TO: ALL HOLDERS OF AILERON AND ELEVATOR CONTROL COLUMN AND WHEEL ASSEMBLY OVERHAUL MANUAL, 27-16-01

REVISION NO. 30, DATED NOV 1/08

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D&O	D/Assy	Cleaning	Insp/Chk	Repair	Assy	F/C	Test	T/Shooting	S/Tools	Storage	IPL	L/Overhaul
Added top assemblies 65-45121-135 thru -138		X		X	X	X	X		X			X	
Changed IPL section items 29C thru 29F to be items 105 thru 108 per latest engineering data												X	

AILERON AND ELEVATOR CONTROL COLUMN AND WHEEL ASSEMBLY

27-16-01

BOEING P/N 65-25747-3 thru -6, -9, -10, -13, -14, -17 thru -24
65-45121-1 thru -10, -17 thru -20, -25 thru -28, -30 thru -48, -51 thru -54, -57 thru -70, -73 thru -94, -99 thru -112, -115 thru -138

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 20396	Jul 15/66
27-86		PRR 21909	Jan 15/67
		PRR 22193	Jan 15/67
27-86, Rev 1			Mar 10/70
27-106			Mar 10/70
27-119		PRR 23012	Mar 10/70
27-1022		PRR 31182	Mar 10/70
		PRR 31705	Mar 10/70
		PRR 23450	May 10/72
		PRR 32058	Jun 25/73
		PRR 17875-3	Jan 5/75
		PRR 24233	May 10/78
	TR 27-18 (707) (727)		May 10/79
	TR 27-3 (737)		May 10/79
		PRR 32950-7	Jan 5/80
		PRR 33537	Jun 5/84
		PRR 33004-23	Sep 5/85
		PRR 33876	Dec 5/85
		PRR 34656	Mar 5/91
		PRR 35005-53	Mar 1/95
		PRR 38060-21	Jul 1/03
		PRR 38502	Mar 1/05

LIST OF EFFECTIVE PAGES

* Indicates pages revised, added or deleted in latest revision
F Indicates foldout pages - print one side only

	PAGE	DATE		PAGE	DATE		PAGE	DATE
27-16-01				601	Mar 1/05	*	1116	Nov 1/08
*	T-1	Nov 1/08		602	Mar 1/05	*	1117	Nov 1/08
	T-2	BLANK		701	Sep 1/96	*	1118	Nov 1/08
*	LEP-1	Nov 1/08		702	Sep 1/96	*	1119	Nov 1/08
	LEP-2	BLANK		703	Jul 1/03	*	1120	Nov 1/08
	T/C-1	May 10/79		704	Mar 5/86	*	1121	Nov 1/08
	T/C-2	BLANK		705	Mar 5/86	*	1122	Nov 1/08
	1	Aug 10/74		706	Jan 5/79	*	1123	Nov 1/08
	2	Mar 10/70		801	Jan 5/80	*	1124	Nov 1/08
*	101	Nov 1/08		802	Jul 1/03	*	1125	Nov 1/08
*	102	Nov 1/08		803	Jul 1/03	*	1126	Nov 1/08
*	103	Nov 1/08		804	Jul 1/03	*	1127	Nov 1/08
	104	BLANK		805	Jul 1/03	*	1128	Nov 1/08
	201	Mar 1/95		806	Jul 1/03	*	1129	Nov 1/08
	202	BLANK		807	Jul 1/03	*	1130	Nov 1/08
*	301	Nov 1/08		808	Jul 1/03		1131	Jul 1/03
	302	BLANK		809	Jul 1/03	*	1132	Nov 1/08
	401	Jul 1/02	*	810	Nov 1/08	*	1133	Nov 1/08
	402	Dec 5/93		811	Jul 1/03		1134	Jul 1/03
	403	Mar 1/95		812	Jul 1/03	*	1135	Nov 1/08
	404	Dec 5/93	*	813	Nov 1/08	*	1136	Nov 1/08
*	404A	Nov 1/08		814	BLANK	*	1137	Nov 1/08
	404B	BLANK		901	Jan 5/81	*	1138	Nov 1/08
*	405	Nov 1/08		902	BLANK		1139	Jul 1/03
*	406	Nov 1/08		1001	Jan 5/79	*	1140	Nov 1/08
	407	Jun 5/88		1002	BLANK	*	1141	Nov 1/08
*	408	Nov 1/08	*	1101	Nov 1/08	*	1142	Nov 1/08
*	501	Nov 1/08		1102	Mar 1/05	*	1143	Nov 1/08
	502	Mar 1/05	*	1103	Nov 1/08	*	1144	Nov 1/08
*	503	Nov 1/08		1104	Mar 1/95	*	1144A	Nov 1/08
	504	Mar 5/86		1105	Jan 5/80	*	1144B	Nov 1/08
*	505	Nov 1/08		1106	Jan 5/80	*	1145	Nov 1/08
	506	Jun 5/84		1106A	BLANK		1146	Jul 1/03
	507	Jan 5/80		1106B	Sep 5/84		1147	Jul 1/03
*	508	Nov 1/08	*	1106C	Nov 1/08	*	1148	Nov 1/08
	509	Jul 1/03		1106D	BLANK	*	1149	Nov 1/08
*	510	Nov 1/08		1107	Jun 5/88	*	1150	Nov 1/08
*	510A	Nov 1/08		1108	Jun 5/88	*	1151	Nov 1/08
	510B	Jul 1/03		1109	Jun 5/88	*	1152	Nov 1/08
*	511	Nov 1/08		1110	Mar 5/91	*	1153	Nov 1/08
	512	Sep 5/84		1111	Jul 1/03	*	1154	Nov 1/08
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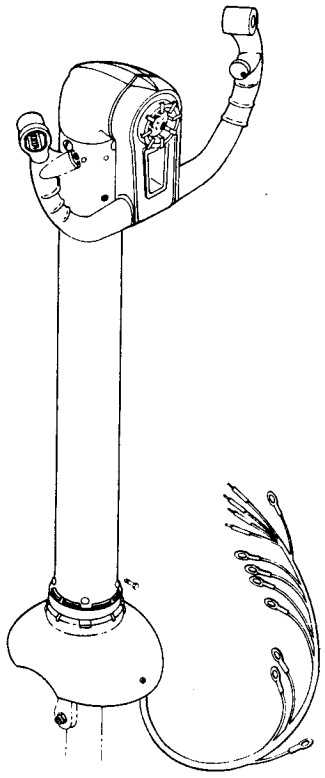
AILERON AND ELEVATOR CONTROL COLUMN AND WHEEL ASSEMBLY



Aileron and Elevator Control Column and Wheel Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

   A. The aileron and elevator control column is a standing tube fitted with a gear train and aileron control wheel assembly. The column base is attached to a movable fork which rotates with the column. Various communications and autopilot control switches and the stabilizer trim switch, together with the connecting wiring, are mounted on the wheel assembly. The electrical cable extends through the wheel and column.

2. Operation

A. Fore and aft movement of control column actuates the elevators through the quadrant, the cable system and elevator power control packages. Rotation of the control wheel operates the ailerons. This motion is transmitted to the aileron cable drum through shafts and bevel gears within the control column and through a universal joint to the aileron bus drum. Operation of specific switches actuates specific control surfaces or communications systems.

3. Leading Particulars

Length, overall -- 38 inches (approximately)
Width -- 14 inches (approximately)
Weight -- 15.0 to 16.4 pounds

DISASSEMBLY

1. Procedures (Fig. 1101)

NOTE: In steps A and B pull switches and memory device, if installed, just far enough to clear housing in wheel assembly (1). Allow to hang by attached wires.

A. Remove screws (5), spacer (5A), insulator (30), screws (6, 7, 24A), cap or plate (8, 9). Carefully pull switches (10, 10A, 24) and memory device or plug assembly (24B), if installed, from wheel assembly (1).

B. Remove pin (11), trigger or trigger assembly (12), screw (13), switch or switches (14), button or detent (15), if installed, and clamp or mount (16) from wheel assembly (1).

NOTE: Do not remove catch (12A) from trigger (12B) unless replacement is required.

C. Unsolder connections or remove terminal screws to remove wire terminals as applicable from switches (10, 10A, 14) and memory device (24B).

NOTE: Do not chip out potting compound or remove wires from stabilizer trim switch (24). Compare wiring of switches (10, 10A, 14) with that shown in Fig. 801. Tag unit with identity of circuit used to facilitate reassembly.

D. Remove screws (18), washers (18A), terminal cover (19), screws (20), lockwashers (21) and washers (22). Detach wire terminals on switch assembly (24) and cable bundle assembly (25) from nuts or inserts (23B) or module (17A).

E. Carefully pull switch assembly (24) from wheel assembly (1) with trailing cable and terminals.

F. On applicable assemblies, remove pad (32D) and module (17A). Remove terminal block assembly (23).

NOTE: Do no remove nuts or inserts (23B) from terminal block (23A). Mark cable (25) at clamp (4) to identify clamp location on cable.

G. Remove nut (2), screw (3), and nylon clamp (4) from cable (25) in wheel assembly (1).

H. Deleted.

I. Remove cotter pin (34), nut (35), bolt (36), spacer (37), washer (38), retainer spring (39) and washer (40); carefully pull wheel (31) from control column (33). Do not attempt to remove cable (25) from column.

NOTE: Assemblies may have a foil marker pointer (31D) on wheel hub, and corresponding wheel-angle indicator scale on column housing (89). These markers are applied with control column installed and rigged in the airplane. If markers are removed, do not replace during column overhaul. If they are not removed, wheel and column should be considered a matched set.

Do not separate spring pin (42) from washer (41) unless replacement is required.

Do not remove helical coil inserts (31C, 31E, 31F, 31G), markers (31D, 32C, 32E) unless replacement is necessary.

J. Mark relative position of gear (46 or 46B) and sleeve (47) to facilitate assembly. Remove spacer (43), nut (44), bearing (45), gear (46 or 46B), sleeve (47). Loosen nut (44) using either of two types of wrenches as follows:

(1) Using two wrenches F72797, use one wrench to hold gear and one wrench to turn nut.

(2) Use F70320-3 to hold gear, F70320-5 to hold sleeve, and F70320-4 wrench to turn nut (Fig. 704).

K. Cut lockwire and remove screw (48), nut (49) and bearing (50).

L. Remove nuts (51), screws (52, 52A) and clamps (53, 53B); loosen clamp (64) and move boot (64A) and cover (65) up tube (73).

NOTE: Do not remove rivets (54) and control column ell (55), or marker (55A) unless repair or replacement is necessary.

M. Remove nut (57), bolt (58), washers (59, 60), or washers (57A, 60), spacers (59A) and bushes (59B, 59C), bearing (60A) and plate assembly (61).

NOTE: Do not remove bearing (62) from plate (63) unless replacement is necessary.

N. Remove clamp (64), cover (65), nut (65A) (if fitted), bearing (66, 66A) and screws (67).

CAUTION: REMOVAL OF CABLE ASSEMBLY (25) FROM CONTROL COLUMN MAY DAMAGE INSULATION OR RENDER INDIVIDUAL WIRES TOO SHORT FOR REASSEMBLY.

O. Remove nuts (68), screws (69), and clamps (70) to loosen tube (71).

NOTE: Do not remove tube (72) with cable assembly (25) unless replacement is necessary or is required for repair of other parts.

P. Remove tubes (71, 73), ring (74), nut (75) and spacer assembly (76).

NOTE: Do not remove tubes (71, 73) with wire bundle assy (98) unless replacement is necessary or is required to be removed for repair of other parts.

NOTE: Do not remove fillers (76A), rivets (76B) or nutplates (76C) from spacer assembly (76) unless repair or replacement is necessary.

Q. Remove lockring (77), bearing retainer nut (78), bearing (79), laminated shim (80), shim (80A) (if installed), pin (81), screw (81A), shaft assembly (82) and gear (86 or 46C) from housing assembly (87).

NOTE: Do not remove rivets (83) or insert (84B) from terminal (84, 84A) and shaft (85) unless repair or replacement of parts is necessary.

Record thickness of shim (80) to facilitate reassembly.

Do not remove insert (88) from housing (89) unless repair or replacement is necessary.

R. If control shaker (102) is installed, unplug connector (99) from control shaker (102). Remove nuts (97), spacers (100), bolts (101), and shims (96) from strap assembly (91).

S. Remove control shaker (102), and strap assembly (91) from control column.

CLEANING

1. Clean all parts using standard industry practices and information contained in 20-30-03 and 20-30-01.

2. Clean accessible parts of cable assemblies (25) and (98) with a cloth dampened in a mild soap and water solution. Clean the solution off with a cloth dampened in clean water until all soap has been removed. Dry with clean, lint-free cloth (Fig. 1101).

INSPECTION/CHECK

1. Check all parts for obvious defects in accordance with standard industry practices. Refer to Fig. 601 for design dimensions and wear limits.

2. Examine the dry lubricant on plate (63). Thickness of dry lubricant on new parts is 0.0002-0.0005 inch. Coating is dull in appearance. Parts which have had the coating burnished may be continued in service as long as the coating is smooth and unbroken. A coating that is worn through or galled must be repaired or replaced.

3. Penetrant check per 20-20-02 -- Switch mount clamp (16, 69-70179), sleeve (47), control wheels (31A, 31B), ell (55), shaft (85), housing (89).

4. Magnetic particle check per 20-20-01 -- Switch mount (16, 69-63433), nut (44), gears (46, 46B, 46C, 86), plate (63).

5. Check continuity of switches (10, 10A, 14, 24); refer to manufacturer's instructions for complete check of their electrical operation.

6. Check spring (39) -- Outside diameter must be 2.54-2.58 inches. Each spring arm height is 0.77-0.81 inch above base.

7. Check continuity of wires in cable assembly (25) and (98).

8. Examine lockrings (74, 77) for distortion. Free inside diameter should be as follows:

   Lockring (74) -- 2.28 inches
   Lockring (77) -- 1.32 inches

REPAIR

1. Repair (Fig. 1101).

   A. Repair minor defects using standard industry practices.

   B. Plate (63) (Fig. 401)

      (1) Machine the lateral surfaces per SOPM 20-10-01, as necessary to remove defects in the 1.32-inch wide area shown. Maintain the limits and dimensions shown.

      (2) Do a magnetic particle check of the machined surfaces per SOPM 20-20-01.

      (3) Stress relieve at 300-350 deg for 2 hours, then air cool at 65-75 deg F.

      (4) Build up the machined surfaces to the design dimensions with nickel plate (SOPM 20-42-09). Make sure the nickel plate is not more than 0.010 inch thick.

      (5) Apply BMS 3-8, Class A dry lubricant as shown.

   C. Spring pin (81) -- If pin BACP18L10P1250 is to be replaced by pin 69-51259-1, enlarge 0.157-inch hole through shaft (82) and gear (86 or 46C) to 0.1640-0.1645-inch diameter.

2. Refinish (Fig. 1101).

   NOTE: Refer to SOPM 20-30-02 for stripping of protective finishes and to SOPM 20-41-01 for explanation of F and SRF finish codes.

   A. Caps (8, 9) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, Type 1 primer (SRF-2.30) plus apply two coats of lacquer (F-12.51) all over except no primer or lacquer on threads. Material: Al alloy.

   B. Plates (8, 9) -- Alodize or chromic acid anodize and apply one coat of zinc chromate primer or BMS 10-11, Type 1 primer (SRF-2.30) all over except no primer on threads. Mask threads and hole. Coat with nonspecular black modified urea formaldehyde thermosetting plastic per Spec P-30 (Barber Webb Co., 3833 E. Medford, Los Angeles, California 90063). Material: Al alloy.

C. Trigger (12B, 66-9828-1) — Alodize or anodize and apply primer BMS 10-11, Type 1 (F-3.30) all over, then coat all over 0.03-0.06 thick (except on underside, holes or counterbores) with nonspecular black modified urea formaldehyde thermosetting plastic per Specification P-30, Barber Webb Co., Los Angeles, California or nonspecular black ethyl cellulose, No. 24-105-4 (Pyroxylin Products Inc., Chicago, Illinois). Apply coating by Pisanko Method Specialized Coating, Inc., Chicago, Illinois. Suggested source: Guardian Electric Mfg. Corp., 1550 W. Carroll Ave., Chicago, Illinois, 60607. Feather edges of coating about 0.3 inch. Material: Magnesium or aluminum.

NOTE: Mask all holes and surfaces not to be coated. Primer may be removed from surfaces to be coated just before the coating application. Do not remove dichromate treatment.

D. Trigger (12B, 66-9828-3) — Mask all holes and coat by fluidized bed process (Polymer Corp., 2120 Fairmont Ave., Reading, Pennsylvania, 19605) with 10-12 mil thick NGA 77 Nylon, color 2181, dull black. Air blast nylon surface with 180 mesh aluminum oxide sufficient only to dull surface. Remove masking, and Dow 7 alodize (F-3.20) (magnesium) or alodize or anodize (F-2.22) (aluminum) and apply primer BMS 10-11, Type 1 (F-20.02).

E. Button (15), Bolt (36), and Nuts (49, 75, and 78) — Anodize (F- 2.20) all over. Material: Al alloy.

F. Clamp (16, 69-4535-1, -2), spacers (5A, 37, 43, 76D), washer (41), ell (55), filler (76A) — Alodize or anodize plus one coat primer BMS 10-11, Type 1 (SRF-2.30) all over. Material: Al alloy.

G. Nut (23B) — Nickel plate (F-1.913) all over. Material: 4130 steel, 125-145 ksi.

H. Control Wheel (31B)

NOTE: Optional to refinish control wheel (31B) using the procedure listed in step I.

(1) Recommended Method:

(a) Mask all machined surfaces per Fig. 401.

(b) Apply 10-12 mil thick NCB 77 nylon, color No. 2181, dull black by fluidized bed process (Polymer Corporation, 2120 Fairmont Ave., Reading, Pennsylvania, 19605).

(c) Air blast exterior nylon surface with 180-mesh aluminum oxide sufficient only to dull surface.

(d) Restore engraved letters and arrows as necessary.

(e) Remove masking. Apply chemical treatment (Dow 7), Type 3, SRF-3.17 by immersion to all surfaces. Omit primer.

(f) Fill engraving with PA-1 white nylon baking enamel BA-G8S-1 (Sun Chemical Corp., Nutley, New Jersey); or apply wash primer MIL-P-8514, plus BMS 10-11, Type 1 primer, plus BMS 10-11, Type 2 enamel, color 792 white, flat gloss; or fill engraved letters with white enamel per MIL-E-5556.

(g) Anodize with Dow 17 or Dow 7 and apply two coats of BMS 10-11, Type 1 primer SRF-3.30 plus apply two coats of TT-L-20 Lacquer, Federal Standard 595, color No. 37038, F-12.51 to machined surfaces except on spline.

(2) Optional Method No. 1 - Minor surface refinish

(a) Dow 7 treat wheel by immersion per MIL-M-3171, Type III or Dow 17 treat.

(b) Mask areas per Fig. 401.

(c) Apply primer BMS 10-11, Type 1 followed by one coat dull black lacquer, TT-L-20, color 37038 to areas shaded per Fig. 401.

(3) Optional Method No. 2 - Major refinish

(a) Remove primer, as necessary, from surfaces to be coated but retain dichromate treated surfaces (Fig. 401).

(b) Mask all machined surfaces as shown in Fig. 401.

(c) Coat indicated surfaces 0.015 - 0.030-inch thick with nonspecular black modified urea formaldehyde thermosetting plastic per Specification P-30 (Barber Webb Company, 3833 E. Medford, Los Angeles, California 90063) or nonspecular black ethyl cellulose No. 25-105-4 (Pyroxylin Products, Inc., Chicago, Illinois. Apply latter coating by Pisanko Method Specialized Coating, Inc., Chicago, Illinois. Suggested source: Guardian Electric Mfg. Co., 1550 W. Carroll Ave., Chicago, Illinois 60607.

(d) Feather edge of coating approximately 0.30 inch wherever it meets a machined surface.

I. Control Wheel (31A) (65-45124-5, -6, -9, -10, -39, -40, -55, -56, -59, -60, -63, -64, -79, -80).

(1) Preferred Method:

(a) Apply chemical treatment (Dow 7), Type 3, SRF-3.17 to all surfaces by immersion; omit primer.

(b) Mask fastener holes, spline, and 0.62-inch diameter hole to maximum 0.20 inch depth.

(c) Apply 10 - 12 mil thick NCB77 nylon, color No. 2181, dull black by fluidized bed process (Polymer Corp., 2120 Fairmont Ave., Reading, Pennsylvania 19605).

(d) In the engraved lettering areas, sand out all overlapping finishes and feather the edges.

(e) Remove all loose dirt and particles by brushing with a soft-bristle brush or wiping with a clean white gauze.

(f) Cold solvent alkaline clean per Subject 20-30-03, "General Cleaning Procedures," to obtain a water-break-free surface.

(g) Prepare a Dow 19 solution as follows: Into a suitable nonmetallic container, pour a gallon of clear water. Add 1-1/2 ounces of chromic acid (H2Cr03) and 1 ounce of calcium sulphate (CaS04.2H20). Stir vigorously for 15 minutes. Use only the clear solution.

(h) Apply Dow 19 solution in the engraved lettering areas by swabbing until the metal surface becomes a dull golden to dark brown in color.

CAUTION: HARD RUBBING OF THE WET SURFACE WILL DAMAGE THE COATING.

(i) Rinse with clean cold water in a low pressure spray.

(j) Dry with warm circulating air or filtered compressed air.

CAUTION: PROTECT PARTS FROM DUST AND HANDLING.

(k) Apply (SRF-12.205) primer BMS 10-11, Type 1 to all engraving and fill with dull white camouflage enamel per MIL-E-5556 (Jarvie Paint Co., Seattle, WA or other satisfactory source) or apply MIL-P-8514 wash primer plus MIL-P- 8585 zinc chromate, and fill engraving with BMS 10-11 epoxy enamel, color 792 white, flat gloss.

NOTE: On interior areas and machined areas, fill voids left by fluidized bed process with BMS 10-11, Type 1 primer plus one coat of dull black lacquer TT-L-20, color 37058.

(l) On all other exterior areas, repair finish with Corvel touch-up compound NCB77, dull black, color 2181.

NOTE: All repairs to finish must blend, fair, and match to not detract from general appearance.

(m) Rubber stamp center internal cavity surface with letters "MAG" and assembly number. Make letters 1/2-inch size, if possible.

J. Washer (38), nut (44) -- Cadmium plate (F-1.20) all over. Material: 8630 or 4130 steel.

K. Spring (39) -- Cadmium plate (F-1.20) or zinc plate (F-1.205) all over. Material: 1095 or 1075 steel, heat treated to Rockwell C-40-45.

L. Gears (46, 46B, 46C, 86) -- Cadmium plate (F-1.1924) all over except on gear teeth and 1.3120-inch diameter and apply two coats of BMS 10-11, Type 1 primer (SRF-12.206) on 0.92-inch diameter. Material: 9310 steel.

M. Sleeve (47) -- Chemical treat all surfaces per MIL-C-5541 Class 1A (F-17.07). Material: Al alloy.

N. Plate (63) -- Cadmium plate (F-15.06) all over except for dry lubricated surface. Apply BMS 3-8, class A dry lubricant not thicker than 0.0004-inch to surface (Fig. 401). Material: 4615 steel (optional: 4620 or 9310 steel).

O. Dust cover (65, 9-48032) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, Type 1 primer (SRF-2.30) plus two coats of grey lacquer, No. 3615 per TT-C-595 all over. Material: Al alloy.

P. Dust cover (65, 9-48032-1) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, Type 1 primer (SRF-2.30) plus apply dull dark gray lacquer (F-14.907) all over. Material: Al alloy.

Q. Dust cover (65, 9-48032-4) -- Chromic acid anodize (F-17.04) and apply one coat of BMS 10-11, Type 1 primer (F-20.02). Material: Al alloy.

R. Tubes (71, 72) -- Alodize and apply one coat of BMS 10-11, Type 1 primer (SRF-2.901) all over. Material: Al alloy.

S. Tube (73, 9-67622-1, -2, -5) -- Alodize and apply one coat of BMS 10-11, Type 1 primer (SRF-2.901) all over except no primer on interior 2.865-inch diameter surface and dull dark gray lacquer (F-14.907) on exterior surface only. Material: Al alloy.

T. Tube (73, 9-67622-7) -- Apply chemical conversion coating (F-17.08) to interior and exterior surfaces and apply one coat of BMS 10-11 (F-20.48). Material: Al alloy.

U. Lock ring (74, 77) -- Cadmium plate (F-1.20) all over. After plating, bake at 350-400°F for 3 hours.

V. Spacer assy (76, 6-62608-3) -- Apply one coat of BMS 10-11, Type 1 primer (SRF-12.205) all over. Material: Al alloy.

W. Spacer assembly (76, 6-62608-5) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, Type 1 primer (SRF-2.30) all over. Material: Al alloy.

X. Spacer (76D) -- Boric acid-sulfuric acid anodize (F-17.31) and apply one coat of BMS 10-11, Type 1 primer (F-20.02).

Y. Filler (76A), spacer (76D) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, Type 1 primer (SRF-2.30) all over. Material: Al alloy.

Z. Shear pin (81, 69-51259-1) -- Cadmium plate (F-1.1926) all over. Material: 4340 steel, 125-145 ksi.

AA. Terminal (84) -- Cadmium plate (F-1.70) all over except on bearing surface down 1.12 inches from square cut end. After plating, bake at 250-300°F for 5-8 hours. Material: 4615 steel.

AB. Shaft (85) -- Anodize, plus one coat primer, BMS 10-11, Type 1 (SRF-2.90) all over except in holes, under terminal (84), and on 0.999-inch diameter. Material: Al alloy.

AC. Housing assembly (87) -- Anodize or alodize, plus two coats primer, BMS 10-11, Type 1 (SRF-3.30) except no primer in bearing bore. Apply two coats dull, dark gray lacquer (F-14.907) on external surface except mating surface with tube (73). Rubber stamp "M" on surface of lower cylinder. Material: Mg alloy.

AD. Plug assembly (24B) -- Apply 0.10-0.12 mil thick NCA 77 nylon, color 2181, dull black by fluidize bed process (Polymer Corp., 2120 Fairmont Ave., Reading, PA 19605) to face of plug; treat remainder of plug per F-17.01. Apply one coat white enamel, BMS 10-11, Type 2 (F-20.03) except to face and threaded areas. Material: Al alloy.

AE. Clamp (16, 69-70179-1, -2, -5, -6, -7, -8) -- Cadmium plate (F-15.02) all over. Material: CRES 309 mod per ASTM-A-296, ch20, opt CRES 630 (17-4PH) per AMS 5343 or AMS 5355.

AF. Strap (92), radius filler (93), shim (96) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, Type 1 primer (F-2.30).

AG. Strap assembly (91) -- Apply flat enamel BMS 10-60, Type 1 per BAC5845 (F-14.9817.703) on all exterior surfaces. Omit finish (F-14.9817) from inside holes.

AH. ELL (55) - Chemically treat surface or chromic acid anodize and apply one coat of BMS 10-11, Type 1 primer (F-18.05). Omit primer from splines.

3. Replacement (Fig. 1101)

A. Replace all unserviceable or irreparable parts.

B. Replace all lockwire and cotter pins (34).

C. Inserts (23B, 24C, 31C, 31E, 31F, 31G, 88) -- Install new inserts with BMS 10-11, Type 1 primer, 1/4 to 1/2 turn below countersink. Remove tang.

D. Foil marker (32C, 32E, 55A) -- Install new marker per SOPM 20-50-05.

E. Spring pin (42) -- Separate from washer (41) and replace with new spring pin (42). Press into washer (41).

F. Ell (55) -- Drill out rivets and separate parts. Assemble new ell (55) with tube (73) and machine 0.500-0.505 inch diameter drain hole on 45-degree angle, with centerline 2.23 inches from end of ell. Use hole in tube (73) as guide, as shown in Fig. 401. Machine rivet holes and squeeze rivets (54) to join parts.

G. Bearing (62) -- Replace per SOPM 20-50-03. Use mandrel to press bearing into plate (63), so that bearing is tight to shoulder. Stake bearing to depth of 0.015-0.020 inch using staking tool with 0.04-0.05 inch spherical radius. Stake bearing five places equally spaced between old staking points. After staking check bearing for freedom of rotation through full range of alignment.

H. Replace nutplates (76C), or parts of spacer assembly (76) in accordance with standard practices.

I. Terminal (84) -- Remove rivets (83), separate terminal (84) from shaft (85), and reassemble with new terminal.

J. Pointer marker (31D) -- Part is applied after installation of wheel in airplane.

K. Cable assembly (25) -- Cut terminals (25A, 25B, 26, 26A, 26B, 26C, 26D, 26E) from cable or wire and pull cable through tube (72) and housing (86). Discard terminals (25A, 25B, 26, 26A, 26B, 26C, 26D, 26E), sleeves (27, 27A, 28, 28A, 28B) and cable (29, 29A, 29B). Replace entire cable assembly with new parts and cable and install in control column (Ref ASSEMBLY).

L. Wire bundle assy (98) -- Disconnect connector (99) from control shaker (102) and pull cable through grommet (70B) in tube (73). Discard wire, sleeves and connector (99). Replace entire wire bundle assembly with new parts and install in control column (Ref Assembly).

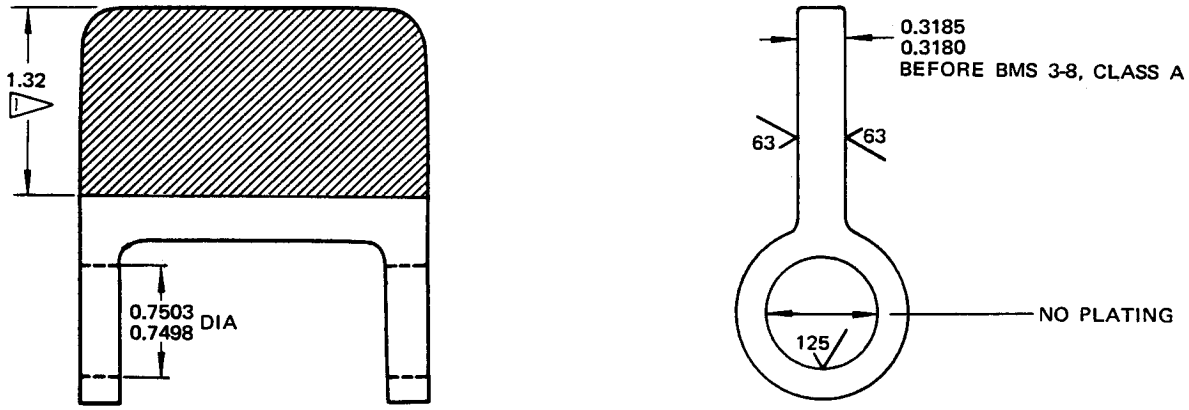
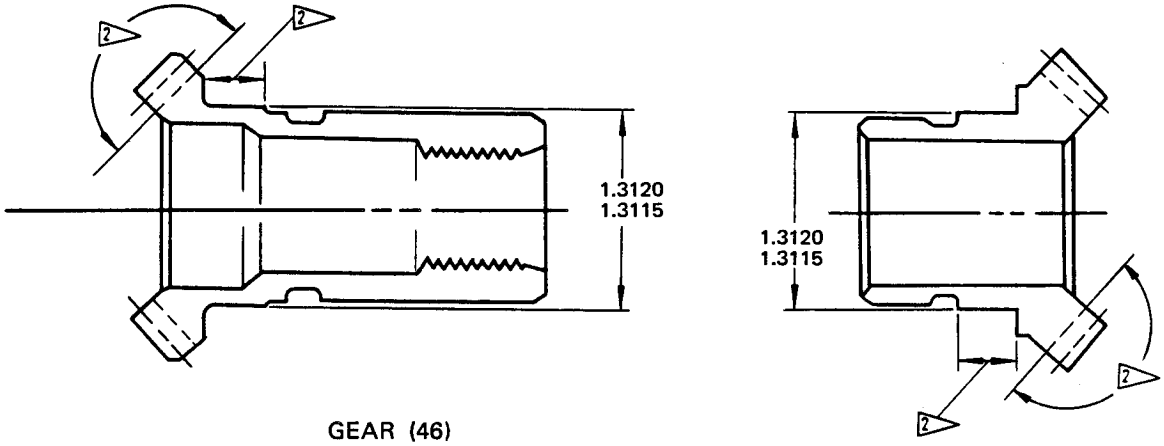
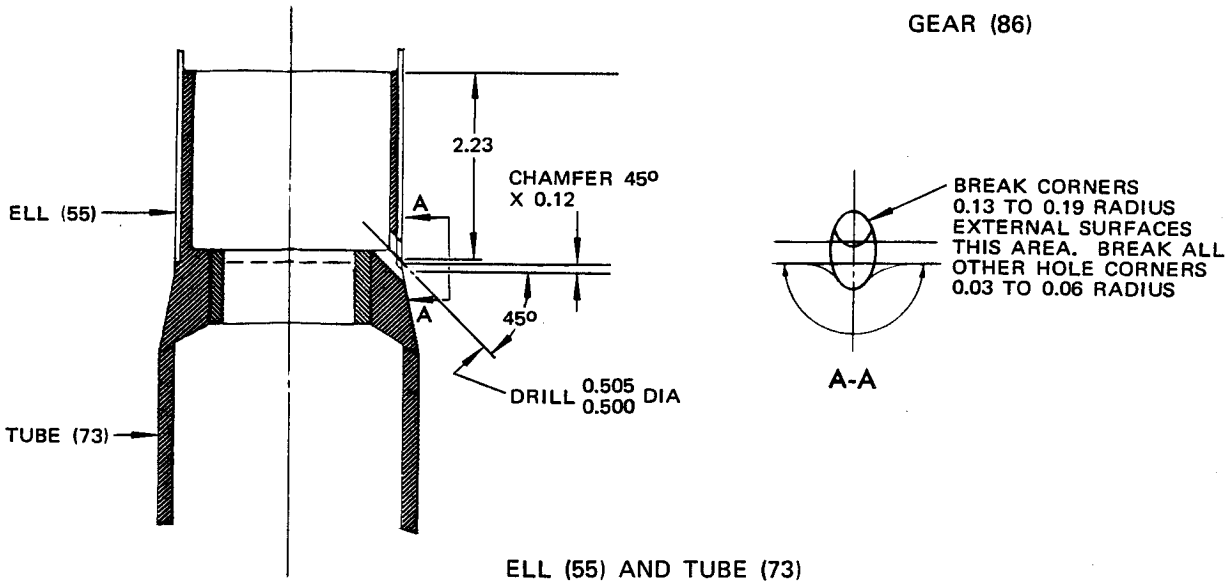


PLATE (63)



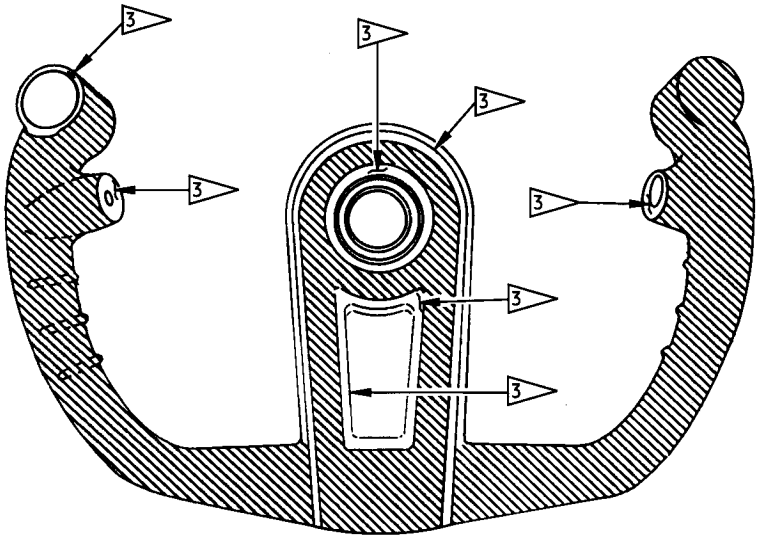
GEAR (46)

GEAR (86)



ELL (55) AND TUBE (73)

Repair and Refinish Details
Figure 401 (Sheet 1)



WHEEL (31A OR 31D)

1 BMS 3-8, CLASS A

2 DO NOT PLATE

3 NO PRIMER OR COATING
ON THIS MACHINED SURFACE.
COAT SHADED AREA ONLY.
SIMILAR MACHINED SURFACES
ON REAR, PORTION TO REMAIN
CLEAR.

