



# PARTS CATALOG

FOURTH RYAN EDITION

1946-47-48-49 and 1950 MODEL NAVIONS

SEPT. 1, 1952

THE RYAN AERONAUTICAL CO.

Lindbergh Field, San Diego 12, California

# NAVIONSWEST INC.

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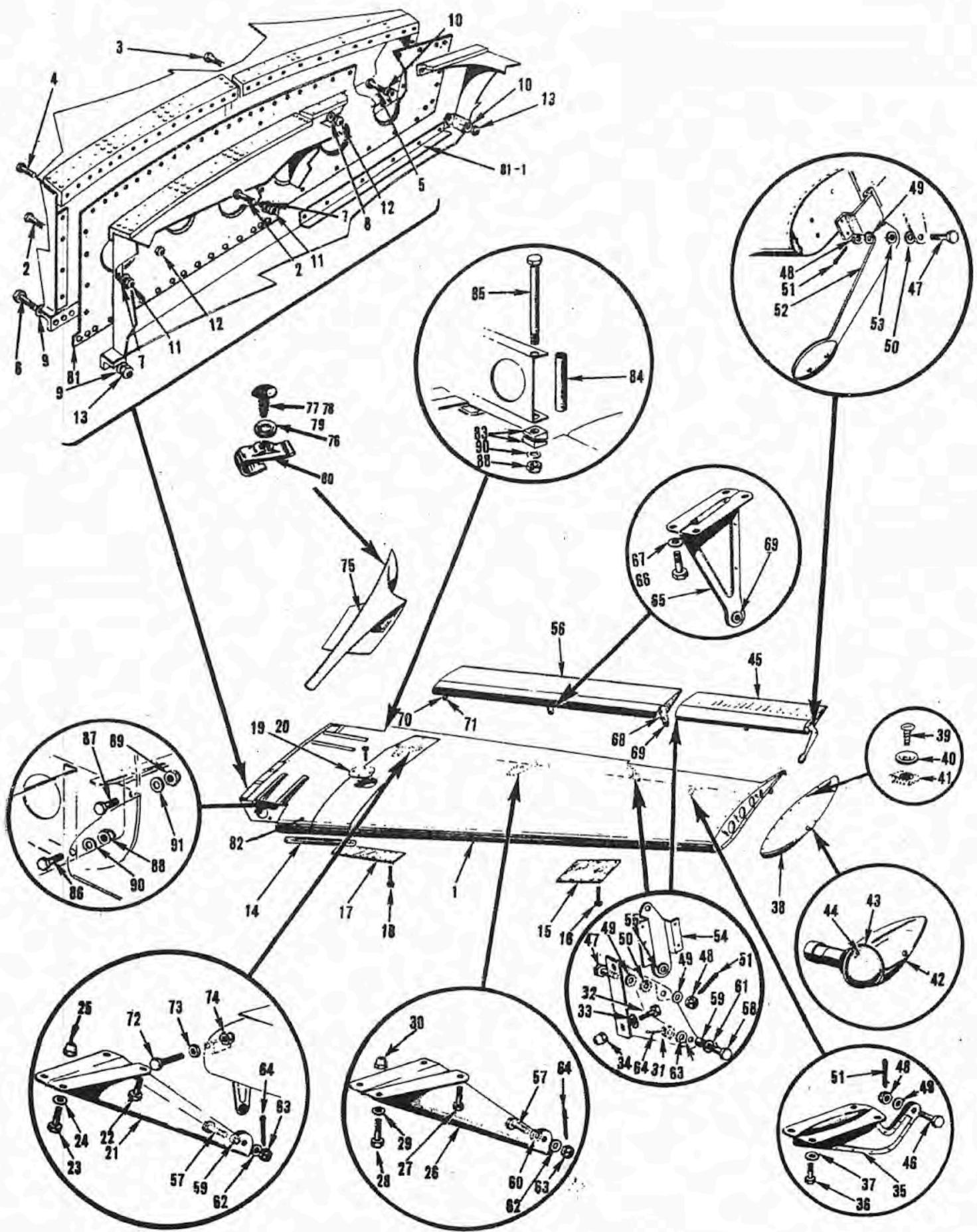


FIGURE 1 - WING

**Figure 1 – Wing**

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1000 1001	143-14901-1 143-14901-2 Attaching Parts-----	Wing Assy-Complete LH Wing Assy-Complete RH -----LH and RH wing panels	1 1
2		AN3-5A	Bolt-Aircraft 10-32	19
3		AN4-7A	Bolt-Aircraft $\frac{1}{4}$ - 28	12
4		AN4-10A	Bolt-Aircraft $\frac{1}{4}$ - 28	16
5		AN5-6A	Bolt-Aircraft 5/16 - 24	1
6		AN5-11A	Bolt-Aircraft 5/16 - 24	16
7		AN960-10	Washer-Plain	42
8		AN960-416	Washer-Plain	28
9		AN960-515	Washer-Plain	32
10	8486	2W1-21-21-62	Washer-Plain	2
11		AN365-1032	Nut-Self Locking	19
12		AN365-428	Nut-Self Locking	28
13		AN365-524	Nut-Self Locking	17
14	1002 1003	145-14020-1 145-14020-2	Spoiler Left Wing Leading Edge Spoiler Right Wing Leading Edge	1 1
15	1004 1005	143-14001-109 143-14001-110	Door-Ail Mech Access LH Door-Ail Mech Access RH	1 1
16		AN520-10-R7	Screw Round Head Machine (fine thread)	12
17	1006	145-14222	Door-Ldg Gr Access	1
18		NAS221-9	Screw Attaching	24
19	1007	145-14121	Door-Left Wing Access Hole Upper Surface	1
20		AN520-10-R8	Screw Round Head Machine (fine thread)	1
21	1008 1009	143-14076-1 143-14076-2	Fitting-Flap Inbd Sup LH Fitting-Flap Inbd Sup RH	1 1
22		AN4-5A	Bolt-Aircraft $\frac{1}{4}$ - 28	3
23		AN4-6A	Bolt-Aircraft $\frac{1}{4}$ - 28	1
24		AN960-416	Washer-Plain	4
25		AN365-428	Nut Self Locking	4
26	1010	143-14075-1	Fitting-Flap Ctr Sup LH	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	1011	143-14075-2	Fitting-Flap Ctr Sup RH	1
27		AN4-5A	Bolt-Aircraft ¼ - 28	3
28		AN4-6A	Bolt-Aircraft ¼ - 28	1
29		AN960-416	Washer-Plain	4
30		AN365-428	Nut Self Locking	4
31	1012 1013	143-16106-1 143-16106-2	Bracket-Ail & Flap Hinge LH Bracket-Ail & Flap Hinge RH	1 1
32		AN4-6A	Bolt-Aircraft ¼ - 28	3
33		AN960-416	Washer-Plain	3
34		AN365-428	Nut Self Locking	3
35	1014 1015	145-16115-1 145-16115-2	Bracket-Ail Ctr Hinge LH Bracket-Ail Ctr Hinge RH	1 1
36		AN4-5A	Bolt-Aircraft ¼ - 28	4
37		AN960-416	Washer-Plain	4
38	1020-10 1021-10	145-14007-101 145-14007-102	Wing Tip LH Wing Tip RH	1 1
39	9001-10	79XZ-8-7	Screw	18
40	8540	2W4	Washer-Special	18
41	9013	A1932-8Z-3	Speednut	18
42	9024 9025	A1285-R-12 A1285-G-12	Light-Position LH (Red) Light-Position RH (Green)	1 1
43	9027 9028	A1280-2 A1280-3	Lens-Position light LH (Red) Lens-Pos Light RH (Green)	1 1
44		AN3122-1512	Lamp-Wing Position Light	1
45	1030 1031	143-16001-1 143-16001-2	Aileron-Complete LH Aileron-Complete RH	1 1
46		AN3-6	Bolt-Aircraft 10-32	1
47		AN3-7	Bolt-Aircraft 10-32	2
48		AN310-3	Nut-Aircraft Castle	3
49		AN960-10	Washer-Plain	4
50		AN970-3	Washer-Flat	2
51		AN380-2-3	Cotter	3
52	1032 1033	145-16123-1 145-16123-2	Hinge & Weight-Outbd LH Hinge & Weight-Outbd RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
53	9030	UK3L	Bearing	1
54	1034 1035	145-16114-1 145-16114-2	Hinge-Inbd IH Hinge-Inbd RH	1 1
55	9030	UK3L	Bearing	1
56	1040 1041	143-18001-1 143-18001-2	Flap-Complete LH Flap-Complete RH	1 1
57		AN4-7	Bolt-Aircraft 1/4 - 28	2
58		AN4-10	Bolt-Aircraft 1/4 - 28	1
59		NAS74-4-005	Bushing-Clamp Up Bronze	2
60	4213	143-18051-4	Bushing-Spacer	1
61	8481	2W1-16-20-63	Washer-Plain	1
62		AN960-D416	Washer-Plain	3
63		AN310-4	Nut-Aircraft-Castle	3
64		AN380-2-2	Cotter	3
65	1042	143-18001-71 ATTACHING PARTS	Bracket Assy-Flap Center Hinge	1
66		AN4-5A	Bolt-Aircraft 1/4 - 28	4
67	8037	AN960-D416 4B18-7-102	Washer-Plain Bushing-Shoulder	4 1
68	1043	143-18001-72	Bracket Assy-Flap Outboard Hinge	1
69	8037	4B18-7-102	Bushing-Shoulder	1
70	1044	143-18001-73	Bracket Assy-Flap Inboard Hinge	1
71	8038	4B18-7-125	Bushing-Shoulder	1
72	8061	5B2-12	Bolt Adjustment	1
73		AN315-4R	Nut-Aircraft Plain	1
74		AN365-428	Nut-Self Locking	1
75	1050-10 1051-10	145-10906-101 145-10906-102 ATTACHING PARTS	Fairing-Rear LH Fairing-Rear RH	1 1
76	8540	2W4	Washer-Wing Fillet to Fuselage Attaching	32
77		AN520-10R8	Screw	2
78	9000	21803-8-6	Screw (Kalon)	22
79	9001	21803-8-7 AN507-832-7	Screw (Kalon) Screw - 100° Flat Head Machine	4 8

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
80	9009A	1803-8Z3	Speednut	4
81	1060 1060-10	143-14010-20 143-14010-22	Wing-Center Rib Wing-Center Rib	1 1
81-1	1061 1062	143-14010-11 143-14010-12	Angle-Ring Root Rear Lwr Joining LH Angle-Ring Root Rear Lwr Joining LR	1 1
82	1016	145-53091	Walkway	1
83	1070	143-14071	Spacer	4
84	1071	145-31105	Tube	2
85		AN5-67	Bolt - Aircraft 5/16-24	2
86		AN5-10A	Bolt - Aircraft 5/16-24	2
87		AN6-10A	Bolt - Aircraft 3/8-24	2
88		AN365-524	Nut-Self Locking	4
89		AN365-624	Nut-Self Locking	2
90		AN960-516	Washer-Plain	6
91		AN960-616	Washer-Plain	4
92			Light Assy - Flap Midway Position	

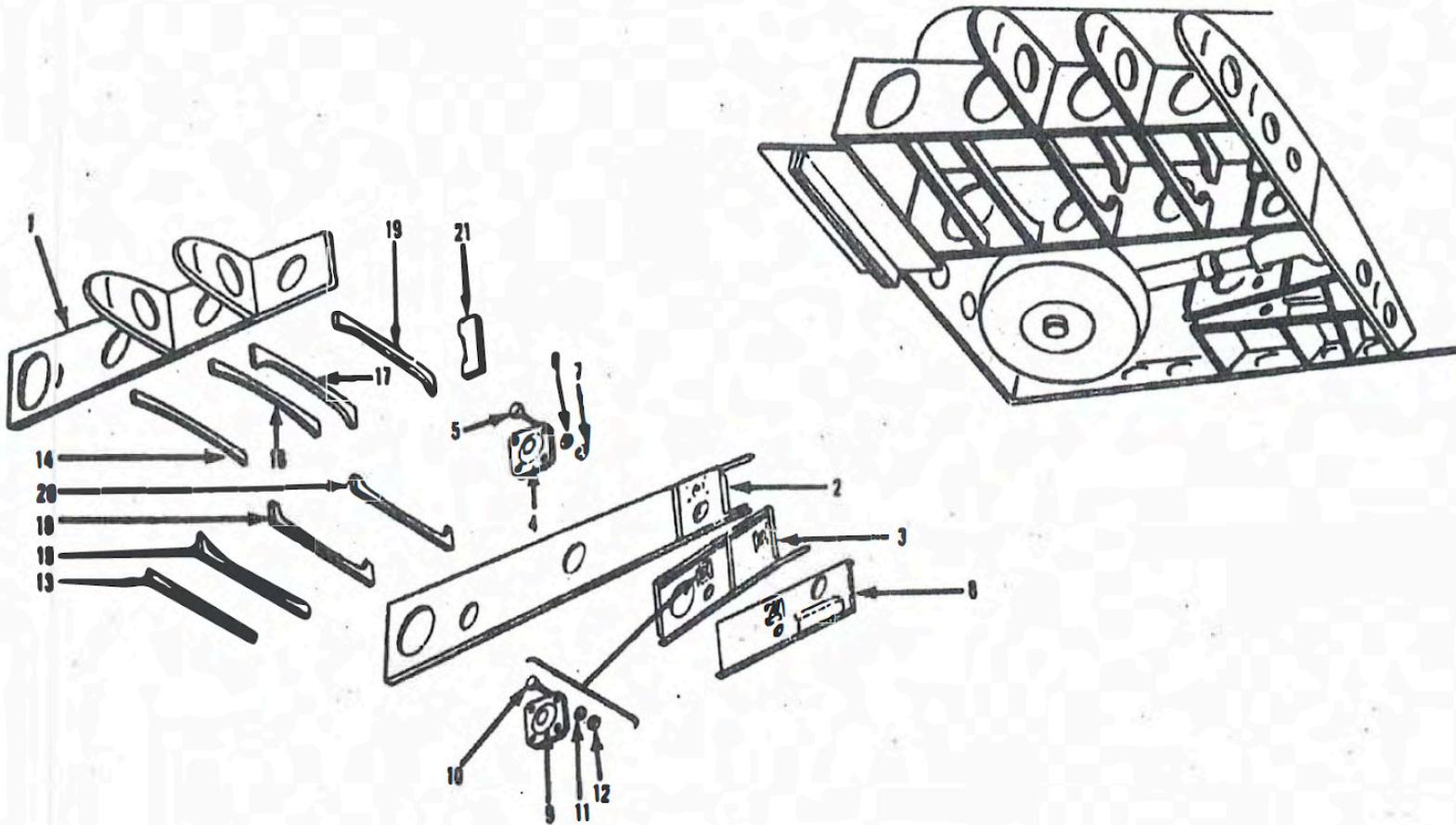


FIGURE 2 - WING PANEL STRUCTURE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1100 1101	143-14003-1 143-14003-2	Spar Assy-Front LH Spar Assy-Front RH	1 1
2	1102 1103	143-14004-1 143-14004-2	Spar Assy-Center LH Spar Assy-Center RH	1 1
3	1104 1105	143-14006-11 143-14006-12	Beam Assy-Ldg Gr Sup Fwd LH Beam Assy-Ldg Gr Sup Fwd RH	1 1
4	1108	143-33152	Fitting	2
5		AN5-6A	Bolt-Aircraft 5/16-24	7
6		AN960-516	Washer-Plain	11
7		AN365-524	Nut-Self Locking	7
8	1106 1107	143-14006-21 143-14006-22	Beam Assy-Ldg Gr Sun Aft LH Beam Assy-Ldg Gr Sup Aft RH	1 1
9	1108	143-33152	Fitting	1
10		AN5-5A	Bolt-Aircraft 5/16-24	4

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
11		AN960-516	Washer-Plain	4
12		AN365-524	Nut-Self Locking	4
13	1110 1111	143-14060-3 143-14060-4	Former-Sta. 6 Lower LH Former-Sta 6 Lower RH	1 1
14	1112 1113	143-14065-3 143-14065-4	Former-Sta 6.594 Upper LH Former-Sta 6.594 Upper RH	1 1
15	1118 1119	145-14112-3 145-14112-4	Former-Sta 12.250 Lower LH Former-Sta 12.250 Lower RH	1 1
16	1122 1123	143-14015-3 143-14015-4	Former-Sta 15.406 Upper LH Former-Sta 15.406 Upper RH	1 1
17	1128 1129	145-14124-3 145-14124-4	Former-Sta 24.5 Upper LH Former-Sta 24 .5 Upper RH	1 1
18	1132 1133	145-14125-3 145-14125-4	Former-Sta 24.5 Lower LH Former-Sta 24.5 Lower RH	1 1
19	1138-10 1139-10	145-14137-3 145-14137-4	Former-Sta 37.25 Upper LH Former-Sta 37.25 Upper RH	1 1
20	1140-10 1141-10	145-14138-3 145-14138-4	Former-Sta 37.25 Lower LH Former-Sta 37.25 Lower RH	1 1
21	1154 1155	143-14052-3 143-14052-4	Former-Tank End Support LH Former-Tank End Support RH	1 1

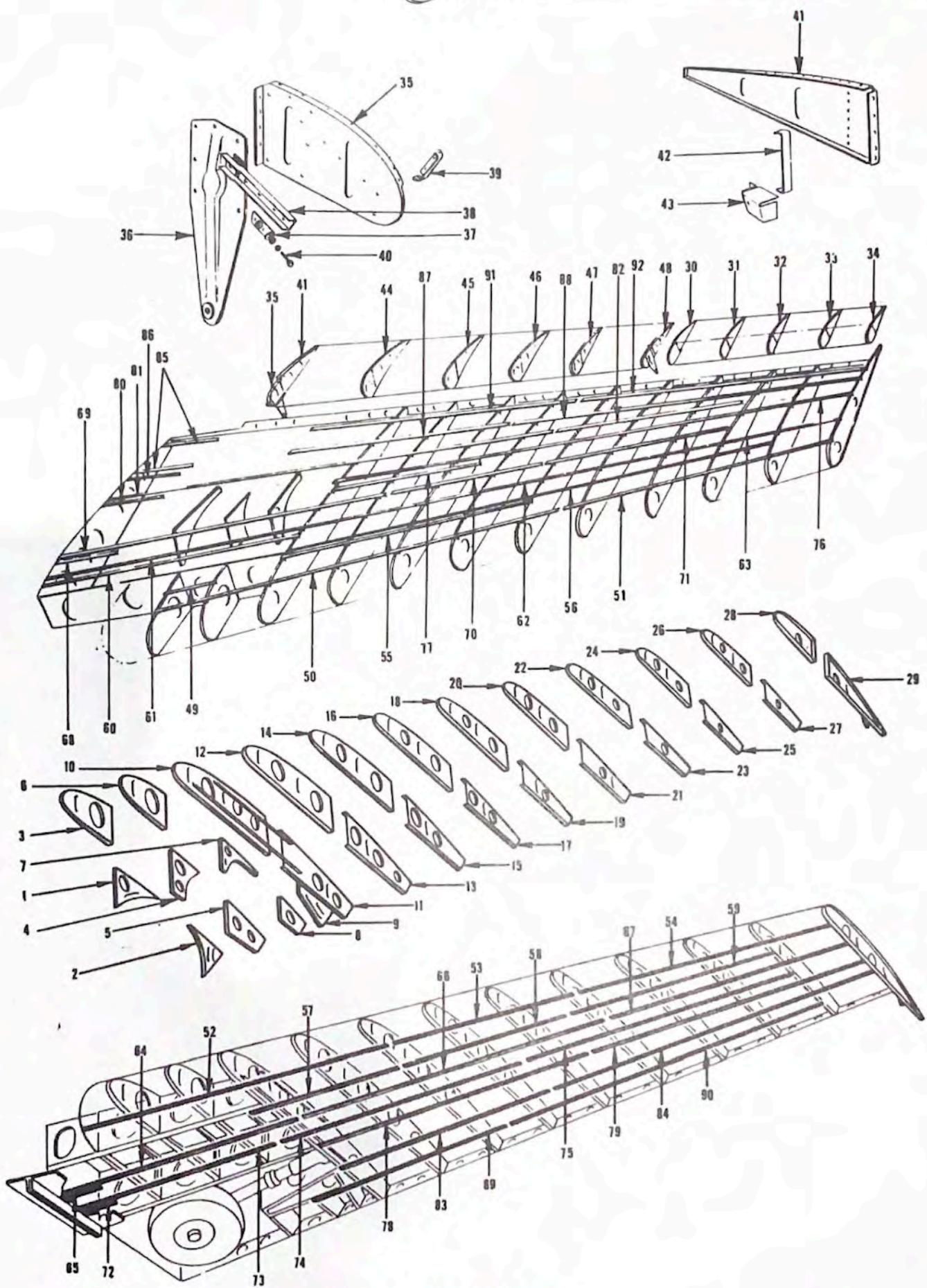


FIGURE 3 - WING PANEL STRUCTURE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1114 1115	145-14213-1 145-14213-2	Rib-Sta 12.250 Center LH Rib-Sta. 120250 Center RH	1 1
2	1116 1117	145-14212-1 145-14212-2	Rib-Sta. 12.250 Aft LH Rib-Sta. 12.250 Aft RH	1 1
3	1124 1125	145-14024-1 145-14024-2	Rib-Sta 24.5 Nose LH Rib-Sta 24.5 Nose RH	1 1
4	1272 1273	143-14224-1 145-14224-2	Rib-Sta 24.5 Center LH Rib-Sta 24.5 Center RH	1 1
5	1134 1135	145-14225-1 145-14225-2	Rib-Sta 24.5 Trailing LH Rib-Sta 24.5 Trailing RH	1 1
6	1136 1137	145-14037-1 145-14037-2	Rib-Sta 37.25 Nose LH Rib-Sta 37.25 Nose RH	1 1
7	1142 1143	145-14237-1 145-14237-2	Rib-Sta 37.25 Intermed LH Rib-Sta 37.25 Intermed RH	1 1
8	1144 1145	145-14238-1 145-14238-2	Rib-Sta 37.25 Trailing LH Rib-Sta 37.25 Trailing LH	1 1
9	1146 1147	145-14006-17 145-14006-18	Rib-Sta 46 Canted Trail LH Rib-Sta Canted Trail RH	1 1
10	1148 1149	143-14050-21 143-14050-22	Rib Assembly - Station 50 Nose LH Rib Assembly - Station 50 Nose RH	1 1
11	1150 1151	143-14050-23 143-14050-24	Rib Assembly - Station 50 Trailing LH Rib Assembly - Station 50 Trailing RH	1 1
12	1156 1157	145-14066-1 145-14066-2	Rib - Station 66 Nose LH Rib - Station 66 Nose RH	1 1
13	1158 1159	145-14266-1 145-14266-2	Rib Assembly - Station 66 Trailing LH Rib Assembly - Station 66 Trailing RH	1 1
14	1160 1161	145-14082-1 145-14082-2	Rib - Station 82 Nose LH Rib - Station 82 Nose RH	1 1
15	1162 1163	145-14282-1 145-14282-2	Rib - Station 82 Trailing LH Rib - Station 82 Trailing RH	1 1
16	1164 1165	145-14098-3 145-14098-4	Rib - Station 98 Nose LH Rib - Station 98 Nose RH	1 1
17	1168 1169	145-14298-3 145-14298-4	Rib Assembly - Station 98 Trailing LH Rib Assembly - Station 98 Trailing RH	1 1
18	1170 1171	145-14114-3 145-14114-4	Rib - Station 114 Nose LH Rib - Station 114 Nose RH	1 1
19	1172 1173	145-14215-3 145-14215-4	Rib - Station 114 Trailing LH Rib - Station 114 Trailing RH	1 1
20	1174 1175	145-14130-3 145-14130-4	Rib - Station 130 Nose LH Rib - Station 130 Nose RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
21	1176 1177	145-14130-21 145-14130-22	Rib Assembly - Station 130 Trailing LH Rib Assembly - Station 130 Trailing RH	1 1
22	1178 1179	145-14146-3 145-14146-4	Rib - Station 146.25 Nose LH Rib - Station 146.25 Nose RH	1 1
23	1180 1181	145-14246-3 145-14246-4	Rib - Station 146.25 Trailing LH Rib - Station 146.25 Trailing RH	1 1
24	1182 1183	145-14162-3 145-14162-4	Rib - Station 162.5 Nose LH Rib - Station 162.5 Nose RH	1 1
25	1184 1185	145-14262-1 145-14262-2	Rib Assembly - Station 162.5 Trailing LH Rib Assembly - Station 162.5 Trailing RH	1 1
26	1186 1187	145-14278-3 145-14278-4	Rib - Station 178.75 Nose LH Rib - Station 178.75 Nose RH	1 1
27	1188 1189	145-14178-3 145-14178-4	Rib - Station 178.75 Trailing LH Rib - Station 178.75 Trailing RH	1 1
28	1190 1191	143-14194-3 143-14194-4	Rib - Station 194.25 Nose LH Rib - Station 194.25 Nose RH	1 1
29	1192 1193	143-14194-23 143-14194-24	Rib Assembly - Station 194.25 Trailing LH Rib Assembly - Station 194.25 Trailing RH	1 1
30	1030-105 1031-105	143-16001-7 143-16001-10	Rib - Aileron Station. 2.375 LH Rib - Aileron Station. 17.545 RH	1 1
31	1030-110 1031-110	143-16001-9 143-16001-10	Rib - Aileron Station. 17.545 LH Rib - Aileron Station. 17.545 RH	1 1
32	1030-115 1031-115	143-16001-21 143-16001-22	Rib - Aileron Station. 32.716 LH Rib - Aileron Station. 32.716 RH	1 1
33	1030-120 1031-120	143-16001-13 143-16001-14	Rib - Aileron Station. 48.495 LH Rib - Aileron Station. 48.495 RH	1 1
34	1030-125 1031-125	143-16001-15 143-16001-16	Rib - Aileron Station. 63.409 LH Rib - Aileron Station. 63.409	1 1
35	1040-100 1041-100 1040-101 1041-101	143-18901-7 143-18001-7 143-18901-8 143-18001-8	Rib Assembly - Flap Station 503 Nose LH Rib - Flap Station. 503 Nose LH Rib Assembly - Station 503 Nose RH Rib - Flap Station 503 Nose RH	1 1 1 1
36	1044	143-18001-73	Bracket Assembly - Inboard Hinge	1
37	1040-110	143-18001-53	Angle - Flap Inboard Rib	1
38	1040-115 1041-115	143-18001-49 143-18001-50	Channel - Flap Inboard Rib LH Channel - Flap Inboard Rib RH	1 1
39	1040-120 1041-120	143-18001-51 143-18001-52	Reinforcement - Inboard Rib LH Reinforcement - Inboard Rib RH	1 1
40		5B2-12	Bolt - Adjusting	1
41	1040-200 1041-200	143-18901-21 143-18901-22	Rib Assembly - Station 503 Training LH Rib Assembly - Station 503 Training RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
42	1040-205 1041-205	143-18001-47 143-18001-48	Stiffener - Flap Inboard Rib LH Stiffener - Flap Inboard Rib RH	1 1
43	1040-210 1041-210	143-18001-45 143-18001-46	Bracket - Flap Inboard Rib LH Bracket - Flap Inboard Rib RH	1 1
44	1040-215 1041-215	143-18001-15 143-18001-16	Rib Assembly - Flap Station 26 LH Rib Assembly - Flap Station 26 RH	1 1
45	1040-220 1041-220	143-18001-13 143-18001-14	Rib Assembly - Flap Station 42.113 LH Rib Assembly - Flap Station 42.113	1 1
46	1040-225 1041-225	143-18001-17 143-18001-18	Rib Assembly - Flap Station 64 LH Rib Assembly - Flap Station 64 RH	1 1
47	1040-230 1041-230	143-18001-19 143-18001-20	Rib Assembly - Flap Station 86 LH Rib Assembly - Flap Station 86 RH	1 1
48	1040-235 1041-235	143-18001-11 143-18001-12	Rib Assembly - Flap Station 106.442 LH Rib Assembly - Station 106.442 RH	1 1
49	1194	143-14001-105	Stiffener - Station 24.5-37.25	1
50	1195	143-14001-44	Stringer - #1 Upper Inner	1
51	1196	143-14001-45	Stringer - #1 Upper Outer	1
52	1198 1199	143-14001-111 143-14001-112	Stringer - #1 Lower Inner LH Stringer - #1 Lower Inner RH	1 1
53	1200	143-14001-43	Stringer - #1 Lower Center	1
54	1201	143-14001-69	Stringer - #1 Lower Outer	1
55	1202 1203	143-14001-81 143-14001-82	Stringer - #2 Upper Forward LH Stringer - #2 Upper Forward RH	1 1
56	1204 1205	143-14001-83 143-14001-84	Stringer - #2 Upper Aft LH Stringer - #2 Upper Aft RH	1 1
57	1206 1207	143-14001-85 143-14001-86	Stringer - #2 Lower Inner LH Stringer - #2 Lower Inner RH	1 1
58	1208	143-14001-47	Stringer - #2 Lower Center	1
59	1209	143-14001-48	Stringer - #2 Lower Center	1
60	1210	143-14001-40	Stringer - #3 Upper Inner Forward	1
61	1211	143-14001-27	Stringer - #3 Upper Inner Aft	1
62	1212	143-14001-28	Stringer - #3 Upper Center	1
63	1213	143-14001-29	Stringer - #3 Upper Outer	1
64	1214	143-14001-49	Stringer - #3 Lower Inner Forward	
65	1215	143-14001-56	Stringer - #3 Lower Inner Aft	1
66	1216	143-14001-50	Stringer - #3 Lower Center	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
67	1217	143-14001-61	Stringer - #3 Lower Outer	1
68	1218	143-14001-57	Stringer - #4 Upper Inner Forward	1
69	1219	143-14001-30	Stringer - #4 Upper Inner Aft	1
70	1220	143-14001-31	Stringer - #4 Upper Center	1
71	1221	143-14001-32	Stringer - #4 Upper Outer	1
72	1222	143-14001-55	Stringer - #4 Lower Inner Aft	1
73	1223	143-14001-62	Stringer - #4 Lower Inner Forward	1
74	1224	143-14001-63	Stringer - #4 Lower Center	1
75	1225	143-14001-64	Stringer - #4 Lower Outer	1
76	1226	143-14001-34	Stringer - #5 Upper	1
77	1228 1229	143-14001-117 143-14001-118	Stringer - #5 Upper Forward LH Stringer - #5 Upper Forward RH	1 1
78	1230	143-14001-65	Stringer - #5 Lower Inner	1
79	1231	143-14001-66	Stringer - #5 Lower Outer	1
80	1227	143-14001-58	Stringer - #6 Upper Forward	1
81	1232	143-14001-32	Stringer - #6 Upper Inner	1
82	1233	143-14001-36	Stringer - #6 Upper Outer	1
83	1234	143-14005-10	Stringer - #6 Lower Inner	1
84	1235	145-14005-7	Stringer - #6 Lower Outer	1
85	1236 1237	143-14001-79 143-14001-80	Stringer - #7- & #8 Up Inner LH Stringer - #7- & #8 Upper & Inner RH	1 1
86	1274	143-14001-60	Stringer - #7 - #8 Upper Inner	1
87	1238 1239	143-14001-89 143-14001-90	Stringer - #7 Upper Center LH Stringer - #7 Upper Center RH	1 1
88	1240	143-14001-38	Stringer - #7 Upper Outer	1
89	1242 1243	143-14005-27 143-14005-28	Stringer - #7 Lower Inner LH Stringer - #7 Lower Inner RH	1 1
90	1244	143-14005-9	Stringer - #7 Lower Outer	1
91	1245	143-14001-39	Stringer - #8 Upper Center	1
92	1241	143-14001-41	Stringer - #8 Upper Outer	1

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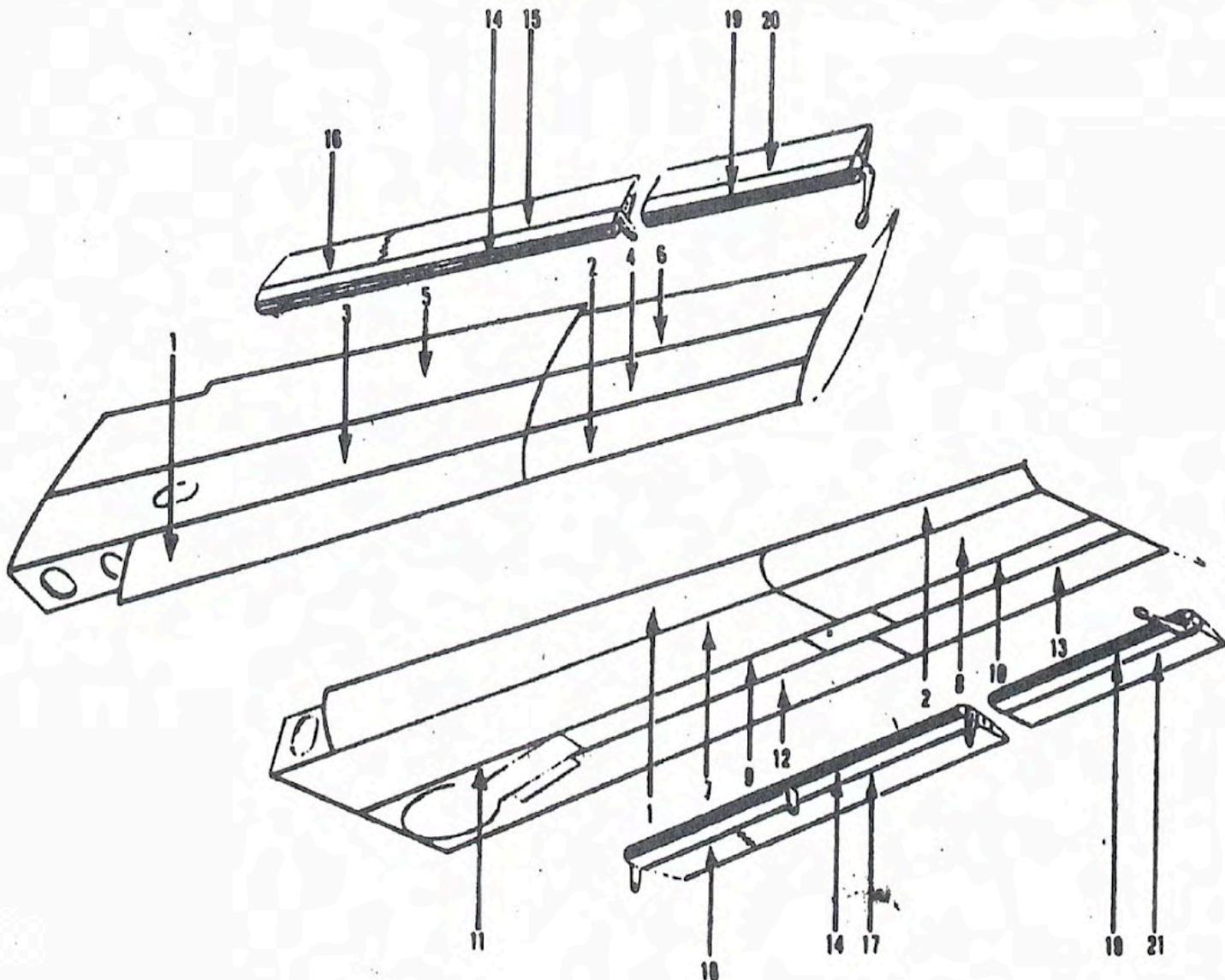


FIGURE 4 - WING PANEL SKINS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1246 1247	143-14001-87 143-14001-88	Skin - Nose Inner LH Skin - Nose Inner RH	1 1
2	1248 1249	143-14001-13 143-14001-14	Skin - Nose Outer LH Skin - Nose Outer RH	1 1
3	1250 1251	143-14001-9 143-14001-10	Skin - Upper Inner Center LH Skin - Upper Inner Center RH	1 1
4	1252 1253	143-14001-15 143-14001-16	Skin - Upper Outer Center LH Skin - Upper Outer Center RH	1 1
5	1254 1255	143-14001-11 143-14001-12	Skin - Upper Inner Aft LH Skin - Upper Inner Aft RH	1 1
6	1256 1257	143-14001-17 143-14001-18	Skin - Upper Outer Aft LH Skin - Upper Outer Aft RH	1 1
7	1258 1259	143-14001-19 143-14001-20	Skin - Lower Inner Center Forward LH Skin - Lower Inner Center Forward RH	1 1
8	1260 1261	143-14001-21 143-14001-22	Skin - Lower Outer Center Forward LH Skin - Lower Outer Center Forward RH	1
9	1262 1263	143-14001-93 143-14001-94	Skin - Lower Inner Center Aft LH Skin - Lower Inner Center Aft RH	1 1
10	1264 1265	143-14001-95 143-14001-96	Skin - Lower Outer Center Aft LH Skin - Lower Outer Center Aft RH	1 1
11	1266 1267	143-14001-75 143-14001-76	Skin - Lower Inner Center LH Skin - Lower Inner Center RH	1 1
12	1268 1269	143-14005-3 143-14005-4	Skin - Lower Inner Aft LH Skin - Lower Inner Aft RH	1 1
13	1270 1271	143-14005-5 143-14005-6	Skin - Lower Outer Aft LH Skin - Lower Outer Aft RH	1 1
14	1040-203 1041-204	143-18001-3 143-18001-4	Skin - Nose Wrap Around LH Skin - Nose Wrap Around RH	1 1
15	1040-257	143-18001-57	Skin - Flap Upper LH	1
16	1040-157 1041-256 1041-156	143-18901-57 143-18001-56 143-18901-56	Skin - Root Section Upper LH Skin - Flap Upper RH Skin - Root Section Upper RH	1 1 1
17	1040-255	143-18001-55	Skin - Flap Lower LH	1
18	1040-155 1041-154	143-18901-55 143-18901-54	Skin - Root Section Lower LH Skin - Root Section Lower RH	1 1
19	1275 1276	143-16001-3 143-16001-4	Skin - Aileron Front Wrap Around LH Skin - Aileron Front Wrap Around RH	1 1
20	1277 1278	143-16001-31 143-16001-32	Skin - Aileron Upper LH Skin - Aileron Upper RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
21	1279 1280	143-16001-33 143-16001-34	Skin - Aileron Lower LH Skin - Aileron Lower RH	1 1

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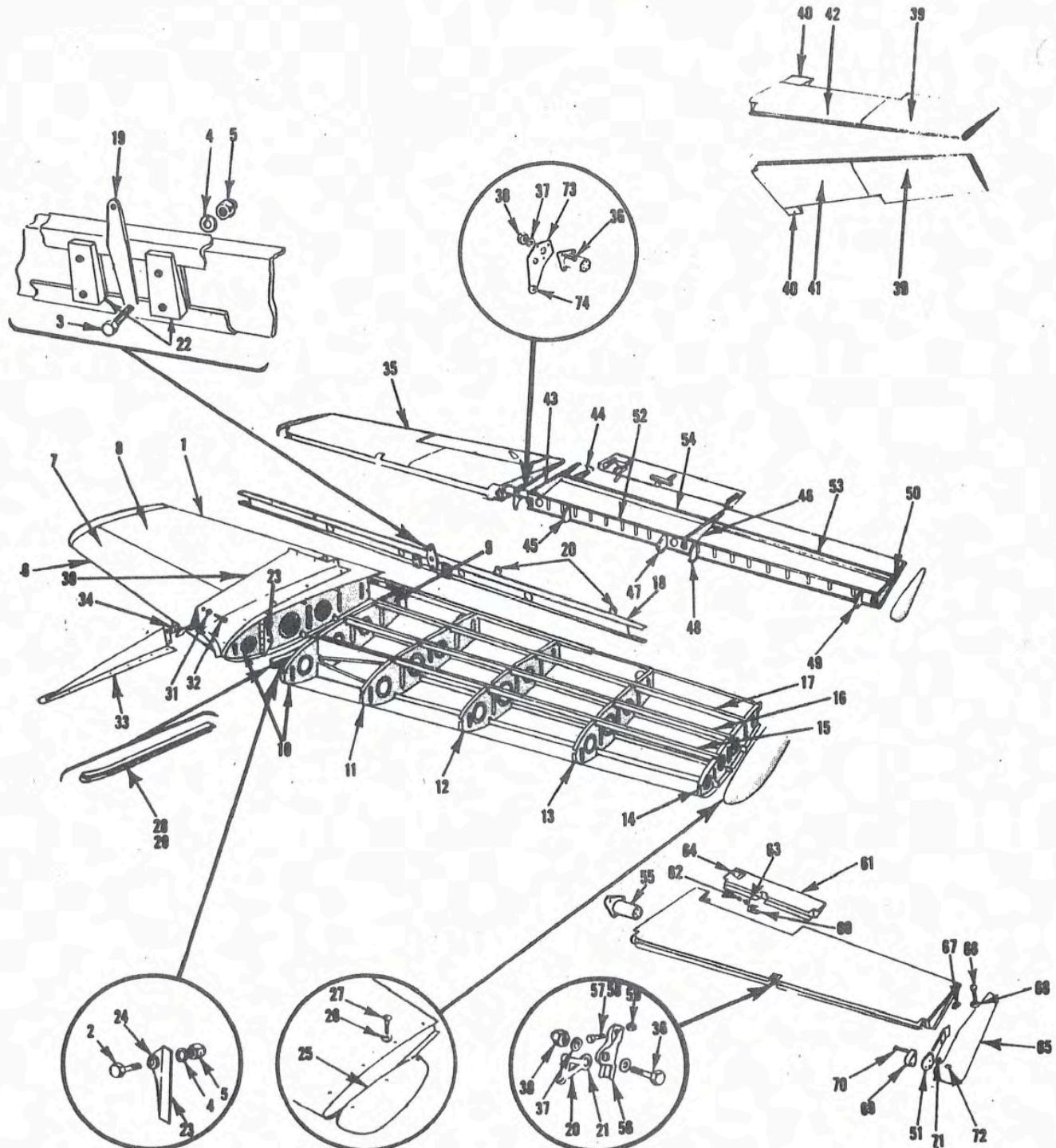


FIGURE 5 - EMPENNAGE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1300	143-21001-50	Stabilizer Assembly - Horizontal Complete	1
2		AN4-6A	Bolt - Aircraft 1/4-28	2
3		AN4-13A	Bolt - Aircraft 1/4-28	4
4		AN960-416	Washer - Plain	14
5	1302	AN365-428 143-21001-51	Nut - Self Locking Stabilizer Panel LH (Less Tip)	6 1
6	1303	143-21001-51	Stabilizer Panel RH (Less Tip)	1
7	1348	143-21001-1	Skin - Horizontal Stabilizer Front Wrap Around	1
8	1349	143-21001-2	Skin - Horizontal Stabilizer Top & Bottom	2
9	1350 1351	143-21001-7 143-21001-45	Rib - Horizontal Stabilizer 8.578 LH Rib - Horizontal Stabilizer 8.578 RH	1 1
10	1360	143-2001-6	Rib - Stabilizer Leading Edge	2
11	1352	143-21001-8	Rib - Horizontal Stabilizer 23.0	1
12	1353	143-21001-9	Rib - Horizontal Stabilizer 40.5	1
13	1354	143-21001-10	Rib - Horizontal Stabilizer 58.0	1
14	1355	143-21001-11	Rib - Horizontal Stabilizer 75.157	1
15	1356	143-21001-3	Stringer - Horizontal Stabilizer Forward	2
16	1357	143-21001-4	Stringer - Horizontal Stabilizer Center	2
17	1358	143-21001-5	Stringer - Horizontal Stabilizer Aft	2
18	1301	143-21001-53	Beam Assembly - Horizontal Stabilizer	1
19	1305	145-21051	Link - Stabilizer Attaching	1
20	1322	145-23401	Fitting Assembly - Hinge	2
21	9030	UK3L	Bearing	2
22	1359	145-21302	Spacer - Horizontal Stabilizer Attaching	1
23	1306 1307	145-21404-1 145-21404-2	Plate - Stabilizer Attaching LH Plate - Stabilizer Attaching RH	1 1
24	8032	4B18-4-63	Bushing - Shoulder	1
25	1304	145-21007	Tip Assembly - Horizontal Stabilizer	1
26	8540	2W4	Washer - Plain	6
27		AN507-832R6	Screw - 100° Flat Head Machine	6
28	1346 1347	145-25001-11 145-25001-12	Fillet LH Fillet RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
29	1346-10	145-14026--20	Seal - Horizontal Stabilizer	2
30	1344	145-25901-3	Dorsal Fin - Aft	1
31	8540	2W4	Washer - Plain	24
32	9001	21803-8-7	Screw	24
33	1345	145-25001-6	Dorsal Fin - Forward	1
34	9011	A1805-8Z-3	Speednut	4
35	1310-10	145-22901-100	Elevator Assembly	2
36		AN3-7A	Bolt - Aircraft #10-32	6
37		AN960-10	Washer - Plain	12
38		AN365-1032	Nut - Self Locking	6
39	1310-104	145-22001-100 SA 3	Skin - Elevator Outer Wrap Around	2
40	1361	145-22001-16	Skin - Elevator Trailing	2
41	1362	145-22001-52	Skin - Elevator Bottom	2
42	1363	145-22001-53	Skin - Elevator Top	2
43	1364	145-22004	Rib - Elevator Inner	1
44	1365	145-22008	Rib - Elevator Inner	1
45	1366	145-22001-34	Rib - Elevator Inner	1
46	1367	145-22040	Rib Assembly - Elevator Station 40.75	1
47	1368	145-22001-35	Rib Assembly - Elevator Station 37.5	1
48	1369	145-22001-36	Rib Assembly - Elevator Station 42.25	1
49	1370	145-22001-37	Rib Assembly - Elevator Station 72	1
50	1371	145-22009	Rib Assembly - Elevator Station 75.5	1
51	1318	145-22006	Channel - Tip Weight Support	1
52	1372	145-22301	Beam Assembly - Elevator Station 4.969-75.5	1
53	1373	145-22302	Beam - Elevator Station 40.75-75.5 Rear	1
54	1374	145-22303	Beam - Elevator Station 5.063-40.75 Rear	1
55	1314	145-922401	Torque Elevator Tube	1
56	1313	145-24402-3	Bracket - Hinge Center	3
57		AN3-4A	Bolt - Aircraft #10-32	2
58		AN3-3A	Bolt - Aircraft #10-32	4

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
59		AN365-2032	Nut - Self Locking	2
60	1315	145-22003	Hinge - Elevator Tab	3
61	1311	145-22002	Tab Assembly - Elevator Trim	1
62		AN3-7A	Bolt - Aircraft #10-32	3
63		NAS75-3-003	Bushing - Steel Press Fit	3
64	1316 1317	145-22005-1 145-22005-2	Horn - LH Trim Tab Upper Horn - LH Trim Tab Lower	1 1
65	1312	145-22010	Tip - Elevator	1
66	9001	21803-8-7	Screw	12
67	9009	A1803-8Z-3	Nut (Tinnerman)	12
68	8540	2W4	Washer - Plain	12
69	1319	145-22007	Weight	1
70		NAS221-27	Screw	3
71		AN960-10	Washer - Plain	3
72		AN365-1032	Nut - Self Locking	3
73	1340	145-22502	Horn - Elevator (incl Bushing)	1
74		NAS75-6-006	Bushing	1

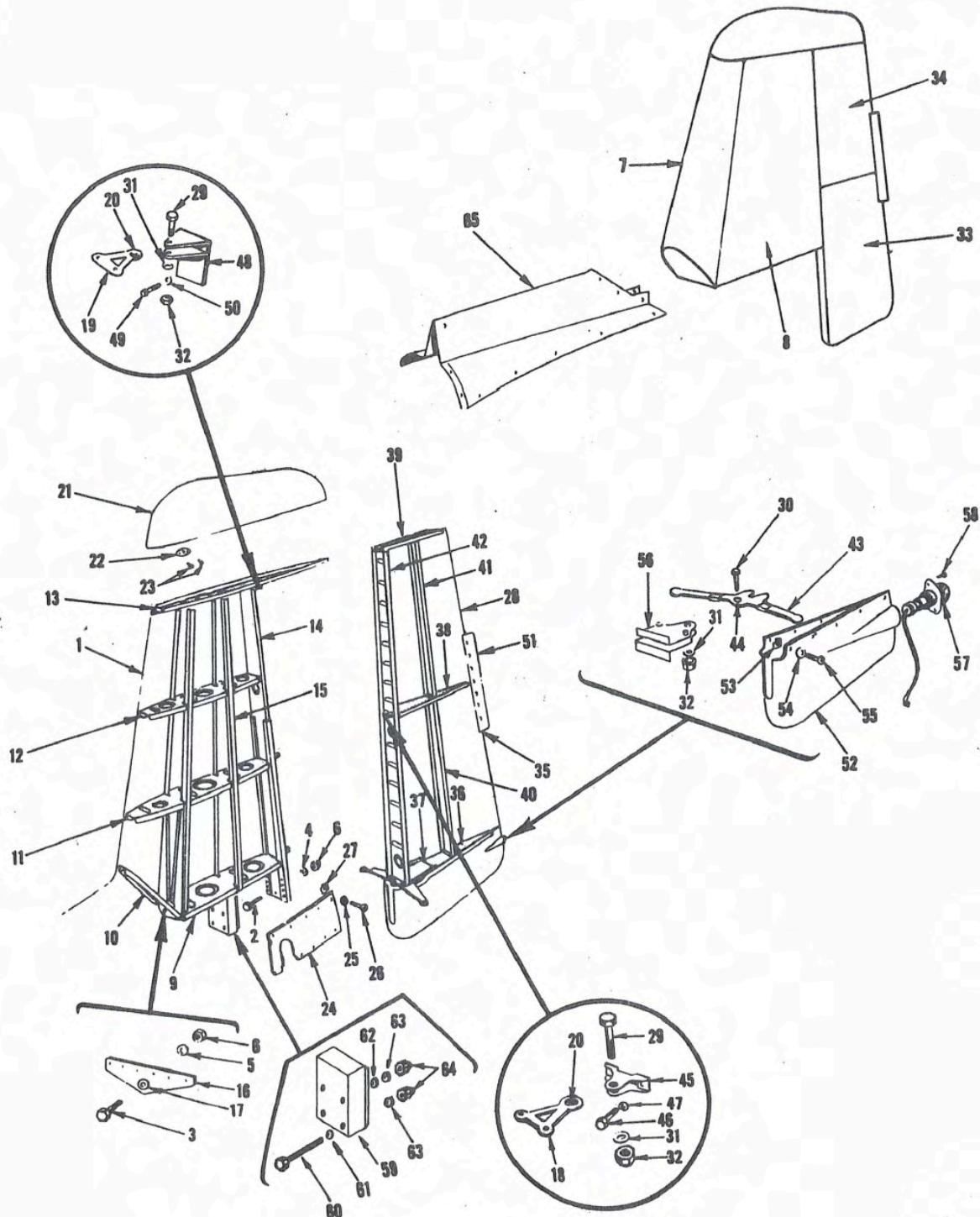


FIGURE 6 - EMPENNAGE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1320	145-23001-3	Stabilizer - Vertical (Includes Tip)	1
2		AN4-6A	Bolt - Aircraft 1/4-28	9
3		AN4-7A	Bolt - Aircraft 1/4-28	1
4		AN960-416	Washer - Plain	16
5		AN960-416L	Washer - Plain	1
6		AN365-428	Nut - Self Locking	10
7	1375	145-23001-5	Skin - Vertical Stabilizer Front	1
8	1376 1377	145-23001-4 145-23001-16	Skin - Vertical Stabilizer LH Skin - Vertical Stabilizer RH	1 1
9	1378	145-23004	Rib - Vertical Stabilizer Station 1.437	1
10	1379	145-23005	Rib - Vertical Stabilizer Station 1.437	1
11	1380	145-23013	Rib - Vertical Stabilizer Station 13.437	1
12	1381	145-23035	Rib - Vertical Stabilizer Station 25.437	1
13	1382	145-23037	Rib - Vertical Stabilizer Station 37.789	1
14	1391	145-23301	Beam Assembly - Vertical Stabilizer	1
15	1383	145-23001-13	Stringer - Vertical Stabilizer	4
16	1324	145-23404	Plate Assembly - Vertical to Horizontal Frame	1
17	8034	4B18-4-81	Bushing - Shoulder	1
18	1322	145-23401	Fitting Assembly - Hinge	1
19	1323	145-23402	Fitting Assembly - Hinge	1
20	9030	UK3L	Bearing	1
21	1321	145-23001-7	Tip Assembly - Vertical Stabilizer	1
22		AN366F832	Nut - Plate	2
23	9066	AN515-8R8 CR163-4-2	Screw - Round Head Machine (Course Thread) Rivet - Cherry	2 22
24	1342 1343	145-20010-1 145-20010-2	Cover - LH Cover - RH	1 1
25	8540	2W4	Washer - Plain	10
26	9001	21803-8-7	Screw	10
27	9013	A1932-8Z-3	Speednut	10

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
28	1330	145-24901-3	Rudder Assembly (Incl Lower Tip)	1
29		AN3-6A		2
30		AN3-7A	Bolt - Aircraft #10-32	2
31		AN960-10	Washer - Plain	1
32		AN365-1032	Nut - Self Locking	3
33	1335	145-24001-4	Skin - Rudder Lower	3
34	1336	145-24001-13	Skin - Rudder Upper	1
35	1337	145-24001-14	Filler - Rudder Tab	1
36	1384	145-24020	Rib - Rudder Station 10.567 Lower	1
37	1385	145-24010	Rib - Rudder Station 10.567	1
38	1386	145-24013	Rib Assembly - Rudder Station 13.687	1
39	1387	145-24037	Rib - Rudder	1
40	1388	145-24303	Beam - Rudder Rear Lower	1
41	1389	145-24302	Beam - Rear Upper	1
42	1390	145-24301	Beam Assembly - Rudder Main Forward	1
43	1332	145-24401	Horn Assembly - Rudder	1
44	9030	UK3L	Bearing	1
45	1313	145-24402-3	Bracket - Hinge Center	1
46		AN3-4A	Bolt - Aircraft #10-32	1
47		AN960-10L	Washer - Plain	2
48	1333	145-24403	Bracket Assembly - Rudder Hinge Upper	2
49		AN3-4A	Bolt - Aircraft #10-32	1
50		AN960-10L	Washer - Plain	2
51	1338	145-24404	Tab Assembly - Rudder	2
52	1331	145-24001-6	Tip - Rudder Lower	1
53	9013	A1932-8Z-3	Speednut	1
54	8540	2W4	Washer - Plain	10
55	9001	21803-8-7	Screw	10
56	1341	145-23403	Bracket Assembly - Rudder Hinge	10
57	9026	A2064	Light - Position (Clear)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
58		AN520-6-10	Screw - Round Head Machine (Fine Thread)	
59	1325	146-23006	Weight Assembly - Fuselage Balance	1
60		AN4-22A	Bolt - Aircraft 1/4-28	1
61	8530	2W1-17-24-64	Washer - Plain	4
62		AN960-416L	Washer - Plain	2
63		AN960-416	Washer - Plain	4
64		AN365-428	Nut - Self Locking	4
65			Dorsal Fin - Aft (see figure 5 for details)	REF

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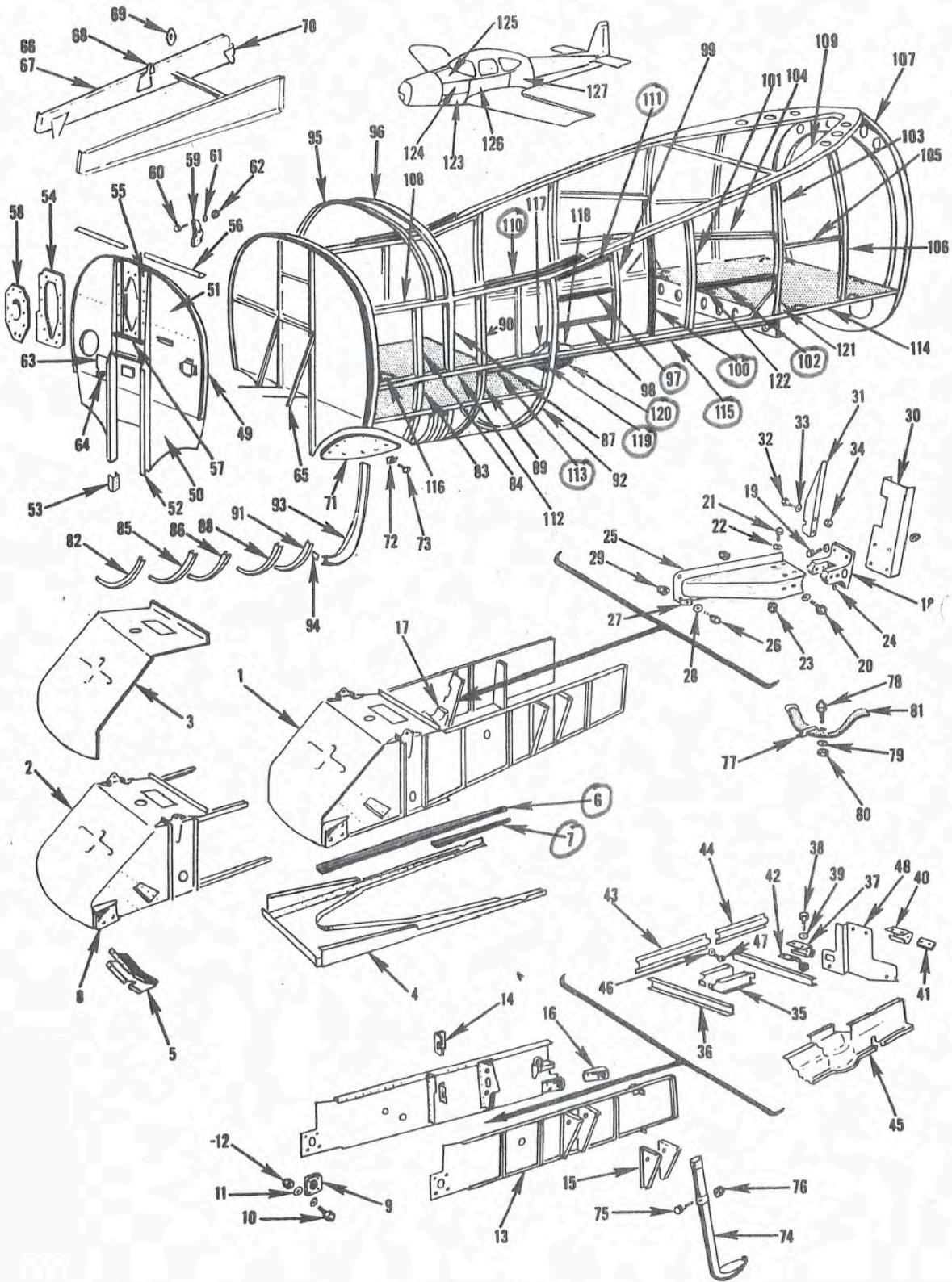


FIGURE 7 - FORWARD FUSELAGE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1401 1401-10	143-31007 SA 1 143-31007-700 SA 1	Box Assembly - Nose Gear Box Assembly - Nose Gear	1 1
2	1540 1540-10	143-31007-100 SA 2 143-31007-700 SA 2	Box - Assembly Nose Gear Forward Box - Assembly Nose Gear Forward	1 1
3	1505	143-31007-18	Plate - Nose Gear Box Upper	1
4	1506	143-31007-27	Plate - Nose Gear Box Lower	1
5	1507 1508	145-34150-1 145-34150-2	Cam Assembly - Gear Centering LH Cam Assembly - Gear Centering RH	1 1
6	1541 1542	143-31007-39 143-31007-40	Doubler - Box Lower Plate LH Doubler - Box Lower Plate RH	1 1
7	1543	143-31007-41	Shim - Box Lower Plate Doubler	2
8	1544	145-31103-5	Fitting - Station 40.50 Joint	2
9	1404	143-34152	Fitting Assembly - Gear Strut Support	2
10		AN6-4A	Bolt - Aircraft 3/8-24	4
11		AN960-416	Washer - Plain	8
12		AN365-428	Nut - Self Locking	4
13	1402 1403	143-31007-101 SA 3 143-31007-102 SA 3	Beam Assembly - Gear Box Side LH Beam Assembly - Gear Box Side RH	1 1
14	1411 1410	145-52409-4 145-52409-3	Fairlead - Elevator & Rudder Cable RH Fairlead - Elevator & Rudder Cable LH	1 1
15	1420 1421	145-31104-3 145-31104-4	Bracket - Step Upper Support Forward Bracket - Step Upper Support Aft	1 1
16	1546 1545	145-31103-8 145-31103-7	Fitting - 93.438 Joint RH Fitting - 93.438 Joint LH	1 1
17	1405	145-34184	Support Assembly - Brace Bearing	1
18	1406	145-34158	Fitting - Gear Drag Brace Support	1
19		AN4-6A	Bolt - Aircraft 1/4-28	4
20		AN4-11A	Bolt - Aircraft 1/4-28	2
21		AN4-22A	Bolt - Aircraft 1/4-28	4
22		AN960-416L	Washer - Plain	10
23		AN365-428	Nut - Self Locking	10
24		NAS2-201	Fitting - Lubricator	1
25	1407	145-34161	Hat - Nose Gear Drag Brace Support	1
26		AN4-7A	Bolt - Aircraft 1/4-28	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
27	1538 1539	145-34003-2 145-34003-3	Doubler - Brace Support Hat Doubler - Brace Support Hat	1 1
28		AN960-416	Washer - Plain	2
29		AN365-428	Nut - Self Locking	2
30	1408	145-34204	Channel - Gear Drag Brace Support	1
31	1409	145-31110	Angle - Beam Stiffener	1
32		AN4-6A	Bolt - Aircraft 1/4-28	2
33		AN960-416	Washer - Plain	2
34		AN365-428	Nut - Self Locking	2
35	1412 1413	145-34201-3 145-34201-4	Frame - Actuating Cyl Support LH Frame - Actuating Cyl Support RH	1 1
36	1415 1414	143-31002-40 143-31002-32	Channel - Reinforcement Forward Channel - Reinforcement Aft	1 1
37	1477	145-34181	Bracket - Tire Rub Strip	1
38		AN3-5A	Bolt - Aircraft #10-32	2
39		AN960-10	Washer - Plain	2
40	1497	145-34181-4	Spring - Nose Gear Tire Rub Strip Bracket	1
41	1498	145-34181-5	Shoe - Nose Gear Tire Rub Strip Bracket	1
42	1478	145-34181-3	Doubler - Tire Rub Strip Bracket	1
43	1470	145-52203-7	Guard - Elevator & Rudder Forward RH	1
44	1471 1471-10	145-52203-9 145-52203-15	Guard - Elevator & Rudder Aft RH Guard - Elevator & Rudder Aft RH	1 1
45	1472-20	145-52203-3	Guard - Elevator & Rudder LH	1
46		AN960-8L	Washer - Plain	4
47		AN515-8R7	Screw - Round Head Machine (Coarse Thread)	4
48	1473 1473-10	145-31015 145-31019	Cover Assembly - Wheel Well Cover Assembly - Nose Wheel Well	1 1
49	1509 1509-10	143-31005 143-31005-700	Firewall Assembly - Complete Firewall Assembly - Complete	1 1
50	1510	143-31005-3	Panel - Firewall Lower	1
51	1511 1511-10	143-31005-4 143-31005-40	Panel - Firewall Upper Panel - Firewall Upper	1 1
52	1468 1469	143-31005-5 143-31005-6	Channel - Firewall Vertical LH Channel - Firewall Vertical RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
53	1537	143-31005-30	Doubler - Vertical Channel	1
54	1547	143-31005-32	Doubler - Firewall Access Door Cutout	1
55	1548 1549	143-31005-33 143-31005-34	Channel - Firewall Access Door Cutout LH Channel - Firewall Access Door Cutout RH	1 1
56	1550 1551	143-31005-42 143-31005-44	Angle - Firewall Upper Aft Reinforcement LH Angle - Firewall Upper Aft Reinforcement RH	1 1
57	1552	143-31005-46	Angle - Door Cutout Lower	1
58	1553	146-31007	Door Assembly Firewall Access	1
59	1464	143-33159	Bracket - Upright Cable Release	1
60		AN3-4A	Bolt - Aircraft #10-32	2
61		AN960-10	Washer - Plain	2
62		AN365-1032	Nut - Self Locking	2
63	1479	145-31005-16	Doubler - Strainer Bracket	1
64	1512	145-48018	Plate - Line Fitting Position	1
65	1513 1514	143-31001-71 143-31001-72	Angle - Gear Box Firewall LH Angle - Gear Box Firewall RH	1 1
66	1480 1480-10	143-51907 143-51907-100	Beam Assembly - Firewall RH Beam Assembly - Firewall RH	1 1
67	1491	143-51007-4	Beam - Instrument Panel - Firewall RH	1
68	1492-10	143-51007 SA 1	Bracket Assembly - Instrument Panel to Firewall Beam	1
69	1494	143-51007-12	Fairlead - Instrument Panel to Firewall Beam	1
70	1495	143-51007-14	Clip - Instrument Panel - Firewall	1
71	1466 1466-10 1467 1467-10 1467-20	143-31001-103 143-31001-212 143-31001-104 143-31001-202 143-31001-210	Baffle - Engine Cooling Air Outlet LH Baffle - Engine Cooling Air Outlet LH Baffle - Engine Cooling Air Outlet RH Baffle - Engine Cooling Air Outlet RH (Fastener Type) Baffle - Engine Cooling Air Outlet RH (Fastener Type)	1 1 1 1 1
72	9002	1803-M-I	Speednut	10
73		AN530-8R6	Screw - Sheet Metal Round Head	10
74	1465-10	145-31101-10	Step Assembly - Cabin Entrance	1
75		AN4-30A	Bolt - Aircraft 1/4-28	2
76		AN365-428	Nut - Self Locking	2
77	8170	3L1	Loop - Baggage Tie Down	8
78		AN3-5A	Bolt - Aircraft #10-32	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
79		AN960-10	Washer - Plain	2
80		AN365-1032	Nut - Self Locking	2
81	4452 4453	145-53071-4 145-53071-5	Strap Assembly - Baggage Tie Down Strap Assembly - Baggage Tie Down	4 4
82	1416 1417	143-31002-3 143-31002-4	Frame - Station 65 Lower LH Frame - Station 65 Lower RH	1 1
83	1515 1516	143-31002-7 143-31002-8	Fuselage Station 65 Center LH Fuselage Station 65 Center RH	1 1
84	1517 1518	143-31002-11 143-31002-12	Frame - Fuse Station 65 Upper RH Frame - Fuse Station 65 Upper RH	1 1
85	1418	143-31002-35	Angle - Step Lower Support Forward	1
86	1419	143-31002-36	Angle - Step Lower Support Aft	1
87	1523 1524	143-31002-47 143-31002-48	Frame - Fuselage Station 71.5 LH Frame - Fuselage Station 71.5 RH	1 1
88	1422 1423	143-31002-5 143-31002-6	Frame - Station 77 Lower LH Frame - Station 77 Lower RH	1 1
89	1519 1520	143-31002-9 143-31002-10	Frame - Fuse Station 65 Center LH Frame - Fuse Station 77 Center RH	1 1
90	1521 1522	143-31002-13 143-31002-14	Frame - Fuse Station 77 Upper LH Frame - Fuse Station 77 Upper RH	1 1
91	1424 1425	143-31002-43 143-31002-44	Frame - Station 80.356 Lower LH Frame - Station 80.356 Lower RH	1 1
92	1426	143-31002 SA 5	Frame Assembly - Station 93.438 Complete	1
93	1427 1428	143-31002-15 143-31002-16	Frame - Station 93.438 LH Frame - Station 93.438 RH	1
94	1429	143-31002-30	Plate - Station 93.438 Joining	1
95	1525	143-31001-63	Frame - Fuselage Station 68.125 Upper	1
96	1526	143-31001-33	Frame - Fuselage Station 72.75 Upper	1
97	1554	143-31001-427	Stiffener - Fuselage Station 93.438-106.25	2
98	1556	143-31001-98	Stiffener - Fuselage Station 93.438-106.25	2
99	1527 1528	143-31001-13 143-31001-14	Frame - Fuselage Station 106.25 LH Frame - Fuselage Station 106.25 RH	1 1
100	1557 1558	143-31001-415 143-31001-416	Stiffener - Fuselage Station 115 LH Stiffener - Fuselage Station 115 RH	1 1
101	1529 1530	143-31001-15 143-31001-16	Frame - Fuselage Station 123.437 LH Frame - Fuselage Station 123.437 RH	1 1
102	1559 1560	143-31001-417 143-31001-418	Stiffener - Fuselage Station 123.437-142.57 LH Stiffener - Fuselage Station 123.437-142.57 RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
103	1531 1532	143-31001-17 143-31001-18	Frame - Fuselage Station 142.57 LH Frame - Fuselage Station 142.57 RH	1 1
104	1535 1535-10 1536 1536-10	145-31009-1 145-31009-3 145-31009-2 145-31009-4	Intercostal - Rear Armrest LH Intercostal - Rear Armrest LH Intercostal - Rear Armrest RH Intercostal - Rear Armrest RH	1 1 1 1
105	1561 1562	143-31001-101 143-31001-102	Stiffener - Fuselage Station 142.57-160.25 LH Stiffener - Fuselage Station 142.57-160.25 LH	1 1
106	1533 1534	143-31001-19 143-31001-20	Frame - Fuselage Station 160.25 LH Frame - Fuselage Station 160.25 RH	1 1
107	1430	143-31006	Frame Assembly - Station 179.75	Ref
108	1483 1484	143-31001-3 143-31001-4	Longeron - Fuselage Upper Forward LH Longeron - Fuselage Upper Forward RH	1 1
109	1485 1486	143-31001-5 143-31001-6	Longeron - Upper Aft LH Longeron - Upper Aft RH	1 1
110	1563 1564	143-31001-411 143-31001-412	Doubler - Station 79.101 Upper LH Doubler - Station 79.101 Upper RH	1 1
111	1565	143-31001-429	Doubler - Station 97-106.25 Upper Lower	2
112	1487 1488	143-31001-7 143-31001-8	Longeron - Fuselage Lower Forward LH Longeron - Fuselage Lower Forward RH	1 1
113	1566	143-31002-66	Doubler - Station 77-93.438 Lower	2
114	1489 1490	143-31001-9 143-31001-10	Longeron - Lower Aft RH Longeron - Lower Aft RH	1 1
115	1567 1568	143-31001-425 143-31001-426	Doubler - Longeron Station 93.438-142.57 Lower LH Doubler - Longeron Station 93.438-142.57 Lower RH	1 1
116	1569 1570	145-31002-19 145-31002-20	Fitting - Station 54 Joint LH Fitting - Station 54 Joint LRH	1 1
117	1571 1572	145-31102-15 145-31102-16	Fitting - 93.438 Upper Fwd LH Fitting - 93.438 Upper Fwd RH	1 1
118	1573	145-31102-22	Fitting - 93.438 Upper Aft Joint	2
119	1574 1575	145-31102-25 145-31102-26	Fitting - 93.438 Lower Forward Joint LH Fitting - 93.438 Lower Forward Joint RH	1 1
120	1576	145-31002-27	Fitting - 93.438 Lower Aft Joint	2
121	1577 1578	145-31102-13 145-31102-14	Fitting - 142.57 Lower Joint LH Fitting - 142.57 Lower Joint RH	1 1
122	1579		Fitting - 142.57 Lower Center Joint	1
123	1447 1502 1503 1504 1448	143-31002 SA 9 143-31001-27 143-31001-47 143-31001-80 143-31002 SA 10	Skin Assembly - Station 54 93.438 LH Skin - Station 54 - 93.438 Lower LH Doubler - Baffle Cutout LH Doubler - Skin Aft Joining Skin Assembly - Station 54 93.438 RH	1 1 1 1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	1499 1500 1500-10 1501	143-31001-79 143-31001-48 143-31001-208 145-48058-2	Skin - Station 54 - 93.438 Lower RH Doubler - Skin Baffle Cutout RH Doubler - Skin Baffle Cutout RH Louvre - Fuel Pump Compartment	1 1 1 1
124	1449 1450	143-31001-67 143-31001-68	Skin - Station 54-93.438 Side LH Skin - Station 54-93.438 Side RH	1 1
125	1451 1452	145-31801-3 SA 5 145-31801-3 SA 6	Skin Assembly - Station 54 - 101 Upper LH Skin Assembly - Station 54 - 100 Upper RH	1 1
126	1453 1453-10 1454 1454-10	143-31001-21 143-31001-117 143-31001-22 143-31001-118	Skin - Fuselage Station 93.438-142.57 Side LH Skin - Fuselage Station 93.438-142.57 Side LH Skin - Fuselage Station 93.438-142.57 Side RH Skin - Fuselage Station 93.438-142.57 Side RH	1 1 1 1
127	1455	143-31001-23	Skin - Station 142.57 - 179.75 LH	1
127A	1455-10 1456	143-31001-431 143-31001-24	Skin Fuselage Station 142.57-179.75 Side LH Skin - Station 142.57 - 179.75 RH	1 1

