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AgustaWestland Products

SERVICE BULLETIN

N° 139-444

DATE: February 25, 2016

REV. : C - June 28, 2018

TITLE

ATA 78 - EXHAUST DUCTS AND REAR FIREWALL RETROMOD

REVISION LOG

The Revision C of this Service Bulletin cancels and supersedes all the previous issues.

Revision C is issued to:

- Modify Part III by adding the central flange LH assy P/N 3G7810A18731 as alternative to installation of doubler P/N 3G7810A18451;
- Modify Part IV by adding the central flange RH assy P/N 3G7810A18831 as alternative to installation of doubler P/N 3G7810A18451;
- Add Parts XIV, XV, XVI and XVII;
- Modify Part V;
- Modify Figures 22 and 31;
- Add Figures from 37 to 49.

For components already modified in accordance with previous issues of this Service Bulletin, refer to Parts XIV, XV, XVI and XVII for the application of relevant repairs as applicable.

1. PLANNING INFORMATION

A. EFFECTIVITY

Part I

All Forward Exhaust LH ducts P/N 3G7810A00331.

Part II

All Forward Exhaust RH ducts P/N 3G7810A00231.

Part III

All Rear Exhaust LH ducts P/N 3G7810A02131.

Part IV

All Rear Exhaust RH ducts P/N 3G7810A02231.

Part V

All Firewall Module assembly P/N 3G7810A02033 and P/N 3G7810A02031.

NOTE

Rear exhaust LH and RH ducts P/N 3G7810A02131 and P/N 3G7810A02231 assembled with firewall module assy P/N 3G7810A02031, is equivalent to the Rear Exhaust Module P/N 3G7810A00431.

Rear exhaust LH and RH ducts P/N 3G7810A02131 and P/N 3G7810A02231 assembled with firewall module assy P/N 3G7810A02033 (or equivalent productive such as P/N 3G7810A02033KIT), is equivalent to the Rear Exhaust Module P/N 3G7810A00433.

Part VI, VIII, and X

All Forward Exhaust LH P/N 3G7806P08931 or P/N 3G7810A00331 (simultaneously with application of Part I).

Part VII, IX, and XI

All Forward Exhaust RH P/N 3G7806P09031 or P/N 3G7810A00231 (simultaneously with application of Part II).

Part XII

All LH rear ejector assy P/N 3G7806P09231 or P/N 3G7810A02131 (simultaneously with application of Part III).

Part XIII

All RH rear ejector assy P/N 3G7806P09331 or P/N 3G7810A02231 (simultaneously with application of Part IV).

Part XIV

All LH rear ejector assy P/N 3G7806P09231 or P/N 3G7810A02131 (simultaneously with application of Part III).

Part XV

All RH rear ejector assy P/N 3G7806P09331 or P/N 3G7810A02231 (simultaneously with application of Part IV).

Part XVI

All Forward Exhaust LH P/N 3G7806P08931 or P/N 3G7810A00331 (simultaneously with application of Part I).

Part XVII

All Forward Exhaust RH P/N 3G7806P09031 or P/N 3G7810A00231 (simultaneously with application of Part II).

B. COMPLIANCE

At Customer's option.

C. CONCURRENT REQUIREMENTS

N.A.

D. REASON

This Service Bulletin is issued in order to provide all necessary instructions on how to perform the reinforcement retromod on the Rear Exhaust Modules.

E. DESCRIPTION

This Service Bulletin provides the instruction to modify the single components of the Unshielded Ejector installation, also providing additional repairs. This Service Bulletin is not covering the installation on the helicopter of the modified components (ref. to SB139-358).

Part I provides instructions to perform the retromod of the forward exhausts LH P/N 3G7810A00331.

Part II provides instructions to perform the retromod of the forward exhausts RH P/N 3G7810A00231.

Part III provides instructions to perform the retromod of the rear ejector assy LH P/N 3G7810A02131.

Part IV provides instructions to perform the retromod of the rear ejector assy RH P/N 3G7810A02231.

Part V provides instructions to perform the retromod of the rear firewall module assembly P/N 3G7810A02033 and P/N 3G7810A02031.

Part VI provides instructions to perform the repair of the forward exhaust LH retromod P/N 3G7806P08931 (ref. Part I of this Service Bulletin).

Part VII provides instructions to perform the repair of the forward exhaust RH retromod P/N 3G7806P09031 (ref. Part II of this Service Bulletin).

Part VIII provides instructions to perform the repair of the forward exhaust LH retromod P/N 3G7806P08931 (ref. Part I of this Service Bulletin).

Part IX provides instructions to perform the repair of the forward exhaust RH retromod P/N 3G7806P09031 (ref. Part II of this Service Bulletin).

Part X provides instructions to perform the repair of the forward exhaust LH retromod P/N 3G7806P08931 (ref. Part I of this Service Bulletin).

Part XI provides instructions to perform the repair of the forward exhaust RH retromod P/N 3G7806P09031 (ref. Part II of this Service Bulletin).

Part XII provides instructions to perform the repair of the LH rear ejector assy retromod P/N 3G7806P09231 (ref. Part III of this Service Bulletin).

Part XIII provides instructions to perform the repair of the RH rear ejector assy retromod P/N 3G7806P09331 (ref. Part IV of this Service Bulletin).

Part XIV provides instructions to perform the repair of the LH rear ejector assy retromod P/N 3G7806P09231 (ref. Part III of this Service Bulletin).

Part XV provides instructions to perform the repair of the RH rear ejector assy retromod P/N 3G7806P09331 (ref. Part IV of this Service Bulletin).

Part XVI provides instructions to perform the repair of the forward exhaust LH retromod P/N 3G7806P08931 (ref. Part I of this Service Bulletin).

Part XVII provides instructions to perform the repair of the forward exhaust RH retromod P/N 3G7806P09031 (ref. Part II of this Service Bulletin).

F. APPROVAL

The technical content of this Service Bulletin is approved under the authority of DOA nr. EASA.21.J.005. For helicopters registered under other Aviation Authorities, before applying the Service Bulletin, applicable Aviation Authority approval must be checked within Leonardo Helicopters customer portal.

E.A.S.A. states mandatory compliance with inspections, modifications or technical directives and related time of compliance by means of relevant Airworthiness Directives.

If an aircraft listed in the effectively embodies a modification or repair not LHD certified and affecting the content of this Service Bulletin, it is responsibility of the

Owner/Operator to obtain a formal approval by Aviation Authority having jurisdiction on the aircraft, for any adaptation necessary before incorporation of the present Service Bulletin.

G. MANPOWER

To comply with this Service Bulletin the following Maintenance-Man-Hours (MMH) are deemed necessary:

Part I: approximately twenty-eight (28) MMH

Part II: approximately twenty-eight (28) MMH

Part III: approximately twenty (20) MMH

Part IV: approximately twenty (20) MMH

Part V: approximately twelve (12) MMH

Part VI: approximately six (6) MMH

Part VII: approximately six (6) MMH

Part VIII: approximately five (5) MMH

Part IX: approximately five (5) MMH

Part X: approximately four (4) MMH

Part XI: approximately four (4) MMH

Part XII: approximately ten (10) MMH

Part XIII: approximately ten (10) MMH

Part XIV: approximately three (3) MMH

Part XV: approximately three (3) MMH

Part XVI: approximately four (4) MMH

Part XVII: approximately four (4) MMH

Maintenance-Man-Hours are based on hands-on time and can change with personnel and facilities available.

H. WEIGHT AND BALANCE

N.A.

I. REFERENCES

1) PUBLICATIONS

DATA MODULE		DESCRIPTION	PART
DM01	39-C-78-10-00-00A-31AA-A	Exhaust duct installation - Detailed Inspection	All

2) ACRONYMS

AR	As Required
AMP	Aircraft Maintenance Publication
DM	Data Module
DOA	Design Organization Approval
EASA	European Aviation Safety Agency
FWD	Forward
LHD	Leonardo Spa Helicopters
SB	Service Bulletin

3) ANNEX

N.A.

J. PUBLICATIONS AFFECTED

N.A.

K. SOFTWARE ACCOMPLISHMENT SUMMARY

N.A.

2. MATERIAL INFORMATION

A. REQUIRED MATERIALS

1) PARTS

PART I

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
1	**3G7806P08931**		**FORWARD EXHAUST LH RETROMOD**	**REF**	**.**		**N.A.**
2	3G7810A03132		Ejector flange assy	1	..		139-444L1
3	3G7810A10652		Upper bracket LH	1	..		139-444L1
4	3G7810A10751		Side bracket LH	1	..		139-444L1
5	3G7810A14751		Z profile	2	..		139-444L1
6	3G7810A14851		Closure plate	2	..		139-444L1

PART II

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
7	**3G7806P09031**		**FORWARD EXHAUST RH RETROMOD**	**REF**	**.**		**N.A.**
8	3G7810A03132		Ejector flange assy	1	..		139-444L2
9	3G7810A11452		Upper bracket RH	1	..		139-444L2
10	3G7810A10751		Side bracket	1	..		139-444L2
11	3G7810A14751		Z profile	2	..		139-444L2
12	3G7810A14851		Closure plate	2	..		139-444L2

PART III

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
13	**3G7806P09231**		**LH REAR EJECTOR RETROMOD**	**REF**	**.**		**N.A.**
14	3G7810A09752		Special rubber	3	..		139-444L3
15	3G7810A12651		Special bushing	3	..		139-444L3
16	3G7810A14031		Central cup assy	1	..		139-444L3
17	3G7810A14131		Internal cup assy exhaust LH	1	..		139-444L3
18	3G7810A14331		External cup assy exhaust LH	1	..		139-444L3
19	MS16625-1087		Retaining ring	3	..		139-444L3
20	999-0066-02-132	AW008TZ-02-132	Washer	3	..		139-444L3
21	**3G7810A12931**		**INTERNAL FLANGE ASSY**	**REF**	**..**		**N.A.**
22	3G7810A13051		Split flange internal	1	...		139-444L3
23	3G7810A13151		Split flange external	1	...		139-444L3
24	**3G7810R00711**		**REAR LH EXHAUST FLANGE REPAIR**	**REF**	**.**	**(10)**	**N.A.**
25	3G7810A18451		Doubler	1	..		N.A.
26	**3G7810R00911**		**REAR LH EXHAUST FLANGE REPAIR**	**REF**	**.**	**(9)**	**N.A.**
27	3G7810A18731		Central flange LH assy	1	..		139-444L4
28	MS20615-4M4R		Rivet	7	..		139-444L4

PART IV

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
29	**3G7806P09331**		**RH REAR EJECTOR RETROMOD**	**REF**	**.**		**N.A.**
30	3G7810A09752		Special rubber	3	..		139-444L5
31	3G7810A12651		Special bushing	3	..		139-444L5
32	3G7810A14031		Central cup assy	1	..		139-444L5
33	3G7810A14231		Internal cup assy exhaust RH	1	..		139-444L5
34	3G7810A14431		External cup assy exhaust RH	1	..		139-444L5
35	MS16625-1087		Retaining ring	3	..		139-444L5
36	999-0066-02-132	AW008TZ-02-132	Washer	3	..		139-444L5
37	A297A04TW02		Rivet	10			139-444L5
38	**3G7810A12931**		**INTERNAL FLANGE ASSY**	**REF**	**..**		**N.A.**
39	3G7810A13051		Split flange internal	1	...		139-444L5
40	3G7810A13151		Split flange external	1	...		139-444L5
41	**3G7810R00712**		**REAR RH EXHAUST FLANGE REPAIR**	**REF**	**.**	**(10)**	**N.A.**
42	3G7810A18451		Doubler	1	..		N.A.
43	**3G7810R00912**		**REAR RH EXHAUST FLANGE REPAIR**	**REF**	**.**	**(9)**	**N.A.**
44	3G7810A18831		Central flange RH assy	1	..		139-444L6
45	MS20615-3M4		Rivet	0,1 Kg	..		139-444L6
46	A297A04TW02		Rivet	1	..		139-444L6

PART V

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
47	**3G7810P00331**		**REAR FIREWALLS MODULE ASSY RETROMOD**	**REF**	**.**	**(3)**	**N.A.**
48	3G7810A03052		Vertical wall	1	..		139-444L7
49	3G7810A03552		Internal bracket LH	1	..		139-444L7
50	3G7810A04052		External bracket LH	1	..		139-444L7
51	3G7810A04153	3G7810A04153A1	Lower bracket LH	1	..		139-444L7
52	3G7810A04252		External bracket FWD LH	1	..		139-444L7
53	3G7810A04752		Internal bracket RH	1	..		139-444L7
54	3G7810A05252		External bracket RH	1	..		139-444L7
55	3G7810A05353	3G7810A05353A1	Lower bracket RH	1	..		139-444L7
56	3G7810A05452		External bracket FWD RH	1	..		139-444L7
57	3G7810A11551		Vertical reinforcement	2	..		139-444L7
58	3G7810A11651	3G7810A11651A1	External reinforcement plate RH	1	..		139-444L7
59	3G7810A11751	3G7810A11751A1	External attachment plate RH	1	..		139-444L7
60	3G7810A11851		Internal reinforcement plate RH	1	..		139-444L7
61	3G7810A11951		Internal attachment plate RH	1	..		139-444L7
62	3G7810A12051	3G7810A12051A1	External reinforcement plate LH	1	..		139-444L7
63	3G7810A12151	3G7810A12151A1	External attachment plate LH	1	..		139-444L7
64	3G7810A12251		Internal reinforcement plate LH	1	..		139-444L7
65	3G7810A12351		Internal attachment plate LH	1	..		139-444L7
66	3G7810A12451	3G7810A12451A1	Reinforcement plate	2	..		139-444L7
67	3G7810A13751		Bracket reinforcement LH	1	..		139-444L7

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
68	3G7810A13851		Bracket reinforcement RH	1	..		139-444L7
69	3G7810P00451		Left bracket reworked	REF	..	(1)	N.A.
70	3G7810P00551		Right bracket reworked	REF	..	(2)	N.A.
71	**3G7810P00711**		**REAR EXHAUST MODULE VARIANT**	**REF**	**..**	**(4)**	**N.A.**
72	3G7810P00851		Vertical wall reinforcement	1	..		N.A.

PART VI

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
73	**3G7810R00311**		**FWD LH EXHAUST REPAIR**	**REF**	**.**	**(5)**	**N.A.**
74	3G7810A17151		FWD LH exhaust upper reinforcement	1	..		139-444L8
75	3G7810A17351		FWD LH exhaust upper reinforcement	1	..		139-444L8

PART VII

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
76	**3G7810R00312**		**FWD RH EXHAUST REPAIR**	**REF**	**.**	**(6)**	**N.A.**
77	3G7810A17251		FWD RH exhaust upper reinforcement	1	..		139-444L9
78	3G7810A17451		FWD RH exhaust upper reinforcement	1	..		139-444L9

PART VIII

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
79	**3G7810R00411**		**FWD LH EXHAUST REPAIR**	**REF**	**.**	**(5)**	**N.A.**
80	3G7810A17551		FWD LH exhaust lateral reinforcement	1	..		N.A.

PART IX

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
81	**3G7810R00412**		**FWD RH EXHAUST REPAIR**	**REF**	**.**	**(6)**	**N.A.**
82	3G7810A17651		FWD RH exhaust lateral reinforcement	1	..		N.A.

PART X

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
83	**3G7810A00511**		**FWD LH EXHAUST REPAIR**	**REF**	**.**	**(5)**	**N.A.**
84	3G7810A17751		FWD LH exhaust lateral reinforcement	1	..		N.A.

PART XI

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
85	**3G7810R00512**		**FWD RH EXHAUST REPAIR**	**REF**	**.**	**(6)**	**N.A.**
86	3G7810A17851		FWD RH exhaust lateral reinforcement	1	..		N.A.

PART XII

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
87	**3G7810R00611**		**REAR LH EXHAUST REPAIR**	**REF**	**.**	**(7)**	**N.A.**
88	3G7810A17951		Rear exhaust reinforcement	1	..		139-444L10
89	3G7810A18351		Rear exhaust reinforcement	2			139-444L10

PART XIII

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
90	**3G7810R00612**		**REAR RH EXHAUST REPAIR**	**REF**	**.**	**(8)**	**N.A.**
91	3G7810A17951		Rear exhaust reinforcement	1	..		139-444L11
92	3G7810A18351		Rear exhaust reinforcement	2	..		139-444L11
93	A297A04TW01		Rivet	1	..		139-444L11
94	A297A04TW02		Rivet	2	..		139-444L11

PART XIV

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
95	**3G7810R01011**		**REAR LH EXHAUST REPAIR**	**REF**	**.**	**(7)**	**N.A.**
96	3G7810A19051		LH rear ejector flange reinforcement	1	..		139-444L12
97	NAS1200M3-3-5		Rivet	11	..		139-444L12

PART XV

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
98	**3G7810R01012**		**REAR RH EXHAUST REPAIR**	**REF**	**.**	**(8)**	**N.A.**
99	3G7810A19151		RH rear ejector flange reinforcement	1	..		139-444L13
100	NAS1200M3-3-5		Rivet	11	..		139-444L13

PART XVI

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
101	**3G7810R00811**		**FWD LH EXHAUST REPAIR**	**REF**	**.**	**(5)**	**N.A.**
102	3G7810A18551		FWD LH exhaust lower reinforcement	1	..		139-444L14
103	MS20615-3M3		Rivet	0,1 Kg	..		139-444L14
104	MS20615-3M4		Rivet	0,1 Kg	..		139-444L14
105	NAS1097U3-3		Rivet	4	..		139-444L14

PART XVII

#	P/N	ALTERNATIVE P/N	DESCRIPTION	Q.TY	LVL	NOTE	LOG P/N
106	**3G7810R00812**		**FWD RH EXHAUST REPAIR**	**REF**	**.**	**(6)**	**N.A.**
107	3G7810A18651		FWD RH exhaust lower reinforcement	1	..		139-444L15
108	MS20615-3M3		Rivet	0,1 Kg	..		139-444L15
109	MS20615-3M4		Rivet	0,1 Kg	..		139-444L15
110	NAS1097U3-3		Rivet	4	..		139-444L15

2) CONSUMABLES

The following consumable materials, or equivalent, are necessary to accomplish this Service Bulletin:

#	Spec./LHD code number	DESCRIPTION	Q.TY	NOTE	PART
111	199-05-152 Type III / Code No. 900002972	Adhesive RTV730	AR	(11)	I, II
112	MS20427M3-4	Rivet	AR	(11)	V
113	MS20615-3M3	Rivet	AR	(11)	I, II, V to XIII
114	MS20615-3M3R	Rivet	AR	(11)	I, II, VI, VII, X to XIII
115	MS20615-3M4	Rivet	AR	(11)	I to XI
116	MS20615-3M4R	Rivet	AR	(11)	VIII to XI
117	MS20615-4M4	Rivet	AR	(11)	V
118	MS20615-4M4R	Rivet	AR	(11)	XII, XIII
119	MS20615-4M5	Rivet	AR	(11)	I toV
120	MS20615-4M5R	Rivet	AR	(11)	VI, VII
121	MS20615-4M6	Rivet	AR	(11)	I, II
122	MS20615-4M6R	Rivet	AR	(11)	VIII, IX
123	MS20615-4M7	Rivet	AR	(11)	VIII, IX
124	NAS1097U3-3	Rivet	AR	(11)	I, II, VI, VII
125	NAS1200-3-3	Rivet	AR	(11)	III, IV
126	NAS1200-3-4	Rivet	AR	(11)	III, IV
127	NAS1200-3-5	Rivet	AR	(11)	III, IV
128	AMS5525	Stainless steel plate THK 0.64 mm	AR	(11)	I
129	MS20615-4M3R	Rivet	AR	(11)	V

3) LOGISTIC MATRIX

In order to apply this Service Bulletin, the following Logistic P/N can be ordered in accordance with the applicable notes:

LOGISTIC P/N	Q.TY	NOTE	PART
139-444L1	1		Part I
139-444L2	1		Part II
139-444L3	1		Part III
3G7810A18451	1	(10)	
139-444L4	1	(9)	
139-444L5	1		Part IV
3G7810A18451	1	(10)	
139-444L6	1	(9)	
139-444L7	1	(3)	Part V
3G7810P00851	1	(3), (4)	
139-444L8	1		Part VI
139-444L9	1		Part VII
3G7810A17551	1		Part VIII
3G7810A17651	1		Part IX
3G7810A17751	1		Part X
3G7810A17851	1		Part XI
139-444L10	1		Part XII
139-444L11	1		Part XIII
139-444L12	1		Part XIV

LOGISTIC P/N	Q.TY	NOTE	PART
139-444L13	1		Part XV
139-444L14	1		Part XVI
139-444L15	1		Part XVII

NOTE

(1) Applicable only to components already equipped with lower reinforcement LH P/N 3G7810A07251. This item must be reworked from supplied lower bracket LH P/N 3G7810A04153.

(2) Applicable only to components already equipped with lower reinforcement RH P/N 3G7810A07252. This item must be reworked from supplied lower bracket RH P/N 3G7810A05353.

(3) This retromod is applicable to Rear Firewall Module assy P/N 3G7810A02033 and P/N 3G7810A02031.

(4) This item is mandatorily required only if the Rear firewall module assy retromod P/N 3G7810P00331 is provided in lieu of the Rear firewall module assy P/N 3G7810A02034 and the helicopter is equipped with Talon antenna.

(5) Compliance with Part I of this Service Bulletin is a mandatory requirement to apply this repair.

(6) Compliance with Part II of this Service Bulletin is a mandatory requirement to apply this repair.

(7) Compliance with Part III of this Service Bulletin is a mandatory requirement to apply this repair.

(8) Compliance with Part IV of this Service Bulletin is a mandatory requirement to apply this repair.

(9) Item to be ordered only if one of the following condition occurs:

- any crack is present on P/N 3G7810A06551 rear ejector attachment flange or on P/N 3G7810A06552 rear ejector attachment flange;
- the P/N 3G7810A06551 rear ejector attachment flange or P/N 3G7810A06552 rear ejector attachment flange is damaged in the zone of application of the reparation.

(10) Item to be ordered only if no one of the following condition occurs:

- any crack is present on P/N 3G7810A06551 rear ejector attachment flange or on P/N 3G7810A06552 rear ejector attachment flange;
- the P/N 3G7810A06551 rear ejector attachment flange or P/N 3G7810A06552 rear ejector attachment flange is damaged in the zone of application of the reparation.

(11) Item to be procured as local supply.

B. SPECIAL TOOLS

The following special tools, or equivalent, are necessary to accomplish this service bulletin:

#	P/N	DESCRIPTION	Q.TY	NOTE	PART
130	3G7806P08931A005A	FWD LH exhaust duct drilling and positioning tool	1		
131	3G7806P09031A005A	FWD RH exhaust duct drilling and positioning tool	1		
132	3G7806P09131A005A	Rear Firewall drilling and positioning tool	1		
133	3G7806P09131A005B	Rear Firewall drilling and positioning tool	1		
134	3G7806P09231A005A	AFT LH exhaust duct drilling and positioning tool	1		
135	3G7806P09331A005A	AFT RH exhaust duct drilling and positioning tool	1		

C. INDUSTRY SUPPORT INFORMATION

Product Enhancement.

3. ACCOMPLISHMENT INSTRUCTIONS

GENERAL NOTES

a) Place an identification tag on all components that are re-usable, including the attaching hardware that has been removed to gain access to the modification area and adequately protect them until their later re-use.

b) Exercise extreme care during drilling operations to prevent instruments, cables and hoses damage.

c) Let adhesive cure at room temperature for at least 24 hours unless otherwise specified.

d) All lengths are in mm.

e) The accomplishment instructions of each Part have been developed with the purpose to be applied independently. If compliance with more than one Part is required simultaneously, coordinates the steps in order to avoid unnecessary operations.

f) If required during repairs it is allowed to remove rivets used for parts positioning for welding operations. After repair close the holes with the same type rivets with proper grip.

g) With reference to Figure 36, if a slot is observed on the junctions (Point 1 and 2) between the cylindric pipe and the others metal sheets of the rear exhaust P/N 3G7810A02131 or 3G7810A02231 or 3G7806P09231 or 3G7806P09331, it is possible to plug it by means of inert gas tungsten arc welding according to AWS D17 Class B (for complete duct sealing).

The shielding gas shall be argon, in accordance with MIL-A-18455.

The filler metal shall be alloy steel ASTM286 or A286 in accordance with AMS5805 or AMS5804.

PART I

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the retromod.

NOTE

If you find cracks within the allowed limits, apply Part I and relevant repairs described in applicable Parts simultaneously to avoid unnecessary operations.
If you find cracks on any area not allowed or with a dimension beyond the limits permitted contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

2. With reference to Figure 22 thru Figure 24, verify if cracks are in the areas and within the maximum dimension permitted.

NOTE

Use the dedicated FWD LH exhaust duct drilling and positioning tool P/N 3G7806P08931A005A, to comply with procedure step 3.

3. With reference to Figure 1 thru Figure 3, perform the forward exhaust LH retromod P/N 3G7806P08931, as described in the following procedure:

NOTE

Perform the following step 3.1 either if FWD exhaust duct flange is found broken or has already been repaired in accordance with an approved repair scheme.

3.1 With reference to Figure 1 section B-B and section C-C, perform indicated cut out of Z profile P/N 3G7810A01251 and forward exhaust LH P/N 3G7810A00331.

NOTE

Perform the following step 3.2 either if the upper bracket P/N 3G7810A01351 is found broken or has already been repaired in accordance with PSE_ES_2014_014 repair scheme or other equivalent approved ones.

3.2 With reference to Figure 1 view A, perform cut out of the upper bracket P/N 3G7810A01351.

3.3 With reference to Figure 1 section C-C, perform the indicated cut out of the ejector flange P/N 3G7810A03131.

NOTE

Perform the following step 3.4 either if the side bracket P/N 3G7810A01451 is found broken or has already been repaired in accordance with PSE_ES_2014_015 repair scheme or other equivalent approved ones.

3.4 With reference to Figure 1 side view, cut out the existing side bracket P/N 3G7810A01451.

3.5 With reference to Figure 3 view F, temporarily locate the upper bracket P/N 3G7810A10652 and countermark position of n°8 rivet holes on forward exhaust LH.

3.6 With reference to Figure 3 view F, drill n°8 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

3.7 With reference to Figure 3 view F, install the upper bracket P/N 3G7810A10652 by means of n°8 rivets P/N MS20615-4M5.

NOTE

Perform following step 3.8 only if the remaining part of Z profile P/N 3G7810A01251 is damaged.

3.8 With reference to Figure 3 section N-N, remove the portion of Z profile damaged and replaced it with a shim with the same dimensions (material AMS5525 Stainless steel plate THK 0.64 mm).

3.9 With reference to Figure 3 view F and section N-N, temporarily install n°2 Z profiles P/N 3G7810A14751 and n°2 closure plates P/N 3G7810A14851. Countermark on Z profiles the positions of n°59 rivet holes and the positions of n°4 rivet holes in the forward exhaust.

3.10 With reference to Figure 2 and Figure 3 view F, on the two Z profiles, drill n°53 rivet holes Ø 2.36 ÷ 2.62 and n°6 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

3.11 With reference to Figure 2 and Figure 3 view F, enlarge existing pilot holes on the two Z profiles and the two closure plates to Ø 2.36 ÷ 2.62.

3.12 With reference to Figure 3 view F and section N-N, drill on the forward exhaust n°4 holes Ø 2.36 ÷ 2.62, in the previously marked positions.

3.13 With reference to Figure 3 view F and section N-N, install together n°2 Z profiles P/N 3G7810A14751 and n°2 closure plates P/N 3G7810A14851 by means of n°8 rivets P/N NAS1097U3-3. Seal any openings by means of Proseal 700.

3.14 With reference to Figure 2 view M, section P-P, Figure 3 view F, and section N-N, install n°2 Z profiles P/N 3G7810A14751 by means of n°6 rivets P/N MS20615-3M4 and n°47 rivets P/N MS20615-3M3R.

3.15 With reference to Figure 3 detail G, temporarily locate side bracket P/N 3G7810A10751 and countermark the positions of n°6 rivet holes.

3.16 With reference to Figure 3 detail G, drill on the side bracket n°6 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

3.17 With reference to Figure 3 detail G, install side bracket P/N 3G7810A10751 by means of n°6 rivets P/N MS20615-4M6. Seal all around the side bracket by means of Proseal 700.

NOTE

If necessary, it is possible to install shims between ejector flange assy and exhaust pipe.

3.18 With reference to Figure 3 detail G and section L-L, temporarily locate ejector flange assembly P/N 3G7810A03132 and countermark position of n°11 rivet holes at positions shown.

3.19 With reference to Figure 3 detail G, drill n°11 rivet holes Ø 2.36 ÷ 2.62, in previously marked position.

3.20 With reference to Figure 3 detail G, install ejector flange assy P/N 3G7810A03132 by means of n°9 rivets P/N MS20615-3M3R and n°2 rivets P/N MS20615-3M4.

3.21 With reference to Figure 2, mark P/N 3G7806P08931 in a visible area on the reworked forward exhaust LH, by means of an indelible pen.

4. Send the attached compliance form to the following mail box:

cse.aw139.aw@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART II

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the retromod.

NOTE

If you find cracks within the allowed limits, apply Part II and relevant repairs described in applicable Parts simultaneously to avoid unnecessary operations.

If you find cracks on any area not allowed or with a dimension beyond the limits permitted contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

2. With reference to Figure 22 thru Figure 24, verify if cracks are in the areas and within the maximum dimension permitted.

NOTE

Use the dedicated FWD RH exhaust duct drilling and positioning tool P/N 3G7806P09031A005A, to comply with procedure step 3.

3. With reference to Figure 4 thru Figure 6, perform the forward exhaust RH retromod P/N 3G7806P09031, as described in the following procedure:

NOTE

Perform the following step 3.1 either if FWD exhaust duct flange is found broken or has already been repaired in accordance with an approved repair scheme.

3.1 With reference to Figure 4 section B-B and section C-C, perform cut out of Z profile P/N 3G7810A01251 and forward exhaust RH P/N 3G7810A00231.

NOTE

Perform the following step 3.2 either if the upper bracket P/N 3G7810A01351 is found broken or has already been repaired in accordance with PSE_ES_2014_014 repair scheme or other equivalent approved ones.

3.2 With reference to Figure 4 View A, perform cut out of the upper bracket P/N 3G7810A01351.

3.3 With reference to Figure 4 Section C-C, perform cut out of the ejector flange P/N 3G7810A03131 as shown.

NOTE

Perform the following step 3.4 either if the side bracket P/N 3G7810A01451 has already been repaired in accordance with PSE_ES_2014_015 repair scheme or other equivalent approved ones.

3.4 With reference to Figure 4, cut of the existing side bracket P/N 3G7810A01451.

3.5 With reference to Figure 6 view F, temporarily locate the upper bracket P/N 3G7810A11452 and countermark position of n°8 rivet holes on forward exhaust RH.

3.6 With reference to Figure 6 view F, drill n°8 rivet holes Ø 3.18 ÷ 3.43 in previously marked positions.

3.7 With reference to Figure 6 view F, install upper bracket P/N 3G7810A11452 by means of n°8 rivets P/N MS20615-4M5.

NOTE

Perform following step 3.8 only if the remaining part of Z profile P/N 3G7810A01251 is damaged.

3.8 With reference to Figure 3 section N-N, remove the portion of Z profile damaged and replaced it with a shim with the same dimensions (material AMS5525 Stainless steel plate THK 0.64 mm).

3.9 With reference to Figure 6 view F and section N-N, temporarily locate n°2 Z profiles P/N 3G7810A14751 and n°2 closure plates P/N 3G7810A14851. Countermark on Z profiles the positions of n°59 rivet holes and the positions of n°4 rivet holes in the forward exhaust.

3.10 With reference to Figure 5 and Figure 6 view F, on the two Z profiles, drill n°53 rivet holes Ø 2.36 to 2.62 and n°6 rivet holes Ø 3.18 ÷ 3.43 in the previously marked points.

3.11 With reference to Figure 5 and Figure 6 view F, enlarge existing pilot holes on the two Z profiles and the two closure plates to Ø 2.36 ÷ 2.62.

3.12 With reference to Figure 6 view F, drill on the forward exhaust n°4 holes Ø 2.36 ÷ 2.62, in the previously marked positions.

3.13 With reference to Figure 6 view F, install together n°2 Z profiles P/N 3G7810A14751 and n°2 closure plates P/N 3G7810A14851 by means of n°8 rivets P/N NAS1097U3-3. Seal any openings by means of Proseal 700.

3.14 With reference to Figure 2 view M, section P-P, Figure 3 view F, and section N-N,

install n°2 Z profiles P/N 3G7810A14751 by means of n°6 rivets P/N MS20615-3M4 and n°47 rivets P/N MS20615-3M3R.

3.15 With reference to Figure 6 detail G, temporarily locate side bracket P/N 3G7810A10751 and countermark the positions n°6 rivet holes.

3.16 With reference to Figure 6 detail G, drill on the side bracket n°6 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

3.17 With reference to Figure 6 detail G, install side bracket P/N 3G7810A10751 by means of n°6 rivets P/N MS20615-4M6. Seal all around the side bracket by means of Proseal 700.

NOTE

If necessary, it is possible to install shims between ejector flange assy and exhaust pipe.

3.18 With reference to Figure 6 detail G and section L-L, temporarily locate ejector flange assembly P/N 3G7810A03132 and countermark position of n°11 rivet holes at positions shown.

3.19 With reference to Figure 6 detail G, drill n°11 rivet holes Ø 2.36 ÷ 2.62 in previously marked position.

3.20 With reference to Figure 6 detail G, install ejector flange assy P/N 3G7810A03132 by means of n°9 rivets P/N MS20615-3M3R and n°2 rivets P/N MS20615-3M4.

3.21 With reference to Figure 6, mark P/N 3G7806P09031 in a visible area on the reworked forward exhaust RH, by means of an indelible pen.

4. Send the attached compliance form to the following mail box:

cse.aw139.aw@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART III

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the retromod.

NOTE

If you find cracks within the allowed limits, apply Part III and relevant repairs described in applicable Parts simultaneously to avoid unnecessary operations.
If you find cracks on any area not allowed or with a dimension beyond the limits permitted contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

2. With reference to Figure 31, verify if cracks are in the areas and within the maximum dimension permitted.

NOTE

Use the dedicated AFT LH exhaust duct drilling and positioning tool P/N 3G7806P09231A005A, to comply with procedure step 3.

3. With reference to Figure 7 thru Figure 10, perform LH rear ejector retromod P/N 3G7806P09231, as described in the following procedure:

   3.1 With reference to Figure 7 view A and section B-B, perform indicated cut out of LH rear ejector assy P/N 3G7810A02131.

NOTE

If the rear ejector attachment flange P/N 3G7810A06552 has already been repaired in accordance with PSE_ES_2014_082, PSE_ES_2014_083, PSE_ES_2014_084 repair schemes or other equivalent approved ones, remove the repair and perform step 3.2, coordinating with existing rivet holes.

   3.2 With reference to Figure 7 view C and view D, perform cut out of rear ejector attachment flange P/N 3G7810A06552 or P/N 3G7810A06551 along the cutting profile shown.

NOTE

Perform following step 3.3 only if the rear ejector attachment flange P/N 3G7810A06552 or P/N 3G7810A06551 is damaged in the area where has been performed the cutting.

3.3 With reference to 7 view C and view D, remove the portion of rear ejector attachment flange damaged.

3.4 With reference to Figure 8 and Figure 10, countermark the position of n°118 rivet holes on the LH rear ejector assy P/N 3G7810A02131 as shown in the figures.

3.5 With reference to Figure 8 and Figure 10, drill n°118 rivet holes Ø 2.36 ÷ 2.62 through the LH rear ejector assy P/N 3G7810A02131, in previously marked positions.

3.6 With reference to Figure 8 and Figure 10, temporarily install n°1 split external flange P/N 3G7810A13151 and n°1 split internal flange P/N 3G7810A13051. Countermark the position of n°118 rivet holes on the two flanges.

3.7 With reference to Figure 8 and Figure 10, drill n°118 rivet holes Ø 2.36 ÷ 2.62 on the two flanges, in previously marked positions.

3.8 With reference to Figure 8 and Figure 10, install together n°1 split external flange P/N 3G7810A13151 and n°1 split internal flange P/N3G7810A13051, by means of n°57 rivets P/N NAS1200-3-3, n°59 rivets P/N NAS1200-3-4 and n°2 rivets P/N NAS1200-3-5.

NOTE

It is possible to use the existing rivets holes if they do not match with the ones indicated on the figures.

3.9 With reference to Figure 9 view L and section P-P, temporarily locate central cup assy P/N 3G7810A14031 and doubler P/N 3G7810A18451 and countermark position of n°8 rivet holes in the rear attachment flange.

3.10 With reference to Figure 9 view L, drill n°8 rivet holes Ø 2.36 ÷ 2.62 in previously marked position.

NOTE

As alternative to installation of doubler P/N 3G7810A18451 (ref. step 3.11), perform step 3.12. Mandatorily perform step 3.12 if one of the following occurs:

- any crack is present on P/N 3G7810A06551 rear ejector attachment flange or on P/N 3G7810A06552 rear ejector attachment flange;
- the P/N 3G7810A06551 rear ejector attachment flange or P/N 3G7810A06552 rear ejector attachment flange is damaged in the zone of application of the reparation.

3.11 With reference to Figure 9 view L and section P-P, install central cup assy P/N 3G7810A14031 and doubler P/N 3G7810A18451 by means of n°8 rivets P/N NAS1200-3-5.

3.12 With reference to Figures 38 and 39, perform the rear left exhaust flange repair P/N 3G7810R00911 as described in the following procedure:

3.12.1 With reference to Figure 38, remove the indicated area.

3.12.2 With reference to Figure 39, install the central flange LH assy P/N 3G7810A18731 by means of n°7 rivets P/N MS20615-4M4R.

NOTE

If necessary, it is allowed to rework the thickness of the special rubber P/N 3G7810A09752.

CAUTION

Take particular care during installation of the special rubber P/N 3G7810A09752, the special bushing P/N 3G7810A12651, the washer P/N 999-0066-02-132 and the ring P/N MS16625-1087, so that all the assembly is contained within the cup assy.

3.13 With reference to Figure 9 Section P-P, install in the central cup assy one special rubber P/N 3G7810A09752, one special bushing P/N 3G7810A12651, one washer P/N 999-0066-02-132 and one ring P/N MS16625-1087.

3.14 With reference to Figure 9 view L and section N-N, temporarily locate external cup assy exhaust LH P/N 3G7810A14331 and internal cup assy exhaust LH P/N 3G7810A14131 and countermark position of n°12 rivet holes in the LH rear ejector.

3.15 With reference to Figure 9 view L, drill n°12 rivet holes Ø 3.18 ÷ 3.43 in previously marked position through LH rear ejector.

3.16 With reference to Figure 9 view L, install external cup assy exhaust LH P/N 3G7810A14331 and internal cup assy exhaust LH P/N 3G7810A14131, by means of n°12 rivets P/N MS20615-4M5.

3.17 With reference to Figure 9 section R-R, install in the external and internal cup assy exhaust LH and RH n°2 special rubbers P/N 3G7810A09752, n°2 special bushings P/N 3G7810A12651, n°2 washers P/N 999-0066-02-132 and n°2 rings P/N MS16625-1087.

3.18 With reference to Figure 8, mark P/N 3G7806P09231 in a visible area on the reworked LH rear ejector assy, by means of an indelible pen.

4. With reference to Figure 37, if the rear exhaust aft attachment flange P/N 3G7810A06551 or P/N 3G7810A06552 has been subject to temporary repair procedure applied as part of dedicated in-service maintenance action, and if during the application of the retro-modification 3G7806P09231 the removal of such temporary repairs related hardware leaved unused rivet holes in the exhaust duct, perform the following procedure:

4.1 Comply with Part XII of this SB to install Rear LH exhaust repair P/N 3G7810R00611.

4.2 With reference to Figure 37, verify if the holes lies inside the reinforcing plates are at least 10mm from the plates edges.

4.3 If confirmed, the presence of the holes lies inside the reinforcing plates is acceptable; if NOT, contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

5. If the Rear Exhaust FWD Profile P/N 3G7810A06651 or P/N 3G7810A06751 has wear perform the following operation:

5.1 With reference to Figure 37, verify the maximum extension and depth of residual damage. Any residual damage that affects the dashed area indicated in Figure 37, is considered acceptable; if the damage exceeds the dashed area, contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

6. With reference to Figure 37, verify the presence of a local deformation of the reinforcing ring on the end section of the Rear Exhaust.

6.1 If such deformation is confined within two consecutive spot welds without affecting their adherence to the exhaust duct, and its height do not exceeds 1mm, then it is acceptable. If NOT, contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair

instruction.

7. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART IV

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the retromod.

NOTE

If you find cracks within the allowed limits, apply Part IV and relevant repairs described in applicable Parts simultaneously to avoid unnecessary operations.
If you find cracks on any area not allowed or with a dimension beyond the limits permitted contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

2. With reference to Figure 31, verify if cracks are in the areas and within the maximum dimension permitted.

NOTE

Use the dedicated AFT RH exhaust duct drilling and positioning tool P/N 3G7806P09331A005A, to comply with procedure step 3.

