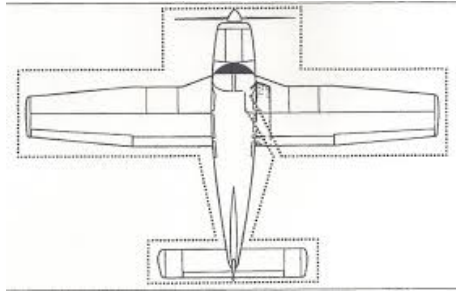


# N809M Piper Arrow III - Checklist

## PREFLIGHT



WEATHER.....CHECK  
EQUIPMENT REQUIRED .....CHECK  
WEIGHT & BALANCE .....CHECK  
PERFORMANCE FIGURES.....CHECK  
AIRCRAFT CLIPBOARD & KEYS .....CHECK

## COCKPIT

REQUIRED DOCUMENTS.....AVAILABLE  
HOBBS/TACH ..... RECORD  
ALL SWITCHES .....OFF  
MIXTURE.....IDLE CUT-OFF  
LANDING GEAR LEVER.....CONFIRM IN DOWN POSITION  
MASTER ..... ON  
MANIFOLD PRESSURE .....SHOWING OUTSIDE PRESSURE  
FUEL QUANTITY GAUGES ..... CHECK  
ANNUNCIATOR PANEL.....CHECK  
LANDING GEAR INDICATORS .....3 GREEN  
ROTATING BEACON .....CHECK  
NAV LIGHTS.....CHECK (NIGHT OPS)  
STROBES .....CHECK  
LANDING LIGHT.....CHECK  
STALL WARNING .....CHECK  
PITOT HEAT .....CHECK  
MASTER SWITCH ..... OFF  
FLAPS ..... DOWN  
PITOT AND STATIC SYSTEMS .....DRAIN

# N809M Piper Arrow III - Checklist

## RIGHT WING

FLAP ..... SECURE & UNDAMAGED  
AILERON ..... FREE & CORRECT  
AILERON COUNTERWEIGHT ..... FREE  
WING TIP & LIGHT ..... UNDAMAGED  
FUEL DRAIN ..... SAMPLE  
FUEL QUANTITY ..... CHECK  
FUEL CAP ..... SECURE  
FUEL VENT ..... CLEAR  
MAIN GEAR TIRE/STRUT/WHEEL HOUSING ..... CHECK  
BRAKES ..... CHECK  
AIR INLET ..... CLEAR

## NOSE

WINDSHIELD ..... CLEAN & UNDAMAGED  
ENGINE OIL LEVEL ..... 6 - 8 QTS  
ENGINE OIL DIPSTICK ..... SECURED  
PROPELLER & SPINNER ..... CHECK  
COWLING ..... CHECK  
LANDING LIGHT ..... CHECK  
NOSE GEAR/TIRE/STRUT/HOUSING ..... CHECK  
TOW BAR ..... REMOVED & STOWED  
CHOCKS ..... REMOVED  
ALTERNATOR BELT ..... TENSION  
FUEL SUMP DRAIN ..... SAMPLE  
AIR INLETS ..... CLEAR

## LEFT WING

AIR INLET ..... CLEAR  
FUEL DRAIN ..... SAMPLE  
FUEL QUANTITY ..... CHECK  
FUEL CAP ..... SECURE  
FUEL VENT ..... CLEAR  
PITOT COVER ..... REMOVED  
PITOT MAST ..... UNDAMAGED  
MAIN GEAR TIRE/STRUT/WHEEL HOUSING ..... CHECK  
SQUAT SWITCH ..... CHECK

# N809M Piper Arrow III - Checklist

STALL WARNING INDICATOR .....CHECK  
WING TIP & LIGHT ..... UNDAMAGED  
AILERON ..... FREE  
AILERON COUNTERWEIGHT .....FREE  
FLAP ..... SECURE & UNDAMAGED

