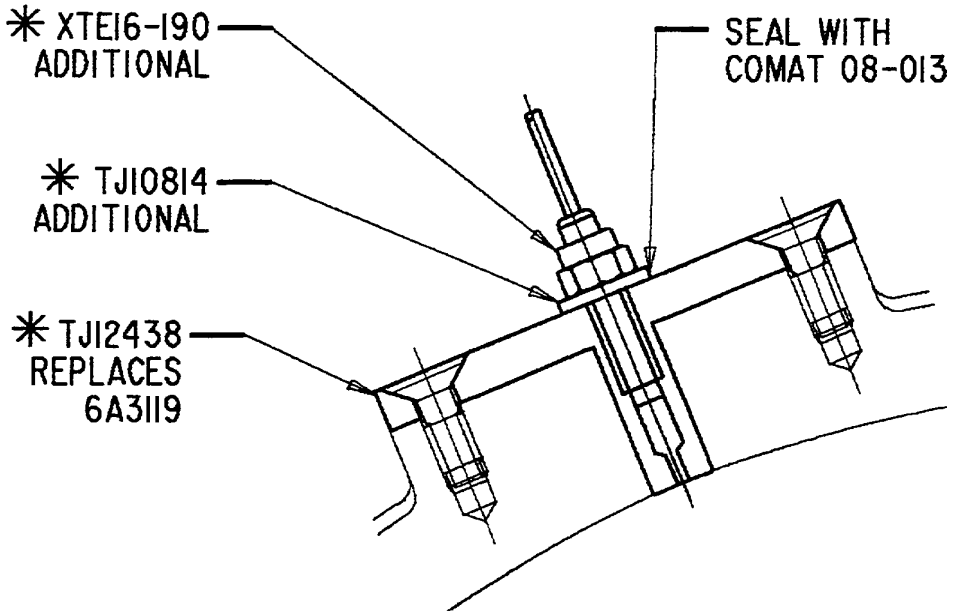


Section AS Before and After Alteration
Fig.8



VIEW ON ARROW **AJ** (SEE FIG 4)

✳ KULITE ASSEMBLY SD5 HCT-Y



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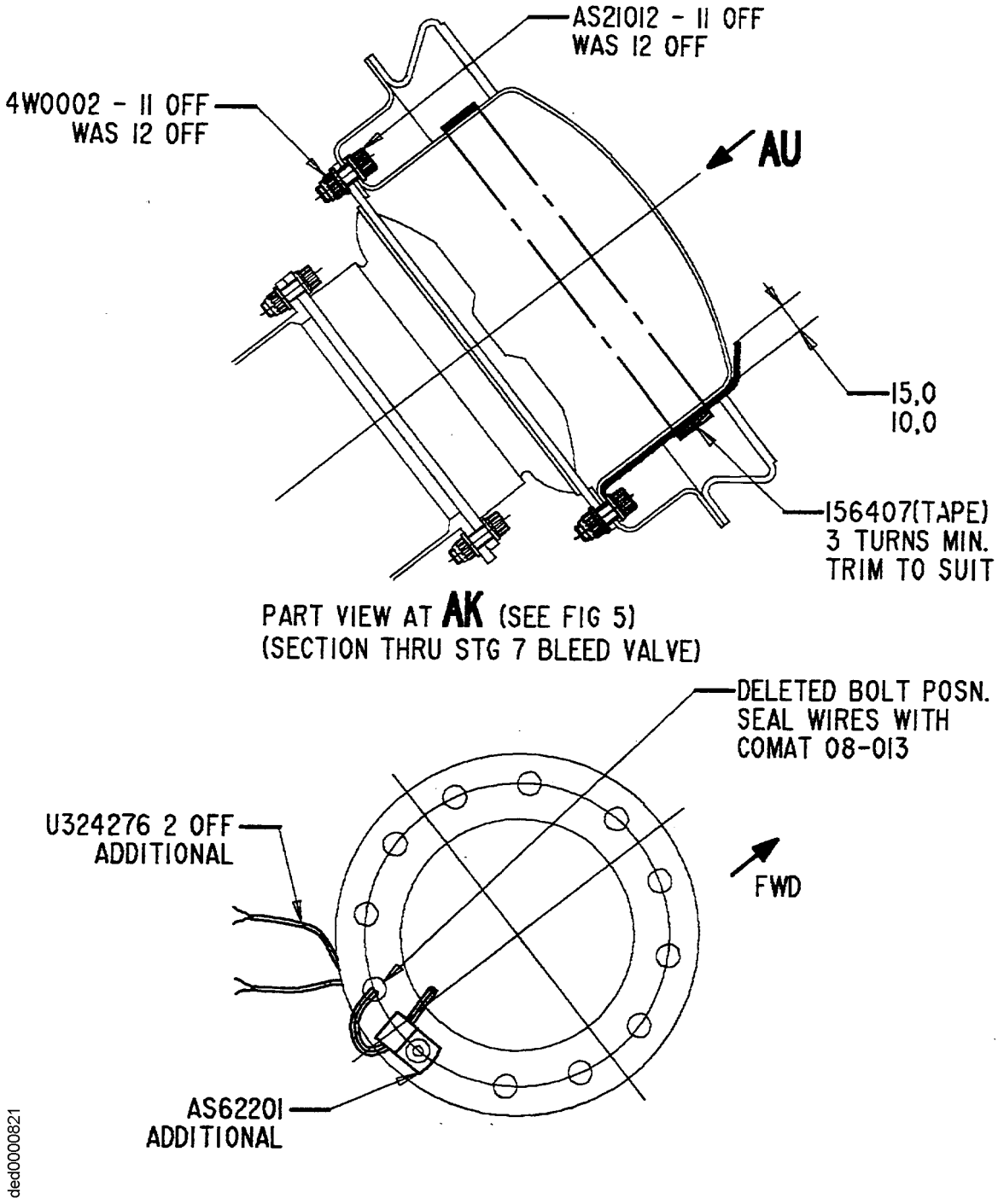
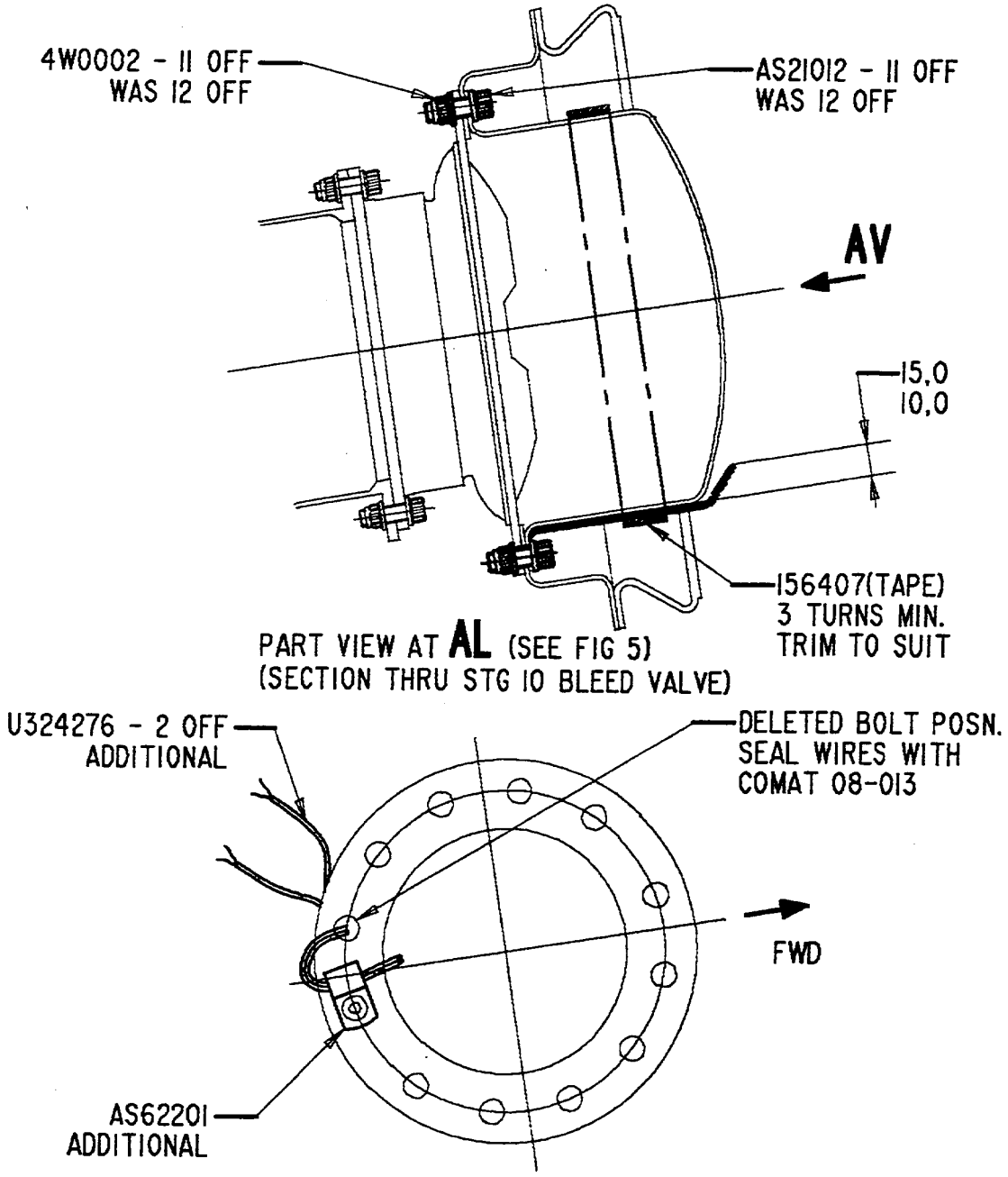
Section AT Before and After Alteration
Fig.9



View on Arrow AU Before and After Alteration
Fig.10



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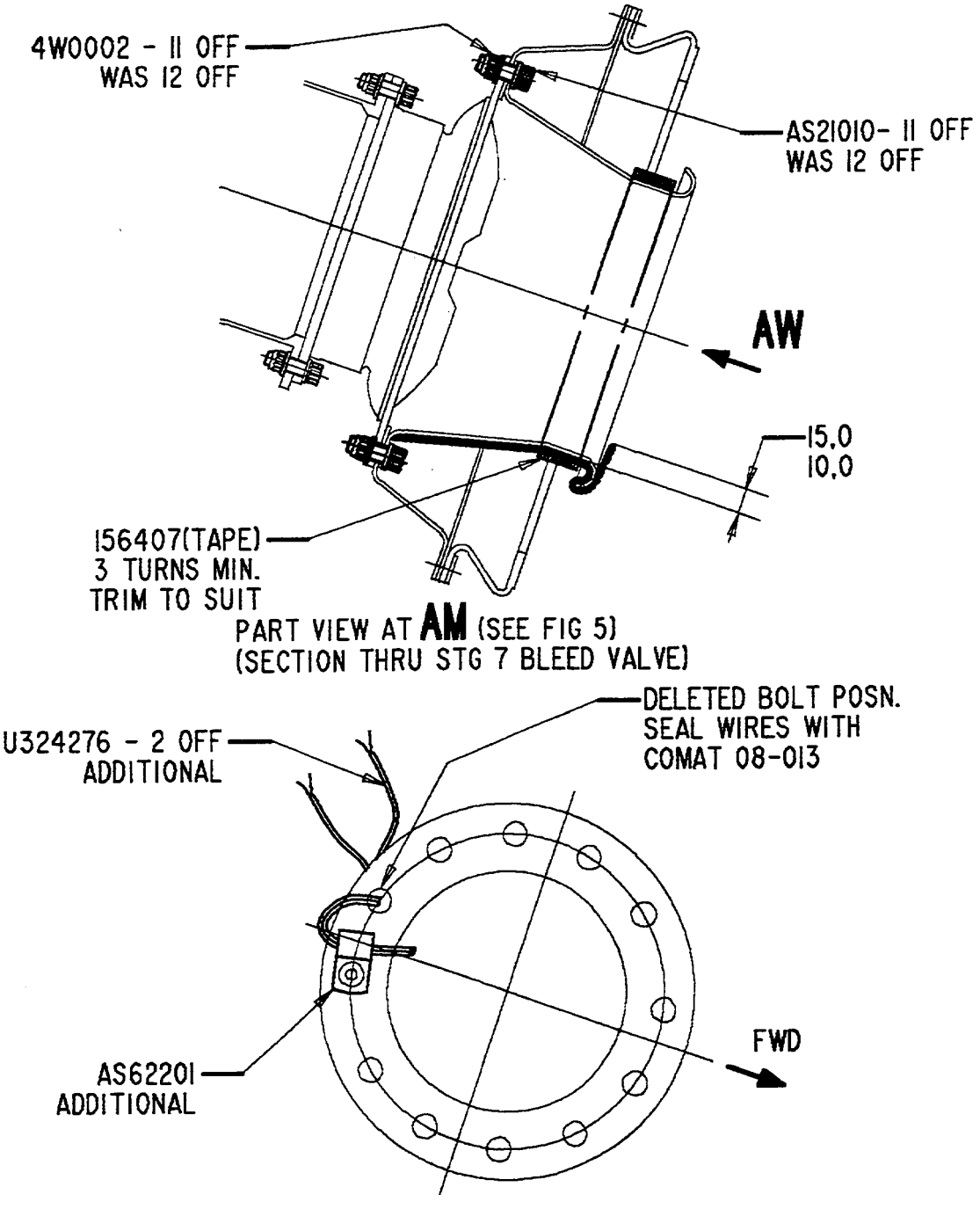
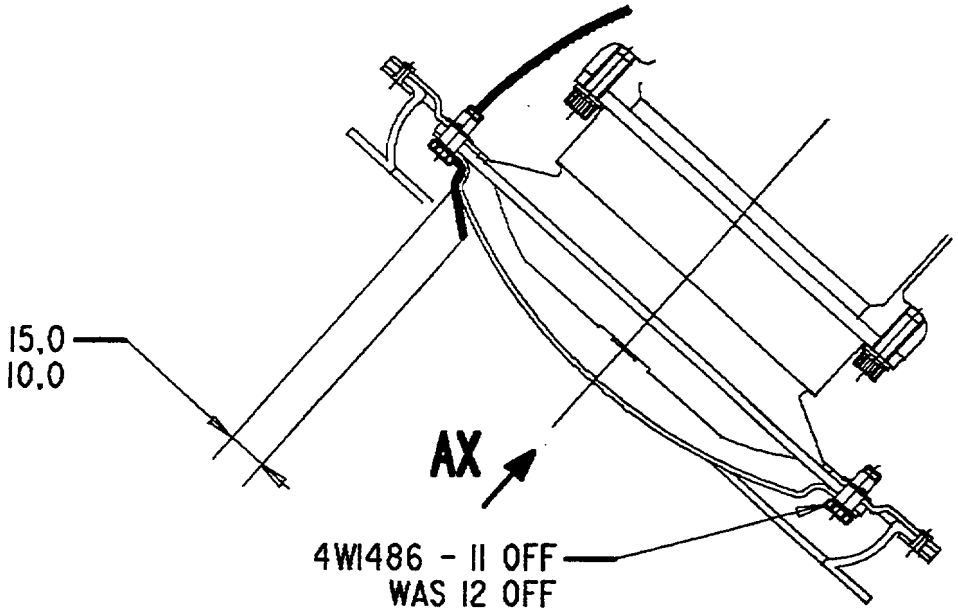
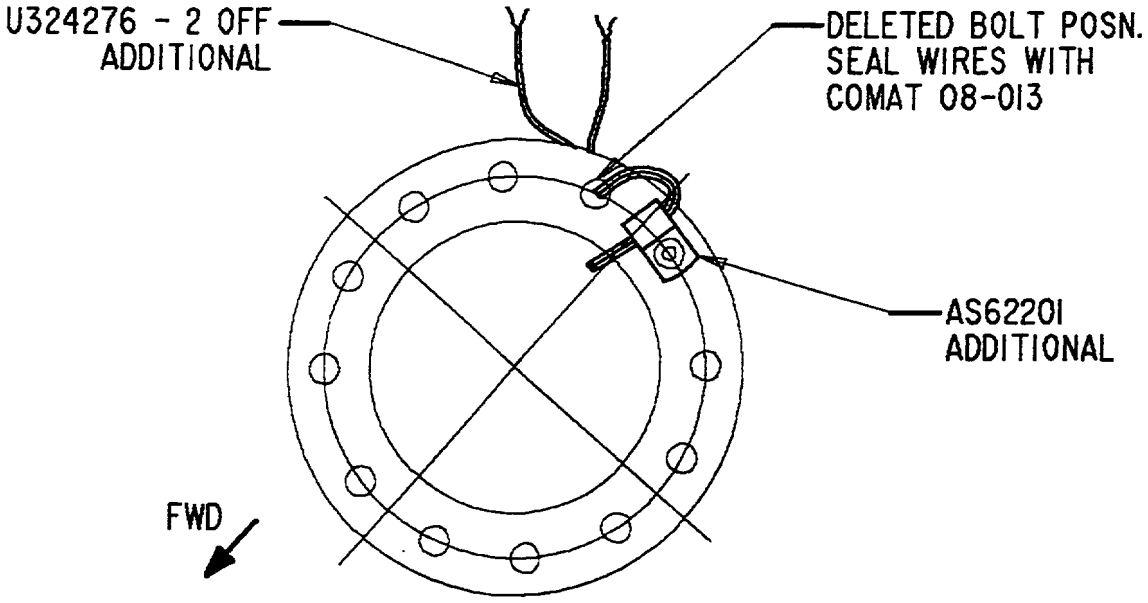
View on Arrow AV Before and After Alteration
Fig.11



