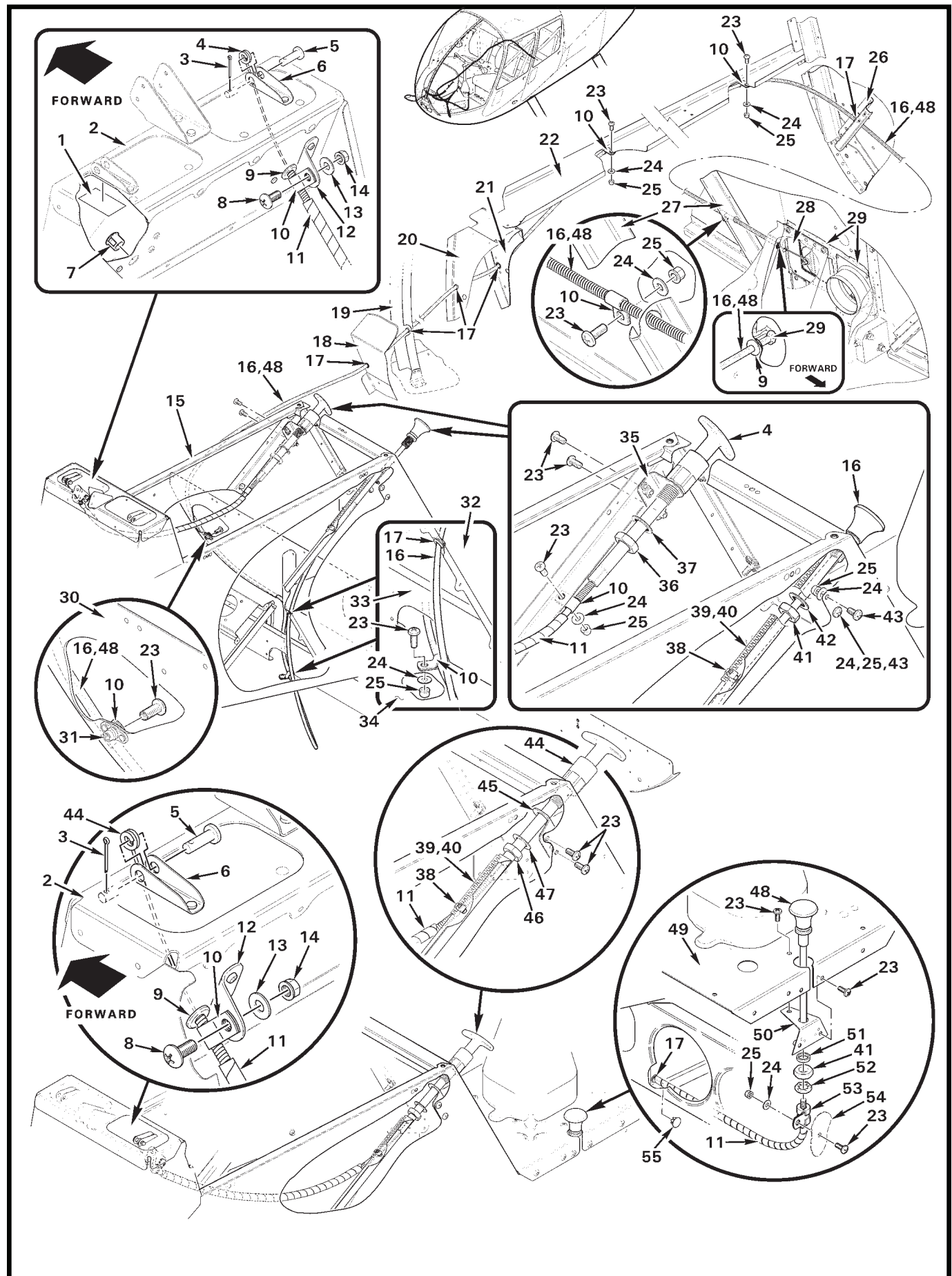


CHAPTER 21
ENVIRONMENT CONTROL

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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|-------------------------------------|---------------|--|-------------|--------------|
| CABIN HEAT AND VENT CONTROLS | | | | |
| 21-1-1 | A701-1 | Tape (aluminum; covers unused slot, LH and RH) | X | A/R |
| 2 | C062-1 | Vent Box Assembly (Ref) | | |
| 3 | MS24665-73 | Cotter Pin | X | 2 |
| 4 | C522-5 | Control – Cabin Air Vent (Ship S/N 0001 thru 9999, and 30001 and subsequent; RH location. Includes items 36 and 37.) | X | 1 |
| 5 | MS20392-2C13 | Pin | X | 2 |
| 6 | A523-4 | Channel (Ref) | | |
| 7 | 2613 | Hole Plug (opposite items 4 or 44, LH or RH) | X | 1 |
| 8 | MS27039C1-06 | Screw | X | 1 |
| 9 | MS35489-4 | Grommet | X | 1 |
| 10 | AN742-3 | Clamp | X | 7 |
| 11 | B161-4 | Spirap | X | A/R |
| 12 | A523-6 | Angle (Ref) | | |
| 13 | NAS1149F0332P | Washer | X | 1 |
| 14 | D210-3 | Nut | X | 2 |
| 15 | C033-1 | Lower Console Assembly (Ref) | | |
| 16 | A522-8 | Control – Cabin Heat (Ship S/N 0001 thru 9999, and 30001 and subsequent; this location. Includes items 41 and 42.) . . . | X | 1 |
| 17 | NAS557-3A | Grommet | X | 9 |
| 18 | C390-2 | Panel (RH, Ref) | | |
| 19 | C403-4 | Channel (RH, Ref) | | |
| 20 | C350-2 | Panel (RH, Ref) | | |
| 21 | C296-4 | Bulkhead (RH, Ref) | | |
| 22 | C287-2 | Panel (RH, Ref) | | |
| 23 | MS27039C0806 | Screw | X | 9 |
| 24 | NAS1149FN816P | Washer | X | 9 |
| 25 | MS21042L08 | Nut | X | 7 |
| 26 | C384-5 | Stiffener (Ref) | | |
| 27 | C372-3 | Stiffener (Ref) | | |
| 28 | B019-3 | Valve Assembly (Ref, see Figure 21-37) | | |
| 29 | B270-1 | Sealant | X | A/R |

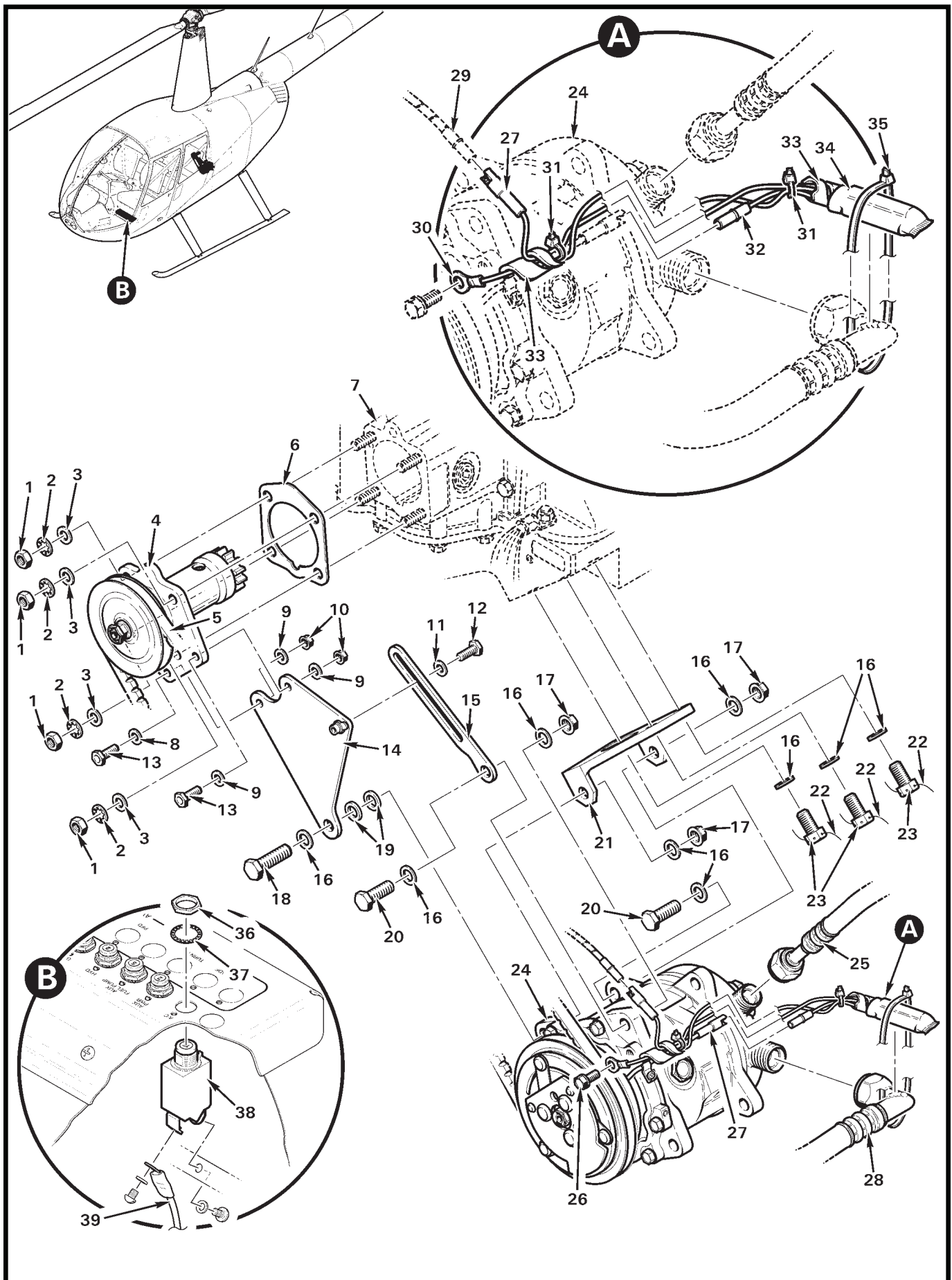
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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|--|--------------|--|-------------|--------------|
| CABIN HEAT AND VENT CONTROLS (Cont'd) | | | | |
| 21-1-30 | D230-2 | Bulkhead (Ref) | | |
| 31 | MS21069L08K | Nutplate (Ref) | | |
| 32 | A371-3 | Stiffener (Ref) | | |
| 33 | C407-2 | Beam (Ref) | | |
| 34 | C272-1 | Chin (Ref) | | |
| 35 | C365-12 | Mount (RH control) | X | 1 |
| 36 | — | Nut | O | 1 |
| 37 | — | Washer | O | 1 |
| 38 | MS3367-5-9 | Ty-Rap | X | 1 |
| 39 | MS21266-1N | Grommet (install using item 40) | X | A/R |
| 40 | B270-8qt | Adhesive | X | A/R |
| 41 | — | Nut | O | 1 |
| 42 | — | Washer | O | 1 |
| 43 | MS27039C0805 | Screw | X | 2 |
| 44 | C522-5 | Control – Cabin Air Vent (ship S/N 10001 thru 29999, LH location; includes items 46 and 47.) | X | 1 |
| 45 | C365-13 | Mount (LH control) | X | 1 |
| 46 | — | Nut | O | 1 |
| 47 | — | Washer | O | 1 |
| 48 | A522-8 | Control – Cabin Heat (Ship S/N 10001 thru 29999 this location. Includes item 41.) | X | 1 |
| 49 | C444 | Cover – Cyclic (Ref) | | |
| 50 | C518-1 | Cover Assembly | X | 1 |
| 51 | A130-18 | Spacer | X | 1 |
| 52 | B330-19 | Palnut | X | 1 |
| 53 | MS21919WDG4 | Clamp | X | 1 |
| 54 | C293-3 | Keel Panel (Fwd, LH; Ref) | | |
| 55 | B209-6 | Hole Plug (ship S/N 0001 thru 9999 only) | X | 1 |

