

1698 Midwest Blvd. Indianapolis, IN 46214 317.271.7100



5500 Series Quarter Midget Shock

The M1 Piston has allowed us to create a shock that is all around superior in today's quarter midget suspension market. We have been able to create a more consistent shock, especially through the long runs.

We are able to control the flow by placing set screws into the holes on the compression and rebound side of the piston allowing us to keep a consistent and smooth valving curve throughout the shock.

Any previous ARS Shock can be updated to our latest valving with the M1 Piston.

We are continuously working to provide the best quarter midget shock available. The combination of a base valve design, which allows for very low rod pressure, and a check valve make the ARS quarter midget shock superior.

Air Valve

An Air Valve Shock allows for a more technical and precise suspension tuning curve. The Gas Pressure allowed in the shock will change the spring rate but allow all dampening ranges to remain the same. This allows for fine tuning but a certain amount of minimum pressure must be maintained in the shock at all times in order for the shock to work correctly. Example being a 1-3 valving on compression needs to maintain no less than 15psi and a 4 or higher on compression no less than 25psi.

A Non-Air Valve Shock is most common among our customers. This type of shock has no maintenance compared to the Air Valve shock. You do not need to set any pressures or check them between every race. They remain very consistent, allowing for you to bolt them on and go!

Non-Air Valve

Springs

ARS has designed a complete line of quarter midget 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 through the complete range of springs from 70 to 170 pounds. The entire line of springs has the same number of coil winds within $\frac{1}{2}$ of a turn. This creates a constant spring frequency when changing from one spring to another spring. Many inferior coil spring manufacturers use the same coil diameter in 4 sequential rates (Ex. 105-120) and just vary the number of coil winds. This system doesn't change the spring rate, but creates a very inconsistent response in spring change.

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.

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 ARS coil-over springs are available in the following rates:

5x050 5x100 5x130 5" long x 1 5/8" I.D. Springs 5x080 5x110 5x140

5x070

5x105

5x135

5x085 5x115 5x150 5x090 5x120 5x170

5X095 5x125

Shock Numbering System

The First number is Rebound, the Second number is Compression.

Example: 5501/3 is #1 on Reb. and #3 on Comp. **5503** is #3 on Reb. & Comp. 5504/3 is #4 on Reb. and #3 on Comp.

AV= Air Valve (shock has an air valve to change the gas pressure)

M1 = M1 Piston Installed Inside Shock

M1X = Valving curve that creates more grip

E= Extended Eye (Eye is $\frac{3}{4}$ " longer than standard)

R= Shock has soft rebound (#1 Valving)

S= Shorty Shock (Has a Shorter Body, Shaft & Eye)

The short shock eyes cannot be install on a standard length shaft. The standard length shock with a short eye will bottom out internally instead of externally causing damage to the shock. Extended shock eyes can be installed on all shocks.

Quarter Midget Shock Dimension Chart

Shock #	Description	Extended	Compressed	Actual Stroke
5500	Qtr Midget Std Eye	10.500	7.700	2.800
5500E	+3/4" Extended Eye	11.250	8.450	2.800
5500S	Shorty Model	9.25	9.950	2.300

Recommendations

Quarter Midget on Asphalt (250-295LBS. Classes)

Left Front: #3 Valving (baseline)

#4/3 (4 rebound /3 compression)
Frees the chassis up throughout the corner for tracks with a lot of grip.
#3R (same as 1 rebound /3 compression)
Tightens chassis up throughout the corner to create more side-bite.
#2/3 (2 rebound /3 compression)

Tightens chassis up throughout the corner to create more side-bite.

Left Rear:

#2/3 Valving (baseline)
#3 (3 rebound /3 compression)
Frees chassis up on entry and tightens chassis up on exit,
#4/3 (4 rebound /3 compression)
Frees chassis up on entry and tightens chassis up on exit.
#3R (1 rebound /3 compression)
Allows weight to transfer to RF corner and makes front end turn more positive.

Right Front: #3 Valving (baseline)

#4 (4 rebound /4 compression)

Tightens chassis on corner entry, but will turn better on exit.

#4/3 (4 rebound /3 compression)Frees the chassis up on corner entry and turns better on exit (for flat or slow tracks)#3/4 (3 rebound /4 compression)

Tightens the chassis more throughout the corner. (Great for high banked tracks.)

Right Rear:

#3 Valving (baseline)
#4 (4 rebound /4 compression)
Frees chassis up on entry and tightens chassis up on exit.
#4/3 (4 rebound /3 compression)
Tightens chassis throughout corner. (Best for track that is rough or has poor grip)
#3R (same as 1 rebound /3 compression)
Frees the chassis up throughout the corner
#3/4 (3 rebound /4 compression)
Frees the chassis up throughout the corner.

