

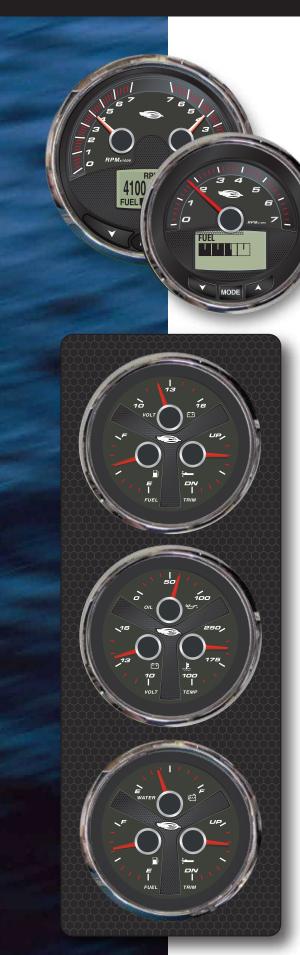


CHAPARRAL

2020 Gauge Guide



The Chaparral Difference







Dual J-1939 / NMEA 2000 Inputs

SAE J1939



Large, Sunlight Visible, Split Screen LCD Display
LED Back-lit Automotive Style Contour Dial
Fog Resistant Lens
Stainless Steel Bezel
Micro Processor Control
Military Style Stepper Motor Controlled Pointer
Default Fuel Management
Sealed Input Switch - Simplified
Initial System Set-Up
Visual and Audible Engine Alarms
Back-lit Pointer

Additional Features

MPH and Km/h Scales on Dial Analog Depth Sounder Easy to read Dials with Multi functions in a wide variety of configurations.





Model: 24SSI

Gauge Layout - Standard



4" - Tachometer/MG3000 Mercury: MGT009 / 13.02031 Volvo: MGT010 / 13.02032



4" - Multifunction Faria / Chaparral (Oil PSI, Temperature, Voltmeter) Faria / Chaparral SG7002 / 13.02115



4" - Multifunction (Fuel, Trim, Potable Water) Faria / Chaparral SG7001 / 13.02116



4" - Speedometer/MG3000 Faria / Chaparral MGS019 / 13.02030

Gauge Layout - Garmin® Option



4" - Tachometer/MG3000 Faria / Chaparral Mercury: MGT009 / 13.02031 Volvo: MGT010 / 13.02032

GARMIN.

Navigation Package



4" - Multifunction (Fuel, Voltmeter, Trim) Faria / Chaparral SG7000 / 13.02117















Model: 237

Gauge Layout - Standard



4" - Tachometer/MG3000 Mercury: MGT009 / 13.02031 Volvo: MGT010 / 13.02032



4" - Multifunction Faria / Chaparral (Oil PSI, Temperature, Voltmeter) Faria / Chaparral SG7002 / 13.02115



4" - Multifunction (Fuel, Trim, Potable Water) Faria / Chaparral SG7001 / 13.02116



4" - Speedometer/MG3000 Faria / Chaparral MGS019 / 13.02030

Gauge Layout - Garmin® Option



4" - Tachometer/MG3000 Faria / Chaparral Mercury: MGT009 / 13.02031 Volvo: MGT010 / 13.02032



Navigation Package



4" - Multifunction (Fuel, Voltmeter, Trim) Faria / Chaparral SG7000 / 13.02117

Model: 257

Gauge Layout - Standard



4" - Tachometer/MG3000 Faria / Chaparral Mercury: MGT009 / 13.02031 Volvo: MGT010 / 13.02032



4" - Multifunction (Oil PSI, Temperature, Voltmeter) Faria / Chaparral SG7002 / 13.02115



4" - Multifunction (Fuel, Trim, Potable Water) Faria / Chaparral SG7001 / 13.02116



4" - Speedometer/MG3000 Faria / Chaparral MGS019 / 13.02030

















Custom Analog Gauges

Custom Back-Lit Dial, Stainless Steel Bezel, Back-Lit Red Pointer, Red and White Graphics on a Black Dial, with Chaparral Logo, Deustch Connectors and Fog Resistant Lens.

