

Advanced

RACING SUSPENSIONS



1698 Midwest Blvd.
Indianapolis, IN 46214
317.271.7100



open wheel catalog

SHOCKS

1000 SERIES

Small Body Twin-Tube

The 1000 series shock is a small body twin-tube that uses CNC machined aluminum internal parts designed for racing with no aftermarket parts. We utilize aluminum billet pistons and base valve assemblies to provide the most consistent performance. The 1000 Series shock has a hard black anodized aluminum body machined with a coarse thread for a coil-over adjustable nut and for increased cooling efficiency. We have a special valving that has been developed for each class of open wheel cars. We have generic valvings (for example a #3 or #5), but we are best known for each person being able to have their own personalized valving depending on chassis design, weight of car and tires that are required for the particular class they compete in. The small body shock accepts 1 7/8", 2 1/4" and 2 1/2" ID Springs and is available in 5", 6", 7", 8" and 9" shaft lengths.



2000 SERIES

Large Body Twin-Tube

The 2000 series shock is very similar to our 1000 series shock. The biggest difference being, the 2000 series shock is made from a large body instead of a small body. This creates more room for the oil capacity creating maximum cooling efficiency. We have a special valving that has been developed for each class of open wheel cars. We have generic valvings for example a #3 or #5, but we are best known for each person being able to have their own personalized valving depending on chassis design, weight of car and tires that are required for the particular class they compete in. The Large Body accepts 2 1/4" and 2 1/2" ID Springs and is available in 5", 6", 7", 8" and 9" shaft lengths. This shock is recommended for the rear corners of dirt sprint cars and silver crown cars.



****All Shocks are available in adjustable or non-adjustable, and standard straight valvings or split valvings.****

3200 SERIES

Small Body Mono-Tube



The 3200 Series small body gas shock is designed specifically for open wheel racing. The latest piston design allows us to change the flow for each corner of the race car to match the different valvings required on each particular corner.

We have a special valving that has been developed for each class of open wheel cars. We have generic valvings (for example a #3 or #5), but we are best known for each person being able to have their own personalized valving depending on chassis design, weight of car and tires that are required for the particular class they compete in.

This shock has always had the most efficient base valve design to allow for the lowest gas pressure required. Most small body gas shocks have too much rod pressure which removes driver feel and causes the race car to feel like it is on top of the race track instead of gripping the track. Maximum traction is obtained because pressure build up is dramatically reduced with the use of low rod pressure.

The 3200 Series shock contains both rebound and compression check valves to ensure no bleed-over when adjusting the rebound dampening. The compression bleed valve allows the racer to create the low speed compression dampening for maximum traction.

Small Body Mono-Tube W/ Canister

This shock has all the internals of the non-canister shock with the advantage of more oil capacity and less pressure build up. Maximum grip is developed with the use of lower rod pressure. The floating piston is located in the remote canister. This allows for substantial reduction of rod pressure.

When track conditions change and tires heat up, you begin to lose grip due to the increasing pressure in shocks with high pressure. The 3200 Series Canister Shock provides more consistent race car performance from the first lap to the end of the race by greatly decreasing spring rate build up in your shocks.

Banjo swivel hose ends with #5 braided hose allows for easy mounting of the remote canister. Quick release canister clamps are available or frame mount from 1" to 1 3/4" OD tubing or the canister can be attached to the Shock body with the Piggy Back Canister clamp.



Small Body Mono-Tube Double Adjustable W/ Canister

The ultimate small body double adjustable mono-tube shock allows the racer to adjust the rebound and compression dampening completely independently.

The 3200 series shock allows for the rebound to be adjusted at the eye of the shock and the compression to be adjusted at the remote canister of the shock.

This shock can be built cockpit adjustable for both rebound and compression.

The compression reservoir tapered needle allows for fine tuning of the

low speed compression dampening. The high speed compression

is controlled through the 2 stage by-pass in the remote canister.