View on Arrow AW Before and After Alteration
Fig.12



PART VIEW AT **AN** (SEE FIG 5)
(SECTION THRU STG 7 BLEED VALVE)



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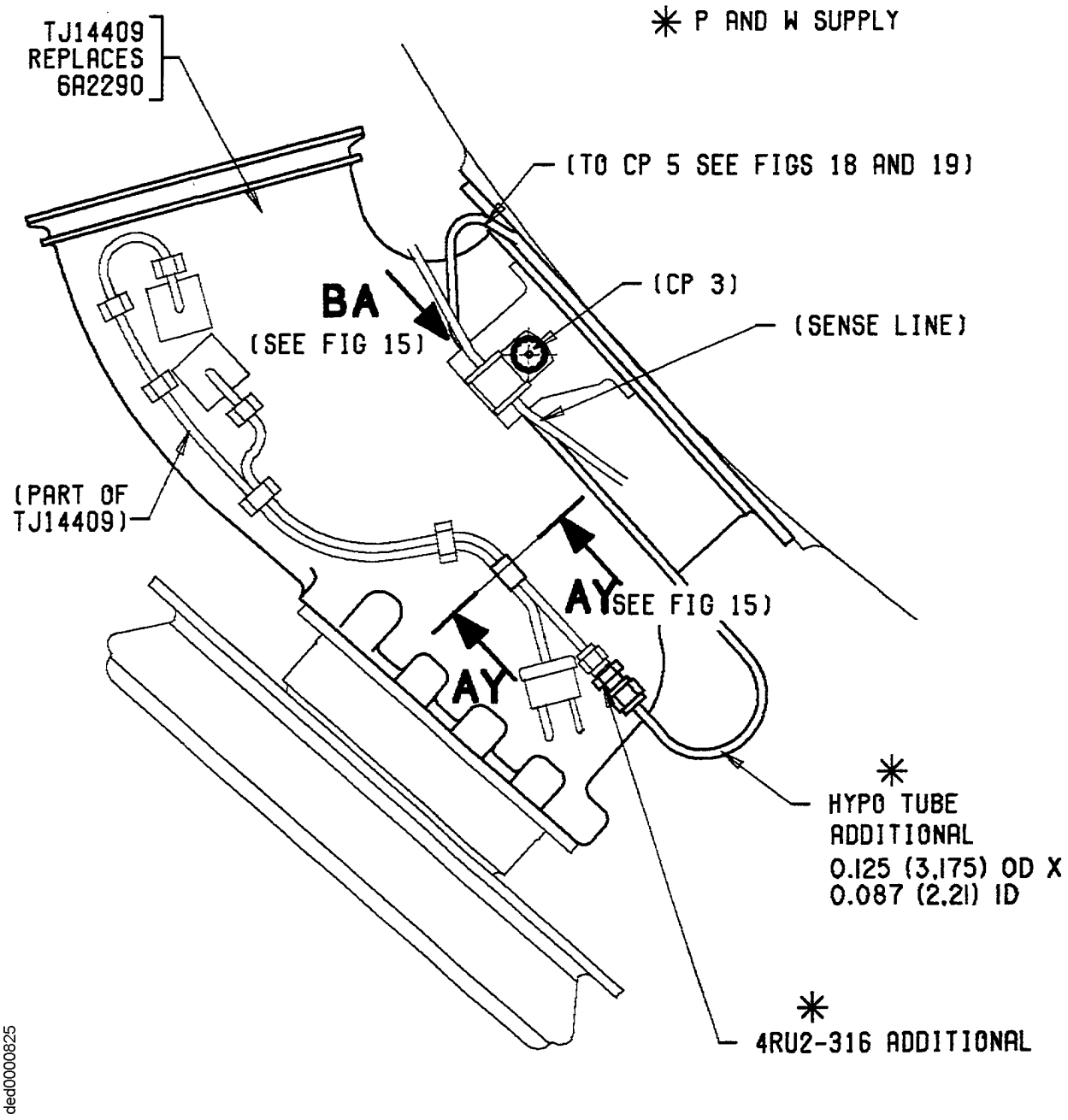
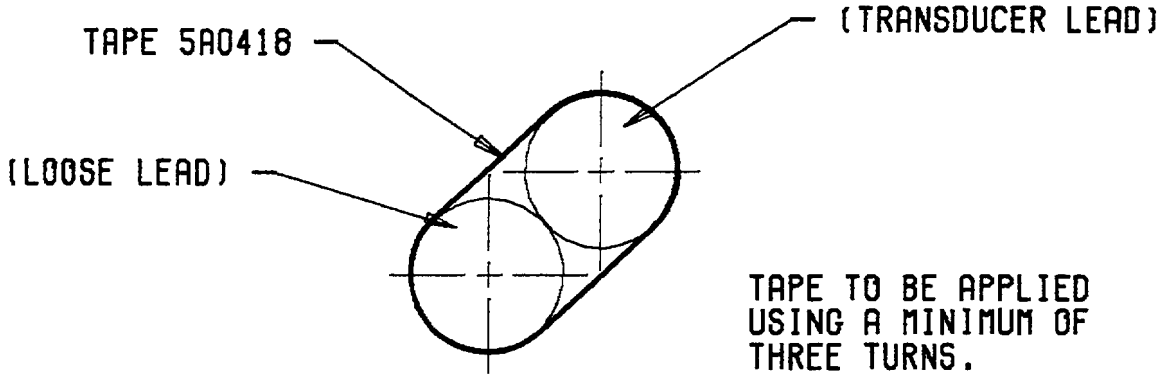
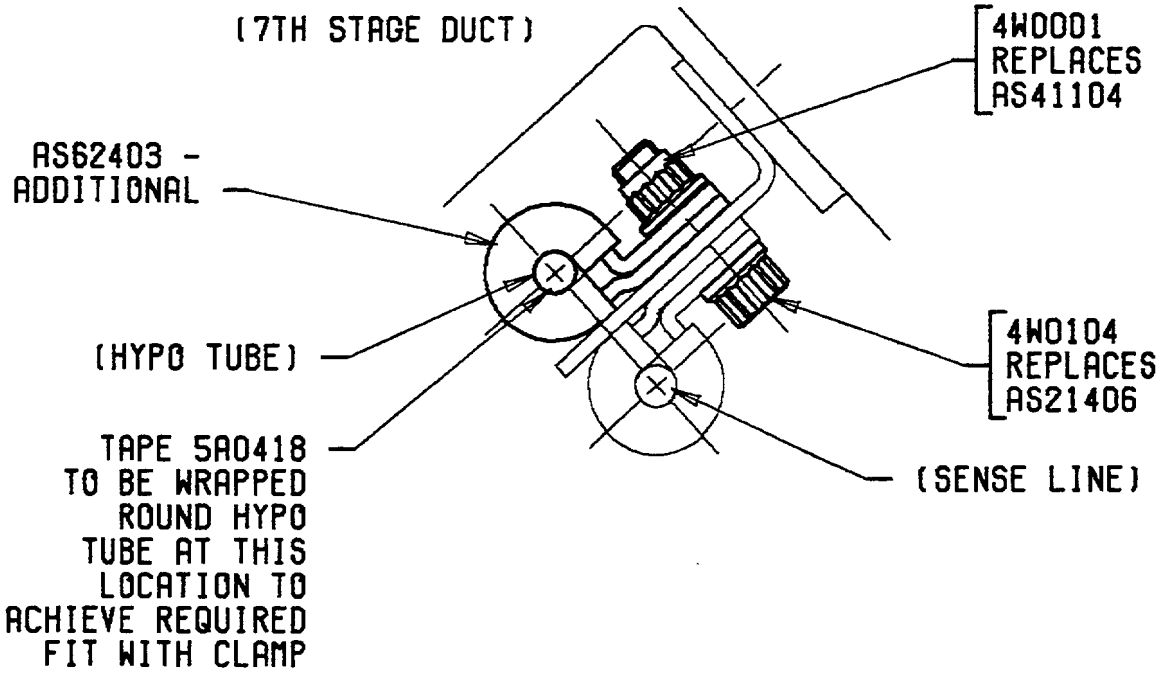
View on Arrow AX Before and After Alteration
Fig.13



Repeat View at AN (see Fig.5) Showing 7th Stage Duct Before and After Alteration
Fig.14