| Part # | Size | Description |
|--------|------|-------------------------------------------------------------------------------------------------------|
| THC702 | 4" | Tachometer with Hourmeter (Digital) (7000 RPM) |
| SEK709 | 4" | Speedometer (65 MPH) (Paddle Wheel) |
| GFC705 | 4" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil PSI (100 PSI) Water Temp (100°-250° F) Trim gauge] |
| GBC704 | 2" | Fuel Level gauge |
| DS0155 | 2" | Depth Finder gauge |





Domed lens





MG3000 Digital Instrumentation

Custom Contour Back-Lit Dial, Stainless Steel Bezel, Back-Lit Red Pointer, Red and White Graphics on a Black Dial, with Chaparral Logo. Fog Resistant Lens and a large Sunlight visible, Split Screen LCD Display.

| Part # | Size | Description | | |
|--------|------|----------------------------------------------------------------------------------|--|--|
| MGS019 | 4" | Speedometer (60 MPH) with Pressure Port and Analog Depth (MG3000) | | |
| MGT009 | 4" | Tachometer (7000 RPM) (Merc) (MG3000) | | |
| MGT010 | 4" | Tachometer (7000 RPM) (Volvo) (MG3000) | | |
| SG7000 | 4" | 3-1 Multifunction [Fuel Level Voltmeter (10-16 vDC) Trim Gauge] (Serial Bus) | | |
| SG7001 | 4" | 3-1 Multifunction [Fuel Level Potable Water Level Trim Gauge] (Serial Bus) | | |
| SG7002 | 4" | 3-1 Multifunction [Oil Pressure (80 PSI) Voltmeter (10-16 vDC) | | |
| | | Water Temp (100°-250° F)] (Serial Bus) | | |
| MGT011 | 5" | Dual Tachometer (7000 RPM) (Merc) (MG3000) | | |
| MGT012 | 5" | Dual Tachometer (7000 RPM) (Volvo) (MG3000) | | |
| MGS020 | 5" | Speedometer (60 MPH) (with Depth) (MG3000) | | |
| SG8029 | 5" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil PSI (80 PSI) | | |
| | | Water Temp (100°-250° F) Trim gauge] (Serial Bus) - Port | | |
| SG8028 | 5" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil Pressure (80 PSI) | | |
| | | Water Temp (100°-250° F) Trim gauge] (Serial Bus) - Starboard | | |
| SG8027 | 5" | 4-1 Multifunction [Fuel Level Oil Pressure (80 PSI) Water Temp (100°-250° F) | | |
| | | Trim gauge] (Serial Bus) | | |
| GE0152 | 2" | Fuel Level gauge | | |
| GE0153 | 2" | Trim gauge (For Retrofit) | | |
| GE0175 | 2" | Fuel Level gauge (for Tank #2) | | |





Domed lens









Custom Analog - Deustch Connectorized Instrumentation

Premium Hand Polished Stainless Steel Bezel, Domed Fog-resistant Glass Lens, Custom Backlighted Gray Dial With Customer Supplied Graphics, Backlighted Orange Pointer With Black Pointer Hub.

| Part # | Size | Description | | |
|--------|------|---------------------------------------------------------------------------------------------------------------------|--|--|
| TCC700 | 5" | Dual Tachometer with hourmeter (6000 RPM) | | |
| THC700 | 5" | Tachometer with hourmeter (6000 RPM) | | |
| THC701 | 4" | Tachometer with hourmeter (6000 RPM) | | |
| SEK700 | 5" | Speedometer (70 MPH) (Pitot) | | |
| SEK701 | 4" | Speedometer (65 MPH) (Pitot) | | |
| SEK702 | 5" | Speedometer (50 MPH) (Pitot) | | |
| SEK704 | 4" | Speedometer (50 MPH) (Pitot) | | |
| SEK703 | 5" | Speedometer (65 MPH) (Pitot) | | |
| SYC700 | 4" | Synchronizer | | |
| SYC701 | 4" | Synchronizer with Rudder Angle Indicator | | |
| DS0141 | 2" | Depth Sounder | | |
| GBC701 | 2" | Fuel Level gauge | | |
| GBC700 | 2" | Water Temperature gauge (125° - 250°F) | | |
| GBC703 | 2" | Oil Pressure gauge (80 PSI) | | |
| VBC700 | 2" | Voltmeter (10-16 vDC) | | |
| GBC702 | 2" | Trim gauge (Mercury) | | |
| BL9134 | 2" | Blank gauge | | |
| GFC700 | 5" | 4-1 Multifunction [Fuel Level Oil Pressure (80 PSI) Water Temp (125°-250° F) Voltmeter (10-16 vDC)] | | |
| GFC701 | 5" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil Pressure (80 PSI) Water Temp (125°-250° F) Trim gauge (Mercury)] | | |
| GFC702 | 4" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil Pressure (80 PSI) Water Temp (125°-250° F) Trim gauge (Mercury)] | | |
| SD0041 | | Rudder Angle Sender | | |

