



# A. C. D.®



(Anti-Cant Device)

- G 1 Inch - Black
- G 30 mm - Black
- G 34 mm - Black
- G 35 mm - Black
- G 1 Inch - Silver
- G 30 mm - Silver

## INSTALLATION & USE INSTRUCTIONS

**CONGRATULATIONS!**

Your new **ACD** is enclosed, providing you with the finest in state-of-the-art accuracy shooting accessories. The **ACD** will prevent any “cant” in your scope that would create accuracy robbing changes in your elevation and windage cross-hair settings.

**IMPORTANT:**

**READ THESE MATERIALS  
BEFORE**

**YOU USE THIS PRODUCT!**



Anti-Cant Device

**Never** completely disassemble **A.C.D.** products. Disassembly of **A.C.D.** products will void all warranties. Some **A.C.D.** models contain small parts & springs that may cause injury if improperly released. If repairs or adjustments are required, return your **A.C.D.** product to Mounting Solutions Plus.

Your **A.C.D.** mount is pre-adjusted for your weapon. If you face unique adjustments, ask your dealer to ship your firearm to Mounting Solutions Plus for adjustment of your **A.C.D.** mount. Otherwise, **never** attempt to re-adjust your mount. Improper adjustment can damage your **A.C.D.** mount, your scope, or your firearm. Re-adjustment of **A.C.D.** mounts by anyone other than Mounting Solutions Plus will void all warranties.

**A.C.D.** products should **only** be installed by a competent gunsmith or armorer. Improper installation may result in damage to your scope or **A.C.D.**, and will void all warranties.

Any alteration or misuse of any **A.C.D.** product voids all warranties.

**Never** attempt to attach **A.C.D.** to your weapon, or detach **A.C.D.** from your weapon, with a cartridge in the chamber. **Always** unload your weapon first.

**Always** avoid lethal situations whenever possible. Products such as **A.C.D.** are intended to improve shooting capabilities, but no product can fully protect the user from injury or death in a firefight. The knowing involvement in a potentially lethal situation, which could be avoided, will constitute an assumption of the known risks of engaging in a lethal situation.

**Never** violate these rules. Firearms are lethal and destructive devices. Violation of these warnings or misuse of any **A.C.D.** product may result in injury or death to the user or to others.

**IN OTHER WORDS:**

**USE SOME COMMON SENSE!!!**

**MOUNTING SOLUTIONS PLUS  
IS NOT RESPONSIBLE FOR  
YOUR MIS-USE OF  
**A.C.D.** PRODUCTS.**

## The Effects Of Cant

“Cant” is the result of a rifle being held off the perfect vertical plane in which it was zeroed. Cant results in rotation of the sights off the true vertical plane. Experienced shooters recognize that only a minor cant in a rifle can result in huge accuracy errors at longer ranges.

Scopes are zeroed so that the cross-hairs are in true vertical and horizontal planes. This is critical so that vertical or horizontal adjustments effect a single plane only. In other words, it is important that, if you try to move the cross-hairs 1 minute of angle left or right, the cross-hairs move only left and right and have no vertical change at all.

A scope is never mounted in the same plane as the bore of the barrel, instead sitting an inch or more above the bore. If the weapon is canted slightly to one side, while the weapon may rotate around the bore, it does not rotate around the center of the cross hairs. As such, canting the weapon changes the point of impact shown in the cross-hairs. While the weapon may appear to be perfectly zeroed, the cross-hairs may actually point to a spot above or below, and left or right, of the actual aiming point.

The effect can be drastic. For example, at 1,000 yards, a .30 caliber bullet, fired from a rifle canted only 6 degrees (visualized as only one minute on the face of a clock) will miss the point of aim by 55 inches -- almost 5 feet. Even at close ranges, a 6 degree cant at 100 yards can cause a ½ inch miss.

The problem is that a 6 degree cant -- one minute on a clock face -- is so small that it may not be seen by the shooter, who may instead believe the weapon is held in a perfect “no cant” hold.

The **A.C.D.** solves that problem. So long as the **A.C.D.** is mounted with the scope perfectly vertical, the **A.C.D.** will tell you when the weapon is canted. You can then simply return the rifle to a perfect vertical hold and shoot, safe in the knowledge that the cross-hairs are properly aligned on the correct point of aim.