ENLARGED SECTION **AY** (SEE FIG 14)
SHOWING SECURING OF LOOSE LEAD



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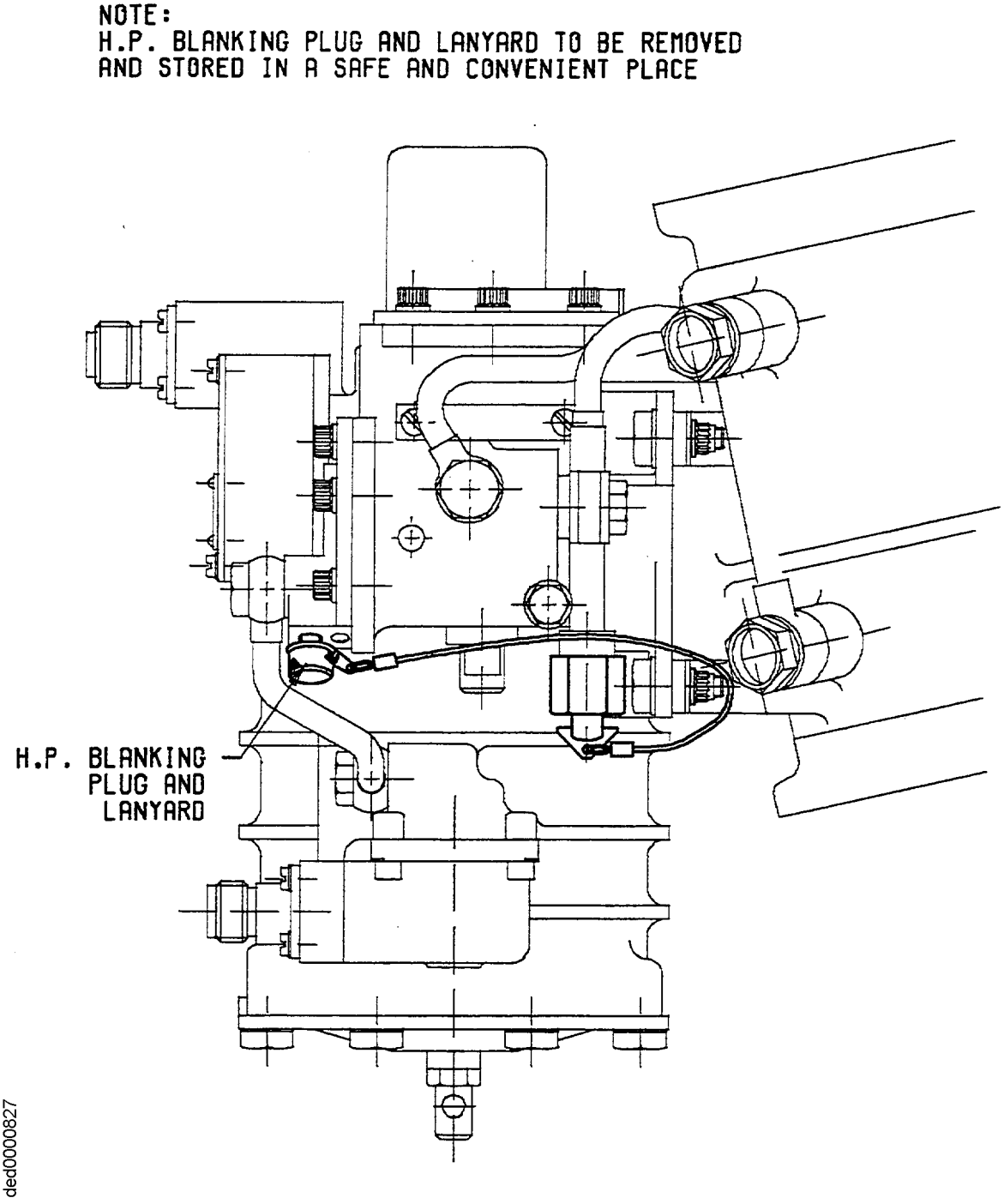
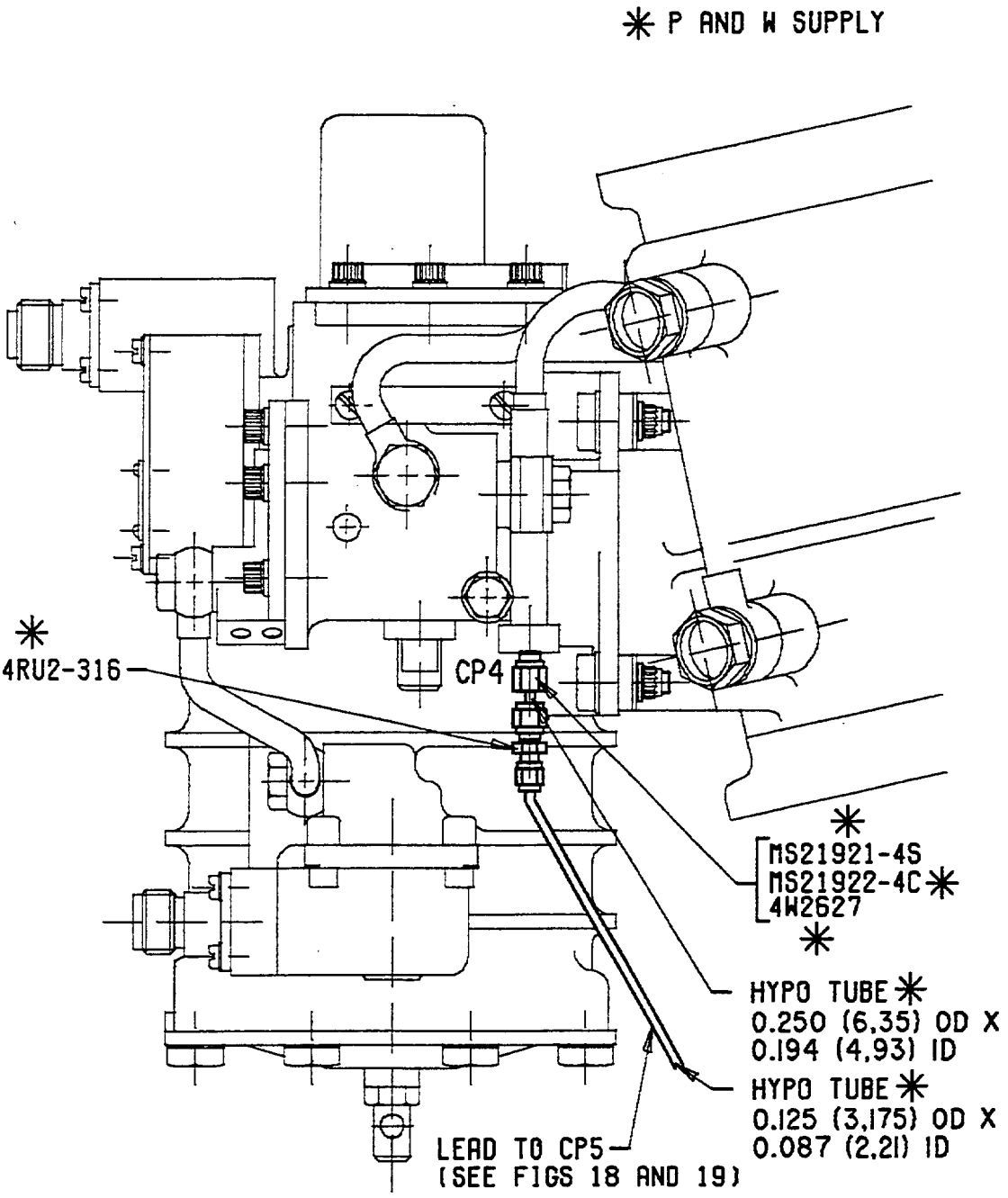
View on Arrow BA (see Fig.14) Showing Clipping Point 3 Before and After Alteration
Fig.15



View on Arrow BC (see Fig.5) Shown thus for Convenience Showing H.P. Valve Before Alteration
Fig.16



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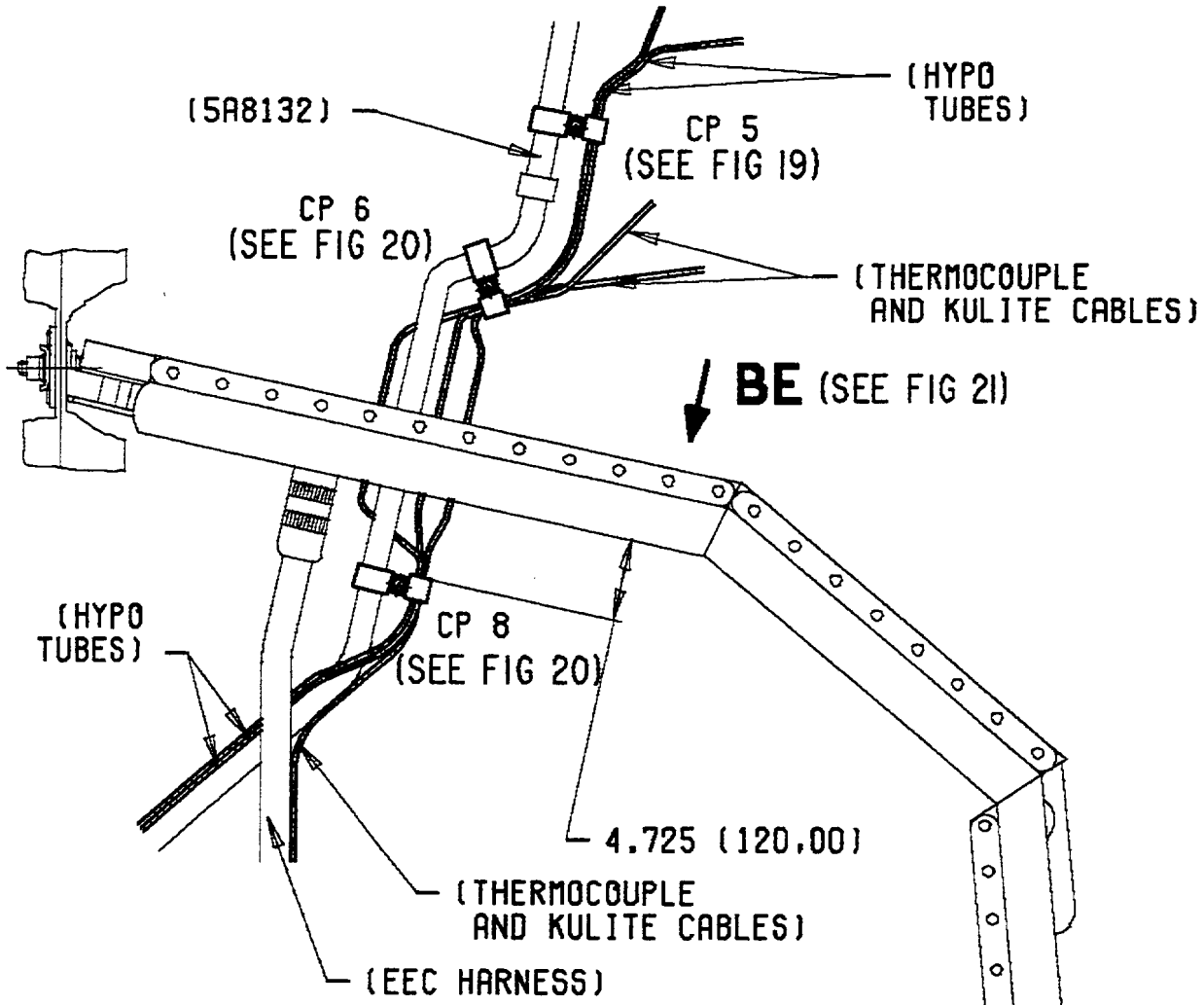
Repeat View on Arrow BC (see Fig.5) Shown thus for Convenience Showing H.P. Valve After Alteration
Fig.17



NOTE:
FROM BIFURCATION PANEL TO BLEED VALVES ALL INSTRUMENTATION CABLES TO BE SECURED IN LINE WITH FIG 34 WHERE POSSIBLE.

NOTE:
FROM CP5 TO CP3 (SEE FIG 14) AND CP4 (SEE FIG 17) TRANSDUCER TUBES TO BE SECURED IN LINE WITH FIG 34 WHERE POSSIBLE.

NOTE:
ALL DIMENSIONS ARE IN INCHES (MILLIMETRES)

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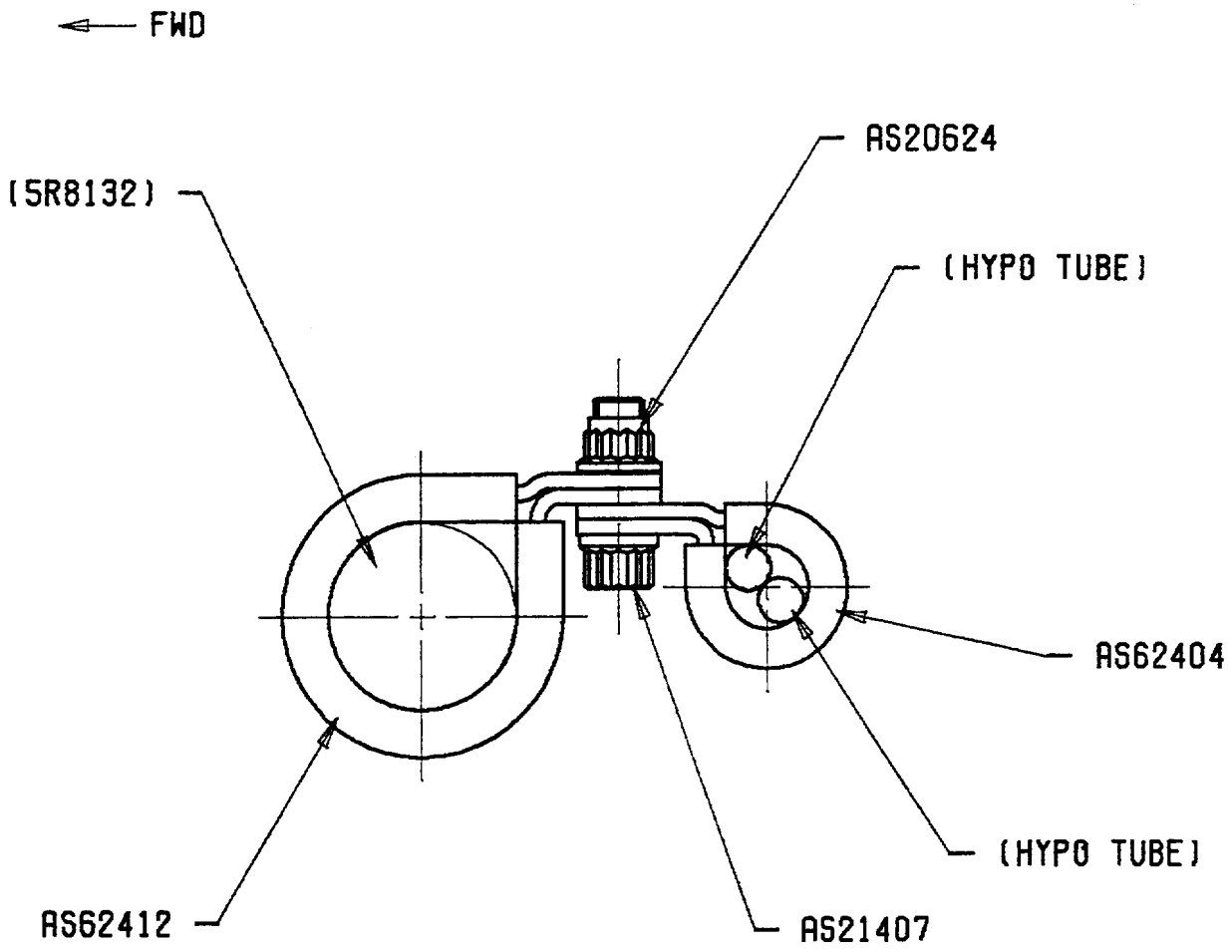
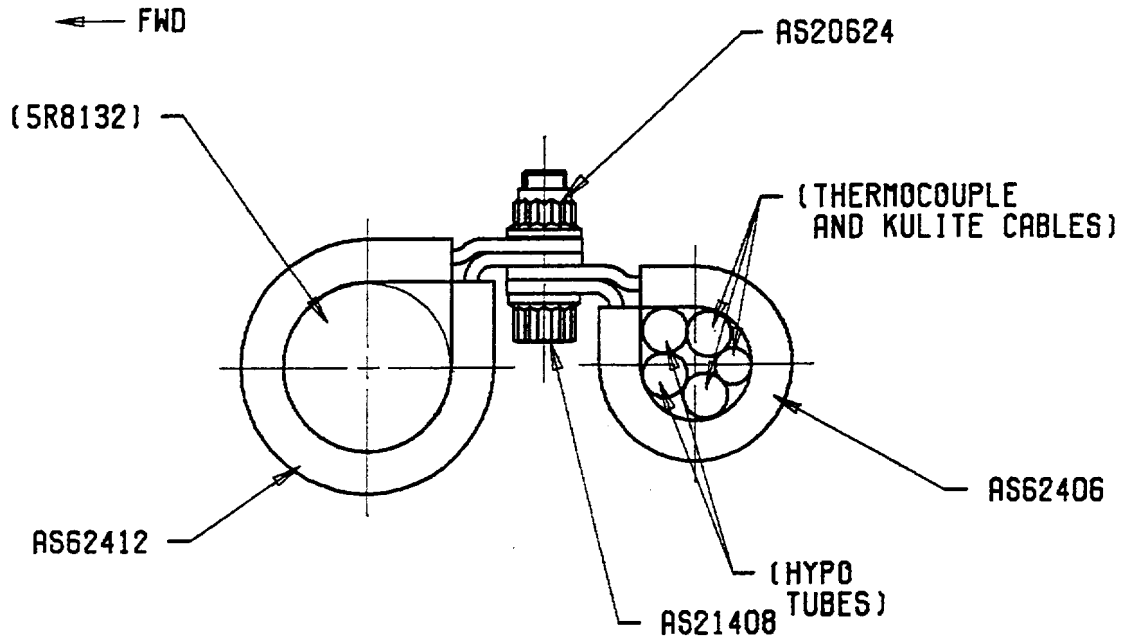
Part View at BD (see Fig.1) Showing Bifurcation Panel
Fig.18

