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V2500-A1/A5 PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Revision 4 of Service Bulletin V2500-ENG-73-0147.

Document History

Service Bulletin Revision Status

Initial Issue	Jul.14/00
Revision 1	Apr.20/01
Revision 2	Jul. 3/01
Revision 3	Jul.25/01

Service Bulletin Revision 4

Remove	Incorporate	Reason for change
All pages of the Service Bulletin	Pages 1 to 158 of the Service Bulletin	To update the complete layout to the latest style format. To revise the Material Information. To revise the Accomplishment Instructions.

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Transmittal - Page 1 of 1

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED
 If any have not been received please advise IAE International Aero Engines AG

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ENGINE – FUEL AND CONTROL – REPLACE CERTAIN FUEL NOZZLE SUPPLY MANIFOLD ASSEMBLIES
AND THE RELATED ATTACHING HARDWARE

1. Planning Information

A. Effectivity

(1) Airbus A319

R V2522-A5, V2524-A5, V2527M-A5 Engines V10001 thru V10888, V10890, V10892, V10894, V10896 and V10898.

(2) Airbus A320

(a) V2500-A1 Engines V0001 thru V0361

R (b) V2527-A5, V2527E-A5 Engines V10001 thru V10888, V10890, V10892, V10894, V10896 and V10898.

(3) Airbus A321

R V2530-A5, V2533-A5 Engines V10001 thru V10888, V10890, V10892, V10894, V10896 and V10898.

B. Concurrent Requirements

This Service Bulletin must be done at the same time as Reference 2, Service Bulletin No. V2500-ENG-72-0394.

C. Reason

(1) Condition:

The current Fuel System features five Manifolds made from brazed fittings and five Manifolds that are fabricated from welded fittings.

(2) Background:

Five Fuel Manifolds at other locations have previously been redesigned to replace there brazed fittings with welded fittings. This was done to address reports of cracked Fuel Manifold joints in service.

(3) Objective:

Although the five Manifolds do not experience failure of their braze joints, they will be replaced by designs incorporating the same welded fittings as the previous five manifolds, for enhanced strength and durability.

(4) Substantiation:

Back to back analysis shows significant improvements in both vibratory and steady stress over the present bill-of-material designs. Test Manifolds were run on engine X804-17, and data from this test confirms the analysis. Following the run of X804-17, small adjustments of the routing of the Manifolds were made to improve their fit. Analysis of the stress and vibratory characteristics of the new routing shows a negligible difference from the tested configurations and significant improvement over the present bill-of-material designs.

(5) Effects of Bulletin on Workshop Procedures:

Removal/Installation

Not affected

Disassembly/Assembly

Not affected

Cleaning

Not affected

Inspection/Check

Not affected

Repair

Not affected

Testing

Not affected

(6) Supplemental Information

None

D. Description

Replace the Fuel Manifold Assemblies and related hardware at the applicable locations.

E. Compliance

Category 7

Accomplish when supply of superseded parts has been depleted.

F. Approval Data

The part number changes and/or part modifications specified in the Accomplishment Instructions and Material Information sections of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) given.

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

G. Manpower

Estimated man-hours to incorporate the full intent of this Bulletin:

Venue	Estimated Manhours
In Service	Not Applicable
At Overhaul	Not Applicable

H. Weight and Balance

Weight Change	None
Moment	No Effect
Datum	Engine Front Mount Centerline (Power Plant Station (PPS) 100)

I. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

J. Software Accomplishment Summary

Not Applicable.

K. References

- (1) IAE V2500 Service Bulletin V2500-ENG-73-0088 (Engine - Fuel And Control - Replace The Fuel Nozzle Supply Manifold Assemblies (For The V2500-A1, V2522-A5, V2527-A5, V2530-A5 and V2533-A5 Only) And Remove The Gasket Option And Change the Installation Procedure (For All Models).
- (2) IAE V2500 Service Bulletin V2500-ENG-72-0394 (Engine - Provide New Loop Clamp Bracket For Use With Non At Risk Fuel Manifolds).
- (3) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, and S-V2500-71B), Chapter/Section 73-11-41.
- (4) V2500 Engine Manual (E-V2500-1IA), Chapter/Section 72-00-40.

(5) This Service Bulletin is subjected to Airbus Aircraft Modification No. 27771.

R (6) Internal Reference No. - 96VA012D, 96VA012D-04, 96VA012D-05, PSAF 11VC204.

R (7) ATA Locator - 73-00-00.

L. Other Publications Affected

R (1) V2500 Engine Illustrated Parts Catalogs (S-V2500-1IA, S-V2500-2IA, S-V2500-2IB, S-V2500-5IA, S-V2500-5IB, S-V2500-6IA, S-V2500-6IB, S-V2500-7IA, and S-V2500-7IB), Chapter/Section 72-40-00 and 73-11-41.

(2) V2500 Engine Manuals (E-V2500-1IA), Chapter/Section 72-00-40 Removal/Installation.

M. Interchangeability of Parts

Old and new parts are directly interchangeable.

This Service Bulletin must be done at the same time as Reference 2, Service Bulletin No. V2500-ENG-72-0394.

N. Information in the Appendix

Alternate Accomplishment Instructions (No)

Progression Charts (Yes)

Added Data (No)

Revision to Table of Limits (No)

Inspection Procedures (No)

2. Material Information

A. Material – Price and Availability

1. Part availability information is provided in material data Instructions-Disposition.
2. Part prices were not available at the time of Service Bulletin publication. Contact IAE's Spare Parts Sales Department for firm quotations.
3. There is no kit provided to do this Service Bulletin.

B. Industry Support Program

Not Applicable.

C. The material data that follows is for each engine.

NOTE: The prices shown are for estimating purposes only and as such are given in good faith without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current Price Catalog for current prices.

R	FIG	NEW				OLD	
R	ITEM	PART				PART	INSTR
R	NO.	NO.	QTY	PART TITLE	MAT	NO.	DISP
R	For each V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5,						
R	V2530-A5, V2533-A5 Engines to incorporate this Service Bulletin which						
R	incorporates V2500-ENG-73-0088:						
R	72-40-00						
R	01-060		1	.Bracket, Loop Clamp	-	2A0406	(D)
R	01-100		1	.Bracket, Loop Clamp	-	2A1196	(D)
R	01-160		1	.Bracket, Loop Clamp	-	2A1963	(D)
R	01-161	2A3389	1	.Bracket, Loop Clamp	-	2A1964	(S1)(S4)(S6)(S8)
R							(S10)(S11)(S13)
R							(S14)(S15)(S16)
R							(S17)(S19)(S20)
R							(S21)(S22)(S23)
R							(S24)(S25)(S26)
R							(S27)(S28)(S29)
R							(S30)(S31)(A)
R							(D)
R	01-170	2A3379	1	.Bracket, Loop Clamp	-	2A1952-01	(S6)(S10)(S13)
R							(S15)(S19)(S21)
R							(S24)(S28)(A)
R							(D)



R R R	FIG ITEM NO.	NEW PART NO.	QTY	PART TITLE	MAT	OLD PART NO.	INSTR DISP
R R R	01-460	2A3388	1	.Bracket, Loop Clamp	-		(S1)(S16)(S22) (S25)(S26)(S29) (S30)(S31)(A)
R R R	01-461	2A3405	1	.Bracket, Loop Clamp	-		(S6)(S10)(S13) (S15)(S19)(S21) (S24)(S28)(A)
R R R	01-463	2A3406	1	.Bracket, Loop Clamp	-		(S5)(S9)(S12) (S14)(S18)(S20) (S23)(S27)(A)
R R R	01-465	2A3391	1	.Bracket, Loop Clamp	-		(S1)(S16)(S22) (S25)(S26)(S29) (S30)(S31)(A)
R R R R R R R R	01-470	2A3387	1	.Bracket, Loop Clamp	-		(S1)(S5)(S6)(S9) (S10)(S12)(S13) (S14)(S15)(S16) (S18)(S19)(S20) (S21)(S22)(S23) (S24)(S25)(S26) (S27)(S28)(S29) (S30)(S31)
R R R	01-475	2A3381	1	.Bracket, Loop Clamp	-		(A) (S1)(S25)(S26) (S30)(S31)(A)
R R R R R R R R R R	01-165	2A3382	1	.Bracket, Loop Clamp	-		(S1)(S4)(S6)(S8) (S10)(S11)(S13) (S14)(S15)(S16) (S17)(S19)(S20) (S21)(S22)(S23) (S24)(S25)(S26) (S27)(S28)(S29) (S30)(S31)(A)
R R R R R R R R	01-259	2A3380	1	.Bracket, Loop Clamp	-		(S1)(S3)(S4)(S6) (S10)(S11)(S13) (S15)(S16)(S19) (S21)(S22)(S24) (S25)(S26)(S27) (S28)(S29)(S30) (S31)(A)
R R R R R R	73-11-41 02-160	2A3260-01	1	.Manifold Assy Fuel Nozzle - (AW)	-	2A3233-01	(S1)(S2)(S7)(S8) (S9)(S10)(S17) (S18)(S19)(S20) (S21)(S22)(S27) (S28)(S29)(S30)
R R	02-245	354581	2	..Wire Thrust	-		(A)(B) (C)

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R	FIG	NEW				OLD	
R	ITEM	PART				PART	INSTR
R	NO.	NO.	QTY	PART TITLE	MAT	NO.	DISP
R	02-250	690704	1	..Wire Thrust	-		(C)
R	03-060	2A3263-01	1	..Manifold Assy Fuel Nozzle	-	2A3235-01	(S1)(S3)(S7)(S11)
R				(AG)			(S12)(S13)(S17)
R							(S18)(S19)(S23)
R							(S24)(S25)(S27)
R							(S28)(S29)(S31)
R							(A)(B)
R	03-140		2	..Sleeve Half		AS3268-083	(D)
R	03-145	354581	2	..Wire Thrust	-		(C)
R	03-150	690704	1	..Wire Thrust	-		(C)
R	03-160	2A3264-01	1	..Manifold Assy Fuel Nozzle	-	2A3237-01	(S1)(S4)(S8)(S11)
R				(AF)			(S14)(S15)(S17)
R							(S20)(S21)(S23)
R							(S24)(S26)(S27)
R							(S28)(S30)(S31)
R							(A)(B)
R	03-245	354581	2	..Wire Thrust	-		(C)
R	03-250	690704	1	..Wire Thrust	-		(C)
R	03-260	2A3265-01	1	..Manifold Assy Fuel Nozzle	-	2A3234-01	(S1)(S5)(S9)(S12)
R				(AE)			(S14)(S16)(S18)
R							(S20)(S22)(S23)
R							(S25)(S26)(S27)
R							(S29)(S30)(S31)
R							(A)(B)
R	03-245	354581	2	..Wire Thrust	-		(C)
R	03-250	690704	1	..Wire Thrust	-		(C)
R	03-360	2A3266-01	1	..Manifold Assy Fuel Nozzle	-	2A3238-01	(S1)(S6)(S10)
R				(AD)			(S13)(S15)(S16)
R							(S19)(S21)(S22)
R							(S24)(S25)(S26)
R							(S28)(S29)(S30)
R							(S31)(A)(B)
R	03-410	690704	1	..Wire Thrust	-		(C)
R	03-445	354581	2	..Wire Thrust	-		(C)
R	03-450	ST1540-05	16	..Loop Clamp, Cushion	-		(A)
R	03-460		10	..Loop Clamp	-	MS122904	(D)
R	03-480		3	..Bolt	-	4W0103	(D)
R	03-480	4W0103	8	..Bolt	-		(A)
R	03-485	4W1183	1	..Bolt	-		(A)
R	03-500		6	..Nut	-	4W0001	(D)
R	03-500	4W0001	10	..Nut	-		(A)
R	03-520		2	..Bolt	-	4W0104	(D)
R	03-520	4W0104	1	..Bolt	-		(A)
R	03-540		2	..Bolt	-	4W0107	(D)
R	73-13-41						

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R	FIG	NEW				OLD	
R	ITEM	PART				PART	INSTR
R	NO.	NO.	QTY	PART TITLE	MAT	NO.	DISP
R	01-140	2A3377-01	1	.Bracket Assy.	-		(S1)(S4)(S8)(S11)
R							(S14)(S15)(S17)
R							(S20)(S21)(S23)
R							(S24)(S26)(S27)
R							(S28)(S30)(S31)
R							(A)
R	01-150	2A3382	1	.Bracket, Loop Clamp	-		(S1)(S4)(S6)(S8)
R							(S10)(S11)(S13)(S14)
R							(S15)(S16)(S17)(S19)
R							(S20)(S21)(S22)(S23)
R							(S24)(S25)(S26)(S27)
R							(S28)(S29)(S30)(S31)
R							(A)(D)
R	01-160	2A3280	1	.Bracket, Loop Clamp	-		(S1)(S3)(S7)(S8)
R							(S12)(S13)(S14)
R							(S15)(S17)(S18)
R							(S19)(S20)(S21)
R							(A)
R	Applicability: For each V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2527E-A5,						
R	V2527M-A5, V2530-A5, V2533-A5 Engine to incorporate this Bulletin which do						
R	not incorporate V2500-ENG-73-0088.						
R	72-40-00						
R	01-060		1	.Bracket, Loop Clamp	-	2A0406	(D)
R	01-100		1	.Bracket, Loop Clamp	-	2A1196	(D)
R	01-160		1	.Bracket, Loop Clamp	-	2A1963	(D)
R	01-161	2A3389	1	.Bracket, Loop Clamp	-	2A1964	(S1)(S4)(S6)(S8)
R							(S10)(S11)(S13)
R							(S14)(S15)(S16)
R							(S17)(S19)(S20)
R							(S21)(S22)(S23)
R							(S24)(S25)(S26)
R							(S27)(S28)(S29)
R							(S30)(S31)
R							(A)(D)
R	01-170	2A3379	1	.Bracket, Loop Clamp	-	2A1952-01	(S6)(S10)(S13)(S15)
R							(S19)(S21)(S24)(S28)
R							(A)(D)
R	01-460	2A3388	1	.Bracket, Loop Clamp	-		(S1)(S16)(S22)
R							(S25)(S26)(S29)
R							(S30)(S31)(A)
R	01-461	2A3405	1	.Bracket, Loop Clamp	-		(S6)(S10)(S13)
R							(S15)(S19)(S21)
R							(S24)(S28)(A)



R	FIG	NEW				OLD	
R	ITEM	PART				PART	INSTR
R	NO.	NO.	QTY	PART TITLE	MAT	NO.	DISP
R	01-463	2A3406	1	.Bracket, Loop Clamp	-		(S5)(S9)(S12)
R							(S14)(S18)(S20)
R							(S23)(S27)(A)
R	01-465	2A3391	1	.Bracket, Loop Clamp	-		(S1)(S16)(S22)
R							(S25)(S26)(S29)
R							(S30)(S31)(A)
R	01-470	2A3387	1	.Bracket, Loop Clamp	-		(S1)(S5)(S6)(S9)
R							(S10)(S12)(S13)
R							(S14)(S15)(S16)
R							(S18)(S19)(S20)
R							(S21)(S22)(S23)
R							(S24)(S25)(S26)
R							(S27)(S28)(S29)
R							(S30)(S31)(A)
R	01-475	2A3381	1	.Bracket, Loop Clamp	-		(S1)(S25)(S26)
R							(S30)(S31)(A)
R	01-165	2A3382	1	.Bracket, Loop Clamp	-		(S1)(S4)(S6)(S8)
R							(S10)(S11)(S13)
R							(S14)(S15)(S16)
R							(S17)(S19)(S20)
R							(S21)(S22)(S23)
R							(S24)(S25)(S26)
R							(S27)(S28)(S29)
R							(S30)(S31)(A)
R	01-259	2A3380	1	.Bracket, Loop Clamp	-		(S1)(S3)(S4)(S6)
R							(S10)(S11)(S13)
R							(S15)(S16)(S19)
R							(S21)(S22)(S24)
R							(S25)(S26)(S27)
R							(S28)(S29)(S30)
R							(S31)(A)
R	73-11-41						
R	02-160	2A3260-01	1	.Manifold Assy Fuel Nozzle -		2A0511-01	(S1)(S2)(S7)(S8)
R				(AW)			(S9)(S10)(S17)
R							(S18)(S19)(S20)
R							(S21)(S22)(S27)
R							(S28)(S29)(S30)
R							(A)(B)
R	02-245	354581	2	..Wire Thrust	-		(C)
R	02-250	690704	1	..Wire Thrust	-		(C)
R	03-060	2A3263-01	1	.Manifold Assy Fuel Nozzle -		2A0515-01	(S1)(S3)(S7)(S11)
R				(AG)			(S12)(S13)(S17)
R							(S18)(S19)(S23)
R							(S24)(S25)(S27)
R							(S28)(S29)(S31)
R							(A)(B)
R	03-140		2	.Sleeve Half	-	AS3268-083	(D)

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R	FIG	NEW				OLD	
R	ITEM	PART				PART	INSTR
R	NO.	NO.	QTY	PART TITLE	MAT	NO.	DISP
R	03-145	354581	2	..Wire Thrust	-		(C)
R	03-150	690704	1	..Wire Thrust	-		(C)
R	03-160	2A3264-01		.Manifold Assy Fuel Nozzle	-	2A1229-01	(S1)(S4)(S8)(S11)
R				(AF)			(S14)(S15)(S17)
R							(S20)(S21)(S23)
R							(S24)(S26)(S27)
R							(S28)(S30)(S31)
R							(A)(B)
R	03-245	354581	2	..Wire Thrust	-		(C)
R	03-250	690704	1	..Wire Thrust	-		(C)
R	03-260	2A3265-01	1	.Manifold Assy Fuel Nozzle	-	2A0513-01	(S1)(S5)(S9)
R				(AE)			(S12)(S14)(S16)
R							(S18)(S20)(S22)
R							(S23)(S25)(S26)
R							(S27)(S29)(S30)
R							(S31)(A)(B)
R	03-245	354581	2	..Wire Thrust	-		(C)
R	03-250	690704	1	..Wire Thrust	-		(C)
R	03-360	2A3266-01	1	.Manifold Assy Fuel Nozzle	-	2A1389-01	(S1)(S6)(S10)
R				(AD)			(S13)(S15)(S16)
R							(S19)(S21)(S22)
R							(S24)(S25)(S26)
R							(S28)(S29)(S30)
R							(S31)(A)(B)
R	03-410	690704	1	..Wire Thrust	-		(C)
R	03-445	354581	2	..Wire Thrust	-		(C)
R	03-450	ST1540-05	16	.Loop Clamp, Cushion	-		(A)
R	03-460		10	.Loop Clamp	-	MS122904	(D)
R	03-480		3	.Bolt	-	4W0103	(D)
R	03-480	4W0103	8	.Bolt	-		(A)
R	03-485	4W1183	1	.Bolt	-		(A)
R	03-500		6	.Nut	-	4W0001	(D)
R	03-500	4W0001	10	.Nut	-		(A)
R	03-520		2	.Bolt	-	4W0104	(D)
R	03-520	4W0104	1	.Bolt	-		(A)
R	03-540		2	.Bolt	-	4W0107	(D)
R	73-13-41						
R	01-140	2A3377-01	1	.Bracket Assy.	-		(S1)(S4)(S8)(S11)
R							(S14)(S15)(S17)
R							(S20)(S21)(S23)
R							(S24)(S26)(S27)
R							(S28)(S30)(S31)
R							(A)

R	FIG	NEW				OLD	
R	ITEM	PART				PART	INSTR
R	NO.	NO.	QTY	PART TITLE	MAT	NO.	DISP
R	01-150	2A3382	1	.Bracket, Loop Clamp	-		(S1)(S4)(S6)(S8)
R							(S10)(S11)(S13)
R							(S14)(S15)(S16)
R							(S17)(S19)(S20)
R							(S21)(S22)(S23)
R							(S24)(S25)(S26)
R							(S27)(S28)(S29)
R							(S30)(S31)
R							(A)(D)
R	01-160	2A3280	1	.Bracket, Loop Clamp	-		(S1)(S3)(S7)(S8)
R							(S12)(S13)(S14)
R							(S15)(S17)(S18)
R							(S19)(S20)(S21)
R							(A)

D. Instructions/Disposition Code Statements:

(S1) New parts coded (S1) must be installed in a complete set to complete the intent of this Service Bulletin, however individual Fuel Nozzle Supply Manifold Assemblies and the necessary attachment hardware can be incorporated as required. See the additional disposition set codes for parts sets when installing individual Fuel Nozzle Supply Manifold Assemblies.

