

# F4U4



## *Illustrated* **ASSEMBLY BREAKDOWN**

This booklet has been prepared by the Publications Section of the Engineering Department at the request of Tool Engineering. It is designed to be used as a ready reference for major assembly numbers of the airplane by all departments of our Company and its subcontractors.

SEPTEMBER 1, 1944

M. SCHWARTZ

CHANCE VOUGHT AIRCRAFT • STRATFORD, CONNECTICUT

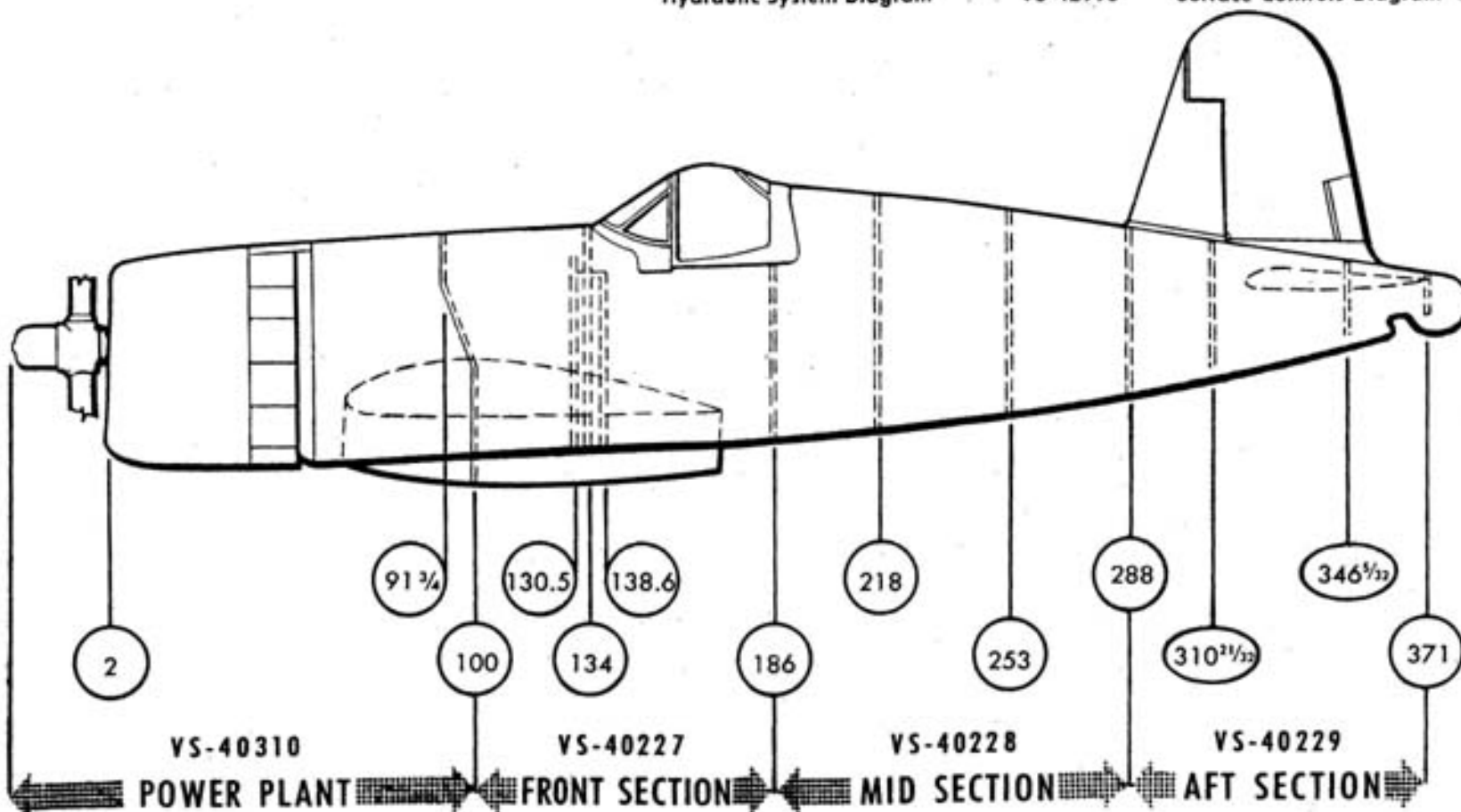
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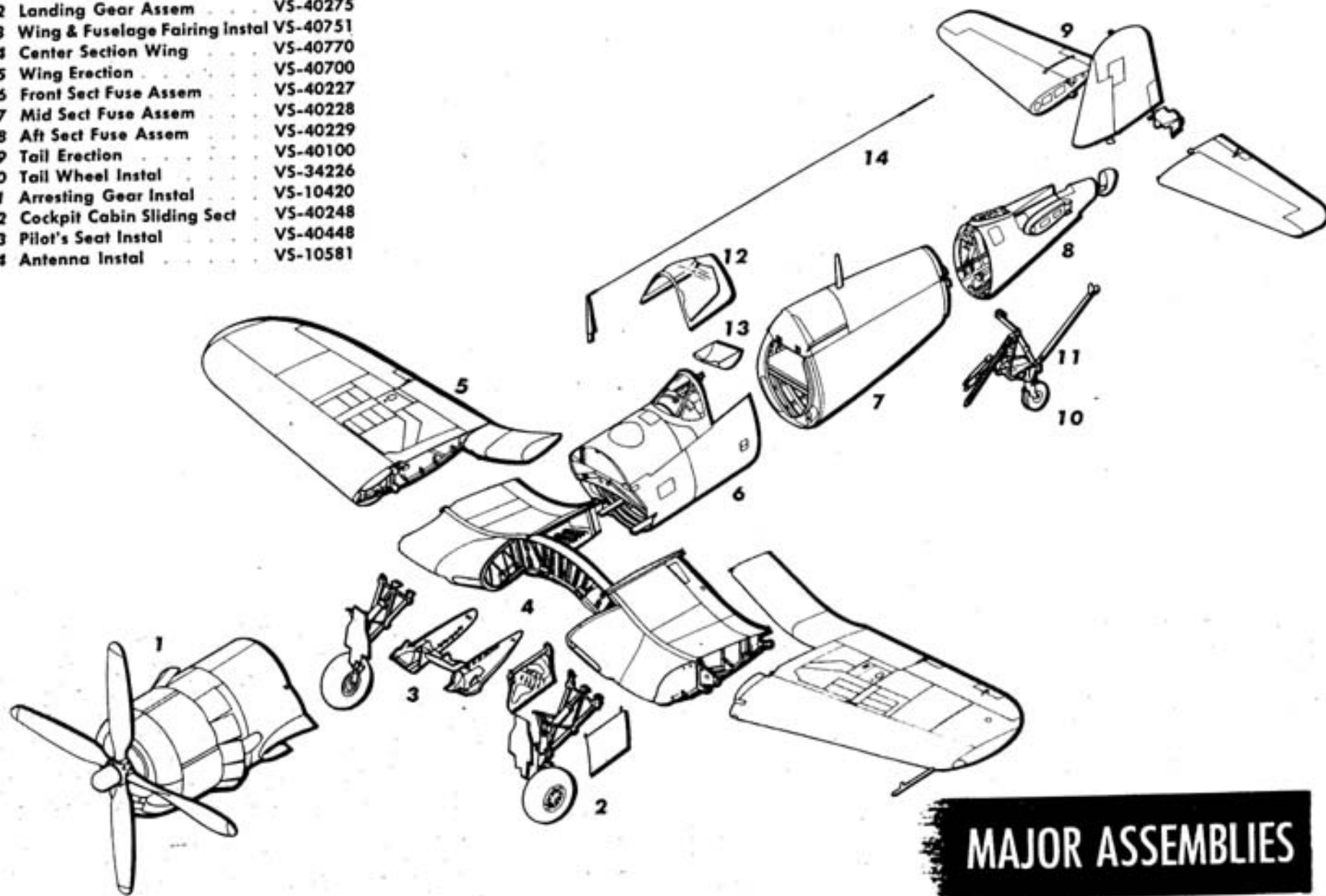
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# PROFILE

General Arrangements . . . . .	VS-40601	Hydraulic System Rigging . . . . .	VS-42997
Armor Plating Arrange . . . . .	VS-44014	Inboard Profile . . . . .	VS-40600
Bomb & Drop Tank Instal . . . . .	VS-33540	Lines Drawing Body . . . . .	VS-40201
Box of Loose Equipment . . . . .	VS-45075	Lubricating System . . . . .	VS-40307
Catapult Arrangement . . . . .	VS-37481	Lubricating System Diagram . . . . .	VS-43064
Droppable Tank Assem — Aux . . . . .	VS-40303	Markings F4U-4 Airplane . . . . .	VS-40900
Electrical System . . . . .	VS-44018	Oiling Diagram . . . . .	VS-43065
Electrical System Wiring Diagram . . . . .	VS-44019	Parachute & Liferaft Arrange . . . . .	VS-45005
Elevator, Rudder & Tab Controls . . . . .	VS-40404	Radio & Cable Instal Identif . . . . .	VS-40535
Forward Fuselage Unit . . . . .	VS-40250	Radio & Cable Instal Commun . . . . .	VS-40525
Front & Center Sect Unit Assem . . . . .	VS-40225	Rear Fuselage Unit . . . . .	VS-40210
Fuselage Assem Body Group . . . . .	VS-40200	Tail Rise Calculation . . . . .	VS-44021
Ground Handling Equipment . . . . .	VS-45165	Towing & Tie-Down Diagram . . . . .	VS-45003
Hydraulic System Diagram . . . . .	VS-42998	Surface Controls Diagram . . . . .	VS-44017



