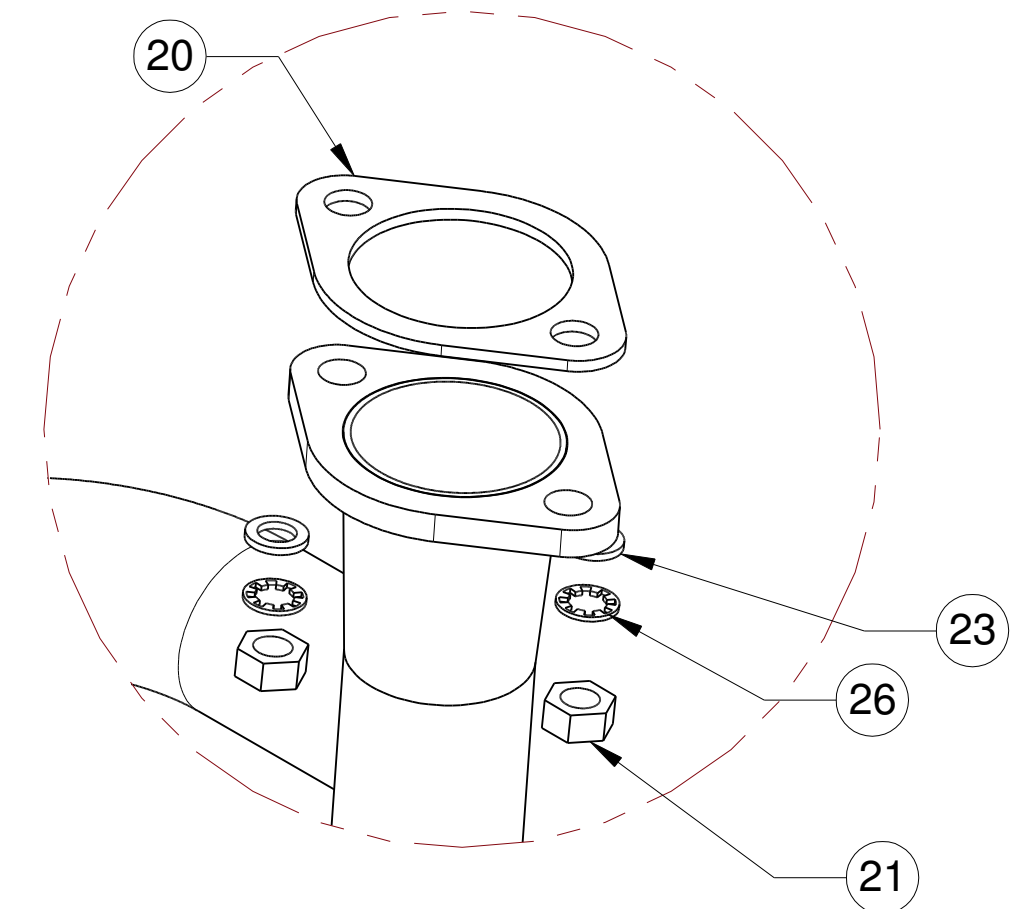
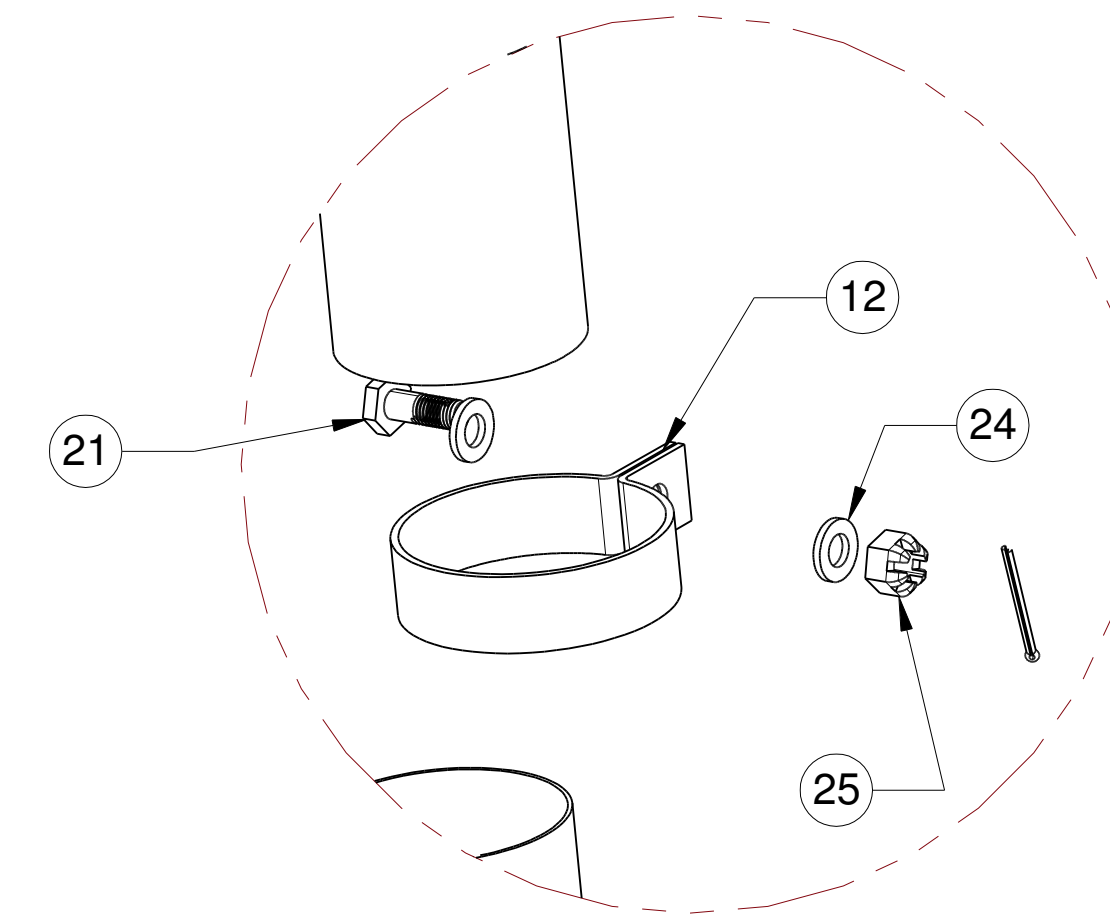