All instruments except speedometer include deutsch connector.













Custom Analog - Packard Connectorized Instrumentation

Premium Hand Polished Stainless Steel Bezel, Domed Fog-resistant Glass Lens, Custom Backlighted Gray Dial With Customer Supplied Graphics, Backlighted Orange Pointer With Black Pointer Hub.

| Part # | Size | Description |
|--------|------|-----------------------------------------------------------------------------------------------------------|
| TCC010 | 5" | Dual Tachometer (6000 RPM) |
| THC016 | 5" | Tachometer with Hourmeter (6000 RPM) |
| THC015 | 4" | Tachometer with Hourmeter (6000 RPM) |
| SEK026 | 5" | Speedometer (70 MPH) (Pitot) |
| SEK023 | 5" | Speedometer (65 MPH) (Pitot) |
| SEK025 | 5" | Speedometer (50 MPH) (Pitot) |
| SEK032 | 4" | Speedometer (50 MPH) (Pitot) |
| SEK024 | 4" | Speedometer (65 MPH) (Pitot) |
| SYC005 | 4" | Synchronizer |
| SYC006 | 4" | Synchronizer with Rudder Angle Indicator |
| DS0141 | 2" | Depth Sounder |
| GBC028 | 2" | Fuel Level gauge |
| GBC031 | 2" | Water Temperature gauge (125° - 250°F) |
| GBC029 | 2" | Oil Pressure gauge (80 PSI) |
| VBC005 | 2" | Voltmeter (10-16 vDC) |
| GBC030 | 2" | Trim gauge (Mercury) |
| BL9134 | 2" | Blank gauge |
| GFC008 | 5" | 4-1 Multifunction [Fuel Level Oil Pressure (80 PSI) Water Temp (125°-250° F) Voltmeter (10-16 vDC)] |
| GFC009 | 5" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil Pressure (80 PSI) |
| | | Water Temp (125k-250° F) Trim gauge (Mercury)] |
| GFC010 | 4" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil Pressure (80 PSI) |
| | | Water Temp (125°-250° F) Trim gauge (Mercury)] |
| SD0041 | | Rudder Angle Sender |

All instruments except speedometer include packard connector.













Custom Analog - SS Deustch Connectorized Instrumentation

Premium Hand Polished Stainless Steel Bezel, Domed Fog-resistant Glass Lens, Custom Backlighted Gray Dial With Customer Supplied Graphics, Backlighted Orange Pointer With Black Pointer Hub.