NOTE: ALL DIMENSIONS ARE
IN INCHES.

Repair and Refinish Details
Figure 401 (Sheet 2)

1650700

ASSEMBLY

1. General (Fig. 1101)

   A. Install items (46C, 59B, 59C, 60A, 62, 66A, 86) with BMS 10-11, Type 1 primer; apply light film of grease BMS 3-33 or MIL-G-23827 to teeth of gears (46, 46B, 46C, 86), bearing (66, 66A), and spline of wheel assembly (31).

   B. Install items (48, 78) in housing assembly (87) with corrosion preventive compound and items (45, 49, 50, 65A, 75, 76, 79, 80, 80A) with a light film of grease BMS 3-33 per SOPM 20-50-07 applied to faying surfaces.

2. Preassemble items (77, 78, 79, 80, 80A, 81, 82, 86 or 46C). Tighten bearing retainer nut (78) to 20 lb-in. and align holes in nut (78) and gear (86 or 46C). If necessary to align holes, tighten nut further, but do not exceed 20-degree nut rotation or torque of 360 lb-in. Install lockring (77), making sure that locking feature extends into gear. Install as unit in housing (87).

3. Install spacer (76) and nut (75). Tighten to 5 lb-in. and align holes in hut and housing (89). If necessary to align holes, tighten nut further but do not exceed 20-degree nut rotation or torque of 85 lb-in. Install lockring (74), making sure that locking feature is visible through housing.

4. Clamp cable shield tubes (71, 72) to inside of tube (73) using parts (68, 69, 70, 70A). Position end of cable shield tubes (71, 72) to align with hole in housing (87). Tube (73) should protrude approximately 1/2 inch over lower end of shield tube (72). Install cable grommet (70B) into hole in housing (87).

5. Preassemble clamp (64) and boot (64A) on dust cover (65) and slide onto tube (73). The bolt of clamp (64) must be forward. Prior to final installation of clamp (64), heatshrink boot (65A) in position.

CAUTION: DUST COVER (65) MAY CONTACT CABLE ASSEMBLY (25) BUT MUST NOT PINCH OR BE FORCED AGAINST IT.

6. Apply corrosion preventive compound to tube, housing faying surfaces, and screw threads. Attach tube (73) to housing assembly (89) using screws (67).

7. Install bearing (66) or nut (65A) and bearing (66A) on shaft assembly (82). Apply lubricant to threads of nut (65A) on installation and tighten to 100-125 lb-in. above run-on torque.

8. Assemble plate (61) and shaft (82) with items (57, 58, 59, 60, 60A) or (57, 57A, 58, 59A, 59B, 59C, 60, 60A). Minimum clearance between thread end of bolt (58) and ell (55) is 0.030 inch. Adjust clearance by adding or removing washer (60) from under end of bolt (58). Shaft assembly (82) must rotate freely in bearing (66). Tighten nut (57) to 5-10 lb-in. above self-locking run-on torque.

CAUTION: DO NOT USE BOLT OR NUT DESIGNED FOR USE WITH COTTER PIN.

9. Install, but do not tighten, clamps (53, 53A, 53B) with screws (52, 52A) and nuts (51).

10. Install bearing (50) and nut (49). Tighten nut (49) to 200-300 lb-in. Install screw (48), and lockwire nut (49) to screw (48), using single wire method.

11. Preassemble items (43, 44, 45, 46, 46B, 47) so that splines on gear (46, 46B) and nut (44) align and index marks on gear (46, 46B) and sleeve (47) match. Install on column assembly (33) as a unit, using parts (35, 36, 37, 38) to secure in place.

12. Check backlash of gear drive (46, 46A, 86). Backlash must be adjusted to an absolute minimum with no perceptible binding, and must not exceed 0.030 in. measured at 7.00 in. radius. Adjust backlash by loosening nut (44) and turning sleeve (47) relative to gear (46, 46B). Tighten nut (44) using either of two types of wrenches as follows:

    A. Use two wrenches F72797: one wrench to tighten nut and one wrench to hold gear.

    B. Use wrench F70320-4 to tighten nut, wrench F70320-3 to hold gear, and F70320-5 to hold sleeve. Use index marks on F70320-3 and F70320-4 to obtain spline and nut alignment. (Ref TESTING, Fig. 704)

        NOTE: Spacer (43A) may be used over spacer (43) and nut (44) to provide integrity to the column during storage.

13. Check that backlash requirement is still met after nut (44) is tightened. If backlash adjustment using sleeve (47) is insufficient, remove shim (80, 80A) and adjust thickness, then repeat step 12.

14. Install switches (10, 10A, 14, 24), memory device or plug (24B), and control wheel (31):

    A. Insert wire bundle of trim switch (24) into control wheel (31) through upper hole in wheel horn. Pull four terminals of switch (24) to vicinity of terminal block (23).

    B. Insert proper length of cable (29, 29A) through hole in hub of wheel (31). Cut cable (29, 29A) insulation and make wire breakouts as shown in Fig. 501, 503, 801 and 1101. Assemble cable with sleeves (27, 27A, 28, 28A, 28B) and terminals (26, 26A, 26B, 26C, 26D, 26E).

    C. Install terminal block (23) in hub of wheel (31).

D. Connect four cable terminals (26, 26A) and four terminals on switch cable (24) to terminal block (23) using washers (21, 22), screws (20).

E. Draw remaining wires of cable (25) thru appropriate wheel horn for connection to switches (10, 10A, 14) and memory device (24B), if applicable. If new switches (10, 10A, 14) are installed, discard obsolete terminal lugs which may be on switches. Use terminal (26, 26C, 26D, 26E) as applicable.

NOTE: If no memory device is installed, install plug (24B) per step I.

F. Attach terminal cover or cover assy (19) with washers (18A) and screws (18). On applicable assemblies, install module assy (17A) and pad (32D).

G. Install clamp (4) with fasteners (2, 3) to hold cable (25) against wheel (1).

H. Make appropriate wire breakouts of cable (25). Install sleeves (27, 27A, 28, 28A, 28B). Install terminals (26, 26A, 26B, 26C, 26D, 26E) as applicable and attach to switch terminals (10, 10A, 14), on 65-45121-36, attached terminals (26D) and terminal on wires from A/P Disengage switch (10) to module (17A) (Fig. 502). Tape and stow unused wires.

CAUTION: AVOID EXCESSIVE TORQUE ON SCREWS (5, 24A).

I. Install insulator (30) and spacer (5A), if applicable; secure switch assembly (24) in place with screws (5). If no memory device (24B) is used, install plug (24B) with screws (24A). Tighten screws (5, 24A), NAS514P440-10 or NAS514P440-10B to 1.75-2.25 lb-in. and screws (5, 24A), NAS600-9BP or -8P to 3.50-4.50 lb-in.

(1) Bond spacer (5A) to end surface of trim switch well in control wheel with Type 48 adhesive per SOPM 20-50-12.

J. If applicable on wheel (31), install items (6, 7, 8, 9, 11, 12, 13, 14, 15, 16).

K. Adjust trigger assembly (12) for wheel assembly 65-22960-25, -26, -79, -80.

(1) Adjust catch (12A) on trigger (12), 66-9828, by extending as required (max 0.078 inch) to maintain actuated position of trigger plus additional extension of 1/4 turn $\pm$ 15 degrees.

L. Adjust switch (14) for wheel assembly, 65-45123-1, -2.

(1) With (INT) switch (14) or button (15) set at 0.38 inch, install and adjust (MIC) switch (14) in clamp or mount (16) until switch button contacts trigger (12). Adjust (MIC) switch (14) 1/4 $\pm$1/8 turn to preload switch button. Tighten locking screw on clamp or mount (16).

15. Apply sealant to cable assembly (25), inside surface of housing (87) and external diameter of wheel assembly (1) hub.

16. Insert cable (25) through hole in housing (87) and into cable shield tube (72). Allow approximately 19.6 inches of free wire for 65-25747 assemblies or 27 inches for 65-45121 assemblies, measured from clamp (4) to hole in housing (87). Use leader wire to pull cable (29 or 29A) through tube (72).

    NOTE: In rear view, looking into upper cavity of housing (87), cable assemblies (25, 61-30443,61-30445) are wrapped around hub of wheel assembly (1) counterclockwise four turns for 65-45121 series assemblies on captain's control column and clockwise four turns for 65-45121 series assemblies on first officer's control column; cable assembly (25, 65-22960-11) is wrapped in same manner but only three turns.

    CAUTION: DO NOT ALLOW EXCESSIVE CABLE LENGTH IN AREA WHERE CABLE (25) WRAPS AROUND WHEEL HUB. THIS COULD RESULT IN BUCKLED OR BUNCHED UP CONDITION AND MAY CAUSE WIRES INSIDE THE WHEEL ASSEMBLY (1) TO BE SEVERED OR WORN.

17. Remove parts (35 thru 38) from column assembly (33). Check that centerline of bolt (58) is parallel to plane of wheel rotation within 1 degree, and install wheel assembly (1) with line through upper edges of wheel horns perpendicular to column centerline (neutral position). Use holding fixture TSJ5-87879-1 or F70320-1 to facilitate assembly. (Fig. 701, 703, 704)

18. Install items (40, 39, 38, 37, 36, 35, 32A). Tighten nut (35) to 85-140 lb-in. and install cotter pin (34).

    NOTE: Cotter pin will be removed during testing.

19. Deleted.

20. Ensure that control wheel (1) travels 108 degrees in each direction from neutral position, and tighten clamps (53, 53A) with screws (52) and nuts (51) on cable (25).

    CAUTION: DO NOT ALLOW CONTROL WHEEL (1) TO ROTATE MORE THAN 110 DEGREES EITHER SIDE FROM NEUTRAL TO AVOID DAMAGE TO CABLE (25).

21. If centerline of universal joint junction between shaft (82) and plate (61) (same as centerline of bolt (58)) is not parallel to plane of wheel rotation within 1 degree, reposition wheel assembly (1) as required.

    NOTE: The combination of 24 gear teeth and 19 spline teeth in gear (46 or 46A) enables adjustments in increments of 4 degrees in the position of control wheel. If gear (46 or 46A) is rotated one tooth (15 degrees) and wheel assembly (1) is pulled out and repositioned by one spline tooth (spline teeth 19 degrees apart) in the opposite direction, the net difference from the original wheel position will be about 4 degrees. A maximum movement of 8 or 9 gear teeth will align the wheel within the 1-degree tolerance from extreme misalignment.

22. Make wiring length adjustment per Fig. 502. Complete wiring by removing sheath to point indicated in diagrams. Use care to prevent nicking the wire insulation. Install sleeves (27, 27A, 28, 28A, 28B) as shown in Fig. 502. Wire breakouts are shown in Fig. 502. Add irvolite sleeves printed with applicable wire number and terminals (25A, 25B, 26, 26A, 26B, 26C, 105, 106) and contacts (107, 108) as shown. Tape and stow unused wires.

23. If applicable, make wiring bundle assy (98) connections per Fig. 504A. Insert wire bundle assembly through tube (71) and grommet (70B) in tube (73) prior to making terminations.

24. If applicable, install strap assembly (91) on control column as shown in Fig. 504. Make sure rivet (95) in strap assembly (91) fits into hole in control column.

25. Attach control shaker (102) to strap assembly (91) with shims (96), nuts (97), spacers (100) and bolts (101). Use shims (96) as required to provide tight installation. Tighten bolts (101) to 20-25 inch-pounds.

26. Apply primer (F-14.996) and enamel finish (F-21.26-703) on nuts (97), bolts (101) and shim (96) edges (F-14.903-701).

27. Plug connector (99) into control shaker (102).

28. Materials

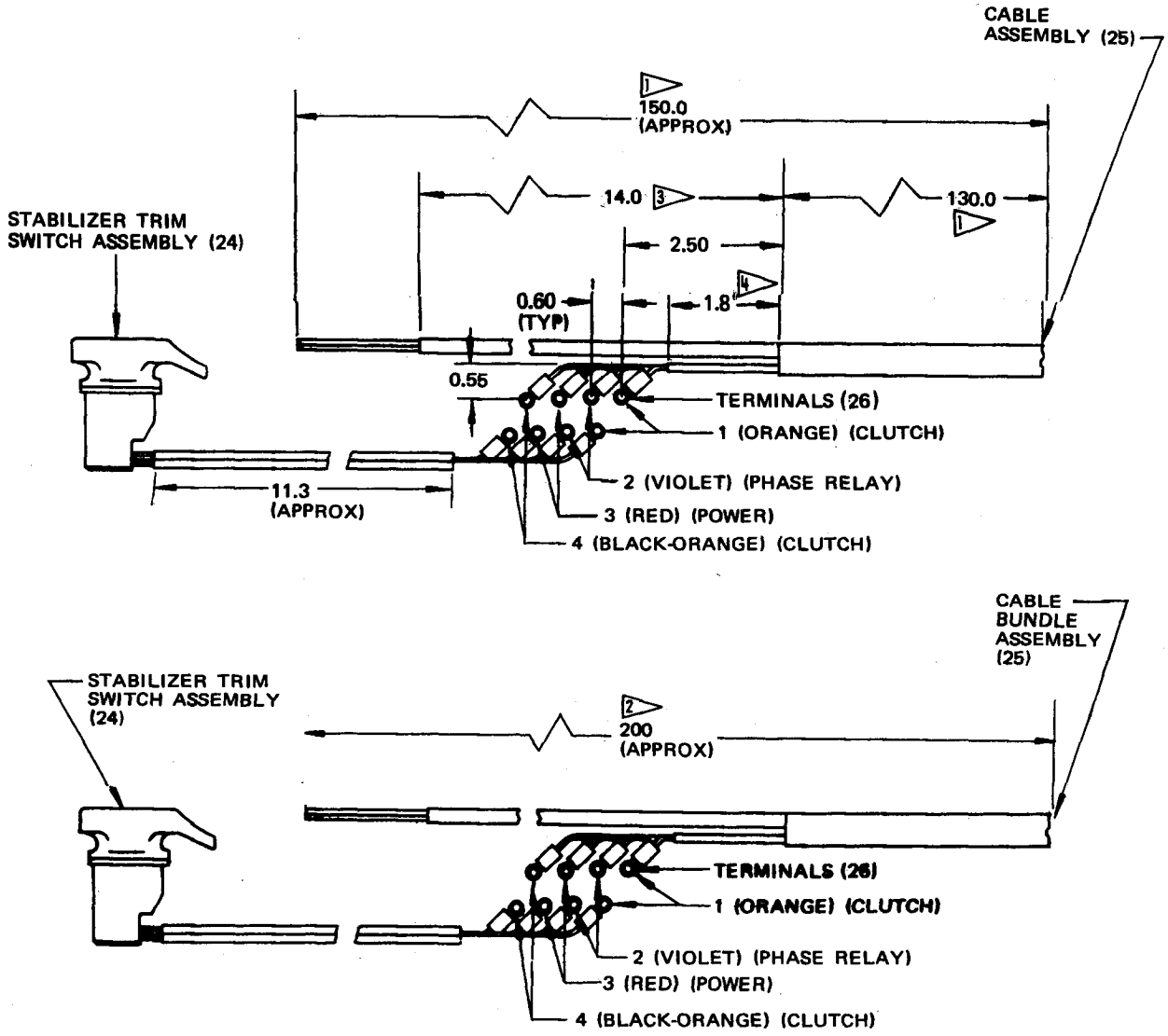
    A. Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

    B. Grease -- MIL-G-23827 (SOPM 20-60-03), BMS 3-33 (SOPM 20-50-07)

    C. Sealant -- Dow Corning No. 5 Compound (SOPM 20-60-04)

    D. Corrosion Preventive Compound -- MIL-C-16173 (SOPM 20-60-03), MIL-C-11796 Class 3

    E. Finish -- BMS 10-11, Type 2 flat enamel (SOPM 20-41-02)



NOTE: ALL DIMENSIONS IN INCHES.

ITEM NUMBERS REFER TO FIGURE 1101

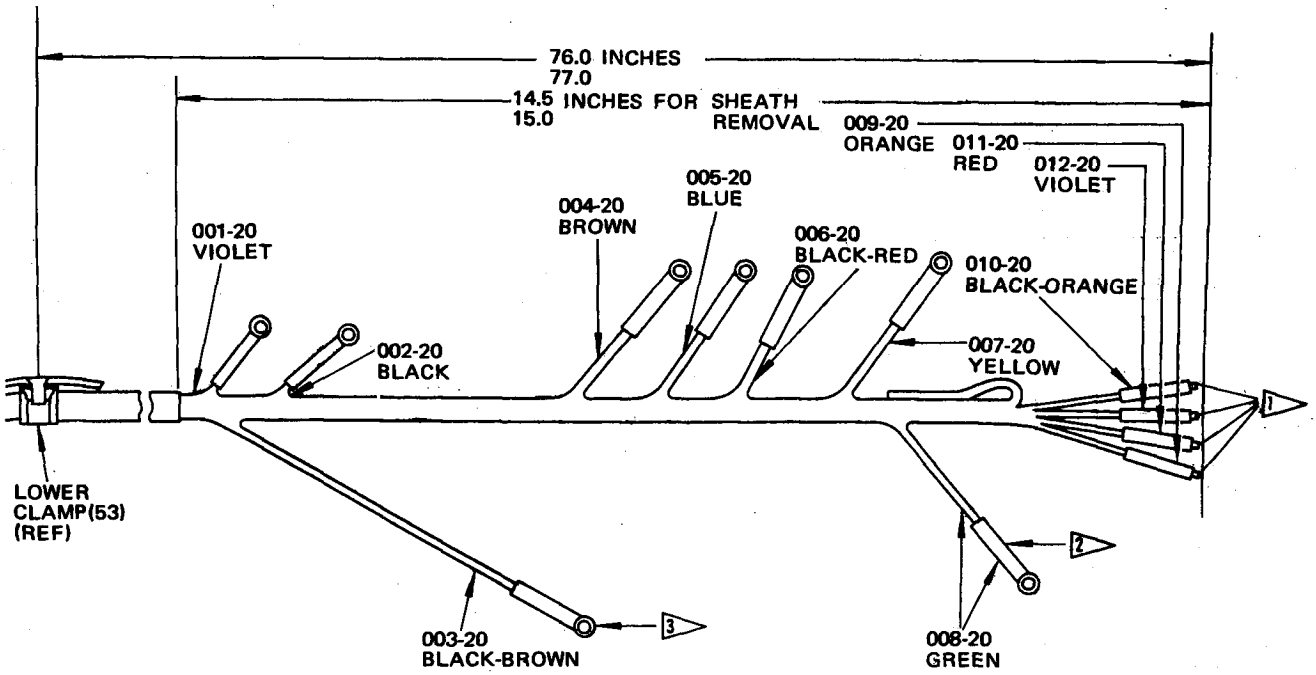
1 APPLIES TO CABLE ASSEMBLY (25, P/N 65-22960-11) USED ON CAPTAIN'S (LH) WHEEL. SUBTRACT 42 INCHES FOR CABLE ASSEMBLY (25, P/N 65-22960-11) USED IN FIRST OFFICER'S (RH) WHEEL.

2 APPLIES TO CABLE ASSEMBLY (25, P/N 61-30443-001 THRU -005) SUBTRACT 40 INCHES FOR CABLE ASSEMBLY (25, 61-30445-001 THRU -005)

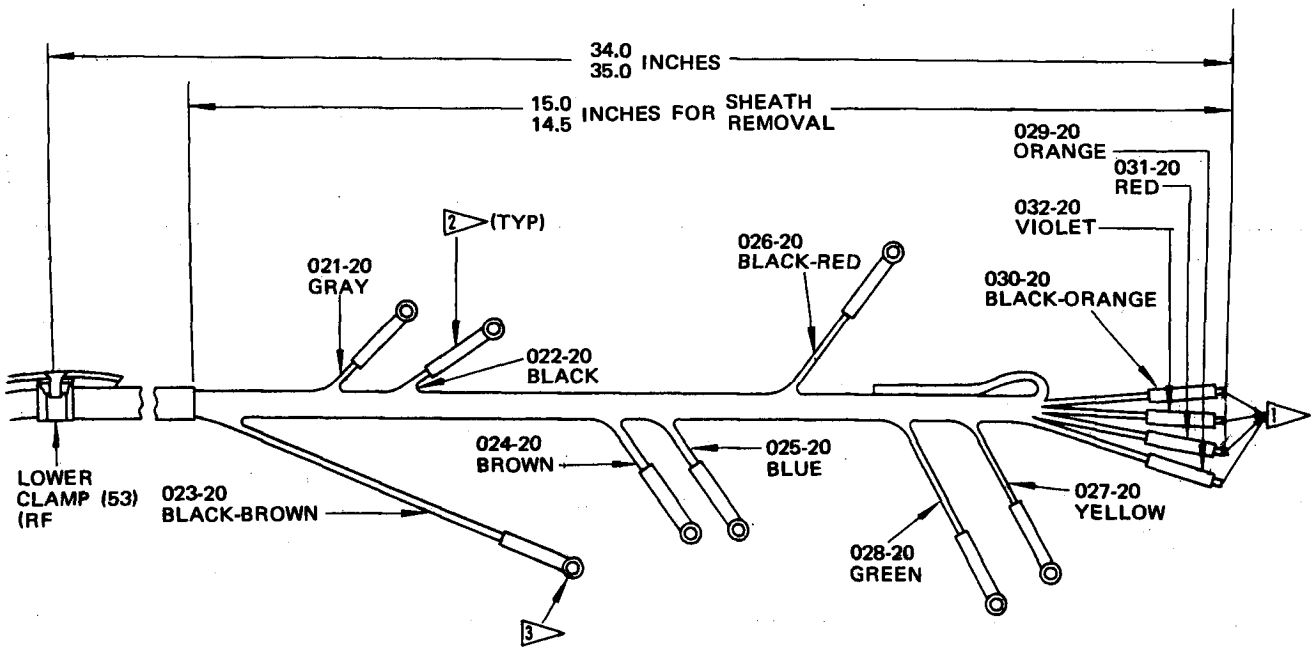
3 COVER WITH SLEEVE (28)

4 COVER WITH SLEEVE (27)

Stabilizer Trim Switch Assembly
Wiring Length Adjustment Diagram
Figure 501



65-25747-SERIES ASSEMBLIES
USED ON CAPTAIN'S (LH) WHEEL

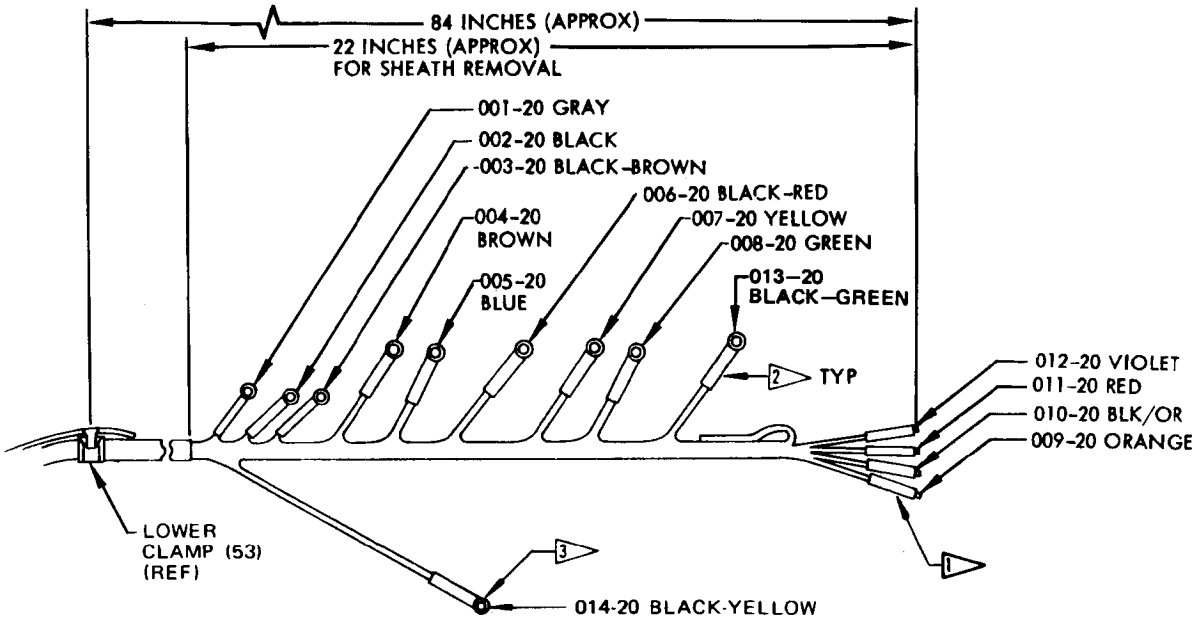


65-25747-SERIES ASSEMBLIES
USED ON FIRST OFFICER'S (RH) WHEEL

1 SPLICE WIRES ON INSTALLATION IN AIRPLANE

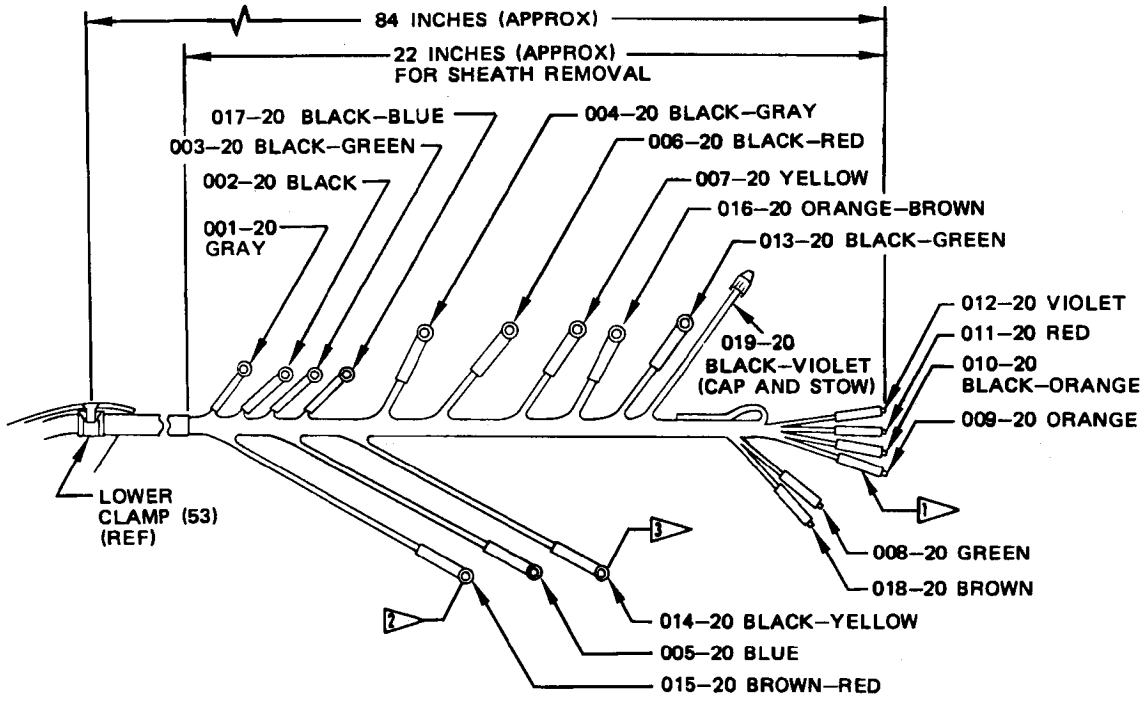
2 ADD SLEEVES PRINTED WITH APPLICABLE WIRE NUMBER TO EACH WIRE.

3 ADD AMP 36153 TERMINAL (8 PLACES)



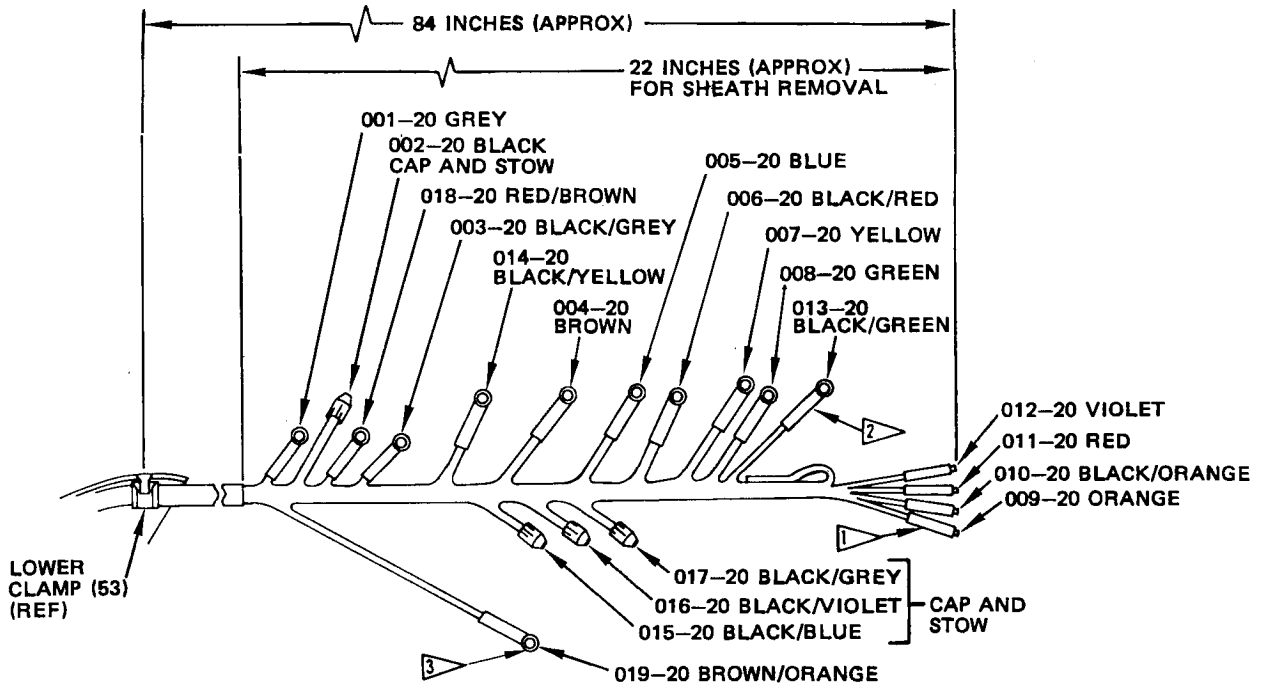
65-45121-SERIES EXCEPT 65-45121-33,-37,-45,-47,-53,-57,-73,-77,-79,-81,-83,-85,-87,-89,-91,-93,-99,-101,-103,-105,-107,-109,-111,-115,-117,-119,-121,-123,-125,-127,-129,-131,-133,-135,-137 ASSEMBLIES

USED ON CAPTAIN'S (LH) WHEEL

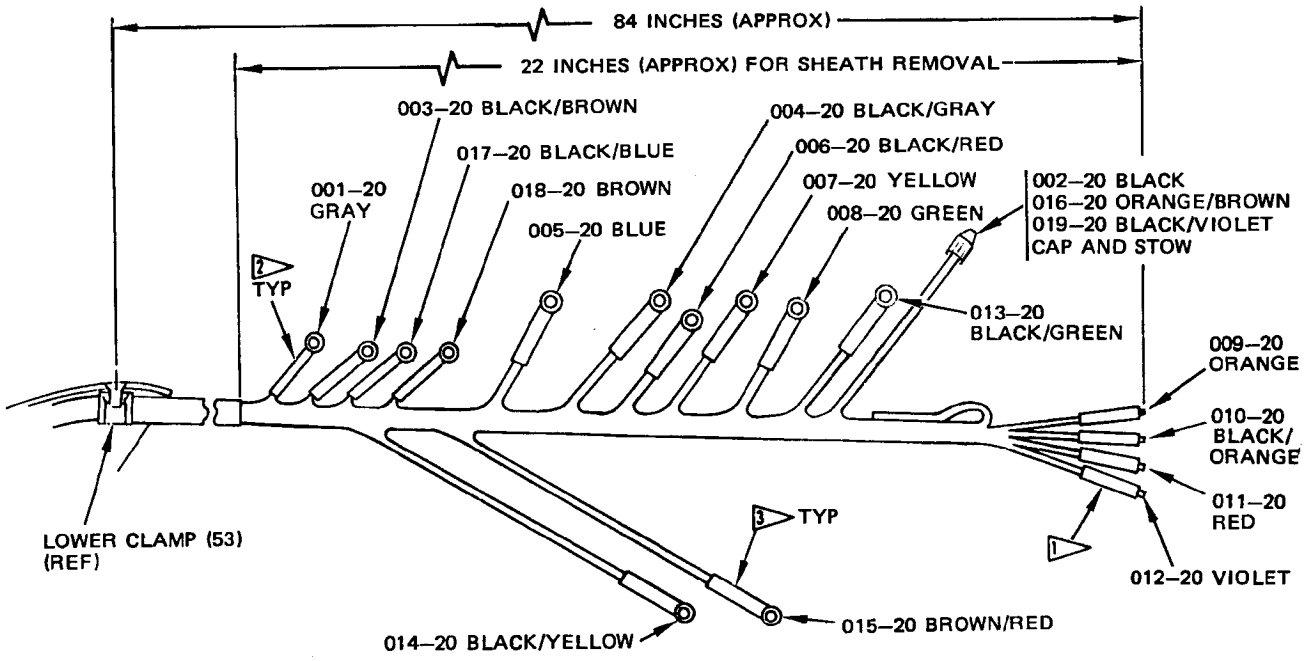


65-45121-33 ASSEMBLY
USED ON CAPTAIN'S (LH) WHEEL
Cable Assemblies
Wiring Length Adjustment Diagram
Figure 502 (Sheet 2)

