



VANS RV-12 CHECKLIST (July 2025) PSM

FIRES

ENGINE FIRE DURING START

Key.....CONT CRANKING
 Choke.....PUSH OFF
 Throttle.....FULL
 Fuel Shut-off.....PULL UP-OFF
 Fuel Pump Fuse.....REMOVE
 Ignitions.....BOTH OFF
 Master.....OFF
 Aircraft.....EVACUATE

ENGINE FIRE – IN FLIGHT

Fuel Shut-off.....PULL UP/CLOSED
 Cabin Heat.....CLOSED
 Ignition Switches.....BOTH OFF
 Air Vents.....CLOSED
 Airspeed.....INCREASE

Do not exceed Vne (136 KIAS)

Forced Landing Checklist..PERFORM

WARN: DO NOT RESTART ENGINE

FORCED LANDING

Airspeed (Best Glide).....63 KIAS
 Fuel Shutoff.....PULL UP/OFF
 Flaps.....UP
 Radio.....MAYDAY on 121.5
 Transponder.....7700
 Ignition Switches.....BOTH OFF

BEFORE TOUCHDOWN

Master Switch.....OFF
 Airspeed.....60 KIAS (55 Min)
 Flaps.....DOWN (Land assured)

Airborne: Insufficient Runway

Landing Area.....SELECT
 Flaps.....FULL DOWN
 Fuel Shutoff Valve.....CLOSED
 Ignition Switches.....OFF
 Master Switch.....OFF
 Land.....MIN AIRSPEED
 180 turn MIN ALT/ Direction of Turn

ENGINE (CONT)

ENGINE RESTART – IN FLIGHT

Airspeed.....60 KIAS (55 Min)
 Best Place to Land.....PICK/TURN TO
 Checklist/Troubleshoot....PERFORM
 Ignition Switches.....BOTH ON
 Fuel Pump.....CHECK FUSE
 Fuel Shut-off.....OPEN (DOWN)
 Choke.....OPEN (PUSH)
 Ignition.....CRANK

IF ENGINE DOES NOT START

Throttle & Choke.....CHANGE
 Forced Landing.....PERFORM

NOTE: Engine starter may be engaged in flight should prop stop windmilling.

Prop will not windmill < 80 KIAS

FORCED LANDING

Airspeed (Best Glide).....63 KIAS
 Fuel Shutoff.....PULL UP/OFF
 Flaps.....UP
 Radio.....MAYDAY on 121.5
 Transponder.....7700
 Ignition Switches.....BOTH OFF



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Airborne: Insufficient Runway

Landing Area.....SELECT
 Flaps.....FULL DOWN
 Fuel Shutoff Valve.....CLOSED
 Ignition Switches.....OFF
 Master Switch.....OFF
 Land.....MIN AIRSPEED
 180 turn MIN ALT/ Direction of Turn

ENGINE (CONT)

ENGINE RESTART – IN FLIGHT

Airspeed.....60 KIAS (55 Min)
 Best Place to Land.....PICK/TURN TO
 Checklist/Troubleshoot....PERFORM
 Ignition Switches.....BOTH ON
 Fuel Pump.....CHECK FUSE
 Fuel Shut-off.....OPEN (DOWN)
 Choke.....OPEN (PUSH)
 Ignition.....CRANK

IF ENGINE DOES NOT START

Throttle & Choke.....CHANGE
 Forced Landing.....PERFORM

NOTE: Engine starter may be engaged in flight should prop stop windmilling.

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FORCED LANDING

Airspeed (Best Glide).....63 KIAS
 Fuel Shutoff.....PULL UP/OFF
 Flaps.....UP
 Radio.....MAYDAY on 121.5
 Transponder.....7700
 Ignition Switches.....BOTH OFF

BEFORE TOUCHDOWN

Master Switch.....OFF
 Airspeed.....60 KIAS (55 Min)
 Flaps.....DOWN (Land assured)

PARTIAL POWER / RUN ROUGH

-- Land As Soon as POSSIBLE using
 Precautionary Landing Approach

ABNORMAL OIL PRESS / TEMP

RPM.....REDUCE MIN REQ
 Precautionary Landing.....ASAP

POH NOTES

- Check other Engine instruments
- **Hi Temp:** Loss of oil or Overheat (Check CHT). Land PRACTICAL.
- **Lo Press:** loss of oil / defective gauge. Land PRACTICAL.

