



**Trusted • Responsive • Versatile • Refined**

Stiletto Steering has been a prominent leader in precision steering components in many types of racing for over 4 1/2 decades. The wide selection of purpose built steering boxes are known for their smooth "Swiss Watch" movement and ease of use. The combination of proven

designs, precision machining of premium grade materials, coupled with meticulous inspection and finish assembly processes have delivered many racers into the winners circle.

**Stiletto Gen 2 Pro-Box**

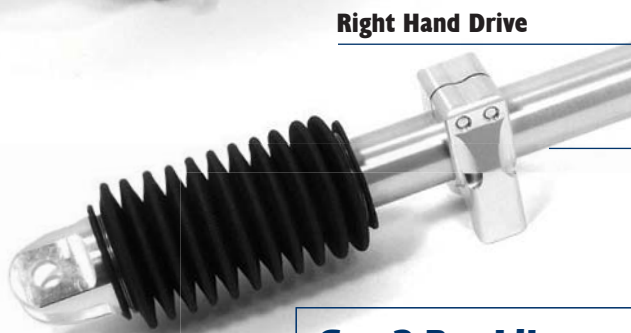
Considered the finest in the industry, the Stiletto Pro-Box is specifically designed for drag racing's full-bodied vehicle categories. The recently re-engineered housing is precision machined of ultra tough billet 2024-t4 aircraft aluminum. The complete assembly tips the scale at 5 1/4 pounds.



**Left Hand Drive**

**20:1 Ratio**

**Heat Treated Aerospace Pinion**



**Right Hand Drive**

**Heat Treated Chromoly Rack**

Now available in several standard lengths from 24 1/2" to 19 1/2" in one-inch intervals.

**Gen 2 Pro-Lite**

This Black Box version of the Gen 2 Pro-Box is the lightest professional grade steering box on the planet.



**Professional Drag Racing Only**

24 1/2" unit weighs under 4 1/2 pounds complete

**Stiletto Steering Systems are Proudly crafted here in the USA**

**Pinion Coupler Options**



**Straight**

**Split Bolt**

**Dual Lock**

**...From Stiletto Users:**



*"I will never use any other rack and pinion in my cars. We have used Stiletto Rack & pinions in our cars for over 20 years. Our customers want the best, we give them the best."*

**Jim Geese/R2B2 Race Cars**

## Dwarf / Mod-lite Heavy Duty Steering Boxes

These Heavy Duty units are the proven winners circle choice for Dwarf / Mod-lite class cars, and are well suited for many other applications requiring a heavy duty steering box.

**10:1 Ratio**

**Side Mount**

**Custom Length**

**1 1/8" diameter Chromoly Rack**

**Stud Mount**

**2024-T4 Aircraft Aluminum Housing**



Combination of 3 and 4 Stud mounting. ARP High Strength 12 point fasteners are standard.



Lifetime Boots – Unique Neoprene Woven/Nylon boots outlast conventional rubber and are secured with double wrapped stainless steel wire.

### Steering Ratio Defined

The overall ratio of a steering system is determined by the degree of the movement of the front wheels in relation to one turn of the steering wheel. One turn of the steering wheel (360°) divided by 30° tire movement would have an overall ratio of 12 to 1 (360/30).

This overall ratio will be determined by the length of the rack movement

created by one turn of the pinion and the length of the spindle arm that the tie rod connects to. A shorter steering arm will make the overall ratio smaller numerically (faster steering), and a longer arm will make the overall ratio larger numerically (slower steering).

For reference purposes, the ratios that we list are calculated using a spindle arm length of 5 inches. This

is the distance measured from the center of the spindle king pin axis to the center of the mounting hole for the tie rod.