3. With reference to Figure 11 thru Figure 14, RH rear ejector retromod P/N 3G7806P09331, as described in the following procedure:

   3.1 With reference to Figure 11 view A and section B-B, perform indicated cut out of RH rear ejector assy P/N 3G7810A02231.

NOTE

If the rear ejector attachment flange P/N 3G7810A06552 has already been repaired in accordance with PSE_ES_2014_082, PSE_ES_2014_083, PSE_ES_2014_084 repair schemes or other equivalent approved ones, remove the repair and perform step 3.2, coordinating with existing rivet holes.

   3.2 With reference to Figure 11 view C and view D, perform cut out of rear ejector attachment flange P/N 3G7810A06552 or P/N 3G7810A06551 along the cutting profile shown.

NOTE

Perform following step 3.3 only if the rear ejector attachment flange P/N 3G7810A06552 or P/N 3G7810A06551 is damaged in the area where has been performed the cutting.

3.3 With reference to 11 view C and view D, remove the portion of rear ejector attachment flange.

3.4 With reference to Figure 12 and Figure 14, countermark the position of n°118 rivet holes on the LH rear ejector assy P/N 3G7810A02231.

3.5 With reference to Figure 12 and Figure 14, drill n°118 rivet holes Ø 2.36 ÷ 2.62 through the LH rear ejector assy P/N 3G7810A02231, in previously marked positions.

3.6 With reference to Figure 12 and Figure 14, temporarily locate n°1 split external flange P/N 3G7810A13151 and n°1 split internal flange P/N 3G7810A13051. Countermark the position of n°118 rivet holes on the two flanges.

3.7 With reference to Figure 12 and Figure 14, drill n°118 rivet holes Ø 2.36 ÷ 2.62 through the two flanges, in previously marked position.

3.8 With reference to Figure 12 and Figure 14, install together install n°1 split external flange P/N 3G7810A13151 and n°1 split internal flange P/N3G7810A13051, by means of n°57 rivets P/N NAS1200-3-3, n°59 rivets P/N NAS1200-3-4 and n°2 rivets P/N NAS1200-3-5.

NOTE

It is possible to use the existing rivets holes if they do not match with the ones indicated on the figures.

3.9 With reference to Figure 13 view L and section P-P, temporarily locate central cup assy P/N3G7810A14031 and doubler P/N 3G7810A18451 and countermark position of n°8 rivet holes in the rear attachment flange.

3.10 With reference to Figure 13 view L, drill n°8 rivet holes Ø 2.36 ÷ 2.62 in previously marked positions.

NOTE

As alternative to installation of doubler P/N 3G7810A18451 (ref. step 3.11), perform step 3.12. Mandatorily perform step 3.12 if one of the following occurs:

- any crack is present on P/N 3G7810A06551 rear ejector attachment flange or on P/N 3G7810A06552 rear ejector attachment flange;
- the P/N 3G7810A06551 rear ejector attachment flange or P/N 3G7810A06552 rear ejector attachment flange is damaged in the zone of application of the reparation.

3.11 With reference to Figure 13 view L and section P-P, install central cup assy P/N3G7810A14031 and doubler P/N 3G7810A18451 by means of n°8 rivet P/N NAS1200-3-5.

3.12 With reference to Figures 40 and 41, perform the rear right exhaust flange repair P/N 3G7810R00912 as described in the following procedure:

3.12.1 With reference to Figure 40, remove the indicated area.

3.12.2 With reference to Figure 41, install the central flange RH assy P/N 3G7810A18831 by means of n°7 rivets P/N MS20615-3M4.

NOTE

If necessary, it is allowed to rework the thickness of the special rubber P/N 3G7810A09752.

CAUTION

Take particular care during installation of the special rubber P/N 3G7810A09752, the special bushing P/N 3G7810A12651, the washer P/N 999-0066-02-132 and the ring P/N MS16625-1087, so that all the assembly is contained within the cup assy.

3.13 With reference to Figure 13 section P-P, install in the central cup assy one special rubber P/N 3G7810A09752, one special bushing P/N 3G7810A12651, one washer P/N 999-0066-02-132 and one ring P/N MS16625-1087.

3.14 With reference to Figure 13 view L and section N-N, temporarily locate external cup assy exhaust RH P/N 3G7810A14431 and internal cup assy exhaust RHP/N 3G7810A14231, and countermark position of n°12 rivet holes in the RH rear ejector.

3.15 With reference to Figure 13 view L, drill n°12 Ø 3.18 ÷ 3.43 rivet holes in previously marked position through RH rear ejector.

3.16 With reference to Figure 13 view L, install external cup assy exhaust LH P/N 3G7810A14431 and internal cup assy exhaust RH P/N 3G7810A14231 by means of n°10 rivets P/N MS20615-4M5 and n°2 rivets P/N A297A04TW02.

3.17 With reference to Figure 13 section R-R, install in the external and internal cup assy exhaust LH and RH n°2 special rubbers P/N 3G7810A09752, n°2 special bushings P/N 3G7810A12651, n°2 washers P/N 999-0066-02-132 and n°2 rings P/N MS16625-1087.

3.18 With reference to Figure 12, mark P/N 3G7806P09331 on the reworked RH rear ejector assy by means of an indelible pen.

4. With reference to Figure 37, if the rear exhaust aft attachment flange P/N 3G7810A06551 or P/N 3G7810A06552 has been subject to temporary repair procedure applied as part of dedicated in-service maintenance action, and if during the application of the retro-modification 3G7806P09331 the removal of such temporary repairs related hardware leaved unused rivet holes in the exhaust duct, perform the following procedure:

4.1 Comply with Part XIII of this SB to install Rear LH exhaust repair P/N 3G7810R00612.

4.2 With reference to Figure 37, verify if the holes lies inside the reinforcing plates are at least 10mm from the plates edges.

4.3 If confirmed, the presence of the holes lies inside the reinforcing plates is acceptable; if NOT, contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

5. If the Rear Exhaust FWD Profile P/N 3G7810A06651 or P/N 3G7810A06751 has wear perform the following operation:

5.1 With reference to Figure 37, verify the maximum extension and depth of residual damage. Any residual damage that affects the dashed area indicated in Figure 37, is considered acceptable; if the damage exceeds the dashed area, contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

6. With reference to Figure 37, verify the presence of a local deformation of the reinforcing ring on the end section of the Rear Exhaust.

7. If such deformation is confined within two consecutive spot welds without affecting their adherence to the exhaust duct, and its height do not exceeds 1mm, then it is acceptable. If NOT, contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

8. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART V

NOTE

The following procedure is applicable to the Rear Firewall Module assy P/N 3G7810A02033 and P/N 3G7810A02031.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the retromod.

NOTE

- Proceed complying with the retromod also if the following repairing sketches have been already embodied:
  - ✓ SK139-072;
  - ✓ SK139-593;
  - ✓ SK139-811;
  - ✓ SK139-840;
  - ✓ SK139-843;
  - ✓ SK139-857.

2. With reference to Figure 15 thru Figure 21, perform the rear firewall module assy retromod P/N 3G7810P00331 as described in the following procedure.

   2.1 With reference to Figure 15 section A-A, remove and retain for further reuse n°4 anchor nuts P/N M21075L3 and n°2 anchor nuts P/N MS21061L3 from pipe ring LH and RH.

   2.2 With reference to Figure 15, remove the following items from rear exhaust module drilling out existing rivets:

   - external FWD bracket RH P/N 3G7810A04251.
   - external FWD bracket RH P/N 3G7810A05451.
   - external bracket LH P/N 3G7810A04051.
   - external bracket RH P/N 3G7810A05251.
   - lower bracket LH P/N 3G7810A04151.
   - lower bracket RH P/N 3G7810A05351.
   - internal bracket LH P/N 3G7810A03551.
   - internal bracket RH P/N 3G7810A04751.
   - vertical wall P/N 3G7810A03051.

NOTE

If the repairing sketches SK139-894 or SK139-740 have already been embodied, do not install the reinforcement plate P/N 3G7810A12451.

2.3 With reference to Figure 20 view N, temporarily locate n°2 reinforcement plate P/N 3G7810A12451, external bracket FWD LH P/N 3G7810A04252 and the external bracket FWD RH P/N 3G7810A05452. Countermark position of n°88 rivet holes in the rear ejector module.

2.4 With reference to Figure 20 view N, drill n°66 rivet holes Ø 2.36 ÷ 2.62 and n°22 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

2.5 With reference to Figure 16, Figure 18 section C-C and Figure 20 view N, install n°2 reinforcement plate P/N 3G7810A12451, one external bracket FWD LH P/N 3G7810A04252 and one external bracket FWD RH P/N 3G7810A05452 by means of n°66 rivets P/N MS20615-3M3 and n°22 rivets P/N MS20615-4M4.

NOTE

Perform following steps from 2.6 to 2.9 only if the lower reinforcement P/N 3G7810A07252 is installed, otherwise skip to Step 2.10.

2.6 With reference to Figure 17, rework the lower bracket LH P/N 3G7810A04153 and lower bracket RH P/N 3G7810A05353 as follows:

2.6.1 Perform cut out of the shaded area of the two lower brackets.

2.6.2 Mark P/N 3G7810P00451 on the reworked lower bracket LH and P/N 3G7810P00551 on the reworked lower bracket RH by means of an indelible pen.

2.7 With reference to Figure 17 upper view, temporarily locate reworked lower bracket LH P/N 3G7810P00451 and reworked lower bracket RH P/N 3G7810P00551. Countermark position of n°10 rivet holes.

2.8 With reference to Figure 17 upper view, drill n°10 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

2.9 With reference to Figure 18 section K-K and Figure 16 section P-P, install reworked lower bracket LH P/N 3G7810P00451 and reworked lower bracket RH P/N 3G7810P00551 to rear ejector module and to pipe ring by means of n°14 rivets P/N MS20615-4M4.

2.10 With reference to Figure 16, temporarily locate lower bracket LH P/N 3G7810A04153 and lower bracket RH P/N 3G7810A05353. Countermark position of n°18 rivet holes.

2.11 With reference to Figure 18 section K-K, drill n°18 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

2.12 With reference to Figure 18 section K-K and Figure 16 section P-P, install lower bracket LH P/N 3G7810A04153 and lower bracket RH P/N 3G7810A05353 to rear ejector module and to pipe ring by means of n°18 rivets P/N MS20615-4M4.

2.13 With reference to Figure 16, temporarily locate external bracket LH P/N 3G7810A04052 and external bracket RH P/N 3G7810A05252. Countermark position of n°18 rivet holes.

2.14 With reference to Figure 18 section C-C and Figure 16 section P-P, drill n°18 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

2.15 With reference to Figure 18 section C-C and Figure 16 section P-P, install external bracket LH P/N 3G7810A04052 and external bracket RH P/N 3G7810A05252 to rear ejector module and pipe ring by means of n°18 rivets P/N MS20615-4M4.

2.16 With reference to Figure 16, temporarily locate internal bracket LH P/N 3G7810A03552 and internal bracket RH P/N 3G7810A04752. Countermark position of n°36 rivet holes.

2.17 With reference to Figure 19 section E-E and Figure 16 section P-P, drill n°36 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

2.18 With reference to Figure 19 section E-E and Figure 16 section P-P, install internal bracket LH P/N 3G7810A03552 and internal bracket RH P/N 3G7810A04752 by means of n°36 rivets P/N MS20615-4M4.

2.19 With reference to Figure 16 section P-P, install n°4 anchor nuts P/N MS21075L3 and n°2 anchor nuts P/N MS21061L3 by means of n°12 rivets P/N MS20427M3-4.

NOTE

If necessary cut silicon rubber P/N A966A080E3 in order to avoid interference with reinforcement plates.

NOTE

If the repairing sketch SK139-958 has already been embodied, coordinate the installation of external reinforcement plate LH P/N 3G7810A12051 and external reinforcement plate RH P/N 3G7810A11651 with the existing repair rivet positions.

2.20 With reference to Figure 18 detail G and section K-K, temporarily locate external reinforcement plate LH P/N 3G7810A12051 and external reinforcement plate RH

P/N 3G7810A11651. Countermark position of n°72 rivet holes in the rear exhaust module.

2.21 With reference to Figure 18 detail G and section K-K, drill n°72 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

2.22 With reference to Figure 16 and Figure 18 detail G, install external reinforcement plate LH P/N 3G7810A12051 and external reinforcement plate RH P/N 3G7810A11651 by means of n°48 rivets P/N MS20615-4M4.

2.23 With reference to Figure 16 and Figure 18 detail G, install external attachment plate LH P/N 3G7810A12151 and external attachment plate RH P/N 3G7810A11751 to reinforcement plates by means of n°24 rivets P/N MS20615-4M4.

2.24 With reference to Figure 20 view L, temporarily locate vertical wall P/N 3G7810A03052 and countermark positions of n°16 rivet holes in the rear exhaust module.

2.25 With reference to Figure 20 view L, drill n°16 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions.

2.26 With reference to Figure 20 view L, install vertical wall P/N 3G7810A03052 by means of n°16 rivets P/N MS20615-4M4.

2.27 With reference to Figure 20 detail M, drill n°4 rivet holes Ø 2.36 ÷ 2.62 in previously marked positions through vertical wall and rear exhaust module.

2.28 With reference to Figure 20 detail M, install n°4 rivets P/N MS20615-3M3 at position shown.

NOTE

If necessary cut silicon rubber P/N A966A080E3 in order to avoid interference with reinforcement plates.

NOTE

If the repair sketch SK139-805 is already embodied, coordinate the installation of reinforcement plate LH P/N 3G7810A12251, internal attachment plate LH P/N 3G7810A12351 and the vertical reinforcement P/N 3G7810A11551 with the existing rivet positions.

NOTE

If the repair sketch SK139-809 is already embodied, coordinate the installation of reinforcement plate RH P/N 3G7810A11851, internal attachment plate RH

P/N 3G7810A11951 and the vertical reinforcement P/N 3G7810A11551 with the existing rivet positions.

2.29 With reference to Figure 19 detail F and section E-E, temporarily locate internal reinforcement plate LH P/N 3G7810A12251 and internal reinforcement plate RH P/N 3G7810A11851. Countermark position of n°68 rivet holes in the rear exhaust module.

2.30 With reference to Figure 19 detail F and section E-E, drill n°68 rivet holes Ø 3.18 ÷ 3.43 in previously marked positions.

2.31 With reference to Figure 19 detail J, and Figure 20 view L, temporarily locate n°2 vertical reinforcements P/N 3G7810A11551, one internal attachment plate LH P/N 3G7810A12351 and one internal attachment plate RH P/N 3G7810A11951. Countermark position of n°22 rivet holes at positions shown on rear exhaust module. Also countermark position of n°10 rivet holes on vertical wall.

2.32 With reference to Figure 19 detail J, drill n°22 rivet holes Ø 3.18 ÷ 3.43 in previously marked positions through rear ejector module.

2.33 With reference to Figure 20 view L, drill n°10 rivet holes Ø 2.36 ÷ 2.62 in previously marked positions through vertical wall.

2.34 With reference to Figure 16 and Figure 19 detail F, install internal reinforcement plate LH P/N 3G7810A12251 and internal reinforcement plate RH P/N 3G7810A11851 by means of n°54 rivets P/N MS20615-4M4.

2.35 With reference to Figure 19 detail F, detail J and Figure 20 view L, install n°2 vertical reinforcements P/N 3G7810A11551, internal attachment plate LH P/N 3G7810A12351 and internal attachment plate RH P/N 3G7810A11951 by means of n°36 rivets P/N MS20615-4M4 and n°10 rivets P/N MS20615-3M4.

2.36 **Applicable only to rear firewall module assy P/N 3G7810A02031**. With reference to Figure 21, rework the forward side of the rear exhaust module as described in the following procedure:

2.36.1 With reference to Figure 21 view R and section S-S, cut out and rework the left mount rear exhaust P/N 3G7810A04651 and the right mount rear exhaust P/N 3G7810A05851 as shown.

2.36.2 With reference to Figure 21 view P, drill out the n°6 indicated existing rivets from the LH side and from the RH side.

2.36.3 With reference to Figure 21 view P, temporarily locate the bracket reinforcement LH P/N 3G7810A13751 and the bracket reinforcement RH P/N 3G7810A13851 and countermark the position of the rivet holes on them.

2.36.4 Drill n°6 rivet holes Ø 3.18 ÷ 3.43 in the previously marked positions on bracket reinforcement LH P/N 3G7810A13751 and the bracket reinforcement RH P/N 3G7810A13851.

2.36.5 With reference to Figure 21 view P, install the bracket reinforcement LH P/N 3G7810A13751 and the bracket reinforcement RH P/N 3G7810A13851 by means of n°6 rivets P/N MS20615-4M5.

2.37 With reference to Figure 15, re-identify the reworked rear firewall module assy by means of an indelible pen as follows:

- Mark the P/N 3G7810A02033 as P/N 3G7810P00331.
- Mark the P/N 3G7810A02031 as P/N 3G7810P00331R.

NOTE

If the helicopter is already equipped with Talon antenna and rear firewall module assy retromod 3G7810P00331, perform the following procedure step.

2.38 With reference to Figure 34, perform the Talon antenna variant P/N 3G7810P00711, as described in the following procedure:

2.38.1 With reference to Figure 34 detail B, perform n°1 cut out with shape and dimension shown on the vertical wall P/N 3G7810A03052.

2.38.2 With reference to Figure 34 view A, install n°1 vertical wall reinforcement P/N 3G7810P00851 by means of n°13 rivets P/N MS20615-4M3R.

3. Send the attached compliance form to the following mail box:

cse.aw139.aw@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART VI

NOTE

Compliance with Part I of this Service Bulletin is a mandatory requirement to comply with this Part VI.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, perform a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 22 perform a visual inspection of the zone 1 of forward exhausts LH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 25, perform the forward left exhaust repair P/N 3G7810R00311, as described in the following procedure:

NOTE

Retain the upper bracket LH P/N 3G7810A10652 for later reuse (ref step 3.1 and Figure 25 view A).

3.1 With reference to Figure 25 view B, drill out the indicated existing rivets and remove the closure plate P/N 3G7810A14851 from the forward exhaust LH.

3.2 With reference to Figure 25 view A, temporarily locate the FWD LH exhaust upper reinforcement P/N 3G7810A17151 on forward exhaust LH.

3.3 Using the FWD LH exhaust upper reinforcement P/N 3G7810A17151 n°32 pilot holes as a template, drill n°32 rivet holes Ø 2.36 ÷ 2.62 through the upper reinforcement and the forward exhaust LH.

3.4 With reference to Figure 25 view B, temporarily locate the FWD LH exhaust upper reinforcement P/N 3G7810A17351 inside the forward exhaust LH and countermark position of n°56 rivet holes on it.

3.5 With reference to Figure 25 view B, drill n°48 rivet holes Ø 2.36 ÷ 2.62 and n°8 Ø 3.18 ÷ 3.43 in the previously marked positions.

3.6 With reference to Figure 25 view A and view B, install the FWD LH exhaust upper reinforcement P/N 3G7810A17151 and the FWD LH exhaust upper reinforcement P/N 3G7810A17351 by means of n°32 rivets P/N MS20615-3M3R, n°12 rivets P/N MS20615-3M4, n°2 rivets P/N MS20615-3M3 and n°4 rivets P/N NAS1097U3-3.

3.7 With reference to Figure 25 view A, reinstall the upper bracket LH P/N 3G7810A10652 by means of n°8 rivets P/N MS20615-4M5R.

4. Under the Forward Exhaust LH P/N, mark “SB139-444 Part VI” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART VII

NOTE

Compliance with Part II of this Service Bulletin is a mandatory requirement to comply with this Part VII.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 22 perform a visual inspection of the zone 2 of forward exhausts RH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 26, perform the forward left exhaust repair P/N 3G7810R00312, as described in the following procedure:

NOTE

Retain the upper bracket RH P/N 3G7810A11452 for later reuse (ref step 3.1 and Figure 26 view A).

3.1 With reference to Figure 26 view B, drill out the indicated existing rivets and remove the closure plate P/N 3G7810A14851 from the forward exhaust RH.

3.2 With reference to Figure 26 view A, temporarily locate the FWD RH exhaust upper reinforcement P/N 3G7810A17251 on forward exhaust RH.

3.3 Using the FWD RH exhaust upper reinforcement P/N 3G7810A17251 n°32 pilot holes as a template, drill n°32 rivet holes Ø 2.36 ÷ 2.62 through the upper reinforcement and the forward exhaust RH.

3.4 With reference to Figure 26 view B, temporarily locate the FWD RH exhaust upper reinforcement P/N 3G7810A17451inside the forward exhaust RH and countermark position of n°56 rivet holes on it.

3.5 With reference to Figure 26 view B, drill n°48 rivet holes Ø 2.36 ÷ 2.62 and n°8 Ø 3.18 ÷ 3.43 in the previously marked positions.

3.6 With reference to Figure 26 view A and view B, install the FWD RH exhaust upper reinforcement P/N 3G7810A17251 and the FWD RH exhaust upper reinforcement P/N 3G7810A17451 by means of n°32 rivets P/N MS20615-3M3R, n°12 rivets P/N MS20615-3M4, n°2 rivets P/N MS20615-3M3 and n°4 rivets P/N NAS1097U3-3.

3.7 With reference to Figure 26 view A, reinstall the upper bracket RH P/N 3G7810A11452 by means of n°8 rivets P/N MS20615-4M5R.

4. Under the Forward Exhaust RH P/N, mark “SB139-444 Part VII” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART VIII

NOTE

Compliance with Part I of this Service Bulletin is a mandatory requirement to comply with this Part VIII.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

NOTE

In the Zone 3 is acceptable to have multiple cracks or lack of material in the circular area highlighted in Figure 35.

2. With reference to Figures 23 and 24 perform a visual inspection of the zone 3 of forward exhausts LH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 27, perform the forward left exhaust repair P/N 3G7810R00411, as described in the following procedure:

NOTE

Retain the ejector flange assy P/N 3G7810A03132 for later reuse (ref step 3.1 and Figure 27 view A).

3.1 With reference to Figure 27 view A, drill out the indicated existing rivets from the forward exhaust LH.

3.2 With reference to Figure 27 view A and detail B, rework and remove the indicated parts of material from the LH holed stiffener P/N 3G7810A00951.

3.3 With reference to Figure 27 view A, temporarily locate the FWD LH exhaust lateral reinforcement P/N 3G7810A17551 inside the forward exhaust LH.

3.4 Countermark the FWD LH exhaust lateral reinforcement P/N 3G7810A17551 n°29 pilot holes on forward exhaust LH.

3.5 Countermark the forward exhaust LH n°9 rivet holes on FWD LH exhaust lateral reinforcement P/N 3G7810A17551.

3.6 With reference to Figure 27 view A, drill n°43 rivet holes Ø 2.36 ÷ 2.62 and n°6 Ø 3.18 ÷ 3.43 in the previously marked positions.

3.7 With reference to Figure 27 view A, install the FWD LH exhaust lateral reinforcement P/N 3G7810A17551 and reinstall the ejector flange assy P/N 3G7810A03132 by means of n°12 rivets P/N MS20615-3M4, n°29 rivets P/N MS20615-3M3, n°4 rivets P/N MS20615-4M6R, n°2 rivets P/N MS20615-4M7 and n°2 rivets P/N MS20615-3M4R.

4. Under the Forward Exhaust LH P/N, mark “SB139-444 Part VIII” with an indelible pen.
5. Send the attached compliance form to the following mail box:

cse.aw139.aw@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART IX

NOTE

Compliance with Part II of this Service Bulletin is a mandatory requirement to comply with this Part IX.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.

NOTE

In the Zone 4 is acceptable to have multiple cracks or lack of material in the circular area highlighted in Figure 35.

2. With reference to Figures 23 and 24 perform a visual inspection of the zone 4 of forward exhausts RH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 28, perform the forward right exhaust repair P/N 3G7810R00412, as described in the following procedure:

NOTE

Retain the ejector flange assy P/N 3G7810A03132 for later reuse (ref step 3.1 and Figure 28 view A).

3.1 With reference to Figure 28 view A, drill out the indicated existing rivets from the forward exhaust RH.

3.2 With reference to Figure 28 view A and detail B, rework and remove the indicated parts of material from the RH holed stiffener P/N 3G7810A01751.

3.3 With reference to Figure 28 view A, temporarily locate the FWD RH exhaust lateral reinforcement P/N 3G7810A17651inside the forward exhaust RH.

3.4 Countermark the FWD RH exhaust lateral reinforcement P/N 3G7810A17651 n°29 pilot holes on forward exhaust RH.

3.5 Countermark the forward exhaust RH n°9 rivet holes on FWD RH exhaust lateral reinforcement P/N 3G7810A17651.

3.6 With reference to Figure 28 view A, drill n°43 rivet holes Ø 2.36 ÷ 2.62 and n°6 Ø 3.18 ÷ 3.43 in the previously marked positions.

3.7 With reference to Figure 28 view A, install the FWD RH exhaust lateral reinforcement P/N 3G7810A17651 and reinstall the ejector flange assy P/N 3G7810A03132 by means of n°12 rivets P/N MS20615-3M4, n°29 rivets P/N MS20615-3M3, n°4 rivets P/N MS20615-4M6R, n°2 rivets P/N MS20615-4M7 and n°2 rivets P/N MS20615-3M4R.

4. Under the Forward Exhaust RH P/N, mark “SB139-444 Part IX” with an indelible pen.
5. Send the attached compliance form to the following mail box:

cse.aw139.aw@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART X

NOTE

Compliance with Part I of this Service Bulletin is a mandatory requirement to comply with this Part X.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figures 23 and 24 perform a visual inspection of the zone 6 of forward exhausts LH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 29, perform the forward left exhaust repair P/N 3G7810R00511, as described in the following procedure:
   - 3.1 With reference to Figure 29 view A, drill out the indicated existing rivets from the forward exhaust LH.
   - 3.2 With reference to Figure 29 view A and detail B, rework and remove the indicated parts of material from the LH stiffener P/N 3G7810A01051.
   - 3.3 With reference to Figure 29 view A, temporarily locate the FWD LH exhaust lateral reinforcement P/N 3G7810A17751 inside the forward exhaust LH.
   - 3.4 Countermark the FWD LH exhaust lateral reinforcement P/N 3G7810A17751 n°34 pilot holes on forward exhaust LH.
   - 3.5 Countermark the forward exhaust LH n°9 rivet holes on FWD LH exhaust lateral reinforcement P/N 3G7810A17751.
   - 3.6 With reference to Figure 29 view A, drill n°43 rivet holes Ø 2.36 ÷ 2.62 in the previously marked positions.
   - 3.7 With reference to Figure 29 view A, install the FWD LH exhaust lateral reinforcement P/N 3G7810A17751 by means of n°22 rivets P/N MS20615-3M3, n°12 rivets P/N MS20615-3M3R, n°7 rivets P/N MS20615-3M4 and n°2 rivets P/N MS20615-3M4R.
4. Under the Forward Exhaust LH P/N, mark “SB139-444 Part X” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART XI

NOTE

Compliance with Part II of this Service Bulletin is a mandatory requirement to comply with this Part XI.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figures 23 and 24 perform a visual inspection of the zone 5 of forward exhausts RH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 30, perform the forward right exhaust repair P/N 3G7810R00512, as described in the following procedure:
   - 3.1 With reference to Figure 30 view A, drill out the indicated existing rivets from the forward exhaust RH.
   - 3.2 With reference to Figure 30 view A and detail B, rework and remove the indicated parts of material from the RH stiffener P/N 3G7810A01651.
   - 3.3 With reference to Figure 30 view A, temporarily locate the FWD RH exhaust lateral reinforcement P/N 3G7810A17851inside the forward exhaust RH.
   - 3.4 Countermark the FWD RH exhaust lateral reinforcement P/N 3G7810A17851 n°34 pilot holes on forward exhaust RH.
   - 3.5 Countermark the forward exhaust RH n°9 rivet holes on FWD RH exhaust lateral reinforcement P/N 3G7810A17851.
   - 3.6 With reference to Figure 30 view A, drill n°43 rivet holes Ø 2.36 ÷ 2.62 in the previously marked positions.
   - 3.7 With reference to Figure 30 view A, install the FWD RH exhaust lateral reinforcement P/N 3G7810A17851 by means of n°22 rivets P/N MS20615-3M3, n°12 rivets P/N MS20615-3M3R, n°7 rivets P/N MS20615-3M4 and n°2 rivets P/N MS20615-3M4R.
4. Under the Forward Exhaust RH P/N, mark “SB139-444 Part XI” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART XII

NOTE

Compliance with Part III of this Service Bulletin is a mandatory requirement to comply with this Part XII.

CAUTION

Do not perform the riveting where the pilot holes affecting the area in which is present the crack.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 31 perform a visual inspection of the zone 1 of LH rear ejector assy. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 32 perform the rear left exhaust repair P/N 3G7810R00611, as described in the following procedure:
   - 3.1 With reference to Figure 32 view C and view D, temporarily locate the n°2 rear exhaust reinforcement P/N 3G7810A18351 on the LH rear ejector assy P/N 3G7806P09231.
   - 3.2 Using the n°2 rear exhaust reinforcement P/N 3G7810A18351 n°52 pilot holes as a template, drill n°52 rivet holes Ø 2.36 ÷ 2.62 through the reinforcements and the LH rear ejector assy P/N 3G7806P09231.

NOTE

Retain the internal cup assy P/N 3G7810A14131 and the external cup assy P/N 3G7810A14331 for later reuse (ref step 3.3 and Figure 28).

   - 3.3 With reference to Figure 32 section B-B, drill out the existing rivets from the LH rear ejector assy P/N 3G7806P09231 (the rivets indicated are only for reference and could change according to exhaust configuration).
   - 3.4 With reference to Figure 32 section B-B, temporarily locate the rear exhaust reinforcement P/N 3G7810A17951 inside the LH rear ejector assy P/N 3G7806P09231.
   - 3.5 Countermark the rear exhaust reinforcement P/N 3G7810A17951 n°49 pilot holes on the LH rear ejector assy P/N 3G7806P09231.
   - 3.6 Countermark the LH rear ejector assy P/N 3G7806P09231 n°64 rivet holes on

rear exhaust reinforcement P/N 3G7810A17951.

3.7 With reference to Figure 32 view A and section B-B, drill n°101 rivet holes Ø 2.36 ÷ 2.62 and n°12 Ø 3.18 ÷ 3.43 in the previously marked positions.

3.8 With reference to Figure 32, install the rear exhaust reinforcement P/N 3G7810A17951, the n°2 rear exhaust reinforcement P/N 3G7810A18351 and reinstall the internal cup assy P/N 3G7810A14131 and the external cup assy P/N 3G7810A14331 by means of n°46 rivets P/N MS20615-3M3, n°55 rivets P/N MS20615-3M3R and n°12 rivets P/N MS20615-4M4R.

4. Under the LH rear ejector assy P/N, mark “SB139-444 Part XII” with an indelible pen.

5. Send the attached compliance form to the following mail box:

cse.aw139.aw@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART XIII

NOTE

Compliance with Part IV of this Service Bulletin is a mandatory requirement to comply with this Part XIII.

CAUTION

Do not perform the riveting where the pilot holes affecting the area in which is present the crack.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 31 perform a visual inspection of the zone 2 of RH rear ejector assy. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 33 perform the rear right exhaust repair P/N 3G7810R00612, as described in the following procedure:

   3.1 With reference to Figure 33 view C and view D, temporarily locate the n°2 rear exhaust reinforcement P/N 3G7810A18351 on the RH rear ejector assy P/N 3G7806P09331.

   3.2 Using the n°2 rear exhaust reinforcement P/N 3G7810A18351 n°52 pilot holes as a template, drill n°52 rivet holes Ø 2.36 ÷ 2.62 through the reinforcements and the RH rear ejector assy P/N 3G7806P09331.

NOTE

Retain the internal cup assy P/N 3G7810A14231 and the external cup assy P/N 3G7810A14431 for later reuse (ref step 3.3 and Figure 29).

   3.3 With reference to Figure 33 section B-B, drill out the existing rivets from the RH rear ejector assy P/N 3G7806P09331 (the rivets indicated are only for reference and could change according to exhaust configuration).

   3.4 With reference to Figure 33 section B-B, temporarily locate the rear exhaust reinforcement P/N 3G7810A17951 inside the RH rear ejector assy P/N 3G7806P09331.

   3.5 Countermark the rear exhaust reinforcement P/N 3G7810A17951 n°49 pilot holes on the RH rear ejector assy P/N 3G7806P09331.

   3.6 Countermark the RH rear ejector assy P/N 3G7806P09331 n°64 rivet holes on

rear exhaust reinforcement P/N 3G7810A17951.

3.7 With reference to Figure 33 view A and section B-B, drill n°100 rivet holes Ø 2.36 ÷ 2.62 and n°13 Ø 3.18 ÷ 3.43 in the previously marked positions.

3.8 With reference to Figure 33, install the rear exhaust reinforcement P/N 3G7810A17951, the n°2 rear exhaust reinforcement P/N 3G7810A18351 and reinstall the internal cup assy P/N 3G7810A14231 and the external cup assy P/N 3G7810A14431 by means of n°45 rivets P/N MS20615-3M3, n°55 rivets P/N MS20615-3M3R, n°10 rivets P/N MS20615-4M4R, n°2 rivets P/N A279A04TW02 and n°1 rivet P/N A279A04TW01.

4. Under the RH rear ejector assy P/N, mark “SB139-444 Part XIII” with an indelible pen.

5. Send the attached compliance form to the following mail box:

cse.aw139.aw@leonardocompany.com

As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART XIV

NOTE

Compliance with Part III of this Service Bulletin is a mandatory requirement to comply with this Part XIV.

CAUTION

Do not perform the riveting where the pilot holes affecting the area in which is present the crack.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 31 perform a visual inspection of the zone 3 of LH rear ejector assy. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 42 perform the rear left exhaust repair P/N 3G7810R01011, as described in the following procedure:
   - 3.1 With reference to Figure 42 detail A, remove the existing n°2 anchor nuts P/N MS21073L3.
   - 3.2 With reference to Figure 43 view C and view D, install the LH rear ejector flange reinforcement P/N 3G7810A19051 by means of n°11 rivets P/N NAS1200M3-3-5.
   - 3.3 With reference to Figure 43 view D and section E-E, re-install n°2 anchor nuts P/N MS21073L3 previously removed by means of n°4 rivets P/N MS20427M3-4.
4. Under the LH rear ejector assy P/N, mark “SB139-444 Part XIV” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART XV

NOTE

Compliance with Part IV of this Service Bulletin is a mandatory requirement to comply with this Part XV.

CAUTION

Do not perform the riveting where the pilot holes affecting the area in which is present the crack.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, do a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 31 perform a visual inspection of the zone 4 of RH rear ejector assy. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figure 44 perform the rear right exhaust repair P/N 3G7810R01012, as described in the following procedure:
   - 3.1 With reference to Figure 44 detail A, remove the existing n°2 anchor nuts P/N MS21073L3.
   - 3.2 With reference to Figure 45 view C and view D, install the RH rear ejector flange reinforcement P/N 3G7810A19151 by means of n°11 rivets P/N NAS1200M3-3-5.
   - 3.3 With reference to Figure 45 view D and section E-E, re-install n°2 anchor nuts P/N MS21073L3 previously removed by means of n°4 rivets P/N MS20427M3-4.
4. Under the RH rear ejector assy P/N, mark “SB139-444 Part XV” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART XVI

NOTE

Compliance with Part I of this Service Bulletin is a mandatory requirement to comply with this Part XVI.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, perform a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 22 perform a visual inspection of the zone 7 of forward exhausts LH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figures 46 and 47, perform the forward left exhaust repair P/N 3G7810R00811, as described in the following procedure:
   - 3.1 With reference to Figure 46 view A, drill out the indicated existing rivets and remove the closure plate P/N 3G7810A14851 from the forward exhaust LH.
   - 3.2 With reference to Figure 47 view A, temporarily locate the FWD LH exhaust lower reinforcement P/N 3G7810A18551 on forward exhaust LH.
   - 3.3 Using the FWD LH exhaust lower reinforcement P/N 3G7810A18551 n°28 pilot holes as a template, drill n°28 rivet holes Ø 2.36 ÷ 2.62 through the lower reinforcement and the forward exhaust LH.
   - 3.4 With reference to Figure 46, install the FWD LH exhaust lower reinforcement P/N 3G7810A18551 by means of n°30 rivets P/N MS20615-3M3, n°12 rivets P/N MS20615-3M4 and n°4 rivets P/N NAS1097U3-3.
4. Under the Forward Exhaust LH P/N, mark “SB139-444 Part XVI” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

PART XVII

NOTE

Compliance with Part II of this Service Bulletin is a mandatory requirement to comply with this Part XVII.

1. In accordance with AMP DM 39-C-78-10-00-00A-31AA-A, perform a visual inspection of the work area affected by the repair. If you find cracks on any area not affected by the repair contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper repair instruction.
2. With reference to Figure 22 perform a visual inspection of the zone 8 of forward exhausts RH. If you find a crack with a length within the max allowable, perform the following steps. Otherwise contact AW139 Customer Support Engineering (cse.aw139.aw@leonardocompany.com) to receive proper instruction.
3. With reference to Figures 48 and 49, perform the forward right exhaust repair P/N 3G7810R00812, as described in the following procedure:
   - 3.1 With reference to Figure 48 view A, drill out the indicated existing rivets and remove the closure plate P/N 3G7810A14851 from the forward exhaust RH.
   - 3.2 With reference to Figure 49 view A, temporarily locate the FWD RH exhaust lower reinforcement P/N 3G7810A18651 on forward exhaust RH.
   - 3.3 Using the FWD RH exhaust lower reinforcement P/N 3G7810A18651 n°28 pilot holes as a template, drill n°28 rivet holes Ø 2.36 ÷ 2.62 through the lower reinforcement and the forward exhaust RH.
   - 3.4 With reference to Figure 49, install the FWD RH exhaust lower reinforcement P/N 3G7810A18651 by means of n°30 rivets P/N MS20615-3M3, n°12 rivets P/N MS20615-3M4 and n°4 rivets P/N NAS1097U3-3.
4. Under the Forward Exhaust RH P/N, mark “SB139-444 Part XVII” with an indelible pen.
5. Send the attached compliance form to the following mail box:

   cse.aw139.aw@leonardocompany.com

   As an alternative, gain access to My Communications section on Leonardo WebPortal and compile the “Service Bulletin Application Communication”.