Quarter Midget on Asphalt (325-340LBS. Classes)

Left Front: #4 Valving (baseline)

#5/4 (5 rebound /4 compression)
Frees chassis up throughout the corner for tracks with a lot of grip.
#3/4 (3 rebound /4 compression)
Tightens chassis up throughout the corner to create more side-bite.



Right Front: #3/5 Valving (baseline) #4 (4 rebound /4 compression) Allows chassis to transfer from RF quicker.

Right Rear:

#3/5 Valving (baseline) #4 (4 rebound /4 compression) Tightens the chassis up throughout the corner.

Left Rear: #4 Valving (baseline) #5/4 (5 rebound /4 compression) Frees chassis up on corner entry and tightens chassis up on exit. #3/4 (3 rebound /4 compression)

Allows weight to transfer to RF corner and make front end turn more positive.

Quarter Midget on Dirt (250-290LBS. Classes)

Left Front:

#2/3 Valving (baseline) #3 (3 rebound /3 compression) Frees the chassis up on corner exit.

<u>Left Rear:</u> #2/3 Valving (baseline)

#3 (3 rebound /3 compression) Doesn't transfer weight as quick to RF

Right Front:

#3 Valving (baseline)

#1/3 (1 rebound /3 compression)Tightens the chassis up throughout the corner.#4/3 (4 rebound /3 compression)Turns better throughout the corner and makes chassis free on corner exit

Right Rear:

#3 Valving (baseline) #4/3 (4 rebound /3 compression) Tightens the chassis up throughout the corner.

Quarter Midget on Dirt (325-340LBS. Classes)

Left Front: #2/4 Valving (baseline) #3 (3 rebound /3 compression) Frees the chassis throughout the corner.

Left Rear: #2/4 Valving (baseline) #3 (3 rebound /3 compression) Frees the chassis up on corner exit.



Right Front:

#4 Valving (baseline)
#3 (3 rebound /3 compression)
Frees the chassis up on corner entry and tightens chassis on corner exit.

Right Rear:

#3/4 Valving (baseline) #3 (3 rebound /3 compression)

#3 (3 rebound /3 compression) Tightens chassis up over 3 /4 valving

Options to <u>correct</u> a front end push condition (Understeer)

Shock Adjustments:

Tight on **CORNER ENTRY**:

I)Increase rebound in LR Shock
 Increase Compression in RR Shock
 Increase Rebound in Front Shocks
 Reduce Compression in Front Shocks

Tight in MIDDLE OF CORNER:

1)Increase Compression in RR Shocks 2)Increase Rebound in Front Shocks 3)Reduce Compression in Front Shocks 4)Increase Pressure in RR Shock

Tight on **CORNER EXIT**:

1)Reduce Rebound in LR Shock 2)Increase Compression in RR Shock 3)Increase Rebound in Front Shocks 4)Increase Pressure in RR Shock

Chassis Adjustments:

Tight on **CORNER ENTRY**:

1)Increase Rear Tire Stagger 2)Move RR Tire out on Axle 3)Reduce Front Spring Rate 4)Lower Front Panhard Bar 5)Narrow RF Wheel Offset

Tight in MIDDLE OF CORNER:

1) Increase Rear Tire Stagger 2) Move RR Tire out on Axle 3) Reduce Front Spring Rate 4) Increase RR Spring Rate 5) Reduce Cross Weight in Chassis 6) Lower Front Panhard Bar 7) Narrow RF Wheel Offset

Tight on **CORNER EXIT**:

1)Increase Rear Tire Stagger 2)Move RR Tire out on Axle 3)Increase RR Spring Rate 4)Reduce LR Spring Rate 5)Reduce Cross Weight in Chassis 6)Raise Rear Panhard Bar

Options to <u>correct</u> a loose rear end condition (Oversteer)

Shock Adjustments:

Loose on CORNER ENTRY:

Increase Compression in Front Shocks
 Reduce Rebound in LR Shock
 Reduce Rebound in LF Shock
 Reduce Compression in RR Shock
 Reduce Pressure in Rear Shocks

Loose in MIDDLE OF CORNER:

I)Increase Compression in Front Shocks
 2)Reduce Compression in RR Shock
 3)Reduce Rebound in LF Shock
 4)Reduce Rebound in RF Shock
 5)Reduce Pressure in Rear Shocks

Loose on **CORNER EXIT**:

1)Reduce Compression in RR Shock 2)Increase Rebound in LR Shock 3)Reduce Rebound in Front Shocks 4)Reduce Pressure in RR Shock

A Loose Corner Exit problem may be amplified by a tight middle of corner problem that must be corrected first.