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Page 21.4 FIGURE 21-5 AIR CONDITIONING – COMPRESSOR ASSEMBLY INSTALLATION FEB 2020

| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|-------------------------|---------------|--|-------------|--------------|
| | | AIR CONDITIONING – COMPRESSOR ASSEMBLY INSTALLATION | | |
| 21-5-1 | STD-1410* | Nut | X | 4 |
| 2 | STD-475* | Lockwasher | X | 8 |
| 3 | STD-35* | Washer | X | 4 |
| 4 | D778-1 | Cartridge Assembly – Compressor Drive (Incl items 1 thru 5 from Figure 21-9) | X | 1 |
| 5 | B173-4 | V-Belt | X | 1 |
| 6 | 69551* | Gasket | X | 1 |
| 7 | IO-540-AE1A5* | Engine (Ref; ship S/N 10001 thru 29999 [R44 II]) | | |
| | O-540-F1B5* | Engine (Ref; ship S/N 30001 and subsequent [R44 Cadet]) | | |
| 8 | NAS1149F0463P | Washer | X | 1 |
| 9 | NAS1149F0432P | Washer | X | 3 |
| 10 | MS21042L4 | Nut | X | 2 |
| 11 | A141-14 | Washer | X | 1 |
| 12 | NAS6604-4 | Bolt | X | 1 |
| 13 | NAS6604-5 | Bolt | X | 2 |
| 14 | D782-1 | Brace Assembly | X | 1 |
| 15 | D782-3 | Arm | X | 1 |
| 16 | NAS1149F0632P | Washer | X | 9 |
| 17 | MS21042L6 | Nut | X | 3 |
| 18 | NAS6606-12 | Bolt | X | 1 |
| 19 | NAS1149F0663P | Washer | X | 2 |
| 20 | NAS6606-8 | Bolt | X | 2 |
| 21 | D782-4 | Bracket | X | 1 |
| 22 | MS20995C32 | 0.032 in. dia. Safety Wire | X | A/R |
| 23 | D782-5 | Bolt | X | 3 |
| 24 | D777-1 | Compressor Assembly (Incl items 26, 31, 33, and 34) | X | 1 |
| 25 | D810-1 | Line Assembly (Ref, see Figure 21-29) | | |
| 26 | — | Bolt (supplied with compressor) | O | 8 |
| 27 | B263-10 | Housing | X | 1 |
| | B263-3 | Pin | X | 1 |
| 28 | D794-1 | Hose Assembly (Ref, see Figure 21-27) | | |
| 29 | C059-1823 | Wire (Ref, power) | | |

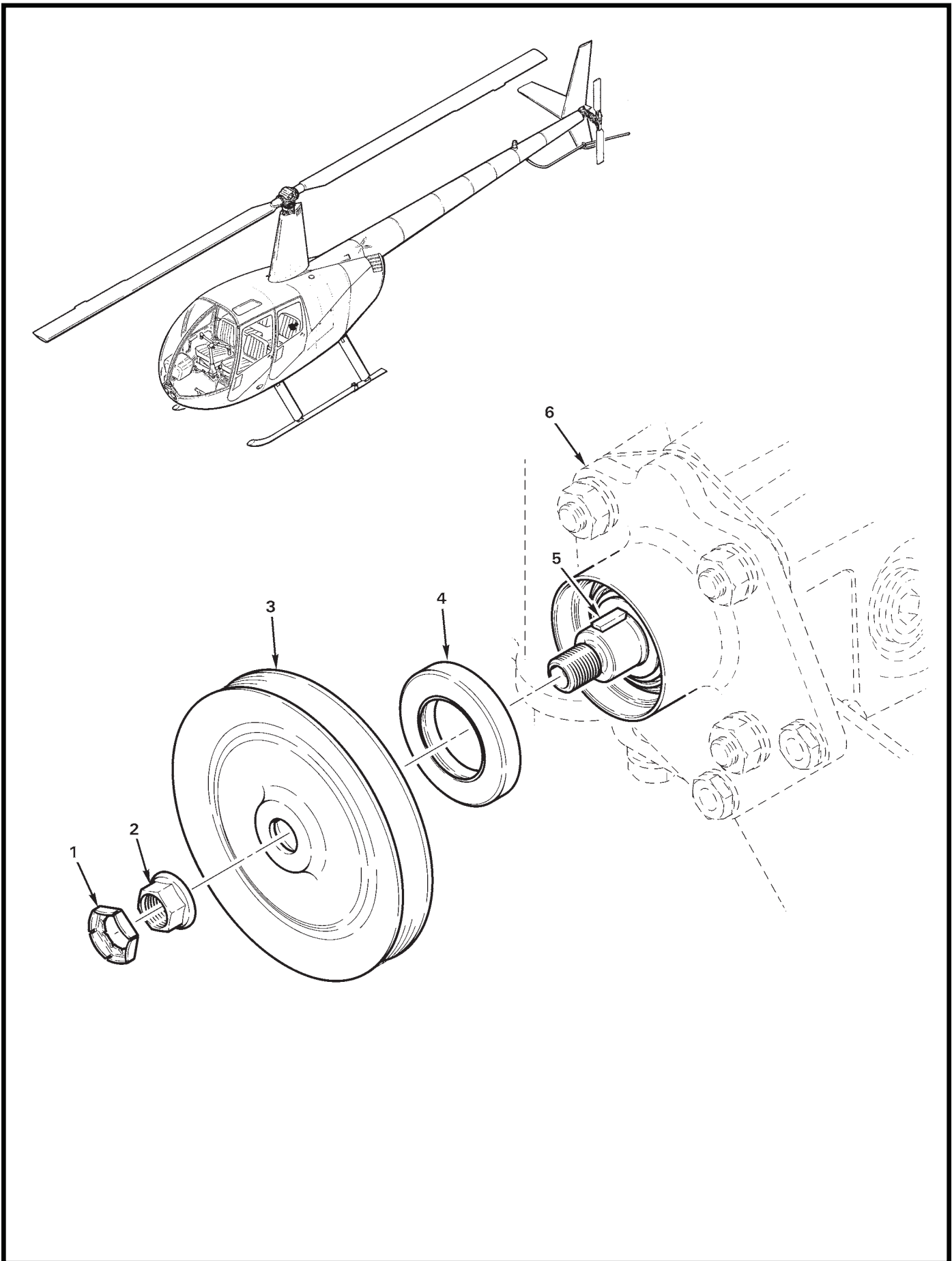
NOTES * Lycoming part no.

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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|-------------|--|-------------|--------------|
| AIR CONDITIONING – COMPRESSOR ASSEMBLY INSTALLATION (Cont'd) | | | | |
| 21-5-30 | B260-5 | Terminal | X | 1 |
| 31 | MS3367-4-9 | Ty-Rap | X | 2 |
| 32 | B263-11 | Housing | X | 1 |
| | B263-4 | Socket | X | 1 |
| 33 | B161-8 | Spirap | X | 1 |
| 34 | D799-6 | Snubber Assembly (Incl items 27, 30, and 32) | X | 1 |
| 35 | MS3367-5-9 | Ty-Rap | X | 1 |
| 36 | — | Nut | O | 1 |
| 37 | — | Lockwasher | O | 1 |
| 38 | B297-15 | Circuit Breaker (15 amp; includes items 36 and 37) | X | 1 |
| 39 | -1807 | Wire (Ref) | | |

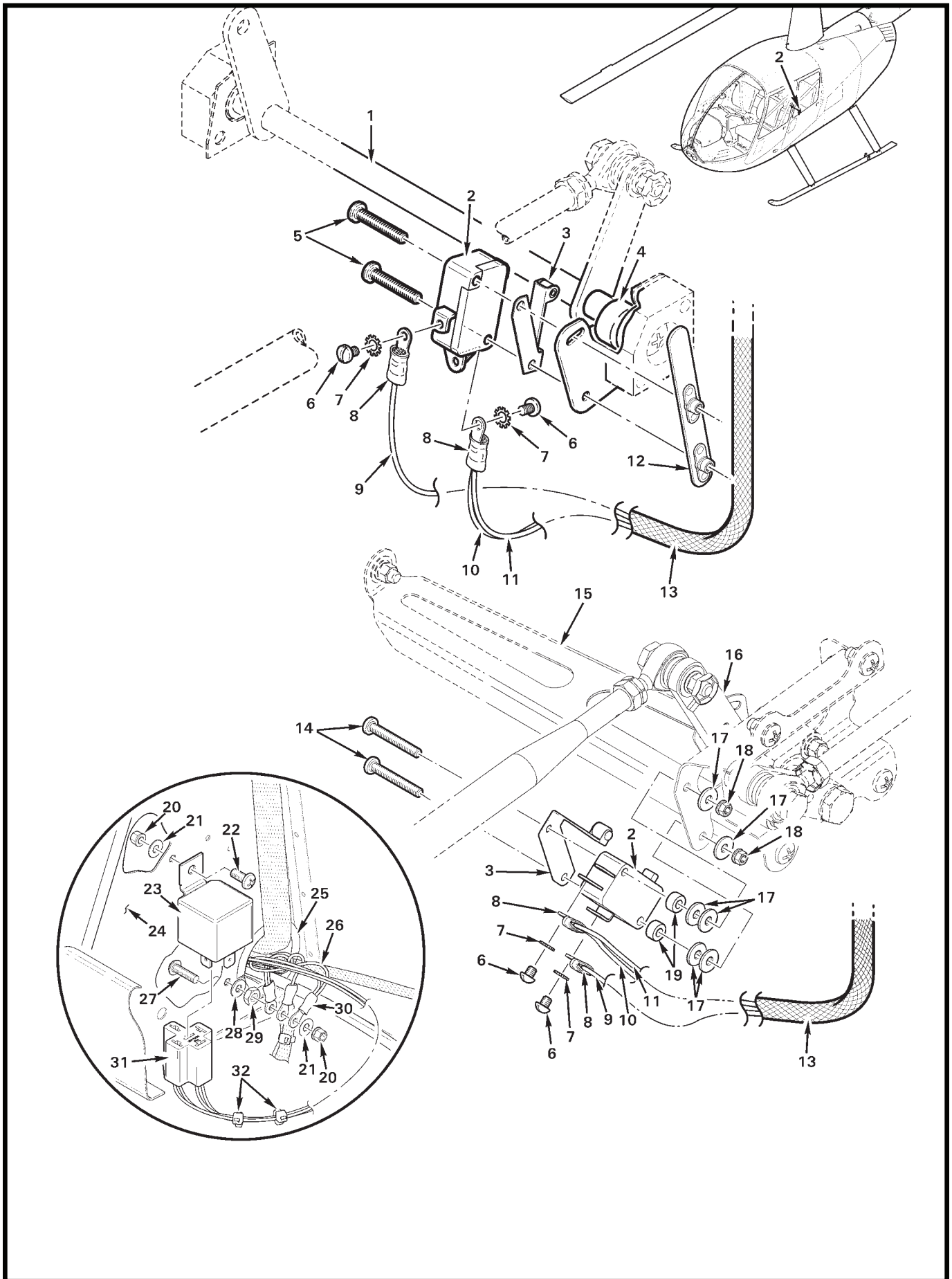
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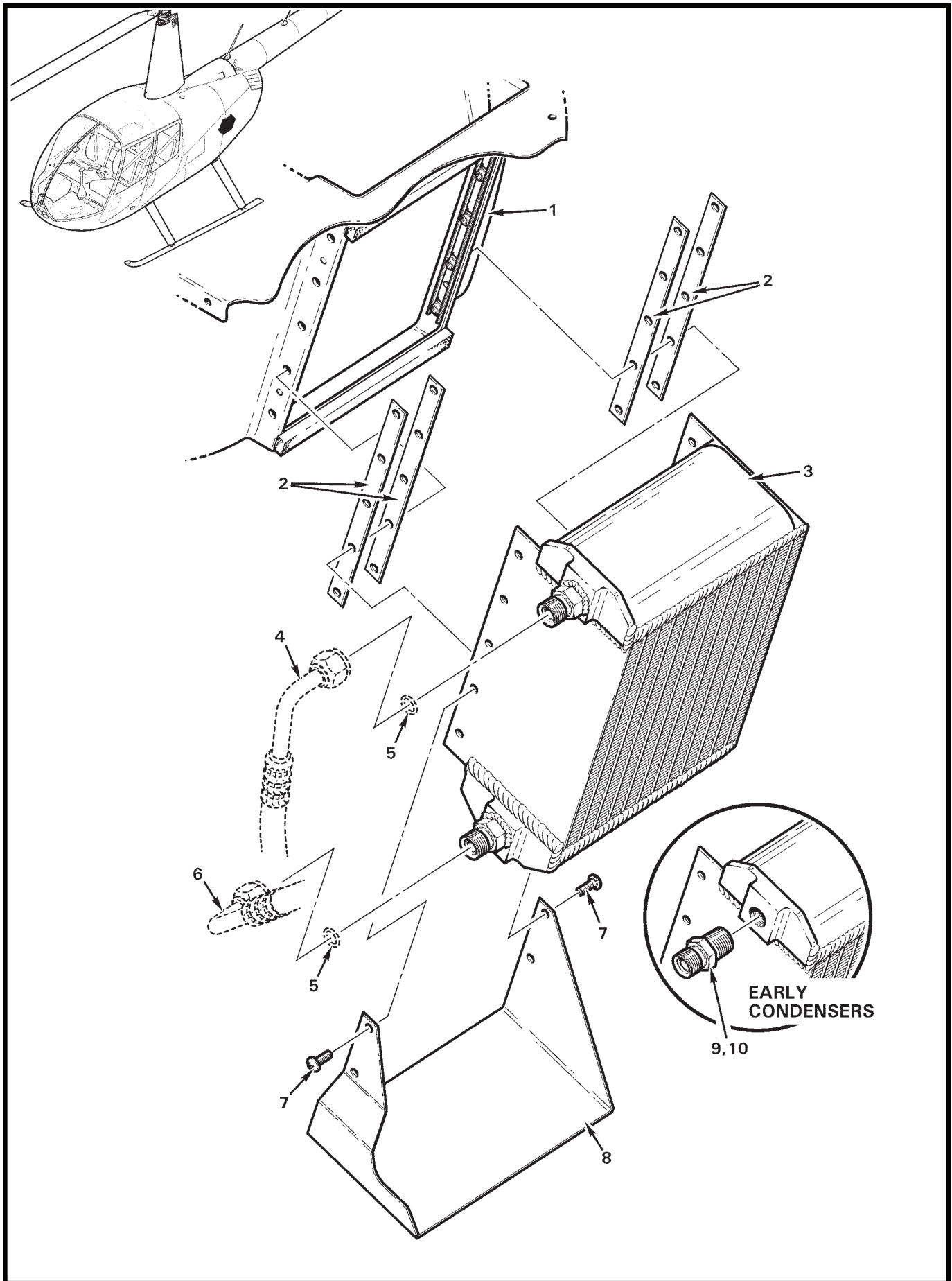
| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|-------------|--|-------------|--------------|
| AIR CONDITIONING – COMPRESSOR DRIVE CARTRIDGE ASSEMBLY | | | | |
| 21-9-1 | B330-19 | Palnut | X | 1 |
| 2 | MS21042L6 | Nut | X | 1 |
| 3 | D779-1 | Pulley | X | 1 |
| 4 | A966-5 | Seal | X | 1 |
| 5 | 98525A075 | Woodruff Key | X | 1 |
| 6 | D778-1 | Cartridge Assembly – Compressor Drive | O | 1 |
| | D778-1R | Cartridge Assembly (overhaul exchange) | X | 1 |