This shock will eliminate the need for extra shock inventory by

creating one shock for each corner of your car.



SHOCKS

SPRINGS

AND BUMP RUBBERS

ARS has designed a complete line of springs that are not only very accurate in spring rate but are also consistent in free length. Even more important, the line of springs have a very constant spring frequency.

The gloss black powder coated springs are manufactured from the highest quality chrome silicone material and shot peened and preset to ensure the springs accuracy. The complete line of coil springs was designed to be as light as possible and still provide a smooth response through the irregularity in the race track.



1 7/8" ID SPRING

4" Tall	8" Tall	10" Tall
4 x 000	8 x 060	10 x 080
4 x 015	8 x 080	10 x 095
4 x 025	8 x 095	10 x 105
4 x 050	8 x 105	10 x 115
	8 x 115	10 x 125
	8 x 125	10 x 140
	8 x 140	10 x 150
	8 x 150	10 x 165
	8 x 165	10 x 175
	8 x 175	10 x 185
	8 x 185	10 x 200
	8 x 200	10 x 225
		10 x 250
		10 x 275
		10 x 300
		10 x 325
		10 x 350

BUMP RUBBERS

The use of a bump rubber on the left rear shock can be a huge tuning tool, especially on winged cars. The bump rubber is used to eliminate the left side frame rail from bottoming out on corner entry. It also helps to get weight transferred back to the right rear for better side bite. The bump rubber can be used on corner exit as well to create forward bite especially on fast tracks. Adding 1/8" spacer allows you to adjust how fast you get into the bump rubber.



ARS # 600429
1 1/8" Red Ribbed
Bump Rubber



ARS # 600420
1 5/8" Red Ribbed
Bump Rubber



ARS # 600421/
200-219 @1"
ARS # 600423/
220-239 @1"
ARS # 600425/
240-259 @1"
Red Ribbed
Bump Rubber



ARS # 600441/
300-319 @1"
ARS # 600443/
320-339 @1"
ARS # 600445/
340-359 @1"
Black Ribbed
Bump Rubber



ARS # 600417
2.125" OD x .125"
Thick Aluminum
Washer
ARS # 60050
1.625" OD x .125"
Thick Steel Washer



ARS # 60048
1/8" Split
Spacers
ARS # 60049
1/8" Split
Spacers
(10 Pack)



ARS # 60046
Aluminum
Cup



ARS # 600426
Bump Rubber
Assembly
For 6" Stroke Shock



ARS # 600427
Bump Rubber
Assembly
For 7" Stroke Shock



ARS #61001
A-Model
Cockpit Adjustable



ARS #61004
A-Model REVERSE
Cockpit Adjustable



ARS #61006
A-Model W/ KNOB



ARS #61020
B-Model
Cockpit Adjustable



ARS #61019
B-Model W/ KNOB



ARS #61040
E-Model
Eye Adjustable

MODELS OF ADJUSTABLE SHOCKS

A Model— Cockpit adjustable which has the cable adjuster parallel to the mounting bolt.

B Model— Cockpit adjustable which has the cable 90° to the mounting bolt.

E Model— Nine position adjustable that adjusts at the eye of the shock without removing the shock from the chassis. This is not cockpit adjustable.

ARC— Cockpit Adjustable shock which adjusts both rebound and compression at the same time in proportional ratios. The cable adjuster is parallel to the mounting bolt.

BRC— Cockpit adjustable shock which adjusts both rebound and compression at the same time in proportional ratios. The cable adjuster is 90° to the mounting bolt.

ERC— Nine Position adjustable that adjusts at the shock eye without removing the shock from the chassis. This shock adjusts both rebound and compression at the same time in proportional ratios.

E/C— Double Adjustable Gas Shock that adjusts the rebound dampening at the shaft eye of the shock. The compression dampening has a 12 position adjuster in the remote canister.