W23838

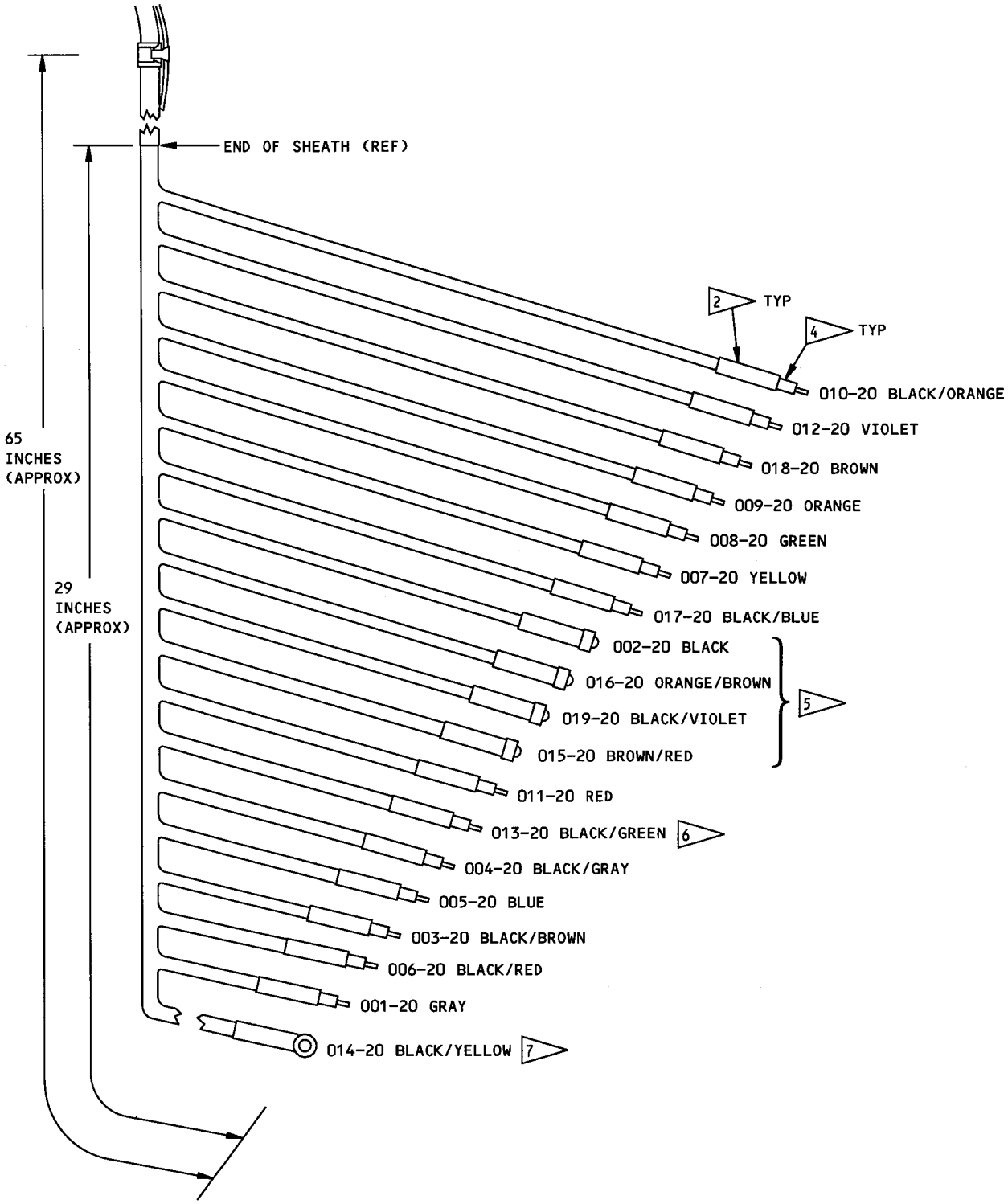


65-45121-37 ASSEMBLY
USED ON CAPTAIN'S (LH) WHEEL



65-45121-45,-47,-53,-57,-73,-77,-79,-81,-83,-85,-87,-89,-91,-93
-99,-101,-103,-105,-107,-109,-111,-115,-117,-119,-121 ASSEMBLIES
USED ON CAPTAIN'S (LH) WHEEL

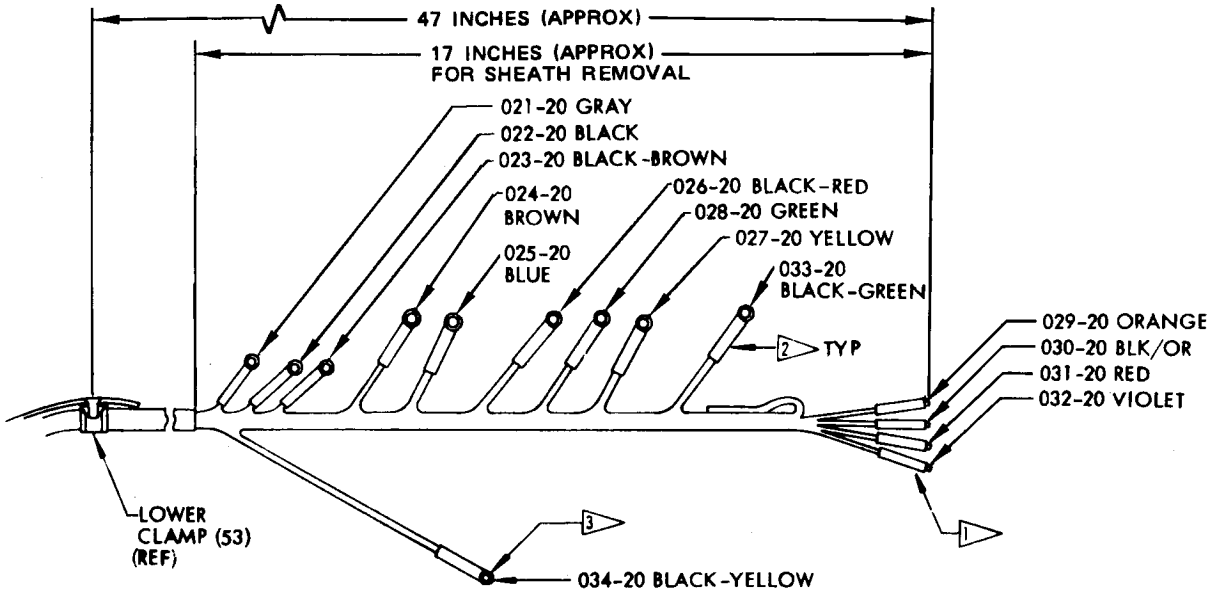
Cable Assemblies
Wire Length Adjustment Diagram
Figure 502 (Sheet 3)



65-45121-123,-125,-127,-129,-131,-133,-135,-137 ASSEMBLIES
USED ON CAPTAIN'S (LH) WHEEL

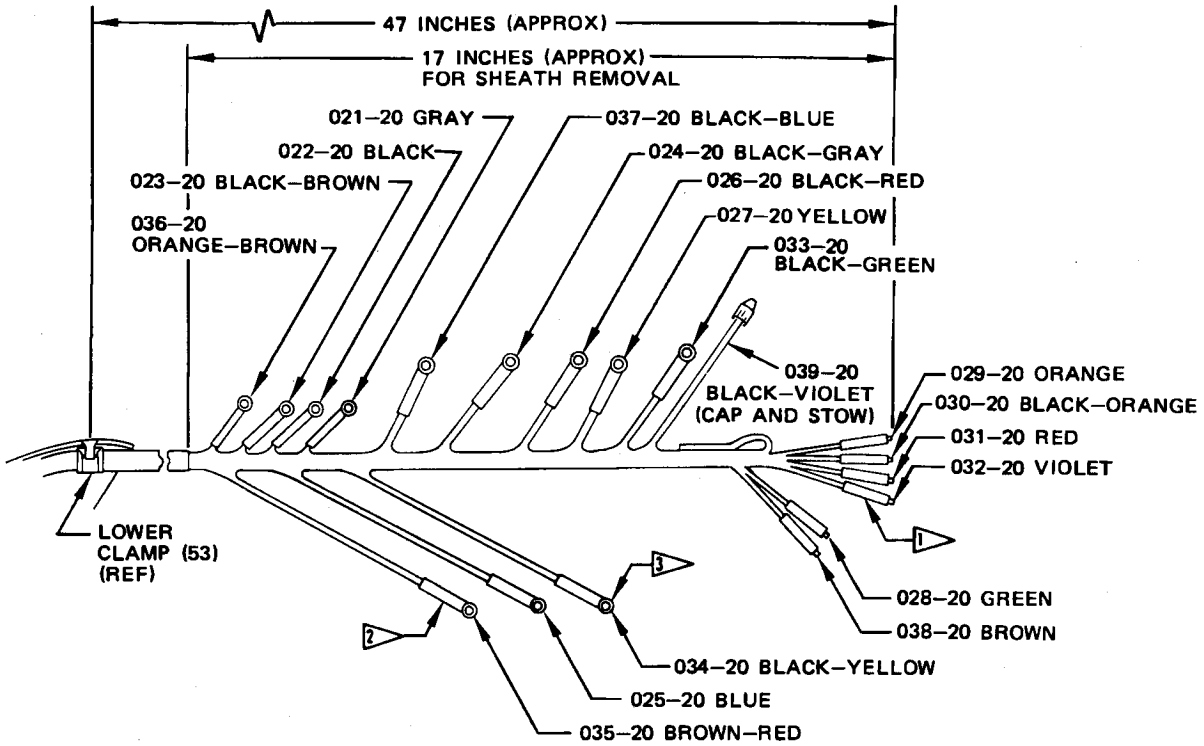
Cable Assemblies
Wiring Length Adjustment Diagram
Figure 502 (Sheet 3A)

W24445



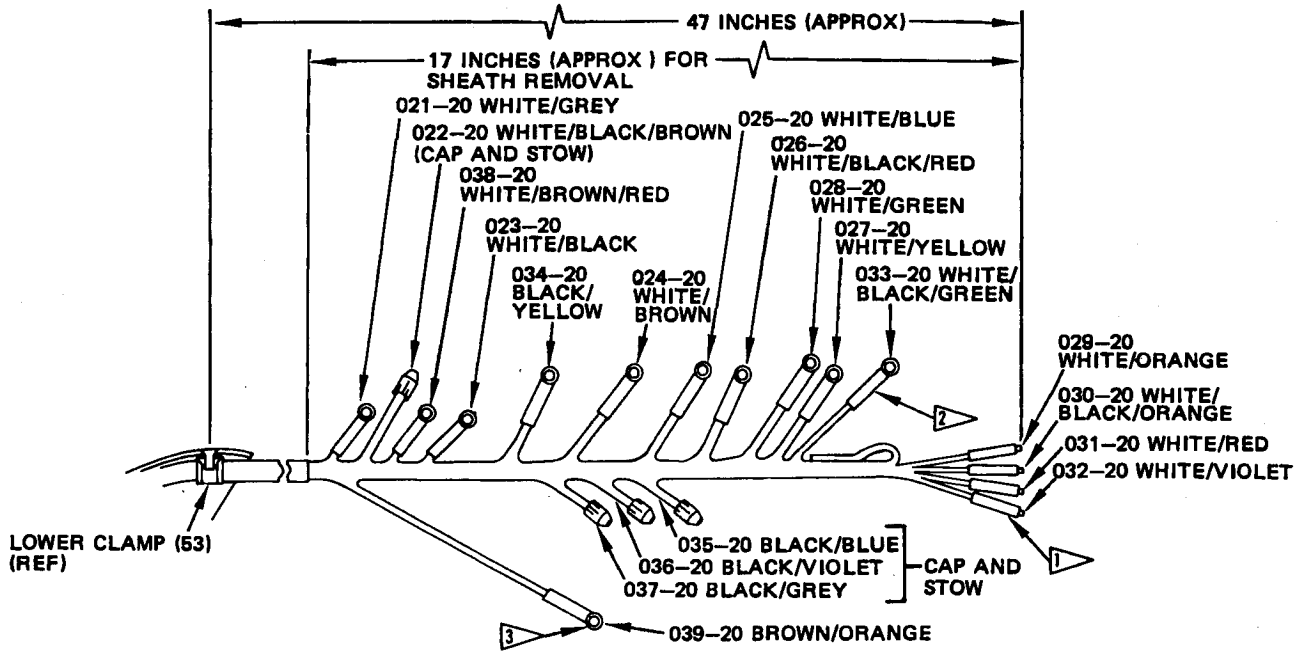
65-45121-SERIES EXCEPT 65-45121-34,-38,-46,-48,-54,-58,-74,-78,-80,-82,-84,-86,-88,-90,-92,-94,-100,-102,-104,-106,-108,-110,-112,-116,-118,-120,-122,-124,-126,-128,-130,-132,-134,-136,-138 ASSEMBLIES

USED ON FIRST OFFICER'S (RH) WHEEL

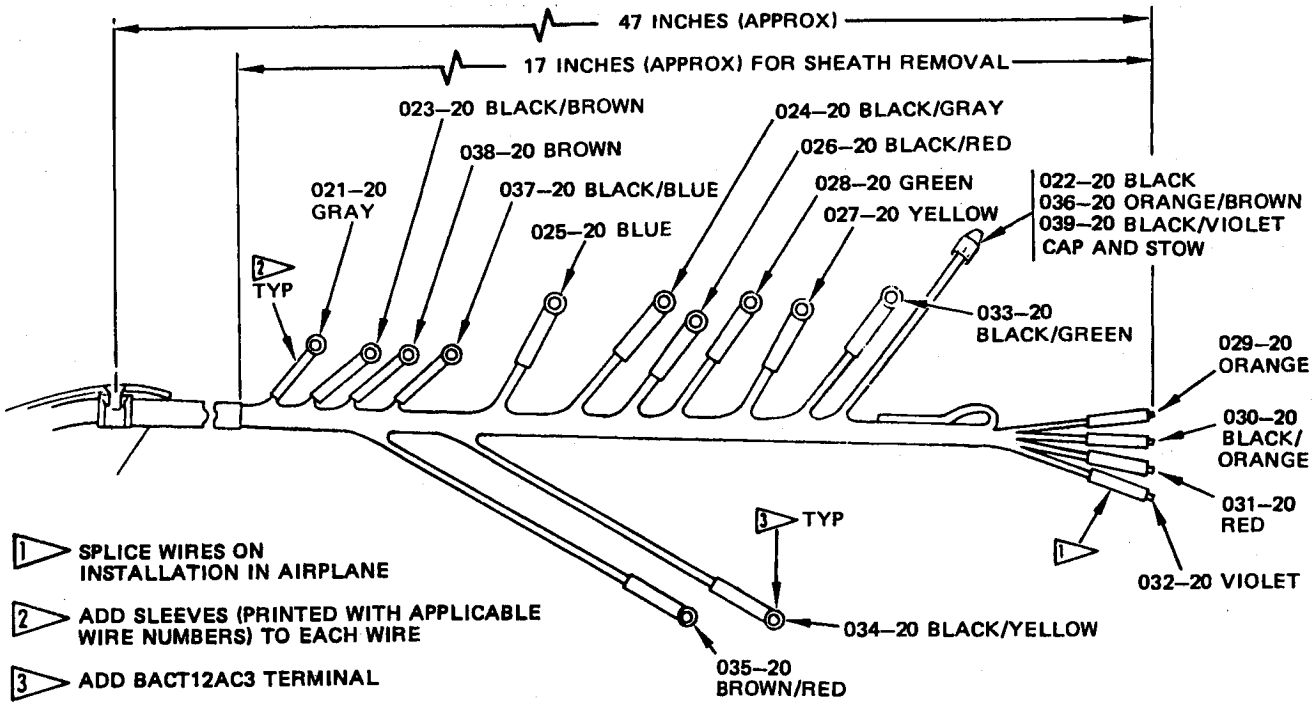


65-45121-34 ASSEMBLY
USED ON FIRST OFFICER'S (RH) WHEEL
Cable Assemblies
Wiring Length Adjustment Diagram
Figure 502 (Sheet 4)

W24381



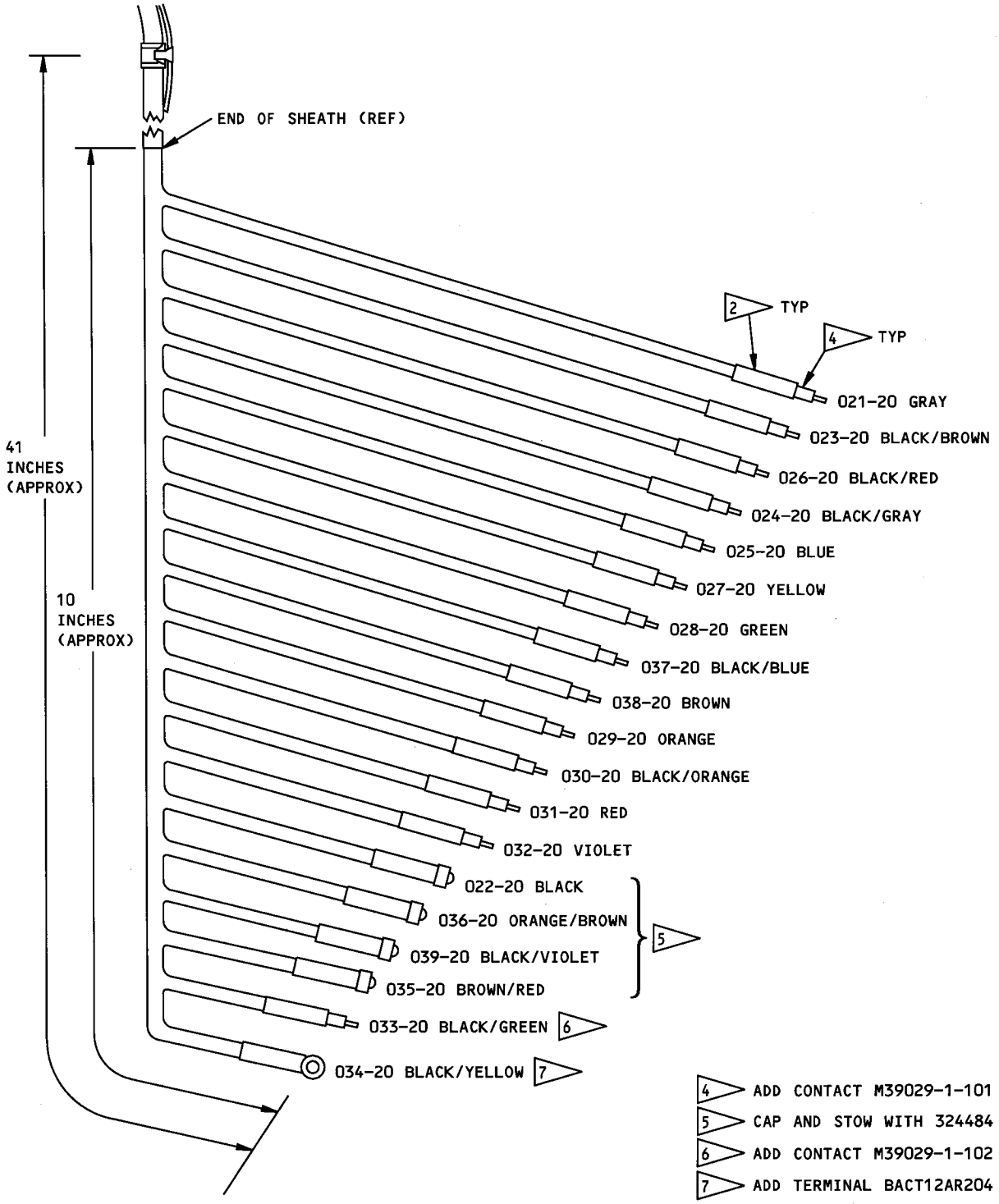
65-45121-38 ASSEMBLY
USED ON FIRST OFFICER'S (RH) WHEEL



65-45121-46,-48,-54,-58,-74,-78,-80,-82,-84,-86,-88,-90,-92,-94,-100, -102,-104,-106,-108,-110,-112,-116,-118,-120,-122 ASSEMBLIES
USED ON FIRST OFFICER'S (RH) WHEEL

Cable Assemblies
Wiring Length Adjustment Diagram
Figure 502 (Sheet 5)

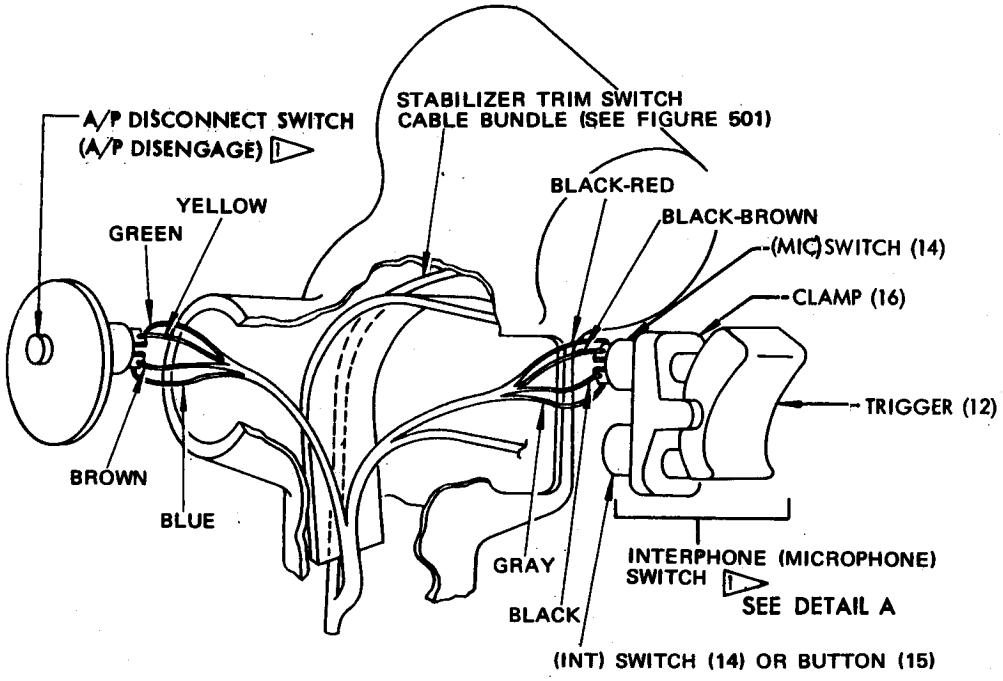
W24486



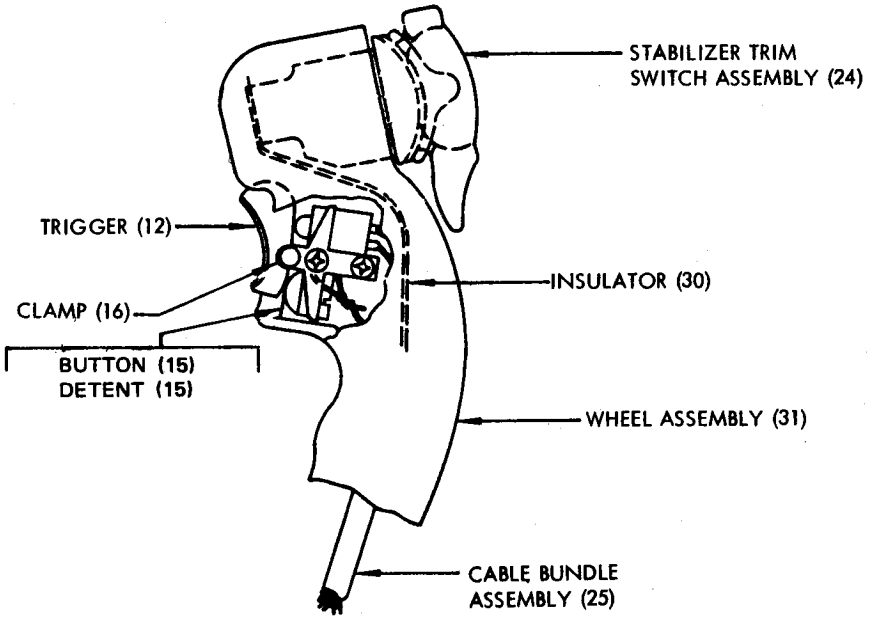
65-45121-124,-126,-128,-130,-132,-134,-136,-138 ASSEMBLIES
USED ON FIRST OFFICER'S (RH) WHEEL

Cable Assemblies
Wiring Length Adjustment Diagram
Figure 502 (Sheet 5A)

W24591

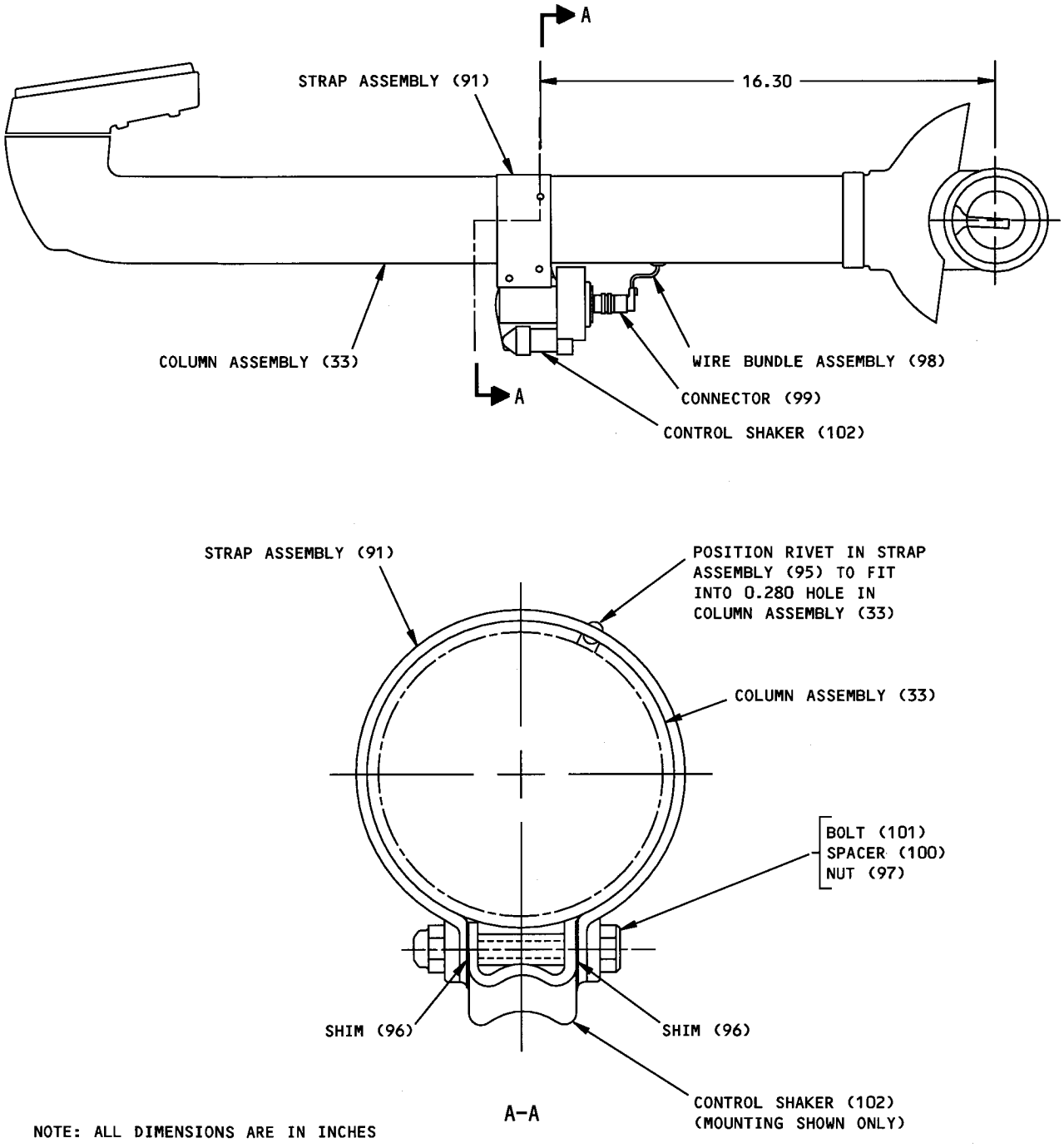


1 NOMENCLATURE IN PARENTHESES IDENTIFIES SWITCHES FOR 65-45121-1 THRU -28 ASSEMBLIES ONLY



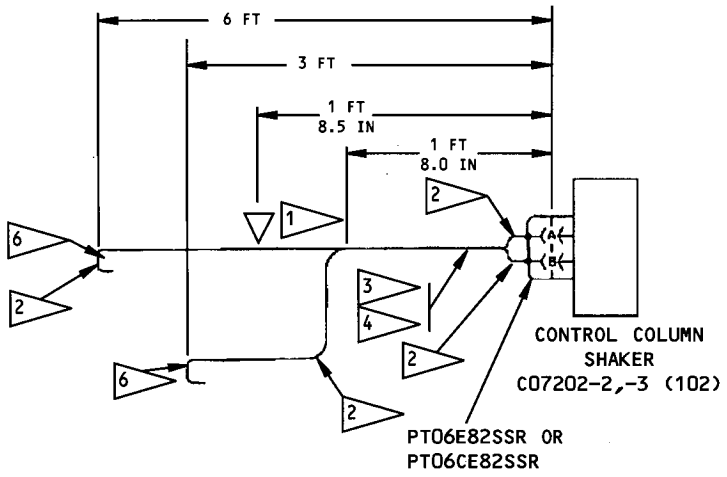
DETAIL A

Typical Switch Hookup
Figure 503



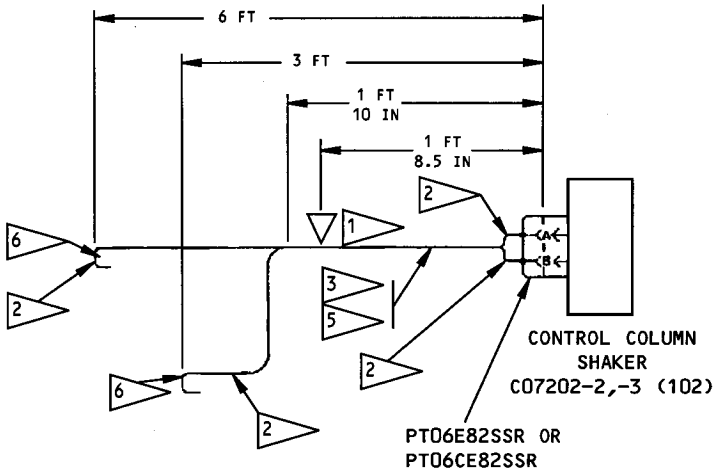
Strap Assembly (91) and Control Shaker (102) Assembly Details
Figure 504

E78787



ITEM (98) 65-45121-95 WIRE BUNDLE ASSEMBLY
USED ON CAPTAINS (L/H) STICK SHAKER

65-45121-89,-91,-93,-99,-101,-103,-105,-107,-109,-111,
-115,-117,-119,-121,-123,-124,-126



ITEM (98) 65-45121-96 WIRE BUNDLE ASSEMBLY
USED ON CO-PILOTS (R/H) STICK SHAKER

65-45121-90,-92,-94,-100,-102,-104,-106,-108,-110,-112,
-116,-118,-120,-122,-125

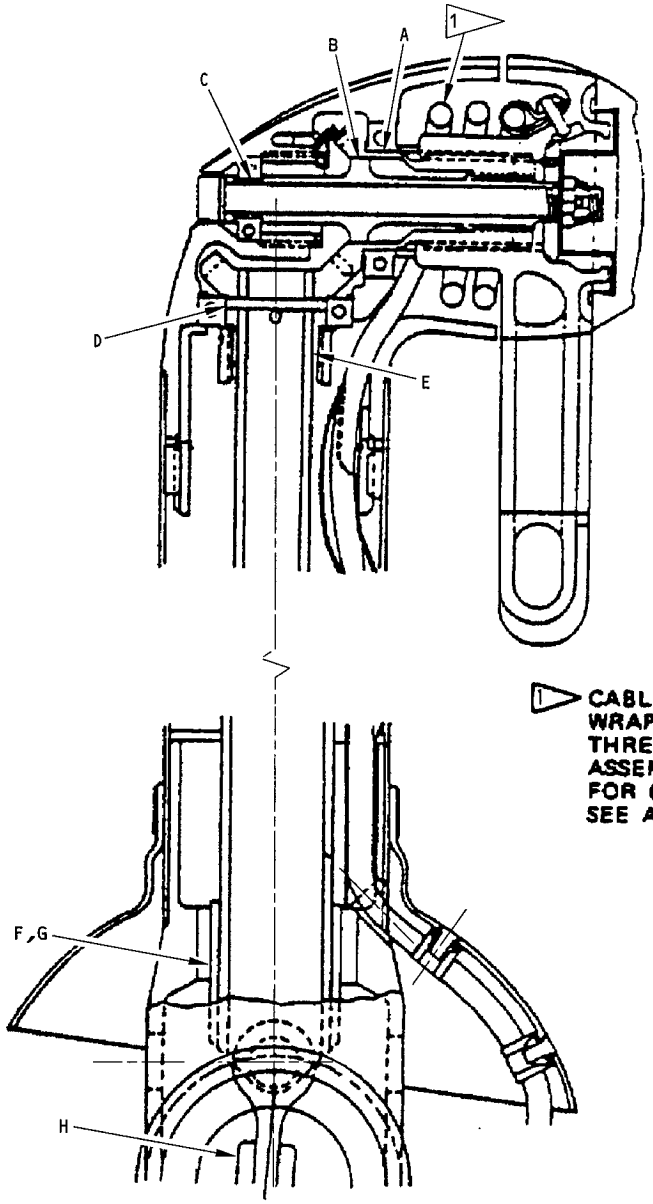
Cable Assemblies
Wiring Length Adjustment Diagram
Figure 504A (Sheet 1)

1650792

1. TAPE WIRE BUNDLE AT THIS POINT WITH GREEN TAPE PER BAC 5157.
2. IDENTIFY EACH WIRE WITH WIRE BUNDLE NUMBER, WIRE NUMBER AND WIRE GAUGE, USING THE HOT EMBOSSING PROCESS PER D6-5456 AND BAC 5152.
3. COVER WIRES WITH 18 INCH X 1/8 INCH BLACK THERMOFIT SLEEVE PER BAC 5152, BAC 5157 AND BSS 7010. POSITION SLEEVE UNDER CONNECTOR CLAMPS AND AS CLOSE TO END OF CONNECTOR AS POSSIBLE.
4. IDENTIFY CONNECTOR PER BAC 5152 USING A 2 INCH PIECE OF BLACK THERMOFIT SLEEVING WITH WHITE INK, 'D281 M/W M424 COLUMN SHAKER' OR OPTIONAL COLOR BLUE WITH BLACK INK 'STICK SHAKER - LEFT W0145 D00281 M/W M00232 CONNECTOR'. SLEEVE TO BE POSITIONED WITHIN 1/4 INCH OF CONNECTOR.
5. IDENTIFY CONNECTOR PER BAC 5152 USING A 2 INCH PIECE OF BLACK THERMOFIT SLEEVING WITH WHITE INK, 'D367 M/W M424 COLUMN SHAKER' OR OPTIONAL COLOR BLUE WITH BLACK INK 'STICK SHAKER - RIGHT W0145 D00367 M/W M00232 CONNECTOR'. SLEEVE TO BE POSITIONED WITHIN 1/4 INCH OF CONNECTOR.
6. CONNECTOR ATTACHED DURING INSTALLATION IN THE AIRCRAFT.

Cable Assemblies
Wiring Length Adjustment Diagram
Figure 504A (Sheet 2)

1650934



1 CABLE ASSEMBLY (25) IS WRAPPED AROUND WHEEL HUB THREE TIMES FOR 65-25747 ASSEMBLIES AND FOUR TIMES FOR 65-45121 ASSEMBLIES. SEE ASSEMBLY SECTION

Fits and Clearances
Figure 601

Ref Letter Fig. 601	Mating Item No. Fig. 1101	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	ID 45	1.3120	1.3130	0.0000	0.0015		1.3140	0.0020
	OD 46	1.3115	1.3120			1.3115		
B	ID 46	1.1200	1.1205	0.0005	0.0015		1.1220	0.0025
	OD 47	1.1190	1.1195			1.1185		
C	ID 50	0.4995	0.5000	0.0005	0.0020		0.5025	0.0035
	OD 47	0.4980	0.4990			0.4975		
D	ID 79	1.3120	1.3130	0.000	0.0015		1.3140	0.0020
	OD 86	1.3115	1.3120			1.3115		
E	ID 86	0.9990	1.0000	-0.0005 *[1]	0.0015		1.0025	0.0030
	OD 85	0.9985	0.9995			0.9980		
F	ID 66	1.7505	1.7518	0.0000	0.0018		1.7525	0.0020
	OD 84	1.7500	1.7505			1.7498		
G	ID 66A	1.3120	1.3125	-0.0010	0.0005			
	OD 84A	1.3120	1.3130					
H	150	0.3194	0.3208	0.0001 *[2]	0.0024		0.3249	0.0060 *[3]
	63	0.3184	0.3193			0.3160		

*[1] Interference Fit

*[2] No Interference Allowed

*[3] See Repair Procedure for rework information

Fits and Clearances
Figure 601 (Sheet 2)

TESTING

1. Test Equipment (Fig. 701 thru 705)

   NOTE: Equivalent tools may be used.