(S2) New parts coded (S2) must be installed as a set when installing the 2A3260-01 Fuel Nozzle Supply Manifold Assembly.

(S3) New parts coded (S3) must be installed as a set when installing the 2A3263-01 Fuel Nozzle Supply Manifold Assembly.

(S4) New parts coded (S4) must be installed as a set when installing the 2A3264-01 Fuel Nozzle Supply Manifold Assembly.

(S5) New parts coded (S5) must be installed as a set when installing the 2A3265-01 Fuel Nozzle Supply Manifold Assembly.

(S6) New parts coded (S6) must be installed as a set when installing the 2A3266-01 Fuel Nozzle Supply Manifold Assembly.

(S7) New parts coded (S7) must be installed as a set when installing the 2A3260-01 and the 2A3263-01 Fuel Nozzle Supply Manifold Assemblies.

(S8) New parts coded (S8) must be installed as a set when installing the 2A3260-01 and the 2A3264-01 Fuel Nozzle Supply Manifold Assemblies.

(S9) New parts coded (S9) must be installed as a set when installing the 2A3260-01 and the 2A3265-01 Fuel Nozzle Supply Manifold Assemblies.

(S10) New parts coded (S10) must be installed as a set when installing the 2A3260-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S11) New parts coded (S11) must be installed as a set when installing the 2A3263-01 and the 2A3264-01 Fuel Nozzle Supply Manifold Assemblies.

(S12))New parts coded (S12) must be installed as a set when installing the 2A3263-01 and the 2A3265-01 Fuel Nozzle Supply Manifold Assemblies.

(S13))New parts coded (S13) must be installed as a set when installing the 2A3263-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.



(S14) New parts coded (S14) must be installed as a set when installing the 2A3264-01 and the 2A3265-01 Fuel Nozzle Supply Manifold Assemblies.

(S15) New parts coded (S15) must be installed as a set when installing the 2A3264-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S16) New parts coded (S16) must be installed as a set when installing the 2A3265-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S17) New parts coded (S17) must be installed as a set when installing the 2A3260-01, 2A3263-01 and the 2A3264-01 Fuel Nozzle Supply Manifold Assemblies.

(S18) New parts coded (S18) must be installed as a set when installing the 2A3260-01, 2A3263-01 and the 2A3265-01 Fuel Nozzle Supply Manifold Assemblies.

(S19) New parts coded (S19) must be installed as a set when installing the 2A3260-01, 2A3263-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S20) New parts coded (S20) must be installed as a set when installing the 2A3260-01, 2A3264-01 and the 2A3265-01 Fuel Nozzle Supply Manifold Assemblies.

(S21) New parts coded (S21) must be installed as a set when installing the 2A3260-01, 2A3264-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S22) New parts coded (S22) must be installed as a set when installing the 2A3260-01, 2A3265-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S23) New parts coded (S23) must be installed as a set when installing the 2A3263-01, 2A3264-01 and the 2A3265-01 Fuel Nozzle Supply Manifold Assemblies.

(S24) New parts coded (S24) must be installed as a set when installing the 2A3263-01, 2A3264-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S25) New parts coded (S25) must be installed as a set when installing the 2A3263-01, 2A3265-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S26) New parts coded (S26) must be installed as a set when installing the 2A3264-01, 2A3265-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S27) New parts coded (S27) must be installed as a set when installing the 2A3260-01, 2A3263-01, 2A3264-01 and the 2A3265-01 Fuel Nozzle Supply Manifold Assemblies.

(S28) New parts coded (S28) must be installed as a set when installing the 2A3260-01, 2A3263-01, 2A3264-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S29) New parts coded (S29) must be installed as a set when installing the 2A3260-01, 2A3263-01, 2A3265-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S30) New parts coded (S30) must be installed as a set when installing the 2A3260-01, 2A3264-01, 2A3265-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

(S31) New parts coded (S31) must be installed as a set when installing the 2A3263-01, 2A3264-01, 2A3265-01 and the 2A3266-01 Fuel Nozzle Supply Manifold Assemblies.

- (A) The new part is currently available.
- (B) The old part will no longer be supplied.
- (C) The new part is a saleable detail of the assembly.
- (D) The old part will be retained.

R E. Tooling – Price and Availability

Special tools are not required to accomplish this Service Bulletin.

F. Other Material Information Data

Not Applicable.

3. Accomplishment Instructions

NOTE: SERVICE BULLETIN INCORPORATION ON ENGINES INSTALLED ON AIRCRAFT MAY BE DESIRABLE AND SHOULD BE INDIVIDUALLY EVALUATED.

Table 1 Possible Installation Of Fuel Nozzle Supply Manifold Assemblies

R R	Parts Set "S#"	FUEL NOZZLE SUPPLY MANIFOLD ASSEMBLIES NEW PART NUMBERS	FUEL NOZZLE SUPPLY MANIFOLD ASSEMBLIES REPLACED PART NUMBERS	APPLICABLE FIGURES FOR INSTALLATION
R	(S1)	2A3260-01* (Tube AW) 2A3263-01* (Tube AG) 2A3264-01* (Tube AF) 2A3265-01* (Tube AE) 2A3266-01* (Tube AD)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
	(S2)	2A3260-01 (Tube AW)	2A0511-01 or 2A3233-01	Figures 1 through 4 (applicable section)
	(S3)	2A3263-01 (Tube AG)	2A0515-01 or 2A3235-01	Figures 1 through 4 (applicable section)
	(S4)	2A3264-01 (Tube AF)	2A1229-01 or 2A3237-01	Figures 1 through 4 (applicable section)
	(S5)	2A3265-01 (Tube AE)	2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
R	(S6)	2A3266-01 (Tube AD)	2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S7)	2A3260-01 (Tube AW) 2A3263-01 (Tube AG)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01	Figures 1 through 4 (applicable section)
	(S8)	2A3260-01 (Tube AW) 2A3264-01 (Tube AF)	2A0511-01 or 2A3233-01 2A1229-01 or 2A3237-01	Figures 1 through 4 (applicable section)
	(S9)	2A3260-01 (Tube AW) 2A3265-01 (Tube AE)	2A0511-01 or 2A3233-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
	(S10)	2A3260-01 (Tube AW) 2A3266-01 (Tube AD)	2A0511-01 or 2A3233-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
	(S11)	2A3263-01 (Tube AG) 2A3264-01 (Tube AF)	2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01	Figures 1 through 4 (applicable section)
R	(S12)	2A3263-01 (Tube AG) 2A3265-01 (Tube AE)	2A0515-01 or 2A3235-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
	(S13)	2A3263-01 (Tube AG) 2A3266-01 (Tube AD)	2A0515-01 or 2A3235-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
	(S14)	2A3264-01 (Tube AF) 2A3265-01 (Tube AE)	2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
	(S15)	2A3264-01 (Tube AF) 2A3266-01 (Tube AD)	2A1229-01 or 2A3237-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
	(S16)	2A3265-01 (Tube AE) 2A3266-01 (Tube AD)	2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S17)	2A3260-01 (Tube AW) 2A3263-01 (Tube AG) 2A3264-01 (Tube AF)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01	Figures 1 through 4 (applicable section)
R	(S18)	2A3260-01 (Tube AW) 2A3263-01 (Tube AG) 2A3265-01 (Tube AE)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)

R	Parts Set "S#"	FUEL NOZZLE SUPPLY MANIFOLD ASSEMBLIES NEW PART NUMBERS	FUEL NOZZLE SUPPLY MANIFOLD ASSEMBLIES REPLACED PART NUMBERS	APPLICABLE FIGURES FOR INSTALLATION
R	(S19)	2A3260-01 (Tube AW) 2A3263-01 (Tube AG) 2A3266-01 (Tube AD)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S20)	2A3260-01 (Tube AW) 2A3264-01 (Tube AF) 2A3265-01 (Tube AE)	2A0511-01 or 2A3233-01 2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
R	(S21)	2A3260-01 (Tube AW) 2A3264-01 (Tube AF) 2A3266-01 (Tube AE)	2A0511-01 or 2A3233-01 2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
R	(S22)	2A3260-01 (Tube AW) 2A3265-01 (Tube AE) 2A3266-01 (Tube AD)	2A0511-01 or 2A3233-01 2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S23)	2A3263-01 (Tube AG) 2A3264-01 (Tube AF) 2A3265-01 (Tube AE)	2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
R	(S24)	2A3263-01 (Tube AG) 2A3264-01 (Tube AF) 2A3266-01 (Tube AD)	2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S25)	2A3263-01 (Tube AG) 2A3265-01 (Tube AE) 2A3266-01 (Tube AD)	2A0515-01 or 2A3235-01 2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S26)	2A3264-01 (Tube AF) 2A3265-01 (Tube AE) 2A3266-01 (Tube AD)	2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S27)	2A3260-01 (Tube AW) 2A3263-01 (Tube AG) 2A3264-01 (Tube AF) 2A3265-01 (Tube AE)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01	Figures 1 through 4 (applicable section)
R	(S28)	2A3260-01 (Tube AW) 2A3263-01 (Tube AG) 2A3264-01 (Tube AF) 2A3266-01 (Tube AD)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S29)	2A3260-01 (Tube AW) 2A3263-01 (Tube AG) 2A3265-01 (Tube AE) 2A3266-01 (Tube AD)	2A0511-01 or 2A3233-01 2A0515-01 or 2A3235-01 2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R	(S30)	2A3260-01 (Tube AW) 2A3264-01 (Tube AF) 2A3265-01 (Tube AE) 2A3266-01 (Tube AD)	2A0511-01 or 2A3233-01 2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)

R R	Parts Set "S#"	FUEL NOZZLE SUPPLY MANIFOLD ASSEMBLIES NEW PART NUMBERS	FUEL NOZZLE SUPPLY MANIFOLD ASSEMBLIES REPLACED PART NUMBERS	APPLICABLE FIGURES FOR INSTALLATION
	(S31)	2A3263-01 (Tube AG) 2A3264-01 (Tube AF) 2A3265-01 (Tube AE) 2A3266-01 (Tube AD)	2A0515-01 or 2A3235-01 2A1229-01 or 2A3237-01 2A0513-01 or 2A3234-01 2A1389-01 or 2A3238-01	Figures 1 through 4 (applicable section)
R				

NOTE: *Fuel Nozzle Supply Manifold Assemblies can be incorporated as necessary to meet replacement requirements, however, the intent of this Service Bulletin will not be complied with until all of the new parts provided by this Service Bulletin are installed.

(1) Removal/Installation of Parts Set (S1) – 5 Fuel Supply Manifold Assemblies 2A3260-01, 2A3263-01, 2A3264-01, 2A3265-01 and 2A3266-01

(a) Replace the 2A0511-01, 2A0515-01, 2A1229-01, 2A0513-01 and 2A1389-01 Fuel Nozzle Supply Manifold Assemblies or the 2A3233-01, 2A3235-01, 2A3237-01, 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the 2A3260-01, 2A3263-01, 2A3264-01, 2A3265-01 and 2A3266-01 Fuel Nozzle Supply Manifold Assemblies (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-40-00, Removal-07. See Figure 1.

(b) Install the 2A3260-01 (Tube AW), 2A3263-01 (Tube AG), 2A3264-01 (Tube AF), 2A3265-01 (Tube AE), and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Remove the Brackets 2A1196, 2A1952-01, 2A1963, and 2A1964 with hardware from K flange, see Figure 2.

(2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.
 - 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- B Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).
- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
- 2 Tighten the bolts with your fingers.
 - 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- C Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).
- NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.
- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
- 2 Tighten the bolts with your fingers.
 - 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

D Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 3 Bottom).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(3) Install the following Brackets and hardware on K Flange by Figure 2 and applicable views.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

B Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

C Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3381 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- F Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

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- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 8 Bottom, Section BC-BC

Figure 4 Sheet 11 Top, Section ZZ-ZZ

Figure 4 Sheet 12 Bottom, Section XX-XX

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (4 off) and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C** Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

- R** (5) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 6 Top, Section X-X

Figure 4 Sheet 11 Top, Section ZZ-ZZ

Figure 4 Sheet 12 Bottom, Section XX-XX

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (2 off) and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- R** **C** Install the 4W0001 Nuts (4 off) on the Bolts and tighten them with your fingers. See (applicable views) Figure 4.

- R** (6) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 8 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AF and AG are clipped together at views Y-Y.

- C Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

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- (7) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 8 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0104 Bolt (1 off), and the 4W1183 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at views Y-Y.

- C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

- R (8) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.
- NOTE: Tube AW is not clipped.
- (9) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (10) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.
- (c) Recording Instructions
- (i) A record of accomplishment is required.
- (2) Removal/Installation of Parts Set (S2) - 2A3260-01 Fuel Supply Manifold Assembly
- R (a) Replace either the 2A0511-01 or the 2A3233-01 Fuel Nozzle Supply Manifold Assembly with 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Removal-07. See Figure 1.
- R (b) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.
- NOTE: Tube AW is not clipped.
- (i) Use the procedure for the post V2500-ENG-73-0088 configuration.
- R (c) Recording Instructions
- (i) A record of accomplishment is required.
- (3) Removal/Installation of Parts Set (S3) - 2A3263-01 Fuel Supply Manifold Assembly
- R (a) Replace either the 2A0515-01 or the 2A3235-01 Fuel Nozzle Supply Manifold Assembly with the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Removal-07. See Figure 1.

- R (b) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.
- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:
- (1) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.
- A Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Top).
- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
- 2 Tighten the bolts with your fingers.
- 3 Torque the fuel nozzle pad bolts by the procedure specified in reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (2) Install the following Brackets and hardware on K Flange by Figure 2 and applicable views.
- A Locate the 2A1963 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- R (3) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:
- NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 8 Top, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0104 Bolt (1 off) to attach the loop clamp to the 2A3280 Bracket. See (applicable view) Figure 3.
- C Install the 4W0103 Bolt (1 off) to attach the loop clamp to the 2A1963 Bracket. See (applicable view) Figure 4.

NOTE: New Tube AG is clipped to old Tube AF.

- D Install the 4W0001 Nut (2 off) to the bolts and tighten them with your hand.
- (4) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (5) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(4) Removal/Installation of Parts Set (S4) - 2A3264-01 Fuel Supply Manifold Assembly

- (a) Replace either the 2A1229-01 or the 2A3237-01 Fuel Nozzle Supply Manifold Assembly with the 2A3264-01 (Tube AF) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Removal-07. See Figure 1.

R

- R (b) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.
- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:
- NOTE: Remove Bracket 2A1963 from K Flange, (see Figure 2).
- NOTE: All other brackets will remain on the engine when the new configuration is installed.
- (1) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.
- R **A** Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Bottom).
- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
- 2 Tighten the bolts with your fingers.
- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- B** Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).
- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
- 2 Tighten the bolts with your fingers.
- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

C Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(2) Install the following Brackets and hardware on K Flange by Figure 2 and applicable views.

A Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

(3) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (3), Engine Manual, Chapter/Section 72-00-40, Removal/Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 8 Bottom, Section BC-BC

A Install ST1540 -05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: The 4W0104 Bolt (1 off) is used to attach the Loop Clamp to the 2A3280 Bracket.

- C Install 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figures 3 and 4.

- (4) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (5) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(5) Removal/Installation of Parts set (S5) – 2A3265-01 Fuel Supply Manifold Assembly

- (a) Replace either the 2A0513-01 or the 2A3234-01 Fuel Nozzle Supply Manifold Assembly (AE) with 2A3265-01 by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal and Installation-07. See Figure 1.

- R (b) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

- R (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Install the following Brackets and hardware on K Flange by Figure 2 and applicable views.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (2) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 3 Top, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.

- B** Install the 4W0103 Bolts (2 off) and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

R NOTE: Old Tube AD is clipped to Tube AE at view X-X.

- C** Install the 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figure 4.

NOTE: Old Tubes AF and AG must be reconnected to 2A3389 Bracket with Bolt 4W0103, Clamps MS122904, and Nut 4W0001.

- (3) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (4) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(6) Removal/Installation of Parts set (S6) – 2A3266-01 Fuel Supply Manifold Assembly

- (a) Replace either the 2A1389-01 or the 2A3238-01 Fuel Nozzle Supply Manifold Assembly with 2A3266-01 (AD) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal and Installation-07. See Figure 1.

R (b) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

R (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

R (1) Remove 2A1952-01 and 2A1963 bracket off K flange, see Figure 2.

- (2) Install the following brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

R

- A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. See Section BT-BT (Figure 3 Sheet 2 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
 - D Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
 - 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
 - E Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
 - 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Top, Section BB-BB

Figure 4 Sheet 9 Top, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- A Install the ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (3 off), 4W0104 Bolt (1 off), and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets.

R

NOTE: Old Tube AF is clipped to Tube AD at view BB-BB.

- C Install the 4W0001 Nuts (6 off) on the bolts with your fingers.

NOTE: Old Tubes AF and AG must be reconnected to 2A3389 Bracket with Bolt 4W0103, Clamps MS122904, and Nut 4W0001.

- (5) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (6) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(7) Removal/Installation of Parts Set (S7) - 2A3260-01 and 2A3263-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01 and 2A0515-01 or the 2A3233-01 and 2A3235-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Removal-07. See Figure 1.

R

- (b) Install the 2A3260-01 (Tube AW) and 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: You can remove and install the 2A3230-01 Fuel Nozzle Supply Manifold Assembly or disconnect and connect the Loop Clamps. This will make it possible to do the modification.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. See Section Y-Y (Figure 3 Sheet 4 Top).

- A Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 1 Tighten the bolts with your fingers.

- 2 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (2) Install the following Brackets and hardware on K Flange by Figure 2 and (applicable views) and as specified.

- A Locate the 2A1963 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- B Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 8 Top, Section BC-BC

- 1 Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable view) Figures 3 and 4.
- 2 Install the 4W0103 Bolt (1 off) and the 4W0104 Bolt (1 off), to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AF and New Tube AG are clipped together at view BC-BC.

- 3 Install the 4W0001 Nut (2 off) to the bolt and tighten it with your fingers. See (applicable view) Figure 3 and 4.