Engine Fail possible at any time

- **Hi Press:** Cold? Land PRACTICAL



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DESCENT / LANDING

EMERGENCY DESCENT

Throttle.....IDLE
 Stick.....Bank 30° - 45°
 Speed.....INCREASE
 -- Do not exceed Vne (136 KIAS)
 Throttle.....(every 1,000 ft) CLEAR

FINAL APPROACH

Airspeed.....55-60 KIAS
 Flaps.....DOWN (Land assured)
 Master Switch.....OFF
 Seat/Harness.....CHECK SECURE

PRECAUTION APPROACH / LAND

Airspeed.....60 KIAS (55 Min)
 Throttle.....IDLE
 Flaps.....LOWER AS NEEDED

LOSS OF BRAKE

Landing Spot.....LONG RUNWAY

NOTE

X-Wind from Inop brake side
 Touch Down.....MIN AIRSPEED
 When Stop.....SHUTDOWN ENGINE

NOTE

Good Brake (Drag) in the middle

ELECTRICAL

LOW VOLTAGE DISCHARGE (<12V)

Non Essential Elec Equip.....OFF
 Avionics Switch.....OFF
 Land.....AS SOON AS POSSIBLE

HIGH VOLTAGE (> 15V)

Master Switch.....OFF
 30A Main Bus Fuse.....REMOVE
 Avionics Switch.....OFF
 Land.....AS SOON AS POSSIBLE

LOSS OF FLIGHT INSTRUMENTS

Throttle.....AS REQ'D
 -- Maintain present throttle posit
 -- Engine Noise

POH NOTE

Stall Warning aural warn will still function with Master + Avionics ON

EFIS REBOOT PROCEDURES

DYNON SKYVIEW
 Buttons 1,2,5 Press Simultaneously,
 EFIS fuse, or master switch OFF
 then ON
GARMIN G3X
 Master Switch.....OFF, then ON

FLIGHT CONTROLS

RUNAWAY TRIM

Trim Fuse....REMOVE IMMEDIATELY
 Autopilot Switch.....OFF
 Stabilator.....HOLD
 Airspeed.....REDUCE
 Land.....AS SOON AS PRACTICAL
 Flaps.....UP (For landing)

LOSS OF TRIM TAB

Airspeed.....REDUCE
 Stick.....FIRM GRIP
 Land.....AS SOON AS POSSIBLE



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LOSS OF AILERON CONTROL

Rudder.....USE FOR LOW RATE TURN
 Autopilot.....MAY BE USED
 Speed.....70 KIAS

LOSS OF RUDDER CONTROL

Runway.....INTO WIND
 X-Wind.....OPP WORKING RUDDER
 Speed.....70 KIAS
 After Land.....SHUTDOWN ENGINE

LOSS OF STABILATOR CONTROL

Trim.....AS REQ'D
 Flaps.....AS REQ'D
 Throttle.....AS REQ'D

WHEN LANDING

Throttle.....REDUCE
 Airspeed.....75 KIAS
 Flaps.....1st POSITION
 -- More nose wheel clearance
 Airspeed.....TRIM TO 60 KIAS
 Throttle.....USE FOR GLIDEPATH

SHORT FINAL

Airspeed.....50 KIAS
 Touchdown...USING POWER + TRIM

POH NOTE

-- Go-around: advance throttle slowly to avoid sudden pitch up

LOSS OF FLAP CONTROL

Speed.....65 KIAS

FLIGHT CONTROLS (CONT)

SPINS

Throttle.....IDLE
 Rudder.....FULL OPPOSITE
 Stabilator.....SLT FWD OF NEUTRAL
 Ailerons.....NEUTRAL
 Flaps.....UP

WHEN ROTATION STOPS

Rudder.....NEUTRALIZE
 Attitude.....RAISE NOSE SMOOTHLY

INFLIGHT OVERSTRESS

Throttle.....REDUCE
 Airspeed.....65 - 75KIAS
 Flaps.....UP
 Land.....AS SOON AS PRACTICAL

WARNING

DO NOT make large control movements or subject the aircraft to additional G loadings.

DITCHING (Water Landing)

Approach.....AS REQ'D
 -- Hi Wind/Hvy Sea: INTO WIND
 -- Lt Wind/Hvy Swell: PARALLEL
 Airspeed (Max Glide).....63 KIAS
 -- Min Rate Descent.....59 KIAS
 Fuel Shutoff.....PULL UP / OFF
 Flaps.....UP
 Radio.....MAYDAY on 121.5
 XPDR.....7700
 Ignition Switches.....BOTH OFF
 Canopy.....UNLATCH
 Seat/Harness.....CHECK SECURE
 Touchdown.....NOSE HIGH



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ENROUTE CLIMB

Flaps.....CHECK UP
 Airspeed.....**85 KIAS**
 Throttle (**5,800 max 5 mins**).....FULL
 Oil Temp.....MONITOR
 Landing Light.....PULSE

CRUISE

Level Off.....ACCELERATE
 Throttle (**5,500 max CONT**).....SET
 Trim..... AS REQ
 Engine Instruments.....CHECK
 Fuel.....MONITOR