- 20 : 1 = 1.570" of travel in 1 rotation
- 15 : 1 = 2.094" of travel in 1 rotation
- 12 : 1 = 2.618" of travel in 1 rotation
- 10 : 1 = 3.141" of travel in 1 rotation
- 6.4 : 1 = 4.712" of travel in 1 rotation

**Car Builder Direct... the Proven Stiletto Steering System designs have evolved through close working relationships to fill both car builders and race teams needs.**

### ...From Stiletto Users:

*"I'd just say that the Stiletto Racks are darn near bullet proof. They do take some very hard hits and continue to give long lasting quality service."*

Darrel Lewis/NXS Motorsports



*"Our record-setting suspension kits utilize Stiletto Gen 2 racks for their unmatched quality, effortless turning and ultra-light weight".*

Kody Schendel/Racecraft Inc,

## Small Box Series Rack and Pinions

The Stiletto Steering Systems Small Box is very versatile and used extensively in Drag Racing. The lightweight compact design is known for the smooth "Swiss Watch" movement. With several ratios and rack lengths to choose from this is a great solution for many lightweight applications.

**12:1, 15:1 and 20:1 Ratios**



Available with either Steel or Aluminum Rack  
(for lightweight Dragster use only).

Assemblies are available with choice of Clevis ends or Aurora VCM Rod ends

## Fast-Ratio Small Box with Magnum Housing

The perfect choice for lightweight applications that require very fast and responsive steering. The recently updated Magnum housing is 35% stronger, without weight penalty. The increased rigidity and torsional stiffness provides a stronger foundation for long lasting gear alignment in abusive applications.

**6.4:1 Ratio**



Precision Pinion is now Drilled for weight reduction



3 lbs. total weight

2024-T4 Aircraft Aluminum Housing

"Side Mount" (shown) or base "Stud Mount"

Available with choice of Clevis ends or Aurora VCM Rod ends

Discriminating race car builders and specialty "OEM's" have selected Stiletto Steering System components as standard equipment on their vehicles for good reason. Steer with confidence, insist that your new car is outfitted Stiletto Steering Systems.



"I choose Stiletto Steering Components because I trust they will deliver me quickly and safely into victory lane".  
Scott Weny /S&W Race Cars

# Stiletto

STEERING SYSTEMS *News!*

## Stiletto Ultra Spindles

Stiletto Steering System components feature impeccable detail and are the best value in racing.

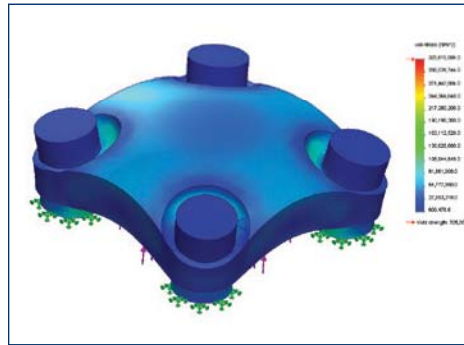
*Proudly crafted right here in the USA.*



**Stiletto Ultra Spindles are the best choice in Drag Racing for a reason...**



The Heat Treated Chromoly Spindle starts life with and American produced forging. Each Spindle is individually hardness tested and 100% Magnaflux inspected.



Extensive FEA evaluation and testing supports Stiletto designs.



Ultra Spindles are available in either the Standard or Lightened version (or Dragster use only).



Rifle drilled 8620 Kin pins are hardened and ground for wear resistance and feature a set screw flat for positive locking.



Proprietary PTFE bushings and thrust washers provide superior durability and smoother steering.

ARP High Strength 12 point fasteners are standard for ultimate connection point strength.



Domed Aluminum Cap	Black Anodized Aluminum Cap	Aluminum Tow Cap
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## Chromoly Steering Arms

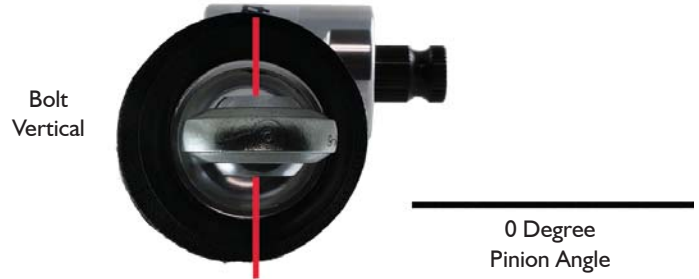
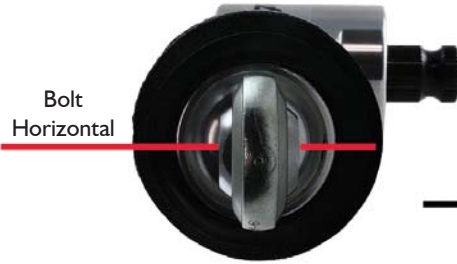
Large selection of sizes enables you to meet individual response requirement. Available in 4 1/2", 5", 5 1/2", 6" and 6 1/2" Lengths.