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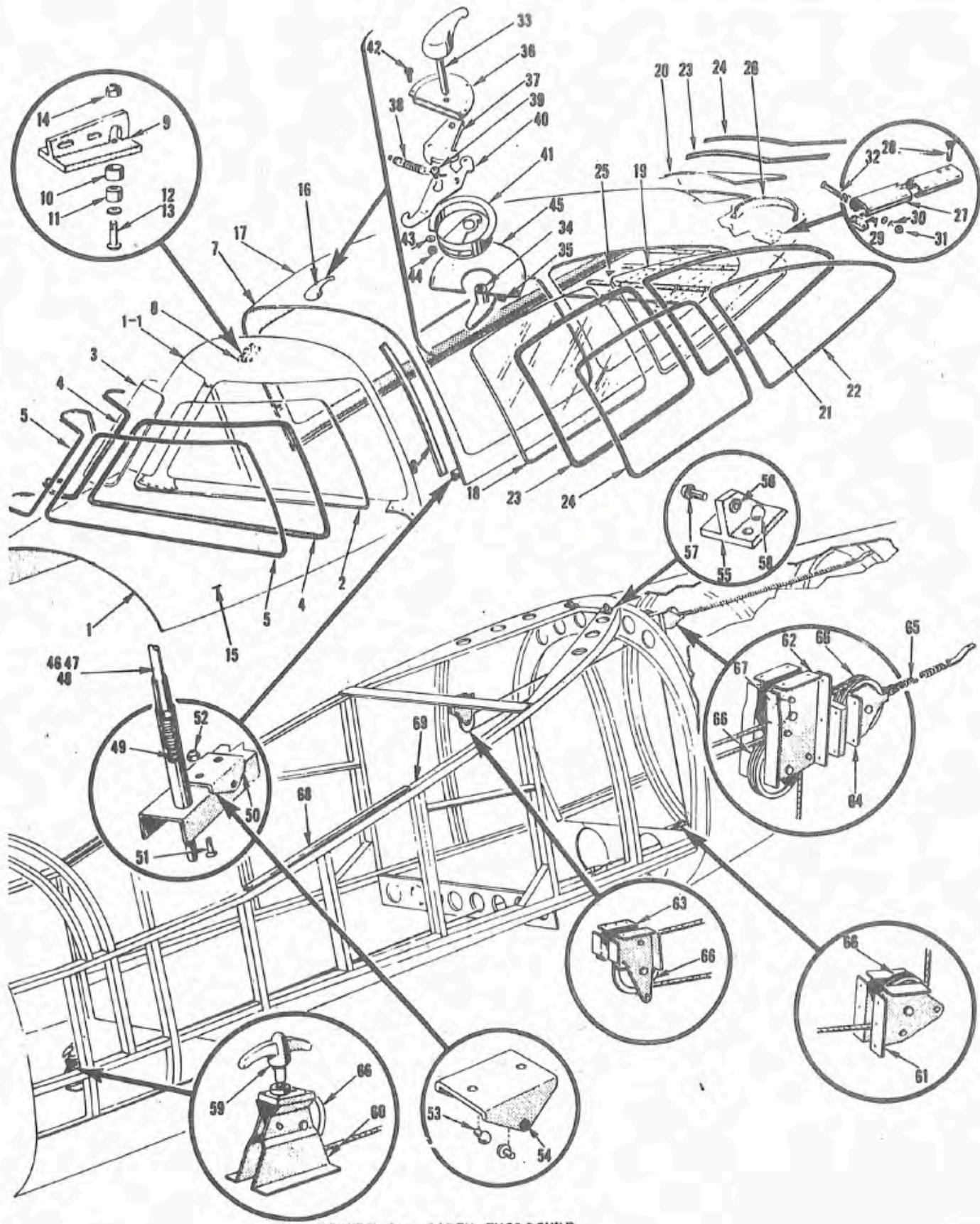


FIGURE 9 - CABIN ENCLOSURE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1651	145-31801-3	Windshield & Upper Deck Assembly (includes Windshield, Deck Skins, and Handle)	1
1-1	1652	145-31801-3A #1	Windshield Frame Assembly (Less Glass and Deck Skins)	1
2	1602-20	145-31801-87	Glass - Windshield LH	1
3	1603-20	145-31801-88	Glass - Windshield RH	1
4	1609	143-31852-5	Retainer - Glass	2
5	1613	143-31853-5	Lock - Glass	2
6	1617	145-31801-5	Seal - Back Sponge Rubber	4
7	1618	145-31834	Hinge - Cabin Air Deflector	2
8	1619	145-31819	Engagement Assembly - Latch Hook	1
9	1620	145-31819-3	Bracket - Hook Engagement	1
10	8345	4S3-D10-16	Spacer - Bolt	1
11	8351	4S3D516-14	Spacer - Bolt	1
12		AN520-10R16	Screw - Round Head Machine (Fine Thread)	1
13		NAS221-18	Screw	1
14		AN365-1032	Nut - Self Locking	1
15	1451 1452	145-31801-3 SA 5 145-31801-3 SA 6	Skin Assembly - Station 54 - 101 Upper LH Skin Assembly - Station 54 - 100 Upper RH	Ref Ref
16	9059	482J3 NAS205-10 AN365-1032	Handle - Cabin Entrance Screw Nut - Self Locking	1 4 4
17	1600	145-31801-3SA #6	Sliding Canopy - Complete	1
18	1604-10 1605-10	145-31801-17 145-31801-18	Window - Front Side LH Window - Front Side LH	1 1
19	1606-10 1607-10	145-31801-23 145-31801-24	Window - Rear Side LH Window - Rear Side RH	1 1
20	1608-10	145-31801-45	Window - Rear	1
21	1609	143-31852-5	Retainer - Glass (Items 1609 & 1613 used with items 1606 & 1607 glasses)	Note
22	1613	143-31853-5	Lock - Glass (Items 1609 & 1613 used with items 1606 & 1607 glasses)	Note
23	1610	143-31852-4	Retainer - Glass (Items 1610 & 1614 used with items 1604, 1605 & 1608 glasses)	Note
23A	1611	143-31852-3	Retainer - Rear Side Window	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
23B	1612	143-31852-2	Retainer - Rear Window	1
24	1614	143-31853-4	Lock - Glass (Items 1610 & 1614 used with items 1604, 1605 & 1608 glasses)	Note
24A	1615	143-31853-4	Lock - Rear Side Window	1
24B	1616	143-31853-2	Lock - Rear Window	1
25	1601	145-31801-32	Cover - Baggage Compartment	1
26	1621	145-31801-34	Reinforcement - Canopy	2
27	1622 1623	145-31801-43 145-31801-44	Track - Canopy Rear LH Track - Canopy Rear RH	1 1
28		NAS205-11	Screw	2
29	1647	145-31801-50	Canopy Stop - Birchwood Block	2
30		AN960-8	Washer - Plain	1
31		AN365-1032	Nut - Self Locking	1
32		AN520-10R16	Screw - Round Head Machine (Fine Thread)	1
33	1624 1624-10	145-31821 145-31824	Handle - Exterior Handle - Cabin Exterior	1 1
34	1625	145-31828	Handle - Cabin Exterior	1
35		AN565A8H8	Set Screw	1
36	1626 1626-10	145-31814 145-31814-3	Support - Latch Cover Plate Support - Latch Cover Plate	1 1
37	1627	145-31816	Pulley Assembly - Canopy Latch	1
38	1628	145-31823	Spring - Latch Hook Closure	1
39	1629	145-31815-22	Bushing - Canopy Latch	1
40	1630	145-31817	Hook Assembly - Canopy Latch	1
41	1631 1631-10	145-31818 145-31818-22	Housing Assembly - Canopy Latch Housing Assembly - Canopy Latch	1 1
42		NAS221-11	Screw	4
43		AN960-D10	Washer - Plain	4
44		AN365-1032	Nut - Self Locking	4
45	1632 1632-10	145-53012-19 145-53012-25	Cover Plate - Headline Assembly Cover Plate - Headline Assembly	1 1
46	1633-10	145-31815-41	Cable - Pin Assembly Canopy Lock	1
47	1633	145-31815-41 SA 1	Cable Assembly - Canopy Locking	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
48	1633-20	145-31815-41 SA 2	Pin Assembly - Canopy Locking	1
49	1634	145-31822	Spring - Canopy Projector	1
50	1635 1635-10	145-31830 145-31831	Truck - Canopy Operating Forward Truck Assembly - Operating Forward	2 2
51		NAS205-10	Screw	2
52	9071	26NKM02	Nut - Cap (Elastic Stop Nut)	2
53	1636 1636-10	143-31851-5 145-31832-4	Roller - Front Track (Male) Roller - Front Track (Male)	4 4
54	8030	4B18-3-125	Bushing - Shoulder	2
55	1637-10	143-31001 SA 43	Fitting - Canopy Roller Rear	2
56	8030	4B18-3-125	Bushing - Shoulder	1
57	1638 1638-10	143-31851-3 145-31832-3	Roller - Rear Track (Male) Roller - Rear Track (Male)	2 2
58	1639 1639-10	143-31851-4 145-31832-5	Roller - Rear Track (Female) Roller - Rear Track (Female)	2 2
59	1640 1640-10	145-31862 145-31867-3	Cable Assembly - Cable Opening Cable Assembly - Emergency Release	1 1
60	1641	145-31858-3	Bracket - Pulley	1
61	1642	145-31857-3	Bracket - Pulley	1
62	1643	145-31856-3	Bracket - Pulley	1
63	1644	145-31855-3	Bracket Assembly - Return Pulley	1
64	1645	145-31859	Bracket - Pulley	1
65	1646	145-31860	Spring - Emergency Operating	1
66		AN210-2A	Pulley - Anti - Friction Bearing Control	5
67		AN210-1A	Pulley - Anti - Fric Bearing Control	1
68	1648	145-31829-2	Track Assembly - Enclosure RH	1
69	1650 1649-10 1650	145-31829-5 145-31829-4 145-31829-5	Seal - Track Sponge Rubber Track Assembly - Enclosure LH Seal - Track Sponge Rubber	1 1 1

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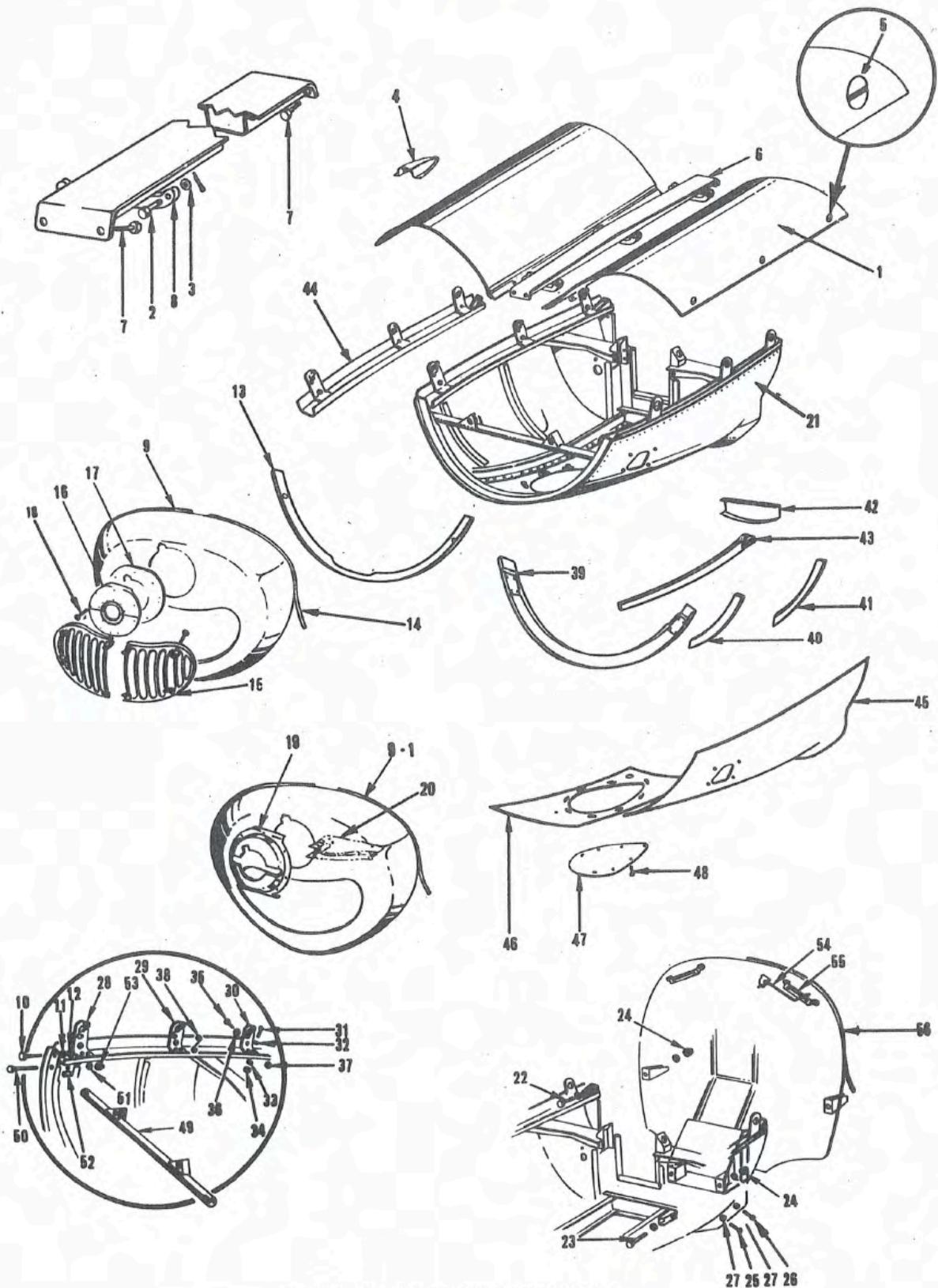


FIGURE 10 - ENGINE MOUNT AND COWLING

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1700 1700-10 1701 1701-10 1701-20	145-31501-5 145-31501-105 145-31501-6 145-31501-106 145-31501-108	Cowling - Removable Hinged LH Cowling - Removable Hinged LH Cowling - Removable Hinged RH Cowling - Removable Hinged RH Cowling - Removable Hinged RH (includes Air Scoop)	1 1 1 1 1
2		AN394-37	Pin - Flat Head 1/4	3
3		AN960-416L AN380-2-2	Washer - Plain Cotter	3 3
4	1739	145-31501-136	Scoop - Cabin Air Inlet	1
5	1704 9354 9355	117-315105 PA6 1/2-55 GF6 1/2-250	Spring - Cowl Fastener Stud - Fastener Grommet - Fastener	3 3 3
6	1702	145-31501-4	Beam Assembly - Engine Cowling	1
7		AN3-4A	Bolt - Aircraft #10-32	4
8	1703	145-31501-63	Bracket - Center Hinge	3
9	1710	145-31501-19	Nose Cowl Assembly - Engine	1
9-1	1710-10	145-31501-519	Nose Cowl Assembly - Engine	1
10		AN3-4A	Bolt - Aircraft #10-32	4
11		AN960-A10	Washer - Plain	8
12		AN365-1032	Nut - Self Locking	4
13	1711	145-31501-42	Angle - Nose Cowl Lower	1
14	1712	145-31501-44	Seal - Cowl Front Fabric	2
15	1715 1716	145-31503-1 145-31503-2 AN520-10R8	Grill Assembly - Opening LH Grill Assembly - Opening RH Screw - Round Head Machine (Fine Thread)	1 1 4
16	1717 1718	145-44012 145-44013	Retainer - Upper Half Retainer - Lower Half	1 1
17	1719	145-44011	Seal - Cowl Propeller Air	1
18		NAS221-9	Screw - Brazier Head	9
19	1736-10	145-44061 NAS221-9	Seal - Propeller Air Screw - Brazier Head	1 9
20	1738-10 1737-10	145-31509-10 145-31508-10	Seal Assembly - Cowl Air Baffle LH Seal Assembly - Air Baffle RH	1 1
21	1720 1720-10	143-31901-100 143-31901-300	Mount Assembly - Engine Mount Assembly - Engine	1 1
22		AN5-7A	Bolt - Aircraft 5/16-24	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
23		AN5-10A AN960-516	Bolt - Aircraft 5/16-24 Washer - Plain	2 10
24		AN365-524	Nut - Self Locking	4
25	8404	7S1-10-6	Screw - Button Head	4
26	8405	7S1-10-7	Screw - Button Head	2
27		AN365-1032	Nut - Self Locking	6
28	1721	145-31926-6	Bracket - Fastener Forward	2
29	1722	145-31926-7	Bracket - Fastener Center	2
30	1723	145-31926-8	Bracket - Fastener Rear	2
31		AN3-7A	Bolt - Aircraft #10-32	2
32		AN960-10	Washer - Plain	2
33		AN960-416	Washer - Plain	4
34		AN365-1032	Nut - Self Locking	2
35		NAS204-10	Screw	1
36	8471	2W1-11-16-63	Washer - Plain	1
37		AN365-832	Nut - Self Locking	1
38	9375	209-L7	Coil - Hadio Ant Load (Ranger)	1
39	1725	143-31901-100 SA	Frame Assembly - 19 Engine Mount	1
40	1726 1727	143-31901-100 SA 1 143-31901-100 SA 2	Frame Assembly - Station 21 LH Frame Assembly - Station 21 RH	1 1
41	1728 1729	143-31901-7 143-31901-8	Frame - Mount Station 30 LH Frame - Mount Station 30 RH	1 1
42	1724	143-31901-19	Frame - Lower Station 40.5	1
43	1730 1731	143-31901 SA 3 143-31901 SA 4	Channel Assembly - Mount Lower LH Channel Assembly - Mount Lower RH	1 1
44	1740 1741	143-31901 SA 9 143-31901 SA 10	Channel Assembly - Mount Upper LH Channel Assembly - Mount Upper RH	1 1
45	1732 1732-10 1733 1733-10	143-31901-143 SA 1 143-31901-243 SA 1 143-31901-144 SA 1 143-31901-244 SA 1	Skin Assembly - Engine Mount LH Skin Assembly - Engine Mount LH Skin Assembly - Engine Mount RH Skin Assembly - Engine Mount RH	1 1 1 1
46	1734	143-31901 SA 17	Skin Assembly - Engine Mount Lower	1
47	1735	143-31901-28 AN960-8	Door - Engine Mount Washer - Plain	8
48		AN515-8R8	Screw - Round Head Machine (Coarse Thread)	8

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
49	1736	143-31902	Support - Engine Front	1
50		AN5-25A	Bolt - Aircraft 5/16-24	2
51		AN960-516	Washer - Plain	2
52	8349	4S3-D516-17	Spacer - Bolt	2
53		AN365-1032	Nut - Self Locking	2
54	1705	145-31501-17	Rod - Cowl Up Support	2
55	1706	145-31502	Bracket-Cowl Up Support	2
56	1707 9339	143-31005-15 48143	Seal - Cowl Rear Fabric Plug - Button	2 1

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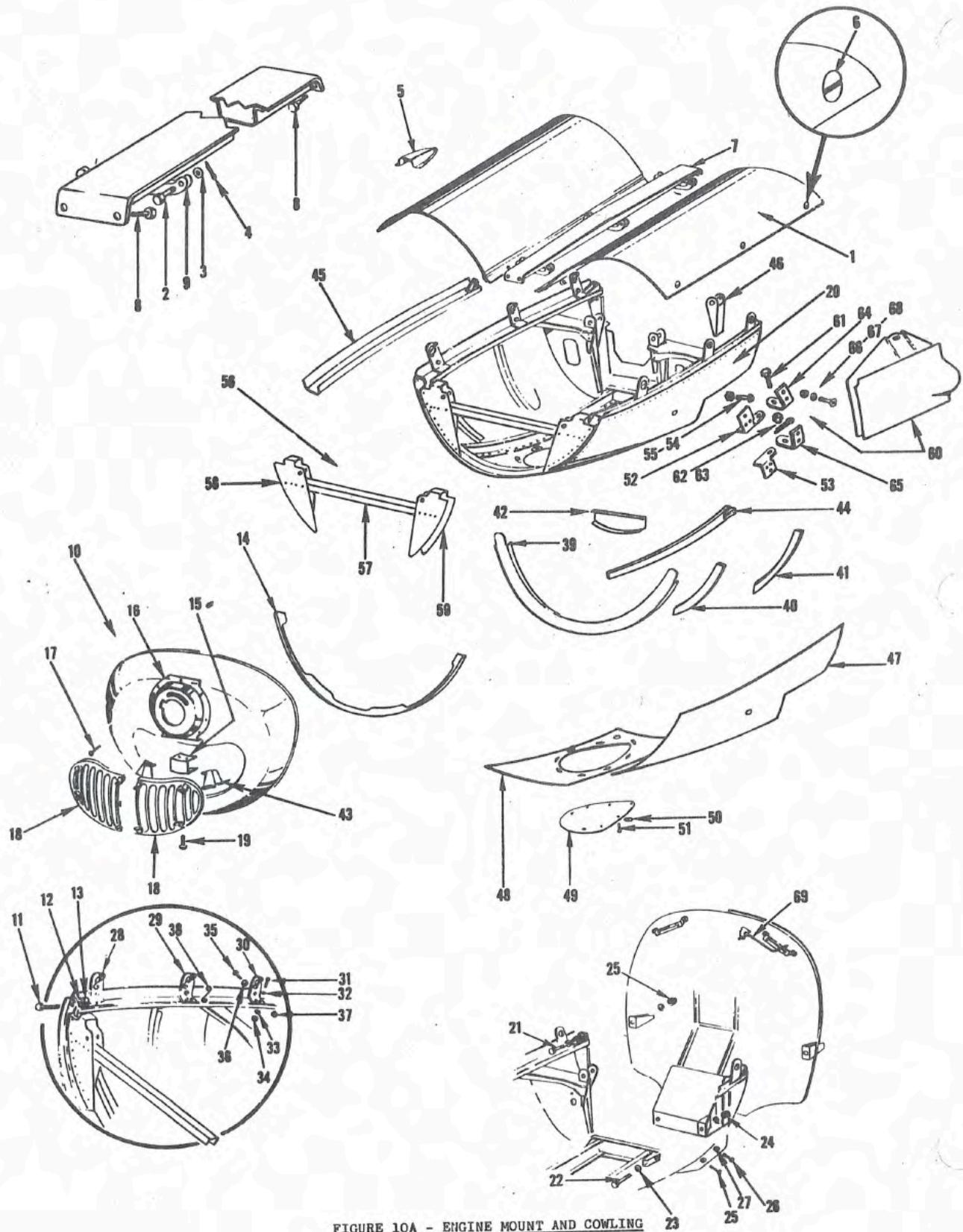


FIGURE 10A - ENGINE MOUNT AND COWLING

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1700-20 1701-30	145-31501-201 145-31501-202	Cowling - Removable Hinged RH Cowling Assembly - Hinged RH	1 1
2		AN394-37	Pin - Flat Head 1/4	3
3		AN960-416L	Washer - Plain	3
4		AN380-2-2	Cotter	3
5	1739	145-31501-136	Scoop - Cabin Air Inlet	1
6	9354 9355	PA6 1/2-55 GF6 1/2-250	Stud - Fastener Grommet - Fastener	3 3
7	1702	145-31501-4	Beam Assembly - Engine Cowling	1
8		AN3-4A	Bolt - Aircraft #10-32	4
9	1703	145-31501-63	Bracket - Center Hinge	3
10	1710-20	145-31501-200	Nose Cowl Assembly - Engine	1
11		AN3-4A	Bolt - Aircraft #10-32	4
12		AN960-A10	Washer - Plain	8
13		AN365-1032	Nut - Self Locking	4
14	1711	145-31501-42	Angle - Nose Cowl Lower	1
15	1713	146-42206-10	Support Assembly - Carburetor Air Inlet Duct	1
16	1719-10	146-44062	Seal Assembly - Cowl Propeller Air	1
16A	1719-20	146-44063	Seal Assembly - Engine Cowl Propeller Air	1
17		NAS221-9	Screw - Brazier Head	9
18	1715 1716	145-31503-1 145-31503-2	Grill Assembly - Opening LH Grill Assembly - Opening RH	1 1
19		AN520-10R8	Screw - Round Head Machine (Fine Thread)	4
20	1720-20 1720-30	143-31901-700 SA10 143-31901-400	Mount Assembly - Engine (Incl Door but Less Cowl Flaps) Mount Assembly - Engine (Incl Door but Less Cowl Flaps)	1 1
21		AN5-7A	Bolt - Aircraft 5/16-24	2
22		AN5-10A	Bolt - Aircraft 5/16-24	2
23		AN960-516	Washer - Plain	10
24		AN365-524	Nut - Self Locking	4
25	8404	7S1-10-6	Screw - Button Head	4
26	8405	7S1-10-7	Screw - Button Head	2
27		AN365-1032	Nut - Self Locking	6

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
28	1721	145-31926-6	Bracket - Fastener Forward	2
29	1722	145-31926-7	Bracket - Fastener Center	2
30	1723	145-31926-8	Bracket - Fastener Rear	2
31		AN3-7A	Bolt - Aircraft #10-32	2
32		AN960-10	Washer - Plain	2
33		AN960-416	Washer - Plain	4
34		AN365-1032	Nut - Self Locking	2
35		NAS204-10	Screw	1
36	8471	2W1-11-16-63	Washer - Plain	1
37		AN365-832	Nut - Self Locking	1
38	9357	S6-425	Spring - Upper Cowl Spring Mounting	1
39	1725-10	143-31901-17	Frame - Engine Mount Station 19	1
40	1726 1727	143-31901-100 SA 1 143-31901-100 SA 2	Frame Assembly - Station 21 LH Frame Assembly - Station 21 RH	1 1
41	1728 1729	143-31901-7 143-31901-8	Frame - Mount Station 30 LH Frame - Mount Station 30 RH	1 1
42	1724	143-31901-19	Frame - Lower Station 40.5	1
43	1742 1743	146-42206-56 146-42206-57	Bracket - Duct Support LH Bracket - Duct Support RH	1 1
44	1730 1731	143-31901 SA 3 143-31901 SA 4	Channel Assembly - Mount Lower LH Channel Assembly - Mount Lower RH	1 1
45	1740 1741	143-31901 SA 9 143-31901 SA 10	Channel Assembly - Mount Upper LH Channel Assembly - Mount Upper RH	1 1
46	1744 1745	143-31901-65 143-31901-66	Fitting - Engine Mount Rear LH Fitting - Engine Mount Rear RH	1 1
47	1732-20 1732-30 1733-20	143-31901-95 SA 1 143-31901-75 SA 1 143-31901-76 SA 1	Skin Assembly - Engine Mount LH Skin Assembly - Engine Mount LH Skin Assembly - Engine Mount RH	1 1
48	1734	143-31901 SA 17	Skin Assembly - Engine Mount Lower	1
49	1735	143-31901-28	Door - Engine Mount	1
50		AN960-8	Washer - Plain	8
51		AN515-8R8	Screw - Round Head Machine (Coarse Thread)	8
52	1746 1747	146-31512-1 146-31512-2	Hinge Assembly - Flap Outboard LH Hinge Assembly - Flap Outboard RH	1 1
53	1748	146-31513-1	Hinge Assembly - Flap Inboard LH	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	1749	146-31513-2	Hinge Assembly - Flap Inboard RH	1
54		NAS221-10	Screw - Phillips Recess Brasier Head 10-32	3
55		AN365-1032	Nut - Self Locking	3
56	1736-20	143-31901-700 SA 1	Support Assembly - Engine Mount Front	1
57	1750	143-31901-67	Channel - Mount Front Support	1
58	1751	143-31901-69	Bracket - Front Support LH	1
59	1752	143-31901-70	Bracket - Front Support RH	1
60	1753 1754	146-31511-1 146-31511-2	Flap Assembly - Engine Mount Cowl LH Flap Assembly - Engine Mount Cowl RH	1 1
61		AN3-6	Bolt - Aircraft Castle	2
62		AN310-3		2
63		AN380-2-2	Cotter	2
64	1755	146-31511-7	Hinge Assembly - Cowl Flap Outboard	1
65	1756	146-31511-9	Hinge Assembly - Cowl Flap Inboard	1
66		NAS221-10	Screw - Phillips Recess Brasier Head 10-32	2
67		AN960-D10	Washer - Plain	2
68		AN365-1032	Nut - Self Locking	2
69	1705	145-31501-17	Rod - Cowl Up Support	2

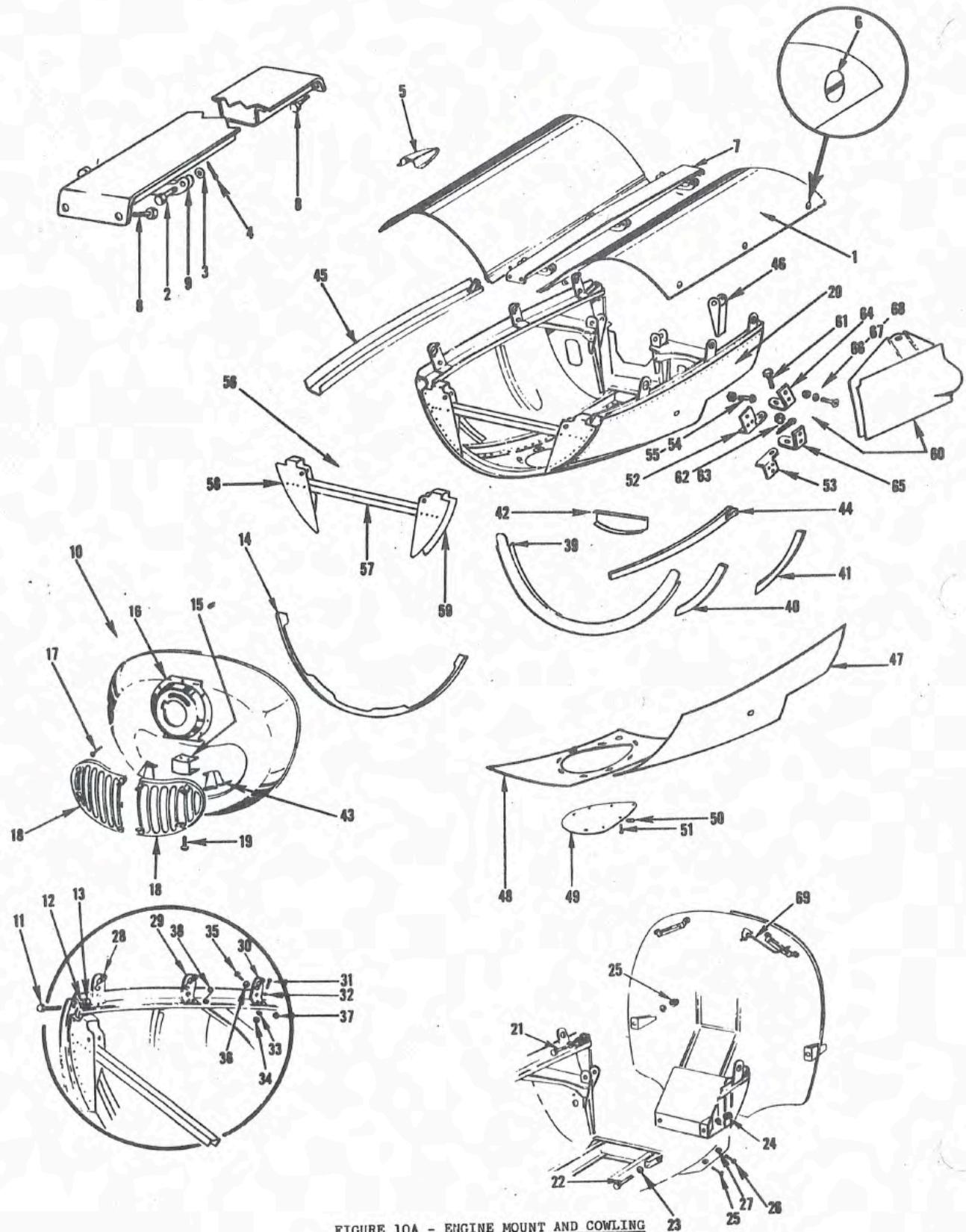


FIGURE 10A - ENGINE MOUNT AND COWLING

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1801	145-42303	Support - Baffle Right Rear	1
2	1802	145-42301-13	Bracket - Right Front Left Rear	2
3	1803	145-42301-24	Baffle Plate - Left Rear	1
4	1804	145-42301-26	Bracket - Baffle Left Front	1
5		AN3-3A	Bolt - Aircraft #10-32	4
6		AN365-1032	Nut - Self Locking	4
7	1805	145-42301-78	Baffle Assembly - Right Rear	1
8		AN3-3A	Bolt - Aircraft #10-32	4
9		AN365-1032	Nut - Self Locking	4
10	1806	145-42301-77	Baffle Plate - Left Rear	1
11	8404	7S1-10-6	Screw - Button Head	4
12		AN365-1032	Nut - Self Locking	4
13	1807	145-42301-70	Baffle Assembly - Right Lower	1
14	8404	7S1-10-6	Screw - Button Head	4
15		AN365-1032	Nut - Self Locking	4
16	1808	145-42301-97	Baffle Assembly - #1 Cylinder Rear	1
17		AN4-4A	Bolt - Aircraft 1/4-28	1
18		AN365-428	Nut - Self Locking	1
19	1829	145-42301-91	Baffle Assembly - #2 Cylinder Rear	1
20		AN520-1032-8	Screw - Round Head Machine (Fine Thread)	1
21		AN365-1032	Nut - Self Locking	1
22	1809	145-42306	Baffle Assembly - Right Rear	1
23	1810	145-42307	Baffle - Center	4
24		AN4-27A	Bolt - Aircraft 1/4-28	1
25	1830	145-42301-15	Clip - Engine Baffle	1
26	1812	145-42301-54	Baffle Assembly - Left Front	1
27		AN4-4A	Bolt - Aircraft 1/4-28	1
28		AN365-428	Nut - Self Locking	1
29	1813	145-42301-53	Baffle Assembly - Right Front	1
30		AN4-4A	Bolt - Aircraft 1/4-28	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
31		AN365-428	Nut - Self Locking	1
32	1811	145-42301-85	Clip - Cooling Air Baffle	8
33		AN520-10-14	Screw - Round Head Machine (Fine Thread)	8
34	8507	2W1AL-16-32-64	Washer - Plain	8
35		AN365-1032	Nut - Self Locking	8
36	9100	E-185-3	Engine (Continental)	1
37		AN7-31A AN7-32A	Bolt - Aircraft 7/16-20 Bolt - Aircraft 7/16-20	2 2
38	1814	145-42026 AN960-716	Bond - Braided Electrical Washer - Plain	2 12
39	9116	25024	Washer - Special (Continental)	8
40	9117	RL15-38	Washer (Lord)	8
41	9118	J2742-1	Shock Mount (Lord)	4
42		AN365-720	Nut - Self Locking	4
43	9095	PS5C	Carburetor	1
44	9406 9406-10	RD7750-1 RD7790-1	Fuel Pump (Romec) Fuel Pump (Romec)	1 1
45	9099 9099-10	LA6 S6LN-21	Magneto Magneto (Scintella)	1 1
46	9101	1101879	Generator	1
47	9102 9102-10	1109658 1109660	Starter Starter (Delco - Remy)	1 1
48	9102-100	1118133	Solenoid	1
49	9102-101	1885541	Resistor	1
50	9100-5	35999	Shaft	1
51	9100-6	352041	Gear	1
52	9100-7	25102	Seal	1
53	9100-8	24907	Plug	1
54	9100-9	352018	Shaft Gear	1
55	9100-10	530443	Adapter (Continental)	1
56	9100-11	2024	Plug	1
57	9100-12	352061	Gasket	1
58		AN4045-1	Gasket (2 used Romec Pump)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
59	9100-14	530479-03	Stud	1
60	9100-15	530371	Spacer	1

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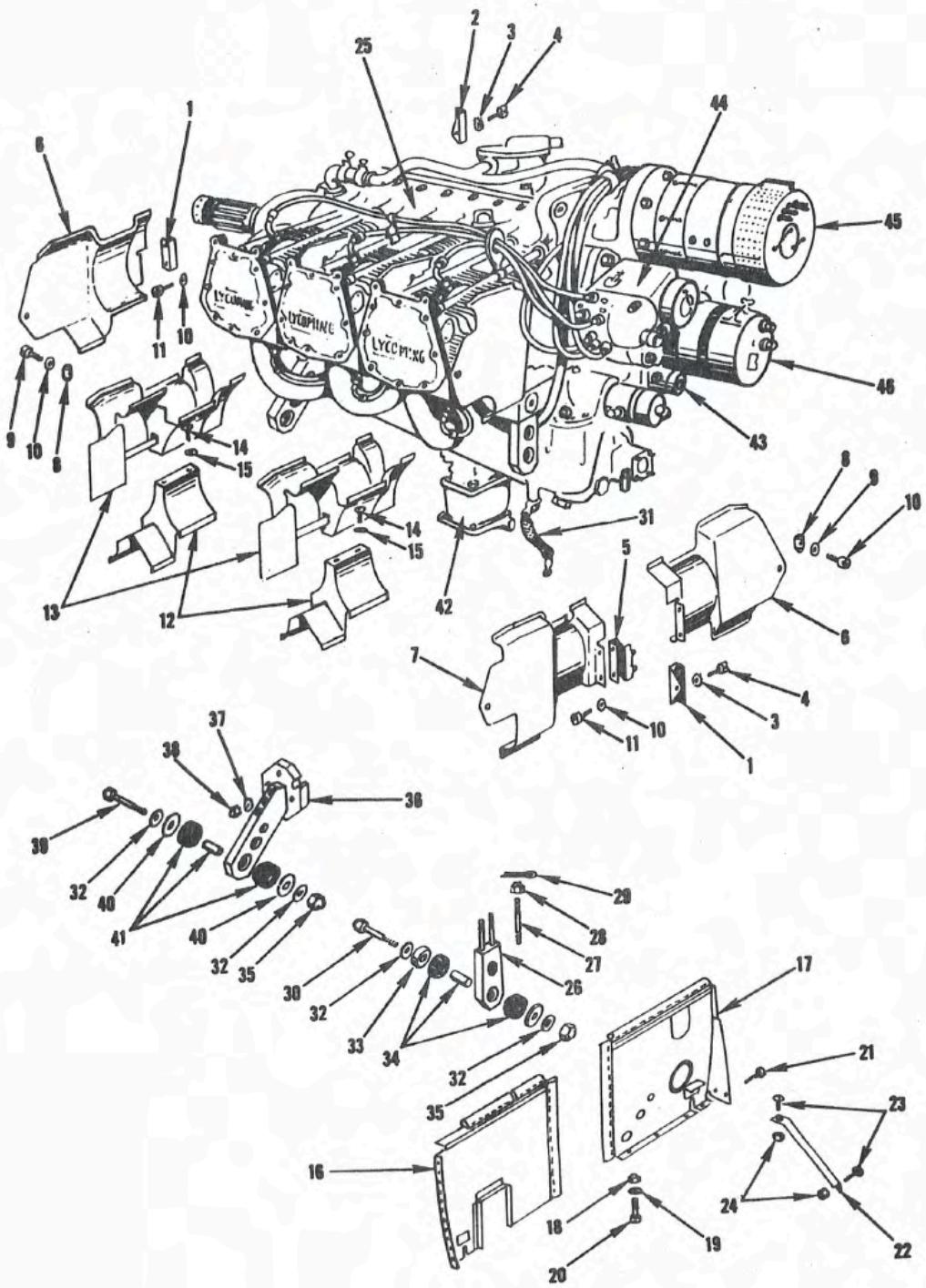


FIGURE 11A - ENGINE AND AIR BAFFLE INSTALLATION

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	1901	146-42015-11	Support Assembly - Baffle	2
2	1902	146-42015-17	Support Assembly - #1 Front Baffle	1
3		AN936B416	Washer - External Teeth Lock	1
4		AN501-416-8	Screw - Fillister Head (Fine Thread)	1
5	1903	146-42015-15	Support Assembly - #6 Rear Baffle	1
6	1904	146-42011	Baffle Assembly - Engine Cylinder	2
7	1905	146-42012	Baffle Assembly - Engine Cylinder	2
8	9600-4	65614	Plug - Engine Cylinder Baffle Attachment	1
9		AN502-10-8	Screw - Drilled Fillister Head Machine (Fine Thread)	1
10		AN960A10L	Washer - Plain	3
11		AN526-1032R7	Screw - Truss Head (Fine Thread)	2
12	1906	146-42013	Baffle Assembly - Engine Inter Cylinder Lower	4
13	1907	146-42014	Baffle Assembly - Engine Inter Cylinder Upper	4
14		AN526-1032R7	Screw - Truss Head (Fine Thread)	2
15		AN960A10L	Washer - Plain	2
16	1908	146-42016-1	Baffle Assembly - Engine Rear LH	1
17	1909	146-42016-2	Baffle Assembly - Engine Rear RH	1
18		AN3-7A	Bolt - Aircraft #10-32	4
19		AN960-10L	Washer - Plain	4
20		AN365-1032	Nut - Self Locking	6
21		AN526-1032R8	Screw - Truss Head (Fine Thread)	2
22	1910	146-42016-29	Angle - Engine Rear Baffle Support	1
23		AN520-10R7	Screw - Round Head Machine (Fine Thread)	2
24		AN365-1032	Nut - Self Locking	2
25	9600	GO-435-C2	Engine - Lycoming	1
26	1911	146-31904	Support Assembly - Rear Engine Mount	2
27		NAS-183-6-20	Stud - Coarse Thread 3/8-24	2
28		AN310-6	Nut - Aircraft Castle 3/8-24	4
29		AN995-C41	Wire - Lock	AR
30		AN7-30A	Bolt - Aircraft 7/16-20 (Engine to Rear Mount)	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
31	1814	145-42026	Bond - Braided Electrical	2
32		AN960-716	Washer - Plain	8
33	1914	146-31906-3	Spacer - Engine to Rear Mount	2
34	9118-20	J2861-9	Shock Mount (Lord)	2
35		AN365-720	Nut - Self Locking	4
36	1912 1913	146-31905 146-31905-1	Support Assembly - Engine Mount LH Support Assembly - Engine Mount RH	1 1
37		AN960-516	Washer - Plain	6
38		AN365-524	Nut - Self Locking	6
39		AN7-26A	Bolt - Aircraft 7/16-20 (Engine to Rear Mount)	2
40	1915		Spacer - Engine to Front and Rear Mount	4
41	9118-10 8535	J2860-6 AN960-616 2W1C-28-68-020	Shock Mount (Lord) Washer - Plain (Rear Engine Mount) Washer - Plain (Front Engine Mount)	2 4 4
42	9095-10	MA 4-5	Carburetor (Marvel)	1
43	9406-20	RD7790A-2N	Pump - Engine Driven Fuel (Romeo)	1
44	9099-20	SF6LN-8	Magneto (Scintilla)	2
45	9101-20	146-40100	Generator - Ryan Modified	1
46	9102-20	397-50B	Starter (Eclipse)	1

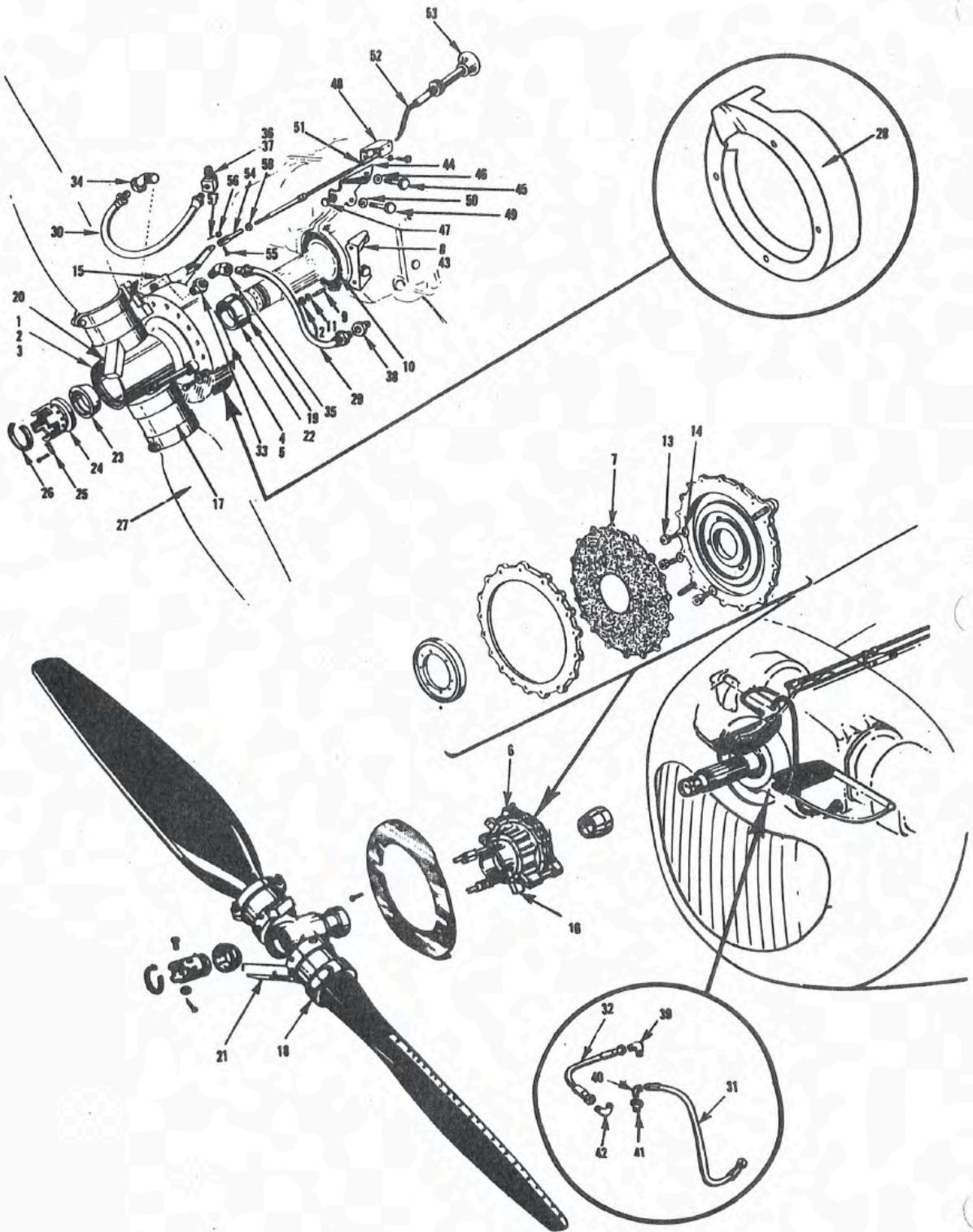


FIGURE 12 - HARTZELL PROPELLER INSTALLATION

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	9105	HC-12X20-1	Propeller (Hartzell)	1
2	9105-10	HC-12X20-5	Propeller (Hartzell)	1
3	9105-20 9105-30	HC-12X20-7 HC-12X20-7B	Propeller (Hartzell) Propeller - Controllable Pitch with Metal Blade	1 1
3A	9105-40	HC-12X20-8	Propeller - Hartzell (260) with Metal Blades	1
4	9107 9449 9114 9115	91-1 92-1 H-222-70-44 H-222-70-67	Hydraulic Element Assembly (Hartzell) Jack Assembly (with Forks L Rod) Seal - "0" Ring Inner Seal - "0" Ring Outer	1 1 1 1
5	9107-100 9450	91-5 B-109	Hydraulic Element Assembly (Hartzell) Jack Assembly (with Forks L Rod)	1 1
6	9107-200 9450-100 9450-110 9450-120	91-7 B-109-2 B-109-3 B-109-4	Hydraulic Element Assembly (Hartzell) Jack Assembly (with Forks R Rod) Jack Assembly (with Forks L Rod) Jack Assembly (with Forks L Rod)	1 1 1 1
7	9459	B-119	Diaphragm (Hartzell - 7)	1
8	1822	145-44014	Bracket	1
9	1816	145-44015	Bolt - Control Cylinder Mount	4
10	1815	145-44021 NAS183-5-7A	Gasket - Engine Nose Propeller Stud	1 4
11		AN960D516L	Washer - Plain	4
12		AN365-524	Nut - Self Locking	4
13	1831	145-44062	Screw - Cylinder Mounting Cap	4
14	8532	2W1-AL-21-14-64	Washer - Plain	4
15	9108 9108-100	93-1 93-5	Valve Assembly (Propeller Control) Valve Assembly (Propeller Control)	1 1
16	9108-200 9112	93-7 H-222-70-10	Valve Assembly (Propeller Control) Seal - "0" Ring - Valve	1 2
17	--	--	--	
18	9451 9451-100 9451-200	C-94 C-49-2A C-49-15	Hub Assy (Hartzell) Hub - Propeller (Hartzell) Hub - Propeller (Hartzell)	1 1 1
19	1817	145-44022	Hub Spacer - Prop Adjustment	1
19A	1817-2 1817-4	145-44022-2 145-44022-4	Spacer - Prop Adjustment Spacer - Prop Adjustment	1 1
20	9452 9452-100	C-66-1 C-66-5	Clamp & Counterweight Assembly Clamp & Counterweight Assembly	1 2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
21	9453 9453-100 9453-110 9453-120	C-66 C-3 C-3-1 C-3-3	Clamp & Counterweight Assembly Clamp (Hartzell) Clamp (Hartzell) Clamp (Hartzell)	2 2 2 2
22	9110-10	A50-1	Rear Cone (Hartzell)	1
23	9111	A42	Front Cone (Hartzell)	1
24		AN5011-20	Nut - Propeller Hub Retaining (Non-Controllable)	1
25		AN393-19	Pin - Flat Head 3/16	1
26		AN5009-20	Ring	1
27	9106 9106-10 9113	8428R 8433 H-222-70-33	Blade - Propeller (Hartzell) Blade - Metal Propeller Seal - "O" Ring (Clamp)	2 2 2
28	1818	145-44018 AN502-10-8 AN936A10	Cover - Propeller Control Cylinder Screw - Drilled Fillister Head Machine (Fine Thread) Washer - External and Internal Teeth Lock	1 4 4
29	9092	145-44017	Hose Assembly - Engine Oil to Propeller LH	1
30	9093 9092 9081	75698 145-44017 145-44020	Hose Assembly Hose Assembly - Engine Oil to Propeller LH Hose Assembly - Engine Oil to Propeller RH	1 1 1
31		AN6264-4-17 1/2	Hose Assembly - Engine Oil to Propeller Control LH	1
31A		AN6264-4-34	Hose Assembly - Hydraulic Fuel & Oil LH	1
32		AN6264-6-11 1/2	Hose Assembly - Engine Oil to Propeller Control RH	1
32A		AN6264-6-14	Hose Assembly - Hydraulic Fuel & Oil RH	1
33	9146	3224X2	Bushing	2
34	9132	352X6	Elbow - Inverted 45°	1
35	9331	352X4	Elbow - 45°	1
36	9133	400X4	Elbow - 90° Inverted Male	1
37	9135	432X6	Elbow - 90°	1
38	1819	145-44052	Bushing - Line Reducer	1
39		AN822-6-2	Elbow - 90°	1
40		AN823-4	Elbow - 45°	1
41		AN912-3	Bushing - Reducer	1
42		AN822-6-6	Elbow - 90°	1
43	1822	145-44014	Bracket	1
44	1823	145-44003	Bracket - Regulator Lever Stop	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
45		AN4-13A	Bolt - Aircraft 1/4-28	2
46		AN960-416	Washer - Plain	6
47	1824	1145-43015	Bolt - Regulator Lever Stop	1
48	1825	145-43023	Bracket - Propeller Control Cable Forward	2
48A	1825-10 1836	145-44060-2 145-43026	Bracket - Propeller Control Forward Sleeve	2 1
49		AN4-13A	Bolt - Aircraft 1/4-28	2
50		AN960-416	Washer - Plain	8
51	1826	145-43026	Sleeve	4
52	1827	145-43020	Control Cable - Propeller Pitch	1
53	1828	145-43024	Knob - Propeller Control Cable	1
54		AN486-2	Clevis - Rod End Adjusting	1
55		AN24-10	Bolt - Clevis 1/4-28	1
56		AN320-4	Nut - Aircraft Shear	1
57		AN380-2-2	Cotter	1
58		AN316-4R	Nut - Aircraft Check	1

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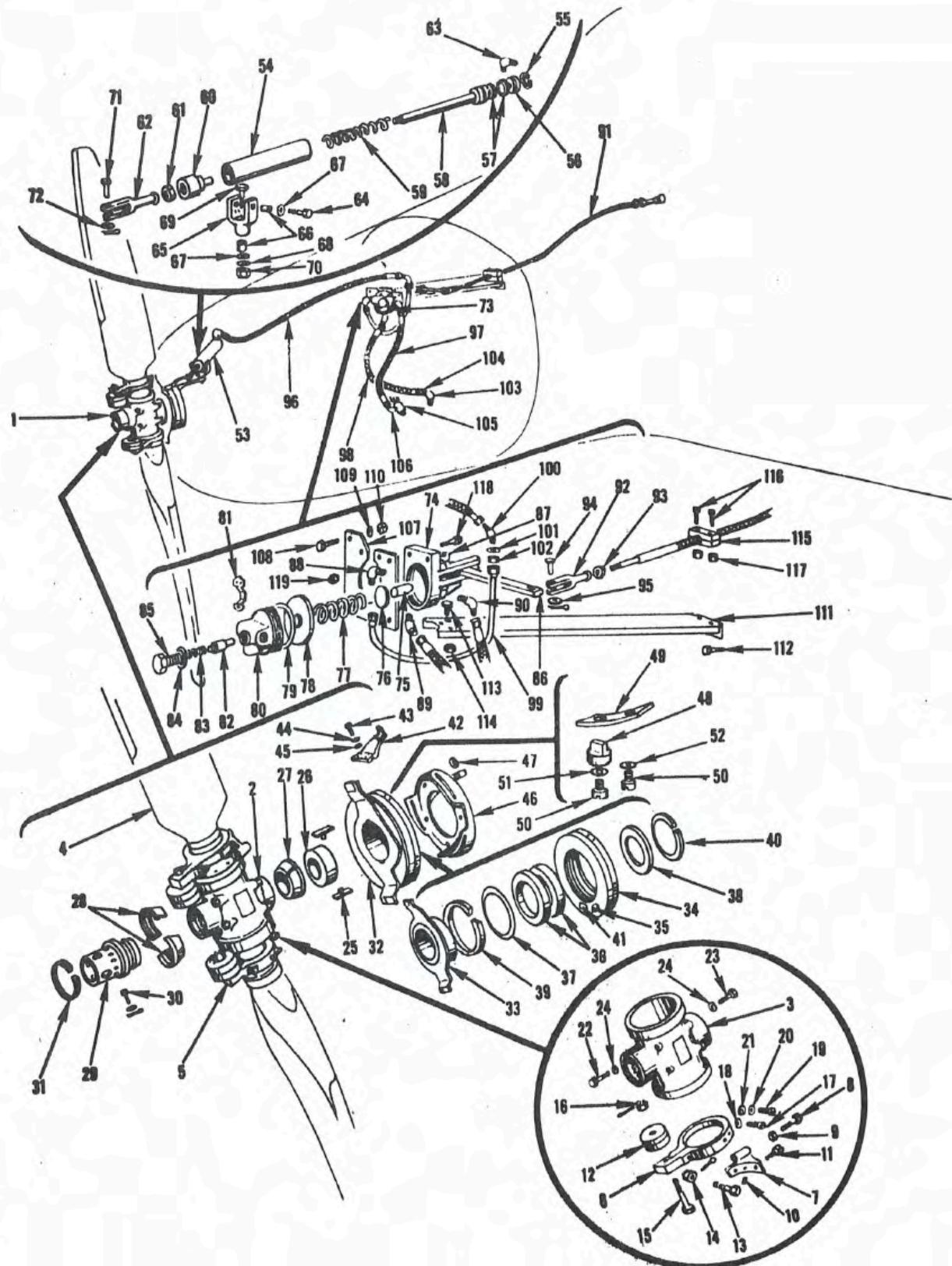


FIGURE 12A - KOPPERS AEROMATIC PROPELLER INSTALLATION

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	9601	4373H	Propeller Assembly - Altitude Control Complete (Aeromatic)	1
2	9601-100	No Number	Propeller Assembly - Altitude Control (Aeromatic)	1
3	9601-110	4221H	Hub Assembly - Propeller Model 220H (Aeromatic)	1
4	9601-120	P40017-93	Blade Assembly - Propeller Model 0-93 (Aeromatic)	2
5	9601-130	3337	Arm & Bracket Assembly - Counterweight (Aeromatic)	2
6	9601-140	3282-1	Arm - Counterweight (Aeromatic)	1
7	9601-150	3335	Bracket - Counterweight Arm Thrust (Aeromatic)	1
8	9601-160	20230	Screw Assembly - Thrust (Aeromatic)	1
9		AN365-524	Nut - Self Locking	1
10	9601-170	20220	Dowel - Thrust Bracket (Aeromatic)	1
11		AN502-416-6	Screw - Drill Filled Head 1/4-28 (Thrust Bracket)	2
12	9601-180 9601-190 9601-200 9601-210 9601-230 9601-240	2965-2 2965-3 2965-4 2965-5 2965-7 2965-8	Counterweight - Propeller (.5oz) (Aeromatic) Counterweight - Propeller (1oz) (Aeromatic) Counterweight - Propeller (2oz) (Aeromatic) Counterweight - Propeller (Aeromatic) Counterweight - Propeller (5oz) (Aeromatic) Counterweight - Propeller (8oz) (Aeromatic)	AR AR AR AR AR AR
13	9601-550	2167	Bolt - Counterweight Arm Clamp	2
14	9601-560	20042-8 AN380C-4-3	Nut - Counterweight Arm Clamp Pin - Cotter	2 2
15		AN7-30	Bolt - Aircraft 7/16-20 (Counterweight)	2
16		AN310-7 AN380C-3-3	Nut - Aircraft Shear (Counterweight) Pin - Cotter	2 2
17	9601-250	2894	Screw - Counterweight Arm Locating (Aeromatic)	2
18	9601-260	2714-6	Washer - Arm Locating Screw (Aeromatic)	2
19		AN502-10-4	Screw - Drill Fill Head #10 (Counterweight Arm Safety)	2
20		AN960-10	Washer - Plain	2
21		AN960-10L	Washer - Plain	2
22	9601-270	2659-49	Bolt - Propeller Low Pitch Stop (Aeromatic)	2
23	9601-280	2659-64	Bolt - Propeller High Pitch Stop (Aeromatic)	2
24	9601-290	2660	Shim - Propeller Stop Bolt (Aeromatic)	8
25	9601-570	No Number	Key - Propeller Thrust Plate Engine Shaft (Aeromatic)	2
26	9426	2542-10	Spacer - Propeller (Aeromatic)	1

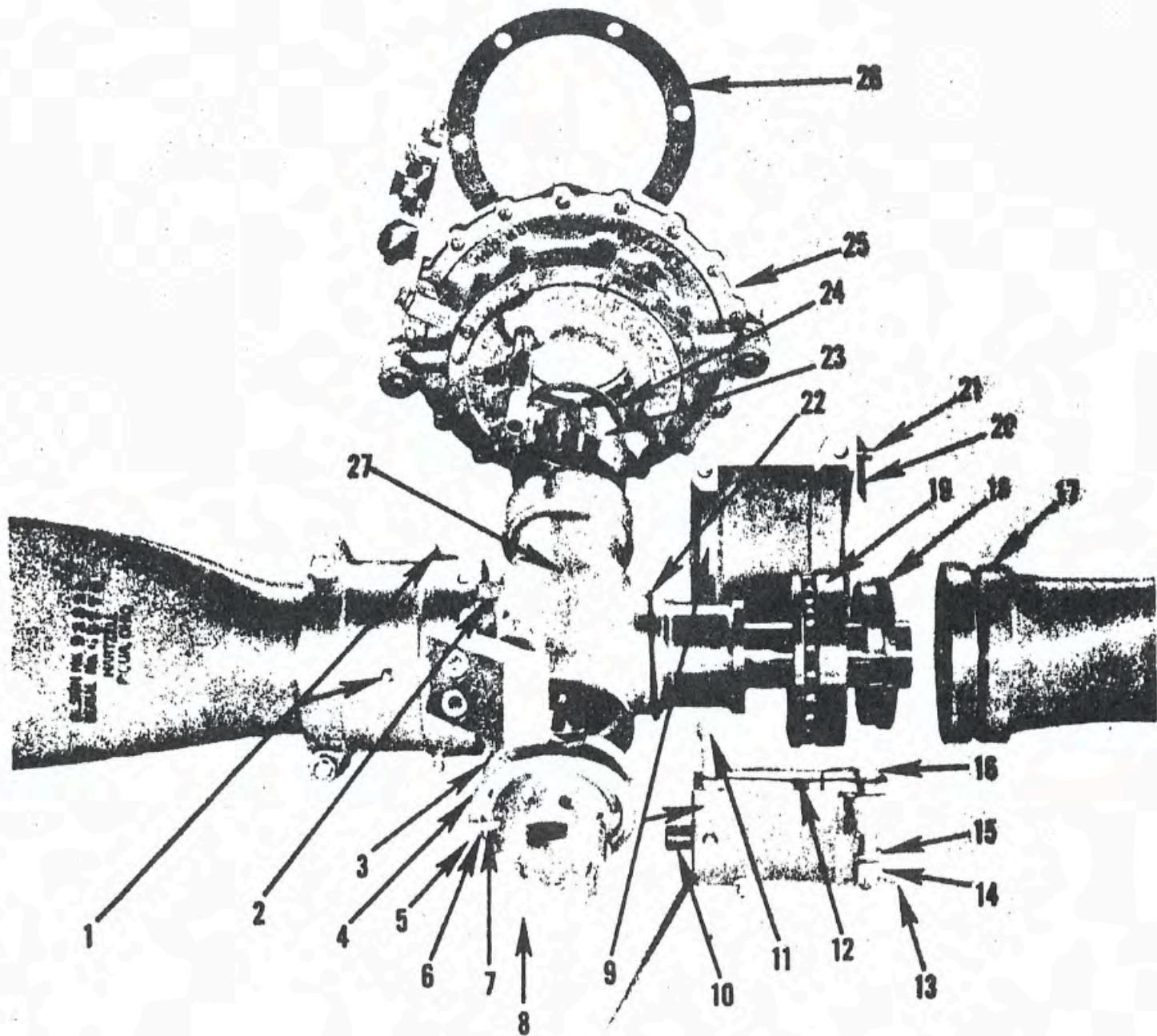
KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
27		AN5008-20	Cone - Propeller Hub Rear	1
28	9425	2400	Front Cone - Prop (Aeromatic)	1
29	9424	2756	Nut - Propeller (Aeromatic)	1
30		AN393-19 AN381-2-12	Pin - Flat Head 3/16 Pin - Cotter (Corrosion Resisting Steel)	1 1
31		AN5009-20	Ring	1
32	9601-300	3362	Plate & Housing Assembly - Thrust (Aeromatic)	1
33	9601-310	3360	Plate Assembly - Alt Control Thrust (Aeromatic)	1
34	9601-320	3359	Housing - Altitude Control (Aeromatic)	1
35	9601-330	20301	Fitting - Altitude Control Grease (Aeromatic)	1
36	9601-340	20277	Bearing - Altitude Control (Aeromatic)	2
37	9601-350	20217	Shim - Bearing Seal (Aeromatic)	1
38	9601-360	20400	Shim - Bearing Seal Inner (Aeromatic)	1
39	9601-370	20403	Ring - Thrust Plate Snap (Aeromatic)	1
40	9601-380	20404	Ring - Housing Snap (Aeromatic)	1
41	9601-390	2428-50	Transfer - Check Lubricant (Aeromatic)	1
42	9601-400	20391-2	Bracket Assembly - Housing	1
43		AN500-416-8	Screw - Drill Filled Head 1/4-20 (Bracket)	4
44		AN960-416	Washer - Plain	4
45		AN936-A416	Washer - Lock (Housing Bracket Screw)	4
46	9601-410	3361	Flange - Altitude Control Mounting (Aeromatic)	1
47		AN936-A616	Washer - Internal Teeth Lock	6
48	9601-420	20204	Dowel - Altitude Control Housing (Aeromatic)	3
49	9601-430	20205	Plate - Housing Dowel Cover (Aeromatic)	3
50		AN502-10-6	Screw - Drill Filled Head 10-32 (Cover Plate)	6
51		AN960-10	Washer - Plain	3
52		AN960-10L	Washer - Plain	3
53	9601-440	3364	Cylinder Assembly - Altitude Control Hydraulic (Aeromatic)	1
54	9601-450	20413	Tube - Alt Control Cylinder (Aeromatic)	1
55	9601-460	20412	Ring - Alt Control Cylinder Snap (Aeromatic)	1
56	9601-470	20414	Plug - Alt Control Cylinder End (Aeromatic)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
57	9601-480	20411	Seal - Alt Control Cylinder O-Ring (Aeromatic)	2
58	9601-490	20416	Piston Assembly - Alt Control Cylinder (Aeromatic)	1
59	9601-500	20423	Spring - Alt Control Cylinder (Aeromatic)	1
60	9601-510	20415	Head - Alt Control Cylinder (Aeromatic)	1
61		AN316-4R	Nut - Aircraft Check	1
62		AN486-2	Clevis - Rod End Adjusting	1
63		AN822-6-2	Elbow - 90 Degrees	1
64		AN76A10	Bolt - Aircraft Drill Head 3/8-16 (Cylinder Attaching)	2
65	9601-520	20410	Yoke - Alt Control Cylinder (Aeromatic)	1
66	9601-530	20419	Bearing - Alt Control Cylinder Yoke (Aeromatic)	3
67		AN960-816	Washer - Plain	2
68		AN960-816L	Washer - Plain (Thin)	2
69	9601-540	20421	Bolt - Alt Control Cylinder Yoke (Aeromatic)	1
70		AN364-624	Nut - Self Locking	1
71		AN394-13	Pin - Flat Head 1/4 (Piston Rod Clevis)	1
72		AN960-416 AN380C-2-2	Washer - Plain Pin - Cotter (Piston Rod Clevis)	1 1
73	9603	3355	Valve Assembly - Alt Control Regulator (Airmatic)	
74	9603-100	335510	Body - Regulator Valve Upper (Airmatic)	1
75	9603-110	335511	Pin - Regulator Valve Upper (Airmatic)	1
76	9603-120	335512	Washer - Regulator Valve Spring (Airmatic)	1
77	9603-130	33559	Spring - Regulator Valve Upper (Airmatic)	1
78	9603-140	33558	Diaphragm - Regulator Valve (Airmatic)	1
79	9603-150	33556	Gasket - Regulator Valve Body (Airmatic)	1
80	9603-160	33551	Body - Regulator Valve Lower (Airmatic)	1
81	9603-170 9603-180	33557 No Number	Spring - Regulator Valve Leaf (Airmatic) Pad - Regulator Valve Leaf Spring (Airmatic)	1 1
82	9603-190	33554	Pin - Regulator Valve Lower (Airmatic)	1
83	9603-200	33553	Spring - Regulator Valve Lower (Airmatic)	1
84	9603-210	33555	Gasket - Regulator Valve Lower (Airmatic)	1
85	9603-220	33552	Nut - Regulator Valve Spring Seat (Airmatic)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
86	9603-230	335514	Lever - Regulator Valve Actuating (Airmatic)	1
87	9603-240	335513	Pin - Regulator Valve Lower (Airmatic)	1
88		AN822-6-2	Elbow - 90 Degrees	1
89		AN823-5	Elbow - 45 Degrees (Regulator Valve Drain Line)	1
90		AN823-4	Elbow - 45 Degrees	1
91	9602	20291-9	Control Assembly - Propeller (Aeromatic)	1
92		AN486-1	Clevis - Rod End Adjusting (Control Cable End)	1
93		AN316-4R	Nut - Aircraft Check	1
94		AN394-17	Pin - Flat Head 1/4	1
95		AN960-416 AN380C-2-2	Washer - Plain Pin - Cotter (Piston Rod Clevis)	1 1
96		AN6264-6-30	Hose Assembly - Hydraulic Fuel & Oil	1
97		AN6264-4-12 1/2	Hose Assembly (Regulator Valve Inlet Line)	1
98		AN6264-5-15 1/2	Hose Assembly - (Regulator Valve Drain Line)	1
99	1832	146-44001-3	Line Assembly - Regulator Outlet Line to Bulkhead Elbow	1
100		AN837-6D	Elbow - 45 Degrees (Regulator Outlet Line at Bulkhead)	1
101		AN960-916	Washer - Plain	2
102		AN924-6D	Nut - Bulkhead & Universal Fitting Flared Tube	1
103	9150	3350X4	Elbow - Street	1
104		AN816-5-4	Nipple - (Valve Drain Line House to Elbow Connecting)	1
105	9524	3750 x 2	Tee - Pipe (Valve Inlet Line at Engine Boss)	1
106		AN822-4	Elbow - 90 Degrees	1
107	1833	146-44024	Plate - Aeromatic Altitude Control Regulator Valve	1
108		AN3-4A	Bolt - Aircraft #10-32	4
109		AN960-10	Washer - Plain	4
110		AN365-1032	Nut - Self Locking	4
111	1834	146-44026	Channel - Aeromatic Propeller Control Support	1
112		AN3-3A	Bolt - Aircraft #10-32	2
113		AN3-10A	Bolt - Aircraft #10-32	2
114		AN365-1032	Nut - Self Locking	2
115	1835	146-44025	Block - Aeromatic Propeller Control Support	1