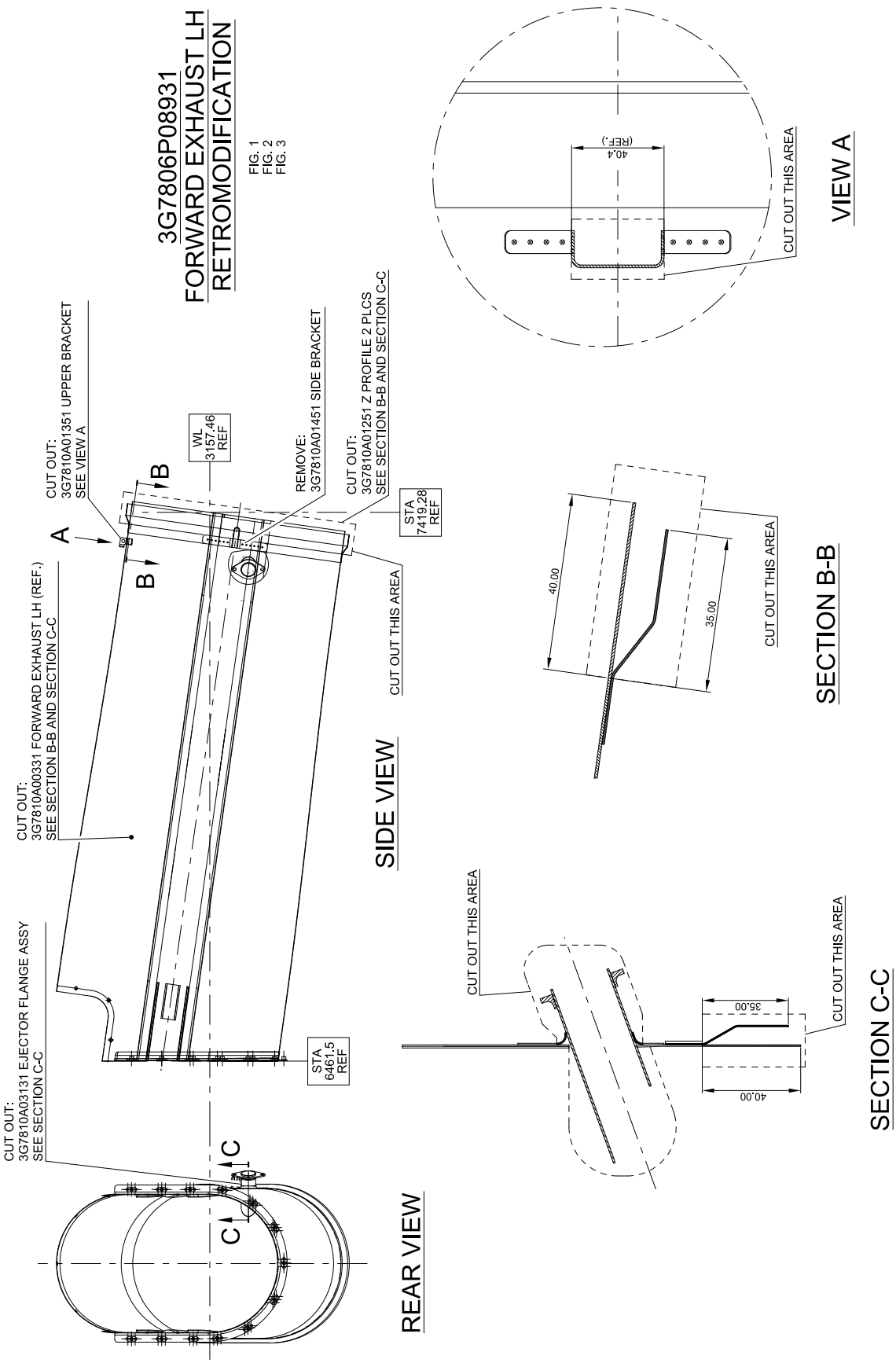

3G7806P08931
FORWARD EXHAUST LH
RETROMODIFICATION
FIG. 1
FIG. 2
FIG. 3
VIEW A
CUT OUT THIS AREA
(REF.)
40.4
SIDE VIEW
CUT OUT:
3G7810A01351 UPPER BRACKET
SEE VIEW A
CUT OUT:
3G7810A00331 FORWARD EXHAUST LH (REF.)
SEE SECTION B-B AND SECTION C-C
CUT OUT:
3G7810A03131 EJECTOR FLANGE ASSY
SEE SECTION C-C
REMOVE:
3G7810A01451 SIDE BRACKET
CUT OUT:
3G7810A01251 Z PROFILE 2 PLCS
SEE SECTION B-B AND SECTION C-C
WL
3157.46
REF
STA
7419.28
REF
STA
6461.5
REF
CUT OUT THIS AREA
A
B
B
C
C
REAR VIEW
SECTION B-B
40.00
35.00
CUT OUT THIS AREA
SECTION C-C
CUT OUT THIS AREA
CUT OUT THIS AREA
35.00
40.00

Figure 1

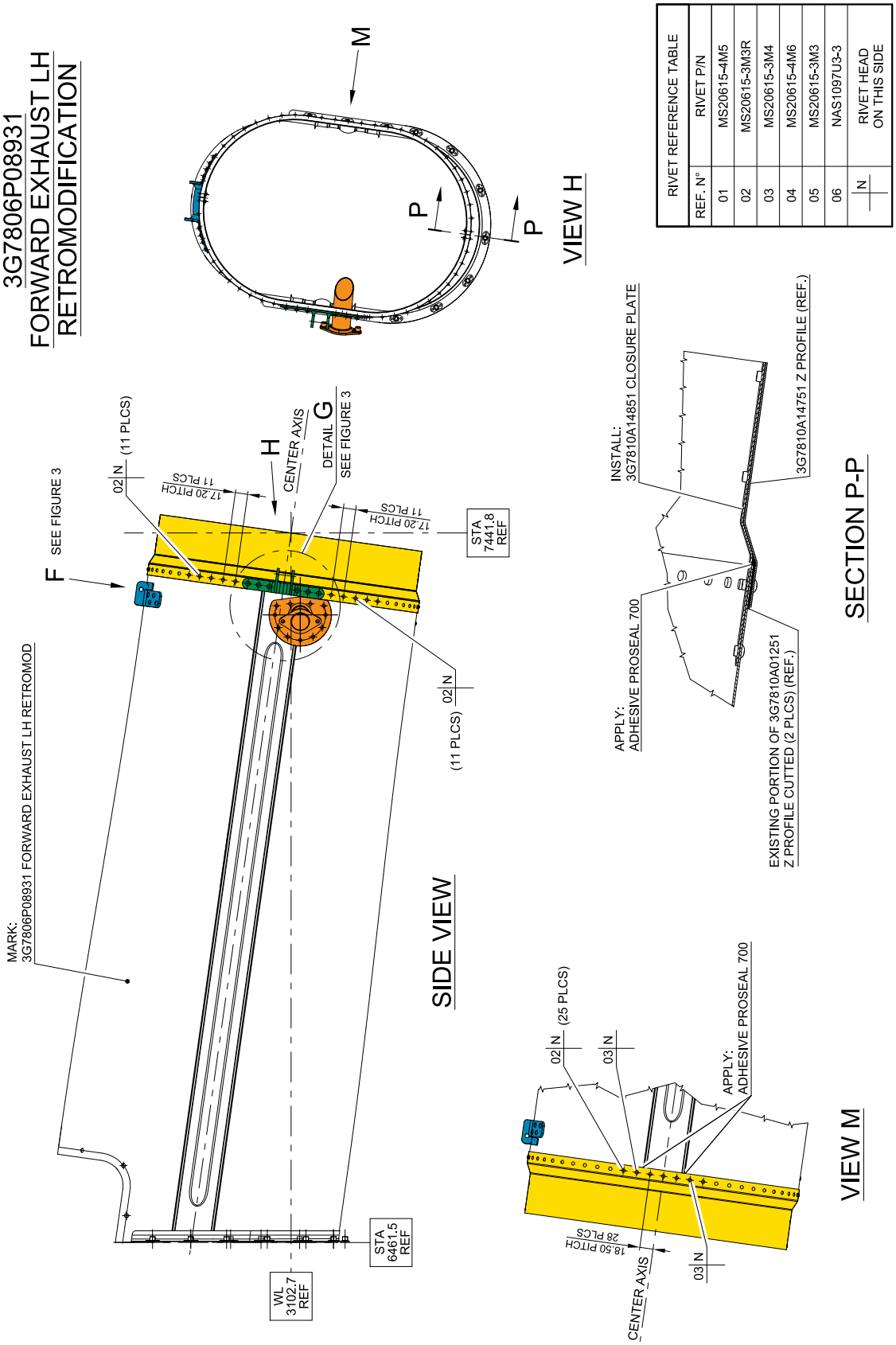

3G7806P08931
FORWARD EXHAUST LH
RETROMODIFICATION
VIEW H
M
P
P
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
MS20615-4M5
02
MS20615-3M3R
03
MS20615-3M4
04
MS20615-4M6
05
MS20615-3M3
06
NAS1097U3-3
N
RIVET HEAD ON THIS SIDE
SIDE VIEW
MARK: 3G7806P08931 FORWARD EXHAUST LH RETROMOD
F
SEE FIGURE 3
02 N (11 PLCS)
17.20 PITCH 11 PLCS
H
CENTER AXIS
DETAIL G
SEE FIGURE 3
STA 7441.8 REF
02 N
(11 PLCS)
STA 6461.5 REF
WL 3102.7 REF
SECTION P-P
INSTALL: 3G7810A14851 CLOSURE PLATE
3G7810A14751 Z PROFILE (REF.)
APPLY: ADHESIVE PROSEAL 700
EXISTING PORTION OF 3G7810A01251 Z PROFILE CUTTED (2 PLCS) (REF.)
VIEW M
02 N (25 PLCS)
03 N
APPLY: ADHESIVE PROSEAL 700
18.50 PITCH 28 PLCS
03 N
CENTER AXIS

Figure 2

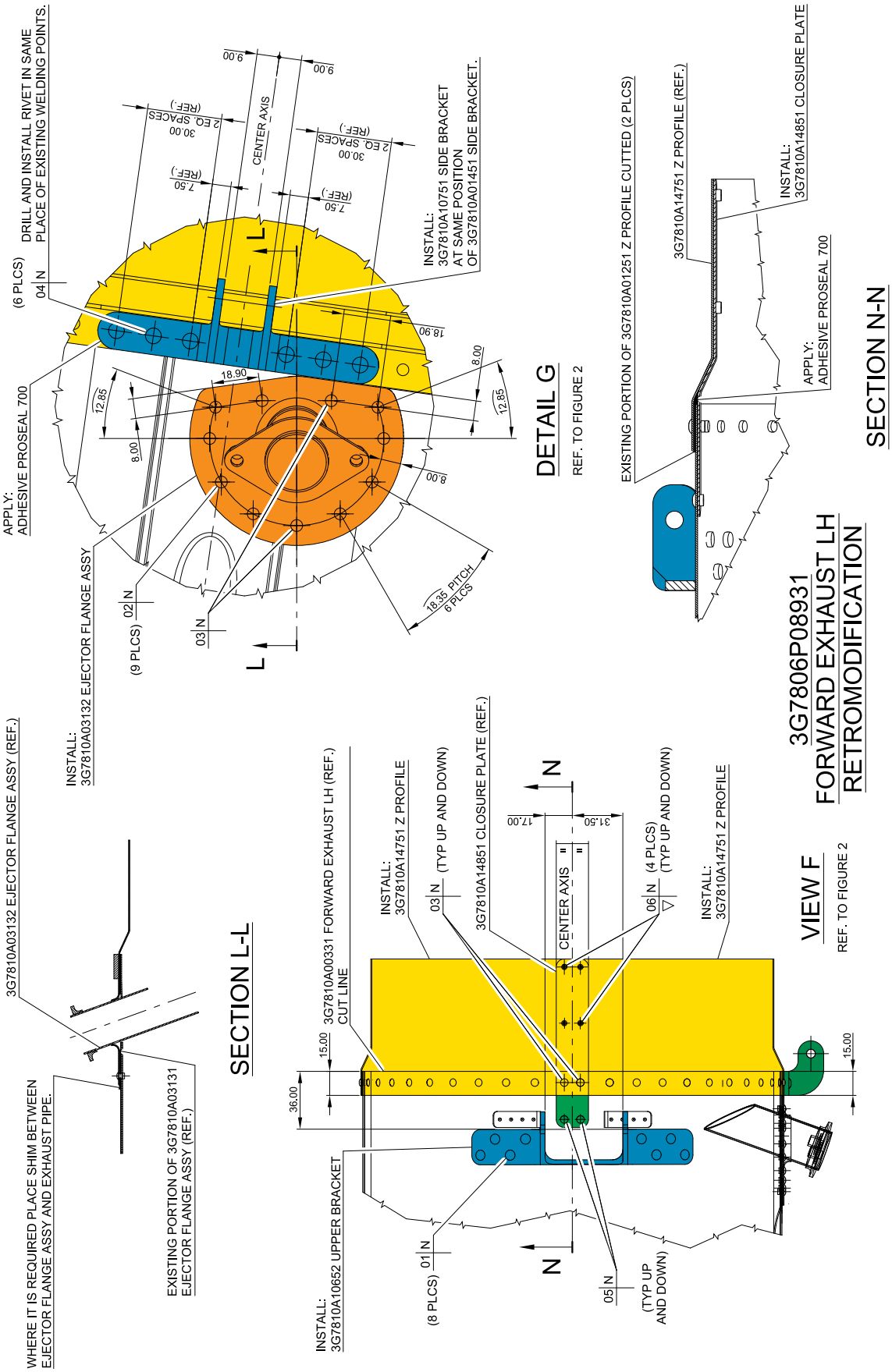

3G7806P08931
FORWARD EXHAUST LH
RETROMODIFICATION
DETAIL G
REF. TO FIGURE 2
SECTION N-N
SECTION L-L
VIEW F
REF. TO FIGURE 2
DRILL AND INSTALL RIVET IN SAME PLACE OF EXISTING WELDING POINTS.
(6 PLCS) 04 N
APPLY: ADHESIVE PROSEAL 700
INSTALL: 3G7810A03132 EJECTOR FLANGE ASSY
(9 PLCS) 02 N
03 N
INSTALL: 3G7810A10751 SIDE BRACKET AT SAME POSITION OF 3G7810A01451 SIDE BRACKET.
CENTER AXIS
2 EQ. SPACES (REF.) 30.00
7.50 (REF.)
9.00
18.90
12.85
8.00
18.35 PITCH 6 PLCS
EXISTING PORTION OF 3G7810A01251 Z PROFILE CUTTED (2 PLCS)
3G7810A14751 Z PROFILE (REF.)
INSTALL: 3G7810A14851 CLOSURE PLATE
APPLY: ADHESIVE PROSEAL 700
3G7810A03132 EJECTOR FLANGE ASSY (REF.)
WHERE IT IS REQUIRED PLACE SHIM BETWEEN EJECTOR FLANGE ASSY AND EXHAUST PIPE.
EXISTING PORTION OF 3G7810A03131 EJECTOR FLANGE ASSY (REF.)
INSTALL: 3G7810A10652 UPPER BRACKET
(8 PLCS) 01 N
3G7810A00331 FORWARD EXHAUST LH (REF.) CUT LINE
INSTALL: 3G7810A14751 Z PROFILE
03 N (TYP UP AND DOWN)
3G7810A14851 CLOSURE PLATE (REF.)
06 N (4 PLCS) (TYP UP AND DOWN)
INSTALL: 3G7810A14751 Z PROFILE
05 N (TYP UP AND DOWN)
17.00
31.50
15.00
36.00

Figure 3

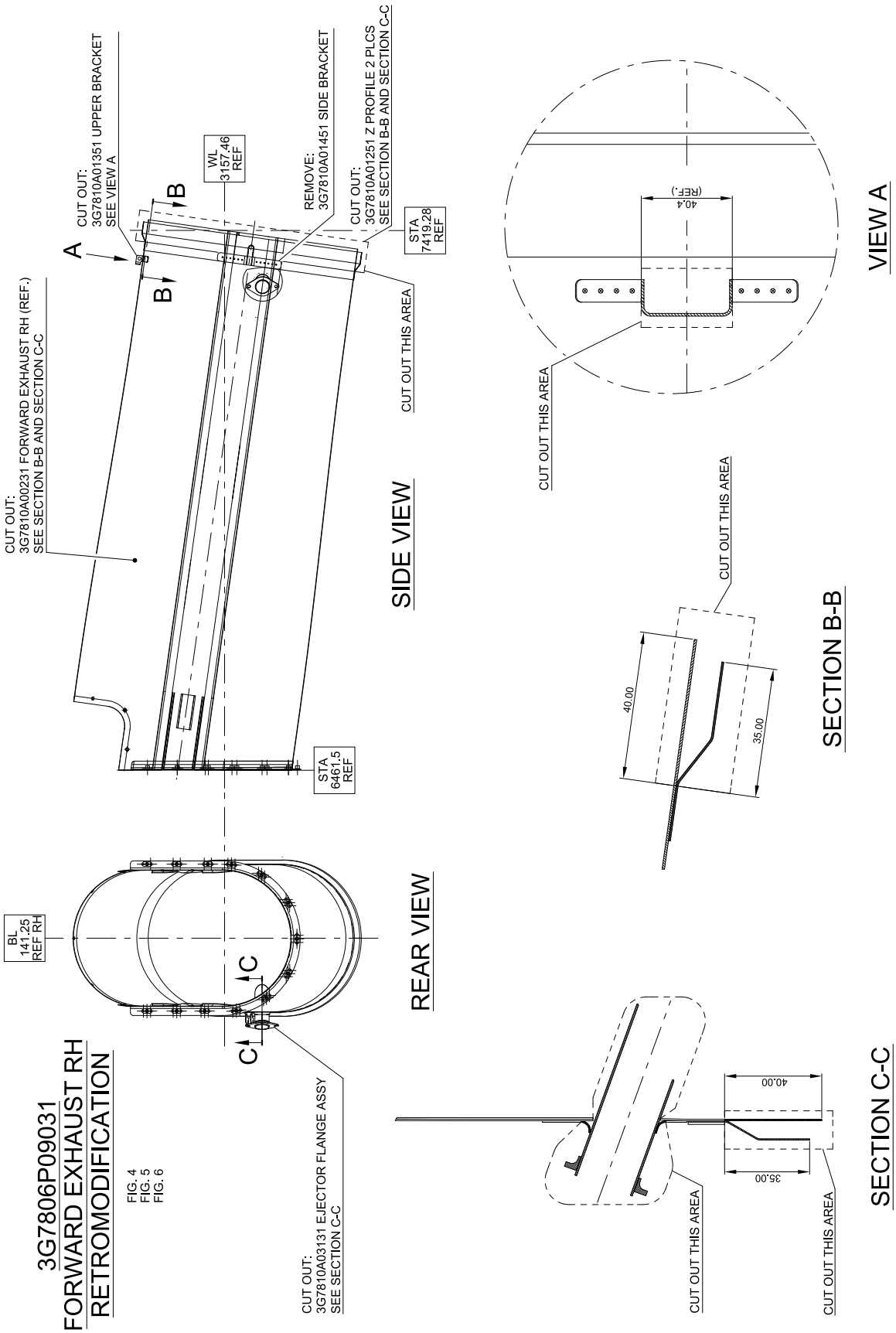

3G7806P09031
FORWARD EXHAUST RH
RETROMODIFICATION
FIG. 4
FIG. 5
FIG. 6
SIDE VIEW
REAR VIEW
VIEW A
SECTION B-B
SECTION C-C
CUT OUT:
3G7810A01351 UPPER BRACKET
SEE VIEW A
CUT OUT:
3G7810A00231 FORWARD EXHAUST RH (REF.)
SEE SECTION B-B AND SECTION C-C
CUT OUT:
3G7810A03131 EJECTOR FLANGE ASSY
SEE SECTION C-C
REMOVE:
3G7810A01451 SIDE BRACKET
CUT OUT:
3G7810A01251 Z PROFILE 2 PLCS
SEE SECTION B-B AND SECTION C-C
WL
3157.46
REF
BL
141.25
REF RH
STA
6461.5
REF
STA
7419.28
REF
CUT OUT THIS AREA
CUT OUT THIS AREA
CUT OUT THIS AREA
CUT OUT THIS AREA
CUT OUT THIS AREA
40.4
(REF.)
40.00
35.00
40.00
35.00
A
B
B
C
C

Figure 4

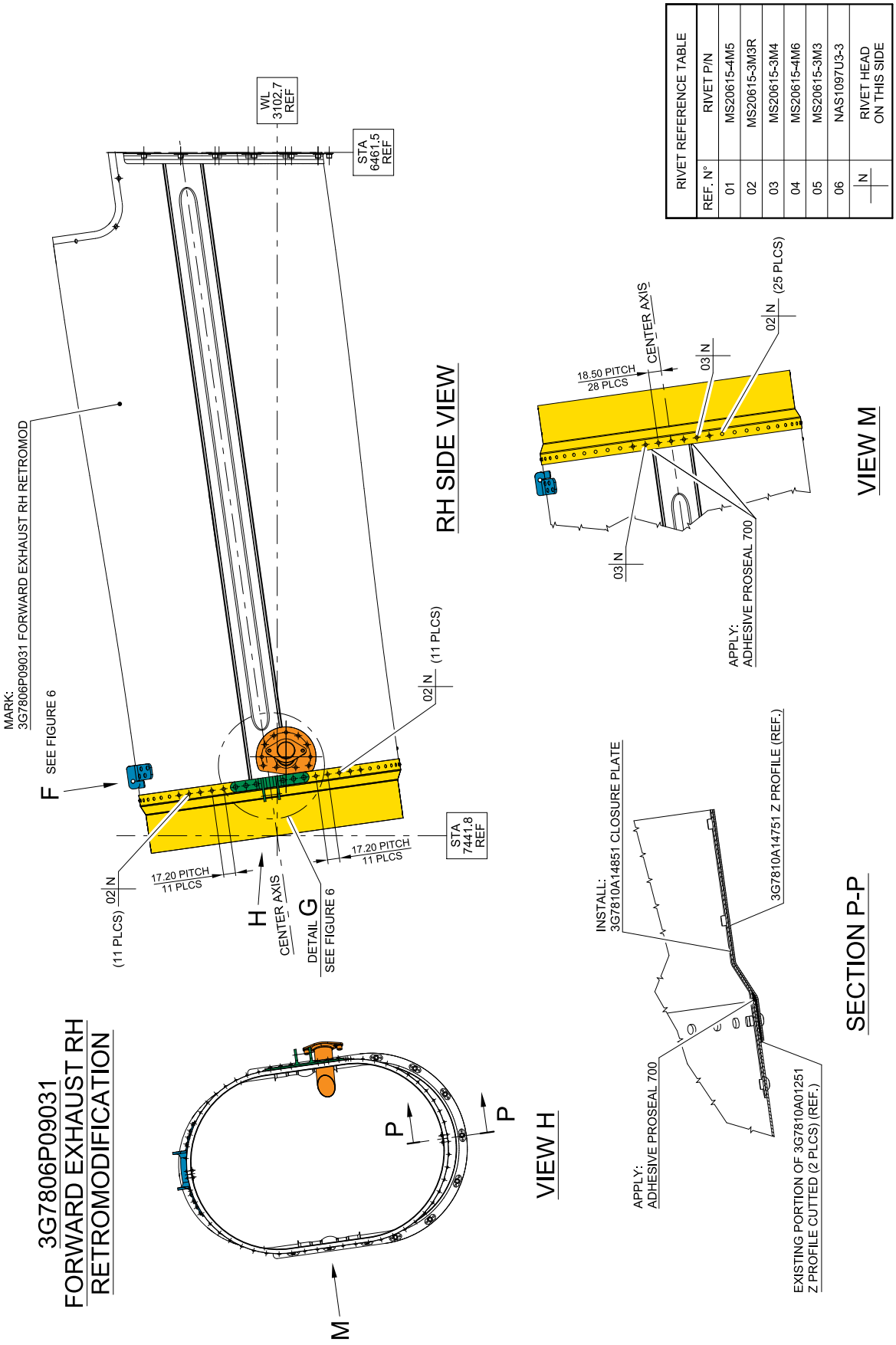

3G7806P09031
FORWARD EXHAUST RH
RETROMODIFICATION
MARK:
3G7806P09031 FORWARD EXHAUST RH RETROMOD
WL 3102.7 REF
STA 6461.5 REF
STA 7441.8 REF
RH SIDE VIEW
SEE FIGURE 6
F
02 N (11 PLCS)
17.20 PITCH 11 PLCS
H
CENTER AXIS
DETAIL G
SEE FIGURE 6
VIEW H
P
M
RIVET REFERENCE TABLE
REF. N° | RIVET P/N
01 | MS20615-4M5
02 | MS20615-3M3R
03 | MS20615-3M4
04 | MS20615-4M6
05 | MS20615-3M3
06 | NAS1097U3-3
N | RIVET HEAD ON THIS SIDE
18.50 PITCH 28 PLCS
CENTER AXIS
03 N
02 N (25 PLCS)
APPLY: ADHESIVE PROSEAL 700
VIEW M
INSTALL: 3G7810A14851 CLOSURE PLATE
3G7810A14751 Z PROFILE (REF.)
APPLY: ADHESIVE PROSEAL 700
EXISTING PORTION OF 3G7810A01251 Z PROFILE CUTTED (2 PLCS) (REF.)
SECTION P-P

Figure 5

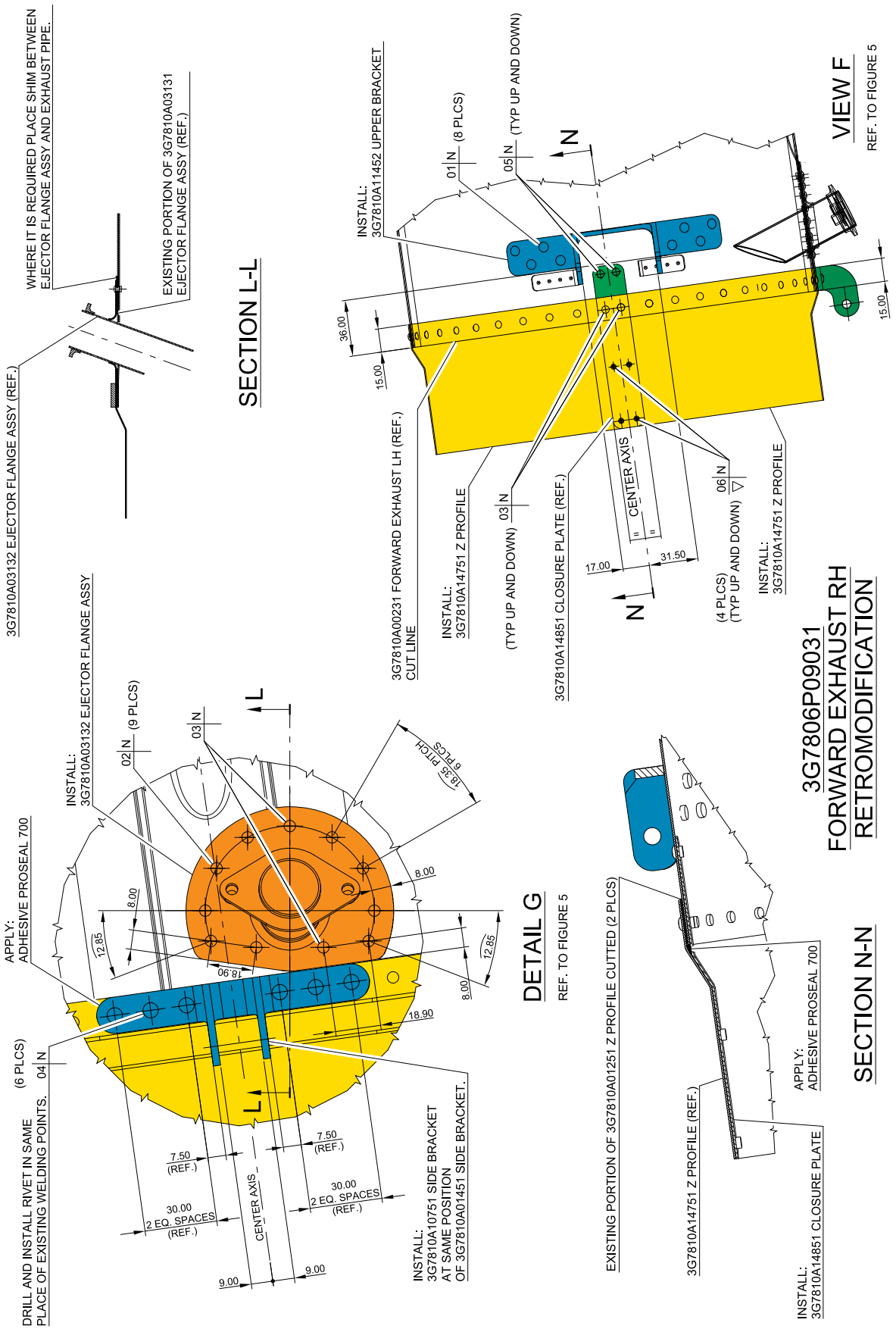

3G7806P09031
FORWARD EXHAUST RH
RETROMODIFICATION
SECTION L-L
WHERE IT IS REQUIRED PLACE SHIM BETWEEN EJECTOR FLANGE ASSY AND EXHAUST PIPE.
EXISTING PORTION OF 3G7810A03131 EJECTOR FLANGE ASSY (REF.)
3G7810A03132 EJECTOR FLANGE ASSY (REF.)
VIEW F
REF. TO FIGURE 5
INSTALL: 3G7810A11452 UPPER BRACKET
01 N (8 PLCS)
05 N (TYP UP AND DOWN)
3G7810A00231 FORWARD EXHAUST LH (REF.) CUT LINE
INSTALL: 3G7810A14751 Z PROFILE
03 N (TYP UP AND DOWN)
3G7810A14851 CLOSURE PLATE (REF.)
CENTER AXIS
06 N (4 PLCS) (TYP UP AND DOWN)
INSTALL: 3G7810A14751 Z PROFILE
36.00
15.00
17.00
31.50
INSTALL: 3G7810A03132 EJECTOR FLANGE ASSY
02 N (9 PLCS)
03 N
APPLY: ADHESIVE PROSEAL 700
DRILL AND INSTALL RIVET IN SAME PLACE OF EXISTING WELDING POINTS.
04 N (6 PLCS)
18.35 PITCH 6 PLCS
8.00
12.85
18.90
DETAIL G
REF. TO FIGURE 5
INSTALL: 3G7810A10751 SIDE BRACKET AT SAME POSITION OF 3G7810A01451 SIDE BRACKET.
7.50 (REF.)
30.00 2 EQ. SPACES (REF.)
CENTER AXIS
9.00
EXISTING PORTION OF 3G7810A01251 Z PROFILE CUTTED (2 PLCS)
3G7810A14751 Z PROFILE (REF.)
APPLY: ADHESIVE PROSEAL 700
INSTALL: 3G7810A14851 CLOSURE PLATE
SECTION N-N

Figure 6

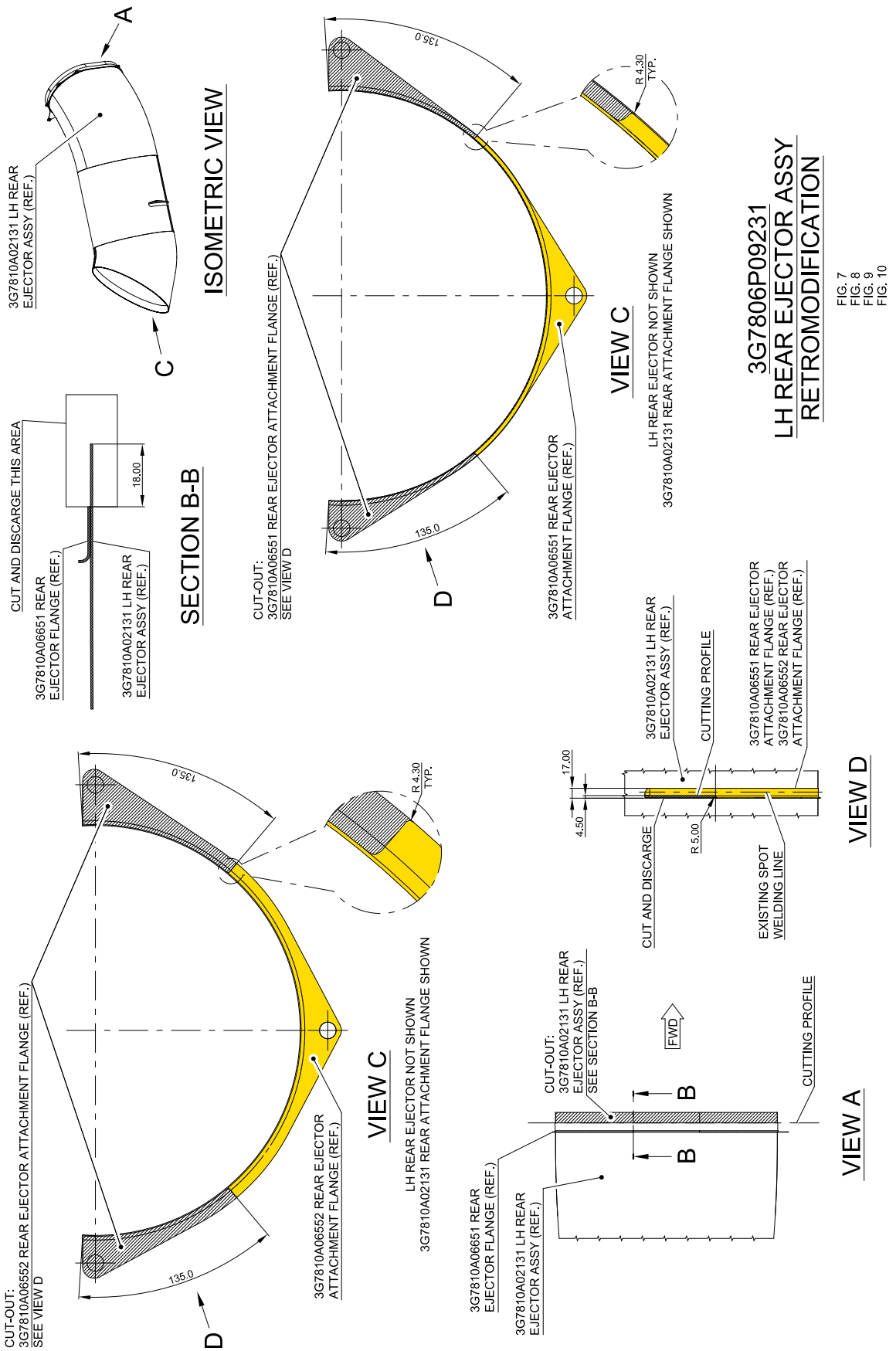

3G7806P09231
LH REAR EJECTOR ASSY
RETROMODIFICATION
FIG. 7
FIG. 8
FIG. 9
FIG. 10
ISOMETRIC VIEW
A
C
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
SECTION B-B
CUT AND DISCARGE THIS AREA
3G7810A06651 REAR
EJECTOR FLANGE (REF.)
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
18.00
CUT-OUT:
3G7810A06551 REAR EJECTOR ATTACHMENT FLANGE (REF.)
SEE VIEW D
135.0
D
3G7810A06551 REAR EJECTOR
ATTACHMENT FLANGE (REF.)
VIEW C
LH REAR EJECTOR NOT SHOWN
3G7810A02131 REAR ATTACHMENT FLANGE SHOWN
R 4.30
TYP.
CUT-OUT:
3G7810A06552 REAR EJECTOR ATTACHMENT FLANGE (REF.)
SEE VIEW D
3G7810A06552 REAR EJECTOR
ATTACHMENT FLANGE (REF.)
VIEW C
LH REAR EJECTOR NOT SHOWN
3G7810A02131 REAR ATTACHMENT FLANGE SHOWN
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
CUTTING PROFILE
3G7810A06551 REAR EJECTOR
ATTACHMENT FLANGE (REF.)
3G7810A06552 REAR EJECTOR
ATTACHMENT FLANGE (REF.)
17.00
4.50
R 5.00
CUT AND DISCARGE
EXISTING SPOT
WELDING LINE
VIEW D
CUT-OUT:
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
SEE SECTION B-B
FWD
B
B
CUTTING PROFILE
3G7810A06651 REAR
EJECTOR FLANGE (REF.)
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
VIEW A

Figure 7

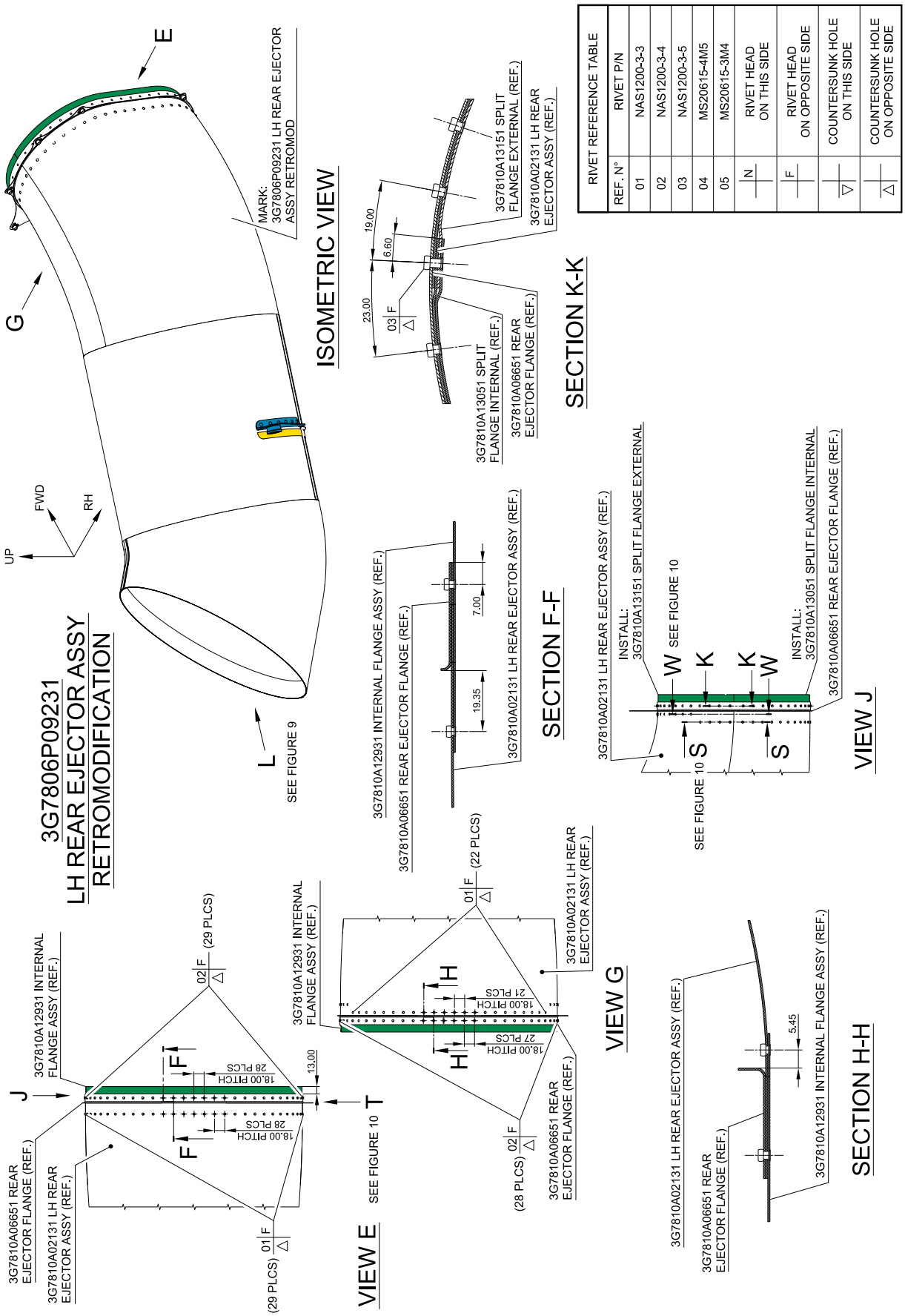

3G7806P09231
LH REAR EJECTOR ASSY
RETROMODIFICATION
ISOMETRIC VIEW
MARK:
3G7806P09231 LH REAR EJECTOR
ASSY RETROMOD
UP
FWD
RH
SEE FIGURE 9
SECTION K-K
3G7810A13151 SPLIT
FLANGE EXTERNAL (REF.)
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
3G7810A13051 SPLIT
FLANGE INTERNAL (REF.)
3G7810A06651 REAR
EJECTOR FLANGE (REF.)
SECTION F-F
3G7810A12931 INTERNAL FLANGE ASSY (REF.)
3G7810A06651 REAR EJECTOR FLANGE (REF.)
3G7810A02131 LH REAR EJECTOR ASSY (REF.)
VIEW J
3G7810A02131 LH REAR EJECTOR ASSY (REF.)
INSTALL:
3G7810A13151 SPLIT FLANGE EXTERNAL
SEE FIGURE 10
INSTALL:
3G7810A13051 SPLIT FLANGE INTERNAL
3G7810A06651 REAR EJECTOR FLANGE (REF.)
VIEW G
3G7810A12931 INTERNAL
FLANGE ASSY (REF.)
3G7810A06651 REAR
EJECTOR FLANGE (REF.)
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
VIEW E
SEE FIGURE 10
SECTION H-H
3G7810A02131 LH REAR EJECTOR ASSY (REF.)
3G7810A06651 REAR
EJECTOR FLANGE (REF.)
3G7810A12931 INTERNAL FLANGE ASSY (REF.)
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 NAS1200-3-3
02 NAS1200-3-4
03 NAS1200-3-5
04 MS20615-4M5
05 MS20615-3M4
N RIVET HEAD ON THIS SIDE
F RIVET HEAD ON OPPOSITE SIDE
COUNTERSUNK HOLE ON THIS SIDE
COUNTERSUNK HOLE ON OPPOSITE SIDE

Figure 8

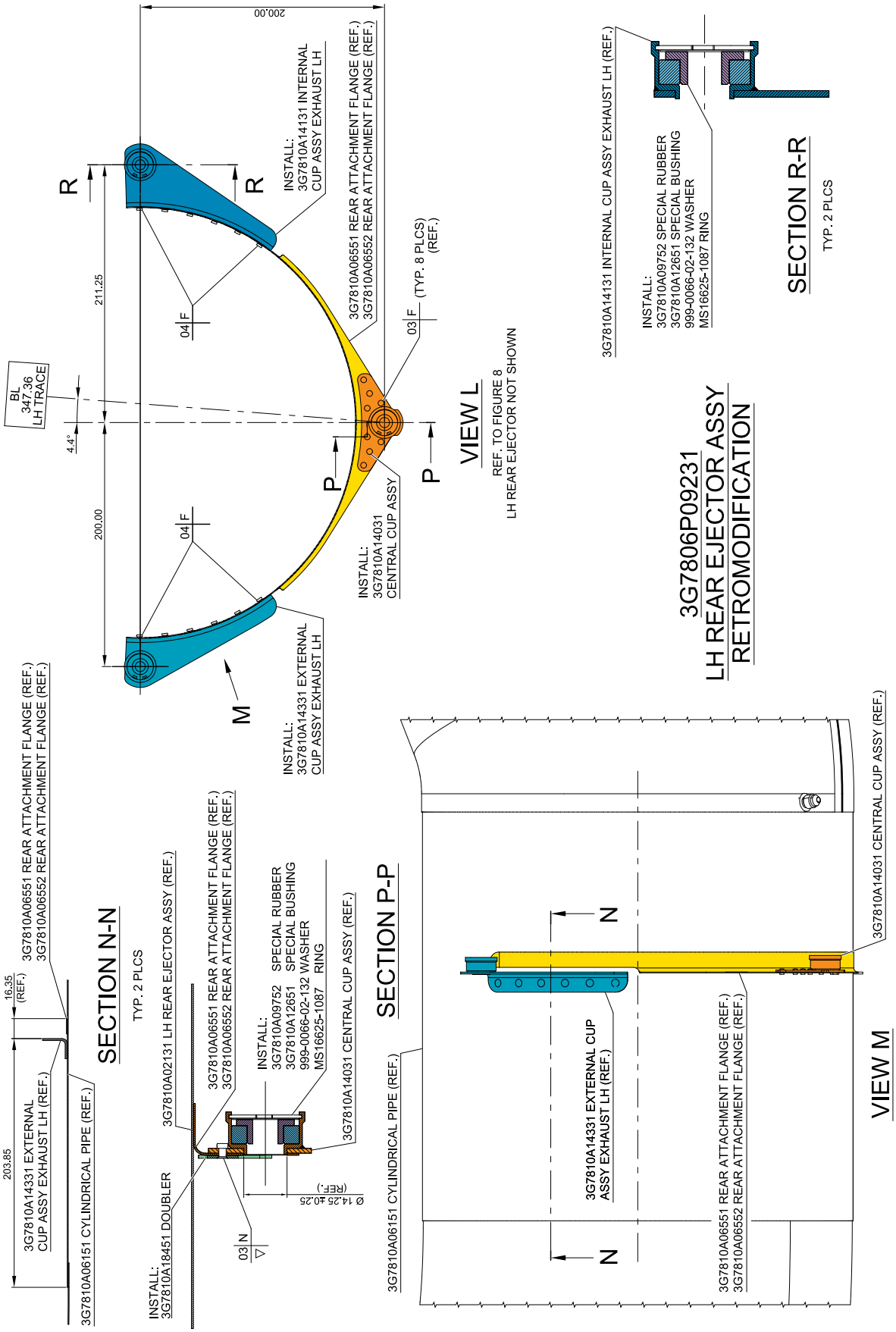

3G7806P09231
LH REAR EJECTOR ASSY
RETROMODIFICATION
VIEW L
REF. TO FIGURE 8
LH REAR EJECTOR NOT SHOWN
SECTION R-R
TYP. 2 PLCS
SECTION N-N
TYP. 2 PLCS
SECTION P-P
VIEW M
INSTALL:
3G7810A14131 INTERNAL
CUP ASSY EXHAUST LH
INSTALL:
3G7810A14331 EXTERNAL
CUP ASSY EXHAUST LH
INSTALL:
3G7810A14031
CENTRAL CUP ASSY
3G7810A06551 REAR ATTACHMENT FLANGE (REF.)
3G7810A06552 REAR ATTACHMENT FLANGE (REF.)
3G7810A14131 INTERNAL CUP ASSY EXHAUST LH (REF.)
INSTALL:
3G7810A09752 SPECIAL RUBBER
3G7810A12651 SPECIAL BUSHING
999-0066-02-132 WASHER
MS16625-1087 RING
3G7810A14331 EXTERNAL
CUP ASSY EXHAUST LH (REF.)
3G7810A06151 CYLINDRICAL PIPE (REF.)
3G7810A02131 LH REAR EJECTOR ASSY (REF.)
3G7810A18451 DOUBLER
3G7810A14031 CENTRAL CUP ASSY (REF.)
3G7810A14331 EXTERNAL CUP ASSY EXHAUST LH (REF.)
BL 347.36 LH TRACE
200.00
211.25
203.85
16.35 (REF.)
4.4°
(TYP. 8 PLCS) (REF.)