NOTES

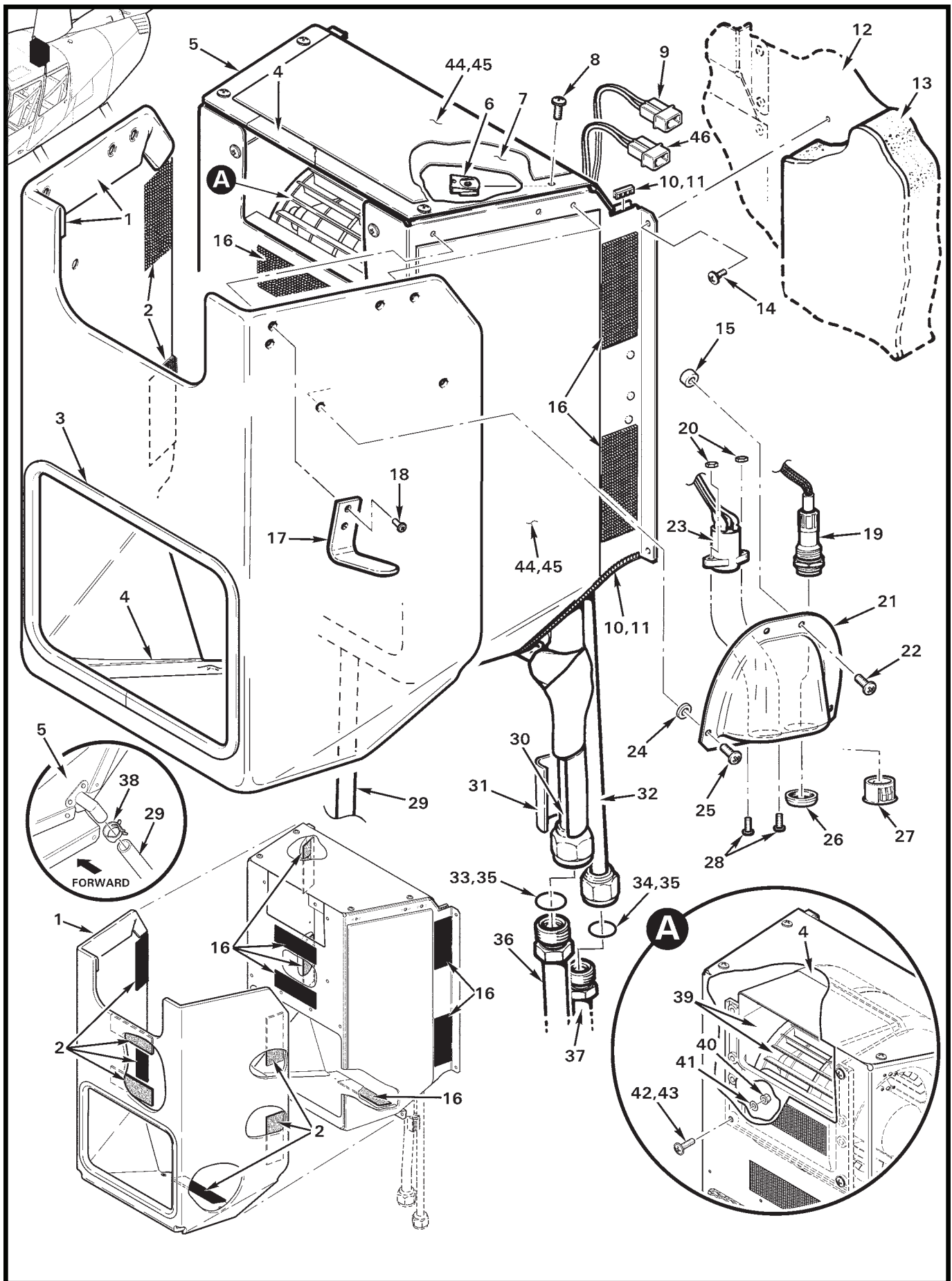


| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|-------------------------|---------------|--|-------------|--------------|
| | | AIR CONDITIONING – COMPRESSOR CUTOFF SWITCH | | |
| 21-11-1 | D731-1 * | Bellcrank Assembly (Ref; forward) | | |
| 2 | V3-1 | Switch (Incl items 6 and 7) | X | 1 |
| 3 | JV-5 | Actuator | X | 1 |
| 4 | A534-1 * | Stop | O | 1 |
| 5 | MS35206-219 | Screw | X | 2 |
| 6 | — | Screw | O | 2 |
| 7 | — | Lockwasher | O | 2 |
| 8 | B260-1 | Terminal | X | 1 |
| 9 | C859-2487 | Wire (Ref; power) | | |
| 10 | C859-2488 | Wire (Ref; full throttle warning light) | | |
| 11 | C859-2490 | Wire (Ref; A/C relay, if installed) | | |
| 12 | D731-11 | Plate Assembly | X | 1 |
| 13 | B266-4 | Sleeving | X | A/R |
| 14 | MS35206-220 | Screw | X | 2 |
| 15 | C607-1 ** | Support (Ref) | | |
| 16 | D756-4 ** | Bellcrank Assembly (Ref; aft) | | |
| 17 | NAS1149FN432P | Washer | X | 6 |
| 18 | MS21042L04 | Nut | X | 2 |
| 19 | A130-14 | Spacer | X | 2 |
| 20 | MS21042L08 | Nut | X | 2 |
| 21 | NAS1149FN816P | Washer | X | 2 |
| 22 | MS27039C0806 | Screw | X | 1 |
| 23 | D260-4 | Relay (air conditioning cutoff) | X | 1 |
| 24 | C351-1 | Panel (Ref) | | |
| 25 | NAS557-22A | Grommet | X | 1 |
| 26 | C859-2491 | Wire – Ground (Ref) | | |
| 27 | AN515UB8R10 | Screw | X | 1 |
| 28 | NAS1149DN832H | Washer | X | 1 |
| 29 | B301-8 | Nut | X | 1 |
| 30 | B260-3 | Terminal | X | 1 |
| 31 | D260-6 | Connector | X | 1 |
| | B262-6 | Receptacle | X | 4 |
| 32 | MS3367-4-9 | Ty-Rap | X | A/R |

NOTES * Ship S/N 10001 thru 29999.
 ** Ship S/N 30001 and subsequent.



| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|--|--------------|---|-------------|--------------|
| AIR CONDITIONING – CONDENSER INSTALLATION | | | | |
| 21-13-1 | C236-5 | Scroll – Lower (Ref, see Figure 71-29) | | |
| 2 | D785-3 | Shim | X | A/R |
| 3 | D783-1 | Condenser | X | 1 |
| 4 | D810-1 | Line Assembly (Ref, see Figure 21-29) | | |
| 5 | 24606 | O-Ring (Ref, see Figure 21-27) | | |
| 6 | D811-1 | Line Assembly (Ref, see Figure 21-29) | | |
| 7 | MS27039C1-08 | Screw | X | 10 |
| 8 | D785-4 | Shield | X | 1 |
| 9 | D785-1 | Fitting (install using item 10) | X | 2 |
| 10 | B270-6 | Sealant | X | A/R |
| NOTES | | | | |



| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|-------------------------|-----------------|--|-------------|--------------|
| | | AIR CONDITIONING – EVAPORATOR ASSEMBLY INSTALLATION | | |
| 21-15-1 | D852-1 * | Cover Assembly (includes items 2 thru 4; no holes in Cadet) | X | 1 |
| 2 | B175-11 | Hook Tape (3.00-inch length) | X | 7 |
| 3 | A226-11 | Trim | X | A/R |
| 4 | A701-1 | Foil Tape | X | A/R |
| 5 | D798-1 | Evaporator Assembly (Incl items 4, 6 thru 8, 10, 11, 29 thru 35, and 39 thru 43) | X | 1 |
| 6 | B162-3 | Clipnut | X | 6 |
| 7 | D787-2 | Cover | X | 1 |
| 8 | MS27039C0806 | Screw | X | 6 |
| 9 | B263-12 | Housing (blower) | X | 1 |
| | B263-3 | Pin | X | 2 |
| 10 | A225-2 | Grommet | X | A/R |
| | MS21266-1N | Grommet (earlier ships, installed using item 11) | X | A/R |
| 11 | B270-8qt | Adhesive | X | A/R |
| 12 | — | Bulkhead – Vertical (Ref) | | |
| 13 | C003-18 | Insulation (Ref, R44 Raven II; see Figure 25-25) | | |
| | C003-25 | Insulation (Ref, R44 Cadet; see Figure 25-25) | | |
| 14 | MS27039C0805 | Screw | X | 10 |
| 15 | A130-21 | Spacer | X | 6 |
| 16 | B175-12 | Loop Tape (3.00-inch length) | X | 7 |
| 17 | A752-1 ** | Angle – Headset Holder | X | 2 |
| 18 | NAS1352-04-8P | Screw | X | 4 |
| 19 | D746-3 | Wire Harness (for use with BOSE headset option) | X | 2 |
| | D746-1 | Wire Harness (for use with BOSE headset option; earlier aircraft) | O | 2 |
| 20 | B330-2 ** | Palnut | X | 2 |
| 21 | C710-4 ** | Cover | X | 2 |
| 22 | MS27039C0811 ** | Screw | X | 6 |
| 23 | TJT-120 ** | Jack (Ref) | X | 2 |
| 24 | C130-24 ** | Spacer | X | 2 |
| 25 | MS27039C0809 ** | Screw | X | 2 |
| 26 | — ** | Nut (Ref) | | |