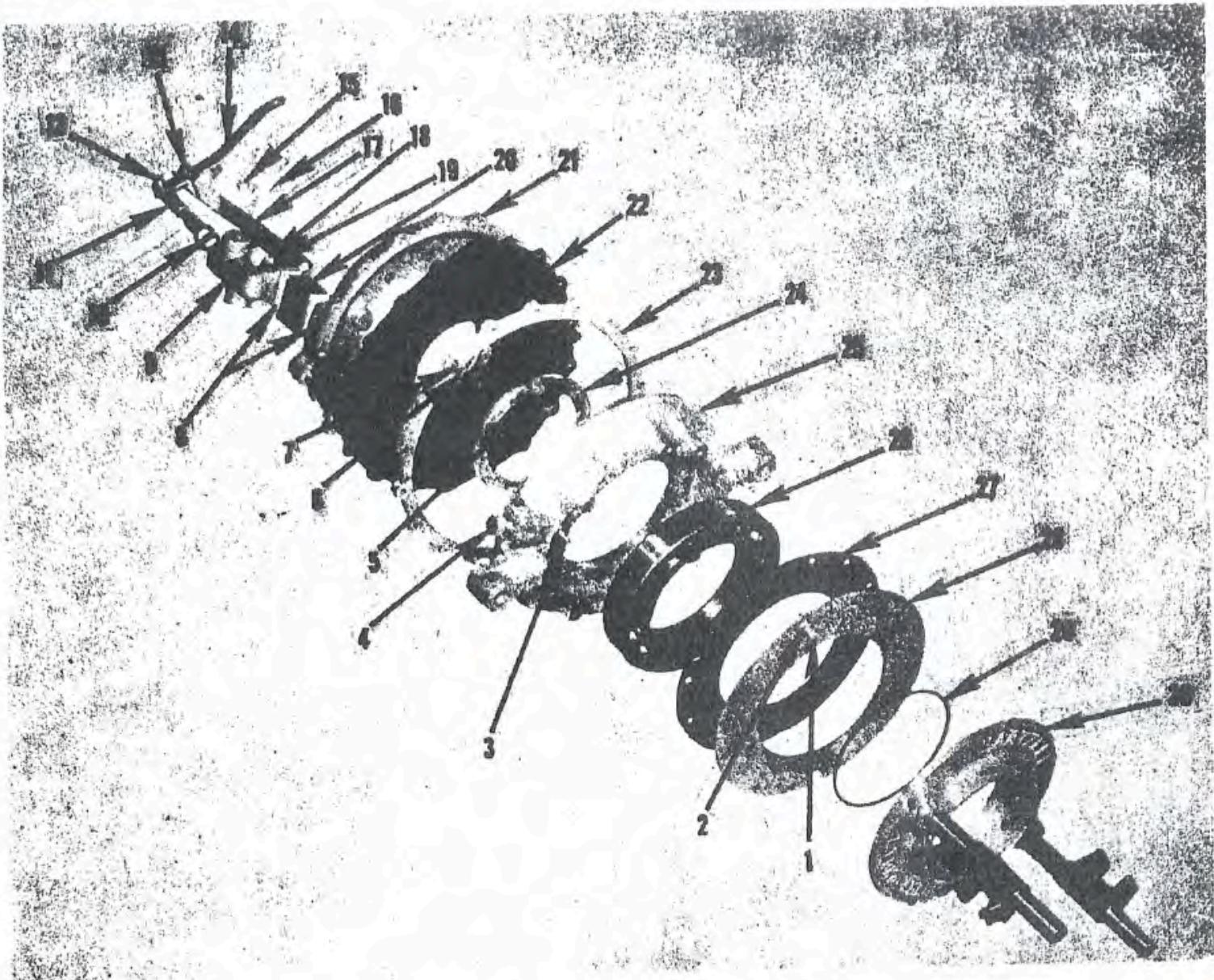
KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
116		AN3-11A	Bolt - Aircraft #10-32	2
117		AN365-1032	Nut - Self Locking	2
118		AN4-10A	Bolt - Aircraft 1/4-28	2
119		AN365-428	Nut - Self Locking	2
120	1836	146-44002-5	Bracket - Propeller Control Cable	1

**NAVIIONS WEST INC.**



HARTZELL PROPELLER COMPANY  
MODEL HC-12X20-8C PROPELLER PARTS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1		1/4-28	Lubricator Fitting	6
2		A-95	Pitch Change Block	2
3		A-46	Snap Ring	1
4		A-156	Puller Ring	1
5		AN380-2-2	Cotter	1
6		AN960-416	Washer - Plain	1
7		AN394-19	Pin	1
8		A-63	Hub nut	1
9		C-3-1	Clamp	2
10		A-98	Link Screw	2
11		3/8-24 x 1-1/4	Socket Head Screw	4
12		A-47	Clamp Gasket	4
13		AN380-3-2	Cotter Pin	8
14		AN355-6	Nut	4
15		AN960-616	Washer	4
16		AN6-21	Bolt	4
17		9333C	Propeller Blade	2
18		A-159	Split Ring	2
19		A-14-A	Blade Bearing	2
20		A-48	Weight Slug	As required
21		AN501-A10	Screw	As required
22		H711-70-7	O Ring	2
23		A-50-1	Rear Cone	1
24		1/16	Spacer	1
25		91-8C	Hydraulic Element	1
26		A-181	Gasket	1
27		C-157	Hub	1



HARTZELL PROPELLER COMPANY  
HYDRAULIC ELEMENT PARTS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1		AN501-10A-8	Screw	12
2		AN936-A10	Lockwasher	12
3		1/4 - 28	Lubricator Fitting	1
4		A-121	Valve Link Screw	1
5		AN501-10A-8	Screw	8
6		AN501-10A-10	Screw	18
7		AN936-A10	Washer - External and Internal Teeth Lock	18
8		A-71-1	Gasket	2
9		B-167	Valve Body	1
10		H222-70-10	O Ring	2
11		A-168	Valve Spool	1
12		AN393-15	Pin	1
13		AN393-23	Pin	1
14		A-185	Lever	1
15		A-126	Spacer Washer	1
16		AN380-2-2	Cotter	2
17		A-184-1	Link	1
18		AN960-416	Washer - Plain	2
19		1/4-28 x 2-5/8	Socket Head Screw	2
20		A-171	Extension Block	1
21		C-111-8	Cylinder	1
22		B-119-2	Diaphragm - Rubber -8	1
23		B-120	Outer Diaphragm Plate	1
24		A-113-2	Inner Diaphragm Plate	1
25		C-112-2	Piston	1
26		A-38	Ball Bearing	1
27		A-73	Cover Plate Gasket	1
28		B-12	Cover Plate	1
29		A-43	Wire Retainer	1
30		B-109-6	Jackplate	1

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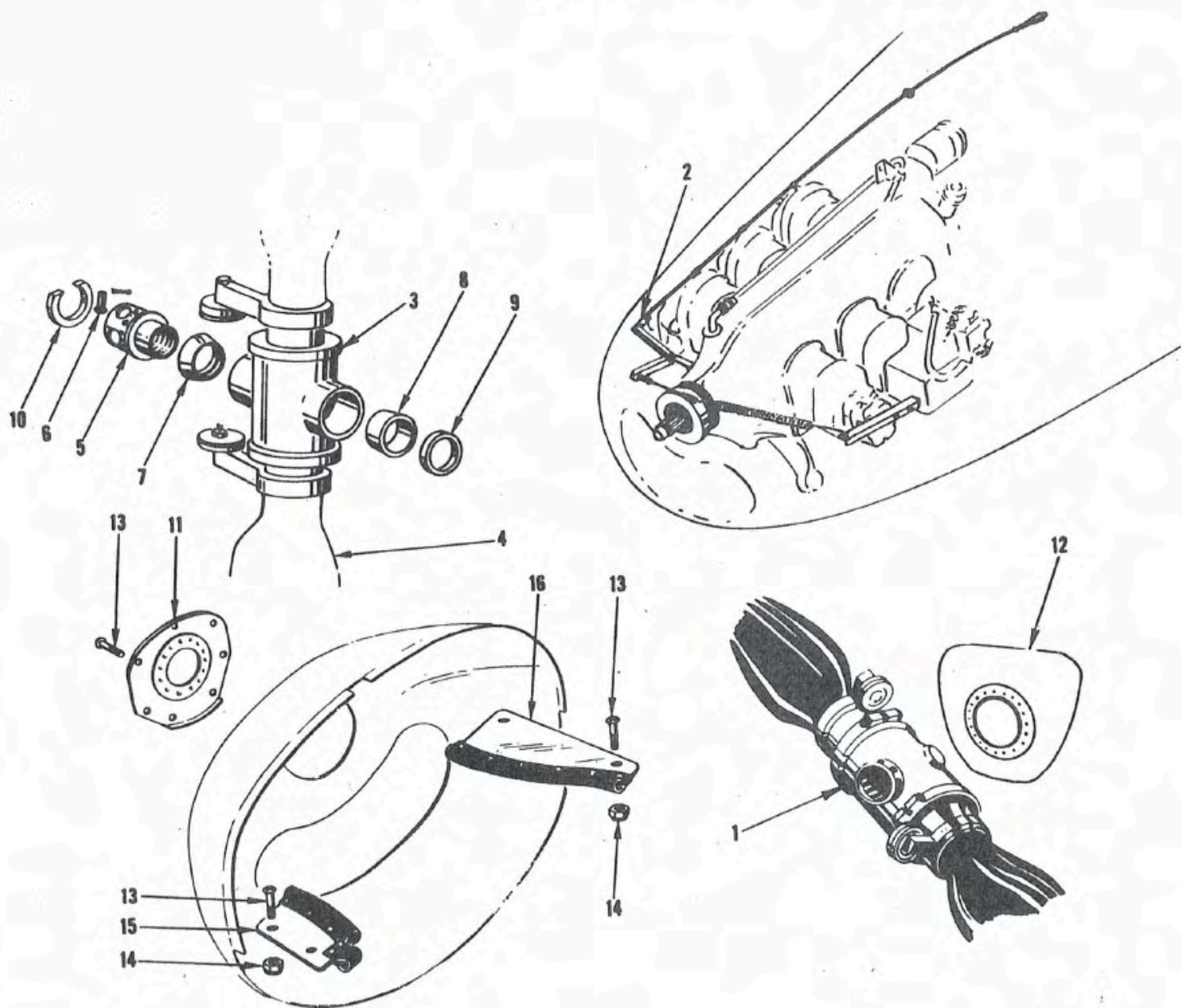


FIGURE 13 - AEROMATIC PROPELLER KITS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
Kit	740	145-89016	Kit Assembly - Aeromatic Propeller	1
Kit	741	145-89016-100	Kit Assembly - (Same as 740 Less Propeller)	1
Kit	740-100 9421	145-89100 No Number 23B 220	Kit Assembly - Aeromatic Propeller with Altitude Control Navion Special Instructions No. 11 Aeromatic Installation Procedure Altitude Propeller (Kit 740-100) Propeller Assembly - Automatic (Kit 740)	1 1 1 1
1	9427	4259-A-1	Prop Assy - Aeromatic Altitude (Kit 740-100)	1
2	9428	4349-C	Man Cont Aero High Alt Prop (Kit 740-100)	1
3	9422	4765	Hub - Propeller (Aeromatic) (Kit 740)	1
4	9423	0-85	Blade - Propeller (Aeromatic)	2
5	9424	2756	Nut - Propeller (Aeromatic)	1
6		AN394-19	Pin	1
7	9425	2400	Front Cone - Prop (Aeromatic)	1
8		AN5008-20	Cone - Propeller Hub Rear	1
9	9426	2542-10	Spacer - Propeller (Aeromatic)	1
10		AN5009-20	Ring	1
11	740-1	145-44010	Seal Assembly - Engine Cowl Propeller Air (Kit 74)	1
12	740-110	145-44064	Seal Assembly - Engine Cowl Propeller Air (Kit 740-100)	1
13		NAS221-8	Screw	11
14		AN365-1032	Nut - Self Locking	4
15	740-2	145-31507	Seal Assembly - Air Baffle LH	1
16	740-3	145-31506	Seal Assembly - Air Baffle RH	1

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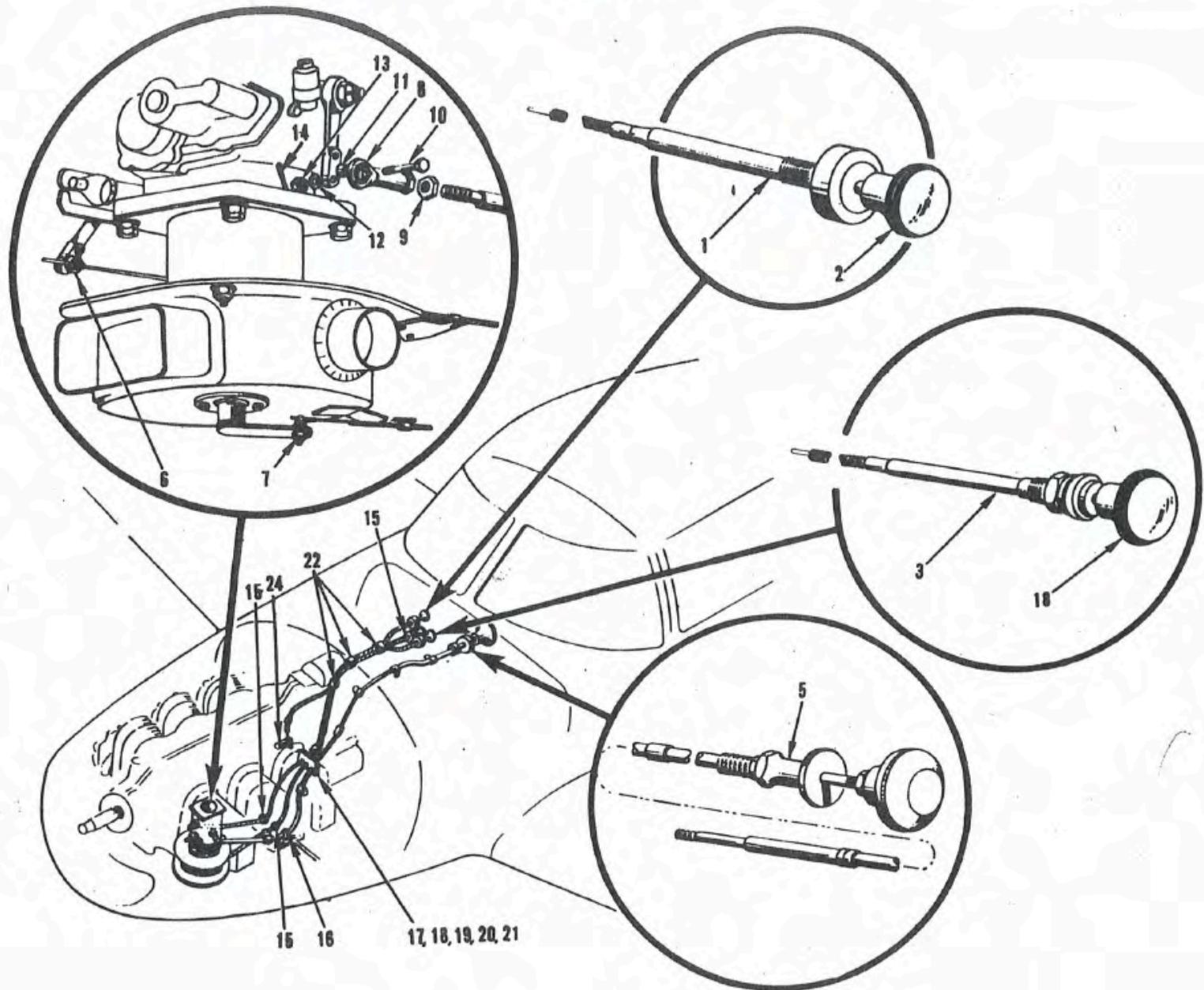


FIGURE 14 - ENGINE CONTROLS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2100	145-43009	Control Assembly - Engine Control Mixture	1
2	2103 2104	145-51061-6 145-51061-3	Knob - Instrument Panel Control Knobs - Instrument Panel Control	1 1
3	2101	145-43010	Control Assembly - Control Carburetor Air	1
4	2104 2103	145-51061-3 145-51061-6	Knobs - Instrument Panel Control Knob - Instrument Panel Control	1 1
5	2102 2107	145-43011 2K04 (Gray)	Control Assembly - Engine Throttle Knob - Throttle Control	1 1
6	9154	X3058 (1/4)	Swivel Assembly	1
7	9155	X3058 (3/32)	Swivel Assembly	1
8	9151	F44-14	Rod End - Spherical	1
9		AN316-4R	Nut - Aircraft Check	1
10		AN4-13	Bolt - Aircraft 1/4-28	1
11	8331	4S3-416-8	Spacer - Bolt	1
12		AN960-416	Washer - Plain	1
13		AN310-4	Nut - Aircraft Castle	1
14		AN380-2-2	Cotter	1
15		AN931-3-9	Grommet - Elastic	2
16		AN931-5-9	Grommet - Elastic	1
17	2105	145-43006	Seal - Engine Control Firewall Attachment	1
18	2106	145-43001-8	Seal Cover	1
19		AN515-8R10	Screw - Round Head Machine (Coarse Thread)	1
20		AN960-10	Washer - Plain	1
21		AN365-832	Nut - Self Locking	1
22	9158	295004	Web Strap	4
23			Fuel Control Shut Off	-
24			Fuel Control Shut Off	-

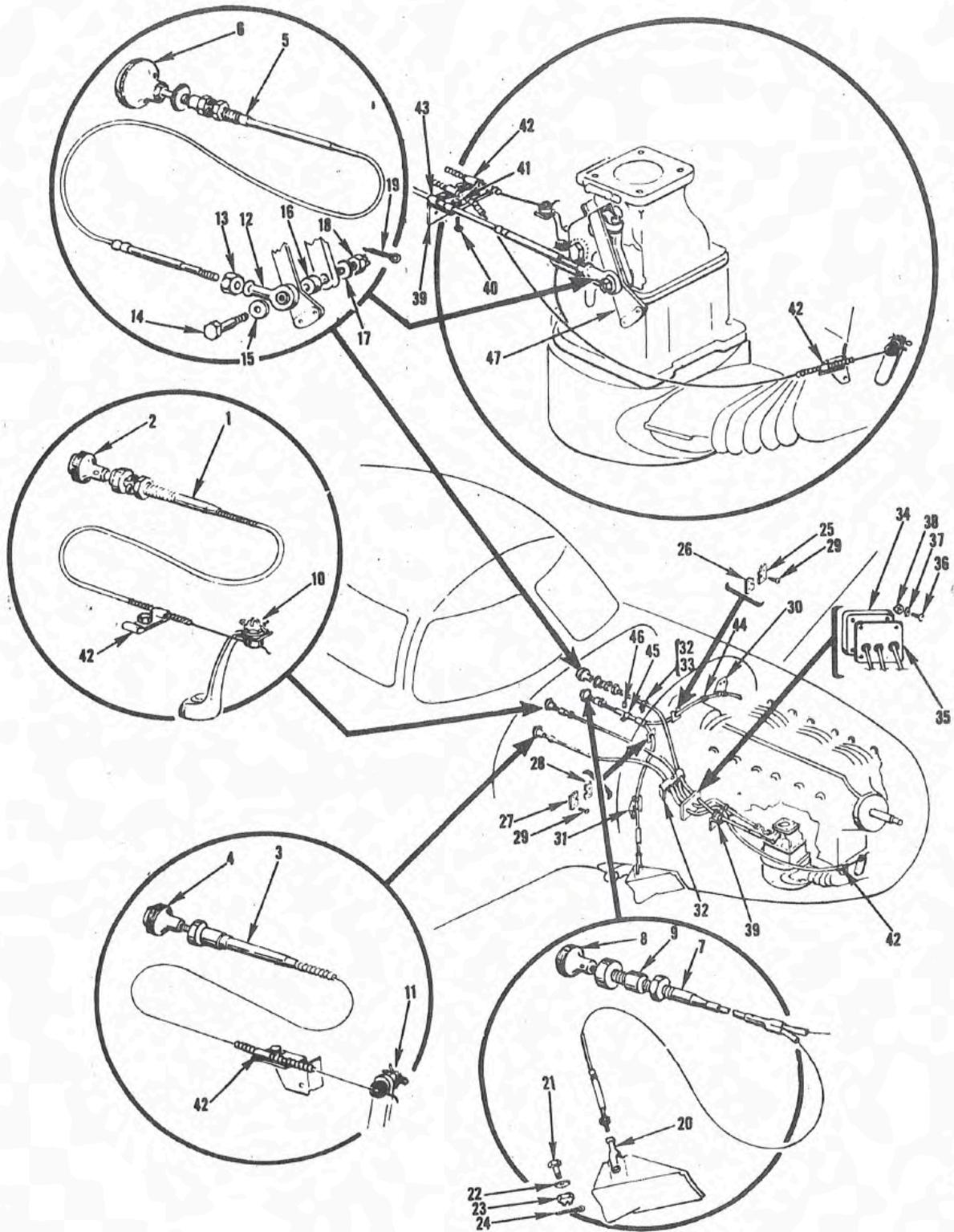


FIGURE 14A - ENGINE CONTROLS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2108 2100	145-43009-3 145-43009	Control Assembly - Engine Control Mixture Control Assembly - Engine Control Mixture	1 1
2	2103	145-51061-6 AN565A6-3	Knob - Instrument Panel Control Screw - Headless Set 6-32 x 3/16	1 1
3	2109 2101	145-43009-5 145-43010	Control Assembly - Engine Control Carburetor Control Assembly - Control Carburetor Air	1 1
4	2103	145-51061-6 AN565A6-3	Knob - Instrument Panel Control Screw - Headless Set 6-32 x 3/16	1 1
4A	2103-10 2104	145-51061-8 145-51061-3	Knobs - Instrument Panel Control Knobs - Instrument Panel Control	1 1
5	2102	145-43011	Control Assembly - Engine Throttle	1
6	2107	2K04 (Gray)	Knob - Throttle Control	1
7	2110	146-21514	Control Assembly - Cowl Flap	1
8	2103	145-51061-6 AN565A6-3	Knob - Instrument Panel Control Screw - Headless Set 6-32 x 3/16	1 1
9	2111	146-31510-7	Spacer - Cowl Flap Control Panel Mounting	1
10	9523 9154	3A665 (1/4) X3058 (1/4)	Swivel Assembly Swivel Assembly	1 1
11	9522 9155	3A665 (3/32) X3058 (3/32)	Swivel Assembly Swivel Assembly	1 1
12	9151	F44-14	Rod End - Spherical	1
13		AN316-4R	Nut - Aircraft Check	1
14		AN4-13	Bolt - Aircraft 1/4-28	1
15	8481	2W1-16-20-63	Washer - Plain	1
16	8331	4S3-416-8	Spacer - Bolt	1
17		AN960-416	Washer - Plain	1
18		AN310-4	Nut - Aircraft Castle	1
19		AN380-2-2	Cotter	1
20		AN486-1	Clevis - Rod End Adjusting (Control Cable End)	2
21		AN4-10	Bolt - Aircraft 1/4-28	1
22		AN960-416	Washer - Plain	1
23		AN310-4	Nut - Aircraft Castle	1
24		AN380-2-2	Cotter	1
25	2112 2112-10	146-31515-1 146-31515-5	Plate - Cowl Flap Control Support LH Outer Plate - Cowl Flap Control Support LH Outer	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
26	2113 2113-10	146-31515-2 146-31515-6	Plate - Cowl Flap Control Support LH Inner Plate - Cowl Flap Control Support LH Inner	1 1
27	2114	146-31515-4	Plate - Cowl Flap Control Support RH Outer	1
28	2115	146-31515-3	Plate - Cowl Flap Control Support RH Inner	1
29		AN520-10R10	Screw - Round Head Machine (Fine Thread)	2
30	2116	146-31510-3	Bracket - Cowl Flap Control Mounting LH	1
31	2117	146-31510-5	Bracket - Cowl Flap Control Mounting RH	1
32	2118 9158	146-43001-3 295004	Clip - Engine Controls Mounting Web Strap	2 4
33	2119	145-43001-5	Clip - Engine Controls Mounting (Throttle Control)	1
34	2105	145-43006	Seal - Engine Control Firewall Attachment	1
35	2106	145-43001-8	Seal Cover	1
36		AN515-8R10	Screw - Round Head Machine (Coarse Thread)	4
37		AN960-10	Washer - Plain	4
38		AN365-832	Nut - Self Locking	4
39	2120	146-43001-5	Bracket - Engine Controls Engine Mount Attaching	1
40		AN520-10R7	Screw - Round Head Machine (Fine Thread)	2
41		AN365-1032	Nut - Self Locking	2
42		AN742-3 AN931-3-9	Clip - Loop Type Support (Engine Controls Mounting) Grommet - Elastic	5 2
43		AN742-4 AN931-5-9	Clip - Loop Type Support Grommet - Elastic	4 1
44		AN742-5	Clip - Loop Type Support (Cowl Flap Controls Mounting)	5
45		AN742-6	Clip - Loop Type Support (Cowl Flap Controls Mounting)	1
46		NAS43DD-3-32	Spacer - Screw and Bolt (Cowl Flap Control Mounting)	1
47	2121	145-54017-5	Arm Assembly - Warning Horn Switch Actuating	1

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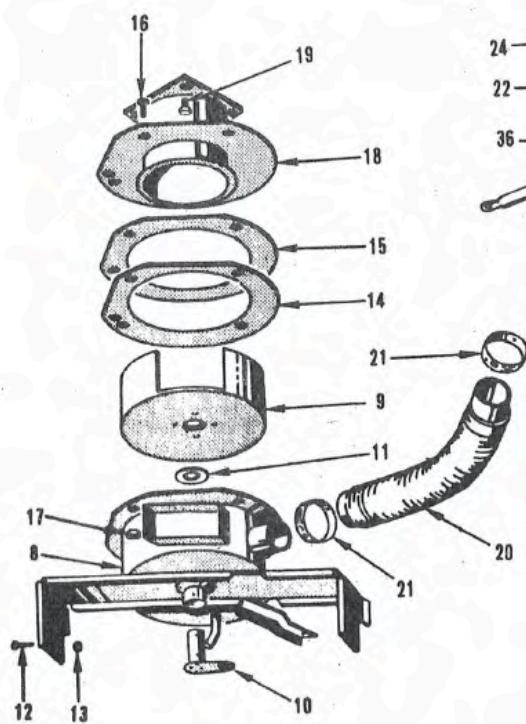
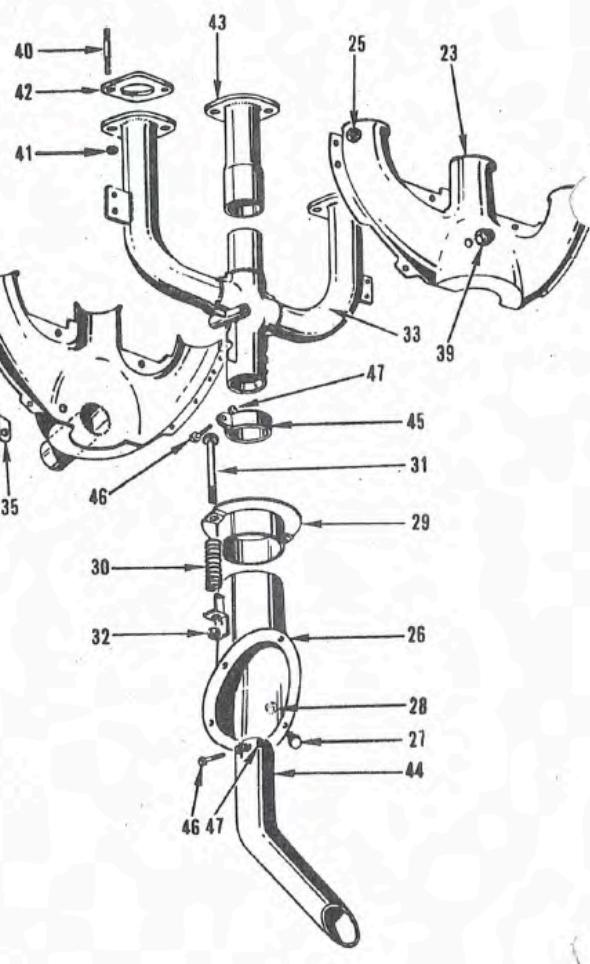
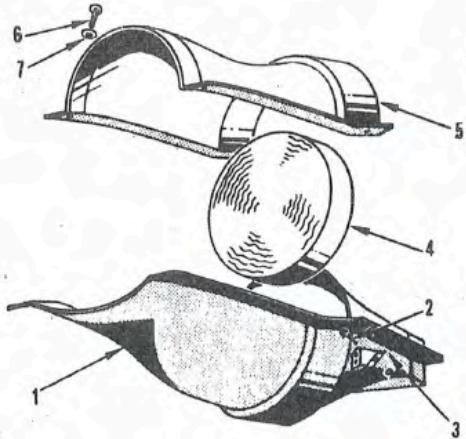
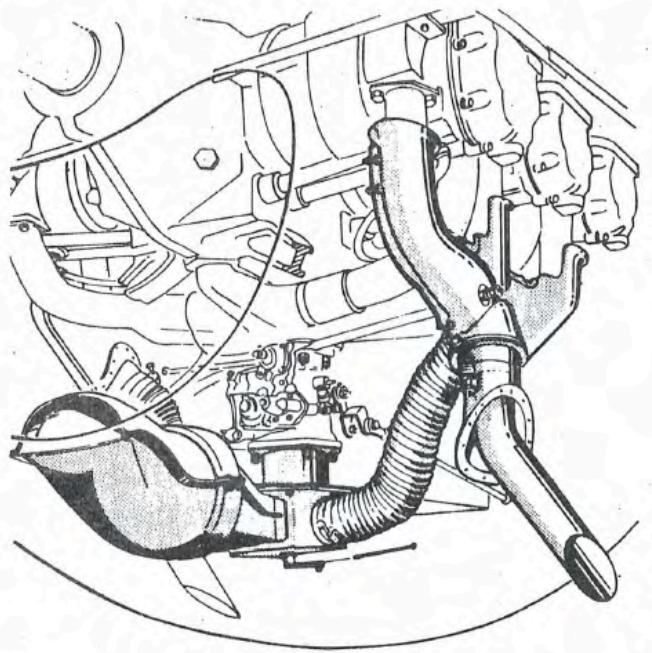


FIGURE 15 - AIR INDUCTION AND EXHAUST SYSTEMS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2000	145-42201-71	Scoop Assembly - Carburetor Air Induct	1
2		AN3-3A	Bolt - Aircraft #10-32	2
3		AN365-1032	Nut - Self Locking	2
4	2001	143-42103	Filter Assembly - Carburetor Air Clean	1
5	2002	145-42201-72	Retainer Assembly - Filter	1
6	8437	7S4-10-7	Screw - Round Head	4
7	2003	AN960-10L 145-42201 SA 1	Washer - Plain Body Assembly - Air Valve	4 1
8	2004	145-42201-45	Body - Air Scoop	1
9	2005	145-42201-46	Gate Assembly - Carburetor Air	1
10	2006	145-42201-41	Lever Assembly - Carburetor Air Scoop	1
11	8523	2W1G20-32-50	Washer - Plain	1
12	8437	7S4-10-7	Screw - Round Head	4
13		AN365-1032	Nut - Self Locking	4
14	2007	145-42201-15	Ring - Carburetor Air Scoop	1
15	2008	145-42201-16	Ring - Carburetor Air Scoop	1
16	8437	7S4-10-7	Screw - Round Head	3
17		AN365-1032	Nut - Self Locking	3
18	2009	145-42222	Riser Assembly - Carburetor Air Duct	1
19	2010	145-42211	Cap Screw - Air Box Attaching	4
20	2011	145-42202	Tube - Flexible	2
21	9078	A3122-34-59 AN748-74	Clamp (Tinnerman) Clamp - Hose	2 2
22	2012 2012-10	145-42101-59 145-42116	Shroud - Inbound Left and Right Shroud Assembly - Inboard Left Right	2 2
23	2013 2013-10	145-42101-60 145-42115	Shroud - Outbound Left and Right Shroud Assembly - Outboard Left Right	2 2
24		AN3-4	Bolt - Aircraft #10-32	8
25		AN365-1032	Nut - Self Locking	8
26	2014 2014-10 2015 2015-10	145-42101-55 145-42108 145-42101-56 145-42107	Seal Assembly - Exhaust Shroud LH Seal Assembly - Exhaust Shroud LH Seal Assembly - Exhaust Shroud RH Seal Assembly - Exhaust Shroud RH	1 1 1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
27		NAS221-8		4
28		AN365-1032	Nut - Self Locking	4
29	2016 2016-10	145-42101-15 145-42106	Collar - Exhaust Shroud Collar - Exhaust Shroud	2 2
30	2017	145-42102	Spring - Exhaust Shroud	4
31		AN3-21A	Bolt - Aircraft #10-32	2
32		AN365-1032	Nut - Self Locking	2
33	2018 2018-10	145-42101-67 145-42105	Collector Assembly - Exhaust LH and RH Collector Assembly - Exhaust Right and Left	2 2
34	2019 2019-10	145-42111 145-42310	Rod - Exhaust Stack Support Rod - Support	1 1
35	2020	145-42112	Clip - Exhaust Stack Support Rod	1
36		AN4-5A	Bolt - Aircraft 1/4-28	1
37		AN365-428	Nut - Self Locking	1
38		AN4-32A	Bolt - Aircraft 1/4-28	1
39		AN363B524	Nut - Self Locking	1
40	9100-1	20990	Stud (Continental)	6
41	9100-2	22022	Nut (Continental)	6
42	9100-3	21493	Gasket	3
43	2021	145-42113	Tube Assembly - Exhaust Collector Center	1
44	2022 2022-10 2023 2023-10	145-42101-51 145-42114-1 145-42101-52 145-42114-2	Exhaust Stack LH Exhaust Stack LH Exhaust Stack RH Exhaust Stack RH	1 1 1 1
45	2024	145-42104	Clamp	1
46		AN4-13A AN4-14A	Bolt - Aircraft 1/4-28 Bolt - Aircraft 1/4-28	1 2
47		AN363-428 AN363C428	Nut - Self Locking Nut - Self Locking	1 2

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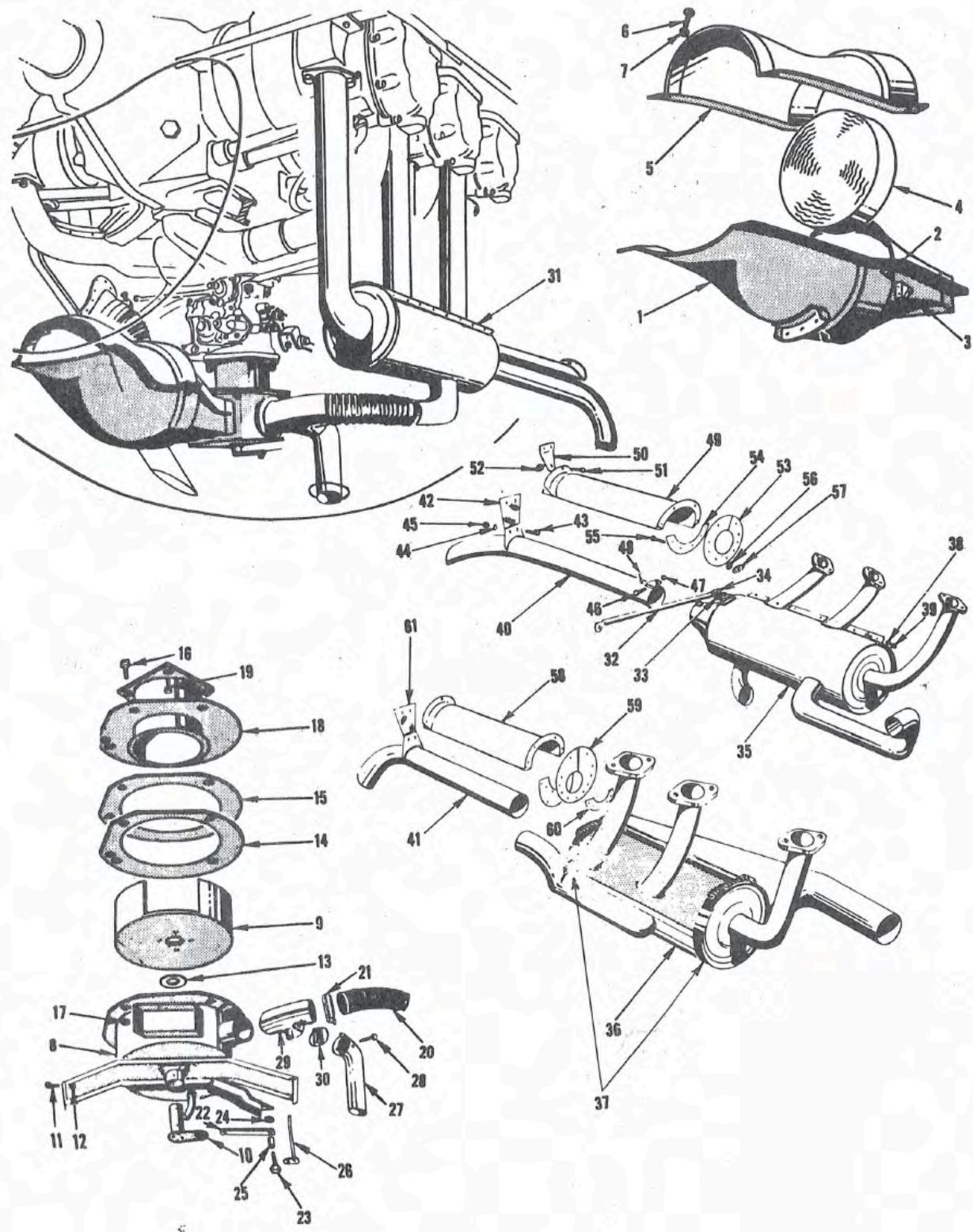


FIGURE 16 - AIR INDUCTION & EXHAUST SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2000	145-42201-71	Scoop Assembly - Carburetor Air Induct	1
2		AN3-3A	Bolt - Aircraft #10-32	2
3		AN365-1032	Nut - Self Locking	2
4	2001	143-42103	Filter Assembly - Carburetor Air Clean	1
5	2002	145-42201-72	Retainer Assembly - Filter	1
6	8437	7S4-10-7	Screw - Round Head	4
7		AN960-10L	Washer - Plain	4
8	2025	145-42201-84 SA 1	Air Valve Assembly - Welded	1
9	2005	145-42201-46	Gate Assembly - Carburetor Air	1
10	2006	145-42201-41	Lever Assembly - Carburetor Air Scoop	1
11	8437	7S4-10-7	Screw - Round Head	4
12		AN365-1032	Nut - Self Locking	4
13	8523	2W1G20-32-50	Washer - Plain	1
14	2007	145-42201-15	Ring - Carburetor Air Scoop	1
15	2008	145-42201-16	Ring - Carburetor Air Scoop	1
16	8436	7S4-10-6	Screw - Round Head	1
17		AN365-1032	Nut - Self Locking	1
18	2009	145-42222	Riser Assembly - Carburetor Air Duct	1
19	2010	145-42211	Cap Screw - Air Box Attaching	4
20	2011-10	145-42202-2	Tube - Flexible	1
21		AN737-74	Clamp - Hose	2
22	2026	145-42201-81	Arm Assembly - Cabin Heater Valve	1
23		AN3-4	Bolt - Aircraft #10-32	1
24		AN310-3	Nut - Aircraft Castle	1
25		NAS75-3-8	Bushing	1
26	2027	145-42201-82	Lever Assembly - Cabin Heater Valve	1
27	2028	145-42201-83	Tube Assembly - Cabin Heater Valve	1
28		AN3-15 AN365-1032	Bolt - Aircraft #10-32 Nut - Self Locking	1 1
29	2043	145-42201-80	Elbow Assembly - Welded	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
30	2029	145-42201-111	Flipper Valve - Heater Valve	1
31	2030 2031 9100-1 9100-2 9100-3	145-42118-3 145-42119-3 20990 22022 21493	Collector Assembly - Engine Exhaust LH Collector Assembly - Engine Exhaust RH Stud (Continental) Nut (Continental) Gasket	1 1 6 6 3
32	2032 2033	145-42125 145-42126	Tube - Exhaust Collector Stabilizer LH Tube - Exhaust Collector Stabilizer RH	1 1
33		AN4-7A AN365-428 AN960-416	Bolt - Aircraft 1/4-28 Nut - Self Locking Washer - Plain	1 1 4
34	2034	145-42124	Clip - Exhaust Collector Stabilizer	1
35	2035	145-42118-5	Shroud Assembly - Engine Exhaust LH	1
36	2036	145-42129	Shroud Assembly - Engine Exhaust RH	1
37	9463	QS200M-84S	Clamp (Aero Seal)	2
38		AN960-10	Washer - Plain	1
39		AN365-1032	Nut - Self Locking	1
40	2037	145-42121	Tail Pipe Assembly - LH	1
41	2038	145-42123	Tail Pipe Assembly - RH	1
42	2039	145-42118-35	Support - Tailpipe RH	1
43		AN4-5A	Bolt - Aircraft 1/4-28	2
44		AN960-416	Washer - Plain	2
45		AN363-428	Nut - Self Locking	2
46		AN393-11	Clevis Pin	1
47		AN960-10	Washer - Plain	1
48		AN380-2-2	Cotter	1
49	2040	145-42127-3	Shroud Assembly - Tailpipe LH	1
50	2042	145-42127-11	Bracket - Tailpipe Shroud LH	1
51		AN3-4	Bolt - Aircraft #10-32	1
52		AN362F-1032	Nut - Self Locking (High Temperature)	1
53	2044	145-42127-5	Seal - Shroud TH	1
54	2045	145-42127-6	Clamp - Shroud LH	1
55		AN3-5	Bolt - Aircraft #10-32	8
56		AN960-10	Washer - Plain	8

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
57		AN362F-1032	Nut - Self Locking (High Temperature)	8
58	2046	145-42128-9	Shroud Assembly - Tailpipe RH	1
59	2050	145-42128-5	Seal - Shroud RH	1
60	2051	145-42128-4	Patch - Shroud RH	1
61	2053	145-42128-11	Support - Aft Tailpipe Shroud	1

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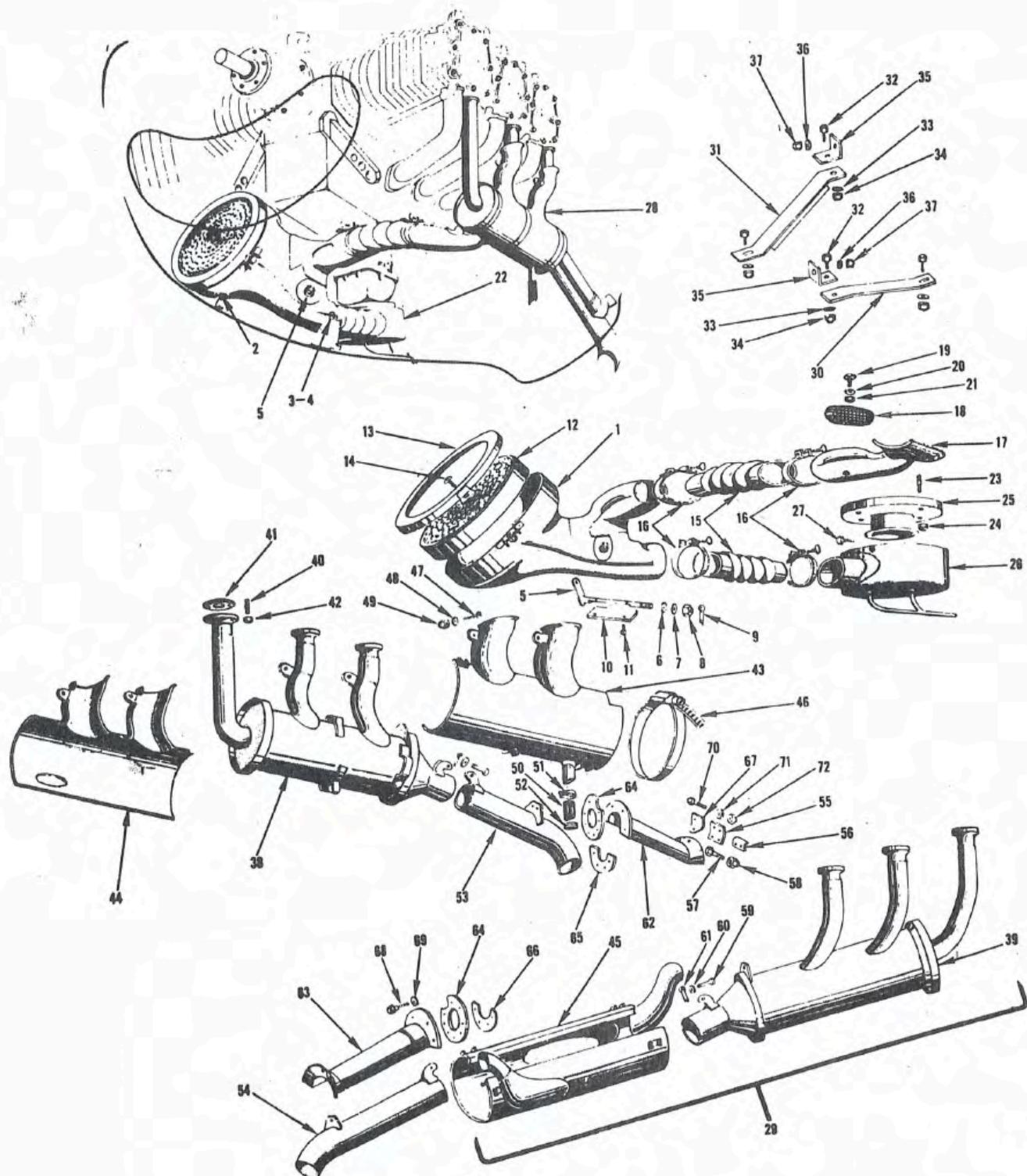


FIGURE 16A - AIR INDUCTION & EXHAUST SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2055	146-42206-2	Inlet Duct-Carburetor Air Induct	1
2		AN520-10R8	Screw - Round Head Machine (Fine Thread)	2
3		AN3-4A	Bolt - Aircraft #10-32	2
4		AN365-1032	Nut - Self Locking	2
5	2056	146-42206-6	Shaft Assembly - Carburetor Air Select	1
6		AN960D416L	Washer - Plain	4
7		AN960-416	Washer - Plain	1
8		AN310-428	Nut - Aircraft Castle	1
9		AN380-2-3	Pin - Cotter	1
10	2057	146-42206-38	Door - Carburetor Air Select	1
11		AN500A8-7	Screw - Fillister Head (Coarse Thread)	3
12	2058	146-42103	Filter Assembly - Carburetor Air Clean	1
13	2059	146-42206-4	Retainer Assembly - Carburetor Air Filter	1
14		AN520-10R12	Screw - Round Head Machine (Fine Thread)	2
15	2060	146-42207	Duct - Carburetor Air Induct Flex	2
16	9520	830-18	Clamp	2
17	2061	146-42206-14	Duct Assembly - Induct Heated Air	1
18	2062	146-42206-71	Screen - Carburetor Air Induct Duct	1
19		AN515-6R6	Screw - Round Head Machine (Coarse Thread)	2
20		AN960-6	Washer - Plain (Rear Engine Mount)	2
21		AN365-632	Nut - Self Locking	2
22	2063	146-42209	Box Assembly - Carburetor Air Induct Air	1
23		NAS183-4-9	Stud - Coarse Thread 1/4-28	4
24		AN310-4	Nut - Aircraft Castle	4
25	2064	146-42209-3	Riser Assembly Induction Air Box	1
26	2065	146-42209-9	Body Assembly Induction Air Box	1
27		AN3-4A	Bolt - Aircraft #10-32	3
28	2066	146-42118 SA 3	Collector & Shroud Assembly LH	1
29	2067	146-42118 SA 2	Collector & Shroud Assembly RH	1
30	2074	146-42128	Arm - Engine Exhaust Collector Stabilizer LH	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
31	2075	146-42129	Arm Assembly - Engine Exhaust Collector Stabilizer	1
32		AN4-5A	Bolt - Aircraft 1/4-28	2
33		AN960-416	Washer - Plain	2
34		AN363-428	Nut - Self Locking	2
35	2076	146-42130	Clip - Engine Exhaust Collector Stabilizer Arm	1
36		AN960-516	Washer - Plain	1
37		AN363-524	Nut - Self Locking (High Temperature)	1
38	2068	146-42118 SA 2	Collector Assembly - Engine Exhaust LH	1
39	2969	146-42119 SA 1	Collector Assembly - Engine Exhaust RH	1
40	9600-1		Stud	6
41	9600-2	67196	Gasket	3
42	9600-3		Nut	6
43	2070	146-42120-3	Shroud Assembly - Collector Outer LH	1
44	2071	146-42120-5	Shroud Assembly - Collector Outer LH	1
45	2072	146-42121	Shroud Assembly - Engine Exhaust Collector RH	1
46	9463 9463	QS200M-84S QS200M-84S	Clamp (Aero Seal) Clamp (Aero Seal)	3 2
47		AN520-10R8	Screw - Round Head Machine (Fine Thread)	2
48		AN960-10	Washer - Plain	2
49		AN363-1032	Nut - Self Locking (High Temperature)	2
50	2073	146-42124-3	Tube - Engine Exhaust Collector Shroud Drain (LH Only)	1
50B	2073-10	146-42305	Tube - Engine Exhaust Collector Shroud Drain (LH Only)	1
51		AN748-34	Clamp - Hose	1
52		AN931-16-22	Grommet - Elastic	1
53	2077	146-42123-1	Tail Pipe Assembly - Engine Exhaust LH	1
54	2078	146-42123-2	Tail Pipe Assembly - Engine Exhaust RH	1
55	2079	146-42126	Support - Engine Exhaust Tail Pipe Aft	1
56	2080	145-42118-43	Plate - Engine Exhaust Tail Pipe Aft Support	1
57		AN4-5A	Bolt - Aircraft 1/4-28	2
58		AN363-428	Nut - Self Locking	2
59		AN383-11	Pin - Flat Head 3/16	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
60		AN960-10	Washer - Plain	1
61		AN380-2-2	Cotter	1
62	2081	146-42128-700	Shroud Assembly - Tail Pipe LH	1
63	2082	146-42128-800	Shroud Assembly - Tail Pipe RH	1
64	2083	146-42128-16	Seal - Tail Pipe Shroud Bulkhead	1
65	2084	146-42128-13	Plate - Engine Exhaust Tail Pipe Shroud Seal LH	1
66	2085	146-42128-12	Plate - Engine Exhaust Tail Pipe Shroud Seal RH	1
67	2086 2087	146-42128-700 SA 2 146-42128-800 SA 2	Support Assembly - Engine Exhaust Tail Pipe Shroud Seal LH Support Assembly - Engine Exhaust Tail Pipe Shroud Seal RH	1 1
68		AN3-4	Bolt - Aircraft #10-32	9
69		AN960-10	Washer - Plain	9
70		AN4-4	Bolt - Aircraft 1/4-28	2
71		AN960D416L	Washer - Plain	2
72		AN364-428	Nut - Self Locking (Thin)	2

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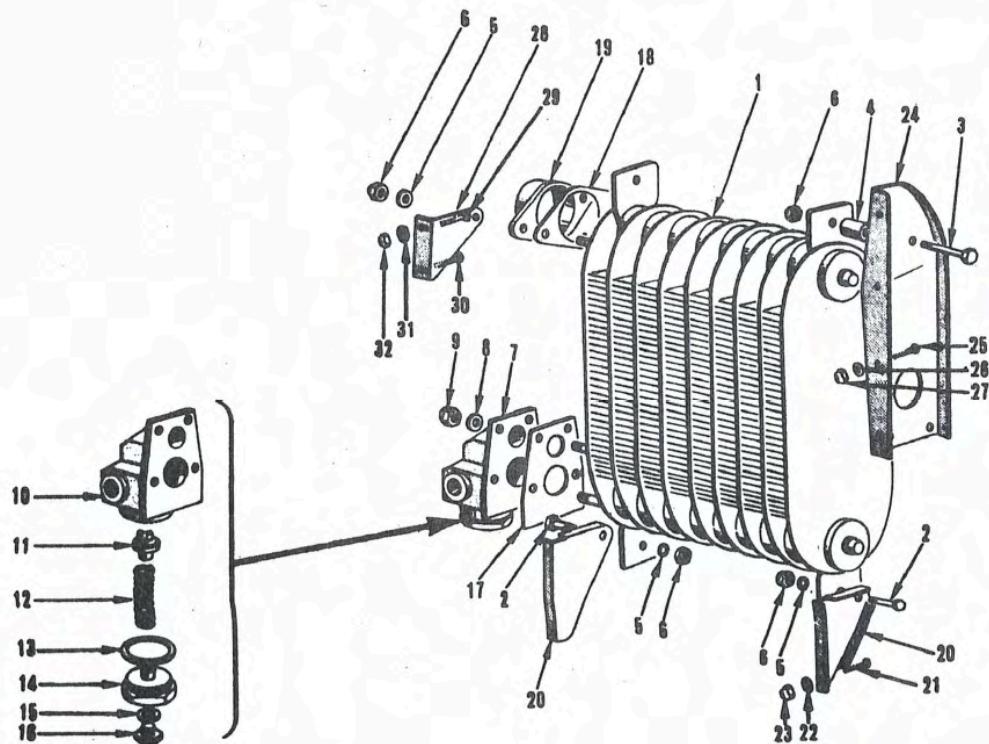
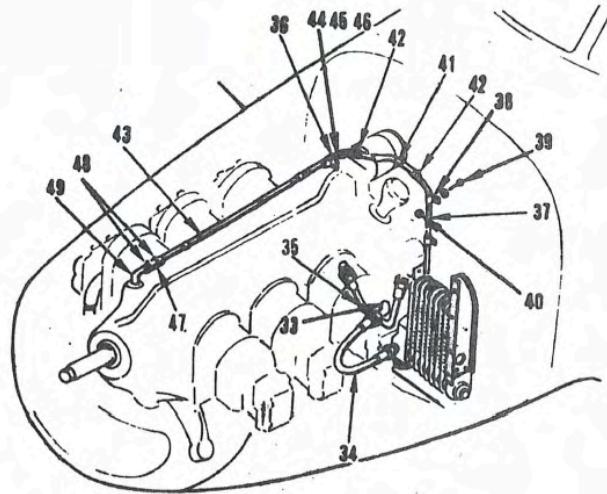


FIGURE 17 - OIL SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2200	145-47004	Oil Cooler	1
2		AN4-5A	Bolt - Aircraft 1/4-28	2
3		AN4-10A	Bolt - Aircraft 1/4-28	1
4	8333	4S3-416-20	Spacer - Bolt	1
5		AN960-416 AN960-416L	Washer - Plain Washer - Plain	5 1
6		AN365-428	Nut - Self Locking	6
7	2201	145-47013	Valve Assembly - Oil Cooler Relief	1
8		AN960-416	Washer - Plain	4
9		AN365-428	Nut - Self Locking	4
10	2202	145-47010	Valve - Housing	1
11	2203	145-47026	Valve - Poppet	1
12	2204	145-47012	Valve - Spring	1
13	8524	2W1K97-57-64	Washer - Plain	1
14	2205	145-47009	Plug	1
15		AN900-8	Gasket - Copper Asbestos Annul	1
16		AN-905B8	Plug (Hexagonal)	1
17	2206	145-47008	Valve - Gasket	1
18	2207	145-47006	Gasket - Oil Cooler Inlet	1
19	2208	145-47007	Fitting - Oil Cooler Inlet	1
20	2209 2209 2209-100	145-47001-3 145-47001-3 145-47001-11	Bracket-Oil Cooler Support Bracket-Oil Cooler Support Line - Oil Breather	2 1 1
21		AN4-5A	Bolt - Aircraft 1/4-28	2
22		AN960-416	Washer - Plain	2
23		AN365-428	Nut - Self Locking	2
24	2210	145-47001-6	Bracket - Support	1
25		AN4-10A	Bolt - Aircraft 1/4-28	1
26	8333	4S3-416-20	Spacer - Bolt	1
27		AN365-428	Nut - Self Locking	1
28	2211	145-47001-9	Bracket - Oil Cooler Inlet	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
29		NAS221-9	Screw - Brazier Head	1
30		NAS221-8	Screw	1
31		AN960-A10	Washer - Plain	4
32		AN365-1032	Nut - Self Locking	2
33		AN823-10D	Elbow - 45 Degrees Flared Tube and Pipe Thread	1
34	9162 2215	RU300-10-61078-17 AN6264-10D-16 145-47031 AN822-10D	Hose - Flexible 17.5 Inch Length Hose Assembly - Hydraulic Fuel & Oil Fitting - Oil Cooler Outlet Elbow - 90 Degrees Flared Tube and Pipe Thread	1 1 1 1
35	9163	RU300-10-610610-24 AN6264-10D-23 1/2	Hose - Flexible 24.5 Inch Length Hose Assembly - Hydraulic Fuel & Oil	1 1
36	2212	145-47001-5	Bracket	1
37	2213	145-47001-8	Line - Oil Breather	1
38		AN742-10	Clamp - Loop Type Support	2
39		AN520-8-R12	Screw - Round Head Machine (Fine Thread)	2
40		AN365-832	Nut - Self Locking	2
41		AN-H-35-10-72	Hose - 5/8 ID x 18	1
42		AN748-34	Clamp - Hose	2
43	2214	145-47001-7	Line - Breather	1
44		AN742-10	Clamp - Loop Type Support	1
45		AN520-8-R10	Screw - Round Head Machine (Fine Thread)	1
46		AN365-832	Nut - Self Locking	1
47		AN-H-35-10-14	Hose - Flexible	1
48		AN748-34	Clamp - Hose	2
49		AN842-10D	Elbow - 45 Degrees Pipe Thread and Hose	1

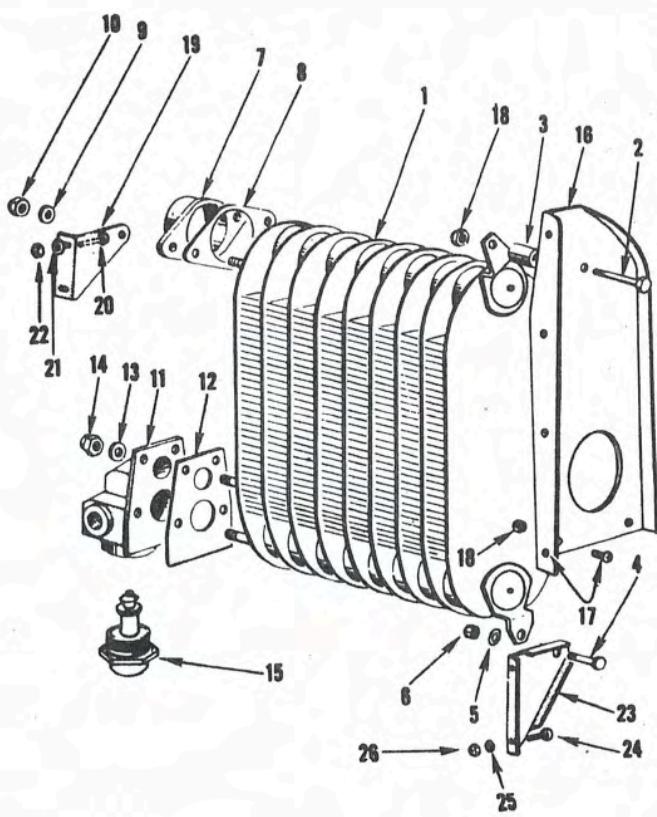
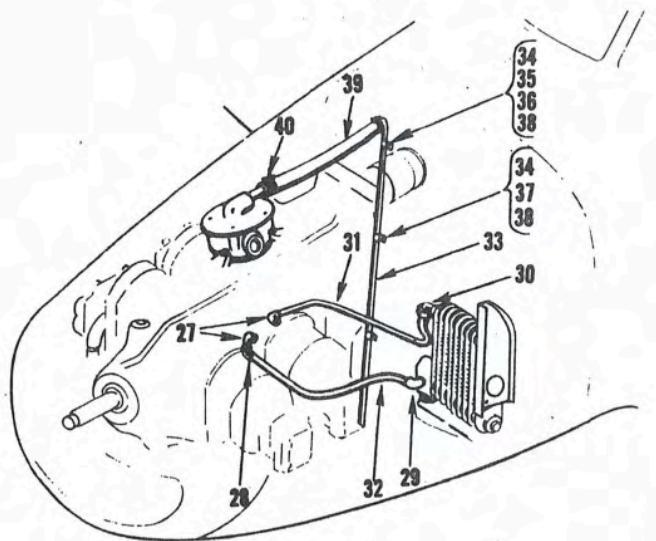


FIGURE 17A - CIL SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2200	145-47004	Oil Cooler	1
2		AN4-10A	Bolt - Aircraft 1/4-28	1
3	8333	4S3-416-20	Spacer - Bolt	1
4		AN4-6A AN4-5A	Bolt - Aircraft 1/4-28 Bolt - Aircraft 1/4-28	1 1
5		AN960-416	Washer - Plain	1
6		AN365-428	Nut - Self Locking	3
7	2208	145-47007	Fitting - Oil Cooler Inlet	1
8	2207	145-47006	Gasket - Oil Cooler Inlet	1
9		AN960-416	Washer - Plain	2
10		AN365-428	Nut - Self Locking	2
11	2202	145-47010	Valve - Housing	1
12	2206	145-47008	Valve - Gasket	1
13		AN960-416	Washer - Plain	4
14		AN365-428 AF905-10 AN900-10	Nut - Self Locking Plug - Valve Housing Temperature Bulb Port Gasket - Copper Asbestos Annul	4 1 1
15	9521	U-3356	Valve - Thermostatic Relief	1
16	2210	145-47001-6	Bracket - Support	1
17		AN520-10R8	Screw - Round Head Machine (Fine Thread)	6
18		AN365-1032	Nut - Self Locking	6
19	2217	146-47009-5	Bracket - Oil Cool Upper Inner Support	1
20		NAS221-9	Screw - Brazier Head	2
21		AN960-10	Washer - Plain	2
22		AN365-1032	Nut - Self Locking	2
23	2218	146-47009-3	Bracket - Oil Cool Lower Outer Support	1
24		NAS221-9	Screw - Brazier Head	2
25		AN960-10	Washer - Plain	2
26		AN365-1032	Nut - Self Locking	2
27		AN822-10	Elbow - 90 Degrees Flared Tube and Pipe Thread	2
28		AN914-4	Elbow - 90 Degrees	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
29	2215	145-47031	Fitting - Oil Cooler Outlet	1
30		AN823-10	Elbow - 45 Degrees Flared Tube and Pipe Thread	1
31		AN6264-10D-23 1/2	Hose Assembly - Hydraulic Fuel & Oil	1
32		AN6264-10D-17	Hose Assembly - Hydraulic Fuel & Oil	1
33	2220	146-47009-9	Line - Engine Oil Breather	1
34		AN742-18	Clamp - Loop Type Support	3
35	8353	4S3-10-24	Spacer - Bolt	1
36		AN520-10R20	Screw - Round Head Machine (Fine Thread)	1
37		AN520-10R8	Screw - Round Head Machine (Fine Thread)	2
38		AN365-1032	Nut - Self Locking	3
39		AN-H-35-16-80 AN737-46	Hose - 1 ID x 20 (Engine Oil Breather Line Connecting) Clamp - Hose	1 2
40	2219	146-47009-7 NAS221-9 AN960-10 AN365-1032	Bracket - Oil Cool Lower Inner Support Screw - Brazier Head Washer - Plain Nut - Self Locking	1 2 2 2