| Part # | Size | Description | | |
|--------|------|---------------------------------------------------------------------------------------------------------------------|--|--|
| TCC603 | 5" | Dual Tachometer (6000 RPM) | | |
| THC602 | 5" | Tachometer with Hourmeter (6000 RPM) | | |
| THC601 | 4" | Tachometer with Hourmeter (6000 RPM) | | |
| SEK026 | 5" | Speedometer (70 MPH) (Pitot) | | |
| SEK023 | 5" | Speedometer (65 MPH) (Pitot) | | |
| SEK025 | 5" | Speedometer (50 MPH) (Pitot) | | |
| SEK032 | 4" | Speedometer (50 MPH) (Pitot) | | |
| SEK024 | 4" | Speedometer (65 MPH) (Pitot) | | |
| SYC601 | 4" | Synchronizer | | |
| SYC600 | 4" | Synchronizer with Rudder Angle Indicator | | |
| DS0147 | 2" | Depth Sounder | | |
| GBC605 | 2" | Fuel Level gauge | | |
| GBC606 | 2" | Water Temperature gauge (125° - 250°F) | | |
| GBC607 | 2" | Oil Pressure gauge (80 PSI) | | |
| VBC602 | 2" | Voltmeter (10-16 vDC) | | |
| GBC608 | 2" | Trim gauge (Mercury) | | |
| BL9134 | 2" | Blank gauge | | |
| GFC602 | 5" | 4-1 Multifunction [Fuel Level Oil {Pressure (80 PSI) Water Temp (125°-250° F) Voltmeter (10-16 vDC)] | | |
| GFC603 | 5" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil Pressure (80 PSI) Water Temp (125°-250° F) Trim gauge (Mercury)] | | |
| GFC604 | 4" | 4-1 Multifunction [Voltmeter (10-16 vDC) Oil Pressure (80 PSI) Water Temp (125°-250° F) Trim gauge (Mercury)] | | |
| SD0041 | | Rudder Angle Sender | | |

All instruments except speedometer include deutsch connector.













No Longer **Available**

MG2000 - Volvo J-1708 Instrumentation

MG2000 Series Instruments - White faced instruments with red backlighting, red backlighted pointer, Polycarbonate domed fog resistant lens, hand polished stainless steel bezel.

| Part # | Size | Description | | |
|--------|------|----------------------------------------------------------------------------------|--|--|
| IG1510 | 5" | Tachometer (4000 RPM) (MG2000) (Volvo J-1708) | | |
| IG1703 | 5" | Speedometer (60 MPH) (MG2000) with Pressure Port (Pitot) | | |
| SG8012 | 5" | 4-1 Multifunction [Fuel Level Oil Pressure (80 PSI) Water Temp (100°-250° F) | | |
| | | Voltmeter (10-16 vDC)] | | |
| GE0059 | 2" | Trim gauge (MG2000) | | |
| | | | | |
| HN0503 | 12" | Harness - Gauge to Gauge Jumper | | |
| HN0564 | | Harness - Tach/Speedo SAE-J1708 , Mini Gateway | | |





Domed lens

Deutsch Connectors





No Longer **Available**

MG2000 (with Red LED) - Volvo J-1708 Instrumentation

MG2000 with Red LED's-Volvo 1708 Protocol, Digital instrumentation with analog displays.

| Part # | Size | Description |
|------------------|------|------------------------------------------------------------------------------------|
| IG1110 | 5" | Tachometer (4000 RPM) (MG2000) (Volvo J-1708) |
| IG1301 | 5" | Speedometer (60 MPH) (MG2000) with Pressure Port (Pitot) |
| GE0058 | 2" | Fuel Level gauge (MG2000) |
| GE0059 | 2" | Trim gauge (MG2000) |
| HN0503 HN0564 | 12" | Harness - Gauge to gauge Jumper Harness - Tach/Speedo SAE-J-1708 , Mini Gateway |





Domed lens

Deutsch Connectors



Instrument Facts

Your boat has been outfitted with instruments manufactured by Faria Beede Instruments., Inc. Each instrument has been manufactured in an ISO:9001 2015 registered facility, built to stringent standards and has passed a comprehensive quality control procedure prior to shipment. Each instrument is backed by a limited lifetime warranty.

The Instrument System:

Your Instrument System consists of individual gauges, wiring harnesses, senders, sensors and transducers. Each of these items has their own tolerances. If these tolerances "stack up" in opposite directions it can lead to what may be perceived as a larger difference in operating readings than actually exists. As long as the readings are within the engine's specified operating band, the engines are operating properly.

Tachometers:

Most Tachometers have a tolerance \pm 2% of full scale (\pm 120 rpm on a 6000-rpm tach). Tachometers will zero when the key is turned on; it doesn't matter what the tach reads with the key off.

Speedometers:

Paddlewheel driven tournament speedometers are manufactured with a fluid filled pointer bobbin. This fluid aids in the control of bounce and reduces rapid movements of the pointer. Due to the viscosity of this fluid, it is important that the instrument not be placed glass side down on a surface for longer than a few seconds. This face down position may cause leakage of the speedometer bobbin fluid, which can then render the instrument unusable and/or irreparable.