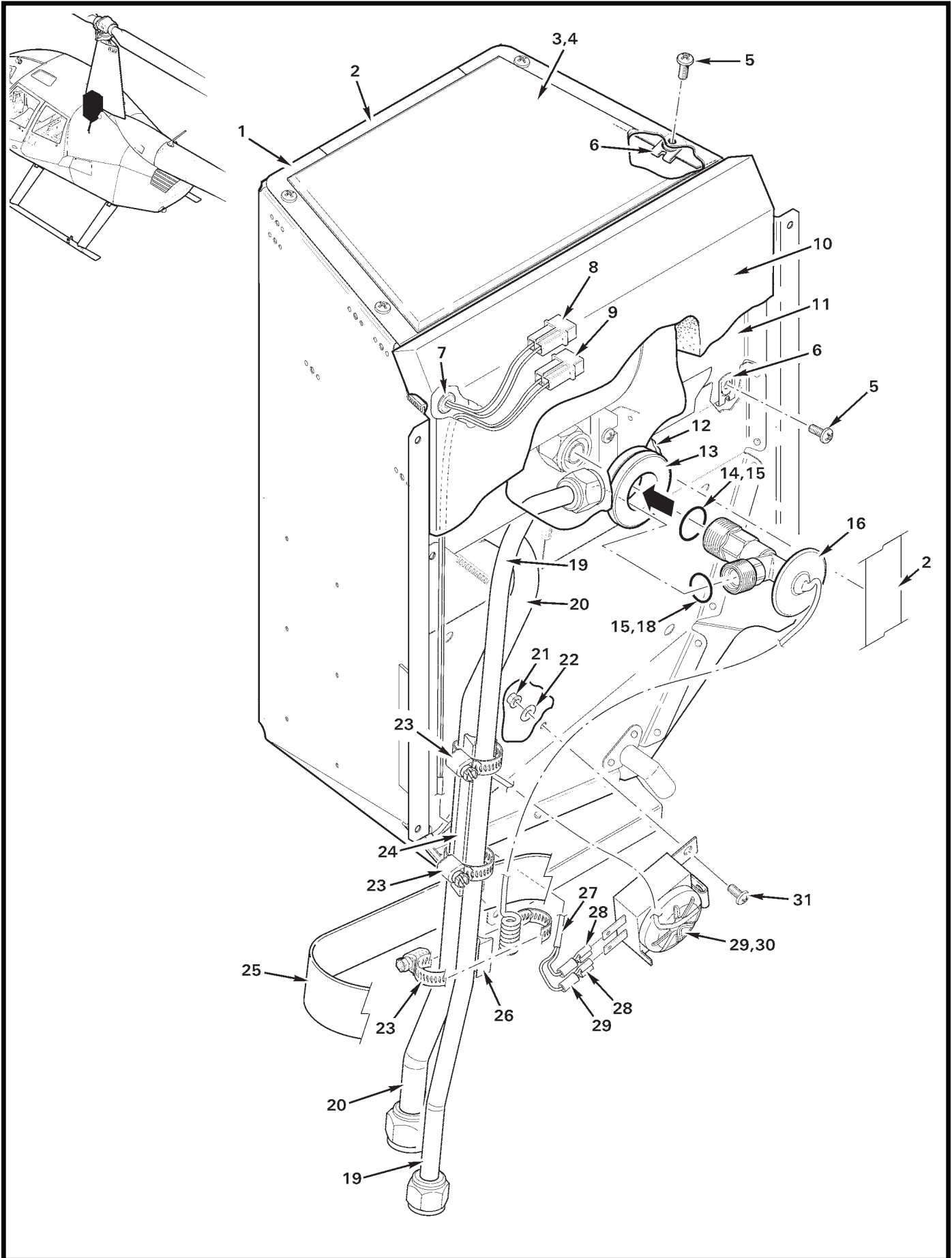
NOTES * Please specify color (blue, charcoal, gray, or tan).
 ** Ship S/N 10001 thru 29999 with A/C installed.

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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|--------------|---|-------------|--------------|
| AIR CONDITIONING – EVAPORATOR ASSEMBLY INSTALLATION (Cont'd) | | | | |
| 21-15-27 | 2653* | Hole Plug (for use when item 19 is not installed) | X | 2 |
| 28 | MS35206-215* | Screw | X | 4 |
| 29 | A729-38 | Tube | X | 1 |
| 30 | D793-1 | Line Assembly (Ref) | | |
| 31 | 5541K11 | Pipe Wrap | X | A/R |
| 32 | D792-1 | Line Assembly (Ref) | | |
| 33 | 24608 | O-Ring (install using item 35) | X | 1 |
| 34 | 24606 | O-Ring (install using item 35) | X | 1 |
| 35 | A257-20 | Oil – Pag | X | A/R |
| 36 | D793-2 | Line Assembly (Ref) | | |
| 37 | D792-2 | Line Assembly (Ref) | | |
| 38 | D277-9 | Clamp | X | 1 |
| | MS20995C32 | 0.032 in. dia. Safety Wire (earlier ships) | X | A/R |
| 39 | D791-4 | Fan Assembly (Incl items 4 and 9) | X | 1 |
| 40 | MS21042L08 | Nut | X | 4 |
| 41 | NAS620-8L | Washer | X | 4 |
| 42 | AN525-832R9 | Screw (installed using item 43 on earlier aircraft) | X | 4 |
| 43 | B270-4 | Sealant | X | A/R |
| 44 | B298-102 | Foam | X | A/R |
| 45 | B270-8qt | Adhesive | X | A/R |
| 46 | B263-32 | Housing (freeze switch) | X | 1 |
| | B263-1 | Pin | X | 2 |

NOTES * Ship S/N 10001 thru 29999 with A/C installed.

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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|---------------|--|-------------|--------------|
| AIR CONDITIONING - EVAPORATOR ASSEMBLY | | | | |
| 21-19-1 | D798-1 | Evaporator Assembly (Incl items 2 thru 8, 10 thru 26, 30, and 31) . | X | 1 |
| 2 | A701-1 | Foil Tape | X | A/R |
| 3 | B298-102 | Foam (install using item 4) | X | A/R |
| 4 | B270-14 | Adhesive | X | A/R |
| 5 | MS27039C0806 | Screw | X | 9 |
| 6 | B162-3 | Clipnut | X | 9 |
| 7 | MS35489-4 | Grommet | X | 1 |
| 8 | B263-12 | Housing (red/black wires, to fan assembly) | X | 1 |
| | B263-3 | Pin | X | 2 |
| 9 | B263-32 | Housing (white wires, to item 29) | X | 1 |
| | B263-1 | Pin | X | 2 |
| 10 | D812-1 | Insulation (install using item 4) | X | A/R |
| 11 | D787-2 | Cover | X | 1 |
| 12 | B270-13 | Sealant (translucent) | X | A/R |
| 13 | MS35489-22 | Grommet | X | 1 |
| 14 | 24608 | O-Ring (install using item 15) | X | 1 |
| 15 | A257-20 | Oil - Pag | X | A/R |
| 16 | G778-1 | Thermal Expansion Valve (TXV; install using item 17 to seal nuts on items 19 and 20) | X | 1 |
| 17 | B270-21 | Protectant | X | A/R |
| 18 | 24606 | O-Ring (install using item 15) | X | 1 |
| 19 | D792-1 | Line Assembly (Ref) | | |
| 20 | D793-1 | Line Assembly (Ref) | | |
| 21 | MS21042L08 | Nut | X | 1 |
| 22 | NAS1149FN816P | Washer | X | 1 |
| 23 | B277-8 | Clamp | X | 3 |
| 24 | D785-7 | Cradle | X | 1 |
| 25 | 5541K11 | Pipe Wrap | X | A/R |
| 26 | D785-2 | Cradle | X | 1 |
| 27 | B158-3 | Heat Shrink | X | A/R |
| 28 | B262-4 | Receptacle | X | 2 |
| 29 | 71R3100 | Switch (freeze) | X | 1 |

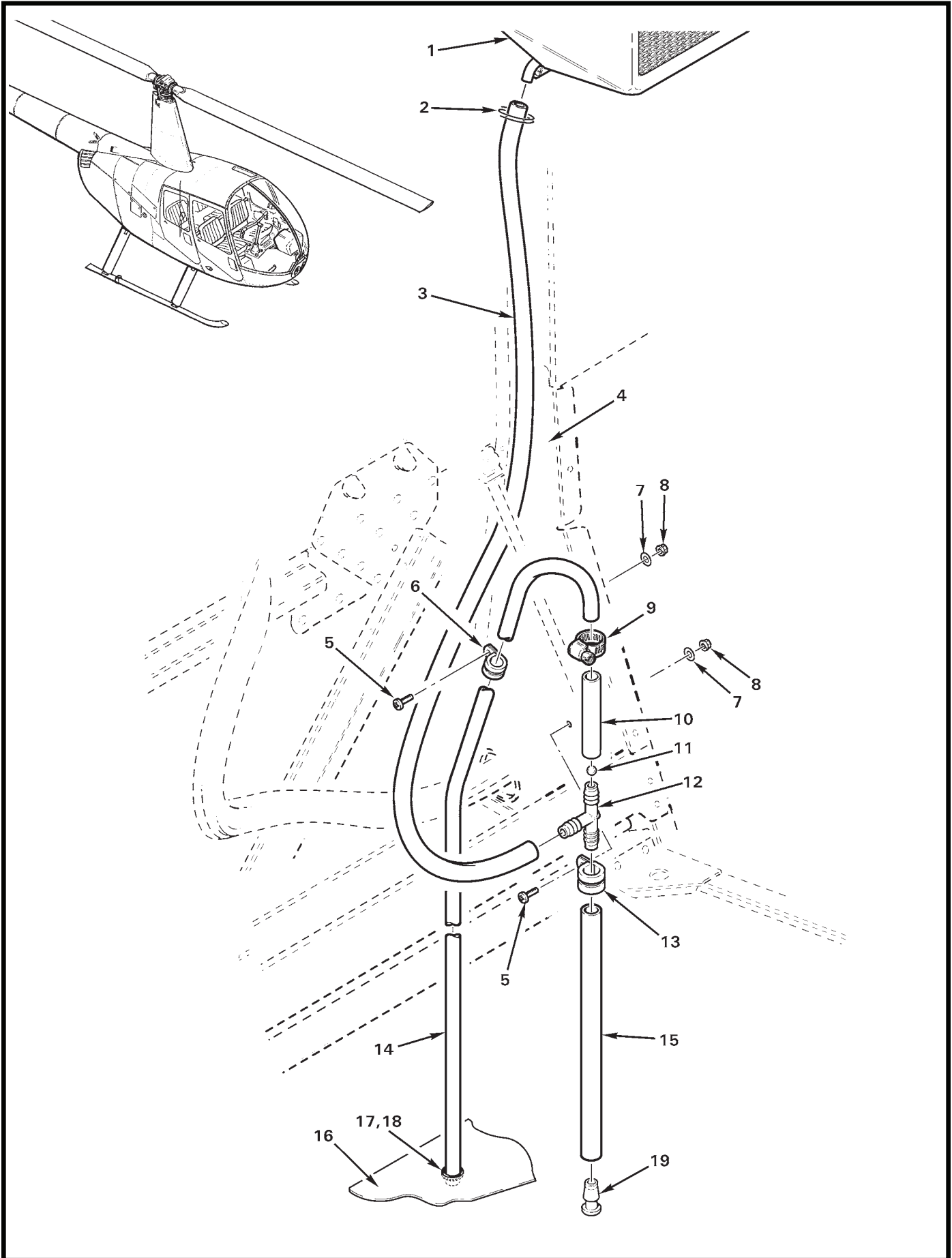
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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|-------------------------|--------------|---|-------------|--------------|
| | | AIR CONDITIONING - EVAPORATOR ASSEMBLY (Cont'd) | | |
| 21-19-30 | D799-1 | Switch Assembly - Freeze (Incl items 9, and 27 thru 29) | X | 1 |
| 31 | MS27039C0805 | Screw | X | 1 |

