IFR Instrument Checks

For IFR flight, add these items to the VFR checklist you use for your airplane.

Preflight, before turning on master switch

Magnetic Compass -- FULL OF FLUID
Inclinometer -- FULL OF FLUID
Turn Coordinator -- WARNING FLAG RED

After turning on master switch

Turn Coordinator -- WARNING FLAG CLEAR
Electric Gyros -- LISTEN, SPOOLING UP SMOOTHLY
Pitot Heat -- TURN ON, CHECK HEAT, THEN OFF.

During walkaround

Pitot tube and static port -- CLEAR OF ALL BLOCKAGE

During runup

Suction -- CHECK INDICATORS (4.5" to 5.5" differential pressure is typical)
Ammeter -- CHARGING/NORMAL INDICATION

While taxiing

Magnetic Compass -- INDICATES KNOWN HEADINGS, TURNS FREELY
Attitude Indicator -- HORIZON BAR SHOULD BE ERECT AND STABLE WITHIN 5 MIN.
BANKS LESS THAN 5 DEGREES DURING TURNS
PITCHES SLIGHTLY WITH BRAKE APPLICATION
Heading Indicator -- SET AFTER 5 MINUTES AND CHECK FOR PROPER ALIGNMENT
AFTER TAXI TURNS
Turn Coordinator -- INDICATES TURNS IN SAME DIRECTION
Inclinometer -- BALL SKIDS TO OUTSIDE DURING TURNS

Before takeoff

Airspeed -- ZERO
Attitude Indicator -- SET AIRPLANE TO 90 DEGREE MARKERS
Altimeter -- LOCAL PRESSURE SET, READS WITHIN 75' OF FIELD ELEVATION
Turn Coordinator -- WARNING FLAG CLEAR
Heading Indicator -- ALIGN WITH MAGNETIC COMPASS
VSI -- NOTE ZERO POINT, CHECK ALTERNATE STATIC SOURCE

Set up all radios as far ahead as possible:

Communications frequencies set, verify both com radios operational
VHF navigation frequencies and OBS set, check signal reception & ID on ground
DME frequency and mode selector set
ADF frequency set, check signal reception & ID on ground when possible
GPS route or first waypoint programmed
Transponder code set, altitude mode engaged

Clearance -- OBTAIN AND REVIEW
Departure Procedure -- REVIEW
Departure Emergency Plan -- REVIEW