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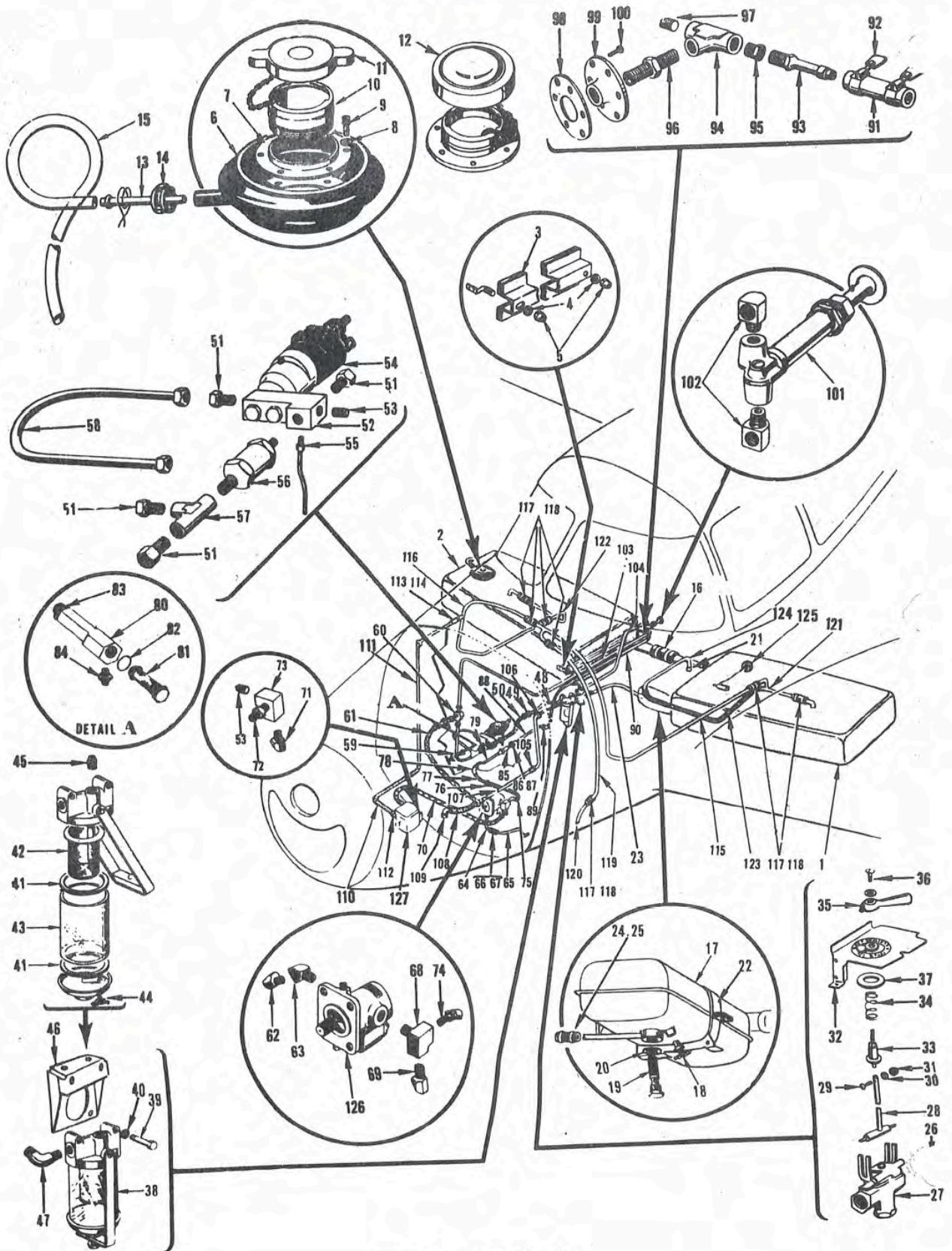


FIGURE 18 - FUEL SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2300 2300-10	145-48002-1 145-48002-101	Fuel Tank - LH Fuel Tank Assembly LH	1 1
2	2301 2301-10	145-48002-2 145-48002-104	Fuel Tank - RH Fuel Tank Assembly RH	1 1
3	2306	145-48017	Support	2
4		AN960-416	Washer - Plain	2
5		AN365-428	Nut - Self Locking	2
6	2302	145-48011	Basin Assembly - Fillerneck Spill	1
7	2303	145-48020	Ring - Fillerneck Mounting	1
8	8520	2W1F12-12-47	Washer - Plain	6
9		AN502-10-8	Screw - Drilled Fillister Head Machine (Fine Thread)	6
10	9175	42B3581	Cap & Adapter Assembly	1
11	9176	42B3589	Filler Cap	1
12	2303-10	145-48227	Fillerneck Assembly - Fuel Tank	1
13	2304 2304-10	145-48001-36 154-48001-111	Tube - Overflow line Tube Assembly - Overflow	1 1
14	9072	A3122-10-59	Clamp (Tinnerman)	1
15	2305 2305-10	145-48001-35 154-48001-110 AN-H-35-24-20	Tube - Overflow Line Tube - Overflow Line Hose - 1 1/2 ID x 5	1 1 1
16		AN-H-35-24-36 AN-H-35-24-42 AN748-66	Hose - 1 1/2 ID x 9 Hose - 1 1/2 ID x 10 1/2 Clamp - Hose	1 1 4
17	2307 2307-10	145-48004 145-48006	Accumulator Tank Tank Assembly - Fuel Accumulator Complete	1 1
18		AN771P-1	Draincock - Screw Type	1
19	2308	145-48016	Screen Assembly - Accumulator Tank Outlet	1
20		AN900-16	Gasket - Asbestos Annul	1
21	9122	200x6 AN816-4	Connector - Inverted Male Nipple - Accumulator Tank to Tube	1 1
22	2309 2309-10	145-48008-3 145-48007	Support - Accumulator Tank Support Assembly - Fuel Accumulator Tank	1 1
23	2323 2323-10	145-48001-54 154-48001-102	Line Assembly - Accumulator Tank Valve Line - Accumulator to Valve	1 1
24		AN-H-35-6-13	Hose - 3/8 ID x 3 1/4	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
25		AN748-26	Clamp - Hose	1
26	9122 2354	200x6 AN816-4 145-48066	Connector - Inverted Male Nipple - Accumulator Tank to Tube Valve Assembly - Shut Off	1 1 1
27	9183 2354-10 9442	702-FG-1/4 145-48076 W7000-2D	Valve - Shut Off Valve Assembly - Shut Off Valve Assembly - Shutoff (Whittaker)	1 1 1
28	2344-10	145-48074	Shaft Assembly - Fuel Shut Off Valve	1
29		NAS220-13	Screw (For Whittaker Valve Only)	1
30		AN960-8	Washer - Plain	1
31	2347	AN365-1032 145-48065	Nut - Self Locking Support Assembly	1 1
32	2347-10 2345	145-48065-10 145-48070	Support Assembly - Shut Off Valve Adapter	1 1
33	2345-10	145-48075	Adapter - Valve Torque Tube	1
34	2346 2349 9071	145-48071 145-48072 26NKM02	Spring - Fuel Shutoff Control Handle - Valve Nut - Cap (Elastic Stop Nut)	1 1 1
35	9442-100	W7000-1D-4	Handle - Valve	1
36		AN505-8-6	Screw (for Whittaker Valve Only)	1
37	2348	AN936C-8L 145-48230	Washer - (For Whittaker Valve Only) Decal	1 1
38	9177	K2250B-2	Strainer - Fuel	1
39		AN4-13A	Bolt - Aircraft 1/4-28	2
40		AN960-416	Washer - Plain	2
41	9178	K2212A	Gasket - Fuel Strainer	2
42	9179	K2205A	Screen - Fuel Strainer	1
43	9180	K2255B	Glass - Fuel Strainer	1
44	9182	W7600-1/8	Drain Cock - Self Locking Type	1
45		AN913-1	Plug - Square Head Pipe Thread	1
46	2310 2310-10	145-48051 145-48055	Bracket Assembly - Fuel Strain Support Bracket Assembly - Fuel Strain Support	1 1
47		AN822-6D	Elbow - Fuel Strainer	1
48	2324-10	145-48001-87	Line Assembly - Primer 2nd Section	1
49	9443 2324-15	250X6 154-48001-49	Connector Line Assembly - Strainer to Hose	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
50	9084	75685	Hose Assembly - Complete Fitting	1
51	9122	200x6 AN6264-6-8 AN816-6	Connector - Inverted Male Hose Assembly - Hydraulic Fuel & Oil Nipple - Threaded	4 1 4
52	2311	145-48228	Fitting - Electric Fuel Pump	1
53		AN913-1	Plug - Square Head Pipe Thread	2
54	9098-10	20113	Pump - Electric Driven Fuel (Adel)	1
55	2322 9119 2322-10	145-48001-52 105X4 154-48001-52	Line Assembly - Electric Pump Drain Nut Line Assembly - Electric Pump Drain	1 1 1
56	9407 9407-10	525-FF1/4D 525-FG1/4D	Valve - Fuel Check Valve - Fuel Check	1 1
57		AN917-2D AN826-6D	Tee - Internal Pipe Thread Tee - Pipe Thread	1 1
58	2328 2328-15	145-48001-81 154-48001-106	Line - Fuel Pump to Tee Line - Fuel Pump to Tee	1 1
59	2339 2339-10 9184	145-48001-6 145-48001-39 D-51	Line - Vapor Return Line - Vapor Return Valve - Fuel Shut Off	1 1 1
60	2350	145-48232	Fitting - Firewall to Fuel Line	1
61	9104	75688 AN6264-6-12 1/2	Hose Assembly Hose Assembly - Hydraulic Fuel & Oil	1 1
62	9444	350X6 AN915-1	Elbow Elbow - 45 Degrees	1 1
63	9150	3350X4 AN823-6 AN15-2	Elbow - Street Elbow - 45 Degrees Flared Tube and Pipe Thread Elbow - 45 Degrees	1 1 1
64	2321-10 2321-11	145-48001-78 154-48001-78	Line Assembly - Engine Pump Vent Line Assembly - Engine Pump Vent	1 1
65	2321-15	145-48001-80 AN742-D66	Line - Engine Pump Drain Clamp	1 1
66		AN-H-35-4-13	Hose - 1/4 ID x 3 1/4	1
67		AN748-22	Clamp - Hose (A3122-10-59 Clamp is Alternate)	2
68	2316-05	145-53307-10	Fitting - 3 Way Special Fuel	1
69	9132	352X6 AN915-1 AN823-4 AN823-6	Elbow - Inverted 45 Degrees Elbow - 45 Degrees Elbow - 45 Degrees Elbow - 45 Degrees Flared Tube and Pipe Thread	1 1 1 1
70	9090	75695 AN6264-6-30 AN931-12-20	Hose Assembly - Complete Fitting Hose Assembly - Hydraulic Fuel & Oil Grommet - Elastic	1 1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
71	9122	200x6 AN823-6	Connector - Inverted Male Elbow - 45 Degrees Flared Tube and Pipe Thread	1 1
72	9404	3200X4	Adapter - Pipe	1
73	2316	145-53307	Fitting - 3 Way Special Fuel	1
74		AN913-1	Plug - Square Head Pipe Thread	1
75	9092	145-44017 AN6264-4-22	Hose Assembly - Engine Oil to Propeller LH Hose Assembly - Hydraulic Fuel & Oil	1 1
76	9128	300X4	Union	1
77	2341	145-48001-114	Line Assembly - Fuel Return Forward Section	1
78		AN823-4D	Elbow - 45 Degrees Flared Tube and Pipe Thread	1
79	2340 2340-15 2340-20	145-48001-85 154-48001-85 154-48001-114	Line - Fuel Return Forward Section Line - Fuel Return Fwd Section Line - Fuel Return Fwd Section	1 1 1
80	2355	145-48080	Filter Assembly - Fuel System	1
81	2355-100	145-48080-6	Screen - Filter	1
82		AN900-16	Gasket - Asbestos Annul	1
83		AN924-10D	Nut - Bulkhead & Universal Fitting Flared Tube	1
84		AN816-4D	Nipple - Flared Tube and Pipe Thread	1
85	9408 9408-10	11145-4 20448A	Valve Fuel Pres Relief (Adel) Valve Fuel Pressure Relief	1 1
86		AN912-1D	Bushing - Reducer	1
87	9443	250X6 AN915-2	Connector Elbow - 90 Degrees Internal and External Pipe Thread	1 1
88	2342	145-48001-92	Line - Fuel Return Center Section	1
89		AN823-4D	Elbow - 45 Degrees Flared Tube and Pipe Thread	1
90	2343 2343-10	145-48001-90 154-48001-104	Line - Fuel Return Aft Line Assembly - Ret Rear of Tank	1 1
91		AN-H-35-6-13	Hose - 3/8 ID x 3 1/4	1
92		AN748-26	Clamp - Hose	2
93		AN911-3D AN844-6D	Nipple - Internal Pipe Thread Elbow - 45 Degrees Pipe Thread and Hose	1 1
94		AN917-3D	Tee - Internal Pipe Thread	1
95		AN912-2D	Bushing - Reducer	1
96		AN840-6D	Adapter - Hose to Pipe Thread	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
97		AN913-2	Plug - Square Head Pipe Thread	1
98	2352	145-48212	Gasket - Fuel Line TK Adapter	1
99	2353	145-948022	Adapter-Fuel Tank Ret Line	1
100		AN502-10-10	Screw - Drilled Fillister Head Machine	6
101	9181	K2405-1/8	Fuel Primer	1
102	9133 2313	400X4 AN822-4 145-48079-6	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees Door - Fillerneck RH Wing	2 2 1
103	2326 9119 2326-10	145-48001-41 105X4 154-48001-41	Line - Primer 2nd Section Nut Line - Primer 2nd Section	1 1 1
104	2327-20 2327-21	154-48001-65 154-48001-65	Line - Primer 1st Section Aft Line-Primer 1st Section Aft	1 1
105	9128	300X4	Union	1
106	2315	145-31017 AN832-4D AN924-4D AN960-A716	Plate - Grommet Union - Flared Tube Bulkhead Nut - Bulkhead & Universal Fitting Flared Tube Washer - Plain	1 1 1 1
107	2327-25 2327-26	145-48001-67 154-48001-67	Line - Primer 1st Section Fwd Line Assembly - Primer 1st Section	1 1
108	9091	75696 AN6264-4-11 1/2	Hose Assembly Hose Assembly - Hydraulic Fuel & Oil	1 1
109	2318 2318-10 2319 9128 9133 2319-10	145-48021 145-48025 145-48001-57 300X4 400X4 154-48001-116 AN822-4	Adapter - Engine Manifold Injector Assembly - Manifold Primer Line - Hose to Prim Adapter Union Elbow - 90° Inverted Male Line Assembly - Hose to Injector Elbow - 90 Degrees	1 1 1 1 1 1 1
110	9091	75696 AN6264-4-11 1/2	Hose Assembly Hose Assembly - Hydraulic Fuel & Oil	1 1
111	2329-10	145-48001-39	Line - Vapor Return	1
112	9131 2356 2357	352X4 154-48801-113 AN815-4D 154-48001-39 AN833-4D AN924-4D	Elbow - 45 Degrees Line Assembly - Vapor Return Engine Section Union - Flared Tube Line - Vapor Return to Vent Elbow - 90 Degrees Bulkhead Nut - Bulkhead & Universal Fitting Flared Tube	1 1 2 1 1 1
113		AN-H-35-4-13	Hose - 1/4 ID x 3 1/4	1
114		AN748-22	Clamp - Hose (A3122-10-59 Clamp is Alternate)	2
115	2330 2330-10	145-48001-25 154-48001-25	Line - Fuel Vent Balance LH Line - Fuel Vent Balance LH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
116	2331-20 2331-21	145-48001-45 154-48001-45	Line Assembly - Fuel Vent Balance RH Line Assembly - Fuel Vent Balance RH	1 1
117		AN-H-35-8-13	Hose - 1/2 ID x 3 1/4	7
118	9074	A3122-14-59	Clamp (Tinnerman)	14
119	2332-10 2332-11	145-48001-38 154-48001-38	Line - Overboard Vent Line - Overboard Vent	1 1
120	2333 2333-10 2333-20	145-48001-28 154-48001-120 154-48001-120	Line - Overboard Drain Line - Overboard Drain Line Assembly - Overboard Drain	1 1 1
121	2334-10	145-48804	Line Assembly - Fuel Vent Drain	1
122	2335 2335-10	145-48001-34 154-48001-34	Line - Fuel Vent Drain RH Line - Fuel Vent Drain RH	1 1
123		AN-H-35-4-136 AN-H-35-4-116	Hose Assy - Accumulator Tank Hose Assy - Accumulator Tank	1 1
124	2336-10	145-48802-21	Line - Accumulator Tank Vent	1
125			Fuel Transmitter	--
126			Fuel Pump	--
127			Carburetor Drive Train	-- --



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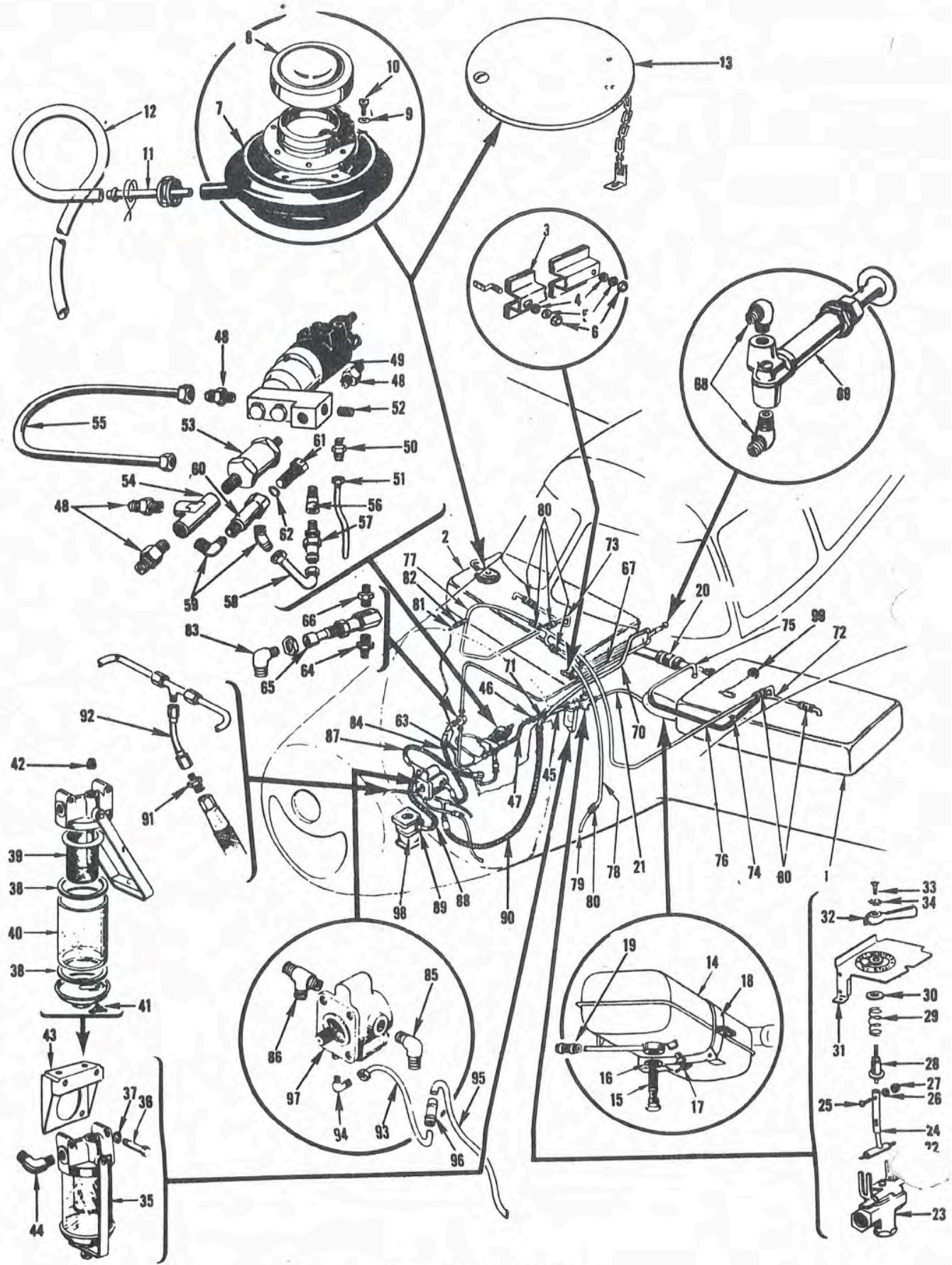


FIGURE 18A-FUEL SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2300-10	145-48002-101	Fuel Tank Assembly LH	1
2	2301-10	145-48002-104	Fuel Tank Assembly RH	1
3	2306	145-48017	Support	2
4	8333	4S3-416-20	Spacer - Bolt	2
5		AN960-416	Washer - Plain	2
6		AN365-428	Nut - Self Locking	2
7	2302	145-48011	Basin Assembly - Fillerneck Spill	1
8	2303-10	145-48227	Fillerneck Assembly - Fuel Tank	1
9	8520	2W1F12-12-47	Washer - Plain	6
10		AN502-10-8	Screw - Drilled Fillister Head Machine (Fine Thread)	6
11	2304-10	154-48001-111	Tube Assembly - Overflow	1
12	2305-10	154-48001-110	Tube - Overflow Line	1
13	2313	145-48079-6	Door - Fillerneck RH Wing	1
13A	2313-10	145-48081	Door Assembly - Fuel Tank Fillerneck Hinged	1
14	2307-10	145-48006	Tank Assembly - Fuel Accumulator Complete	1
15	2308	145-48016	Screen Assembly - Accumulator Tank Outlet	1
16		AN900-16	Gasket - Asbestos Annul	1
17		AN771-P1	Draincock - Screw Type	1
18	2309-10	145-48007	Support Assembly - Fuel Accumulator Tank	1
19		AN-H-35-6-20 AN748-26	Hose - 3/8 ID x 5 Clamp - Hose	1 2
20		AN-H-35-24-42 AN-H-35-24-16 AN748-66	Hose - 1 1/2 ID x 10 1/2 Hose - 1 1/2 ID x 4 Clamp - Hose	1 1 2
21	2323-10	154-48001-102	Line - Accumulator to Valve	1
22		AN816-6	Nipple - Threaded	1
23	2354-10 9442	145-48076 W7000-2D	Valve Assembly - Shut Off Valve Assembly - Shutoff (Whittaker)	1 1
23A	2354-20	145-48031 SA 1	Valve Assembly - Fuel Shut Off (Koehler)	1
23B	2359	145-48031-3	Adapter Assembly - Fuel Shutoff Valve	1
24	2344-10	145-48074	Shaft Assembly - Fuel Shut Off Valve	1
24A	2344-20	145-48074-1	Shaft Assembly - Fuel Shut Off Valve	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
25		NAS220-13	Screw (For Whittaker Valve Only)	1
26		AN960-8	Washer - Plain	1
27		AN365-832	Nut - Self Locking	1
28	2345-10	145-48075	Adapter - Valve Torque Tube	1
29	2346	145-48071	Spring - Fuel Shutoff Control	1
30		AN960A816	Washer - Plain	1
31	2347-10 2348	145-48065-10 145-48230	Support Assembly - Shut Off Valve Decal	1 1
32	9442-10C	W7000-1D-4	Handle - Shutoff Valve	1
33		AN505-8-6	Screw (for Whittaker Valve Only)	1
34		AN936C8L	Washer - (For Whittaker Valve Only)	1
35	9177	K2250B-2	Strainer - Fuel	1
36		AN4-13A	Bolt - Aircraft 1/4-28	2
37		AN960-416	Washer - Plain	2
38	9178	K2212A	Gasket - Fuel Strainer	2
39	9179	K2205A	Screen - Fuel Strainer	1
40	9180	K2255B	Glass - Fuel Strainer	1
41	9182	W7600-1/8	Drain Cock - Self Locking Type	1
41A	9182-10	K9000S1A	Drain Cock - Fuel Strainer	1
42		AN913-1S	Plug - Square Head Pipe Thread	1
43	2310-10	145-48055	Bracket Assembly - Fuel Strain Support	1
44		AN822-6	Elbow - 90 Degrees Flared Tube and Pipe Thread	1
45	2324-15	154-48001-49	Line Assembly - Strainer to Hose	1
46		AN815-6D	Union - Flared Tube	1
47		AN6264-6-8	Hose Assembly - Hydraulic Fuel & Oil	1
48		AN816-6	Nipple - Threaded	2
49	9098-20 9098-10	23067 20113 AN515-416R7 AN960-416 AN935-416	Fuel Pump - Electric (Adel) Pump - Electric Driven Fuel (Adel) Screw - Round Head Machine (Coarse Thread) Washer - Plain Washer - Medium Spring Lock	1 1 4 4 4
50		AN816-4	Nipple - Accumulator Tank to Tube	1
51	2322-10	154-48001-52	Line Assembly - Electric Pump Drain	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
52		AN913-1S	Plug - Square Head Pipe Thread	1
53	9407-10	525-FG1/4D	Valve - Fuel Check	1
54		AN826-6	Tee - Pipe Thread	1
55	2328-20	154-48001-81	Line Assembly - Electric Fuel Pump Tee	1
56		AN915-2	Elbow - 90 Degrees Internal and External Pipe Thread	1
57	9408-20 9408-10	23066 20448A	Valve Fuel Pressure Relief Valve Fuel Pressure Relief	1 1
58	2340-30 2340-20	146-48001-8 154-48001-114	Line Assembly - Pump Fuel Return Line - Fuel Return Fwd Section	1 1
59		AN823-6 AN823-4	Elbow - 45 Degrees Flared Tube and Pipe Thread Elbow - 45 Degrees	2 2
60	2355-10 2355	145-48080-6 145-48080 AN960-1616L AN924-10D	Screen - Filter Filter Assembly - Fuel System Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube	1 1 1 1
61	2355-100	145-48080-6	Screen - Filter	1
62		AN900-16	Gasket - Asbestos Annul	1
63	2339-10	154-48001-47	Line Assembly - Main Fuel	1
64		AN816-6	Nipple - Threaded	1
65	2350	145-48232 AN924-12D	Fitting - Firewall to Fuel Line Nut - Bulkhead & Universal Fitting Flared Tube	1 1
66		AN816-4 AN822-4	Nipple - Accumulator Tank to Tube Elbow - 90 Degrees	1 1
67	2326-10 2326-20	154-48001-41 154-48001-11	Line - Primer 2nd Section Line Assembly - Bulkhead Fitting to Primer Pump	1 1
68		AN822-4	Elbow - 90 Degrees	2
69	9181	K2405-1/8	Fuel Primer	1
70	2327-21	154-48001-65	Line-Primer 1st Section Aft	1
71		AN833-4D AN832-4D AN960-A716 AN924-4D	Elbow - 90 Degrees Bulkhead Union - Flared Tube Bulkhead Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube	1 1 1 1
72	2334-10	145-48804	Line Assembly - Fuel Vent Drain	1
73	2335-10	154-48001-34	Line - Fuel Vent Drain RH	1
74		AN-H-35-4-116 AN748-22	Hose Assy - Accumulator Tank Clamp - Hose (A3122-10-59 Clamp is Alternate)	1 2
75	2336-20	154-48001-94	Line - Accumulator Tank Vent	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
76	2330-10	154-48001-25	Line - Fuel Vent Balance LH	1
77	2331-21	154-48001-45	Line Assembly - Fuel Vent Balance RH	1
78	2332-11	154-48001-38	Line - Overboard Vent	1
79	2333-20 2333-30 2333-35	154-48001-120 146-48001-13 146-48001-15	Line Assembly - Overboard Drain Line - Fuel Overboard Vent Connection Line Assembly - Overboard Vent Drain	1 1 1
80		AN-H-35-8-13 AN748-30	Hose - 1/2 ID x 3 1/4 Clamp - Hose	8 2
81	2358	146-48001-7	Plug - Line Tube	1
82	2357 2356	AN-H-35-4-13 AN742-22 154-48001-39 AN815-4D 154-48801-113 AN815-4D AN6264-4-15 1/2 AN823-4	Hose - 1/4 ID x 3 1/4 Clamp - Hose Line - Vapor Return to Vent Union - Flared Tube Line Assembly - Vapor Return Engine Section Union - Flared Tube Hose Assembly - Hydraulic Fuel & Oil Elbow - 45 Degrees	1 2 1 1 1 1 1 1
83		AN823-6 AN816-6	Elbow - 45 Degrees Flared Tube and Pipe Thread Nipple - Threaded	1 1
84		AN6264-6-11 1/2 AN6264-6-12 1/2	Hose Assembly - Hydraulic Fuel & Oil Hose Assembly - Hydraulic Fuel & Oil	1 1
85		AN822-6 AN823-6 AN915-2	Elbow - 90 Degrees Flared Tube and Pipe Thread Elbow - 45 Degrees Flared Tube and Pipe Thread Elbow - 90 Degrees Internal and External Pipe Thread	1 1 1
86	2316-05	AN826-6 145-53307-10 AN823-6 AN823-4	Tee - Pipe Thread Fitting - 3 Way Special Fuel Elbow - 45 Degrees Flared Tube and Pipe Thread Elbow - 45 Degrees	1 1 1 1
87		AN6264-6-20 AN6264-4-22	Hose Assembly - Hydraulic Fuel & Oil Hose Assembly - Hydraulic Fuel & Oil	1 1
88		AN6264-6-24 AN6264-6-30	Hose Assembly - Hydraulic Fuel & Oil Hose Assembly - Hydraulic Fuel & Oil	1 1
89	2316	AN822-6-6 AN823-6 145-53307 AN913-1	Elbow - 90 Degrees Elbow - 45 Degrees Flared Tube and Pipe Thread Fitting - 3 Way Special Fuel Plug - Square Head Pipe Thread	1 1 1 1
90	2327-26	AN6264-4-34 154-48001-67 AN6264-4-11 1/2	Hose Assembly - Hydraulic Fuel & Oil Line Assembly - Primer 1st Section Hose Assembly - Hydraulic Fuel & Oil	1 1 1
91		AN919-1D AN815-4D	Reducer - External Thread Flared Tube Union - Flared Tube	1 2
92	2319-20 2319-10	154-48001-5 154-48001-116 AN822-4	Line Assembly - Hose to Engine Primer Line System Line Assembly - Hose to Injector Elbow - 90 Degrees	1 1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
93	2321-40 2321-11	146-48001-2 154-48001-78	Line Assembly - Electric Fuel Pump Drain Upper Line Assembly - Engine Pump Vent	1 1
94		AN816-4 AN816-4	Nipple - Accumulator Tank to Tube Nipple - Accumulator Tank to Tube	1 1
95	2321-45 2321-16	146-48001-4 145-48001-80	Line Assembly - Electric Fuel Pump Drain Lower Line - Engine Pump Drain	1 1
96		AN-H-35-4-13 AN748-22	Hose - 1/4 ID x 3 1/4 Clamp - Hose (A3122-10-59 Clamp is Alternate)	1 2
97			Fuel Pump - Engine Driven	--
98			Carburetor	--
99			Fuel Transmitter	--

# NAVIONS WEST INC.

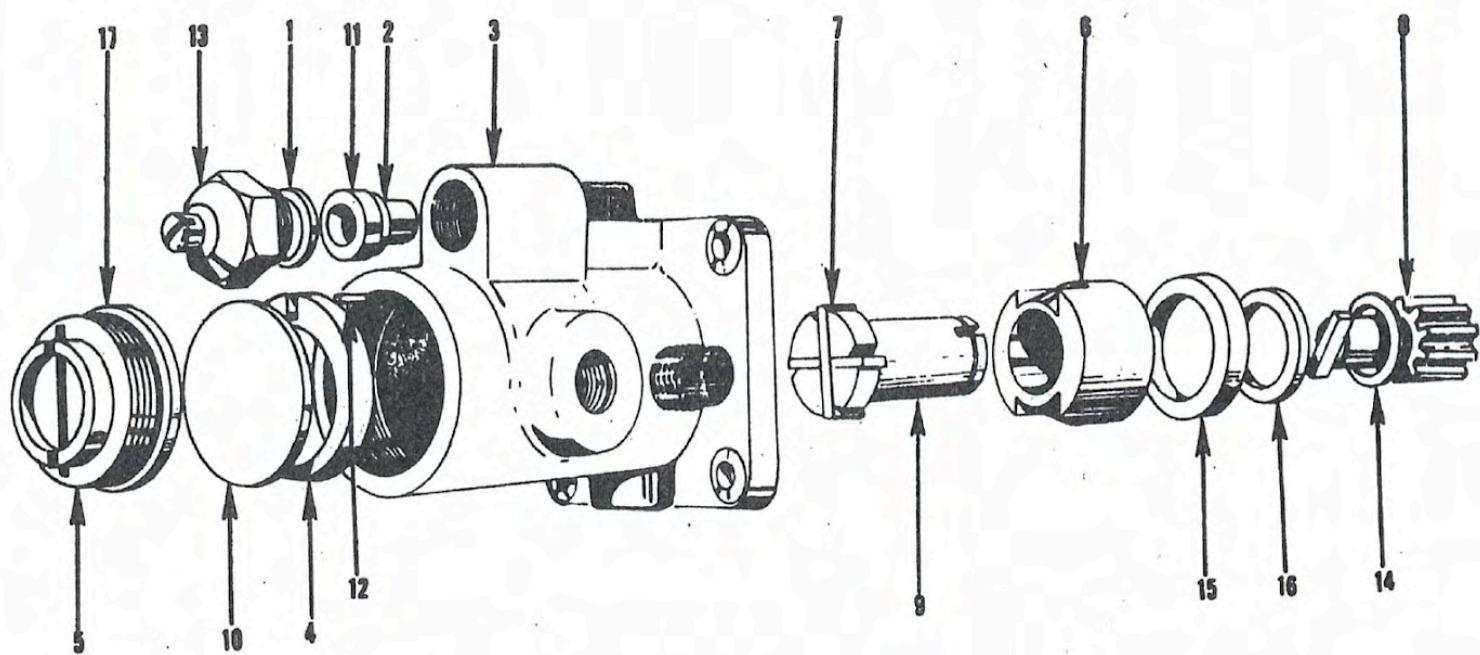


FIGURE 19 - FUEL PUMP - ENGINE DRIVEN (ROBEC)

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	9406	RD7750-1	Fuel Pump (Romec)	1
	9406-10	RD7790-1	Fuel Pump (Romec)	1
	9406-20	RD7790A-2N	Pump - Engine Driven Fuel (Romec)	1
1	9406-125	RA-2429	Gasket - Fuel Relief Valve Cap	1
2	9406-105	RA-3791	Disc - Fuel Pump Relief Valve	1
3	9406-190 9406-191	RD-77 51 RD-77 81	Body - pump Body - pump	1 1
4	9406-130 9406-131	RA-7752 RA-7793	Liner - Pump (7750 - 1 Pump Only) Liner - Pump Non-Pulsating	1 1
5	9406-135	RA-7753	Locknut - Pump Body Closure	1
6	9406-140 9406-141	RA-7754 RA-7754-1	Bearing - Fuel Pump Rotor Bearing - Fuel Pump Rotor	1 1
7	9406-145 9406-146	RA-7755 RA-7794	Blade - Rotor (7750 - 1 Pump Only) Blade - Fuel Pump Rotor	2 2
8	9406-150 9406-151	RA-7756 RB-7779	Driver - Pump 12 Tooth Spline Driver - Pump 11 Tooth Spline	1 1
9	9406-155 9406-156	RA-7756 RA-7791	Driver - 12 Tooth Spline Rotor - Fuel Pump	1 1
10	9406-160 9406-161	RA-7758 RA-7792	Plate - Thrust (7750 - 1 Pump Only) Plate - Thrust (7790 - 1 Pump Only)	1 1
11	9406-100 9406-115 9406-186 9406-110 9406-185	R4-7766 RA-7759 RA-7763 RA-7764 RA-8692-31	Valve Assembly - By Pass & Relief Valve - Fuel Pump Relief Valve - By Pass Ball Spring - Pump By Pass Valve Ring - By Pass Valve Retaining	1 1 1 1 1
12	9406-165	RA-7762	Pin - Fuel Pump Liner Locating	1
13	9406-120 9406-121 9406-200	RA-7768 RA-7761 RD-7795	Cap Assembly - Pump Relief Valve Cap Assembly - Pump Relief Valve Spring - Fuel Pump Relief Valve	1 1 1
14	9406-175	RA-8693-62	Ring - Driver Retaining	1
15	9406-170	RA-6861	Seal - Fuel Pump Rotor	1
16	9406-180	RA-8692-112	Ring - Rotor Seal Retaining	1
17		AN6227-22 AN960-4L	Packing - "O" Ring Hydraulic Washer - Plain (Bypass Valve)	1 1

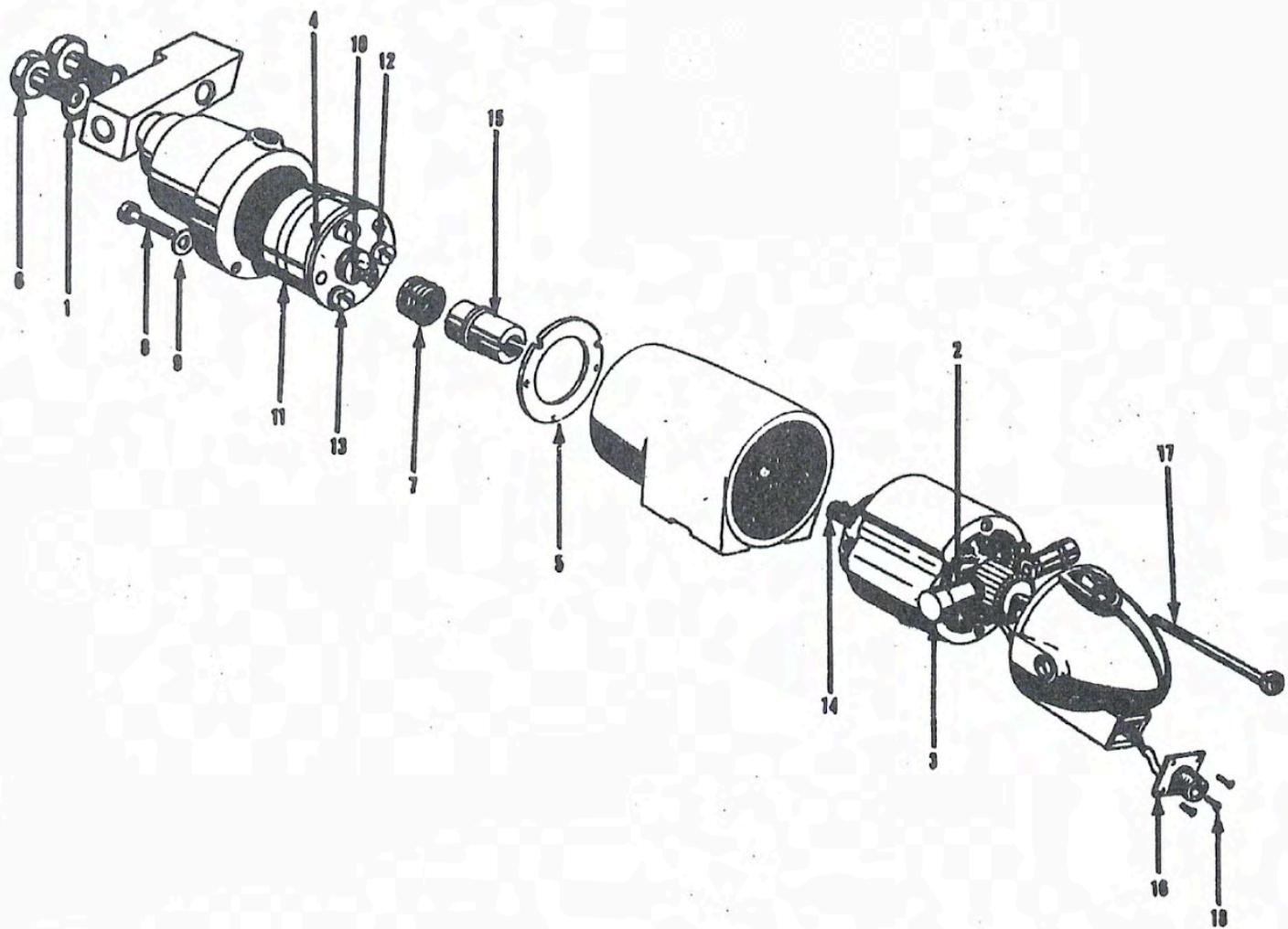


FIGURE 20 - ELECTRIC DRIVEN FUEL PUMP

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	9098	19372	Fuel Pump Assembly - Electric Drive (Adel)	1
	9098-10	20113	Pump - Electric Driven Fuel (Adel)	1
1	9098-165	42300-7	Seal - "O" Ring Packing	4
2	9098-110	8813	Brush Assembly - Pump Motor	2
3	9098-115	8814	Plug - Brush Holder	2
4	9098-120	15799	Gasket - Power Package Plate	1
5	9098-130	19197	Gasket - Heater Pump Housing	1
6	9098-135 9098-140	19365 20228	Bolt - Bypass and Relief Valve Spring	2
7	9098-141	21553	Spring - Fuel Pump Seal	1
8	9098-145 9098-150	43131-32 43131-37	Screw - Short Screw - Long	1 2
9	9098-155	43400-5	Washer - Lock Spring Type	3
10	9098-160 9098-125	16040 19075	Pin - Pump Shaft Seal - Heater Pump Cartridge	1 1
11	9098-180 9098-105 9098-176 9098-177 9098-178 9098-179	19077 42300-6 19471 20173 20227 20227	Cartridge Assembly - Heater Pump Seal - "O" Ring Packing Seal Ring Metallic Rotating Seal Pin Metallic Rotating Seal Cover	1 1
12	9098-185	19174	Washer - Heater Fuel Pump	3
13	9098-190	42773-31	Screw - Heater Pump	3
14	9098-170	8332	Pin - Motor Drive Shaft	1
15	9098-175	20058	Coupling - Heater Fuel Pump	1
16		AN3102-10S-2P	Receptacle	1
17		8/32X1 13/16	Screw - Socket Head Cap	2
18		AC500-4-5	Screw	4

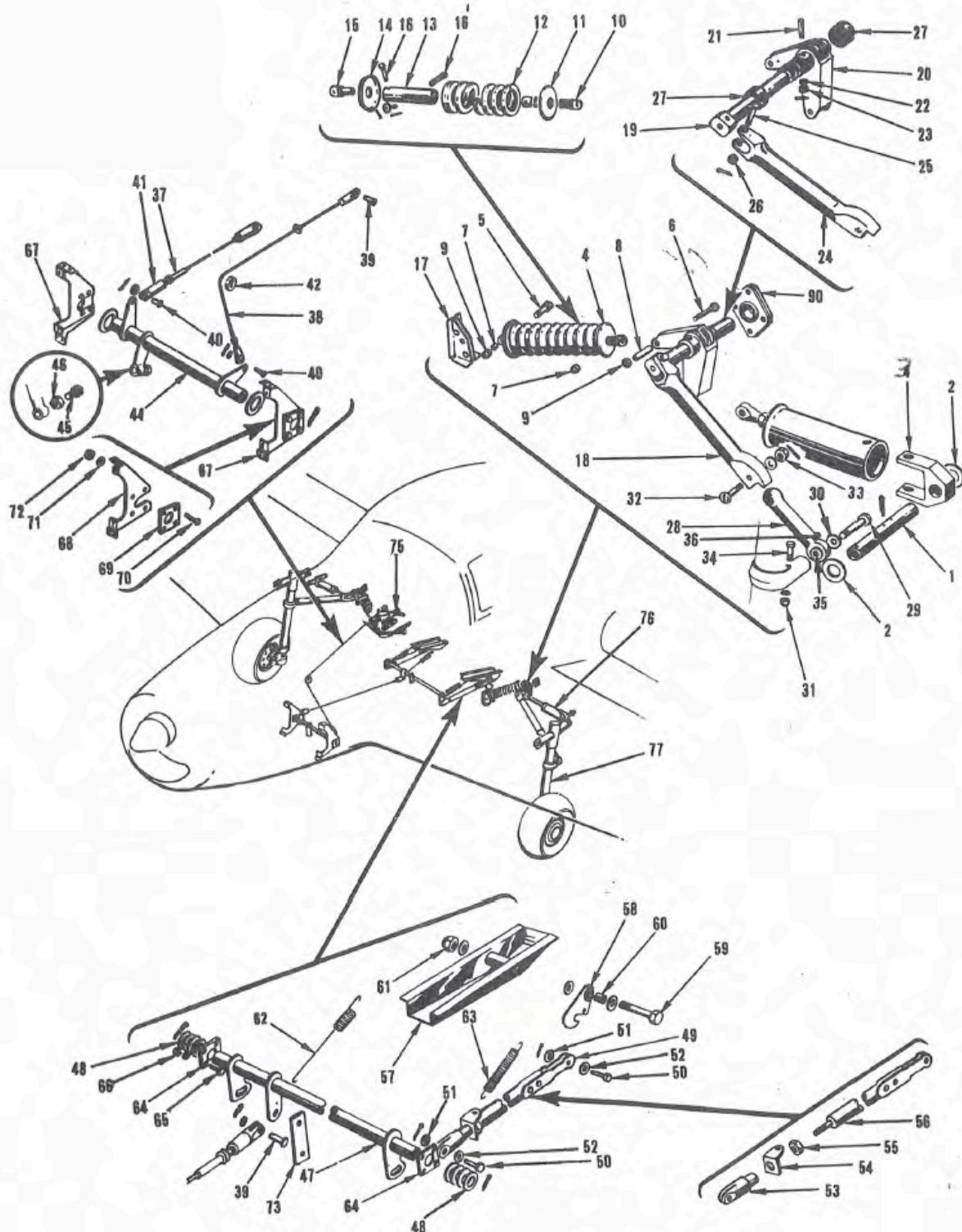


FIGURE 21 - MAIN LANDING GEAR MECHANISM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2501	143-33153	Shaft - MLanding Gear Strut Support	2
2		AN960-1216	Washer - Plain	2
3	2502	143-33154	Universal - MLanding Gear Actuating Strut	2
4	2503	143-33160-4	Bungee Assembly - Landing Gear Down Lock	2
5		AN4-7A	Bolt - Aircraft 1/4-28	1
6		AN4-15A	Bolt - Aircraft 1/4-28	1
7	2504	145-34155-7	Spacer - Landing Gear Link Bolt	2
8	8368	4S4-8-24	Spacer - Rivet	1
9		AN365-428	Nut - Self Locking	2
10	2505	143-33160-11	End - Landing Gear Down Lock Bungee Rod	1
11	2506	143-33160-13	Tube Assembly - Landing Gear Down Lock	1
12	9164	M97	Spring (Muelhausen)	1
13	2507	143-33160-10	Tube - Landing Gear Down Lock	1
14	2508	143-33160-15	Cap - Bungee Tube	1
15	2509	143-33160-6	Rod End - Bungee	1
16		AN392-19	Pin - Flat Head 1/8	2
17	2510 2511	143-33161-1 SA #1 143-33161-2 SA #2	Fitting - LH Fitting - RH	1 1
18	2512-10 2513-10	145-33171-101 145-33171-102	Shaft Assembly - Torque Brace LH Shaft Assembly - Torque Brace RH	1 1
19	2514	143-33156	Shaft - Side Brace Support	1
20	2515	143-33166	Bellcrank Assembly - MLanding Gear Return	1
21		AN386-3-10	Pin - Threaded Taper	2
22		AN975-4	Washer - Tipper Pin	2
23		AN320-4	Nut - Aircraft Shear	2
24	2516-10	143-33165-10	Brace Assembly MLanding Gear - Upper Side	1
25	2517	143-33184	Bolt - Brace to Torque Shaft Attachment	1
26		AN320-7	Nut - Aircraft Shear	1
27	2518	143-33155	Retainer - Brace Support Shaft Oil	2
28	2519	143-33164	Link Assembly - MLanding Gear Side Brace	1
29	2520	145-33160	Pin - Landing Gear Down Link	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
30	8533	2W1-40-44-62	Washer - Plain	1
31		AN365-428	Nut - Self Locking	1
32		AN26-28	Bolt - Clevis 3/8-24	1
33		AN320-6	Nut - Aircraft Shear	1
34		AN4-15A	Bolt - Aircraft 1/4-28	1
35	2521	143-33164-6	Bearing - MLanding Gear Side Brace Link	1
36		NAS2-101	Fitting - Lubricator	1
37	2522 2522-10	143-33175-2 143-33175-8	Cable Assembly - MLanding Gear Up Lock Cable Assembly - MLanding Gear Up Lock	1 1
38	2523 2523-10	143-33175-5 143-33175-10	Cable Assembly Cable Assembly - MLanding Gear Up Lock	1 1
39		AN393-7	Pin - Flathead 3/16	1
40		AN393-11	Pin - Flathead 3/16	1
41		AN665-10R	Terminal - Clevis Type Tie Rod	1
42	2539	AN210-1A 145-33176	Pulley - Anti - Fric Bearing Control Pulley - Release Cable Idler	1 1
43		NAS73-3-005	Bushing	1
44	2524	145-33118	Shaft Assembly - Lock Release Torque	1
45	8050	5B1-7	Bolt Adjustment	1
46		AN345-10	Nut - Light Hexagon Fine Thread	1
47	2525	145-33109	Shaft Assembly - MLanding Gear Up Lock Torque	1
48	8491	2W1-34-28-64	Washer - Plain	8
49	2526	145-33167	Rod Assembly - MLanding Gear Up Lock	2
50		AN393-13	Pin - Flathead 3/16	2
51		AN960-10L	Washer - Plain	2
52	8473	2W1-12-12-20	Washer - Plain	2
53		AN486-4	Clevis - Rod End Adjusting	1
54	2527	145-33168	Clip - MLanding Gear Up Lock Spring	1
55		AN316-4R	Nut - Aircraft Check	1
56	2528	145-33167-6	Tube Assembly	1
57	2530 2531	145-33170-1 145-33170-2	Bracket Assembly - MLanding Gear Up Lock LH Bracket Assembly - MLanding Gear Up Lock RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
58	2529	145-33169	Hook Assembly - MLanding Gear Up Lock	2
59		AN6-27A	Bolt - Aircraft 3/8-24	1
60		NAS72-6-006	NAS72-6-006	1
61		AN365-624	Nut - Self Locking	1
62	2532	143-33181	Spring - Release Cable Tension	1
63	2533	145-33172	Spring - MLanding Gear Up Lock	2
64	2534	145-33162	Block - Up Lock Torque Shaft Bearing	2
65		AN3-5A	Bolt - Aircraft #10-32	4
66		AN365-1032	Nut - Self Locking	4
67	2535	145-33109	Shaft Assembly - Unlock Torque	2
68	2536	143-33158-3	Bracket - Release Torque Shaft	2
69	2537	145-33168	Clip - Uplock Spring	1
70		AN3-5A	Bolt - Aircraft #10-32	4
71		AN960-10L	Washer - Plain	4
72		AN365-1032	Nut - Self Locking	4
73	2538	145-33167-6 AN365-832	Tube Assembly Nut - Self Locking	1 2
74			Fitting - Trunnion Bearing	--
75			Valve - Hydraulic Power & Control	--
76			Actuating Cylinder - Complete Hydraulic	--
77			Shock Strut - Main Landing Gear	--

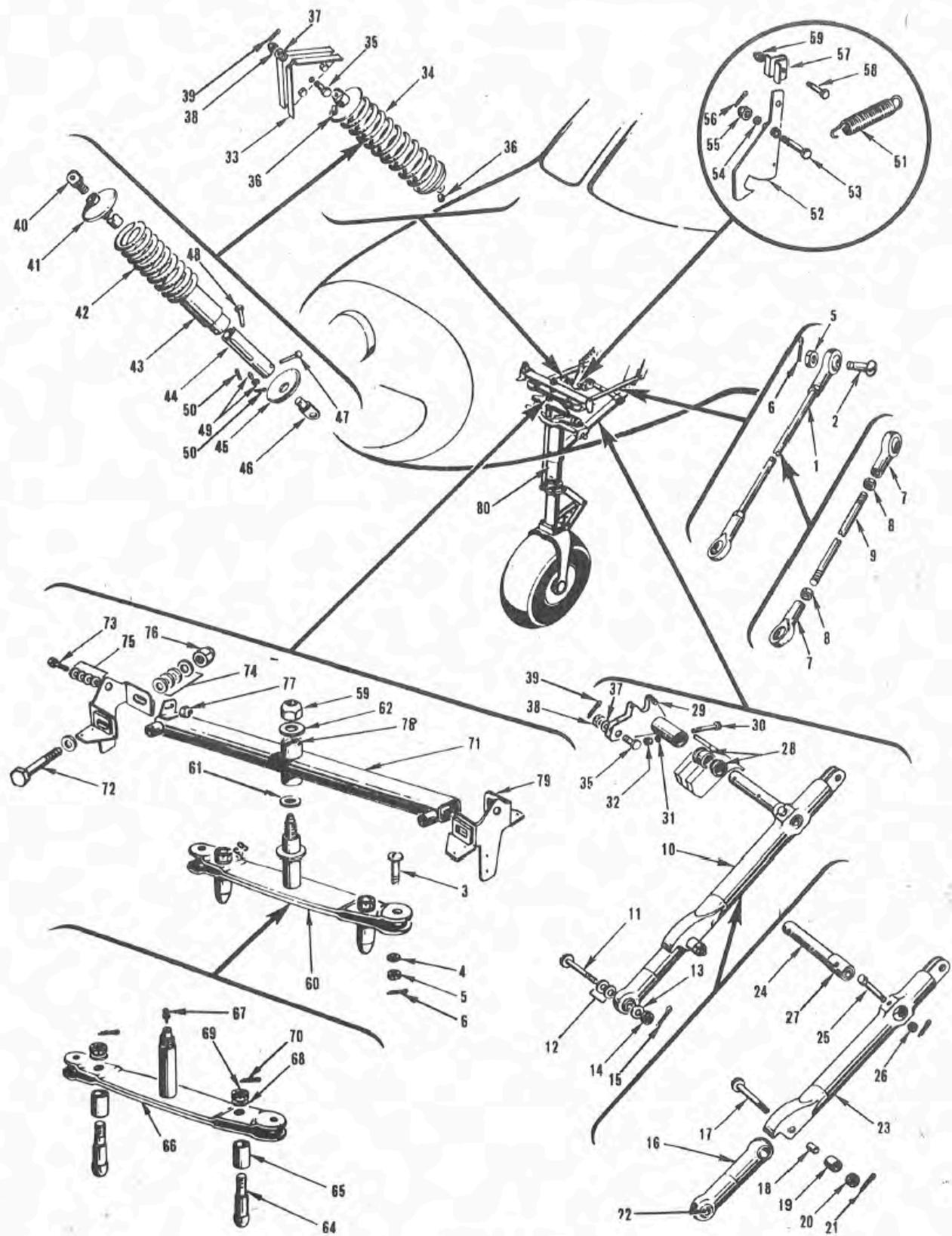


FIGURE 22 - NOSE GEAR MECHANISM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2601	145-34149	Rod Assembly - Landing Gear Steering Mechanism	2
2		AN24-16	Bolt - Clevis 1/4-28	1
3		AN24-19	Bolt - Clevis 1/4-28	1
4		AN960-416	Washer - Plain	1
5		AN320-4	Nut - Aircraft Shear	2
6		AN380-2-2	Cotter	2
7	9167	RE4F5	Bearing - Rod End (Fafnir)	2
8		AN316-5R	Nut - Aircraft Check	2
9	2602	145-34149-3	Rod	1
10	2603-10	145-34120-10	Link Assembly - Aux Landing Gear Drag	1
11		NAS57-21	Bolt - Close Tolerance 7/16-20	1
12	8490	2W1-30-40-63	Washer - Plain	2
13	8489	2W1-259-20-32	Washer - Plain	1
14		AN320-7	Nut - Aircraft Shear	1
15		AN380-3-3	Cotter	1
16	2604	145-34164	Link Assembly - Drag Brace Lower	1
17	2605	145-34121	Bolt - Brace Over Center Joint	1
18	2606	145-34182	Bushing - Landing Gear Up Lock Roller	1
19	2607	145-34182	Bushing - Landing Gear Drag Link	1
20		AN320-7	Nut - Aircraft Shear	2
21		AN380-3-3	Cotter	21
22	2608	145-34164-7	Bearing - Drag Brace Lower Link	1
23	2609-10	145-34106-10	Link Assembly - Retracting Torque	1
24	2610	145-34108	Shaft Assembly - Drag Brace Torque	1
25	2611	145-34123	Bolt - Aux Landing Gear Drag Brace	1
26		AN320-7	Nut - Aircraft Shear	1
27	2629	145-34144	Collar - Brace Torque Shaft	1
28	8020	4B17-14-60	Bushing - Bronze Flanged	1
29	2612 2612-10 2612-20	145-34122 145-34122-10 145-34314	Crank Assembly - Drag Link Torque Crank Assembly - Drag Link Torque Crank Assembly - Drag Link Torque	1 1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
30		AN4-13A	Bolt - Aircraft 1/4-28	2
31		AN960-416	Washer - Plain	2
32		AN365-428	Nut - Self Locking	2
33	2613	145-34119	Bracket Assembly - Bungee Support	1
34	2614	143-33160-3	Bungee Assembly - Landing Gear Down Lock	1
35		AN4-7	Bolt - Aircraft 1/4-28	2
36	2504	145-34155-7	Spacer - Landing Gear Link Bolt	2
37		AN960-416	Washer - Plain	2
38		AN310-4	Nut - Aircraft Castle	2
39		AN380-2-2	Cotter	2
40	2505	143-33160-11	End - Landing Gear Down Lock Bungee Rod	1
41	2615	143-33160-17	Tube Sub Assembly - Bungee	1
42	9165	M100	Spring	1
43	2616	143-33160-19	Collar - Landing Gear Down Lock	1
44	2617	143-33160-18	Tube End - Landing Gear Down Lock	1
45	2508	143-33160-15	Cap - Bungee Tube	1
46	2509	143-33160-6	Rod End - Bungee	1
47		AN392-19	Pin - Flat Head 1/8	1
48		AN392-23	Pin - Flat Head 1/8	1
49		AN960-4L	Washer - Plain (Bypass Valve)	2
50		AN381-2-6	Cotter - Corrosion Resisting Steel	2
51	2618	145-34202	Spring - Aux Landing Gear Up Lock	1
52	2619	145-34118	Hook Assembly - Aux Landing Gear Up Lock	1
53		AN3-11	Bolt - Aircraft #10-32	1
54		AN960-10	Washer - Plain	1
55		AN310-3	Nut - Aircraft Castle	1
56		AN380-2-2	Cotter	1
57	2620	145-34188	Fitting - Landing Gear Up Lock Engaging	1
58		AN3-4A	Bolt - Aircraft #10-32	1
59		AN365-1032	Nut - Self Locking	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
60	2621	145-34175	Bellcrank Assembly - Steering Mech	1
61	8511	2W1B-41-32-32	Washer - Plain	1
62	2622	145-34191	Washer - Bellcrank Shaft	1
63		AN365-720	Nut - Self Locking	1
64	2623	145-34208	Bolt - Aux Landing Gear Steer Bellcrank	2
65	2624	145-34179	Tube - Aux Landing Gear Steering Mech Bolt	2
66	2625	145-34175-5	Bellcrank Sub Assembly - Steering	1
67	9166	1728-J	Fitting - Lubrication	1
68		AN960-616	Washer - Plain (Rear Engine Mount)	2
69		AN320-6	Nut - Aircraft Shear	2
70		AN380-3-3	Cotter	2
71	2628	145-34180	Support Assembly - Steering Bellcrank	1
72		AN5-25A	Bolt - Aircraft 5/16-24	2
73		AN3-10A	Bolt - Aircraft #10-32	1
74		AN960-516	Washer - Plain	10
75		AN960-10	Washer - Plain	10
76		AN365-524	Nut - Self Locking	2
77		AN365-1032	Nut - Self Locking	1
78	9172	B-1012X	Bearing - Needle (long)	2
79	2626 2627	145-34207-1 145-34207-2	Bracket Assembly - Bellcrank Support Bracket Assembly - Bellcrank Support	1 1
80	2800	145-34102	Shock Strut - Nose Gear	--

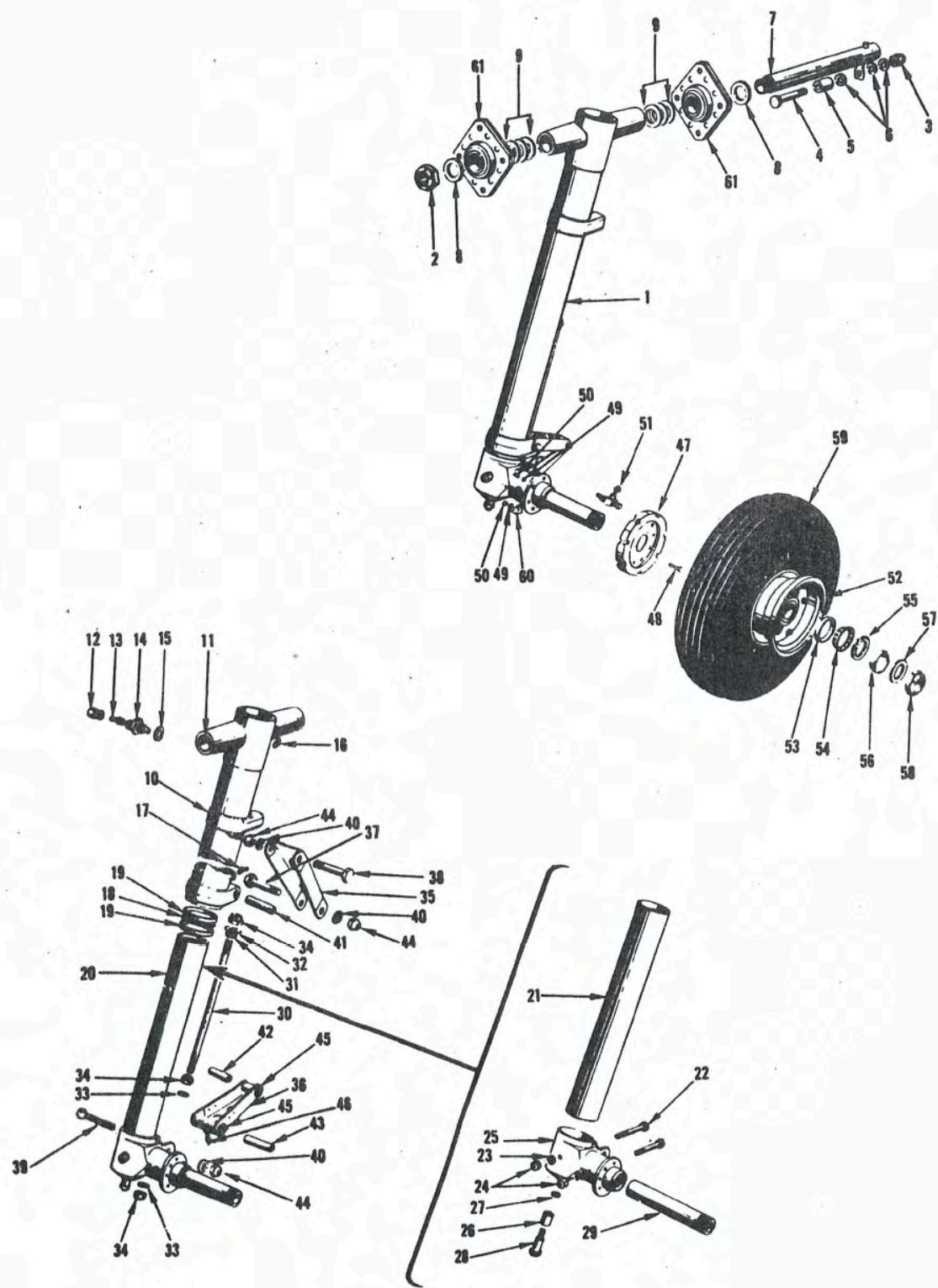


FIGURE 23 - MAIN GEAR SHOCK STRUT

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2700 2700-10 2701 2701-10	145-33102-3 145-33102-5 145-33102-4 145-33102-6	Shock Strut - Main Gear LH Shock Strut - Main Gear LH Shock Strut - Main Gear RH Shock Strut - Main Gear RH	1 1 1 1
2		AN364-1414	Nut - Self Locking	1
3		AN365-524	Nut - Self Locking	1
4		AN5-16A	Bolt - Aircraft 5/16-24	1
5	8350	4S3D516-21	Spacer - Bolt	1
6		AN960-516	Washer - Plain	3
7	2706	143-33151	Shaft Assembly - Trunnion	1
8	8492	2W1-57-48-125	Washer - Plain	2
9	8496 8497 8498 8500	2W1-65-48-25 2W1-65-48-31 2W1-65-48-25 2W1-65-48-125	Washer - Plain Washer - Plain Washer - Plain Washer - Plain	AR AR AR AR
10	2702 2703	145-33903-1 145-33903-2	Cylinder Assembly - Shock Strut LH Cylinder Assembly - Shock Strut RH	1 1
11	2721	145-33156	Bushing - Main Gear Cylinder	2
12		AN813-1A	Cap - High Pressure Air Valve	1
13		AN809-1	Core - High Pressure Air Valve	1
14		AN812-1	Body - High Pressure Air Valve	1
15		AN901-5C	Gasket - Metal Tube Connector Seal	1
16		NAS2-101	Fitting - Lubricator	1
17		NAS2-101	Fitting - Lubricator	1
18		AN6227-34	Packing - "O" Ring Hydraulic	1
19		AN6246-34	Ring - Hydraulic Packing Backup	1
20	2704 2704-10 2705 2705-10	145-33205-3 145-33205-5 145-33205-4 145-33205-6	Piston & Axle Assembly - LH Piston & Axle Assembly - Strut LH Piston & Axle Assembly - Strut RH Piston & Axle Assembly - Strut RH	1 1 1 1
21	2707 2707-10	145-33104 145-33104-7	Inner Cylinder Assembly Cylinder Assembly - Strut Inner	1 1
22		AN4-31A	Bolt - Aircraft 1/4-28	1
23		AN960-416	Washer - Plain	2
24		AN365-428	Nut - Self Locking	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
25	2708 2709	143-33113-9 143-33113-10	Fitting Assembly - Axle LH Fitting Assembly - Axle RH	1 1
26	2710	145-33119	Roller - Main Gear Up Lock	1
27		AN960-416L	Washer - Plain	1
28	2711	145-33212	Bolt - Main Gear Jack Fitting	1
29	2712	145-33161	Axle - Main Gear Shock Strut	1
30	2713	145-33158	Rod - Main Gear Shock Extension	1
31	2714	145-33157	Washer - Strut Rod Rubber	1
32	8487	2W1-25-28-63	Washer - Plain	1
33		AN960-416	Washer - Plain	2
34		AN365-524	Nut - Self Locking	3
35	2715	145-33108	Link Assembly - Main Gear Torque	1
36	2716	145-33107	Link Assembly - Main Gear Torque	1
37		AN5-21A	Bolt - Center Attaching	1
38		AN5-31A	Bolt - Upper Attaching	1
39		AN5-32A	Bolt - Lower Attaching	1
40		AN960-516	Washer - Plain	3
41	2717	145-33204-3	Spacer - Main Gear Torque Link	1
42	2718	145-33204-4	Spacer - Main Gear Torque Link	1
43	2719	145-33204-5	Spacer - Main Gear Torque Link	1
44		AN365-524	Nut - Self Locking	3
45	8022	4B17-8-50	Bushing - Bronze Flanged	1
46		NAS2-101	Fitting - Lubricator	1
47	9185 9185-1 9186 9186-1 9189 9189-1	G-2-537L G-2-537R D-2-559-1-L D-2-559-1-R CFA299L CFA299R	Brake Assembly - LH Brake Assembly - RH Brake Assembly - LH Brake Assembly - RH Brake Assembly - LH (Firestone) Brake Assembly - RH (Firestone)	1 1 1 1 1 1
48		AN4-6A	Bolt - Aircraft 1/4-28	6
49		AN960-416	Washer - Plain	6
50		AN365-428	Nut - Self Locking	6
51	9187 9185-2	A-57-33 B-27-249	Bleeder Valve Assembly (Goodrich) Block (Goodrich)	1 7