Figure 9

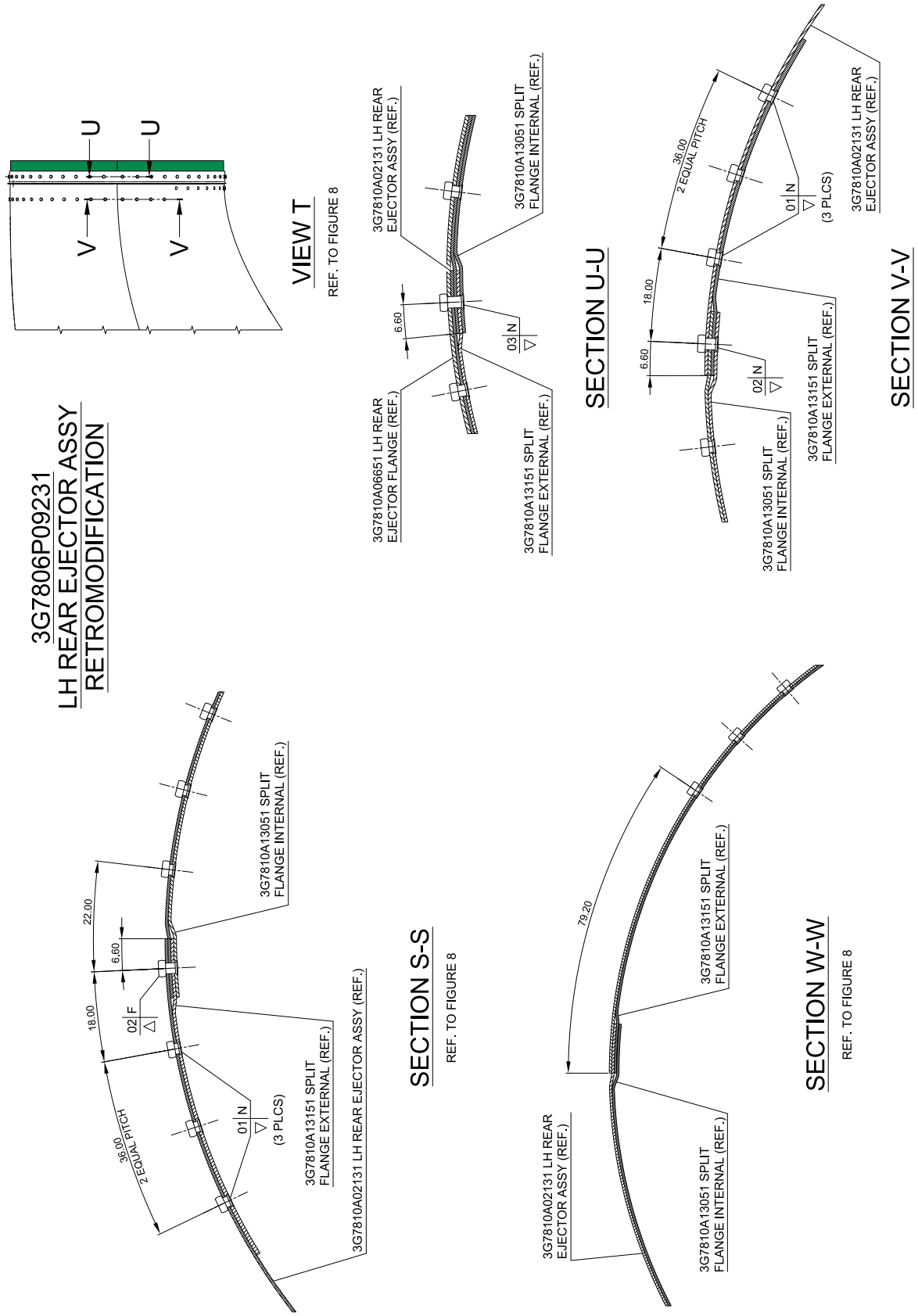

3G7806P09231
LH REAR EJECTOR ASSY
RETROMODIFICATION
U
U
V
V
VIEW T
REF. TO FIGURE 8
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
3G7810A13051 SPLIT
FLANGE INTERNAL (REF.)
6.60
03 N
3G7810A06651 LH REAR
EJECTOR FLANGE (REF.)
3G7810A13151 SPLIT
FLANGE EXTERNAL (REF.)
SECTION U-U
36.00
2 EQUAL PITCH
18.00
6.60
01 N
(3 PLCS)
02 N
3G7810A13051 SPLIT
FLANGE INTERNAL (REF.)
3G7810A13151 SPLIT
FLANGE EXTERNAL (REF.)
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
SECTION V-V
22.00
6.60
18.00
02 F
36.00
2 EQUAL PITCH
01 N
(3 PLCS)
3G7810A13051 SPLIT
FLANGE INTERNAL (REF.)
3G7810A13151 SPLIT
FLANGE EXTERNAL (REF.)
3G7810A02131 LH REAR EJECTOR ASSY (REF.)
SECTION S-S
REF. TO FIGURE 8
79.20
3G7810A02131 LH REAR
EJECTOR ASSY (REF.)
3G7810A13151 SPLIT
FLANGE EXTERNAL (REF.)
3G7810A13051 SPLIT
FLANGE INTERNAL (REF.)
SECTION W-W
REF. TO FIGURE 8

Figure 10

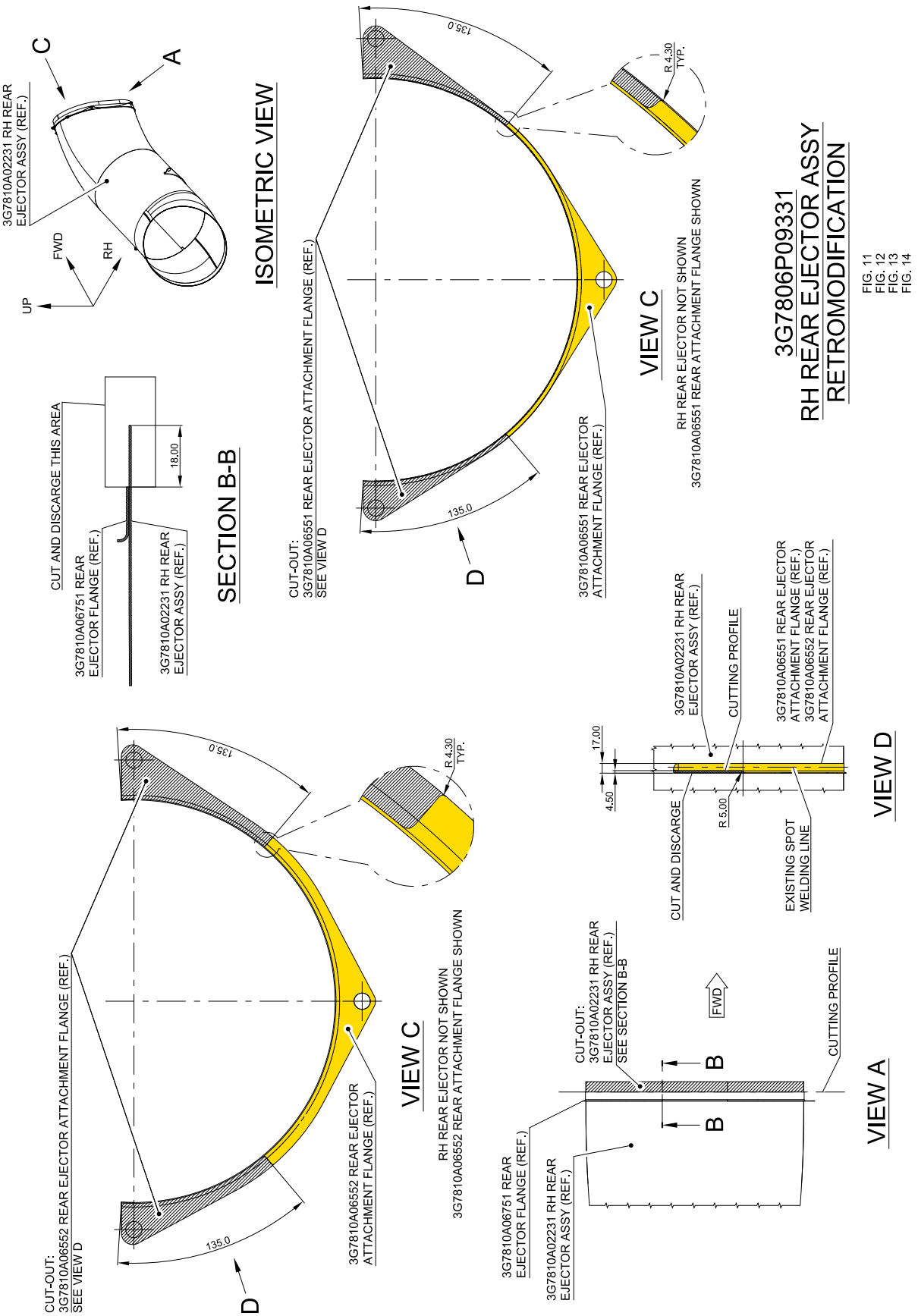

3G7806P09331
RH REAR EJECTOR ASSY
RETROMODIFICATION
FIG. 11
FIG. 12
FIG. 13
FIG. 14
ISOMETRIC VIEW
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
FWD
RH
UP
SECTION B-B
CUT AND DISCARGE THIS AREA
3G7810A06751 REAR EJECTOR FLANGE (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
18.00
VIEW C
RH REAR EJECTOR NOT SHOWN
3G7810A06551 REAR ATTACHMENT FLANGE SHOWN
CUT-OUT:
3G7810A06551 REAR EJECTOR ATTACHMENT FLANGE (REF.)
SEE VIEW D
3G7810A06551 REAR EJECTOR ATTACHMENT FLANGE (REF.)
R 4.30 TYP.
135.0
D
VIEW C
RH REAR EJECTOR NOT SHOWN
3G7810A06552 REAR ATTACHMENT FLANGE SHOWN
CUT-OUT:
3G7810A06552 REAR EJECTOR ATTACHMENT FLANGE (REF.)
SEE VIEW D
3G7810A06552 REAR EJECTOR ATTACHMENT FLANGE (REF.)
R 4.30 TYP.
135.0
D
VIEW D
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
CUTTING PROFILE
3G7810A06551 REAR EJECTOR ATTACHMENT FLANGE (REF.)
3G7810A06552 REAR EJECTOR ATTACHMENT FLANGE (REF.)
17.00
4.50
R 5.00
CUT AND DISCARGE
EXISTING SPOT WELDING LINE
VIEW A
CUT-OUT:
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
SEE SECTION B-B
FWD
B
B
CUTTING PROFILE
3G7810A06751 REAR EJECTOR FLANGE (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)

Figure 11

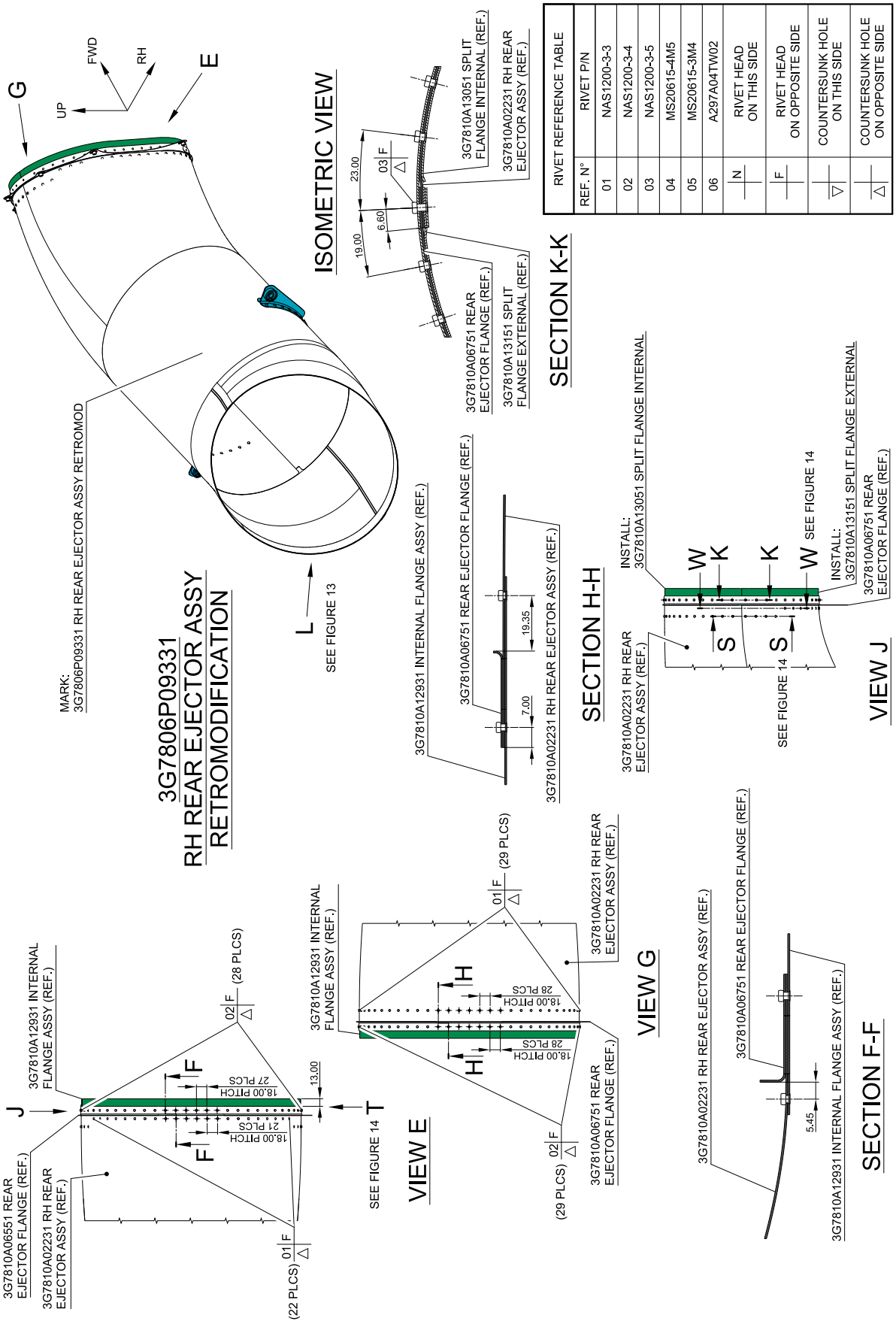

3G7806P09331
RH REAR EJECTOR ASSY
RETROMODIFICATION
MARK:
3G7806P09331 RH REAR EJECTOR ASSY RETROMOD
ISOMETRIC VIEW
G
E
UP
FWD
RH
L
SEE FIGURE 13
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 NAS1200-3-3
02 NAS1200-3-4
03 NAS1200-3-5
04 MS20615-4M5
05 MS20615-3M4
06 A297A04TW02
RIVET HEAD ON THIS SIDE
RIVET HEAD ON OPPOSITE SIDE
COUNTERSUNK HOLE ON THIS SIDE
COUNTERSUNK HOLE ON OPPOSITE SIDE
3G7810A13051 SPLIT FLANGE INTERNAL (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
3G7810A06751 REAR EJECTOR FLANGE (REF.)
3G7810A13151 SPLIT FLANGE EXTERNAL (REF.)
23.00
19.00
6.60
SECTION K-K
3G7810A12931 INTERNAL FLANGE ASSY (REF.)
3G7810A06751 REAR EJECTOR FLANGE (REF.)
19.35
7.00
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
SECTION H-H
INSTALL:
3G7810A13051 SPLIT FLANGE INTERNAL
INSTALL:
3G7810A13151 SPLIT FLANGE EXTERNAL
3G7810A06751 REAR EJECTOR FLANGE (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
W
K
S
SEE FIGURE 14
VIEW J
3G7810A12931 INTERNAL FLANGE ASSY (REF.)
3G7810A06551 REAR EJECTOR FLANGE (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
J
T
13.00
18.00 PITCH
27 PLCS
21 PLCS
(28 PLCS)
(22 PLCS)
SEE FIGURE 14
VIEW E
H
18.00 PITCH
28 PLCS
(29 PLCS)
3G7810A06751 REAR EJECTOR FLANGE (REF.)
VIEW G
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
3G7810A06751 REAR EJECTOR FLANGE (REF.)
5.45
3G7810A12931 INTERNAL FLANGE ASSY (REF.)
SECTION F-F

Figure 12

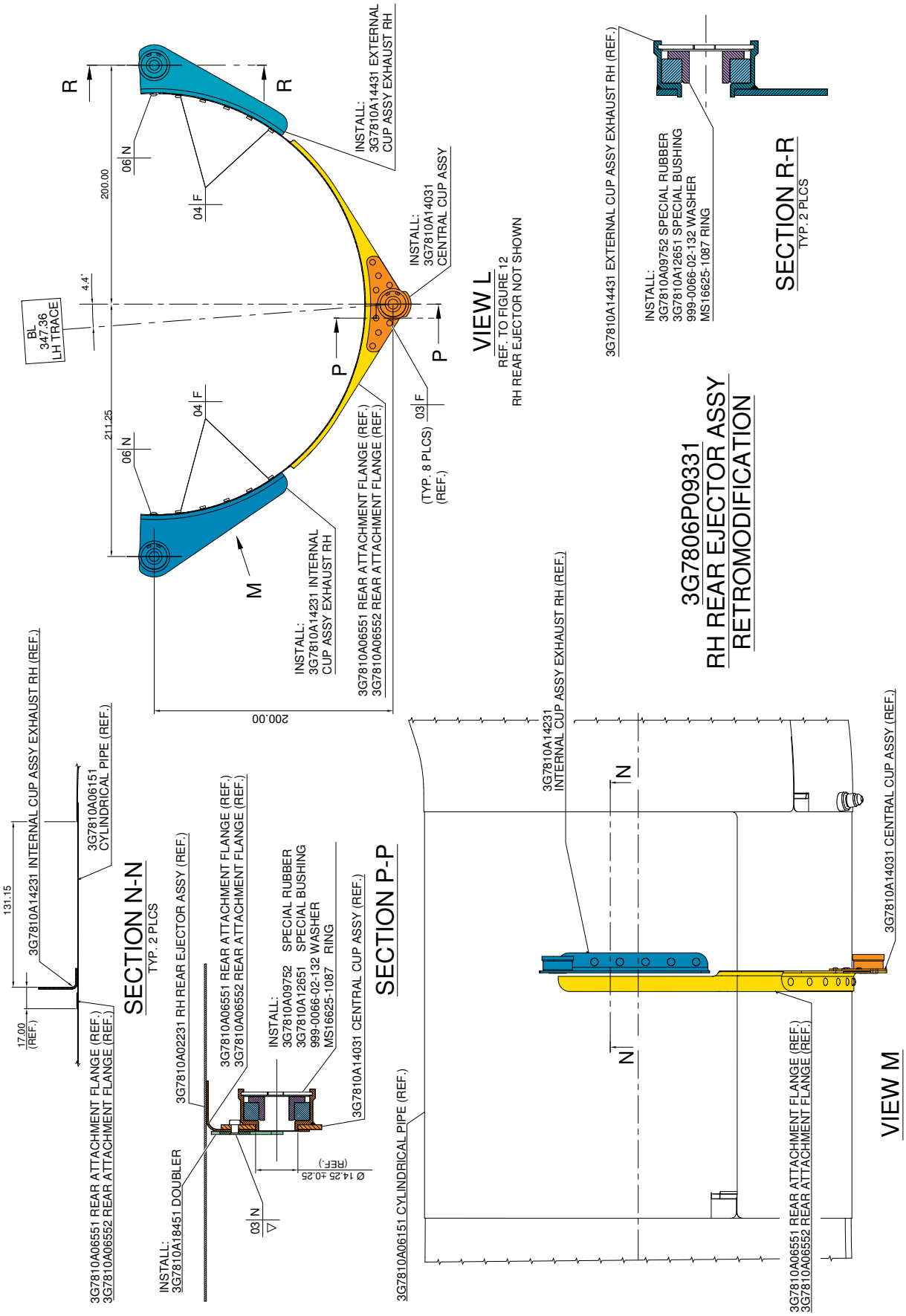

3G7806P09331
RH REAR EJECTOR ASSY
RETROMODIFICATION
VIEW L
REF. TO FIGURE 12
RH REAR EJECTOR NOT SHOWN
SECTION R-R
TYP. 2 PLCS
SECTION N-N
TYP. 2 PLCS
SECTION P-P
VIEW M
INSTALL:
3G7810A14431 EXTERNAL
CUP ASSY EXHAUST RH
INSTALL:
3G7810A14031
CENTRAL CUP ASSY
INSTALL:
3G7810A14231 INTERNAL
CUP ASSY EXHAUST RH
3G7810A06551 REAR ATTACHMENT FLANGE (REF.)
3G7810A06552 REAR ATTACHMENT FLANGE (REF.)
3G7810A14431 EXTERNAL CUP ASSY EXHAUST RH (REF.)
INSTALL:
3G7810A09752 SPECIAL RUBBER
3G7810A12651 SPECIAL BUSHING
999-0066-02-132 WASHER
MS16625-1087 RING
3G7810A14231 INTERNAL CUP ASSY EXHAUST RH (REF.)
3G7810A06151 CYLINDRICAL PIPE (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
INSTALL:
3G7810A18451 DOUBLER
3G7810A14031 CENTRAL CUP ASSY (REF.)
BL 347.36 LH TRACE
200.00
211.25
131.15
17.00 (REF.)
4.4°

Figure 13

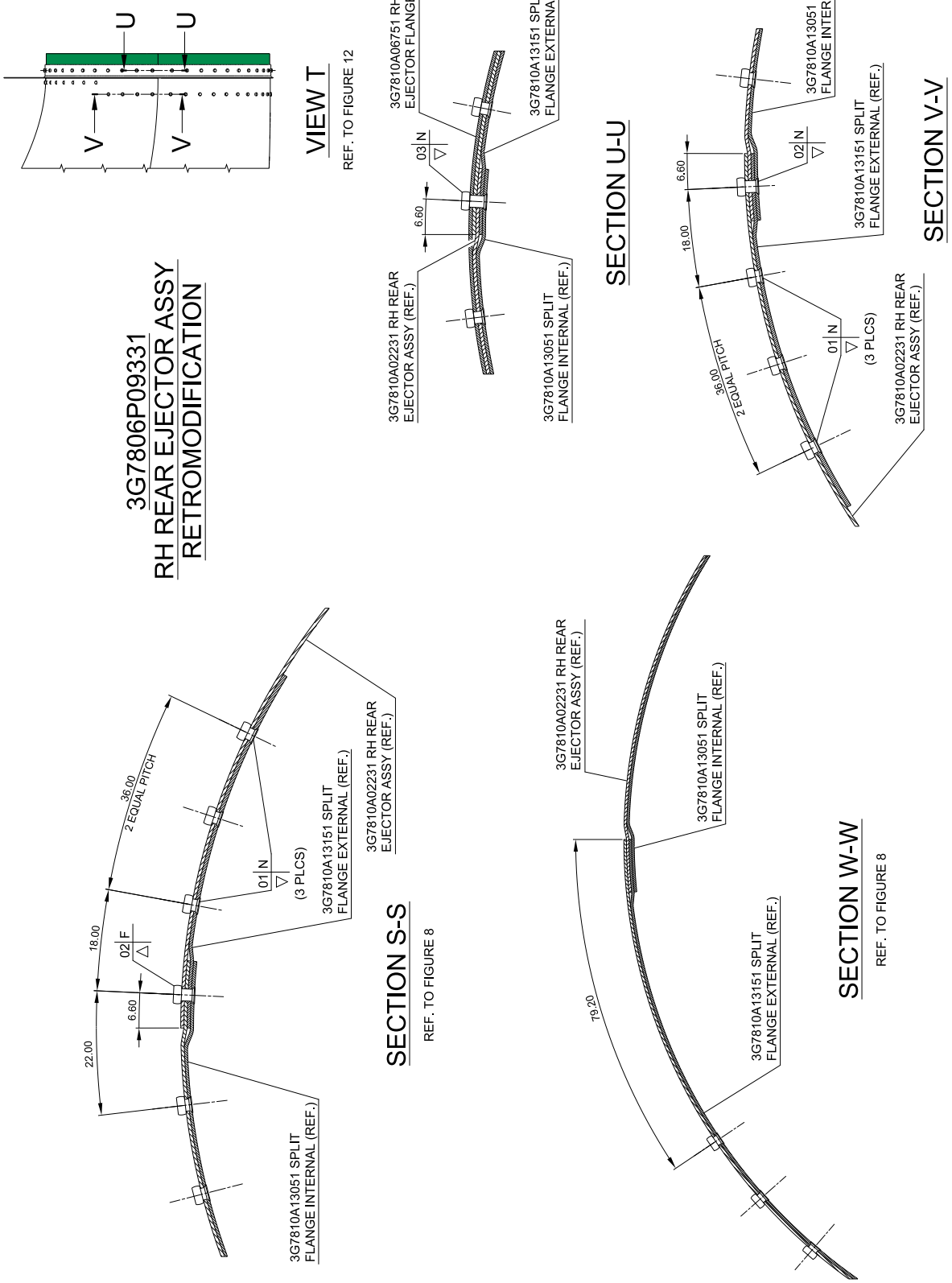

3G7806P09331
RH REAR EJECTOR ASSY
RETROMODIFICATION
VIEW T
REF. TO FIGURE 12
U
U
V
V
SECTION U-U
3G7810A06751 RH REAR EJECTOR FLANGE (REF.)
3G7810A13151 SPLIT FLANGE EXTERNAL (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
3G7810A13051 SPLIT FLANGE INTERNAL (REF.)
03 N
6.60
SECTION V-V
3G7810A13051 SPLIT FLANGE INTERNAL (REF.)
3G7810A13151 SPLIT FLANGE EXTERNAL (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
02 N
01 N
(3 PLCS)
6.60
18.00
36.00
2 EQUAL PITCH
SECTION S-S
REF. TO FIGURE 8
3G7810A13051 SPLIT FLANGE INTERNAL (REF.)
3G7810A13151 SPLIT FLANGE EXTERNAL (REF.)
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
02 F
01 N
(3 PLCS)
6.60
18.00
22.00
36.00
2 EQUAL PITCH
SECTION W-W
REF. TO FIGURE 8
3G7810A02231 RH REAR EJECTOR ASSY (REF.)
3G7810A13051 SPLIT FLANGE INTERNAL (REF.)
3G7810A13151 SPLIT FLANGE EXTERNAL (REF.)
79.20

Figure 14

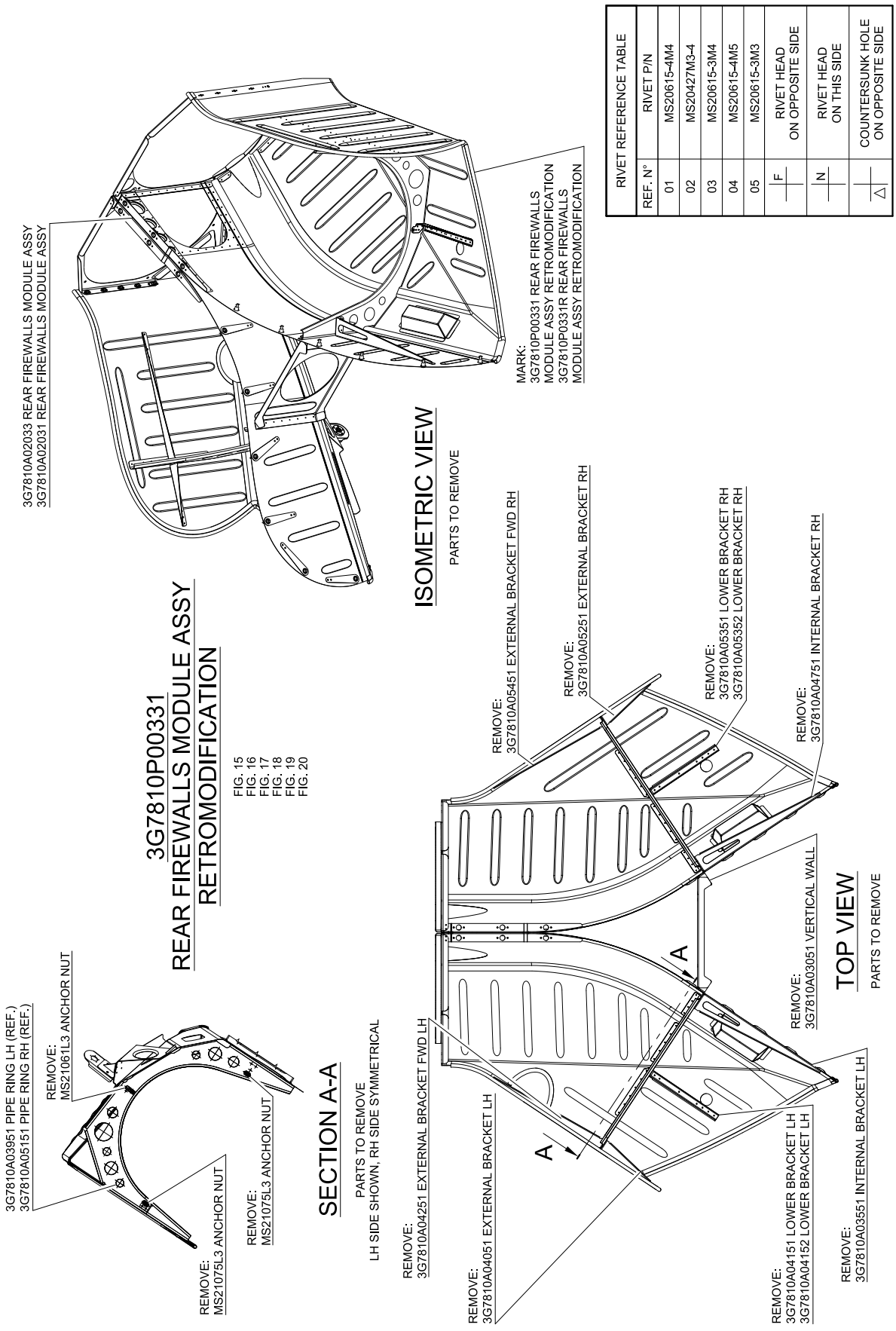

3G7810P00331
REAR FIREWALLS MODULE ASSY
RETROMODIFICATION
FIG. 15
FIG. 16
FIG. 17
FIG. 18
FIG. 19
FIG. 20
ISOMETRIC VIEW
PARTS TO REMOVE
3G7810A02033 REAR FIREWALLS MODULE ASSY
3G7810A02031 REAR FIREWALLS MODULE ASSY
MARK:
3G7810P00331 REAR FIREWALLS
MODULE ASSY RETROMODIFICATION
3G7810P0331R REAR FIREWALLS
MODULE ASSY RETROMODIFICATION
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 MS20615-4M4
02 MS20427M3-4
03 MS20615-3M4
04 MS20615-4M5
05 MS20615-3M3
F RIVET HEAD ON OPPOSITE SIDE
N RIVET HEAD ON THIS SIDE
COUNTERSUNK HOLE ON OPPOSITE SIDE
SECTION A-A
PARTS TO REMOVE
LH SIDE SHOWN, RH SIDE SYMMETRICAL
3G7810A03951 PIPE RING LH (REF.)
3G7810A05151 PIPE RING RH (REF.)
REMOVE:
MS21061L3 ANCHOR NUT
REMOVE:
MS21075L3 ANCHOR NUT
REMOVE:
MS21075L3 ANCHOR NUT
REMOVE:
3G7810A04251 EXTERNAL BRACKET FWD LH
REMOVE:
3G7810A04051 EXTERNAL BRACKET LH
REMOVE:
3G7810A04151 LOWER BRACKET LH
3G7810A04152 LOWER BRACKET LH
REMOVE:
3G7810A03551 INTERNAL BRACKET LH
REMOVE:
3G7810A05451 EXTERNAL BRACKET FWD RH
REMOVE:
3G7810A05251 EXTERNAL BRACKET RH
REMOVE:
3G7810A05351 LOWER BRACKET RH
3G7810A05352 LOWER BRACKET RH
REMOVE:
3G7810A04751 INTERNAL BRACKET RH
REMOVE:
3G7810A03051 VERTICAL WALL
TOP VIEW
PARTS TO REMOVE
A
A

Figure 15

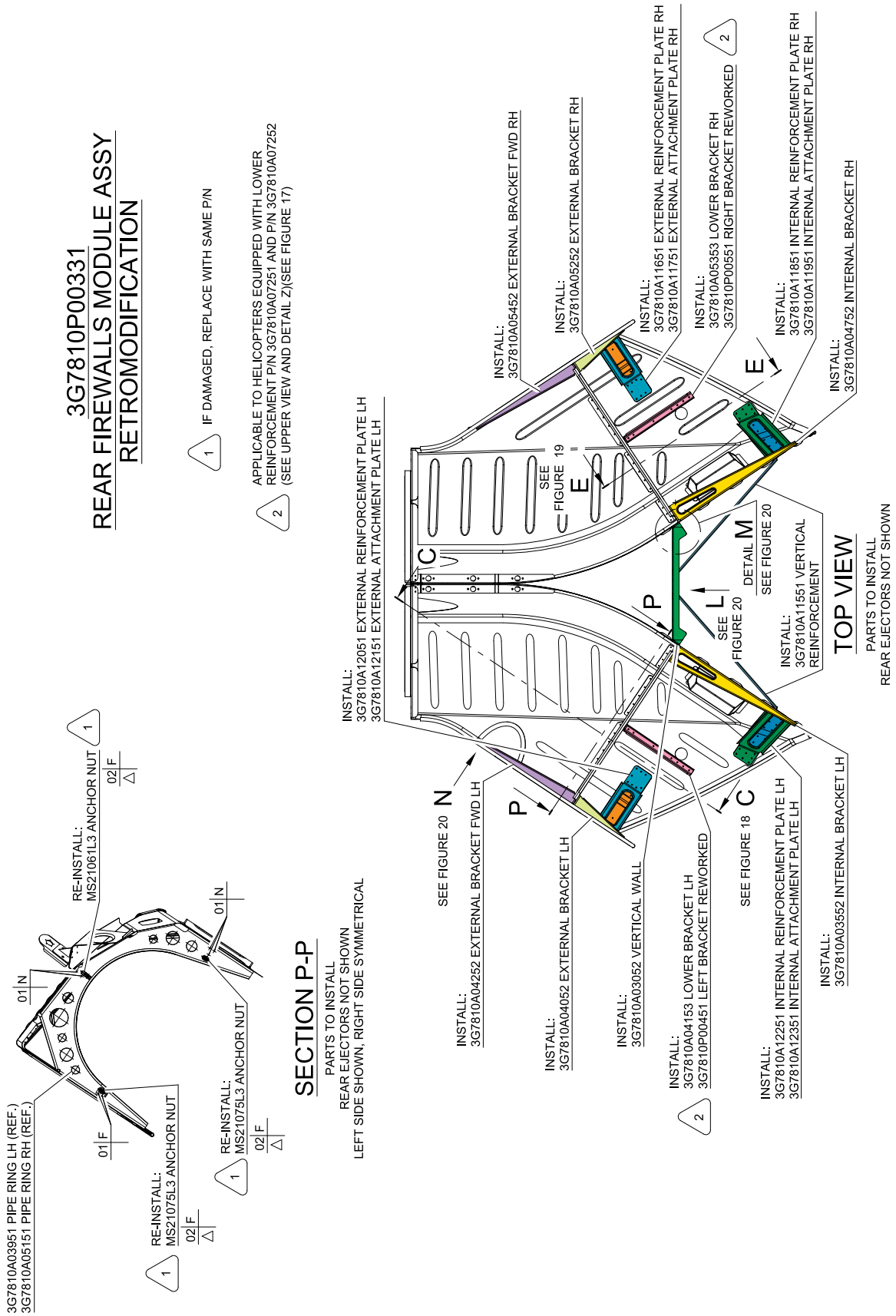

3G7810P00331
REAR FIREWALLS MODULE ASSY
RETROMODIFICATION
1 IF DAMAGED, REPLACE WITH SAME P/N
2 APPLICABLE TO HELICOPTERS EQUIPPED WITH LOWER REINFORCEMENT P/N 3G7810A07251 AND P/N 3G7810A07252 (SEE UPPER VIEW AND DETAIL Z)(SEE FIGURE 17)
SECTION P-P
PARTS TO INSTALL
REAR EJECTORS NOT SHOWN
LEFT SIDE SHOWN, RIGHT SIDE SYMMETRICAL
3G7810A03951 PIPE RING LH (REF.)
3G7810A05151 PIPE RING RH (REF.)
RE-INSTALL: MS21061L3 ANCHOR NUT
RE-INSTALL: MS21075L3 ANCHOR NUT
INSTALL: 3G7810A12051 EXTERNAL REINFORCEMENT PLATE LH
3G7810A12151 EXTERNAL ATTACHMENT PLATE LH
INSTALL: 3G7810A04252 EXTERNAL BRACKET FWD LH
INSTALL: 3G7810A04052 EXTERNAL BRACKET LH
INSTALL: 3G7810A03052 VERTICAL WALL
INSTALL: 3G7810A04153 LOWER BRACKET LH
3G7810P00451 LEFT BRACKET REWORKED
INSTALL: 3G7810A12251 INTERNAL REINFORCEMENT PLATE LH
3G7810A12351 INTERNAL ATTACHMENT PLATE LH
INSTALL: 3G7810A03552 INTERNAL BRACKET LH
INSTALL: 3G7810A05452 EXTERNAL BRACKET FWD RH
INSTALL: 3G7810A05252 EXTERNAL BRACKET RH
INSTALL: 3G7810A11651 EXTERNAL REINFORCEMENT PLATE RH
3G7810A11751 EXTERNAL ATTACHMENT PLATE RH
INSTALL: 3G7810A05353 LOWER BRACKET RH
3G7810P00551 RIGHT BRACKET REWORKED
INSTALL: 3G7810A11851 INTERNAL REINFORCEMENT PLATE RH
3G7810A11951 INTERNAL ATTACHMENT PLATE RH
INSTALL: 3G7810A04752 INTERNAL BRACKET RH
INSTALL: 3G7810A11551 VERTICAL REINFORCEMENT
TOP VIEW
PARTS TO INSTALL
REAR EJECTORS NOT SHOWN
SEE FIGURE 20
SEE FIGURE 18
SEE FIGURE 19
SEE FIGURE 20
DETAIL M
SEE FIGURE 20