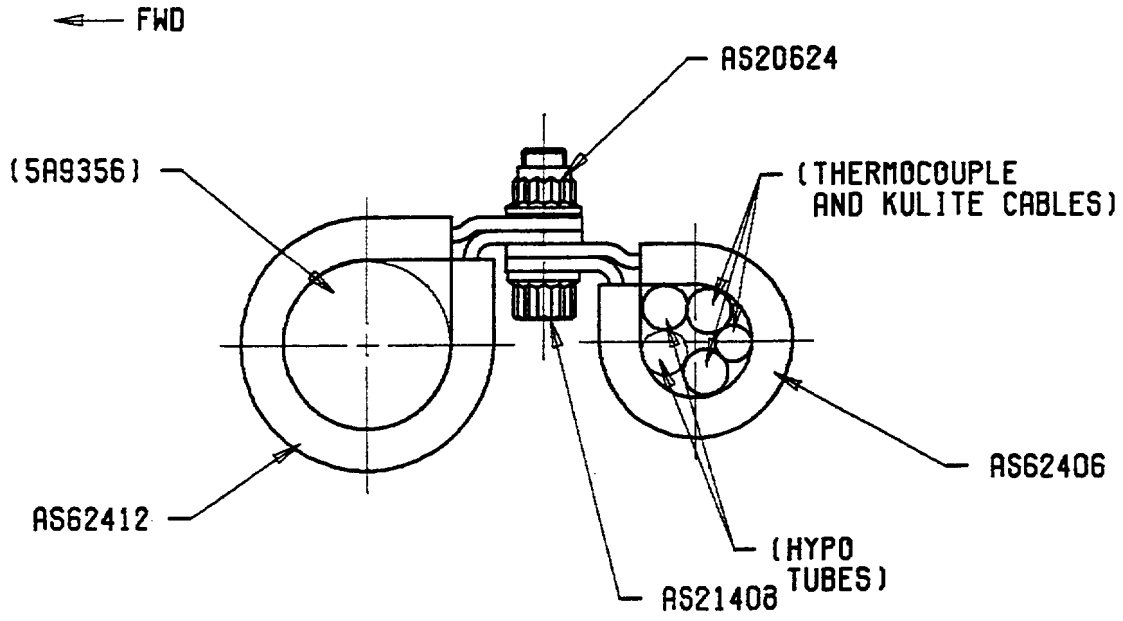


CLIPPING POINT 5 (SEE FIG 18)

Clipping Point 5 (see Fig.18)
Fig.19



CLIPPING POINTS 6 - ADDITIONAL
(SEE FIG 21)



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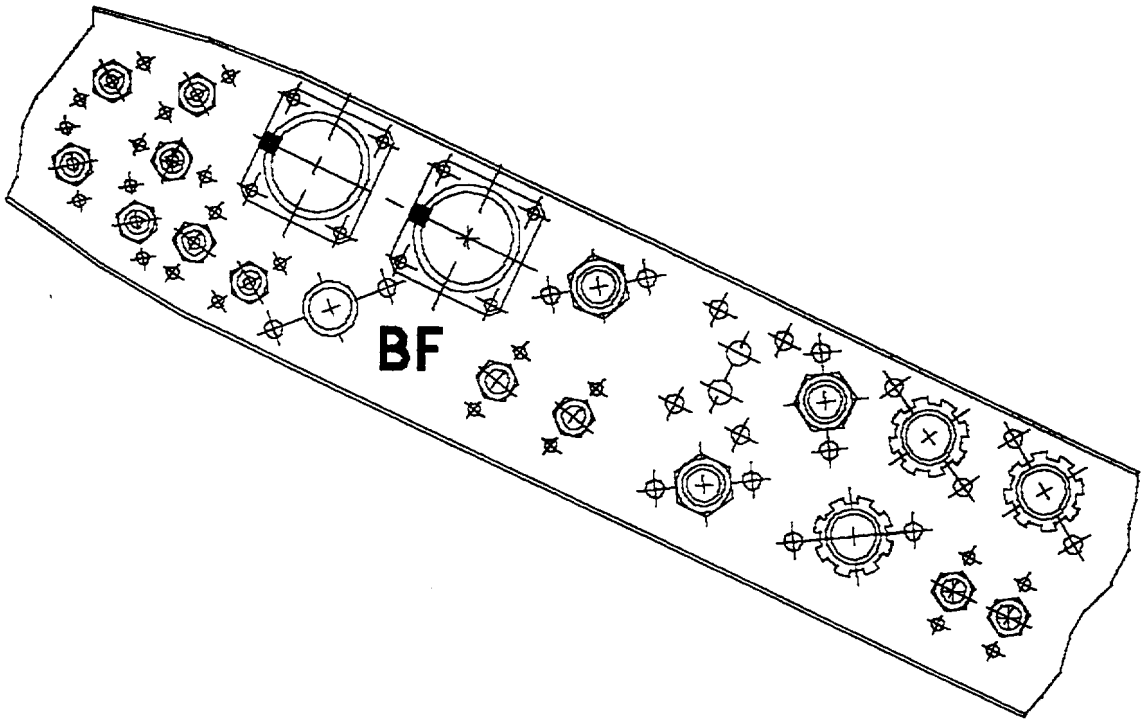
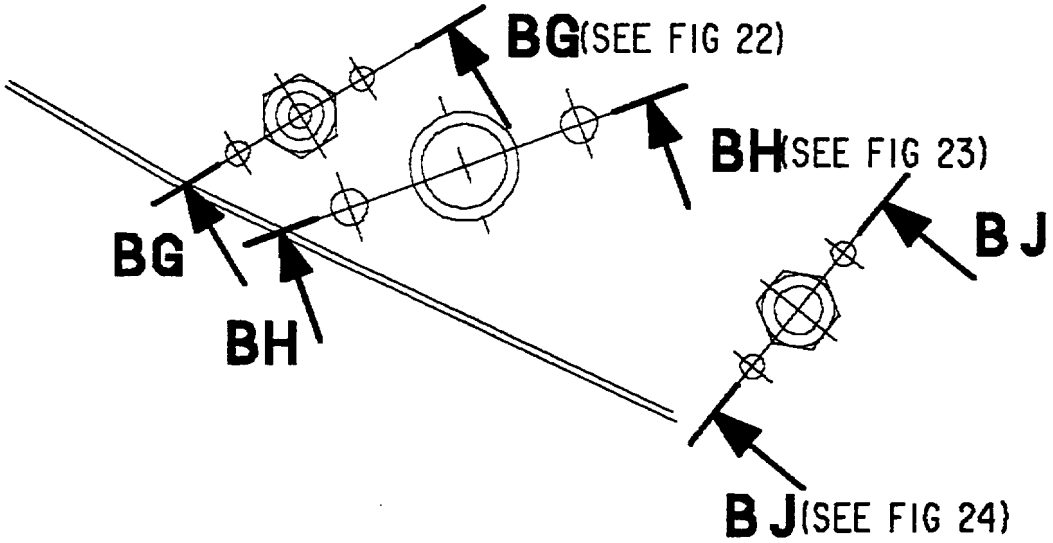
Clipping Points 8 - Additional (See Fig.21)
Fig.20



VIEW ON ARROW **BE** (SEE FIG 18)
SHOWING BIFURCATION PANEL



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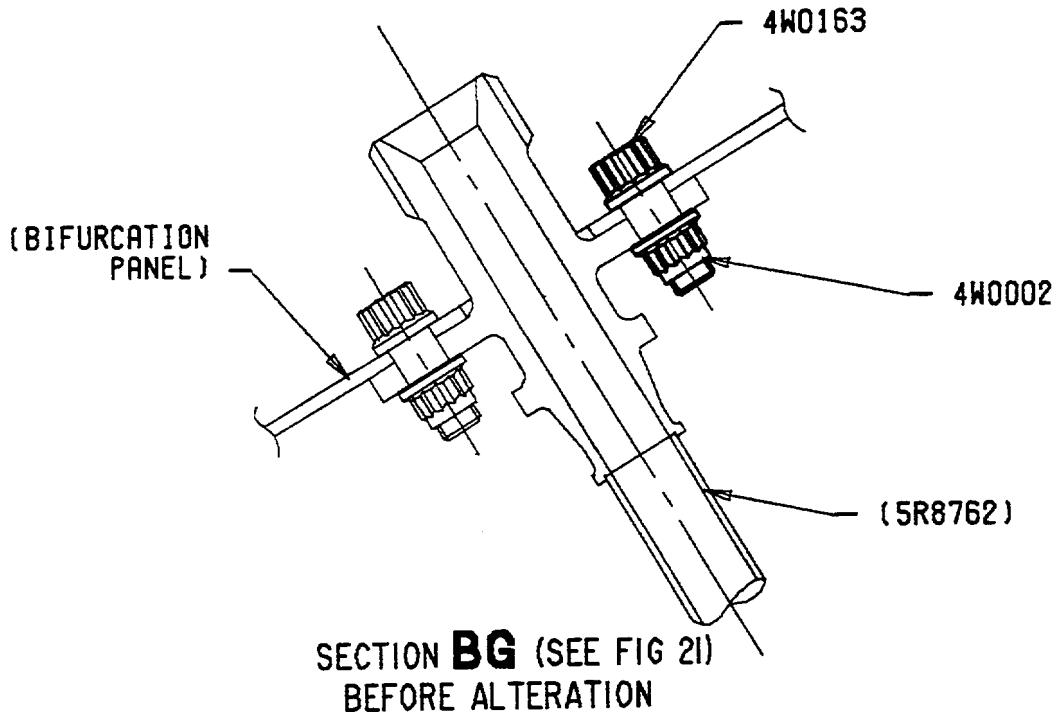
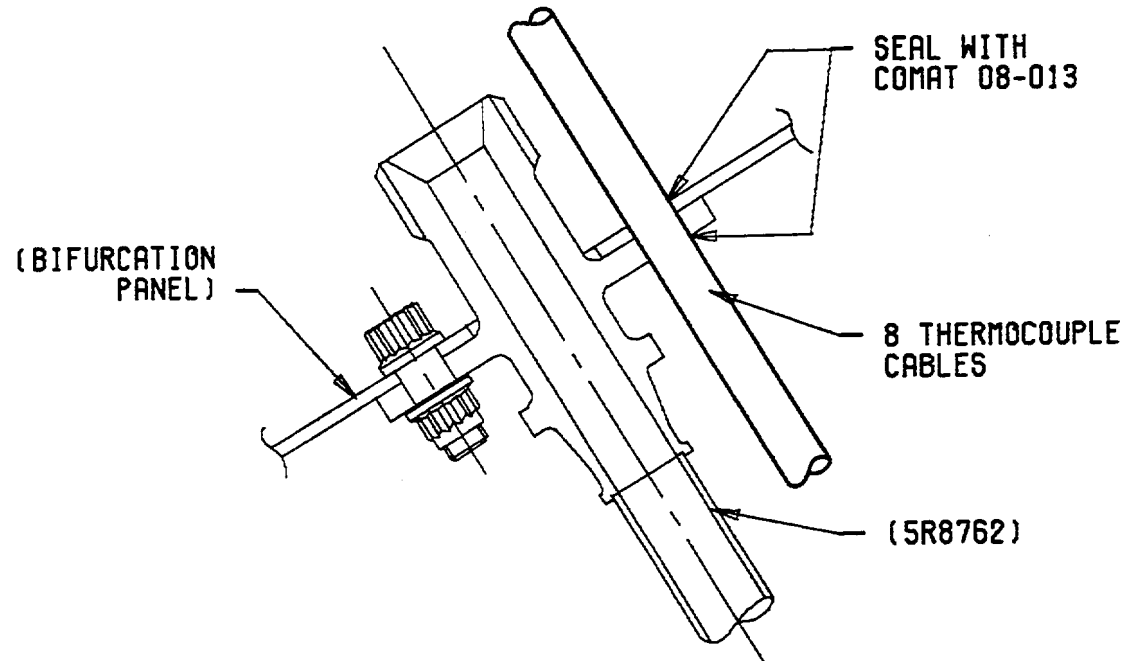
Enlarged View at BF
Fig.21



