

MD Explorer Cutaway Drawing Legend

- 1 Nose compartment access door
- 2 Battery stowage
- 3 Windscreen de-misting air duct
- 4 Stretched acrylic windscreens panels

- 5 Stand-by compass
- 6 Instrument panel shroud
- 7 Instrument console
- 8 Yaw control rudder pedals
- 9 Avionics access
- 10 Cockpit boarding step
- 11 Landing gear forward strut mounting
- 12 Collective pitch lever, optional full dual controls
- 13 Cockpit door, port and starboard
- 14 Adjustable seat mounting
- 15 Second pilot's seat
- 16 Safety harness
- 17 Cyclic pitch control column
- 18 Central console
- 19 Circuit breaker panel
- 20 Pilot's seat

- 21 Headset stowage
- 22 Cockpit air duct
- 23 Control rod linkages
- 24 Instrument light
- 25 Main rotor blade leading edge titanium abrasion sheath
- 26 Glass-fibre blade spars
- 27 Foam filled trailing edge
- 28 Glass-fibre skin panels
- 29 Kevlar composite top fairing access doors, open
- 30 Kevlar composite rotor head fairing
- 31 Vapour cycle cooling system equipment

- 32 Water separator
- 33 Rotor head hydraulic actuators
- 34 Hydraulic reservoir
- 35 Hydraulic ground connectors
- 36 Handhold
- 37 Starboard cabin door
- 38 Aft facing seat row, six-seat utility layout shown
- 39 Maintenance steps
- 40 Position of fuel filler on starboard side (not shown)

- 41 Carbon-fibre fuselage skinning
- 42 Lower sliding door rail
- 43 Fuselage sill structure
- 44 Underfloor fuel tank, total capacity 600 lit (132 Imp gal)
- 45 Sliding door latch
- 46 Composite cabin floor panels
- 47 Forward facing rear seat row
- 48 Seat mounting stanchion
- 49 Port cabin door
- 50 Upper door rail
- 51 Gearbox mounting deck
- 52 Steel tube gearbox support truss
- 53 Hydraulic pump

- 54 Oil pump
- 55 Main transmission gearbox
- 56 Curvic coupling anti-vibration gearbox mounting
- 57 Machined gearbox upper support frame
- 58 Swash plate mechanism
- 59 Rotor mast
- 60 Blade pitch control rods
- 61 Carbon-fibre flexbeam blade retention strap
- 62 Blade root attachment joint
- 63 Glass-fibre pitchcase
- 64 Detachable blade tip with balance and tracking weights
- 65 Fixed blade tab
- 66 Five-bladed rotor
- 68 Bearingless rotor hub
- 69 Oil cooler air exhaust
- 70 Gearbox driven blower
- 71 Transmission oil cooler