## Clevis and Rod End Orientation

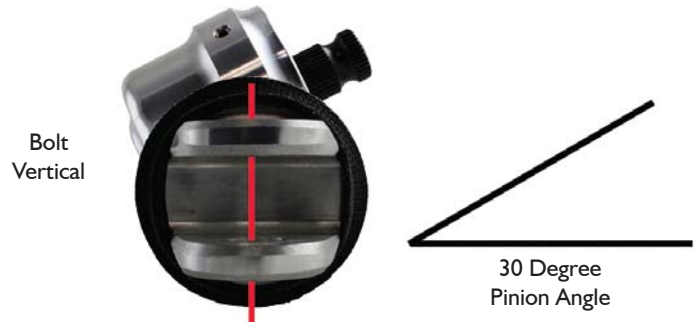
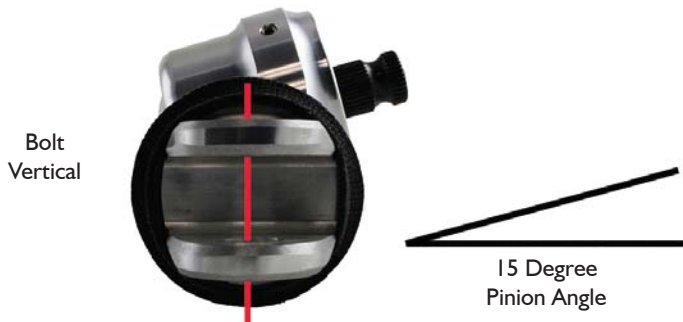
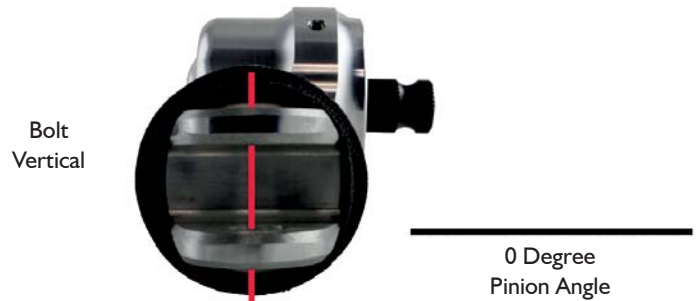
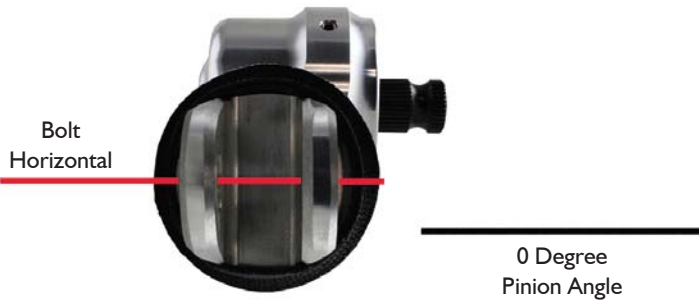
Can be factory positioned to fit any application.

These are our most popular Clevis and Rod End configurations.  
Custom orientation is also available to meet your specific requirements on request.