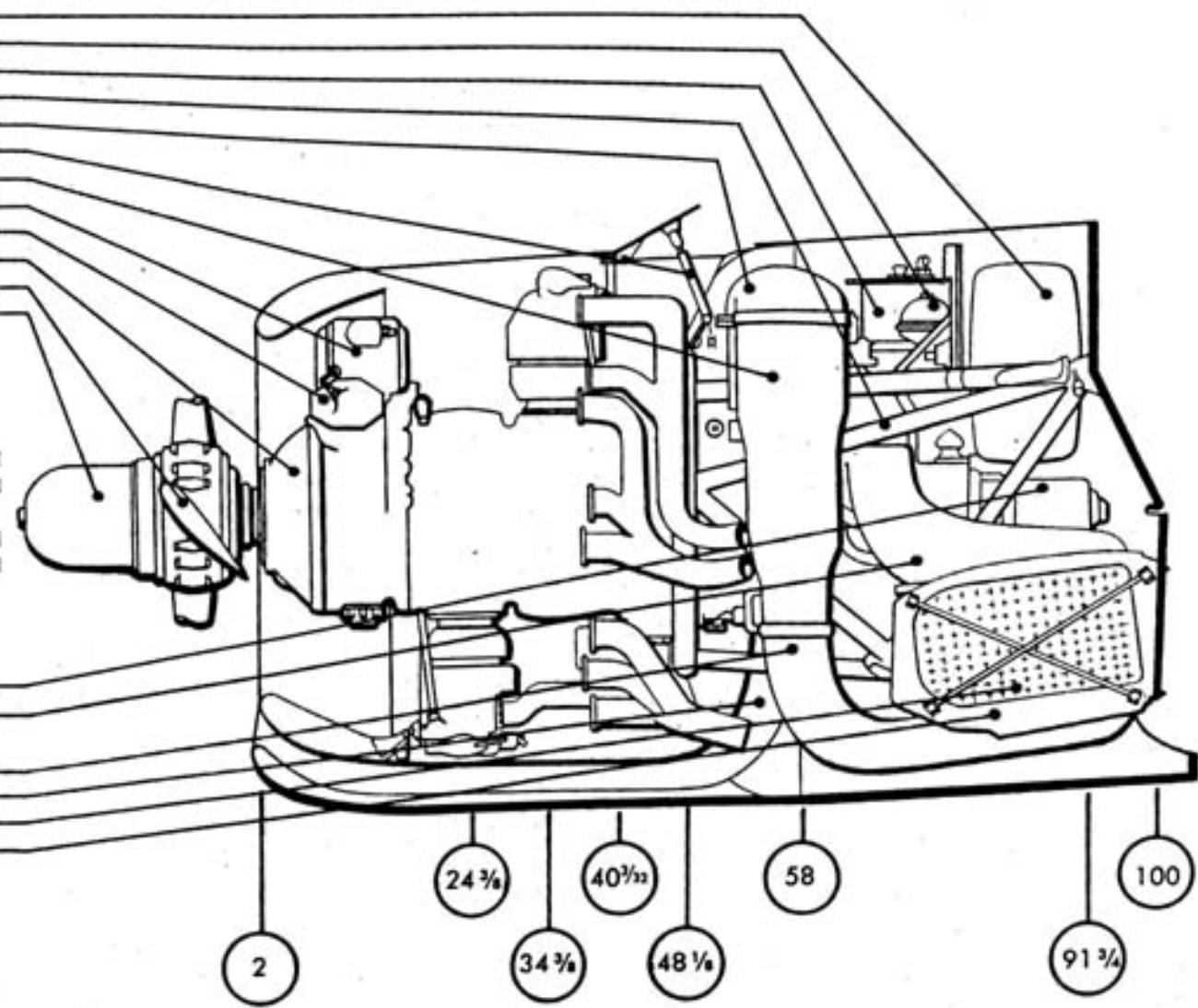
- |                                  |          |
|----------------------------------|----------|
| 1 Power Plant Unit               | VS-40310 |
| 2 Landing Gear Assem             | VS-40275 |
| 3 Wing & Fuselage Fairing Instal | VS-40751 |
| 4 Center Section Wing            | VS-40770 |
| 5 Wing Erection                  | VS-40700 |
| 6 Front Sect Fuse Assem          | VS-40227 |
| 7 Mid Sect Fuse Assem            | VS-40228 |
| 8 Aft Sect Fuse Assem            | VS-40229 |
| 9 Tail Erection                  | VS-40100 |
| 10 Tail Wheel Instal             | VS-34226 |
| 11 Arresting Gear Instal         | VS-10420 |
| 12 Cockpit Cabin Sliding Sect    | VS-40248 |
| 13 Pilot's Seat Instal           | VS-40448 |
| 14 Antenna Instal                | VS-10581 |