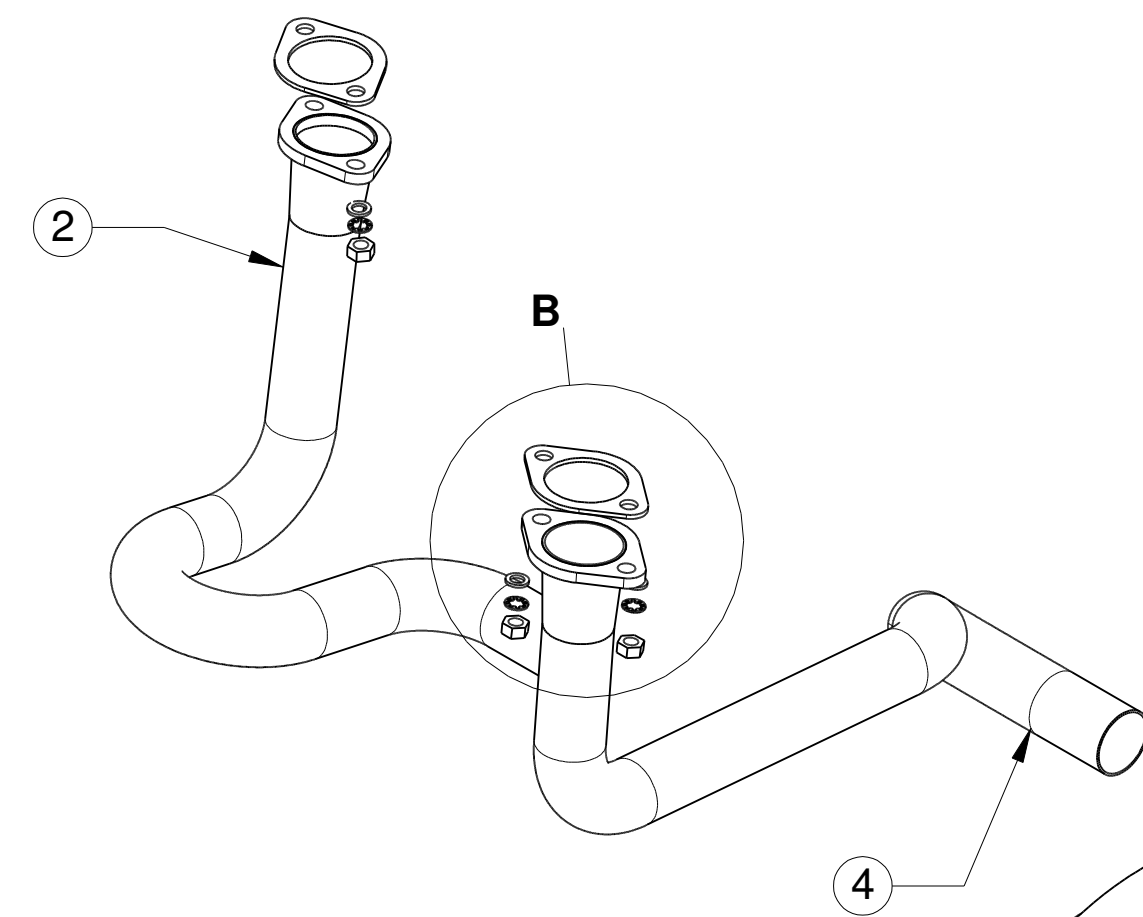