Chassis Adjustments:

Loose on **CORNER ENTRY:** 1)Reduce Rear Tire Stagger 2)Move RR Tire in on Axle 3)Increase Front Spring Rate 4)Raise Front Panhard Bar 5)Reduce Rear Spring Rate 6) Extend Front Axle Width

Loose in MIDDLE OF CORNER:

1)Reduce Rear Tire Stagger 2)Move RR Tire in on Axle 3)Increase Front Spring Rate 4)Reduce RR Spring Rate 5)Raise Front Panhard Bar 6)Lower Rear Panhard Bar

Loose on **CORNER EXIT**:

1)Reduce Rear Tire Stagger 2)Move RR Tire in on Axle 3)Reduce RR Spring Rate 4)Increase LR Spring Rate 5)Increase Cross Weight in Chassis 6)Lower Rear Panhard Bar

Tune Sheet Quarter Midget

Please Visit Advanced Racing Suspensions.com or Call (317) 271-7100 to order parts



ARS #55120

Shock Oil

(1 Quart)



ARS #55987 **Bushing Removal Tool**



ARS #55994 **Bleeding Bell**



Short Eye

ARS #5509

Cone Style Coil-Over Kit

ARS #5511 Adjusting Nut

ARS #5514 Cone Style Spring Seat



Standard Eye



ARS #5521 **Extended** Eye

ARS #5510 Flat Style Coil-Over Kit ARS #5511 Adjusting Nut ARS #5515 Flat Style Spring Seat



ARS #40887 Gas Gauge



ARS #5508 **Thrust Bearing Kit Fits Between Spring** and Adjusting Nut



ARS #5533 ARS #5524 Air Valve **Closure Nut** Assembly





Shorty Shaft

ARS #55993 Standard Shaft Spanner Wrench ARS #55202



ARS #55975 Shock Covers (Pair)



ARS #55997M1 Revalve Kit Includes: ARS #5543 M1 Piston (3) ARS #55435 Piston Set Screw (10) ARS #5550 A-Shim (8) ARS #5554 B-Shim (8) ARS #5561 .001 Pre-Load Shims (10) ARS #5562 .002 Pre-Load Shims (10) ARS #5563 .003 Pre-Load Shims (10) ARS #5565 .005 Pre-Load Shims (10) ARS #558645 Compression Bleed Plate .063 (2) ARS #55866 Compression Bleed Plate .095 (2) ARS #55713 Check Valve Assy for #3 M1



ARS #559975M1X Revalve Kit Includes: ARS #5543 M1 Piston (3) ARS #55435 Piston Set Screw (10) ARS #5550 A-Shim (8) ARS #5554 B-Shim (8) ARS #5561 .001 Pre-Load Shims (10) ARS #5562 .002 Pre-Load Shims (10) ARS #5563 .003 Pre-Load Shims (10) ARS #5565 .005 Pre-Load Shims (10) ARS #558645 Compression Bleed Plate .063 (2) ARS #558648 Compression Bleed Plate .081 (2) ARS #5567 Shaft Nut Bleed Plate Holder (1)



ARS #55999 Rebuild Kit Includes: ARS #5516 Standard Eye (1) ARS #5517 O-Ring for Eye (4) ARS #5520 Standard Shaft (2) ARS #5525 Bleed Screw (2) ARS #5526 Seals (2) ARS #5527 Wiper (1) ARS #5528 Bushings (2) ARS #5532 O-Ring for Closure Nut (2) ARS #55993 Spanner Wrench

5500 Series Quarter Midget M1X Version

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EBOUND SIDE HAS----AILABLE FEED HOLES

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NOTES: - #14 AND #15 ARE "A" AND "B" SHIMS. REFER TO VALVING CODE FOR THEIR QUANTTY. - #16 REPRESENTS THE NECESSARY SPACING SHIMS TO GET THE DESIRED SHIM STACK PRELOAD OR OFFSET AS SHOWN ON THE VALVING CODE.