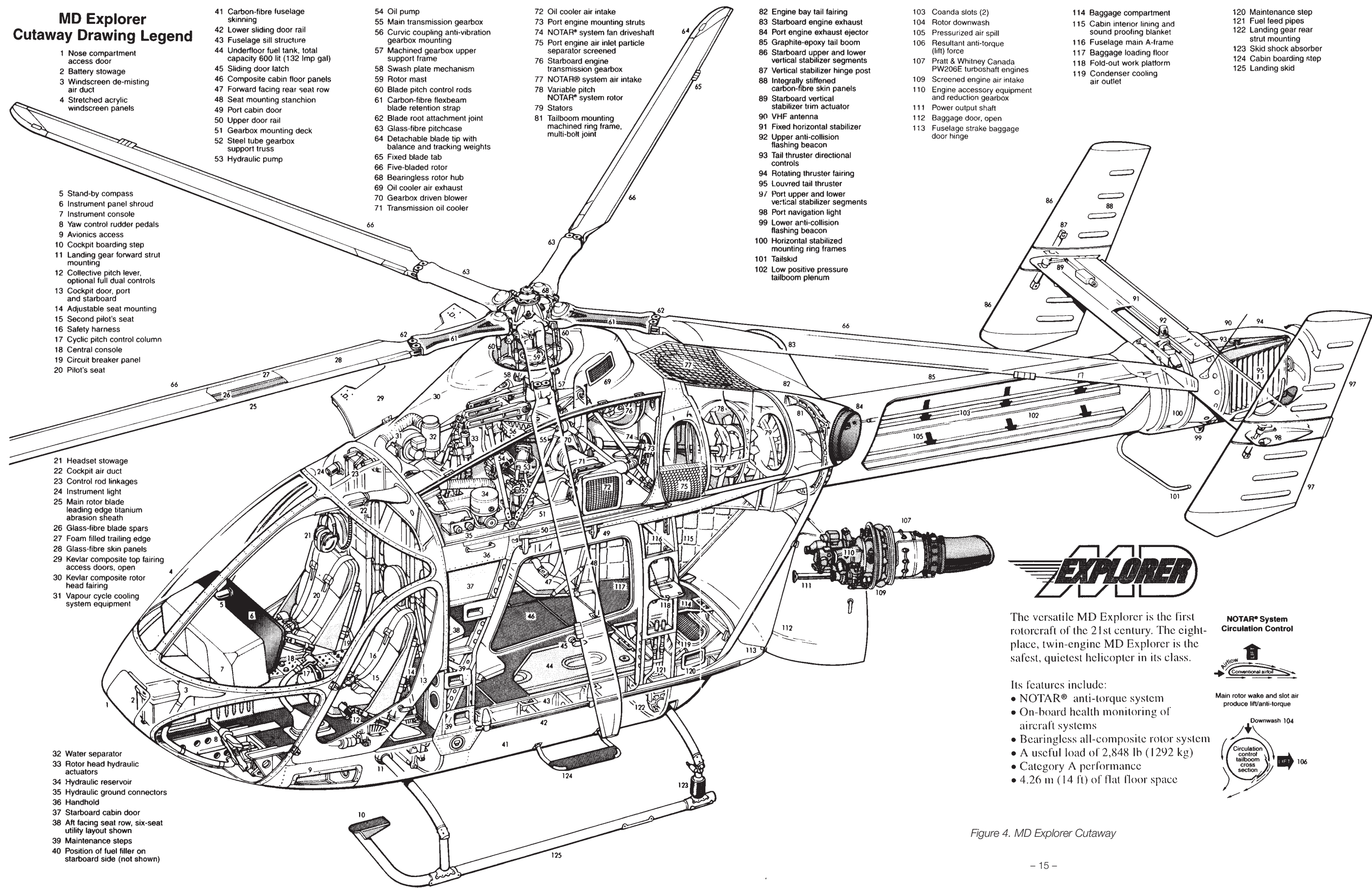
- 72 Oil cooler air intake
- 73 Port engine mounting struts
- 74 NOTAR® system fan driveshaft gearbox mounting
- 75 Port engine air inlet particle separator screened
- 76 Starboard engine transmission gearbox
- 77 NOTAR® system air intake
- 78 Variable pitch NOTAR® system rotor
- 79 Stators
- 81 Tailboom mounting machined ring frame, multi-bolt joint

- 82 Engine bay tail fairing
- 83 Starboard engine exhaust
- 84 Port engine exhaust ejector
- 85 Graphite-epoxy tail boom
- 86 Starboard upper and lower vertical stabilizer segments
- 87 Vertical stabilizer hinge post
- 88 Integrally stiffened carbon-fibre skin panels
- 89 Starboard vertical stabilizer trim actuator
- 90 VHF antenna
- 91 Fixed horizontal stabilizer
- 92 Upper anti-collision flashing beacon
- 93 Tail thruster directional controls
- 94 Rotating thruster fairing
- 95 Louvred tail thruster
- 97 Port upper and lower vertical stabilizer segments
- 98 Port navigation light
- 99 Lower anti-collision flashing beacon
- 100 Horizontal stabilized mounting ring frames
- 101 Tailskid
- 102 Low positive pressure tailboom plenum

- 103 Coanda slots (2)
- 104 Rotor downwash
- 105 Pressurized air spill
- 106 Resultant anti-torque (lift) force
- 107 Pratt & Whitney Canada PW206E turboshaft engines
- 109 Screened engine air intake
- 110 Engine accessory equipment and reduction gearbox
- 111 Power output shaft
- 112 Baggage door, open
- 113 Fuselage strake baggage door hinge

- 114 Baggage compartment
- 115 Cabin interior lining and sound proofing blanket
- 116 Fuselage main A-frame (lift) force
- 117 Baggage loading floor
- 118 Fold-out work platform
- 119 Condenser cooling air outlet

- 120 Maintenance step
- 121 Fuel feed pipes
- 122 Landing gear rear strut mounting
- 123 Skid shock absorber
- 124 Cabin boarding step
- 125 Landing skid



The versatile MD Explorer is the first rotorcraft of the 21st century. The eight-place, twin-engine MD Explorer is the safest, quietest helicopter in its class.

- Its features include:
- NOTAR® anti-torque system
 - On-board health monitoring of aircraft systems
 - Bearingless all-composite rotor system
 - A useful load of 2,848 lb (1292 kg)
 - Category A performance
 - 4.26 m (14 ft) of flat floor space

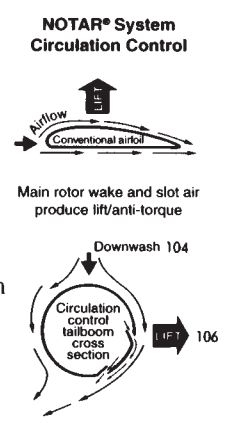


Figure 4. MD Explorer Cutaway