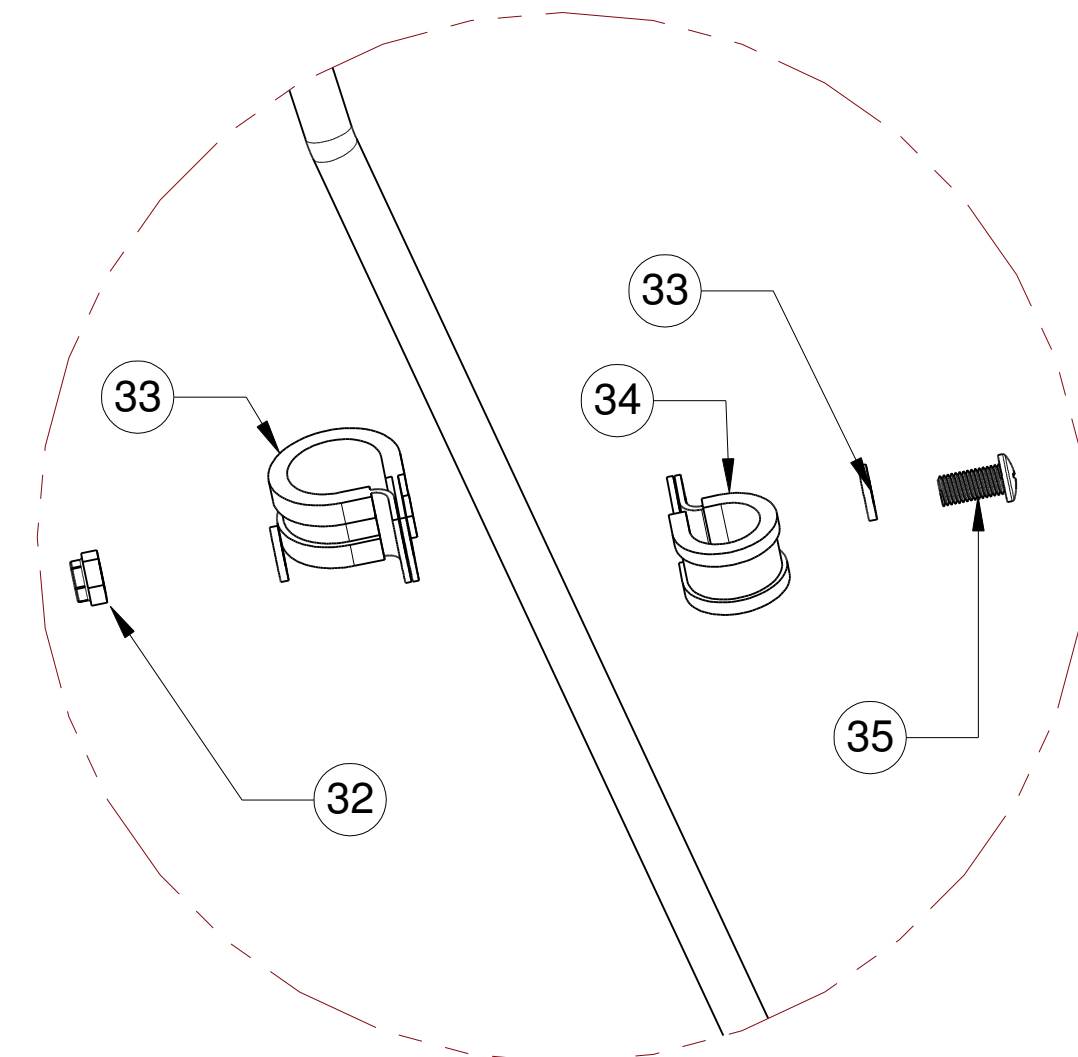
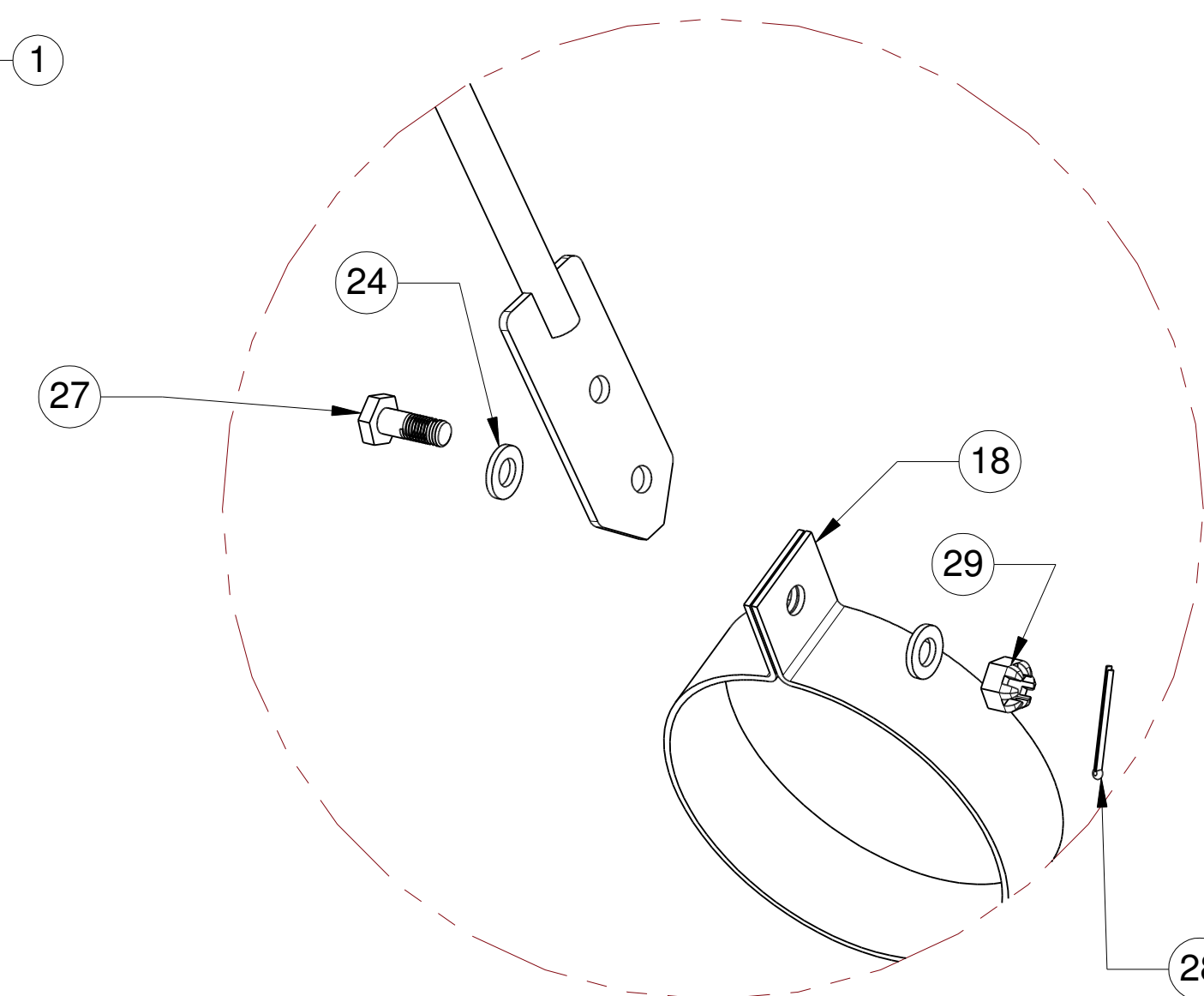