Figure 16

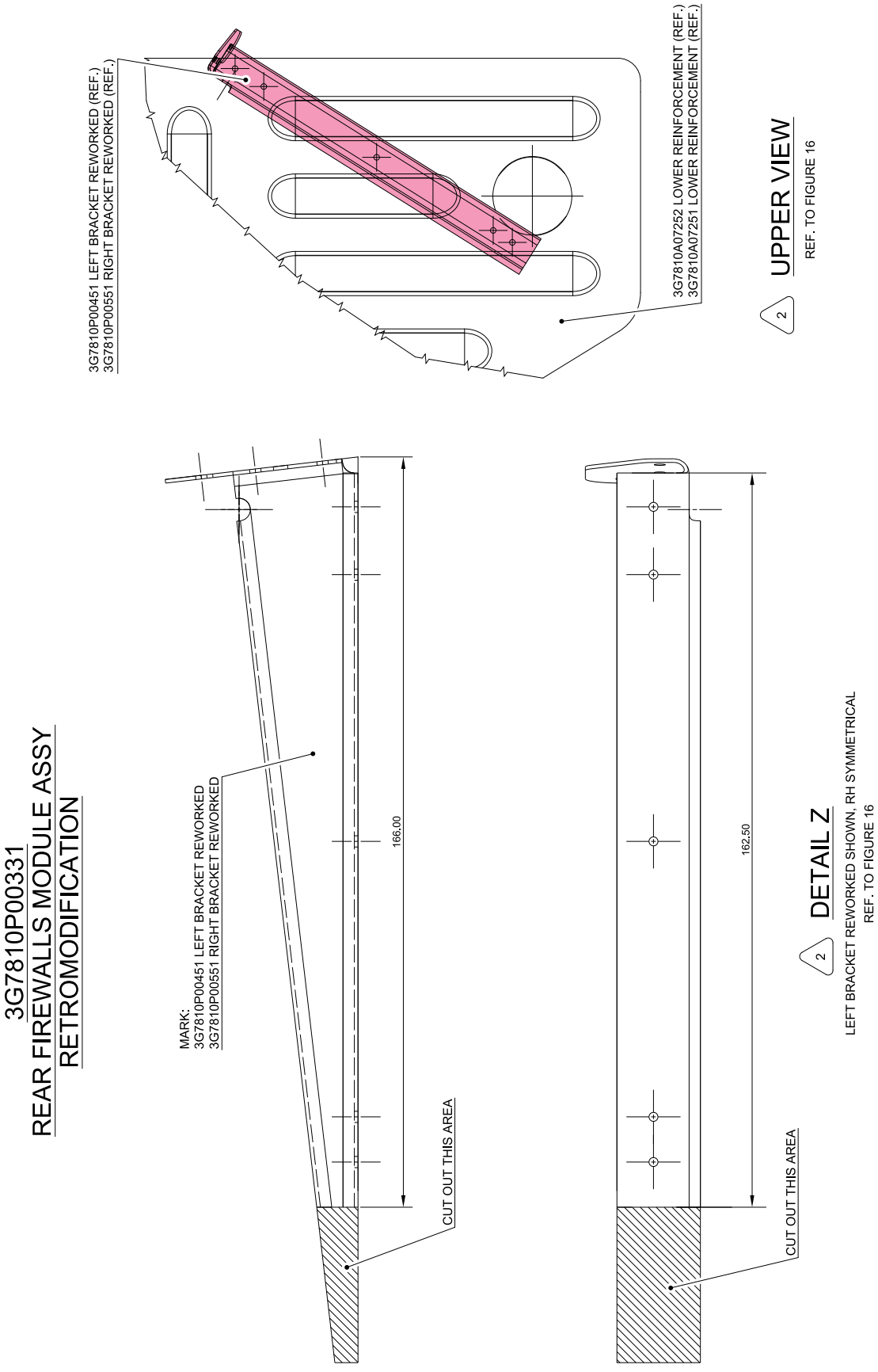

3G7810P00331
REAR FIREWALLS MODULE ASSY
RETROMODIFICATION
3G7810P00451 LEFT BRACKET REWORKED (REF.)
3G7810P00551 RIGHT BRACKET REWORKED (REF.)
3G7810A07252 LOWER REINFORCEMENT (REF.)
3G7810A07251 LOWER REINFORCEMENT (REF.)
2
UPPER VIEW
REF. TO FIGURE 16
MARK:
3G7810P00451 LEFT BRACKET REWORKED
3G7810P00551 RIGHT BRACKET REWORKED
166.00
CUT OUT THIS AREA
162.50
CUT OUT THIS AREA
2
DETAIL Z
LEFT BRACKET REWORKED SHOWN, RH SYMMETRICAL
REF. TO FIGURE 16

Figure 17

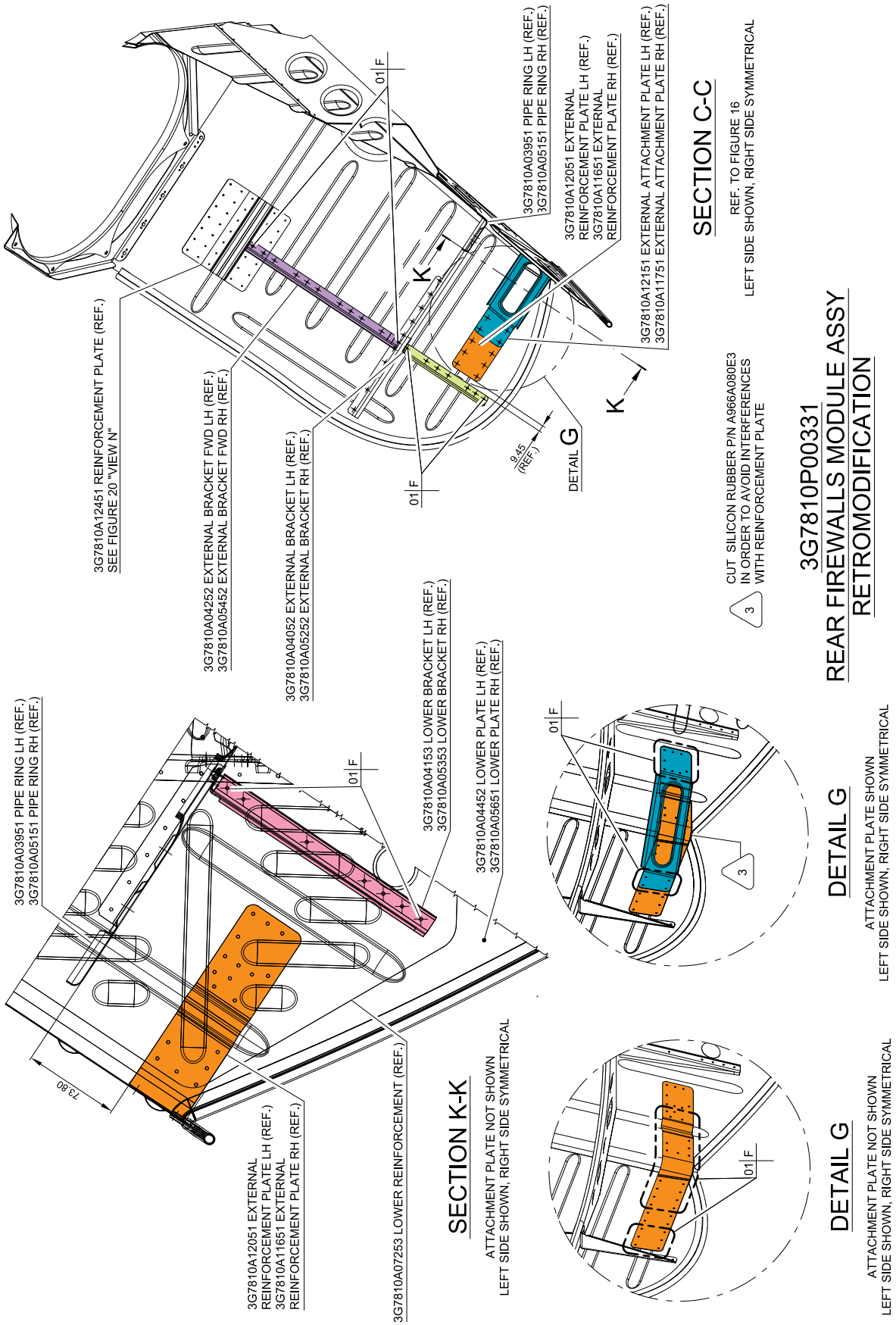

3G7810A12451 REINFORCEMENT PLATE (REF.)
SEE FIGURE 20 "VIEW N"
3G7810A04252 EXTERNAL BRACKET FWD LH (REF.)
3G7810A05452 EXTERNAL BRACKET FWD RH (REF.)
3G7810A04052 EXTERNAL BRACKET LH (REF.)
3G7810A05252 EXTERNAL BRACKET RH (REF.)
3G7810A03951 PIPE RING LH (REF.)
3G7810A05151 PIPE RING RH (REF.)
3G7810A12051 EXTERNAL
REINFORCEMENT PLATE LH (REF.)
3G7810A11651 EXTERNAL
REINFORCEMENT PLATE RH (REF.)
3G7810A12151 EXTERNAL ATTACHMENT PLATE LH (REF.)
3G7810A11751 EXTERNAL ATTACHMENT PLATE RH (REF.)
01 F
K
K
9.45 (REF.)
DETAIL G
SECTION C-C
REF. TO FIGURE 16
LEFT SIDE SHOWN, RIGHT SIDE SYMMETRICAL
3
CUT SILICON RUBBER P/N A966A080E3
IN ORDER TO AVOID INTERFERENCES
WITH REINFORCEMENT PLATE
3G7810P00331
REAR FIREWALLS MODULE ASSY
RETROMODIFICATION
3G7810A03951 PIPE RING LH (REF.)
3G7810A05151 PIPE RING RH (REF.)
3G7810A04153 LOWER BRACKET LH (REF.)
3G7810A05353 LOWER BRACKET RH (REF.)
3G7810A04452 LOWER PLATE LH (REF.)
3G7810A05651 LOWER PLATE RH (REF.)
01 F
73.80
3G7810A12051 EXTERNAL
REINFORCEMENT PLATE LH (REF.)
3G7810A11651 EXTERNAL
REINFORCEMENT PLATE RH (REF.)
3G7810A07253 LOWER REINFORCEMENT (REF.)
SECTION K-K
ATTACHMENT PLATE NOT SHOWN
LEFT SIDE SHOWN, RIGHT SIDE SYMMETRICAL
DETAIL G
ATTACHMENT PLATE SHOWN
LEFT SIDE SHOWN, RIGHT SIDE SYMMETRICAL
DETAIL G
ATTACHMENT PLATE NOT SHOWN
LEFT SIDE SHOWN, RIGHT SIDE SYMMETRICAL

Figure 18

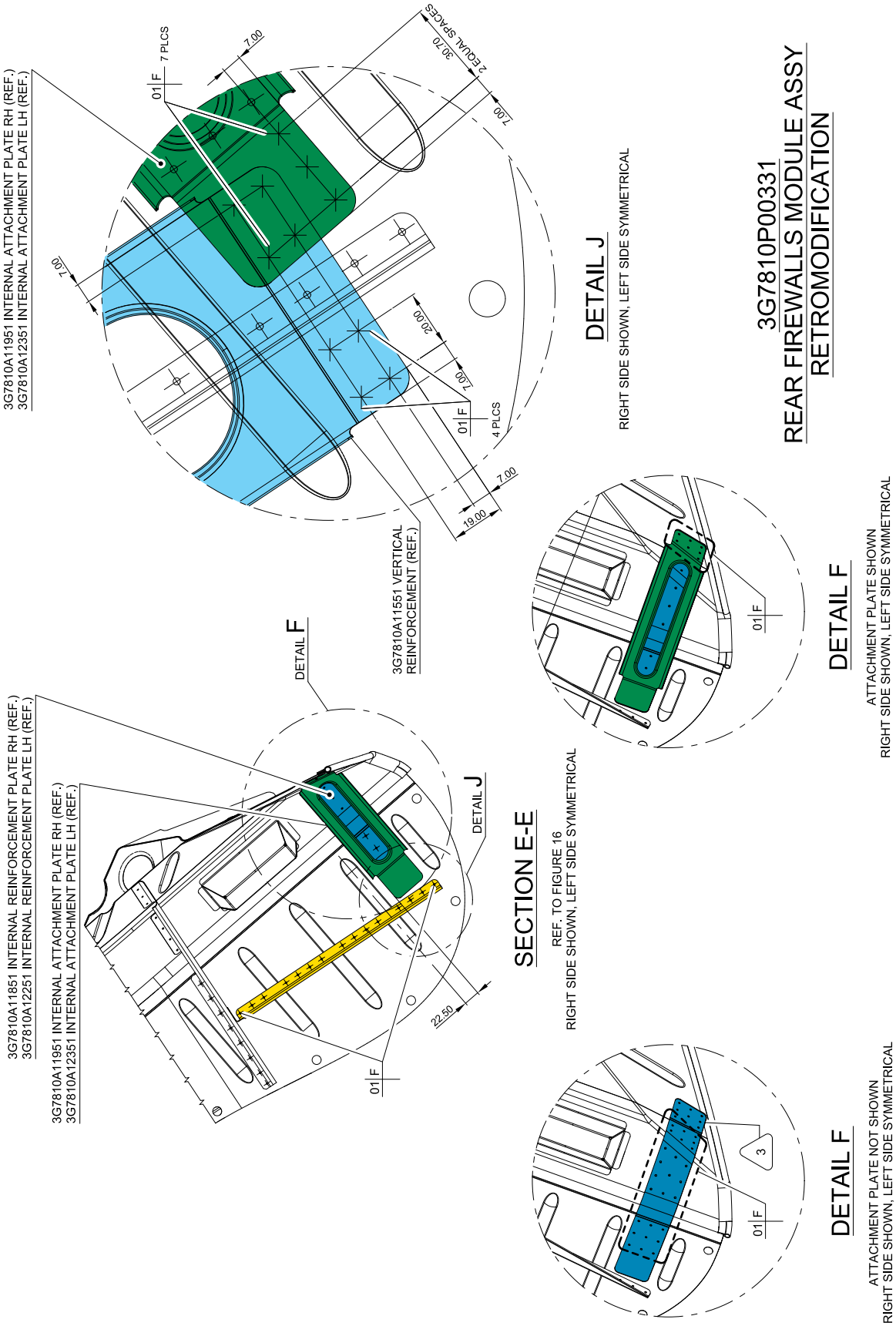

3G7810P00331
REAR FIREWALLS MODULE ASSY
RETROMODIFICATION
DETAIL J
RIGHT SIDE SHOWN, LEFT SIDE SYMMETRICAL
3G7810A11951 INTERNAL ATTACHMENT PLATE RH (REF.)
3G7810A12351 INTERNAL ATTACHMENT PLATE LH (REF.)
7 PLCS
7.00
2 EQUAL SPACES
30.70
7.00
7.00
20.00
7.00
4 PLCS
7.00
19.00
3G7810A11551 VERTICAL
REINFORCEMENT (REF.)
DETAIL F
ATTACHMENT PLATE SHOWN
RIGHT SIDE SHOWN, LEFT SIDE SYMMETRICAL
3G7810A11851 INTERNAL REINFORCEMENT PLATE RH (REF.)
3G7810A12251 INTERNAL REINFORCEMENT PLATE LH (REF.)
3G7810A11951 INTERNAL ATTACHMENT PLATE RH (REF.)
3G7810A12351 INTERNAL ATTACHMENT PLATE LH (REF.)
DETAIL F
DETAIL J
22.50
SECTION E-E
REF. TO FIGURE 16
RIGHT SIDE SHOWN, LEFT SIDE SYMMETRICAL
DETAIL F
ATTACHMENT PLATE NOT SHOWN
RIGHT SIDE SHOWN, LEFT SIDE SYMMETRICAL
3

Figure 19

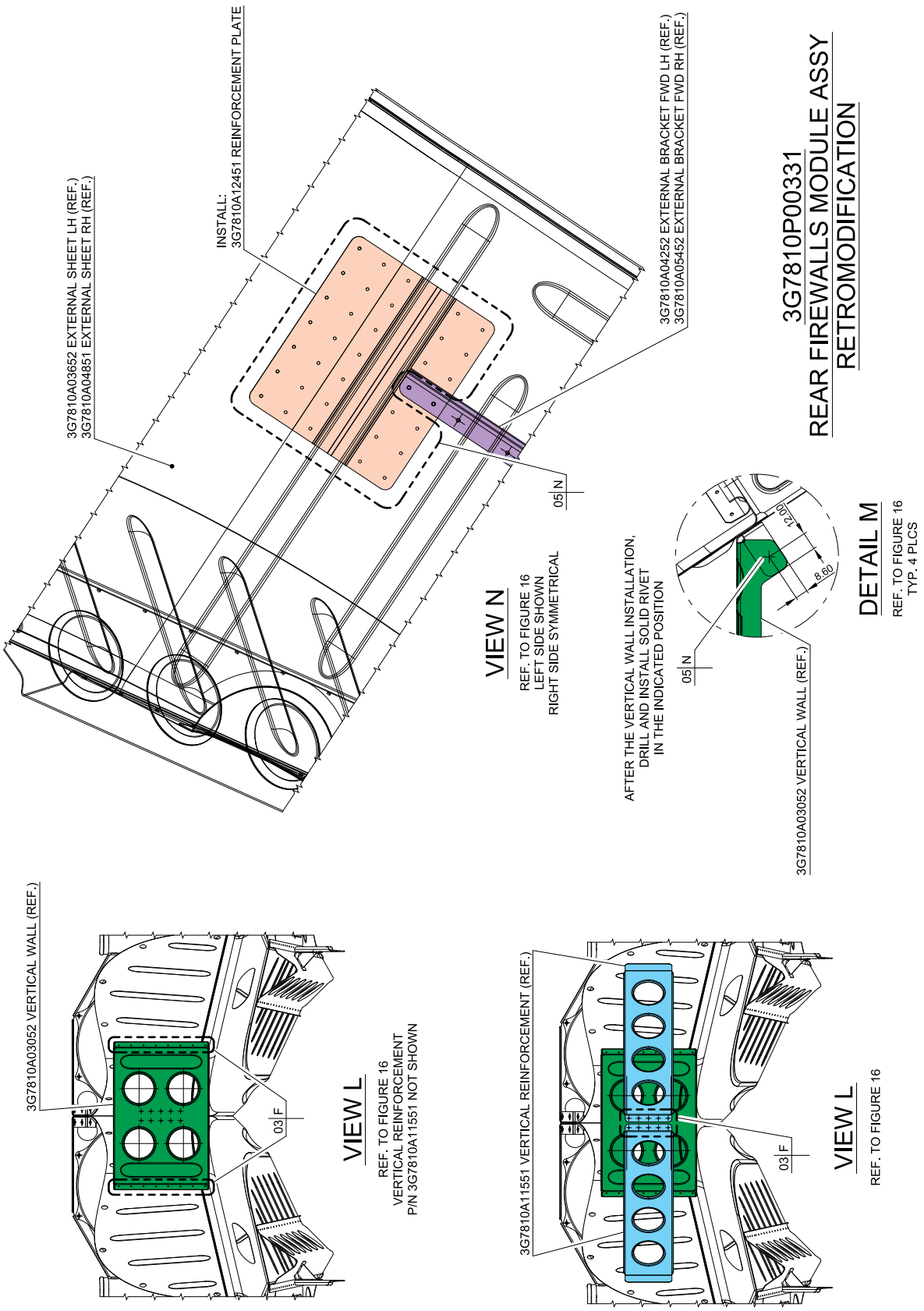

3G7810P00331
REAR FIREWALLS MODULE ASSY
RETROMODIFICATION
INSTALL:
3G7810A12451 REINFORCEMENT PLATE
3G7810A03652 EXTERNAL SHEET LH (REF.)
3G7810A04851 EXTERNAL SHEET RH (REF.)
3G7810A04252 EXTERNAL BRACKET FWD LH (REF.)
3G7810A05452 EXTERNAL BRACKET FWD RH (REF.)
05 N
VIEW N
REF. TO FIGURE 16
LEFT SIDE SHOWN
RIGHT SIDE SYMMETRICAL
AFTER THE VERTICAL WALL INSTALLATION,
DRILL AND INSTALL SOLID RIVET
IN THE INDICATED POSITION
05 N
12.00
8.60
DETAIL M
REF. TO FIGURE 16
TYP. 4 PLCS
3G7810A03052 VERTICAL WALL (REF.)
3G7810A03052 VERTICAL WALL (REF.)
03 F
VIEW L
REF. TO FIGURE 16
VERTICAL REINFORCEMENT
P/N 3G7810A11551 NOT SHOWN
3G7810A11551 VERTICAL REINFORCEMENT (REF.)
03 F
VIEW L
REF. TO FIGURE 16

Figure 20

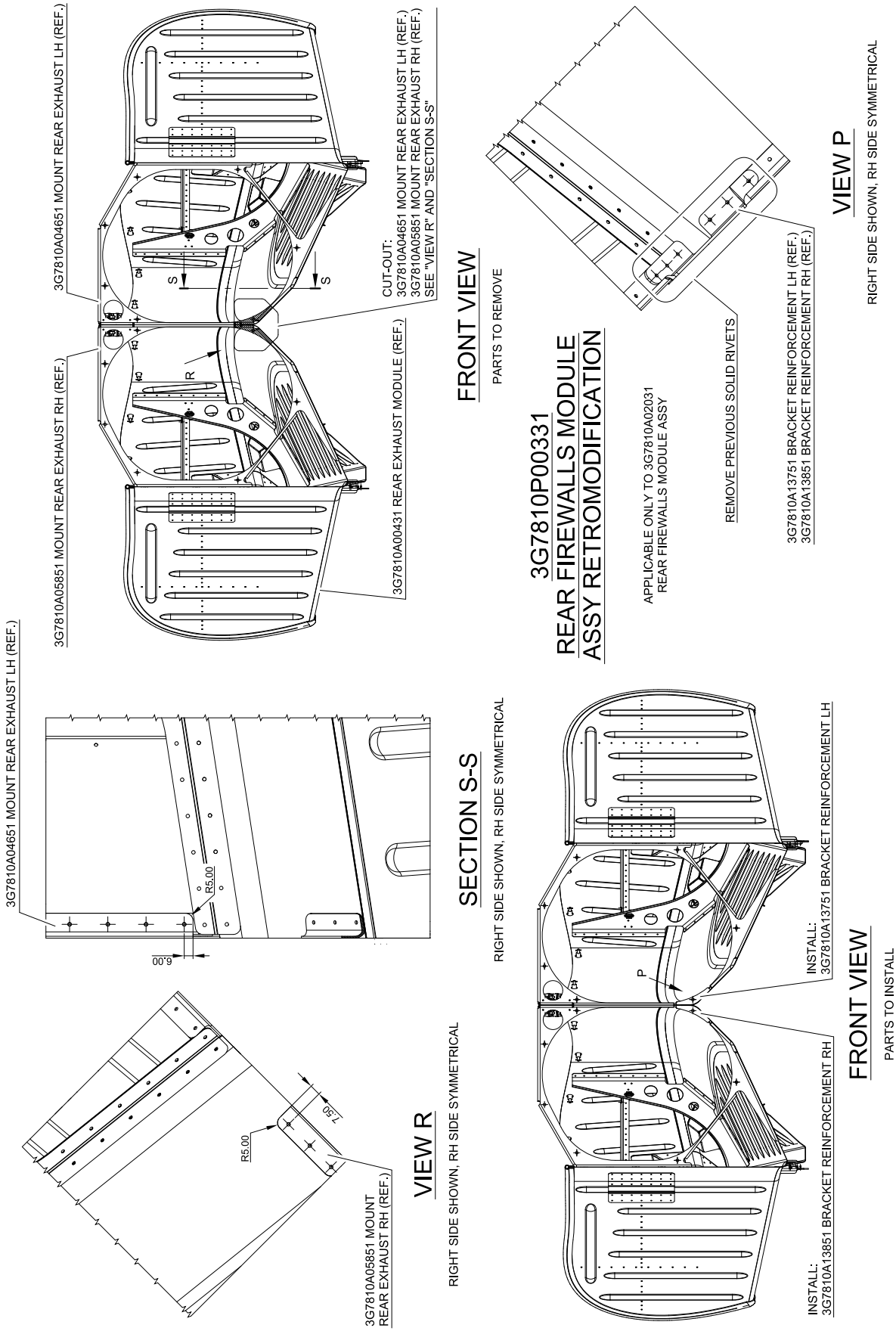

3G7810P00331
REAR FIREWALLS MODULE ASSY RETROMODIFICATION
APPLICABLE ONLY TO 3G7810A02031 REAR FIREWALLS MODULE ASSY
REMOVE PREVIOUS SOLID RIVETS
3G7810A13751 BRACKET REINFORCEMENT LH (REF.)
3G7810A13851 BRACKET REINFORCEMENT RH (REF.)
VIEW P
RIGHT SIDE SHOWN, RH SIDE SYMMETRICAL
FRONT VIEW
PARTS TO REMOVE
3G7810A04651 MOUNT REAR EXHAUST LH (REF.)
3G7810A05851 MOUNT REAR EXHAUST RH (REF.)
3G7810A00431 REAR EXHAUST MODULE (REF.)
CUT-OUT:
3G7810A04651 MOUNT REAR EXHAUST LH (REF.)
3G7810A05851 MOUNT REAR EXHAUST RH (REF.)
SEE "VIEW R" AND "SECTION S-S"
SECTION S-S
RIGHT SIDE SHOWN, RH SIDE SYMMETRICAL
3G7810A04651 MOUNT REAR EXHAUST LH (REF.)
R5.00
6.00
VIEW R
RIGHT SIDE SHOWN, RH SIDE SYMMETRICAL
3G7810A05851 MOUNT REAR EXHAUST RH (REF.)
R5.00
7.50
INSTALL:
3G7810A13751 BRACKET REINFORCEMENT LH
INSTALL:
3G7810A13851 BRACKET REINFORCEMENT RH
FRONT VIEW
PARTS TO INSTALL

Figure 21

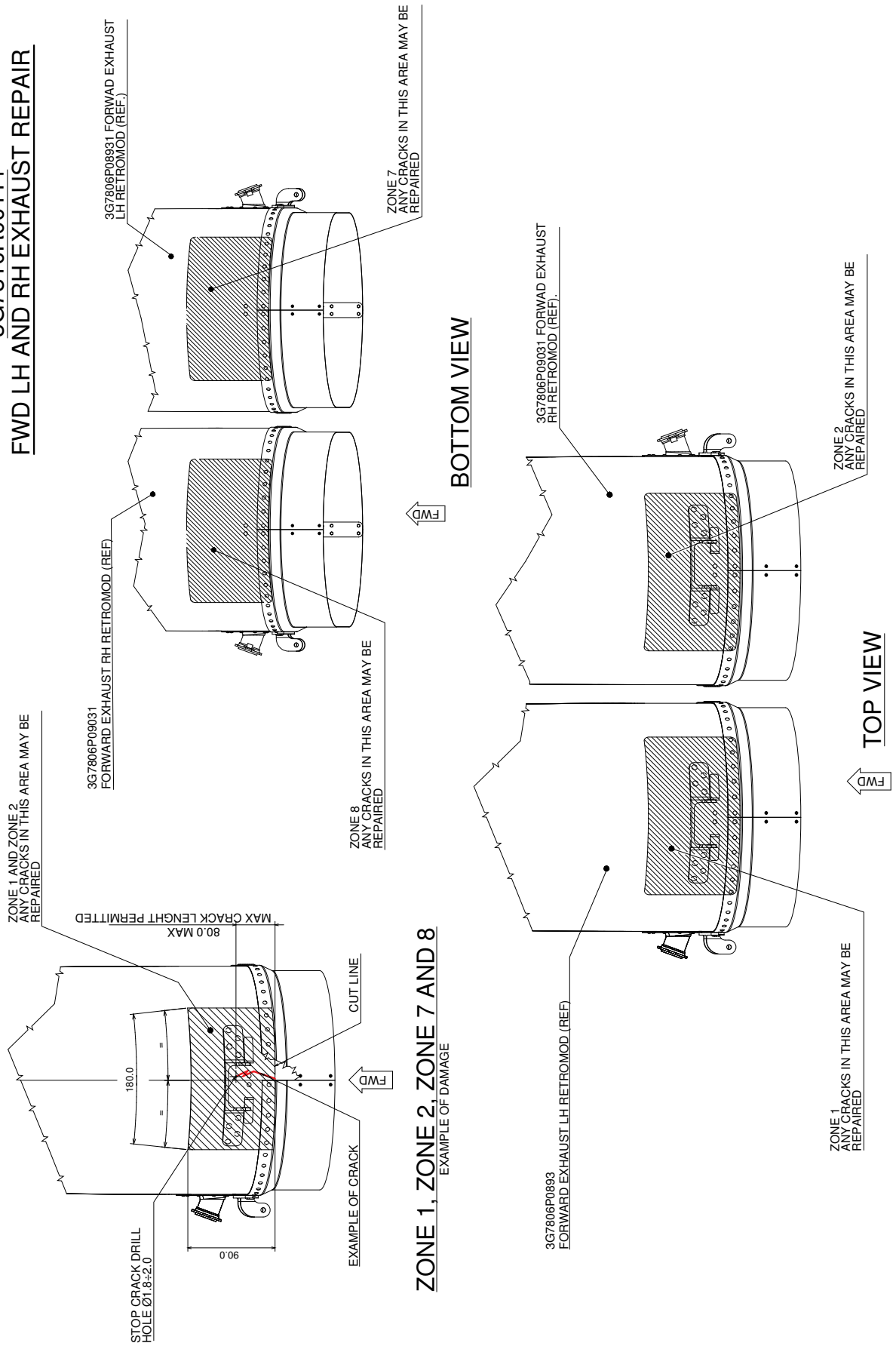

3G7810R00111
FWD LH AND RH EXHAUST REPAIR
3G7806P08931 FORWAD EXHAUST LH RETROMOD (REF.)
ZONE 7
ANY CRACKS IN THIS AREA MAY BE REPAIRED
3G7806P09031
FORWARD EXHAUST RH RETROMOD (REF)
ZONE 8
ANY CRACKS IN THIS AREA MAY BE REPAIRED
FWD
BOTTOM VIEW
3G7806P09031 FORWAD EXHAUST RH RETROMOD (REF).
ZONE 2
ANY CRACKS IN THIS AREA MAY BE REPAIRED
TOP VIEW
FWD
ZONE 1
ANY CRACKS IN THIS AREA MAY BE REPAIRED
3G7806P0893
FORWARD EXHAUST LH RETROMOD (REF)
ZONE 1 AND ZONE 2
ANY CRACKS IN THIS AREA MAY BE REPAIRED
MAX CRACK LENGHT PERMITTED
80.0 MAX
180.0
CUT LINE
FWD
EXAMPLE OF CRACK
STOP CRACK DRILL
HOLE Ø1.8÷2.0
90.0
ZONE 1, ZONE 2, ZONE 7 AND 8
EXAMPLE OF DAMAGE

Figure 22

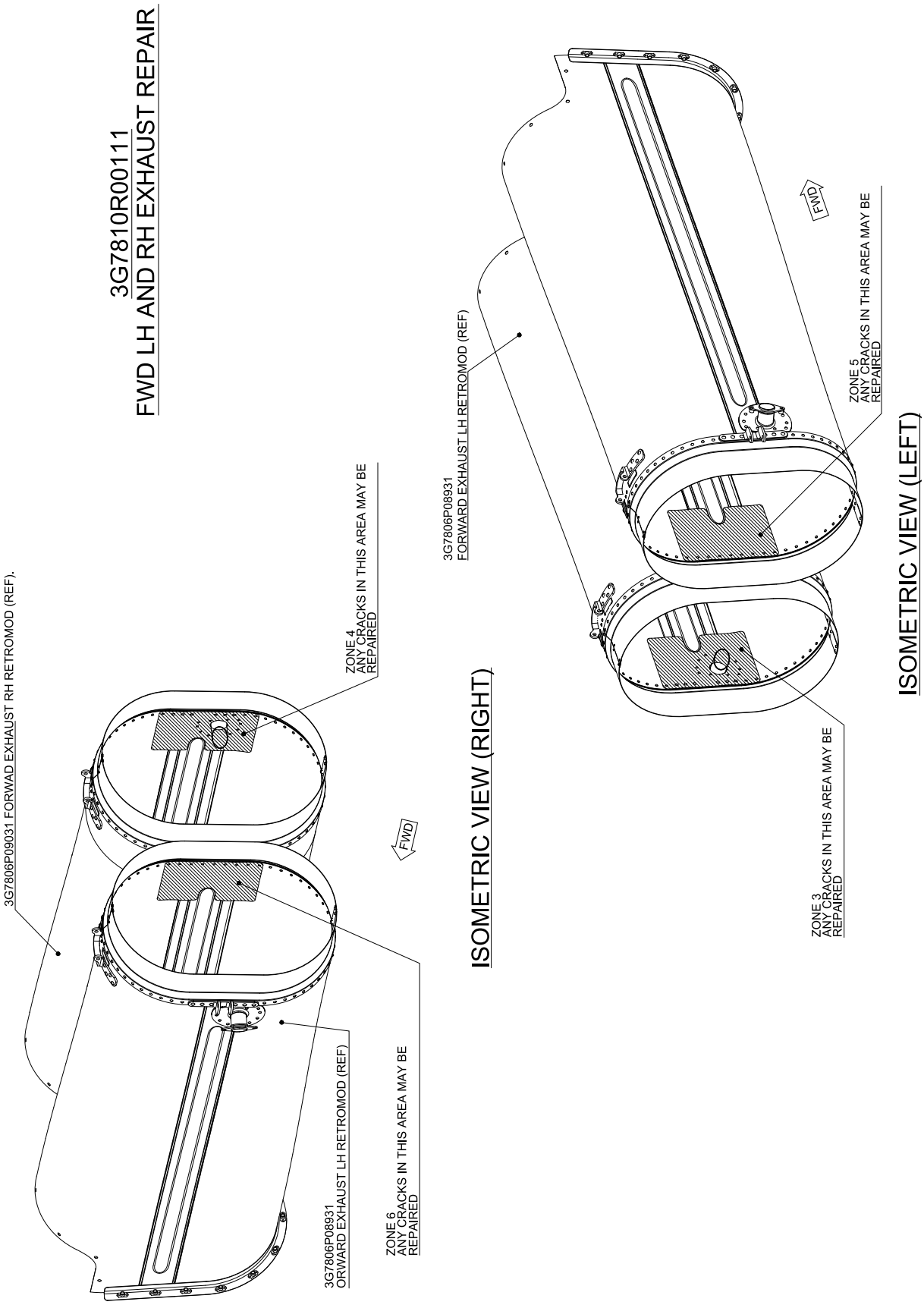

3G7810R00111
FWD LH AND RH EXHAUST REPAIR
ISOMETRIC VIEW (RIGHT)
3G7806P09031 FORWAD EXHAUST RH RETROMOD (REF).
ZONE 4
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
FWD
3G7806P08931
ORWARD EXHAUST LH RETROMOD (REF)
ZONE 6
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
ISOMETRIC VIEW (LEFT)
3G7806P08931
FORWARD EXHAUST LH RETROMOD (REF)
FWD
ZONE 5
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
ZONE 3
ANY CRACKS IN THIS AREA MAY BE
REPAIRED

Figure 23

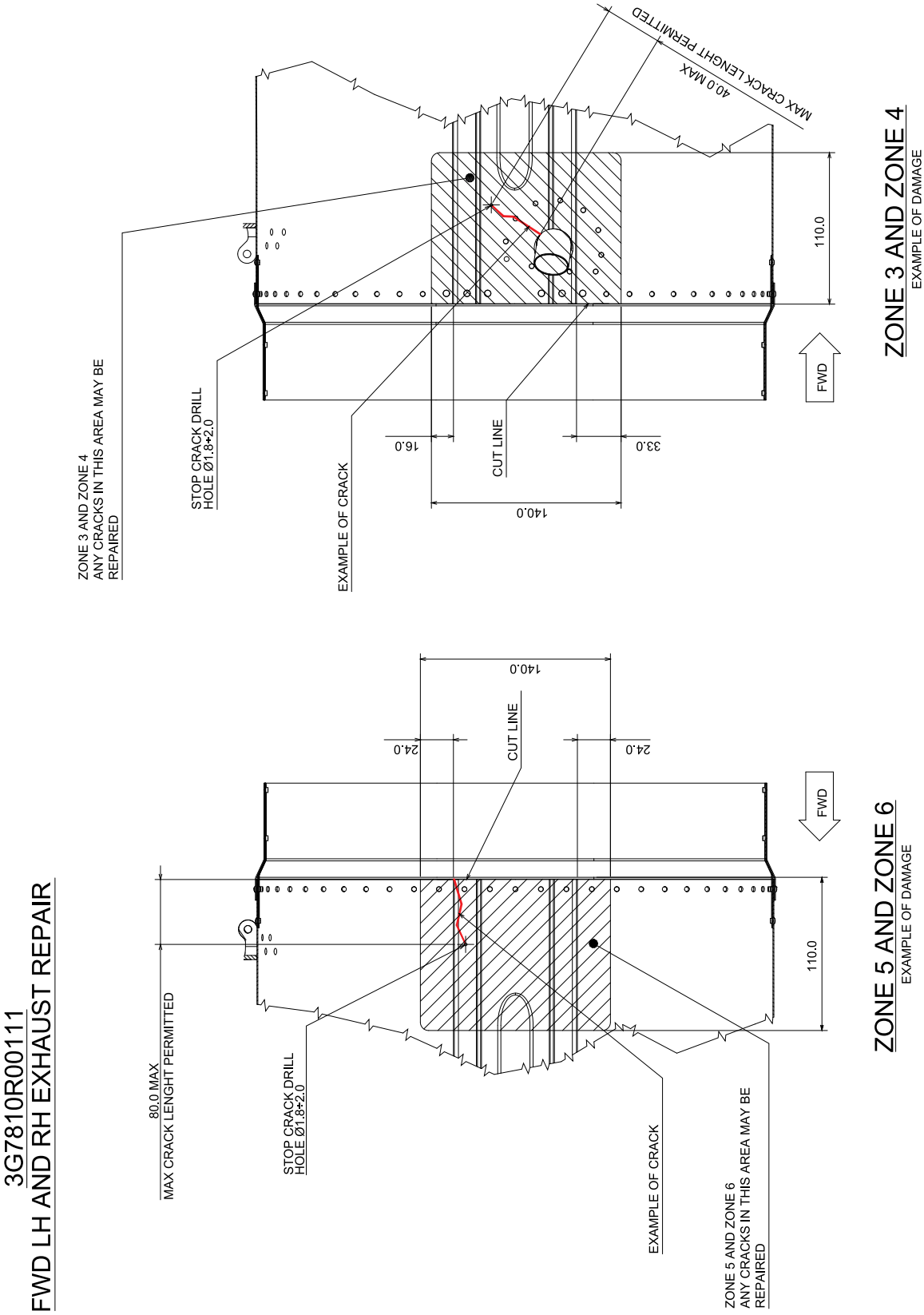

3G7810R00111
FWD LH AND RH EXHAUST REPAIR
ZONE 3 AND ZONE 4
EXAMPLE OF DAMAGE
ZONE 3 AND ZONE 4
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
STOP CRACK DRILL
HOLE Ø1.8÷2.0
EXAMPLE OF CRACK
MAX CRACK LENGHT PERMITTED
40.0 MAX
110.0
FWD
16.0
CUT LINE
33.0
140.0
ZONE 5 AND ZONE 6
EXAMPLE OF DAMAGE
80.0 MAX
MAX CRACK LENGHT PERMITTED
STOP CRACK DRILL
HOLE Ø1.8÷2.0
EXAMPLE OF CRACK
ZONE 5 AND ZONE 6
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
140.0
CUT LINE
24.0
24.0
FWD
110.0