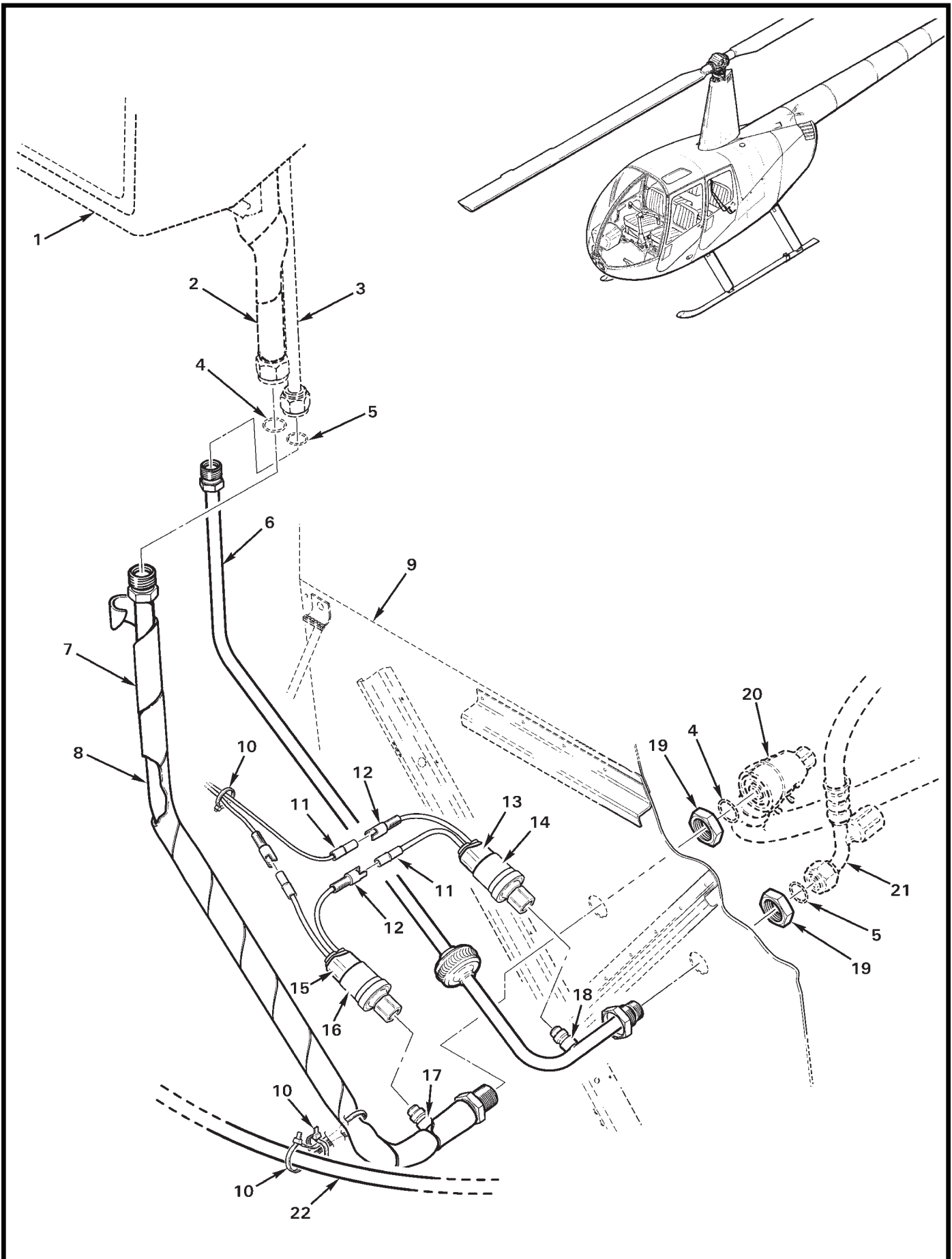
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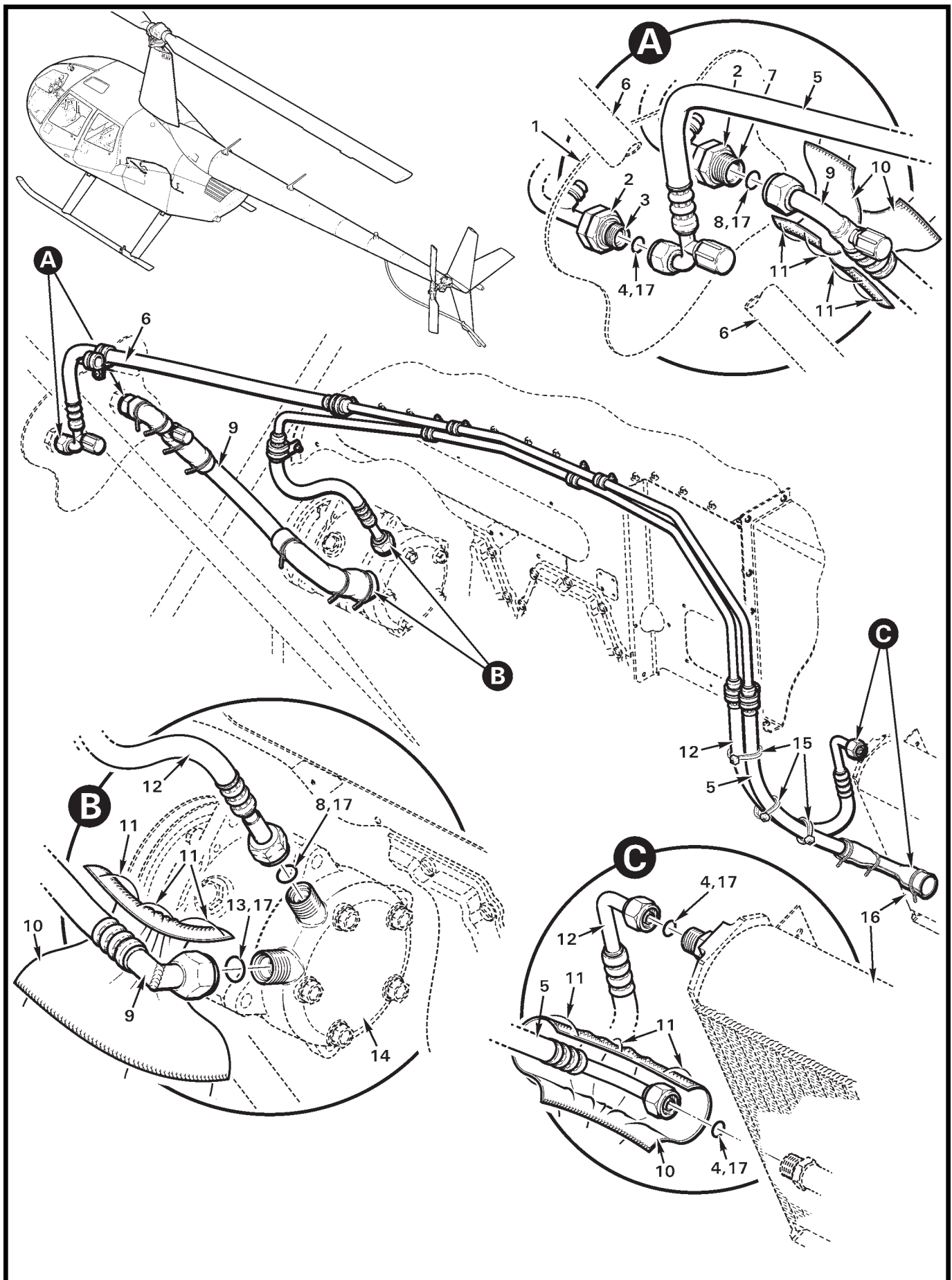
| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|--|---------------|--|-------------|--------------|
| AIR CONDITIONING - EVAPORATOR DRAIN TUBE INSTALLATION | | | | |
| 21-23-1 | D798-1 | Evaporator Assembly (Ref, see Figures 21-15 and 21-19) | | |
| 2 | MS20995C32 | 0.032 in. dia. Safety Wire | X | A/R |
| 3 | A729-38 | Tube | X | 1 |
| 4 | C351-2 | Brace - RH (Ref) | | |
| 5 | MS27039C0807 | Screw | X | 2 |
| 6 | MS21919WDG6 | Clamp | X | 1 |
| 7 | NAS1149FN816P | Washer | X | 2 |
| 8 | MS21042L08 | Nut | X | 2 |
| 9 | B277-4 | Clamp | X | 1 |
| 10 | A729-40 | Tube | X | 1 |
| 11 | 9529K16 | Ball | X | 1 |
| 12 | A457-1 | Tee | X | 1 |
| 13 | MS21919WDG8 | Clamp | X | 1 |
| 14 | D789-5 | Tube (one-piece) | X | 1 |
| 15 | A729-39 | Tube - Sediment | X | 1 |
| 16 | — | Belly - (Ref) | | |
| 17 | NAS557-6A | Grommet (install using item 18) | X | 1 |
| 18 | B270-1 | Sealant (2-oz tube) | X | A/R |
| 19 | A457-3 | Plug | X | 1 |