R

- (3) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (4) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (5) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(8) Removal/Installation of Parts Set (S8) – 2A3260-01 and 2A3264-01 Fuel Supply Manifold Assemblies

- R (a) Replace either the 2A0511-01 and 2A1229-01 or the 2A3233-01 and
R 2A3237-01 Fuel Nozzle Supply Manifold Assemblies with the parts
specified in B. by the procedure given in Reference (4), Engine
Manual, Chapter/Section 72-00-40, Installation-07. See Figure 1.
- R (b) Install the 2A3260-01 (Tube AW) and 2A3264-01 (Tube AF) Fuel Nozzle
Supply Manifold Assemblies by the procedure given in Reference (4),
Engine Manual, Chapter/Section 72-00-40, Installation-07.
 - (i) Use the procedure for the post V2500-ENG-73-0088 configuration
except as follows:
 - (1) Remove 2A1963 bracket off K flange, see Figure 2.

NOTE: You must loosen the flange nuts that hold the
Brackets for tubes AC and AK until fingertight.
 - (2) Install the 2A3382 Loop Clamp Bracket (1 off) at fuel
nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

A Install the Bolts (2 off) through the bracket holes
and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach
the Fuel nozzle to the pad at this location
(for a total of 3).

1 Tighten the bolts with your fingers.

2 Torque the fuel nozzle pad bolts by the procedure
specified in Reference (4) Engine Manual,
Chapter/Section 70-00-42, Installation-01.

- (3) Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: the 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- A Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 1 Tighten the bolts with your fingers.

- 2 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (4) Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Bottom).

- A Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 1 Tighten the bolts with your fingers.

- 2 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (5) Install the following Brackets and hardware on K Flange by Figure 2 and (applicable views) and as specified.

- A Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (6) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 8 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (4 off), at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolt (2 off), the 4W1183 Bolt (1 off), and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: The Old Tube AG is clipped to Tube at view BC-BC.

- C Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W0103, Clamps MS122904, and Nut 4W0001.

R

- (7) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (8) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (9) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(9) Removal/Installation of Parts Set (S9) – 2A3260-01 and 2A3265-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01 and 2A0513-01 or the 2A3233-01 and 2A3234-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07. See Figure 1.

R

- (b) Install the 2A3260-01 (Tube AW) and 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and Figure 2 and applicable views.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Install the following Brackets and hardware on K Flange by Figure 2 and (applicable views) and as specified.

- A
- Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

- 1
- Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2
- Install the 4W0003 Nuts (3 off) on the bolts with your fingers.

- B
- Install the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

- 1
- Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2
- Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C
- Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

- 1
- Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.

- 2
- Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (2) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 2 Bottom, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.

- B Install the 4W0103 Bolts (2 off) and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Old Tube AD and New Tube AE are clipped together at view X-X.

- C Install the 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figure 4.

NOTE: Old Tube AD and new Tube AF are clipped together at 2A1952-01 Bracket with Bolt 4W0107, Clamps MS122904, Clamp ST1540-05, and Nut 4W0001.

R

- (3) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (4) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (5) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(10) Removal/Installation of Parts Set (S10) - 2A3260-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01 and 2A1389-01 or the 2A3233-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Removal-07. See Figure 1.

- R (b) Install the 2A3260-01 (Tube AW) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and Figure 2.

- R (i) Use the procedure for the post V2500-ENG-73-0088 configuration and as follows:

- (1) Install the following brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

- R A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. See Section BT-BT (Figure 3 Sheet 2 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (2) Install the following brackets on K flange by Figure 2 (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- B Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- F Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Top, Section BB-BB

Figure 4 Sheet 9 Top, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- 1 Install the ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- 2 Install the 4W0103 Bolts (3 off), 4W0104 Bolt (1 off), and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets.

NOTE: Old Tube AF and New Tube AD are clipped together at view BB-BB.

- 3 Install the 4W0001 Nuts (6 off) on the bolts with your fingers.

NOTE: Old Tube AE is clipped at 2A3379 Bracket with Bolt 4W0103, Clamps MS122904, and Nut 4W0001.

NOTE: Old Tube AF and AG are clipped together at 2A3389 Bracket with Bolt 4W0103, Clamps MS122904, and Nut 4W0001.

R

- G Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (3) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (4) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(11) Removal/Installation of Parts Set (S11) – 2A3263-01 and 2A3264-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0515-01 and 2A1229-01 or the 2A3235-01 and 2A3237-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

NOTE: Remove 2A1963 bracket off flange K (holes 62 and 63). A new bracket to be added (see below) at the same holes.

- R (b) Install the 2A3263-01 (Tube AG) and 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

- R (i) Use the procedure for the post V2500-ENG-73-0088 configuration and as follows:

- (1) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. See Section BU-BU (Figure 3 Sheet 3 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- B** Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. See Section BS-BS (Figure 3-2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C** Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. See Section Y-Y (Figure 3 Sheet 3 Bottom).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (2)** Install the following brackets on K flange by Figure 5 (applicable views) and as specified.

- A** Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.

- 1** Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

- 2** Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (3) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (4) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 10 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt hole lines up with the bolt hole in the bracket. See (applicable view) Figure 3 and 4.

- B Install the 4W0104 Bolt (1 off) and the 4W1183 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

- (5) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (6) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(12) Removal/Installation of Parts Set (S12) – 2A3263-01 and 2A3265-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0515-01 and 2A0513-01 or the 2A3235-01 and 2A3234-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

- R (b) Install the 2A3263-01 (Tube AG) and 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.
- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:
- (1) Install the following brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.
- R A Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. See Section Y-Y (Figure 3 Sheet 4 Top).
- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
- 2 Tighten the bolts with your fingers.
- 3 Torque the fuel nozzle pad bolts by the procedure specified in reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (2) Install the following brackets on K Flange by Figure 4 and (applicable views) and as specified.
- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- B Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A1963 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (3) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 3 Top, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (2 off) and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

- C Install the 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figure 4.

NOTE: Old Tubes AD and AF must be reconnected to 2A1952-01 Bracket with Bolt 4W0107, Clamps MS122904, and Nut 4W0001.

- (4) Install the 2A3263-01 (tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 8 Top, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0104 Bolt (1 off) and the 4W0103 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AF and new Tube AG are clipped together at view BC-BC.

- C Install the 4W0001 Nut (2 off) to the bolts and tighten them with your hand.

- (5) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (6) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(13) Removal/Installation of Parts Set (S13) – 2A3263-01 and 2A3266-01 Fuel Supply Manifold Assemblies

(a) Replace either the 2A0515-01 and 2A1389-01 or the 2A3235-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R (b) Install the 2A3263-01 (Tube AG) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Remove 2A1952-01 and 2A1963 bracket off K flange, see Figure 2.

(2) Install the following brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

R A Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. See Section Y-Y (Figure 3 Sheet 4 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

R B Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. See Section BT-BT (Figure 3 Sheet 2 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3) Install the following brackets on K flange by Figure 2 (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- E Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 9 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolt (1 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the Brackets. See (applicable view) Figure 3 and 4.

NOTE: Old Tube AF and new Tube AG are clipped together at view BC-BC.

- C Install the 4W0001 Nut (2 off) to the bolts and tighten them with your hand.

R

- (5) Install the 2A3266-01 (tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Top, Section BB-BB

Figure 4 Sheet 9 Bottom, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- A** Install the ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolts (3 off), 4W0104 Bolt (1 off), and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets.

NOTE: Old Tube AF and Tube AD are clipped together at view BB-BB.

- C** Install the 4W0001 Nuts (6 off) on the bolts with your fingers.

NOTE: Old Tube AE must be reconnected to 2A3379 Bracket with Bolt 4W0103, Clamp MS122904, and Nut 4W0001.

- (6) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (7) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(14) Removal/Installation of Parts Set (S14) – 2A3264-01 and 2A3265-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A1229-01 and 2A0513-01 or the 2A3237-01 and 2A3234-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

- R (b) Install the 2A3264-01 (Tube AF) and 2A3265 (Tube AE) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and Figure 4.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

NOTE: Remove 2A1963 Bracket from K Flange. See Figure 2.

- (1) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

- R A Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. See Section Y-Y (Figure 3 Sheet 4 Bottom).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- B Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. See Section BS-BS (Figure 3 Sheet 2 Bottom).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- D Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. See Section BU-BU (Figure 3 Sheet 3 Top).
- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
 - 2 One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
 - 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- E Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (2) Install the following brackets on K Flange by Figure 2 and (applicable views) and as specified.
- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole l 35 and 36. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- B Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

D Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.

1 Install the 4W0103 Bolt (1 off) through the bolt hole in the flange and the bracket.

2 Install the 4W0003 Nut (1 off) on the bolt with your fingers.

E Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

(3) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (3), Engine Manual, Chapter/Section 72-00-40, Removal/Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 8 Bottom, Section BC-BC

A Install ST1540 -05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

B Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off), to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

C Install 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W0103, Clamp MS122904, and Nut 4W0001.

R

- (4) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 3 Bottom, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.

- B Install the 4W0103 Bolts (2 off) and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Old Tube AD and new Tube AE are clipped together at view X-X.

- C Install the 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figure 4.

NOTE: Old Tube AD must be reconnected to 2A1952-01 Bracket with Bolt 4W0107, Clamp MS122904, and Nut 4W0001.

- (5) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (6) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(15) Removal/Installation of Parts Set (S15) – 2A3264-01 and 2A3266-01 Fuel Supply Manifold Assemblies

(a) Replace either the 2A1229-01 and 2A1389-01 or the 2A3237-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R

(b) Install the 2A3264-01 (Tube AF) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Bottom).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

C Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

R

D Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. See Section BT-BT (Figure 3 Sheet 2 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

R

(2) Remove 2A1952-01 and 2A1963 bracket off K flange, see Figure 2.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

(3) Install the following brackets on K Flange by Figure 4 and (applicable views) and as specified.

- A Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- B Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

NOTE: New Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamp ST1540-05, and Nut 4W0001.

R

- (4) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly by the procedure given in Reference (3), Engine Manual, Chapter/Section 72-00-40, Removal/Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Top, Section BC-BC

- A Install ST1540 -05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0103 Bolt (3 off) and 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

- C Install four 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figures 3 and 4.

NOTE: New Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamp ST1540-05, and Nut 4W0001.

R

- (5) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Bottom, Section BB-BB

Figure 4 Sheet 10 Top, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- A Install the ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (3 off), 4W0104 Bolt (1 off), and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets.
- C Install the 4W0001 Nuts (6 off) on the bolts with your fingers.

NOTE: Old Tube AE must be reconnected to 2A3379 Bracket with Bolt 4W0103, Clamp MS122904, and Nut 4W0001.

- (6) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (7) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(16) Removal/Installation of Parts Set (S16) – 2A3265-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0513-01 and 2A1389-01 or the 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R

- (b) Install the 2A3265-01 (Tube AE) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and Figure 4.
 - (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:
 - (ii) Remove the 2A1952-01, 2A1196, and 2A1963 Brackets and hardware, from K flange. See Figure 2.

- (iii) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- (1) Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

A Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

1 Tighten the bolts with your fingers.

2 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (iv) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

- (1) Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

A Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

B Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- (2) Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

A Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

B Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- (3) Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

A Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

B Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- (4) Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- A Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
- B Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- (5) Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- A Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
- B Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- (6) Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- A Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
- B Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- R (7) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 9 Top, Section BC-BC

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0103 Bolts (5 off), the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 3 and 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tubes AF and AG must be reconnected to 2A3389 Bracket with Bolt 4W0103, Clamps MS122904, and Nut 4W0001.

R

- (8) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 6 Bottom, Section X-X

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0103 Bolts (4 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C Install the 4W0001 Nuts (4 off) to the 4W0103 Bolts and tighten them with your fingers. See (applicable views) Figure 4.

- (9) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (10) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(17) Removal/Installation of Parts Set (S17) - 2A3260-01, 2A3263-01 and 2A3264-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01, 2A0515-01 and 2A1229-01 or the 2A3233-01, 2A3235-01 and 2A3237-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Removal-07. See Figure 1.

R
R

- (b) Install the 2A3260-01 (Tube AW), 2A3263-01 (Tube AG) and 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the 2A1963 Bracket and hardware from K flange, see Figure 2.
- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 3 Bottom).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- B** Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C** Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3)** Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A** Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.

- 1** Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2** Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (5) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 10 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0104 Bolt (1 off), and the 4W1183 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C** Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (6) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(18) Removal/Installation of Parts Set (S18) – 2A3260-01, 2A3263-01 and 2A3265-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01 2A0515-01 and 2A0513-01 or the 2A3233-01 2A3235-01 and 2A3234-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B, by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

(b) Install the 2A3260-01 (Tube AW), 2A3263-01 (Tube AG) and 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(2) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. Section XX-XX. See Figure 4.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

B Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A1963 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (3) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 3 Top, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.
- B Install the 4W0103 Bolts (2 off), 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

- C Install the 4W0001 Nuts (4 off) to the Bolts and tighten them with your fingers. See (applicable views) Figure 4.

NOTE: Old Tubes AD and AF must be reconnected to 2A1952-01 Bracket with Bolt 4W0107, Clamps MS122904, and Nut 4W0001.

R

- (4) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 8 Top, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0104 Bolt (1 off) and 4W0103 Bolt (1 off) to attach the loop clamp to the bracket. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AF is clipped to new Tube AG at view BC-BC.

- C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (5) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (6) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (7) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

(i) A record of accomplishment is required.

(19) Removal/Installation of Parts Set (S19) – 2A3260-01, 2A3263-01 and 2A3266-01 Fuel Supply Manifold Assemblies

(a) Replace either the 2A0511-01, 2A0515-01 and 2A1389-01 or the 2A3233-01, 2A3235-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Removal-07. See Figure 1.

(b) Install the 2A3260-01 (Tube AW), 2A3263-01 (Tube AG) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07 and Figure 1 and applicable views.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Remove the applicable Brackets and hardware from K flange, see Figure 2.

(2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- B** Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Top).
- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE:** One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).
- 2** Tighten the bolts with your fingers.
- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.
- NOTE:** See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.
- A** Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.
- 1** Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2** Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- B** Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1** Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2** Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C** Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1** Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
- 2** Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Top, Section BB-BB

Figure 4 Sheet 9 Bottom, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (3 off), 4W0104 Bolt (1 off), and the 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

R

NOTE: Old Tube AF is clipped to Tube AD at view BB-BB.

- C Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AE must be reconnected to 2A3379 Bracket with Bolt 4W0103, Clamp MS122904, and Nut 4W0001.

R

- (5) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 9 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0103 Bolt (1 off) and 4W0104 Bolt (1 off), to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AF is clipped to new Tube AG at view BC-BC.

- C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (6) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(20) Removal/Installation Parts set (S20) – 2A3260-01, 2A3264-01 and 2A3265-01
Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01, 2A1229-01 and 2A0513-01 or the 2A3233-01, 2A3237-01 and 2A3234-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

- (b) Install the 2A3260-01 (Tube AW), 2A3264-01 (Tube AF) and 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the applicable Brackets and hardware from K flange, see Figure 2.
- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

- A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- B** Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C** Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Bottom).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3)** Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

- A** Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

- 1** Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

- 2** Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 3 Bottom, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolts (2 off) and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Old tube AD is clipped to Tube AE at view X-X.

- C** Install the 4W0001 Nuts (4 off) to the 4W0103 and 4W1183 Bolts and tighten them with your fingers. See (applicable views) Figure 4.

NOTE: Old Tube AD must be reconnected to 2A1952-01 Bracket with Bolt 4W0107, Clamp MS122904, and Nut 4W0001.

R

- (5) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 8 Bottom, Section BC-BC

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolt (3 off), the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

- C Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamp MS122904, and Nut 4W0001.

R

- (6) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(21) Removal/Installation Parts set (S21) - 2A3260-01, 2A3264-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01, 2A1229-01 and 2A1389-01 or the 2A3233-01, 2A3237-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

- (b) Install the 2A3260-01 (Tube AW), 2A3264-01 (Tube AF) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the 2A1963 and 2A1952-01 Brackets and hardware from K flange, see Figure 2.

NOTE: Do not remove 2A1964 Bracket.

- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

C Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

D Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Bottom).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

B Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Bottom, Section BB-BB

Figure 4 Sheet 10 Top, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (3 off), the 4W0104 Bolt (1 off), and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AD and AF are clipped together at view BC-BC.

- C** Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AE must be reconnected to 2A3379 Bracket with Bolt 4W0103, Clamp MS122904, and Nut 4W0001.

NOTE: Old Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamp MS122904, and Nut 4W0001.

R

- (5) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Top, Section BC-BC

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolt (3 off) and 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AF are clipped together at view BC-BC.

- C** Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

- R (6) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.
- NOTE: Tube AW is not clipped.
- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.
- (c) Recording Instructions
- (i) A record of accomplishment is required.
- (22) Removal/Installation Parts set (S22) - 2A3260-01, 2A3265-01 and 2A3266-01 Fuel Supply Manifold Assemblies
- (a) Replace either the 2A0511-01, 2A0513-01 and 2A1389-01 or the 2A3233-01, 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.
- R (b) Install the 2A3260-01 (Tube AW), 2A3265-01 (Tube AE) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.
- R (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:
- (1) Remove the 2A1196, 2A1952-01, and the 2A1963 Brackets and hardware from K flange, see Figure 2.
- NOTE: Do not remove 2A1964 Bracket.
- A (A) Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).
- R 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.
- NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.
 - 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (2) Install the following Brackets and hardware on K Flange by Figure 2 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- B Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. Section ZZ-ZZ (applicable view) Figure 4.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- F Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (3) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 5 Top, Section BB-BB

Figure 4 Sheet 9 Top, Section BC-BC

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (3 off), the 4W0104 Bolt (1 off), and the 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

NOTE: Old Tube AF is clipped to Tube AD at view BB-BB.

- C** Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tubes AF and AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamps MS122904, and Nut 4W0001.

R

- (4) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 6 Bottom, Section X-X

Figure 4 Sheet 5 Top, Section BB-BB

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.

- B** Install the 4W0103 Bolts (2 off) and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C** Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

- R (5) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.
- NOTE: Tube AW is not clipped.
- (6) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (7) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.
- (c) Recording Instructions
- (i) A record of accomplishment is required.
- (23) Removal/Installation Parts set (S23) - 2A3263-01, 2A3264-01 and 2A3265-01 Fuel Supply Manifold Assemblies
- (a) Replace either the 2A0515-01, 2A1229-01 and 2A0513-01 or the 2A3235-01, 2A3237-01 and 2A3234-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.
- R (b) Install the 2A3263-01 (Tube AG), 2A3264-01 (Tube AF) and 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.
- R (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:
- (1) Remove the 2A1963 Bracket and hardware from K flange, see Figure 2.

- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: the 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

C Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 3 Bottom).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.
 - 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.
- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- B Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 3 Bottom, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.

- B Install the 4W0103 Bolts (2 off), and 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Old Tube AD is clipped to Tube AE at view X-X.

- C Install the 4W0001 Nuts (4 off) on the bolts with your fingers. See (applicable views) Figure 4.

NOTE: Old Tube AD must be reconnected to 2A1952-01 Bracket with Bolt 4W0107, Clamp MS122904, and Nut 4W0001.

R

- (5) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Bottom, Section BC-BC

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C** Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (6) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 10 Bottom, Section BC-BC

- A** Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W1183 Bolt (1 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C** Install the 4W0001 Nut (2 off) to the bolts and tighten with your fingers. See (applicable views) Figures 3 and 4.

- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(24) Removal/Installation Parts set (S24) – 2A3263-01, 2A3264-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- R (a) Replace either the 2A0515-01, 2A1229-01 and 2A1389-01 or the 2A3235-01, 2A3237-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

- R (b) Install the 2A3263-01 (Tube AG), 2A3264-01 (Tube AF) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the 2A1952-01 and 2A1963 Brackets and hardware from K flange, see Figure 2.

NOTE: Do not remove 2A1196 and 2A1964 Brackets.

- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- B** Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C** Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- D** Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 3 Bottom).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Bottom, Section BB-BB

Figure 4 Sheet 7 Bottom, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (4 off) and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.
- C Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (5) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 7 Bottom, Section BC-BC

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C** Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (6) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 7 Bottom, Section BC-BC

- A** Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W1183 Bolt (1 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(25) Removal/Installation Parts set (S25) – 2A3263-01, 2A3265-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0515-01, 2A0513-01 and 2A1389-01 or the 2A3235-01, 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

- (b) Install the 2A3263-01 (Tube AG), 2A3265-01 (Tube AE) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the 2A1196, 2A1952-01, 2A1963, and 2A1964 Brackets and hardware from K flange, see Figure 2.
- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

- A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

B Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

C Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- F Locate the 2A3381 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 5 Top, Section BB-BB

Figure 4 Sheet 9 Bottom, Section BC-BC

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (3 off), 4W1183 Bolt (2 off), and 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

NOTE: Old Tube AF is clipped to new Tube AD at view BB-BB.

- C** Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AF must be reconnected to 2A3389 Bracket with Bolt 4W0103, Clamp MS122904, and Nut 4W0001.

R

- (5) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 6 Top, Section X-X

Figure 4 Sheet 5 Top, Section BB-BB

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.

- B** Install the 4W0103 Bolts (2 off) and the 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C** Install the 4W0001 Nuts (2 off) to the 4W0103 Bolts and tighten them with your fingers. See (applicable views) Figure 4.

R

- (6) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 9 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolt (1 off), 4W0104 Bolt (1 off), and the 4W1183 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AF is clipped to Tube AG at view BC-BC.

- C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.
- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(26) Removal/Installation Parts set (S26) - 2A3264-01, 2A3265-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A1229-01, 2A0513-01 and 2A1389-01 or the 2A3237-01, 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

(b) Install the 2A3264-01 (Tube AF), 2A3265-01 (Tube AE) and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the 2A1196, 2A1952-01, 2A1963, and 2A1964 Brackets and hardware from K flange, see Figure 2.
- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- D Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Bottom).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3381 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- F Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 10 Top, Section BC-BC

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (4 off) and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (5) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 6 Top, Section X-X

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.

- B** Install the 4W0103 Bolts (2 off) and the 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C** Install the 4W0001 Nuts (4 off) to the Bolts and tighten them with your fingers. See (applicable views) Figure 4.

NOTE: Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamp MS122904, and Nut 4W0001.

R

- (6) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Top, Section BC-BC

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.
- C** Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.
- (7) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (8) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(27) Removal/Installation Parts set (S27) – 2A3260-01, 2A3263-01, 2A3264-01 and 2A3265-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01, 2A0515-01, 2A1229-01 and 2A0513-01 or the 2A3233-01, 2A3235-01, 2A3237-01 and 2A3234-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

- (b) Install the 2A3260-01 (Tube AW), 2A3263-01 (Tube AG), 2A3264-01 (Tube AF), and 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the applicable Brackets and hardware from K flange, see Figure 2.

NOTE: Do not remove 2A1952-01 and 2A1964 Brackets.

- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- B** Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C** Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 3 Bottom).

- 1** Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2** Tighten the bolts with your fingers.

- 3** Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3)** Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

- A** Locate the 2A1952-01 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

- 1** Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

- 2** Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3406 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 7 Top, Section X-X

Figure 4 Sheet 3 Bottom, Section BB-BB

Figure 4 Sheet 13 Top, Section XX-XX

Figure 4 Sheet 11 Bottom, Section ZZ-ZZ

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figure 4.
- B** Install the 4W0103 Bolt (2 off) and 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Old Tube AD is clipped to Tube AE at view X-X.

- C** Install the 4W0001 Nuts (4 off) on the Bolts and tighten them with your fingers. See (applicable views) Figure 4.

NOTE: Old Tube AD must be reconnected to 2A1952-01 Bracket with Bolt 4W0107, Clamp MS122904, and Nut 4W0001.

R

- (5) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Bottom, Section BC-BC

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C** Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (6) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 10 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W1183 Bolt (1 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the bracket. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C Install the 4W0001 Nut (1 off) to the bolt and tighten with your fingers. See (applicable views) Figures 3 and 4.

R

- (7) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (8) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(c) Recording Instructions

- (i) A record of accomplishment is required.

- (28) Removal/Installation Parts set (S28) – 2A3260-01, 2A3263-01, 2A3264-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0511-01, 2A0515-01, 2A1229-01 and 2A1389-01 or the 2A3233-01, 2A3235-01, 2A3237-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

(b) Install the 2A3260-01 (Tube AW), 2A3263-01 (Tube AG), 2A3264-01 (Tube AF), and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Remove the 2A1963 and 2A1952-01 Brackets and hardware from K flange, see Figure 2.

NOTE: Do not remove 2A1964 Bracket.

(2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- D Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 3 Bottom).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3405 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3379 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 4 Bottom, Section BB-BB

Figure 4 Sheet 7 Bottom, Section BC-BC

Figure 4 Sheet 13 Bottom, Section XX-XX

Figure 4 Sheet 12 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (3 off), the 4W0104 Bolt (1 off), and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.
- C Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (5) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 7 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (6) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 7 Bottom, Section BC-BC

- A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

R

- B Install the 4W1183 Bolt (1 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable view) Figure 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

- C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (7) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (8) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (9) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(29) Removal/Installation Parts set (S29) – 2A3260-01, 2A3263-01, 2A3265-01 and 2A3266-01 Fuel Supply Manifold Assemblies

(a) Replace either the 2A0511-01, 2A0515-01, 2A0513-01 and 2A1389-01 or the 2A3233-01, 2A3235-01, 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

(b) Install the 2A3260-01 (Tube AW), 2A3263-01 (Tube AG), 2A3265-01 (Tube AE), and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Remove the 2A1963, 2A1952-01, and 2A1196 Brackets and hardware from K flange, see Figure 2.

NOTE: Do not remove 2A1964 Bracket.

(2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

B Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

C Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- F Locate the 2A1964 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 5 Top, Section BB-BB

Figure 4 Sheet 9 Bottom, Section BC-BC

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (3 off), 4W0104 Bolt (1 off), and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

NOTE: Old Tube AF is clipped to new Tube AD at view BB-BB.

- C** Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (5) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE

Figure 4 Sheet 6 Bottom, Section X-X

Figure 4 Sheet 5 Top, Section BB-BB

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (2 off) and the 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C** Install the 4W0001 Nuts (4 off) to the Bolts and tighten them with your fingers. See (applicable views) Figure 4.

R

- (6) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 4 Top, Section Y-Y

Figure 4 Sheet 9 Bottom, Section BC-BC

A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

B Install the 4W0103 Bolt (1 off) and 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Old Tube AF is clipped to Tube AG at view BC-BC.

C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

(7) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

(8) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

(9) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

(i) A record of accomplishment is required.

(30) Removal/Installation Parts set (S30) – 2A3260-01, 2A3264-01, 2A3265-01 and 2A3266-01 Fuel Supply Manifold Assemblies

(a) Replace either the 2A0511-01, 2A1229-01, 2A0513-01 and 2A1389-01 or the 2A3233-01, 2A3237-01, 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

(b) Install the 2A3260-01 (Tube AW), 2A3264-01 (Tube AF), 2A3265-01 (Tube AE), and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

(i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

(1) Remove the 2A1963, 2A1964, 2A1952-01, and 2A1196 Brackets and hardware from K flange, see Figure 2.

(2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

B Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

2 Tighten the bolts with your fingers.

3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- D Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 4 Bottom).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

- 1 Install the 4W0649 Bolts (2 off) through the bolt holes in the flange and the bracket.

- 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- C Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- E Locate the 2A3381 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- F Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 10 Top, Section BC-BC

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A** Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B** Install the 4W0103 Bolts (4 off) and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C** Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

NOTE: New Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamp ST1540-05, and Nut 4W0001.

- R** (5) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 6 Top, Section X-X

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolts (2 off) and the 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C** Install the 4W0001 Nuts (4 off) to the 4W0103 Bolts and tighten them with your fingers. See (applicable views) Figure 4.

R

- (6) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 4 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 10 Top, Section BC-BC

- A** Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B** Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figures 3 and 4.

- C** Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

NOTE: New Tube AG must be reconnected to 2A3389 Bracket with Bolt 4W1183, Clamp ST1540-05, and Nut 4W0001.

R

- (7) Install the 2A3260-01 (Tube AW) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07.

NOTE: Tube AW is not clipped.

- (8) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (9) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

(c) Recording Instructions

- (i) A record of accomplishment is required.

(31) Removal/Installation Parts set (S31) – 2A3263-01, 2A3264-01, 2A3265-01 and 2A3266-01 Fuel Supply Manifold Assemblies

- (a) Replace either the 2A0515-01, 2A1229-01, 2A0513-01 and 2A1389-01 or the 2A3235-01, 2A3237-01, 2A3234-01 and 2A3238-01 Fuel Nozzle Supply Manifold Assemblies with the parts specified in B. by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Removal-07. See Figure 1.

R
R

- (b) Install the 2A3263-01 (Tube AG), 2A3264-01 (Tube AF), 2A3265-01 (Tube AE), and 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assemblies by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40 Installation-07 and Figure 1 and applicable views.

- (i) Use the procedure for the post V2500-ENG-73-0088 configuration except as follows:

- (1) Remove the 2A1196, 2A1963, 2A1964, and 2A1952-01 Brackets and hardware from K flange, see Figure 2.
- (2) Install the following Brackets and hardware on the Fuel Nozzle Pads given by Figure 3 (applicable views) and as specified.

A Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 12. Section BU-BU (Figure 3 Sheet 3 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- B Install the 2A3382 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 16. Section BT-BT (Figure 3 Sheet 2 Top).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- C Install the 2A3377-01 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 11. Section BS-BS (Figure 3 Sheet 2 Bottom).

NOTE: The 2A3377-01 Loop Clamp Bracket is located on top of the 6A5555 Bracket.

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.

- 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- D Install the 2A3280 Loop Clamp Bracket (1 off) at fuel nozzle pad No. 8. Section Y-Y (Figure 3 Sheet 3 Bottom).

- 1 Install the Bolts (2 off) through the bracket holes and into the bolt holes in the pad.

NOTE: One additional MS9575-13 Bolt is used to attach the Fuel nozzle to the pad at this location (for a total of 3).

- 2 Tighten the bolts with your fingers.
 - 3 Torque the fuel nozzle pad bolts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.
- (3) Install the following Brackets and hardware on K Flange by Figure 4 and (applicable views) and as specified.

NOTE: See AZ-AZ (Figure 4 Sheet 14) to attach Bolt and Nut to Bracket 2A0406.

- A Locate the 2A3387 Loop Clamp Bracket (1 off) at hole locations 35 and 36. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- B Locate the 2A3388 Loop Clamp Bracket (1 off) at hole locations 40 and 41. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- C Locate the 2A3391 Loop Clamp Bracket (1 off) at hole locations 50 and 51. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- D Locate the 2A3380 Loop Clamp Bracket (1 off) at hole locations 57 and 58. See Figure 2.

1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.

2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

- E Locate the 2A3381 Loop Clamp Bracket (1 off) at hole locations 60 and 61. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.
- F Locate the 2A3389 Loop Clamp Bracket (1 off) at hole locations 62 and 63. See Figure 2.
- 1 Install the 4W0649 Bolts (2 off) though the bolt holes in the flange and the bracket.
 - 2 Install the 4W0003 Nuts (2 off) on the bolts with your fingers.

R

- (4) Install the 2A3266-01 (Tube AD) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 4, Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AD.

Figure 3 Sheet 2 Top, Section BT-BT

Figure 4 Sheet 5 Bottom, Section A-A

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 7 Bottom, Section BC-BC

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (6 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.
- B Install the 4W0103 Bolts (4 off) and the 4W1183 Bolt (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C Install 4W0001 Nuts (6 off) on the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

R

- (5) Install the 2A3265-01 (Tube AE) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07, and as follows:

NOTE: Applicable clipping views for Tube AE.

Figure 4 Sheet 6 Top, Section X-X

Figure 4 Sheet 2 Top, Section BB-BB

Figure 4 Sheet 12 Bottom, Section XX-XX

Figure 4 Sheet 11 Top, Section ZZ-ZZ

- A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

- B Install the 4W0103 Bolts (2 off) and the 4W1183 Bolts (2 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AD and AE are clipped together at views XX-XX and ZZ-ZZ.

- C Install the 4W0001 Nuts (4 off) to the 4W0103 Bolts and tighten them with your fingers. See (applicable views) Figure 4.

R

- (6) Install the 2A3264-01 (Tube AF) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AF.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 3 Sheet 2 Bottom, Section BS-BS

Figure 3 Sheet 3 Top, Section BU-BU

Figure 4 Sheet 7 Bottom, Section BC-BC

A Install ST1540-05 Loop Clamps (4 off) at the Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

B Install the 4W0103 Bolt (3 off) and the 4W0104 Bolt (1 off) to attach the loop clamps to the brackets. See (applicable views) Figure 4.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

C Install the 4W0001 Nuts (4 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

(7) Install the 2A3263-01 (Tube AG) Fuel Nozzle Supply Manifold Assembly (1 off) by the procedure given in Reference 3, Engine Manual, Chapter/Section 72-00-40, Removal/Installation, and as follows:

NOTE: Applicable clipping views for Tube AG.

Figure 3 Sheet 3 Bottom, Section Y-Y

Figure 4 Sheet 8 Bottom, Section BC-BC

A Install ST1540-05 Loop Clamps (2 off) at Bracket locations and position them so the bolt holes line up with the bolt holes in the brackets. See (applicable views) Figures 3 and 4.

B Install the 4W1183 Bolt (1 off) and the 4W0104 Bolt (1 off) to attach the loop clamp to the bracket. See (applicable views) Figures 3.

NOTE: Tubes AF and AG are clipped together at view Y-Y.

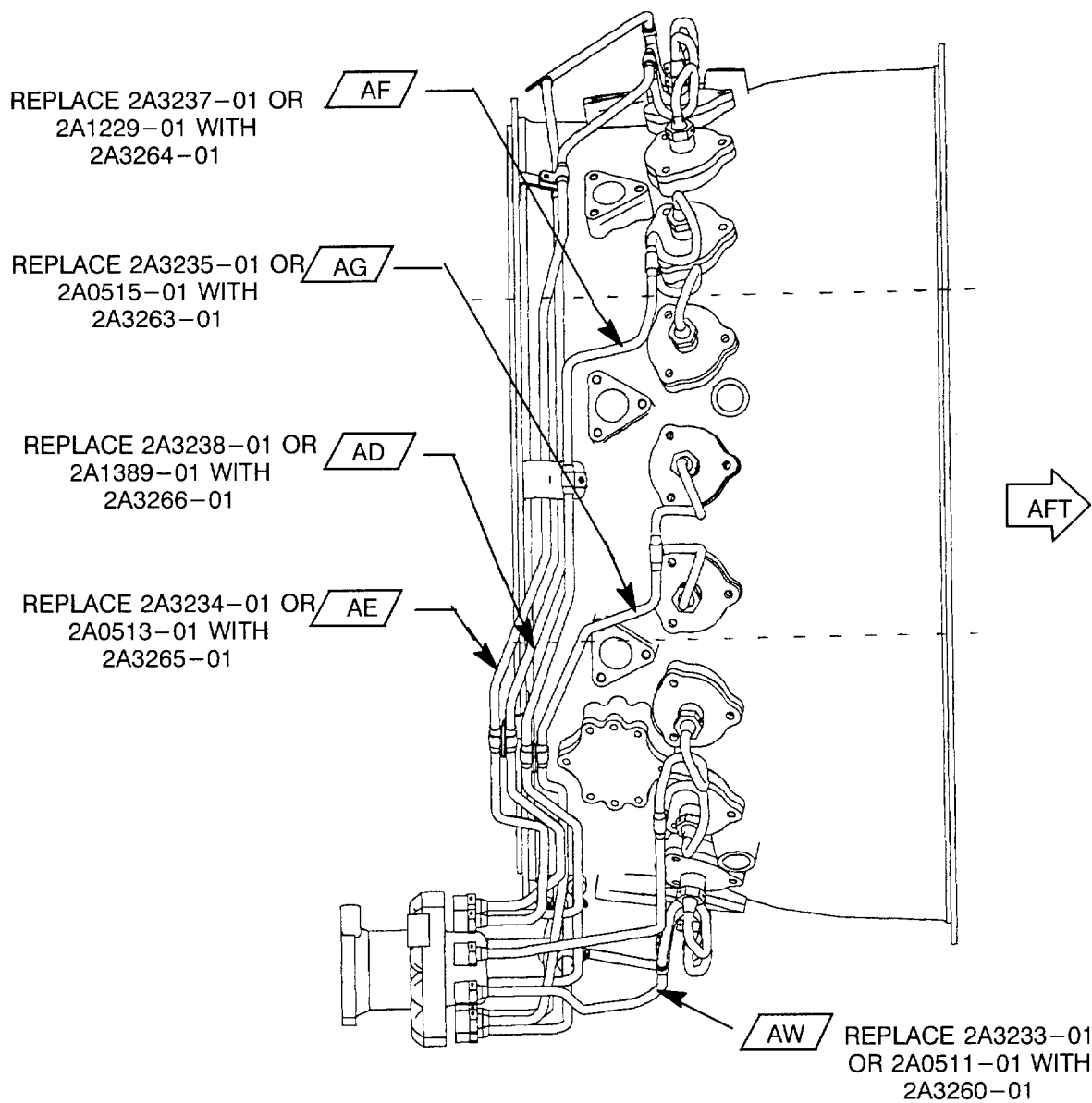
C Install the 4W0001 Nuts (2 off) to the bolts and tighten them with your fingers. See (applicable views) Figures 3 and 4.

(8) Torque the flange nuts by the procedure specified in Reference (4) Engine Manual, Chapter/Section 70-00-42, Installation-01.

- (9) Complete the installation by the procedure given in Reference (4), Engine Manual, Chapter/Section 72-00-40, Installation-07.