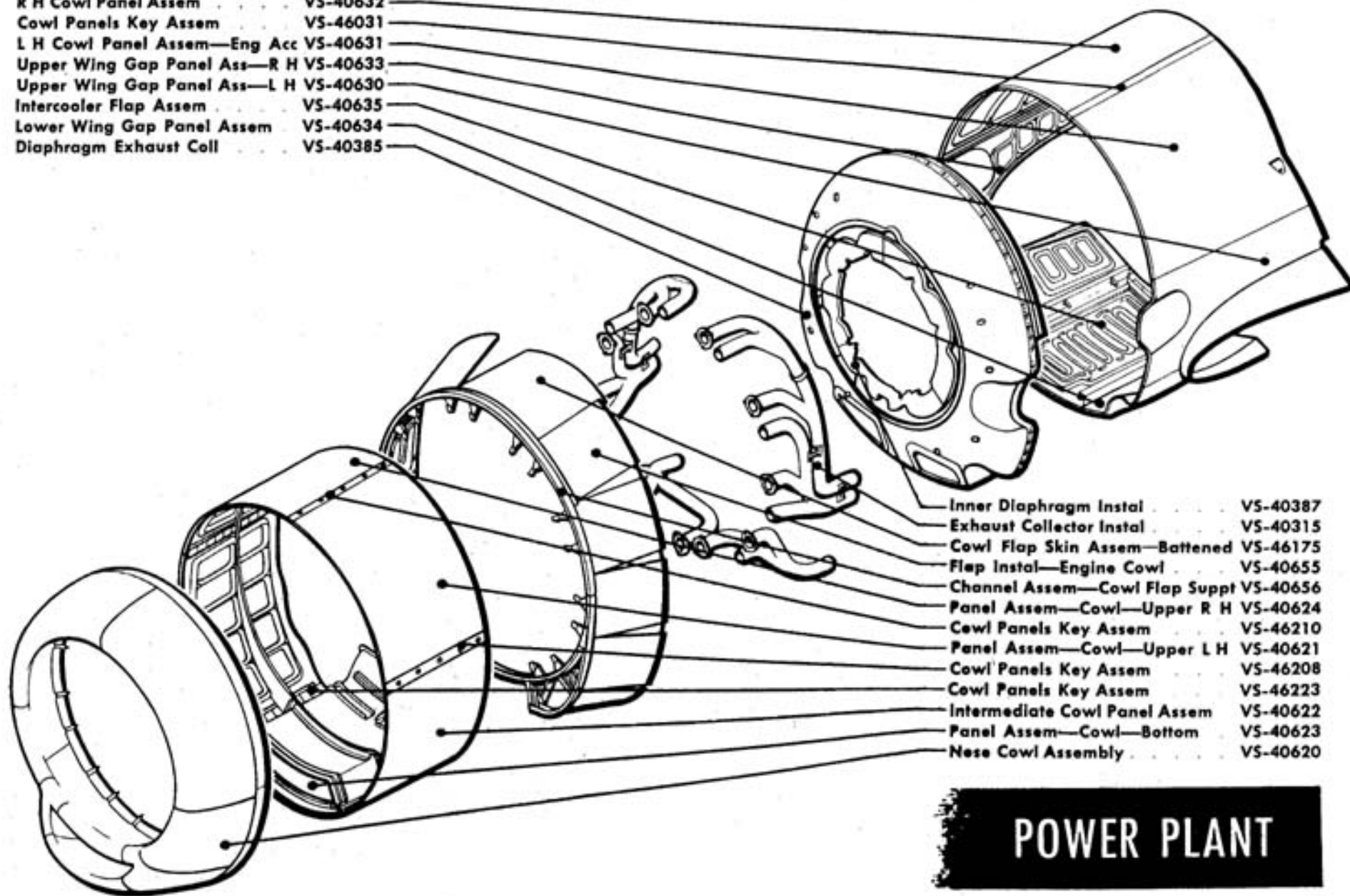
## MAJOR ASSEMBLIES

# POWER PLANT

- Power Plant Unit . . . . . VS-40310
- Oil Tank Assem . . . . . VS-43306
- Hydraulic Accumulator . . . . . VS-12281
- Hydraulic Reservoir Assem . . . . . VS-48088
- Engine Mount & Attach Parts . . . . . VS-40640
- Carburetor Air Box Assem . . . . . VS-40335
- Automatic Cowl Flap Controls . . . . . VS-
- Intermediate Intercool Duct Assem . . . . . VS-40340
- Magneto . . . . . DF-18LU-2
- Distributor . . . . .
- Engine—Pratt & Whitney . . . . . R-2800-18-W
- Propeller Blade—Hamilton Std . . . . . 6507-A-0
- Propeller Hub—Hamilton Std . . . . . 24E60
- Aux Stage Air Exit Duct Assem . . . . . VS-40337
- Blower Drain Instal . . . . . VS-40308
- Electrical System Instal . . . . . VS-40430
- Engine Accessories . . . . . VS-40302
- Engine Controls Instal . . . . . VS-40301-1
- Fuel System Instal . . . . . VS-40325-1
- Hydraulic System Instal . . . . . VS-40271
- Instrument Instal . . . . . VS-40470-1
- Lubricating System . . . . . VS-40307-1
- Power Plant Instal . . . . . VS-40300
- Removable Section . . . . . VS-40350
- Res, Valves, Accum, & Pan Assem . . . . . VS-48001
- Starter Instal—Jack & Heintz . . . . . JH4NER
- Intercool Air Ent Duct Assem—L H . . . . . VS-40338
- Intercool Air Ent Duct Assem—R H . . . . . VS-40348
- Intercool Air Exit Duct Assem . . . . . VS-40339
- Aux Stage Air Entrance Duct Assem . . . . . VS-40336
- Intercooler—Engine Access . . . . . VS-40395
- Intercooler Suppt Rib Assem—L H . . . . . VS-40323
- Intercooler Suppt Rib Assem—R H . . . . . VS-40324
- Vac Pump & Oil Separator Instal . . . . . VS-40396
- Water Injection System . . . . . VS-40327
- Water Tank Assem—Water Inject . . . . . VS-40328



- Cowling Instal . . . . . VS-40645
- R H Cowl Panel Assem . . . . . VS-40632
- Cowl Panels Key Assem . . . . . VS-46031
- L H Cowl Panel Assem—Eng Acc VS-40631
- Upper Wing Gap Panel Ass—R H VS-40633
- Upper Wing Gap Panel Ass—L H VS-40630
- Intercooler Flap Assem . . . . . VS-40635
- Lower Wing Gap Panel Assem . . . VS-40634
- Diaphragm Exhaust Coll . . . . . VS-40385

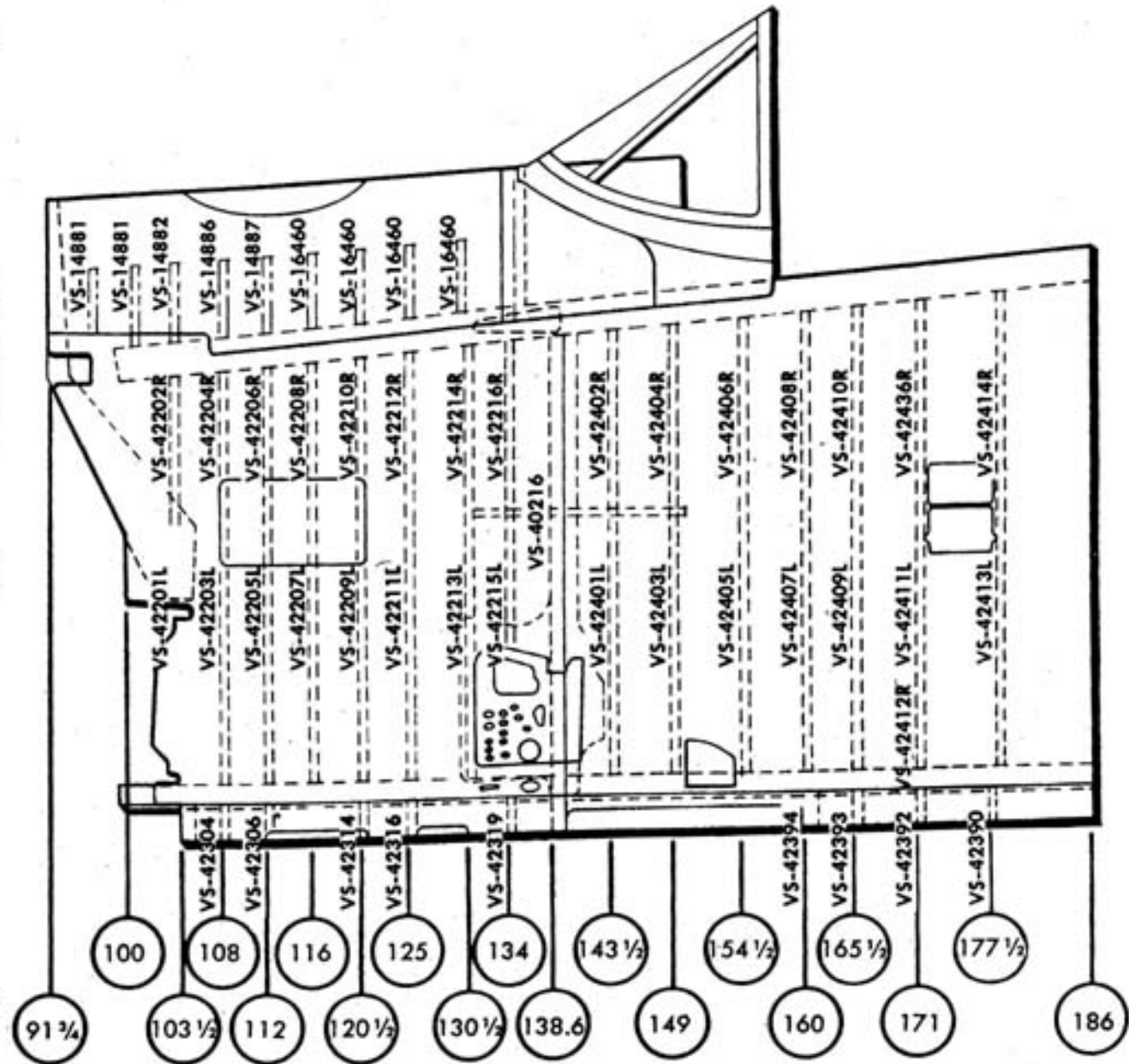


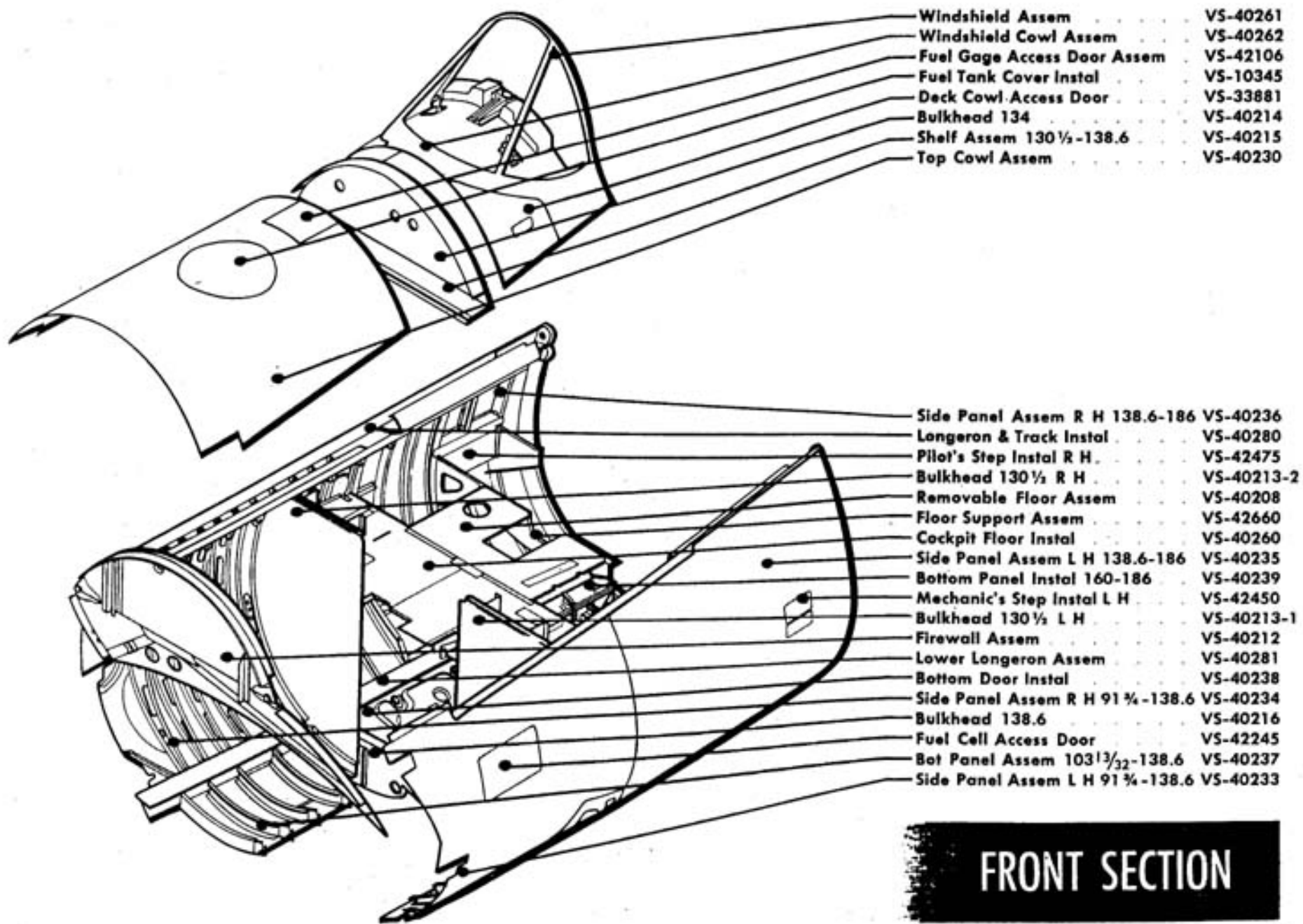
- Inner Diaphragm Instal . . . . . VS-40387
- Exhaust Collector Instal . . . . . VS-40315
- Cowl Flap Skin Assem—Battened VS-46175
- Flap Instal—Engine Cowl . . . . . VS-40655
- Channel Assem—Cowl Flap Suppt VS-40656
- Panel Assem—Cowl—Upper R H VS-40624
- Cowl Panels Key Assem . . . . . VS-46210
- Panel Assem—Cowl—Upper L H VS-40621
- Cowl Panels Key Assem . . . . . VS-46208
- Cowl Panels Key Assem . . . . . VS-46223
- Intermediate Cowl Panel Assem VS-40622
- Panel Assem—Cowl—Bottom . . . VS-40623
- Nose Cowl Assembly . . . . . VS-40620