**Additional Bullet Drop**  
A Matrix Representing The Additional Bullet Drop Caused By Varying Degrees Of Cant

Cant Angle	"Normal" Bullet Drop																			
	1"	2"	4"	8"	16"	32"	64"	128"	256"	512"	1"	2"	4"	8"	16"	32"	64"	128"	256"	512"
0°	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"	0.00"
½°	.004"	.009"	.017"	.035"	.070"	.140"	.279"	.558"	1.117"	2.234"	.008"	.017"	.035"	.070"	.140"	.279"	.558"	1.117"	2.234"	4.468"
1°	.018"	.035"	.070"	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"	.017"	.035"	.070"	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"
1½°	.026"	.052"	.105"	.209"	.419"	.838"	1.675"	3.351"	6.701"	13.40"	.026"	.052"	.105"	.209"	.419"	.838"	1.675"	3.351"	6.701"	13.40"
2°	.035"	.070"	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"	17.87"	.035"	.070"	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"	17.87"
3°	.052"	.105"	.209"	.419"	.838"	1.675"	3.351"	6.701"	13.40"	26.80"	.052"	.105"	.209"	.419"	.838"	1.675"	3.351"	6.701"	13.40"	26.80"
4°	.070"	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"	17.87"	35.72"	.070"	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"	17.87"	35.72"
5°	.087"	.174"	.349"	.697"	1.394"	2.789"	5.578"	11.156"	22.311"	44.624"	.087"	.174"	.349"	.697"	1.394"	2.789"	5.578"	11.156"	22.311"	44.624"
6°	.105"	.209"	.419"	.838"	1.675"	3.351"	6.701"	13.40"	26.80"	53.52"	.105"	.209"	.419"	.838"	1.675"	3.351"	6.701"	13.40"	26.80"	53.52"
7°	.122"	.244"	.487"	.975"	1.950"	3.900"	7.800"	15.60"	31.2"	62.40"	.122"	.244"	.487"	.975"	1.950"	3.900"	7.800"	15.60"	31.2"	62.40"
8°	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"	17.87"	35.72"	71.26"	.140"	.279"	.558"	1.117"	2.234"	4.468"	8.936"	17.87"	35.72"	71.26"
9°	.156"	.313"	.626"	1.251"	2.503"	5.006"	10.011"	20.022"	40.044"	80.088"	.156"	.313"	.626"	1.251"	2.503"	5.006"	10.011"	20.022"	40.044"	80.088"
10°	.174"	.349"	.697"	1.394"	2.789"	5.578"	11.156"	22.311"	44.624"	88.91"	.174"	.349"	.697"	1.394"	2.789"	5.578"	11.156"	22.311"	44.624"	88.91"
15°	.259"	.517"	1.035"	2.071"	4.141"	8.282"	16.564"	33.128"	66.256"	132.512"	.259"	.517"	1.035"	2.071"	4.141"	8.282"	16.564"	33.128"	66.256"	132.512"
20°	.342"	.684"	1.368"	2.736"	5.472"	10.944"	21.888"	43.776"	87.552"	175.104"	.342"	.684"	1.368"	2.736"	5.472"	10.944"	21.888"	43.776"	87.552"	175.104"
30°	.500"	1.000"	2.000"	4.000"	8.000"	16.000"	32.000"	64.000"	128.000"	256.000"	.500"	1.000"	2.000"	4.000"	8.000"	16.000"	32.000"	64.000"	128.000"	256.000"
45°	.707"	1.414"	2.828"	5.657"	11.314"	22.628"	45.256"	90.512"	181.024"	362.048"	.707"	1.414"	2.828"	5.657"	11.314"	22.628"	45.256"	90.512"	181.024"	362.048"

**Example:** A 55 grain .223 round at a 3,200 feet per second muzzle velocity and zeroed for 100 yards will drop roughly 64 inches at 475 yards. A 5 degree cant will cause the bullet to drop an additional **6.578** inches, or over 1 minute of angle.

## INSTALLATION & USE



Step 1 - Place rifle in padded vise, remove the scope, and level the action.



Step 2 - Install the **A.C.D.** on the scope but leave it loose enough to turn.



Step 3 - Install the scope on the rifle and level the scope to match the level of the action.



Step 4 - Rotate the **A.C.D.** to match the level of the action and the scope.



Step 5 - Tighten the **A.C.D.** screws equally, one-half turn each, alternating until the **A.C.D.** is locked on.



To use, simply watch the **A.C.D.** when adjusting the bipod legs to remove cant. Simply center the bubble to keep the cross-hairs perfectly vertical.

## WARRANTY & DISCLAIMER

THERE IS NO WARRANTY, REPRESENTATION OR CONDITION OF ANY KIND FOR *A.C.D.* PRODUCTS; AND ANY WARRANTY, EXPRESS OR IMPLIED, IS SPECIFICALLY EXCLUDED AND DISCLAIMED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE.

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*A. C. D.*®

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