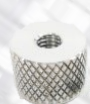
B/C— Double adjustable gas shock which adjusts rebound dampening with a cockpit adjustable cable. The compression dampening has a 12 position adjuster in the remote canister.



Non-Adjustable Eye
1/2" Shaft ARS #10052
9/16" Shaft ARS #20052
Steel Eye ARS #20072



Non-Adjustable
1" Extended Eye
1/2" Shaft ARS #10053
9/16" Shaft ARS #20054



ARS #61017
Knob for A & B Eye



ARS #61198
O-Shit Kit



ARS #10043 & #30043
2-Step Kit



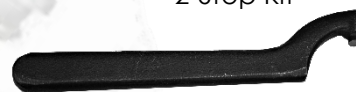
ARS #175
2-Step Sleeve



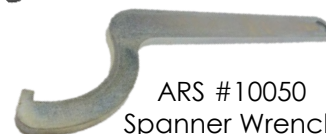
ARS #10100 & 30100
Cone Style Coil-Over Kit
Individual:
Cone Spring Seat #10108
Adjuster Nut 10110 or 30110



ARS #10101 & 30101
Flat Style Coil-Over Kit
Individual:
Spring Seat #10109
Adjuster Nut #10110 or 30110



ARS #10049
2-Step Spanner Wrench



ARS #10050
Spanner Wrench



ARS #10120
1 7/8" Diaper Pin



ARS #60008
Reducer Bushings
1/2" to 3/8"



SHOCK EYES AND

COIL-OVER KITS

HARDWARE



ARS #32067
Shock Cover
(Pair)



ARS #32065
Carbon Fiber
Shock Cover



ARS #60012
High Angularity
Steel Spacers (1/2" ID)



ARS #60002
Bearings
(1/2" Bearing w/
injected Liner)



ARS #61034
Weld on Bracket for
Adjustable Cable Knob



ARS #32122 Revalve Kit for 3200 Series:

- j(5) 20A Shims
- (5) 15A Shims
- (5) 12A Shims
- (5) 10A Shims
- (5) 20B Shims
- (5) 15B Shims
- (5) 12B Shims
- (5) 10B Shims
- (5) 8B Shims
- (5) 20C Shims
- (5) 15C Shims
- (5) 12C Shims

- (5) 10C Shims
- (5) 8C Shims
- (5) 20D Shims
- (5) 15D Shims
- (5) 12D Shims
- (5) 10D Shims
- (5) 20E Shims
- (5) 15E Shims
- (5) 12E Shims
- (5) 10E Shims
- (5) 20F Shims
- (5) 60F Shims

- (10) .001 Pre-Load Shims
- (10) .002 Pre-Load Shims
- (10) .003 Pre-Load Shims
- (10) .005 Pre-Load Shims
- (2) Rod Seals
- (2) Bushings
- (2) Bleed Screws for Closure Nut
- (4) Piston O-Rings
- (4) Closure Nut O-Rings
- (6) Rebound Check Valve O-Rings
- (6) Inner Shaft Top O-Rings
- (4) Inner Shaft Bottom O-Rings
- (3) Compression Bleed Valves



ARS #40887
Gas Gauge
(100 PSI)
ARS #40882
(200 PSI)



ARS #40376
Piggy Back
Canister Clamp



Canister Clamp
1" ARS #40359
1 1/4" ARS #40360
1 3/8" ARS #40361
1 1/2" ARS #40362
1 3/4" ARS #40363



Cables for Adjustable Shocks
are available in sizes

W/ Knobs & W/O Knobs:

- | | |
|---------------|--------|
| 3' #61055 | #61075 |
| 3 1/2' #61056 | #61076 |
| 4' #61057 | #61077 |
| 4 1/2' #61058 | #61078 |
| 5' #61059 | #61079 |
| 5 1/2' #61061 | #61080 |
| 6' #61062 | #61081 |
| 6 1/2' #61063 | #61082 |