**POWER PLANT**

# FRONT SECTION

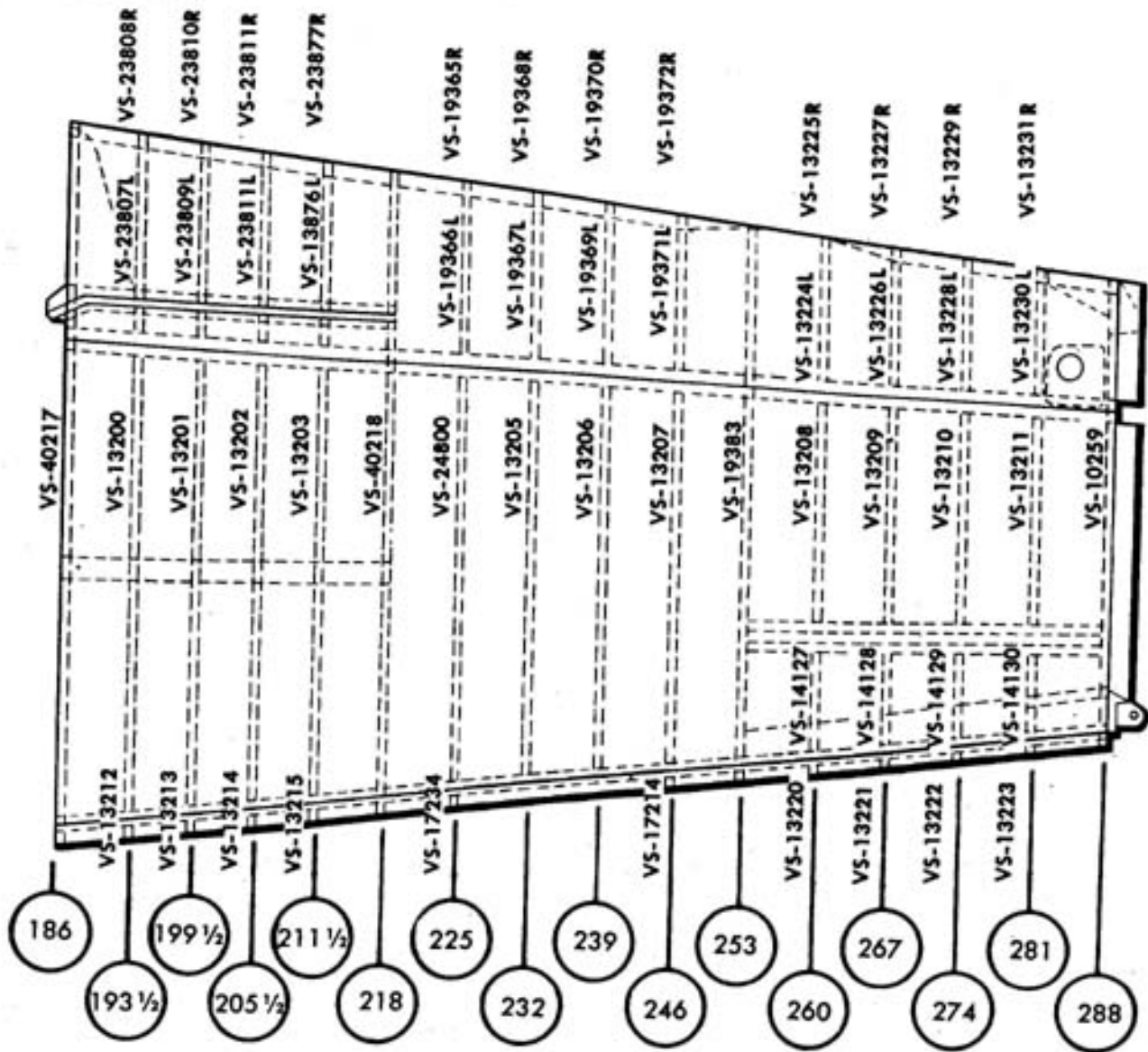
Front Section Assem	VS-40227
Aux Control Panel Instal Vert	VS-40415
Aux Control Panel Instal Horiz	VS-40414
Brake Instal Low Press Pedal	VS-48957
Canvas Floor Assem	VS-44850
Chartboard Stowage Holder Instal	VS-44462
Checkoff List—Cockpit	VS-40557
Cockpit Ventilator Instal	VS-40442-1
Cowl & Windshield Assem	VS-40266
Electrical Instal	VS-40431
Elevator, Rudder & Tab Controls	VS-40404-2
Engine Controls Instal	VS-40301-2
Fuel System Instal	VS-40325-2
Fumeproof Instal	VS-40293
Fumeproof Instal Bikhd 130 1/2-134	VS-40268
Fumeproof Instal Firewall	VS-40269
Hydraulic System Instal	VS-40273
Illuminated Gun Sight Instal	VS-40507
Instrument Instal	VS-40470-2
Lubricating System	VS-40307-2
Main Fuel Tank Instal	VS-40326
Main Fuel Tank Sheath Instal	VS-40320
Main Instrument Board Instal	VS-40411
Man Bomb & Drop Tank Release	VS-44693
Oxygen System Instal	VS-40550
Pedal, Rudder & Brake Controls	VS-40410
Pilot's Seat Instal	VS-40448
Radio Control Box Instal	VS-44025
Relief Tube Instal	VS-40558
Shell Assem L H	VS-40231
Shell Assem R H	VS-40232
Signal Pistol Support Instal	VS-40556
Sliding Section Instal	VS-40248
Sliding Section Control Instal	VS-40211
Stick & Rudder Pedal Lock Assem	VS-44500
Stick & Torque Tube Controls	VS-40405
Tail Wheel Lock Ind Controls	VS-40417-2
Windshield Defrosting Instal	VS-40441-1
Wing Flap Controls	VS-45004



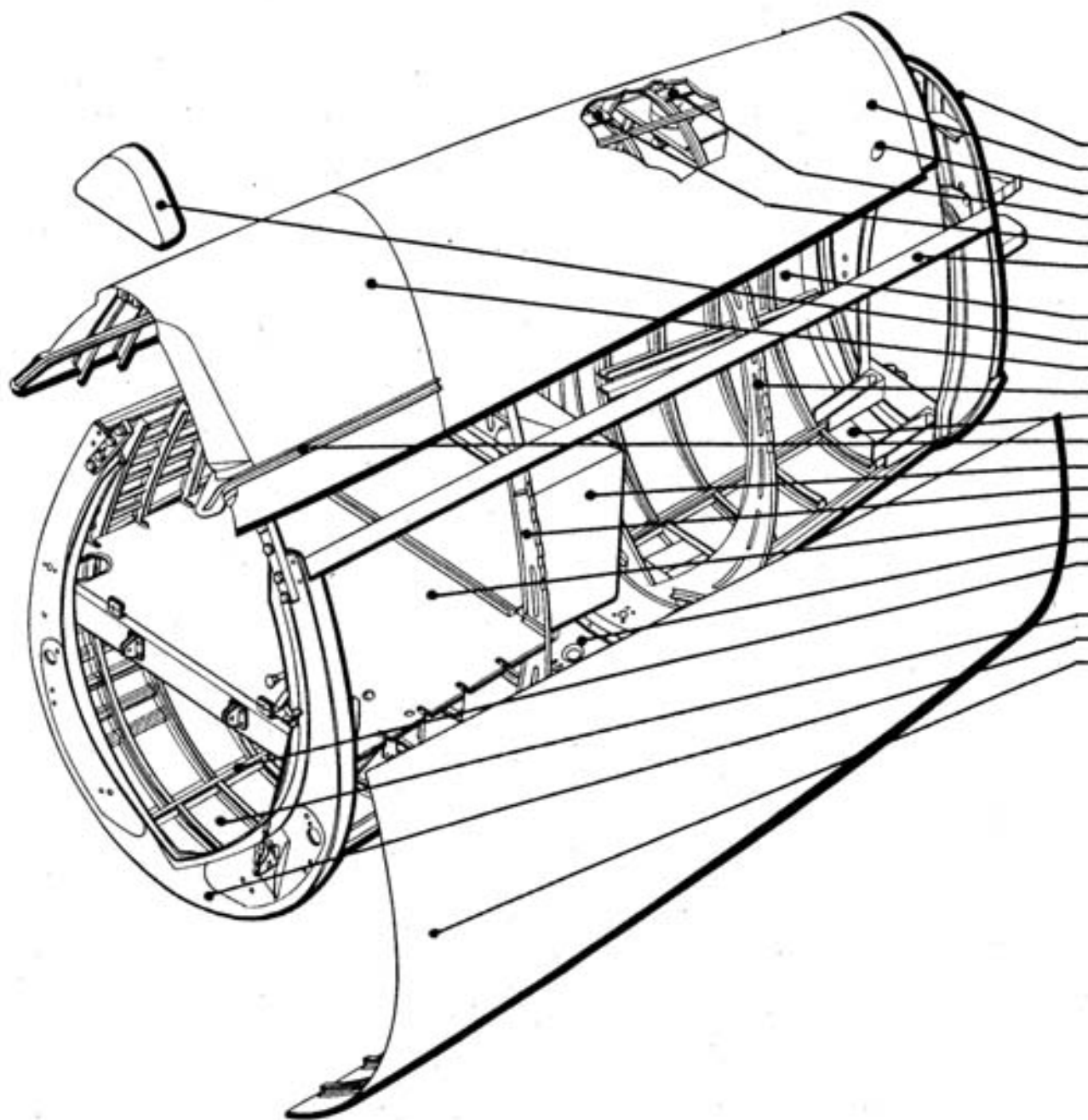


**FRONT SECTION**

# MID SECTION







Mid Section Fuse Assem	VS-40228
Fumeproofing—Mid Section	VS-40294
Fumeproofing—Blkhd 218	VS-40279