   A. F70320-1 -- Control Column Holding Fixture (Replaces TSJ5-87879-1) consisting of following:

      (1) F70320-2 -- Base

      (2) F70320-3 -- Wrench

      (3) F70320-4 -- Wrench

      (4) F70320-5 -- Adapter

      (5) F70320-6 -- Yoke

      (6) F70320-15 -- Shaft

   B. TSJ5-87879-1 -- Control Column Holding Fixture (Replaced by F70320-1)

   C. Dial indicator

   D. Spring scale

   E. Megohmmeter (500-volt) -- Biddle Model 656

   F. Torque wrench (0-15 lb-in.)

2. Preparation for Test -- If applicable, make sure control shaker (102) has been removed from control column (reinstall control shaker (102) after test). Install control column and wheel assembly in holding fixture TSJ5-87879-1, or F70320-1. If TSJ5-87879-1 is used, remove plate (63) at lower end of control column (Fig. 701, 703).

3. Mechanical Test -- Using Fixture TSJ5-87879-1 (Fig. 701, 702).

   CAUTION: DO NOT TURN CONTROL WHEEL MORE THAN 110 DEGREES IN EITHER DIRECTION OR DAMAGE TO CABLE (25) MAY OCCUR.

   A. Torque Check (Fig. 701)

      (1) Cycle control wheel five times through entire range of travel, 106-110 degrees each side of neutral position. Control wheel must turn freely through entire range of travel.

(2) Attach spring scale at 7.0 inch radius of wheel. Turn wheel 90 degrees each side of neutral position. Check that force does not exceed 1.0 lb (7.0 lb-in. torque at (35) nut).

(3) Turn wheel 90-108 degrees on each side of neutral position. Check that force does not exceed 1.5 lb (10.5 lb-in. torque at (35) nut).

B. Backlash (Fig. 701)

(1) Apply 1.0 lb force at a 7-inch radius (7.0 lb-in. torque at (35) nut) and measure backlash at 7.0-inch radius of wheel at three positions, 108 degrees apart. One position must be neutral setting. Check that backlash does not exceed 0.030 inch. Adjust backlash per ASSEMBLY par. 12.

C. End Play (Fig. 702)

(1) Apply 1.75-2.25 lb force parallel to axis of wheel rotation. Check that end play of wheel does not exceed 0.010 inch.

4. Mechanical Test -- Using Fixture F70320-1 (Fig. 703, 704, 705)

CAUTION: DO NOT TURN CONTROL WHEEL MORE THAN 110 DEGREES IN EITHER DIRECTION OR DAMAGE TO CABLE (25) MAY OCCUR.

A. Torque Check (Fig. 703)

(1) Cycle control wheel five times through entire range of travel, 106-110 degrees each side of neutral position. Control wheel must turn freely through entire range of travel.

(2) Remove cotter pin (34). Install torque wrench on nut (35). Turn wheel 90 degrees each side of neutral position. Check that torque does not exceed 7.0 lb-in.

(3) Turn wheel 90-108 degrees each side of neutral position. Check that torque does not exceed 10.5 lb-in.

B. Backlash (Fig. 703)

(1) Secure plate (63) at lower end of column to Fixture Shaft F70320-15 on base F70320-2. Lock in position and install dial indicator at 7.0-inch radius of wheel.

(2) Apply 7.0 lb-in. torque at nut (35) and measure backlash at three positions, 108 degrees apart. One position must be at neutral setting. Check that backlash does not exceed 0.030 inch. Adjust backlash per ASSEMBLY par. 12 (Ref Fig. 704).

C. End Play (Fig. 705)

(1) Attach Fixture Yoke F70320-6 to wheel hub and position dial indicator as shown. Using spring scale apply 1.75-2.25 lb force parallel to axis of wheel rotation (perpendicular to column). Check that end play of wheel does not exceed 0.010 inch.

5. Electrical Test

A. Continuity -- Check electrical circuits for continuity (Ref Wiring Diagram, Fig. 801 thru 812).

B. Insulation Check (65-45121 Assemblies)

NOTE: Insulation check for 65-25747 assemblies is performed after column assembly is installed in the airplane.

(1) On applicable assemblies, remove memory device (24B) by removing screws (24A).

(2) Check insulation at wire terminals in terminal block (lower column end) using 500-volt megger. Check from each terminal to ground, and from terminal to terminal in the following pairs. Rotate control wheel through full travel and back during breakdown check.

(a) Violet - Red

(b) Violet - Orange

(c) Violet - Black/Orange

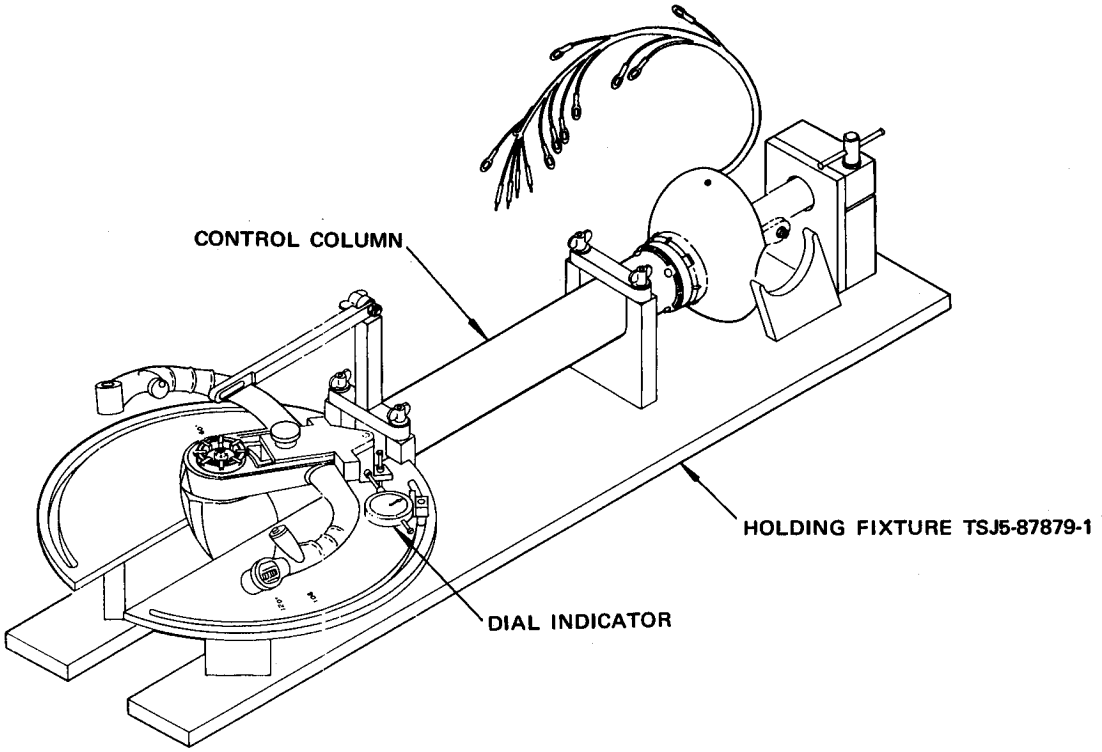
(d) Red - Black/Orange

(e) Red - Orange

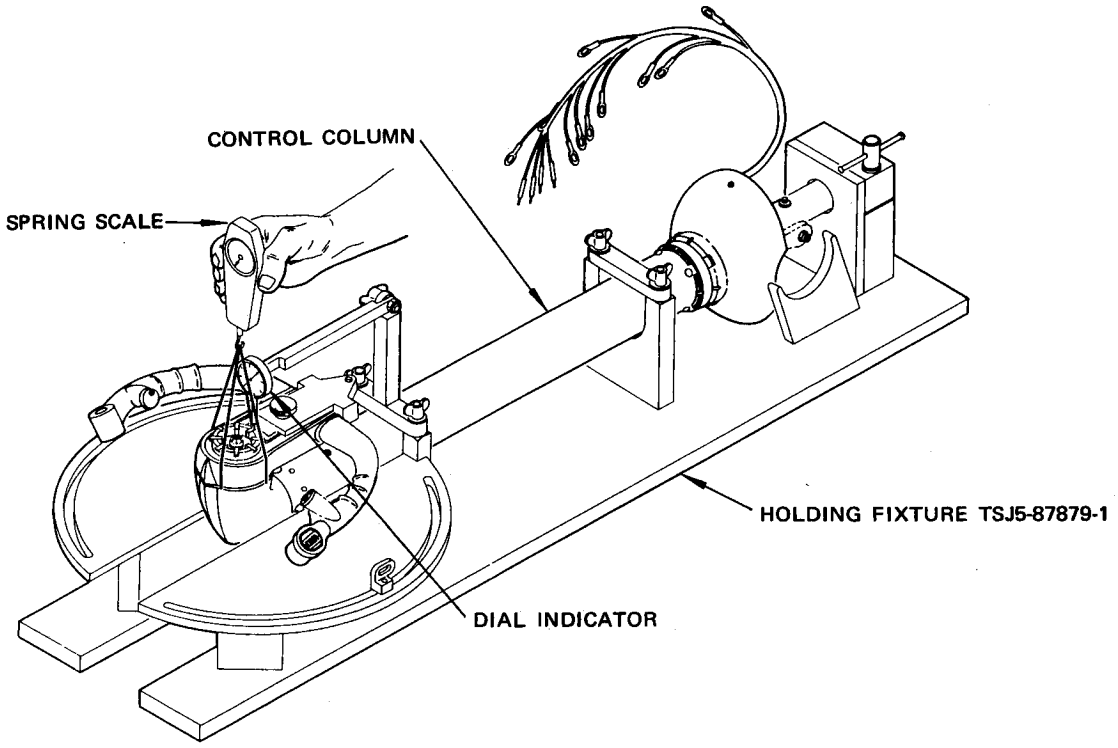
(f) Black/Orange - Orange

(3) Insulation resistance shall not be less than 100 megohms and there shall be no insulation breakdown.

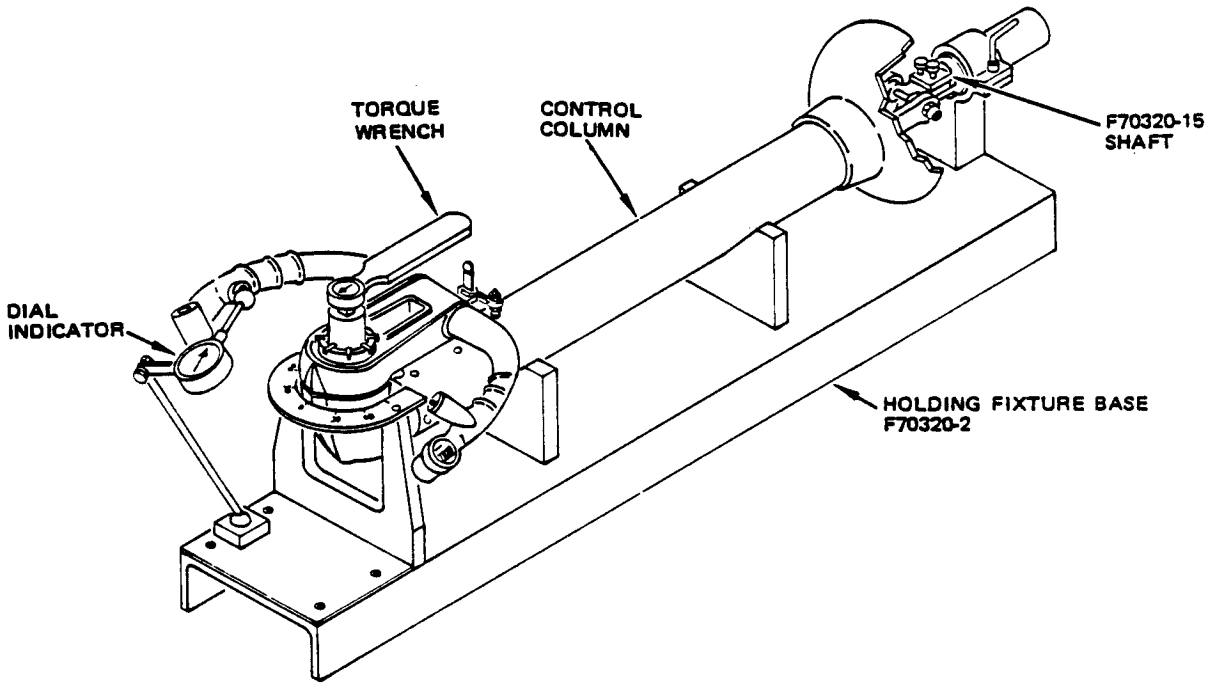
(4) On applicable assemblies, install memory device (24B) using screws (24A). Apply 5 volts (ac or dc) to black/green wire (power) and black/yellow wire (ground). Lights in memory device shall illuminate.



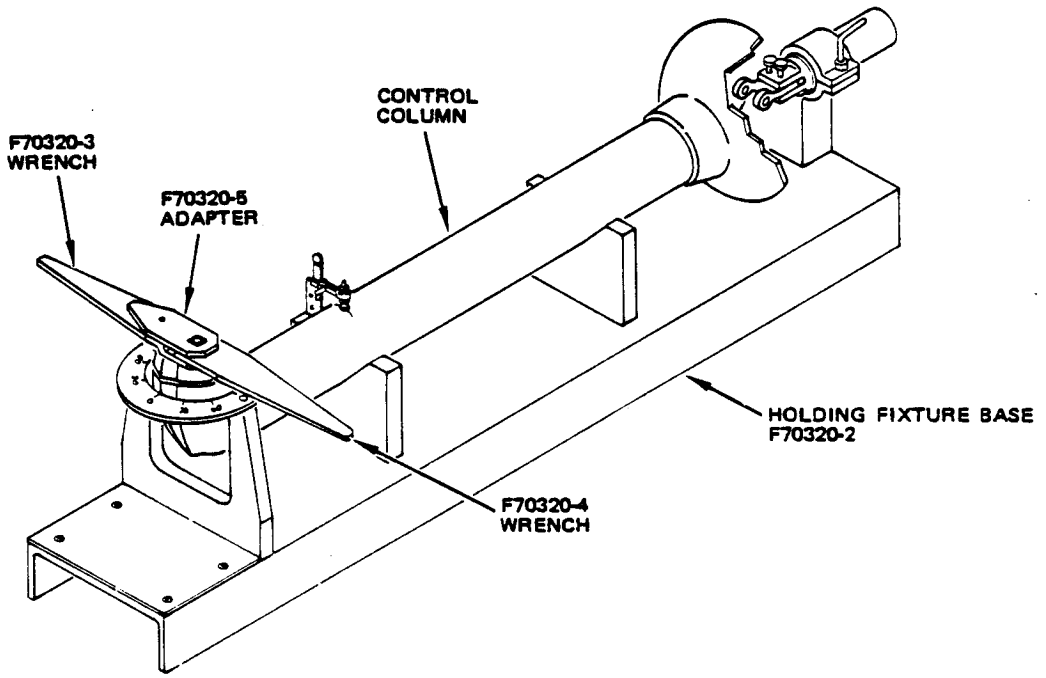
Control Wheel Torque and Backlash Check
Figure 701



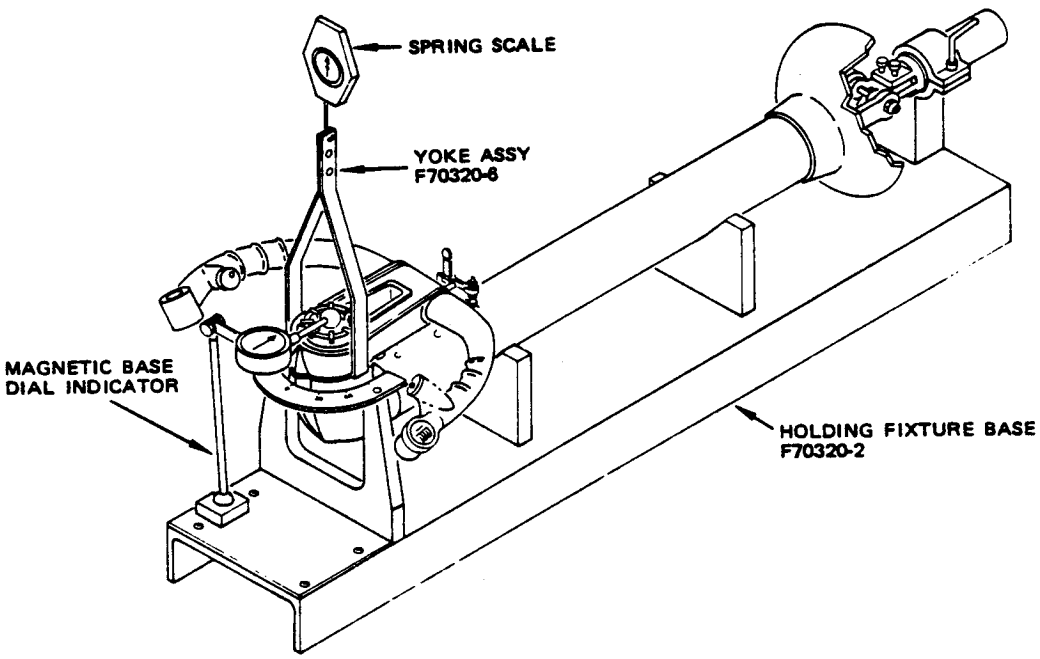
Control Wheel End Play Check
Figure 702



Control Wheel Torque and Backlash Check
Figure 703



Control Column Backlash Adjustment
Figure 704

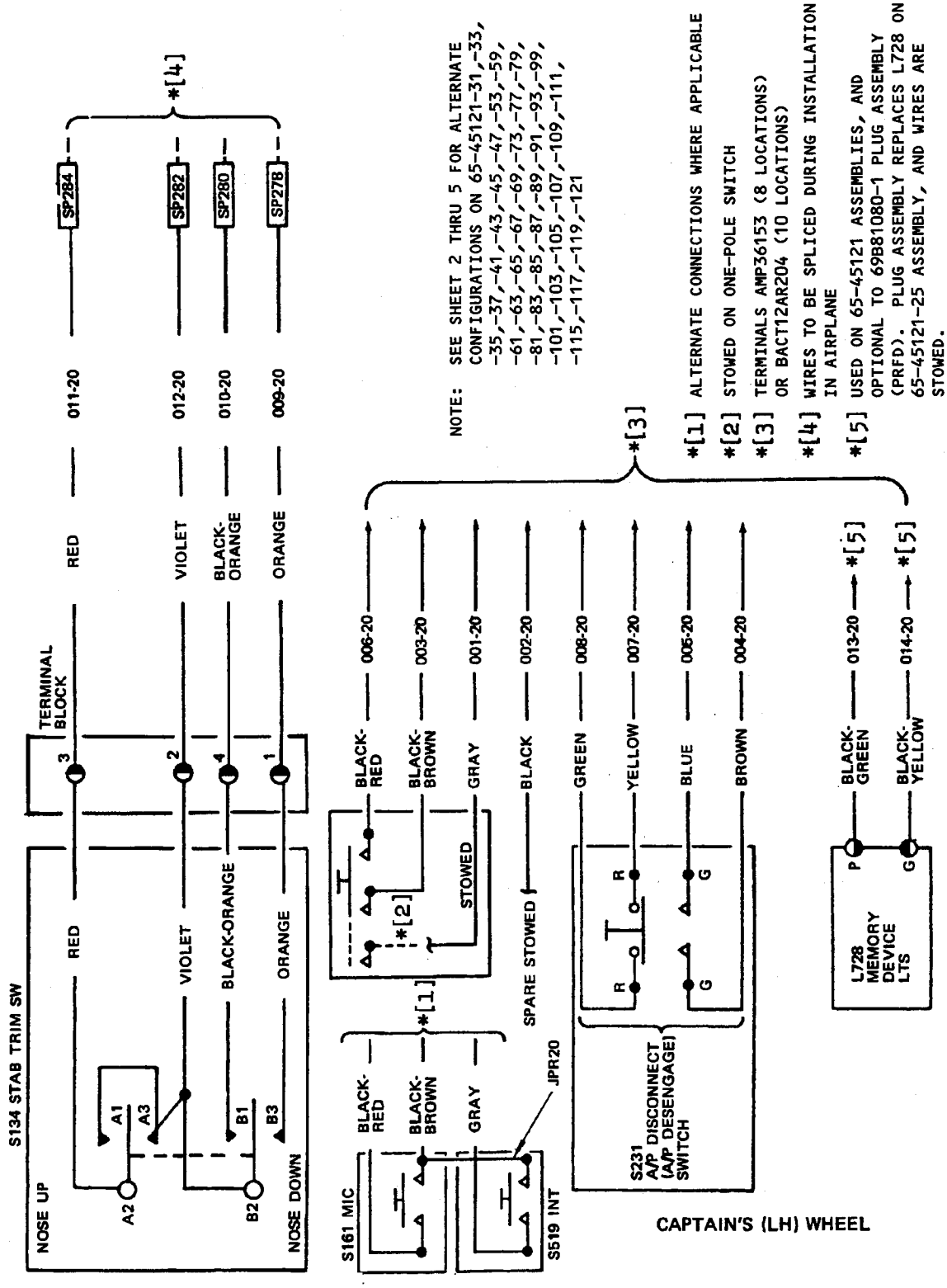


Control Wheel End Play Check
Figure 705

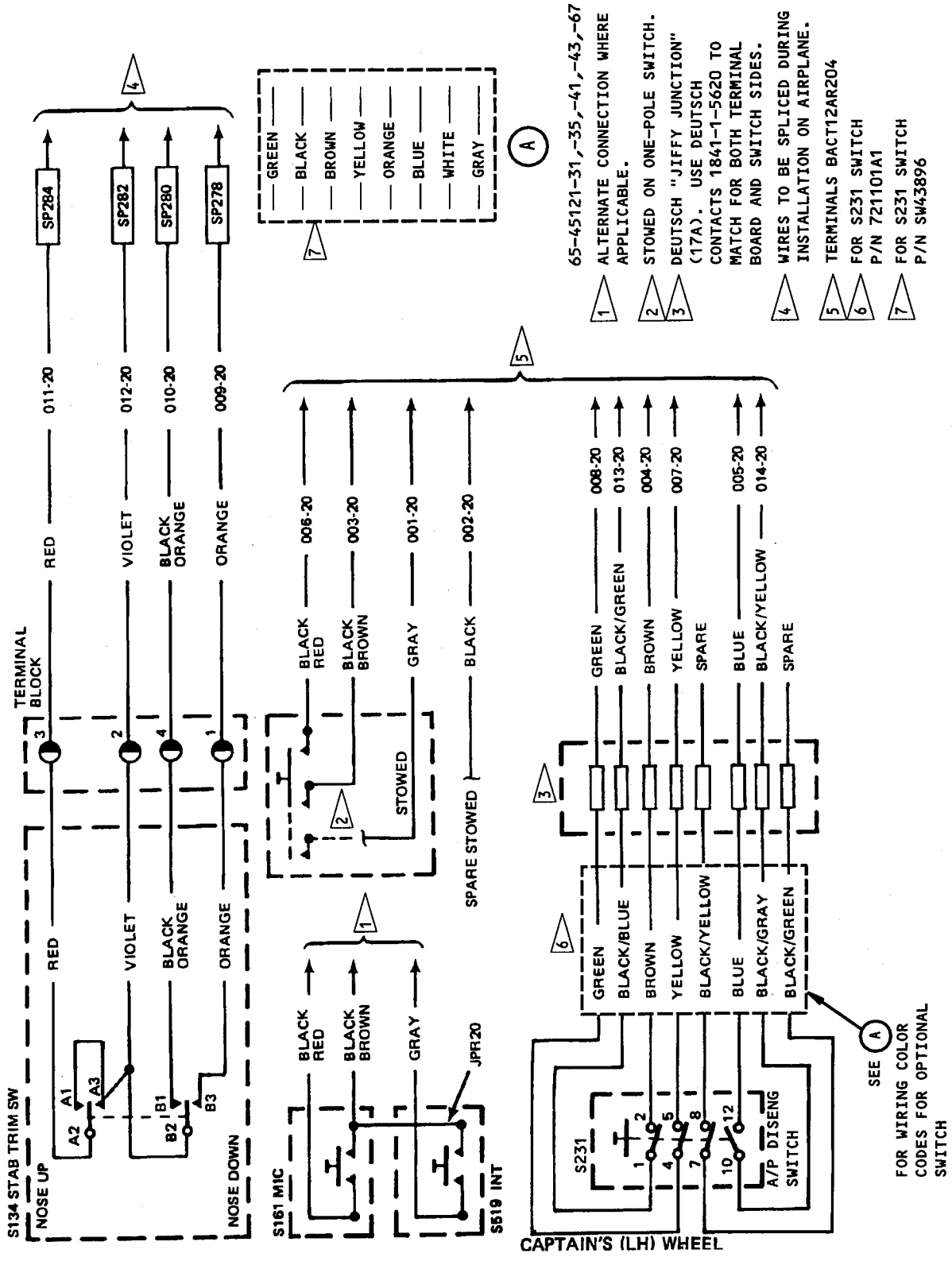
TROUBLE SHOOTING

1. Trouble shooting is keyed to individual steps of the test procedure. Referenced paragraphs show test procedure step in which the noted trouble would appear. (See figures 801 and 1101.)

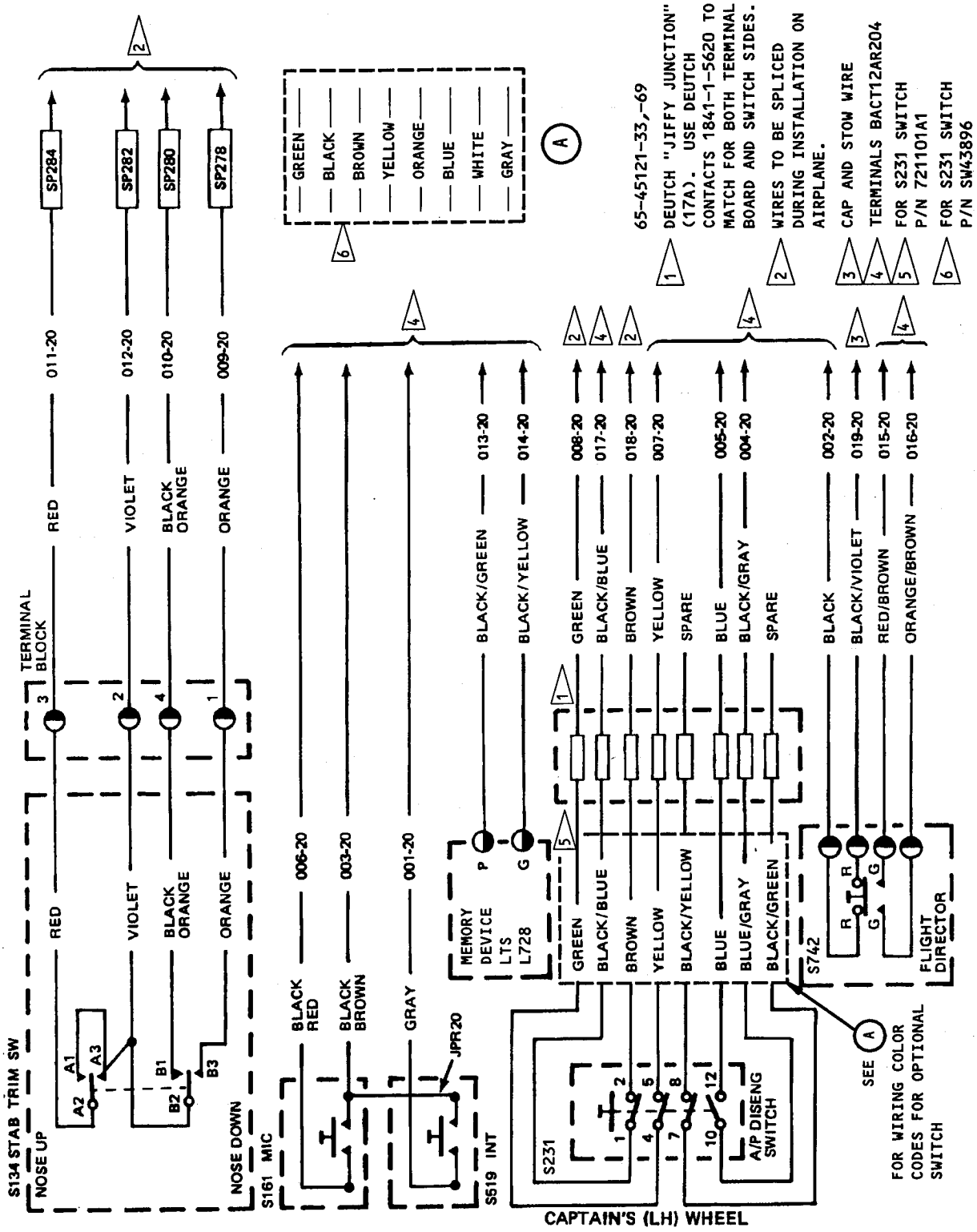
Trouble	Possible Cause	Correction
A. Wheel assembly (1) does not turn freely, paragraph 3.A	Gears (46 and 86 or 46B and 46C) are not meshing properly	Adjust gear (46 or 46B) to within backlash limits
	Cable (25) binding in column housing (86)	Remove wheel assembly (1) from column assembly (33) and rearrange cable assembly so that turns about wheel hub have ample clearance
		Apply liberal coating of Dow Corning No. 5 compound on cable and adjoining surfaces in column head (86) if necessary
B. Switches (10,10A, 14 and 24) and memory device (24B) if applicable, are not functioning properly, paragraph 3.D	Switches defective	Check out switches (10, 10A, 14 and 24), and memory device (24B), as applicable
	Defective wiring	Check wiring continuity
	Assembly incorrectly wired	Check all connections



Wiring Diagram
Figure 801 (Sheet 1)