Tach-Hourmeter and Digital Hourmeters:

To ensure accuracy, Tach-Hourmeter Combination Instruments utilize Engine Running Only hourmeters. This instrument does not read engine hours until a certain voltage has been achieved during engine use.

Engine Running Only hourmeters by Faria Beede have an icon in the left hand corner of the display. The icon lets the operator know that hours are being displayed.

During normal operations the icon displays solid when the key is on and the engine has not yet been started. Turning the engine on activates the counting function. The icon will begin to blink indicating that the hourmeter is currently counting hours for the connected engine. This is normal.



Fuel gauges:

Fuel gauges may at some times seem to "bounce". In most circumstances this is actually caused by the fuel sloshing in the tank and does not necessarily indicate a problem with the gauge or sender.

Instrument Fogging with Standard Glass Lens:

Most marine instruments have small vents in their cases to allow a way out for moisture that finds its way in. It is possible for moist air to be drawn into the vents when the air inside the gauge cools down after the instrument is turned off. The morning sun can draw this moisture up against the lens, causing fogging. Turning on the instrument with the instrument light "on" will speed up moisture removal. Fogging is not abnormal, nor will it harm your instrument, which is built to withstand the harsh marine environment.

Instruments with Fog Resistant Lenses:

These instruments are manufactured with a polycarbonate or glass lens which utilize an anti-fog coating. This coating eliminates fogging in the instrument.

Radio Transmissions:

Some interference (erratic operation) may be noticed on tachometers or synchronizers during radio transmissions. This will neither damage the instrument nor affect its accuracy when not transmitting.

Pointer Jumping (mostly for older instruments):

Occasionally when an engine has been revved up high and then abruptly shut off, the pointer will fall to the incorrect starting pin on the instrument. (For example, on a 6000 Rpm Tachometer – The pointer sits on the numeral six instead of beginning at zero.) There is a quick on-site fix to this problem. Place a magnet against the glass directly on the end of the pointer resting on the increments. You can slowly move the magnet and drag the pointer back to the zero position.

Specifications

Our instruments are manufactured by Faria Beede Instruments., Inc. in Uncasville Connecticut, USA. Each instrument has been manufactured in an ISO:9001 2008 registered facility, built to stringent standards and has passed a comprehensive quality control procedure prior to shipment. Each instrument is backed by the Faria Beede Limited Warranty.

4" & 5" Electronic Instruments

| Operating Temperature | -4°F to +158° F (-20°C to +70°C) | |
|-----------------------|--------------------------------------------------------------------------------|--|
| Storage Temperature | -22° F to +185° F (-30° C to +85° C) | |
| Lighting | See product line for specific information | |
| Operating Voltage | 11.5 to 16 volts | |
| Nominal Voltage | 14.2 volts | |
| Current Consumption | < 100 mA, without illumination | |
| Bezel | Stainless Steel or Aluminum - see product line for specific information | |
| Lens | Glass or Poly carbonate - see product line for specific information | |
| Connection | Studs, blade terminals, connectors - see product line for specific information | |
| Mounting Bracket | Plastic mounting clamp. Clamping range 08" (0-20 mm) | |
| Torque | 5 to 7 inch pounds (.5780 Nm) | |
| Mounting Hole | 3 3/8" (85 mm) for 4" Instrument - 4 3/8" (112 mm) for 5" Instrument | |

4" & 5" Mechanical Instruments

| Operating Temperature | -22° F to +185° F (-30° C to +85° C) | |
|-----------------------|-------------------------------------------------------------------------|--|
| Storage Temperature | -40° F to +221° F (-40° C to +105° C) | |
| Lighting | See product line for specific information | |
| Bezel | Stainless Steel or Aluminum - see product line for specific information | |
| Lens | Glass or Poly carbonate - see product line for specific information | |
| Connection | Studs, blade terminals - see product line for specific information | |
| Mounting Bracket | Plastic mounting clamp. Clamping range 08" (0-20 mm) | |
| Torque | 5 to 7 inch pounds (.5780 Nm) | |
| Mounting Hole | 3 3/8" (85 mm) for 4" Instrument – 4 3/8" (112 mm) for 5" Instrument | |