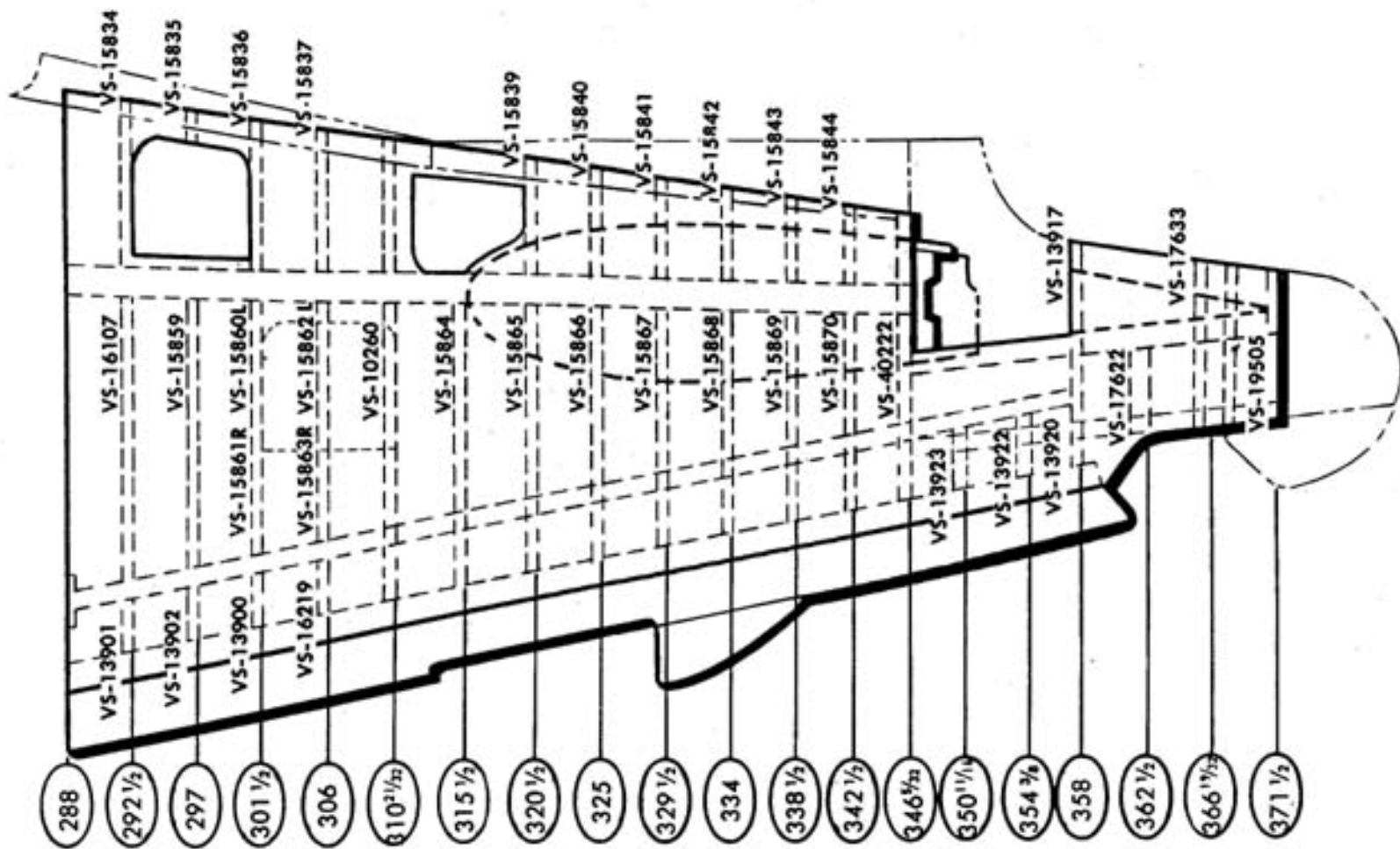
Bulkhead 288	VS-10259
Aft Turtledeck Assem 218-288	VS-19360-1
Lift Tube Instal	VS-10818
Top Longeron 259 1/2-288	VS-12254-3
Top Longeron 186-253	VS-19359
Upper Longeron Assem L H	VS-12244-2
Upper Longeron Assem R H	VS-12244-1
Side Panel Assem R H	VS-40242
Head Rest Instal	VS-40496
Turtledeck Panel Assem 186-218	VS-23804
Bulkhead 253	VS-19383
Bottom Panel Assem—246-288	VS-11834-7
Track Instal	VS-11203
Baggage Compartment Instal	VS-45013
Bulkhead 218	VS-40218
Radio Compartment Floor	VS-33800-2
Bottom Access Door	VS-17243
Lower Longeron Assem R H	VS-12245-1
Lower Longeron Assem L H	VS-12245-2
Bottom Panel Assem 186-225	VS-40267
Bulkhead 186	VS-40217
Side Panel Assem L H	VS-40241

Armor Plate Instal	VS-48760
Electrical System Instal	VS-40432
Fumeproofing Sta 218	VS-40279
Hydraulic System Instal	VS-40276
Reel Instal	VS-44876
Tow Target Release Instal	VS-44022
Turtledeck Assem Complete	VS-40245

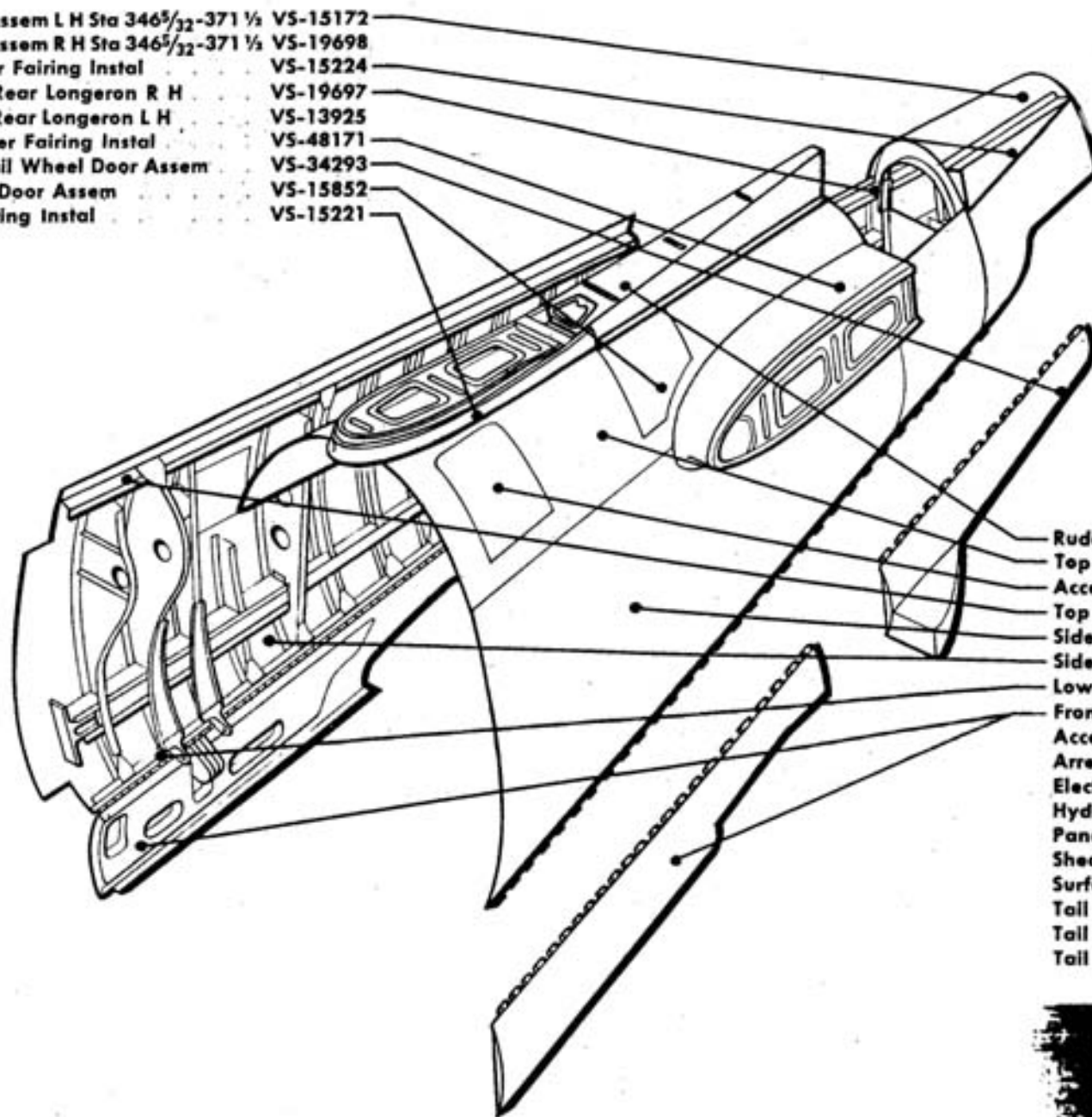
## MID SECTION

# AFT SECTION

Aft Section Fuselage	VS-40229
Rear Fuselage Assem	VS-40209
Rear Fuselage Unit	VS-40210
Tail Cone Assem	VS-19504