SECTION **BG** (SEE FIG 21)
BEFORE ALTERATION



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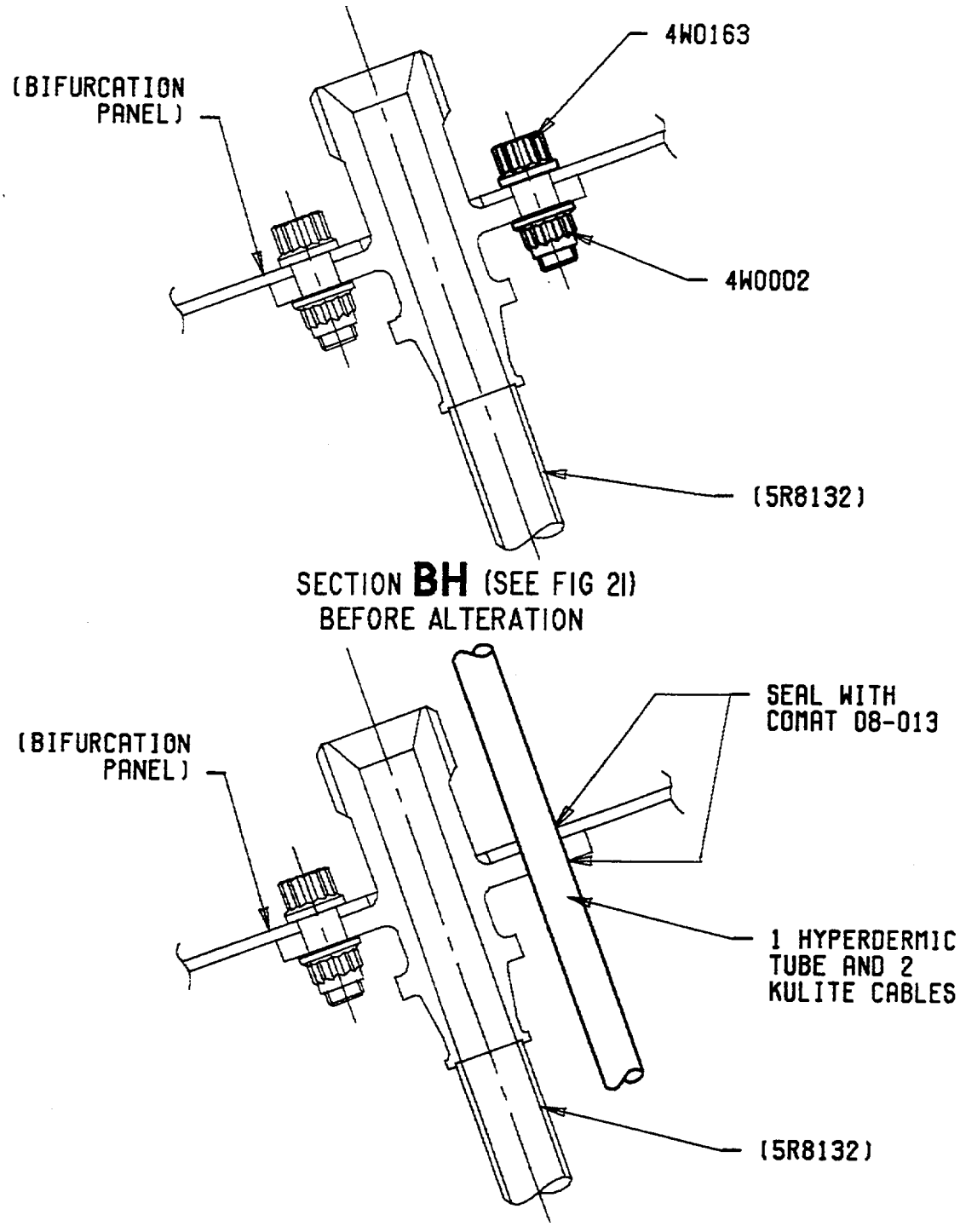
Section BG (see Fig.21) After Alteration
Fig.22



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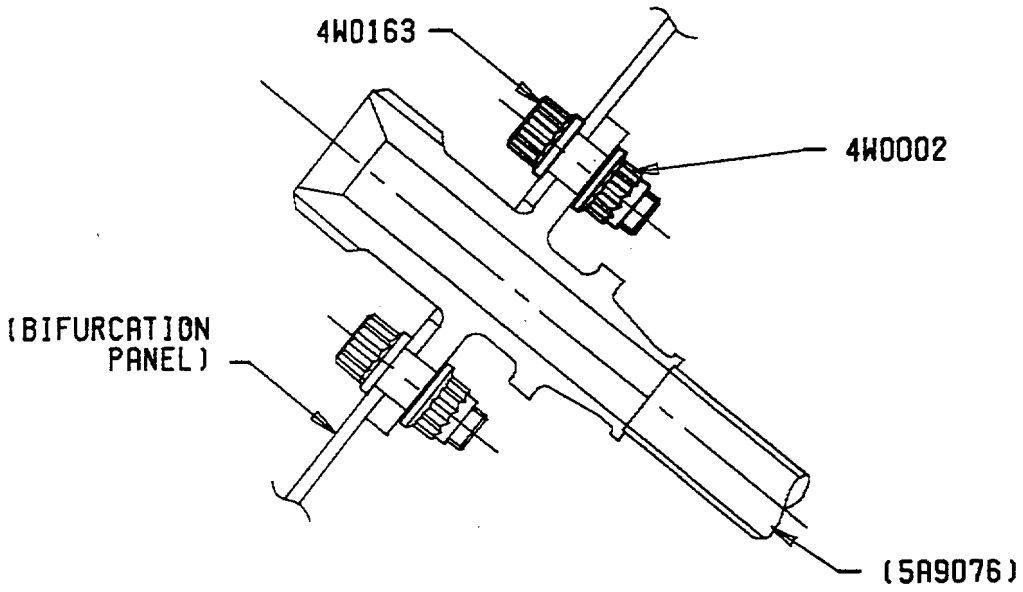
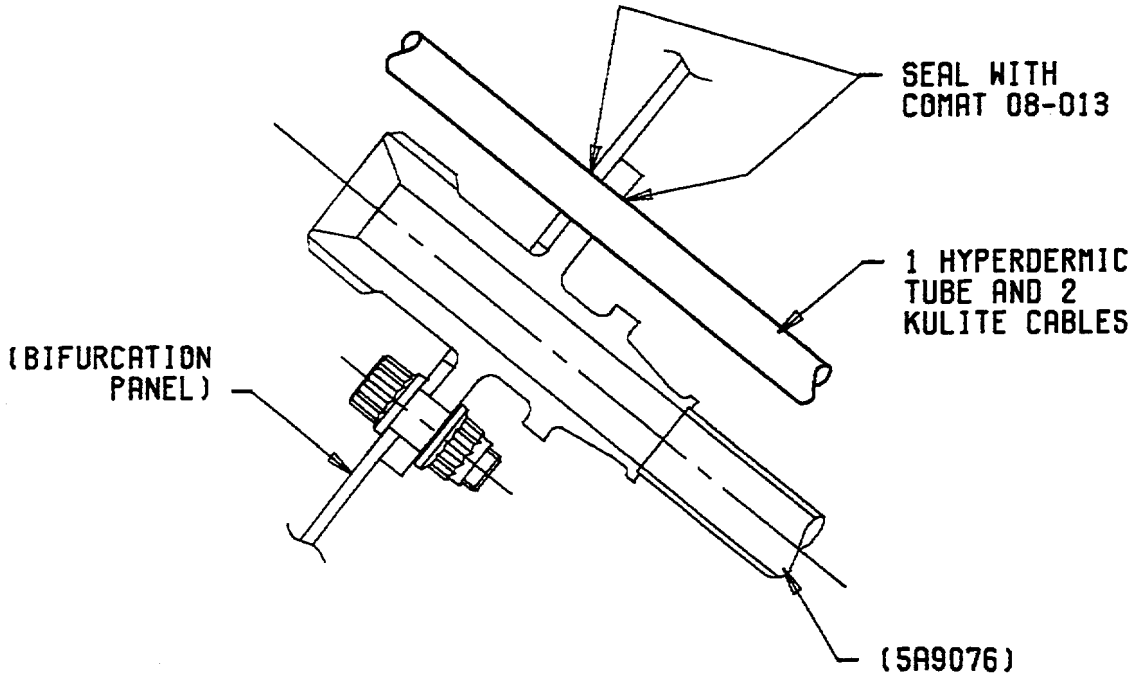
Section BH (see Fig.21) After Alteration
Fig.23



SECTION **B J** (SEE FIG 21)
BEFORE ALTERATION



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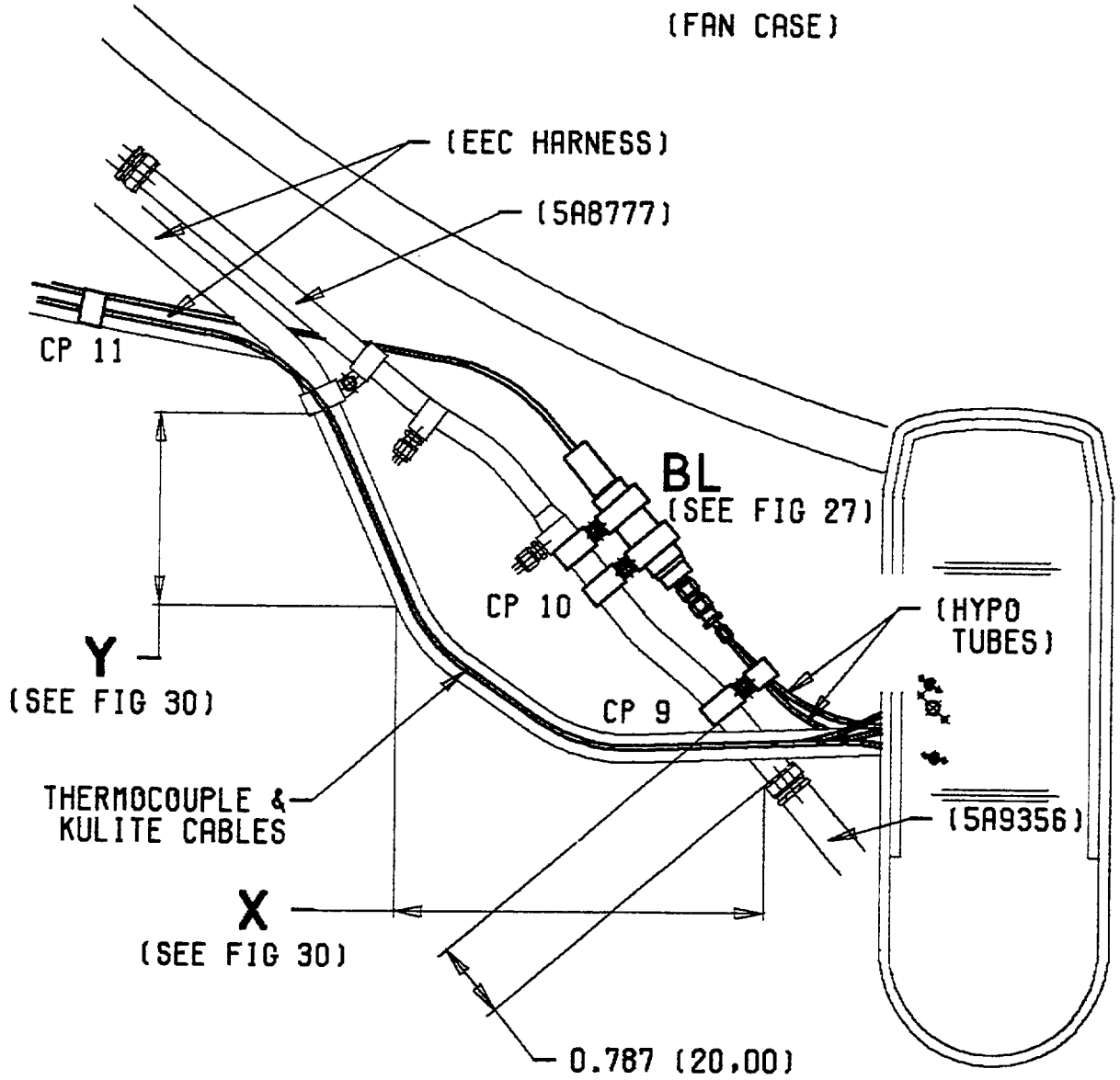
Section BJ (see Fig.21) After Alteration
Fig.24

NOTE:
CP 11 TO BE TIED AS PER FIGS 31, 32 AND 33
ALL DIMENSIONS ARE IN INCHES (MILLIMETRES)



