

# GYROS – STANDBY VACUUM SYSTEMS

## MID-CONTINENT INSTRUMENTS & AVIONICS STANDBY ATTITUDE MODULE MD302



SAM® is the industry's first digital standby instrument to provide attitude, altitude, airspeed and slip information to the pilot in an advanced, 2-inch format. SAM delivers an easy-to-fit, compact design with selectable orientation (horizontal and vertical) like no other, ensuring a perfect fit within any panel. The unique two-screen display

features high-definition graphics and extra-wide viewing angles, and at 1.6 pounds, SAM weighs less than just one of the three instruments it's designed to replace.

See [www.aircraftspruce.com](http://www.aircraftspruce.com) for complete list of features and specifications.

| Model No.         | Configuration                                                                         | Part No. | Price |
|-------------------|---------------------------------------------------------------------------------------|----------|-------|
| MD302 - 6420302-1 | Digital, 10-32 VDC, Attitude, Altitude, Airspeed, Slip, Internal battery, Black bezel | 10-05081 | .     |
| MD302 - 6420302-2 | Digital, 10-32 VDC, Attitude, Altitude, Airspeed, Slip, No battery, Black bezel       | 10-06017 | .     |
| MD302 - 6420302-3 | Digital, 10-32 VDC, Attitude, Altitude, Airspeed, Slip, Internal battery, Gray bezel  | 10-06018 | .     |
| MD302 - 6420302-4 | Digital, 10-32 VDC, Attitude, Altitude, Airspeed, Slip, No battery, Gray bezel        | 10-06019 | .     |
| MD302 - 6420302-5 | No display, 10-32 VDC, Remote mounted, ARINC output, No battery                       | 10-06020 | .     |

## MID-CONTINENT INSTRUMENTS & AVIONICS MD32 MAGNETOMETER



The MD32 Magnetometer is designed specifically for the MD302 Standby Attitude Module — SAM®. The MD32 is FAA TSO-certified and delivers independent heading reference without orientation limitations or the need for special installation hardware. Its compact size, unique mounting flexibility, and convenient cockpit calibration ensure easy, economical installation.

P/N 10-06594 .....

## VOLT & VAC ALERT



A gyro instrument can start giving false information in less than one minute, and it is important that the pilot become instantly aware of a vacuum loss. The Volt & Vac Alert monitors instrument vacuum and electrical voltage. Should either fall below set values, the system will provide an instantly recognizable voice warning directly in the pilots headset, and then flash a light

positioned within the normal gyro scan area, providing him with instant recognition of a problem. The Volt & Vac Alert is STC - PMA approved.

P/N 10-00393 .....

## SIGMA TEK CAGEABLE ATTITUDE GYROS



Short stops (engine off less than twelve minutes) and some aerobatic maneuvers may cause your attitude gyro to tumble or precess from its vertical reference. When the rotor is spinning, the gyros normal erection system is slow and can take several minutes to correct a large erection error. This non-locking caging feature allows the pilot to quickly align the gyro display and rotor to gyro case reference. The attitude gyro should only be caged for quick alignment during straight and level VFR flight using

well defined earth horizon for reference or prior to take off. **All lighted gyros must order tray separately.**

| Part No. | Description                             | Price |
|----------|-----------------------------------------|-------|
| 5000B    | Standard Gyro, Unlighted (non-cageable) | .     |
| 5000B-46 | With Inclinator, 0° Panel Tilt          | .     |
| 5000B-45 | With Inclinator, 0° Panel Tilt, Lighted | .     |
| 5000B-51 | With Inclinator, 8° Panel Tilt          | .     |
| 5000B-53 | With Inclinator, 8° Panel Tilt, Lighted | .     |
| 10-00111 | 5000B Light Tray 14V                    | .     |
| 10-00112 | 5000B Light Tray 24V                    | .     |

## B&C LYCOMING VACUUM PUMP PAD ADAPTER INVERTED OIL PICKUP



This provides a direct replacement for the Lycoming vacuum pump pad adapter. Its unique design offers both a standard vacuum pump pad adapter AND provision for inverted oil pickup. The vacuum pump pad is often used for a B&C spline-driven alternator, such as the SD8 or SD20. Aircraft with oil systems using the standard "T" fitting on the firewall will typically experience a 3 to 5 second drop into the "yellow" oil pressure range after rolling inverted. However with this installed, the oil pressure will have a momentary blip or "wiggle" on the oil pressure gauge as the ball valve switches ends. As a result, the engine receives better lubrication and prop surges are lessened. The comes with oil seal installed,

gaskets, and an MS20822-10D 90 degree fitting. Just slip the existing vacuum pump gear and thrust washer in, and it is ready for installation on the engine. The standard Lycoming vacuum pump gear and washer will fit (gear and washer not included). Alternate P/N: VAC-2/4

BC704-H For 4 Cylinder Engines.....P/N 07-06790 .....

BC706-H For 6 Cylinder Engines.....P/N 07-06795 .....

## VENTURI

### 2" VENTURI



This small aluminum venturi provides 2" Hg vacuum for operating turn/bank indicator. Has 1/8" NPT port. Use 1/4" tubing for hookup.

Wt. 3.5 oz..... P/N 15045 .....

### 4" VENTURI



This venturi develops 4" Hg suction from double-throat venturi and 10" long horn. Used to operate a directional gyro or gyro horizon. When operating a directional gyro there is sufficient capacity to also operate a turn/bank. All aluminum construction. May require a suction regulator. Wt. 0.9 lb.

P/N 15050 .....

### 9" VENTURI



This "super venturi" is similar in appearance to the 4" venturi but with redesigned air passages and a recontoured, long (11-1/4") horn. It pulls enough vacuum to operate a gyro horizon, directional gyro and a turn/bank. Must be used with a suction regulator

P/N 15052 .....