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	9186-2 9185-3 9186-3 9185-4 9185-5 9186-4 9186-5 9185-6 9186-6 9189-2 9189-3 9189-4 9189-5 9189-6 9189-7 9189-8 9189-9	B-27-250 B-21-116 B-21-111 B-22-148L B-22-148R B-22-165L B-22-165R A-72-89 A-72-29 BFA520 BFA233 BFA281 AFA358 BFA236 CFA514 No Number AFA564	Block (Goodrich) Spring (Goodrich) Spring - Brake Friction Block Tube - Expander LH Tube - Expander RH Tube - Expander LH Tube - Expander RH Shield - Tube Shield - Tube Brake Seal (Firestone) Pusher Ring (Firestone) Floating Disc Retraction Spring Brake Lining Disc (Firestone) Stationary Disc Assembly Copper Friction Facings (Includes Rivets) (Firestone) Lockwasher	7 7 7 1 1 1 1 7 7 1 1 1 1 1 18 6
52	9190 9191 9191-2 9192 9192-1 9191-5	G-3-516M G-3-637MD-1 D-13-242 DFA233 AFA-434 A-43-217	Wheel Assembly - Main (Goodrich) Wheel Assembly - 1.5 Inch Brake Drum - Brake Wheel Assembly Bolt - Wheel (Firestone) Bolt - Main Wheel Tie	1 1 1 1 1 1
53	9193 9200	19268 13836	Cup - Roller Bearing Cup - Roller Bearing	2 2
54	9194 9199	19150 13889	Cone - Roller Bearing Cone - Roller Bearing	2 2
55	9195 9191-6 9448-110 9448-120	988 E-50024-147 A-56-162 A-85-113	Grease Seal - Roller Bearing Felt - Bearing Seal Retainer - Wheel Assembly (Goodrich) Ring - Wheel Assembly (Goodrich)	2 2 4 2
56	2720	145-33159	Collar - Axle Outer	2
57	8528	2W1-100-64-62	Washer - Plain	2
58		AN7502-24	Nut - Wheel Bearing Retaining	2
59	9196 9197	No Number No Number	Tire - 7:00 x 8 Inner Tube - 7:00 x 8	1 1
60	2722 2723 2722-10 2723-10	145-58239-1 145-58239-2 145-58239-3 145-58239-4	Bracket - LH Bracket - RH Bracket - LH Bracket - RH	1 1 1 1
61	1108	143-33152	Fitting Assembly - Trunnion Bearing	--

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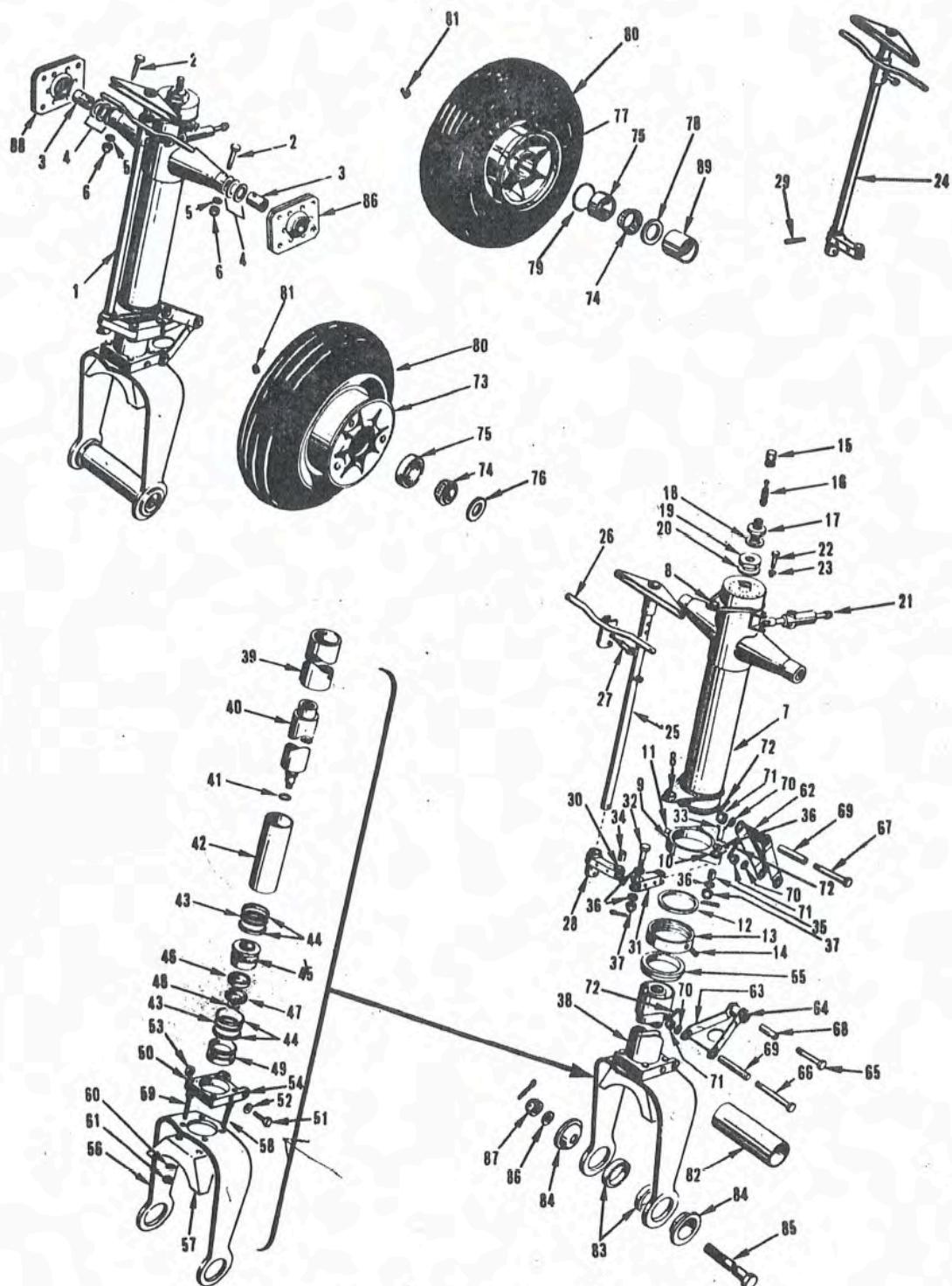


FIGURE 24 - NOSE GEAR SHOCK STRUT

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2800 2800-20	145-34102 145-34102-10	Shock Strut - Nose Gear Shock Strut Assembly - Landing Gear	1 1
2		AN3-14A	Bolt - Aircraft #10-32	2
3	2804	143-34153	Pin - Nose Landing Gear Trunnion	2
3A	2804-10	145-34197	Pin - Nose Landing Gear Trunnion	2
4	8515 8516 8517	145-34155-4 145-34155-5 145-34104	Spacer - Nose Gear Steer Link Spacer - Nose Gear Steer Link Cylinder Assembly - Nose Gear Inner	AR AR AR
5		AN960-10	Washer - Plain	2
6		AN365-1032	Nut - Self Locking	2
7	2801	145-34103	Casing Assembly - Strut Outer	1
8	8015	4B16RF12-16	Bearing - Oil impregnated Sintered	2
8A	8017	4B16RF12-32	Bearing - Oil impregnated Sintered	2
9	2805	145-34166	Collar Assembly - Oleo Torque	1
10	8011	4B16CF6-8	Bearing - Oil impregnated Sintered	4
10A	8016	4B16CF6-12	Bearing - Oil impregnated Sintered	4
11		NAS2-101	Fitting - Lubricator	1
12		AN6231-21	Wiper - Packing Gland Ring	1
13	2806	145-34135	Nut - Wiper Ring Retainer	1
14	2807	145-34212	Screw - Gear Retainer Nut	1
15		AN813-1A	Cap - High Pressure Air Valve	1
16		AN809-1	Core - High Pressure Air Valve	1
17		AN812-1	Body - High Pressure Air Valve	1
18		AN960-1416L	Washer - Plain	1
19		AN316-14R	Nut - Aircraft Check	1
20		AN901-5C	Gasket - Metal Tube Connector Seal	1
21	2809	145-34211	Spring - Centering Bungee	2
22		AN3-H3	Bolt - Aircraft #10-32	2
23	8010	4B16CF3-7	Bearing - Oil impregnated Sintered	1
24	2803	145-34102 SA 2	Tube Assembly	1
24A	2803-10	145-34102 SA 203	Tube Assembly - Nose Wheel Steering Torque	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
25	2810	145-34126	Tube Assembly - Wheel Steering Torque	1
25A	2810-10 2810-11	145-34126-1 145-34126-11	Tube Assembly - Nose Wheel Steering Torque Spacer - Steering Tube Interchangeability	1 1
26	2811	145-34189	Arm Assembly - Nose Landing Gear Center	1
27	2812	145-34171	Lever - Center Bungee Attaching	1
28	2813 2813-10	145-34136 145-34136-10	Link Assembly - Male Link Assembly - Male	1 1
28A	2813-20	145-34196	Link Assembly - Nose Gear Shock Strut Male	1
29		AN386-2-7A AN386-2-8A AN386-2-9A	Pin - Threaded Taper Pin - Threaded Taper Pin - Threaded Taper	2 1 1
30	8011	4B16CF6-8	Bearing - Oil impregnated Sintered	2
31	2814	145-34137	Link Assembly - Gear Strut Female	1
31A	2814-10	145-34137-1	Link Assembly - Nose Gear Shock Strut Female	1
32		AN4-13	Bolt - Aircraft 1/4-28	1
33		AN4-14	Bolt - Aircraft 1/4-28	1
34	2815	145-34155-4	Spacer - Nose Gear Steer Link	1
35	2816	145-34155-5	Spacer - Nose Gear Steer Link	1
36		AN960-416	Washer - Plain	2
37		AN320-4	Nut - Aircraft Shear	2
38	2802	145-34116	Cylinder Assembly - Fork & Inner	1
39	2817	145-34104	Cylinder Assembly - Nose Gear Inner	1
40	2818	145-34107	Tube Assembly - Nose Gear Orifice	1
41		AN6227-11	Packing - "O" Ring Hydraulic	1
42	2819	145-34148	Tube - Gear Strut Extension Stop	1
43		AN6227-27	Packing - "O" Ring Hydraulic	1
44		AN6246-27	Ring - Hydraulic Packing Backup	2
45	2820	145-34128	Bearing - Orifice Tube	1
46	9174	MRC202S-T6	Bearing	1
47	2821	145-34203	Ring - Gear Bearing Retainer	1
48		AN316-8R	Nut - Aircraft Check	1
49	2822	145-34129	Diaphragm - Nose Gear Strut	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
50	2823	145-34143	Collar Assembly - Shock Strut	1
51		AN5-31A	Bolt - Upper Attaching	1
52		AN960-516	Washer - Plain	1
53		AN365-524	Nut - Self Locking	1
54	8011	4B16CF6-8	Bearing - Oil impregnated Sintered	2
55	2824	145-34134	Bearing - Gear Strut Extension	1
56	2825	145-34117	Fork - Nose Gear Oleo	1
57	2826	145-34153	Scraper - Nose Gear Tire Mud	1
58		AN5-17A	Bolt - Aircraft 5/16-24	2
59		AN5-20A	Bolt - Aircraft 5/16-24	2
60		AN960-516	Washer - Plain	4
61		AN365-524	Nut - Self Locking	4
62	2827	145-34139	Link Assembly - Female Upper	1
62A	2827-10	145-34139-1	Assembly - Nose Gear Torque Female Upper	1
63	2828	145-34138	Link Assembly - Male Lower	1
63A	2828-10	145-34138-1	Assembly - Nose Gear Torque Male Lower	1
64	8011	4B16CF6-8	Bearing - Oil impregnated Sintered	2
65		AN4-17	Bolt - Aircraft 1/4-28	1
66		AN4-36	Bolt - Aircraft 1/4-28	1
67		AN24-56	Bolt - Clevis 1/4-28	1
68	2829	145-34155-3	Spacer - Landing Gear Link Bolt	1
69	2830	145-34155-6	Spacer - Landing Gear Link Bolt	2
70		AN960-416	Washer - Plain	3
71		AN310-4	Nut - Aircraft Castle	3
72		AN380-2-4	Cotter	3
73	9198	6C5	Wheel Assembly - Nose (Firestone)	1
74	9199	13889	Cone - Roller Bearing	2
75	9200	13836	Cup - Roller Bearing	2
75A	9200-100	BT13830	Cup	2
76	9201	AFA348	Retainer Assembly - Bearing	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
77	9448 9448-100	G-3-609-MD-1 A-43-268	Wheel Assembly - Nose (Goodrich) Bolt - Wheel Assembly (Goodrich)	1 6
78	9448-110	A-56-162	Retainer - Wheel Assembly (Goodrich)	4
79	9448-120	A-85-113	Ring - Wheel Assembly (Goodrich)	2
80	9202 9203	No Number No Number	Tire - 6:00 x 6 - 4 Ply Smooth Tube - 6:00 x 6	1 1
81	9204	654	Valve Cap	1
82	2831	145-34127	Axle - Nose Landing Gear	1
83	2832	145-34146	Spacer - Nose Landing Gear Axle	2
84	2833	145-34142	Retainer - Nose Landing Gear Axle	2
85		AN5-80	Bolt - Aircraft 5/16-24	1
86		AN960-516	Washer - Plain	1
87		AN310-5	Nut - Axle Attaching	1
88	1401	143-31007 SA 1	Box Assembly - Nose Gear	2
89	2834	145-34146-2	Spacer - Nose Landing Gear Axle	2

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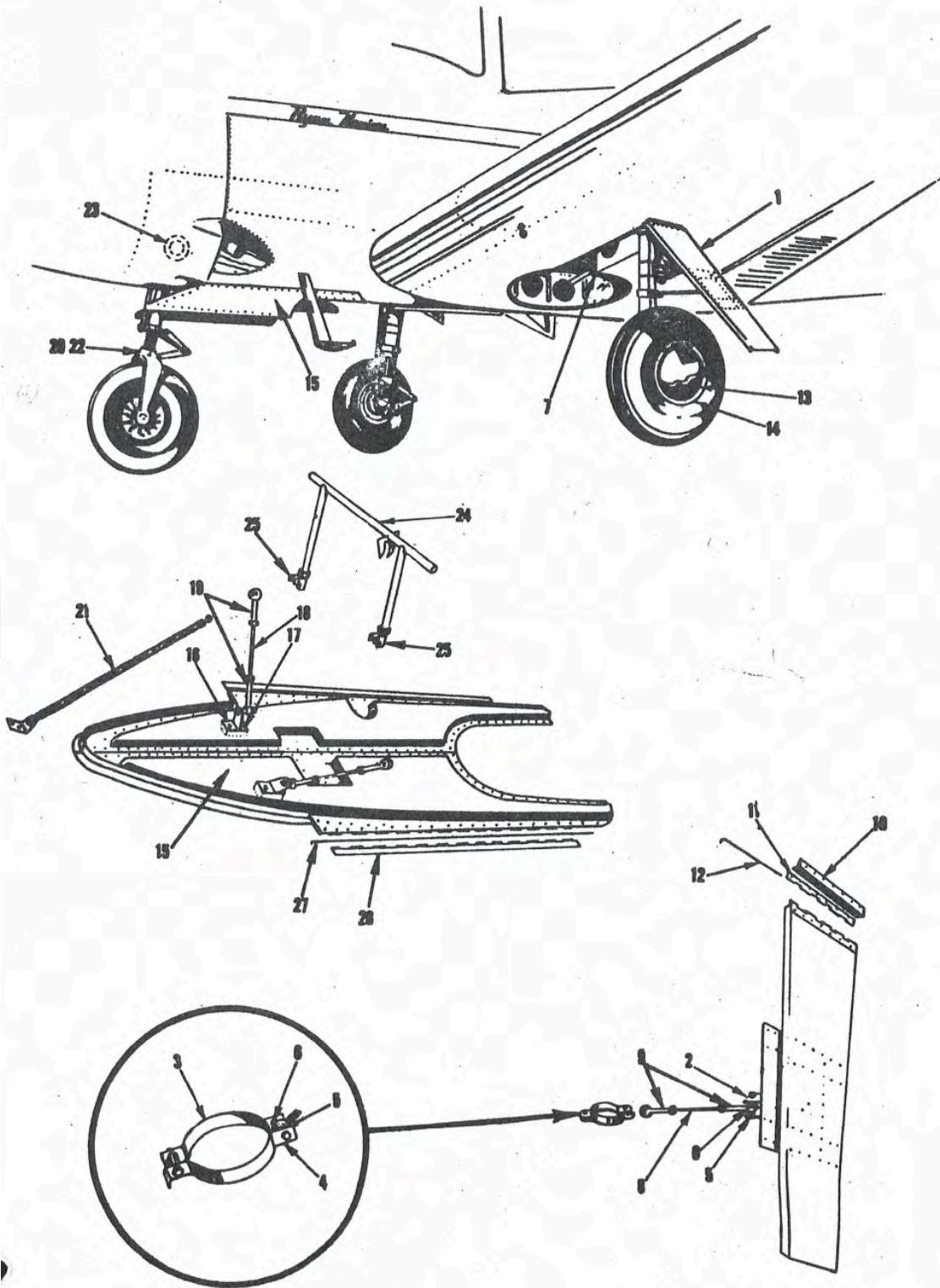


FIGURE 25 - LANDING GEAR FAIRINGS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2850 2851	145-33302-3 145-33302-4	Door Assembly - Main Gear Fairing LH Door Assembly - Main Gear Fairing RH	1 1
2	2855	145-33302-8 AN526-1032R9 AN365-1032	Bracket Assembly - Fairing Door Screw Nut - Self Locking	1 2 2
3	2856	145-33302-9	Bracket Assembly - Fairing Door	2
4	2857	145-33302-18 AN3-6A AN365-1032 AN3-15A AN365-1032	Clamp Ear Bolt - Aircraft #10-32 Nut - Self Locking Bolt - Aircraft #10-32 Nut - Self Locking	1 1 1 1 1
5	2888	145-33309	Spacer - Gear Fairing Bracket	1
6	2889	145-33309	Spacer - Gear Fairing Bracket	1
7	2858	145-33302-10 AN503-8-8 AN935-8	Stop Assembly - Fairing Door Screw - Stop Angle Attaching Washer - Stop Angle Attaching	2 2 2
8	2859 2860	145-33303-3 145-33303-5	Link - Fairing Operator Stud - Fairing Door Link	1 1
9	9461	F34-14 AN316-4R AN380-2-3	Rod End Nut - Aircraft Check Pin - Cotter	2 2 1
10	2861 2862-100	145-33302-11 145-33302-12 & 14	Angle - Fairing Door Hinge Hinge Half Main Gear Fairing RH	1 1
11	2863-100	145-33302-13 & 15	Hinge Half Main Gear Fairing LH	1
12	2867	145-33302-17	Hinge Pin - Main Gear Fairing	1
13	9191-3	D-31-100	Wheel Cover	2
14	9191-4	B-85-95	Snap Ring	1
15	2868 2869	145-33306-1 145-33306-2	Door Assembly - Wheel Fairing LH Door Assembly - Wheel Fairing RH	1 1
16	2872	145-33306-13	Clip - Nose Wheel Fairing Door	1
17	2873 2878	145-33306-14 AN526-1024-14 AN365-1024 AN960-10 145-33303-2	Clip - Nose Wheel Fairing Door Screw - Truss Head (Coarse & Fine Thread) Nut - Self Locking Washer - Plain Link - Nose Gear Fairing	1 2 2 2 2
18	2879	145-33303-4	Stud - Nose Wheel Fairing Link	1
19	9461	F34-14 AN316-4R AN380-2-3	Rod End Nut - Aircraft Check Pin - Cotter	2 2 2
20	2823 8011	145-34143 4B16CF6-8	Collar Assembly - Shock Strut Bearing - Oil impregnated Sintered	1 2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
21	2880	145-33307-3	Spring Assembly - Wheel Fairing	1
22	2883	145-33308-7	Stop Assembly - Wheel Fairing	1
23	2884 2885 9462	145-33305 145-33305-3 LSS8	Block Assembly - Fairing Bearing Block Bearing - Press Fit	2 1 1
24	2886	145-33304-3	Arm Assembly - Nose Wheel Fairing	1
25	2887	145-33304-4 AN316-6R	End Assembly - Actuating Arm Nut - Aircraft Check	2 2
26	2875	145-33306-9	Hinge - Half	2
27	2876 2866 2882	145-33306-11 145-33304-3 145-33308-1	Pin - Nose Wheel Fairing Hinge Arm Assembly - Nose Wheel Fairing Stop Assembly - Nose Wheel Fairing	2 1 1

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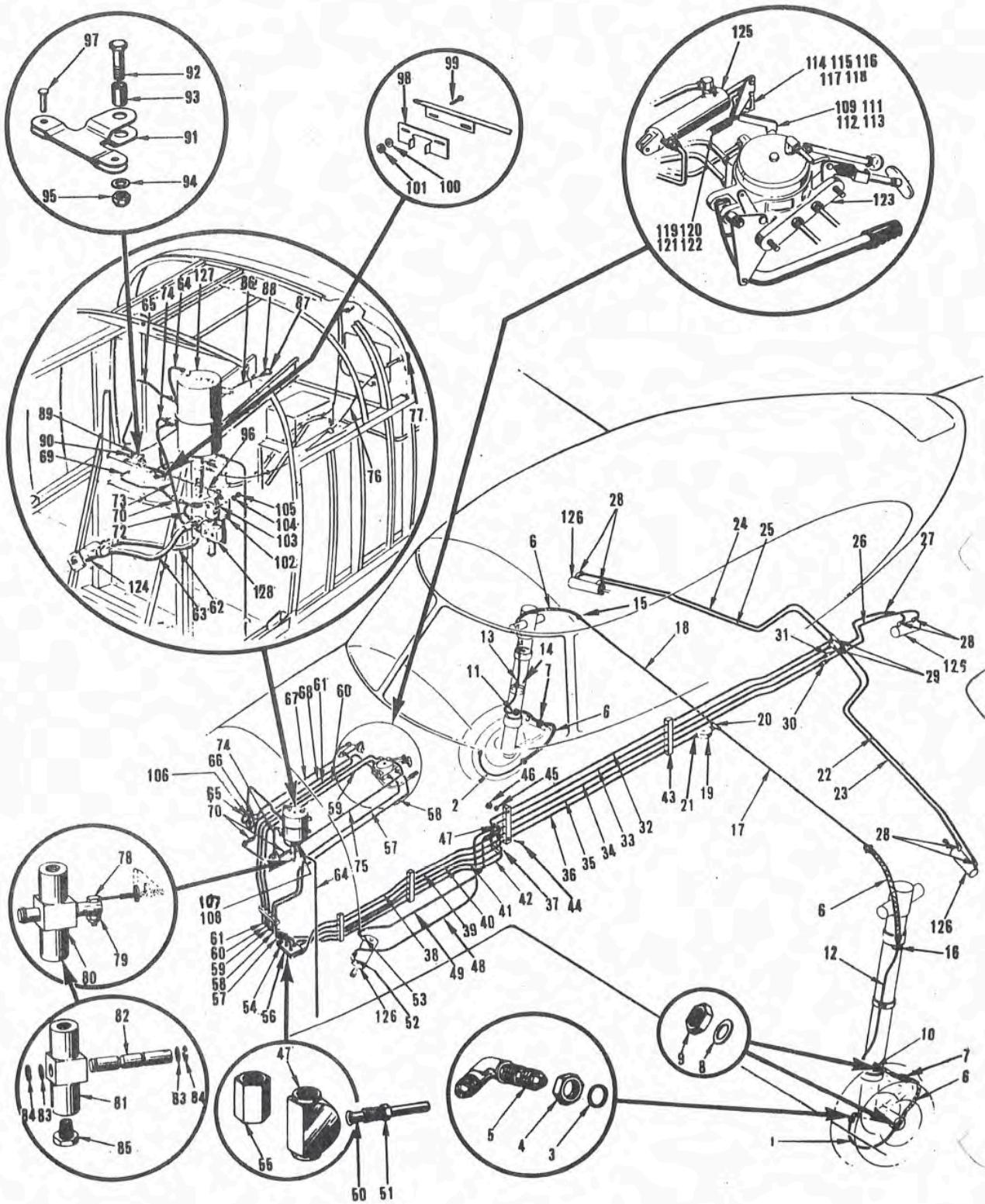


FIGURE 26 - HYDRAULIC AND BRAKE SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2900 2900-10 2900-15	145-58802-18 145-58802-30 145-58802-44	Line - Left Brake Pressure Line - Left Brake Pressure Line - Left Brake Pressure	1 1 1
2	2901 2900-10 2901-10	145-58802-24 145-58802-30 145-58802-50	Line - Right Brake Pressure Line - Right Brake Pressure Line - Right Brake Pressure	1 1 1
3		AN902-4	Gasket - Flared Tube	1
4		AN924-4D	Nut - Bulkhead & Universal Fitting Flared Tube	1
5		AN833-4	Elbow - 90 Degrees Bulkhead	1
6	9085	75690 AN6264-4-16 1/2	Hose Assembly - Complete Fitting Hose Assembly - Hydraulic Fuel & Oil	4 4
7	2941	145-58213 AN316-10R	Clamp - Hose Nut - Aircraft Check	1 1
8		AN960-A1016 AN832-4D	Washer - Plain Union - Flared Tube Bulkhead	1 1
9		AN924-4D AN960-A416	Nut - Bulkhead & Universal Fitting Flared Tube Washer - Plain	1 1
10	2942	145-58229-1	Bracket - LH	1
11	2943	145-58229-2	Bracket - RH	1
12	2902 2902-10	145-58802-16 145-58802-42	Line Assembly - Left Brake Pressure Line Assembly - Left Brake Pressure	1 1
13	2903 2903-10	145-58802-22 145-58802-48	Line - Right Brake Pressure Line Assembly - Right Brake Pressure	1 1
14		AN742-44	Brake Line - Strut Straps	2
15		AN837-4	Elbow - 45 Degrees Flared Tube	2
16	2944	1145-58230	Bracket - Hydraulic Hose Upper	2
17	2904 2904-10	145-58802-14 145-58802-40	Line Assembly - Left Brake Pressure Line Assembly - Left Brake Pressure	1 1
18	2905 2905-10	145-58802-20 145-58802-46	Line Assembly - Right Brake Pressure Line Assembly - Right Brake Pressure	1 1
19	9188 9188-105	B-107-19 A-207-3	Adjuster Valve Diaphragm - Adjuster Valve	1 1
20	9137	600X4 AN823-4	Tee (Used with Hayes Brake) Elbow - 45 Degrees	1 1
21	9121	200X4 AN822-4	Connector - Inverted Male Elbow - 90 Degrees	1 1
22	2906 2906-10	145-58801-50 145-58801-82	Line Assembly - Gear Down LH Line Assembly - Gear Down LH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
23	2908 2908-10	145-58801-52 145-58801-84	Line Assembly - Gear Up LH Line Assembly - Gear Up LH	1 1
24	2907 2907-10	145-58801-54 145-58801-86	Line Assembly - Gear Down RH Line Assembly - Gear Down RH	1 1
25	2909 2909-10	145-58801-56 145-58801-88	Line Assembly - Gear Up RH Line Assembly - Gear Up RH	1 1
26	2910 2910-10	145-58801-46 145-58801-78	Line Assembly - Flaps Up Line Assembly - Flaps Up	1 1
27	2911 2911-10	145-58801-48 145-58801-80	Line Assembly - Flaps Down Line Assembly - Flaps Down	1 1
28	9145	1444 AN822-4	Elbow - 90° Inverted Male Elbow - 90 Degrees	6 8
29	9141	702X4 AN824-4D	Tee Tee - Flared Tube	2 2
30	9128	300X4 AN815-4D	Union Union - Flared Tube	1 1
31	2945 2945-10 2945-20	145-58021 145-58021-3 145-58021-5	Restrictor Assembly - Cylinder Restrictor Assembly - Cylinder Restrictor Assembly - Cylinder	1 1 1
32	2912-10 2912-15 2912-20	145-58803-4 145-58803-50 145-58803-84	Line - Landing Gear Down Line - Landing Gear Down Line Assembly - Landing Gear Down	1 1 1
33	2913-10 2913-15	145-58803-6 145-58803-52	Line - Landing Gear Up Line - Landing Gear Up	1 1
34	2914-10 2914-15	145-58803-20 145-58803-64	Line - Flaps Down Line Assembly - Flaps Down	1 1
35	2915-10 2915-15	145-58803-22 145-58803-66	Line - Flaps Up Line Assembly - Flaps Up	1 1
36	2916-10 2916-15	145-58802-26 145-58802-52	Line - Brake Pressure Line Assembly - Brake Pressure	1 1
37	9128	300X4 AN815-4D	Union Union - Flared Tube	1 1
38	2917-10 2917-15	145-58803-12 145-58803-56	Line Assembly - Landing Gear Down Line Assembly - Landing Gear Down	1 1
39	2918-10 2918-15	145-58803-14 145-58803-58	Line Assembly - Landing Gear Up Line Assembly - Landing Gear Up	1 1
40	2919-10 2919-15	145-58803-18 145-58803-62	Line Assembly - Flaps Down Line Assembly - Flaps Down	1 1
41	2920-10 2920-15	145-58803-16 145-58803-60	Line Assembly - Flaps Up Line Assembly - Flaps Up	1 1
42	2921-10 2921-15	145-58802-28 145-58802-54	Line Assembly - Brake Pressure Line Assembly - Brake Pressure	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
43	2946 2946 2946-10	145-58142 145-58142 145-58142-7	Tube Block - Hydraulic Tube Block - Hydraulic Clamp - Line Block	5 4 1
44		AN515-8R16	Screw - Round Head Machine (Coarse Thread)	2
45		AN960-8	Washer - Plain	2
46		AN365-832	Nut - Self Locking	2
47	9141	702X4 AN824-4D	Tee Tee - Flared Tube	2 2
48	2924 2924-10	145-58803-48 145-58803-82	Line Assembly - Landing Gear Down Line Assembly - Landing Gear Down	1 1
49	2925 2925-10	145-58803-44 145-58803-80	Line Assembly - Landing Gear Up Line Assembly - Landing Gear Up	1 1
50	2968	4145-58305	Seal - 1/4 Tube Flared	1
51	9119	105X4	Nut	1
52	9145	1444 AN822-4	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees	1 1
53	2969	145-58281	Restrictor - Cylinder Flow	1
54	2947 2948-10 2947-10	145-58220 145-58308 145-58307	Plate Assembly - Fitting Plate - Fitting (Rubber) Frame - Fitting Plate	1 1 1
55	9128	300X4	Union	5
56	2948	145-58221	Gasket - Fitting Plate	1
57	2926 2926-10	145-58801-14 145-58801-70	Line Assembly - Landing Gear Down Line Assembly - Landing Gear Down	1 1
58	2927 2927-10	145-58801-16 145-58801-72	Line Assembly - Landing Gear Up Line Assembly - Landing Gear Up	1 1
59	2928 2928-10	145-58801-18 145-58801-74	Line Assembly - Flaps Down Line Assembly - Flaps Down	1 1
60	2930 2930-10	145-58801-20 145-58801-76	Line Assembly - Flaps Up Line Assembly - Flaps Up	1 1
61	2931 2931-10	145-58802-8 145-58802-38	Line Assembly - Brake Pressure Line Assembly - Brake Pressure	1 1
62	9088	145-58030 AN6264-4-14 1/2	Hose Assembly - Reservoir to Pump Hose Assembly - Hydraulic Fuel & Oil	1 1
63	9083	145-58028 AN6264-6-20	Hose Assembly - Pump to Relief Valve Hose Assembly - Hydraulic Fuel & Oil	1 1
64	2932 2932-10 2932-20	145-58801-6 145-58801-64 145-58801-96	Line Assembly - Reservoir Vent Line Assembly - Reservoir Vent Line Assembly - Reservoir Vent	1 1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
65	2933 2933-10	145-58802-4 145-58802-36	Line Assembly - Brake Supply Line Assembly - Brake Supply	1 1
66	9128	300X4 AN815-4D	Union Union - Flared Tube	1 1
67	2934-10 2934-20	145-58802-34 145-58802-58	Line Assembly - Brake Supply Line Assembly - Brake Supply	1 1
68	2935 2935-10 2935-15	145-58801-62 145-58801-92 145-58801-94	Line Assembly - Pump Pressure Line Assembly - Pump Pressure Line Assembly - Pump Pressure	1 1 1
69	2936 2936-10	145-58801-58 145-58801-90	Line Assembly - Pump Pressure Line Assembly - Pump Pressure	1 1
70	9128	300X4	Union	2
71	2922	145-58802-60	Line Assembly - Cylinder to Valve	1
72	2937	145-58803-40	Line Assembly - Pump Pressure	1
73	2938 2938-10	145-58803-42 145-58803-78	Line - Regulator to Reservoir Line Assembly - System Return	1 1
74	2939 2939-10	145-58801-12 145-58801-68	Line Assembly - System Return Line Assembly - System Return	1 1
75	2940 2940-10	145-58801-10 145-58801-66	Line Assembly - System Return Line Assembly - System Return	1 1
76	2949	145-58205	Control Assembly - Hydraulic Emergency Cutoff	1
77	2950	145-51061-4	Knob (Unlettered)	1
78	2951	145-58191	Bolt - Cable Attaching	1
79		AN365-1032	Nut - Self Locking	1
80	2952 2952-10	145-58017-3 145-58017-5	Valve - Hydraulic Emergency Cutoff Valve - Hydraulic Emergency Cutoff	1 1
81	2953	145-58172	Valve Body	1
82	2954	145-58171	Shaft	1
83		AN6227-7	Packing - "O" Ring Hydraulic	2
84		NAS51-37	Snap Ring	2
85	9122	200x6 AN823-6	Connector - Inverted Male Elbow - 45 Degrees Flared Tube and Pipe Thread	1 1
86	2955 2955-10	145-58294 145-58294-3	Rod - Hydraulic Relief Valve Control Rod - Hydraulic Relief Valve Control	1 1
87	2104	145-42104	Clamp	1
88	2956	145-58293	Ferrule	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
89	2957	145-58298	Spring	1
90	2958	145-58297	Washer - Special	1
91	2959	145-58286	Bellcrank - Hydraulic Relief Valve	1
92		AN3-7A	Bolt - Aircraft #10-32	1
93	8328	4S3-10-16	Spacer - Bolt	1
94		AN960-10	Washer - Plain	1
95		AN365-1032	Nut - Self Locking	1
96	2960	145-58302	Link - Hydraulic Relief Valve Control	1
97		AN392-7	Pin - Flat Head 1/8	3
98	2961	145-58303	Striker - Hydraulic Indicator Switch	1
99		AN3-4A	Bolt - Aircraft #10-32	2
100		AN960-D10	Washer - Plain	2
101		AN365-1032	Nut - Self Locking	2
102	2962 2962-10	145-58292 145-58292-3	Bracket - Valve Mounting Bracket - Valve Mounting	1 1
103		AN515-8R8	Screw - Round Head Machine (Coarse Thread)	4
104		AN960-8L	Washer - Plain	8
105		AN365-832	Nut - Self Locking	4
106	2315	145-31017	Plate - Grommet	4
107	2972	145-58284	Plate - Hydraulic Relief Valve Switch	1
108	2973	145-58283	Clip - Valve Mounting Bracket	1
109	2963 2964 2965	145-58018-5 143-58010 145-58143	Handle Assembly - Master Brake Spring - Brake Pawl Return Grip - Brake & Pump Handle	1 1 1
110	2974	145-58176	Latch - Hydraulic Master Brake	1
111		AN4-12A	Bolt - Aircraft 1/4-28	1
112		NAS76A4-024	Bushing	1
113		AN365-428	Nut - Self Locking	1
114	2966	145-58179	Ratchet Assembly - Master Brake	1
115		AN3-6A	Bolt - Aircraft #10-32	1
116		AN3-10A	Bolt - Aircraft #10-32	1
117	8325	4S3-10-9	Spacer - Bolt	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
118		AN365-1032	Nut - Self Locking	2
119	2967	143-58009	Spring - Hydraulic Brake Handle Return	1
120		AN42-4	Eyebolt - 10-32 for 3/16 Pin	1
121	8323	4S3-10-5	Spacer - Bolt	1
122		AN365-1032	Nut - Self Locking	1
123			Hydraulic Power & Control Valve	--
124			Hydraulic Pump	--
125			Master Brake Cylinder	--
126			Hydraulic Actuating Cylinder	--
127			Hydraulic Reservoir	--
128			Hydraulic Relief Valve	--

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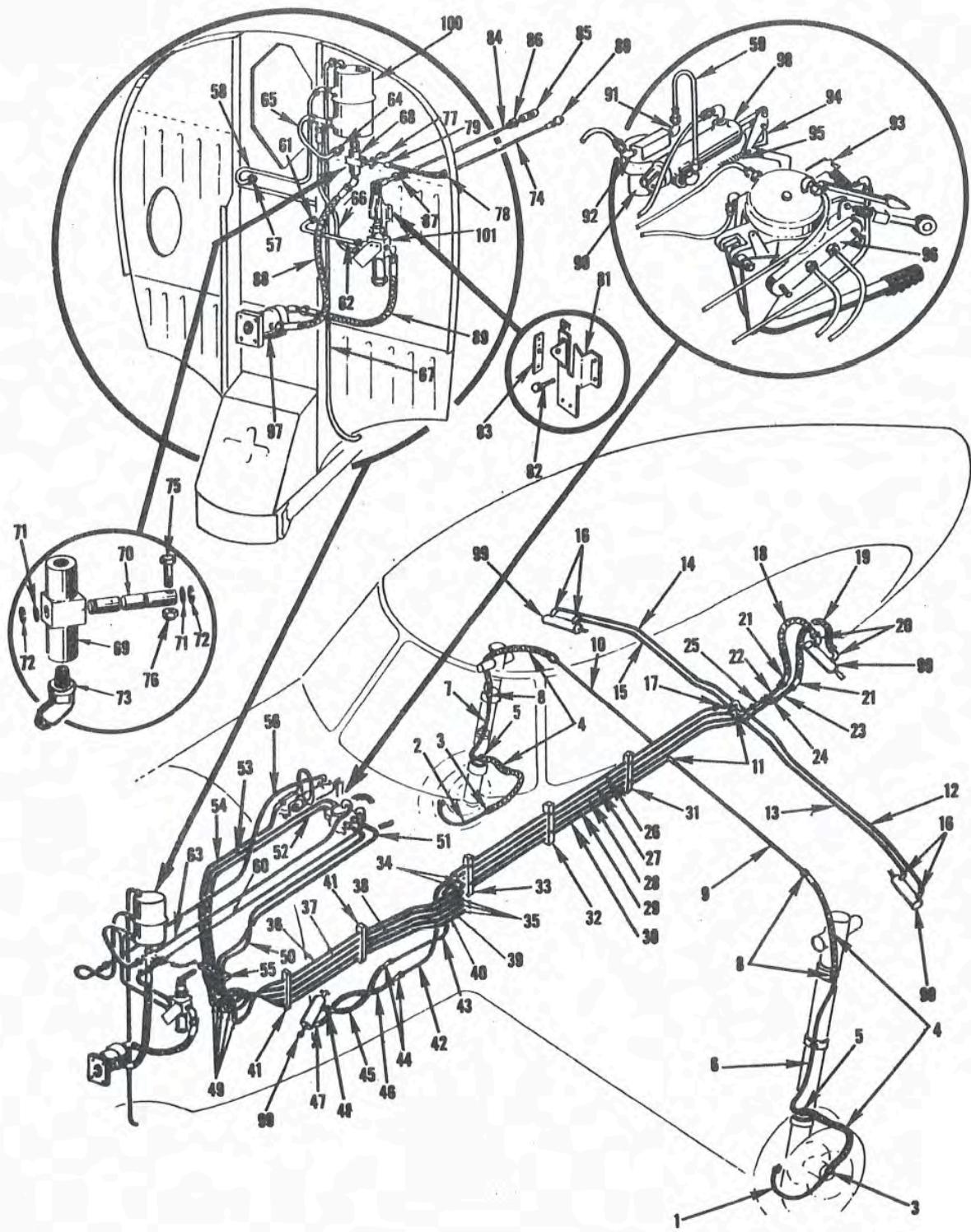


FIGURE 26A - HYDRAULIC & BRAKE SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	2900-15	145-58802-44	Line - Left Brake Pressure	1
2	2901-10 2971 9211	145-58802-50 145-58228 A3046-A4-199 AN520-10R6 AN365-1032	Line - Right Brake Pressure Bracket - Hydraulic Brake Line Support Clip Screw - Round Head Machine (Fine Thread) Nut - Self Locking	1 1 1 1 1
3		AN832-4 AN960-716 AN924-4	Union - Flared Tube Bulkhead Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube	1 1 1
4	2941	AN6264-4-15 1/2 145-58213	Hose Assembly - Hydraulic Fuel & Oil Clamp - Hose	4 1
5	2975 2976	AN837-4 AN960-A716 AN924-4D 145-58403 145-58402 AN520-10R20 AN365-1032	Elbow - 45 Degrees Flared Tube Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube Clamp - Main Landing Gear Hydraulic Hose Lower Bracket - Main Landing Gear Hydraulic Hose Lower Screw - Round Head Machine (Fine Thread) Nut - Self Locking	2 1 1 1 1 1 1 1
6	2902-10	145-58802-42	Line Assembly - Left Brake Pressure	1
7	2903-10 9208	145-58802-48 AN742-44 A2980A-4-199 AN520-10R6 AN365-1032	Line Assembly - Right Brake Pressure Brake Line - Strut Straps Clip Screw - Round Head Machine (Fine Thread) Nut - Self Locking	1 1 1 1 1
8	2944	AN832-4D AN960-A716 AN924-4D 1145-58230	Union - Flared Tube Bulkhead Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube Bracket - Hydraulic Hose Upper	4 1 1 1
8A	2944-10	1145-58230-3	Bracket - Main Landing Gear Hydraulic Upper Hose	1
9	2904-10	145-58802-40	Line Assembly - Left Brake Pressure	1
10	2905-10 9208 9006	145-58802-46 A2980A-4-199 AN530-10R8 A1779-10Z-3	Line Assembly - Right Brake Pressure Clip Screw - Sheet Metal Round Head Speednut	1 2 2 2
11		AN824-4D	Tee - Flared Tube	2
12	2906-10	145-58801-82	Line Assembly - Gear Down LH	1
13	2908-10	145-58801-84	Line Assembly - Gear Up LH	1
14	2907-10	145-58801-86	Line Assembly - Gear Down RH	1
15	2909-10 9208 9006	145-58801-88 A2980A-4-199 AN530-10R8 A1779-10Z-3	Line Assembly - Gear Up RH Clip Screw - Sheet Metal Round Head Speednut	1 2 1 1
16		AN822-4	Elbow - 90 Degrees	--

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
17	2945-20	145-58021-5	Restrictor Assembly - Cylinder	1
17A	2945-30	145-58021-7 AN825-4 AN816-4	Restrictor Assembly Tee - Flared Tube with Pipe Thread on Side Nipple - Accumulator Tank to Tube	1 1 1
18		AN6264-4-14 1/2	Hose Assembly - Hydraulic Fuel & Oil	1
19		AN6264-4-11 1/2	Hose Assembly - Hydraulic Fuel & Oil	1
20		AN822-4	Elbow - 90 Degrees	--
21		AN815-4D	Union - Flared Tube	2
22	2911-20	145-58801-106	Line Assembly - Restrictor to Hose Flaps Down	1
23	2910-20	145-58801-108	Line Assembly - Union Hose Flap Up	1
24		AN815-4D	Union - Flared Tube	1
25	2945-10	145-58021-3 AN816-4	Restrictor Assembly - Cylinder Nipple - Accumulator Tank to Tube	1 2
26	2912-20	145-58803-84	Line Assembly - Landing Gear Down	1
27	2913-15	145-58803-52	Line - Landing Gear Up	1
28	2914-15	145-58803-64	Line Assembly - Flaps Down	1
29	2915-15	145-58803-66	Line Assembly - Flaps Up	1
30	2916-15 2908 8355	145-58802-52 145-58801-52 4S3-D10-28 AN3-14A AN960-10 AN365-1032	Line Assembly - Brake Pressure Line Assembly - Gear Up LH Spacer - Bolt Bolt - Aircraft #10-32 Washer - Plain Nut - Self Locking	1 1 1 1 1 1
31	2946	145-58142 AN503-8-16	Tube Block - Hydraulic Screw - Drilled Fillister Head Machine (Coarse Thread)	1 2
32	2946	145-58142	Tube Block - Hydraulic	1
33	2946-10	145-58142-7 AN515-8R16 AN960-8 AN365-832	Clamp - Line Block Screw - Round Head Machine (Coarse Thread) Washer - Plain Nut - Self Locking	1 2 2 2
34		AN824-4D	Tee - Flared Tube	2
35		AN815-4D	Union - Flared Tube	3
36	2917-15	145-58803-56	Line Assembly - Landing Gear Down	1
37	2918-15	145-58803-58	Line Assembly - Landing Gear Up	1
38	2919-15	145-58803-62	Line Assembly - Flaps Down	1
39	2920-15	145-58803-60	Line Assembly - Flaps Up	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
40	2921-15	145-58802-54	Line Assembly - Brake Pressure	1
41	2946	145-58142 AN515-8R16 AN960-8 AN365-1032	Tube Block - Hydraulic Screw - Round Head Machine (Coarse Thread) Washer - Plain Nut - Self Locking	1 2 2 2
42	2924-20 9219	145-58803-88 794-4 AN515-8R18 AN515-8R6 AN365-832	Line Assembly - Station 93.438 Clip Screw - Round Head Machine (Coarse Thread) Screw - Round Head Machine (Coarse Thread) Nut - Self Locking	1 1 1 1 2
43	2925-20	145-58803-86	Line Assembly - Fuselage Station 93.438 to Nose Gear Up Line	1
44		AN815-4D	Union - Flared Tube	2
45	9518	AN6264-4-15 1/2 795-8R AN515-8-18 AN515-8-6 AN365-832	Hose Assembly - Hydraulic Fuel & Oil Clamp - Loop Type Support Line Screw - Round Head Machine (Coarse Thread) Screw - Round Head Machine (Coarse Thread) Nut - Self Locking	1 1 1 1 2
46		AN6264-4-11 1/2	Hose Assembly - Hydraulic Fuel & Oil	1
47		AN822-4	Elbow - 90 Degrees	--
48	3416	145-58282	Restrictor Assembly	--
49		833-4D AN960-A716 AN924-4D	Elbow - 90 Degrees Bulkhead Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube	5 1 1
50	2926-10	145-58801-70	Line Assembly - Landing Gear Down	1
51	2927-10	145-58801-72	Line Assembly - Landing Gear Up	1
52	2928-10	145-58801-74	Line Assembly - Flaps Down	1
53	2930-10	145-58801-76	Line Assembly - Flaps Up	1
54	2931-10 9208  8110	145-58802-38 A2980A-4-199 AN742-4 5C5 AN515-8R8 AN515-8R10 AN515-8R14 AN365-832 4S3-D10-9	Line Assembly - Brake Pressure Clip Clip - Loop Type Support Clamp Screw - Round Head Machine (Coarse Thread) Screw - Round Head Machine (Coarse Thread) Screw - Round Head Machine (Coarse Thread) Nut - Self Locking Spacer - Bolt	1 8  2 6 3 2 3 8 1
55	2946	145-58142 AN515-8R16 AN960-8	Tube Block - Hydraulic Screw - Round Head Machine (Coarse Thread) Washer - Plain	1 2 2
56	2934-30 2934-20	145-58802-94 145-58802-58	Line Assembly - Brake Supply Line Assembly - Brake Supply	1 1
57		AN832-4D AN960-A716 AN924-4D	Union - Flared Tube Bulkhead Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube	1 1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
		AN815-4D	Union - Flared Tube	1
58	2933-20 2933-10	145-58802-92 145-58802-36	Line Assembly - Brake Supply Line Assembly - Brake Supply	1 1
59	2922	145-58802-60	Line Assembly - Cylinder to Valve	1
60	2935-20 2935-10	145-58801-100 145-58801-92	Line Assembly - Pump Pressure Line Assembly - Pump Pressure	1 1
61		AN832-4D AN833-4D AN960-A716 AN924-4D	Union - Flared Tube Bulkhead Elbow - 90 Degrees Bulkhead Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube	1 1 1 1
62	2936-20 2936-10	145-58801-98 145-58801-90	Line Assembly - Pump Pressure Line Assembly - Pump Pressure	1 1
63	2940-20 2940-10	145-58801-104 145-58801-66	Line Assembly - Firewall System Line Assembly - System Return	1 1
64	2315	AN832-4D AN960-A716 AN924-4D AN815-4D 145-31017 AN515-8R6	Union - Flared Tube Bulkhead Washer - Plain Nut - Bulkhead & Universal Fitting Flared Tube Union - Flared Tube Plate - Grommet Screw - Round Head Machine (Coarse Thread)	1 1 1 1 2 2
65	2939-20 2939-10	145-58801-102 145-58801-68	Line Assembly - System Return Line Assembly - System Return	1 1
66	2938-10	145-58803-78	Line Assembly - System Return	1
67	2932-20	145-58801-96	Line Assembly - Reservoir Vent	1
68	2952-10	145-58017-5	Valve - Hydraulic Emergency Cutoff	1
69	2953	145-58172	Valve Body	1
70	2954	145-58171	Shaft	1
71		AN6227-7	Packing - "O" Ring Hydraulic	2
72		NAS51-37	Snap Ring	2
73		AN823-6	Elbow - 45 Degrees Flared Tube and Pipe Thread	1
74	2949	145-58205	Control Assembly - Hydraulic Emergency Cutoff	1
75	2951	145-58191	Bolt - Cable Attaching	1
76		AN365-1032	Nut - Self Locking	1
77	2977	145-58285 AN520-10R8 AN960-D10 AN365-1032	Bracket - Control Mounting Screw - Round Head Machine (Fine Thread) Washer - Plain Nut - Self Locking	1 2 2 2
78		AN931-3-5	Grommet - Elastic	1
79		AN742-D3	Clamp - Loop Type Support	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	8345	AN520-10R20 4S3-D10-16	Screw - Round Head Machine (Fine Thread) Spacer - Bolt	1 1
80	2950	145-51061-4	Knob (Unlettered)	1
81	2962-20	145-48401 SA 102	Bracket Assembly - Valve Mounting	1
82		AN3-3A	Bolt - Aircraft #10-32	4
83	2972-10 9279  9525	145-58284-4 8396-K7 AN515-DD6-5 AN960-A6 AN365D-632 29-761	Plate - Valve Switch Switch - Hydraulic Control Indicator Screw - Round Head Machine Washer - Plain Nut - Self Locking Ring - Switch Locking	1 -- 2 2 2 1
84	2955-10	145-58294-3 AN392-7 AN960-4L AN380-2-1	Rod - Hydraulic Relief Valve Control Pin - Flat Head 1/8 Washer - Plain (Bypass Valve) Pin - Cotter	1 1 1 1
85	2104	145-51061-3	Knobs - Instrument Panel Control	1
86	2956	145-58293	Ferrule	1
87	2957 8518	145-58298 2W1C-13-32-25 AN380-2-1	Spring Washer - Plain Pin - Cotter	1 2 1
88		AN6260-6-11 1/2 AN6260-6-20	Hose Assembly - Reservoir to Hydraulic Pump Supply Hose Assembly - Reservoir to Hydraulic Pump Supply	1 1
89		AN6264-5-14 1/2 AN6264-5-20	Hose Assembly - Hydraulic Fuel & Oil Hose Assembly - Hydraulic Fuel & Oil	1 1
90	9188 9188-105	B-107-19 A-207-3	Adjuster Valve Diaphragm - Adjuster Valve	1 1
91		AN822-4	Elbow - 90 Degrees	1
92		AN823-4	Elbow - 45 Degrees	1
93	2963  2965	145-58018-5 AN4-12A NAS76A-4-024 AN365-428 145-58143	Handle Assembly - Master Brake Bolt - Aircraft 1/4-28 Bushing Nut - Self Locking Grip - Brake & Pump Handle	1 1 1 1 1
94	2966  8325	145-58179 AN3-6A AN3-10A 4S3-10-9	Ratchet Assembly - Master Brake Bolt - Aircraft #10-32 Bolt - Aircraft #10-32 Spacer - Bolt	1 1 2 2
95	2967  8323	143-58009 AN42-4 4S3-10-5 AN960-10 AN365-1032	Spring - Hydraulic Brake Handle Return Eyebolt - 10-32 for 3/16 Pin Spacer - Bolt Washer - Plain Nut - Self Locking	1 1 1 1 1
96			Hydraulic Power and Control Valve	--

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
97			Hydraulic Pump	--
98			Hydraulic Master Brake Cylinder	--
99			Hydraulic Actuating Cylinder	--
100			Hydraulic Reservoir	--
101			Hydraulic Relief Valve	--

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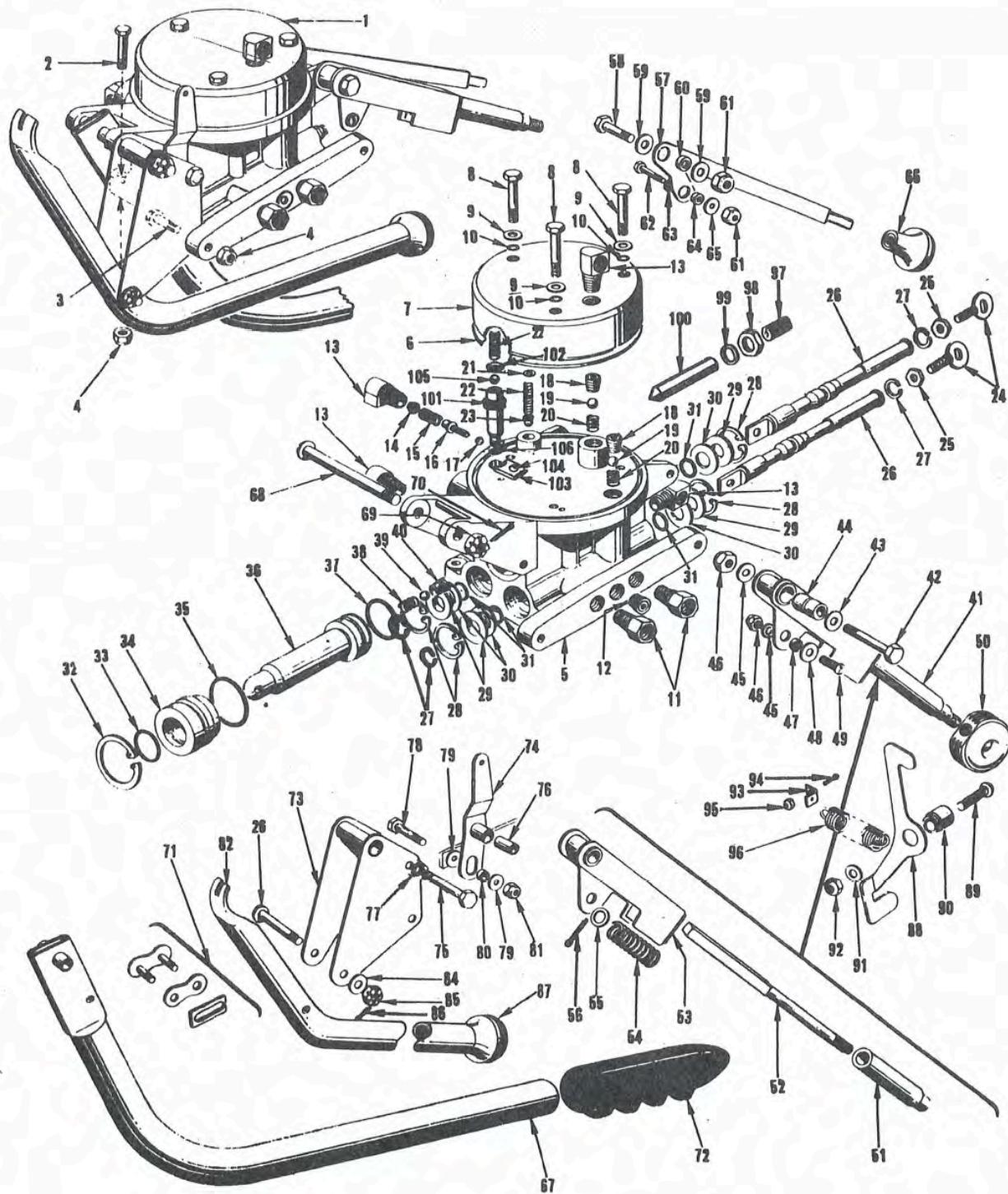


FIGURE 27 - HYDRAULIC POWER AND CONTROL VALVE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3100 3100-20 3100-10	145-58012 145-58012-20 145-58012-10	Valve - Hydraulic Power & Control Valve - Hydraulic Power & Control Valve - Hydraulic Power & Control	1 1 1
2		AN3-13A	Bolt - Aircraft #10-32	1
3		AN23-18	Bolt - Clevis #10-32	2
4		AN365-1032	Nut - Self Locking	3
5	3101 3101-10	145-58108 145-58108-5	Valve Body Valve Body	1 1
6	3102	145-58117	Gasket - Hydraulic Power and Control Unit	1
7	3103	145-58147	Cap - Hydraulic Power and Control Unit	1
8		AN3-11A	Bolt - Aircraft #10-32	3
9		AN960-10L	Washer - Plain	3
10		AN6227-3	Packing - "O" Ring Hydraulic	3
11	9121	200X4 AN816-4	Connector - Inverted Male Nipple - Accumulator Tank to Tube	2 3
12	9241	3152-3-1/8B	Plug	1
13	9145	1444 AN822-4	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees	4 3
14	3104 3104	145-58268 145-58268	Retainer - Valve Poppet Spring Retainer - Valve Poppet Spring	1 2
15	3105 3105	145-58212 145-58212	Spring - Hydraulic Power and Control Unit Spring - Hydraulic Power and Control Unit	1 2
16	9240 9240	S780-1 S780-1	Valve Valve	1 2
17	9235 9235	No Number No Number	Ball - Stainless Steel 1/8 Diameter Ball - Stainless Steel 1/8 Diameter	1 2
18	3106	145-58110	Plug - Hydraulic Power and Control Unit	2
19	9237	No Number	Ball - Stainless Steel 1/4 Diameter	2
20	3107	145-58127	Spring - Power Control Unit Small	2
21	8508	2W1ALP-4-7-20	Washer - Plain	4
22	3108 3108	73-58225 73-58225	Spring - Relief Valve Spring - Relief Valve	1 2
23	9236 9236	No Number No Number	Ball - Stainless Steel 3/16 Diameter Ball - Stainless Steel 3/16 Diameter	1 2
24	3109	145-58145-3	End - Power & Control Unit Shaft	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
25		AN345-10	Nut - Light Hexagon Fine Thread	2
26	3110	145-58116-3	Shaft - Power & Control Unit	2
27		NAS51-35	Ring - Internal Retainer	4
28		NAS50-75	Ring - Internal Retainer	4
29	3111	145-58111	Retainer - Power & Control Unit	4
30		AN6264-7	Packing - "O" Ring Hydraulic	4
31		AN6227-7	Packing - "O" Ring Hydraulic	4
32		NAS50-125	Ring - Internal Retainer	1
33		AN6227-14	Packing - "O" Ring Hydraulic	1
34	3112	145-58114-3	Bearing - Power & Control Unit	1
35		AN6227-19	Packing - "O" Ring Hydraulic	1
36	3113	145-58113	Piston - Power & Control Unit	1
37		AN6227-16	Packing - "O" Ring Hydraulic	1
38	3107	145-58127	Spring - Power Control Unit Small	1
39	9237	No Number	Ball - Stainless Steel 1/4 Diameter	1
40	3106	145-58110	Plug - Hydraulic Power and Control Unit	1
41	3114	145-58196	Handle - Landing Gear Control	1
42		AN3-14A	Bolt - Aircraft #10-32	1
43		AN960-10L	Washer - Plain	1
44		NAS73-3-013	Bushing - Clamp Up	1
45		AN960-10	Washer - Plain	3
46		AN365-1032	Nut - Self Locking	2
47	3115	145-58233	Spacer - Valve Handle Linkage	1
48		AN970-3	Washer - Flat (For Wood)	1
49		AN3-6A	Bolt - Aircraft #10-32	1
50	3116	145-58253	Knob - Landing Gear Control Handle	1
51	3117	145-58148	Spacer - Landing Gear Control Handle	1
52	3118	145-58149	Rod - Landing Gear Control Handle	1
53	3119	145-58192	Bellcrank Assembly - Gear Control	1
54	3120	145-58167	Spring	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
55	8485	2W1-21-14-64	Washer - Plain	1
56		AN380-2-2	Cotter	1
57	3121	145-58168	Handle - Wing Flap Control	1
58		AN3-6A	Bolt - Aircraft #10-32	1
59		AN960-10L	Washer - Plain	2
60	8323	4S3-10-5	Spacer - Bolt	1
61		AN365-1032	Nut - Self Locking	1
62		AN3-6A	Bolt - Aircraft #10-32	1
63		AN970-3	Washer - Flat (For Wood)	1
64	3115	145-58233	Spacer - Valve Handle Linkage	1
65		AN960-10	Washer - Plain	2
66	2104 2104-10	145-51061-3 145-51075	Knobs - Instrument Panel Control Knob - Wing Flap Control Handle	1 1
67	3122	145-58203	Handle - Hydraulic Power & Control	1
68		AN24-44	Bolt - Clevis 1/4-28	1
69		AN320-4	Nut - Aircraft Shear	1
70		AN380-2-2	Cotter	1
71	9243	270	Link - Connecting	1
72	2965	145-58143	Grip - Brake & Pump Handle	1
73	3123	145-33115	Bracket	1
74	3124	145-33208	Bellcrank	1
75		AN3-10A	Bolt - Aircraft #10-32	1
76		NAS76-3-24	Bushing - Plain Press Fit Bronze	1
77		AN936-B10	Lockwasher	1
78		AN3-5A	Bolt - Aircraft #10-32	1
79		AN960-10L	Washer - Plain	2
80	3115	145-58233	Spacer - Valve Handle Linkage	1
81		AN365-1032	Nut - Self Locking	1
82	3125	145-33116	Lever Assembly - Emergency Release	1
83		AN23-18	Bolt - Clevis #10-32	1
84		AN960-10	Washer - Plain	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
85		AN320-3	Nut - Aircraft Shear	1
86		AN380-2-2	Cotter	1
87	3126	145-33114	Knob - Control	1
88	3127	145-58250	Lock Assembly - Landing Gear Control Handle	1
89		AN520B10R20	Screw - Round Head Machine (Fine Thread)	1
90	8346	4S3-D10-23	Spacer - Bolt	1
91		AN960D10	Washer - Plain	1
92		AN365B1032	Nut - Self Locking	1
93	3128	145-58238	Clip - Control Handle Lock Spring	1
94		AN520B10R8	Screw - Round Head Machine (Fine Thread)	1
95		AN365B1032	Nut - Self Locking	1
96	3129	145-54025	Spring - Fuse Panel Retaining	1
97	3616	145-58170	Screw - Hydraulic Relief Valve	1
98		AN924-6D	Nut - Bulkhead & Universal Fitting Flared Tube	1
99		AN902-6	Gasket - Flared Tube	1
100	3130	145-58241	Plug	1
101	3131	145-58310	Valve Cage - Thermal Relief	1
102		AN6227-7	Packing - "O" Ring Hydraulic	1
103	3132	145-58311	Retainer	1
104		AN520-10-6	AN520-10-6	1
105	9236	No Number	Ball - 3/16 Diameter Stainless Steel	1
106	8508	AN6227-1 2W1ALP-4-7-20 AN380-2-3	Packing - "O" Ring Hydraulic Washer - Plain Pin - Cotter	1 4 1

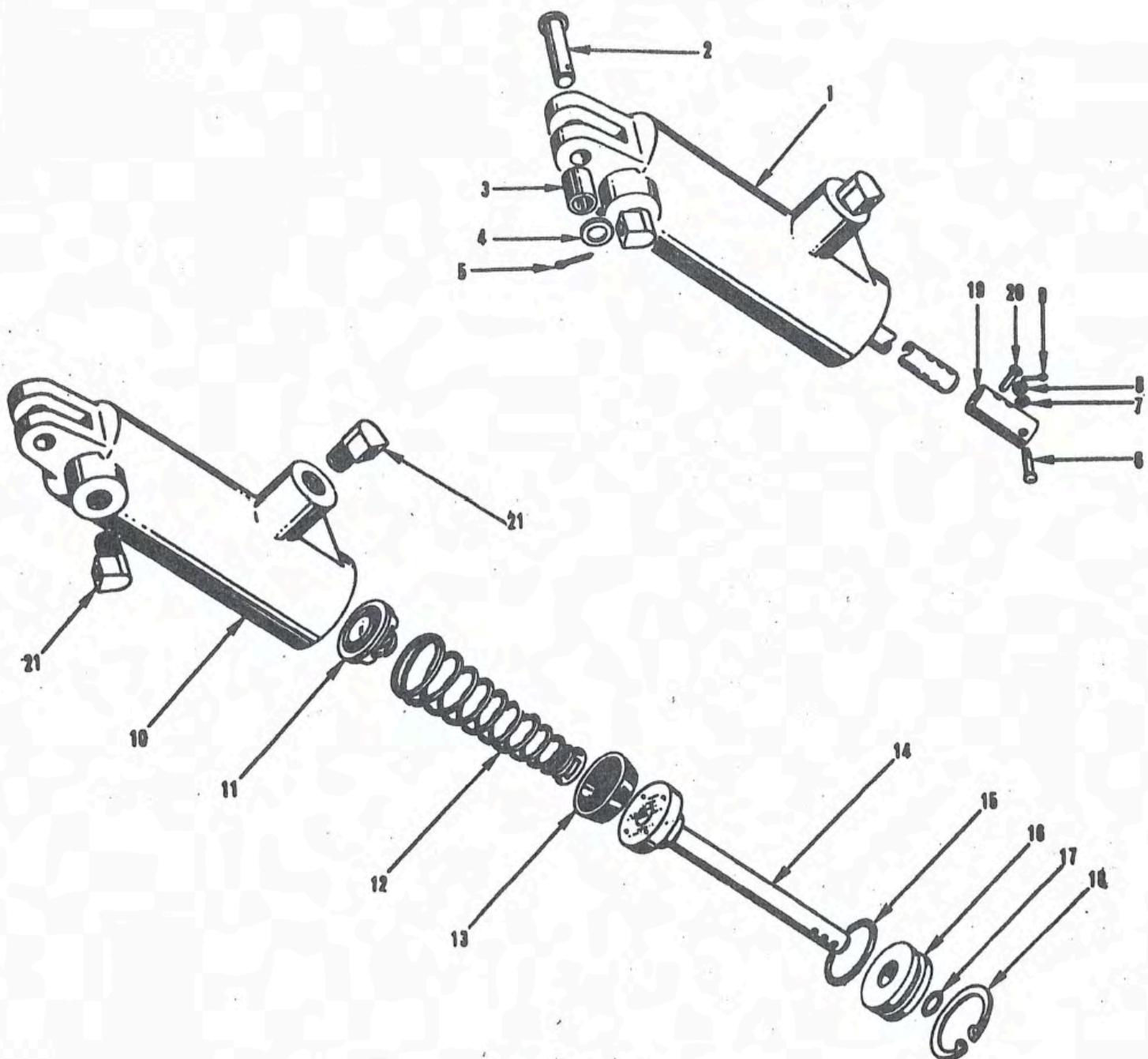


FIGURE 28 - MASTER BRAKE CYLINDER

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3300 3300-10	145-58015-3 145-58015-5	Master Brake Cylinder Master Brake Cylinder	1 1
2		AN395-51	Pin - Flathead 5/16	1
3	8335	4S3-516-16	Spacer - Bolt	1
4		AN960-516	Washer - Plain	1
5		AN380-3-3	Cotter	1
6		AN23-16	Bolt - Clevis #10-32	1
7		AN960-10L	Washer - Plain	1
8		AN320-3	Nut - Aircraft Shear	1
9		AN380-2-1	Pin - Cotter	1
10	3301	145-58123-3	Body - Master Cylinder Brake Valve	1
11	9247	STD578	Valve Assembly - Master Brake Valve	1
12	9248	STD932	Spring - Return	1
13	9249	STD344	Cup	1
14	3302	145-58122	Piston Assembly - Cylinder Brake	1
15		AN6227-20	Packing - "O" Ring Hydraulic	1
16	3303	145-58120	Bearing - Cylinder Brake Valve	1
17		AN6227-7	Packing - "O" Ring Hydraulic	1
18		NAS50-131	Ring - Internal Retainer	1
19	3305	145-58237	Spacer	1
20		AN393-17	Pin - Flathead 3/16	1
21	9133	400X4 AN822-4	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees	2 2