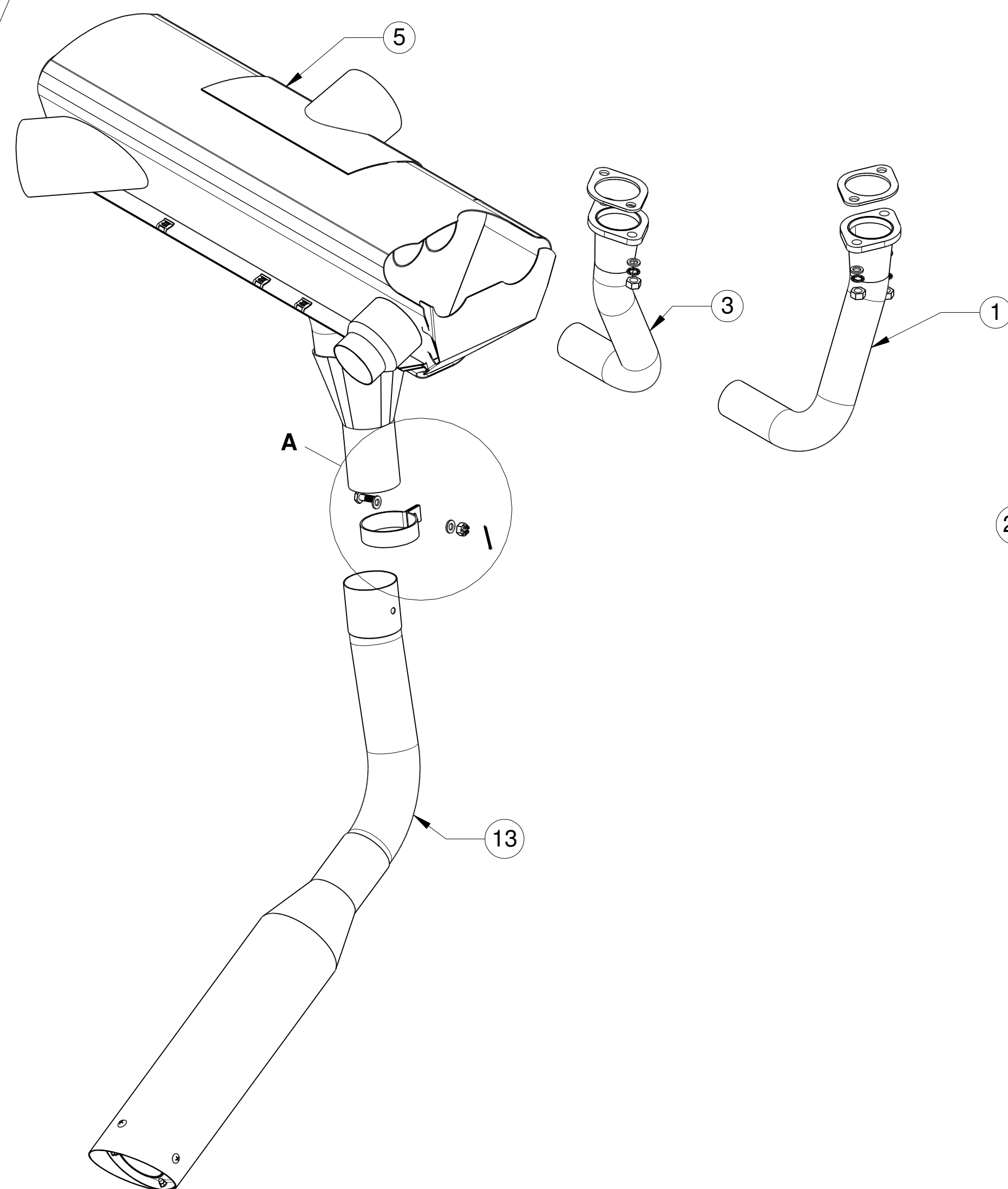
REV		DESCRIPTION	DATE