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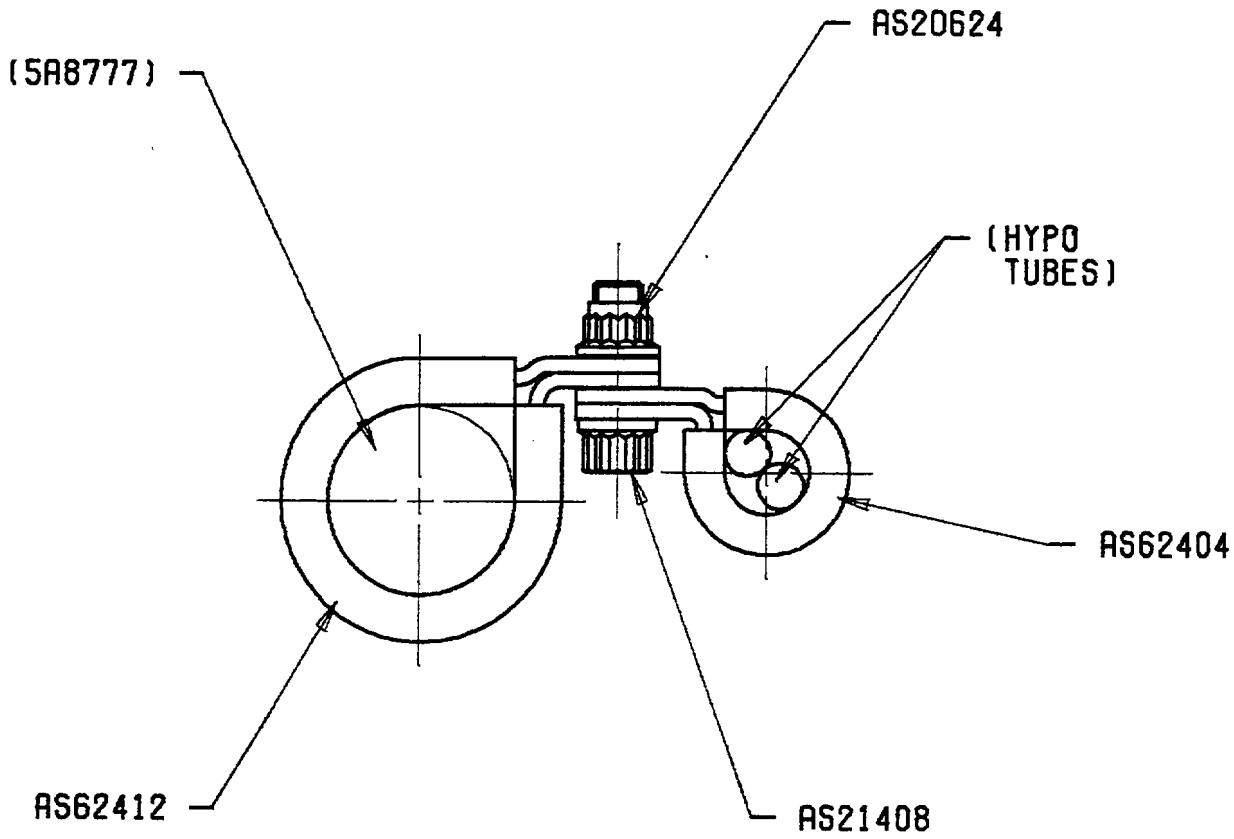
View on Arrow BK (see Fig.1)
Fig.25



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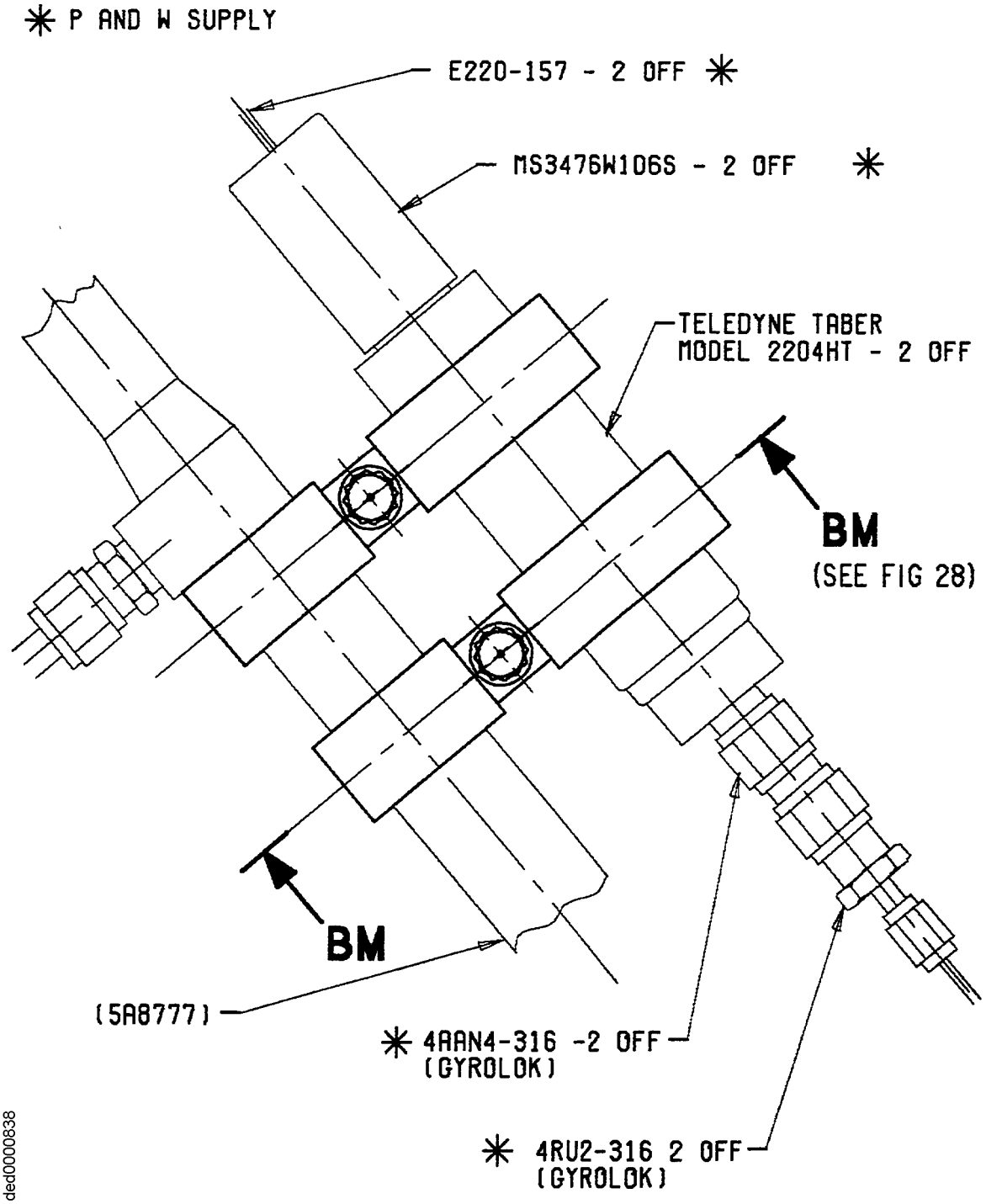
View Looking Forward Clipping Point 9 (see Fig.21) Added
Fig.26



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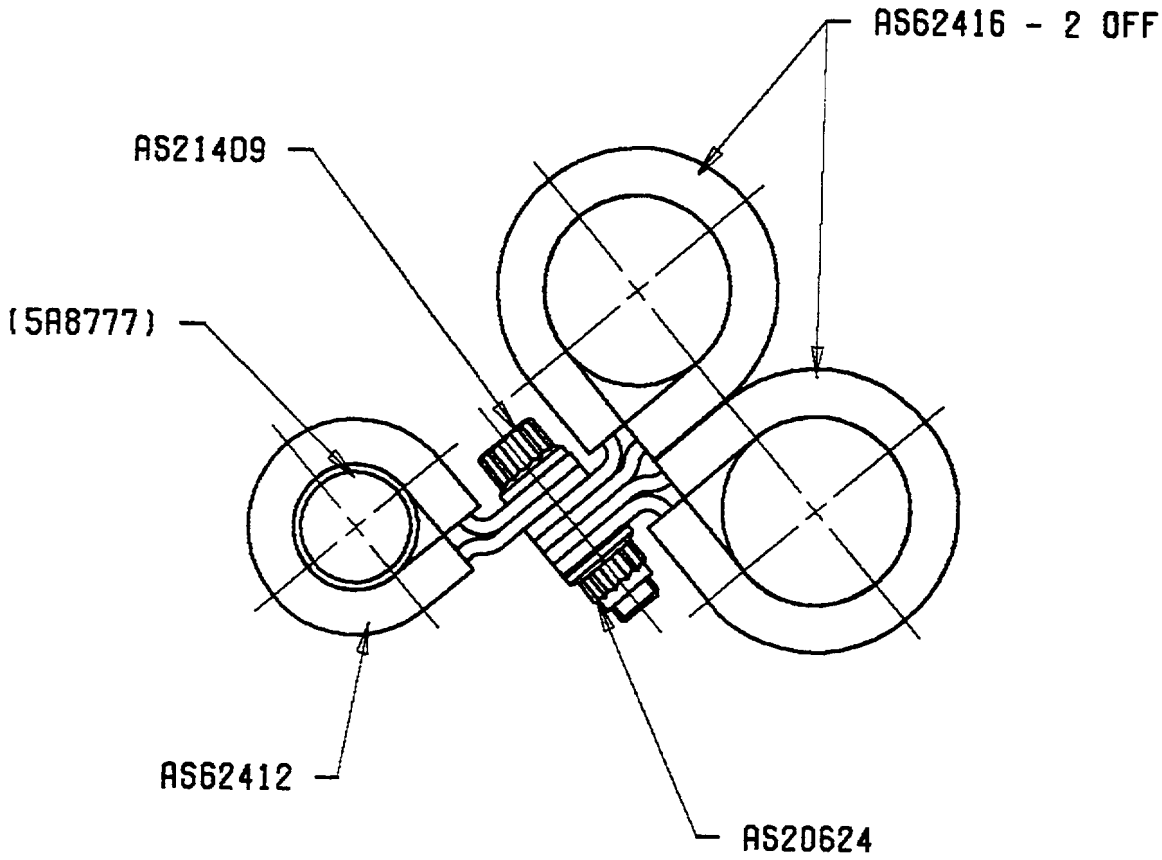
Enlarged View at BL (see Fig.25) Showing Transducers Added
Fig.27



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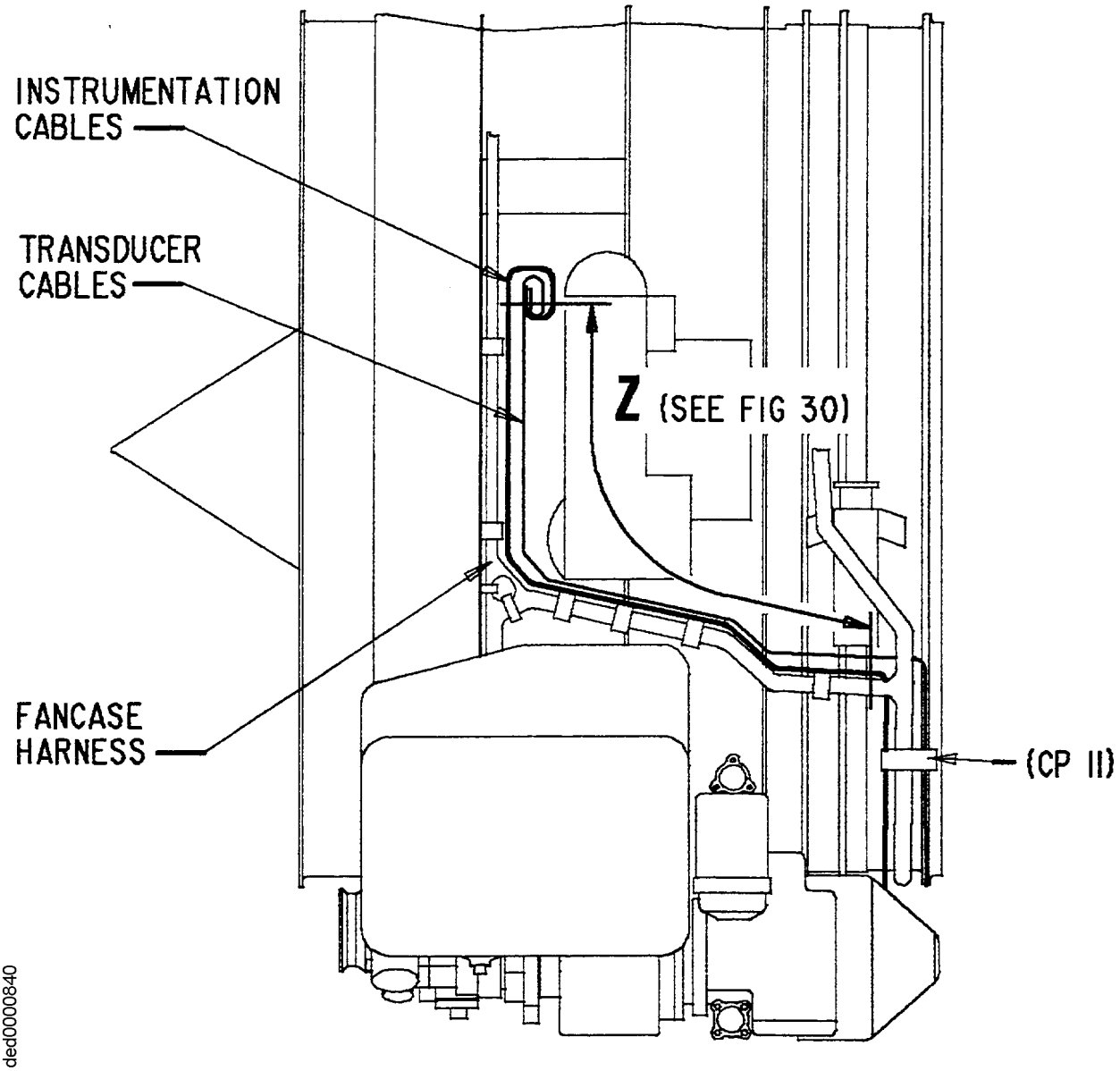
Section BM (see Fig.27) Typical 2 Positions
Fig.28