NOTES



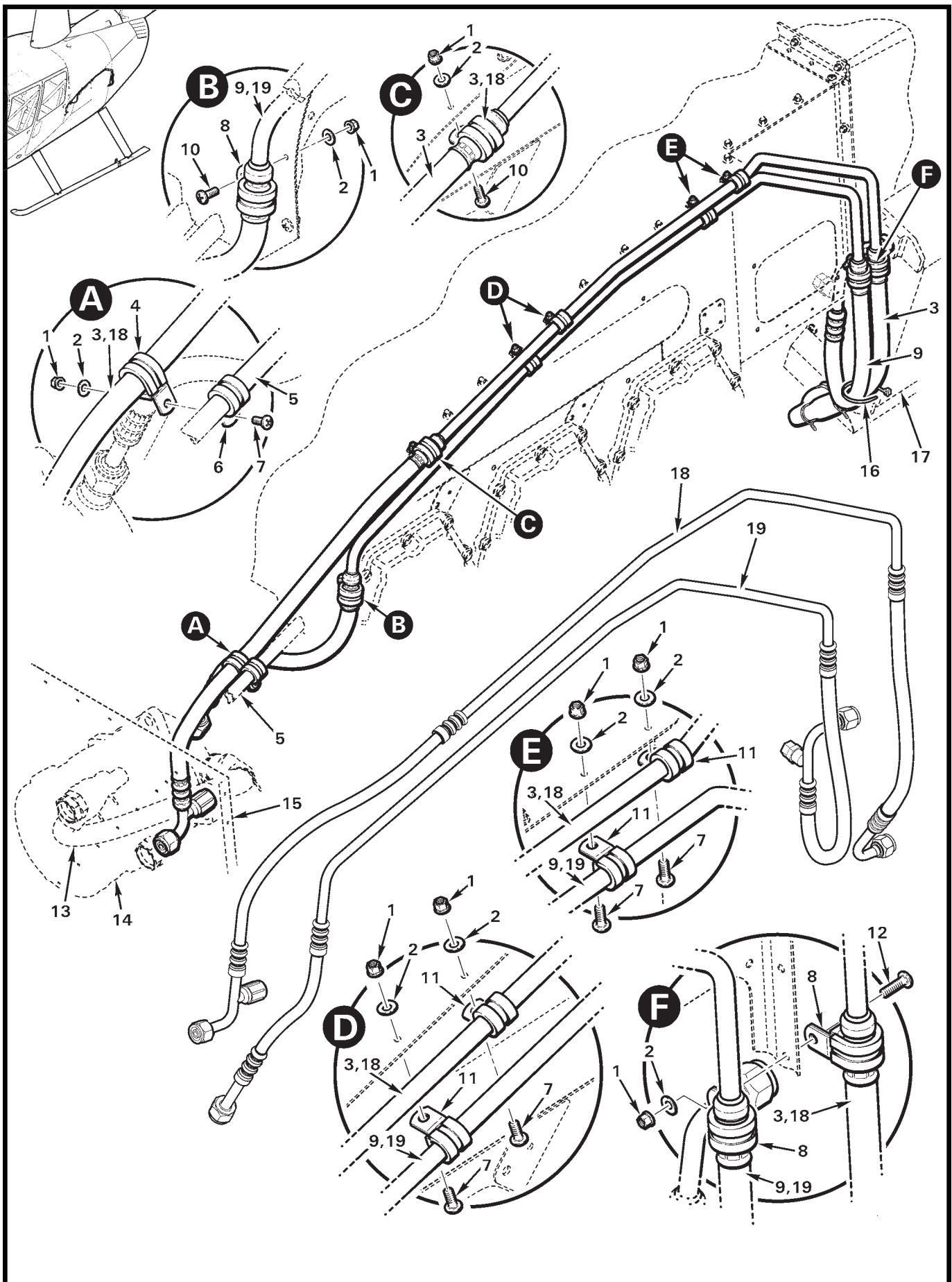
| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|-------------|--|-------------|--------------|
| AIR CONDITIONING – EVAPORATOR LINES INSTALLATION | | | | |
| 21-25-1 | D798-1 | Evaporator Assembly (Ref) | | |
| 2 | D793-1 | Line Assembly (Ref) | | |
| 3 | D792-1 | Line Assembly (Ref) | | |
| 4 | 24608 | O-Ring (Ref) | | |
| 5 | 24606 | O-Ring (Ref) | | |
| 6 | D792-2 | Line Assembly (Incl item 18) | X | 1 |
| 7 | 5541K11 | Pipe Wrap | X | A/R |
| 8 | D793-2 | Line Assembly (Incl items 7 and 17) | X | 1 |
| 9 | C233-1 | Firewall – Vertical (Ref) | | |
| 10 | MS3367-4-9 | Ty-Rap | X | 2 |
| 11 | B263-11 | Housing | X | 2 |
| | B263-4 | Socket | X | 2 |
| 12 | B263-10 | Housing | X | 2 |
| | B263-3 | Pin | X | 2 |
| 13 | B158-512 | Heat Shrink (red, 0.375-inch dia.) | X | A/R |
| 14 | D799-2 | Switch Assembly – High-Pressure (Incl items 11 thru 13) . . . | X | 1 |
| 15 | B158-412 | Heat Shrink (blue, 0.375-inch dia.) | X | A/R |
| 16 | D799-3 | Switch Assembly – Low-Pressure (Incl items 11, 12, and 15) | X | 1 |
| 17 | B158-408 | Heat Shrink (blue, 0.25-inch dia.) | X | A/R |
| 18 | B158-508 | Heat Shrink (red, 0.25-inch dia.) | X | A/R |
| 19 | AN924-8D | Nut | X | 2 |
| 20 | D794-1 | Hose Assembly (Ref, see Figure 21-27) | | |
| 21 | D811-1 | Line Assembly (Ref) | | |
| 22 | — | Static Pressure Line (Ref) | | |
| 23 | B330-19 | Palnut (for compressor pulley, not shown; see Figure 21-9) . . | X | 1 |
| 24 | KI-201 | Air Conditioning System Upgrade Kit (For R44s with D799-2 and -3 switches, revision “J” and prior. Includes items 10, 14, 16 thru 18, and 23.) | X | 1 |

NOTES



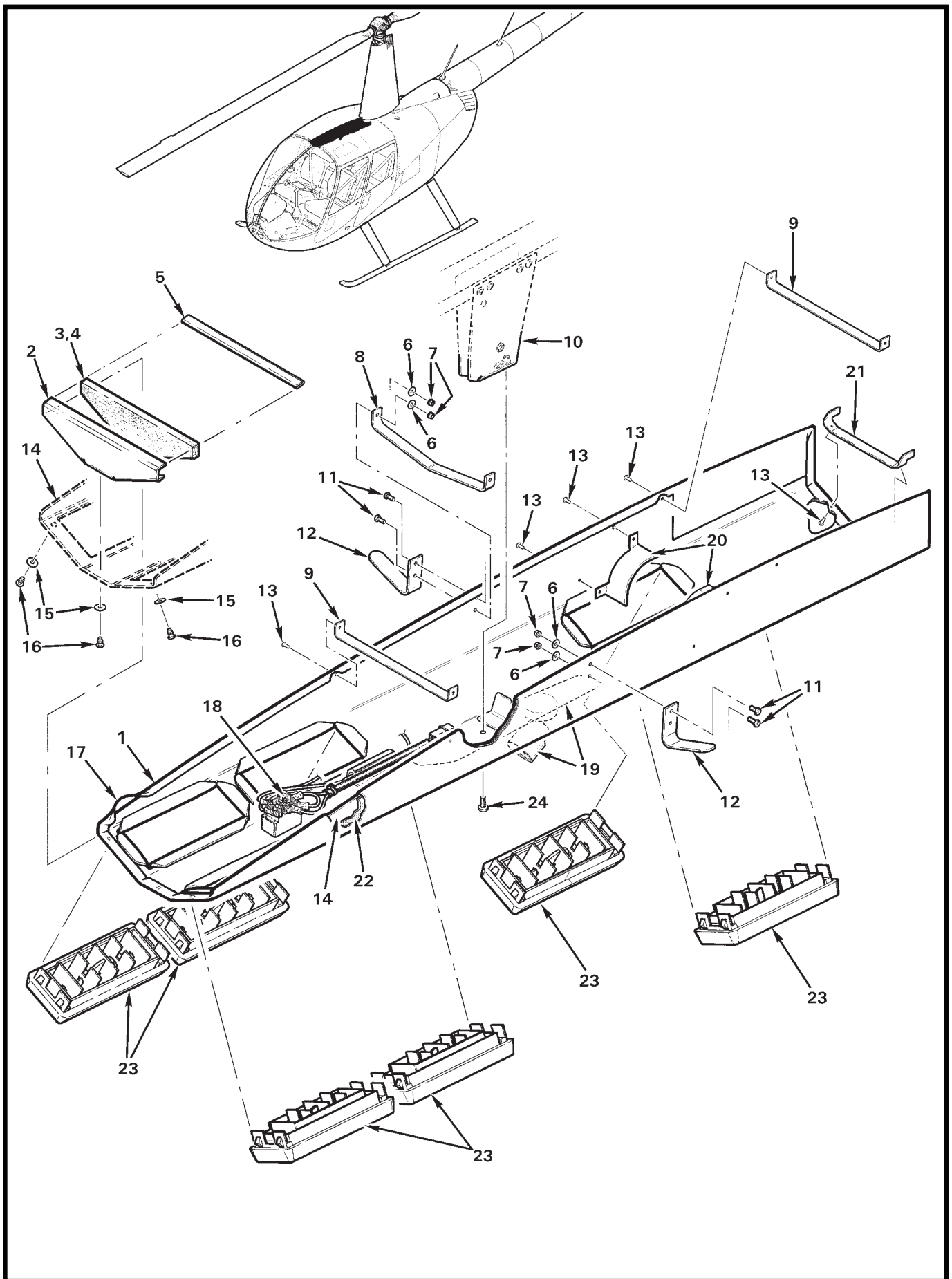
| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|--|-------------|--|-------------|--------------|
| AIR CONDITIONING – LINE ASSEMBLY INSTALLATION | | | | |
| 21-27-1 | C233-1 | Firewall – Vertical (Ref) | | |
| 2 | AN924-8D | Nut (Ref, see Figure 21-25) | | |
| 3 | D792-2 | Line Assembly (Ref, see Figure 21-25) | | |
| 4 | 24606 | O-Ring (install using item 17) | X | 3 |
| 5 | D811-1 | Line Assembly (Ref, see Figure 21-29) | | |
| | D811-2 | Line Assembly (Ref, not shown; see Figure 21-29) | | |
| 6 | C046 | Frame – Lower (LH, Ref) | | |
| 7 | D793-2 | Line Assembly (Ref, see Figure 21-25) | | |
| 8 | 24608 | O-Ring (install using item 17) | X | 2 |
| 9 | D794-1 | Hose Assembly | X | 1 |
| 10 | AE272-3 | Sleeve | X | A/R |
| 11 | MS20995C32 | 0.032 in. dia. Safety Wire | X | A/R |
| 12 | D810-1 | Line Assembly (Ref, see Figure 21-29) | | |
| 13 | 24610 | O-Ring (install using item 17) | X | 1 |
| 14 | D777-1 | Compressor Assembly (Ref, see Figure 21-5) | | |
| 15 | MS3367-5-9 | Ty-Rap | X | 1 |
| 16 | D783-1 | Condenser (Ref, see Figure 21-13) | | |
| 17 | A257-20 | Oil – Pag (lubricate o-ring and threads) | X | A/R |