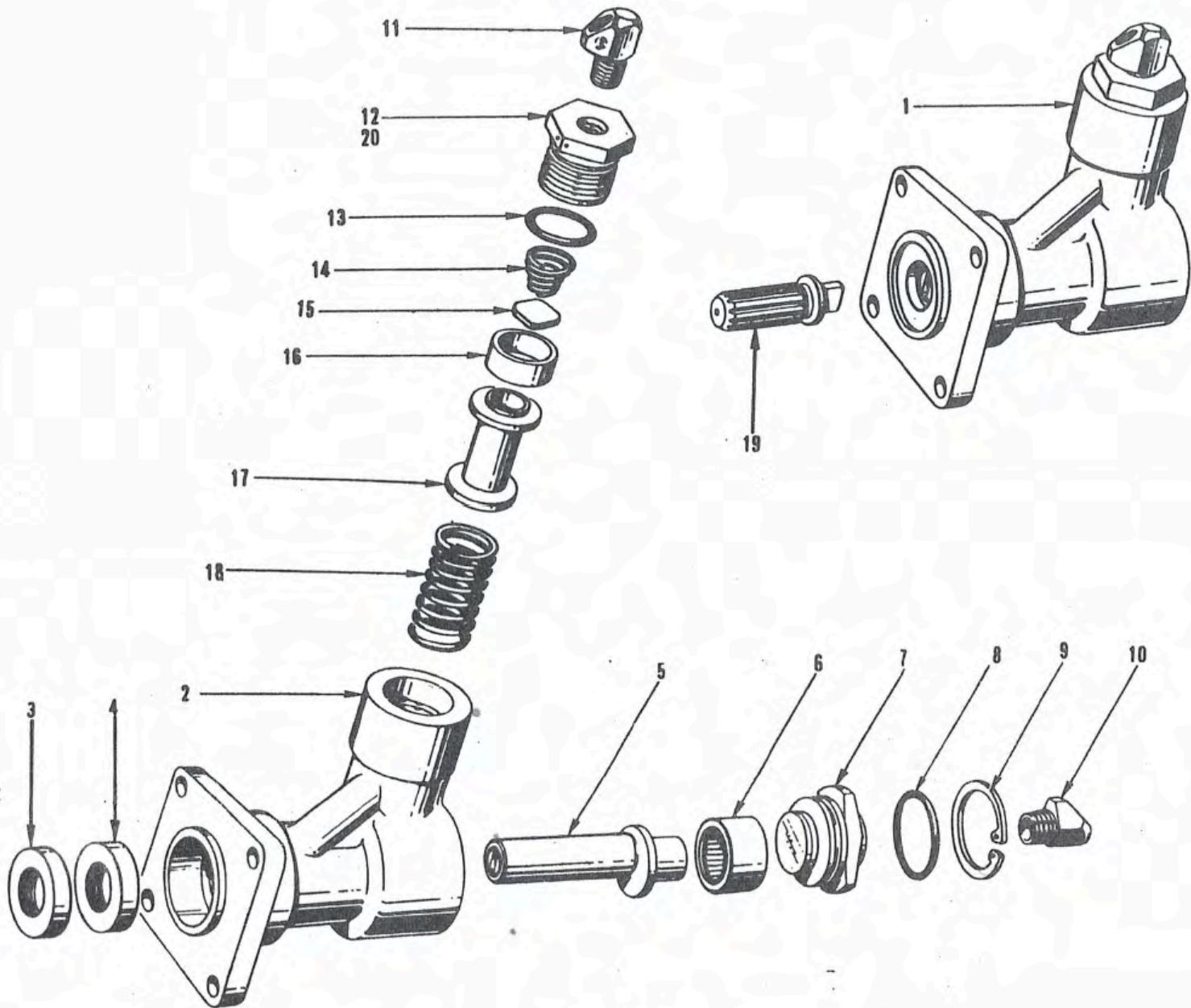


FIGURE 29 - HYDRAULIC PUMP  
Used On Serial Numbers 2 To 1627

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3200 3200-10	145-58020 145-58020-3	Hydraulic Pump Complete Hydraulic Pump Complete	-- --
2	3201 9170 9172	145-58137 B108X B-1012X	Pump - Body Bearing - Needle (short) Bearing - Needle (long)	1 1 1
3	9244	H-12520-K2	Retainer - Oil (Outer)	1
4	9245	60098	Retainer - Oil (Inner)	1
5	3202	145-58136	Crankshaft	1
6	3203	145-58131	Roller Assembly - Hydraulic Engine Pump	1
7	3204	145-58216-10	End	1
8		AN6227-23	Packing - "O" Ring Hydraulic	1
9		NAS50-150	Ring - Internal Retainer	1
10	9134	400X6 AN822-6	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees Flared Tube and Pipe Thread	1 1
11	9150	3350X4 AN823-4	Elbow - Street Elbow - 45 Degrees	1 1
12	3205	145-58135	Cap	1
13		AN6227-17	Packing - "O" Ring Hydraulic	1
14	3206	145-58134	Spring - Pump Valve	1
15	3207	145-58133	Valve - Hydraulic Engine Driven Pump	1
16	3208	145-58269	Guide - Engine Driven Pump Valve	1
17	3209	145-58144	Cylinder Assembly	1
18	3210	145-58129	Spring - Hydraulic Engine Driven Piston	1
19	3211	145-58189	Adapter - Engine Pump Splined	1
20	793 793-100	AN912-1 145-89098-1 145-89098	Bushing - Reducer Kit Installation - New York Airbrake Hydraulic Pump Kit Installation - New York Airbrake Hydraulic Pump	1 1 1

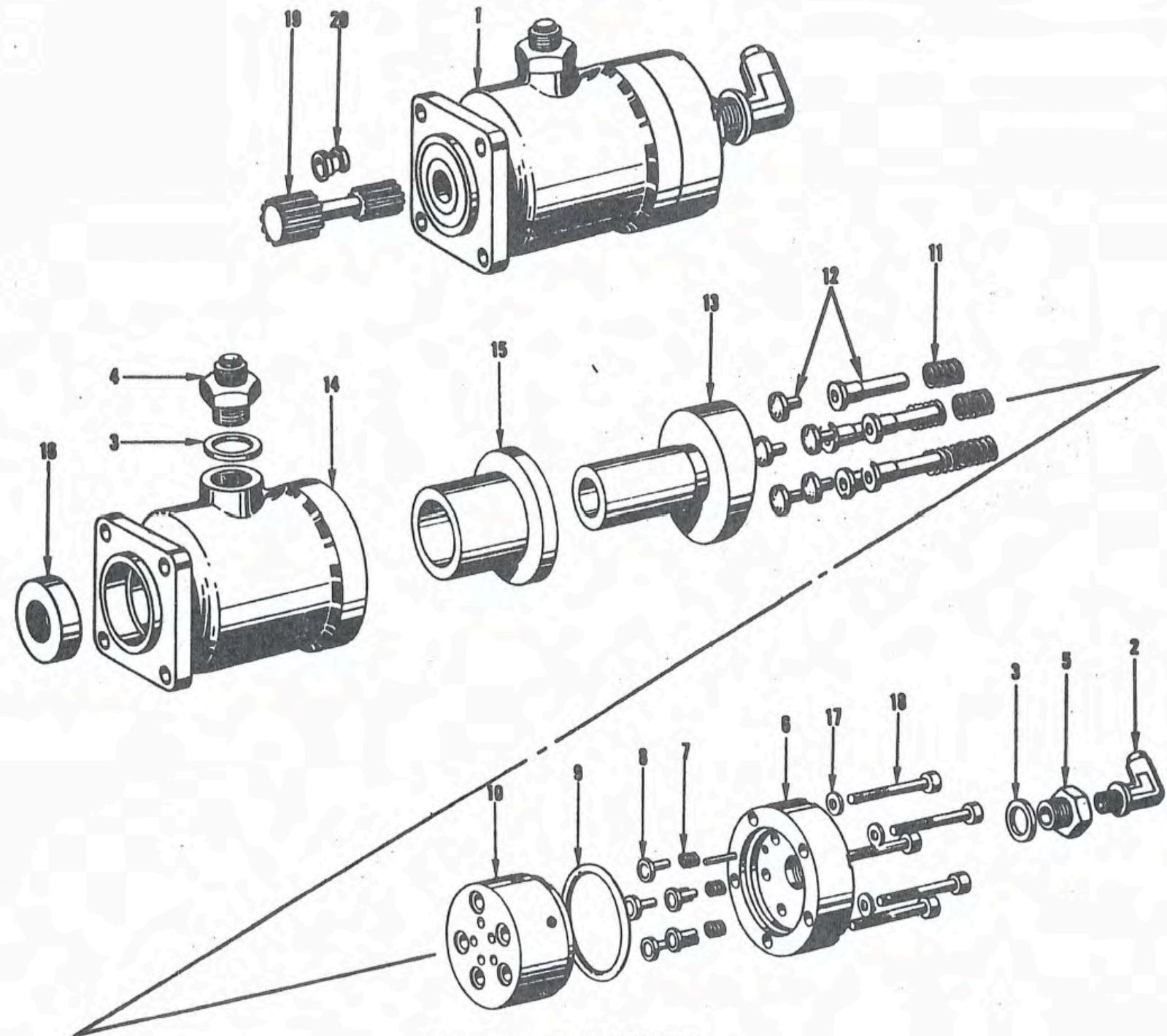


FIGURE 30 - HYDRAULIC PUMP  
Used On Serial Numbered Planes 1790 And Subsequent

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3200-20 3200-30	145-58024 145-58024-3	Hydraulic Pump Complete Pump & Fitting Assembly	1 1
2		AN833-5D	Elbow - 90 Degrees Bulkhead	1
3		AN902-5	Gasket - Flared Tube	2
4		AN919-7D	Reducer - External Thread Flared Tube	1
5	9440	AN924-5 67A025	Nut - Bulkhead & Universal Fitting Flared Tube Pump Assembly - Hydraulic	1 1
6	9440-5	67A777	Cover Assy - Hyd Pump	1
7	9440-20	67A774	Spring - Check	5
8	9440-25	67A768	Check - Pump	5
9	9440-30	P-763	Packing - "O" Ring Hydraulic	1
10	9440-35	67B767	Block - Cylinder	1
11	9440-40	67A773	Spring - Piston	5
12	9440-45	67A769	Piston Assy - Pump	5
13	9440-60 9440-65	67A771 67A776	Cam - Driving Pump Housing Assy - Pump	1 1
14	9440-70	67C765	Housing - Pump	1
15	9440-75	67A766	Bearing - Thrust	1
16	9440-80	P-795	Seal - Perfect	1
17	9440-85	P-797	Washer Special	5
18	9440-90	P-798	Screw - Cap	5
19	9440-95	67A812	Coupling - Drive	1
20	9440-100	67A810	Retainer - Coupling	1

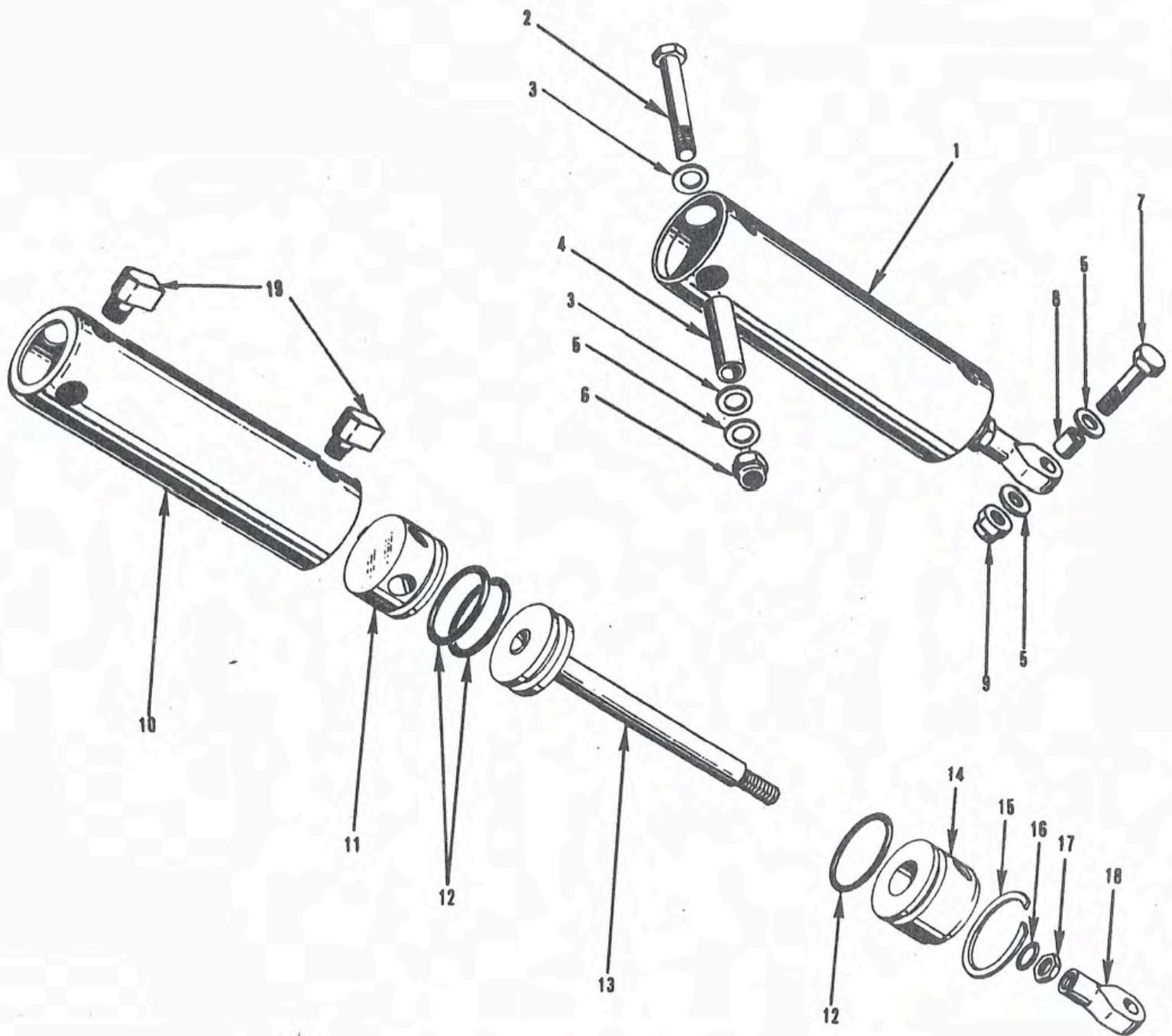


FIGURE 31 - HYDRAULIC MAIN GEAR  
AND FLAP ACTUATING CYLINDER

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3400	145-58013	Actuating Cylinder - Gear Flap	3
2		AN4-25A AN4-23A	Bolt - Aircraft 1/4-28 (Main Gear) Bolt - Aircraft 1/4-28 (Flap)	1 1
3		AN960-616	Washer - Plain (Rear Engine Mount)	2
4		NAS75-4-124	Bushing - Steel Press Fit	1
5		AN960-416	Washer - Plain	3
6		AN365-428	Nut - Self Locking	1
7		AN4-11A AN4-11	Bolt - Aircraft 1/4-28 (Main Gear) Bolt - Aircraft 1/4-28 (Flap)	1 1
8		NAS72-4-008	Bushing - Steel Chrome Clampup	1
9		AN365-428 AN310-4	Nut - Self Locking Nut - Aircraft Castle	1 1
10	3401	145-58263	Body - Actuating Cylinder	1
11	3402	145-58262	Head - Hydraulic Actuating Cylinder	1
12		AN6227-23	Packing - "O" Ring Hydraulic	3
13	3403	145-58242	Piston Assembly - Hydraulic Actuating Cylinder	1
14	3404	145-58105-3	Bearing - Hydraulic Actuating Cylinder	1
15	3405	145-58232	Ring - Actuating Cylinder Bearing Retainer	1
16		AN6227-9	Packing - "O" Ring Hydraulic	1
17		AN316-6R	Nut - Aircraft Check	1
18	3406	145-58223	End - Gear Actuating Cylinder Rod	1
19	9145	1444 AN822-4	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees	2 2

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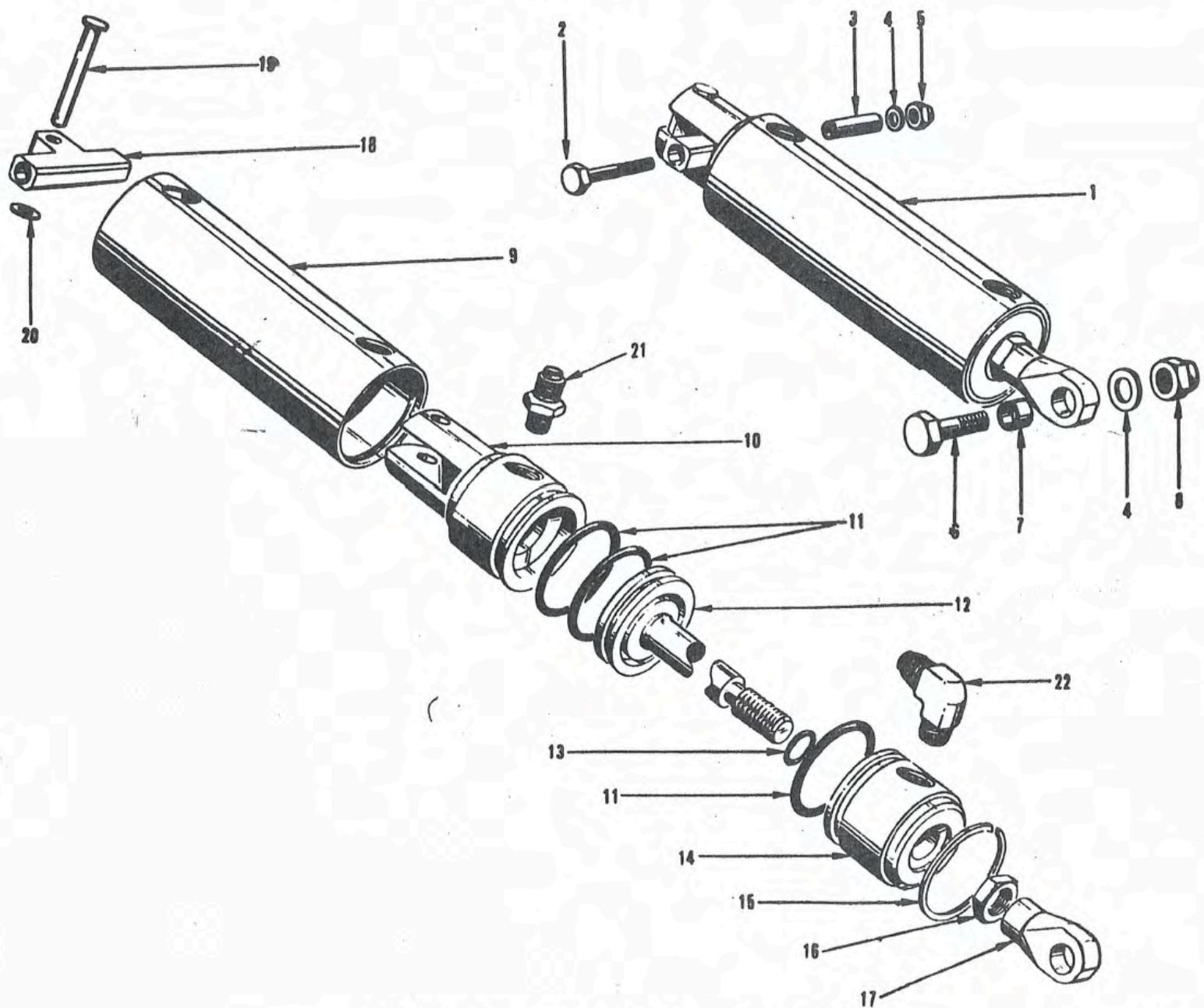


FIGURE 32 - HYDRAULIC NOSE GEAR ACTUATING CYLINDER

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3410 3410-10	145-56014 145-58014-3	Cylinder Assembly - Nose Gear Cylinder Assembly - Nose Gear	1 1
2		AN4-23A	Bolt - Aircraft 1/4-28 (Flap)	1
3		NAS43-4-120	Spacer	1
4		AN960-416	Washer - Plain	2
5		AN365-428	Nut - Self Locking	1
6		AN4-12	Bolt - Aircraft 1/4-28	1
7		NAS72-4-008	Bushing - Steel Chrome Clamp Up	1
8		AN310-4	Nut - Aircraft Castle	1
9	3411	145-58257	Cylinder - Hydraulic Gear Actuating	1
10	3412	145-58256	Head - Hydraulic Actuating Cylinder	1
11		AN6227-23	Packing - "O" Ring Hydraulic	3
12	3413	145-58258	Piston Assembly - Actuating Cylinder	1
13		AN6227-9	Packing - "O" Ring Hydraulic	1
14	3414	3145-58255	Bearing	1
15	3405	145-58232	Ring - Actuating Cylinder Bearing Retainer	1
16		AN316-6R	Nut - Aircraft Check	1
17	3406	145-58223	End - Gear Actuating Cylinder Rod	1
18	3415	145-34213	Universal - Hydraulic Cylinder Support	1
19		AN394-35	Pin - Flat Head 1/4	1
20		AN960-416L	Washer - Plain	1
21	3416	145-58282	Restrictor Assembly	1
22	9145	1444 AN822-4	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees	1 1

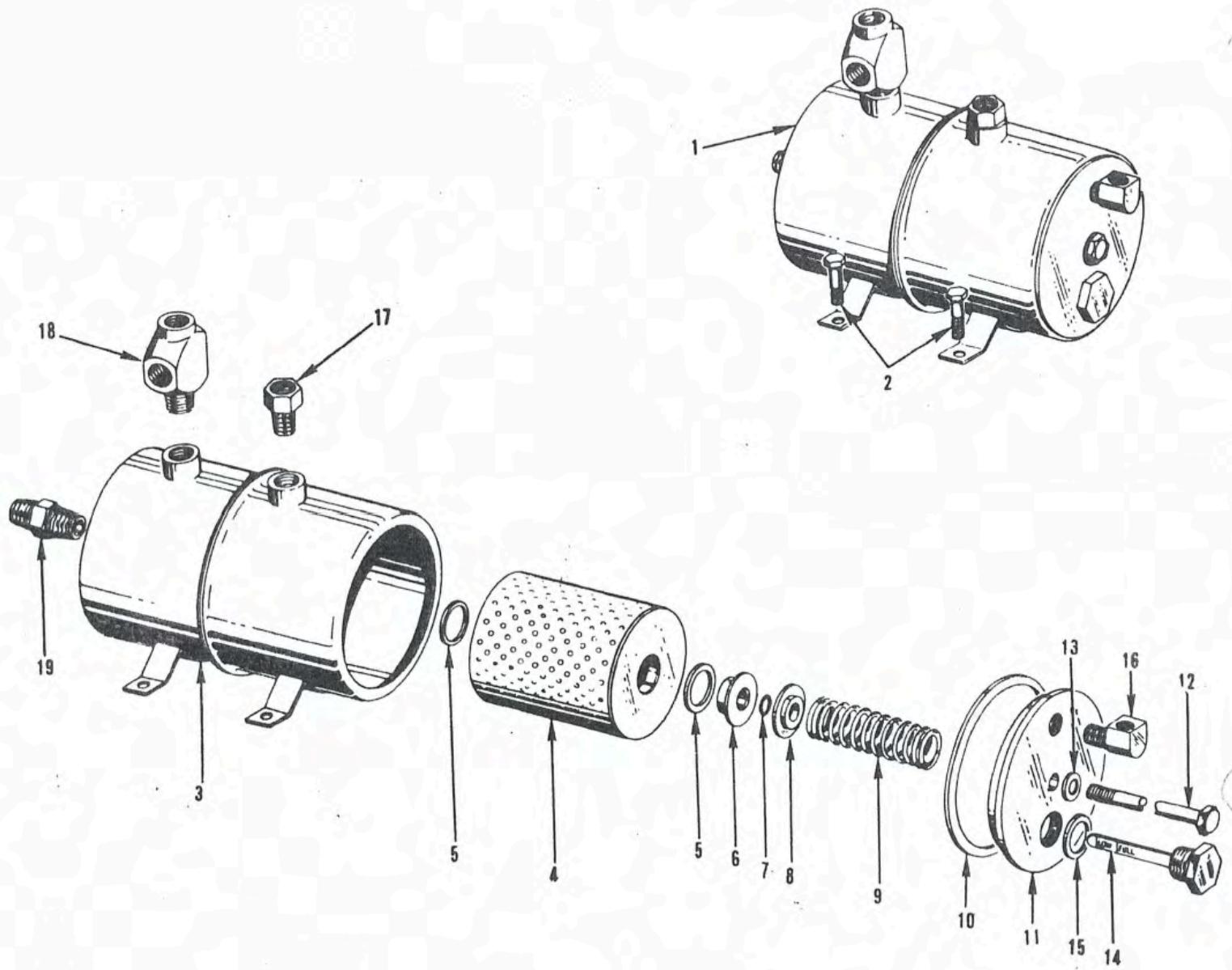


FIGURE 33 - HYDRAULIC RESERVOIR

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3500 3500-10 3500-20	145-58016 145-58016-3 145-58016-5	Reservoir Assembly - Hydraulic Complete Reservoir Assembly - Hydraulic Complete Reservoir Assembly - Hydraulic Complete	1 1 1
2		AN3-4A	Bolt - Aircraft #10-32	4
3	3501	145-58152	Shell	1
4	9246	32101	Filter - Hydraulic Reservoir	1
5		AN902-8	Gasket - Flared Tube	2
6	3502	145-58161	Guide	1
7		AN6227-3	AN6227-3	1
8	3503	145-58162	Retainer	1
9	3504	145-58158	Spring	1
10	3505	145-58236	Gasket - Hydraulic Reservoir Cover	1
11	3506	145-58159	Cover	1
12		AN3-61A	Bolt - Aircraft #10-32	1
13	8521	2W1F13-14-33	Washer - Plain	1
14	3507 3507-10	145-58155 145-58155-3	Plug - Dipstick & Filler Plug - Dipstick & Filler	1 1
15		AN902-8	Gasket - Flared Tube	1
16	9133	400X4 AN822-4	Elbow - 90 Degrees Inverted Male Elbow - 90 Degrees	1 1
17	9121	200X4 AN816-4 AN823-4	Connector - Inverted Male Nipple - Accumulator Tank to Tube Elbow - 45 Degrees	1 1 1
18	9142	752x4 AN826-4	Tee - Inverted Tee - Flared Tube with Pipe Thread on Run	1 1
19		AN911-2	Nipple - Pipe Thread	1

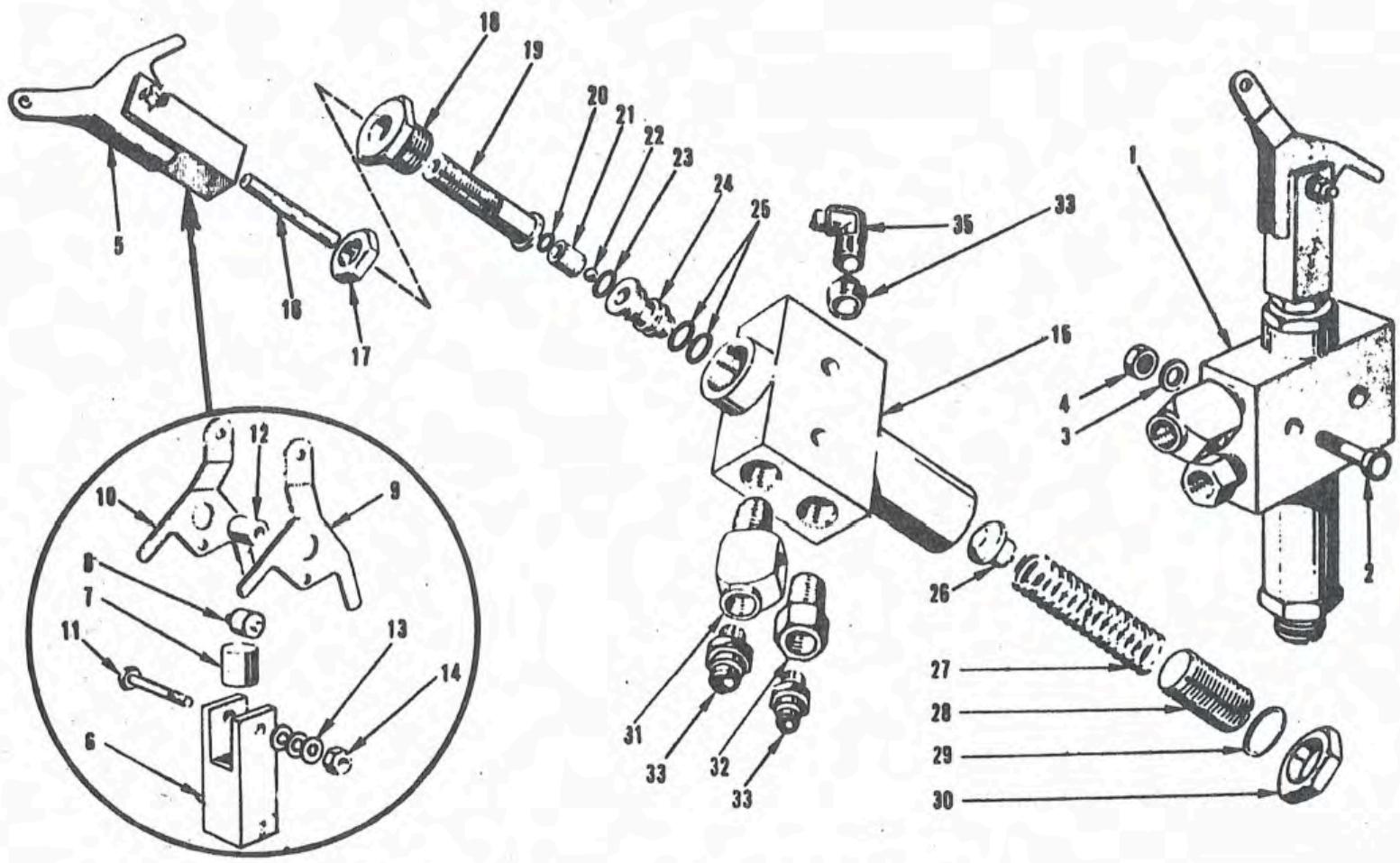


FIGURE 34 - HYDRAULIC RELIEF MECHANISM LIFT VALVE

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3600 3600-10	145-58027 145-58027-5	Relief Mechanism Lift Valve - Complete Relief Mechanism Lift Valve - Complete	1 1
2		AN3-12A	Bolt - Aircraft #10-32	2
3		AN960D10	Washer - Plain	6
4		AN365-1032		2
5	3601 3601-10	145-58271 145-58271-3	Lift Assembly - Relief Valve Mechanism Lift Assembly - Relief Valve Mechanism	1 1
6	3602	145-58289	Body & Lift	1
7	3603	145-58275	Plunger - Relief Valve Mechanism Lift	1
8	3604	145-58287	Roller - Relief Valve Adapter	1
9	3605 3605-10	145-58288-1 145-58288-3	Lever - Relief Valve Mechanism Lift Lever - Relief Valve Mechanism Lift	1 1
10	3606	145-58288-2	Lever	1
11		AN3-12A	Bolt - Aircraft #10-32	1
12	3607	145-58300	Bearing	1
13		AN960A10L	Washer - Plain	3
14		AN365-1032	Nut - Self Locking	1
15	3608	245-58247	Body - Hydraulic Relief Valve	1
16	3609	J45-58279	Pintle - Relief Valve Lift	1
17		AN924-3D	Nut - Bulkhead & Universal Fitting Flared Tube	1
18	3610	145-58278	Retainer - Relief Mechanism Lift	1
19	3611	J45-58277	Adapter - Relief Mechanism Lift	1
20		AN6227-1	Packing - "O" Ring Hydraulic	1
21	3612	145-58280	Spacer - Relief Valve Lift	1
22	9238	No Number	Ball - 5/32 Stainless Steel	1
23		AN6227-6	Packing - "O" Ring Hydraulic	1
24	3613	145-58270	Cage Assembly - Hydraulic Relief Valve	1
25		AN6227-7	Packing - "O" Ring Hydraulic	2
26	3614	145-58245	Button - Spring Bearing	1
27	3615	145-58146	Spring - Hydraulic Relief Valve	1
28	3616	145-58170	Screw - Hydraulic Relief Valve	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
29		AN902-6	Gasket - Flared Tube	1
30		AN924-6D	Nut - Bulkhead & Universal Fitting Flared Tube	1
31	9142	752x4 AN826-4	Tee - Inverted Tee - Flared Tube with Pipe Thread on Run	1 1
32	9121	200X4	Connector - Inverted Male	1
33		AN816-4	Nipple - Accumulator Tank to Tube	2
34		AN913-1	Plug - Square Head Pipe Thread	1
35		AN822-5	Elbow - 90 Degrees	1

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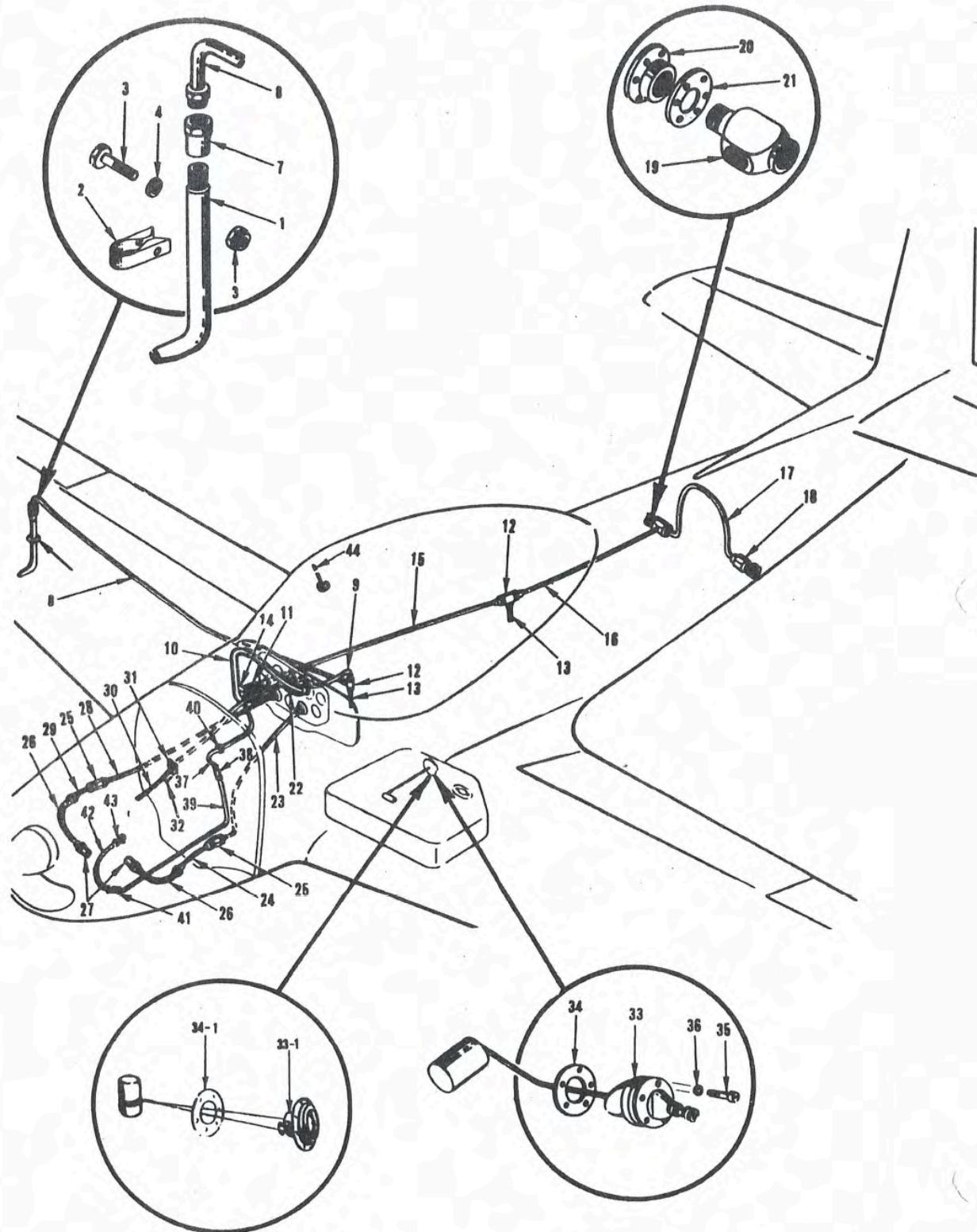


FIGURE 35 - INSTRUMENT SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3700	145-51030	Pitot Tube - Airspeed	1
2	9250	Q901A8	Clip	2
3		AN3-11A	Bolt - Aircraft #10-32	2
4	8324	4S3-10-6	Spacer - Bolt	2
5		AN365-1032	Nut - Self Locking	2
6		AN931-8-13	Grommet - Elastic	1
7	9126	250X4	Connector - Inverted Female	1
8	3701	145-51001-3	Line Pitot Pressure Wing	1
9	3702	145-51031-28	Line - Pitot Pressure Fuse	1
10	3703	145-51031-34	Line - Pitot Pressure Panel	1
11	9128	300X4	Union	2
12	9141	702X4	Tee	2
13	3704	145-51031-30	Sump	2
14	3705	145-51031-32	Line - Pitot Static Panel	1
15	3706	145-51031-22	Line - Pitot Static Forward	1
16	3707	145-51031-24	Line - Pitot Static Aft	1
17	3708	145-51031-26	Line - Pitot Static Balance	1
18	9121	200X4	Connector - Inverted Male	1
19	9142 9139	752x4 652X4	Tee - Inverted Tee	1 1
20	9251 3709	42A13995 145-51050	Tube Tube - Static Pressure	2 2
21	9252 3710	42A11521 145-51051	Plate Plate	2 2
22	3711 3711-10	145-51031-20 145-51031-66	Line - Alt to Airspeed Indicator Line Assembly - Alt to Airspeed Indicator	1 1
23	3712 3712-10	145-51031-12 145-51031-62	Line Assembly - Oil Pressure Line Assembly - Oil Pressure	1 1
24	3713 3713-10	145-51031-14 145-51031-64	Line Assembly - Oil Pressure Line Assembly - Oil Pressure	1 1
25	9128	300X4	Union	2
26	9080 9080	75681 145-51067	Hose Assembly - Oil and Fuel Pressure Hose Assembly - Oil and Fuel Pressure	2 2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
27	3714 3714 3714-10	145-451062 145-451062 145-51054	Restrictor - Instrument Line Restrictor - Instrument Line Elbow Assembly - Line Restrictor	1 1 1
28	3715 3715-10	145-51031-10 T45-51031-58	Line - Fuel Pressure Line - Fuel Pressure	1 1
29	3716 3716-10	145-51031-16 145-51031-60	Line - Fuel Pressure Line - Fuel Pressure	1 1
30	9252	42A11521	Plate	1
31	3717 3718	143-51026-1 143-51026-2	Plate - Tachometer Support LH Plate - Tachometer Support RH	1 1
32	8439	7S4-10-10	Screw - Round Head	2
33	9254 9254-10	439140 145-51071-2	Transmitter - Fuel Level Transmitter - Fuel Level	1 1
34	3719 3719-10	143-51025 145-48237	Gasket - Fuel Transmitter Gasket - Fuel Transmitter	1 1
35		AN502-10-8	Screw - Drilled Fillister Head Machine (Fine Thread)	6
36	8520	2W1F12-12-47	Washer - Plain	2
37	3721 9121 9119	145-89062-16 200X4 105X4	Line Assembly - Gauge to Connector Connector - Inverted Male Nut	1 1 3
38	9128	300X4	Union	1
39	3722	145-89062-14	Line Assembly - Connector to Connector	1
40		AN931-4-7	Grommet - Elastic	1
41		AN742-8 AN742-9C	Clamp - Loop Type Support Clamp	1 1
42	9080-10	145-51067-5	Hose Assembly - Instrument	1
43	9429	3400X2	Elbow	1
44	9456 3723 9119	Model A 145-51031-58 105X4	Thermometer - Outside Air Line Assembly - Climb Indicator to Alt Nut	1 1 2

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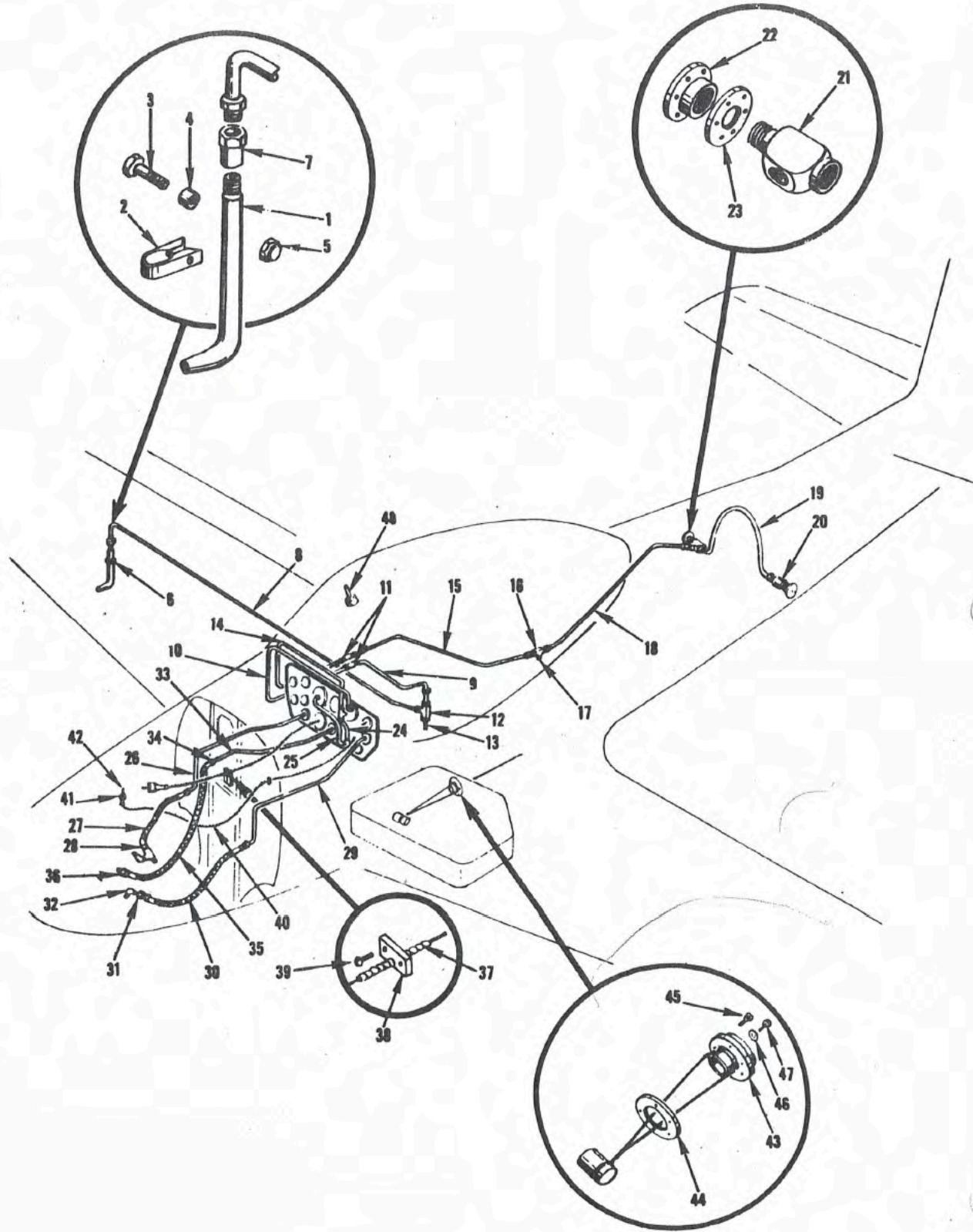


FIGURE 35A - INSTRUMENT SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3700	145-51030	Pitot Tube - Airspeed	1
2	9250	Q901A8	Clip	2
3		AN3-11A	Bolt - Aircraft #10-32	2
4	8324	4S3-10-6	Spacer - Bolt	2
5		AN365-1032	Nut - Self Locking	2
6		AN931-8-13	Grommet - Elastic	1
7	9126	250X4	Connector - Inverted Female	1
8	3701	145-51001-3	Line Pitot Pressure Wing	1
9	3702	145-51031-28	Line - Pitot Pressure Fuse	1
10	3703	145-51031-34	Line - Pitot Pressure Panel	1
11	9128	300X4	Union	2
12	9141	702X4	Tee	1
13	3704	145-51031-30	Sump	1
14	3705	145-51031-32	Line - Pitot Static Panel	1
15	3706	145-51031-22	Line - Pitot Static Forward	1
16	9139	652X4	Tee	1
17	9241	3152-3-1/8B	Plug	1
18	3707	145-51031-24	Line - Pitot Static Aft	1
19	3708	145-51031-26	Line - Pitot Static Balance	1
20	9121	200X4	Connector - Inverted Male	1
21	9142	752x4	Tee - Inverted	1
22	3709	145-51050	Tube - Static Pressure	2
23	3710	145-51051	Plate	2
24	3711-10	145-51031-66	Line Assembly - Alt to Airspeed Indicator	1
25	3723	145-51031-58	Line Assembly - Climb Indicator to Alt	1
26	3712-10 9128 3713-10	145-51031-62 145-51031-64	Line Assembly - Oil Pressure Line Assembly - Oil Pressure	1 2 1
27	9530 9531	145-51067-1 145-51067-3	Hose Assembly - Instrument Hose Assembly - Instrument	1 1
28	3714 3714-10	145-451062 145-51054	Restrictor - Instrument Line Elbow Assembly - Line Restrictor	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
29	3716-10 9128 3715-10	145-51031-60 T45-51031-58	Line - Fuel Pressure Line - Fuel Pressure	1 1 1
30	9080-10 9530	145-51067-5 145-51067-1	Hose Assembly - Instrument Hose Assembly - Instrument	1 1
31	3714 3714-10	145-451062 145-51054	Restrictor - Instrument Line Elbow Assembly - Line Restrictor	1 1
32		AN914-1	Elbow - 90 Degrees (Fuel Pressure Line to Carburetor)	1
33	3721-10 3721	145-51031-70 145-89062-16	Line Assembly - Panel to Union Manifold Pressure Line Assembly - Gauge to Connector	1 1
34	9128	300X4	Union	1
35	700-2 3722-10 9080-10	145-53327 145-89062-18 145-51067-5	Hose Assembly - Heater Fuel Line Assembly - Panel to Union Manifold Pressure Hose Assembly - Instrument	1 1 1
36	9121 9429	200X4 3400X2	Connector - Inverted Male Elbow	1 1
37	9527 9253	1536403 63600	Shaft - Tachometer Tachometer Shaft	1 1
38	3717-10 3717 3718	143-51026-3 143-51026-1 143-51026-2	Plate - Tachometer Shaft Support Plate - Tachometer Support LH Plate - Tachometer Support RH	1 1 1
39	8439	7S4-10-10	Screw - Round Head	1
40	9532 714-2	L-104-6 L-174-10	Lead - Cylinder Head Temp Thermocouple Lead - Temp Thermocouple	1 1
41	9533	8T688	Adapter - Cylinder Head Temp Thermocouple	1
42	9534 714-1 714-3	8T752C2 8T301G2 8T301G3	Thermocouple - Cylinder Head Temperature Thermocouple - Cyl Head (18mm) Thermocouple - Cyl Head (14mm)	1 1 1
43	9254-10	145-51071-2	Transmitter - Fuel Level	1
44	3719-10	145-48237	Gasket - Fuel Transmitter	1
45		AN502-10-8	Screw - Drilled Fillister Head Machine (Fine Thread)	6
46		AN936-A8	Washer - Lock (Fuel Transmitter Wire Connecting)	1
47		AN515-8R4	Screw - Fuel Transmitter Wire Connecting)	1
48	9456	Model A	Thermometer - Outside Air	1

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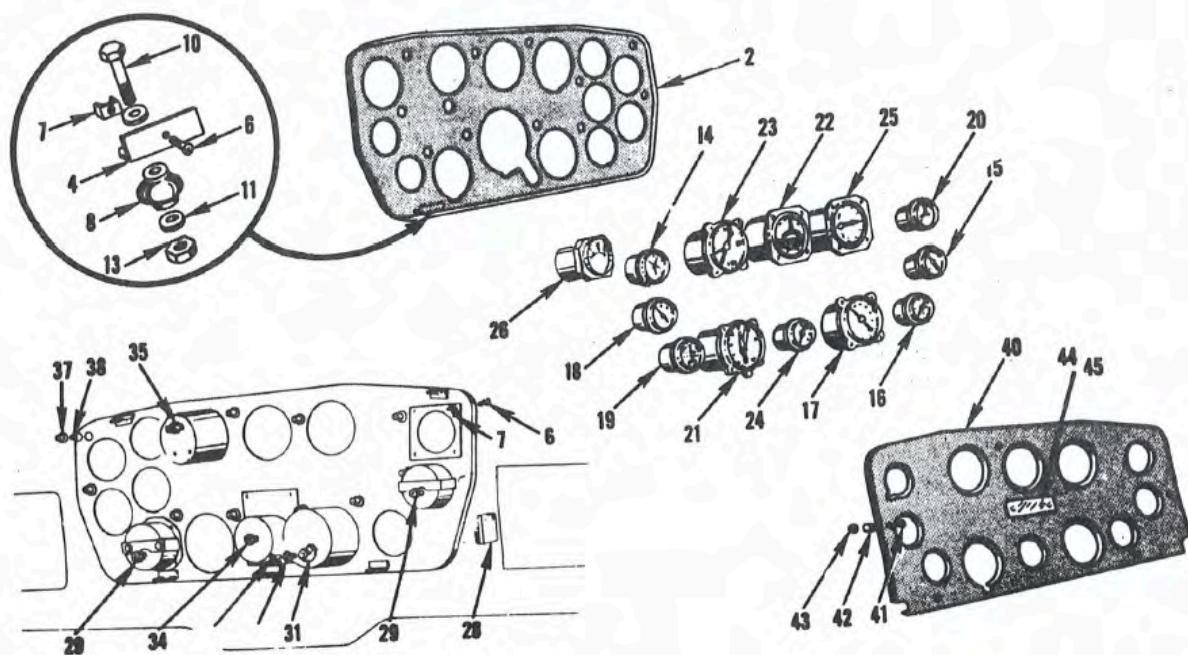
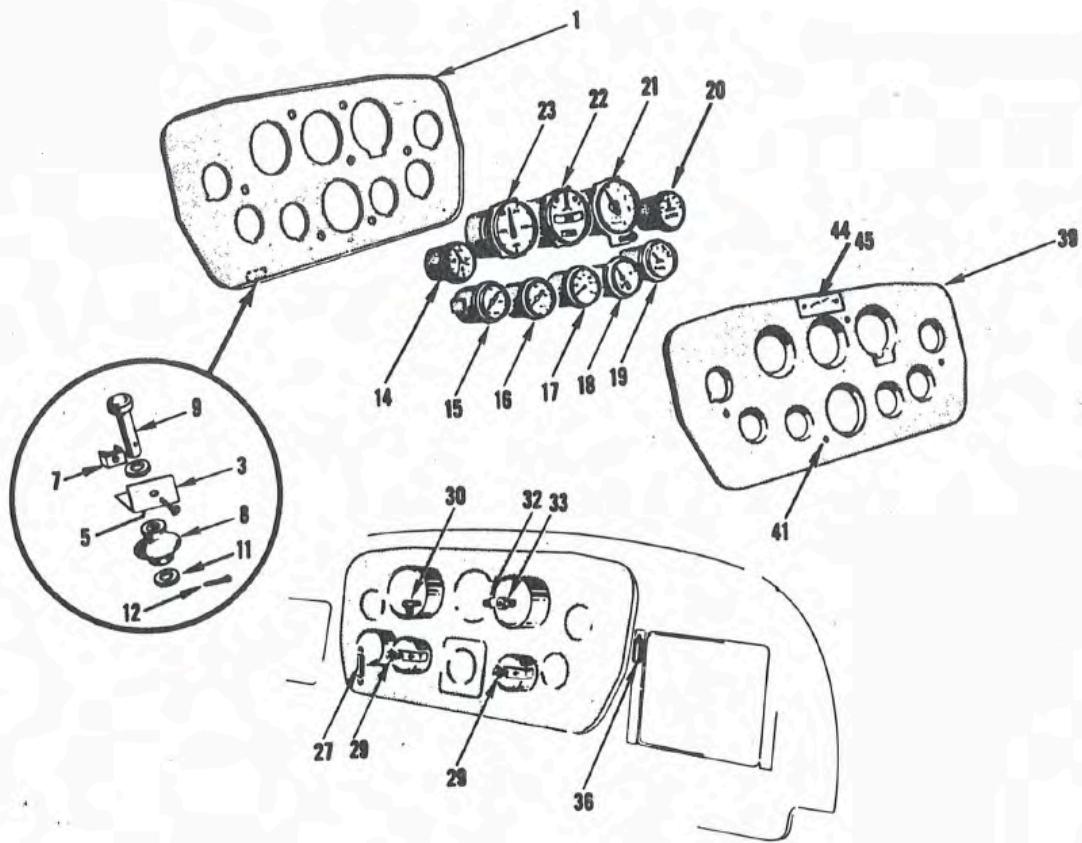


FIGURE 36 - INSTRUMENT PANEL

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3800	145-51006	Panel Assembly - Instrument Mounting	1
2	3800-10	145-51078	Panel Assembly - Instrument Mounting	1
3	3801	443-51024	Clip	4
4	3801-10 3801-15	145-51078-4 145-51078-6	Clip - Instrument Panel Support Clip - Instrument Panel Support	4 1
5		AN515B6R6	AN515B6R6	4
6		AN515B6R7	AN515B6R6	6
7	9019 9019	6939-632-062 6939-632-062	Nut Nut	4 6
8	9273 9273	275-5 275-5	Isolator - Vibration Isolator - Vibration	4 9
9		AN393-19	Pin - Flat Head 3/16	4
10		AN3-6A	Bolt - Aircraft #10-32	9
11		AN960-A10L AN960-A10	Washer - Plain Washer - Plain	8 18
12		AN380-2-2	Cotter	4
13		AN365-1032	Nut - Self Locking	9
14	9262	1792 NAS202-632B12	Clock (Elgin) Screw - Phillips Recess Round Head Brass	1 2
15	9255	442247	Oil Temp Indicator	1
16	9256	444103	Oil Pressure Gauge	1
17	9257 9256	557JM 444103 AN515B6R12 AN365B632	Tachometer Oil Pressure Gauge Screw - Phillips Recess Round Head Brass Nut - Self Locking	1 1 4 4
18	9258 9529	444234 146-51007	Fuel Pressure Gauge Gauge - Fuel Pressure	1 1
19	9259 9259-20	441104 154-48002-3	Fuel Level Indicator Fuel Level Indicator	1 1
20	9260	440116	Ammeter	1
21	9263 9021	987-10-031 AN515B6R12 6939-632-250	Altimeter - Sensitive Screw - Phillips Recess Round Head Brass Nut	1 4 4
22	9265	NS27200 NAS202-632B12 AN365B632	Turn & Bank Indicator Screw - Phillips Recess Round Head Brass Nut - Self Locking	1 4 4
23	9266	AW2-3/4-16BD	Indicator - Air Speed	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	9022	AN515B6R12 6939-632-375	Screw - Phillips Recess Round Head Brass Nut	4 4
24	9438 9022	AW1-7/8-31A AN515B6R12 6939-632-375	Gauge - Manifold Pressure Screw - Phillips Recess Round Head Brass Nut	1 3 3
25		AN5825-1 AN515-B6R12	Indicator - Rate of Climb Screw - Phillips Recess Round Head Brass	1 4
26	9528	16NT2C AN515B6R12	Gauge - Cylinder Head Temperature (Lewis Engine) Screw - Phillips Recess Round Head Brass	1 4
27	9261	91396	Resistor Unit - Fuel Gauge	1
28	9261-10	7219	Divider - Fuel Gauge Voltage	1
29	9126	250X4	Connector - Inverted Female	2
30	9133	400X4	Elbow - 90° Inverted Male	1
31	9142	752x4	Tee - Inverted	1
32	9142	752x4	Tee - Inverted	1
33	9121	200X4	Connector - Inverted Male	1
34	9121	200X4	Connector - Inverted Male	1
35	9121	200X4	Connector - Inverted Male	1
36	9272 9272-10 9272-10	Type AB No Number No Number	Resistor - 35 0hm 10 Watt Resistor - 10 0hm 10 Watt Resistor - 10 0hm 10 Watt	1 1 2
37	9293 9293	2505 2505	Socket - Mini Bayonet Base Socket - Mini Bayonet Base	6 13
38	9053 9053	#53 #53	Lamp - 12 Volt 0.11 Amp Red Lamp - 12 Volt 0.11 Amp Red	6 13
39	3802	145-51045	Reflector Panel	1
40	3802-10	145-51079	Reflector Panel	1
41		AN507B632R15	Screw - 100° Flat Head Machine	5
42	8376	4S4D5-12	Spacer	5
43	9019	6939-632-062	Nut	5
44	9515	R88-H-500	Holder - Compass Card	1
45	9275	R88C200	Card - Compass Correction	1

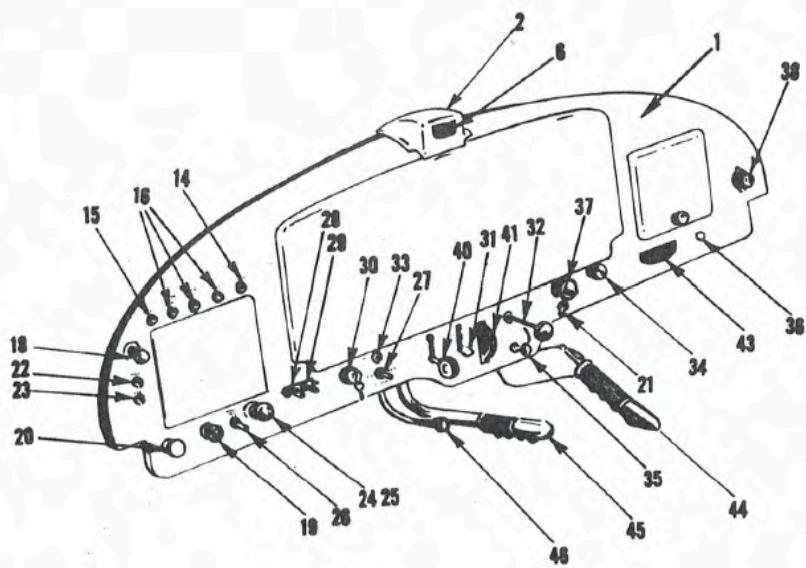
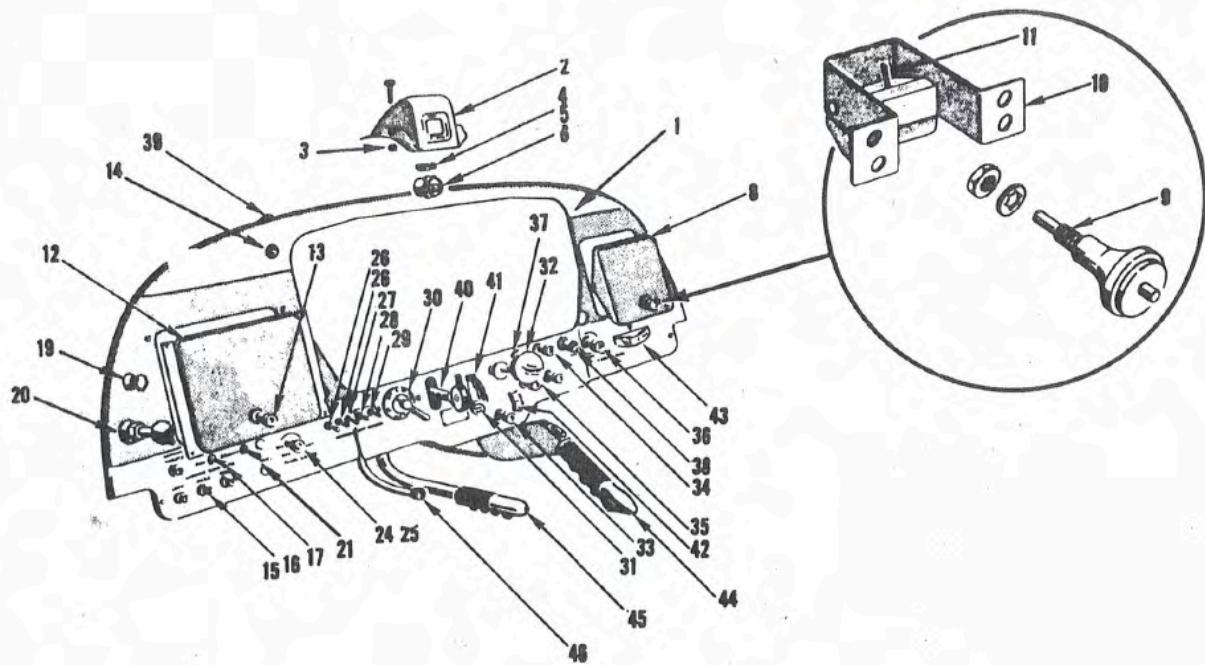


FIGURE 37 - CONTROL PANEL

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3810	145-51003-50	Panel - Instrument Dash	1
1A	3810-10	145-51003-100	Panel - Instrument Dash	1
2	3803	145-51023 NAS200-632BC12	Shroud - Compass Screw	1 2
3	9020	6939-632-125	Nut	2
4	9295	3104	Socket - Mini Bayonet Base	1
5	9053	#53	Lamp - 12 Volt 0.11 Amp Red	1
6	9271-10 9021	C-2300 AN515B6R12 6939-632-250	Compass - Airpath Screw - Phillips Recess Round Head Brass Nut	1 4 4
7	3813	145-51039	Clip	3
8	3804	145-51041-10 AN515B8R8 AN365-B832	Door - Glove Compartment Screw - Round Head Machine (Coarse Thread) Nut - Self Locking	1 2 2
9	3805	145-51044-10 AN936-A616 AN319-6R	Knob - Glove Compartment Door Washer - Internal Teeth Lock Nut	1 1 1
10	3806	145-51047	Latch	1
11	3807	145-51048	Spring	1
12	3809	145-51040	Cover Plate - Radio Cut-Out	1
13	2104	145-51061-3 AN520-10R6	Knobs - Instrument Panel Control Screw - Round Head Machine (Fine Thread)	1 1
14	9291	810-BS	Lamp Assembly (Amber)	1
15	9290	810-BS	Lamp Assembly (Red)	1
16	9289 9056	810-BS 1816	Lamp Assembly (Green) Lamp - 13 Volt .33A	3 5
17	9445	AN3027-2 PW-25-2D-8	Switch Assembly - Landing Gear Position Rheostat - Gear Indicator Lights	1 1
18	4319	145-51061-5	Knob - Instrument Panel Control	1
19	2950	145-51061-4	Knob (Unlettered)	1
20	9181	K2405-1/8	Fuel Primer (See Figure 18 for Details)	Ref
21	9279 9346	8396-K7 51076	Switch - Hydraulic Control Indicator Plug - Button	1 2
22	9446	A1	Phone Jack	1
23	9447	SCA-2B	Microphone Jack	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
24	9284 9284-10	PW-25D-4-35 PW-25-4D-15	Rheostat - Panel Lights Rheostat - Panel Lights	1 1
25	4319	145-51061-5 AN565A6-3	Knob - Instrument Panel Control Screw - Headless Set 6-32 x 3/16	1 1
26		AN3027-3	Switch - Double Pole Toggle	1
27	9280	7402-K4	Switch - Landing Light	1
28	9279	8396-K7	Switch - Hydraulic Control Indicator	2
29	4318	145-54005	Lever - Master Switch	1
30	9283 9283-10	1648N GM-10-51104	Ignition Switch Ignition Switch	1 1
31	2104 2104-10	145-51061-3 145-51075 AN565D6H3	Knobs - Instrument Panel Control Knob - Wing Flap Control Handle Set Screw	1 1 1
32	2107	2K04 (Gray)	Knob - Throttle Control	--
33	2104	145-51061-3	Knobs - Instrument Panel Control	--
34	2103	145-51061-6	Knob - Instrument Panel Control	1
34A	2103-10 3812 2104	145-51061-8 145-51062 145-51061-3	Knobs - Instrument Panel Control Restrictor - Fuel Pressure Line Knobs - Instrument Panel Control	1 1 1
35	2104 2103 9340	145-51061-3 145-51061-6 48151	Knobs - Instrument Panel Control Knob - Instrument Panel Control Plug - Button	1 1 1
36	4319	145-51061-5	Knob - Instrument Panel Control	1
37	1828	145-43024	Knob - Propeller Control Cable	--
38	9333	L14001	Cigarette Lighter	--
39	9337 9338	9A4140 1A390	Ashtray Ashtray	1 1
40			Landing Gear Control	--
41			Elevator Trim Tab Control	--
42			Elevator Trim Tab Indicator	--
43			Cabin Air Control	--
44			Brake Control	--
45			Hydraulic Hand Brake Control	--
46			Landing Gear Emergency	--