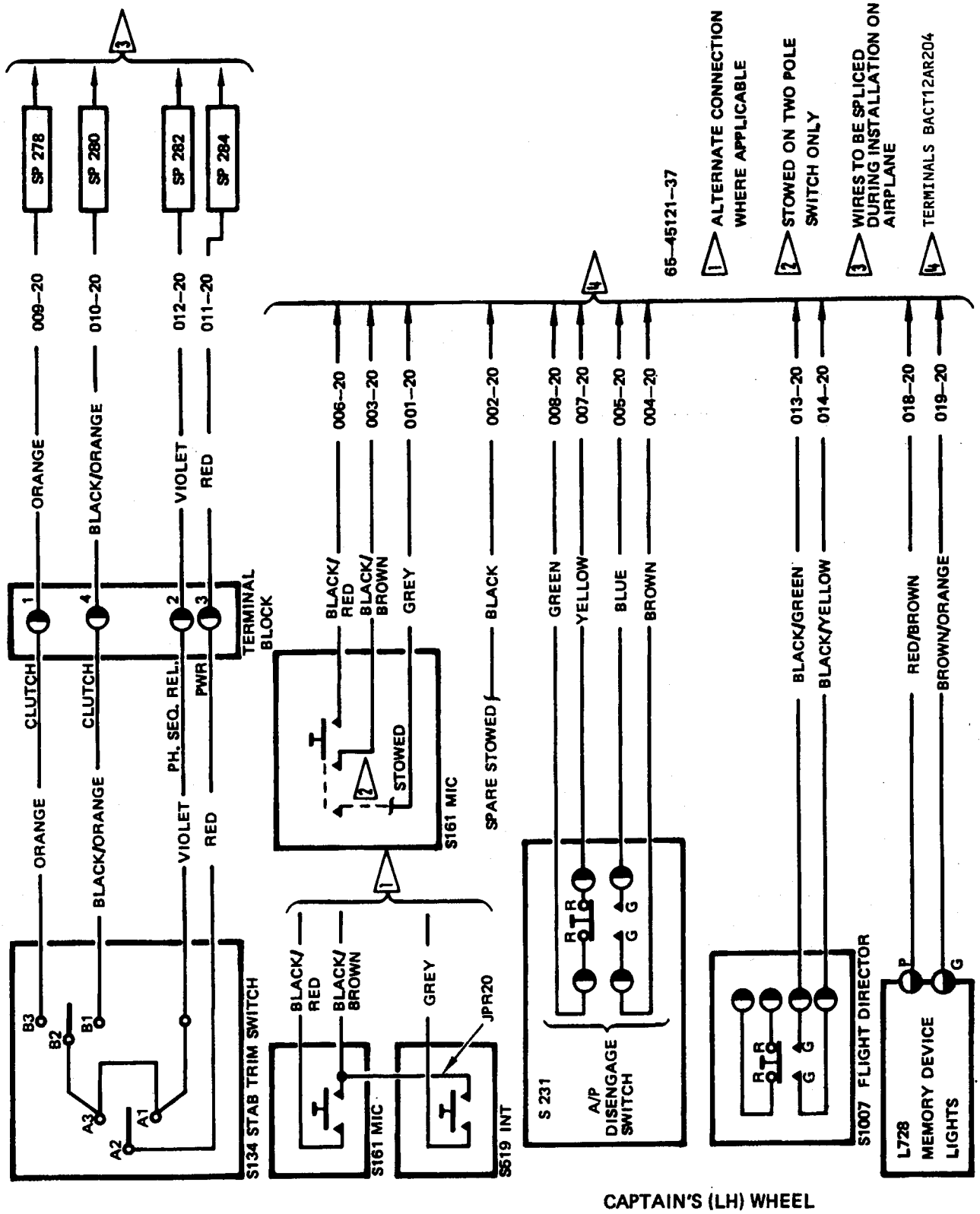


Wiring Diagram
Figure 802

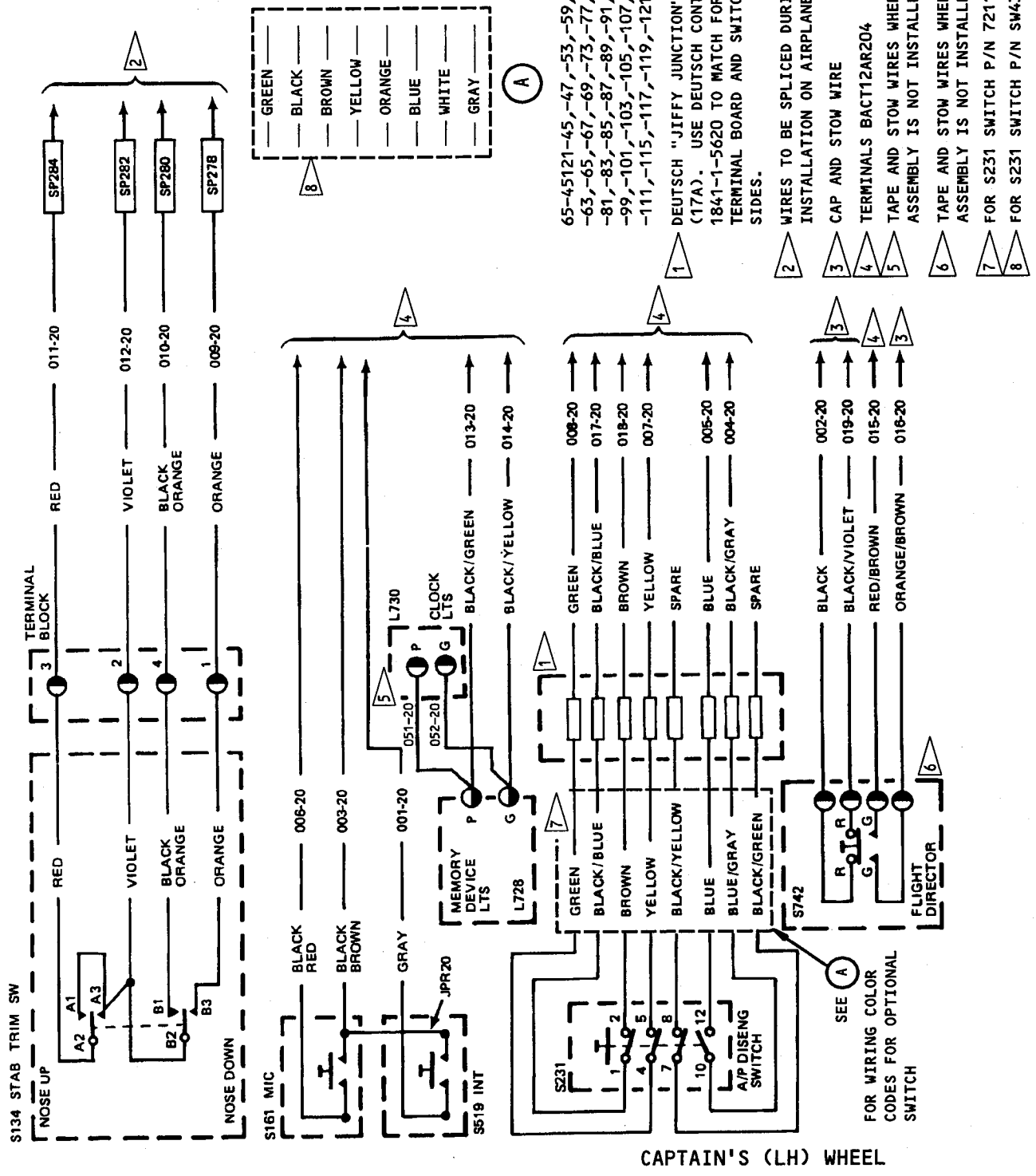


Wiring Diagram
Figure 803

M88981

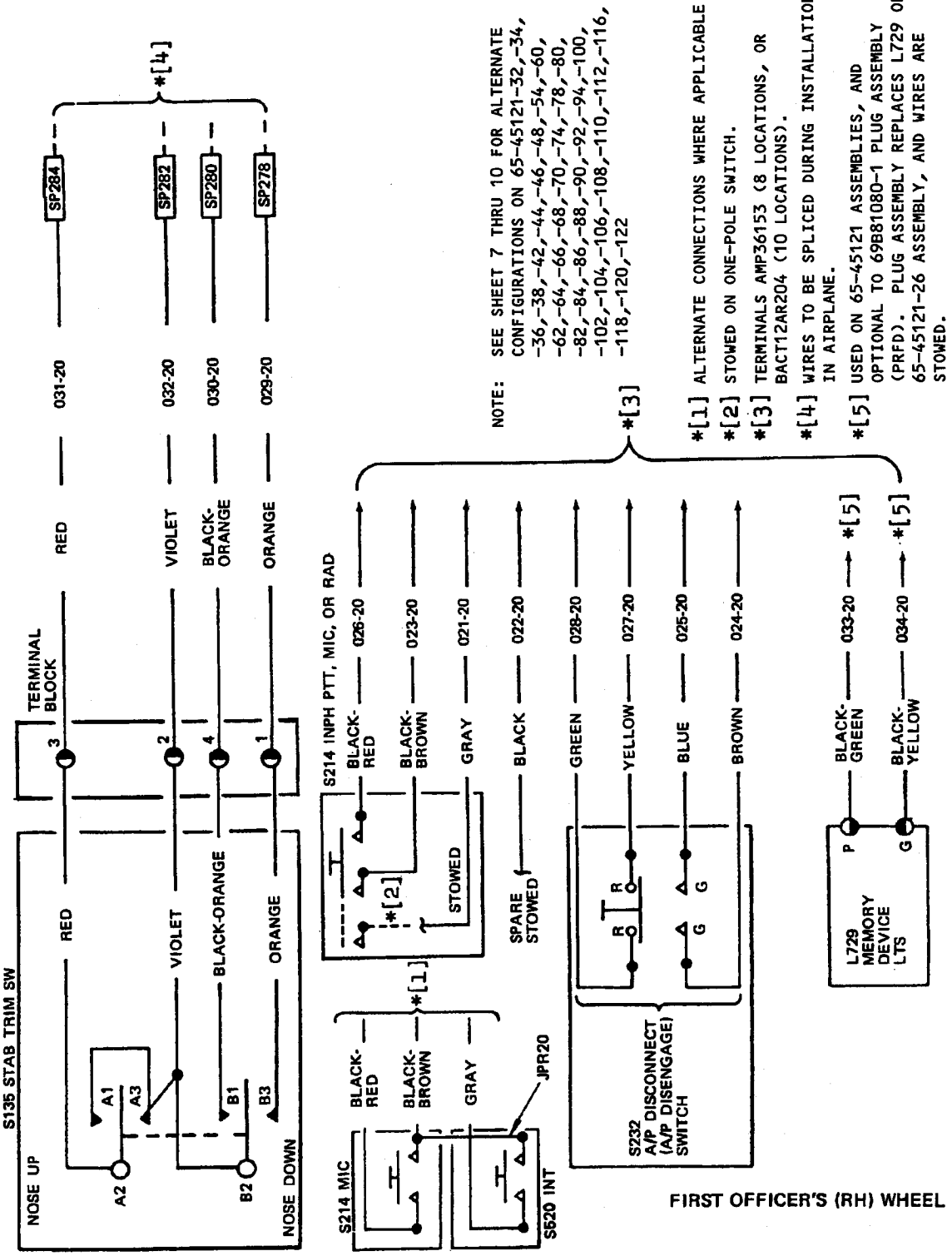


Wiring Diagram
Figure 804

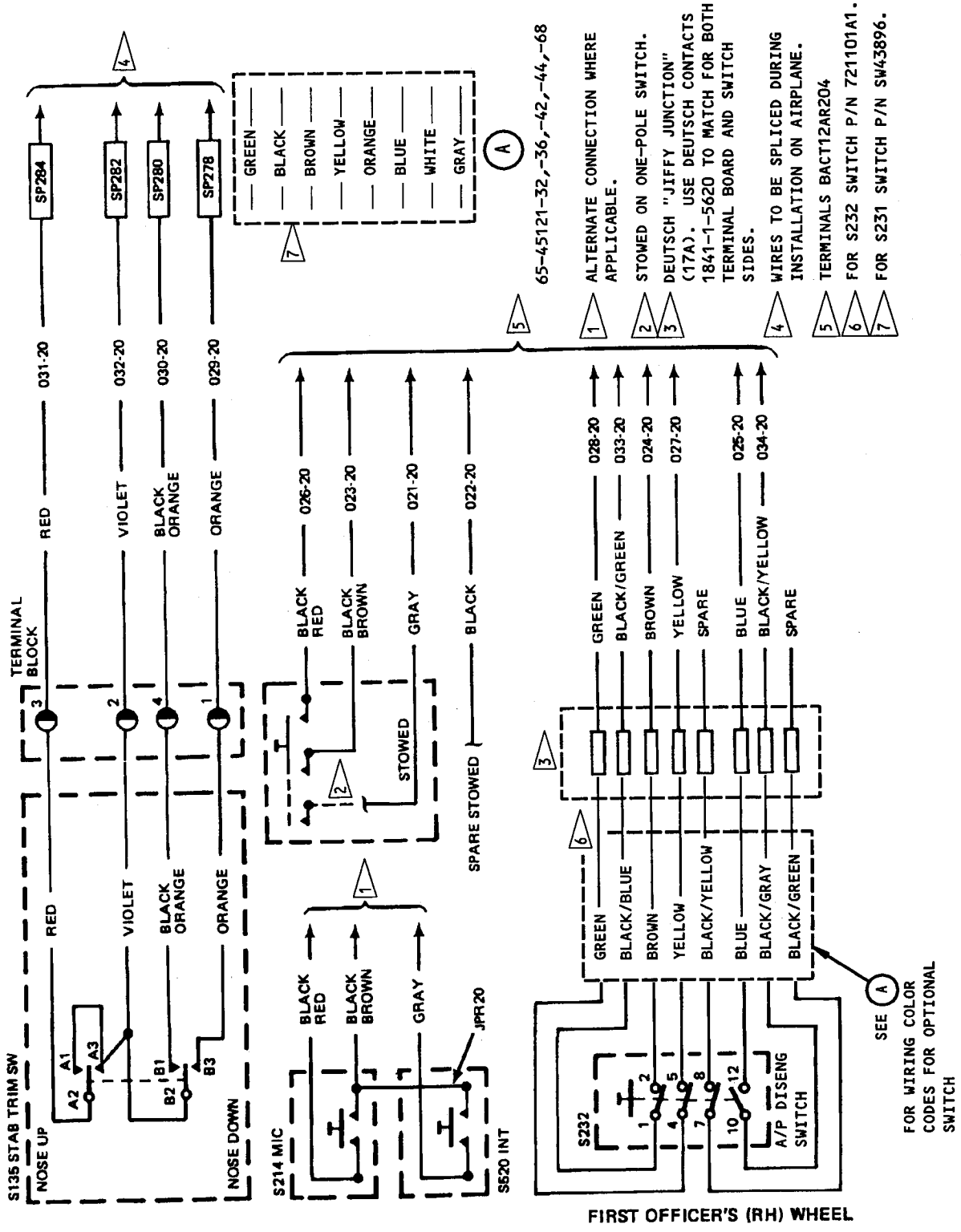


Wiring Diagram
Figure 805

M88988

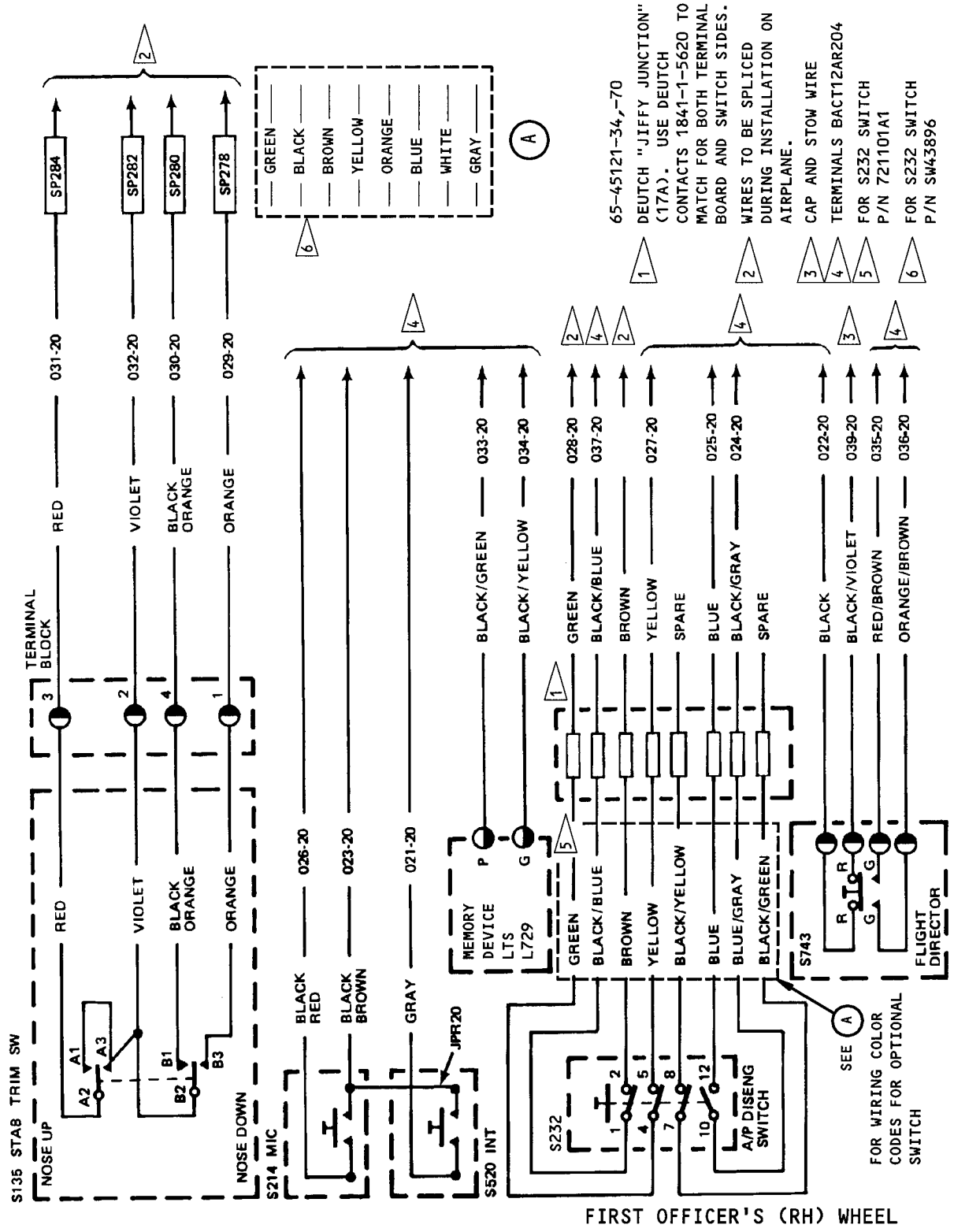


Wiring Diagram
Figure 806

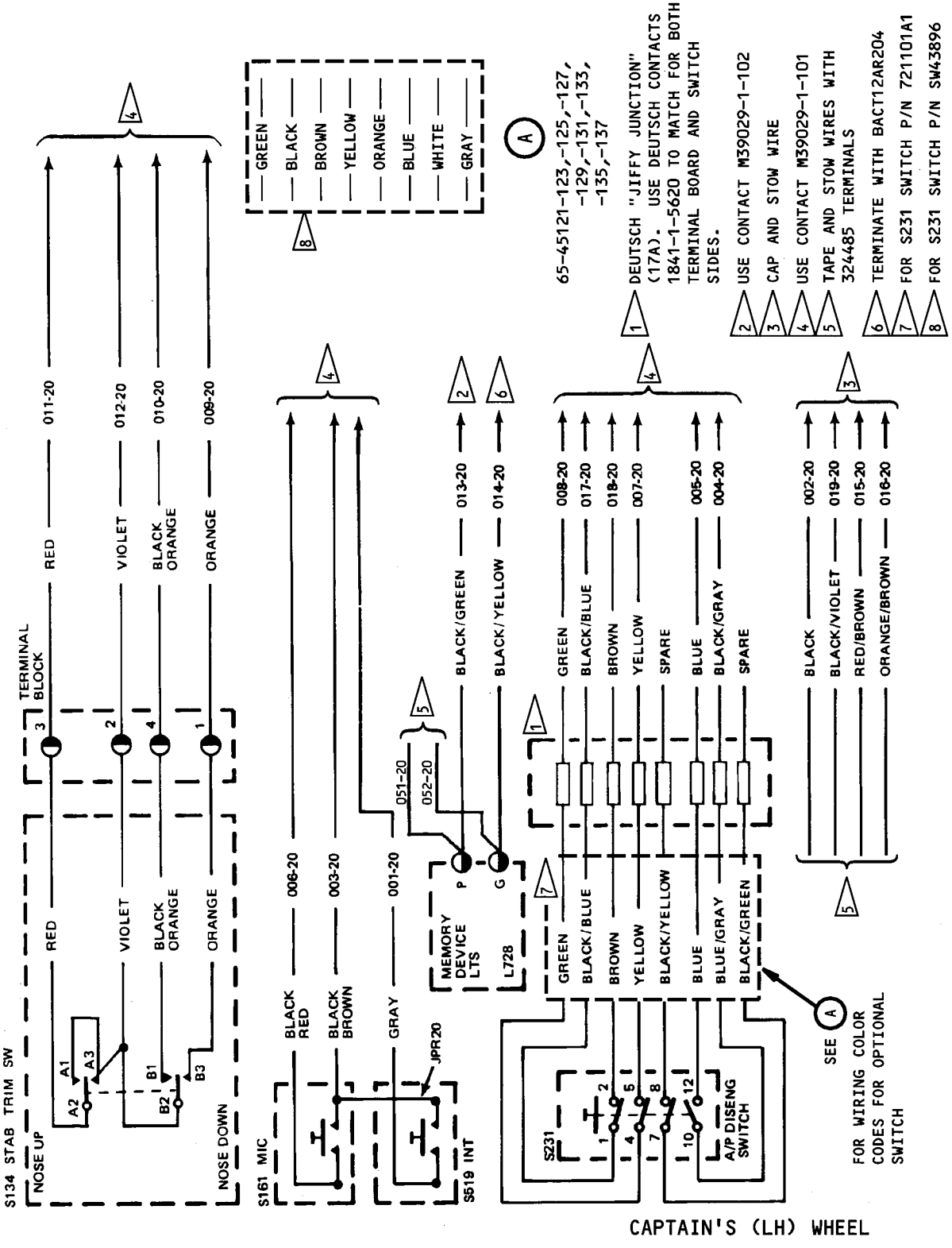


Wiring Diagram
Figure 807

M88991

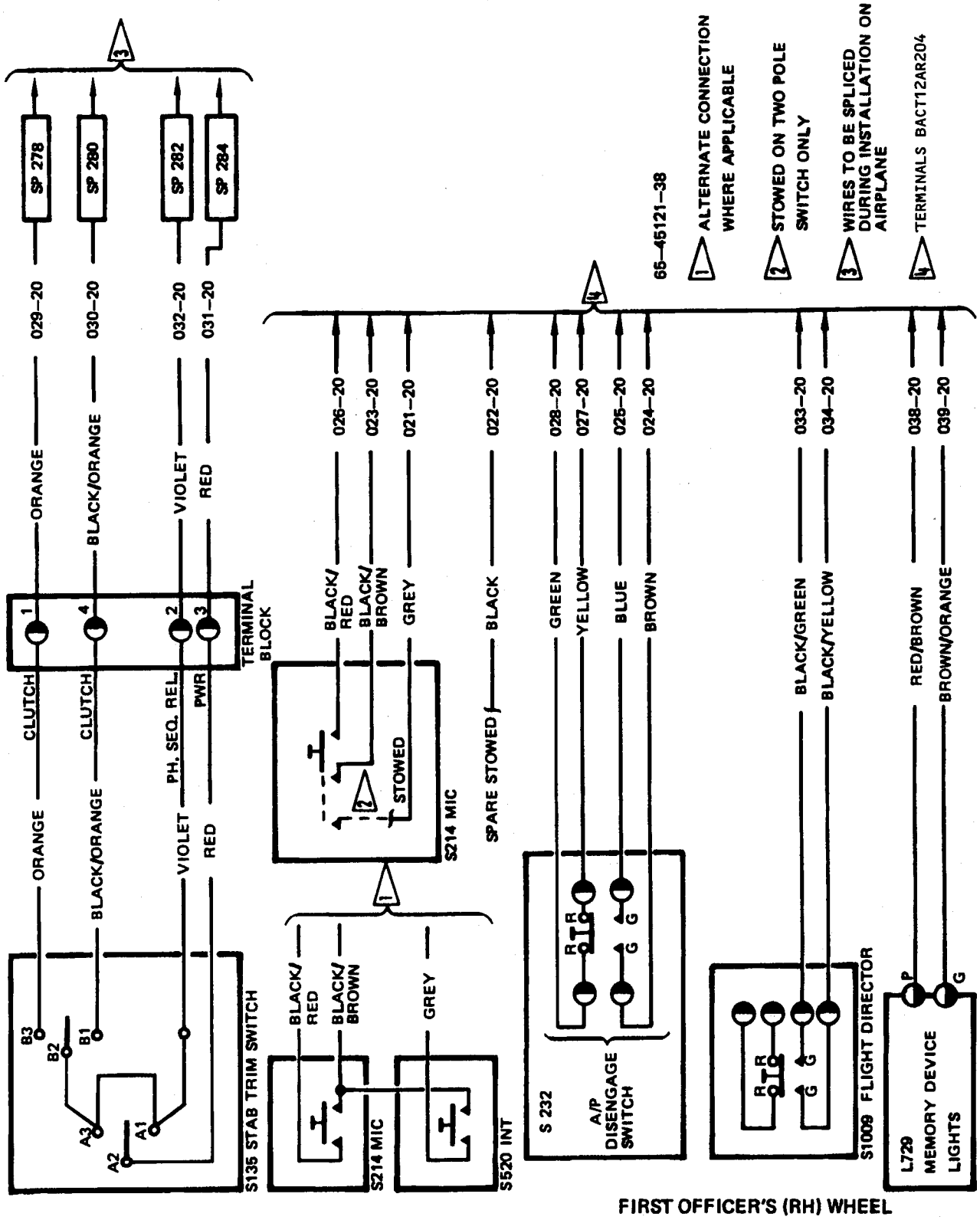


Wiring Diagram
Figure 808

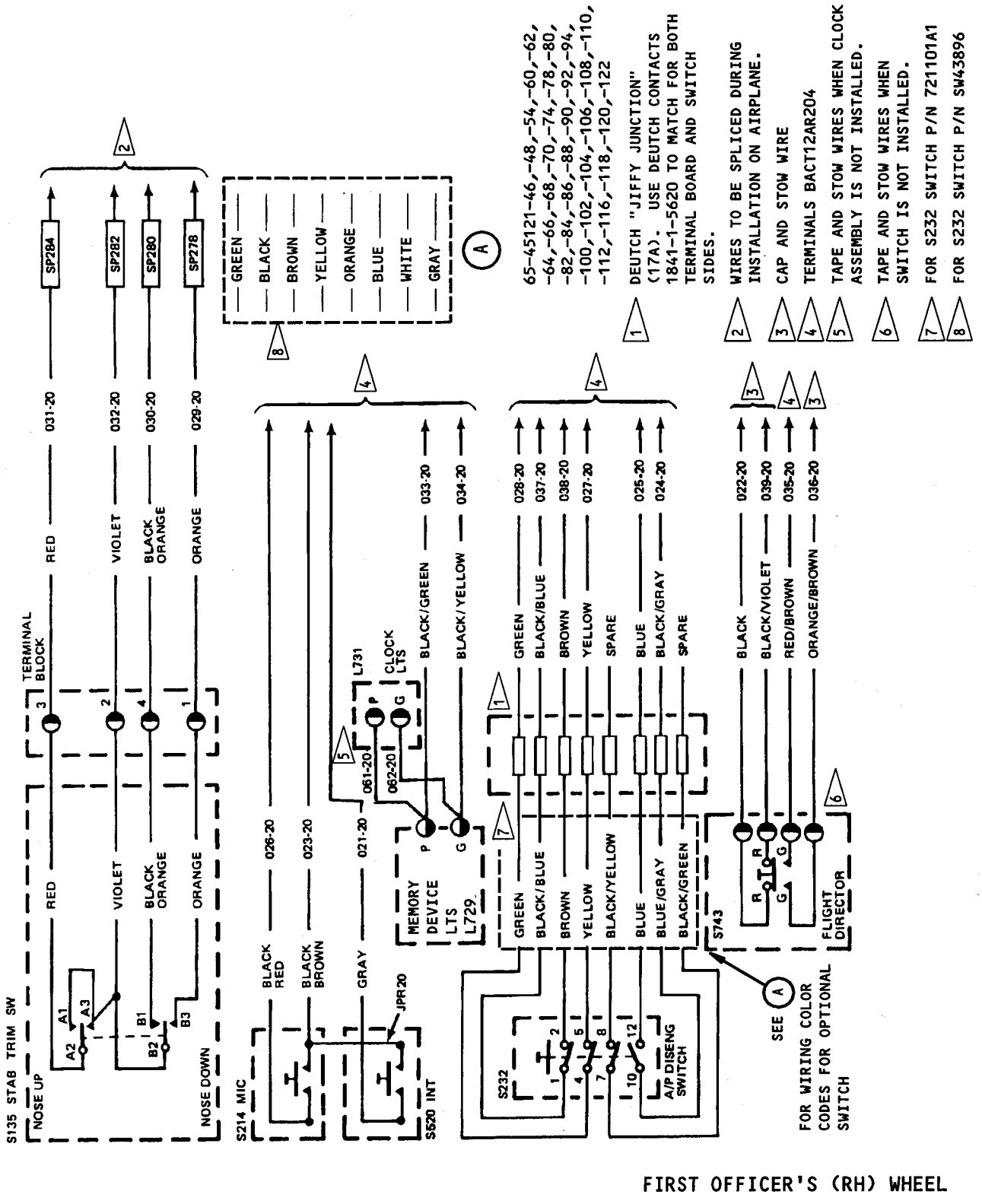


Wiring Diagram
Figure 809

W24846

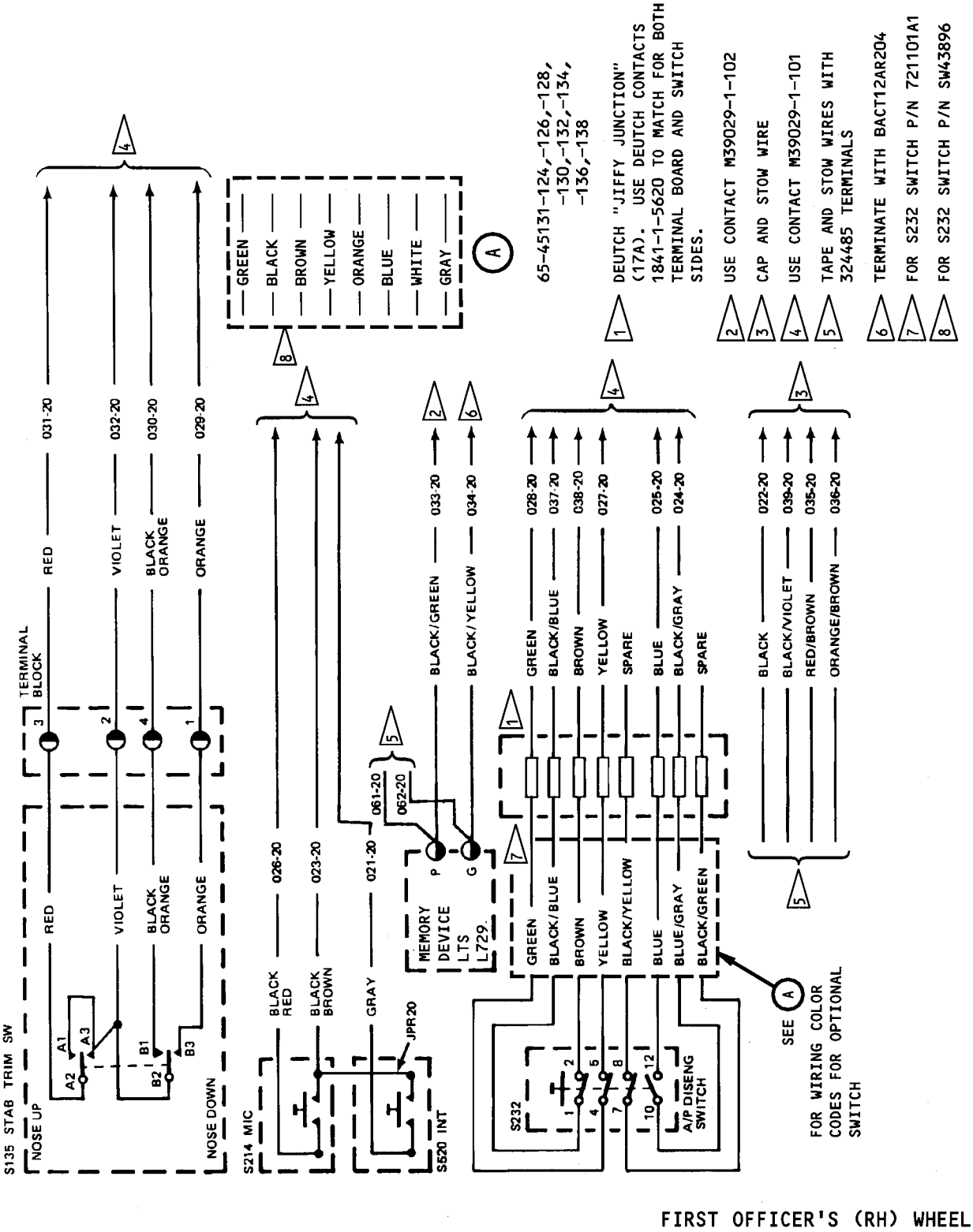


Wiring Diagram
Figure 810



Wiring Diagram
Figure 811

M89044



Wiring Diagram
Figure 812

W24899

STORAGE INSTRUCTIONS

1. Tape control wheel assembly (1) firmly to column to prevent movement of wheel during storage. Spacer (43A) may be used to provide integrity to column during storage.

2. Tape cable assembly (25) securely to dust cover (65).

3. Protect and store unit in accordance with standard industry practices and the information in 20-44-02 and 20-70-01.

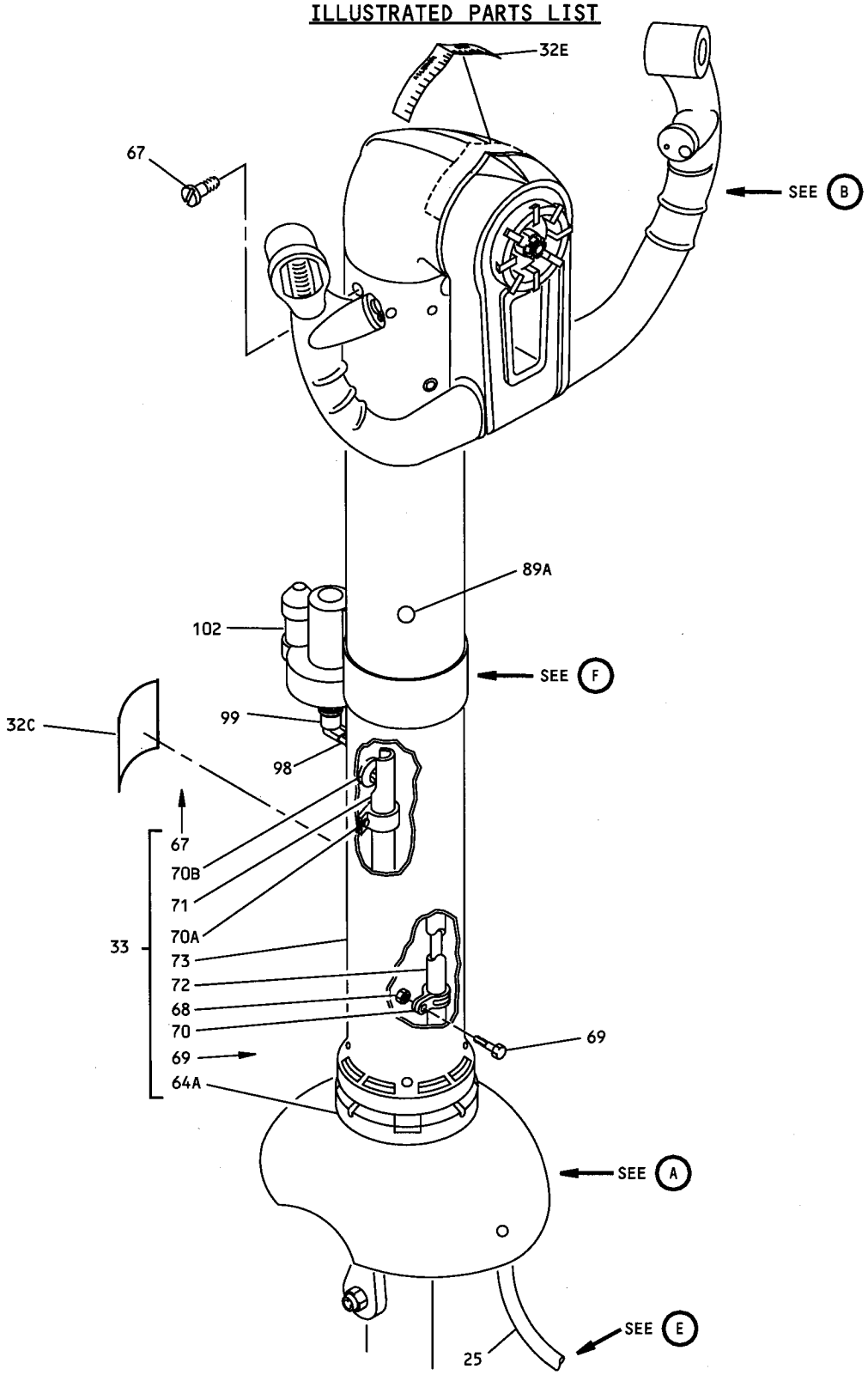
SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

1. F72797 -- Wrench, Splined, Control Column (two required)(replaces VMIT5-87879-3005)
2. F70320-3 -- Wrench *[1]
3. F70320-4 -- Wrench *[1]
4. F70320-5 -- Adapter *[1]
5. For tools required for testing, refer to TESTING.

NOTE: Tools equivalent to listed items may be used.

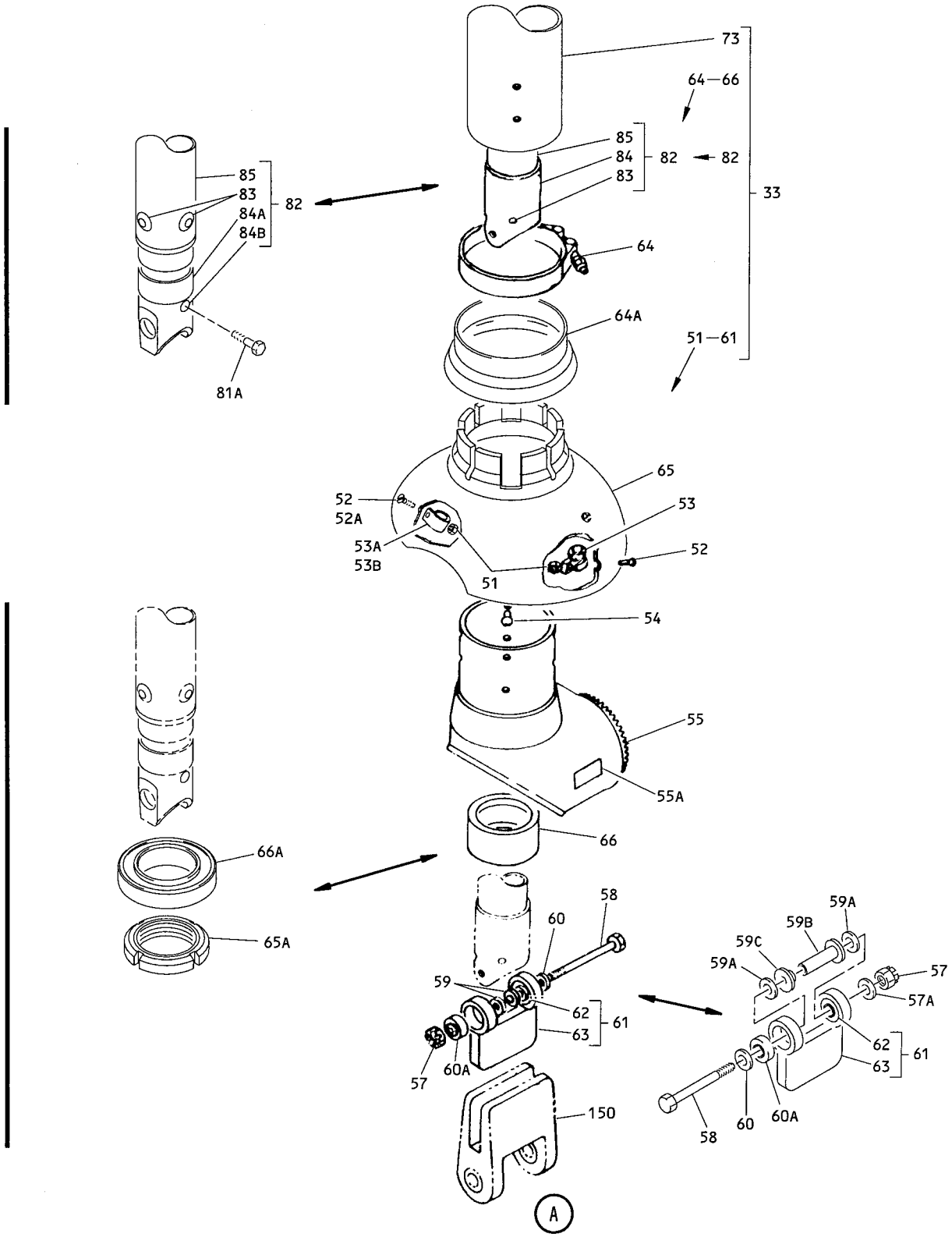
*[1] These tools are part of F70320-1 Holding Fixture and also used in TESTING. (Replaces F72797).