Figure 24

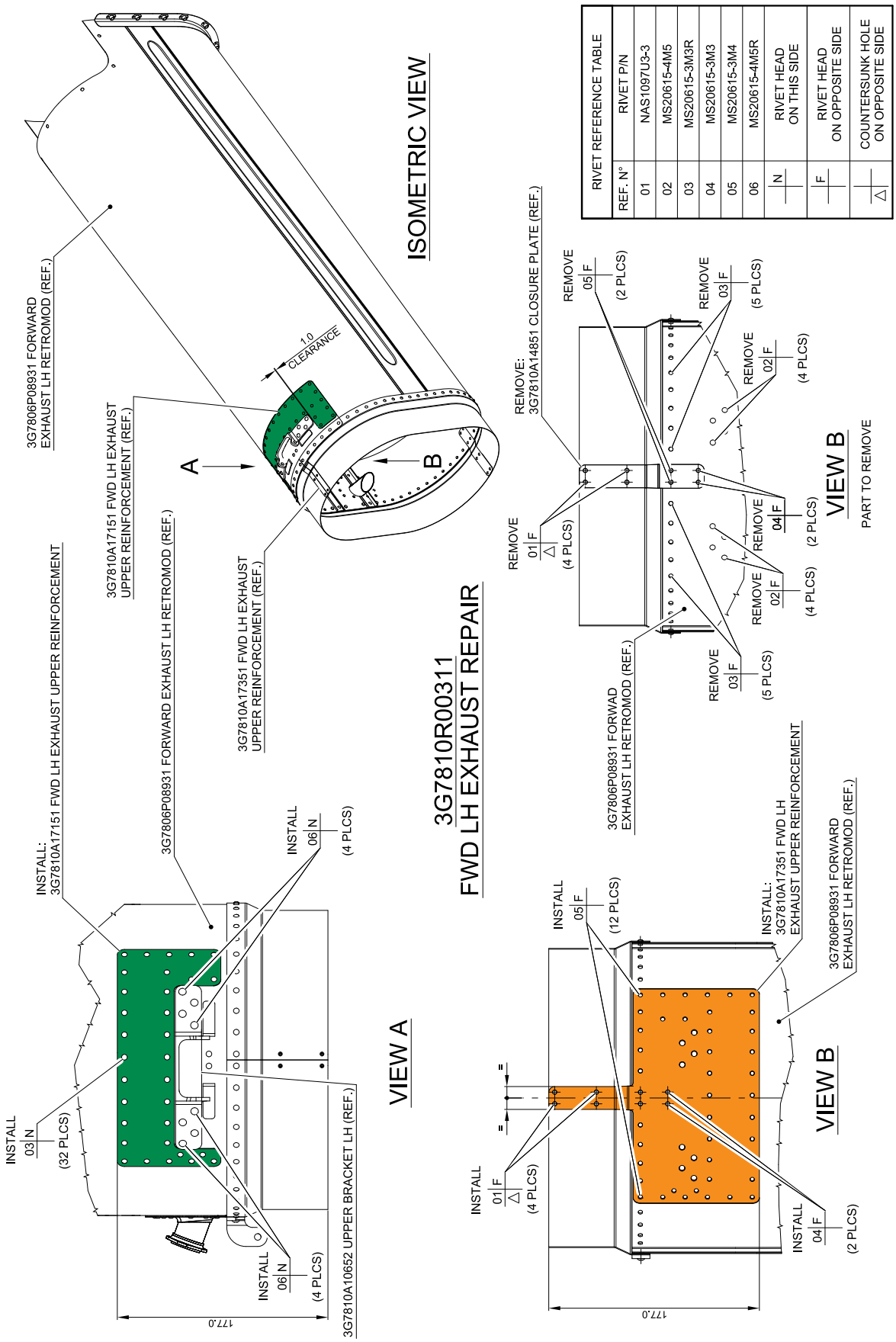

3G7810R00311
FWD LH EXHAUST REPAIR
ISOMETRIC VIEW
VIEW A
VIEW B
VIEW B
PART TO REMOVE
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 NAS1097U3-3
02 MS20615-4M5
03 MS20615-3M3R
04 MS20615-3M3
05 MS20615-3M4
06 MS20615-4M5R
N RIVET HEAD ON THIS SIDE
F RIVET HEAD ON OPPOSITE SIDE
△ COUNTERSUNK HOLE ON OPPOSITE SIDE
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)
3G7810A17151 FWD LH EXHAUST UPPER REINFORCEMENT (REF.)
3G7810A17351 FWD LH EXHAUST UPPER REINFORCEMENT (REF.)
1.0 CLEARANCE
A
B
INSTALL: 3G7810A17151 FWD LH EXHAUST UPPER REINFORCEMENT
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)
INSTALL 06 N (4 PLCS)
INSTALL 03 N (32 PLCS)
INSTALL 06 N (4 PLCS)
3G7810A10652 UPPER BRACKET LH (REF.)
177.0
REMOVE: 3G7810A14851 CLOSURE PLATE (REF.)
REMOVE 05 F (2 PLCS)
REMOVE 03 F (5 PLCS)
REMOVE 02 F (4 PLCS)
REMOVE 04 F (2 PLCS)
REMOVE 01 F △ (4 PLCS)
REMOVE 02 F (4 PLCS)
REMOVE 03 F (5 PLCS)
3G7806P08931 FORWAD EXHAUST LH RETROMOD (REF.)
INSTALL 05 F (12 PLCS)
INSTALL: 3G7810A17351 FWD LH EXHAUST UPPER REINFORCEMENT
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)
INSTALL 01 F △ (4 PLCS)
INSTALL 04 F (2 PLCS)
177.0

Figure 25

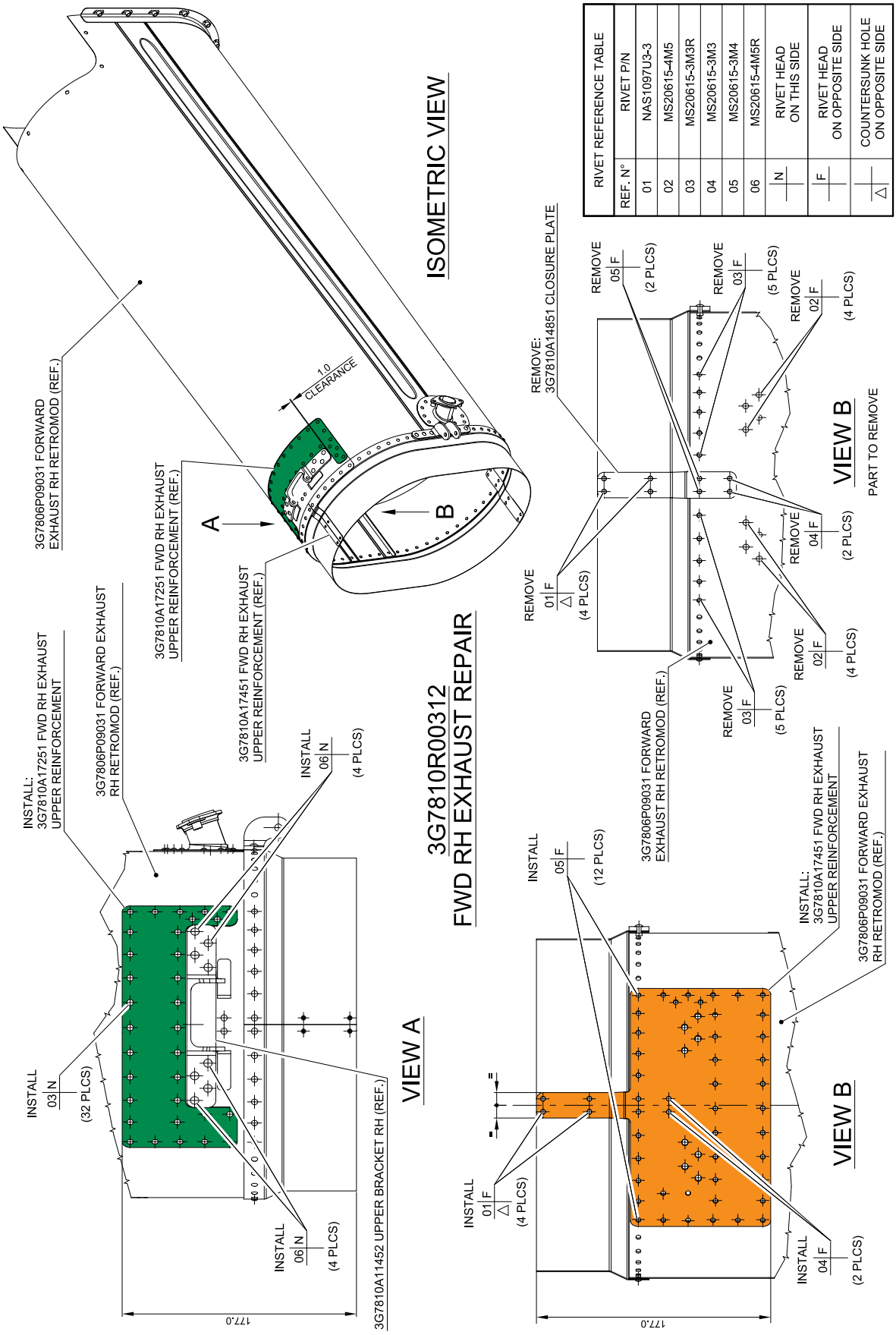

3G7810R00312
FWD RH EXHAUST REPAIR
ISOMETRIC VIEW
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 NAS1097U3-3
02 MS20615-4M5
03 MS20615-3M3R
04 MS20615-3M3
05 MS20615-3M4
06 MS20615-4M5R
N RIVET HEAD ON THIS SIDE
F RIVET HEAD ON OPPOSITE SIDE
△ COUNTERSUNK HOLE ON OPPOSITE SIDE
3G7806P09031 FORWARD EXHAUST RH RETROMOD (REF.)
3G7810A17251 FWD RH EXHAUST UPPER REINFORCEMENT (REF.)
3G7810A17451 FWD RH EXHAUST UPPER REINFORCEMENT (REF.)
1.0 CLEARANCE
A
B
INSTALL: 3G7810A17251 FWD RH EXHAUST UPPER REINFORCEMENT
INSTALL 03 N (32 PLCS)
INSTALL 06 N (4 PLCS)
INSTALL 06 N (4 PLCS)
3G7810A11452 UPPER BRACKET RH (REF.)
177.0
VIEW A
REMOVE: 3G7810A14851 CLOSURE PLATE
REMOVE 01 F △ (4 PLCS)
REMOVE 05 F (2 PLCS)
REMOVE 03 F (5 PLCS)
REMOVE 02 F (4 PLCS)
REMOVE 04 F (2 PLCS)
REMOVE 03 F (5 PLCS)
REMOVE 02 F (4 PLCS)
VIEW B
PART TO REMOVE
INSTALL 05 F (12 PLCS)
INSTALL 01 F △ (4 PLCS)
INSTALL: 3G7810A17451 FWD RH EXHAUST UPPER REINFORCEMENT
INSTALL 04 F (2 PLCS)
177.0
VIEW B

Figure 26

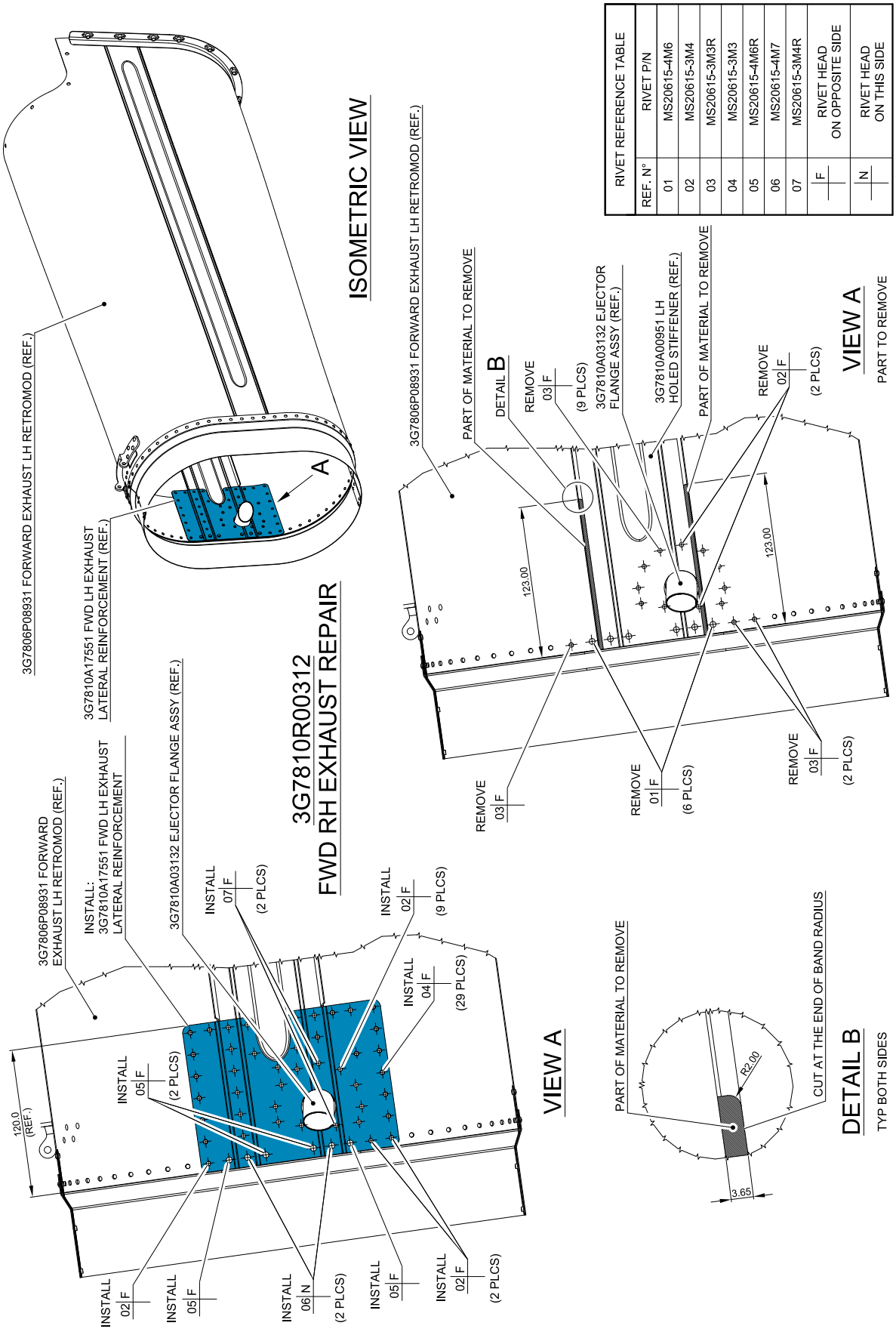

3G7810R00312
FWD RH EXHAUST REPAIR
ISOMETRIC VIEW
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)
3G7810A17551 FWD LH EXHAUST LATERAL REINFORCEMENT (REF.)
A
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)
PART OF MATERIAL TO REMOVE
DETAIL B
REMOVE 03 F (9 PLCS)
3G7810A03132 EJECTOR FLANGE ASSY (REF.)
3G7810A00951 LH HOLED STIFFENER (REF.)
PART OF MATERIAL TO REMOVE
REMOVE 02 F (2 PLCS)
VIEW A
PART TO REMOVE
123.00
REMOVE 03 F
REMOVE 01 F (6 PLCS)
REMOVE 03 F (2 PLCS)
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)
INSTALL: 3G7810A17551 FWD LH EXHAUST LATERAL REINFORCEMENT
3G7810A03132 EJECTOR FLANGE ASSY (REF.)
INSTALL 07 F (2 PLCS)
INSTALL 02 F (9 PLCS)
INSTALL 04 F (29 PLCS)
INSTALL 05 F (2 PLCS)
120.0 (REF.)
INSTALL 02 F
INSTALL 05 F
INSTALL 06 N (2 PLCS)
INSTALL 05 F
INSTALL 02 F (2 PLCS)
VIEW A
PART OF MATERIAL TO REMOVE
R2.00
3.65
CUT AT THE END OF BAND RADIUS
DETAIL B
TYP BOTH SIDES
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 MS20615-4M6
02 MS20615-3M4
03 MS20615-3M3R
04 MS20615-3M3
05 MS20615-4M6R
06 MS20615-4M7
07 MS20615-3M4R
F RIVET HEAD ON OPPOSITE SIDE
N RIVET HEAD ON THIS SIDE

Figure 27

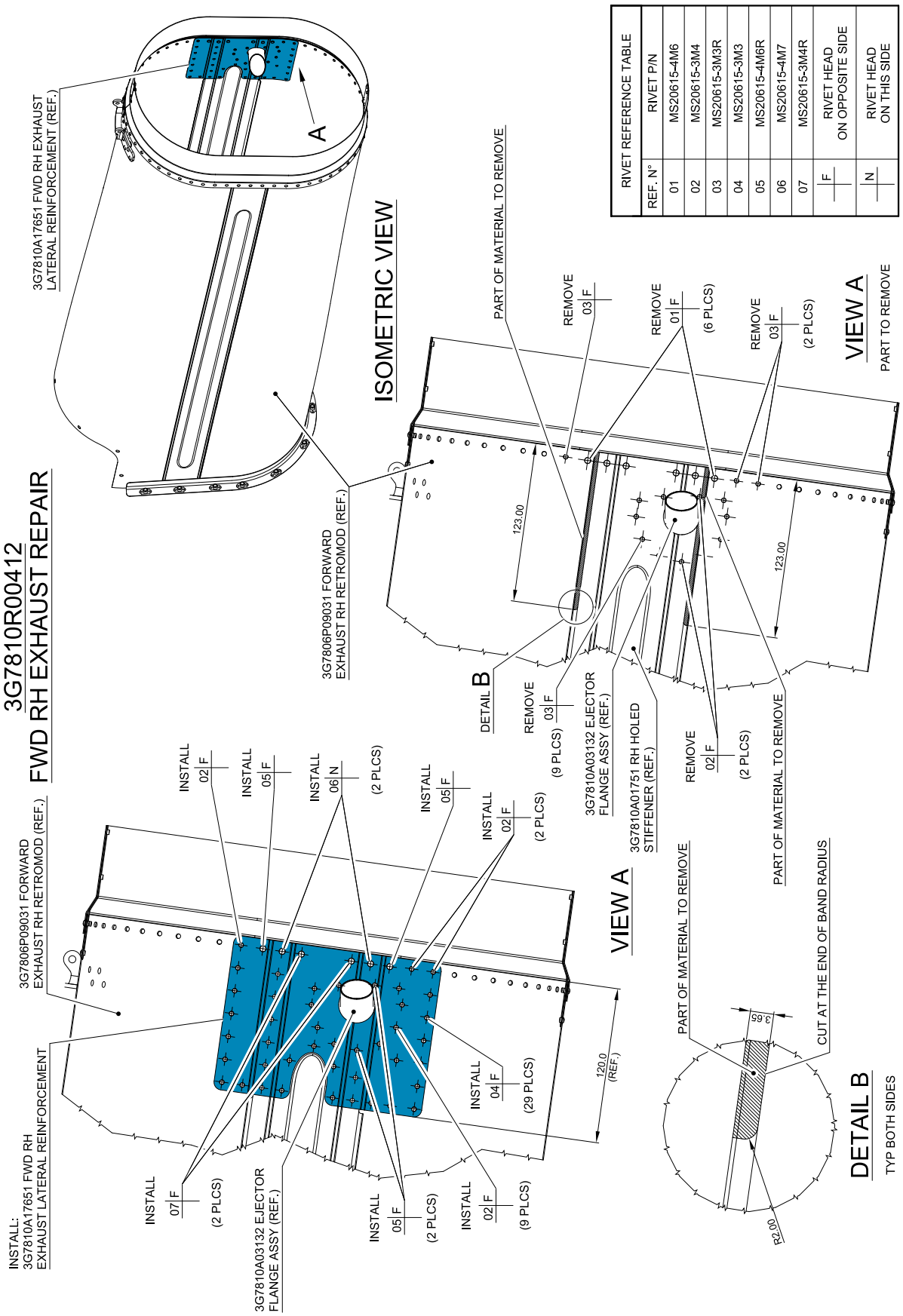

3G7810R00412
FWD RH EXHAUST REPAIR
ISOMETRIC VIEW
3G7810A17651 FWD RH EXHAUST LATERAL REINFORCEMENT (REF.)
3G7806P09031 FORWARD EXHAUST RH RETROMOD (REF.)
PART OF MATERIAL TO REMOVE
REMOVE 03 F
REMOVE 01 F (6 PLCS)
REMOVE 03 F (2 PLCS)
123.00
VIEW A
PART TO REMOVE
DETAIL B
REMOVE 03 F (9 PLCS)
3G7810A03132 EJECTOR FLANGE ASSY (REF.)
3G7810A01751 RH HOLED STIFFENER (REF.)
REMOVE 02 F (2 PLCS)
INSTALL: 3G7810A17651 FWD RH EXHAUST LATERAL REINFORCEMENT
INSTALL 02 F
INSTALL 05 F
INSTALL 06 N (2 PLCS)
INSTALL 05 F
INSTALL 02 F (2 PLCS)
INSTALL 04 F (29 PLCS)
120.0 (REF.)
INSTALL 07 F (2 PLCS)
INSTALL 05 F (2 PLCS)
INSTALL 02 F (9 PLCS)
VIEW A
PART OF MATERIAL TO REMOVE
CUT AT THE END OF BAND RADIUS
3.65
R2.00
DETAIL B
TYP BOTH SIDES
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 MS20615-4M6
02 MS20615-3M4
03 MS20615-3M3R
04 MS20615-3M3
05 MS20615-4M6R
06 MS20615-4M7
07 MS20615-3M4R
F RIVET HEAD ON OPPOSITE SIDE
N RIVET HEAD ON THIS SIDE

Figure 28

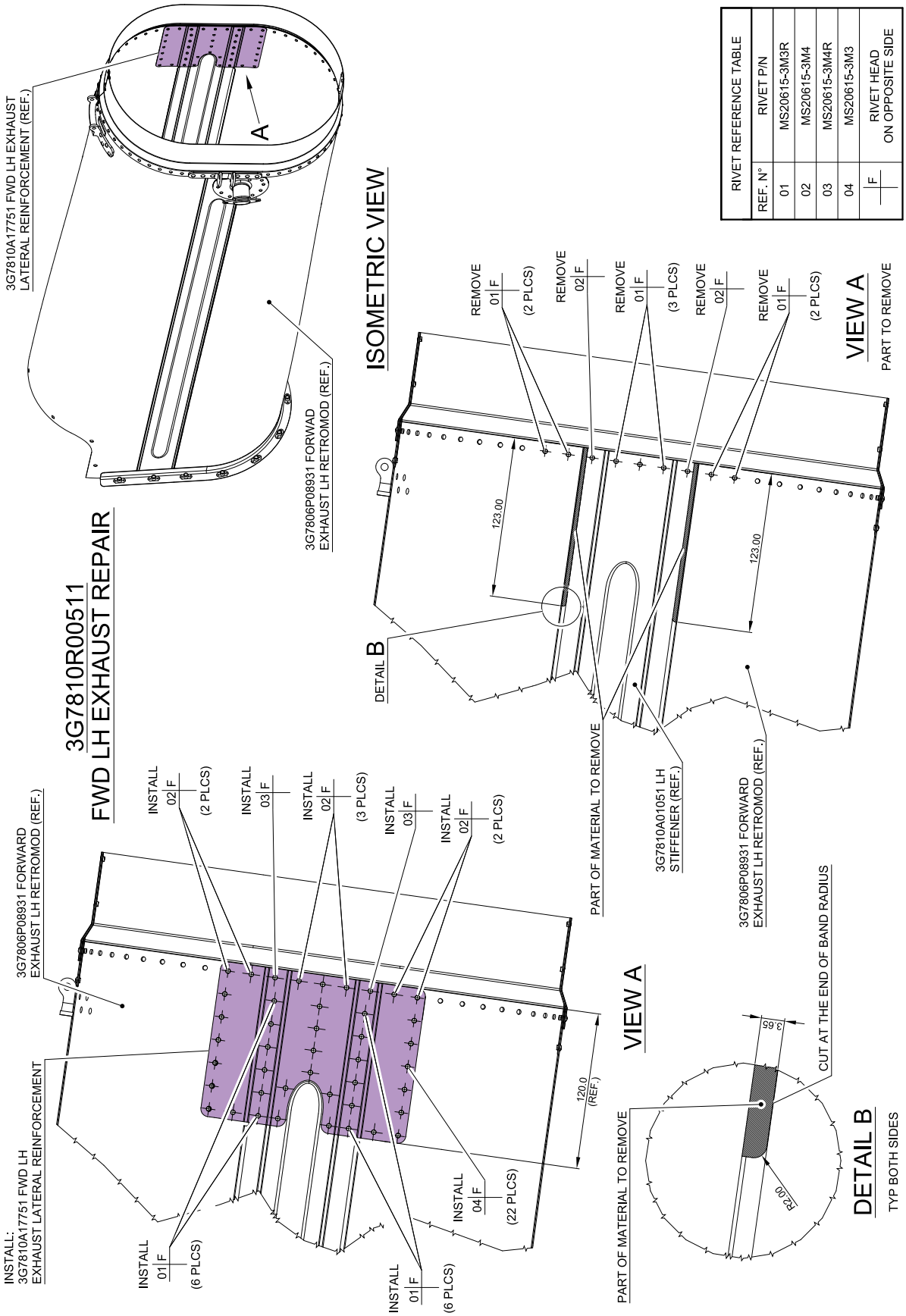

3G7810R00511
FWD LH EXHAUST REPAIR
3G7810A17751 FWD LH EXHAUST LATERAL REINFORCEMENT (REF.)
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)
ISOMETRIC VIEW
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 MS20615-3M3R
02 MS20615-3M4
03 MS20615-3M4R
04 MS20615-3M3
F RIVET HEAD ON OPPOSITE SIDE
INSTALL: 3G7810A17751 FWD LH EXHAUST LATERAL REINFORCEMENT
INSTALL 01 F (6 PLCS)
INSTALL 02 F (2 PLCS)
INSTALL 03 F
INSTALL 02 F (3 PLCS)
INSTALL 03 F
INSTALL 02 F (2 PLCS)
INSTALL 04 F (22 PLCS)
INSTALL 01 F (6 PLCS)
120.0 (REF.)
VIEW A
PART OF MATERIAL TO REMOVE
DETAIL B
TYP BOTH SIDES
CUT AT THE END OF BAND RADIUS
3.65
R2.00
DETAIL B
REMOVE 01 F (2 PLCS)
REMOVE 02 F
REMOVE 01 F (3 PLCS)
REMOVE 02 F
REMOVE 01 F (2 PLCS)
123.00
123.00
VIEW A
PART TO REMOVE
PART OF MATERIAL TO REMOVE
3G7810A01051 LH STIFFENER (REF.)
3G7806P08931 FORWARD EXHAUST LH RETROMOD (REF.)

Figure 29

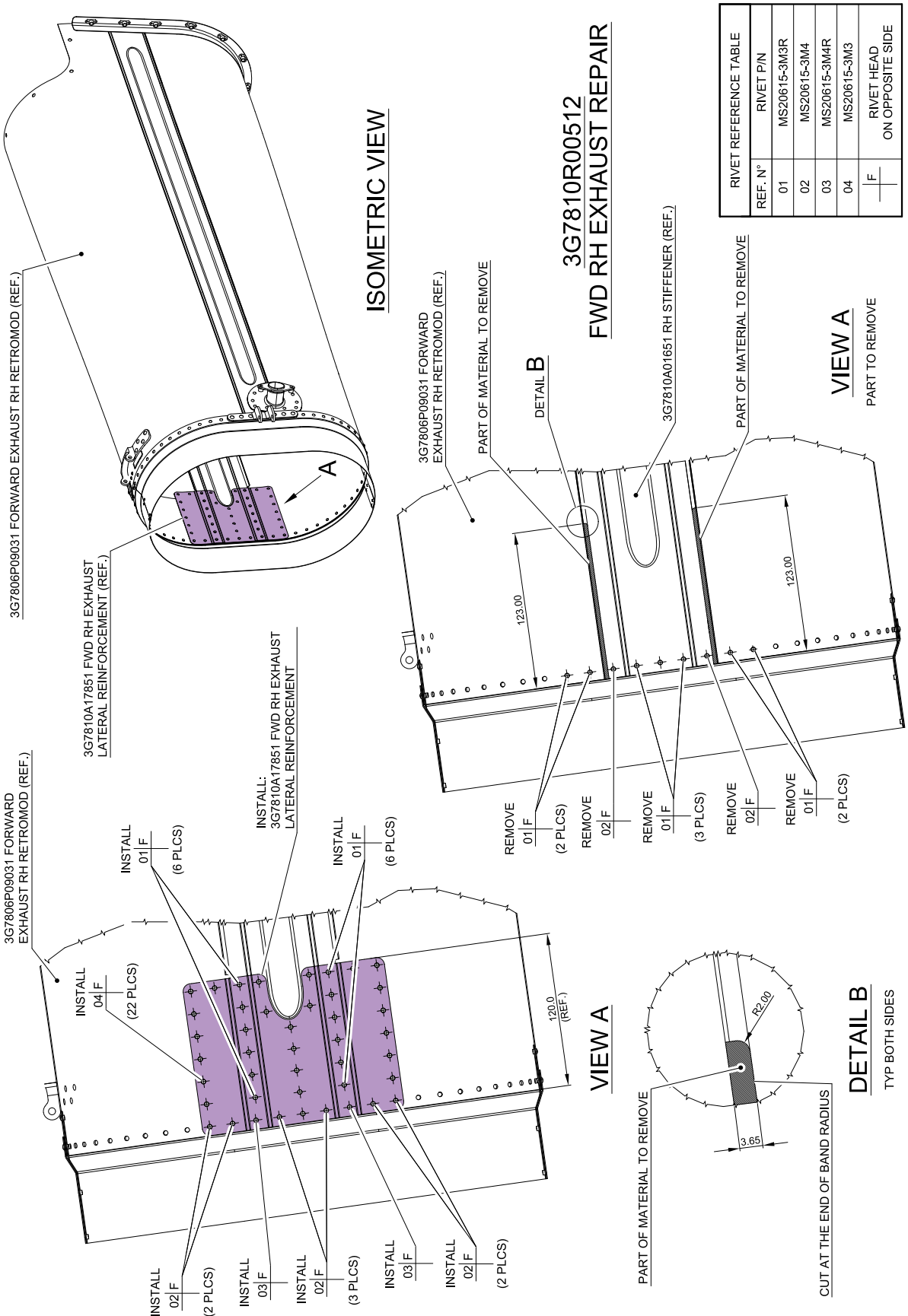

3G7810R00512
FWD RH EXHAUST REPAIR
ISOMETRIC VIEW
3G7806P09031 FORWARD EXHAUST RH RETROMOD (REF.)
3G7810A17851 FWD RH EXHAUST LATERAL REINFORCEMENT (REF.)
A
DETAIL B
PART OF MATERIAL TO REMOVE
3G7806P09031 FORWARD EXHAUST RH RETROMOD (REF.)
3G7810A01651 RH STIFFENER (REF.)
VIEW A
PART TO REMOVE
123.00
REMOVE 01 F (2 PLCS)
REMOVE 02 F
REMOVE 01 F (3 PLCS)
REMOVE 02 F
REMOVE 01 F (2 PLCS)
INSTALL: 3G7810A17851 FWD RH EXHAUST LATERAL REINFORCEMENT
INSTALL 01 F (6 PLCS)
INSTALL 04 F (22 PLCS)
INSTALL 02 F (2 PLCS)
INSTALL 03 F
INSTALL 02 F (3 PLCS)
INSTALL 03 F
INSTALL 02 F (2 PLCS)
120.0 (REF.)
VIEW A
R2.00
3.65
PART OF MATERIAL TO REMOVE
CUT AT THE END OF BAND RADIUS
DETAIL B
TYP BOTH SIDES
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 MS20615-3M3R
02 MS20615-3M4
03 MS20615-3M4R
04 MS20615-3M3
F RIVET HEAD ON OPPOSITE SIDE

Figure 30

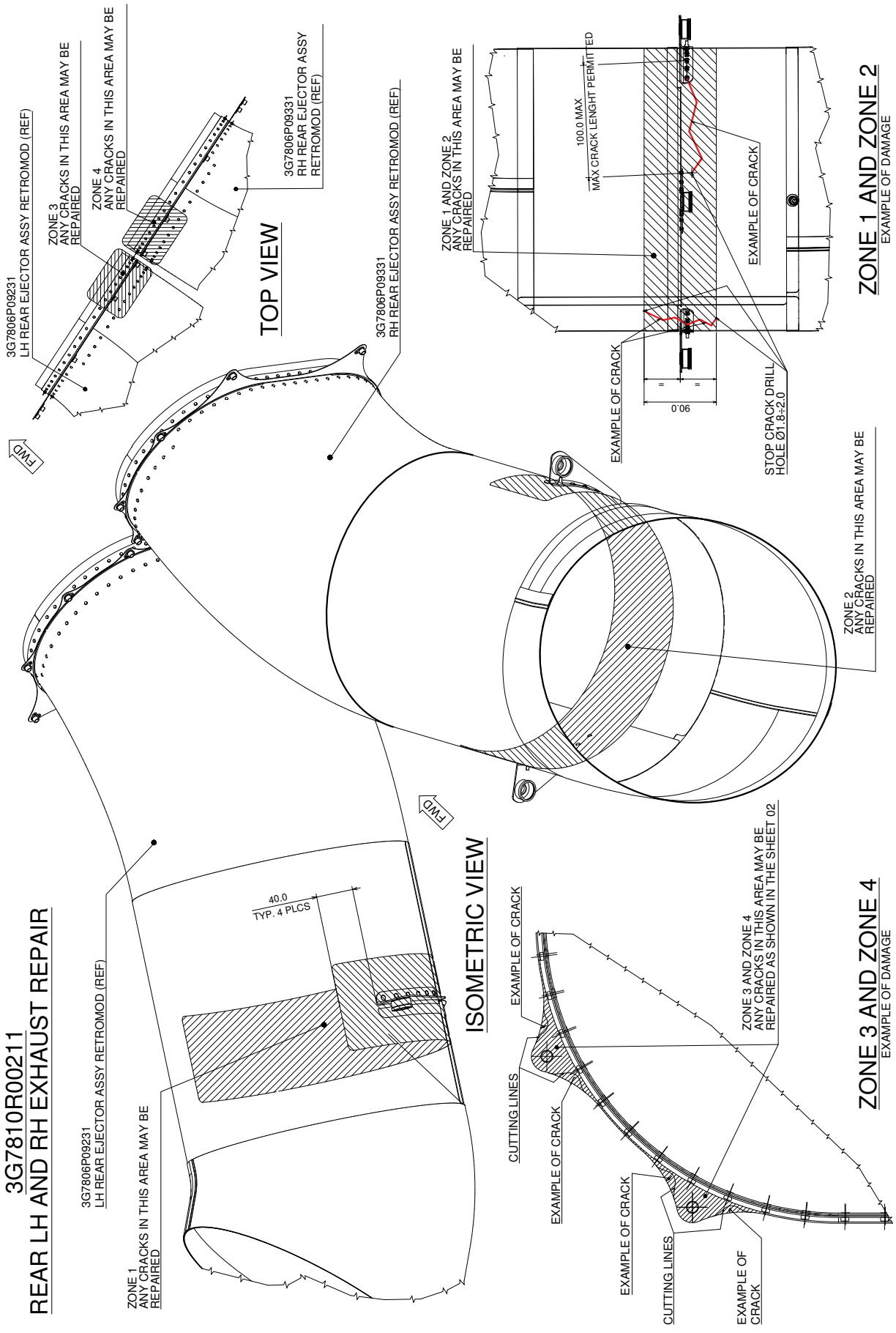

3G7810R00211
REAR LH AND RH EXHAUST REPAIR
3G7806P09231
LH REAR EJECTOR ASSY RETROMOD (REF)
ZONE 1
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
40.0
TYP. 4 PLCS
ISOMETRIC VIEW
FWD
3G7806P09231
LH REAR EJECTOR ASSY RETROMOD (REF)
ZONE 3
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
ZONE 4
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
3G7806P09331
RH REAR EJECTOR ASSY
RETROMOD (REF)
TOP VIEW
3G7806P09331
RH REAR EJECTOR ASSY RETROMOD (REF)
ZONE 2
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
ZONE 1 AND ZONE 2
ANY CRACKS IN THIS AREA MAY BE
REPAIRED
100.0 MAX
MAX CRACK LENGHT PERMITTED
EXAMPLE OF CRACK
EXAMPLE OF CRACK
STOP CRACK DRILL
HOLE Ø1.8÷2.0
0.06
ZONE 1 AND ZONE 2
EXAMPLE OF DAMAGE
CUTTING LINES
EXAMPLE OF CRACK
EXAMPLE OF CRACK
CUTTING LINES
EXAMPLE OF
CRACK
ZONE 3 AND ZONE 4
ANY CRACKS IN THIS AREA MAY BE
REPAIRED AS SHOWN IN THE SHEET 02
ZONE 3 AND ZONE 4
EXAMPLE OF DAMAGE

Figure 31

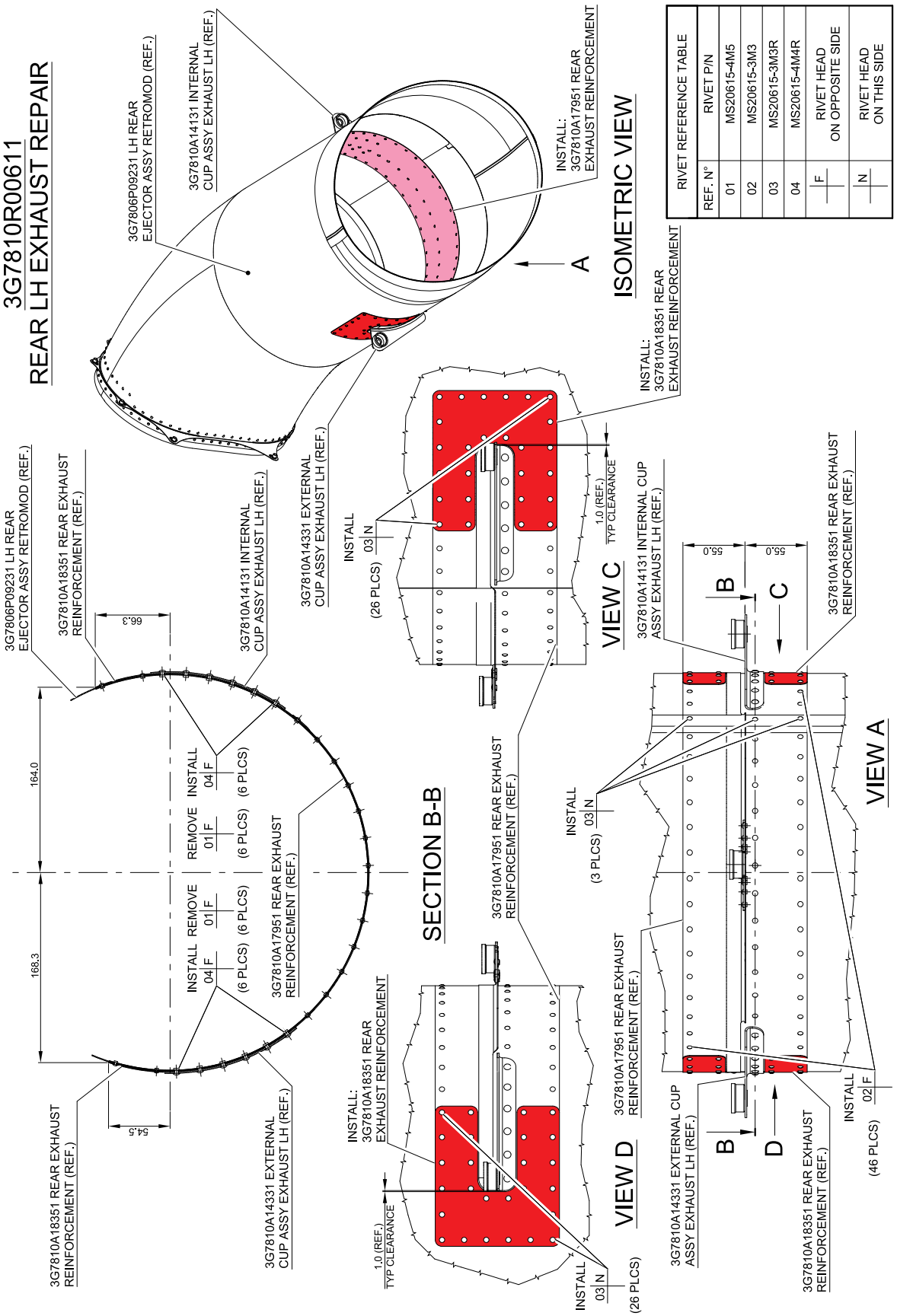

3G7810R00611
REAR LH EXHAUST REPAIR
ISOMETRIC VIEW
3G7806P09231 LH REAR EJECTOR ASSY RETROMOD (REF.)
3G7810A14131 INTERNAL CUP ASSY EXHAUST LH (REF.)
INSTALL: 3G7810A17951 REAR EXHAUST REINFORCEMENT
A
INSTALL: 3G7810A18351 REAR EXHAUST REINFORCEMENT
3G7810A14331 EXTERNAL CUP ASSY EXHAUST LH (REF.)
INSTALL 03 N (26 PLCS)
1.0 (REF.) TYP CLEARANCE
VIEW C
3G7810A14131 INTERNAL CUP ASSY EXHAUST LH (REF.)
55.0
B
C
3G7810A18351 REAR EXHAUST REINFORCEMENT (REF.)
3G7806P09231 LH REAR EJECTOR ASSY RETROMOD (REF.)
3G7810A18351 REAR EXHAUST REINFORCEMENT (REF.)
66.3
164.0
168.3
54.5
INSTALL 04 F (6 PLCS)
REMOVE 01 F (6 PLCS)
INSTALL 04 F (6 PLCS)
REMOVE 01 F (6 PLCS)
3G7810A17951 REAR EXHAUST REINFORCEMENT (REF.)
3G7810A14131 INTERNAL CUP ASSY EXHAUST LH (REF.)
3G7810A14331 EXTERNAL CUP ASSY EXHAUST LH (REF.)
SECTION B-B
3G7810A17951 REAR EXHAUST REINFORCEMENT (REF.)
INSTALL 03 N (3 PLCS)
VIEW A
INSTALL: 3G7810A18351 REAR EXHAUST REINFORCEMENT
1.0 (REF.) TYP CLEARANCE
VIEW D
INSTALL 03 N (26 PLCS)
3G7810A17951 REAR EXHAUST REINFORCEMENT (REF.)
3G7810A14331 EXTERNAL CUP ASSY EXHAUST LH (REF.)
B
D
3G7810A18351 REAR EXHAUST REINFORCEMENT (REF.)
INSTALL 02 F (46 PLCS)
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
MS20615-4M5
02
MS20615-3M3
03
MS20615-3M3R
04
MS20615-4M4R
F
RIVET HEAD ON OPPOSITE SIDE
N
RIVET HEAD ON THIS SIDE