THIS IS ONLY APPLICABLE TO PFS-13702  
 ONLY APPLICABLE TO C177, C177A AIRCRAFT  
 WITH LYCOMING O-360 FIXED PITCH  
 THIS SYSTEM IS OBSLETE. REPLACEMENT  
 HEADERS, TAILPIPE, AND SHROUD MAY BE AVAILABLE.



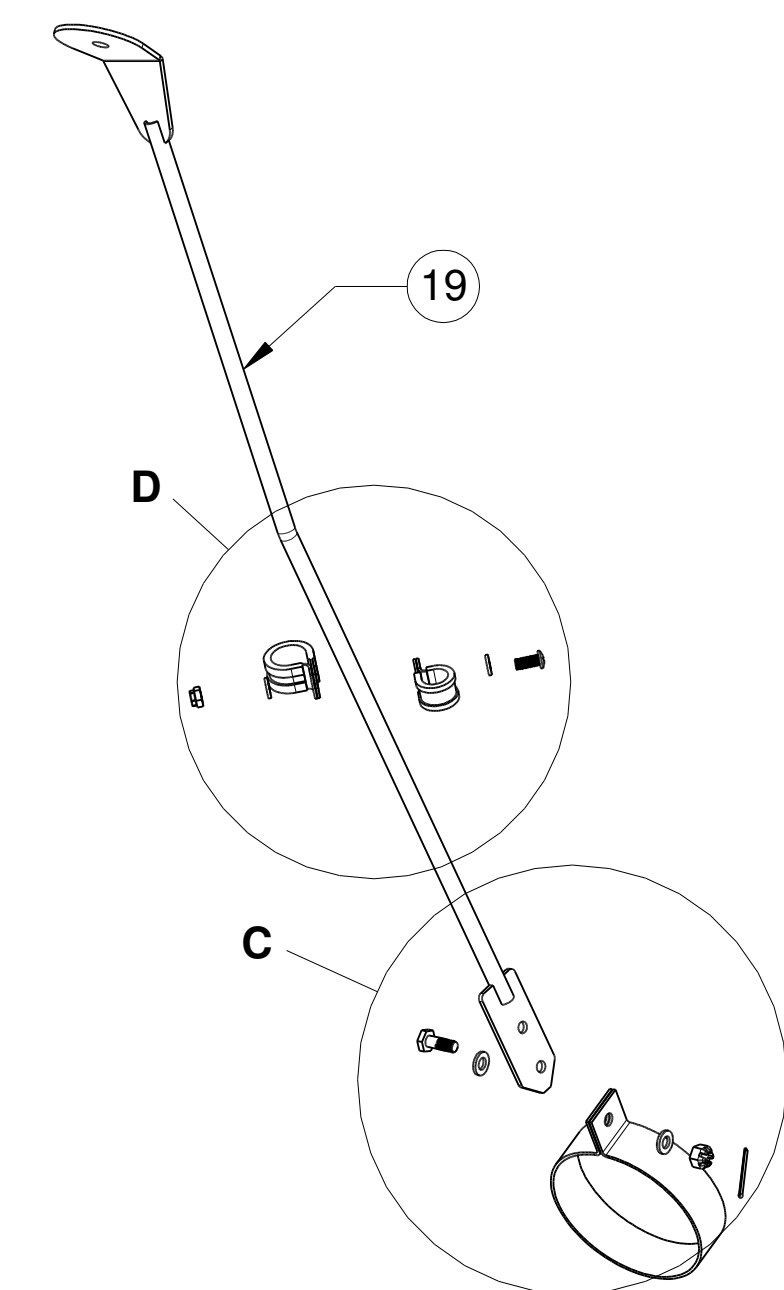
Detail A

Detail B



Detail C

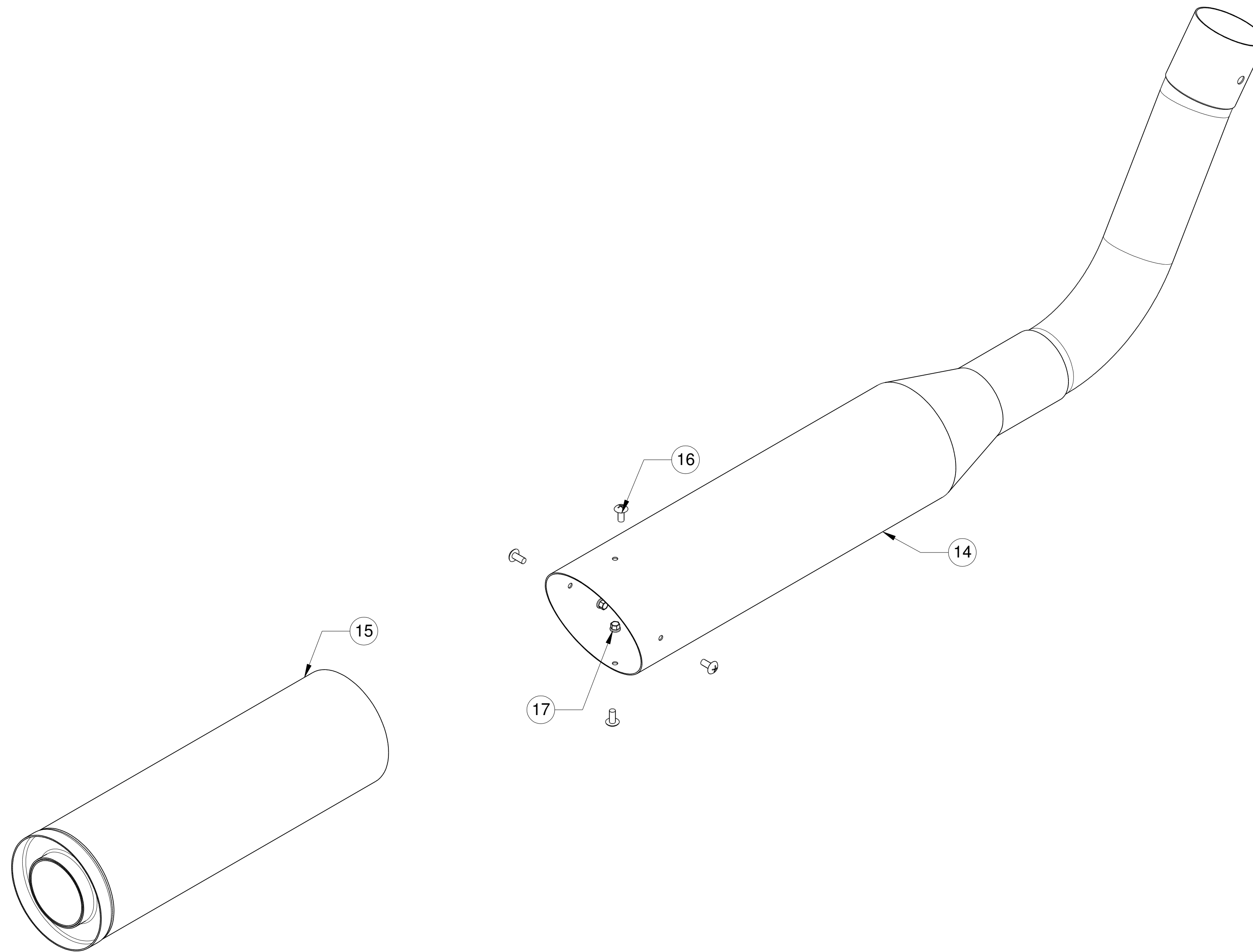
Detail D




ANY EQUIVALENT AVIATION GRADE HARDWARE MAY BE USED

TOLERANCES EXCEPT AS NOTED XX ±0.1 0 ±0.2 XXX ±0.063 0.0 ±0.1 XXXX ±0.010 0.00 ±0.5	DRAWN ES	DATE 11/9/2018	<b>POWER FLOW SYSTEMS, INC.</b> 1585 AVIATION CENTER PKWY HANGAR 804 DAYTONA BEACH, FL 32114
	CHECKED		
ALL INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY TO POWER FLOW SYSTEMS, INC.	DIMENSIONS IN INCHES THIRD ANGLE		DWG NO. PFS-13702-IPC STOCK SIZE
	SIZE D	SCALE	

REVISIONS		
REV	DESCRIPTION	DATE



ANY EQUIVALENT AVIATION GRADE HARDWARE MAY BE USED

TOLERANCES EXCEPT AS NOTED XX ±0.1 0 ±2 XXX ±0.063 0.0 ±1 XXXX ±0.010 0.00 ±0.5	DRAWN ES	DATE 11/9/2018	<b>POWER FLOW SYSTEMS, INC.</b> 1585 AVIATION CENTER PKWY HANGAR 804 DAYTONA BEACH, FL 32114 		
	CHECKED	DIMENSIONS IN INCHES THIRD ANGLE		DWG NO. PFS-13702-IPC	DWG TITLE PFS-13701 TAILPIPE
ALL INFORMATION CONTAINED IN THIS DRAWING IS PROPRIETARY TO POWER FLOW SYSTEMS, INC.	SIZE D	SCALE	STOCK SIZE	MATERIAL	SHEET 2 OF 3