ILLUSTRATED PARTS LIST

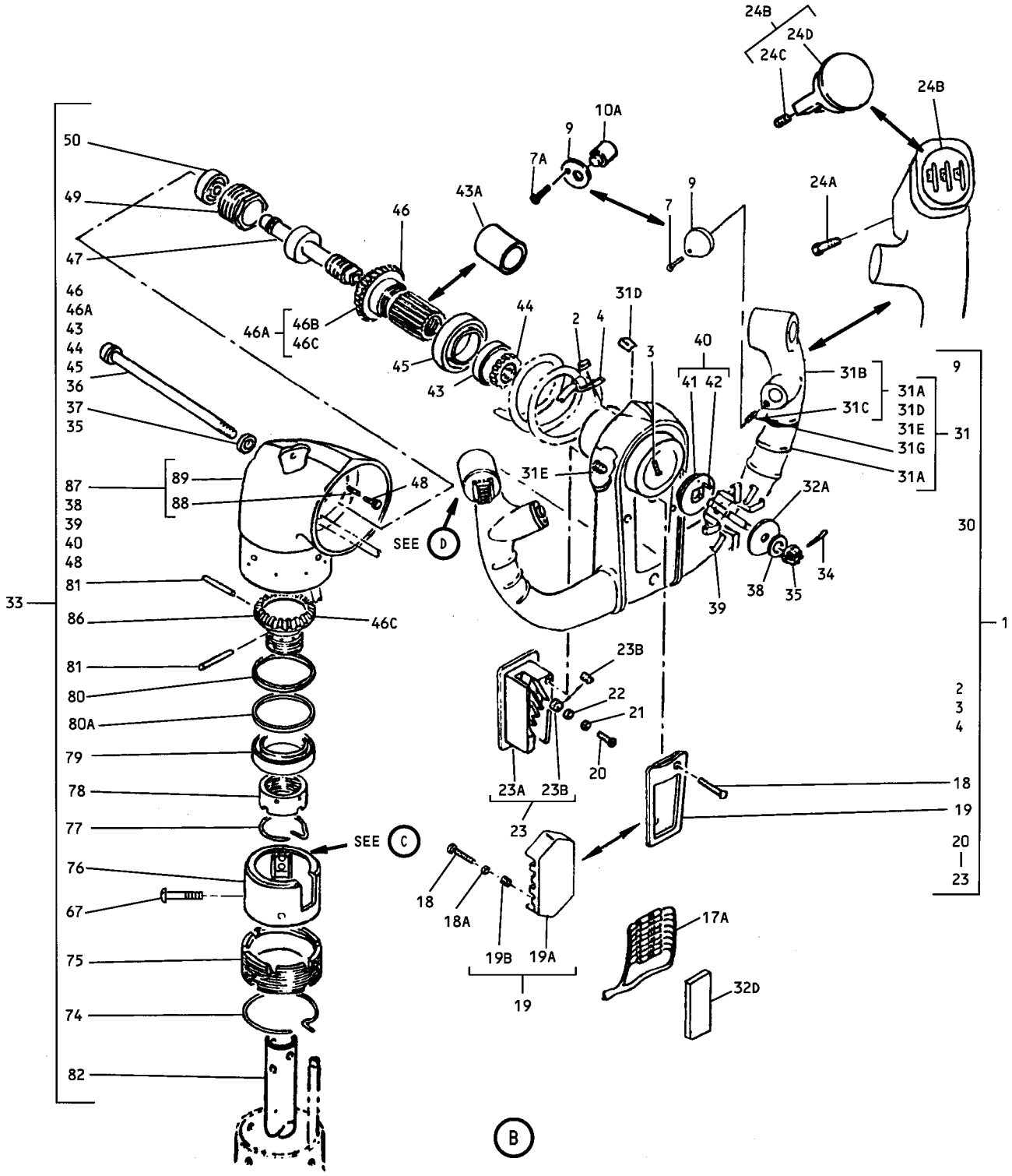


Aileron and Elevator Control Column and Wheel Assembly
Figure 1101 (Sheet 1)

E78790

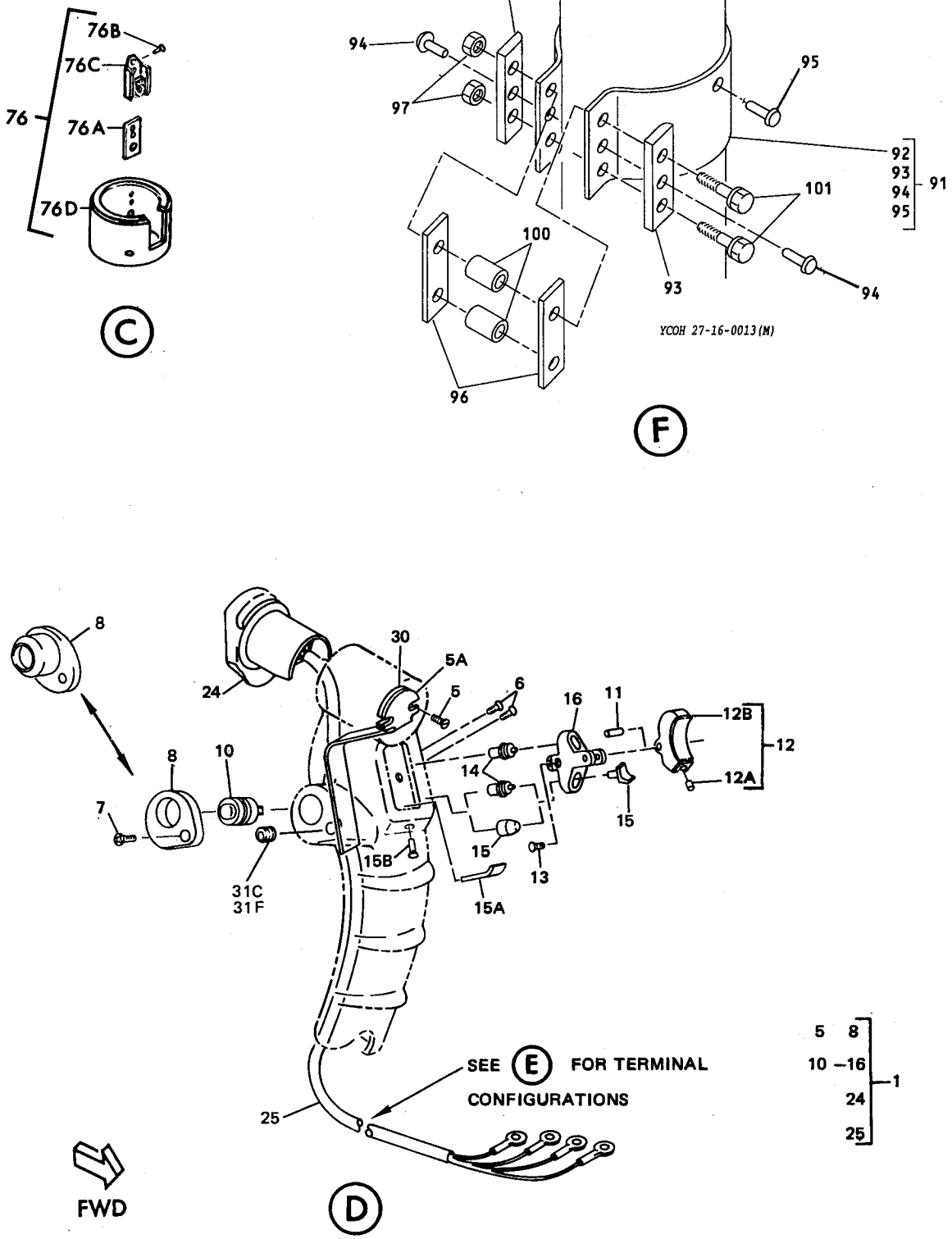


Aileron and Elevator Control Column and Wheel Assembly
Figure 1101 (Sheet 2)

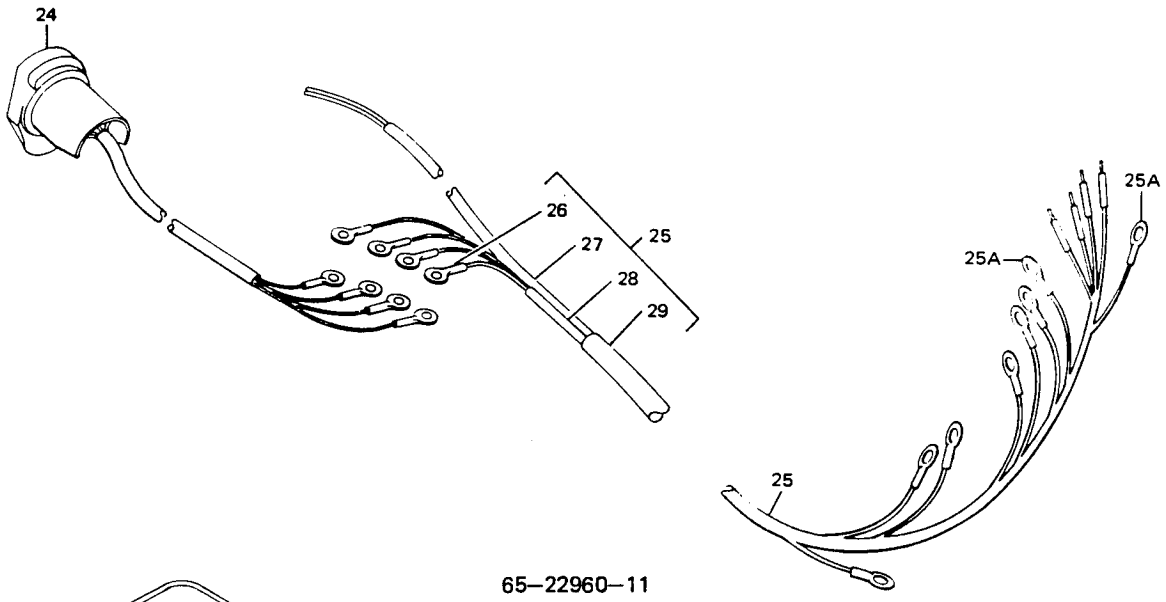


Aileron and Elevator Control Column and Wheel Assembly
Figure 1101 (Sheet 3)

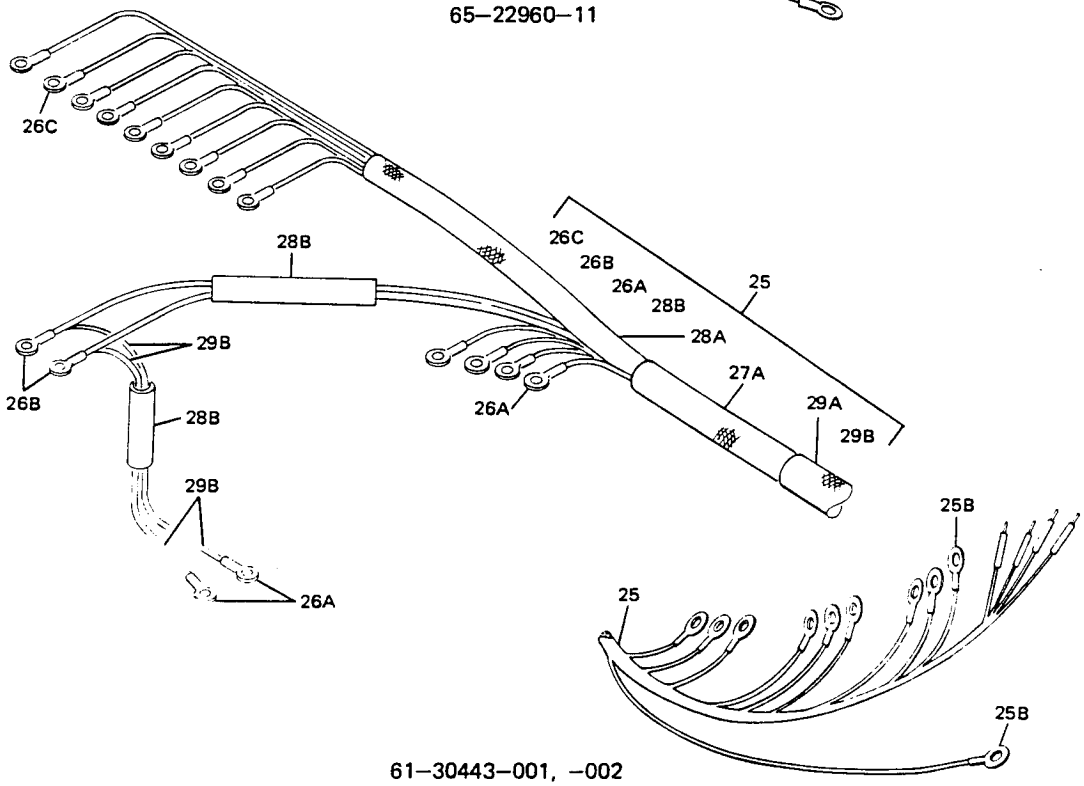
W25043



Aileron and Elevator Control Column and Wheel Assembly
Figure 1101 (Sheet 4)



65–22960–11



61–30443–001, –002
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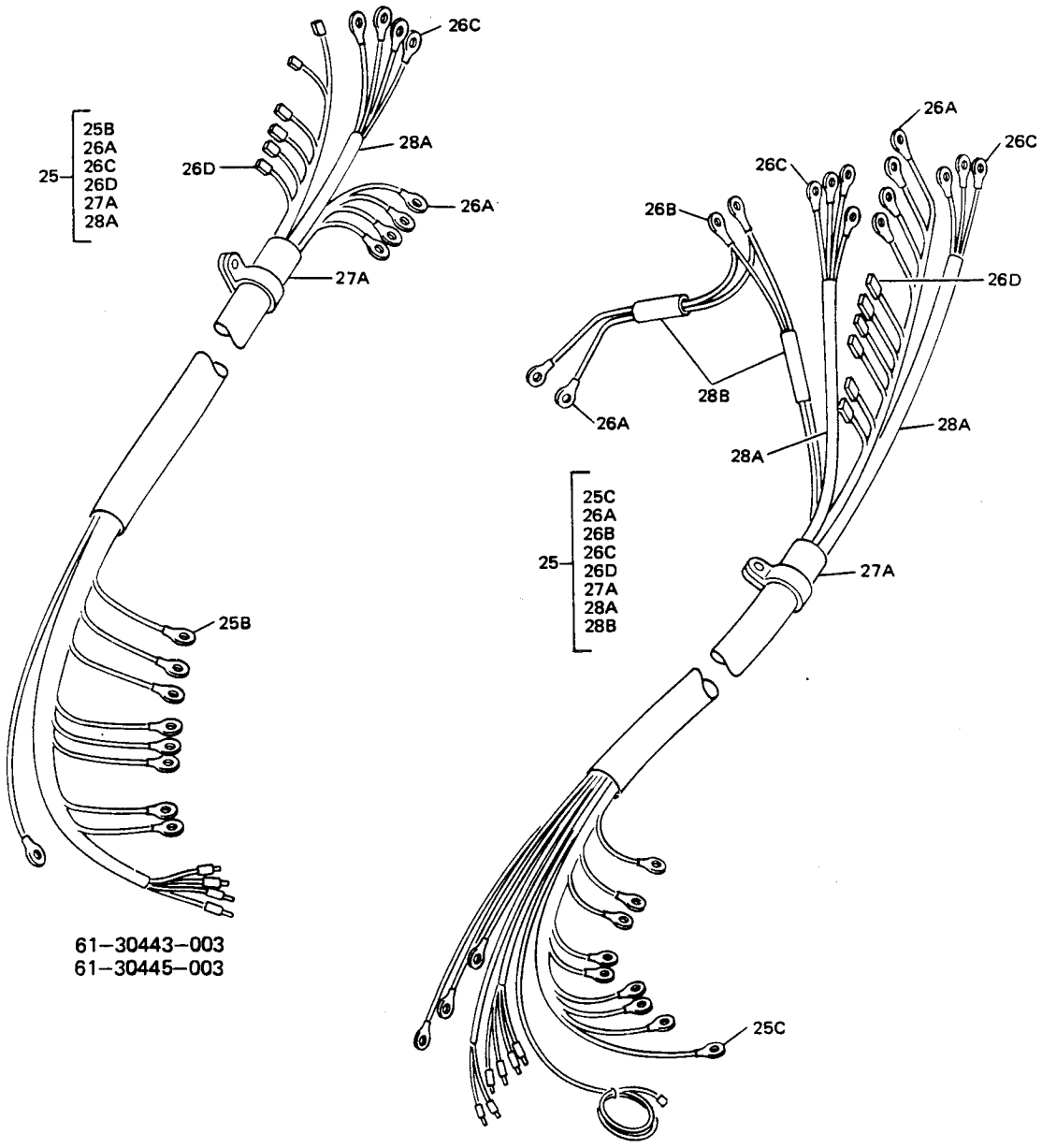
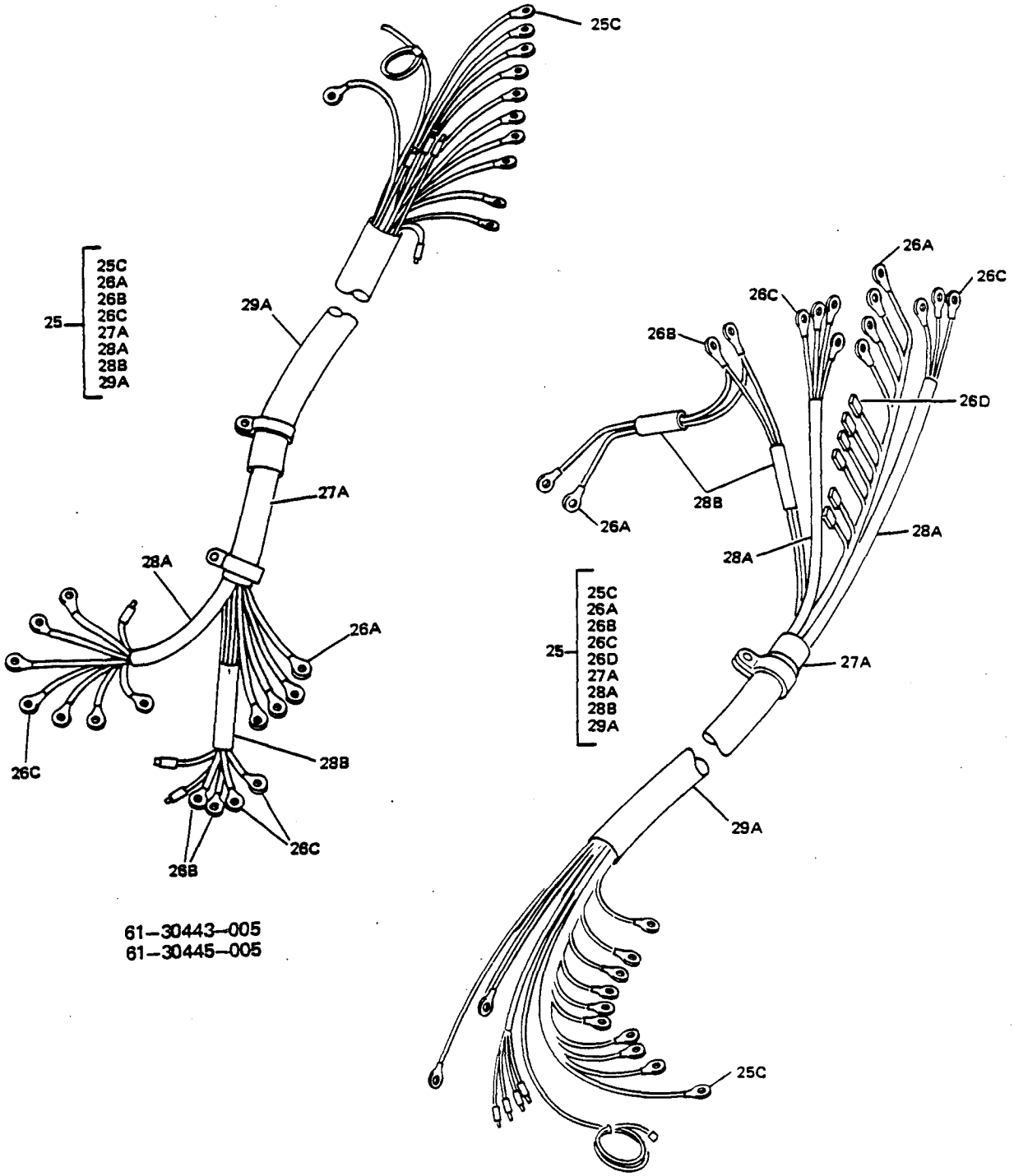
(E)



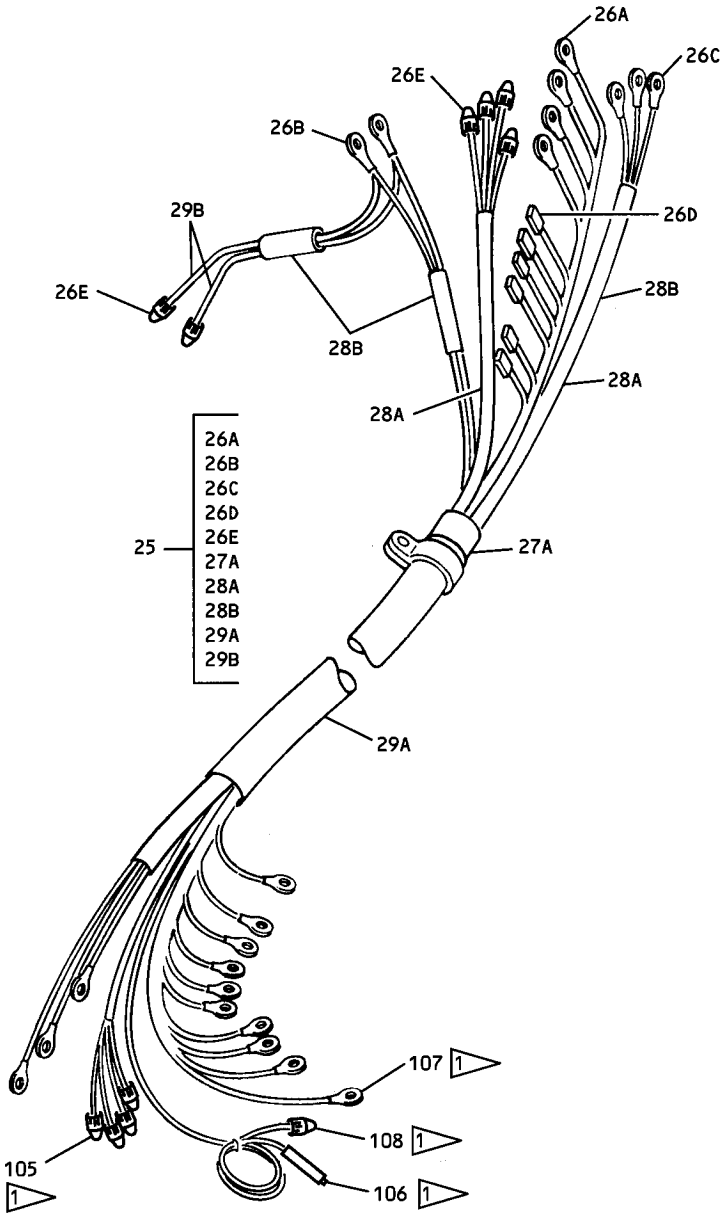
(E) (CONT.)

Aileron and Elevator Control Column and Wheel Assembly
Figure 1101 (Sheet 6)



(E) (CONT.)

Aileron and Elevator Control Column and Wheel Assembly
Figure 1101 (Sheet 7)



251A2146-1
251A2146-2
251A2146-6
251A2146-7

1 USED WITH 251A2146-1,-2,-6,-7

(E) (CONT)

Aileron and Elevator Control Column and Wheel Assembly
Figure 1101 (Sheet 8)

W25221

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-25747-3		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	A	RF
	65-25747-4		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	B	RF
	65-25747-5		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	C	RF
	65-25747-6		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	D	RF
	65-25747-9		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	E	RF
	65-25747-10		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	F	RF
	65-25747-13		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	G	RF
	65-25747-14		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	H	RF
	65-25747-17		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	I	RF
	65-25747-18		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	J	RF
	65-25747-19		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	K	RF
	65-25747-20		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	L	RF
	65-25747-21		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	M	RF
	65-25747-22		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	N	RF
	65-25747-23		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	O	RF
	65-25747-24		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	P	RF
	65-45121-1		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH) SB 27-86)	Q	RF
	65-45121-2		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH) SB 27-86)	R	RF
	65-45121-3		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH) (SB 27-86)	S	RF
	65-45121-4		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH) (SB 27-86)	T	RF
	65-45121-5		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)(SB 27-86)	U	RF
	65-45121-6		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)(SB 27-86)	V	RF

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-45121-7		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	W	RF
	65-45121-8		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	X	RF
	65-45121-9		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	Y	RF
	65-45121-10		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	Z	RF
	65-45121-17		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	BA	RF
	65-45121-18		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	CA	RF
	65-45121-19		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	DA	RF
	65-45121-20		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	EA	RF
	65-45121-25		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	FA	RF
	65-45121-26		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	GA	RF
	65-45121-27		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	HA	RF
	65-45121-28		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	IA	RF
	65-45121-30		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL	JA	RF
	65-45121-31		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	KA	RF
	65-45121-32		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	LA	RF
	65-45121-33		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	MA	RF
	65-45121-34		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	NA	RF
	65-45121-35		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	OA	RF
	65-45121-36		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	PA	RF
	65-45121-37		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	QA	RF
	65-45121-38		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	RA	RF
	65-45121-39		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	SA	RF

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-45121-40		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	TA	RF
	65-45121-41		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	UA	RF
	65-45121-42		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	VA	RF
	65-45121-43		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	WA	RF
	65-45121-44		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	XA	RF
	65-45121-45		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	YA	RF
	65-45121-46		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	ZA	RF
	65-45121-47		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	CB	RF
	65-45121-48		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	DB	RF
	65-45121-51		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	EB	RF
	65-45121-52		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	FB	RF
	65-45121-53		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	GB	RF
	65-45121-54		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	HB	RF
	65-45121-57		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	IB	RF
	65-45121-58		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	JB	RF
	65-45121-59		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	KB	RF
	65-45121-60		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	LB	RF
	65-45121-61		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	MB	RF
	65-45121-62		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	NB	RF
	65-45121-63		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	OB	RF
	65-45121-64		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	PB	RF
	65-45121-65		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	QB	RF

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-45121-66		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	RB	RF
	65-45121-67		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	SB	RF
	65-45121-68		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	TB	RF
	65-45121-69		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	UB	RF
	65-45121-70		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	VB	RF
	65-45121-71		DELETED		
	65-45121-72		DELETED		
	65-45121-73		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	YB	RF
	65-45121-74		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	ZB	RF
	65-45121-75		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	DC	RF
	65-45121-76		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	EC	RF
	65-45121-77		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	FC	RF
	65-45121-78		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	GC	RF
	65-45121-79		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	HC	RF
	65-45121-80		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	IC	RF
	65-45121-81		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	JC	RF
	65-45121-82		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	KC	RF
	65-45121-83		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	LC	RF
	65-45121-84		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	MC	RF
	65-45121-85		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	NC	RF
	65-45121-86		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	OC	RF
	65-45121-87		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	PC	RF
	65-45121-88		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	QC	RF

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-45121-89		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	RC	RF
	65-45121-90		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	SC	RF
	65-45121-91		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	TC	RF
	65-45121-92		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	UC	RF
	65-45121-93		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	VC	RF
	65-45121-94		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	WC	RF
	65-45121-99		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	XC	RF
	65-45121-100		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	YC	RF
	65-45121-101		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	ZC	RF
	65-45121-102		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	ED	RF
	65-45121-103		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	FD	RF
	65-45121-104		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	GD	RF
	65-45121-105		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	HD	RF
	65-45121-106		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	ID	RF
	65-45121-107		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	JD	RF
	65-45121-108		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	KD	RF
	65-45121-109		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	LD	RF
	65-45121-110		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	MD	RF
	65-45121-111		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	ND	RF
	65-45121-112		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	OD	RF
	65-45121-115		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	PD	RF
	65-45121-116		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	QD	RF

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-45121-117		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	RD	RF
	65-45121-118		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	SD	RF
	65-45121-119		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	TD	RF
	65-45121-120		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	UD	RF
	65-45121-121		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	VD	RF
	65-45121-122		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	WD	RF
	65-45121-123		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	XD	RF
	65-45121-124		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	YD	RF
	65-45121-125		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	ZD	RF
	65-45121-126		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	FE	RF
	65-45121-127		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	GE	RF
	65-45121-128		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	HE	RF
	65-45121-129		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	IE	RF
	65-45121-130		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	JE	RF
	65-45121-131		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	KE	RF
	65-45121-132		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	LE	RF
	65-45121-133		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	ME	RF
	65-45121-134		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	NE	RF
	65-45121-135		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	OE	RF
	65-45121-136		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	PE	RF
	65-45121-137		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (LH)	QE	RF
	65-45121-138		COLUMN AND WHEEL ASSY, AIL/ELEV CONTROL (RH)	RE	RF