Figure 32

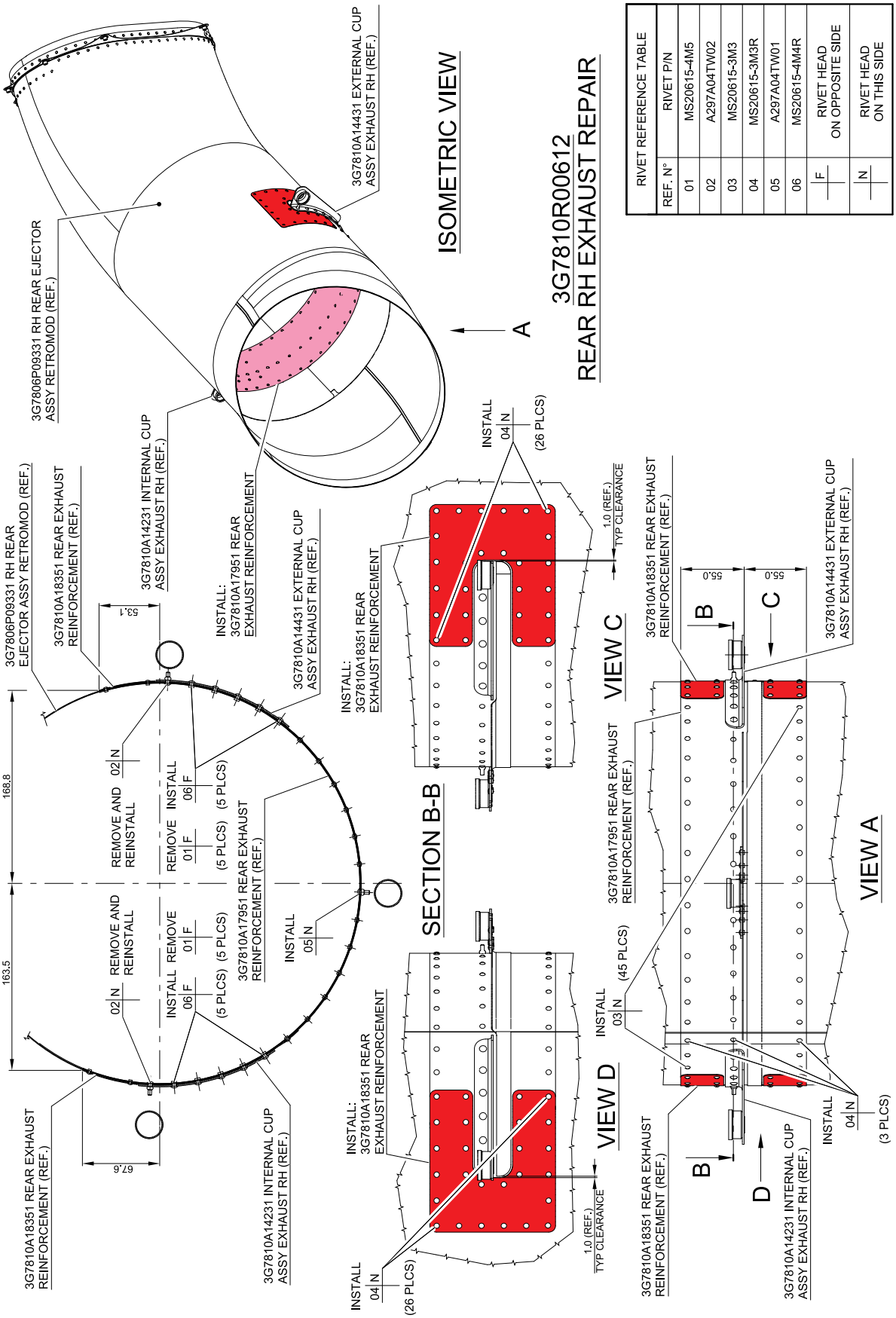

3G7810R00612
REAR RH EXHAUST REPAIR
ISOMETRIC VIEW
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01 MS20615-4M5
02 A297A04TW02
03 MS20615-3M3
04 MS20615-3M3R
05 A297A04TW01
06 MS20615-4M4R
F RIVET HEAD ON OPPOSITE SIDE
N RIVET HEAD ON THIS SIDE
3G7806P09331 RH REAR EJECTOR ASSY RETROMOD (REF.)
3G7810A14431 EXTERNAL CUP ASSY EXHAUST RH (REF.)
3G7810A14231 INTERNAL CUP ASSY EXHAUST RH (REF.)
3G7810A18351 REAR EXHAUST REINFORCEMENT (REF.)
3G7810A17951 REAR EXHAUST REINFORCEMENT (REF.)
INSTALL: 3G7810A17951 REAR EXHAUST REINFORCEMENT
INSTALL: 3G7810A18351 REAR EXHAUST REINFORCEMENT
SECTION B-B
VIEW C
VIEW D
VIEW A
REMOVE AND REINSTALL 02 N
REMOVE 01 F
INSTALL 06 F
INSTALL 05 N
INSTALL 04 N (26 PLCS)
INSTALL 03 N (45 PLCS)
INSTALL 04 N (3 PLCS)
(5 PLCS)
1.0 (REF.) TYP CLEARANCE
168.8
163.5
67.6
53.1
55.0

Figure 33

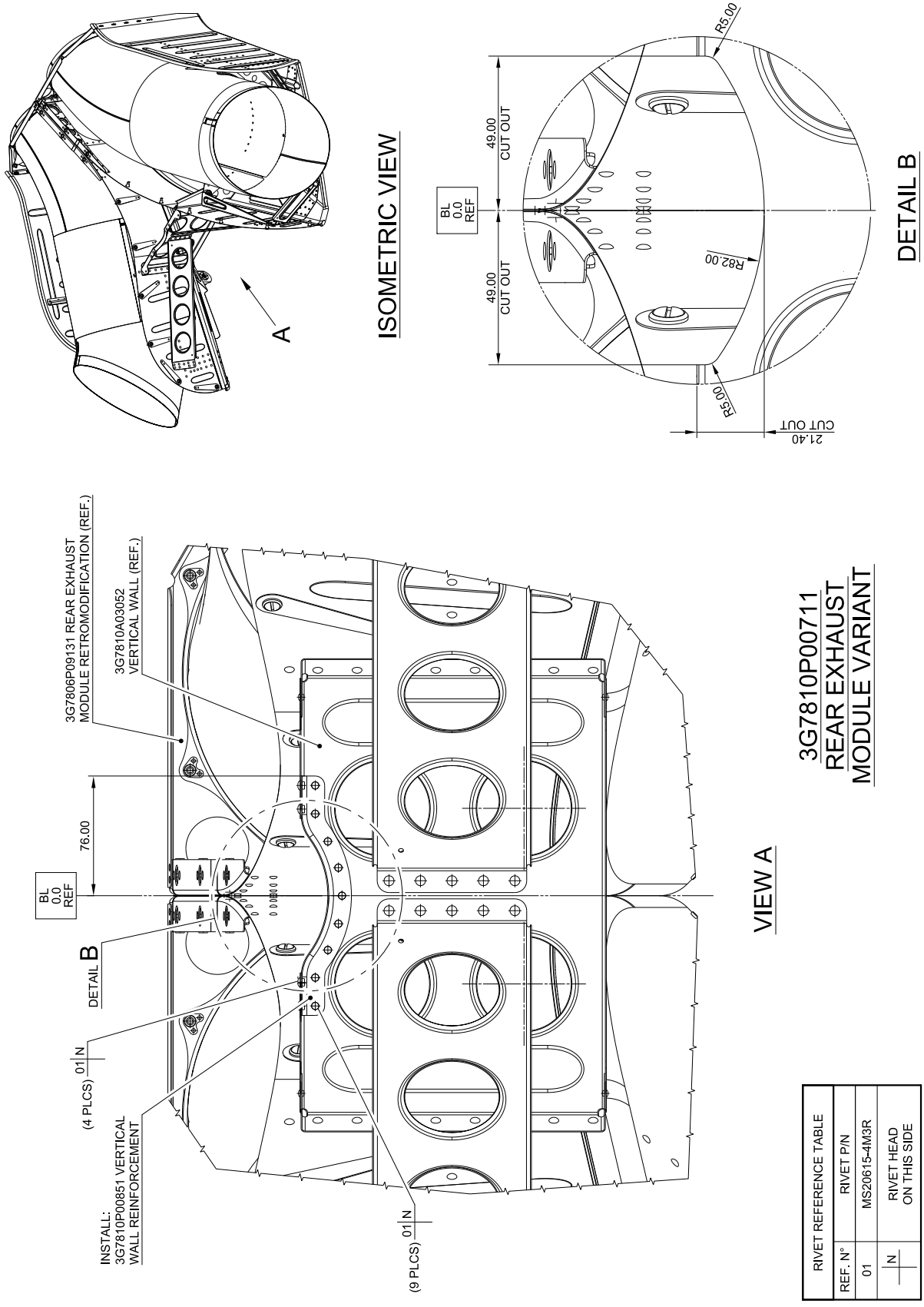
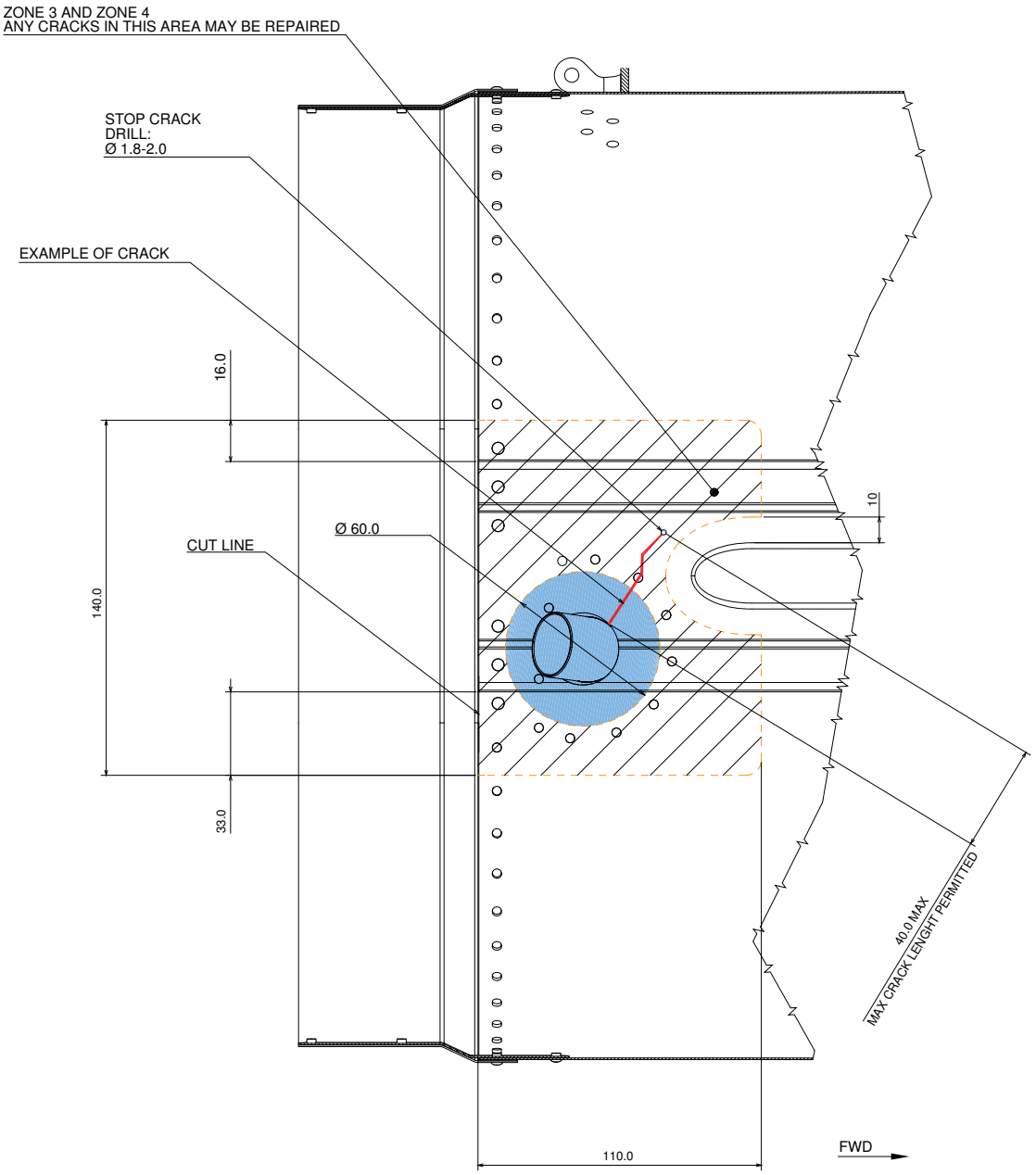

ISOMETRIC VIEW
A
DETAIL B
R5.00
49.00
CUT OUT
BL
0.0
REF
49.00
CUT OUT
R82.00
R5.00
21.40
CUT OUT
VIEW A
3G7810P00711
REAR EXHAUST
MODULE VARIANT
3G7806P09131 REAR EXHAUST
MODULE RETROMODIFICATION (REF.)
3G7810A03052
VERTICAL WALL (REF.)
76.00
BL
0.0
REF
DETAIL B
(4 PLCS) 01 N
INSTALL:
3G7810P00851 VERTICAL
WALL REINFORCEMENT
(9 PLCS) 01 N
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
MS20615-4M3R
N
RIVET HEAD
ON THIS SIDE

Figure 34



ZONE 3 AND ZONE 4
EXAMPLE OF DAMAGE

Figure 35

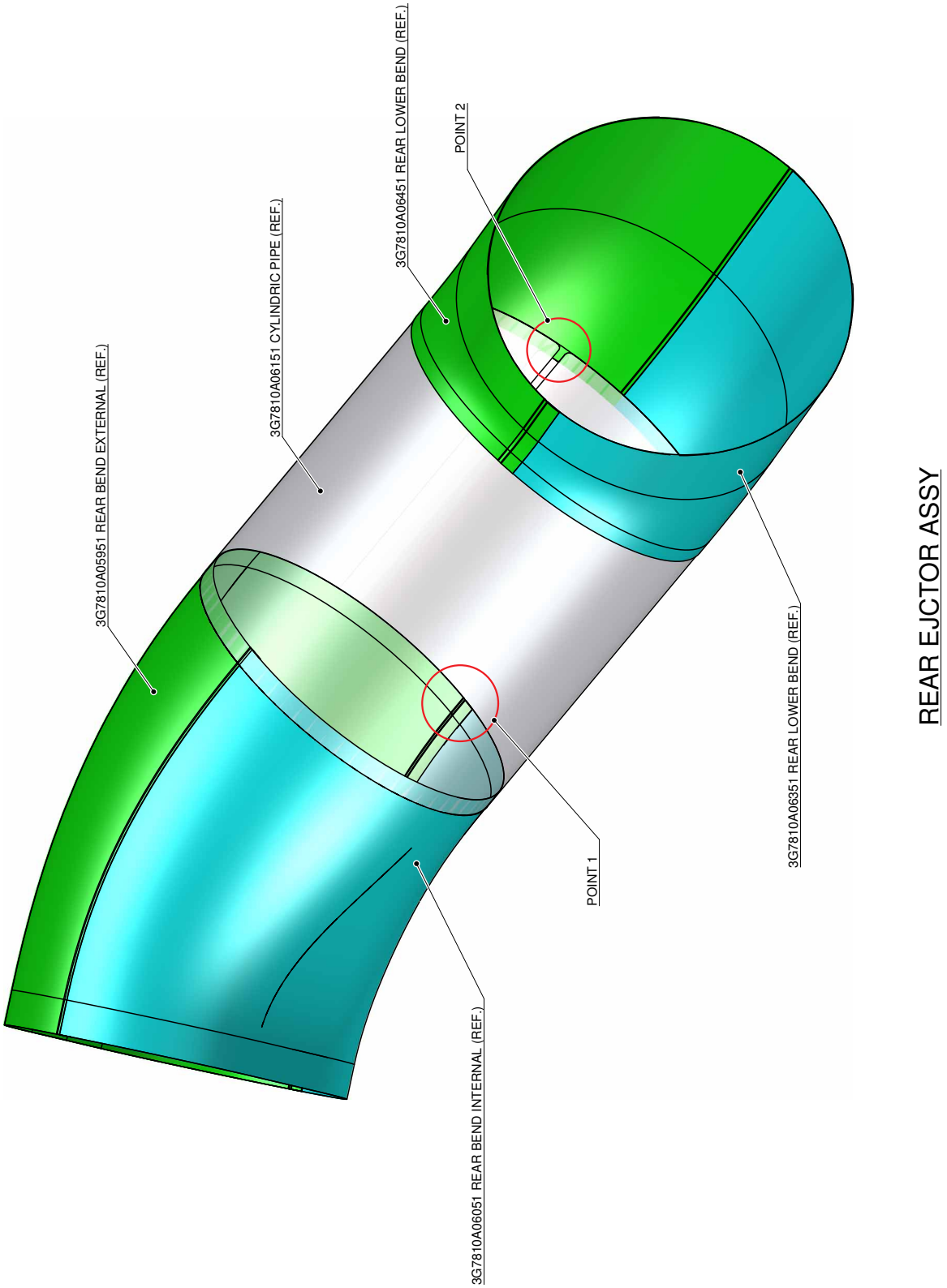
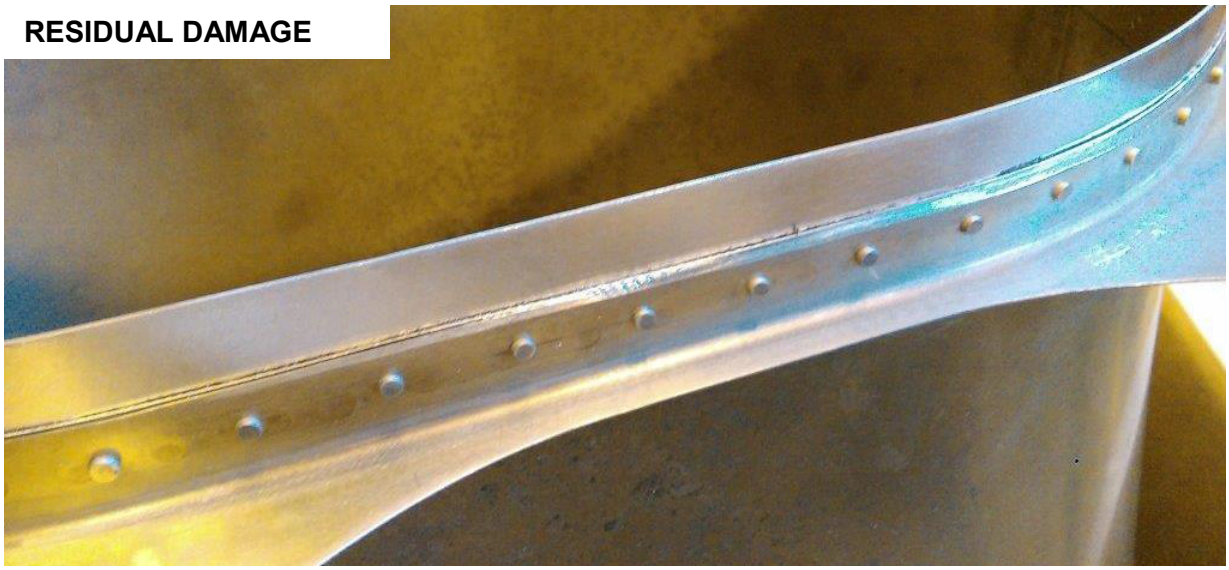
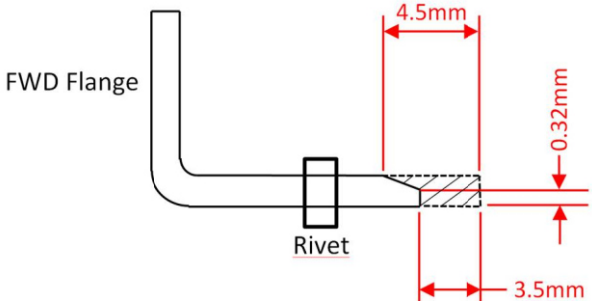

REAR EJCTOR ASSY
3G7810A05951 REAR BEND EXTERNAL (REF.)
3G7810A06151 CYLINDRIC PIPE (REF.)
3G7810A06451 REAR LOWER BEND (REF.)
POINT 2
3G7810A06351 REAR LOWER BEND (REF.)
POINT 1
3G7810A06051 REAR BEND INTERNAL (REF.)

Figure 36

UNSED RIVET HOLES

RESIDUAL DAMAGE





LOCAL DEFORMATION

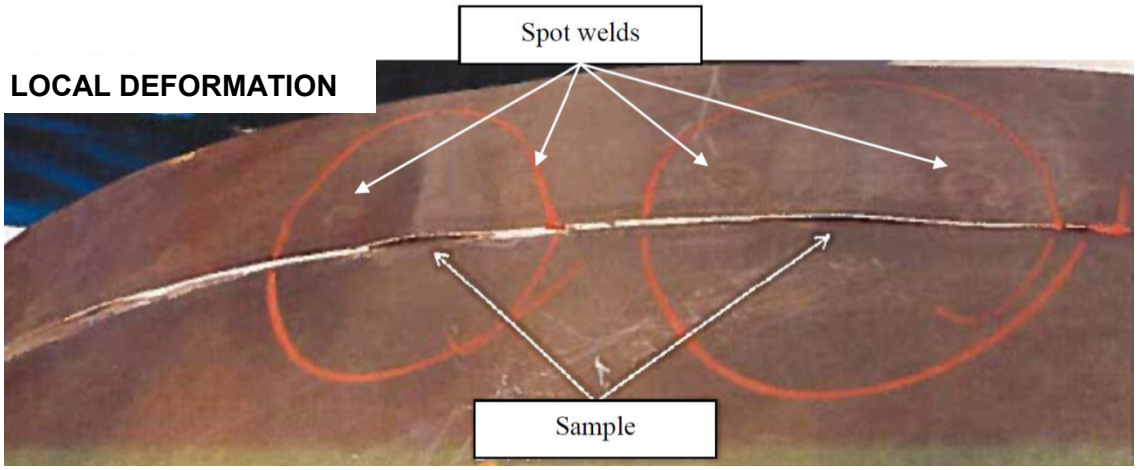


Figure 37

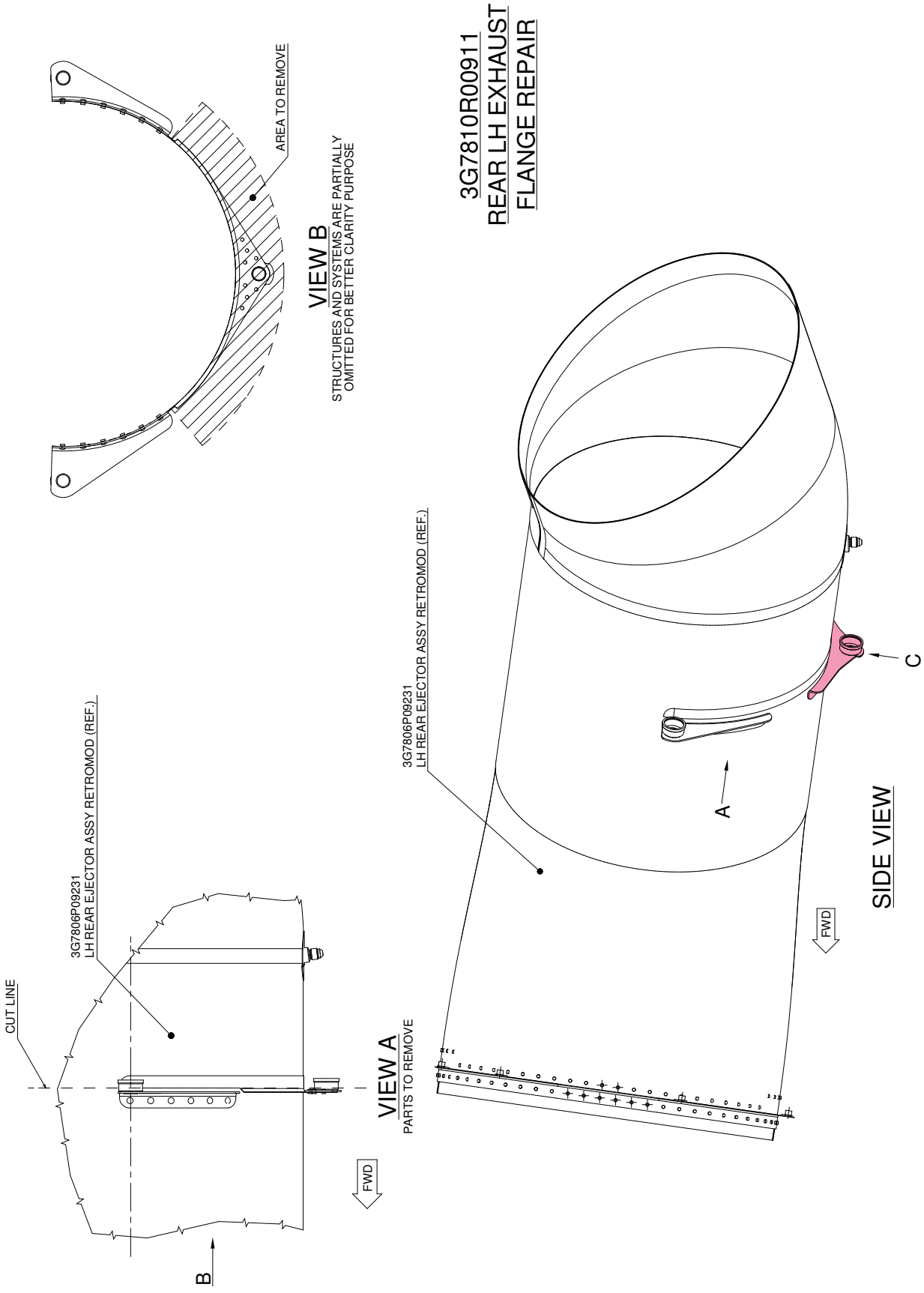

3G7810R00911
REAR LH EXHAUST
FLANGE REPAIR
AREA TO REMOVE
VIEW B
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
3G7806P09231
LH REAR EJECTOR ASSY RETROMOD (REF.)
C
A
SIDE VIEW
FWD
CUT LINE
VIEW A
PARTS TO REMOVE
FWD
B

Figure 38

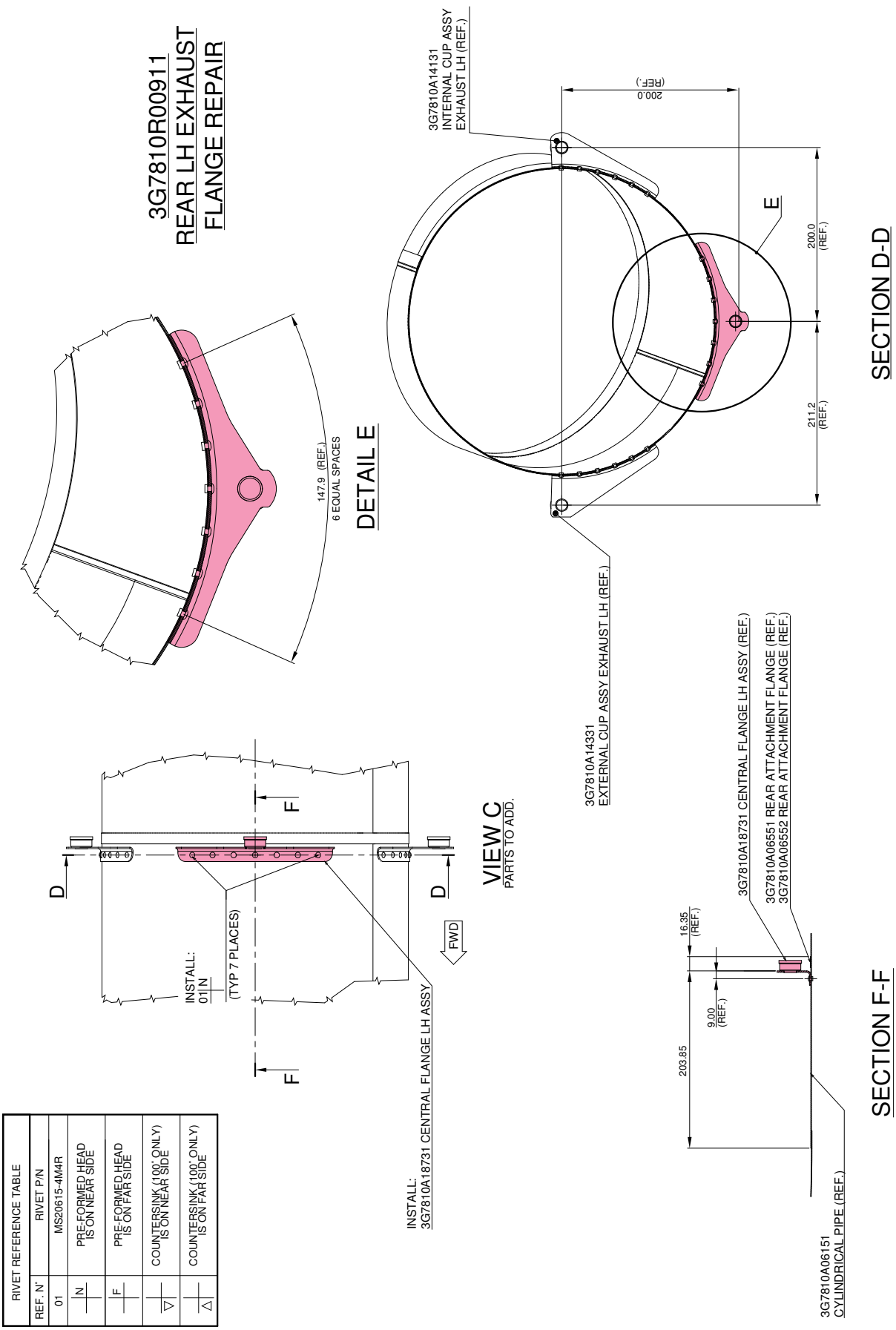

3G7810R00911
REAR LH EXHAUST
FLANGE REPAIR
DETAIL E
147.9 (REF.)
6 EQUAL SPACES
SECTION D-D
3G7810A14131
INTERNAL CUP ASSY
EXHAUST LH (REF.)
200.0 (REF.)
E
200.0 (REF.)
211.2 (REF.)
3G7810A14331
EXTERNAL CUP ASSY EXHAUST LH (REF.)
VIEW C
PARTS TO ADD.
D
D
F
F
INSTALL:
01 N
(TYP 7 PLACES)
FWD
INSTALL:
3G7810A18731 CENTRAL FLANGE LH ASSY
3G7810A18731 CENTRAL FLANGE LH ASSY (REF.)
3G7810A06551 REAR ATTACHMENT FLANGE (REF.)
3G7810A06552 REAR ATTACHMENT FLANGE (REF.)
16.35 (REF.)
9.00 (REF.)
203.85
SECTION F-F
3G7810A06151
CYLINDRICAL PIPE (REF.)
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
MS20615-4M4R
N
PRE-FORMED HEAD IS ON NEAR SIDE
F
PRE-FORMED HEAD IS ON FAR SIDE
COUNTERSINK (100° ONLY) IS ON NEAR SIDE
COUNTERSINK (100° ONLY) IS ON FAR SIDE

Figure 39

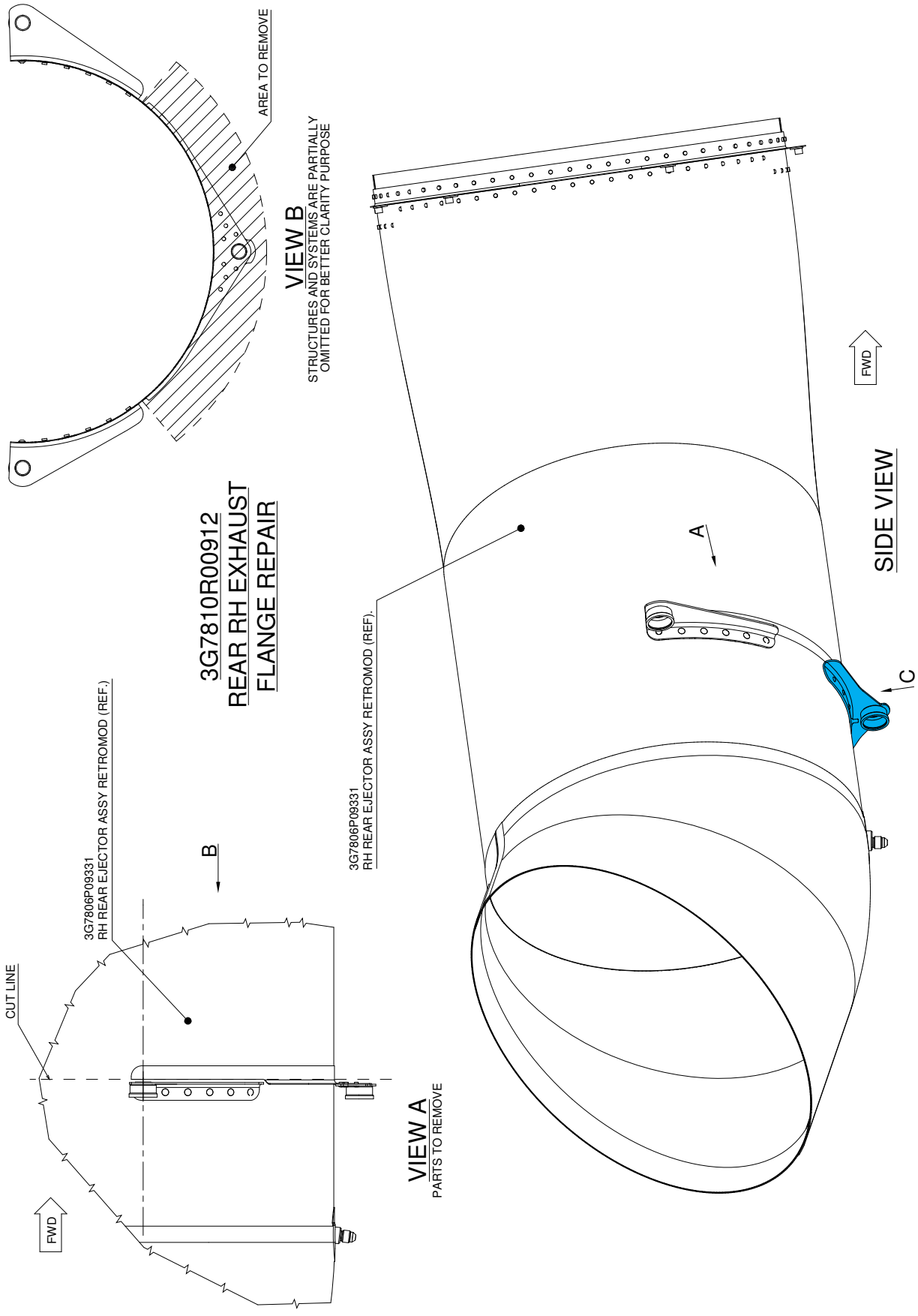

3G7810R00912
REAR RH EXHAUST
FLANGE REPAIR
VIEW B
STRUCTURES AND SYSTEMS ARE PARTIALLY
OMITTED FOR BETTER CLARITY PURPOSE
AREA TO REMOVE
SIDE VIEW
FWD
A
C
3G7806P09331
RH REAR EJECTOR ASSY RETROMOD (REF.).
B
CUT LINE
VIEW A
PARTS TO REMOVE
FWD

Figure 40

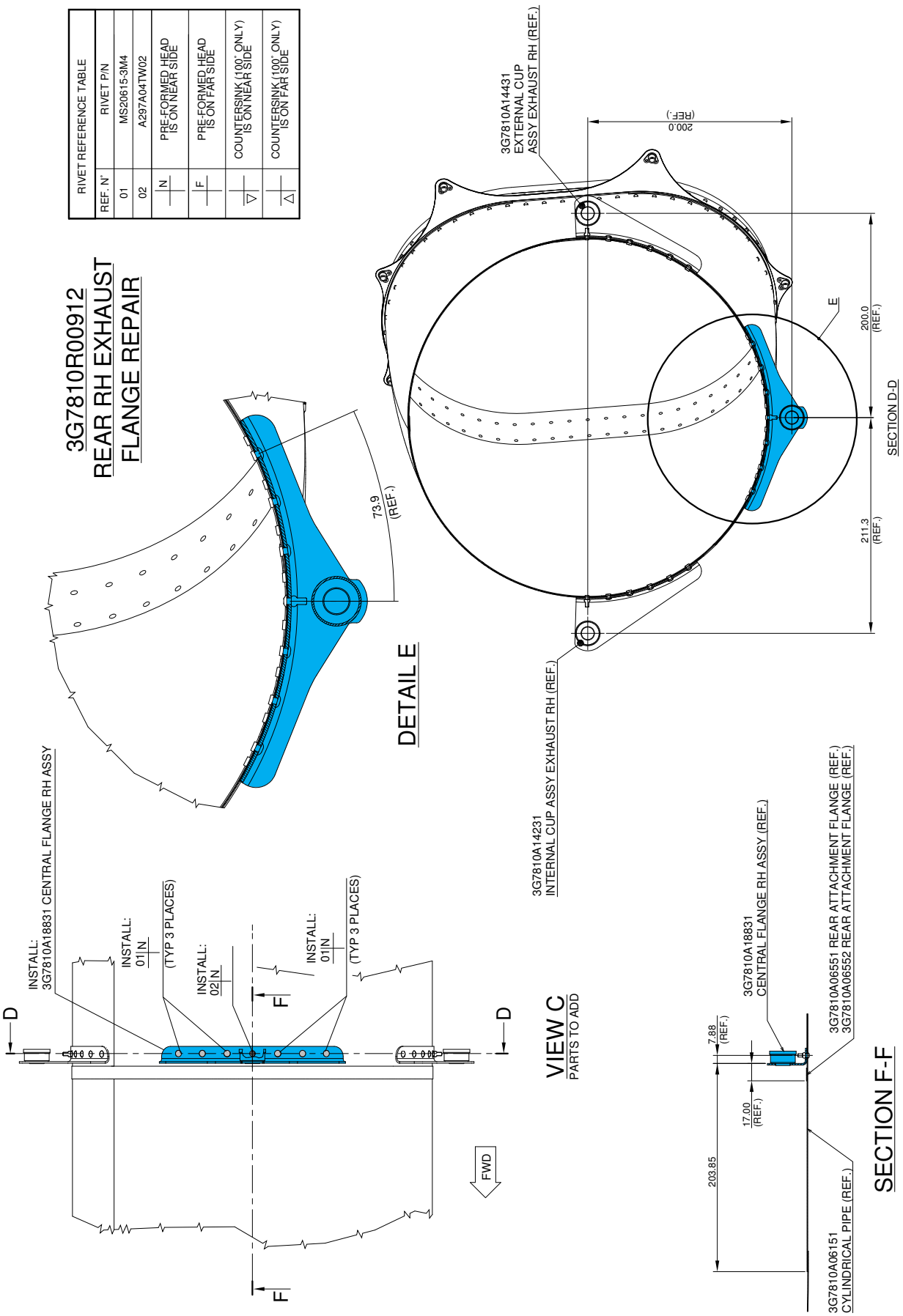

3G7810R00912
REAR RH EXHAUST
FLANGE REPAIR
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
MS20615-3M4
02
A297A04TW02
N
PRE-FORMED HEAD IS ON NEAR SIDE
F
PRE-FORMED HEAD IS ON FAR SIDE
COUNTERSINK (100° ONLY) IS ON NEAR SIDE
COUNTERSINK (100° ONLY) IS ON FAR SIDE
3G7810A14431
EXTERNAL CUP
ASSY EXHAUST RH (REF.)
200.0 (REF.)
E
200.0
(REF.)
211.3
(REF.)
SECTION D-D
73.9
(REF.)
DETAIL E
3G7810A14231
INTERNAL CUP ASSY EXHAUST RH (REF.)
INSTALL:
3G7810A18831 CENTRAL FLANGE RH ASSY
INSTALL:
01 N
(TYP 3 PLACES)
INSTALL:
02 N
INSTALL:
01 N
(TYP 3 PLACES)
D
D
F
F
FWD
VIEW C
PARTS TO ADD
3G7810A18831
CENTRAL FLANGE RH ASSY (REF.)
3G7810A06551 REAR ATTACHMENT FLANGE (REF.)
3G7810A06552 REAR ATTACHMENT FLANGE (REF.)
7.88
(REF.)
17.00
(REF.)
203.85
3G7810A06151
CYLINDRICAL PIPE (REF.)
SECTION F-F