REVISIONS		
REV	DESCRIPTION	DATE

8

7

6

5

4

3

2

1

D

D

C

C

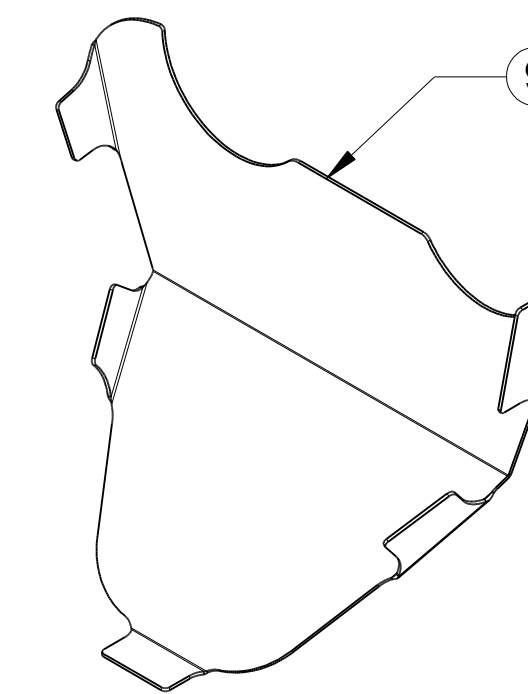
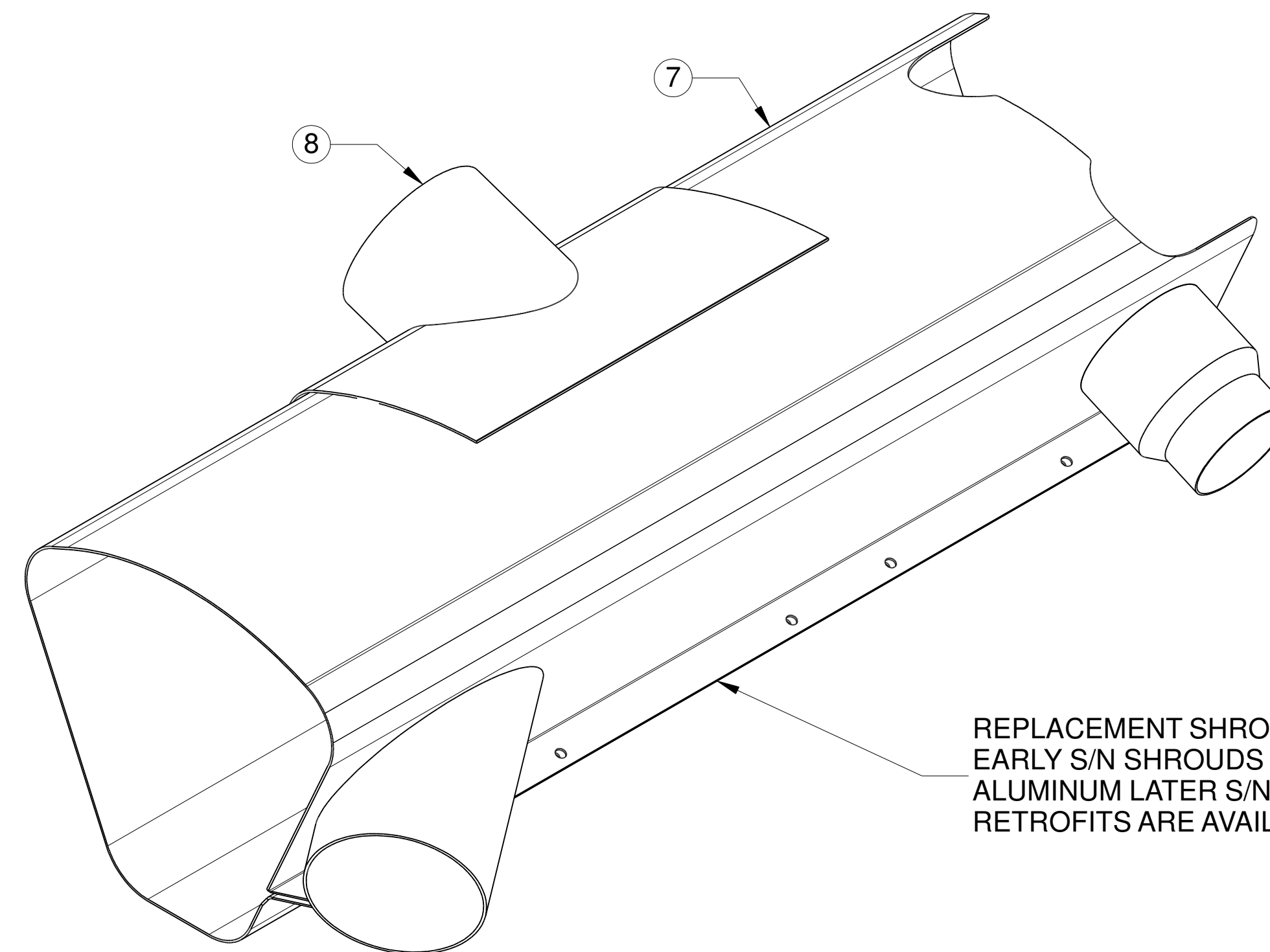
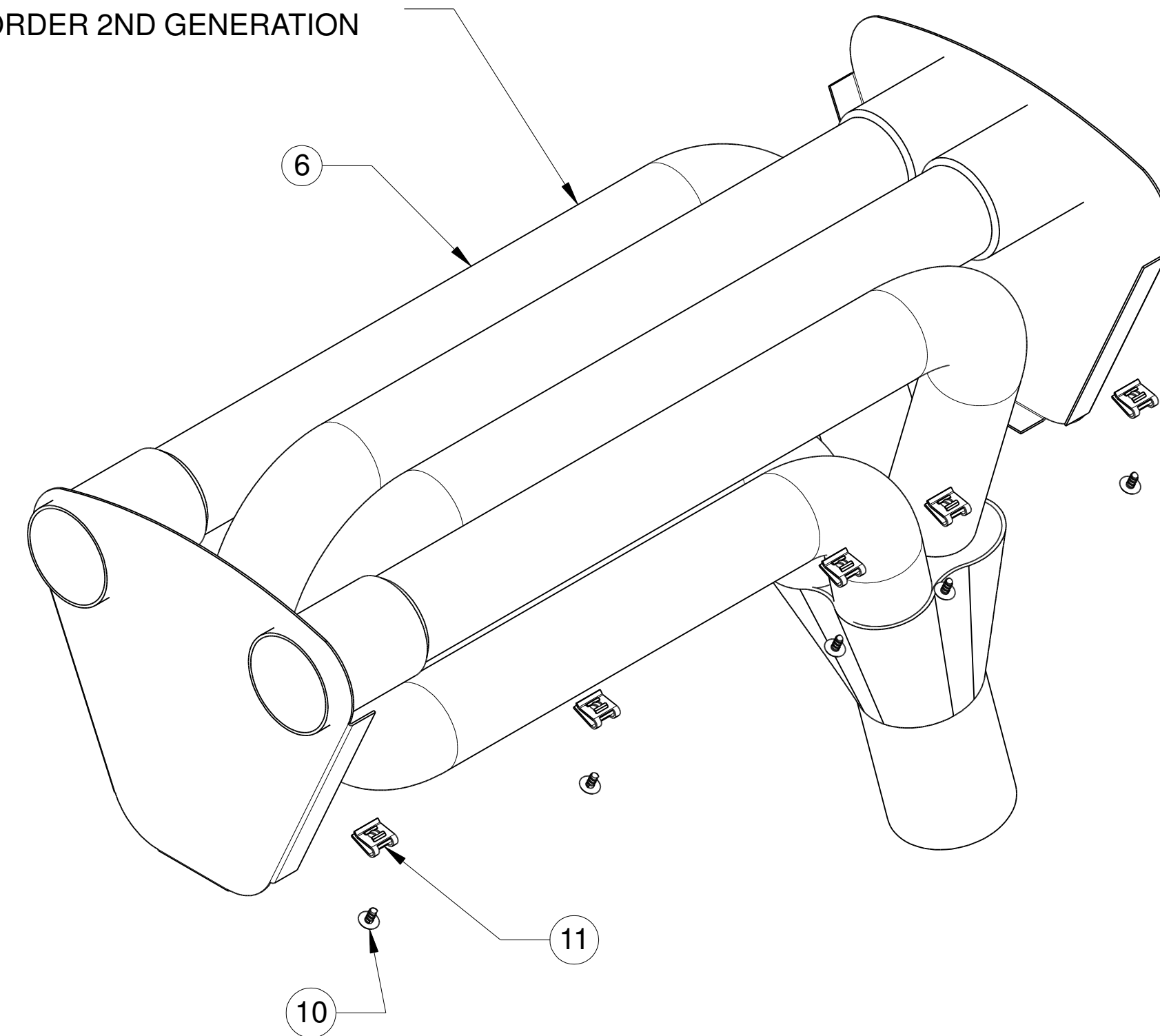
B

B

A

A

THE COLLECTOR IS NO LONGER IN PRODUCTION  
FOR REPLACEMENT ORDER 2ND GENERATION  
UPGRADE



REPLACEMENT SHROUDS ARE AVAILABLE  
EARLY S/N SHROUDS WERE MADE OF  
ALUMINUM LATER S/N ARE STAINLESS  
RETROFITS ARE AVAILABLE.