THE UNSECURED CABLE BUNDLES TO BE COILED , SECURED BY 3 TURNS OF 5A0418 TAPE AS REQUIRED AND FURTHER SECURED BY 3 TURNS OF 5A0418 TAPE AT A CONVENIENT POSITION NEAR TO WHERE SERVICE BULLETIN V2500 - ENG 72-0209 WILL BE FITTED



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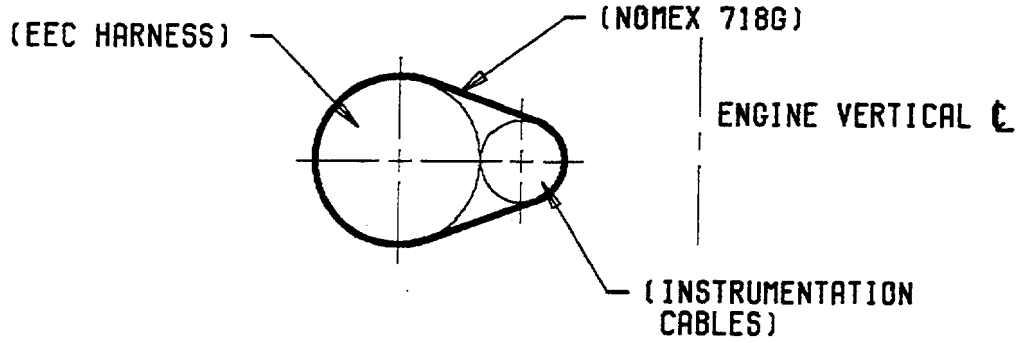
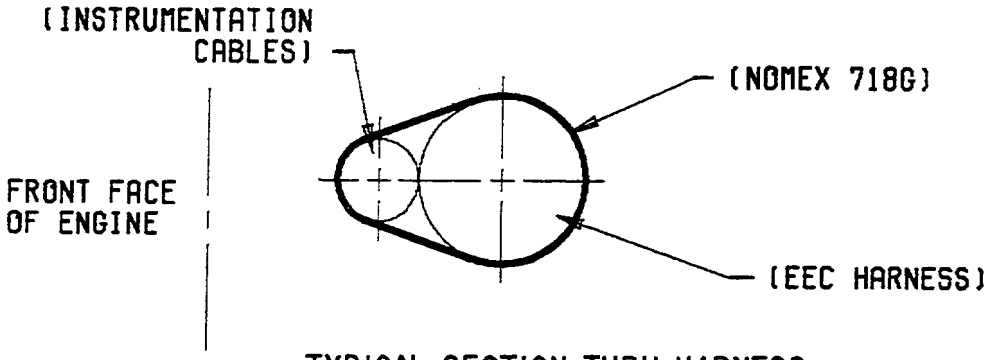
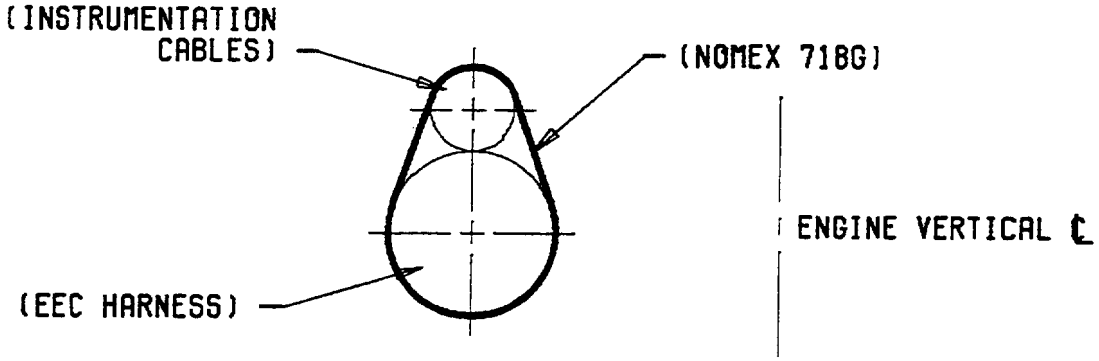
View on Fancase Showing Instrumentation Cable and Transducer Cable Runs
Fig.29



TYPICAL SECTION THRU HARNESS
OVER LENGTH **X** (SEE FIG 25)



TYPICAL SECTION THRU HARNESS
OVER LENGTH **Y** (SEE FIG 25)



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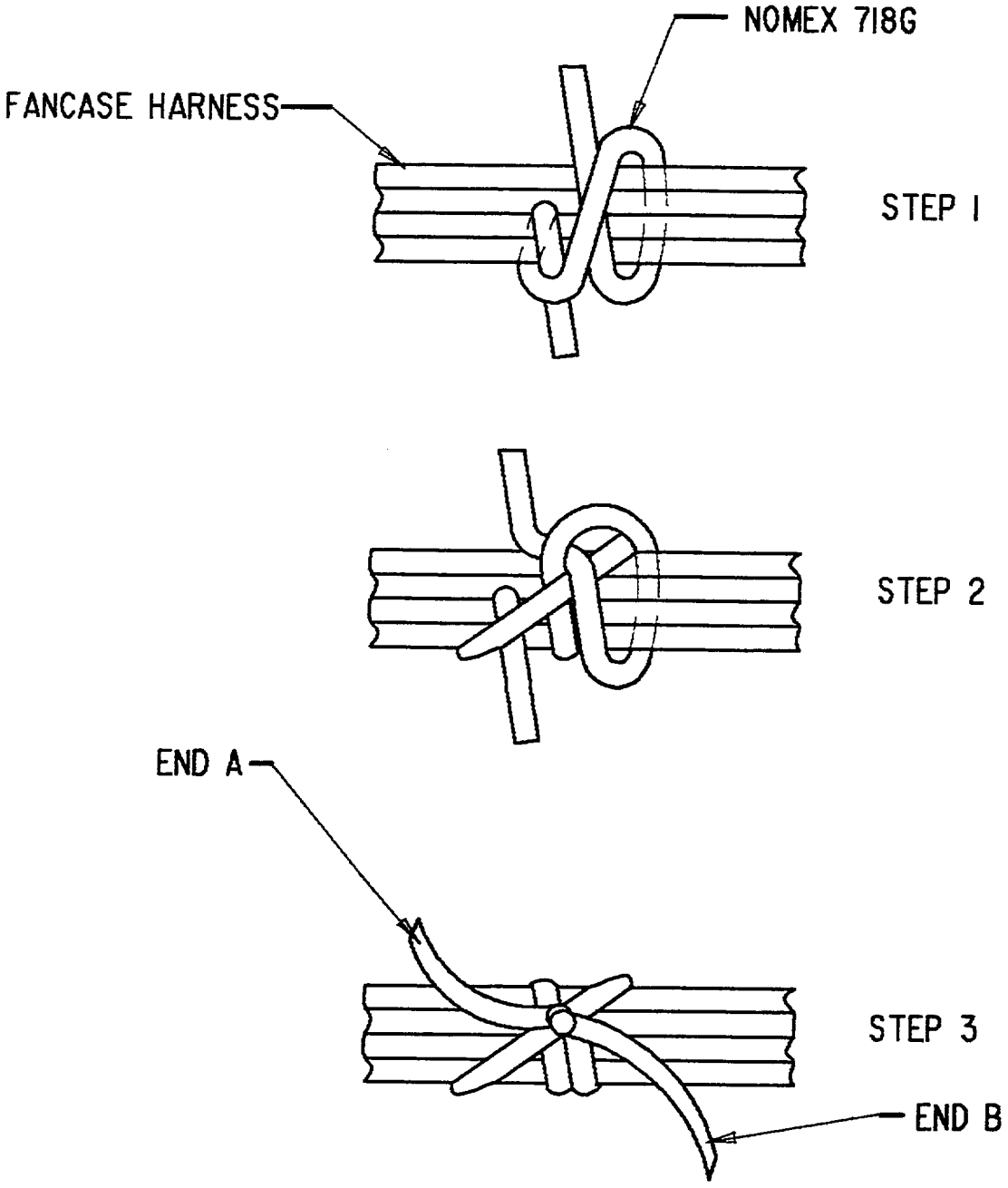
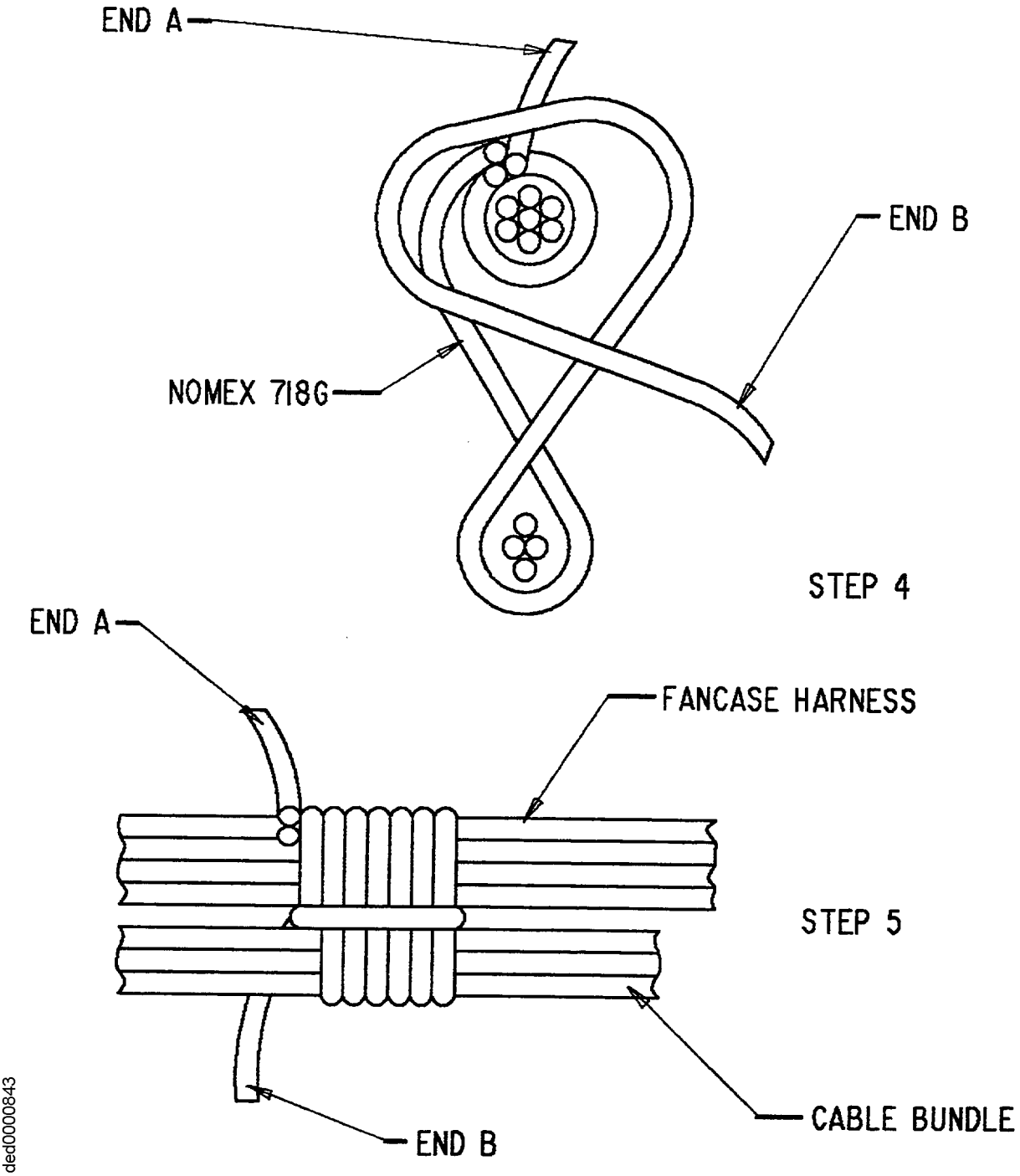
NOTE:
FOR TYING PROCEDURE SEE FIGS 31, 32 AND 33.