NOTES



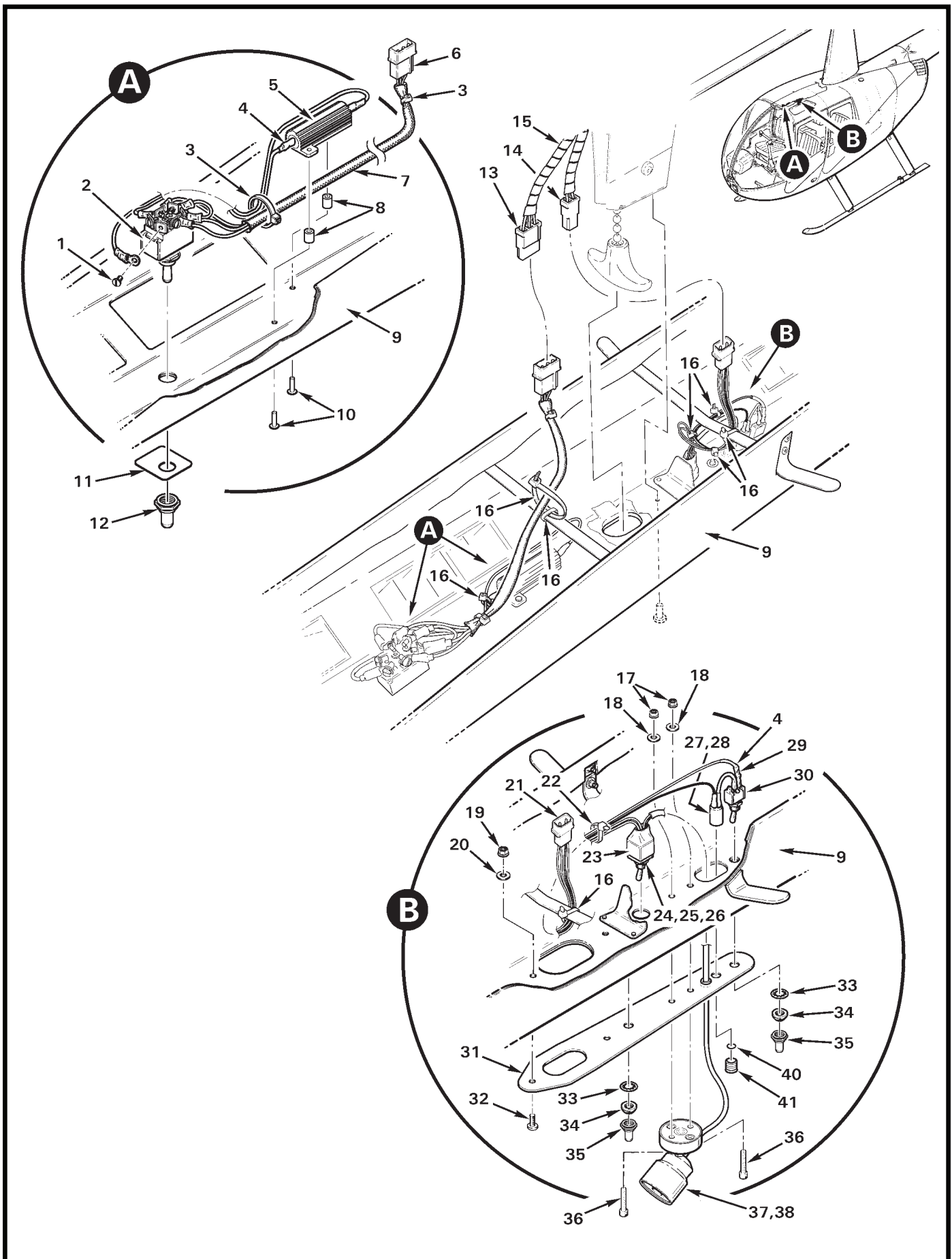
| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|--|---------------|--|-------------|--------------|
| AIR CONDITIONING – LINE ASSEMBLY INSTALLATION | | | | |
| 21-29-1 | MS21042L08 | Nut | X | 8 |
| 2 | NAS1149FN816P | Washer | X | 8 |
| 3 | D811-1* | Line Assembly | X | 1 |
| 4 | MS21919WDG9 | Clamp | X | 1 |
| 5 | C046-18 | Frame – Lower (LH, Ref) | | |
| 6 | MS21919WDG8 | Clamp | X | 1 |
| 7 | MS27039C0806 | Screw | X | 5 |
| 8 | MS21919WDG10 | Clamp | X | 4 |
| 9 | D810-1* | Line Assembly | X | 1 |
| 10 | MS27039C0807 | Screw | X | 2 |
| 11 | MS21919WDG6 | Clamp | X | 4 |
| 12 | MS27039C0809 | Screw | X | 1 |
| 13 | D794-1 | Hose Assembly (Ref, see Figure 21-27) | | |
| 14 | D777-1 | Compressor Assembly (Ref, see Figure 21-5) | | |
| 15 | C233-1 | Vertical Firewall (Ref) | | |
| 16 | MS3367-5-9 | Ty-Rap (see Figure 21-27) | X | 3 |
| 17 | D783-1 | Condenser (Ref, see Figure 21-13) | | |
| 18 | D811-2** | Line Assembly | X | 1 |
| 19 | D810-2** | Line Assembly | X | 1 |

NOTES * Ship S/N 10001 thru 29999 with A/C installed.
 ** Ship S/N 30001 and subsequent with A/C installed.



| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|--|---------------|--|-------------|--------------|
| AIR CONDITIONING - DUCT ASSEMBLY INSTALLATION | | | | |
| 21-31-1 | D796-1 | Duct Assembly (includes items 2 thru 24) | X | 1 |
| 2 | D797-2 | Bracket | X | 1 |
| 3 | D812-4 | Insulation* | X | 1 |
| 4 | B270-14 | Adhesive | X | A/R |
| 5 | A226-15 | Trim | X | 1 |
| 6 | NAS1149FN416P | Washer | X | 4 |
| 7 | MS21042L04 | Nut | X | 4 |
| 8 | D797-4 | Strap | X | 1 |
| 9 | D797-6 | Strap | X | 2 |
| 10 | D122-1 | Bracket Assembly (Ref, see Figure 63-11) | X | 2 |
| 11 | MS35206-215 | Screw | X | 4 |
| 12 | A752-1 | Angle | X | 2 |
| 13 | MS20470AD3 | Rivet | X | 10 |
| 14 | D797-1 | Duct | X | 1 |
| 15 | NAS1149FN616P | Washer | X | 3 |
| 16 | B204-2 | Rivet (blind; alternate part no.1693-0414) | X | 3 |
| 17 | B298-31 | Headliner* (Dark blue) | X | A/R |
| | B298-33 | Headliner* (Gray) | X | A/R |
| | B298-34 | Headliner* (Tan) | X | A/R |
| 18 | D799-4 | Switch Assembly - Power (Ref) | | |
| 19 | D799-8 | Light Assembly (Ref) | | |
| 20 | D797-3 | Scoop | X | 2 |
| 21 | D797-5 | Bracket | X | 1 |
| 22 | B298-102 | Foam* (Black) | X | A/R |
| 23 | 10.124.63 | Louver and Bezel Assembly | X | 6 |
| 24 | MS27039C0807 | Screw | X | 1 |

NOTES * Install using item 4.



| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|-------------------------|---------------|---|-------------|--------------|
| | | AIR CONDITIONING - DUCT ASSEMBLY COMPONENTS | | |
| 21-33-1 | — | Screw | O | 6 |
| 2 | D799-4 | Switch Assembly - Power (Incl items 3 thru 7, 12, and 16) | X | 1 |
| | MS25201-4 | Switch - On/Off (compressor; includes item 1) | X | 1 |
| 3 | MS3367-4-9 | Ty-Rap | X | 2 |
| 4 | B158-2 | Heat Shrink | X | A/R |
| 5 | RH50 | Resistor (3Ω, 50w) | X | 1 |
| 6 | B263-14 | Housing | X | 1 |
| | B263-1 | Pin (pins 2 and 3) | X | 2 |
| | B263-3 | Pin (pin 1) | X | 1 |
| 7 | B266-4 | Sleeving (expandable) | X | A/R |
| 8 | A130-55 | Spacer | X | 2 |
| 9 | D796-1 | Duct Assembly (Ref, see also Figure 21-31) | | |
| 10 | MS20470AD4 | Rivet | X | 2 |
| 11 | D122-4 | Plate | X | 1 |
| 12 | C1131/28 | Boot | X | 1 |
| 13 | B263-15 | Housing | X | 1 |
| | B263-2 | Socket | X | 3 |
| 14 | B263-13 | Housing | X | 1 |
| | B263-2 | Socket | X | 2 |
| 15 | B161-4 | Spirap | X | A/R |
| 16 | MS3367-4-9 | Ty-Rap | X | A/R |
| 17 | MS21042L06 | Nut | X | 2 |
| 18 | NAS1149FN616P | Washer | X | 2 |
| 19 | MS21042L08 | Nut | X | 1 |
| 20 | NAS1149FN816P | Washer | X | 1 |
| 21 | B263-12 | Housing | X | 1 |
| | B263-1 | Pin | X | 2 |
| 22 | MS3367-4-9 | Ty-Rap | X | 1 |
| 23 | B158-12 | Heat Shrink | X | A/R |
| 24 | B300-5 | Switch (Incl items 33 and 34) | X | 1 |
| | B158-2 | Heat Shrink (around leads) | X | A/R |

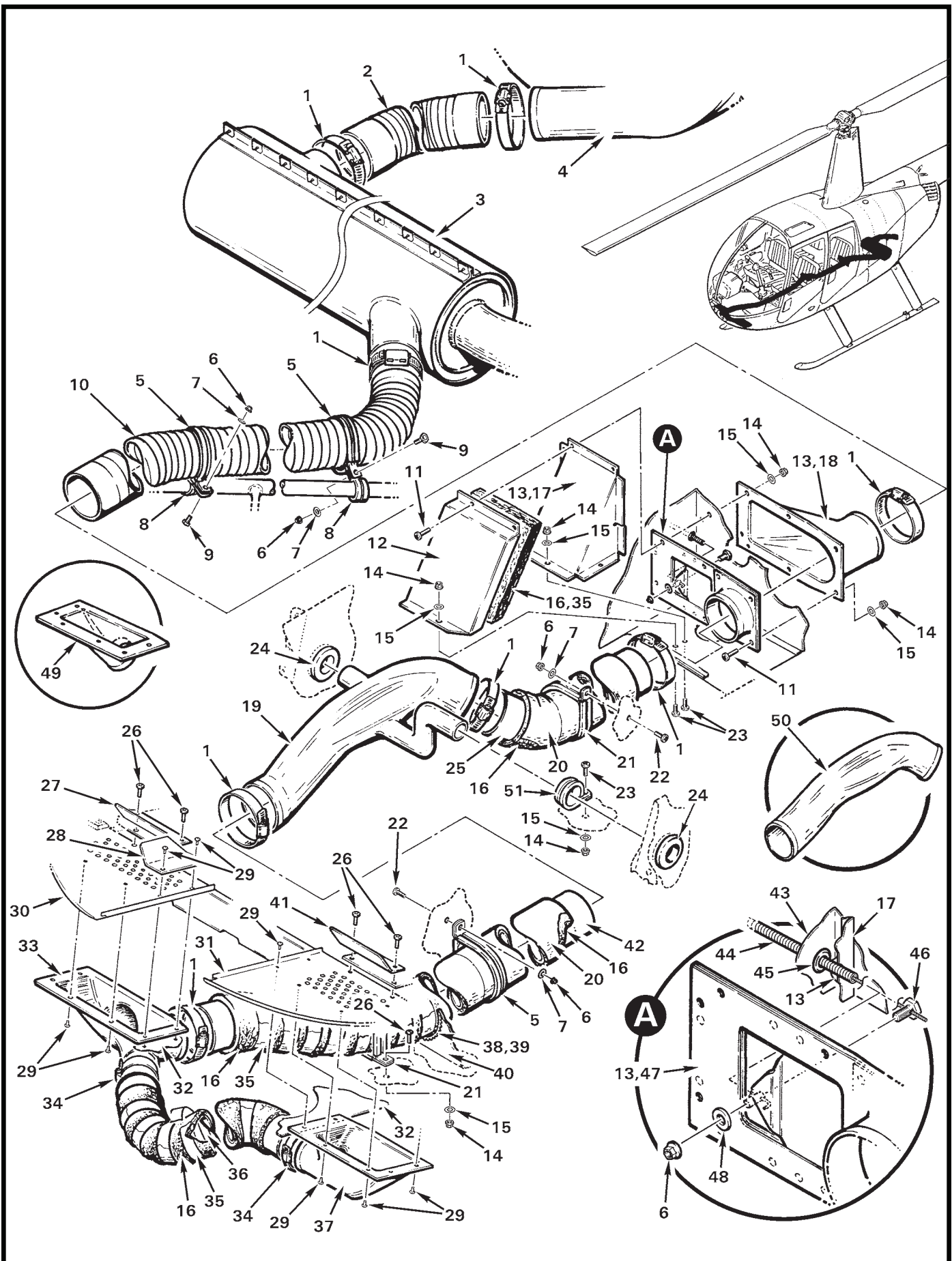
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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|---------------------|--|-------------|--------------|
| AIR CONDITIONING - DUCT ASSEMBLY COMPONENTS (Cont'd) | | | | |
| 21-33-25 | B0207C1K650F5T | Resistor (not shown) | X | 1 |
| 26 | B0207C3K400F5T | Resistor (not shown) | X | 1 |
| 27 | CNX310-000-X-4-1-12 | Connector | X | 1 |
| 28 | E1003 | LED (not shown) | X | 1 |
| 29 | B0207C1K210F5T | Resistor | X | 1 |
| 30 | B300-1 | Switch (Incl items 33 and 34) | X | 1 |
| | B158-2 | Heat Shrink (around leads) | X | A/R |
| 31 | D122-6 | Plate | X | 1 |
| 32 | MS27039C0807 | Screw | X | 1 |
| 33 | B227-3 | Lockwasher | X | 2 |
| 34 | B227-4 | Dress Nut | X | 2 |
| 35 | N-5030S | Boot | X | 2 |
| 36 | NAS1352-06-8 | Screw | X | 2 |
| 37 | D799-8 | Light Assembly (Incl items 21, 23 thru 31, 35, and 38 thru 41) . | X | 1 |
| 38 | D606-1 | Spotlight | X | 1 |
| 39 | NAS557-3A* | Grommet | X | 1 |
| 40 | A215-008* | O-Ring | X | 1 |
| 41 | CMC321-CTP | Lens | X | 1 |

NOTES * Not shown; installed on earlier R44s.