- Panel Assem L H Sta 346<sup>5</sup>/<sub>32</sub>-371 <sup>1</sup>/<sub>2</sub> VS-15172
- Panel Assem R H Sta 346<sup>5</sup>/<sub>32</sub>-371 <sup>1</sup>/<sub>2</sub> VS-19698
- Elevator Fairing Instal VS-15224
- Upper Rear Longeron R H VS-19697
- Upper Rear Longeron L H VS-13925
- Stabilizer Fairing Instal VS-48171
- Rear Tail Wheel Door Assem VS-34293
- Access Door Assem VS-15852
- Fin Fairing Instal VS-15221

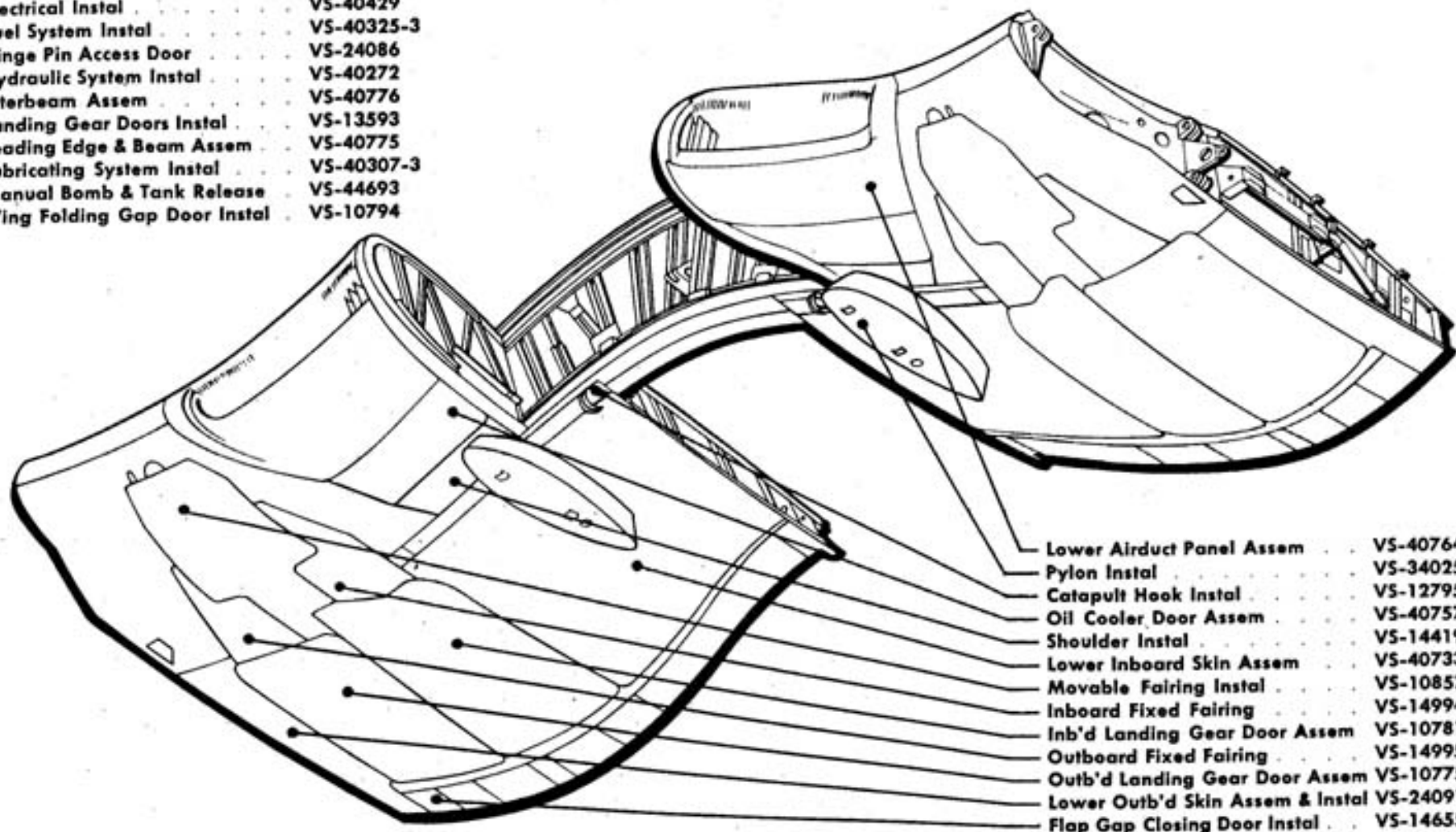


- Rudder Fairing Instal VS-15222
- Top Panel Assem VS-15266
- Access Door Assem VS-15849
- Top Longeron Assem VS-15877
- Side Panel Assem L H VS-15857
- Side Panel Assem R H VS-15265
- Lower Longeron Assem VS-15878
- Front Tail Wheel Door Assem VS-34282
- Access Door Sta 306 R H VS-15874
- Arresting Gear Instal VS-10420
- Electrical Instal VS-40432
- Hydraulic Instal VS-40276
- Panel Assem Sta 346<sup>5</sup>/<sub>32</sub>-371 <sup>1</sup>/<sub>2</sub> VS-15171
- Shear Vee Truss Instal VS-15833
- Surface Control Instal VS-40404-4
- Tail Wheel Door Mech Instal VS-12850
- Tail Wheel Instal VS-34226
- Tail Wheel Lock Pos Ind VS-40417-4

## AFT SECTION

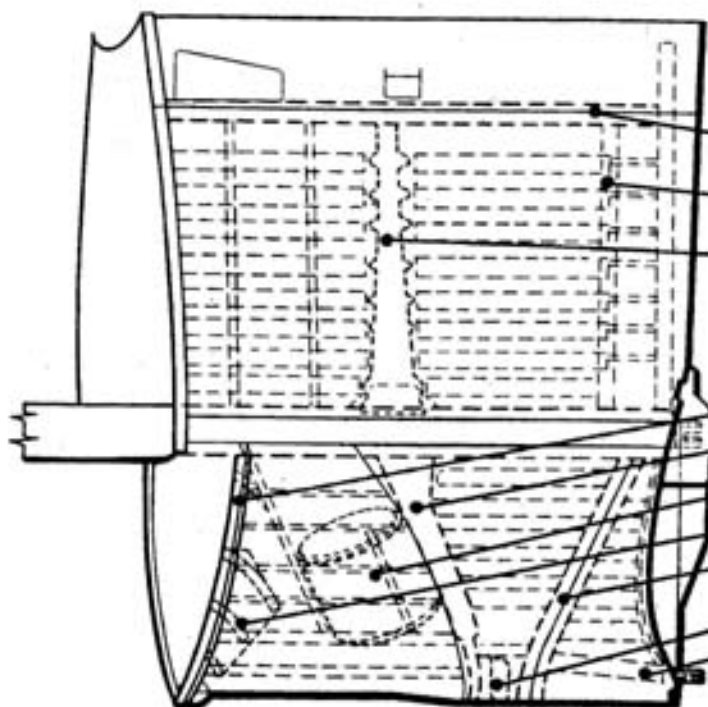
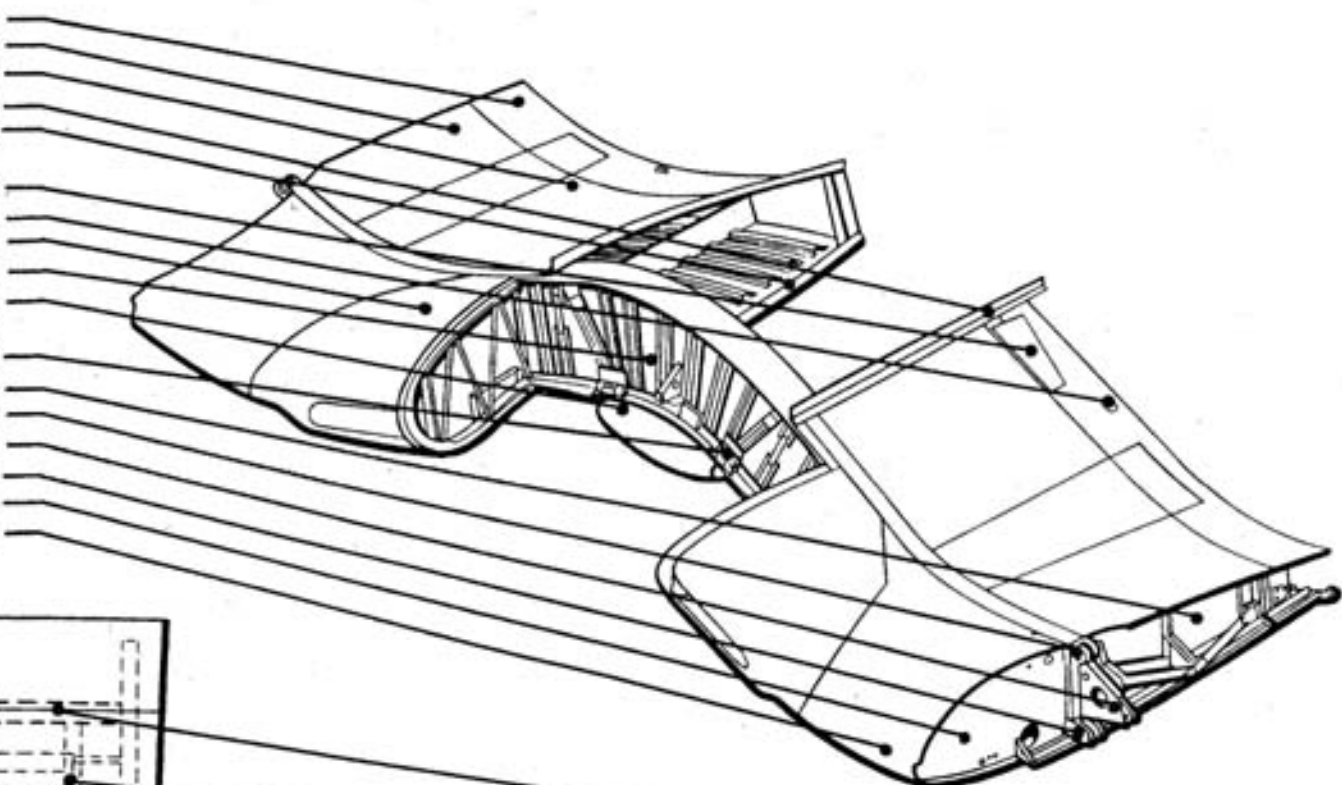
# CENTER SECTION