Figure 41

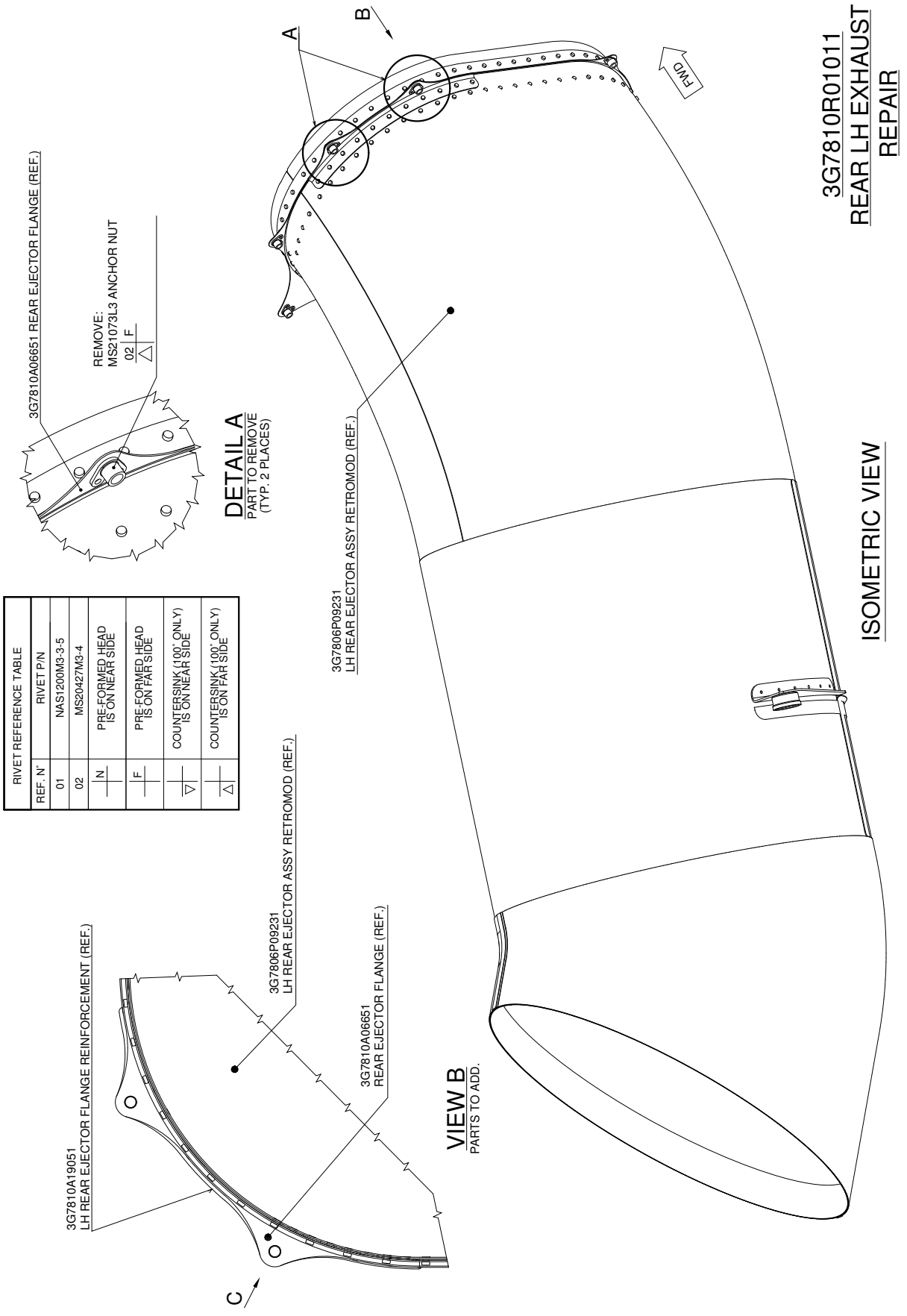

3G7810R01011
REAR LH EXHAUST
REPAIR
ISOMETRIC VIEW
FWD
A
B
C
3G7806P09231
LH REAR EJECTOR ASSY RETROMOD (REF.)
3G7810A06651 REAR EJECTOR FLANGE (REF.)
REMOVE:
MS21073L3 ANCHOR NUT
02 F
DETAIL A
PART TO REMOVE
(TYP. 2 PLACES)
VIEW B
PARTS TO ADD.
3G7810A19051
LH REAR EJECTOR FLANGE REINFORCEMENT (REF.)
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
NAS1200M3-3-5
02
MS20427M3-4
N
PRE-FORMED HEAD
IS ON NEAR SIDE
F
PRE-FORMED HEAD
IS ON FAR SIDE
COUNTERSINK (100° ONLY)
IS ON NEAR SIDE
COUNTERSINK (100° ONLY)
IS ON FAR SIDE

Figure 42

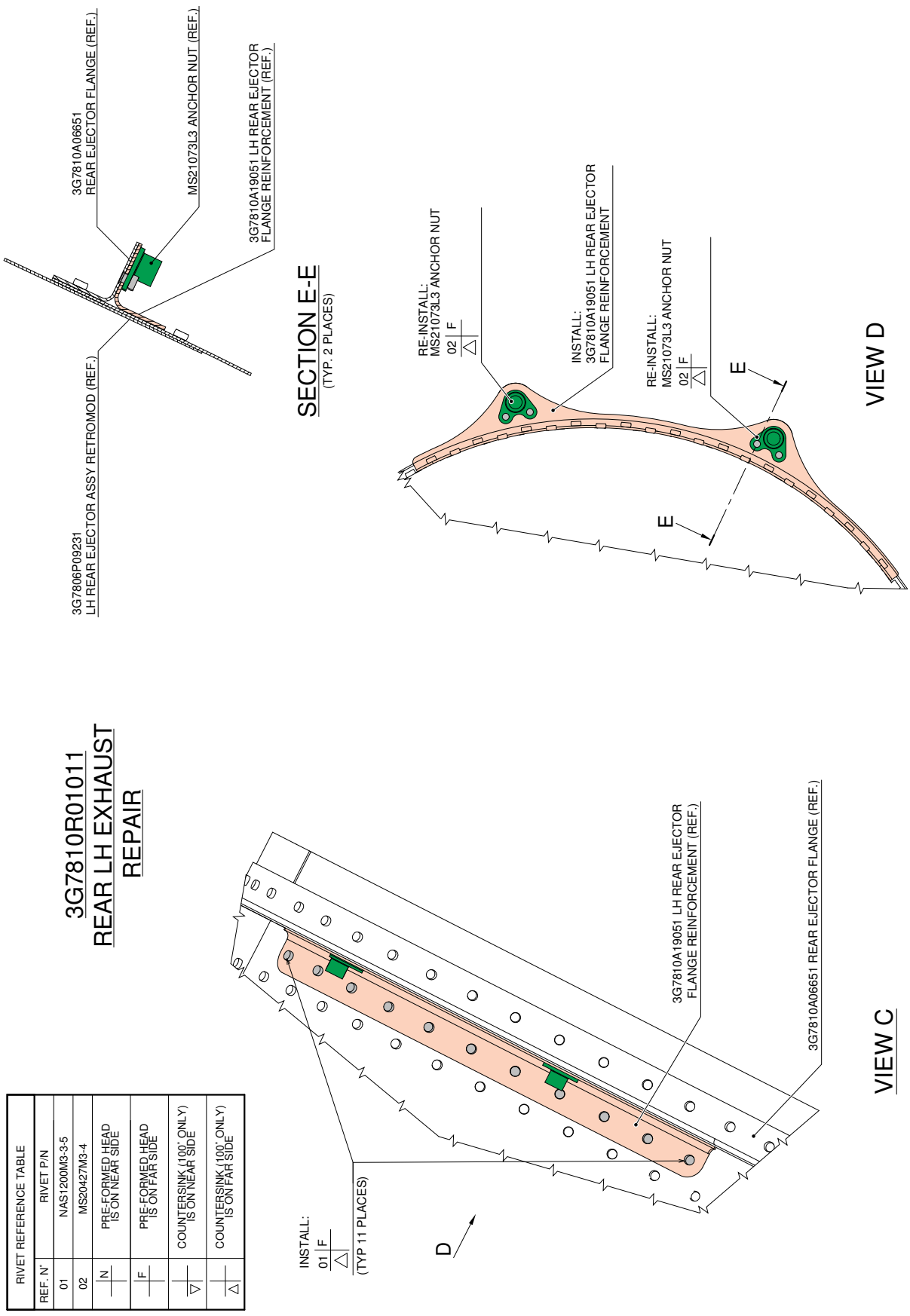

3G7806P09231
LH REAR EJECTOR ASSY RETROMOD (REF.)
3G7810A06651
REAR EJECTOR FLANGE (REF.)
MS21073L3 ANCHOR NUT (REF.)
3G7810A19051 LH REAR EJECTOR
FLANGE REINFORCEMENT (REF.)
SECTION E-E
(TYP. 2 PLACES)
RE-INSTALL:
MS21073L3 ANCHOR NUT
02 | F
INSTALL:
3G7810A19051 LH REAR EJECTOR
FLANGE REINFORCEMENT
RE-INSTALL:
MS21073L3 ANCHOR NUT
02 | F
E
E
VIEW D
3G7810R01011
REAR LH EXHAUST
REPAIR
INSTALL:
01 | F
(TYP 11 PLACES)
D
3G7810A19051 LH REAR EJECTOR
FLANGE REINFORCEMENT (REF.)
3G7810A06651 REAR EJECTOR FLANGE (REF.)
VIEW C
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
NAS1200M3-3-5
02
MS20427M3-4
N
PRE-FORMED HEAD
IS ON NEAR SIDE
F
PRE-FORMED HEAD
IS ON FAR SIDE
COUNTERSINK (100° ONLY)
IS ON NEAR SIDE
COUNTERSINK (100° ONLY)
IS ON FAR SIDE

Figure 43

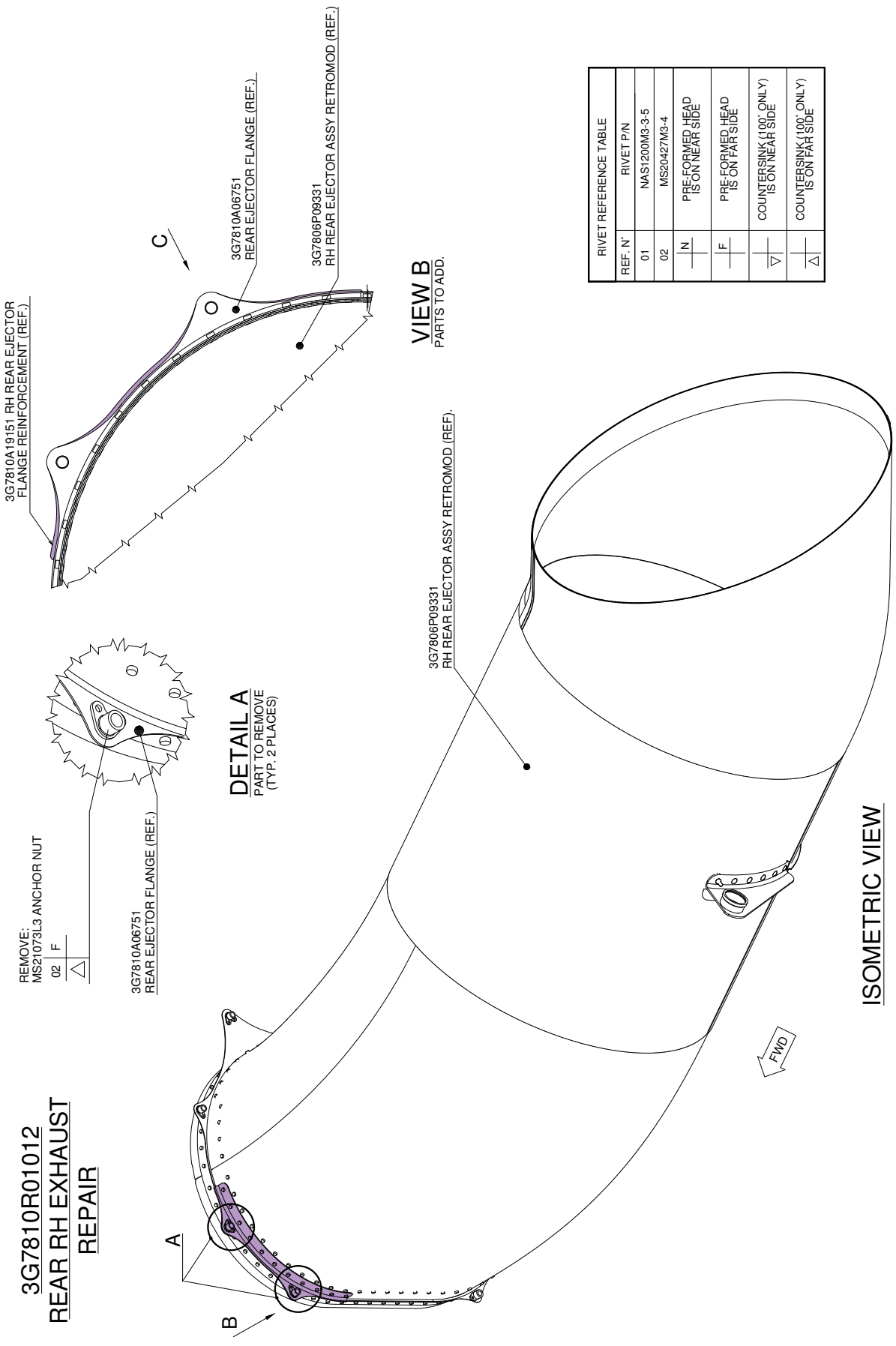

3G7810R01012
REAR RH EXHAUST
REPAIR
A
B
C
3G7810A19151 RH REAR EJECTOR
FLANGE REINFORCEMENT (REF.)
3G7810A06751
REAR EJECTOR FLANGE (REF.)
3G7806P09331
RH REAR EJECTOR ASSY RETROMOD (REF.)
VIEW B
PARTS TO ADD.
REMOVE:
MS21073L3 ANCHOR NUT
02 F
3G7810A06751
REAR EJECTOR FLANGE (REF.)
DETAIL A
PART TO REMOVE
(TYP. 2 PLACES)
3G7806P09331
RH REAR EJECTOR ASSY RETROMOD (REF).
ISOMETRIC VIEW
FWD
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
NAS1200M3-3-5
02
MS20427M3-4
N
PRE-FORMED HEAD
IS ON NEAR SIDE
F
PRE-FORMED HEAD
IS ON FAR SIDE
COUNTERSINK (100° ONLY)
IS ON NEAR SIDE
COUNTERSINK (100° ONLY)
IS ON FAR SIDE

Figure 44

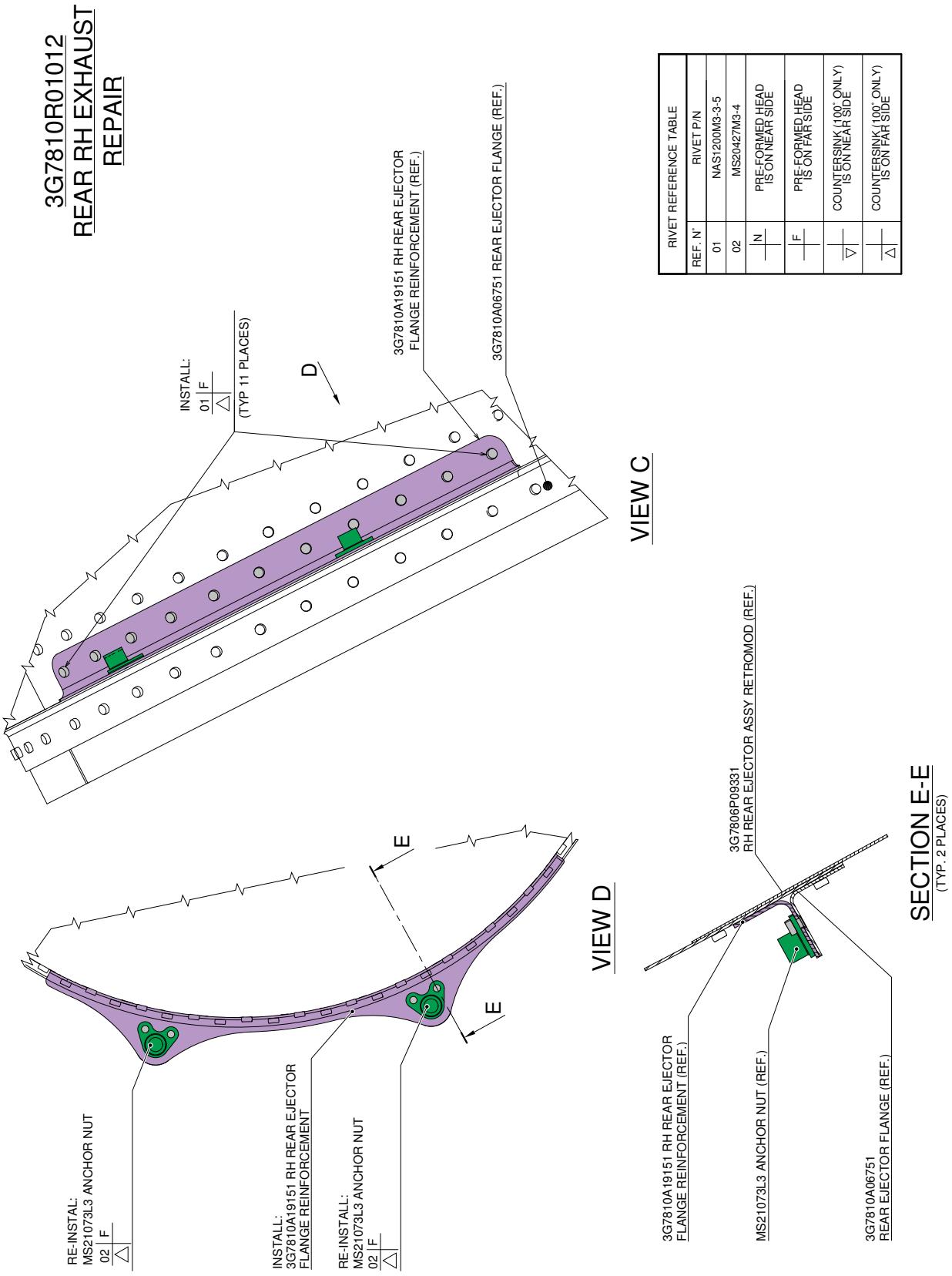

3G7810R01012
REAR RH EXHAUST
REPAIR
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
NAS1200M3-3-5
02
MS20427M3-4
PRE-FORMED HEAD IS ON NEAR SIDE
PRE-FORMED HEAD IS ON FAR SIDE
COUNTERSINK (100° ONLY) IS ON NEAR SIDE
COUNTERSINK (100° ONLY) IS ON FAR SIDE
INSTALL:
01 F
(TYP 11 PLACES)
D
3G7810A19151 RH REAR EJECTOR FLANGE REINFORCEMENT (REF.)
3G7810A06751 REAR EJECTOR FLANGE (REF.)
VIEW C
E
E
RE-INSTAL:
MS21073L3 ANCHOR NUT
02 F
INSTALL:
3G7810A19151 RH REAR EJECTOR FLANGE REINFORCEMENT
RE-INSTALL:
MS21073L3 ANCHOR NUT
02 F
VIEW D
3G7806P09331
RH REAR EJECTOR ASSY RETROMOD (REF.)
3G7810A19151 RH REAR EJECTOR FLANGE REINFORCEMENT (REF.)
MS21073L3 ANCHOR NUT (REF.)
3G7810A06751
REAR EJECTOR FLANGE (REF.)
SECTION E-E
(TYP. 2 PLACES)

Figure 45

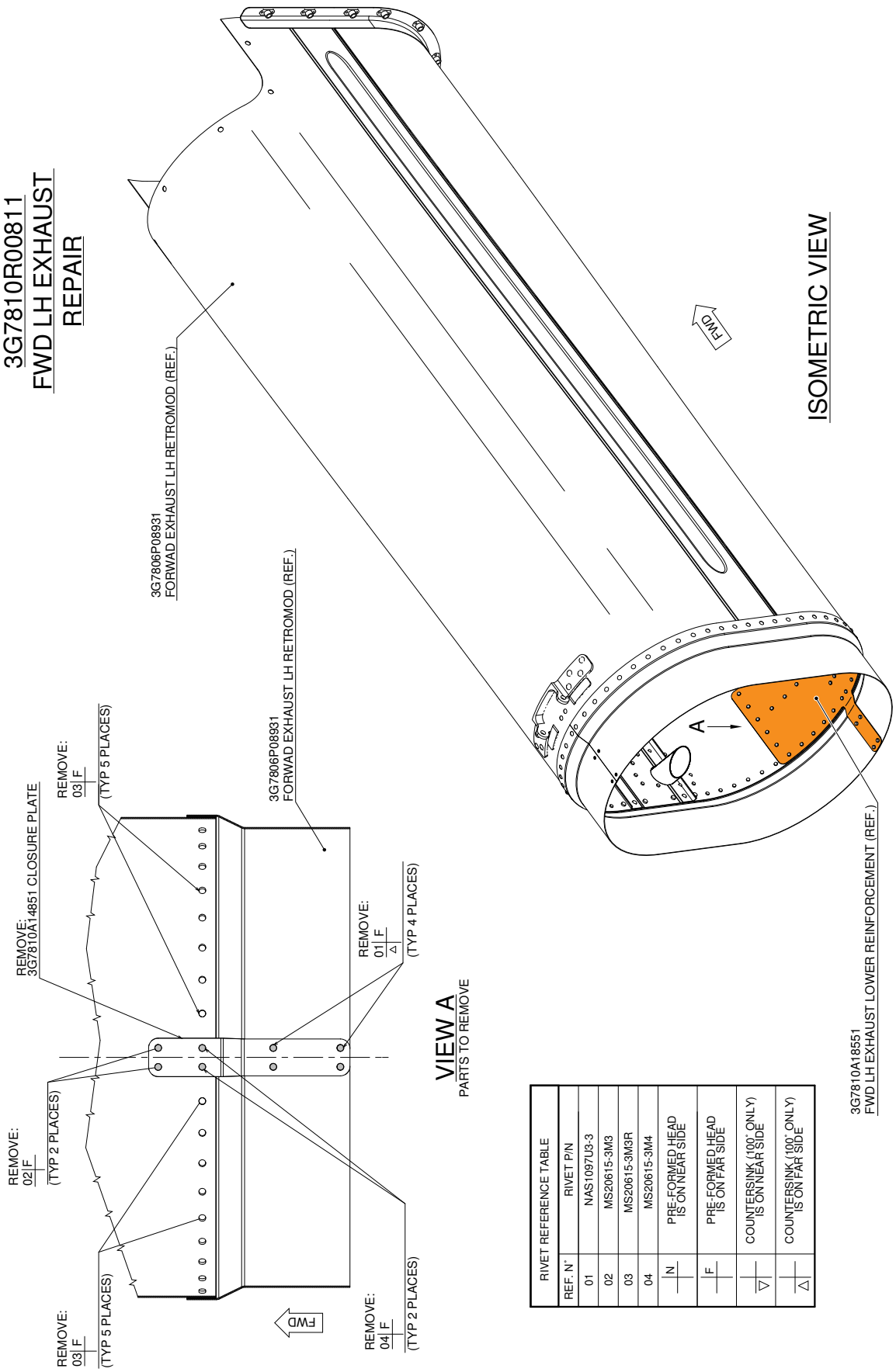
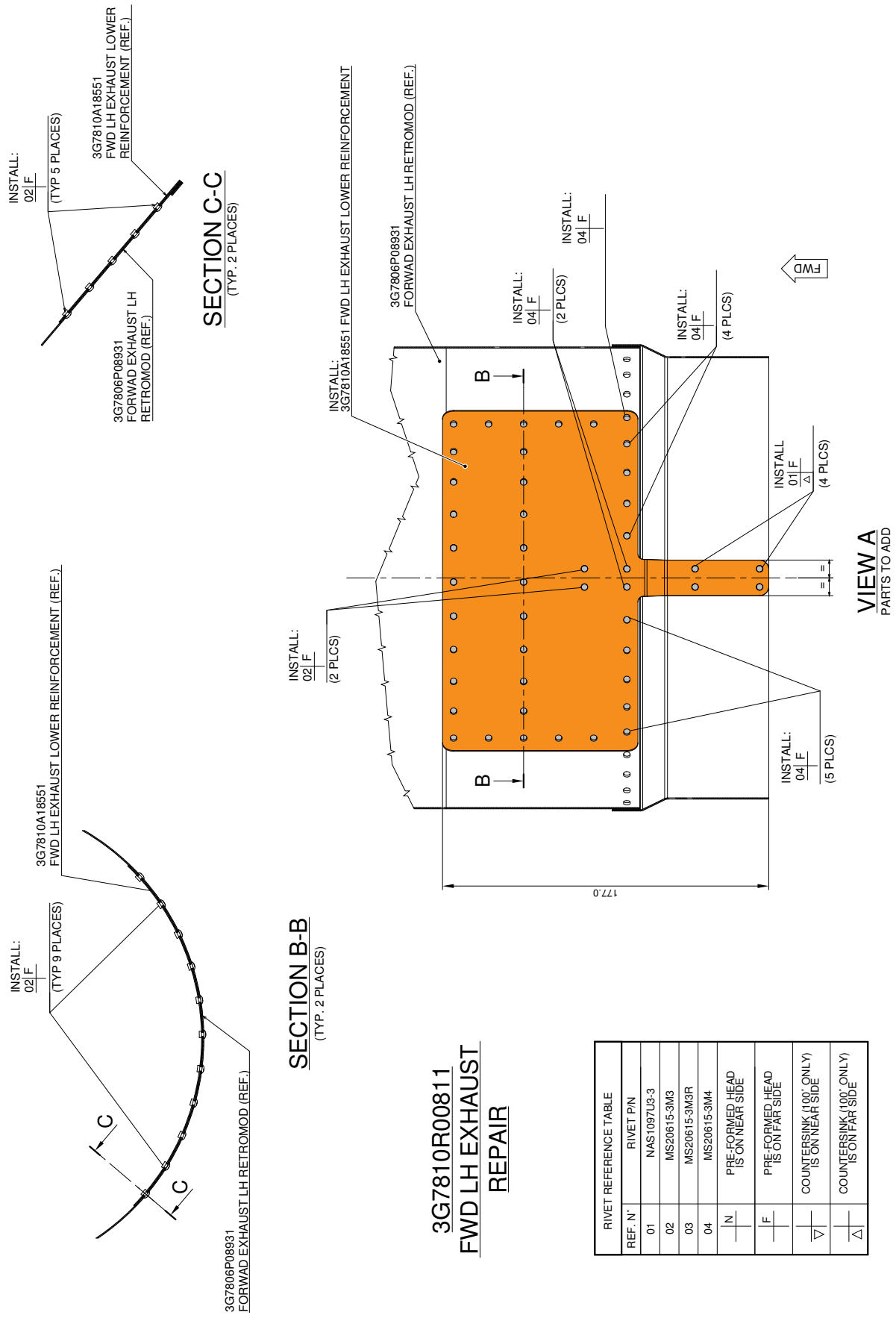

3G7810R00811
FWD LH EXHAUST
REPAIR
ISOMETRIC VIEW
3G7806P08931
FORWAD EXHAUST LH RETROMOD (REF.)
3G7806P08931
FORWAD EXHAUST LH RETROMOD (REF.)
FWD
A
3G7810A18551
FWD LH EXHAUST LOWER REINFORCEMENT (REF.)
VIEW A
PARTS TO REMOVE
REMOVE:
3G7810A14851 CLOSURE PLATE
REMOVE:
02 F
(TYP 2 PLACES)
REMOVE:
03 F
(TYP 5 PLACES)
REMOVE:
03 F
(TYP 5 PLACES)
REMOVE:
01 F
(TYP 4 PLACES)
REMOVE:
04 F
(TYP 2 PLACES)
FWD
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
NAS1097U3-3
02
MS20615-3M3
03
MS20615-3M3R
04
MS20615-3M4
N
PRE-FORMED HEAD IS ON NEAR SIDE
F
PRE-FORMED HEAD IS ON FAR SIDE
COUNTERSINK (100° ONLY) IS ON NEAR SIDE
COUNTERSINK (100° ONLY) IS ON FAR SIDE

Figure 46



3G7810R00811
FWD LH EXHAUST
REPAIR

RIVET REFERENCE TABLE	
REF. N°	RIVET P/N
01	NAS1097U3-3
02	MS20615-3M3
03	MS20615-3M3R
04	MS20615-3M4
N	PRE-FORMED HEAD IS ON NEAR SIDE
F	PRE-FORMED HEAD IS ON FAR SIDE
▽	COUNTERSINK (100° ONLY) IS ON NEAR SIDE
△	COUNTERSINK (100° ONLY) IS ON FAR SIDE

Figure 47

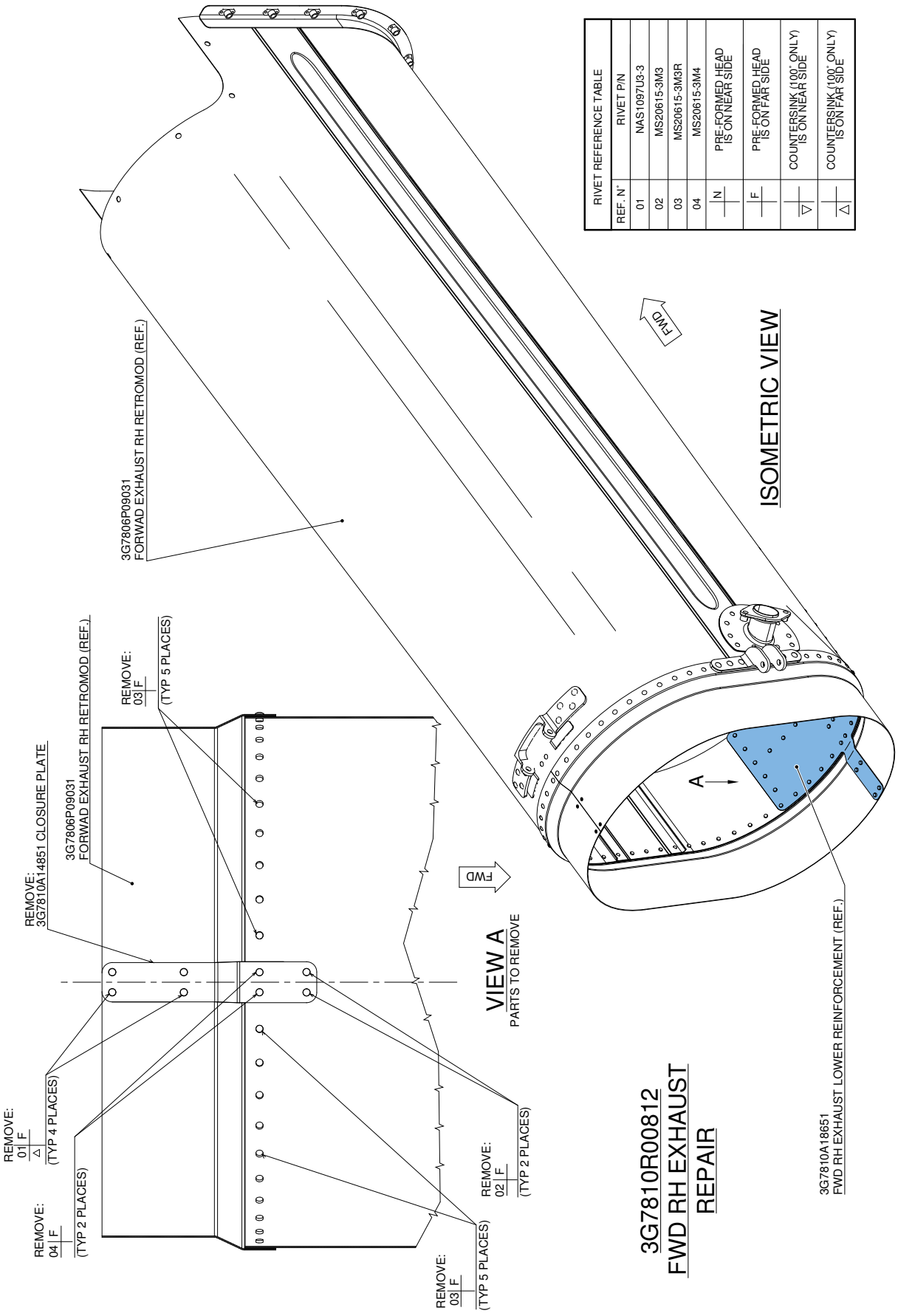
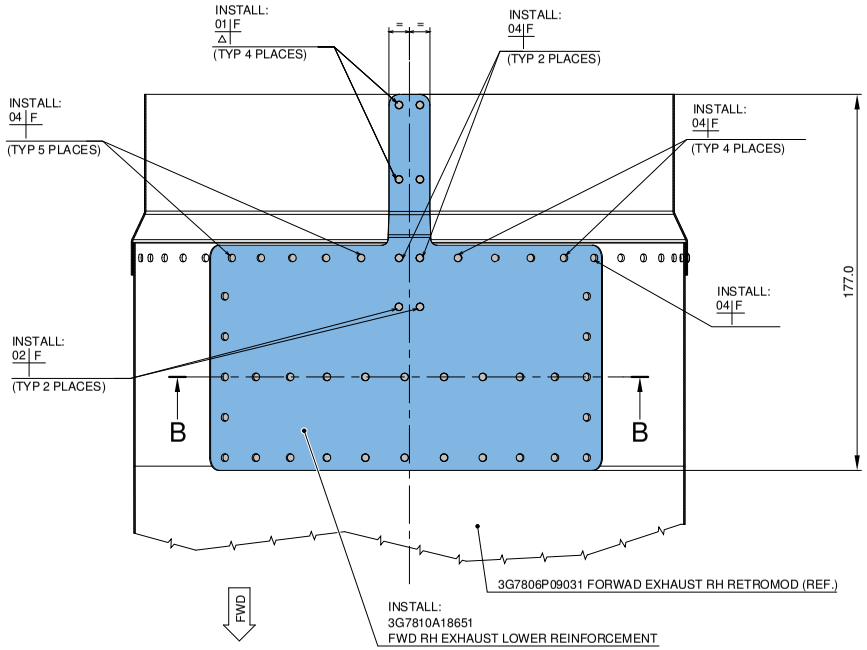

3G7810R00812
FWD RH EXHAUST
REPAIR
ISOMETRIC VIEW
VIEW A
PARTS TO REMOVE
FWD
A
3G7806P09031
FORWAD EXHAUST RH RETROMOD (REF.)
3G7810A18651
FWD RH EXHAUST LOWER REINFORCEMENT (REF.)
REMOVE:
3G7810A14851 CLOSURE PLATE
REMOVE:
01 | F | △
(TYP 4 PLACES)
REMOVE:
04 | F
(TYP 2 PLACES)
REMOVE:
03 | F
(TYP 5 PLACES)
REMOVE:
02 | F
(TYP 2 PLACES)
REMOVE:
03 | F
(TYP 5 PLACES)
RIVET REFERENCE TABLE
REF. N°
RIVET P/N
01
NAS1097U3-3
02
MS20615-3M3
03
MS20615-3M3R
04
MS20615-3M4
N
PRE-FORMED HEAD IS ON NEAR SIDE
F
PRE-FORMED HEAD IS ON FAR SIDE
▽
COUNTERSINK (100° ONLY) IS ON NEAR SIDE
△
COUNTERSINK (100° ONLY) IS ON FAR SIDE

Figure 48

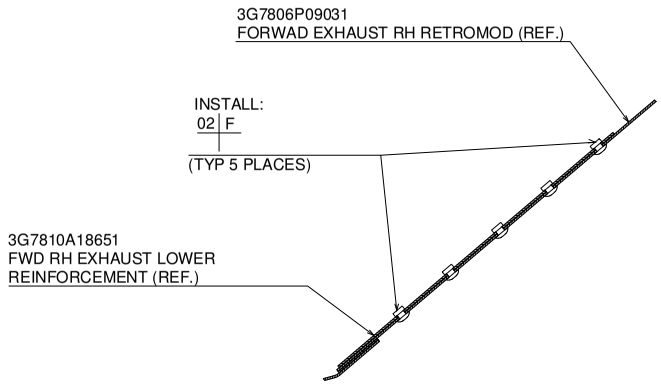
Figure 49

RIVET REFERENCE TABLE	
REF. N°	RIVET P/N
01	NAS1097U3-3
02	MS20615-3M3
03	MS20615-3M3R
04	MS20615-3M4
N	PRE-FORMED HEAD IS ON NEAR SIDE
F	PRE-FORMED HEAD IS ON FAR SIDE
▽	COUNTERSINK (100° ONLY) IS ON NEAR SIDE
△	COUNTERSINK (100° ONLY) IS ON FAR SIDE

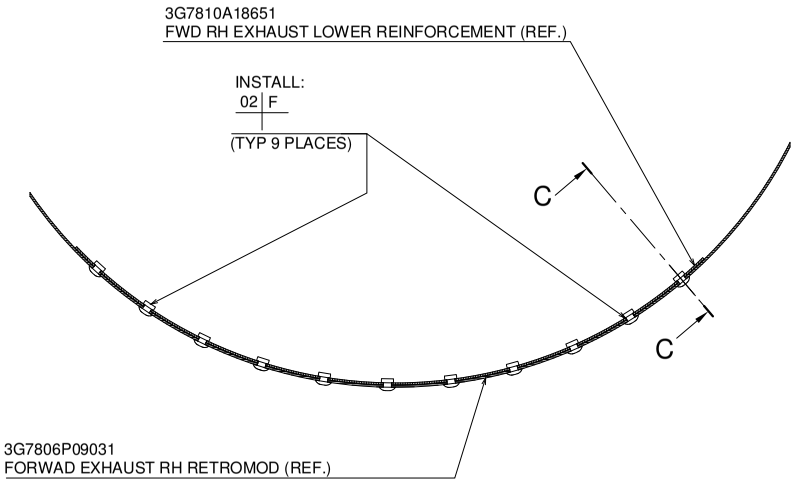
3G7810R00812
FWD RH EXHAUST REPAIR



VIEW A
PARTS TO ADD



SECTION C-C
(TYP. 2 PLACES)



SECTION B-B
(TYP. 2 PLACES)

LEONARDO
HELICOPTERS

AgustaWestland Products

Please send to the following address: **LEONARDO S.p.A.** **CUSTOMER SUPPORT & SERVICES - ITALY** **PRODUCT SUPPORT ENGINEERING & LICENSES DEPT.** Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA) - ITALY Tel.: +39 0331 225036 Fax: +39 0331 225988	**SERVICE BULLETIN COMPLIANCE FORM**	Date:
	Number:	
	Revision:	

Customer Name and Address:	Telephone:
	Fax:
	B.T. Compliance Date:

Helicopter Model	S/N	Total Number	Total Hours	T.S.O.

Remarks:

Information:

We request your cooperation in filling this form, in order to keep out statistical data relevant to aircraft configuration up-to-date. The form should be filled in all its parts and sent to the above address or you can communicate the application also via Technical Bulletin Application Communication Section placed in Leonardo AW Customer Portal - MyCommunications Area. We thank you beforehand for the information given.