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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|---------------|---|-------------|--------------|
| CABIN HEATER - SYSTEM INSTALLATION | | | | |
| 21-37-1 | B277-36 | Clamp | X | A/R |
| 2 | A785-12 | Hose | X | 1 |
| 3 | C169-2 | Shroud Assembly - Muffler (Ref, see also Figure 71-21) | | |
| 4 | C236 | Scroll Assembly - Lower (Ref) | | |
| 5 | MS21919WDG42 | Clamp ([1] required to install item 10 on IO-540 ships) | X | 2 |
| 6 | MS21042L3 | Nut | X | A/R |
| 7 | NAS1149F0332P | Washer | X | A/R |
| 8 | MS21919WDG16 | Clamp ([1] required to install item 10 on IO-540 ships) | X | 2 |
| 9 | NAS6603-3 | Bolt | X | 1 |
| 10 | A785-13 | Hose | X | 1 |
| 11 | MS27039C0808 | Screw | X | 8 |
| 12 | C753-1 | Cover (seal around using item 13) | X | 1 |
| 13 | B270-1 | Sealant (2-oz tube) | X | A/R |
| 14 | MS21042L08 | Nut | X | A/R |
| 15 | NAS1149FN816P | Washer | X | A/R |
| 16 | R5111 | Insulation (Microlite AA, 1" thick) | X | A/R |
| 17 | C625-1 | Box (seal around using item 13) | X | 1 |
| 18 | A623-1 | Inlet (seal around using item 13) | X | 1 |
| 19 | D164-2 | Duct - Aft Outlet (ship S/N 0151 and higher) | X | 1 |
| 20 | A701-2 | Foil Tape (6-inch width; aft of item 40) | X | A/R |
| 21 | MS21919WDG48 | Clamp | X | A/R |
| 22 | MS27039C1-07 | Screw | X | 2 |
| 23 | MS27039C0806 | Screw | X | 1 |
| 24 | MS35489-23 | Grommet | X | 2 |
| 25 | A785-14 | Hose | X | 1 |
| 26 | MS27039C0807 | Screw | X | A/R |
| 27 | B189-2 | Deflector | X | 1 |
| 28 | B189-1 | Deflector (side) | X | 1 |
| 29 | MS20470AD3 | Rivet | X | A/R |
| 30 | C232-4 | Panel - Floor, (RH, Ref) | | |
| 31 | C232-3 | Panel - Floor, (LH, Ref) | | |

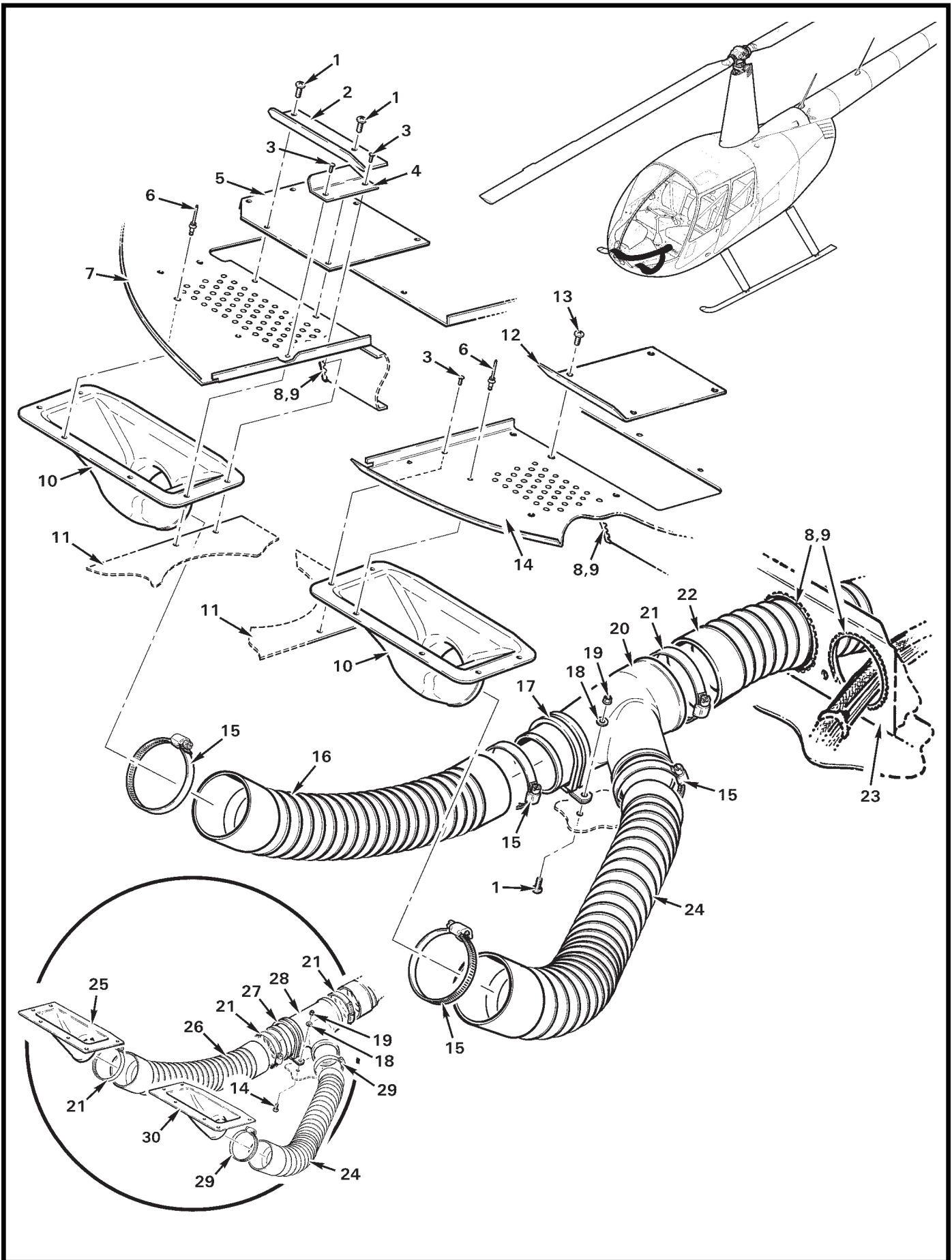
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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|--|---------------|--|-------------|--------------|
| CABIN HEATER - SYSTEM INSTALLATION (Cont'd) | | | | |
| 21-37-32 | C408-1 | Panel - Floor, Center (Ref) | | |
| 33 | D165-1 * | Outlet - (RH, Ref) | | |
| 34 | B277-24 | Clamp | X | 2 |
| 35 | A701-1 | Tape - Aluminum (1 in. width; forward of item 40) | X | 1 |
| 36 | A785-24 | Hose | X | 1 |
| 37 | D166-1 * | Outlet - (LH, Ref) | | |
| 38 | MS21266-1N | Grommet (install using item 39) | X | A/R |
| 39 | B270-14.5oz | Adhesive (0.5-oz bottle, or B270-8qt) | X | A/R |
| 40 | D230 | Bulkhead (Ref) | | |
| 41 | B189-4 | Deflector | X | 1 |
| 42 | A785-23 | Hose (ship S/N 0271 thru 0357) | X | 1 |
| 43 | C292 | Keel Panel (Ref) | | |
| 44 | A522-8 | Control (Ref, see Figure 21-1) | | |
| 45 | MS35489-4 | Grommet | X | 1 |
| 46 | A462-1 | Fitting | X | 1 |
| 47 | B019-3 | Valve Assembly (seal around using item 13) | | |
| 48 | NAS1149F0363P | Washer | X | 1 |
| 49 | B164-1 * | Outlet-RH (Ref, no longer available. Used on single-forward-outlet heater installation ship S/N 0001 thru 0270.) | | |
| 50 | D164-1 * | Duct (Ref, no longer available; ship S/N 0001 thru 0150.) | | |
| 51 | MS21919WDG18 | Clamp | X | 1 |

NOTES * No longer available. Contact RHC Customer Service for replacement.

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| FIGURE AND INDEX NUMBER | PART NUMBER | DESCRIPTION | PARTS AVAIL | QTY PER ASSY |
|---|-----------------|--|-------------|--------------|
| CABIN HEATER - SPLITTER INSTALLATION | | | | |
| 21-41-1 | MS27039C0807 | Screw | X | 3 |
| 2 | B189-2 | Deflector | X | 1 |
| 3 | MS20470AD3 | Rivet | X | 4 |
| 4 | B189-1 | Deflector (side) | X | 1 |
| 5 | A412-2 | Cover | X | 1 |
| 6 | NAS1919B04S01 * | Rivet | X | 8 |
| 7 | C232-4 | Panel - Floor, RH (Ref) | | |
| 8 | MS21266-1N | Grommet (install using item 9) | X | A/R |
| 9 | B270-14.5oz | Adhesive (0.5-oz bottle or B270-8qt) | X | A/R |
| 10 | B164-3 | Outlet | X | 1 |
| 11 | C408-1 | Panel - Floor, Center (Ref) | | |
| 12 | B189-4 | Deflector | X | 1 |
| 13 | MS27039C0806 | Screw | X | 8 |
| 14 | C232-3 | Panel - Floor (LH, Ref) | | |
| 15 | B277-28 | Clamp | X | 4 |
| 16 | A785-34 | Hose | X | 1 |
| 17 | MS21919WDG32 | Clamp | X | 1 |
| 18 | NAS1149FN816P | Washer | X | 1 |
| 19 | MS21042L08 | Nut | X | 1 |
| 20 | B391-2 | Splitter | X | 1 |
| 21 | B277-36 | Clamp ([3] required when item 28 "15" installed) | X | 1 |
| 22 | A785-29 | Hose | X | 1 |
| 23 | D230-1 | Bulkhead (Ref) | | |
| 24 | A785-25 | Hose | X | 1 |
| 25 | B164-1 | Outlet (RH, Ref. No longer available. To replace, order items 10, 15, 16, and 20.) | | |
| 26 | A785-27 | Hose | X | 1 |
| 27 | MS21919WDG40 | Clamp | X | 1 |
| 28 | B391-1 | Splitter (Ref, no longer available. Order items 10, 15, 16, and 20). | | |
| 29 | B277-24 | Clamp | X | 2 |
| 30 | B164-2 | Outlet (LH, Ref. No longer available. Order item 10.) | | |

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