## EMPENNAGE

STABILATOR & TRIM.....CHECK  
RUDDER .....CHECK  
VERTICAL STABILIZER.....CHECK  
ANTENNAS .....CHECK  
FRESH AIR INLET .....CLEAR

## FUSELAGE

ANTENNAS .....CHECK  
LEFT/RIGHT STATIC VENTS .....CLEAR  
BAGGAGE DOOR ..... CLOSED & SECURE  
PREFLIGHT INSPECTION ..... COMPLETE

# N809M Piper Arrow III - Checklist

## BEFORE STARTING ENGINE

PASSENGER BRIEFING .....COMPLETE  
FLAPS ..... RETRACTED  
SEATS, BELTS.....ADJUSTED, LOCKED  
DOOR ..... LATCHED  
AVIONICS MASTER ..... OFF  
FUEL SELECTOR ..... LOWEST TANK  
CIRCUIT BREAKERS ..... CHECK  
CONTROLS ..... CHECK

## ENGINE START

PARKING BRAKE ..... SET

### COLD START

PROPELLER .....FULL FORWARD  
THROTTLE ..... CRACKED  
MIXTURE .....IDLE CUT-OFF  
MASTER SWITCH .....ON  
MIXTURE .....FULL RICH  
FUEL PUMP .....ON TO PRIME

*Three Seconds or Until Fuel Flow Needle Moves*

FUEL PUMP .....OFF  
MIXTURE .....IDLE CUT-OFF  
ANTI-COLLISION LIGHTS .....ON  
PROPELLER AREA .....CLEAR  
STARTER .....ENGAGE

*As Engine Starts Then...*

MIXTURE .....FULL RICH

# N809M Piper Arrow III - Checklist

## HOT START/FLOODED

PROPELLER .....FULL FORWARD  
THROTTLE ..... FULL OPEN  
MIXTURE .....IDLE CUT-OFF  
MASTER SWITCH .....ON  
ANTI-COLLISION LIGHTS .....ON  
PROPELLER AREA .....CLEAR  
STARTER .....ENGAGE

*As Engine Starts Then Simultaneously...*

MIXTURE .....FULL RICH  
THROTTLE ..... IDLE

## AFTER ENGINE START

ENGINE ..... SET 1000 RPM  
OIL PRESSURE (30/WARM & 60/COLD) ..... CHECK  
FUEL PRESSURE ..... CHECK  
AVIONICS/RADIOS ..... ON  
TRANSPONDER ..... ALT & 1200  
G430 .....VERIFY DATABASE

## TAXI

DO NOT RIDE THE BRAKES

GBR UNICOM 122.8 .....RADIO CHECK  
ALTIMETER .....SET  
FLIGHT INSTRUMENTS .....CHECK  
LIGHTS .....AS REQUIRED  
AIRPORT DIAGRAM .....AVAILABLE  
TAXI AREA CLEAR .....CLEAR  
STERILE COCKPIT .....NO NON-ESSENTIAL CONVERSATION  
BRAKES .....TEST

# N809M Piper Arrow III - Checklist

## RUN UP

AIRCRAFT POSITION.....INTO THE WIND  
PARKING BRAKE .....SET  
MIXTURE ..... FULL RICH  
FUEL SELECTOR ..... FULLEST TANK  
PROPELLER .....FULL FWD  
THROTTLE .....2000 RPM  
MAGNETOS (175 RPM MAX DROP, 50 RPM DIFF.) ..... CHECK  
ALTERNATE AIR .....CHECK  
PROPELLER .....EXERCISE  
ENGINE INSTRUMENTS ..... IN THE GREEN  
FUEL PRESSURE .....CHECK  
AMMETER.....CHECK  
ANNUNCIATOR .....CHECK  
VACUUM GAUGE ..... 4.5 – 5.2  
THROTTLE ..... 1000 RPM  
THROTTLE FRICTION LOCK ..... ADJUSTED