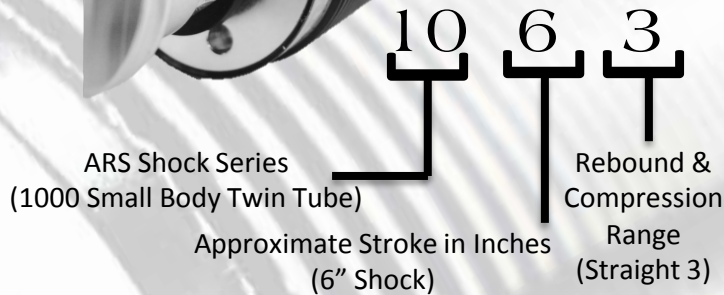
ARS #32065
Shock Oil
(1 Gal.)



Adjuster Knob Decals:

The Red decal is used when you have a "A-Model REVERSE Eye" on your shock. Counter clockwise will increase your Rebound or Compression depending on your shock valving.

The black decal is our standard decal. It's used on all adjustable shocks EXCEPT for "A-Model Reverse Eyes" Clockwise will increase your Rebound or Compression depending on your shock valving.



A 3 2 6 4-.0 2 5 /3

Type of Shock Eye

Note: If shock eye has been changed outside of ARS this letter may be incorrect.

ARS Shock Series

Rebound Range

Approximate Stroke in Inches

Compression Range

Type of Shock Eyes:

- A A-Model
- B B-Model
- ARC A-Model that adjusts Reb. & Comp. at the same time
- BRC B-Model that adjusts Reb. & Comp. at the same time
- A/C Double Adjustable shock that uses A-Model to adjust Reb. & remote canister to adjust Comp.
- B/C Double Adjustable shock that uses B-Model to adjust Reb. & remote canister to adjust Comp.
- E/C Double Adjustable shock that uses E-Model to adjust Reb. & remote canister to adjust Comp.
- E E-Model

Shock Series:

- 10 1000 Small Body Twin Tube
- 11 1100 Small Body Twin Tube
- 20 2000 Large Body Twin Tube
- 22 2200 Large Steel Body Twin Tube
- 30 3000 Small Body Double Adjustable
- 32 3200 Small Body Mono Tube
- 33 3300 Small Body Mono Tube
- 34 3400 Small Body Mono Tube
- 40 4000 Large Body Double Adjustable
- 42 4200 Large Body Mono Tube
- 55 5500 Quarter Midget
- 72 7200 Large Steel Body Mono Tube

Approximate Stroke:

- 4 4" Stroke
- 5 5" Stroke
- 6 6" Stroke
- 7 7" Stroke
- 8 8" Stroke
- 9 9" Stroke
- 10 10" Stroke

Rebound Range & Compression Range
Numbers will vary depending on your shock valving

Please Note:

- Older shocks may have different numbers that are not explained
- On a Non-Adjustable Split Valve Shock, the Reb. Dampening is always before the "/", the Comp. dampening is always after.
- Only Split Valve Shocks have a "/"

THE SYSTEM



Advanced

RACING SUSPENSIONS

1698 midwest blvd.
indianapolis, in 46214
317. 271.7100

LOOKS ARE DECEIVING

Over the years A.R.S. has always focused on building the highest quality racing shocks possible. Many improvements have been made in shock technology in the past six years and even in the past six weeks.

Things are always changing and it is necessary for competitive racers to be on top of those changes. Just because you have a shock body that looks similar to a new shock body, don't assume that they are the same inside. A.R.S. does not change the color of the shock body to fool their customers into buying a new shock. The shock body is only the skin. The heart of the shock is the pistons, base valve, check valves, etc. that create the valve curves. All of our shock's valve curves and internal parts have gone through updates over the years and some even the last few weeks.

Your older A.R.S. shocks can be updated to the latest valve curves. Make sure you're A.R.S. black anodize body has the latest build because **what's inside makes the difference on the track.**



WWW.ADVANCEDRACINGSUSPENSIONS.COM