DESCENT/IN RANGE

PSM ATIS: 132.05 / PSM TWR: 128.4

ATIS/ASOS/AWOS.....CHECK
 Altimeter.....SET
 Arrival/Pattern Entry.....BRIEF
 Runway Review / Field Elevation / Pattern
 Altitude / Winds / Landing Type/ Turnoff
 Side / Taxi Route / Parking Location
 Flt / Nav Instruments.....SET
 Fuel Quantity.....CHECK
 Landing Light.....AS REQ
 Descend.....AS REQ
 Engine Instruments.....MONITOR

BEFORE LANDING

Fuel Shutoff.....Down (Open)
 Seat Belts.....FASTENED
Normal.....FLAPS AS REQ (< 82KIAS)
 -- Appch Speed.....**60 – 65 KIAS**
Short Field.....FLAPS 2ND DETENT

-- Appch Speed.....**55 - 60 KIAS**
 -- Touchdown.....FLAPS RETRACT
 -- Brakes.....MAX
Soft Field..FLAPS AS REQ (< 82KIAS)
 -- Speed.....**55 – 60 KIAS**
 -- Touchdown.....POWER AS REQ
 -- Nose Wheel.....LOWER GENTLY

BALKED LANDING / GO AROUND

Throttle.....FULL
 Airspeed.....**60 KIAS**
 Flaps 1.....SET
 Airspeed.....**Vx or Vy as REQ**
 Flaps 0.....ONCE CLR OF OBST

AFTER LANDING

PSM GND: 120.95

Flaps.....UP
 Trim.....SET FOR TAKEOFF
 Landing Light.....AS REQ
 Transponder..... SET VFR

Wind Correction:

Climb Into/Dive Away

SHUTDOWN

Throttle.....**2000 RPM**
 Ignition Switches.....BOTH OFF
 When Prop Stops.....KEY REMOVE
 Autopilot.....OFF
 Landing and Strokes.....OFF
 Avionics.....OFF
 ELT LIGHT.....OFF
 HOBBS.....RECORD
 Master.....OFF

SECURE AIRPLANE

FLT Control Lock.....SECURE
 Rudder Lock.....INSTALL
 Chocks.....INSTALL
Post Flt Walkaround..... COMPLETE



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PREFLIGHT INSPECTION

INTERIOR

Canopy.....OPEN check condition
 Fuel Quantity.....CHECK
 Seat Belt Control lock.....REMOVE
 Rudder Gust Lock.....REMOVE
 Spar Pins.....CHECK
 Fire Extinguisher.....IN GREEN
 Baggage Area.....CHECK
 ELT Light.....OFF
 Documents (AROW).....PRESENT
 Master + Avionics.....ON
 Stall Vane + Horn.....ACTUATE/ON
 Avionics Switch.....OFF
 Fuel Shut-off.....DOWN (Open)
 Gascolator.....SUMP & CHECK
 Lights / Strobes.....CHECK, then OFF
 Trim.....TAKEOFF POSITION
 HOBBS.....RECORD
 Master Switch.....OFF
 Baggage.....RESTRAINED
 FOD.....CHECK
Canopy..... DOWN

LEFT MAIN LANDING GEAR

Tire.....CHK CONDITION
 Brake Assembly.....CHECK
 Brake Line.....CHECK
 Axle Nut Cotter Pin.....CHECK
 Landing Gear Rivets.....CHECK

LEFT WING

Canopy.....CHECK DOWN
 Leading Edge.....CHECK CONDITION
 Wing Hand Hold.....Shake Laterally
 Flaperon.....FREE
 Flaperon Hinge Brackets.....SECURE

EMPENNAGE

L Static Port.....CLEAR & OPEN
 Vertical Stab.....CHECK
 Stabilator.....CHECK FREE & SECURE
 Anti-Servo Tab.....CHECK
 Rudder.....CHECK FREE
 R Static Port.....CLEAR & OPEN
 Comm. Antenna.....CHECK
 ADSB Antenna.....CHECK
 Fuel Vent Lines.....CLEAR
 Fuel Cap.....SECURE

RIGHT MAIN LANDING GEAR

Tire.....CHK CONDITION
 Brake Assembly.....CHECK
 Brake Line.....CHECK
 Axle Nut Cotter Pin.....CHECK
 Landing Gear Rivets.....CHECK

RIGHT WING

Flaperon.....FREE
 Flaperon Hinge Brackets.....SECURE
 Wing Hand Hold.....Shake Laterally
 Leading Edge.....CHECK CONDITION

NOSE SECTION

Transponder Antenna.....CHECK
 Muffler.....CHECK
 Coolant.....CHECK LEVEL
WARN: MASTER & IGNITIONS OFF
 Oil Level.....CHECK LEVEL
 Nose Landing Gear.....CHECK
 Tire.....CONDITION
 Cowling.....CHECK