## BEFORE TAKEOFF

FLIGHT CONTROLS ..... FREE & CORRECT  
FLIGHT INSTRUMENTS.....CHECK  
TRANSPONDER ..... ON-ALT  
FUEL PUMP .....CONFIRM ON  
LANDING LIGHT .....ON  
STROBES.....ON  
MIXTURE ..... CONFIRM FULL RICH  
PROPELLER ..... FULL FWD  
FLAPS.....SET  
TRIM .....SET  
DOOR & WINDOW .....SECURE  
SEAT BELTS.....FASTENED  
TIME OFF.....NOTED  
DEPARTURE BRIEFING.....BRIEFED

# N809M Piper Arrow III - Checklist

## DEPARTURE BRIEFING

- Wind Direction & Speed
- Runway Abort Point
- Climb Speed
- Best Glide Speed
- Known Obstructions & Terrain
- Decision Height/Altitude
- Landing Options
- Airplane Configured (W.H.A.T. - I.F.)

Risk Profile

*Low*

### **1.TAKE OFF ROLL**

Power To Idle  
Maintain Directional Control  
Stop

*Moderate*

### **2.RUNWAY REMAINING**

Pitch Down  
Power To Idle  
Land Straight Ahead

*High*

### **3.INITIAL CLIMB**

Pitch Down  
Establish Best Glide  
Land Within a Widening Pie Slice  
Land Into Wind

*Moderate*

### **4.DEPARTURE CLIMB**

Pitch Down  
Establish Best Glide  
Select Best Landing Spot  
Land Into Wind  
Systems Off  
Crack Open Doors

# N809M Piper Arrow III - Checklist

## NORMAL TAKEOFF

FLAPS .....UP  
ROTATE ..... 65 - 75 KTS

## SHORT-FIELD TAKEOFF

FLAPS .....25°  
POSITION .....ALL AVAILABLE RUNWAY  
BRAKES.....HOLD  
THROTTLE ..... FULL OPEN  
ENGINE GAUGE.....MAX STATIC POWER  
BRAKES.....RELEASE  
ROTATE ..... 50 - 60 KTS  
ACCELERATE ..... 55 - 65 ITS  
INITIAL CLIMB SPEED (V<sub>x</sub>) ..... 78 KTS  
FLAPS .....UP CLEAR 50' OBSTACLE  
CLIMB SPEED (V<sub>y</sub>).....90 KTS

## CLIMB

BEST RATE (GEAR UP & FLAPS UP) .....90 KTS  
(GEAR DOWN & FLAPS UP) .....78 KTS

BEST ANGLE (GEAR UP & FLAPS UP) .....78 KTS  
(GEAR DOWN & FLAPS UP) .....72 KTS

FLAPS .....RETRACT CLEAR OBSTACLES  
GEAR UP.....CLEAR OF AVAILABLE RUNWAY  
THROTTLE.....25"  
PROPELLER .....2500 RPM  
ENROUTE CLIMB.....104 KTS



# N809M Piper Arrow III - Checklist

## CRUISE

PITCH .....SET  
THROTTLE ..... **SET PER POWER TABLE**  
PROPELLER..... **SET PER POWER TABLE**  
TRIM ..... SET  
MIXTURE .....LEAN AS REQ  
FUEL SELECTOR .....PROPER TANK  
FUEL PUMP .....OFF  
LANDING LIGHT .....OFF