### Small Box with Rod End



### Small Box with Clevis



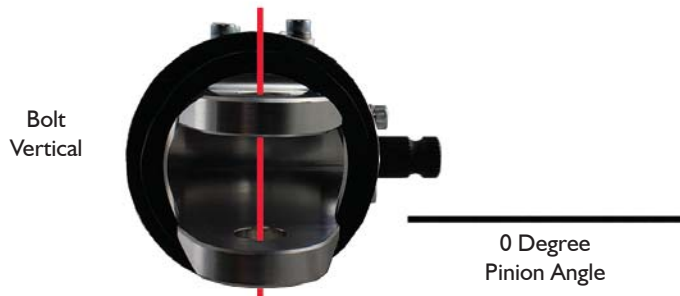
## Clevis Orientation

Can be factory positioned to fit any application.

These are our most popular Clevis configurations.  
Custom orientation is also available to meet your specific requirements on request.

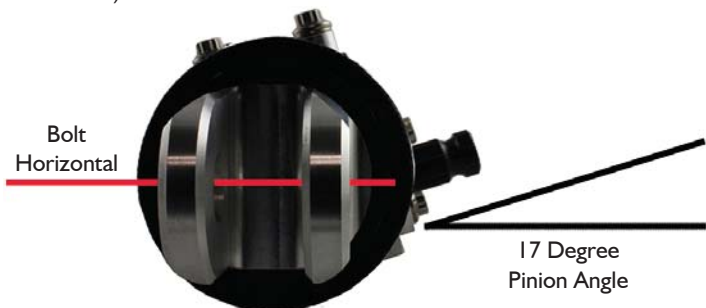
### Gen 2 Pro-Box

(Available only with Clevis)



### Dwarf/Mod-Lite Box

(Available only with Clevis)





### The Forged Advantage

Stiletto Ultra Spindles are forged from Chromoly and heat-treated to provide maximum strength.



ARP bolts provide the ultimate connection point strength.

# The 'Swiss Watch' of Rack and Pinions

## Stiletto STEERING SYSTEMS



Gen 2 Pro-Box shown

# Stiletto The Standard of Excellence



Life starts as a block of tough 2024-T4 billet aluminum.



The gear box housing is a masterpiece of precision CNC machining.



The rack and pinion are crafted of premium heat-treated alloy and exceed AGMA specs.



**World's Best Performance Steering**

The trusted finished assembly is known for smooth "Swiss Watch" movement and ease of use.

## Built Without Compromise in the USA

Engineering, materials and craftsmanship are second to none. We charge only a little more to build Stiletto this way, but we think you will agree the performance advantages and piece of mind are worth it.

Stiletto's efficient aerospace spur gear pinion rolls effortlessly on sealed ball bearings.

Stiletto's nylon interwoven neoprene boots are durable.



Tough 2024-T4 billet aluminum throughout.

Gen 2 Pro-Box weighs only 5 1/4 pounds.

The competitor's helical pinion is forced into the rack resulting in undesirable resistance by design.

The competitor's molded boots are easily torn.



### BRAND X

Cast aluminum housing.

The competitor's weighs 12 pounds.

# Stiletto

STEERING SYSTEMS

"The Industry Leader Since 1973"

## Purpose Built

Tom Bailey, Owner/Driver  
SICK SECONDS 2.0  
2015 HOT ROD Drag Week Winner



*"The best steering out there!"*

### Fast Ratio

6.4:1 ratio

The perfect choice for lightweight applications requiring very fast and responsive steering. The Magnum housing provides increased rigidity and torsional stiffness for long lasting gear alignment in abusive applications.



### Dwarf/Mod-lite

10:1 ratio

A proven winner for Dwarf / Mod-lite cars, these are well suited for many applications requiring a heavy duty steering box.



### Small Box

12:1, 15:1 or 20:1 ratios

This compact design is a versatile and popular solution for many lightweight applications. Available in several ratios and rack lengths.



### Gen 2 Pro-Box

20:1 ratio

Designed specifically for drag racing's full-bodied vehicle classes. The complete assembly only weighs 5 1/4 pounds.



Also available in  
Left Hand Drive

Proudly Made  
in the USA



Tim Fleenor, Crew Chief  
BIG RED CAMARO  
The Original Outlaw Racer

*"Unlike others, we like that it steers effortlessly and there is no need for the complication of power steering. It's one of the components that has performed flawlessly in Big Red."*