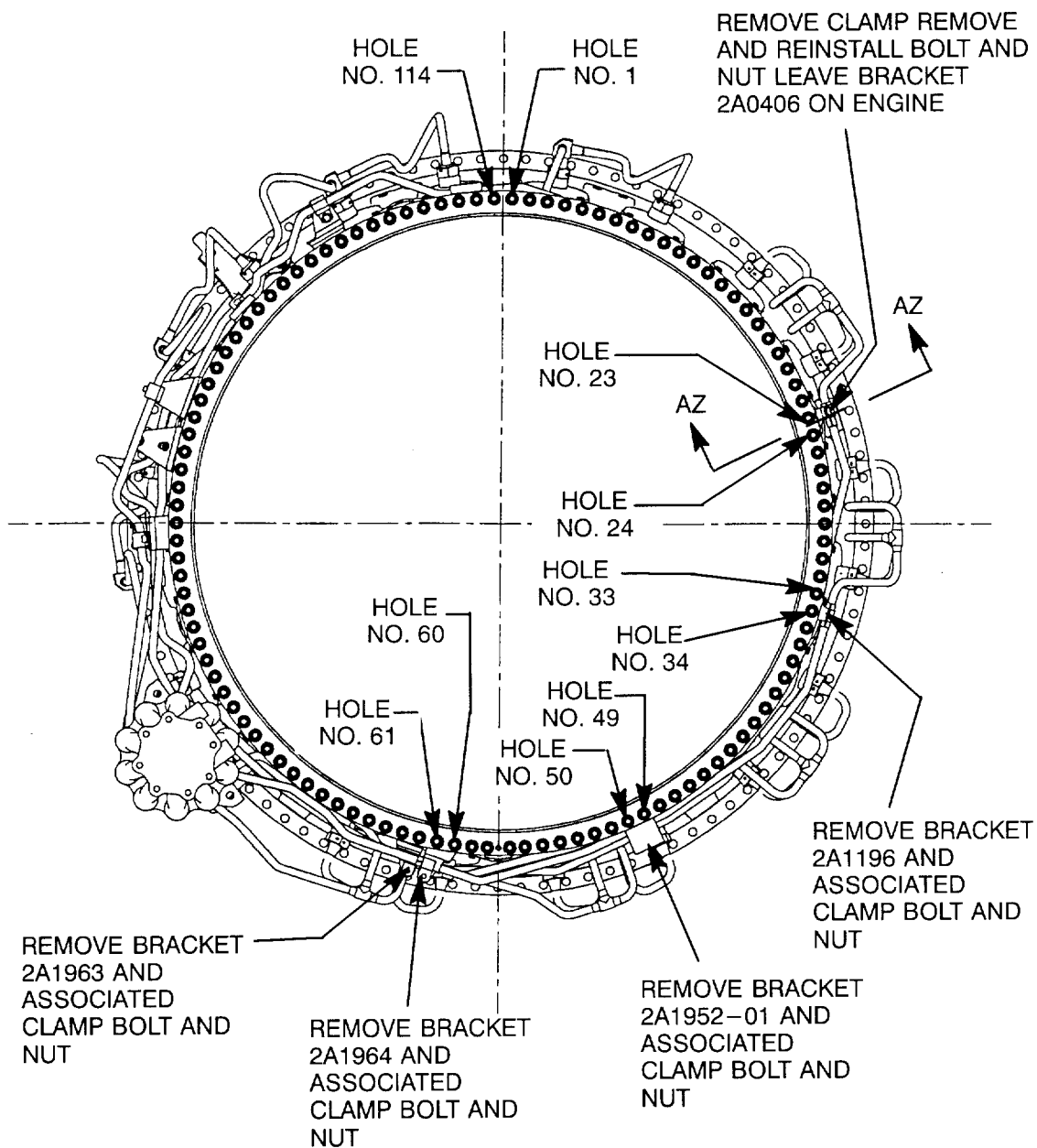
(c) Recording Instructions

- (i) A record of accomplishment is required.

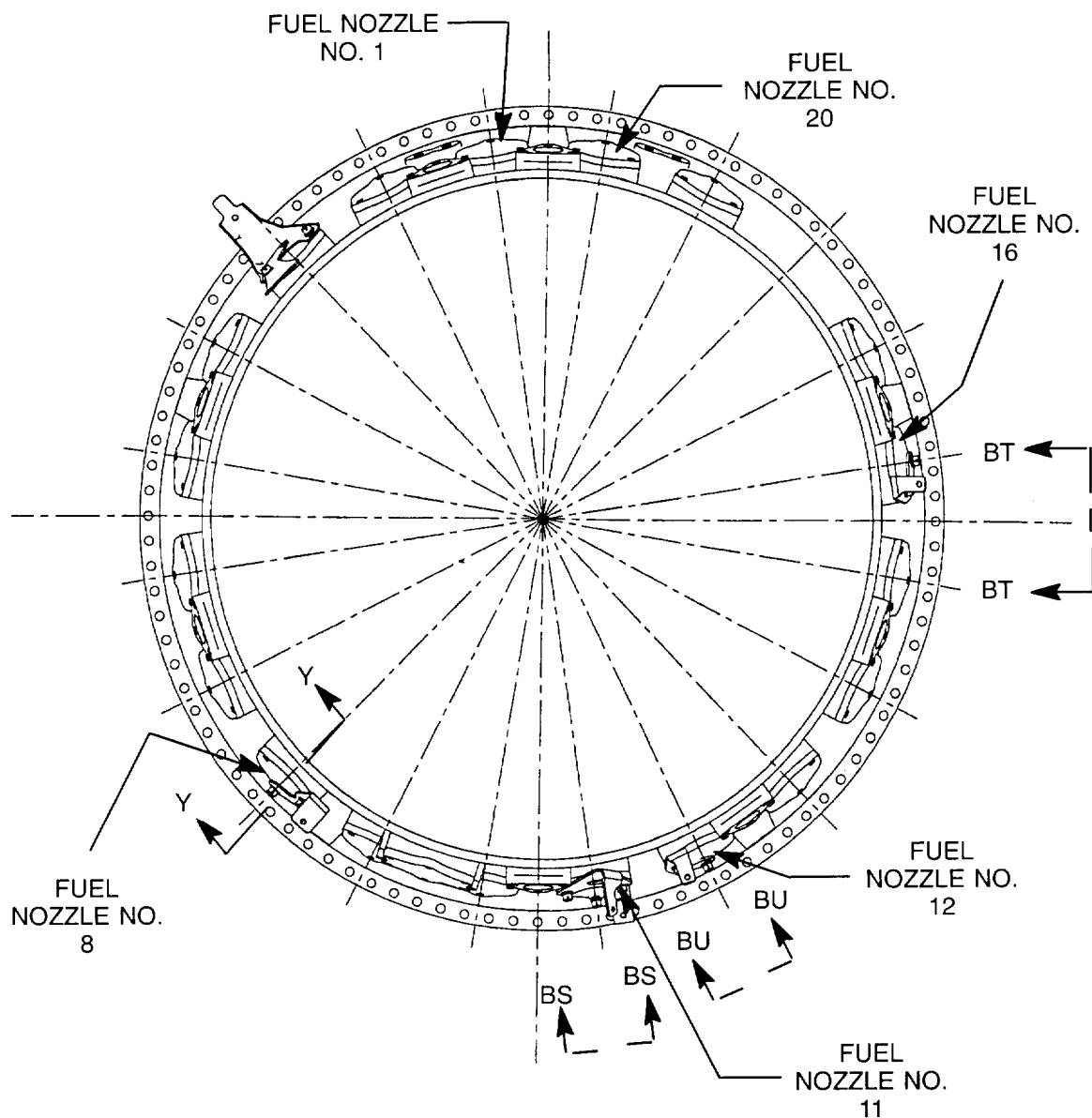


Engine left side fuel manifolds (rotated)
Fig 1

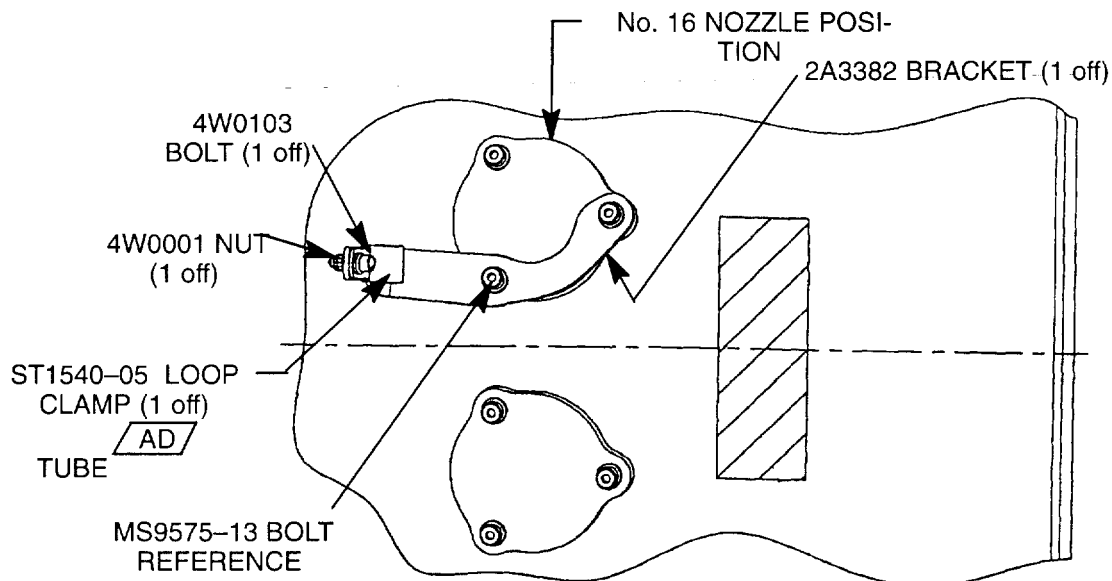
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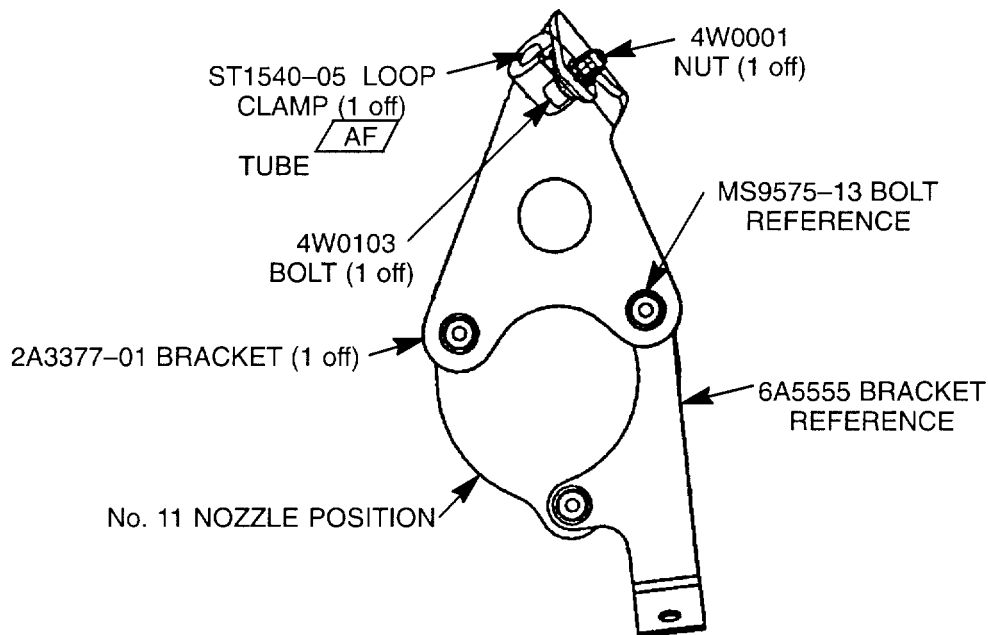
Engine front view
Fig 2



Engine front view Location of the brackets bolted to fuel nozzle pads
Fig 3 (sheet 1)

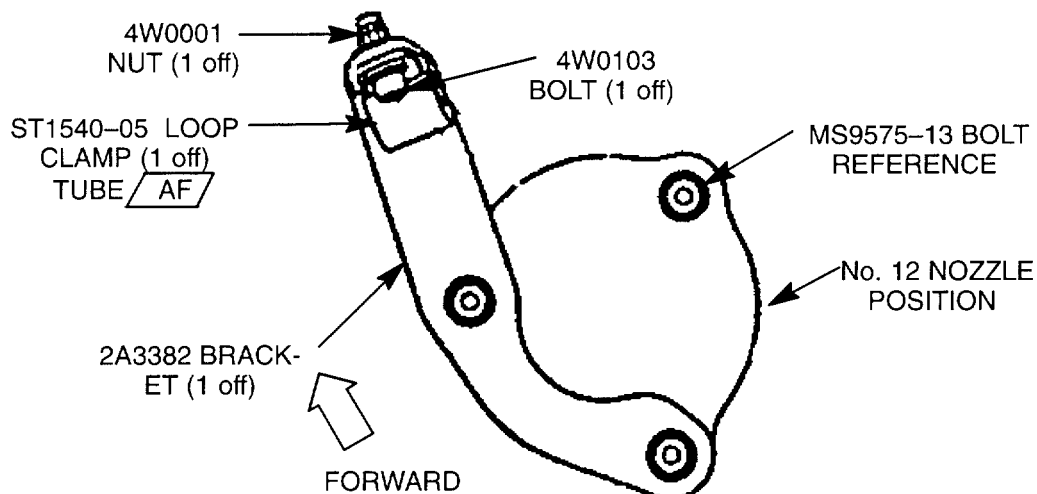


SECTION BT- BT
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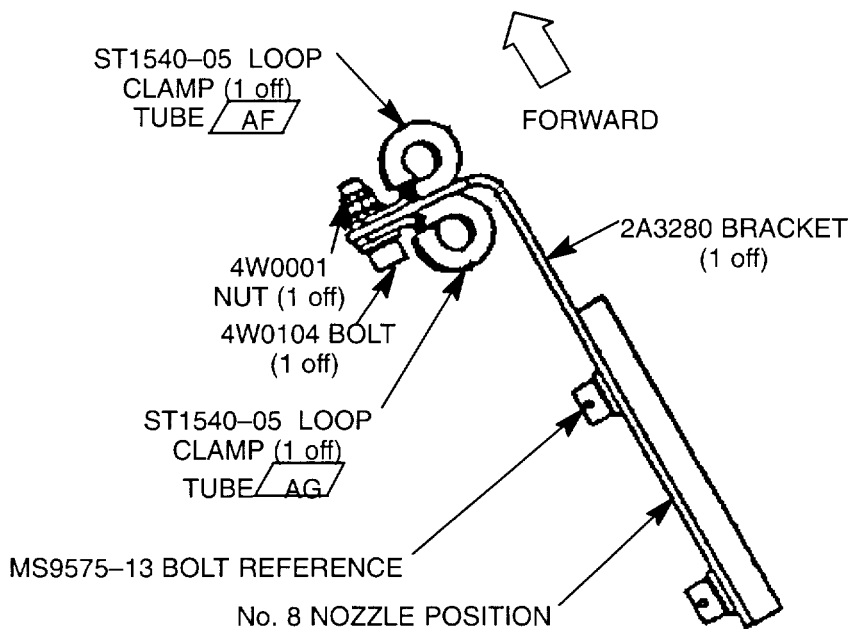


SECTION BS - BS
(FOR PARTS SETS S1, S4, S8, S11, S14, S15, S17, S20, S21, S23, S24, S26, S27, S28, S30, OR S31)

Location of the brackets bolted to fuel nozzle pads
Fig 3 (sheet 2)



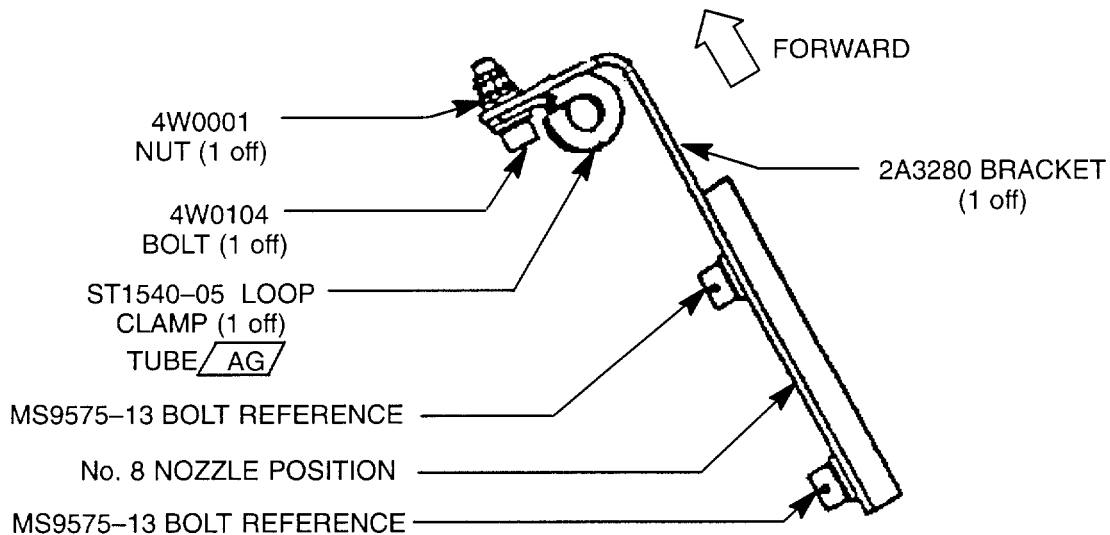
SECTION BU - BU
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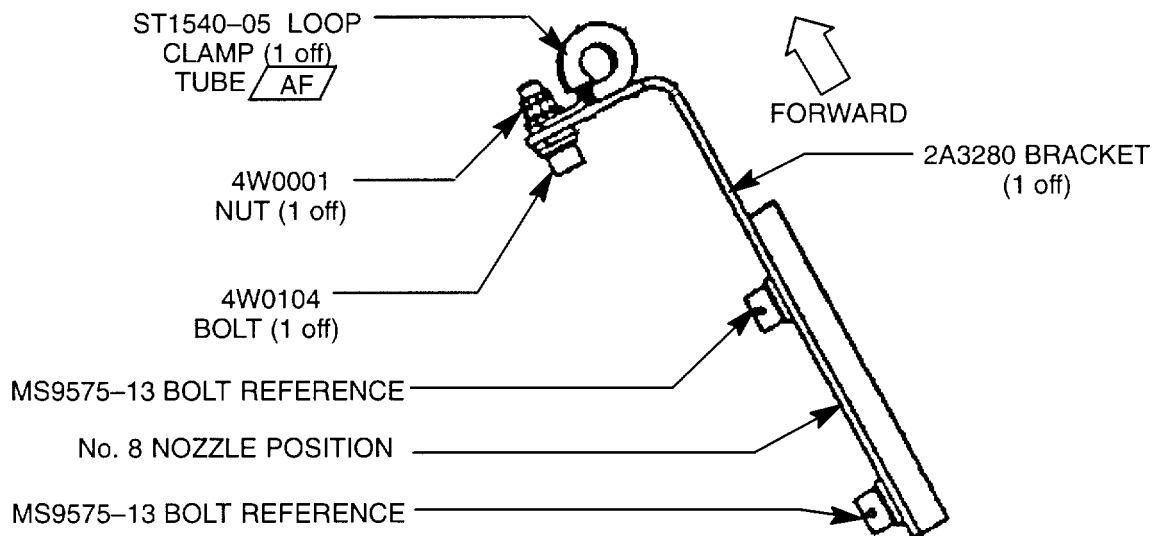
SECTION Y - Y
(FOR PARTS SETS S1, S11, S17, S23, S24, S27, S28, OR S31)

location of the brackets bolted to fuel nozzle pads
Fig 3 (sheet 3)