# N809M Piper Arrow III - Checklist

## POWER SETTINGS TABLE

**Power Setting Table - Lycoming Model 10-360-C Series, 200 HP Engine**

Press. Alt Feet	Std. Alt Temp ° F	110 HP - 55% Rated RPM AND MAN. PRESS. 2400		130 HP - 65% Rated RPM AND MAN. PRESS. 2400		150 HP - 75% Rated RPM AND MAN. PRESS. 2400		Press. Alt Feet
SL	59	20.4	22.9	25.5	SL	4,000		
1,000	55	20.2	22.7	25.2	1,000	5,000		
2,000	52	20.0	22.5	25.0	2,000	6,000		
3,000	48	19.8	22.2	24.7	3,000	7,000		
4,000	45	19.5	22.0	24.4	4,000	8,000		
5,000	41	19.3	FT	FT	5,000	9,000		
6,000	38	19.1	FT	FT	6,000	10,000		
7,000	34	18.9	FT	FT	7,000	11,000		
8,000	31	18.7	21.0		8,000	12,000		
9,000	27	18.5	FT		9,000	13,000		
10,000	23	18.3			10,000	14,000		
11,000	19	18.1			11,000			
12,000	16	17.8			12,000			
13,000	12	17.6			13,000			
14,000	9	FT			14,000			

# N809M Piper Arrow III - Checklist

## APPROACH

ATIS/AWOS.....CHECK  
ALTIMETER .....SET  
AIRPORT DIAGRAM.....CHECK  
LANDING LIGHT .....ON  
MIXTURE .....ADJUST  
PROPELLER .....SET  
APPROACH .....BRIEFED

## BEFORE LANDING

POWER.....AS REQUIRED  
MIXTURE .....RICH  
FUEL PUMP .....ON  
FUEL SELECTOR .....PROPER TANK  
SEAT BELTS .....FASTENED  
FLIGHT INSTRUMENTS.....CHECK  
GEAR .....DOWN (129 KTS MAX)  
FLAPS .....AS REQ (103 KTS MAX)

## NORMAL LANDING

FLAPS.....FULL  
GEAR .....CONFIRM 3 GREEN

*Four Checks With a Verbal Call Out:  
"Three Green" on Downwind, Base, Final and Short-Final*

PROPELLER.....FULL FORWARD ON FINAL  
AIRSPEED .....75 KTS

# N809M Piper Arrow III - Checklist

## GO AROUND

THROTTLE .....FULL FWD  
PROPELLER.....FULL FWD  
PITCH .....UP  
GEAR .....RETRACT  
FLAPS .....RETRACT TO 25°  
AIRSPEED (V<sub>x</sub>) .....PITCH FOR 73KTS  
POSITIVE RATE OF CLIMB .....CONFIRM  
FLAPS.....RETRACT  
AIRSPEED(V<sub>y</sub>) .....PITCH FOR 85 KTS

# N809M Piper Arrow III - Checklist

## CLEAR OF RUNWAY

FLAPS.....RETRACT  
MIXTURE.....LEAN AS REQ  
LANDING LIGHT.....AS REQ  
STROBE LIGHTS.....OFF  
FUEL PUMP.....OFF  
TAXI CLEARANCE.....BRIEF

## SHUTDOWN

THROTTLE.....1000 RPM  
TRANSPONDER.....1200 & STANDBY  
LANDING LIGHT.....OFF  
AVIONICS/RADIOS.....OFF  
FUEL PUMP.....OFF  
PROPELLER.....FULL INCREASE  
THROTTLE.....FULL AFT  
MIXTURE.....IDLE CUT-OFF  
MAGNETOS.....OFF  
MASTER.....OFF  
KEY.....REMOVED

## SECURING

WINDOW.....CLOSED  
FLIGHT CONTROLS.....SECURED  
COCKPIT.....CLEAN OF DEBRIS  
PARKING BRAKE.....OFF  
HOBBS/TACH.....RECORDED  
COWL COVERS.....INSTALLED  
PITOT COVER.....INSTALLS  
DOOR.....CLOSED  
CHOCK.....AS REQ  
POST-FLIGHT WALK AROUND.....COMPLETE

# N809M Piper Arrow III - Checklist

## EMERGENCY PROCEDURES

### ENGINE FIRE DURING START

- STARTER..... CONTINUE CRANKING
- MIXTURE ..... IDLE CUT-OFF
- THROTTLE..... OPEN
- FUEL PUMP ..... OFF
- FUEL SELECTOR..... OFF
- IF FIRE CONTINUES.....EVACUATE