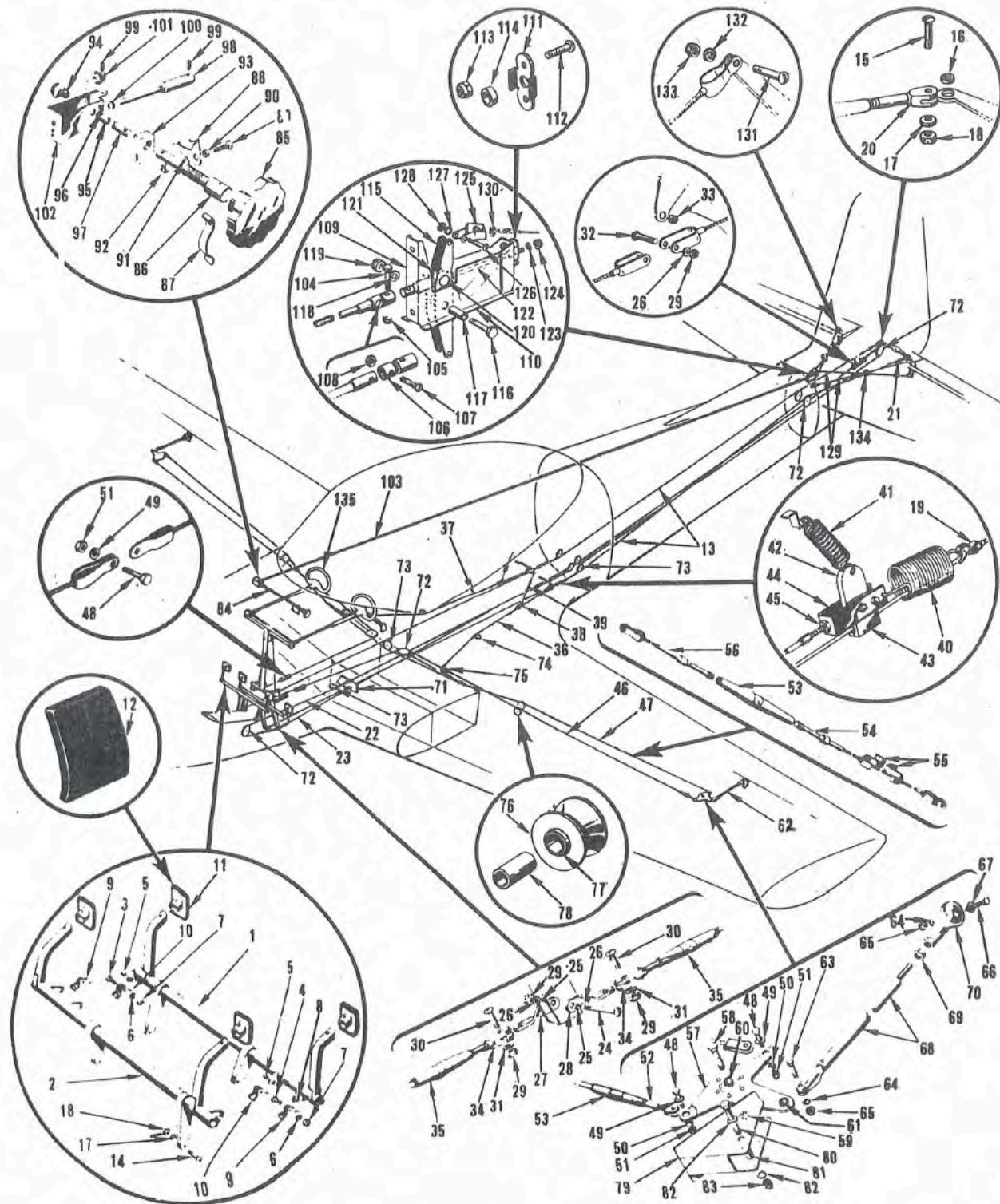


FIGURE 38 - SURFACE CONTROL SYSTEM

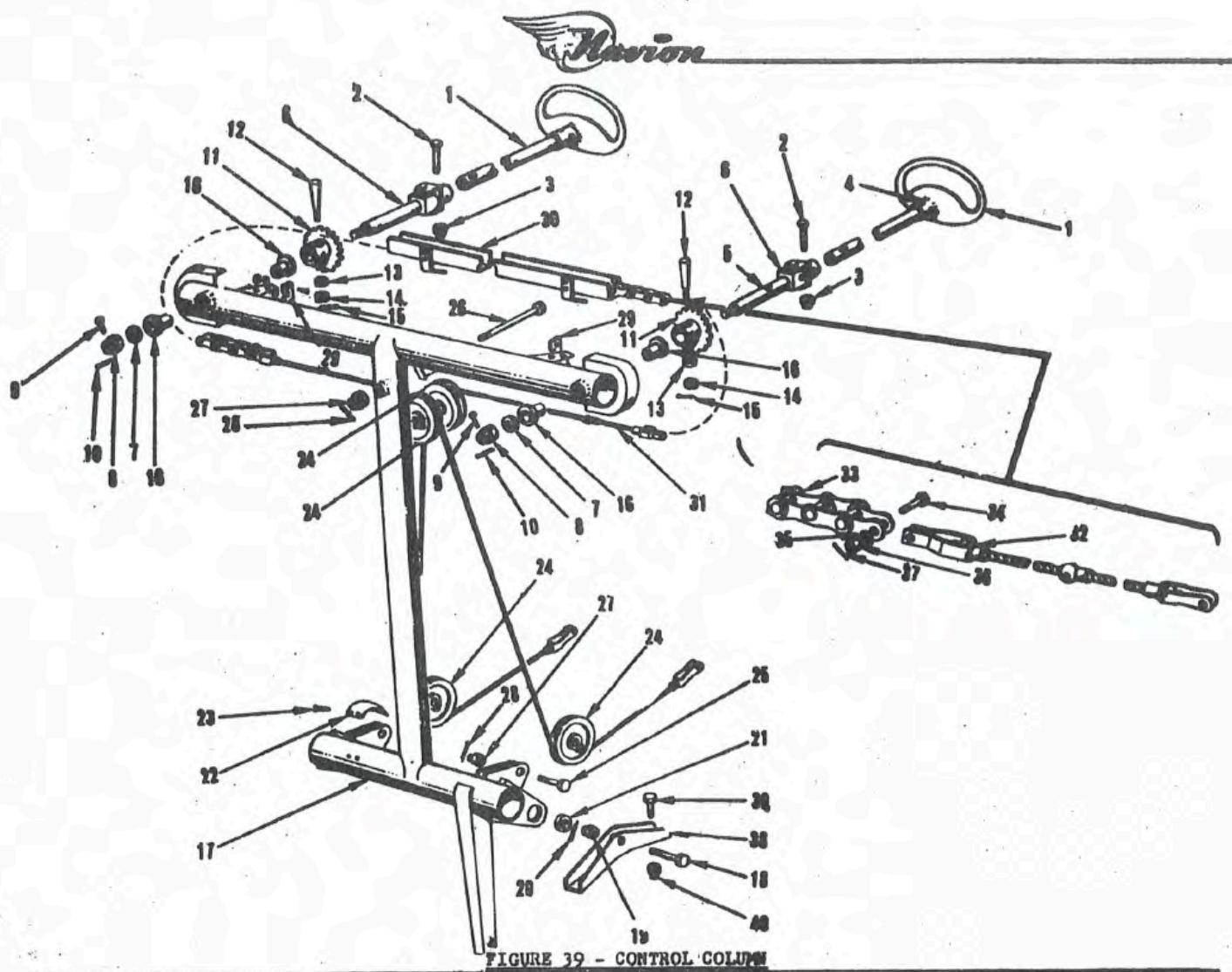
KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	3900	145-52401-51	Rudder Pedal Weld Assembly - Aft	1
2	3901	145-52401-53	Rudder Pedal Weld Assembly - Forward	1
3		AN3-11	Bolt - Aircraft #10-32	1
4		AN3-6	Bolt - Aircraft #10-32	1
5	8000	4B14-3-4	Bushing	2
6		AN960-10	Washer - Plain	2
7		AN310-3	Nut - Aircraft Castle	2
8	9030	UK3L	Bearing	3
9	3902	145-24402-4	Bracket	2
10	3903	145-52401-15	Bracket	2
11	3904	145-52407	Pad Assembly - Rudder Pedal	2
12	3905-10	145-52408-2	Pad - Rudder Pedal	1
13	3906	115-52010-25	Cable Assembly - Rudder	2
14		AN23-10	Bolt - Clevis #10-32	1
15		AN23-11	Bolt - Clevis #10-32	1
16	3917	145-52323	Spacer - Bellcrank Cable Bolt	1
17		AN960-10L	Washer - Plain	2
18		AN320-3	Nut - Aircraft Shear	2
19	3916	145-52317	Terminal - Quick Disconnect	1
20		AN161-22LL	Fork - Turnbuckle	1
21		AN155-32S	Barrel - Turnbuckle	1
22	3907	145-52010-29	Cable Assembly - Elevator Down	1
23	3908	145-52010-33	Cable Assembly - Elevator Up	1
24		AN23-23	Bolt - Clevis #10-32	1
25	3918	145-52221	Spacer	2
26		AN960-10L	Washer - Plain	3
27	3919	145-52218-3	Link - Cable Control	1
28	3920	145-52218-5	Link - Cable Control	1
29		AN320-3	Nut - Aircraft Shear	4
30		AN23-12	Bolt - Clevis #10-32	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
31		AN960-10	Washer - Plain	2
32		AN23-15	Bolt - Clevis #10-32	1
33	3921	145-52214	Spacer - Bellcrank Cable Bolt	1
34		AN161-22RS	Fork - Turnbuckle	1
35		AN155-32S	Barrel - Turnbuckle	1
36	3909	145-52010-41	Cable Assembly - Rudder Aileron LH	1
37	3910	145-52010-37	Cable Assembly - Rudder Aileron RH	1
38	3916	145-52317	Terminal - Quick Disconnect	1
39	3922	1275-52320	Spring - Retracting Rudder Aileron	1
40	3923	115-52319	Spring - Extension Rudder Aileron	1
41	3924	145-52324	Spring - Cable Support Fairlead	1
42	3925	145-52318-3	Fairlead - Control Cable	1
43	3926	145-52318-5	Fairlead - Control Cable	1
44	3927	145-52316	Connector - Control Cable	1
45		AN315-640R	Nut - Aircraft Plain	2
46	3911	145-52010-11	Cable Assembly - Aileron Actuating	2
47	3912	145-52010-21	Cable Assembly - Aileron Bus Complete	1
48		AN23-12	Bolt - Clevis #10-32	2
49		AN960-10L	Washer - Plain	2
50	3917	145-52323	Spacer - Bellcrank Cable Bolt	1
51		AN320-3	Nut - Aircraft Shear	2
52		AN161-22LS	Fork - Turnbuckle	1
53		AN155-32S	Barrel - Turnbuckle	1
54	3913	145-52010-15	Cable Sub Assembly - Aileron Bus	1
55	3916	145-52317	Terminal - Quick Disconnect	2
56	3914	145-52010-19	Cable Sub Assembly - Aileron Bus	1
57	3928 3929	145-52300-1 145-52300-2	Bellcrank Assembly - Aileron Connection LH Bellcrank Assembly - Aileron Connection RH	1 1
58		AN4-11	Bolt - Aircraft 1/4-28 (Flap)	1
59		AN310-4	Nut - Aircraft Castle	1
60	9168	BC4W9	Bearing	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
61		NAS75-4-006	Bushing - Steel Press Fit	1
62	3930	145-52303	Rod Assembly - Aileron Control	2
63		AN4-7	Bolt - Aircraft 1/4-28	1
64		AN960-416	Washer - Plain	2
65		AN310-4	Nut - Aircraft Castle	2
66		AN4-12	Bolt - Aircraft 1/4-28	1
67	8530	2W1-17-24-64	Washer - Plain	1
68	3931	145-52303-4	Rod Sub Assembly - Aileron Connection LH	1
69		AN316-5R	Nut - Aircraft Check	1
70	9167	RE4F5	Bearing - Rod End (Fafnir)	1
71	3932	145-52219-3	Fairlead	1
72		AN210-4A4DR7-3/4	Pulley - Anti - Friction Bearing Control	6
73		AN210-4A4DR7-3/4	Pulley - Anti - Friction Bearing Control	6
74		AN210-1APN3A	Pulley - Anti - Fric Bearing Control	3
75		AN210-1APN3A	Pulley - Anti - Fric Bearing Control	2
76	3933	145-52301	Roller Assembly - Cable	2
77	9274	A313	Bushing - Rolling Assembly	1
78	8329	4S3-10-19	Spacer - Bolt	1
79	3934	145-52310-5	Stop	1
80		AN4-20A	Bolt - Aircraft 1/4-28	1
81	8354	4S3-416-46	Spacer - Bolt	1
82		AN960-A416	Washer - Plain	2
83		AN365-428	Nut - Self Locking	1
84	3935	145-52501-13	Knob & Shaft Assembly - Trim Tab	1
85	3936	145-52529	Knob - Trim Tab Control	1
86	3937	145-52502	Shaft - Elevator Trim Tab	1
87	3938	145-52548	Spring - Trim Tab Control Knob	1
88	3940	145-52503	Indicator - Trim Tab Position	1
89		AN515B8-10	Screw - Round Head Machine (Coarse Thread)	1
90	8337	4S3-B8-6	Spacer	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
91		AN960-516	Washer - Plain	2
92		AN365B832	Nut - Self Locking	1
93	3941	145-52504	Nut-Trim Tab Indicator	1
94	3942	145-52501-11	Gear & Tube Assembly - Trim Tab	1
95	3943	345-52501-21	Coupling - (Includes Set Screws)	1
96	9275	R88C200	Card - Compass Correction	1
97	3939	145-52501-24	Tube Assembly - Trim Tab Control	1
98	3945	145-52522	Shaft Assembly - Trim Tab Pinion	1
99	9401	No Number	Screw - 10 - 32 X 3/8	2
100	8510	2W1B17-18-005	Shim	AR
101	3946	145-52513-5	Gear - Trim Tab Operating	1
102	3947	145-52545	Box - Gear Elevator Trim Tab	1
103	3948	145-52547	Shaft Assembly - Trim Tab Torque	1
104		AN23-13A	Bolt - Clevis #10-32	1
105		AN365-1032	Nut - Self Locking	1
106	3949	145-52546	Universal	1
107		AN23-13A	Bolt - Clevis #10-32	1
108		AN365-1032	Nut - Self Locking	1
109	3950	145-52505	Control Assembly - Trim Tab	1
110	3951	149-52528	Bracket Assembly	1
111	3952	145-52527	Retainer	1
112		NAS221-11	Screw	2
113		AN365-1032	Nut - Self Locking	1
114		AN200K3	Bearing - Heavy Duty	1
115	3953	145-52505-5	Bellcrank - Elevator Trim Tab	1
116		AN4-14	Bolt - Aircraft 1/4-28	1
117	3954	145-52505-14	Spacer - Elevator Trim Tab	1
118		AN960-416	Washer - Plain	2
119		AN310-4	Nut - Aircraft Castle	1
120	3955	145-52511	Nut - Elevator Trim Tab Swivel	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
121		AN960-1216L	Washer - Plain	2
122	3956	145-52507	Shaft - Elevator Trim Tab Jack	1
123		AN960-10	Washer - Plain	1
124		AN310-3	Nut - Aircraft Castle	1
125	3957	145-52505-13	Strap	1
126		AN23-19	Bolt - Clevis #10-32	2
127		AN960-10	Washer - Plain	2
128		AN310-3	Nut - Aircraft Castle	1
129	3915	145-52510	Cable Assembly - Elevator Trim Tab	4
130		AN316-5R	Nut - Aircraft Check	1
131		AN23-9	Bolt - Clevis #10-32	1
132		AN960-10	Washer - Plain	1
133		AN320-3	Nut - Aircraft Shear	1
134	3958	145-52509	Fairlead	2
135			Control Column	--



KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4100	145-52202-13	Wheel & Tube Assembly	2
2		AN4-12A	Bolt - Aircraft 1/4-28	1
3		AN365-428	Nut - Self Locking	1
4	4101	145-52012	Control Wheel	1
4A	4101-10	2654A2	Control Wheel	1
5	4102	145-52202-11	Tube - Control Wheel	1
6	4103	145-52308	Universal Joint - Control Tube	2
7	8487	2W1-25-28-63	Washer - Plain	1
8		AN310-6	Nut - Aircraft Castle 3/8-24	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
9		AN392-17	Pin - Flat Head 1/8	1
10		AN380-2-1	Pin - Cotter	1
11	4104	143-52008-5	Sprocket - Control Column	2
12		AN386-1-7	Pin - Threaded Taper	1
13		AN975-3	Washer - Tipper Pin	1
14		AN320-3	Nut - Aircraft Shear	1
15		AN380-2-2	Cotter	1
16	8012	4B16CF8-20	Bearing - Oil impregnated Sintered	4
17	4105	145-52202-33	Weld Assembly - Control Column	1
18		AN3-6	Bolt - Aircraft #10-32	2
19		AN310-3	Nut - Aircraft Castle	2
20		AN380-2-3	Pin - Cotter	2
21		AN200K3	Bearing - Heavy Duty	4
22	4106	145-52202-46	Strip Rubbing	1
23		AN530-6R4	Screw - Sheet Metal Round Head	4
24		AN210-4A4DR7-3/4	Pulley - Anti - Friction Bearing Control	4
25		AN4-10	Bolt - Aircraft 1/4-28	1
26		AN4-34	Bolt - Aircraft 1/4-28	1
27		AN310-4	Nut - Aircraft Castle	1
28		AN380-2-3	Pin - Cotter	1
29	4107	145-52312	Stop	2
30	4108	145-52202-45	Trough Assembly - Control Column	1
31	4109	145-52010-7	Cable 7 Chain Assembly	1
32	4110	145-52010-5	Cable Assembly - Aileron Control	2
33	9276	#35	Chain Assy - Roller	1
34		AN23-11	Bolt - Clevis #10-32	2
35		AN960-10L	Washer - Plain	2
36		AN310-3	Nut - Aircraft Castle	2
37		AN380-2-2	Cotter	2
38	4111	145-52202-29	Bracket - Column Mounting	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
39		AN3-4A	Bolt - Aircraft #10-32	2
40		AN365-1032	Nut - Self Locking	2

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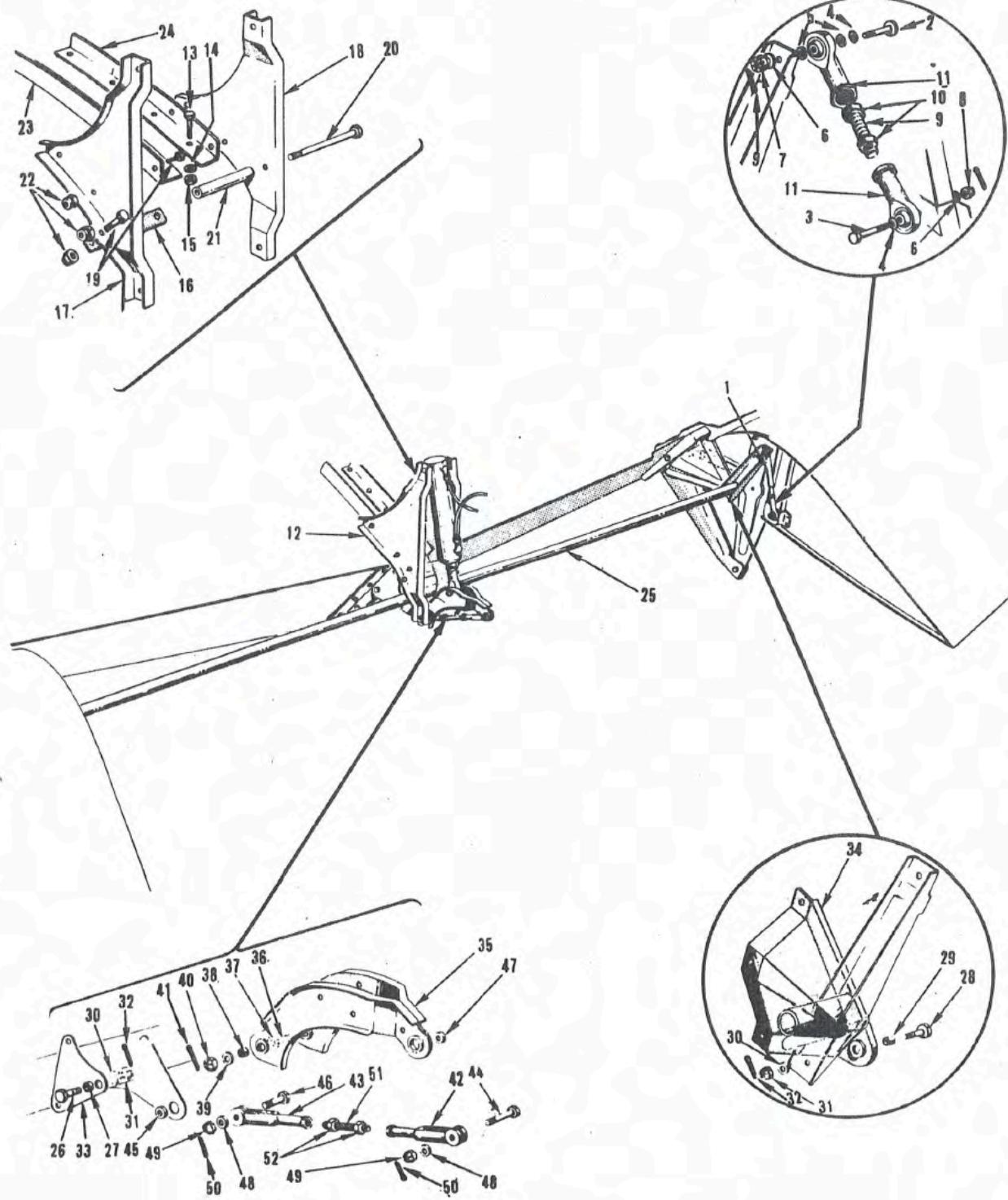


FIGURE 40 - WING FLAP OPERATING MECHANISM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4200	145-52019-10	Rod Assembly - Wing Flap Actuating	2
2		AN24-20	Bolt - Clevis 1/4-28	1
3		AN4-12	Bolt - Aircraft 1/4-28	1
4	8530	2W1-17-24-64	Washer - Plain	2
5	8529	2W1-17-12-64	Washer - Plain	4
6		AN960-416	Washer - Plain	4
7		AN320-4	Nut - Aircraft Shear	1
8		AN310-4	Nut - Aircraft Castle	1
9	4201-10	145-52019-2	Stud - Flap Actuating Rod	1
10		AN316-5R	Nut - Aircraft Check	2
11	9152	F45-19	Bearing - Rod End	2
12	4202	145-52022 SA #1	Support Assembly - Flap Cylinder	1
13		AN4-6A	Bolt - Aircraft 1/4-28	8
14		AN960-416	Washer - Plain	8
15		AN365-428	Nut - Self Locking	8
16	4203	145-52022-3	Strap	1
17	4204	145-52022-9	Bucket - Wing Cylinder Support LH	1
18	4205	145-52022-10	Bucket - Wing Cylinder Support RH	1
19		AN4-5A	Bolt - Aircraft 1/4-28	6
20		AN4-30A	Bolt - Aircraft 1/4-28	1
21	8379	4S4D8-74	Spacer	1
22		AN365-428	Nut - Self Locking	7
23	4206	145-52022-5	Angle - Wing Cylinder Support LH	1
24	4207	145-52022-6	Angle - Wing Cylinder Support RH	1
25	4208	145-52026	Tube Assembly - Flap Torque	1
26		AN4-6	Bolt - Aircraft 1/4-28	1
27	4211	143-18051-2	Bushing - Flap Hinge Spacer	1
28		AN4-7	Bolt - Aircraft 1/4-28	1
29	4213	143-18051-4	Bushing - Flap Hinge Spacer	2
30		AN960-416	Washer - Plain	3

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
31		AN310-4	Nut - Aircraft Castle	3
32		AN380-2-2	Cotter	3
33	4209	145-52027	Support - Torque Tube Center	1
34	4214 4215	145-52024-2 145-52024-1	Support - Torque Tube Outboard RH Support - Torque Tube Outboard LH	1 1
35	4216	145-52021	Bellcrank Assembly - Flap Strut	1
36		AN4-6	Bolt - Aircraft 1/4-28	2
37	8483	2W1-17-18-32	Washer - Plain	2
38	4210	143-18051-1	Bushing - Flap Hinge Spacer	2
39		AN960-416	Washer - Plain	2
40		AN310-4	Nut - Aircraft Castle	2
41		AN380-2-2	Cotter	2
42		NAS170-5	Clevis - Engine Control Rod Adjustable	1
43		NAS170-6	Clevis - Engine Control Rod Adjustable	1
44		AN4-7	Bolt - Aircraft 1/4-28	1
45	4211	143-18051-2	Bushing - Flap Hinge Spacer	1
46		AN4-6	Bolt - Aircraft 1/4-28	1
47	4213	143-18051-4	Bushing - Flap Hinge Spacer	1
48		AN960-416	Washer - Plain	2
49		AN310-4	Nut - Aircraft Castle	2
50		AN380-2-2	Cotter	2
51	4217	145-52028	Rod - Wing Flap Torque Tube Push	1
52		AN316-6R	Nut - Aircraft Check	2
53			Actuating Cylinder	--

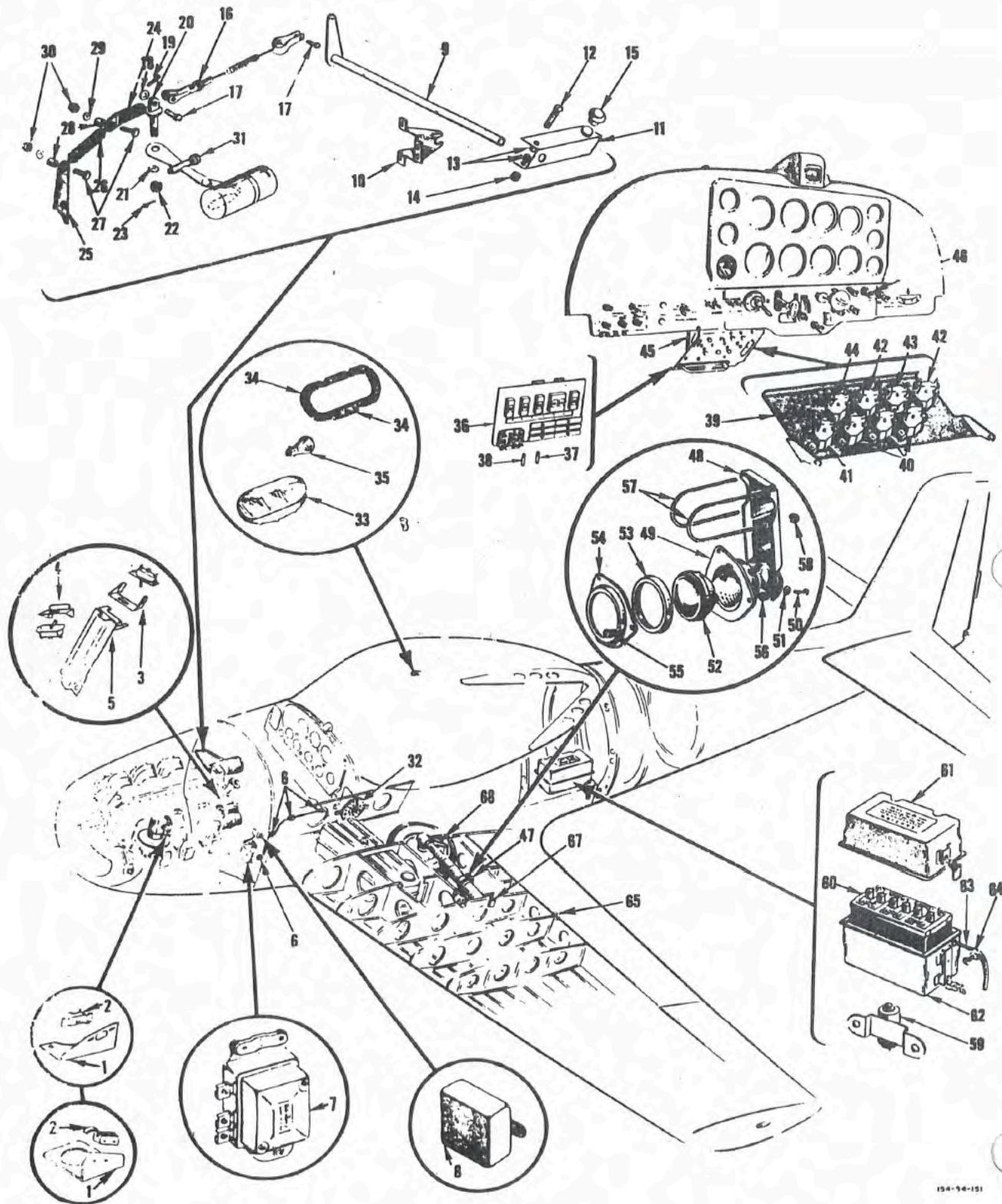


FIGURE 41 - ELECTRICAL EQUIPMENT

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4300 4300-10 4300-20	145-54038 145-54058-2 145-54058-2	Bracket - Warning Horn Switch Bracket - Warning Horn Switch Bracket - Warning Horn Switch	1 1 1
2	9277 4301 9277  8357 9224 9535	8215-K4 145-54039 8215-K4 AN515-6R10 AN960-6 4S3-6-4 49138 BZ-2RW-A2 AN515-6R16 AN365-632	Switch - Throttle Warning Horn Spring - Warning Horn Switch Switch - Throttle Warning Horn Screw - Round Head Machine (Coarse Thread) Washer - Plain (Rear Engine Mount) Spacer - Bolt Fastener Switch - Micro Screw - Round Head Machine (Coarse Thread) Nut - Self Locking	1 1 1 2 2 2 1 1 2 2
3	4304 4302 4302-10	145-54011 145-54050 145-54063	Bracket-Nose Gear Switch Bracket - Nose Gear Switch Bracket - Nose Gear Switch	1 1 1
4	4303 4303-10 9277 9278 4301	145-54051 145-54077 8215-K4 8715 145-54039 AN515-6R7 AN960-6	Bracket - Nose Gear Switch Bracket - Nose Gear Switch Switch - Throttle Warning Horn Switch - Gear Up Position Indicator Spring - Warning Horn Switch Screw - Round Head Machine (Coarse Thread) Washer - Plain (Rear Engine Mount)	1 1 1 1 1 2 2
5	4305  8326	145-54052 AN520-10R14 AN960-10 4S3-10-10 AN365-1032	Arm Assembly - Switch Actuating Screw - Round Head Machine (Fine Thread) Washer - Plain Spacer - Bolt Nut - Self Locking	1 3 3 3 3
6	9158 9228 9229	295004 49287 49296	Web Strap Clip - Web Strap Support Clip - Web Strap Support	4 2 2
7	9103	1118263	Regulator - Generator Voltage	1
7A	9103-20	3038-RB6 AN520-10R12 AN960-10 AN936-A10 AN345-10	Regulator - Generator Voltage Screw - Round Head Machine (Fine Thread) Washer - Plain Washer - External and Internal Teeth Lock Nut - Light Hexagon Fine Thread	1 3 3 3 3
8	9296	CA275X AN520-10R6 AN365-1032	Capacitor - Filter Screw - Round Head Machine (Fine Thread) Nut - Self Locking	1 2 2
9	4306	145-54013 AN380-4-3	Bellcrank - Starter Control Pin - Cotter	1 2
10	4307	145-54054 AN515-8R8 AN960-8L AN365-832	Bracket - Support Screw - Round Head Machine (Coarse Thread) Washer - Plain Nut - Self Locking	1 4 8 4
11	4308	145-54014	Starter Pedal (Includes Pad)	1
12		AN520-10R22	Screw - Round Head Machine (Fine Thread)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
13	8324	4S3-10-6	Spacer - Bolt	2
14		AN365-1032	Nut - Self Locking	1
15	9335	101	Pad - Starter Pedal	1
16	4309	145-54021	Cable - Starter Control	1
17		AN393-13	Pin - Flathead 3/16	2
18		AN960-10	Washer - Plain	2
19		AN380-2-3	Pin - Cotter	2
20		AN42-3	Eyebolt - 10-32 for 3/16 Pin	1
21		AN960-10	Washer - Plain	1
22		AN320-3	Nut - Aircraft Shear	1
23		AN380-2-2	`Cotter	1
24	4310	145-54046	Link - Spring	1
25	4311	145-54047	Bracket - Spring	1
26	4312	145-54055	Spring - Lever Return Spring	1
27		AN3-4A	Bolt - Aircraft #10-32	2
28	8364	4S4-6-4	Spacer - Rivet	2
29		AN960-10	Washer - Plain	2
30		AN365-1032	Nut - Self Locking	2
31	4313 9457	145-54045 405C	Bolt - Starter Switch Switch - Starter	1 1
32	4314	145-54042 AN4-4A AN960-416 AN936-A416	Horn Assembly - Gear Warning Bolt - Aircraft 1/4-28 Washer - Plain Washer - Lock (Housing Bracket Screw)	1 2 2 1
33	4315	145-54031 AN530-2R4	Lens - Cabin Light Screw - Sheet Metal Round Head	1 2
34	4316 9458 9009 9479	145-54032 AN530-6R6 A5727 AN530-8R6 A1803-8Z-3 5551	Retainer - Lens Screw - Sheet Metal Round Head Dome Light Screw - Sheet Metal Round Head Nut (Tinnerman) Lens - Cabin Dome Light	2 2 1 2 2 1
35	9055	1141	Lamp - 12 Volt Clear	1
36	4320	145-54024	Panel Assembly - Fuse	1
37	9323	3AF10	Fuse	5

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
38	9324 9322	3AG20AMP 3AG-2AMP	Fuse Fuses (Turn & Bank Indicator)	3 2
39	4320-10	145-54023	Circuit Breaker - Panel Assembly	1
40	9328 9328	CM5 CM5	Circuit Breaker Circuit Breaker	4 3
41	9328-100	CM10	Circuit Breaker	1
42	9329 9329	CM15 CM15	Circuit Breaker Circuit Breaker	2 1
43	9330	CM20	Circuit Breaker	1
44	9331 9004	CA20 AN530-8R10 A1778-8Z-1	Circuit Breaker Screw - Sheet Metal Round Head Speednut	1 2 2
45	3129	145-54025	Spring - Fuse Panel Retaining	1
46	9333 9333-1 9334 4322	L14001 LHA29236 LFA2850A 145-54036	Cigarette Lighter Knob & Element - Cigarette Lighter Fuse - Cigarette Lighter Spring - Lighter Retainer	1 1 1 1
47	4323	145-54007	Light Assembly - Complete Landing Gear	2
48	4324	145-54007-3	Channel - Landing Light Support	1
49	4326	145-54007-10	Shell Assembly - Landing Light	1
50		AN515-8R9	Screw - Round Head Machine	2
51		AN960-8	Washer - Plain	2
52	9047	2R5-6-5	Rivet - Braz Head (Hi - Shear)	1
53	4327	144-54246	Gasket - Landing Light Lamp	1
54	4328	144-54245	Retainer - Landing Light Lamp	1
55		AN520-10R5	Screw - Round Head Machine (Fine Thread)	3
56		AN365-1032	Nut - Self Locking	3
57	4325	145-54008 AN960-10	U-Bolt - Landing Light Attach Washer - Plain	4 2
58		AN365-1032	Nut - Self Locking	2
59	9285 4329 8405	71-111242 145-54038 7S1-10-7 AN960-10 AN365-1032	Relay - Battery Disconnect Cover - Battery Disconnect Relay Screw - Button Head Washer - Plain Nut - Self Locking	1 1 2 2 2
60	9286 9272-10	6TAS9B No Number	Battery - 12 Volt Resistor - 10 0hm 10 Watt	1 1
60A	9286-10	Type R33	Battery - Storage "Rebat"	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	4332-11 4332-12	145-54016-23 145-54016-25	Bracket - Battery Box Lower Spacer Block - Battery Hold Down	1 2
61	4331	145-54016-41	Cover Assembly - Battery Box	1
62	4332	145-54016-51	Box - Battery Lower Half	1
62A	4332-10 9287 9288	145-54016-61 4300 6846	Box - Battery Lower Half Terminal Boot Terminal Boot	1 4 2
63	4333	143-54801-2	Line - Battery Vent	1
64	9536	A3122-8-59 AN931-7-11	Clamp - Hose Grommet - Elastic	1 2
65	4334  9019 9053-10	145-54076 AN515-6R8 6939-632-062 #53	Light Assembly - Midway Position Screw - Round Head Machine (Coarse Thread) Nut Lamp - 12 Volt Min Bayonet Base 1 CP Clear	1 2 2 1
67	9277 4301  4321 8363	8215-K4 145-54039 AN515-6R6 AN515-6R8 AN960-6 145-54010-3 4S4-5-8	Switch - Throttle Warning Horn Spring - Warning Horn Switch Screw - Round Head Machine (Coarse Thread) Screw - Round Head Machine (Coarse Thread) Washer - Plain (Rear Engine Mount) Plate - Gear Down Switch Support Spacer - Rivet	2 1 1 1 2 1 2
68	9277 9278 4301  4335 4336	8215-K4 8715 145-54039 AN515-6R6 AN515-6R8 AN960-6 145-54048-1 145-54048-2	Switch - Throttle Warning Horn Switch - Gear Up Position Indicator Spring - Warning Horn Switch Screw - Round Head Machine (Coarse Thread) Screw - Round Head Machine (Coarse Thread) Washer - Plain (Rear Engine Mount) Washer - Plain (Rear Engine Mount) Bracket - Up Switch Support LH Bracket - Up Switch Support RH	2 2 1 1 1 2 1 1

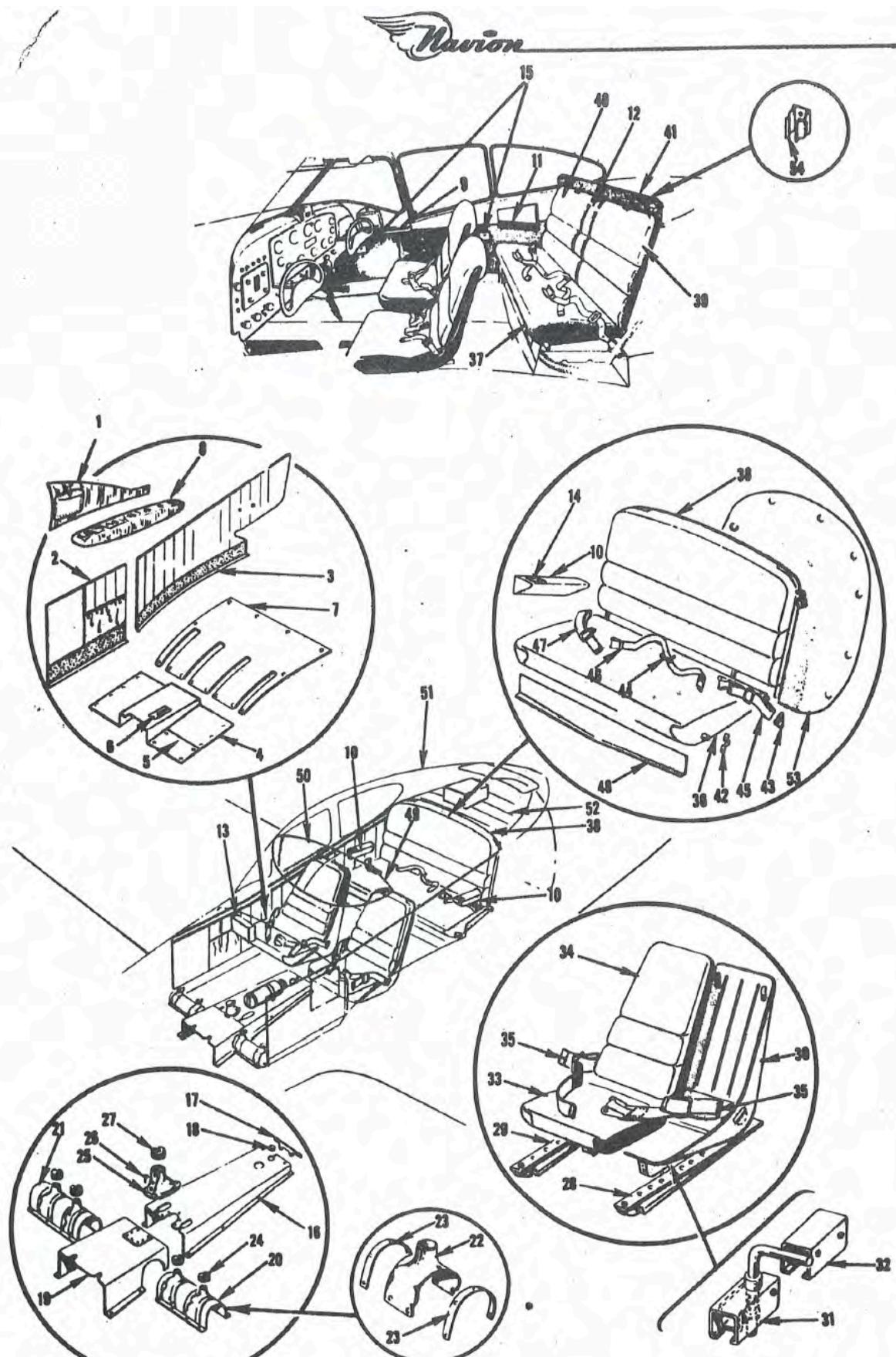


FIGURE 42 - FURNISHINGS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4400 4400-10 4401 4401-10	145-53011-300 145-53032-24 145-53011-400 145-53032-25	Upholstery Panel - Upper LH Upholstery Panel - Upper LH Upholstery Panel - Upper RH Upholstery Panel - Upper RH	1 1 1 1
2	4402-10 4402-15 4403-10 4403-15	145-53032-4 145-53032-91 145-53032-5 145-53032-149	Upholstery Panel - Front LH Upholstery Panel - Front LH Upholstery Panel - Front RH Upholstery Panel - Front RH	1 1 1 1
3	4404-10 4404-15 4405-10 4405-15	145-53032-66 145-53032-95 145-53032-67 145-53032-151	Upholstery Panel - Rear LH Upholstery Panel - Rear LH Upholstery Panel - Rear RH Upholstery Panel - Rear RH	1 1 1 1
4	4410-05 4410 4410-10	143-53008-0 143-53008-10 143-53008-17	Floor Mat - Front LH Floor Mat - Front RH Carpet - Pilots Floor	1 1 2
5	4411	145-53033	Plate - Pilots Scuff	1
6	4412	145-31864-5	Plate - Canopy Handle Warning	1
7	4413	143-53008-11	Carpet - Passenger Floor	1
8	4414	145-53032-38	Armrest - Front LH	1
9	4414-10 4415 4415-10	145-53032-105 145-53032-39 145-53032-148	Armrest - Front LH Armrest - Front RH Armrest - Front RH	1 1 1
10	4416	145-53018-2	Armrest - Rear LH	1
11	4417 4417-10	145-53018-1 145-53035-1	Armrest - Rear RH Armrest - Rear RH	1 1
12	4450	145-53003-216	Armrest - Rear Center	1
13	9337 9338	9A4140 1A390	Ashtray Ashtray	2 2
14	9338	1A390	Ashtray	2
15	9338-10	25A2570	Ashtray	4
16	4418 4418-10	145-52402-7 145-52402-30	Guard - Center Rear Guard - Center Rear	1 1
17	4419	145-52402-11	Angle - Surface Controls Guard	1
18	9339	48143	Plug - Button	1
19	4420	145-52402-15	Guard - Center Front	1
20	4422	145-52402-3	Guard - LH	1
21	4423	145-52402-4	Guard - RH	1
22	4424	145-52403-1	Boot - Rudder Pedal	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
23	4425	145-52402-5	Strap	2
24	9075	A3122-16-59	Clamp (Tinnerman)	1
25	4421	145-52205	Boot - Control Column	1
26	9161	295016	Web Strap	8
27	9077	A3122-30-59	Clamp (Tinnerman)	1
28	4426	143-53010-3	Track Assembly - Front Seat LH	2
29	4427	143-53010-4	Track Assembly - Front Seat RH	2
30	4428 4429	143-53002-1 143-53002-2	Seat Frame - Front LH (includes Lock) Seat Frame - Front RH (includes Lock)	1 1
31	4430	145-53005	Lock Assembly - Front Seat Adjusting	1
32	4431	143-53002-14	Clamp Angle - Front Seat	3
33	4432	143-53004-3	Cushion - Front Seat	1
34	4433	145-53006	Back Assembly - Front Seat	1
35	9336-10	M-5100-40	Safety Belt - Front Seat (Gray)	1
36	4434	143-53003-54	Cushion - Rear Seat	1
37	4434-10	143-53003-202	Cushion - Rear Seat	1
38	4435	143-53003-58	Back Assembly - Rear Seat	1
39	4435-10	143-53003-206	Back Assembly - Rear Seat LH	1
40	4435-20	143-53003-208	Back Assembly - Rear Seat RH	1
41	4449	145-53037	Head Rest - Rear Seat	1
42	4436	145-53016	Clip - Rear Seat Cushion	2
43	4437	145-53054-1	Fitting - Safety Belt Outer	2
44	4438	145-53054-2	Fitting - Safety Belt Center	2
45	4439-10	145-53051-6	Safety Belt - Rear Seat LH (gray)	1
46	4440-10	145-53051-4	Safety Belt - Rear Seat Center (gray)	1
47	4441-10	145-53051-5	Safety Belt - Rear Seat RH (gray)	1
48	4442 9350 9351 9352 9005 9007	143-53003-57 PK88XA-8-8 PL88XA-8-10 2T4830-18 A1778-8Z-3 A1788-8Z-3	Scuff Carpet - Rear Seat Screw - Upholstery Attaching Screw - Upholstery Attaching Washer - Upholstery Attaching Speednut Speednut	1 AR AR AR AR AR
49	4444 4444-10	145-53011-100 145-53011-700	Headliner Assembly- Windshield LH Headliner Assembly - Windshield LH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
50	4445 4445-10	145-53011-200 145-53011-800	Headliner Assembly - Windshield RH Headliner Assembly - Windshield RH	1 1
51	4446	145-53012-SA#1	Headliner Assembly - Canopy	1
52	4447	145-53012-34	Embossed Board - Rear Deck	1
53	4443 4448 9231	143-31001-64 145-53031 49380	Curtain - Baggage Compartment Placard - Canopy Opening Fastener - Carpet (United Carr)	1 1 AR
54	4451	145-53038	Clip - Rear Seat Back	4

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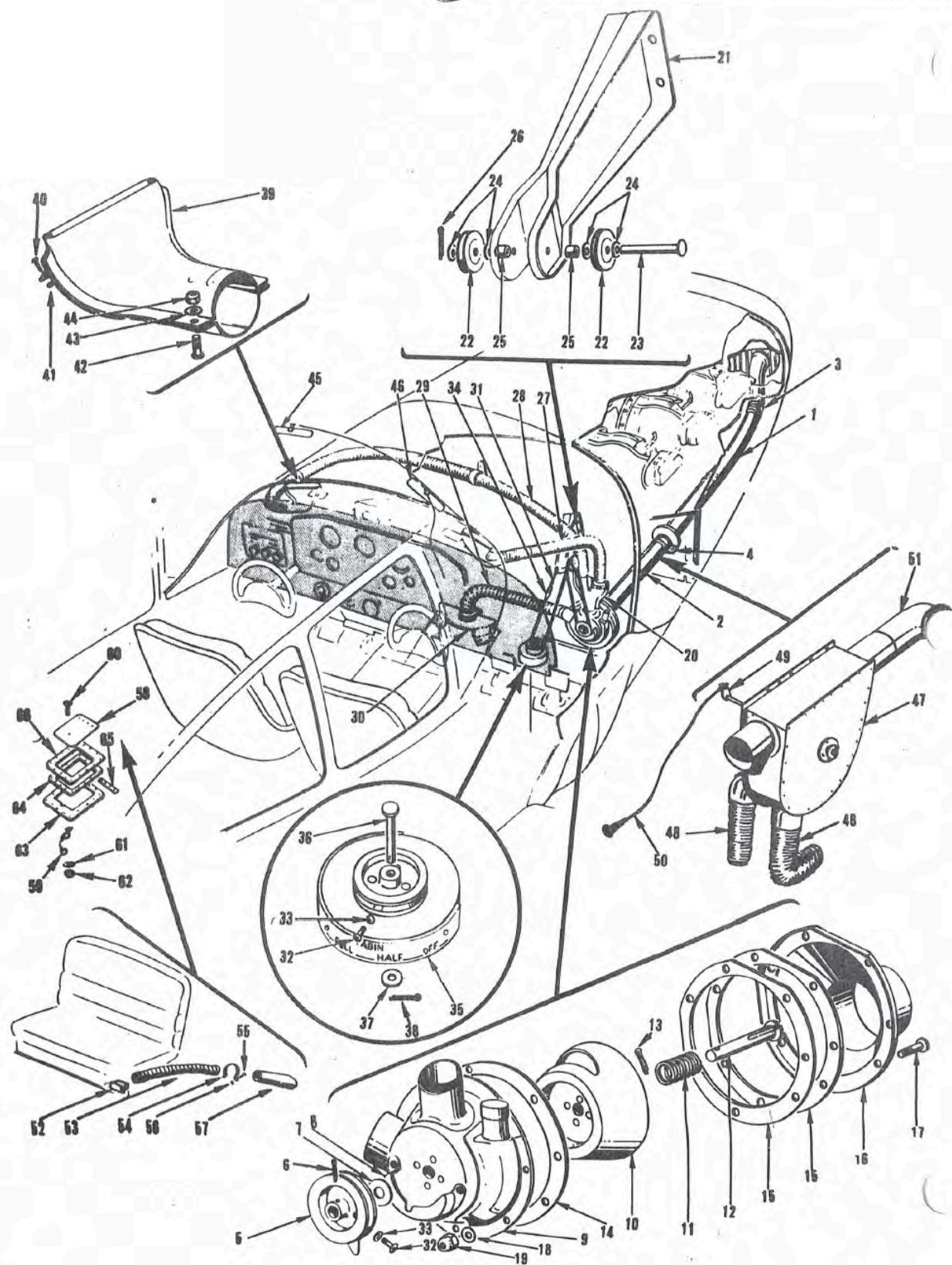


FIGURE 43 - VENTILATING SYSTEM

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4600	145-53301-55	Duct Assembly - Front Vent System	1
2	4601	145-53301-23	Duct Assembly - Aft Vent System	1
3	4602	145-53301-15	Clamp Assembly - Front	1
4	4603	145-53301-16 AN735-40	Clamp Assembly - Center	1
	4628	145-53301-7	Clamp Assembly - Rear	1
			Valve Assembly - Cabin Air Control	1
5	4604	145-53301-10	Pulley Assembly - Cabin Air Valve	1
6		AN380-3-5	Pin - Cotter	1
7		AN960-616	Washer - Plain (Rear Engine Mount)	2
8	4605	145-53301-39	Guard - Cabin Air Valve Pulley	1
9	4606	145-53301-6	Valve Assembly - Outer	1
10	4607	145-53301-V	Valve Assembly - Inner	1
11	4608	145-53313	Spring - Cabin Air Valve System	1
12	4609	145-53310	Shaft - Cabin Air Valve	1
13		AN380-4-5	Pin - Cotter	1
14	4610	145-53301-26	Ring	1
15	4611	145-53301-27	Gasket	2
16	4612	145-53301-14	Adapter Assembly - Cabin Air Inlet	1
17		NAS220-9	Screw	8
18		AN960-8	Washer - Plain	8
19		AN365-832	Nut - Self Locking	8
20	4613	145-53301-8	Adapter Assembly - Cabin Air Outlet	1
21	4614	145-53321 SA#1	Bracket Assembly - Idler Pulley	1
22	4615	145-53319	Pulley	2
23		AN393-84	Pin - Flat Head 3/16	1
24		AN960-10	Washer - Plain	4
25	8325	4S3-10-9	Spacer - Bolt	2
26		AN380-2-2	Cotter	1
27	4616	145-53301-37	Hose - Cabin Air LH	1
28	4617	145-53301-38 AN742D36	Hose - Cabin Air RH Clamp - Loop Type Support	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
29	4618	145-53301-57 AN735D32	Hose - Cabin Air Main AN735D32	1 2
30	4619	145-53324	Diffuser Assembly	1
31	4620	145-53318	Cable Assembly (Less Barrel)	1
32	8431	7S4-6-8	Screw	2
33		AN935-6	Washer - Medium Spring Lock	2
34		AN155-8S	Barrel - Turnbuckle	1
35	4621	145-53316	Control Assembly - Cabin Air	1
36		AN393-46	Pin - Flathead 3/16	1
37		AN960-10	Washer - Plain	1
38		AN380-2-2	Cotter	1
39	4622	145-53301-9	Diffuser Assembly - Windshield	2
40		AN507B632R7	Screw - 100° Flat Head Machine (Coarse Thread)	2
41		AN365B632	Nut - Self Locking	2
42	8436	7S4-10-6	Screw - Round Head	4
43		AN960-10	Washer - Plain	4
44		AN365-1032	Nut - Self Locking	4
45	4626 4626-10	145-53329 145-53329-25	Deflector Assembly - Vent Air LH Deflector Assembly - Vent Air LH	1 1
46	4627 4627-10 4627-20	145-53329-1 145-53329-21 145-53329-23	Deflector Assembly - Vent Air RH Deflector Assembly - Vent Air RH Deflector Assembly - Vent Air RH	1 1 1
47	4629 4634 4635	145-42122 145-42122-28 145-42201-23	Valve Assembly - Cabin Air Mixture Shaft Assembly - Air Mixture Valve Pin - Cabin Air Mixture Valve	1 1 2
48	2011	145-42202	Tube - Flexible	2
49	9460	K-3058	Swivel Assembly	1
50	9477	28231	Control Assembly	1
51	4631	145-53301-63	Tube Assembly - Front Vent System	1
52	4623 4623-10 4632	143-53003-84 143-53003-161 145-53301-9	Vent Assembly - Cabin Air Outlet Vent Frame - Cabin Air Outlet Diffuser Assembly - Windshield	2 2 2
53	4624 4624-10	143-53001-2 145-53339	Hose Assembly - Cabin Air Vent Duct Assembly - Cabin Air Vent	2 2
54		AN735D32	Clamp - Hose	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
55		AN530-8R12	Screw - Sheet Metal Round Head	1
56	9013	A1932-8Z-3	Speednut	1
57	4625	145-10006-18	Tube - Air Outlet	2
58	4638	146-53302-7	Door - Cabin Canopy Ventilator	1
59	4640	146-53303	Spring - Cabin Canopy Ventilator Door	1
60		AN526-1032-7	Screw - Truss Head (Fine Thread)	1
61		AN960-10	Washer - Plain	1
62	9071	26NKM02	Nut - Cap (Elastic Stop Nut)	1
63	4636	146-53302-3	Doubler - Cabin Canopy Ventilator Door Cutout	1
64	4637-10	146-53341-41	Seal - Cabin Canopy Ventilator Door (Rubber)	1
65	4639	146-53302-9	Strip - Cabin Canopy Ventilator Door	1
66	4641	146-53302-11	Doubler - Cabin Canopy Ventilator Door	1

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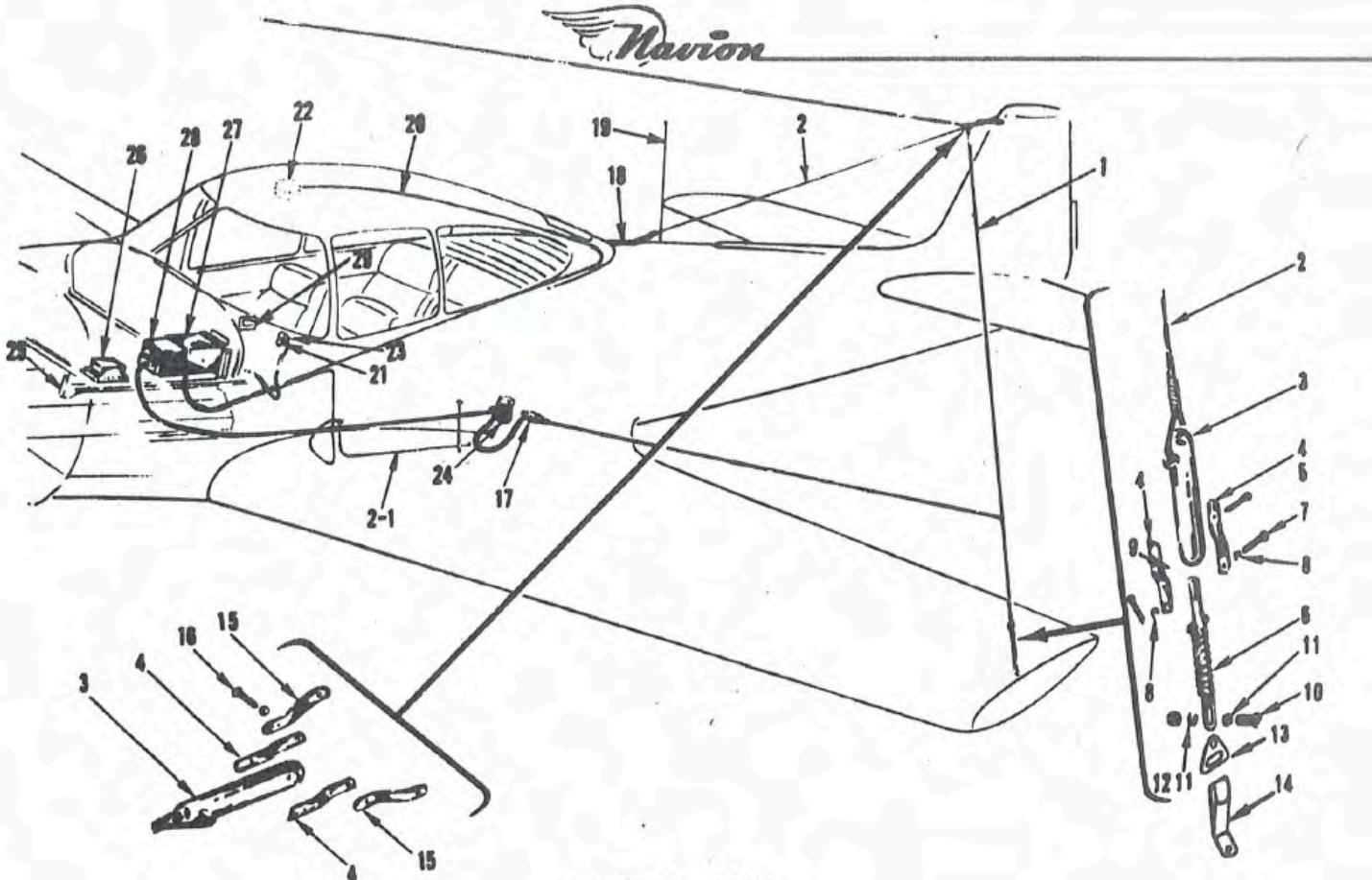


FIGURE 44 - RADIO

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4700	145-71045-10	Antenna Assembly - Complete (GE)	1
2	4700-10	145-71050-7	Antenna Assembly - Complete (RCA)	1
2-1	4709 9358 9358	MI-5905-2 W-106 W-106	MI-5905-2 Wire - Antenna (Price Per 100ft) Wire - Antenna (Price Per 100ft)	1 1 1
3	9359 9359	1419-00 1419-00	Insulator - Antenna (GE) Insulator - Antenna (RCA)	3 2
4	8150 8150	2L6-2 2L6-2	Lug - Insulator Attaching Lug - Insulator Attaching	6 4
5		AN380-3-4	Cotter	1
6	4701 4701	145-71035 145-71035	Spring Assembly - Antenna Tension (GE) Spring Assembly - Antenna Tension (RCA)	2 1
7		AN392-7	Pin - Flat Head 1/8	1
8		AN960-4L	Washer - Plain (Bypass Valve)	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
9		AN380-2-1	Pin - Cotter	2
10		AN515-8R8	Screw - Round Head Machine (Coarse Thread)	1
11		AN960-8	Washer - Plain	2
12		AN365-1032	Nut - Self Locking	1
13	4702	145-71017	Clip - Radio Antenna Attaching	2
14	4703	68-71080	Clip - Antenna Attaching	2
15	4704	145-71044	Clip - Antenna Attaching Vertical Stabilizer	2
16		AN392-9	Pin - Flat Head 1/8	1
17	9360 8527 9287	1060-01 2W1V52-40-40 4300	Insulator - Lead In Washer Terminal Boot	1 1 1
18	4708	145-71050-3	Bracket - Antenna to Fuse Attaching	1
19	9454	M15908-3	Whip Antenna & Lead - VHF (RCA)	1
20	9455	M15907-3	Cable - Power & Audio (RCA)	1
21	4705	145-71040 AN515-8R8	Bracket - Microphone - Headphone	1 2
22	9394 9394-10	PMR-2A MI19578 NAS220-18 NAS43-3-40	Dome Speaker - Canopy (Bendix) Dome Speaker - Canopy (RCA) Screw - Brazier Head NAS43-3-40	1 1 2 2
23	9362	9177	Microphone	1
24	9364	7477670G1	Load Coil - Antenna (GE)	1
25	4706	145-71033	Support - Power Supply	1
26	9366	4AP1A1	Power Supply (GE)	1
27	4707 4707-10	145-71041 145-71020	Support Assembly - Transceiver (GE) Support Assembly - Transceiver	1 1
28	9368 9368-10 9446 9447	7665324G1 MI19655 A1 SCA-2B	Transmitter - Receiver (GE) Transmitter - Receiver (RCA) Phone Jack Microphone Jack	1 1 1 1
29	4711 4712	145-53032-30 145-71211	Card Holder - Radio Frequency Measure Card - Radio Frequency Measure	1 1

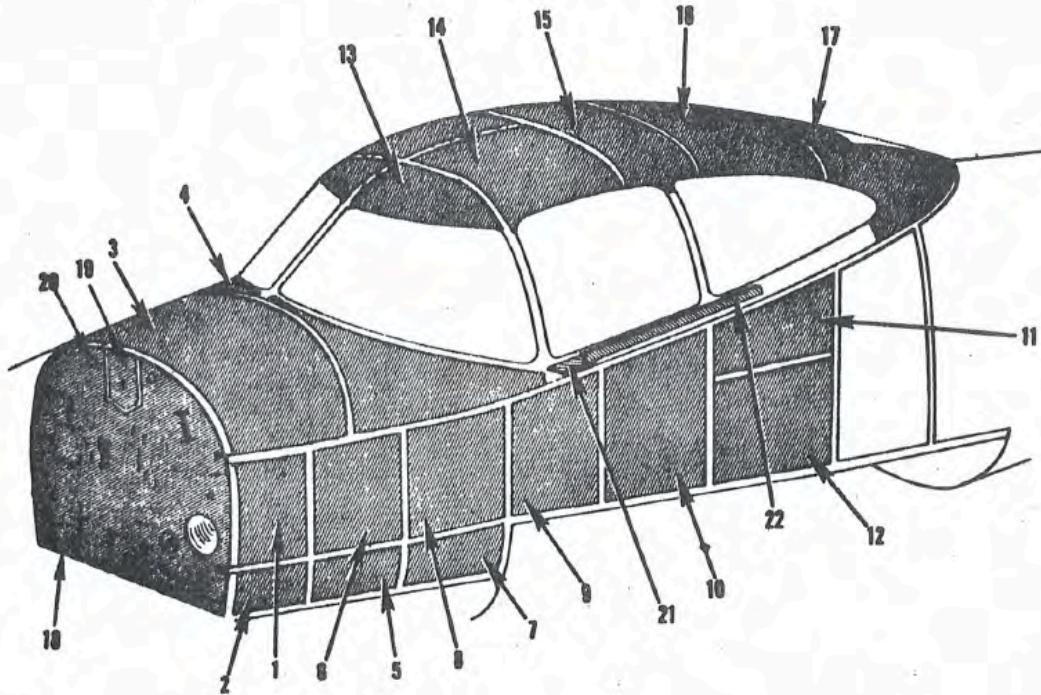


FIGURE 44A - SOUNDPROOFING

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	9481	145-53105-2	Panel - Soundproof Upper Front Deck	2
2	9482	145-53105-4	Panel - Soundproof Station 54 to 65 Lower Front	2
3	9483	145-53105-6	Panel - Soundproof Station 54 to 72.75 Upper Front Deck	1
4	9484 9485	145-53105-8 145-53105-9	Panel - Soundproof Station 72.75 to 100 Upper LH Panel - Soundproof Station 72.75 to 100 Upper RH	1 1
5	9486	145-53105-10	Panel - Soundproof Station 65 to 77 Lower	2
6	9487 9488	145-53105-12 145-53105-13	Panel - Soundproof Station 65 to 77 Center Side LH Panel - Soundproof Station 65 to 77 Center Side RH	1 1
7	9489	145-53105-14	Panel - Soundproof Station 77 to 93.438 Lower	2
8	9490 9491	145-53105-16 145-53105-17	Panel - Soundproof Station 77 to 93.438 Center Side LH Panel - Soundproof Station 77 to 93.438 Center Side RH	1 1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
9	9492 9493	145-53105-18 145-53105-19	Panel - Soundproof Station 93.438 to 106.25 Side LH Panel - Soundproof Station 93.438 to 106.25 Side RH	1 1
10	9494 9495	145-53105-20 145-53105-21	Panel - Soundproof Station 106.25 to 123.437 Side LH Panel - Soundproof Station 106.25 to 123.437 Side RH	1 1
11	9496 9497	145-53105-24 145-53105-25	Panel - Soundproof Station 123.437 to 142.57 Side Upper LH Panel - Soundproof Station 123.437 to 142.57 Side Upper RH	1 1
12	9498 9499	145-53105-32 145-53105-33	Panel - Soundproof Station 123.437 to 142.57 Side Lower LH Panel - Soundproof Station 123.437 to 142.57 Side Lower RH	1 1
13	9500 9501	145-53105-28 145-53105-35	Panel - Soundproof Windshield Headliner LH Panel - Soundproof Windshield Headliner RH	1 1
14	9502 9503	145-53105-37 145-53105-39	Panel - Soundproof Canopy Dome Top Front LH Panel - Soundproof Canopy Dome Top Front RH	1 1
15	9504	145-53105-26	Panel - Soundproof Canopy Dome Top Center Front	1
16	9505	145-53105-40	Panel - Soundproof Canopy Dome Top Center Rear	1
17	9506	145-53105-42	Panel - Soundproof Canopy Dome Top Rear	1
18	9507 9507-10 9507-20	145-53101-2 145-53105-30 145-53105-46	Panel - Soundproof Firewall Panel - Soundproof Firewall Panel - Soundproof Firewall	1 1 1
19	9507-25	145-53105-44	Cover - Soundproof Firewall Access Door	1
20	9509 9005	145-53105-45 AN530-8R8 145-53105-40	Plate - Soundproof Firewall Upper Support Screw - Sheet Metal Round Head Panel - Soundproof Canopy Dome Top Center Rear	2 1 1
21	1653	145-31801-106	Strip - Felt 1/4 x 1.5 x 4.5	2
22	1654	145-31801-108	Strip - Felt 1/4 x 1.5 x 27	2

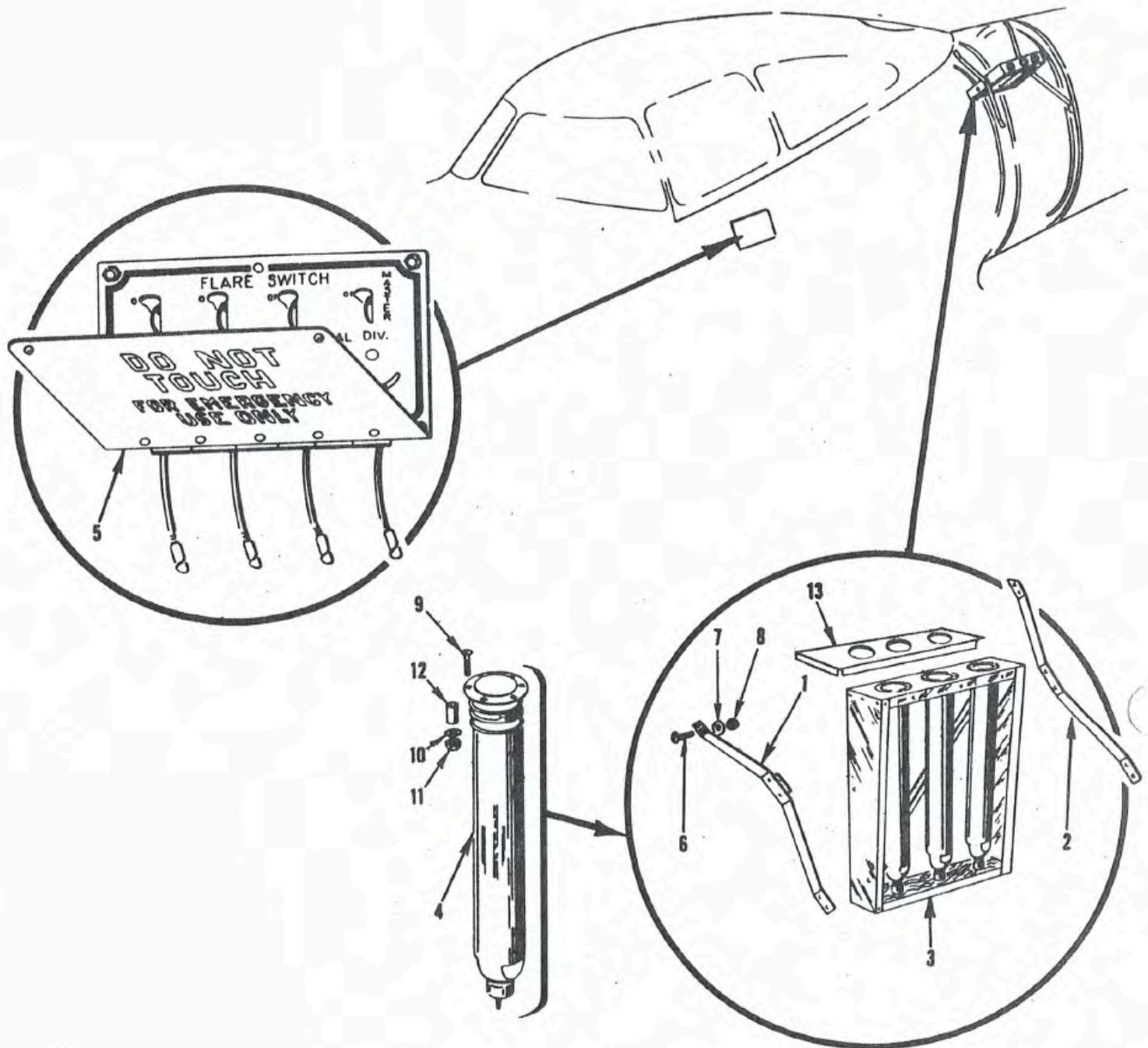
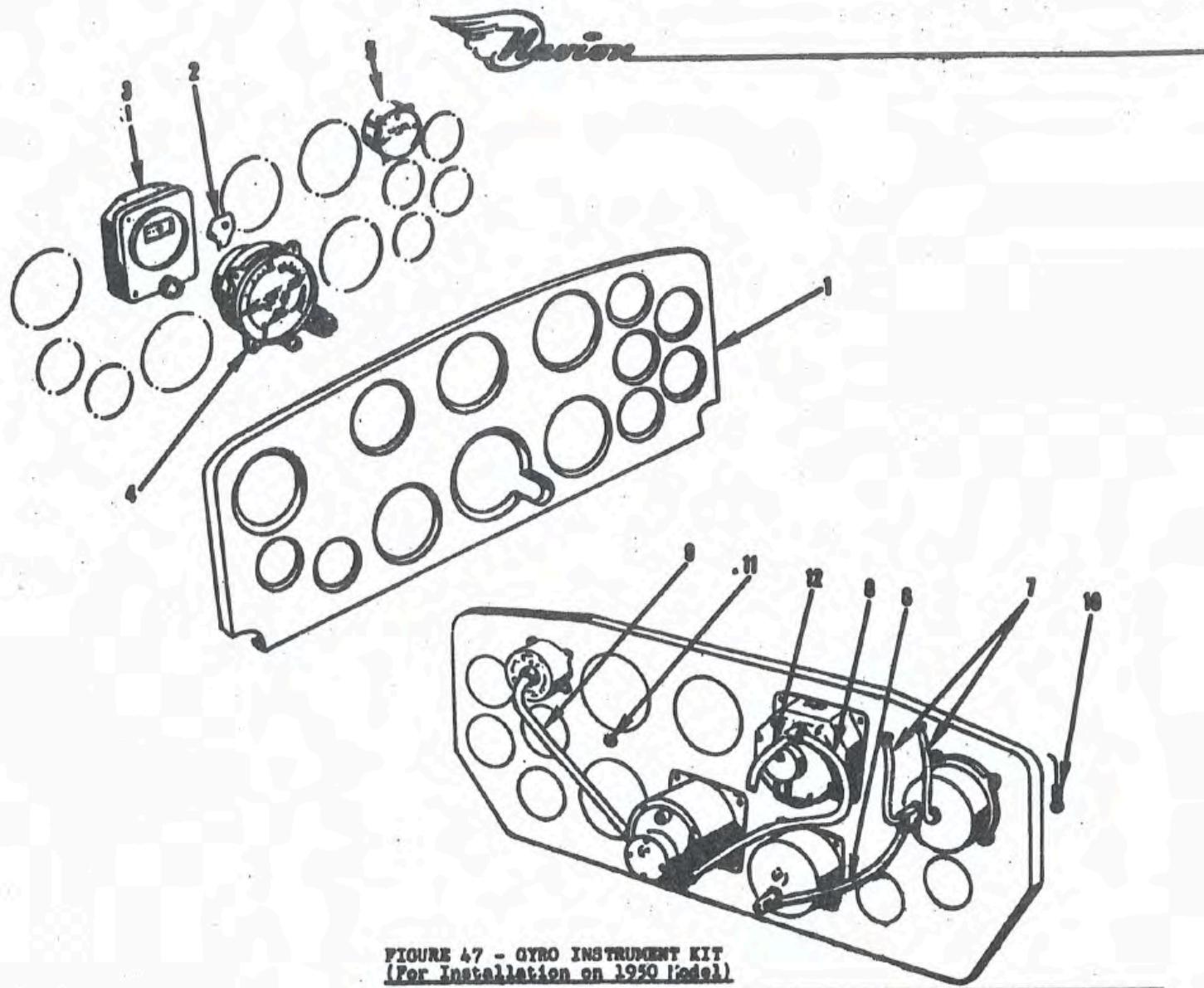