Center Section Assem . . . . .	VS-40770
Aileron Controls Instal . . . . .	VS-10475
Electrical Instal . . . . .	VS-40429
Fuel System Instal . . . . .	VS-40325-3
Hinge Pin Access Door . . . . .	VS-24086
Hydraulic System Instal . . . . .	VS-40272
Interbeam Assem . . . . .	VS-40776
Landing Gear Doors Instal . . . . .	VS-13593
Leading Edge & Beam Assem . . . . .	VS-40775
Lubricating System Instal . . . . .	VS-40307-3
Manual Bomb & Tank Release . . . . .	VS-44693
Wing Folding Gap Door Instal . . . . .	VS-10794



Lower Airduct Panel Assem . . . . .	VS-40764
Pylon Instal . . . . .	VS-34025
Catapult Hook Instal . . . . .	VS-12795
Oil Cooler Door Assem . . . . .	VS-40757
Shoulder Instal . . . . .	VS-14419
Lower Inboard Skin Assem . . . . .	VS-40733
Movable Fairing Instal . . . . .	VS-10857
Inboard Fixed Fairing . . . . .	VS-14994
Inb'd Landing Gear Door Assem . . . . .	VS-10781
Outboard Fixed Fairing . . . . .	VS-14995
Outb'd Landing Gear Door Assem . . . . .	VS-10775
Lower Outb'd Skin Assem & Instal . . . . .	VS-24091
Flap Gap Closing Door Instal . . . . .	VS-14655

Trailing Edge Assem	VS-15754
Upper Outboard Skin Assem	VS-15589
Upper Inboard Skin Assem	VS-40732
Upper Fuse Attach Angle	VS-47098
Lower Fuse Attach Angle R H	VS-47097
Lower Fuse Attach Angle L H	VS-47099
Step Assem	VS-13520
Handgrip Instal	VS-10772
Upper Airduct Panel Assem	VS-40763
Main Beam Assem	VS-40772
Firewall Shoulder Assem	VS-40285
Firewall Shoulder Instal	VS-40286
Lower Eng Mt Attach Socket	VS-10709
Interbeam End Rib Instal	VS-40707
Upper Hinge Fitting	VS-10717
Wing Folding Support Assem	VS-10719
Lower Hinge Fitting	VS-10718
L E End Rib Instal	VS-10704
Outboard Leading Edge Assem	VS-14760