### ENGINE POWER LOSS DURING TAKEOFF

SUFFICIENT RUNWAY REMAINING:

- THROTTLE.....CLOSE
- LANDING GEAR ..... LEAVE EXTENDED
- BRAKES.....APPLY AS REQUIRED
- STOP .....STRAIGHT AHEAD

IF AREA AHEAD IS ROUGH OR TO CLEAR OBSTACLES:

- LANDING GEAR .....RETRACT

IF SUFFICIENT ALTITUDE TO ATTEMPT RESTART:

- AIRSPEED.....SAFE AIRSPEED
- FUEL SELECTOR.....SWITCH TANKS
- FUEL PUMP ..... ON
- MIXTURE ..... RICH
- ALTERNATE AIR ..... OPEN
- LANDING GEAR ..... AS REQ.
- ENGINE GAUGES .....CHECK
- PRIMER ..... IN & LOCKED
- IGNITION .....LEFT/RIGHT/BOTH

IF POWER NOT REGAINED PROCEED WITH POWER OFF  
LANDING

# N809M Piper Arrow III - Checklist

## ENGINE POWER LOSS IN FLIGHT

AIRSPPEED.....BEST GLIDE  
SUITABLE FIELD.....SELECT  
FUEL SELECTOR.....SWITCH TANKS  
FUEL PUMP ..... ON  
MIXTURE ..... RICH  
ALTERNATE AIR .....OPEN  
ENGINE GAUGES .....CHECK  
PRIMER ..... IN & LOCKED  
IGNITION.....LEFT/RIGHT/BOTH

### IF POWER IS RESTORED:

ALTERNATE AIR.....AS REQ.  
FUEL PUMP ..... AS REQ.

### IF POWER IS NOT RESTORED PREPARE FOR POWER OFF LANDING

## POWER OFF LANDING

AIRSPPEED .....79 KIAS  
SUITABLE FIELD.....SELECT  
TRANSPONDER.....7700  
COMMUNICATE .....MAYDAY (121.5)

### WHEN COMMITTED TO LANDING:

LANDING GEAR.....AS REQ.  
IGNITION SWITCH ..... OFF  
MASTER SWITCH ..... OFF  
FUEL SELECTOR VALVE ..... OFF  
MIXTURE ..... IDLE CUT-OFF  
SEAT BELTS.....SECURE  
PASSENGERS.....BRIEFED  
DOOR ..... OPEN  
FLAPS .....AS REQ  
TOUCHDOWN.....72 KIAS  
EXIT AIRCRAFT.....AS SOON AS POSSIBLE

# N809M Piper Arrow III - Checklist

## **FIRE IN FLIGHT**

SOURCE OF FIRE .....CHECK

## **ELECTRICAL FIRE (SMOKE IN CABIN)**

MASTER .....OFF

VENTS .....OPEN

CABIN HEAT ..... OFF

ELECTRICAL EQUIPMENT .....OFF

LAND ..... AS SOON AS POSSIBLE

## **ENGINE FIRE**

FUEL SELECTOR.....OFF

THROTTLE ..... CLOSED

MIXTURE .....IDLE CUT-OFF

FUEL PUMP .....OFF

CABIN HEAT..... OFF

DEFROSTER.....OFF

AIRSPEED .....PITCH FOR EMERGENCY DESCENT

PROCEED WITH POWER OFF LANDING

## **LOSS OF OIL PRESSURE/HIGH OIL TEMPERATURE**

LAND .....AS SOON AS PRACTICAL

PREPARE FOR IMMINENT ENGINE FAILURE

## **LOSS OF FUEL PRESSURE**

FUEL PUMP .....ON

FUEL SELECTOR.....CHECK ON FULL TANK

LAND .....AS SOON AS PRACTICAL



# N809M Piper Arrow III - Checklist

## ALTERNATOR FAILURE

VERIFY FAILURE

REDUCE ELECTRICAL LOAD AS MUCH AS POSSIBLE  
CIRCUIT BREAKERS .....CHECK & RESET  
ALTERNATOR.....OFF (FOR 1 SECOND), THEN ON

IF POWER NOT RESTORED THEN:

ALTERNATOR .....OFF  
ELECTRICAL LOAD .....REDUCE  
LAND .....AS SOON AS PRACTICAL

IF BATTERY IS FULLY DISCHARGED, LOWER GEAR USING  
THE EMERGENCY GEAR EXTENSION PROCEDURE.  
POSITION LIGHTS WILL NOT ILLUMINATE.