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Air Inlets.....CHECK
 Prop and Spinner.....CHECK
 Pitot..... OPEN/DOESNT SPIN
 Chocks.....REMOVE
 Final Walk Around.....COMPLETE

PRE-START

Passenger Brief.....S.A.F.E.TY
 -special airworthiness placard
 Master.....ON
 Nav / Strobe.....ON
 Canopy.....DOWN
 Safety Belts.....FASTENED/SECURE
 Fuel Valve.....DOWN (Open)
 Brakes.....TEST
 Ignition A & B.....ON

ENGINE START

Fuel Press (**2.2 psi min**).....NORMAL
Cold Start.....THROTTLE CLOSED
CHOKE PULL & SET
Oil temp <= 90
Warm.....THROTTLE 1/8 inch OPEN
CHOKE IN & LOCKED
Oil temp > 90
 Brakes.....HOLD
 Area....."CLEAR PROP"
 Ignition Key.....ENGAGE
CAUTION: 10 sec max, wait 2 mins
 Choke.....IN & LOCKED
 Throttle.....2,000 RPM
 Oil Pressure.....CHECK
 -- **12 psi min w/in 10 seconds**
 Ammeter.....CHARGING

AFTER START

Avionics.....ON
 Autopilot.....ON
 Headset.....ON
 COMMS.....TUNE
PSM ATIS: 132.05 PSM GND: 120.95
 Altimeter.....SET
 Transponder.....CHECK
 Flight Instruments.....CHECK
 Flight Plan.....BRIEF/LOAD

BEFORE TAXI

Airport Diagram.....BRIEF
 Landing Light.....As Required
 Taxi Area.....CLEAR
 Brakes.....TEST
 Runup Checklist.....IF USING RW16
 Taxi Clearance.....OBTAIN
 During Taxi.....VERIFY
 -- Flt Instruments move in turns
 -- **1800-2500 RPM until Oil 120°F**
 -- Wind Correction *Climb Into/Dive*
Away



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ENGINE RUNUP

Brakes.....HOLD
 Flight Controls.....CHECK
 Flight Instruments.....CHECK & SET
 Fuel Quantity (**4 gal min**).....CHECK
 Canopy.....LATCHED
 Oil Temp.....**120°F min**
 Stick.....BACK
 Run Up Area.....CLEAR BEHIND
 Throttle.....4,000 RPM
 -- Ignition.....CYCLE A & B
 -- **300 max RPM Drop /115 DIFF**
 -- Engine Instrument.....CHECK
 -- Ammeter.....CHARGING
 Throttle.....MIN IDLE CHECK
 Throttle.....2,000 RPM
 Fuses.....CHECK (NO RED LIGHTS)
 Fuel Press (**2.2 psi min**)....NORMAL
 Seat Belt.....FASTENED

PRE-TAKEOFF BRIEF

Engine Fail/Abnormality on T/O Roll
 - Throttle IDLE / Stop St-Ahead

Engine Fail on Ltoff w/ RWY remain

-- Airspeed.....**60 KIAS**
 -- Throttle.....IDLE
 -- Land.....MAX BRAKING
 -- Flaps.....RETRACT

Engine Fail Airborne: Insufficient Runway

-- Airspeed.....**60 KIAS**
 -- Landing Area.....SELECT

-- Flaps.....Once Landing Assured
 -- Fuel Shutoff Valve.....CLOSED
 -- Ignition Switches.....OFF
 -- Master.....OFF
 -- Touchdown.....55-65kts
 -- 180° Turn Min Alt/Dir of Turn?

BEFORE TAKEOFF

PSM TWR: 128.4 / BOS DEP: 125.05
 Pre-Takeoff Brief.....COMPLETE
 Radios SET
 Landing Light.....As Required
 Transponder.....SET
 Fuel QTY.....CHECK
 Fuel Valve.....Down (Open)
 Trim.....SET TAKEOFF
 Flaps.....1ST DETENT
 Engine Instruments.....CHECK
 Canopy.....LATCHED

Takeoff Procedures:

-- Stab.....RAISE NOSE SLIGHTLY
 -- Rotate.....**50 - 55 KIAS**
 -- Climb.....**75 KIAS (Vy)**
 -- Flaps 0..... ONCE CLR OF OBS

SHORT FIELD TAKEOFF

Flaps.....1ST DETENT
 Brakes.....HOLD until FULL Power
 Rotate.....**50-55 KIAS**
 Climb.....**60 KIAS (Vx)** until Clear

SOFT FIELD TAKEOFF

Flaps.....1ST DETENT
 Stabilator.....RAISE NOSE
 After Lift Off.....LEVEL FLIGHT
 -- *Attain Vx or Vy as Req'd*