pw000e8211

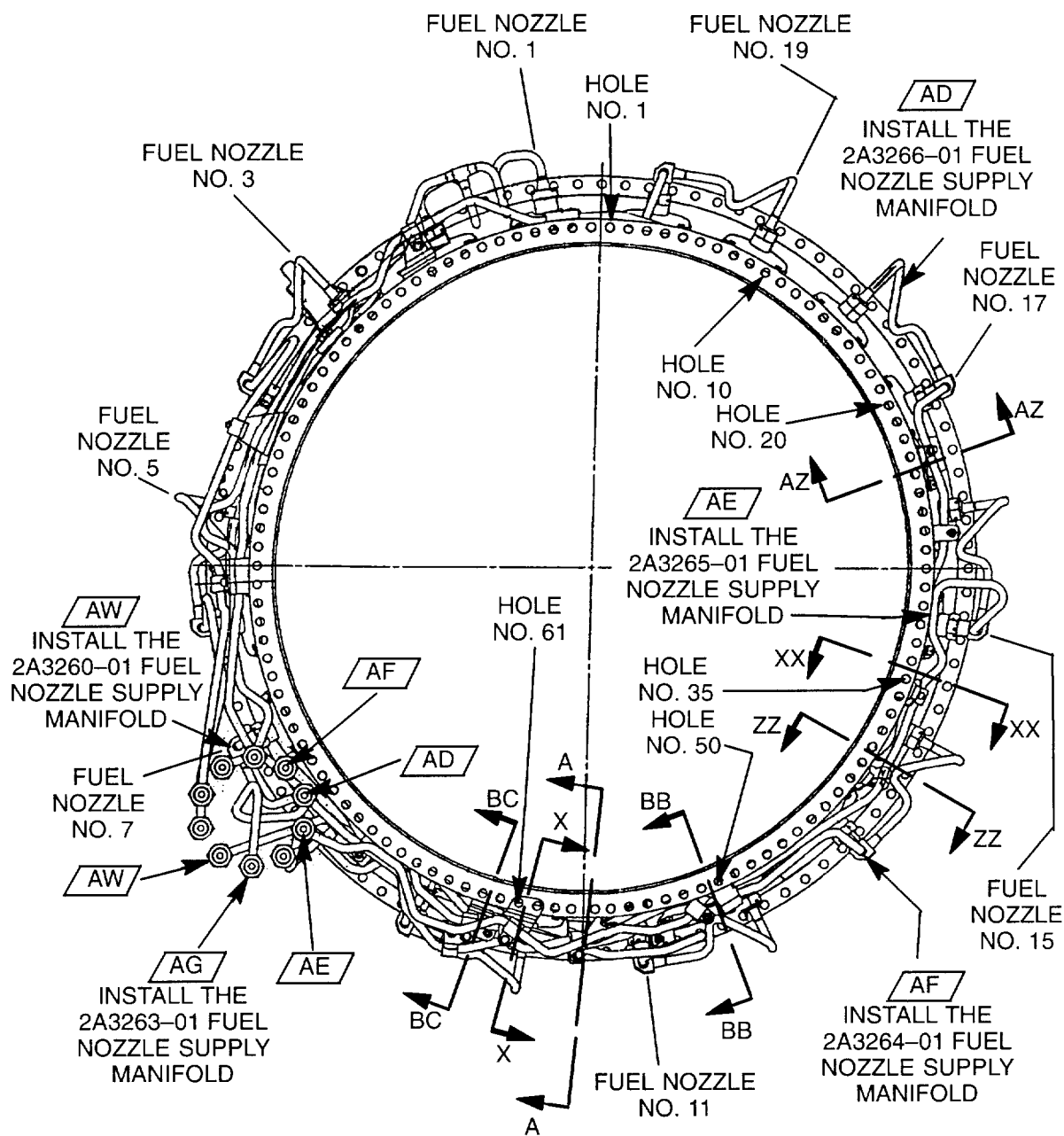


SECTION Y-Y
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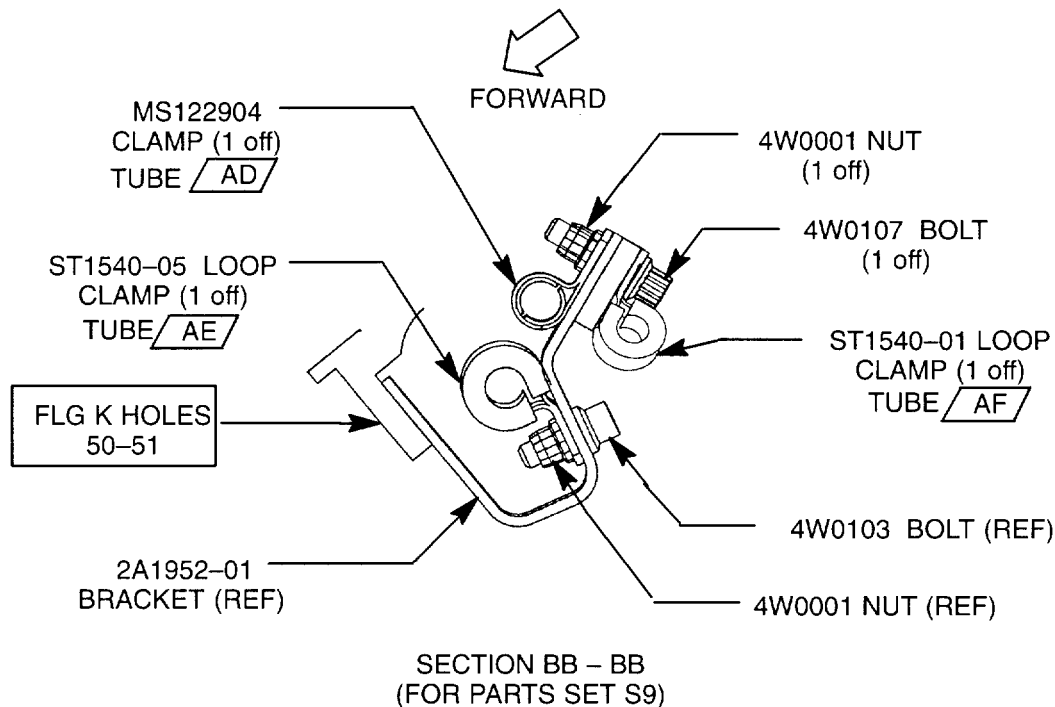
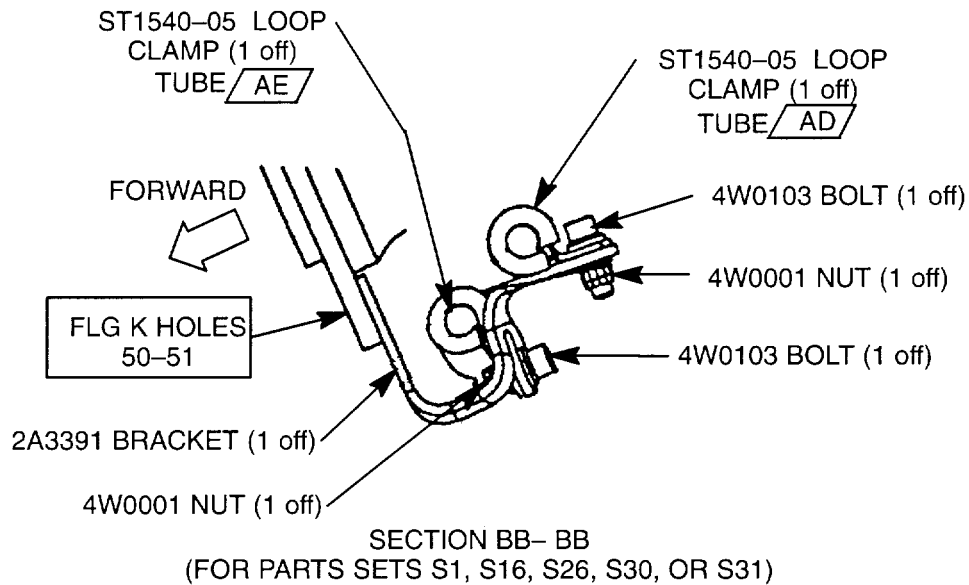
SECTION Y-Y
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Location of the brackets bolted to fuel nozzle pads
Fig 3 (sheet 4)

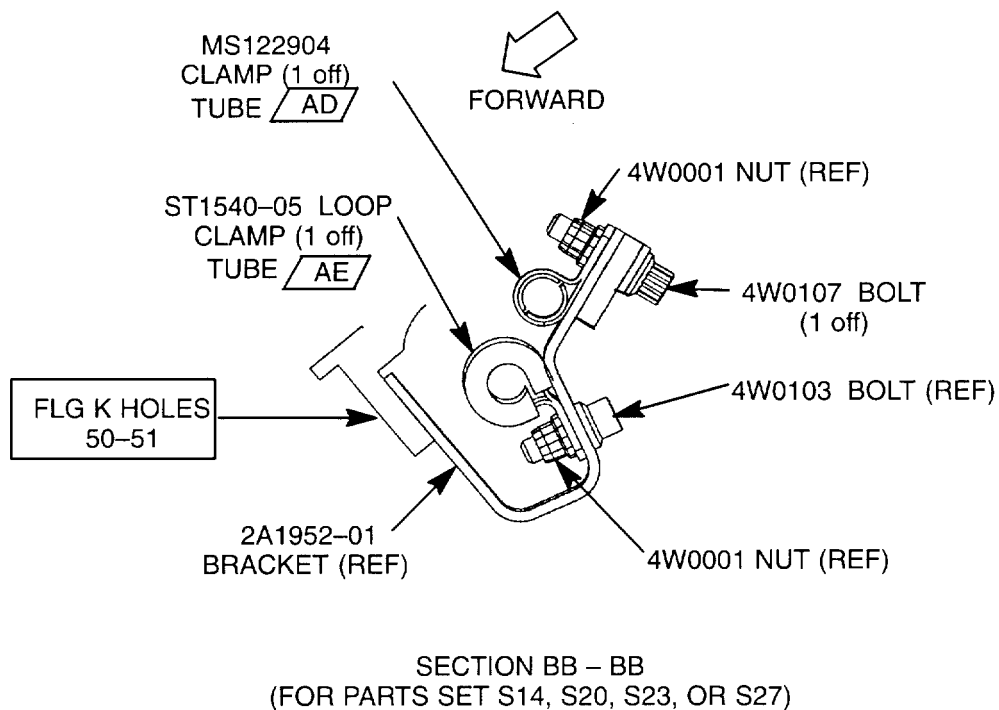
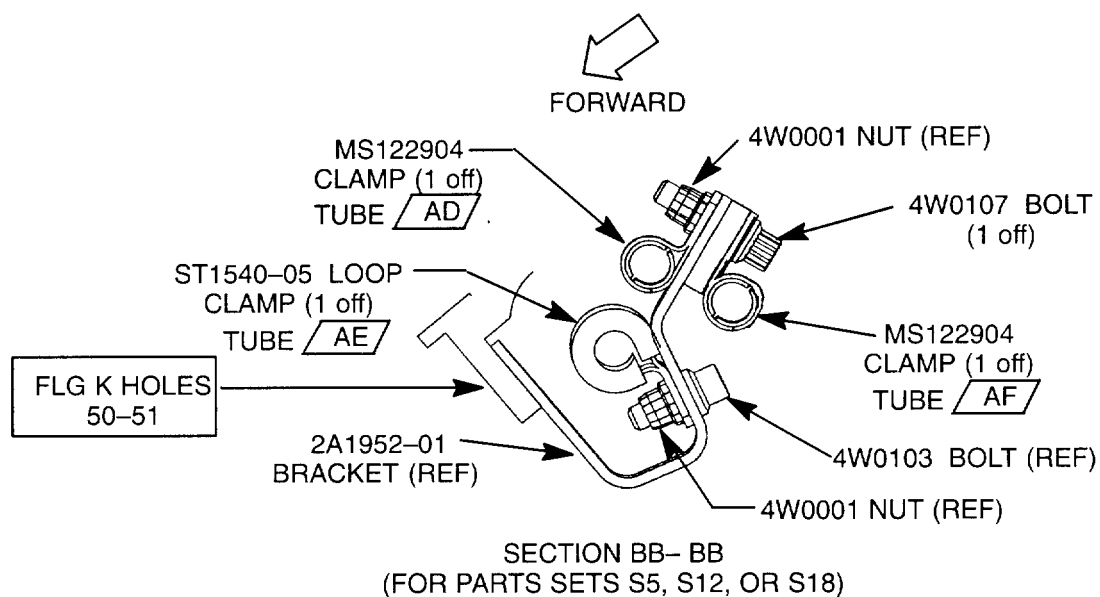


VIEW OF FUEL MANIFOLD INSTALLATION WHEN YOU LOOK FROM THE FRONT

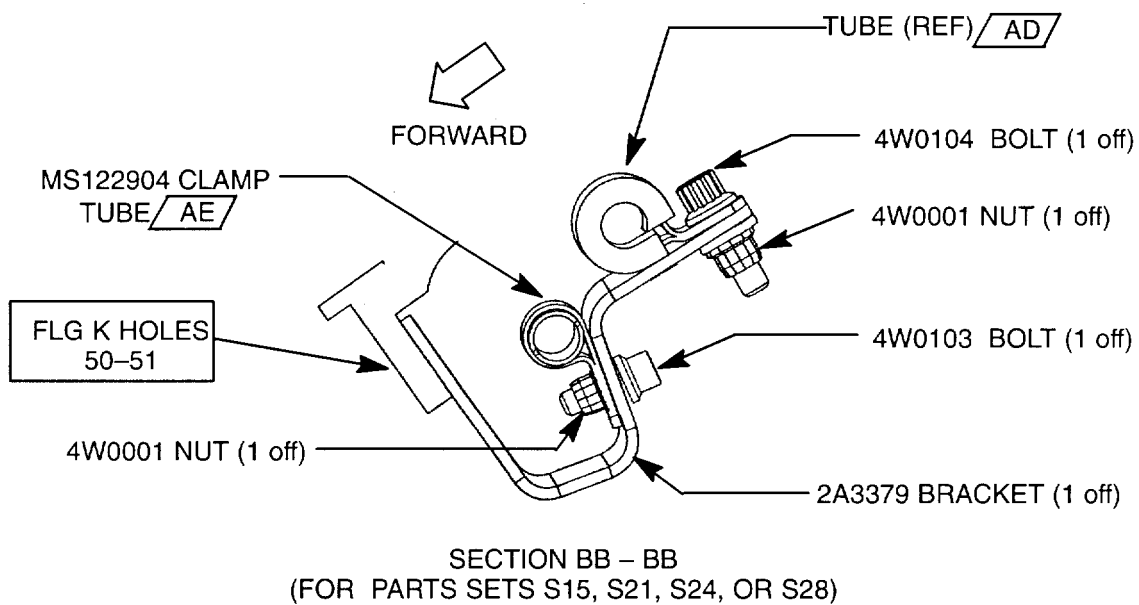
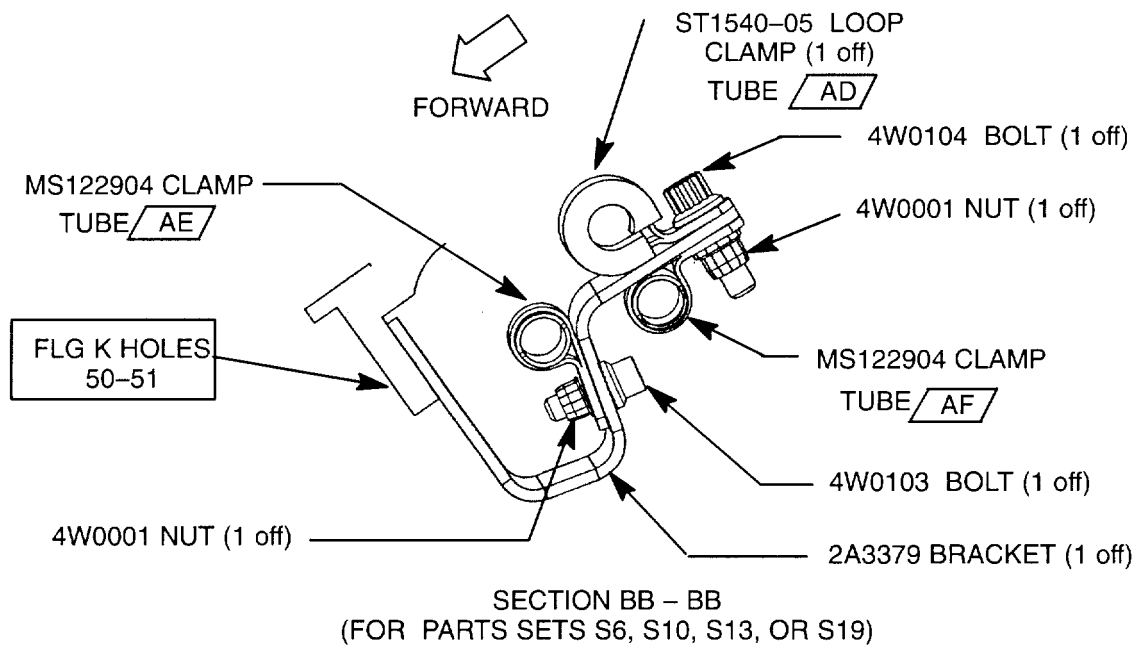
Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 1)



Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 2)

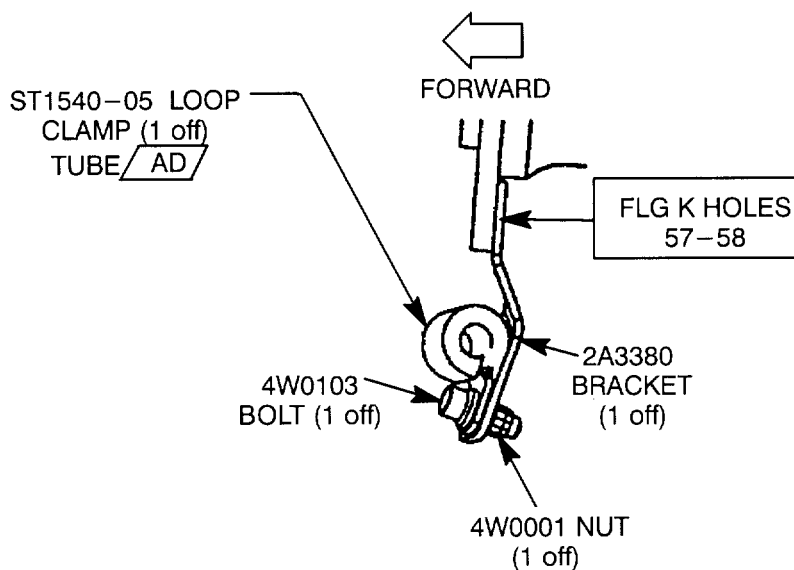
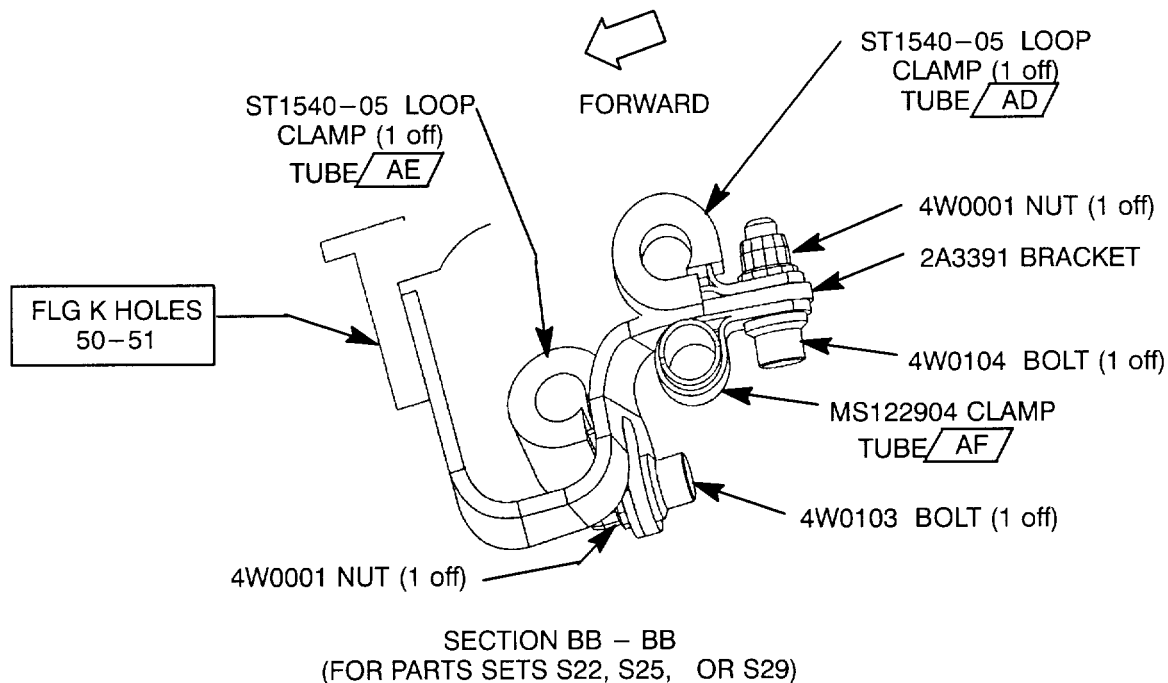


Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 3)



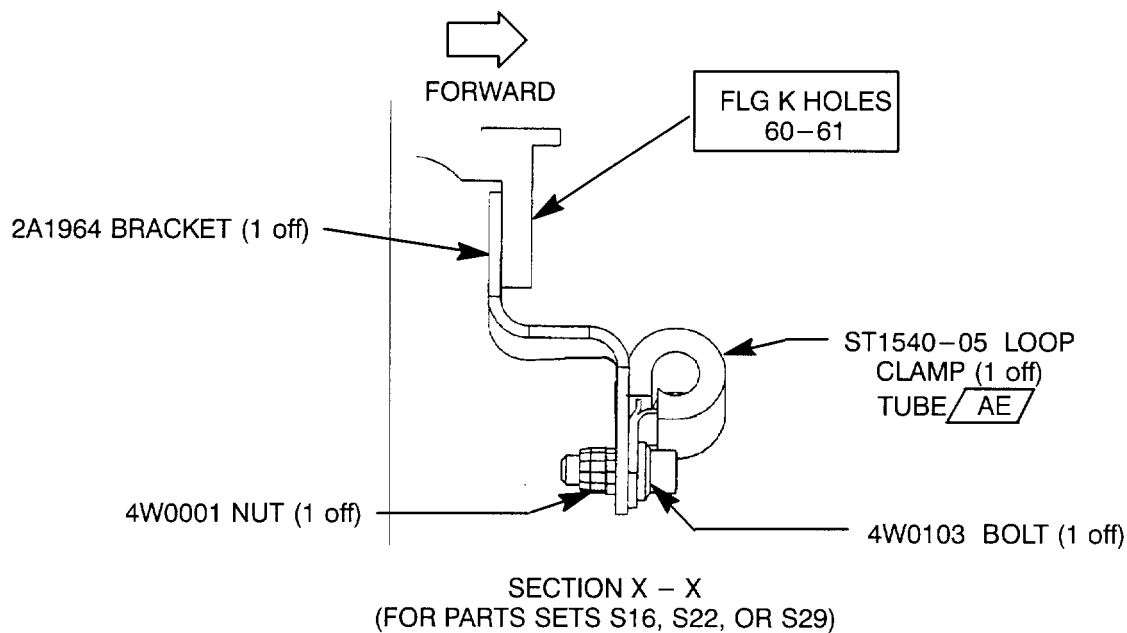
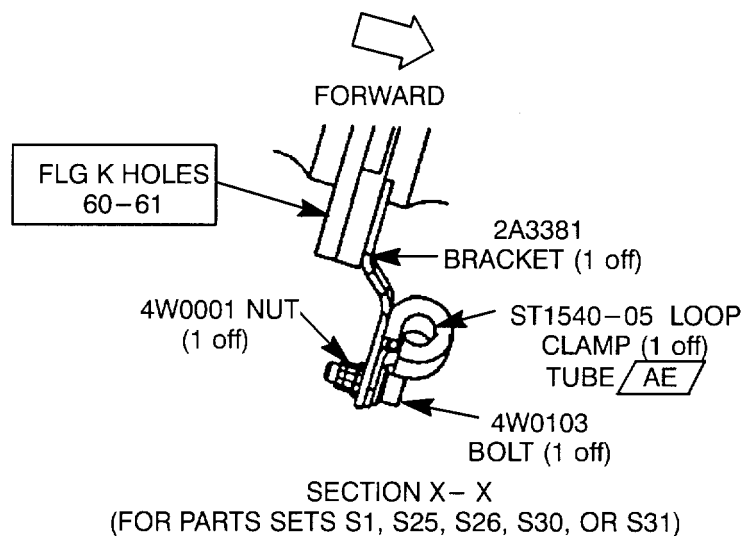
pw000e8216

Location of the fuel nozzle manifold assemblies
Fig 4 (sheet 4)



Location of the fuel nozzle manifold assemblies
Fig 4 (sheet 5)

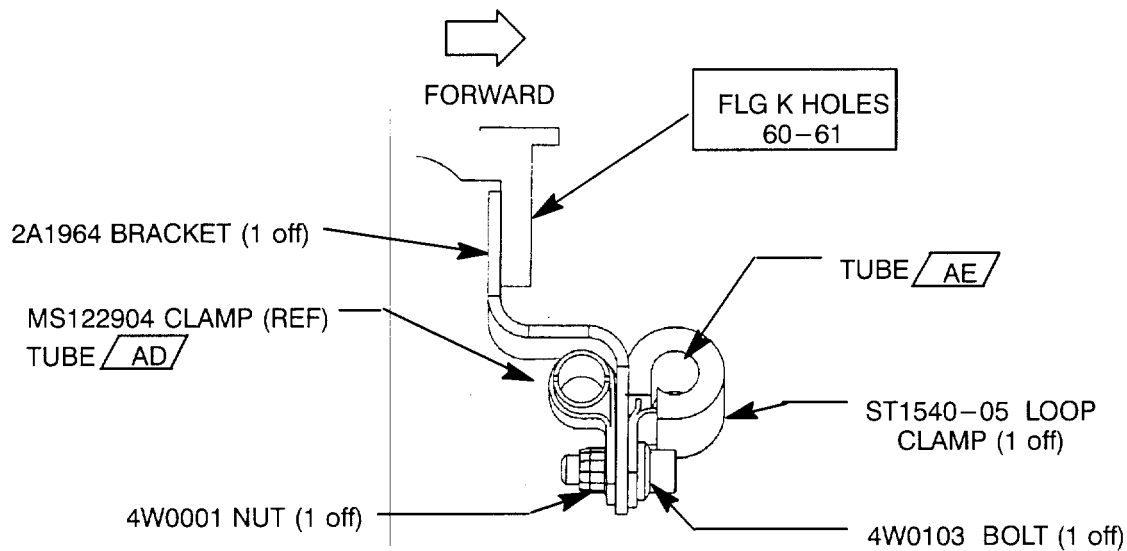
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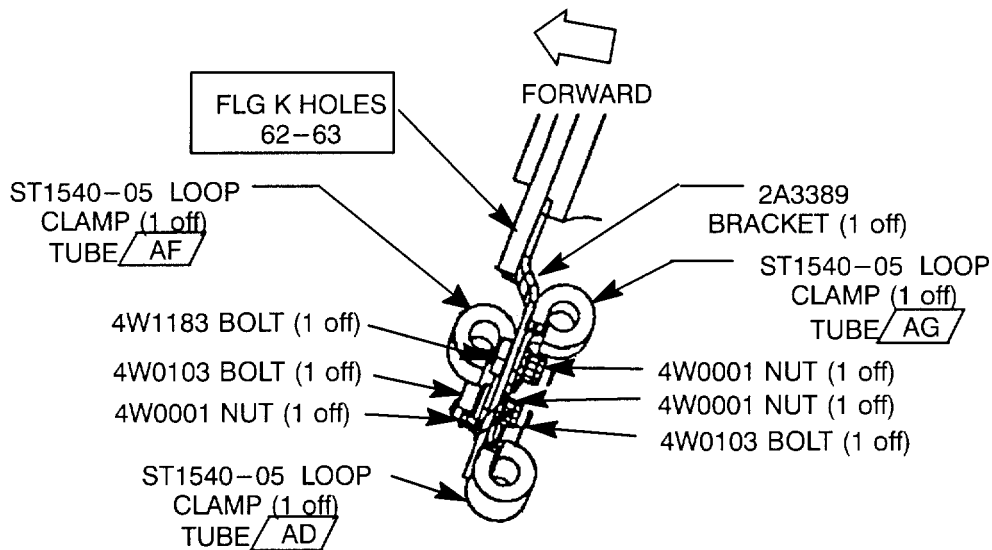
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Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 6)

7



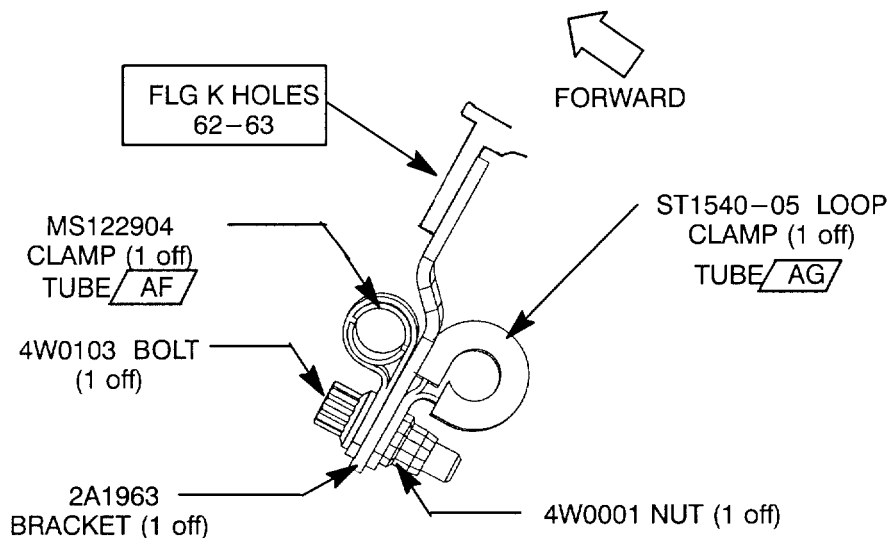
SECTION X - X
(FOR PARTS SETS S5, S9, S12, S14, S18, S20, S23, OR S27)



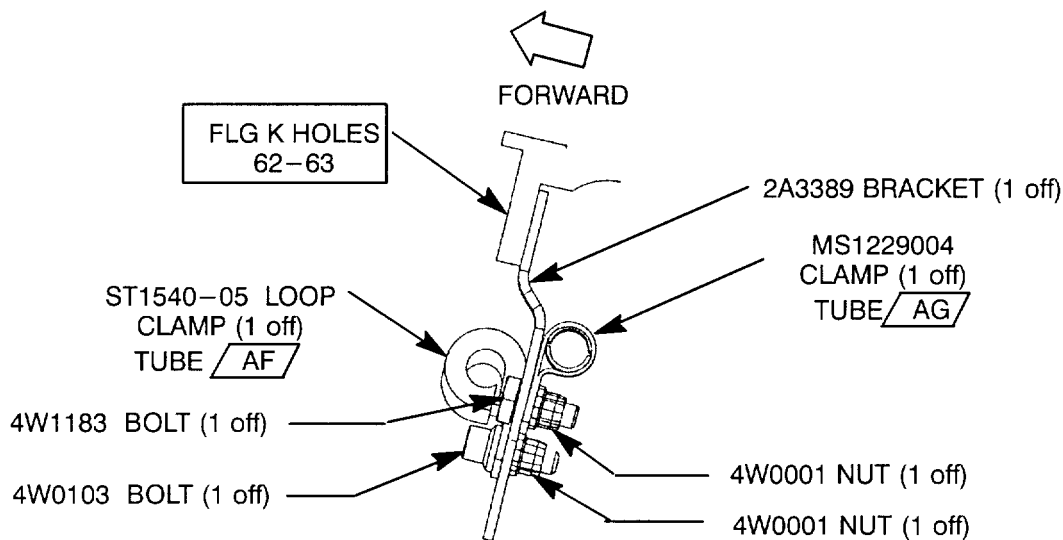
SECTION BC - BC
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Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 7)

pw000e8219

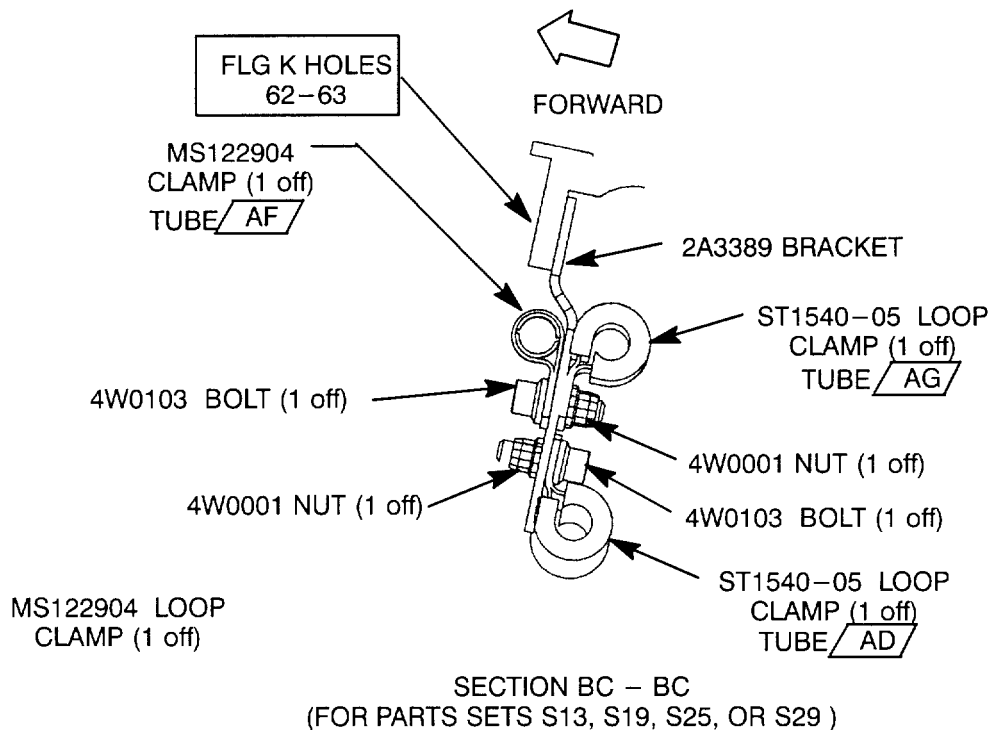
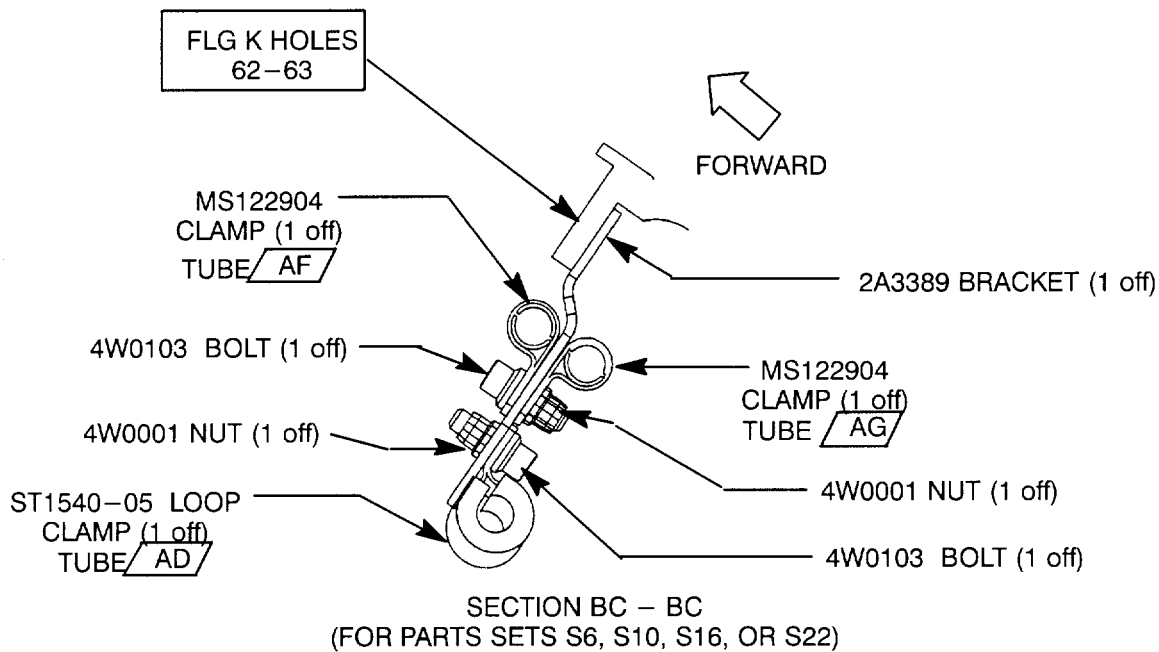


SECTION BC – BC
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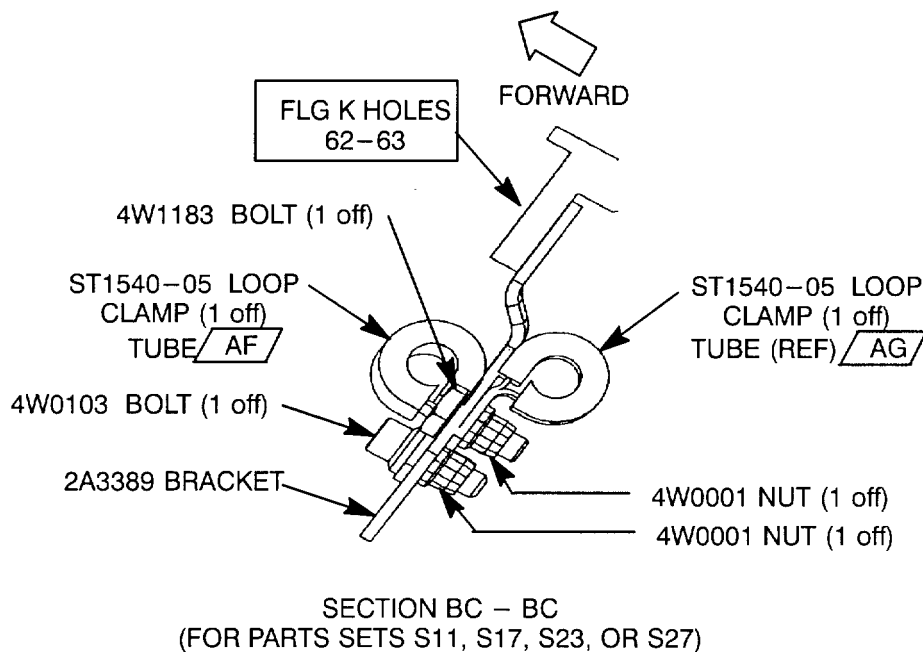
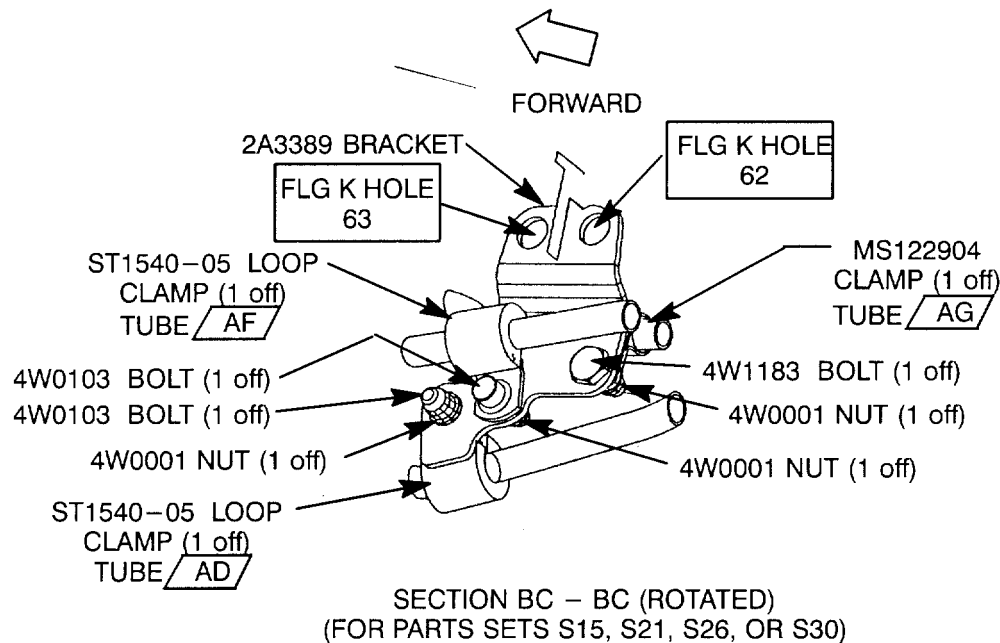