## PROPELLER OVERSPEED

THROTTLE.....RETARD  
OIL PRESSURE .....CHECK  
PROP CONTROL.....FULL DECREASE RPM  
THEN SET IF CONTROL AVAILABLE  
AIRSPEED.....REDUCE  
THROTTLE .....AS REQUIRED  
.....TO MAINTAIN BELOW 2700 RPM

## EMERGENCY LANDING GEAR EXTENSION

PRIOR TO EMERGENCY EXTENSION:

MASTER SWITCH.....ON  
CIRCUIT BREAKERS .....CHECK  
PANEL LIGHTS .....OFF (DAYTIME)  
GEAR INDICATOR BULBS .....CHECK

# N809M Piper Arrow III - Checklist

IF LANDING GEAR DOES NOT CHECK DOWN & LOCKED:

AIRSPEED.....BELOW 87 KIAS  
LANDING GEAR SELECTOR .....DOWN  
EMERGENCY GEAR LEVEL .....EMERGENCY DOWN  
.....FISHTAIL AIRCRAFT AS NEEDED

IF ALL ELECTRICAL POWER HAS BEEN LOST, THE POSITION LIGHTS WILL NOT ILLUMINATE.

## SPIN RECOVERY

THROTTLE .....IDLE  
AILERONS .....NEUTRAL  
RUDDER .....OPPOSITE ROTATION  
CONTROL WHEEL.....FULL FORWARD  
RUDDER .....NEUTRAL (WHEN ROTATION STOPS)  
FLAPS.....UP (IF EXTENDED)  
CONTROL WHEEL .....SMOOTHLY REGAIN LEVEL FLIGHT

## OPEN DOOR

AIRSPEED .....SLOW TO 87 KIAS  
CABIN VENTS .....CLOSE  
STORM WINDOW .....OPEN  
IF UPPER LATCH OPEN .....LATCH  
IF SIDE LATCH OPEN.....PULL ON ARMREST WHILE

.....MOVING LATCH HANDLE TO  
.....LATCHED POSITION  
IF BOTH LATCHES ARE OPEN.....LATCH SIDE LATCH  
.....TREN TOP LATCH

# N809M Piper Arrow III - Checklist

## PERFORMANCE\*

Takeoff Ground Run (minimum) .....	1025 ft
Takeoff Distance Over 50-ft Obstacle (25 ° flaps).....	1600 ft
Rate of Climb (ft per min).....	831 fpm
Service Ceiling .....	16,200 ft
Landing Roll (flaps down) .....	615 ft
Landing Roll Over 50-ft Obstacle (flaps down).....	1525 ft

Vso .....	56 kts
Vs .....	65 kts
Vx .....	73 kts
Vy .....	85 kts
Vfe .....	103 kts
Va .....	96 - 118 kts
Vlo .....	107 kts
Vle .....	129 kts
Vno .....	146 kts
Vne .....	186 kts
Vbg .....	85 kts

Max. Gross Weight.....	2750 lbs
Useful Load .....	1005.97 lbs
Max. Baggage .....	200 lbs

Fuel .....	Full 77 gals
.....	Usable 72 gals
.....	Tabs 50 gals
Oil.....	8 quarts

Fuel Consumption.....12.7 gph at 75%

\*Please reference specific aircraft POH for flight planning.

The pilot is responsible for verifying all documents prior to flight!  
For more detailed information on operating each aircraft and its systems, please refer to each aircraft's specific POH and W&B.