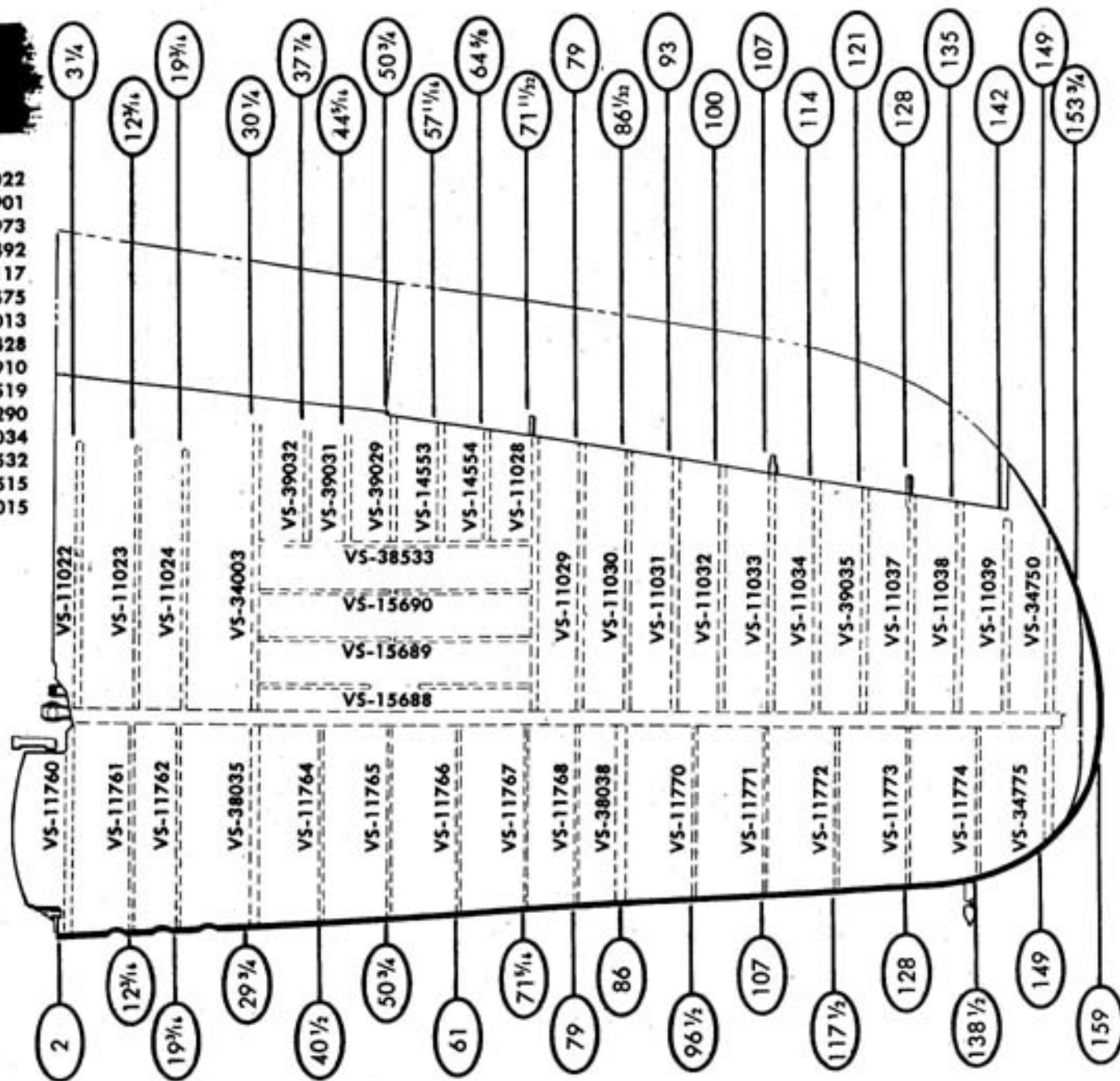


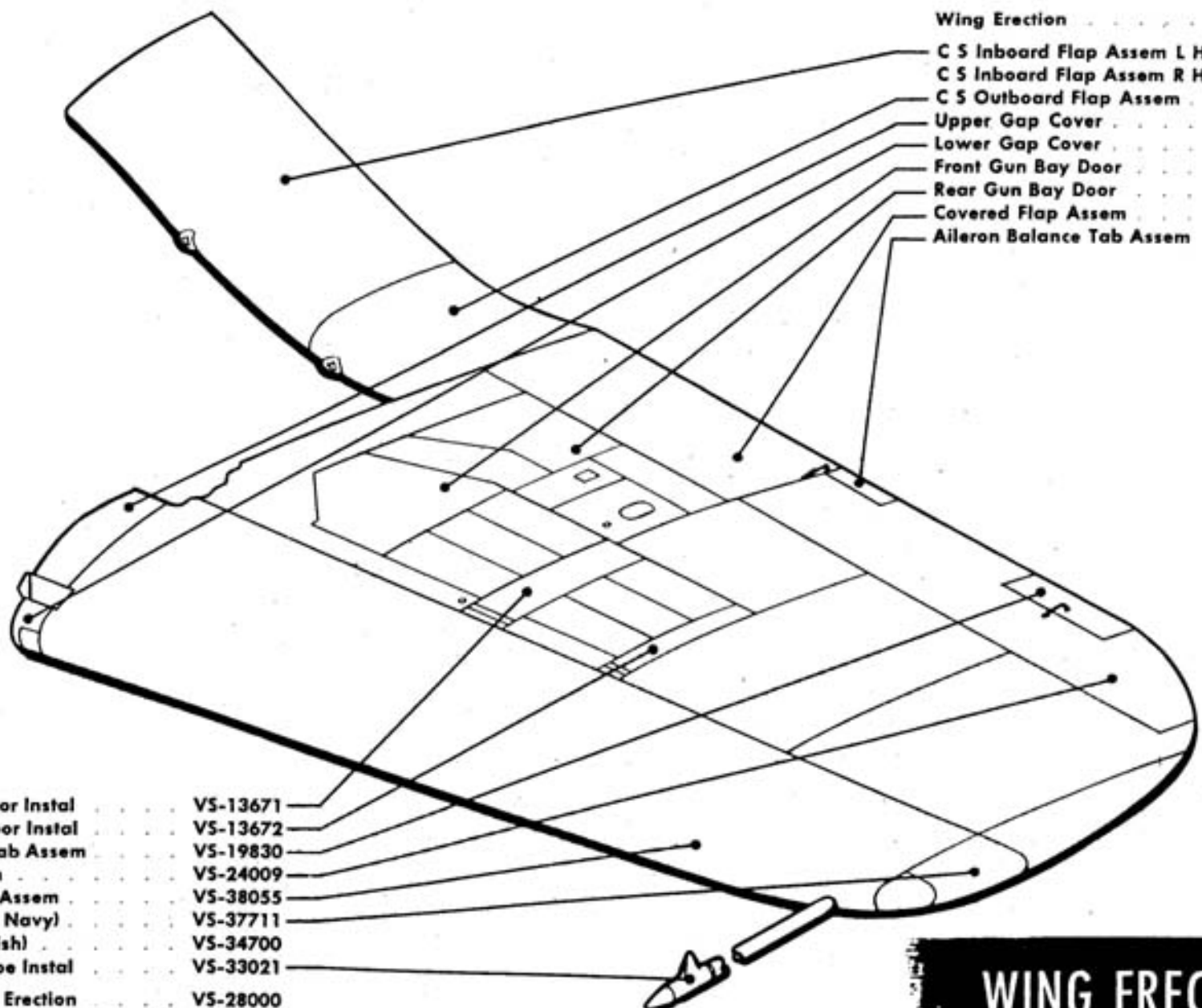
Rear Beam Assem	VS-10073
Interbeam Inb'd Rib Instal	VS-40706
Interbeam Inb'd Rib Instal	VS-10705
Inboard Air Duct Rib Instal	VS-40701
Inboard Diagonal Rib Instal	VS-10702
Oil Cooler L H	VS-12307
Oil Cooler R H	VS-12306
Vane & Partition Instal	VS-47100
Outb'd Diagonal Rib Instal	VS-10703
Landing Knuckle Fitting	VS-10007
Wing Hinge Beam Instal	VS-10786

## CENTER SECTION

# OUTER PANEL

Wing Assem	VS-38022
Aileron Control Instal	VS-10901
Aileron Tab Control Instal	VS-10973
Airspeed Tubing Instal	VS-19492
Beam Assem	VS-38117
Camera Instal	VS-10575
Covered Panel Assem	VS-38013
Electrical Instal	VS-34428
Flap Control Rod Instal	VS-10910
Gun Instal	VS-10519
Hydraulic System	VS-12290
Rib, Skin & Stringer Assem	VS-38034
Rib Instal Sta 30 1/4 to 37 1/4	VS-38532
Rocket Instal	VS-40515
Skeleton Panel Assem	VS-38015





- Wing Erection . . . . . VS-40700
- C S Inboard Flap Assem L H . . . . . VS-10069
- C S Inboard Flap Assem R H . . . . . VS-37769
- C S Outboard Flap Assem . . . . . VS-10068
- Upper Gap Cover . . . . . VS-11714
- Lower Gap Cover . . . . . VS-11716
- Front Gun Bay Door . . . . . VS-16553
- Rear Gun Bay Door . . . . . VS-16552
- Covered Flap Assem . . . . . VS-38776
- Aileron Balance Tab Assem . . . . . VS-24013

- Gap Cover Door Instal . . . . . VS-13671
- Gap Cover Door Instal . . . . . VS-13672
- Aileron Trim Tab Assem . . . . . VS-19830
- Aileron Assem . . . . . VS-24009
- Leading Edge Assem . . . . . VS-38055
- Tip Instal (U S Navy) . . . . . VS-37711
- Tip Instal (British) . . . . . VS-34700
- Pitot Static Tube Instal . . . . . VS-33021
- Cannon Wing Erection . . . . . VS-28000
- Inboard Flap Gap Clos Door . . . . . VS-13589
- Outboard Flap Gap Clos Door . . . . . VS-23009

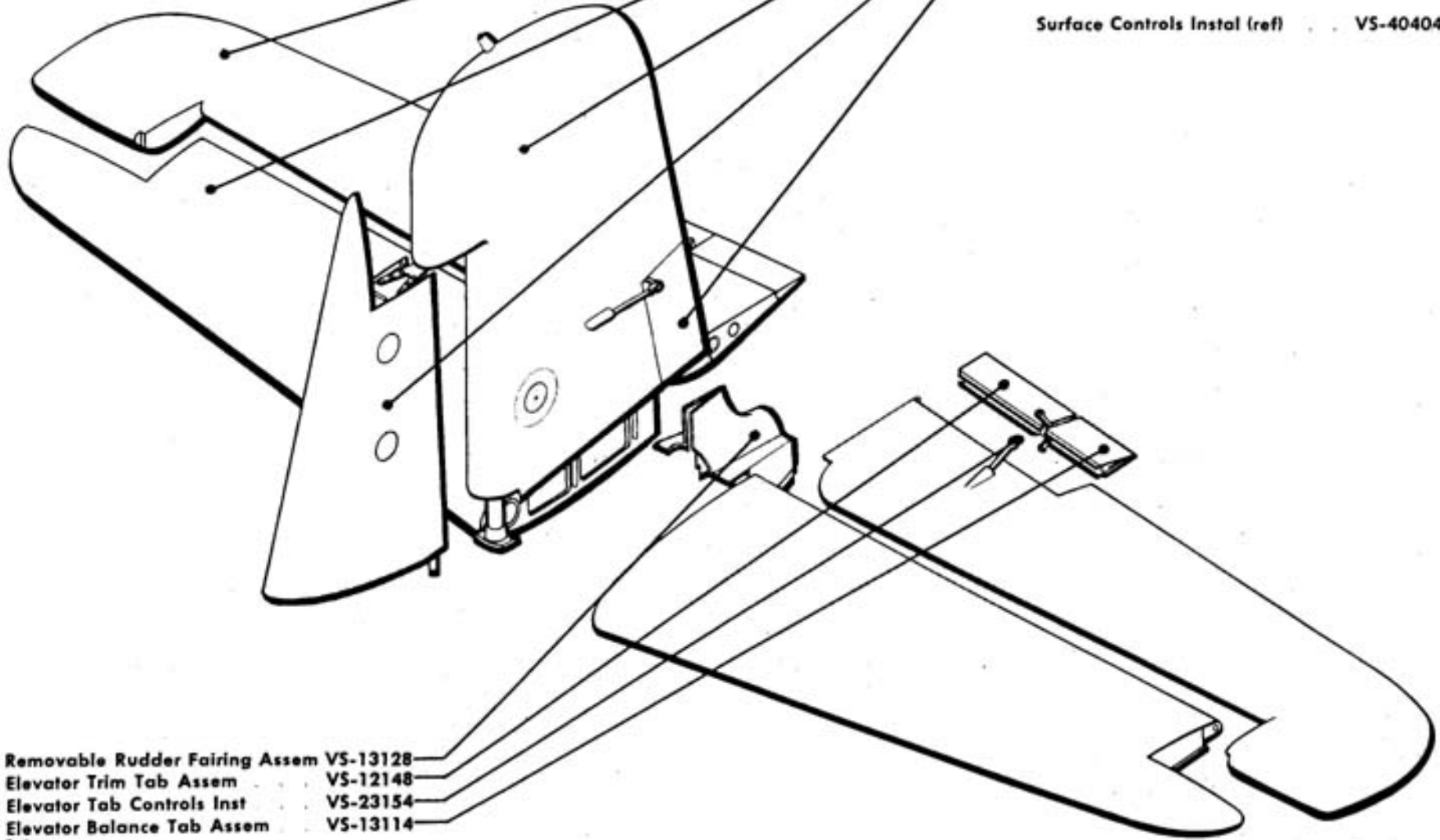
# WING ERECTION

# TAIL ERECTION

Tail Erection . . . . . VS-40100

- Elevator Assem—Covered . . . . . VS-33109
- Stabilizer Assem . . . . . VS-40103
- Rudder Assem—Covered . . . . . VS-33107
- Fin Assem . . . . . VS-10105
- Rudder Tab Assem . . . . . VS-10174

Surface Controls Instal (ref) . . . . . VS-40404



- Removable Rudder Fairing Assem VS-13128
- Elevator Trim Tab Assem . . . . . VS-12148
- Elevator Tab Controls Inst . . . . . VS-23154
- Elevator Balance Tab Assem . . . . . VS-13114