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
1	65-22960-15		. WHEEL ASSY	A	1
1	65-22960-16		. WHEEL ASSY	B	1
1	65-22960-17		. WHEEL ASSY	C	1
1	65-22960-18		. WHEEL ASSY	D	1
1	65-22960-21		. WHEEL ASSY	G	1
1	65-22960-22		. WHEEL ASSY	H	1
1	65-22960-25		. WHEEL ASSY	E	1
1	65-22960-26		. WHEEL ASSY	F	1
1	65-22960-73		. WHEEL ASSY	I	1
1	65-22960-74		. WHEEL ASSY	J	1
1	65-22960-75		. WHEEL ASSY	K	1
1	65-22960-76		. WHEEL ASSY	L	1
1	65-22960-77		. WHEEL ASSY	O	1
1	65-22960-78		. WHEEL ASSY	P	1
1	65-22960-79		. WHEEL ASSY	M	1
1	65-22960-80		. WHEEL ASSY	N	1
1	65-45123-1		. WHEEL ASSY	Q KB	1
1	65-45123-2		. WHEEL ASSY	R LB	1
1	65-45123-3		. WHEEL ASSY	S MB	1
1	65-45123-4		. WHEEL ASSY	T NB	1
1	65-45123-5		. WHEEL ASSY	U	1
1	65-45123-6		. WHEEL ASSY	V	1
1	65-45123-7		. WHEEL ASSY	W OB	1
1	65-45123-8		. WHEEL ASSY	X PB	1
1	65-45123-9		. WHEEL ASSY	Y QB	1
1	65-45123-10		. WHEEL ASSY	Z RB	1
1	65-45123-17		. WHEEL ASSY	BA	1
1	65-45123-18		. WHEEL ASSY	CA	1
1	65-45123-19		. WHEEL ASSY	DA	1
1	65-45123-20		. WHEEL ASSY	EA	1
1	65-45123-25		. WHEEL ASSY	FA	1
1	65-45123-26		. WHEEL ASSY	GA	1
1	65-45123-27		. WHEEL ASSY	HA	1
1	65-45123-28		. WHEEL ASSY	IA	1
1	65-45123-30		. WHEEL ASSY	JA	1
1	65-45123-31		. WHEEL ASSY	KA SB	1
1	65-45123-32		. WHEEL ASSY	LA TB	1
1	65-45123-33		. WHEEL ASSY	MA	1
1	65-45123-34		. WHEEL ASSY	NA	1
1	65-45123-35		. WHEEL ASSY	OA UB	1
1	65-45123-36		. WHEEL ASSY	PA VB	1
1	65-45123-37		. WHEEL ASSY	QA	1
1	65-45123-38		. WHEEL ASSY	RA	1
1	65-45123-39		. WHEEL ASSY	SA	1
1	65-45123-40		. WHEEL ASSY	TA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
1	65-45123-41		. WHEEL ASSY	UA	1
1	65-45123-42		. WHEEL ASSY	VA	1
1	65-45123-43		. WHEEL ASSY	WA	1
1	65-45123-44		. WHEEL ASSY	XA	1
1	65-45123-45		. WHEEL ASSY	YA JC	1
1	65-45123-46		. WHEEL ASSY	ZA KC	1
1	65-45123-47		. WHEEL ASSY	CB IB YB HC	1
1	65-45123-48		. WHEEL ASSY	DB JB ZB IC	1
1	65-45123-51		. WHEEL ASSY	EB DC	1
1	65-45123-52		. WHEEL ASSY	FB EC	1
1	65-45123-53		. WHEEL ASSY	GB FC NC TC	1
1	65-45123-54		. WHEEL ASSY	HB GC OC UC	1
1	65-45123-59		. WHEEL ASSY	LC PC RC VC	1
1	65-45123-60		. WHEEL ASSY	MC QC SC WC	1
1	65-45123-61		. WHEEL ASSY	XC ZC	1
1	65-45123-62		. WHEEL ASSY	YC ED	1
1	65-45123-63		. WHEEL ASSY	FD	1
1	65-45123-64		. WHEEL ASSY	GD	1
1	65-45123-65		. WHEEL ASSY	HD JD VD	1
1	65-45123-66		. WHEEL ASSY	ID KD WD	1
1	65-45123-67		. WHEEL ASSY	LD PD RD	1
1	65-45123-68		. WHEEL ASSY	MD QD SD	1
1	65-45123-69		. WHEEL ASSY	ND TD	1
1	65-45123-70		. WHEEL ASSY	OD UD	1
1	65-45123-71		. WHEEL ASSY	XD	1
1	65-45123-72		. WHEEL ASSY	YD	1
1	65-45123-73		. WHEEL ASSY	ZD	1
1	65-45123-74		. WHEEL ASSY	FE	1
1	65-45123-75		. WHEEL ASSY	GE KE OE	1
1	65-45123-76		. WHEEL ASSY	HE LE PE	1
1	65-45123-77		. WHEEL ASSY	IE ME QE	1
1	65-45123-78		. WHEEL ASSY	JE NE RE	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
2	BACN10JC08		. . NUT (REPLS NAS679A08W)	A-P	1
3	NAS602-8P		. . SCREW (REPLS NAS602-8)	A-P	1
3	BACS12CB3-8		. . SCREW	Q-VB YB-RE	1
4	BACC10BJ6		. . CLAMP, NYLON	A-P	1
4	BACC10DK5		. . CLAMP	Q-VB YB-RE	1
5	NAS514P440-10B		. . SCREW	A-F	2
5	NAS600-9BP		. . SCREW (REPLS NAS600-9B) (ADDED BY SB 27-106)	I-N	2
5	NAS600-8P		. . SCREW	Q-VB YB-FE	2
5	NAS514P440-10		. . SCREW (OPT)	Q-V EB FB KB-NB DC EC	2
5	BACS12CK04H8		. . SCREW	GE-RE	2
5A	69-47451-1		. . SPACER	I-N	1
5A	69-47451-1		. . SPACER (ADDED BY SB 27-106)	BE	1
6	NAS514P440-6B		. . SCREW	A-FE	2
6	BACS12GX04H6		. . SCREW	GE-RE	2
7	NAS514P632-7B		. . SCREW	A-P	2
7	NAS514P632-7B		. . SCREW	Q-JA QA-TA EB FB KB-RB DC EC	1
7	NAS6600-7B		DELETED		
7	NAS600-7B		. . SCREW	KA-PA UA-DB GB-JB SB-VB YB ZB FC-FE	1
7	BACS12CK04H7		. . SCREW	GE-RE	1
7A	NAS514P632-7B		. . SCREW	MA NA QA RA	1
8	6-72490		. . CAP	A-P	1
8	69-38238-1		. . PLATE	Q-JA QA-TA EB FB KB-RB DC EC	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-8	69B82799-1		. . PLATE, SWITCH	KA-PA UA-DB GB-JB SB-VB YB ZB FC-RE	1
9	6-72490-1		. . CAP	A-P	1
9	69-38238-1		. . PLATE	MA NA	1
10	C2006RCB		. . SWITCH, A/P DISENGAGE, V81640	A-P	1
10	C2006CB		. . SWITCH, A/P DISENGAGE, V81640 (OPT)	A-P	1
10	C2006R		. . SWITCH, A/P DISENGAGE, V81640	Q-JA QA-TA EB FB KB-RB DC EC	1
10	C2006RCB		. . SWITCH, A/P DISENGAGE, V81640 (OPT)	Q-JA QA-TA EB FB KB-RB DC EC	1
10	721101A1		. . SWITCH, A/P DISENGAGE, V97564	KA-PA UA-DB GB-JB SB-VB YB ZB FC-FE	1
10	721101A1		. . SWITCH, A/P DISENGAGE, V97564 (OPT)	GE-RE	1
10	SW43896		. . SWITCH, A/P DISENGAGE, V07150 (OPT)	KA-PA UA-DB GB-JB SB-VB YB ZB FC-RE	1
10A	C2006		. . SWITCH, FL DIRECTOR PITCH SYNC, V81640	MA NA QA RA	1
10A	C2006R		DELETED		
10A	C2006RCB		DELETED		
10A	C2006CB		DELETED		
11	MS20253-2-67		. . PIN (REPLS AN253-2-67)	A-N U-X BA-JA MA NA QA-VA OB PB	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
11	251N1283-1		. . PIN *[3]*[4]*[5]*[6]*[7]*[8]	Q-TYZ KA LA QA PA WA-JB KB-NB QB-VB YB-KC NC OC TC UC	1
11	251N1283-1		. . PIN	LC MC PC-SC VC-ZC ED-RE	2
11	MS20253-2-67		. . PIN (OPT) *[3]*[4]*[5]*[6]*[7]*[8]		1
12	66-4034		. . TRIGGER	A-D G-L O-V BA CA FA-IA MA-TA CB-FB IB JB KB- NB YB- EC HC IC	1
12	66-9828		. . TRIGGER ASSY	EFMN	1
12	251N1241-6		. . TRIGGER ASSY	W-Z DA EA JA-LA UA-ZA GB HB OB-TB FC GC JC KC NC OC TC UC FD GD ND OD TD UD ZD FE IE JE ME NE QE RE	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-12	66-9828-2		. . TRIGGER ASSY (OPT)	W-ZDA EA JA-LA UA-ZA GB HB OB-TB FC GC JC KC NC OC TC UC	1
12	251N1241-7		. . TRIGGER	LC MC PC-SC VC-ZC ED HD-KD LD MD PD QD RD SD VD WD XD YD GE HE KE LE OE PE	1
12A	BACC12C3		. . . CATCH	EFMN W-ZDA EA JA-LA UA-ZA GB HB OB-TB FC GC JC KC NC OC TC UC FD GD	1
12A	3066-1		. . . CATCH, V14608 (OPT)	EFMN W-Z DA EA JA-LA UA-ZA GB HB OB-TB FC GC JC KC TC UC FD GD	1
12B	66-9828-1		. . . TRIGGER	EFMN	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-12B	251N1241-7		. . . TRIGGER (USED ON 251N1241-6)	W-Z DA EA JA-LA UA-ZA GB HB OB-TB FC GC JC KC TC UC FD GD	1
12B	66-9828-3		. . . TRIGGER (USED ON 66-9828-2)	W-ZDA EA JA-LA UA-ZA GB HB OB-TB FC GC JC KC NC OC TC UC	1
13	NAS514P440-7B		. . SCREW	A-FE	1
13	BACS12GX04H7		. . SCREW	GE-RE	1
14	C1006RCB		. . SWITCH, V81640	ABIJ	1
14	C1006CB		. . SWITCH, V81640 (OPT)	ABIJ	1
14	C2006RCB		. . SWITCH, MICROPHONE, V81640	QR KB LB	1
14	C2006CB		. . SWITCH, MICROPHONE, V81640 (OPT)	QR KB LB	1
14	A8006CB		. . SWITCH, INTERPHONE, V81640	CDKL	1
14	A8006CB		. . SWITCH, MICROPHONE (MIC), V81640	UV	1
14	C1006CB		. . SWITCH, RADIO, V81640	EFMN	2
14	C2006RCB		. . SWITCH, INTERPHONE/RADIO, V81640	GHOP	2
14	C2006CB		. . SWITCH, INTERPHONE/RADIO, V81640 (OPT)	GHOP	2
14	C2006RCB		. . SWITCH, MICROPHONE (MIC) AND INTERPHONE (INT), V81640	ST W-EA HA IA MB-RB	2
14	C2006CB		. . SWITCH, MICROPHONE (MIC) AND INTERPHONE (INT), V81640 (OPT)	ST W-EA HA IA MB-RB	2
14	C2006		. . SWITCH, MICROPHONE (MIC) AND INTERPHONE (INT), V81640	JA-VB YB-WC	2
14	C2006R		. . SWITCH, MICROPHONE (MIC) AND INTERPHONE (INT), V81640 (OPT)	JA-VB YB-WC	2
14	P8-4000003		. . SWITCH, MICROPHONE (MIC) AND INTERPHONE (INT), V21649	XC-ZC ED-RE	2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
14	C2006RCB		. . SWITCH, MICROPHONE, V81640	QR FA-IA	1
14	C2006CB		. . SWITCH, MICROPHONE, V81640 (OPT)	QR FA-IA	1
15	66-3199		. . BUTTON	A-DI-LQ RUV FA GA KB LB	1
15	66-9727		. . DETENT, SWITCH	EFMN	1
15A	69-40904-1		. . DETENT	W-Z KA-PA UA-DB OB-VB YB ZB JC KC	1
15B	BACS12BP04C3		. . SCREW	W-Z KA-PA UA-DB OB-VB YB ZB JC KC NC OC TC UC	1
16	69-4535-1		. . CLAMP, SWITCH	ACEGI KMOW BA FA OB	1
16	69-4535-1		. . CLAMP, SWITCH (OPT TO 69-70179-1) *[3]	QSUY HA KA MA OA QA SA YA CB EB IB KB MB QB SB UB YB DC HC JC	1
16	69-4535-2		. . CLAMP, SWITCH	BDFHJL NPX PB	1
16	69-4535-2		. . CLAMP, SWITCH (OPT TO 69-70179-2) *[4]	RTVZ CA GA IA LA NA PA RA TA ZA DB FB JB LB NB RB TB VB ZB EC IC KC	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
16	69-63433-1		. . MOUNT	DA UA	1
16	69-63433-2		. . MOUNT	EA JA VA	
16	69-63433-7		. . MOUNT *[5]	WA	1
16	69-63433-5		. . MOUNT (OPT TO 69-63433-7) *[5]	WA	1
16	69-63433-11		. . MOUNT *[7]	GB FC NC TC	1
16	69-63433-7		. . MOUNT (OPT TO 69-63433-11) *[7]	GB FC NC TC	1
16	69-63433-5		. . MOUNT (OPT TO 69-63433-11) *[7]	GB FC NC TC	1
16	69-63433-13		. . MOUNT	FD ND TD ZD IE ME QE	1
16	69-63433-11		. . MOUNT (OPT TO 69-63433-13)	FD ND TD ZD IE ME QE	1
16	69-63433-8		. . MOUNT *[6]	XA	1
16	69-63433-6		. . MOUNT (OPT TO 69-63433-8) *[6]	XA	1
16	69-63433-12		. . MOUNT *[8]	HB GC OC VC	1
16	69-63433-8		. . MOUNT (OPT TO 69-63433-12) *[8]	HB GC OC VC	1
16	69-63433-6		. . MOUNT (OPT TO 69-63433-12) *[8]	HB GC OC UC	1
16	69-63433-14		. . MOUNT	GD OD UD FE JE NE RE	1
16	69-63433-12		. . MOUNT (OPT TO 69-63433-14)	GD OD UD FE JE NE RE	1
16	69-70179-1		. . CLAMP, SWITCH	U HA MA QA SA	1
16	69-70179-1		. . CLAMP, SWITCH (OPT TO 69-70179-5) *[3]	QSY KA OA EB KB MB QB SB UB DC	1
16	69-70179-2		. . CLAMP, SWITCH	CA GA IA NA RA TA	1
16	69-70179-2		. . CLAMP, SWITCH (OPT TO 69-70179-6) *[4]	RTZ LA PA FB LB NB RB TB VB EC	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-16	69-70179-5		. . CLAMP, SWITCH *[3]	QSY KA OA EB KB MB QB SB UB DC	1
16	69-70179-6		. . CLAMP, SWITCH *[4]	RTZ LA PA FB LB NB RB TB VB EC	1
16	69-70179-5		. . CLAMP, SWITCH (OPT TO 69-70179-7) *[3]	YA CB IB YB HC JC	1
16	69-70179-7		. . CLAMP, SWITCH *[3]	YA CB IB YB HC JC	1
16	69-70179-7		. . CLAMP, SWITCH	LC PC RC VC	1
16	69-70179-5		. . CLAMP, SWITCH (OPT TO 69-70179-7)	LC PC RC VC	1
16	69-70179-7		. . CLAMP, SWITCH	XC ZC HD JD LD PD RD VD XD GE KE OE	1
16	69-70179-6		. . CLAMP, SWITCH (OPT TO 69-70198-8) *[4]	ZA DB JB ZB IC KC	1
16	69-70179-8		. . CLAMP, SWITCH *[4]	ZA DB JB ZB IC KC	1
16	69-70179-8		. . CLAMP, SWITCH	MC QC SC WC	1
16	69-70179-6		. . CLAMP, SWITCH (OPT TO 69-70179-8)	MC QC SC WC	1
16	69-70179-8		. . CLAMP, SWITCH	YC ED ID KD MD QD SD WD YD HE LE PE	1
17			DELETED		

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-17A	TSE20-01		. . MODULE ASSY, V17419	KA-PA UA-DB GB-JB SB-VB YB ZB FC-RE	8
18	NAS514P632-10B		. . SCREW	A-N	2
18	MS16997-33		. . SCREW	Q-VB YB-RE	2
18A	NAS1197-8L		. . WASHER	Q-VB YB-KD	2
19	65-19806-9		. . COVER, TERMINAL	A-N	1
19	65-45118-2		. . COVER ASSY	Q-VB YB-RE	1
19A	65-45118-4		. . . COVER		1
19B	BACS13AL08L		. . . INSERT		2
20	NAS601-6P		. . SCREW (REPLS NAS601-6)	A-N	1
20	NAS601-5P		. . SCREW	Q-VB YB-KD	4
21	MS35338-41		. . LOCKWASHER (REPLS MS35337-41)		4
22	NAS620B6L		. . WASHER		4
23	65-19806-7		. . TERMINAL BLOCK ASSY	A-N	1
23	65-45118-1		. . TERMINAL BLOCK ASSY	Q-VB YB-RE	1
23A	65-19806-8		. . . TERMINAL BLOCK	A-N	1
23A	65-45118-3		. . . TERMINAL BLOCK	Q-VB YB-RE	1
23B	69-15994-2		. . . NUT	A-N	6
23B	BACS13AL06L		. . . INSERT (OPT)	Q-VB YB-RE	5
23B	CE150S62L		. . . INSERT (OPT)	Q-VB YB-RE	5
24	306-4305		. . SWITCH ASSY, STAB TRIM, V81579 (BOEING 10-60705-1)		1
24A	NAS600-8P		. . SCREW	Q-VB YB-FE	2
24A	NAS514P440-10		. . SCREW (OPT)	Q-RB QA-TA EB FB DC EC	2
24A	BACS12CK04H8		. . SCREW	GE-RE	4

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-24B	310-1		. . MEMORY DEVICE (OPT)	Q-EA KB-RB	1
24B	310-2		. . MEMORY DEVICE	EB FB DC EC XC-ZC ED-GD	1
24B	310-3		. . MEMORY DEVICE	LD-UD XD-RE	1
24B	69B81080-1		. . PLUG ASSY	FA-DB GB-JB SB-VB YB ZB	1
24B	69B81080-1		. . PLUG ASSY (PREF)	Q-EA KB-RB	1
24B	69B81080-9		. . PLUG ASSY	HD-KD VD WD	1
24C	NAS1395C04L		. . . INSERT		2
24D	69B81080-2		. . . PLUG		1
25	65-22960-11		. . CABLE BUNDLE ASSY	A-N	1
25	61-30443-001		. . CABLE ASSY	QSUWY DA HA SA EB KB MB OB QB DC	1
25	61-30445-001		. . CABLE ASSY	RTVXZ EA IA TA FB LB NB PB RB EC	1
25	61-30443-002		. . CABLE ASSY	BA FA	1
25	61-30445-002		. . CABLE ASSY	CA GA JA	1
25	61-30443-003		. . CABLE ASSY	KA OA UA WA SB UB	1
25	61-30445-003		. . CABLE ASSY	LA PA VA XA TB VB	1
25	61-30443-004		. . CABLE ASSY	MA	1
25	61-30445-004		. . CABLE ASSY	NA	1
25	61-30443-005		. . CABLE ASSY	QA	1
25	61-30445-005		. . CABLE ASSY	RA	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-25	61-30443-501		. . CABLE ASSY	YA CB GB IB YB FC HC JC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TD VD	1
25	61-30445-501		. . CABLE ASSY	ZA DB HB JB ZB GC IC KC MC OC QC SC UC WC YC ED GD ID KD MD OD QD SD UD WD	1
25	251A2146-1		. . CABLE ASSY	XD ZD	1
25	251A2146-2		. . CABLE ASSY	YD FE	1
25	251A2146-6		. . CABLE ASSY	HE JE LE NE PE RE	1
25	251A2146-7		. . CABLE ASSY	GE IE KE ME OE QE	1
25A	AMP36153		. . . TERMINAL, V00779	A-N	8
25B	BACT12AC3		. . . TERMINAL (REPLD BY BACT12AR204)	Q-LA OA PA SA-XA EB FB KB-VB DC EC	10
25B	BACT12AR204		. . . TERMINAL (REPLS BACT12AC3)	Q-LA OA PA SA-ZA EB FB KB-VB DC EC	10

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-25C	BACT12AC3		. . . TERMINAL (REPLD BY BACT12AR204)	MA NA YA-DB GB-JB YB-ZB FC-ZC ED-KD	12
25C	BACT12AR204		. . . TERMINAL (REPLS BACT12AC3)	MA NA YA-DB GB-JB YB-ZB FC-ZC ED-WD	12
25C	BACT12AC3		. . . TERMINAL (REPLD BY BACT12AR204)	QA RA	11
25C	BACT12AR204		. . . TERMINAL (REPLS BACT12AC3)	QA RA	11
26	AMP36149		. . . TERMINAL, V00779	A-N	14
26A	BACT12AC2		. . . TERMINAL	Q-JA MA NA SA TA YA-JB KB-RB YB-ZC ED-WD	6
26A	BACT12AC2		. . . TERMINAL	KA LA OA-RA UA-XA SB-VB	4
26A	BACT12AR202		. . . TERMINAL	XD YD ZD FE-RE	8
26B	BACT12AC6		. . . TERMINAL	Q-JA MA NA QA- TA YA-JB KB-RB YB-ZC ED-WD	2
26B	BACT12AC2		. . . TERMINAL	XD YD ZD FE-RE	2
26C	AMP329636		. . . TERMINAL, V00779	Q-JA MA NA QA- TA YA-JB KB-RB YB-ZC ED-WD	9

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
26C	329636		. . . TERMINAL, V00779	XD-RE	5
26D	1841-1-5620		. . . TERMINAL, V17419	KA-PA UA-DB GB-JB SB-VB YB ZB FC-ZC ED-WD	6
26D	1841-1-5620		. . . TERMINAL, V17419	XD-RE	14
26E	324485		. . . TERMINAL	XD-FE	6
26E	324484		. . . TERMINAL	GE-RE	6
27	65-22960-13		. . . SLEEVE	A-N	1
27A	61-30443-12		. . . SLEEVE	QSUWY BA DA PA HA KA OA QA SA UA WA EB KB MB OB QB SB UB DC	1
27A	61-30445-12		. . . SLEEVE	RTVXZ CA EA GA IA JA LA PA RA TA VA XA FB LB NB PB RB TB VB EC	1
27A	61-30443-16		. . . SLEEVE	MA YA CB GB IB YB FC HC JC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TB VD	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-27A	61-30445-16		. . . SLEEVE	NA ZA DB HB JB ZB GC IC KC MC OC QC SC VC WC YC ED GD ID KD MD OD QD SD UD WD	1
27A	251A2146-5		. . . SLEEVE	XD-RE	1
28	65-33960-12		. . . SLEEVE	A-N	1
28A	61-30443-11		. . . SLEEVE	QSUWY BA DA FA HA QA SA EB KB MB OB QB DC	1
28A	61-30445-11		. . . SLEEVE	RTVXZ CA EA GA IA JA RA TA FB LB NB PB RB EC	1
28A	61-30443-15		. . . SLEEVE	KA CA UA WA SB UB	1
28A	61-30445-15		. . . SLEEVE	LA PA VA PA TB VB	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101- 28A	61-30443-15		. . . SLEEVE	MA YA CB GB IB YB FC HC JC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TD VD	2
28A	61-30445-15		. . . SLEEVE	NA ZA DB HB JA ZB GC IC KC MC OC QC SC UC WC YC ED GD ID KD MD OD QD SD UD WD	2
28A	251A2146-4		. . . SLEEVE	XD-FE	2
28A	251A2146-8		. . . SLEEVE	GE-RE	1
28B	61-30443-13		. . . SLEEVE	QSUWY BA DA FA HA MA YA CB EB GB IB KB MB OB QB YB DC FC HC JC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TD VD	2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-28B	61-30445-13		. . . SLEEVE	RTVXZ CA EA GA IA JA NA ZA DB FB HB JB LB NB PB RB ZB EC GC IC KC MC OC QC SC VC WC YC ED GD ID KD MD OD QD SD UD WD	2
28B	61-30443-13		. . . SLEEVE	QA	1
28B	61-30445-13		. . . SLEEVE	RA	1
28B	251A2146-3		. . . SLEEVE	XD-FE	2
28B	251A2146-9		. . . SLEEVE	GE-RE	3
29	115880		. . . CABLE, V12984 (BOEING 10-60233-5)	A-N	1
29	3776		. . . CABLE, V90484 (BOEING 10-60233-5)	A-N	1
29A	167654		. . . MULTICONDUCTOR CABLE ASSY, 200 IN. LONG, V12984 (BOEING 10-60816-12)	QSUWY DA HA KA OA SA UA WA EB KB MB OB QB SB UB DC	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-29A	CAC19ACAA		. . . MULTICONNECTOR CABLE ASSY, 200 IN. LONG, V90484 (BOEING 60B40033-8)	MA QA YA CB GB IB YB FC HC JC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TD VD	1
29A	167654		. . . MULTICONDUCTOR CABLE ASSY, 160 IN. LONG, V12984 (BOEING 10-60816-12)	RTVXZ EA IA LA PA TA VA XA LB NB PB RB TB VB	1
29A	CAC19ACAA		. . . MULTICONNECTOR CABLE ASSY, 160 IN. LONG, V90484 (BOEING 60B40033-8)	NA RA ZA DB HB JB ZB GC IC KC MC OC QC SC UC WC YC ED GD ID KD MD OD QD SD UD WD	1
29A	167654		. . . MULTICONDUCTOR CABLE ASSY, 230 IN. LONG, V12984 (BOEING 10-60816-12)	BA FA	1
29A	167654		. . . MULTICONDUCTOR CABLE ASSY, 164 IN. LONG, V12984 (BOEING 10-60816-12)	CA GA JA	1
29A	167654		. . . MULTICONDUCTOR CABLE ASSY, 140 IN. LONG, V12984 (BOEING 10-60816-12)	FB EC	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-29A	2044070077M19		. . . MULTICONDUCTOR CABLE ASSY, 170 IN. LONG, V12984 (BOEING 60B40033-8) (ALTERNATE PART NO. 20440/70077M-19)	XD-RE	1
29B	61-30443-14		. . . WIRE	QSUWY BA DA FA HA EB KB MB OB QB DC	1
29B	61-30443-19		. . . WIRE	MA YA CB GB IB YB FC HC JC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TD VD	1
29B	61-30445-14		. . . WIRE	RTVXZ CA EA GA IA JA FB LB NB PB RB EC	1
29B	61-30445-19		. . . WIRE	NA ZA DB HB JB ZB GC IC KC MC OC QC SC VC WC YC ED GD ID KD MD OD QD SD UD WD	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
29B	61-30443-17		. . . WIRE	QSUWY BA DA FA HA EB KB MB OB QB DC	1
29B	61-30443-18		. . . WIRE	MA YA CB GB IB YB FC HC JC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TD VD	1
29B	61-30445-17		. . . WIRE	RTVXZ CA EA GA IA JA FB LB NB PB RB EC	1
29B	61-30445-18		. . . WIRE	NA ZA DB HB JB ZB GC IC KC MC OC QC SC VC WC YC ED GD ID KD MD OD QD SD UD WD	1
29B	BMS13-16T01C01G020		. . . WIRE	XD-RE	1
29C	324484		DELETED		
29D	BACT12AR204		DELETED		
29E	M39029-1-101		DELETED		
29F	M39029-1-102		DELETED		

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
30	63-1958		. . INSULATOR		1
31	69-16273-3		. . WHEEL ASSY, LH	AC	1
31	69-16273-4		. . WHEEL ASSY, RH	BD	1
31	69-16273-5		. . WHEEL ASSY, LH	EG	1
31	69-16273-6		. . WHEEL ASSY, RH	FH	1
31	69-16273-9		. . WHEEL ASSY, LH	IK	1
31	69-16273-10		. . WHEEL ASSY, RH	JL	1
31	69-16273-11		. . WHEEL ASSY, LH	MO	1
31	69-16273-12		. . WHEEL ASSY, RH	NP	1
31	65-45124-1		. . WHEEL ASSY, LH	QU FA KB	1
31	65-45124-2		. . WHEEL ASSY, RH	RV GA LB	1
31	65-45124-3		. . WHEEL ASSY, LH	SW BA DA HA EB MB OB DC	1
31	65-45124-4		. . WHEEL ASSY, RH	TX CA EA IA JA FB NB PB EC	1
31	65-45124-13		. . WHEEL ASSY, LH	Y QB	1
31	65-45124-14		. . WHEEL ASSY, RH	Z RB	1
31	65-45124-43		. . WHEEL ASSY, LH	KA OA UA WA YA CB GB IB SB UB YB FC HC JC LC NC PC RC TC VC	1
31	65-45124-77		. . WHEEL ASSY, LH (OPT)	CB GB IB YB FC HC LC NC PC RC TC VC	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
31	65-45124-44		. . WHEEL ASSY, RH	LA PA VA XA ZA DB HB JB TB VB ZB GC IC KC MC OC QC SC VC WC	1
31	65-45124-78		. . WHEEL ASSY, RH (OPT)	DB HB JB ZB GC IC MC OC QC SC UC WC	1
31	65-45124-53		. . WHEEL ASSY, LH	MA	1
31	65-45124-54		. . WHEEL ASSY, RH	NA	1
31	65-45124-57		. . WHEEL ASSY, LH	QA	1
31	65-45124-58		. . WHEEL ASSY, RH	RA	1
31	65-45124-61		. . WHEEL ASSY, LH	SA	1
31	65-45124-62		. . WHEEL ASSY, RH	TA	1
31	65-45124-77		. . WHEEL ASSY, LH	XC ZC FD HD JD LD ND PD RD TD VD XD ZD GE IE KE ME OE QE	1
31	65-45124-78		. . WHEEL ASSY, RH	YC ED GD ID KD MD OD QD SD UD WD YD FE HE JE LE NE PE RE	1
31A	65-21047-19		. . . WHEEL ASSY, LH	AC	1
31A	65-21047-20		. . . WHEEL ASSY, RH	BD	1
31A	65-21047-23		. . . WHEEL ASSY, LH	EG	1
31A	65-21047-24		. . . WHEEL ASSY, RH	FH	1
31A	65-21047-53		. . . WHEEL ASSY, LH	IK	1
31A	65-21047-54		. . . WHEEL ASSY, RH	JL	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
31A	65-21047-57		. . . WHEEL ASSY, LH	MO	1
31A	65-21047-58		. . . WHEEL ASSY, RH	NP	1
31A	65-45124-5		. . . WHEEL, LH (LIMITED)	QSUW BA DA FA HA EB KB MB OB DC	1
31A	65-45124-6		. . . WHEEL, RH (LIMITED)	RTVX CA EA GA IA JA FB NB PB EC	1
31A	65-45124-9		. . . WHEEL, LH (LIMITED)	QSUWY BA DA FA HA EB KB MB OB QB DC	1
31A	65-45124-10		. . . WHEEL, RH (LIMITED)	RTVXZ CA EA GA IA JA FB NB PB RB EC	1
31A	65-45124-39		. . . WHEEL, LH (USED ON 65-45124-43)	KA OA UA WA YA CB GB IB SB UB YB FC HC JC LC NC PC RC TC VC	1
31A	65-45124-40		. . . WHEEL, RH (USED ON 65-45124-44)	LA PA VA XA ZA DB HB JB TB VB ZB GC IC KC MC OC QC SC UC WC	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
31A	65-45124-79		. . . WHEEL, LH (USED ON 65-45124-77)	CB GB IB YB FC HC LC NC PC RC TC VC XC ZC FD HD JD LD ND PD RD TD VD XD ZD GE IE KE ME OE QE	1
31A	65-45124-80		. . . WHEEL, RH (USED ON 65-45124-78)	DB HB JB ZB GC IC MC OC QC SC UC WC YC ED GD ID KD MD OD QD SD UD WD YD FE HE JE LE NE PE RE	1
31A	65-45124-55		. . . WHEEL, LH	MA	1
31A	65-45124-56		. . . WHEEL, RH	NA	1
31A	65-45124-59		. . . WHEEL, LH	QA	1
31A	65-45124-60		. . . WHEEL, RH	RA	1
31A	65-45124-63		. . . WHEEL, LH	SA	1
31A	65-45124-64		. . . WHEEL, RH	TA	1
31B	65-21047-21		. . . . WHEEL	AC	1
31B	65-21047-22		. . . . WHEEL	BD	1
31B	65-21047-25		. . . . WHEEL	EG	1
31B	65-21047-26		. . . . WHEEL	FH	1
31B	65-21047-55		. . . . WHEEL	IK	1
31B	65-21047-56		. . . . WHEEL	JL	1
31B	65-21047-59		. . . . WHEEL	MO	1
31B	65-21047-60		. . . . WHEEL	NP	1
31C	MS21208C0620		. . . . INSERT (REPLS BACS13P06C4)	A-P	2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
31D	BACM9L10ADD		. . . MARKER *[1]	A-P	1
31E	MS21209C0615		DELETED		
31E	MS21209F1-15		. . . INSERT	Q-VB YB-WC KE-RE	1
31E	MS21209C415		DELETED		
31F	MS21209C0615		. . . INSERT	Q-JA QA-TA EB FB KB-RB DC EC	1
31F	MS21209C0415		. . . INSERT	KA-PA UA-DB GB-JB SB-VB YB ZB FC-WC KE-RE	
31G	MS21209C0615		. . . INSERT	MA NA QA RA	1
32	MS16997-37		DELETED		
32A	69-40891-1		. WASHER, GUIDE	Q-VB YB-RE	1
32B	65-45119-3		DELETED		1
32B	65-45119-1		DELETED		
32C	BAC27DCT174		. MARKER, FOIL	Q-X FA-PB SB-VB YB-RE	1
32D	65B80308-7		. PAD	KA-PA UA-DB GB-JB SB-VB YB ZB FC-RE	1
32E	BAC27DCT731		. MARKER, AILERON TRIM	OE-RE	1
33	65-24555-1		. COLUMN ASSY	ACEGI KMO	1
33	65-24555-2		. COLUMN ASSY (OPP 65-24555-1)	BDFHJ LNP	1
33	65-45122-1		. COLUMN ASSY	QSUWY BA DA FA HA KA OA QA YA CB EB	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-33	65-45122-2		. COLUMN ASSY (OPP 65-45122-1)	RTVXZ CA EA GA IA JA LA PA RA ZA DB FB	1
33	65-45122-5		. COLUMN ASSY	MA SA UA	1
33	65-45122-6		. COLUMN ASSY (OPP 65-45122-5)	NA TA VA	1
33	65-45122-7		. COLUMN ASSY	GB IB	1
33	65-45122-8		. COLUMN ASSY (OPP 65-45122-7)	HB JB	1
33	65-45122-9		. COLUMN ASSY	KB MB OB QB SB UB YB DC	1
33	65-45122-10		. COLUMN ASSY (OPP 65-45122-9)	LB NB PB RB TB VB ZB EC	1
33	65-45122-11		. COLUMN ASSY	WA	1
33	65-45122-12		. COLUMN ASSY (OPP 65-45122-11)	XA	1
33	65-45122-13		. COLUMN ASSY	FC HC	1
33	65-45122-14		. COLUMN ASSY (OPP 65-45122-13)	GC IC	1
33	65-45122-15		. COLUMN ASSY	JC LC RC XC JD	1
33	65-45122-16		. COLUMN ASSY	KC MC SC YC KD	1
33	65-45122-17		. COLUMN ASSY	NC PC TC VC ZC FD HD LD ND	1
33	65-45122-18		. COLUMN ASSY	OC QC UC WC ED GD ID MD OD	1
33	65-45122-19		. COLUMN ASSY	PD	1
33	65-45122-20		. COLUMN ASSY	QD	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
33	65-45122-21		. COLUMN ASSY	RD TD VD XD ZD GE IE	1
33	65-45122-22		. COLUMN ASSY	SD UD WD YD FE HE JE	1
33	65-45122-24		. COLUMN ASSY	KE ME OE QE	1
33	65-45122-25		. COLUMN ASSY	LE NE PE RE	1
34	MS24665-283		. . PIN, COTTER	A-JE	1
34	BACP18BC03C06P		. . PIN, COTTER	KE-RE	1
35	BACN10JD6		. . NUT (REPLS AN310-6)	A-JE	1
35	BACN10JD6ASU		. . NUT	KE-RE	1
36	66-14778-1		. . BOLT		1
37	30-3681		. . SPACER		1
38	30-3567		. . WASHER	A-P	1
38	AN960-616		. . WASHER	Q-VB YB-JE	1
38	NAS1149F0663P		. . WASHER	KE-RE	1
39	60-5740		. . SPRING, MEDALLION RETAINER	A-P	1
40	3-85293-2		. . WASHER ASSY		1
41	3-85293-1		. . . WASHER		1
42	MS16562-21		. . . PIN, SPRING (REPLS NAS561P3-4)		1
43	60-5795		. . SPACER		1
43A	65-45122-3		. . SPACER *[2]		1
44	66-25058		. . NUT, BEVEL GEAR	A-JE	1
44	66-25058-1		. . NUT, BEVEL GEAR	KE-RE	1
45	BACB10A822		. . BEARING, BALL (REPLS AN202KP21B AND MS20202KP21B)	A-P	1
45	MS20202KP21B		. . BEARING, BALL (OPT)	Q-RE	1
45	BACB10AU21		. . BEARING, BALL (BACB10A822 OPT TO BACB10AU21)	Q-RE	1
46	9-49084-3000		. . GEAR	A-P	1
46A	65-45122-4		. . GEAR ASSY (OPT 251A2183-1, 65-45122-23)	Q-VB YB-RE	1
46A	251A2183-1		. . GEAR ASSY (OPT 65-45122-4)	KE-RE	1
46A	65-45122-23		. . GEAR ASSY (OPT 65-45122-4)	KE-RE	1
46B	9-49084-3000		. . . GEAR *[9] (USED ON 65-45122-4)		1
46B	251A2183-2		. . . GEAR *[10] (USED ON 251A2183-1)		1
46B	9-48067-2		. . . GEAR *[11] (USED ON 65-45122-23)		1
46C	9-48067-1		. . . GEAR *[9] (USED ON 65-45122-4)		1
46C	251A2183-3		. . . GEAR *[10] (USED ON 251A2183-1)		1
46C	9-49084-2		. . . GEAR *[11] (USED ON 65-45122-23)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
47	6-62607		. . SLEEVE	A-JE	1
47	6-62607-1		. . SLEEVE	KE-RE	1
48	MS24677-7		. . SCREW, CAP (REPLS BACS12AE6)	A-P	1
48	BACS12AE6		. . SCREW, MACHINE	A-P	1
48	AN500A6-4		. . SCREW, MACHINE (OPT TO BACS12A36)	A-P	1
48	AN500A6-4		. . SCREW, MACHINE	Q-VB YB-IC	1
48	NAS1352-06H4P		. . SCREW, CAP, SCKT HD	JC-JE	1
48	BACS12HM06H4		. . SCREW	KE-RE	1
49	3-85291		. . NUT, RETAINER		1
50	BACB10A544		. . BEARING, BALL (REPLS AN201KP8A AND MS20201KP8A)	A-IC	1
50	MS20201KP8A		. . BEARING, BALL (OPT)	JC-JE	1
50	BACB10AP8		. . BEARING, BALL (BACB10A544 OPT TO BACB10AP8)	JC-JE	1
50	BACB10FS08RJ		. . BEARING, BALL	KE-RE	1
50	BACB10FS08J		. . BEARING, BALL (OPT)	KE-RE	1
51	BACN10JC3		. . NUT (REPLS NAS679A3W)	A-P	2
51	BACN10JC3		. . NUT (REPLS NAS679A3W)	Q-VB YB-JE	4
51	BACN10JC3CD		. . NUT	KE-RE	3
52	NAS514P1032-6		. . SCREW	A-P	2
52	NAS514P1032-10		. . SCREW	Q-VB YB-JE	2
52	NAS514P1032-8		. . SCREW	Q-VB YB-JE	2
52	NAS514P1032-9		. . SCREW	KE-RE	2
52A	NAS514P1032-8		. . SCREW	KE-RE	1
53	MS21919WDG6		. . CLAMP	A-P	2
53	BACC10DK5		. . CLAMP	Q-VB YB-RE	2
53A	BACC10DK2		. . CLAMP	Q-VB YB-JE	2
53B	BACC10DK2		. . CLAMP	KE-RE	1
54	BACR15BB8D		. . RIVET (REPLS MS20470D8, AN470D8)	A-JE	8
54	NAS1398D8A3		. . RIVET (OPT BACR15BB8D7C)	KE-RE	8
55	15-14521-3		. . ELL (OPT)	Q-VB YB-IC	1
55	15-14521-2002		. . ELL (OPT)	A-IC	1
55	15-14521-2002		. . ELL (15-14521-3 OPT TO 15-14521-2002 OPT TO 15-14521-4 OPT TO 15-14521-5)	JC-OD	1
55	15-4521-3		. . ELL (15-14521-3 OPT TO 15-14521-2002 OPT TO 15-14521-4 OPT TO 15-14521-5)	JC-OD	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-55	15-4521-4		. . ELL (15-14521-3 OPT TO 15-14521-2002 OPT TO 15-14521-4 OPT TO 15-14521-5)	JC-OD	1
55	15-4521-5		. . ELL (15-14521-3 OPT TO 15-14521-2002 OPT TO 15-14521-4 OPT TO 15-14521-5)	JC-OD	1
55	15-4521-5		. . ELL CONTROL	PD-JE	1
55	15-14521-6		. . ELL CONTROL COLUMN	KE-RE	1
55A	BAC27DCT0425		. . MARKER, FOIL	A-JE	1
55A	BAC27NCT0274		. . MARKER, FOIL	VB-JC YB-IC	1
55A	BAC27DCT0496		. . MARKER, FOIL (BAC27NCT0274 OPT TO BAC27DCT0496)	JC-JE	1
55A	BAC27NCT0274		. . MARKER, FOIL (BAC27NCT0274 OPT TO BAC27DCT0496)	JC-JE	1
56	MS24665-132		DELETED		
57	BACN10JC4		. . NUT (SUPSDS AN320-4, BACN10JD104)	A-JE	1
57	BACN10YR4CD		. . NUT	KE-RE	1
57A	NAS1149E0416P		. . WASHER	KE-RE	1
58	BACB30NF4-37		. . BOLT (SUPSDS NAS1104-37DW)	A-P	1
58	69-40961-2		. . BOLT	Q-VB YB-JE	1
58	69-40961-1		. . BOLT (OPT TO 69-40961-2)		1
58	NAS1104-37		. . BOLT (OPT TO 69-40961-1)		1
58	BACB30LJ4-32		. . BOLT	KE-RE	1
59	AN960D416		. . WASHER	A-JE	2
59A	NAS42HT8-7		. . SPACER	KE-RE	2
59B	BACB28X4M096		. . BUSHING	KE-RE	1
59C	BACB28X4M014		. . BUSHING	KE-RE	1
60	AN960D416L		. . WASHER		1
60	NAS1149E0416P		. . WASHER	KE-RE	1
60A	BACB10A661		. . BEARING, BALL (REPLS AN201KP4A, MS20201KP4A)		1
60A	BACB10FS04RJ		. . BEARING, BALL	KE-RE	1
61	6-60429		. . PLATE ASSY	A-JE	1
61	251N1223-5		. . PLATE ASSY	KE-RE	1
61	251N1233-3		. . PLATE ASSY (OPT)	KE-RE	1
62	BACB10A661		. . . BEARING, BALL (REPLS AN201KP4A, MS20201KP4A) (USED ON 6-60429)		1
62	BACB10FS04RJ		. . . BEARING, BALL (USED ON 251N1233-3, 251N1223-5)		1
63	6-60429-1		. . . PLATE (USED ON 6-60429)		1
63	251N1233-4		. . . PLATE (USED ON 25IN1233-3)		1
63	251N1223-6		. . . PLATE (USED ON 251N1223-5)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-64	BACC10P3-62-312SH		. . CLAMP, SUPPORT		1
64A	65B80309-2		. . BOOT	KE-RE	1
65	9-48032		. . DUST COVER	A-P	1
65	9-48032-1		. . DUST COVER	Q-VB YB-JE	1
65	9-48032-4		. . DUST COVER	KE-RE	1
65A	BACN10RF20		. . NUT	KE-RE	1
66	BACB10BM28-16		. . BEARING, NEEDLE (REPLS BACB10B28PLT)	A-IC	1
66	UF66113		. . BEARING (BACB10BM28-16 OPT TO UF66113)	JC-JE	1
66A	BACB10AU21		. . BEARING	KE-RE	1
67	NAS222-12		. . SCREW	A-P	4
67	NAS623-4-7		. . SCREW	Q-VB YB-JE	4
67	BACB30LK4-6		. . BOLT (OPT NAS623-4-7)	KE-RE	4
67	BACB30ZG4-7		. . BOLT (OPT BACB30LK4-6)	KE-RE	4
68	BACN10JC3		. . NUT (REPLS NAS679A3W)	Q-VB YB-JE	4
68	BACN10JC3		. . NUT (REPLS NAS679A3W)	A-P	2
68	BACN10JC3CD		. . NUT	KE-RE	4
69	NAS603-6P		. . SCREW	Q-VB YB-JE	4
69	NAS603-6P		. . SCREW (REPLS NAS603-6)	A-P	2
69	BACS12CK3-6		. . SCREW	KE-RE	4
70	AN742-8		. . CLAMP	A-P	2
70	AN742D8		. . CLAMP	Q-VB YB-RE	2
70A	AN742D6		. . CLAMP	Q-VB YB-RE	2
70B	BACG20C7		. . GROMMET	Q-VB YB-JE	1
70B	BACG20C207N		. . GROMMET	KE-RE	1
71	69-38299-1		. . TUBE	Q-VB YB-RE	1
72	60-1463-1		. . TUBE	A-P	1
72	60-1463-2		. . TUBE	Q-FB KB-EC JC-MC RC SC XC YC JD KD PD QD	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-72	60-1463-4		. . TUBE	GB-JB FC-IC NC-QC TC-WC ZC ED-ID LD-OD RD-RE	1
73	9-67622-1		. . TUBE	A-P	1
73	9-67622-2		. . TUBE	Q-FB KB-VB YB-EC JC-MC RC SC XC YC JD KD PD QD	1
73	9-67622-5		. . TUBE	GB-JB FC-IC NC-QC TC-WC ZC ED-ID LD-OD RD-JE	1
73	9-67622-7		. . TUBE	KE-RE	1
74	3-85967		. . LOCKRING		1
75	60-5747		. . NUT		1
75	60-5747-1		. . NUT (60-5747 OPT TO 60-5747-1)	KB-JE	1
75	60-5747-2		. . NUT	KE-RE	1
76	6-62608-3		. . SPACER ASSY	A-P	1
76	6-62608-5		. . SPACER ASSY	Q-VB YB-JE	1
76	6-62608-7		. . SPACER ASSY	KE-RE	1
76A	6-62608-2		. . . FILLER (USED ON 62608-3,-5)	A-VB YB-JE	4
76B	BACR15BA3D		. . . RIVET (REPLS MS20426D3)		8
76B	BACR15BA3D6C		. . . RIVET (OPT TO BACR15DR3AC4) (USED ON 6-62608-7)		8
76C	BACN10KB4F		. . . NUTPLATE (REPLS NAS687A4)		4
76D	6-62608-4		. . . SPACER (USED ON 6-62608-3)		1
76D	6-62608-6		. . . SPACER (USED ON 6-62608-5)		1
76D	6-62608-8		. . . SPACER (USED ON 6-62608-7)		1
77	3-85966		. . LOCKRING		1
77	3-85966-1		. . LOCKRING (3-85966 OPT TO 3-85966-1)	JC-RE	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
78	3-85290-1		. . NUT		1
78	3-85290-2		. . NUT (3-85290-1 OPT TO 3-85290-2)	JC-RE	1
79	BACB10A822		. . BEARING, BALL (REPLS AN202KP21B)	A-JE	1
79	BACB10AU21		. . BEARING, BALL	KE-RE	1
80	30-2282		. . SHIM, LAMINATED		1
80	30-2282-0		. . SHIM, LAMINATED (30-2282 OPT TO 30-2282-0)		1
80A	69-78564-1		. . SHIM	KB-RE	AR
81	69-51259-1		. . PIN, SHEAR (REPLS BACP18L10P1250)(POST SB 27-119, 27-1022)		2
81	BACP18L10P1250		. . PIN, SPRING (PRE SB 27-119, 27-1022)		2
81A	BACS12HM08AU4		. . SCREW (OPT NAS1352C08-4)	KE-RE	1
82	6-84648		. . SHAFT ASSY	A-P	1
82	6-84648-2		. . SHAFT ASSY	Q-FB KB-VB YB-EC JC-MC RC SC XC YC JD KD PD QD	1
82	6-84648-8		. . SHAFT ASSY	GB-JB FC-IC NC-QC TC-WC ZC ED-ID LD-OD RD-JE	1
82	251N1101-5		. . SHAFT ASSY	KE-RE	1
83	BACR15BA5D		. . . RIVET (REPLS MS20426D5, AN426D5)	A-JE	4
83	NAS1398D6A4		. . . RIVET (USED ON 251N1101-5)		4
84	6-6048		DELETED		
84	6-60488		. . . TERMINAL	A-JE	1
84	6-60488-1		. . . TERMINAL (OPT TO 6-60488)	A-JE	1
84A	251N1101-6		. . . FITTING (USED ON 251N1101-5)		1
84B	BACI12AE-C0810P		. . . INSERT (USED ON 251N1101-5)		1
85	6-84648-1		. . . SHAFT (USED ON 6-84648)		1
85	6-84648-3		. . . SHAFT (USED ON 6-84648-2)		1
85	6-84648-9		. . . SHAFT (USED ON 6-84648-8)		1
85	251N1101-7		. . . TUBE (USED ON 251N1101-5)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
86	9-48067-1		. . GEAR	A-P	1
87	65-24190-1		. . HOUSING ASSY (USED ON 65-24555-1,-2, 65-45122-1,-7) (OPT)		1
87	65-24190-4		. . HOUSING ASSY (USED ON 65-45122-2,-8)(OPT)		1
87	65-24190-8		. . HOUSING ASSY (USED ON 65-45122-1,-2,-5,-6,-7,-8)		1
87	65-24190-12		. . HOUSING ASSY (USED ON 65-45122-9 THRU -22)		1
87	65-24190-12		. . HOUSING ASSY (USED ON 65-45122-24,-25) (OPT TO 65-24190-16)		1
87	65-24190-16		. . HOUSING ASSY (USED ON 65-45122-24,-25) (OPT TO 65-24190-12)		1
88	MS21209C0620		. . . INSERT (USED ON 65B24190-1,-4, -8,-12) (REPLS BACS13W06CN4)		1
88	BACI12AE-C0620P		. . . INSERT (USED ON 65B24190-16)		1
89	65-24190-2		. . . HOUSING (USED ON 65-24190-1)		1
89	65-24190-5		. . . HOUSING (USED ON 65-24190-4)		1
89	65-24190-9		. . . HOUSING (USED ON 65-24190-8)		1
89	65-24190-13		. . . HOUSING (USED ON 65-24190-12)		1
89	65-24190-17		. . . HOUSING (USED ON 65-24190-16)		1
89A	BACP20B66		. . PLUG, BUTTON (USED ON 65-45122-2,-6,-7,-12)		1
91	69-62729-1		. STRAP ASSY	RC-RE	1
92	69-62729-2		. . STRAP		1
93	69-62729-3		. . RADIUS FILLER		2
94	BACR15BA4D		. . RIVET		2
95	BACR15BB4D		. . RIVET		1
96	69-62729-4		. SHIM (OPT 69-62729-5)	RC-RE	2
97	BACN10JC3CD		. NUT	RC-RE	2
98	65-45121-95		. WIRE BUNDLE ASSY	RC TC VC XC ZC FD HD JD LD ND PD RD TD VD XD ZD GE IE KE ME OE QE	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-98	65-45121-96		. WIRE BUNDLE ASSY	SC UC WC YC ED GD ID KD MD OD QD SD UD WD YD FE HE JE LE NE PE RE	1
99	PT06E82SSR		. . CONNECTOR	RC-RE	1
99	PT06CE82SSR		. . CONNECTOR (OPT)	RC-RE	1
100	NAS43DD3-56		. SPACER	RC-OD	2
100	NAS43DD3-56FC		. SPACER	PD-JE	2
100	NAS43DD3-58FC		. SPACER	KE-RE	2
101	NAS6603-24		. BOLT	RC-JE	2
101	BACB30LM3-24		. BOLT	KE-RE	2
102	C07202-3		. CONTROL SHAKER	RC-RE	1
102	C07202-2		. CONTROL SHAKER (OPT)	RC-RE	1
105	324484		. CAP	XD-RE	4
106	BACT12AR204		. TERMINAL	XD-RE	1
107	M39029-1-101		. CONTACT, PIN	XD-RE	13
108	M39029-1-102		. CONTACT, PIN	XD-RE	1
150	6-60428		FORK *[1]		RF