FIGURE 45 - FLARE KIT

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	735-100	145-89002-100	Kit - Flare Complete	1
	735	145-89002	Kit - Flare Complete	1
		No Number	Navion Special Instructions No. 6	1
1	735-1	145-65008	Bracket - Flare Kit Forward Support	1
2	735-2	145-65009	Bracket - Flare Kit Rear Support	1
3	735-3	145-65010	Flare Assembly - (Rework)	1
4	9420	E15KF	Flare - Mark 1. Model 1	3
5	735-4	145-54040	Switch Assembly - Flares	1
6	9297	31770	Terminal Wire	4
7	8436	7S4-10-6	Screw - Round Head	12
8		AN960-10	Washer - Plain	12
9		AN365-1032	Nut - Self Locking	12
10		NAS220-13	Screw (For Whittaker Valve Only)	18
11		AN960D8	Washer - Plain	18
12		AN365-1032	Nut - Self Locking	18
13	8375	4S4D5-8	Spacer	18
14	735-5	145-31111 AN530-8-8	Doubler - Skin Cut Out Screw - Sheet Metal Round Head	1 7



KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	717-100	145-89088	Gyro Instrument Kit - Complete with Instructions	Ref
	717-200	145-89088-100	Gyro Instrument Kit (Without Instructions)	Ref
1	717-105	145-51080	Reflector Panel	1
2	717-110	145-51081	Light Reflector - Direction Gyro	1
3	9269	649742	Directional Gyro (Sperry)	1
4	9441	645391	Horizon Gyro (Sperry)	1
5	9268	AW1-7/8-21L	Suction Gage (U.S. Gauge)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
6	717-115 9464	145-89088-2 100X4	Line Assembly - Altimeter to Air Speed Indicator Nut	1 2
7	717-120 9464	145-89088-4 100X4	Line Assembly - Air Speed Indicator Nut	2 2
8	717-125 9465	145-89088-8 100x6	Line Assembly - Directional Gyro to Gyro Horizon Nut	1 2
9	717-130 9464	145-89088-10 100X4	Line Assembly - Gyro Horizon to Suction Gauge Nut	1 2
10	717-135 9053 9472	145-89088-12 #53 #704	Light Assembly Lamp - 12 Volt 0.11 Amp Red Socket - Miniature Bayonet	1 1 1
11	717-140	145-89088-14	Seal - Light	1
12	9088 9123 9134 9468 9143 9404  8376 8380	145-58030 200X8 400X6 434X4 752X6 3200X4 AN515B6R12 AN520B10R12 AN520B10R14 NAS200-632BC12 NAS200-632BC12 4S4D5-12 4S4D6-12	Hose Assembly - Reservoir to Pump Connector Elbow - 90° Inverted Male Elbow Tee Adapter - Pipe Screw - Phillips Recess Round Head Brass Screw - Round Head Machine (Fine Thread) Screw - Round Head Machine (Fine Thread) Screw Screw Spacer Spacer	1 3 1 1 1 1 4 4 2 5 1 5 1

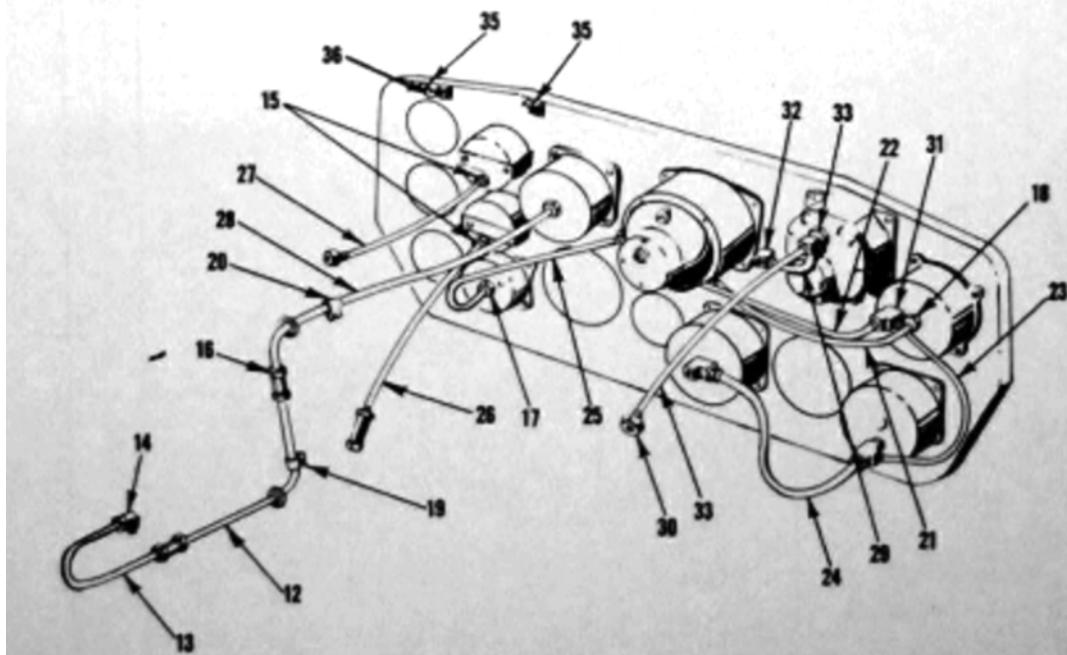
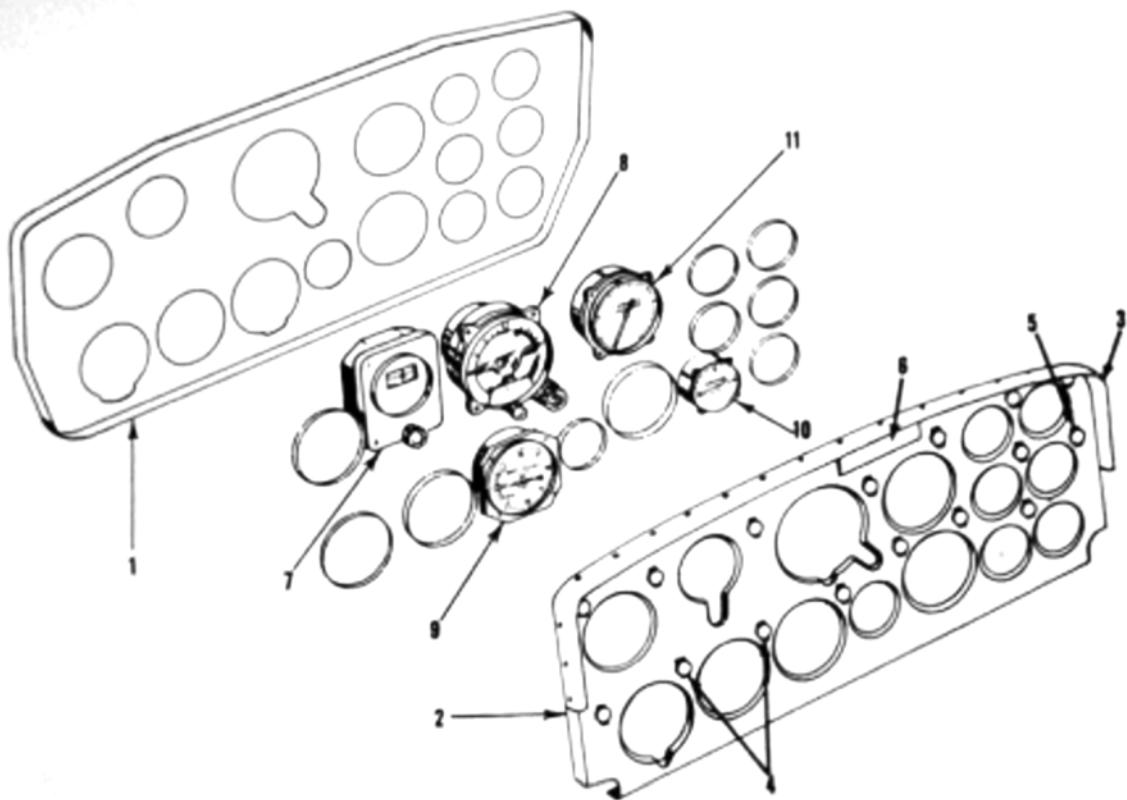


FIGURE 48 - GYRO INSTRUMENT KIT  
AIR FORCE TYPE PANEL

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	716-300	145-89074-10	Kit Assembly - Air Force Type Gyro (with Instruments)	1
	716-400	145-89074-20	Kit Assembly - Air Force Type Gyro (without Instruments)	1
1	716-1 716-2	145-51065 145-51066	Panel Assembly - Instrument Reflector Assembly - Panel	1 1
2	716-15	145-51066-2	Panel - Reflector	1
3	716-4	145-51077	Coaming - Anti Glare	1
4	9511 9512 9513	A-2870A1 A-2877-1-2V 145-51066-20	Socket - Assembly Panel Lights Lamp - Panel 12 Volts Washer - Insulating	15 15 15
5	9514	A-2953	Lamp Holder - Spare	1
6	9515 9275 8376	R88-H-500 AN515-B4R8 AN365B440 R88C200 AN507B632R15 4S4D5-12	Holder - Compass Card Screw Nut - Self Locking Card - Compass Correction Screw - 100° Flat Head Machine Spacer	1 2 2 1 5 5
7	9269	649742	Directional Gyro (Sperry)	1
8	9441	645391	Horizon Gyro (Sperry)	1
9	9264	991-18-01	Vertical Speed Indicator (Kollsman)	1
10	9268	AW1-7/8-21L	Suction Gage (U.S. Gauge)	1
11	9474	990-23-01	Gauge - Manifold Pressure	1
12	3722	145-89062-14	Line Assembly - Connector to Connector	1
13	9092	145-44017	Hose Assembly - Engine Oil to Propeller LH	1
14	9133	400X4	Elbow - 90° Inverted Male	1
15	9126	250X4	Connector - Inverted Female	1
16	9119	105X4 AN931-4-12 AN931-4-7	Nut Grommet - Elastic Grommet - Elastic	2 1 1
17	9128	300X4	Union	1
18	9121	200X4	Connector - Inverted Male	1
19		AN742-4C AN515-8-14 AN365-832 AN366F832	Clip - Loop Type Support Screw - Round Head Machine (Coarse Thread) Nut - Self Locking Nut - Plate	2 3 2 1
20	716-3	145-89062-12 AN515B8R14	Clip Screw - Round Head Machine (Coarse Thread)	1 4

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	9475	AN365B832 PW50D-4-35	Nut - Self Locking Rheostat (Clarostat)	4 1
21	716-5	145-51073-2	Line Assembly - Airspeed Indicator to Union	1
22	716-6	145-51073-4	Line Assembly - Airspeed Indicator to Union	1
23	716-7	145-51073-6	Line Assembly - Airspeed Indicator to Altimeter	1
24	716-8	145-51073-8	Line Assembly - Altimeter to Vertical Speed Indicator	1
25	716-9	145-51073-10	Line Assembly - Suction Gauge to Horizon Gyro	1
26	716-10	145-51073-12	Line Assembly - Oil Pressure Indicator to Union	1
27	716-11	145-51073-14	Line Assembly - Fuel Pressure Indicator to Union	1
28	716-12	145-51073-22	Line Assembly - Manifold Pressure Gauge	1
29	716-13 9120 9119 9121	145-51073-28 105X6 105X4 200X4	Line Assembly - Directional Gyro to Elbow Nut Nut Connector - Inverted Male	1 2 16 2
30	9466 9126 9476 9128 9134	236X6 250X4 252X8 300X4 400X6	Connector Connector - Inverted Female Connector Union Elbow - 90° Inverted Male	1 2 1 5 1
31	9142	752x4	Tee - Inverted	2
32	9143	752X6	Tee	1
33	9404	3200X4	Adapter - Pipe	1
34	9088	145-58030	Hose Assembly - Reservoir to Pump	1
35	716-14	145-51065-8	Clip - Isolator	2
36	9273 9019 9022  8376	275-5 6939-632-062 6939-632-375 NAS200-632BC12 4S4D5-12 AN515B6R12 AN520B10R12 AN520B10R14 AN3-6A AN960A10 AN365-1032 AN960A616L AN515B6R6	Isolator - Vibration Nut Nut Screw Spacer Screw - Phillips Recess Round Head Brass Screw - Round Head Machine (Fine Thread) Screw - Round Head Machine (Fine Thread) Bolt - Aircraft #10-32 Washer - Plain Nut - Self Locking Washer - Plain Screw - Round Head Machine (Coarse Thread)	10 7 4 5 5 8 3 4 10 20 10 6 2

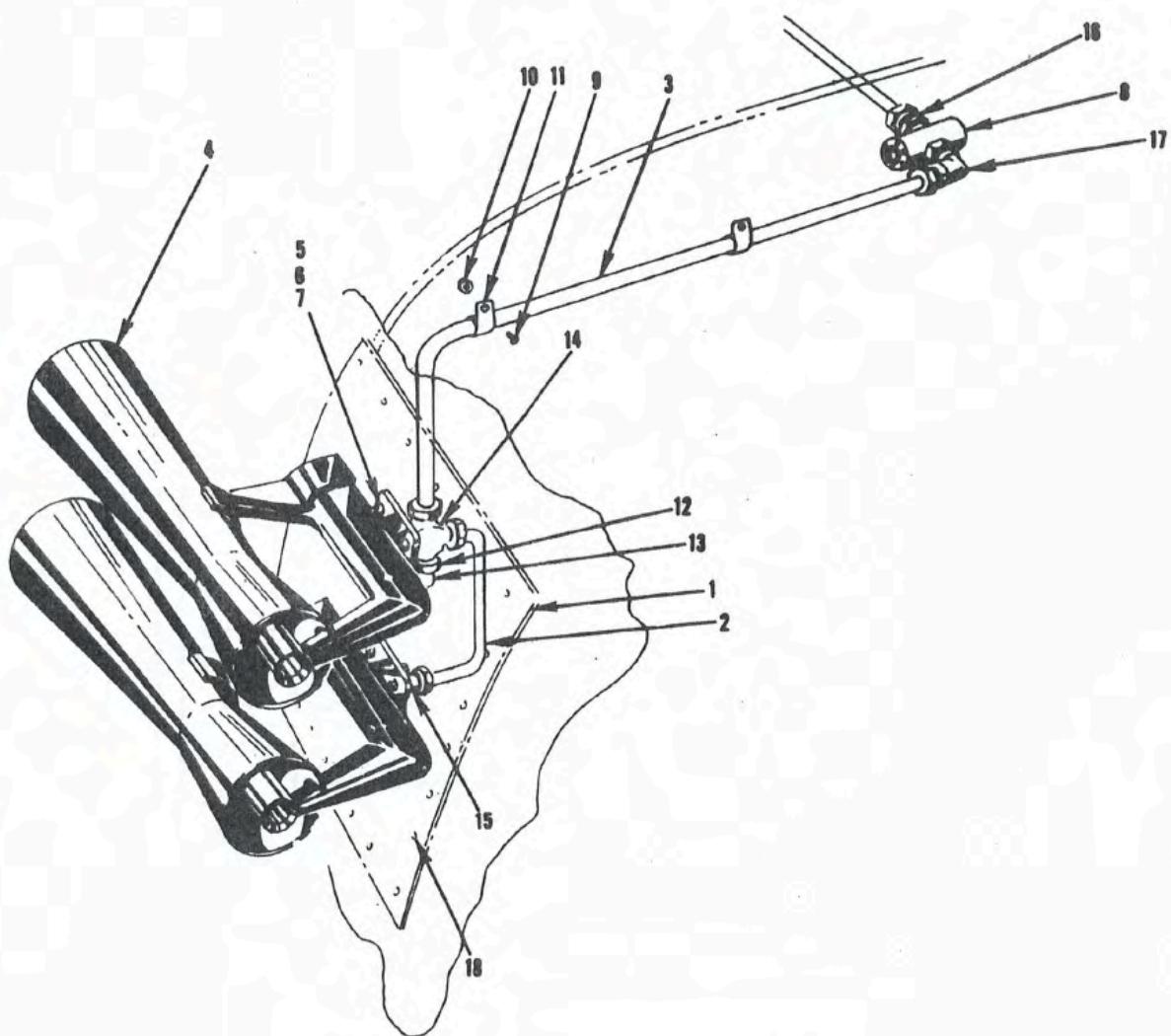
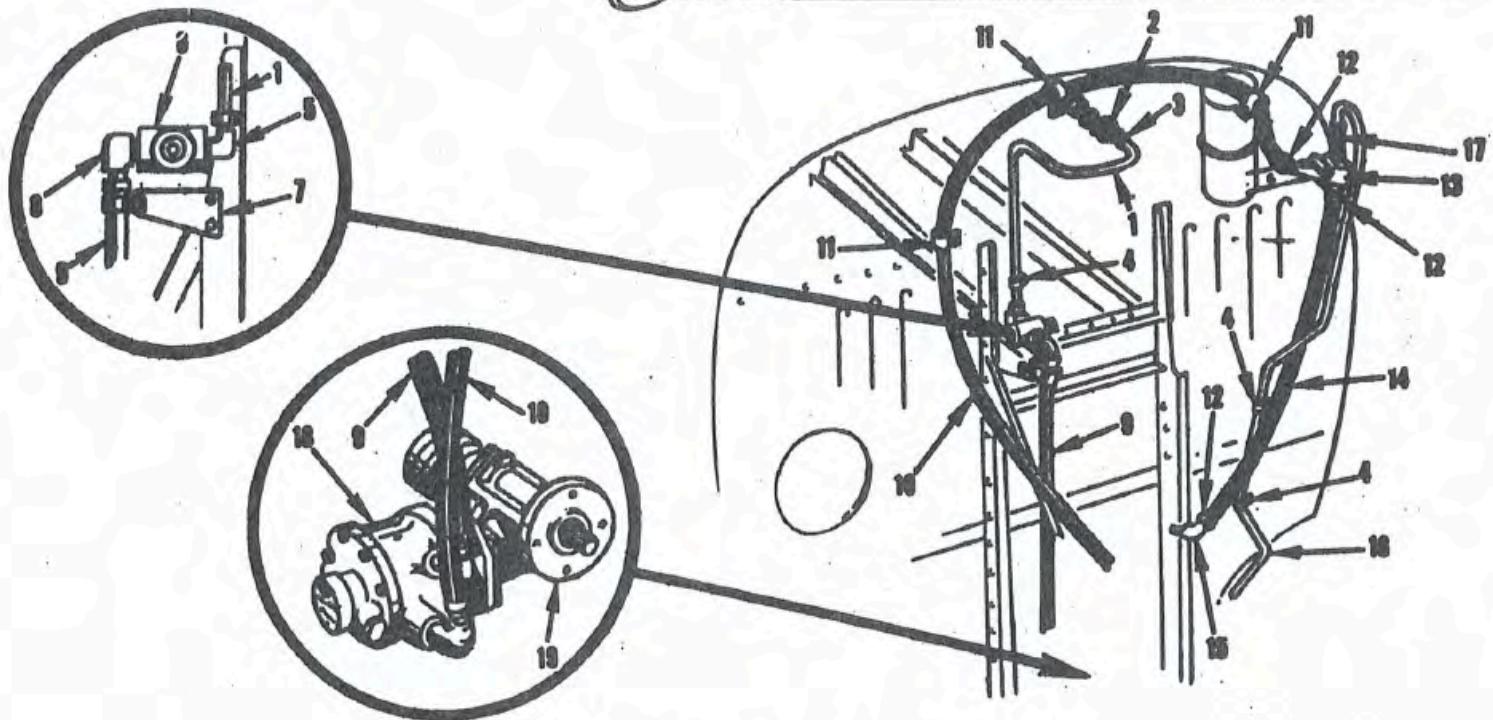


FIGURE 49 - VENTURI TUBE ACCESSORY

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	720	145-89066	Kit - Venturi Vac System (Double Tube)	1
	721	145-89066-100	Kit - Venturi Vac System (Single Tube)	1
1	720-100	145-89066-6	Doubler	1
2	720-105	145-53801-37	Line Assembly	1
3	720-110	145-53801-39	Line Assembly	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
4	9473	AN5807-1	Venturi Tube	2
5		AN526-1032R10	Screw - Truss Head (Coarse & Fine Thread)	8
6		AN960-10	Washer - Plain	8
7		AN365-1032	Nut - Self Locking	8
8	9434	AN6119-1	Vacuum Relief Valve (Romec)	1
9		AN530-8R8	Screw - Sheet Metal Round Head	2
10	9005	A1778-8Z-3	Speednut	2
11	9233	A2980-8	Clamp	2
12	9471	3206X4	Adapter	1
13	9402	3400X4	Elbow	1
14	9470	752X8	Tee	1
15	9469	434X8	Elbow	1
16	9466	236X6	Connector	1
17	9467	400X8	Elbow	1
18	8208	2R1AD4-5	Rivet	12



**FIGURE 50 - GYRO VACUUM PUMP DRIVE**

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	718	145-89074-50	Kit - Vacuum Pump Drive (Less "Y" Drive)	Ref
1	718-1	145-51801-41	Line Assembly - Instrument Vacuum	1
2		AN931-8-13	Grommet - Elastic	1
3	9218	766-8R	Clamp - Bulkhead Line	1
4	9233 9234	A2980-8 766-9	Clamp Clamp - (When Heater is Used)	3 1
5	9467	400X8	Elbow	1
6	9434 9434-10 9434-20	A 507 D (AN6119-1) 3 V 195 (AN6119-1) RB 2210 (AN611901)	Vacuum Relief Valve (Aro) Vacuum Relief Valve (Pesco) Vacuum Relief Valve (Romec)	1 Ref Ref
7	715-4	145-51052	Bracket - Vacuum Relief Valve Support	1
8		AN842-8D	Elbow - 90 Degrees (Vacuum Pump & Relief Valve Outlet)	3
9		AN-H-35-8-50	Hose - 1/2 ID x 12 1/2 (Relief Valve to Pump)	1
10		AN-H-35-8-224	Hose - 1/2 ID x 56 (Pump to Oil Separator Inlet)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
11		AN742-16C	Clamp - Loop Type Support	3
12	9073	A3122-12-59	Clamp	8
13	9432 9432-10 9432-20	AN6121-1 RB 2324 (AN6121-1) D73138 (AN6121-1)	Separator - Vacuum Oil (Pesco) Separator - Vacuum Oil (Romec) Separator - Vacuum Oil (Eclipse)	1 Ref Ref
14		AN-H-35-8-96	Hose - 1/2 ID x 24 (Oil Separator to Engine Sump)	1
15	715-11	145-51064 AN844-8D AN912-4D	Fitting Elbow - 45 Degrees Pipe Thread and Hose Bushing - Reducer	1 Ref Ref
16	718-2	145-51801-43	Line - Oil Separator to Air Vent	1
17		AN-H-35-8-10	Hose - 1/2 ID x 2 1/2 (Air Vent Line Connecting)	1
18	9430 9430-10	A 513 DB (AN6110-1) RB 3870B (AN6110-1)	Pump - Engine Driven Vacuum (Aro) Pump - Engine Driven Vacuum (Romeo)	1 Ref
19	9550	C-192-2	Drive - Engine Driven Accessory "T"	1

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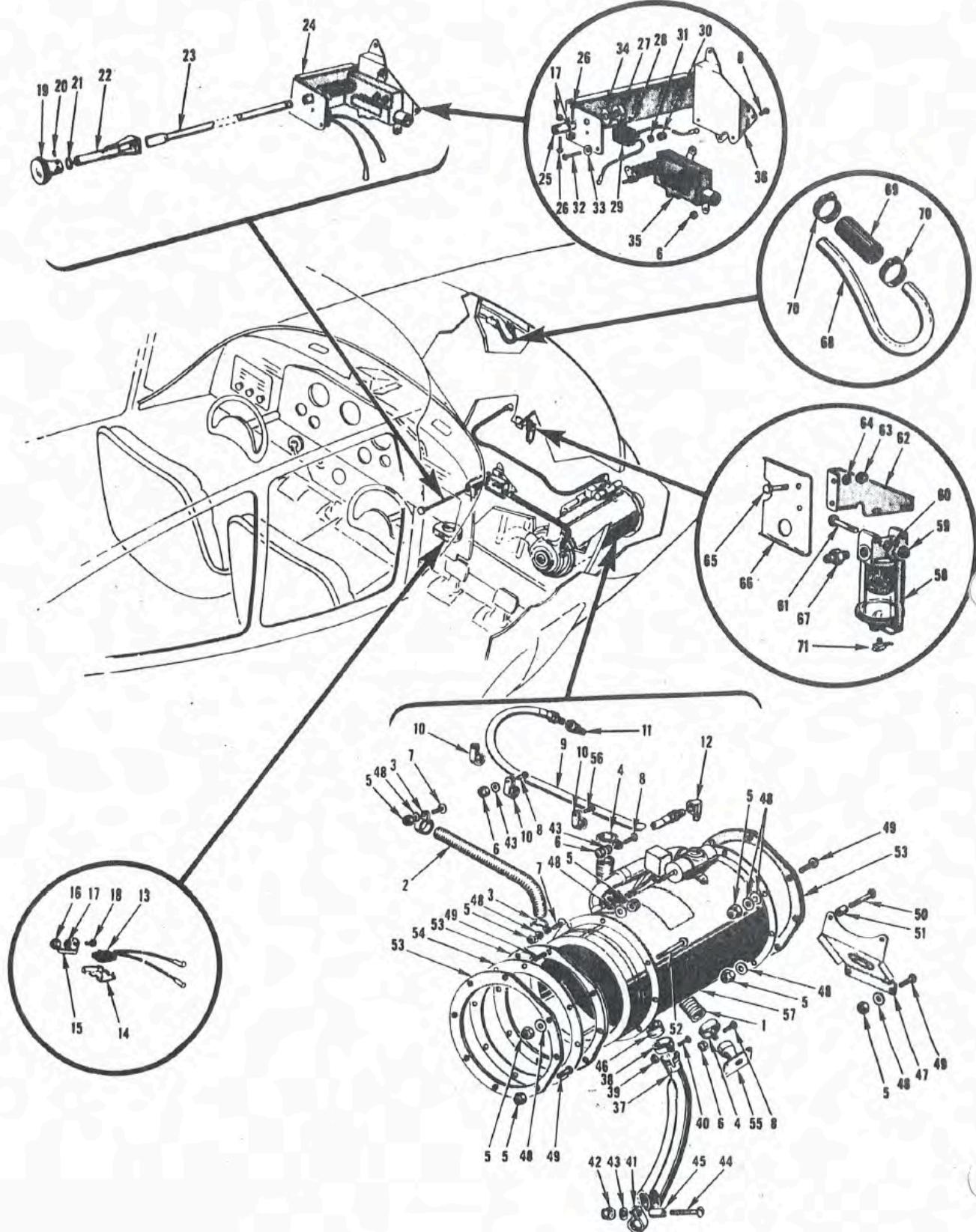


FIGURE 51 - HEATER KIT

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	700	145-89006	Heater Kit - Complete	1
	701	145-89006-10	Heater Kit - Complete	1
		No Number	Navion Special Instruction No. 5	1
1	9415	9AX (2"IDx22 1/4"L)	Hose - Flexible	1
2	9416	9AX (1"IDx12"L)	Hose - Flexible	1
3		AN735-18	Clamp - Loop Type Bonding	2
4		AN735-32	Clamp - Loop Type Bonding	2
5		AN365-932	Nut - Self Locking	26
6		AN365-1032	Nut - Self Locking	7
7		AN515-8R10	Screw - Round Head Machine (Coarse Thread)	2
8		AN520-8R8	Screw - Round Head Machine (Fine Thread)	4
9	700-2	145-53327	Hose Assembly - Heater Fuel	1
10		AN742-9C	Clamp	3
11	9131	352X4	Elbow - 45 Degrees	1
12	9133	400X4	Elbow - 90° Inverted Male	1
13	700-3	145-54035-4	Switch Assembly - Heater Control	1
14	700-4	145-53328	Actuatinguator Assembly - Micro Switch	1
15	700-5	145-53309	Shaft Assembly - Thermostat Control	1
16		AN365-632	Nut - Self Locking	1
17		AN960-6L	Washer - Plain	1
18		AN515-6R6	Screw - Round Head Machine (Coarse Thread)	1
19	4319	145-51061-5	Knob - Instrument Panel Control	1
20		AN565D6-3	Set Screw	2
21		AN6227-5	Packing - "O" Ring Hydraulic	1
22	700-6	145-53331	Shaft Assembly - Thermostat Control	1
23	700-7	145-53305	Rod Assembly - Thermostat Control	1
24	700-8	145-53304	Thermostat Assembly	1
25	700-9	145-53304-3	Adapter - ThermoStationt	1
26		AN515-6-10	Screw	1
27	700-10	145-53302	Cam Assembly (Includes Set Screw)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	700-19	13835-7	Cam Assembly (Welded)	1
28		AN565D8H3	Set Screw - Cam	1
29	700-11	145-54035-3	Switch Assembly - Heater Control	1
30		AN340-2	Nut - Light Hexagon Coarse Thread	3
31		AN935-2L	Lockwasher	3
32		AN515-2R8	Screw - Round Head Machine (Coarse Thread)	2
33		AN960-3	Washer - Plain	2
34		AN960-616	Washer - Plain (Rear Engine Mount)	1
35	9418	933A	Thermostat (Southwind)	1
36	700-12	145-53306	Bracket Assembly - Thermostat Support	1
37	700-13	145-53303	Exhaust Assembly - Heater	1
38		AN741-13P	Clamp - Tube	1
39		AN363-428	Nut - Self Locking	1
40		AN4-7A	Bolt - Aircraft 1/4-28	1
41		AN742-24	Clamp - Loop Type Support	1
42		AN363-1032	Nut - Self Locking (High Temperature)	1
43		AN960-10	Washer - Plain	6
44		AN520-10R32	Screw - Round Head Machine (Fine Thread)	1
45	8330	4S3-10-28	Spacer	2
46	9417	7A (1 1/2"IDX1"L)	Exhaust Seal - Heater	1
47	700-14	145-53308	Support - Heater	1
48		AN960-8	Washer - Plain	31
49		AN515-8R8	Screw - Round Head Machine (Coarse Thread)	18
50		AN515-8R12	Screw - Round Head Machine (Coarse Thread)	2
51	8319	2R1AD5-10	Spacer	2
52		NAS220-30	Screw	4
53	4611	145-53301-27	Gasket	3
54	4610	145-53301-26	Ring	1
55	700-17	145-53314	Adapter Assembly - Air Inlet	1
56		AN520-10R10	Screw - Round Head Machine (Fine Thread)	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
57	700-18 9419	145-53315 977-B	Heater Assembly Heater (Southwind)	1 1
58	9177	K2250B-2	Strainer - Fuel	1
59		AN365-428	Nut - Self Locking	1
60		AN960-416	Washer - Plain	2
61		AN4-13A	Bolt - Aircraft 1/4-28	2
62	2310	145-48051	Bracket Assembly - Fuel Strain Support	2
63		AN365-1032	Nut - Self Locking	2
64		AN960-10	Washer - Plain	2
65		AN3-4A	Bolt - Aircraft #10-32	2
66	1479	145-31005-16	Doubler - Strainer Bracket	1
67	9147	3325X4	Nipple	1
68	701-1	145-48803	Line - Overboard Vent Connecting	1
69		AN-H-35-8-13		1
70	9074	A3122-14-59	Clamp (Tinnerman)	2
71	9182 9324	W7600-1/8 3AG-20AMP	Drain Cock - Self Locking Type Fuse	1 2

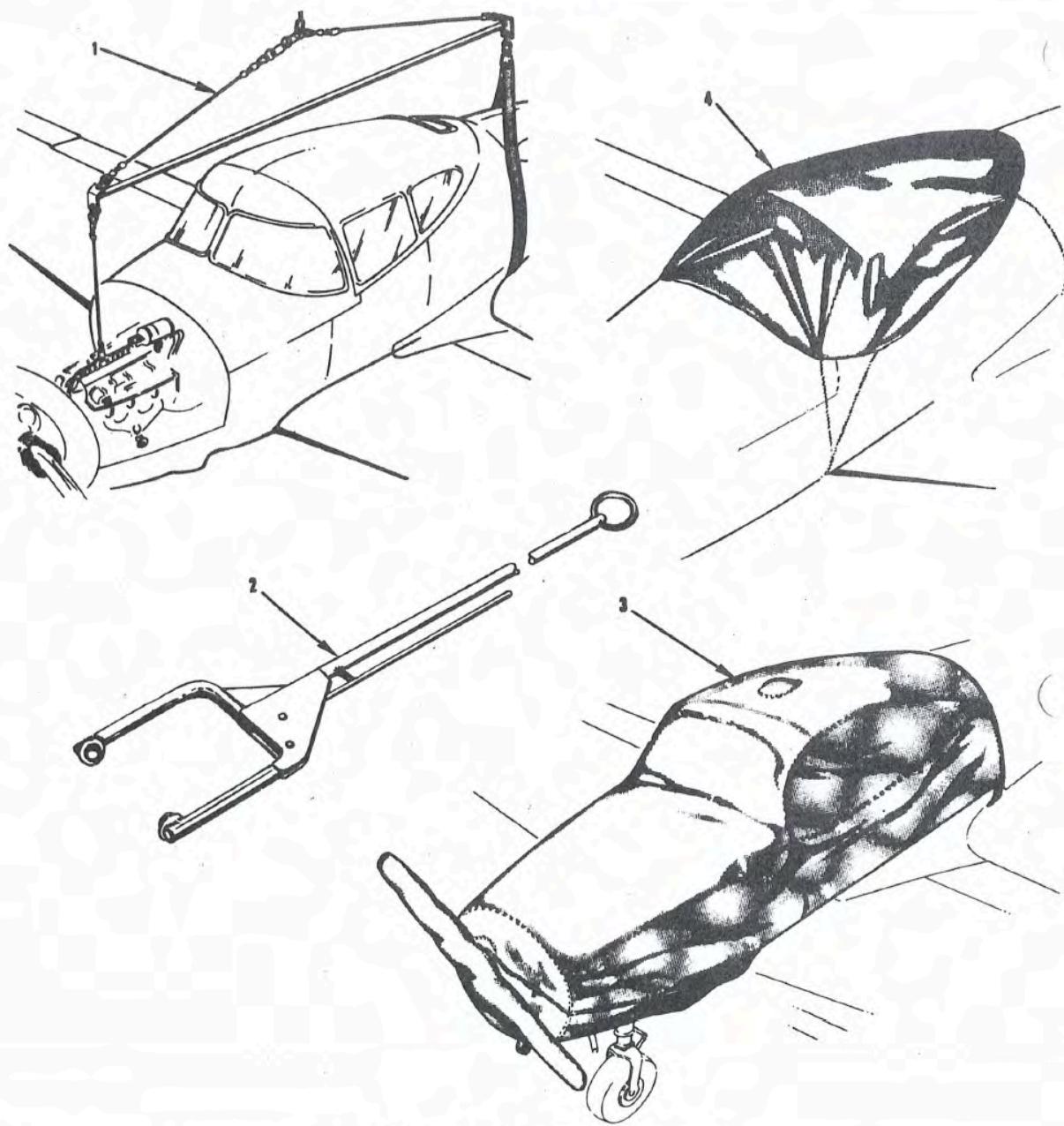


FIGURE 52 - GROUND HANDLING EQUIPMENT

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4801	145-55001	Sling Assembly - Fuse or Complete Hoisting	
2	4814	154-55010	Tow Bar	
3	760 760-100 761 761-100	AeroTrans AeroTrans AeroTrans AeroTrans	Kit - "All in One Cover" (Blue-Green Drill Fabric) Kit - "All in One Cover" (Blue-Green Drill Fabric) Kit - "All in One Cover" (Silver Vinyl Coated Fabric) Kit - "All in One Cover" (Silver Vinyl Coated Fabric)	

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
4	762 762-100	CC601 CC602	Kit - Canopy Cover (Silver Vinyl Coated Fabric) Kit - Canopy Cover (Silver Vinyl Coated Fabric)	

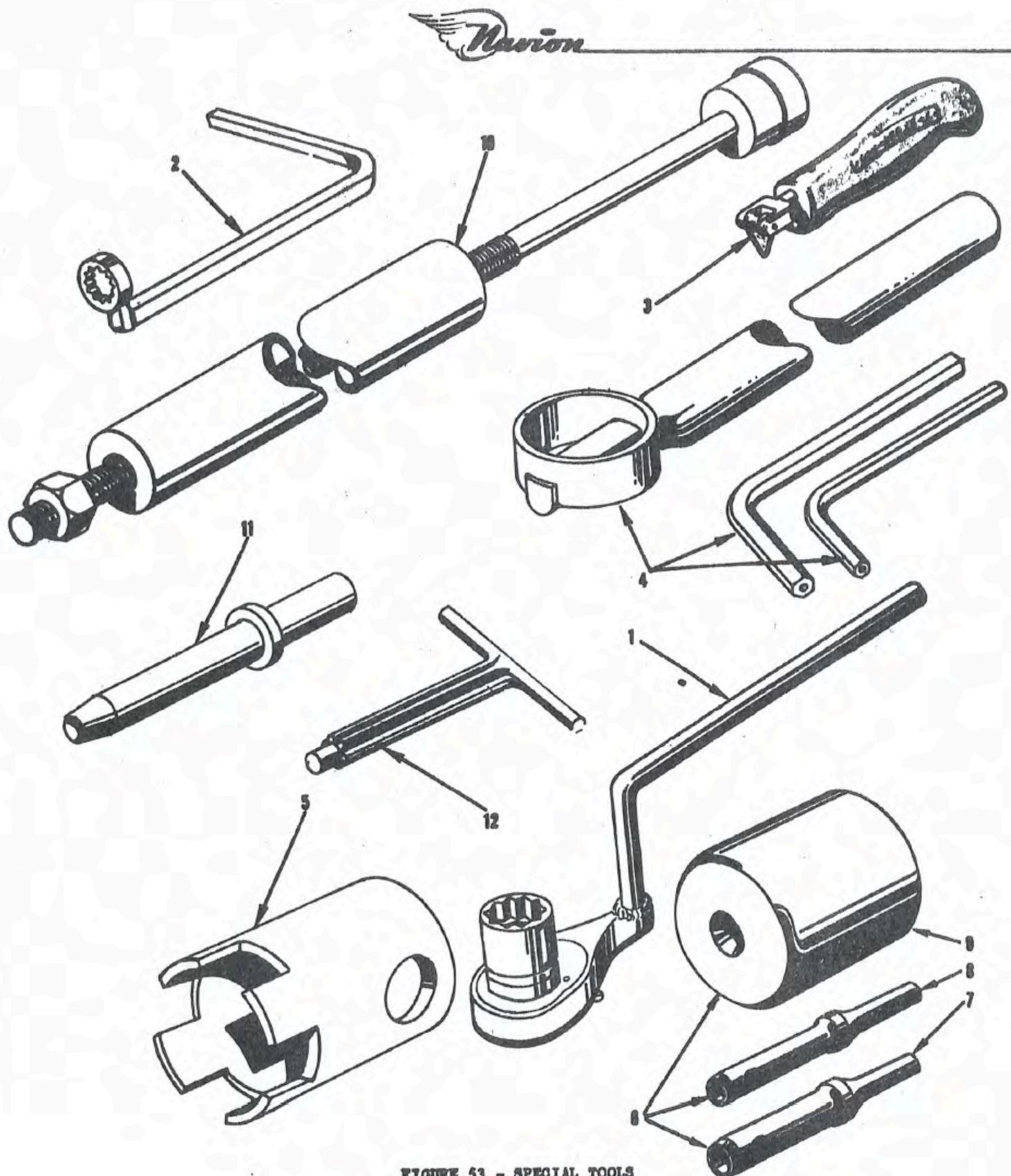


FIGURE 53 - SPECIAL TOOLS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	4802	RST8004	Wrench - Trunnion Shaft Nut	
2	4803-10	145-53103	Wrench - Generator Mounting Nut	
3	4804	T97537	Tool - Cockpit Enclosure Window	
4	4805	145-53084	Wrench Set - Propeller	
5	4805-10	154-53004	Wrench - Propeller Retaining Nut	
6	4809	No Number	Tool Kit - Hi - Shear Rivet	
7	4810	3/16 (-6)	Gun Tool Straight 3 1/2" long	
8	4811	1/4 (-8)	Gun Tool Straight 3 1/2" long	
9	4812	Type 1	Buching Bar - 3/16 & 1/4	
10	4813	145-53104	Extractor - Nose Wheel Shaft	
11	4815 4816 4817 4818	AT-100-5-2R1-3 AT-100-5-2R1-4 AT-100-5-2R1-5 AT-100-5SP-2R1-6	Rivet Gun Set - Braz Riv (3/32) Rivet Gun Set - Braz Riv (1/8) Rivet Gun Set - Braz Riv (5/32) Rivet Gun Set - Braz Riv (3/16)	
12	4820	145-53107	Key - Fuel Level Transmitter	

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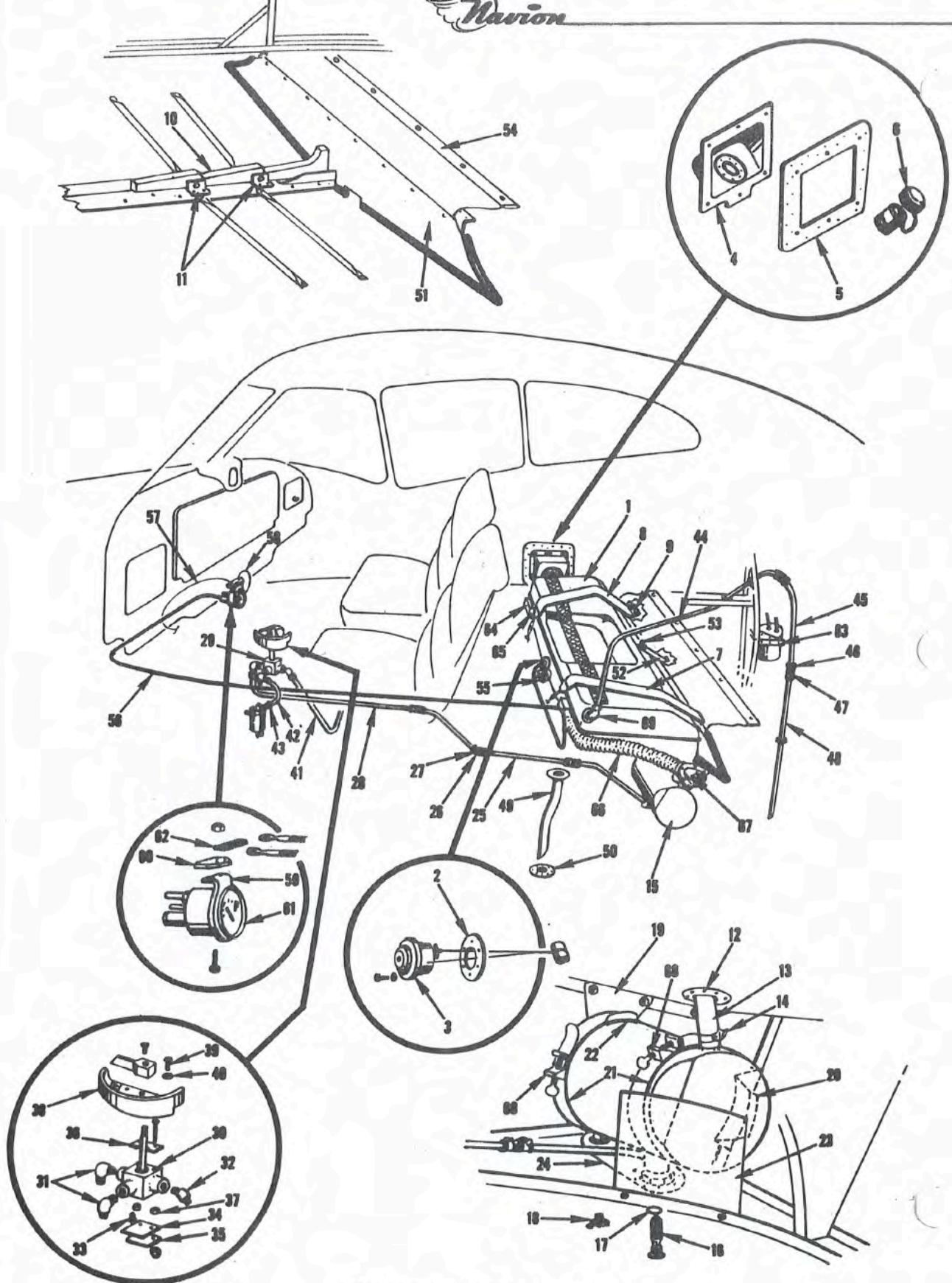


FIGURE 54 - AUXILIARY FUEL TANK KIT  
(Underseat Type)

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY A	UNITS PER ASSY B
	746	145-89067-150	Kit - Auxiliary Fuel Tank (Underseat Type)	A	
	746-100	145-89067-300	Kit - Auxiliary Fuel Tank (Underseat Type)	B	
1	746-1	145-48304	Tank Assembly - Auxiliary Fuel	1	1
2	3719-10	145-48237	Gasket - Fuel Transmitter	1	1
3	746-2	145-51071-4 AN503-10-10 AN960-10	Transmitter Assembly - Fuel Level Screw - Drilled Fillister Head Machine (Coarse Thread) Washer - Plain	1 6 6	1 6 6
4	746-3	145-89067 SA 2	Scupper Assembly - Fuel Tank	1	1
5	746-4	145-89067 SA 6	Doubler Assembly - Fuel Tank Supply	1	1
6	9175	42B3581	Cap & Adapter Assembly	1	1
7	746-5	145-48241-1	Strap - Assembly Auxiliary Fuel Tank	1	1
8	746-6	145-48241-2	Strap - Assembly Auxiliary Fuel Tank	1	1
9	746-7	145-89067-5	Doubler - Auxiliary Fuel Tank Strap Bolting	2	2
10	746-8	145-48240	Cradle Assembly - Fuel Tank Supply	1	1
11	746-9	145-89067-53	Bracket - Auxiliary Fuel Tank Cradle Support	4	4
12	746-10	145-89067-145	Doubler - Auxiliary Fuel Tank Upper Wing Skin	1	1
13	746-11	145-89067-114	Hose - Auxiliary Fuel Tank Connecting	1	1
14		AN748-46	Clamp - Hose	2	2
15	746-12	145-48239	Tank Assembly - Auxiliary Fuel Accumulator Complete	1	1
16	2308	145-48016	Screen Assembly - Accumulator Tank Outlet	1	1
17		AN900-16	Gasket - Asbestos Annul	1	1
18	9182	W7600-1/8	Drain Cock - Self Locking Type	1	1
19	746-13	145-48077-3	Bracket - Fuel Tank Sup Outer	1	1
20	746-14	145-48077-4	Bracket - Fuel Tank Sup Inner	1	1
21	746-15	145-89067-49	Pad - Auxiliary Fuel Accumulator Tank Clamp	2	2
22	746-16	145-89067-146	Cushion - Auxiliary Fuel Accumulator Tank Bracket	2	2
23	746-17	145-89067-70	Shield Assembly - Auxiliary Fuel Accumulator Tank	1	1
24	746-18	145-89067-66	Doubler - Auxiliary Fuel Tank Access Lower Wing Skin	1	1
25	746-19	145-89067-141	Line Assy - Auxiliary Accumulator Tank to Valve Aft Section	1	1
26	746-20	145-89067-106	Hose - Fuel Line Connecting	2	2

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY A	UNITS PER ASSY B
27		AN748-26	Clamp - Hose	4	4
28	746-21	145-89067-131	Line Assy - Aux Accumulator Tank to Valve Fwd Section	1	1
29	746-22 746-23	145-89067 SA 4 145-89067 SA 5	Valve Assembly - Three Way Fuel Selector Complete Valve Assembly - Three Way Fuel Selector Complete	1	1
30	9543	W6235-1/4D	Valve - Three Way Fuel Selector	1	1
31	9134	AN822-6B 400X6	Elbow - 90 Degrees Flared Tube and Pipe Thread Elbow - 90° Inverted Male	1 1	2
32		AN823-6	Elbow - 45 Degrees Flared Tube and Pipe Thread	1	1
33	746-24	145-48244	Pin - Fuel Selector Valve Detent	1	1
34	746-25	145-48243-3	Spring - Pin Upper	1	1
35	746-26	145-48243-5	Spring - Pin Lower	1	1
36	746-27	145-89067-51	Spacer - Mounting Upper Plate	1	1
37	746-28	145-89067-71	Spacer - Mounting Screw Lower	2	2
38	746-29	145-89067 SA 3 145-89067-128	Plate - Fuel Selector Indicator Decal - "Fuel Selector-Main-Aux-Off"	1 1	1
39	9351	PL88XA-8-10	Screw - Upholstery Attaching	3	3
40	9352	2T4830-18	Washer - Upholstery Attaching	3	3
41	746-30	145-89067-137	Line Assembly - Tank Valve	1	1
42	746-31 746-32	145-89067-133 145-89067-139	Line Assembly - Selector Valve to Fuel Strainer Line Assembly - Selector Valve to Fuel Strainer	1	1
43		AN816-6	Nipple - Threaded	1	1
44	746-33	145-89067-12	Line Assembly - Auxiliary Fuel Tank Vent (Incl Vinyl Cover)	1	1
45	746-34	145-89067-13	Line Assembly - Auxiliary Fuel Tank Vent (Incl Grommet)	1	1
46	746-35	145-89067-14	Hose - Auxiliary Fuel Tank Vent Line Connecting	2	2
47		AN748-30	Clamp - Hose	4	4
48	746-36	145-89067-18	Line Assembly - Auxiliary Fuel Tank Vent (Incl Grommet)	1	1
49	746-37	145-53336	Pipe Assembly Compartment Vent	1	1
50	746-38	145-89067-44	Doubler - Tank Compt Vent Lower	1	1
51	746-39	145-53335	Baffle Assembly - Auxiliary Fuel Tank Compartment (Metal)	1	1
52	746-40	145-43003-100	Support - Rear Seat Aft Center	1	
53	746-41	145-43003-102	Spacer - Rear Seat Aft Center Support Upepr	1	
54	746-42	145-53337	Baffle Assy - Auxiliary Fuel Tank Compartment (Fabric)	1	

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY A	UNITS PER ASSY B
55	746-43	145-71050 SA 2	Condenser Assembly - Auxiliary Fuel Level Transmitter	1	1
56	745-35	145-54002-150	Wire Assembly - Fuel Transmitter to Indicator	1	1
57	745-37	145-54002-151	Wire Assembly - Fuel Res to Breaker	1	1
58	745-36	145-54002-240	Wire Assembly - Fuel Indicator to Resistor	1	
59	745-28	145-48201-56	Bracket - Auxiliary Fuel Level Indicator Support	1	1
60	745-29	145-48201-59	Bracket - Fuel Landing Resistor	1	1
61	9478	154-48002-6	Indicator - Auxiliary Fuel Level	1	1
62	9261	91396	Resistor Unit - Fuel Gauge	1	
63	746-44	145-89067-149	Bracket - Radio Antenna Load Coil Support	1	
64	4632	143-53003-162	Cover - Vent Assembly	2	
65	4623-10	143-53003-161	Vent Frame - Cabin Air Outlet	2	
66	4624-10	145-53339	Duct Assembly - Cabin Air Vent	2	
67	746-45 746-46	145-10006-19 145-10006-20	Louvre - Cabin Air Outlet LH Louvre - Cabin Air Outlet RH	1 1	
68	9520	830-18	Clamp	2	2
69	1739 4631 746-47 2350 746-48	AN822-8 145-31501-136 145-53301-63 145-43201-98 145-48232 154-48001-70 145-51066-15 145-51066-16 145-51066-17 145-53078 145-89067-148	Elbow - 90 Degrees Scoop - Cabin Air Inlet Tube Assembly - Front Vent System Bracket - Cabin Air Inlet Tube Support Fitting - Firewall to Fuel Line Line Assembly - Firewall to Relief Valve Fuel Return Decal - "Turn on Elect Fuel Pump Before Sel Tank" Decal - "Use Aux Tank Only After Main Reads-Etc" Decal - "Do Not Use Aux Tank For Take Off-Etc" Decal - "Fuel Sump Screen Drain" Decal - "Fuel Selector-Main-Aux-Off"	1 1 1 1 1 1 1 1 1 1 1 1 1 1	



FIGURE 55 - SPECIAL RIVETS

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
1	<i>Note: The following rivets require Item 4815 Tool AT-100-5-2R1-3 Rivet</i>			
	8201	2R1AD3-3	Rivet - Modified Brazier Head (3/32 Diameter x 3/16 Length)	
	8203	2R1AD3-5	Rivet - Modified Brazier Head (3/32 Diameter x 5/16 Length)	
	8222	2R1AD3-10	Rivet - Modified Brazier Head (3/32 Diameter x 5/8 Length)	
	<i>Note: The following rivets require Item 4816 Tool AT-100-5-2R1-4 Rivet</i>			
	8206	2R1AD4-3	Rivet - Modified Brazier Head (1/8 Diameter x 3/16 Length)	
	8223	2R1AD4-3	Rivet - Modified Brazier Head (1/8 Diameter x 7/32 Length)	
	8195	2R1A-4-4	Rivet - Modified Brazier Head (1/8 Diameter x 1/4 Length)	
	8207	2R1AD4-4	Rivet - Modified Brazier Head (1/8 Diameter x 1/4 Length)	
	8224	2R1AD4-4-5	Rivet - Modified Brazier Head (1/8 Diameter x 9/32 Length)	
	8196	2R1A-4-5	Rivet - Modified Brazier Head (1/8 Diameter x 5/16 Length)	
	8208	2R1AD4-5	Rivet - Modified Brazier Head (1/8 Diameter x 5/16 Length)	
	8197	2R1A-4-6	Rivet - Modified Brazier Head (1/8 Diameter x 3/8 Length)	
	8209	2R1AD4-6	Rivet - Modified Brazier Head (1/8 Diameter x 3/8 Length)	
	8211	2R1AD4-8	Rivet - Modified Brazier Head (1/8 Diameter x 1/2 Length)	
	8225	2R1AD4-9	Rivet - Modified Brazier Head (1/8 Diameter x 9/16 Length)	
	<i>Note: The following rivets require Item 4817 Tool AT-100-5-2R1-5 Rivet</i>			
	8213	2R1AD5-4	Rivet - Modified Brazier Head (5/32 Diameter x 1/4 Length)	
	8214	2R1AD5-5	Rivet - Modified Brazier Head (5/32 Diameter x 5/16 Length)	
	8215	2R1AD5-6	Rivet - Modified Brazier Head (5/32 Diameter x 3/8 Length)	
	8216	2R1AD5-7	Rivet - Modified Brazier Head (5/32 Diameter x 7/16 Length)	
	8218	2R1AD5-9	Rivet - Modified Brazier Head (5/32 Diameter x 9/16 Length)	
	<i>Note: The following rivets require Item 4818 Tool AT-100-5-2R1-6 Rivet</i>			
	8226	2R1AD6-5	Rivet - Modified Brazier Head (3/16 Diameter x 5/16 Length)	
	8227	2R1AD6-7	Rivet - Modified Brazier Head (3/16 Diameter x 7/16 Length)	
2	<i>Note: The following rivets require Item 4810 Tool 3/16(-6) Rivet Gun</i>			
	9031	2R2-6-4	Pin - Flush Head (3/16 Diameter x 1/4 Maximum Grip)	
	9544	2R2-6-5	Pin - Flush Head (3/16 Diameter x 5/16 Maximum Grip)	4
3	9032	2R3-6-3	Pin - Flat Head (3/16 Diameter x 3/16 Maximum Grip)	20
	9033	2R3-6-4	Pin - Flat Head (3/16 Diameter x 1/4 Maximum Grip)	112

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	9034 9035 9036 9545	2R3-6-5 2R3-6-6 2R3-6-7 2R3-6-10	Pin - Flat Head (3/16 Diameter x 5/16 Maximum Grip) Pin - Flat Head (3/16 Diameter x 3/8 Maximum Grip) Pin - Flat Head (3/16 Diameter x 7/16 Maximum Grip) Pin - Flat Head (3/16 Diameter x 5/8 Maximum Grip)	30 7 2 12
	<i>Note: The following rivets require Item 4811 Tool 1/4(-8) Rivet Gun</i>			
	9039 9040 9041	2R3-8-5 2R3-8-6 2R3-8-7	Pin - Flat Head (1/4 Diameter x 5/16 Maximum Grip) Pin - Flat Head (1/4 Diameter x 3/8 Maximum Grip) Pin - Flat Head (1/4 Diameter x 7/16 Maximum Grip)	9 32
	<i>Note: The following rivets require Item 4821 Tool 5/16(-10) Rivet Gun</i>			
	9546	2R3-10-6	Pin - Flat Head (5/16 Diameter x 3/8 Maximum Grip)	2
4	9043 9044 9045	2R4-6 2R4-8 2R4-10	Collar - Hi Shear Rivet (For 3/16 Diameter Pin) Collar - Hi Shear Rivet (For 1/4 Diameter Pin) Collar - Hi Shear Rivet (For 5/16 Diameter Pin)	187 41 2

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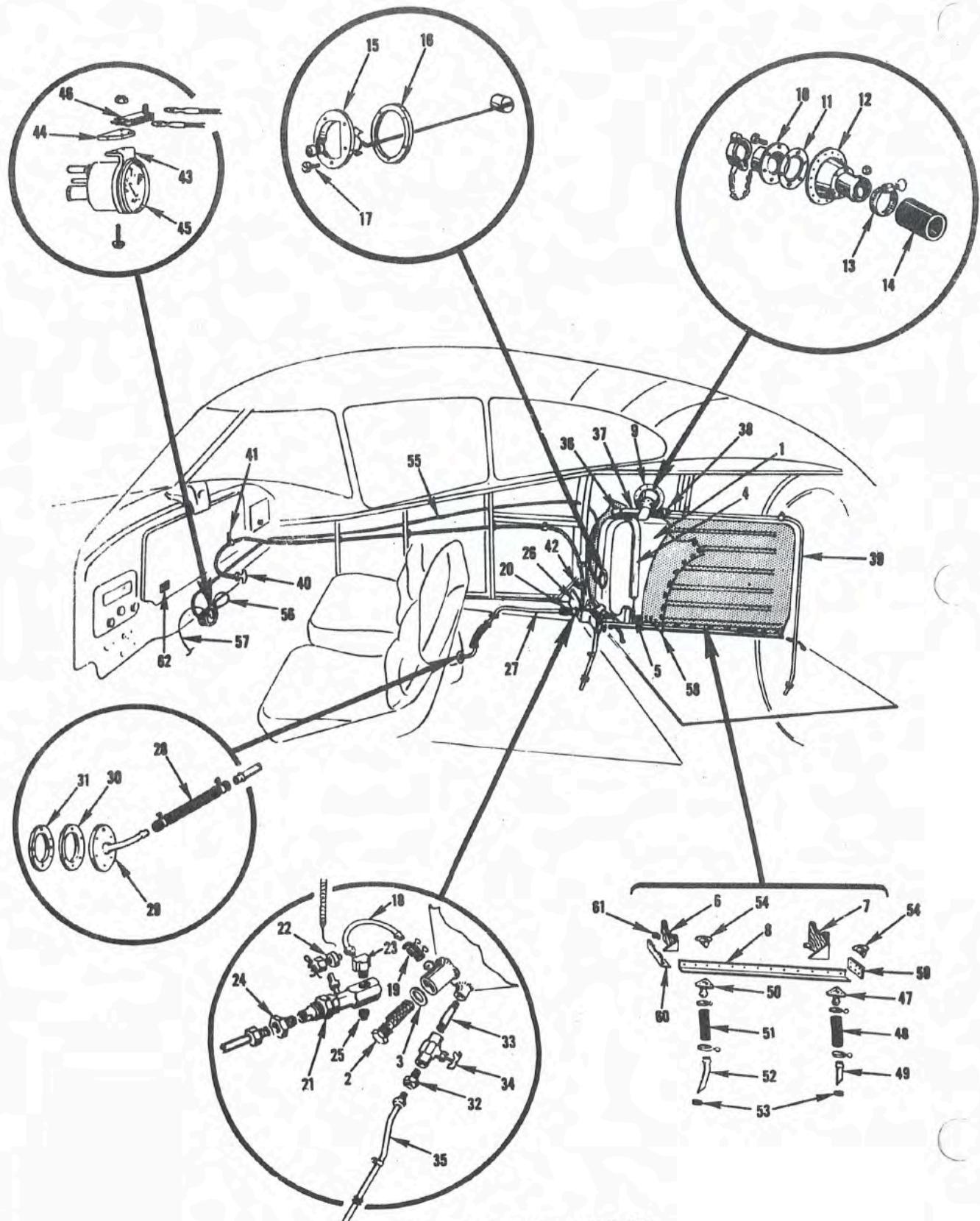


FIGURE 56 - AUXILIARY FUEL TANK KIT  
(Baggage Compartment Type)

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
	745	145-89009	Kit - Auxiliary Tank (Baggage Compt Type)	Ref
1	745-3	145-48202 SA 1	Tank Assembly - Baggage Compartment Fuel)	1
2	2308	145-48016	Screen Assembly - Accumulator Tank Outlet	1
3	745-5 745-4	AN900-16 145-48201 SA 2 145-48201 SA 1	Gasket - Asbestos Annul Strap Assembly - Fuel Tank Forward Strap Assembly - Fuel Tank Aft	1 1 1
5		AN150-16S	Fork - Turnbuckle	2
6	745-6	145-48201 SA 3	Support Assembly - Auxiliary Fuel Tank Forward	1
7	745-7	145-48201 SA 4	Support Assembly - Auxiliary Fuel Tank Aft	1
8	745-8	145-48201 SA 5	Angle Assembly - Fuel Tank Sup	1
9	745-9	145-48216	Fillerneck Assembly - Auxiliary Fuel Tank Complete	1
10	2303-10 9176	145-48227 42B3589	Fillerneck Assembly - Fuel Tank Filler Cap	1 1
11	745-10	145-48204	Gasket - Auxiliary Fuel Tank Fillerneck	1
12	745-11	145-48203	Cup Assembly - Auxiliary Fuel Tank Fillerneck	1
13		AN748-82	Clamp - Hose	2
14	745-12	145-48201-25	Hose - Tank Connecting	1
15	745-1	145-48215	Transmitter Assembly - Fuel Level	1
16	3719	143-51025	Gasket - Fuel Transmitter	1
17		AN502-10-8	Screw - Drilled Fillister Head Machine (Fine Thread)	5
18	745-13	145-48201-19	Line Assembly - Tank to Shut Off Valve Auxiliary Fuel	1
19	745-14	145-48201-31	Hose - Outlet Line Connect	1
20	745-15	145-48222-7	Valve Assembly - System Shut Off	1
21	745-16	145-48222-11	Valve - Fuel System Shut Off	1
22	9155	X3058 (3/32)	Swivel Assembly	1
23	9469	434X8	Elbow	1
24	9125	234X8	Connector	1
25		AN913-1	Plug - Square Head Pipe Thread	1
26	745-17	145-48222-9	Bracket - Fuel Shut Off Sup	1
27	745-18	145-48201-23	Line Assembly - Valve Aux Fuel	1
28	745-19	145-48201-33	Hose - Tank Adapter Aux Fuel	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
29	745-20	145-48213	Adapter Assembly - Fuel Wing Tank	1
30	2352	145-48212	Gasket - Fuel Line TK Adapter	1
31	745-21	145-48211	Right - Wing Tank Adapter Bolt	1
32	9121	200X4	Connector - Inverted Male	1
33	9537	3330X2	Nipple - Auxiliary Fuel Tank Drain Line	1
34	9538	6800	Valve	1
35	745-22	145-48201-21	Line Assembly - Fuel Tank Drain	1
36	9467	400X8	Elbow	1
37	745-23	145-48201-17	Line Assembly - Auxiliary Fuel Tank Vent 1st Section	1
38	745-24	145-48201-27	Hose - Tank Vent Line Connect	1
39	745-25	145-48201-15	Line - Auxiliary Fuel Tank Vent 2nd Section	1
40	745-2	R-09	Control Assembly - Fuel Shut Off	1
41	745-26	145-48201-35	Spacer - Auxiliary Fuel Shut Off Control Clamp Forward	1
42	745-27	145-48201-48	Spacer - Auxiliary Fuel Shut Off Control Clamp Aft	1
43	745-28	145-48201-56	Bracket - Auxiliary Fuel Level Indicator Support	1
44	745-29	145-48201-59	Bracket - Fuel Landing Resistor	1
45	9259-10 8323	441100 4S3-10-5	Indicator - Fuel Level Auxiliary Tank Spacer - Bolt	1 1
46	9261	91396	Resistor Unit - Fuel Gauge	1
47	745-30	145-48226-2	Adapter Assembly - Auxiliary Fuel Tank Compt Vent Aft	1
48		AN-H-35-16-26	Hose - 1 ID x 6 1/2 (Auxiliary Fuel Tank Compt Vent Aft)	1
49	745-31	145-48226-24	Tube - Auxiliary Fuel Tank Compartment Vent Aft	1
50	745-32	145-48226-3	Adapter Assembly - Auxiliary Fuel Tank Compt Vent Forward	1
51		AN-H-35-16-40	Hose - 1 ID x 10 (Auxiliary Fuel Tank Compt Vent Forward)	1
52	745-33	145-48226-25	Tube - Auxiliary Fuel Tank Compartment Vent Forward	1
53		AN931-16-22	Grommet - Elastic	2
54	745-34	145-48226-21	Louvre - Fuselage Vent	3
55	745-35	145-54002-150	Wire Assembly - Fuel Transmitter to Indicator	1
56	745-36	145-54002-240	Wire Assembly - Fuel Indicator to Resistor	1
57	745-37	145-54002-151	Wire Assembly - Fuel Res to Breaker	1
58	745-38	145-48225-2	Cover Assembly - Aux Fuel Tank	1

KEY	ITEM NO.	PART NUMBER	NOMENCLATURE	UNITS PER ASSY
59	745-39	145-48225 SA 1	Plate Assembly - Auxiliary Tank Cover Aft	1
60	745-40	145-48225 SA 2	Angle Assembly - Auxiliary Tank Cover Forward	1
61	745-42	145-48217-3	Placard - Instrument Panel Auxiliary Fuel Warning	1
62	745-41	145-48217-3 145-48201-41 145-48201-45 145-48201-43 145-48201-57 745-43 145-48225-32	Placard - Instrument Panel Auxiliary Fuel Warning Decal - "Turn Aux Tank Off Before Filling" (Cream) Decal - "Turn Aux Tank Off Before Filling" (Red) Decal - "Aux Fuel - Pull to Trns - Turn to Look" Decal - "Aux Fuel - 20 U.S. Gal's" (Indicator) Template - Auxiliary Fuel Tank Cover Hole Locating	1 1 1 1 1 1

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