ANY EQUIVALENT AVIATION GRADE HARDWARE MAY BE USED

TOLERANCES  
EXCEPT AS NOTED  
XX ±0.1 0 ±2  
X.XX ±0.063 0.0 ±1  
X.XXX ±0.010 0.00 ±0.5

DRAWN  
ES

DATE  
11/9/2018

CHECKED

**POWER FLOW SYSTEMS, INC.**

1585 AVIATION CENTER PKWY  
HANGAR 804  
DAYTONA BEACH, FL 32114



DIMENSIONS IN INCHES  
THIRD ANGLE

DWG NO.  
PFS-13702-IPC

DWG TITLE  
PFS-13702 COLLECTOR

SIZE  
D

SCALE

STOCK SIZE

MATERIAL  
IR

REV  
3 OF 3

8

7

6

5

4

3

2

1

# PFS-13702 IPC BOM

**NOTE: COMMONLY ORDERED PARTS ARE BOLDED**

Item	Part Number	Description	Qty Per Assy	HW Pack #	Comment
1	11100	HEADER #1	1		
2	12160	HEADER #2	1		
3	13100	HEADER #3	1		
4	14160	HEADER #4	1		
5	41770S	SHROUDED COLLECTOR, C177	1		COLLECTOR NO LONGER AVAILABLE, NOW 2ND GEN UPGRADE
6	30001	COLLECTOR ASSEMBLY, ANNEALED	1		COLLECTOR NO LONGER AVAILABLE, NOW 2ND GEN UPGRADE
7	<b>51770S</b>	<b>SHROUD SUB-ASSEMBLY, C177</b>	<b>1</b>		INC. IN <b>PFS-51770S</b> EARLY SERIAL NUMBER ALUMINUM SHROUD NO LONGER AVAILABLE
8	4177S	SLIDER, STAINLESS	1		INC. IN PFS-51770S
9	6001S	SHROUD ENDPLATE, SS	1		INC. IN PFS-51770S
10	8Rx3/8THBSS	SHROUD SCREW	19		INC. IN PFS-51770S
11	D1274-8-1	TINNERMAN CLIP	19		INC. IN PFS-51770S
12	<b>7020</b>	<b>CLAMP, 2IN, PINNED, POLISHED</b>	<b>1</b>		
13	80177-CER	STUFFED MUFFLER, CERAMIC COATED	1		OPTIONAL, CERAMIC FINISH
13	80177	STUFFED MUFFLER	1		POLISHED FINISH
14	8020	MUFFLER BODY	1		INC. IN 80177
15	<b>8016</b>	<b>WRAPPED MUFFLER INSERT</b>	<b>1</b>		INC. IN 80177 OR <b>PFS-8016</b>
16	AN526C832R6	SCREW, #8 X 3/8, CRES	4		INC. IN 80177 OR PFS-8016
17	MS21042L08	NUT, LOCKING, #8	4		INC. IN 80177 OR PFS-8016
18	<b>8030</b>	<b>CLAMP, MUFFLER, POLISHED</b>	<b>1</b>		
19	90030	SUPPORT ROD, C177	1		
	10320	HW PACK, HEADERS AND CLAMPS	1		
20	77611	LYCOMING EXHAUST GASKET	4	10320	
21	94819A045	ASTM F594 S/S HEX NUT 5/16-18	8	10320	
22	AN4C5A	BOLT, 1/4IN, UNDRILLED, CRES	2	10320	REPLACES DRILLED BOLT (ITEM 27)
23	AN960-516	WASHER, PLAIN, 5/16	8	10320	
24	AN960C416	WASHER, PLAIN, 1/4, CRES	4	10320	
25	MS21045C4	NUT, LOCKING, 1/4, CRES	2	10320	REPLACES CASTLE NUT (ITEM 28) AND COTTER PIN (ITEM 29)
26	MS35333-41	WASHER LOCKING, 5/16	8	10320	
27	AN4C5	BOLT, 1/4IN, DRILLED, CRES	2		SUPERSEDED BY UNDRILLED BOLT (ITEM 22), SEE 10362
28	MS24665-153	COTTER PIN	2		SUPERSEDED BY LOCKING NUT (ITEM 25), SEE 10362

## PFS-13702 IPC BOM

29		AN310C4	NUT, CASTLE, 1/4, CRES	2		SUPERSEDED BY LOCKING NUT (ITEM 25), SEE 10362
	10322		HW PACK, ADEL CLAMP	1		
30		AN960C10	WASHER, PLAIN, 3/16, CRES	2	10322	
31		CCP-32	RIVET, BLIND STAINLESS, 3/32", 0.04"	6	10322	
32		MS21044C3	NUT, NYLOCK, 3/16, CRES	11	10322	
33		MS21919WH12	CLAMP, ADEL, #12	1	10322	
34		MS21919WH6	CLAMP, ADEL, 3/8	1	10322	
35		MS51958-63	SCREW, PANHEAD, #10x1/2"	1	10322	
	<b>10362</b>					<b>REPLACEMENT PACK FOR ITEMS 22, 24 AND 25</b>
	22	AN4C5A	BOLT, 1/4IN, UNDRILLED, CRES	1	10362	
	24	AN960C416	WASHER, PLAIN, 1/4, CRES	2	10362	
	25	MS21045C4	NUT, LOCKING, 1/4, CRES	1	10362	