2" Electronic Instruments

| Operating Temperature | -4 °F to +158°F (-20 °C to +70 °C) | |
|-----------------------|--------------------------------------------------------------------------------|--|
| Storage Temperature | -22°F to +185°F (-30°C to +85°C) | |
| Lighting | See product line for specific information | |
| Operating Voltage | 11.5 to 16 volts | |
| Nominal Voltage | 14.2 volts | |
| Current Consumption | < 100 mA, without illumination | |
| Bezel | Stainless Steel or Aluminum - see product line for specific information | |
| Lens | Glass or Poly carbonate - see product line for specific information | |
| Connection | Studs, blade terminals, connectors - see product line for specific information | |
| Mounting Bracket | Plastic mounting clamp. Clamping range 08" (0-20 mm) | |
| Torque | 5 to 7 inch pounds (.5780 Nm) | |
| Mounting Hole | 2 1/16" (53 mm) for 2" Instrument | |

2" Mechanical Instruments

| Operating Temperature | -22 °F to +185°F (-30 °C to +85°C) | | |
|-----------------------|-------------------------------------------------------------------------|--|--|
| Storage Temperature | -40 °F to +221°F (-40 °C to +105 °C) | | |
| Lighting | See product line for specific information | | |
| Bezel | Stainless Steel or Aluminum - see product line for specific information | | |
| Lens | Glass or Poly carbonate - see product line for specific information | | |
| Connection | Studs, blade terminals - see product line for specific information | | |
| Mounting Bracket | Plastic clamp, metal on water pressure. Clamping range 08" (0-20 mm) | | |
| Torque | 5 to 7 inch pounds (.5780 Nm) | | |
| Mounting Hole | 2 1/16" (53 mm) for 2" Instrument | | |

Network Troubleshooting Chart

| Observation | Possible Cause | Procedure |
|-------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| "0" displayed for data fields | Data sources are not configured | Use DATA SOURCES menu to configure data source. |
| Tachometer does not power on. | Power supply harness fuse blown. | Check the Power Supply harness, fuses and switched B+ from the ignition harness. See Note below. |
| Power Supply harness blown fuse | Network current draw is exceeding 3A. | Check all connections and wiring. Disconnect accessory connections to network. Isolate possible overloads or shorted accessory. |
| No Speed display. | Pitot Pitot tube is not connected to Speedometer Pitot tube connection. | |
| Speed Over Water (SOW) does not display. | Pitot tube is clogged. | |
| | Paddle Wheel Requires input from speed transducer or paddle wheel. | |
| Speed Over Ground (SOG) does not display. | Requires input from GPS. | Check that the device is installed and connected to the network. |
| Water depth does not display. | Power may have been disconnected on the Speedometer at pin 5. | |
| | Transducer harness is disconnected. | |
| | Transducer not functioning properly. | |
| Sea water temperature does not display. | NMEA: Requires NMEA 2000 temperature transducer or analog sender. | |
| | SmartCraft: Requires NMEA 2000 temperature transducer or analog sender. | |
| Fuel tank level does not display. | Requires fuel level sensor or analog sender. |] |
| No "Fuel Econ". (Mercury only) | Requires input from SmartCraft GPS. | |

Note: The tachometer harness of the MG3000 network must be connected to the network using the device port of a t-connector. Misaligned t-connectors can cause the network power supply fuse to blow and disrupt or eliminate communications in the system.

| Observation | Possible Cause | Procedure |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Instrument display is erratic. | Power supply battery voltage is less than 11.5V. One or more terminators are missing from the network. | Check for a minimum 11.5 V across the terminals of the power supply battery. Check for installation of two terminators on the network. Check network bus cable and device connections. |
| Gauge repeatedly reset to factory defaults. | If this occurs during heavy power use possible poor battery condition exists. | Check system supply battery voltage with engine running. Check ignition and ground connections on pins 4 and 5 of the tachometer. |

Need help!Call our exclusive Chaparral Dealer Help Line.



MG3000 Wiring Diagram - WD0095

