

INSTALLATION INSTRUCTIONS

ANGLE RINGS

For 2%" and 2%" Gauges and Gauge Panels MODELS 2234, 3244



In-Dash Installation

- 1. Angle Rings (Model 2234) are designed to mount 2 1/16" gauges in a 21/8" diameter hole. Angle Rings (Model 3244) are designed to mount 2 5/8" gauges in a 2 23/32" diameter hole. These hole sizes allow the gauge to be positioned in any orientation. The hole may be either a hole in the dash or a gauge panel.
- Attach gauge wiring connections before mounting gauge into mounting hole.
- Secure the gauge in the hole using the mounting brackets, nuts and lock washers provided. All installations will require that the brackets be modified for the final chosen viewing angle of the gauge and angle ring. For details, see mounting bracket modification instructions below.

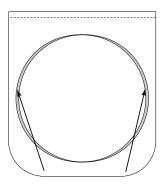




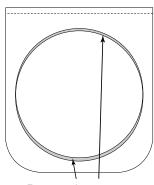
In-Panel Installation

When mounting angle rings into one of Auto Meter's Gauge Panels (Models 2236, 2237, 2238, 3231, 3232, or 3233), the panel will need to be modified to allow the gauges and angle rings to fit properly.

- Widen the hole openings on the gauge panels. This will allow the gauges to be inserted at an angle. The modifications shown to the right will allow the gauges to be angled left, right, up or down. The area of the gauge panels that need to be removed will depend on the final viewing angle.
- Modify brackets, (for details, refer to next page). All installations will require bracket modification for final fit.
- Secure the gauge in it's hole using the mounting brackets, nuts and lock washers provided.



Remove these areas if gauges tilt LEFT/RIGHT



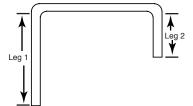
Remove these areas if gauges tilt UP/DOWN

Mounting Bracket Modifications

In order to install the angle ring the mounting bracket needs to be altered. How it is altered depends on the direction the gauge is intended to face. In order for the gauge to be tilted up or down, the legs of the bracket must be cut at an angle (Fig. 1). For a left or right tilt, the legs of the bracket must be cut straight, with one side shorter than the other (Fig. 2). Use templates provided below for accurate alterations.



Bracket Type	Leg 1 Height	Leg 2 Height
2 %"	1.12"	1.12"
2 1/16"	1.16"	1.16"



Bracket Type	Leg 1 Height	Leg 2 Height
2 %"	1.40"	.64"
2 1/16"	1.38"	.79"

Fig 1. For Up/Down modifications

side view

15°

Fig 2. For Left/Right modifications

Using Bracket Templates

- Carefully cut out the template needed and lay it face up on a hard surface. It is suggested to make a copy of this page in order to keep the original template.
- Place the bracket on the template, being sure to line up the holes on the bracket with the circles on the template.
- Lift up the ends of the template and mark the bracket where the template ends with a fine point marker or scribe.
- 4. Cut bracket as needed.

NOTE: Consider the dashboard or panel thickness when measuring brackets.

For 2-1/16" gauges:

Use template A to tilt the gauge up or down and 45° to the left or right.

Use template B to tilt the gauge straight up or down.

Use template C to tilt the gauge to the left or right.

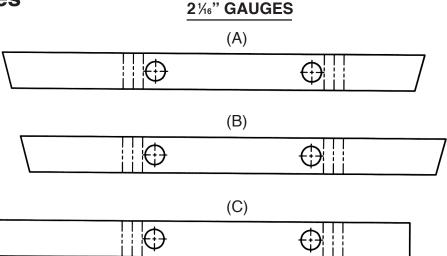
For 2-5/8" gauges:

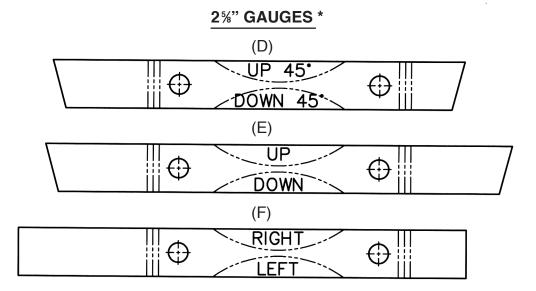
Use template D to tilt the gauge up or down and 45° to the left or right.

Use template E to tilt the gauge straight up or down.

Use template F to tilt the gauge to the left or right.

*NOTE: For the 2-5/8" gauges be sure to correctly line up the grooves in the center of the bracket, taking note of whether you want it tilted up or down.





AUTO METER GAUGES CAR GAUGES