SECTION BC – BC
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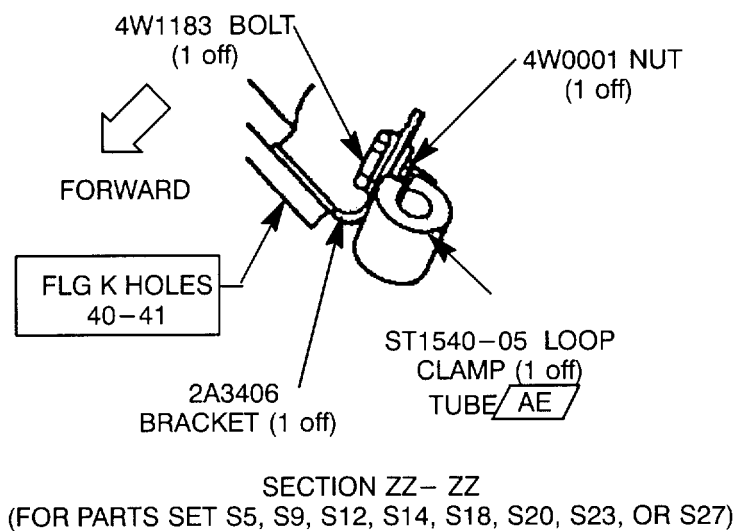
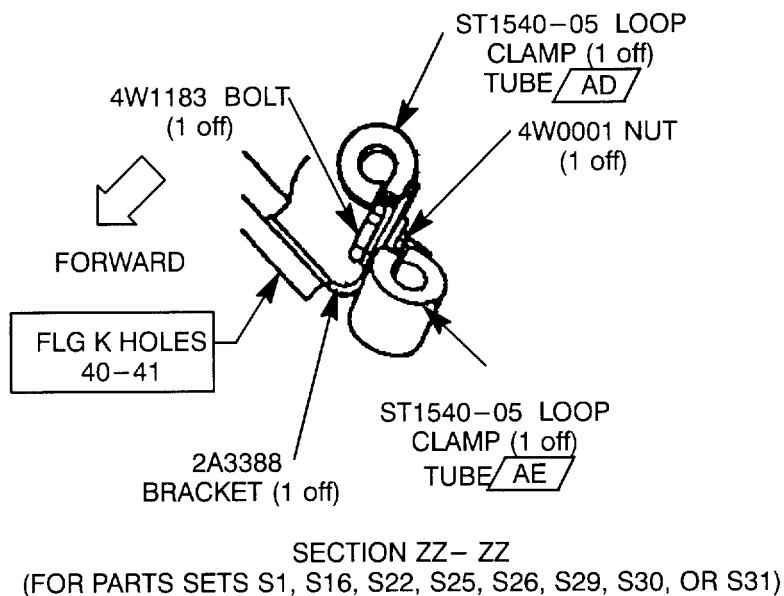
Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 8)



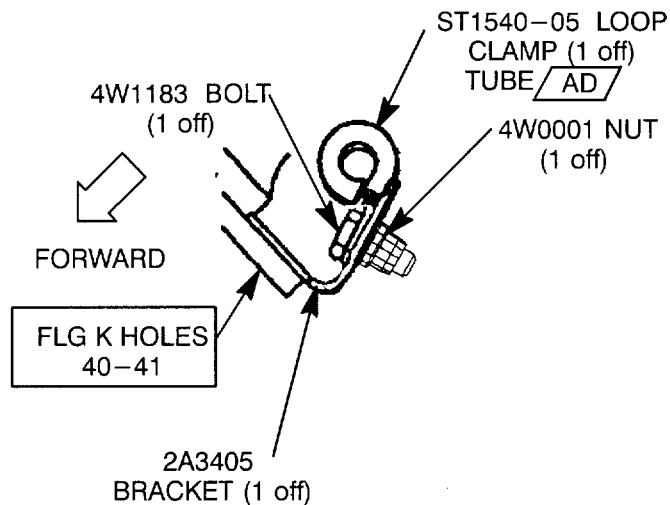
Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 9)



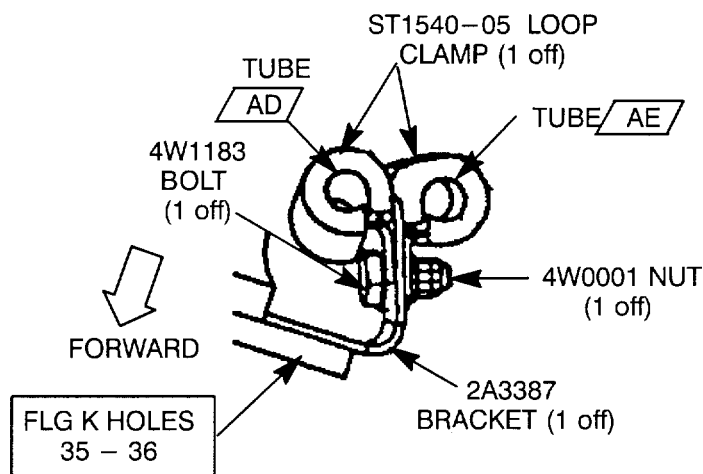
Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 10)



Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 11)



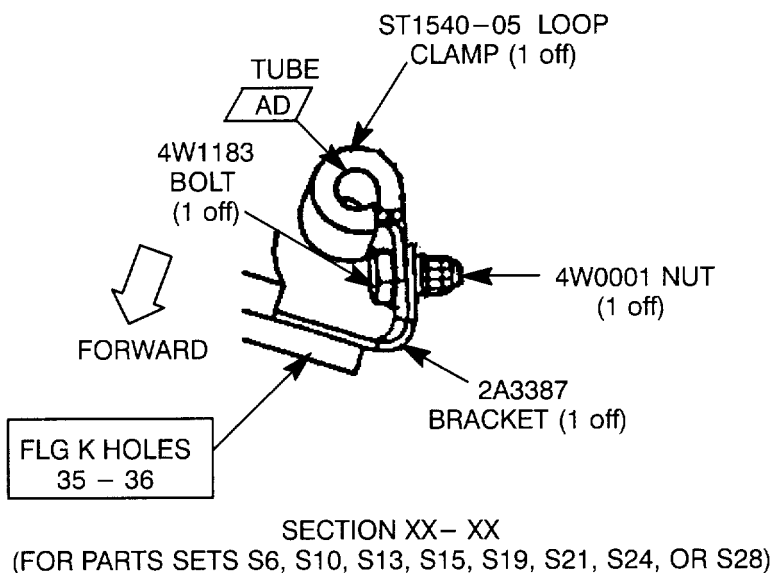
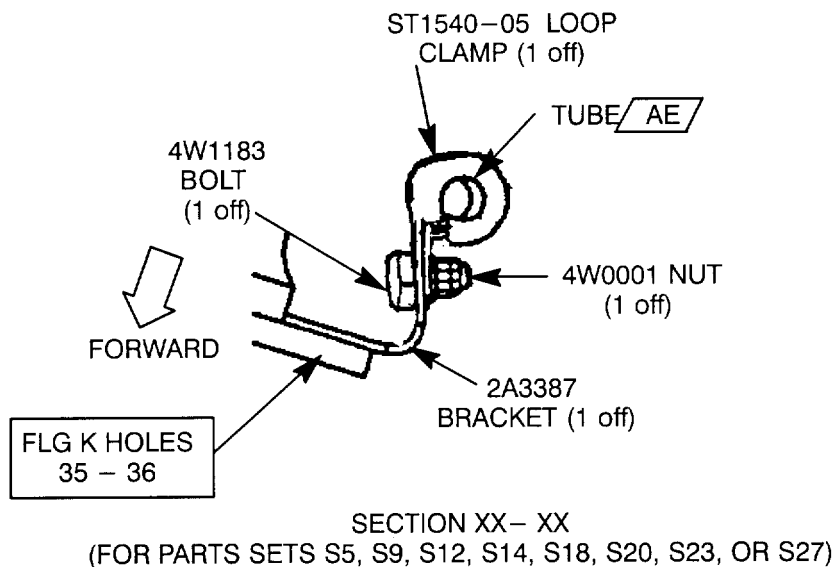
SECTION ZZ- ZZ
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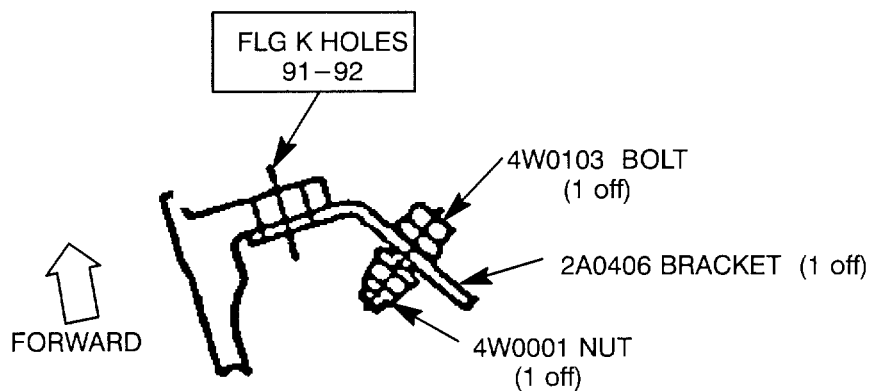
SECTION XX- XX
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pw000e8224

Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 12)



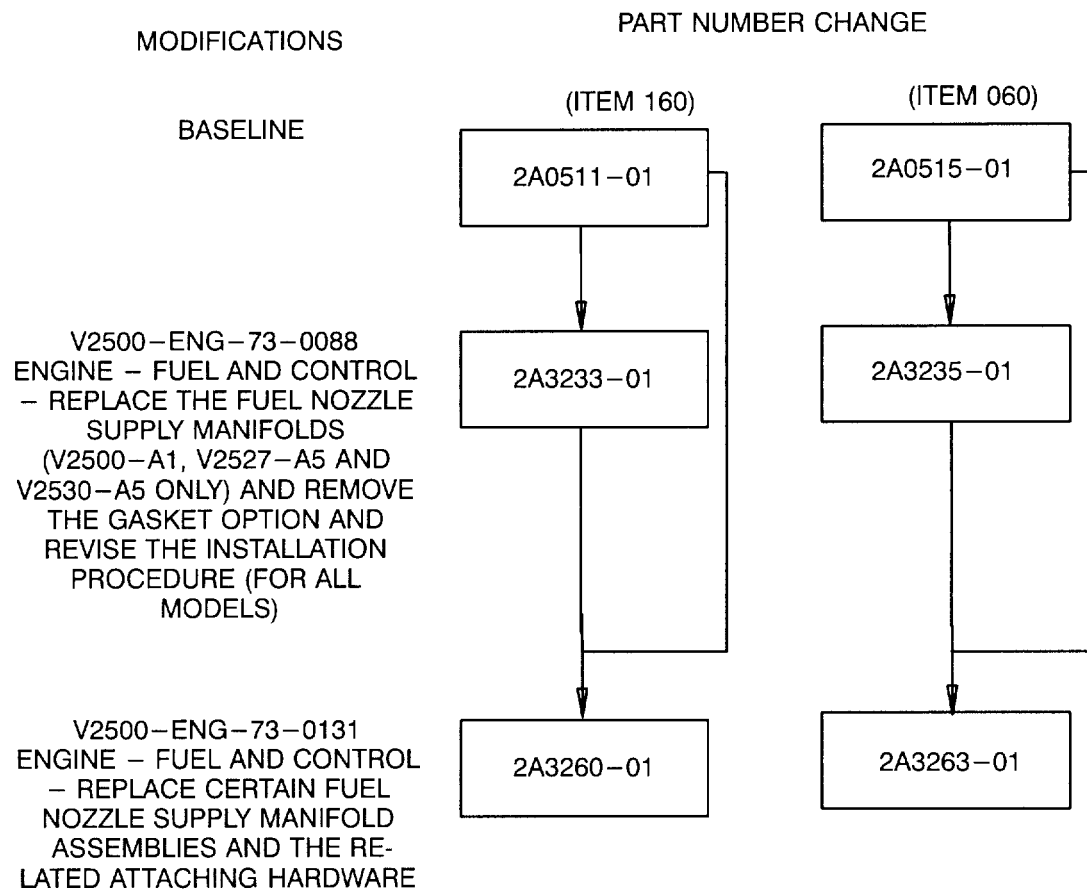
Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 13)



SECTION AZ – AZ
(FOR PARTS SETS S1, S6, S10, S13, S15, S16, S17,
S19, S21, S22, S24, S25, S26, S28, S29, S30, OR S31)

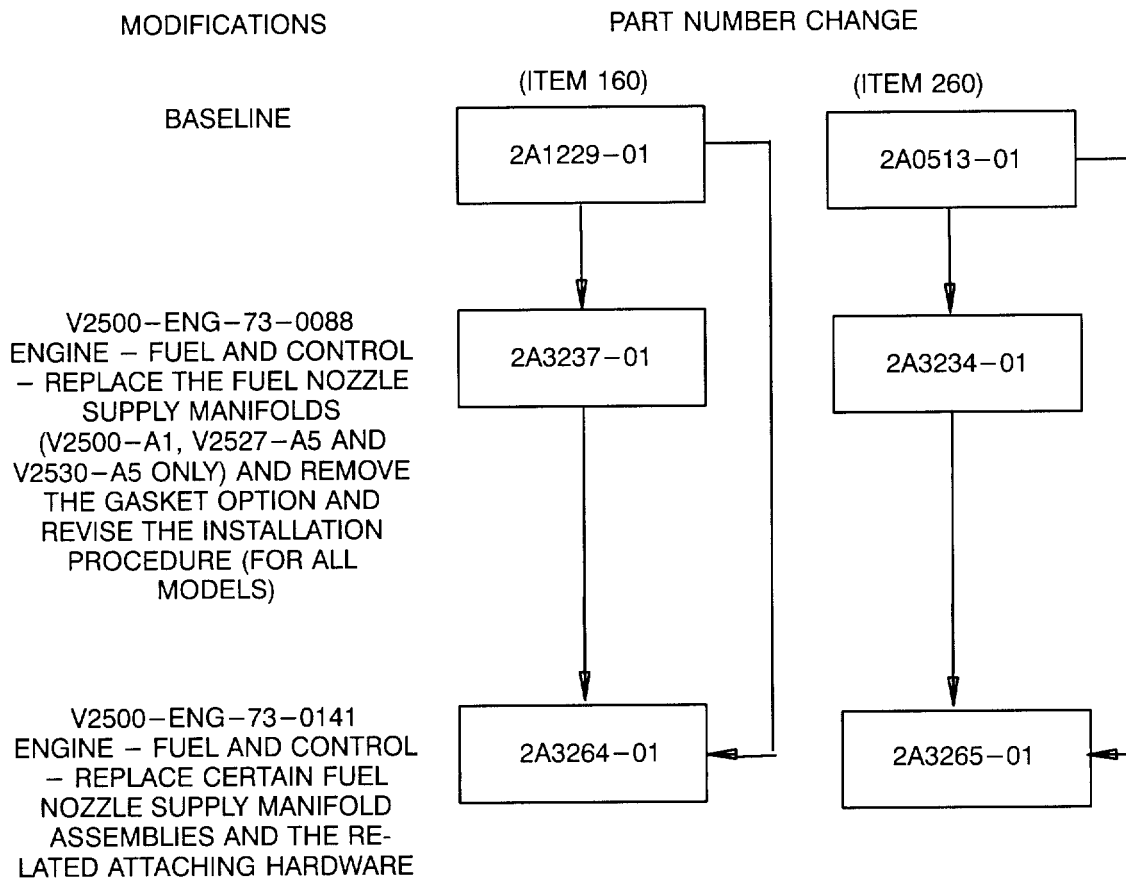
pw000e8226

Location of the fuel nozzle supply manifold assemblies
Fig 4 (sheet 14)



pw000e8227

Family tree (V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2530-A5 and V2533-A5 engines) – Ref catalog sequence no. 73-11-41, Fig 2 item 160 and Fig 3 item 060
Fig 5



pw000e8228

Family tree (V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2530-A5 and V2533-A5 engines) – Ref catalog sequence no. 73-11-41, Fig 3 items 160, 260
Fig 6

MODIFICATIONS

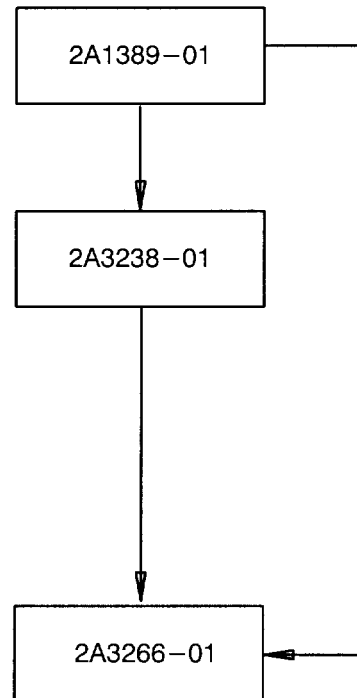
BASELINE

V2500-ENG-73-0088
ENGINE – FUEL AND CONTROL
– REPLACE THE FUEL NOZZLE
SUPPLY MANIFOLDS
(V2500-A1, V2527-A5 AND
V2530-A5 ONLY) AND REMOVE
THE GASKET OPTION AND
REVISE THE INSTALLATION
PROCEDURE (FOR ALL
MODELS)

V2500-ENG-73-0141
ENGINE – FUEL AND CONTROL
– REPLACE CERTAIN FUEL
NOZZLE SUPPLY MANIFOLD
ASSEMBLIES AND THE RE-
LATED ATTACHING HARDWARE

PART NUMBER CHANGE

(Item 360)


Added Data

Number values shown in parenthesis adjacent to U.S. values are Systeme Internationale equivalents.

pw0000e8229

Family tree (V2500-A1, V2522-A5, V2524-A5, V2527-A5, V2530-A5, V2533-A5 engines) –
Ref catalog sequence no. 73-11-41, Fig 3 item 360
Fig 7