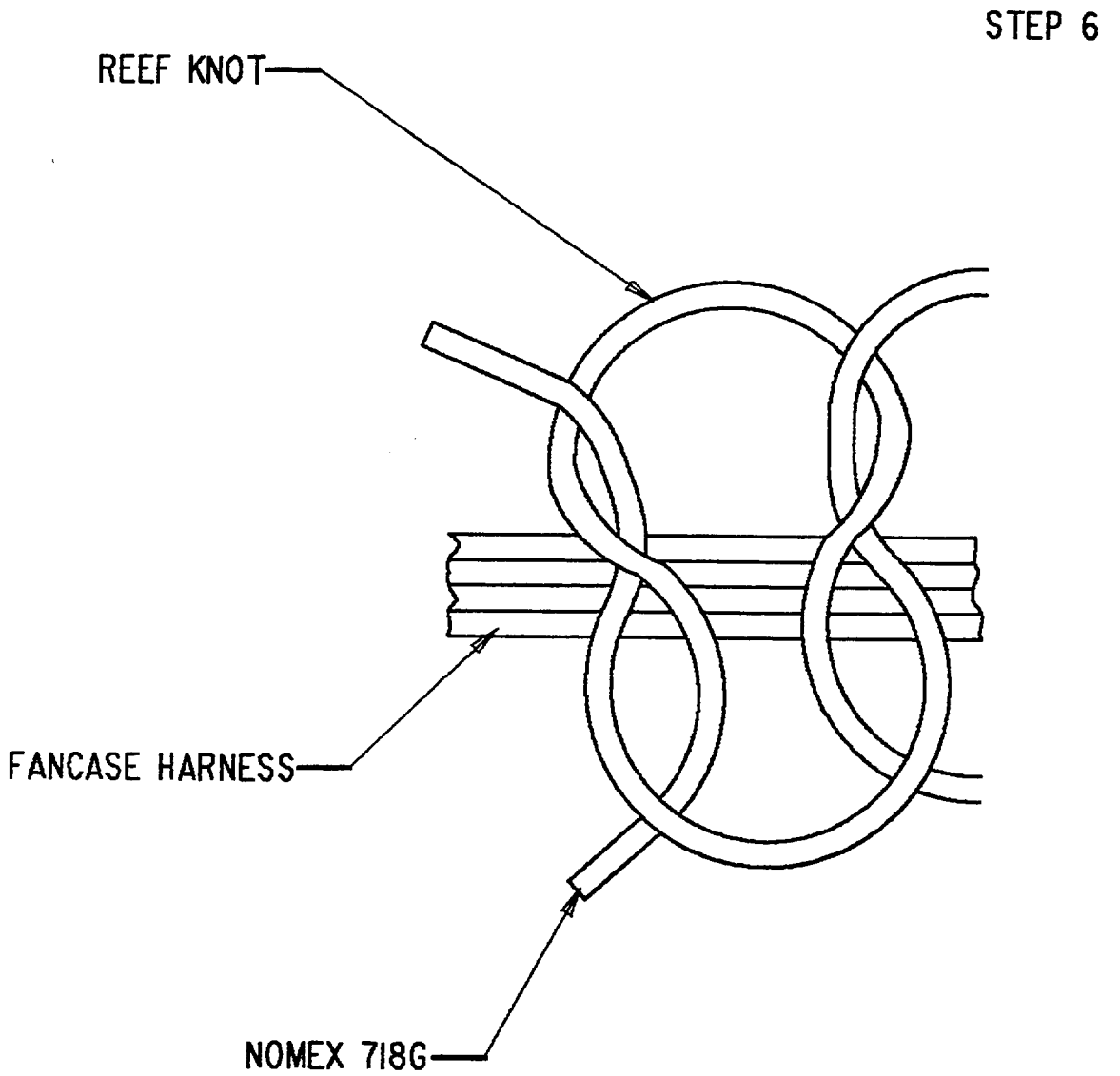
Typical Section Thru Harness Over Length Z (see Fig.29)
Fig.30



Typical View Showing Procedure for Fastening Lacing Tape at CP11, Over Lengths X and Y (see Fig.25) and Over Length Z (see Fig.29)
Fig.31



Typical View Showing Procedure for Fastening Lacing Tape at CP11, Over Lengths X and Y (see Fig.25) and Over Length Z (see Fig.29)
Fig.32



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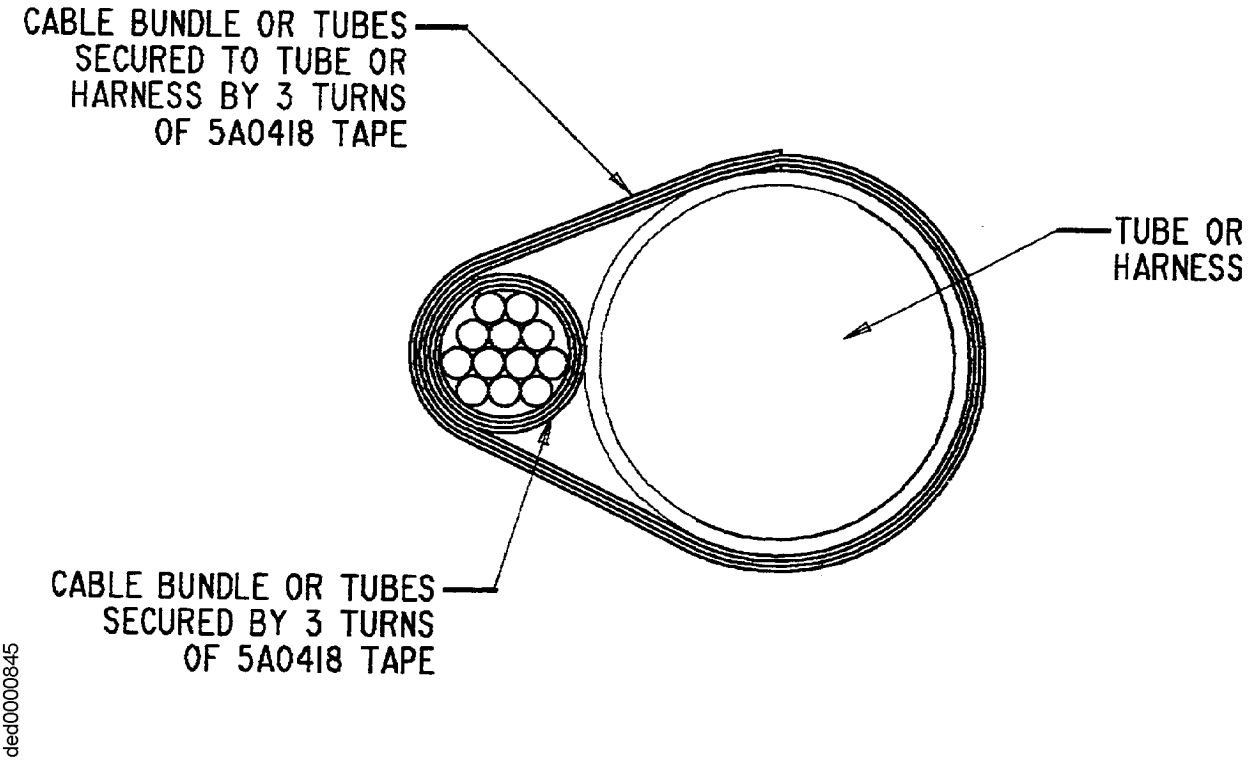
Typical View Showing Procedure for Fastening Lacing Tape at CP11, Over Lengths X and Y (see Fig.25) and Over Length Z (see Fig.29)
Fig.33

ALL INSTRUMENTATION CABLES AND TRANSDUCER TUBES TO BE SECURED AT INTERVALS OF NOT MORE THAN 8 INCHES
NUMBER OF CABLES WILL VARY BETWEEN 1 AND 12 DEPENDANT UPON SECURING POSITION
NUMBER OF TUBES WILL BE 1 OR 2 DEPENDANT ON SECURING POSITION.



Schematic Securing Position (Typical)
Fig.34

2. Material Information

Applicability: For each V2500 Engine subject to paragraph 1.A.(2) to incorporate this Bulletin.

A. Kits associated with this Bulletin:

None

B. Parts affected by this Bulletin:

New Part No. (ATA No.)	Qty	Keyword		Old Part No. (IPC No.)	Instructions Disposition
4W0104 (36-21-49)	1	Bolt		AS21406 (01-525)	(A)(B)
AS62403 (36-21-49)	1	Clip	CP5865	- (01-528)	(A)
4W0001 (36-21-49)	1	Nut, self-locking		AS41104 (01-532)	(A)(B)
- (72-38-25)	1	Plate, Blanking		UP10842 (01-280)	(B)
- (72-38-25)	2	Bolt		AS21009 (01-282)	(B)
- (72-38-25)	2	Nut, self-locking		4W0002 (01-284)	(B)
XTE16-190 (72-41-21)	4	Transducer		- (80-800)	(A)
TJ10814 (72-41-21)	4	Washer, Adjusting		- (80-805)	(A)
5A0418 (72-41-21)	A/R	Tape, Glass		- (99-525)	(A)
6A6424 (72-41-31)	1	Bracket		6A3689 (01-115)	(A)(B)
6A6425 (72-41-31)	1	Bracket, Support		6A3080 (01-118)	(A)(B)

TJ12437 (72-41-31)	3	Housing	6A1069 (01-120)	(A)(B)
TJ12438 (72-41-31)	1	Housing	6A3119 (01-140)	(A)(B)
- (73-22-49)	1	Nut, self-locking	4W0002 (06-102)	(B)(1D)
- (73-22-49)	1	Bolt	4W0163 (06-106)	(B)(1D)
TJ14409 (75-00-49)	1	Duct, H.P.7 - Bleed Valve Assembly of	6A2290 (01-250)	(A)(B)
4RU2-316 (75-00-49)	1	Union - Connection	- (83-100)	(A)
TUBE (75-00-49)	1	Hypo, Tube 0.125 in (3,175mm) O/D x 0.087in (2,21mm) ID	- (83-110)	(A)
4RU2-316 (75-00-19)	1	Union - Connection	- (83-120)	(A)
4AAN4-316 (75-00-49)	1	Adaptor	- (83-130)	(A)
2204HT (75-00-49)	1	Transducer	- (83-140)	(A)
AS62416 (75-00-49)	2	Clip	- (83-150)	(A)
MS21922-4C (75-00-49)	1	Sleeve	- (83-160)	(A)
MS21921-4S (75-00-49)	1	Nut	- (83-170)	(A)
TUBE (75-00-49)	1	Hypo, Tube 0.0250in (6,35mm) O/D x 0.194in (4,93mm) ID	- (83-180)	(A)
TUBE (75-00-49)	1	Hypo, Tube 0.125in (3,175mm) O/D x 0.087in (2,21mm) ID	- (83-190)	(A)
4RU2-316 (75-00-49)	2	Union - Connection	- (83-200)	(A)
4AAN4-316 (75-00-49)	1	Adaptor	- (83-210)	(A)

2204HT (75-00-49)	1	Transducer	- (83-220)	(A)
AS62416 (75-00-49)	2	Clip	- (83-230)	(A)
AS21409 (75-00-49)	2	Bolt	- (83-240)	(A)
AS20624 (75-00-49)	2	Nut, self-locking	- (83-250)	(A)
AS62412 (75-00-49)	2	Clip	- (83-260)	(A)
4W2627 (75-00-49)	A/R	Wire, locking	- (83-270)	(A)
AS62412 (75-00-49)	1	Clip	- (83-320)	(A)
AS21407 (75-00-49)	1	Bolt	- (83-330)	(A)
AS20624 (75-00-49)	1	Nut, self-locking	- (83-340)	(A)
AS62404 75-00-49)	1	Clip	- (83-350)	(A)
AS62412 (75-00-49)	1	Clip	- (83-360)	(A)
AS21408 (75-00-49)	1	Bolt	- (83-370)	(A)
AS20624 (75-00-49)	1	Nut, self-locking	- (83-380)	(A)
AS62406 (75-00-49)	1	Clip	- (83-390)	(A)
AS62412 (75-00-49)	1	Clip	- (83-400)	(A)
AS21408 (75-00-49)	1	Bolt	- (83-410)	(A)
AS20624 (75-00-49)	1	Nut, self-locking	- (83-420)	(A)

AS62406 (75-00-49)	1	Clip	- (83-430)	(A)
AS62412 (75-00-49)	1	Clip	- (83-440)	(A)
AS1408 (75-00-49)	1	Bolt	- (83-450)	(A)
AS20624 (75-00-49)	1	Nut, self-locking	- (83-460)	(A)
AS62404 (75-00-49)	1	Clip	- (83-470)	(A)
718G (75-00-49)	A/R	Tape, lacing	- (83-480)	(A)
MS3476W106S (75-00-49)	2	Connector	- (83-490)	(A)
E220-157 (75-00-49	A/R	Cable	- (83-500)	(A)
5A0418 75-00-49	A/R	Table, Glass	- (99-525)	(A)
- (75-23-48)	1	Nut, self-locking	4W0002 (02-510)	(1D)(B)
- (75-23-48)	1	Bolt	4W0163 (02-514)	(1D)(B)
- (75-32-52)	11	Bolt	4W1486 (01-062)	(2D)(B)
- (75-32-52)	11	Nut, Self-locking	4W0002 (01-266)	(2D)(B)
- (75-32-52)	11	Bolt	AS21012 (01-268)	(2D)(B)
- (75-32-52)	11	Nut, Self-locking	4W0002 (01-466)	(2D)(B)
- (75-32-52)	11	Bolt	AS21010 (01-468)	(2D)(B)
AS62201 (75-32-52)	3	Clip	- (80-100)	(A)

U324276 (75-32-52)	6	Cable, Thermocouple	- (80-105)	(A)
156407 (75-32-52)	A/R	Tape, Adhesive Foil	- (80-110)	(A)
- (75-32-54)	11	Nut, Self-locking	4W0002 (01-366)	(2D)
- (75-32-54)	11	Bolt	AS21012 (01-368)	(2D)
AS62201 (75-32-54)	1	Clamp	- (80-100)	(A)
U324276 (75-32-54)	2	Cable, Thermocouple	- (80-105)	(A)
156407 (75-32-54)	A/R	Tape, Adhesive Foil	- (80-110)	(A)
- (79-21-49)	1	Nut, self-locking	4W0002 (04-510)	(1D)(B)
- (79-21-49)	1	Bolt	4W0163 (04-514)	(1D)(B)

C. Instructions/Dispostion Code Statement:

(A) New parts are currently available

(B) Old parts to be retained

(1D) Quantity of part no. Decreased from 2 to 1

(2D) Quantity of part no. Decreased from 12 to 11

D. Consumable Materials

CoMat 01-001 Trichlorethane inhib and stabil
CoMat 08-013 Cold curing silicone compound
CoMat 01-031 Acetone (CH3) 2CO
CoMat 01-076 Methylethylketone CH3COC2H5
CoMat 01-124 Isopropyl Alcohol
CoMat 01-337 Solvent Cleaner