*[1] INSTALLATION ITEM
*[2] OPTIONAL USE. THIS SPACER MAY BE USED TO PROVIDE INTEGRITY TO COLUMN DURING STORAGE ONLY.
*[3] 69-4535-1 OR 69-70179-1 (ITEM 16) USED WITH MS20253-2-67 (ITEM 11) OPTIONAL TO 69-70179-5 OR 69-70179-7 USED WITH 251N1283-1.
*[4] 69-4535-2 OR 69-70179-2 (ITEM 16) USED WITH MS20253-2-67 (ITEM 11) OPTIONAL TO 69-70179-6 OR 69-70179-8 USED WITH 251N1283-1.
*[5] 69-63433-5 (ITEM 16) USED WITH MS20253-2-67 (ITEM 11) OPTIONAL TO 69-63433-7 USED WITH 251N1283-1.
*[6] 69-63433-6 (ITEM 16) USED WITH MS20253-2-67 (ITEM 11) OPTIONAL TO 69-63433-8 USED WITH 251N1283-1.
*[7] 69-63433-5 (ITEM 16) USED WITH MS20253-2-67 (ITEM 11) OR 69-63433-7 (ITEM 16) USED WITH 251N1283-1 (ITEM 11) OPTIONAL TO 69-63433-11 USED WITH 251N1283-1.
*[8] 69-63433-6 (ITEM 16) USED WITH MS20253-2-67 OR 69-63433-8 USED WITH 251N1283-1 (ITEM 11) OPTIONAL TO 69-63433-12 USED WITH 251N1283-1.
*[9] 9-49084-3000 AND 9-48067-1 GEARS COMPOSE A MATCHED SET.
*[10] 251A2183-2 AND 251A2183-3 GEARS COMPOSE A MATCHED SET.
*[11] 9-48067-2 AND 9-49084-2 GEARS COMPOSE A MATCHED SET.

REFERENCE DESIGNATION INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATION	PART NUMBER	ITEM NO.
L728	310-1	24B
L729	310-1	24B
S134	426221	24
S135	426221	24
S161-INPH	C1006CB	14
S161-INPH	C1006RCB	14
S161-INPH	A8006CB	14
S161-INPH-RAD	C2006CB	14
S161-INPH-RAD	C2006RCB	14
S161-MIC	C2006CB	14
S161-MIC	C2006RCB	14
S161-MIC	A8006CB	14
S161-RAD	C1006CB	14
S214-INPH	C1006CB	14
S214-INPH	C1006RCB	14
S214-INPH	A8006CB	14
S214-INPH-RAD	C2006CB	14
S214-INPH-RAD	C2006RCB	14
S214-MIC	C2006CB	14
S214-MIC	C2006RCB	14
S214-MIC	A8006CB	14
S214-RAD	C1006CB	14
S231	721101A1	10
S231	C2006	10
S231	C2006CB	10
S231	C2006R	10
S231	C2006RCB	10
S232	721101A1	10
S232	C2006	10
S232	C2006CB	10
S232	C2006R	10
S232	C2006RCB	10
S519 MIC-INT	C2006	14
S519 MIC-INT	C2006CB	14
S519 MIC-INT	C2006R	14
S519 MIC-INT	C2006RCB	14
S520 MIC-INT	C2006	14
S520 MIC-INT	C2006CB	14
S520 MIC-INT	C2006R	14
S520 MIC-INT	C2006RCB	14
S742	C2006	10A
S743	C2006	10A

VENDORS

V00779	TYCO ELECTRONICS, 2901 FULLING MILL RD., MIDDLETOWN, PENNSYLVANIA 17057
V07150	ELECTRO-MECHANICAL COMPONENTS, INC., 1826 N. FLORADALE AVE., SOUTH EL MONTE, CALIFORNIA 91733-3689
V12984	PRESTOLITE WIRE DIV. OF ELTRA CORP., P.O. BOX 658, 601 S. POPLAR ST., HAZLETON, PENNSYLVANIA 18201
V14608	EMHART INDUSTRIES, INC., CORBIN CABINET LOCK HARDWARE DIV., 225 EPISCOPAL RD., BERLIN, CONNECTICUT 06037
V17419	DEUTSCH CO., THE, WELLS FARGO BANK BLDG, 2444 WILSHIRE BLVD. #600, SANTA MONICA, CALIFORNIA 90403
V21649	OTTO CONTROLS, DIV. OF OTTO ENGINEERING, INC., 2 E. MAIN ST., CARPENTERSVILLE, ILLINOIS 60110
V28277	DEXTER-WILSON CORP., 4133 STONE WAY N., SEATTLE, WASHINGTON 98103
V81579	MASON ELECTRIC CO., INC. SUBSIDIARY OF CLAROSTAT, 440 W. LOS FELIZ RD., GLENDALE, CALIFORNIA 91205-0159
V81640	EATON CORP., AEROSPACE AND COMMERCIAL CONTROLS DIV., 2250 WHITFIELD AVE. E., SARASOTA, FLORIDA 34243-9703
V90484	SURPRENANT WIRE AND CABLE DIV. OF FL. IND., 172 STERLING ST., CLINTON, MASSACHUSETTS 01510

Part No.	Fig. and Index No.	Qty. per Assy.
A8006CB	1101-14	1
A8006CB	14	1
AMP329636	26C	9
AMP36149	26	14
AMP36153	25A	8
AN500A6-4	48	1
AN500A6-4	48	1
AN742-8	70	2
AN742D6	70A	2
AN742D8	70	2
AN960-616	38	1
AN960D416	59	2
AN960D416L	60	1
BAC27DCT0425	55A	1
BAC27DCT0496	55A	1
BAC27DCT174	32C	1
BAC27DCT731	32E	1
BAC27NCT0274	55A	1
BAC27NCT0274	55A	1
BACB10A544	50	1
BACB10A661	60A	1
BACB10A661	62	1
BACB10A822	45	1
BACB10A822	79	1
BACB10AP8	50	1
BACB10AU21	45	1
BACB10AU21	66	1
BACB10AU21	79	1
BACB10BM28-16	66	1
BACB10FS04RJ	60A	1
BACB10FS04RJ	62	1
BACB10FS08RJ	50	1
BACB28X4M096	59B	1
BACB28X4M014	59C	1
BACB30LJ4-32	58	1
BACB30LK4-6	67	4
BACB30LM3-24	101	2
BACB30NF4-37	58	1
BACB30ZG4-7	67	4
BACC10BJ6	4	1
BACC10DK2	53A	2
BACC10DK2	53B	1
BACC10DK5	4	1
BACC10DK5	53	2
BACC10P3-62-312SH	64	1
BACC12C3	12A	1
BACG20C7	70B	1

Part No.	Fig. and Index No.	Qty. per Assy.
BACG20C207N	70B	1
BACI12AEC0620P	88	1
BACI12AEC0810P	84A	1
BACM9L10ADD	31D	1
BACN10JC08	2	1
BACN10JC3	51	2
BACN10JC3	51	4
BACN10JC3	68	4
BACN10JC3	68	2
BACN10JC3CD	51	3
BACN10JC3CD	68	4
BACN10JC3CD	97	2
BACN10JC4	57	1
BACN10JD6	35	1
BACN10JD6ASU	35	1
BACN10KB4F	76C	4
BACN10RF20	65A	1
BACN10YR4CD	57	1
BACP18BC03C06P	34	1
BACP18L10P1250	81	2
BACP20B66	89A	1
BACR15BA3D	76B	8
BACR15BA3D6C	76B	8
BACR15BA4D	94	2
BACR15BA5D	83	4
BACR15BB4D	95	1
BACR15BB8D	54	8
BACS12AE6	48	1
BACS12BP04C3	15B	1
BACS12CB3-8	3	1
BACS12CK3-6	69	4
BACS12CK04H7	7	1
BACS12CK04H8	5	2
BACS12GX04H6	6	2
BACS12GX04H7	13	1
BACS12HM06H4	48	1
BACS12HM08AU4	81A	1
BACS13AL06L	23B	5
BACS13AL08L	19B	2
BACT12AC2	26A	6
BACT12AC2	26A	4
BACT12AC2	26B	2
BACT12AC3	25B	10
BACT12AC3	25C	12
BACT12AC3	25C	11
BACT12AC6	26B	2
BACT12AR202	26A	8

Part No.	Fig. and Index No.	Qty. per Assy.
BACT12AR204	1101-25B	10
BACT12AR204	25C	12
BACT12AR204	25C	11
BACT12AR204	106	1
BMS13-16T01C01G020	29B	1
C07202-2	102	1
C07202-3	102	1
C1006CB	14	1
C1006CB	14	2
C1006RCB	14	1
C2006	10A	1
C2006	14	2
C2006CB	10	1
C2006CB	10A	
C2006CB	14	1
C2006CB	14	2
C2006CB	14	2
C2006CB	14	1
C2006R	10	1
C2006R	10A	
C2006R	14	2
C2006RCB	10	1
C2006RCB	10	1
C2006RCB	10A	
C2006RCB	14	1
C2006RCB	14	2
C2006RCB	14	2
C2006RCB	14	1
CAC19ACAA	29A	1
CAC19ACAA	29A	1
CE150S62L	23B	5
M39029-1-101	107	13
M39029-1-102	108	1
MS16562-21	42	1
MS16997-33	18	2
MS16997-37	32	
MS20201KP8A	50	1
MS20202KP21B	45	1
MS20253-2-67	11	1
MS20253-2-67	11	1
MS21208C0620	31C	2
MS21209C0415	31F	
MS21209C0615	31E	
MS21209C0615	31F	1
MS21209C0615	31G	1
MS21209C0620	88	1

Part No.	Fig. and Index No.	Qty. per Assy.
MS21209C415	31E	
MS21209F1-15	31E	1
MS21919WDG6	53	2
MS24665-132	56	
MS24665-283	34	1
MS24677-7	48	1
MS35338-41	21	4
NAS1104-37	58	1
NAS1149E0416P	57A	1
NAS1149E0416P	60	1
NAS1149F0663P	38	1
NAS1197-8L	18A	2
NAS1352-06H4P	48	1
NAS1395C04L	24C	2
NAS1398D6A4	83	4
NAS1398D8A3	54	8
NAS222-12	67	4
NAS42HT8-7	59A	2
NAS43DD3-56	100	2
NAS43DD3-56FC	100	2
NAS43DD3-58FC	100	2
NAS514P1032-10	52	2
NAS514P1032-6	52	2
NAS514P1032-8	52	2
NAS514P1032-8	52A	1
NAS514P1032-9	52	2
NAS514P440-10	5	2
NAS514P440-10	24A	2
NAS514P440-10B	5	2
NAS514P440-6B	6	2
NAS514P440-7B	13	1
NAS514P632-10B	18	2
NAS514P632-7B	7	2
NAS514P632-7B	7	1
NAS514P632-7B	7A	1
NAS600-7B	7	1
NAS600-8P	5	2
NAS600-8P	24A	2
NAS600-9BP	5	2
NAS601-5P	20	4
NAS601-6P	20	1
NAS602-8P	3	1
NAS603-6P	69	4
NAS603-6P	69	2
NAS620B6L	22	4
NAS623-4-7	67	4
NAS6600-7B	7	

Part No.	Fig. and Index No.	Qty. per Assy.
NAS6603-24	1101-101	2
P8-4000003	14	2
PT06CE82SSR	99	1
PT06E82SSR	99	1
SW43896	10	1
TSE20-01	17A	8
UF66113	66	1
115880	29	1
15-14521-2002	55	1
15-14521-2002	55	1
15-14521-3	55	1
15-14521-6	55	1
15-4521-3	55	1
15-4521-4	55	1
15-4521-5	55	1
15-4521-6	55	1
167654	29A	1
167654	29A	1
167654	29A	1
167654	29A	1
167654	29A	1
1841-1-5620	26D	6
1841-1-5620	26D	14
2044070077M19	29A	1
251A2146-1	25	1
251A2146-2	25	1
251A2146-3	28B	2
251A2146-4	28A	2
251A2146-5	27A	1
251A2146-6	25	1
251A2146-7	25	1
251A2146-8	28A	1
251A2146-9	28B	3
251A2183-2	46B	1
251A2183-3	46C	1
251N1101-5	82	1
251N1101-6	84	1
251N1101-7	85	1
251N1233-3	61	1
251N1233-4	63	1
251N1241-6	12	1
251N1241-7	12	1
251N1241-7	12B	1
251N1283-1	11	1
251N1283-1	11	2
30-2282	80	1
30-2282-0	80	1
30-3567	38	1

Part No.	Fig. and Index No.	Qty. per Assy.
30-3681	37	1
306-4305	24	1
3066-1	12A	1
310-1	24B	1
310-2	24B	1
310-3	24B	1
324484	26E	6
324484	105	4
324485	26E	6
329636	26C	5
3776	29	1
3-85290-1	78	1
3-85290-2	78	1
3-85291	49	1
3-85293-1	41	1
3-85293-2	40	1
3-85966	77	1
3-85966-1	77	1
3-85967	74	1
6-62607-1	47	1
6-62608-7	76	1
6-62608-8	76D	1
60-1463-1	72	1
60-1463-2	72	1
60-1463-4	72	1
60-5740	39	1
60-5747	75	1
60-5747-1	75	1
60-5747-2	75	1
60-5795	43	1
61-30443-001	25	1
61-30443-002	25	1
61-30443-003	25	1
61-30443-004	25	1
61-30443-005	25	1
61-30443-11	28A	1
61-30443-12	27A	1
61-30443-13	28B	2
61-30443-13	28B	1
61-30443-14	29B	1
61-30443-15	28A	1
61-30443-15	28A	2
61-30443-16	27A	1
61-30443-17	29B	1
61-30443-18	29B	1
61-30443-19	29B	1
61-30443-501	25	1

Part No.	Fig. and Index No.	Qty. per Assy.
61-30445-001	1101-25	1
61-30445-002	25	1
61-30445-003	25	1
61-30445-004	25	1
61-30445-005	25	1
61-30445-11	28A	1
61-30445-12	27A	1
61-30445-13	28B	2
61-30445-13	28B	1
61-30445-14	29B	1
61-30445-15	28A	1
61-30445-15	28A	2
61-30445-16	27A	1
61-30445-17	29B	1
61-30445-18	29B	1
61-30445-19	29B	1
61-30445-501	25	1
63-1958	30	1
65-19806-7	23	1
65-19806-8	23A	1
65-19806-9	19	1
65-21047-19	31A	1
65-21047-20	31A	1
65-21047-21	31B	1
65-21047-22	31B	1
65-21047-23	31A	1
65-21047-24	31A	1
65-21047-25	31B	1
65-21047-26	31B	1
65-21047-53	31A	1
65-21047-54	31A	1
65-21047-55	31B	1
65-21047-56	31B	1
65-21047-57	31A	1
65-21047-58	31A	1
65-21047-59	31B	1
65-21047-60	31B	1
65-22960-11	25	1
65-22960-13	27	1
65-22960-15	1	1
65-22960-16	1	1
65-22960-17	1	1
65-22960-18	1	1
65-22960-21	1	1
65-22960-22	1	1
65-22960-25	1	1
65-22960-26	1	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-22960-73	1	1
65-22960-74	1	1
65-22960-75	1	1
65-22960-76	1	1
65-22960-77	1	1
65-22960-78	1	1
65-22960-79	1	1
65-22960-80	1	1
65-24190-1	87	1
65-24190-12	87	1
65-24190-13	89	1
65-24190-16	87	1
65-24190-17	89	1
65-24190-2	89	1
65-24190-4	87	1
65-24190-5	89	1
65-24190-8	87	1
65-24190-9	89	1
65-24555-1	33	1
65-24555-2	33	1
65-25747-10		RF
65-25747-13		RF
65-25747-14		RF
65-25747-17		RF
65-25747-18		RF
65-25747-19		RF
65-25747-20		RF
65-25747-21		RF
65-25747-22		RF
65-25747-23		RF
65-25747-24		RF
65-25747-3		RF
65-25747-4		RF
65-25747-5		RF
65-25747-6		RF
65-25747-9		RF
65-33960-12	28	1
65-45118-1	23	1
65-45118-2	19	1
65-45118-3	23A	1
65-45118-4	19A	1
65-45119-1	32B	
65-45119-3	32B	1
65-45121-1		RF
65-45121-10		RF
65-45121-100		RF
65-45121-101		RF

Part No.	Fig. and Index No.	Qty. per Assy.
65-45121-102	1101-	RF
65-45121-103		RF
65-45121-104		RF
65-45121-105		RF
65-45121-106		RF
65-45121-107		RF
65-45121-108		RF
65-45121-109		RF
65-45121-110		RF
65-45121-111		RF
65-45121-112		RF
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65-45121-138		RF
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65-45121-18		RF
65-45121-19		RF
65-45121-2		RF
65-45121-20		RF
65-45121-25		RF
65-45121-26		RF
65-45121-27		RF
65-45121-28		RF
65-45121-3		RF
65-45121-30		RF
65-45121-31		RF

Part No.	Fig. and Index No.	Qty. per Assy.
65-45121-32		RF
65-45121-33		RF
65-45121-34		RF
65-45121-35		RF
65-45121-36		RF
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65-45121-39		RF
65-45121-4		RF
65-45121-40		RF
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65-45121-52		RF
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65-45121-57		RF
65-45121-58		RF
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65-45121-60		RF
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65-45121-62		RF
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65-45121-64		RF
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65-45121-67		RF
65-45121-68		RF
65-45121-69		RF
65-45121-7		RF
65-45121-70		RF
65-45121-71		
65-45121-72		
65-45121-73		RF
65-45121-74		RF
65-45121-75		RF
65-45121-76		RF
65-45121-77		RF
65-45121-78		RF

Part No.	Fig. and Index No.	Qty. per Assy.
65-45121-79	1101-	RF
65-45121-8		RF
65-45121-80		RF
65-45121-81		RF
65-45121-82		RF
65-45121-83		RF
65-45121-84		RF
65-45121-85		RF
65-45121-86		RF
65-45121-87		RF
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65-45121-9		RF
65-45121-90		RF
65-45121-91		RF
65-45121-92		RF
65-45121-93		RF
65-45121-94		RF
65-45121-95	98	1
65-45121-96	98	1
65-45121-99		RF
65-45122-1	33	1
65-45122-10	33	1
65-45122-11	33	1
65-45122-12	33	1
65-45122-13	33	1
65-45122-14	33	1
65-45122-15	33	1
65-45122-16	33	1
65-45122-17	33	1
65-45122-18	33	1
65-45122-19	33	1
65-45122-24	33	1
65-45122-25	33	1
65-45122-2	33	1
65-45122-20	33	1
65-45122-21	33	1
65-45122-22	33	1
65-45122-3	43A	1
65-45122-4	46A	1
65-45122-5	33	1
65-45122-6	33	1
65-45122-7	33	1
65-45122-8	33	1
65-45122-9	33	1
65-45123-1	1	1
65-45123-10	1	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-45123-17	1	1
65-45123-18	1	1
65-45123-19	1	1
65-45123-2	1	1
65-45123-20	1	1
65-45123-25	1	1
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65-45123-27	1	1
65-45123-28	1	1
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65-45123-65	1	1
65-45123-66	1	1
65-45123-67	1	1
65-45123-68	1	1
65-45123-69	1	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-45123-7	1101-1	1
65-45123-70	1	1
65-45123-71	1	1
65-45123-72	1	1
65-45123-73	1	1
65-45123-74	1	1
65-45123-75	1	1
65-45123-76	1	1
65-45123-77	1	1
65-45123-78	1	1
65-45123-8	1	1
65-45123-9	1	1
65-45124-1	31	1
65-45124-10	31A	1
65-45124-13	31	1
65-45124-14	31	1
65-45124-2	31	1
65-45124-3	31	1
65-45124-39	31A	1
65-45124-4	31	1
65-45124-40	31A	1
65-45124-43	31	1
65-45124-44	31	1
65-45124-5	31A	1
65-45124-53	31	1
65-45124-54	31	1
65-45124-55	31A	1
65-45124-56	31A	1
65-45124-57	31	1
65-45124-58	31	1
65-45124-59	31A	1
65-45124-6	31A	1
65-45124-60	31A	1
65-45124-61	31	1
65-45124-62	31	1
65-45124-63	31A	1
65-45124-64	31A	1
65-45124-77	31	1
65-45124-77	31	1
65-45124-78	31	1
65-45124-78	31	1
65-45124-79	31A	1
65-45124-80	31A	1
65-45124-9	31A	1
65B80308-7	32D	1
65B80309-2	64A	1
6-60428	150	RF

Part No.	Fig. and Index No.	Qty. per Assy.
6-60429	61	1
6-60429-1	63	1
6-6048	84	
6-60488	84	1
6-60488-1	84	1
66-14778-1	36	1
66-25058	44	1
66-25058-1	44	1
6-62607	47	1
6-62608-2	76A	4
6-62608-3	76	1
6-62608-4	76D	1
6-62608-5	76	1
6-62608-6	76D	1
66-3199	15	1
66-4034	12	1
66-9727	15	1
66-9828	12	1
66-9828-1	12B	1
66-9828-2	12	1
66-9828-3	12B	1
6-72490	8	1
6-72490-1	9	1
6-84648	82	1
6-84648-1	85	1
6-84648-2	82	1
6-84648-3	85	1
6-84648-8	82	1
6-84648-9	85	1
69-15994-2	23B	6
69-16273-10	31	1
69-16273-11	31	1
69-16273-12	31	1
69-16273-3	31	1
69-16273-4	31	1
69-16273-5	31	1
69-16273-6	31	1
69-16273-9	31	1
69-38238-1	8	1
69-38238-1	9	1
69-38299-1	71	1
69-40891-1	32A	
69-40904-1	15A	1
69-40961-1	58	1
69-40961-2	58	1
69-4535-1	16	1
69-4535-1	16	1

Part No.	Fig. and Index No.	Qty. per Assy.
69-4535-2	1101-16	1
69-4535-2	16	1
69-47451-1	5A	1
69-47451-1	5A	1
69-51259-1	81	2
69-62729-1	91	1
69-62729-2	92	1
69-62729-3	93	2
69-62729-4	96	2
69-63433-1	16	1
69-63433-11	16	1
69-63433-11	16	1
69-63433-12	16	1
69-63433-12	16	1
69-63433-13	16	1
69-63433-14	16	1
69-63433-2	16	
69-63433-5	16	1
69-63433-5	16	1
69-63433-6	16	1
69-63433-6	16	1
69-63433-7	16	1
69-63433-7	16	1
69-63433-8	16	1
69-63433-8	16	1
69-70179-1	16	1
69-70179-1	16	1
69-70179-2	16	1
69-70179-2	16	1
69-70179-5	16	1
69-70179-5	16	1
69-70179-5	16	1
69-70179-6	16	1
69-70179-6	16	1
69-70179-6	16	1
69-70179-7	16	1
69-70179-7	16	1
69-70179-8	16	1
69-70179-8	16	1
69-70179-8	16	1
69-70179-8	16	1
69-78564-1	80A	AR
69B81080-1	24B	1
69B81080-1	24B	1
69B81080-2	24D	1
69B81080-9	24B	1
69B82799-1	8	1

Part No.	Fig. and Index No.	Qty. per Assy.
721101A1	10	1
721101A1	10	1
9-48032	65	1
9-48032-4	65	1
9-48032-1	65	1
9-48067-1	46C	1
9-48067-1	86	1
9-48067-2	46B	1
9-49084-2	46C	1
9-49084-3000	46	1
9-49084-3000	46B	1
9-67622-1	73	1
9-67622-2	73	1
9-67622-5	73	1
9-67622-7	73	1