_____3 ____2 ____ \ (5) (4)

5516 1 Eye with Bearing and Retaining Ring. Options: 5521 - 750 Long 55162 - 500 Long 55162 - 500 Long 55162 - 500 Long 5522 552 3 .375*-24 Jon Nut 5520 4 Shaft, Standard Length, - 28 Stack Option: 5227 - 23 Stack 5520 4 Shaft, Standard Length, - 28 Stack 5520 5 O-Ring, Movement Indicator 5527 6 Shaft Wiper 5528 7 Seal Screw - Closure Nut 5524 8 Closure Nut - Complete - With Se Bushing, Wiper of Seal Screw. 5524 10 Shaft Seal - Standard - Tan Cok Option: 5522 - Saft Durometer Site Color 5528 11 Shaft Seal - Standard - Tan Cok Option: 552 - Saft Durometer Site Color 5540 12 Piston Stop Washer 5550 15 "A" Shin(s) 5543 14 "B" Shin(s) 5543 16 201*, 002*, 003*, 005* Preloac Shins 5543 17 4-40 x 3/16* Set Screw to deleting feed as necessary. 5543 18 Piston 5544 14 "B" Shin(s) 55545 16 Sol*, ods	ARS #	ITEM	DESCRIPTION				
5517 2 O-Ring, Spring Cup 5522 3 .375'-24 Jam Nut 5520 4 Shaft, Standard Length - 2.8" Str. Option: 55202 - 2.3" Stroke 5527 6 Shaft, Standard Length - 2.8" Str. Option: 55202 - 2.3" Stroke 5527 6 Shaft, Standard Length - 2.8" Str. 5527 6 Shaft Standard Length - 2.8" Str. 5527 6 Shaft Standard Length - 2.8" Str. 5528 7 Seal Screw - Closure Nut 5524 8 Closure Nut - Complete - With Rody 5526 10 Shaft Seal - Standard - Tan Cold Option:5522 - Soft Durometer Blue Color 5528 11 Shaft Seal - Standard - Tan Cold Option:5522 - Soft Durometer Blue Color 5540 12 Piston Stop Washer 5550 16 .001", 002", 003", 005" Preload 55415 16 .001", 002", 003", 005" Preload 5543 17 4-40 x 3/16" Set Screw to deleth feed as necessary. 5543 18 Piston Nut with Seed Jet hale. 5544 19 O-Ring, Check Valve 55850 22 O-Rin	5516	1	Eye with Bearing and Retaining Ring. Options: 5521750 Longer 55162 - Short Eye for 2.3" Stroke				
5522 3 .375'-24 Jam Nut 5520 4 Shaft, Standard Length - 2.8' Str. Option: 5522' - 2.3' Stroke 5529 5 O-Ring, Movement Indicator 5527 6 Shaft, Standard Length - 2.8' Str. Option: 5522' - 2.3' Stroke 5527 6 Shaft Wiper 5526 7 Seal Screw - Closure Nut 5524 8 Closure Nut - Complete - With Screw. 5522 9 O-Ring, Closure Nut to Body 5524 10 Shaft Scal - Standard - Ian Cold Option:5522 Soft Durometer Blue Color 5526 10 Shaft Scal - Standard - Ian Cold Option:5522 Soft Durometer Blue Color 5540 12 Piston Stop Washer 5550 15 'A' Shim(s) 5560 16 .001". 002'. 005'', n05'' Preload Shims 5541 14 'B' Shim(s) 5543 18 Piston 5543 18 Piston 5543 18 Piston Nut with bleed jet hole. (Bare Nut) 5544 20 Glyde Ring 55457 21 Piston Nut wi	5517	2	O-Ring, Spring Cup				
5520 4 Shaft, Standard Length, - 2.4" Stroption: 55202 - 2.3" Stroke 5529 5 O-Ring, Movement Indicator 5527 6 Shaft Wiper 5525 7 Seal Screw - Closure Nut 5524 8 Closure Nut - Complete - Stat Screw. 5525 7 O-Ring, Closure Nut Indicator 5526 7 O-Ring, Closure Nut Indicator 5527 9 O-Ring, Closure Nut Indicator 5528 10 Shaft Seal - Strondard - Tan Cold Option:S5262 - Soft Durometer Blue Color 5540 12 Piston Stop Washer 5540 13 Spacer, Piston .020" thick 5541 14 "B" Shim(s) 5543 16 O ¹¹ 007005" Preload 5543 18 Piston 5544 19 O-Ring, Piston to Clyde Ring 5545 16 Glyde Ring 5546 20 Glyde Ring 5547 21 Piston Nut with bleed jet hole. (Bare Nut) 55860 22 O-Ring, Check Valve 55854 24 Internal Snap Ring. Check Valve 55859 23 Bleed Pilate .048" to .116" 55860 26 Spiral Retaining Ring 55861 26 Spiral Retaining	5522	3	.375"-24 Jam Nut				
5529 5 O-Ring, Movement Indicator 5527 6 Shaft Wiper 5525 7 Seal Screw - Closure Nut 5524 8 Closure Nut - Complete - With Seal Screw - Closure Nut 5524 9 O-Ring, Closure Nut - Complete - With Seal Screw - Closure Nut to Body 5522 9 O-Ring, Closure Nut to Body 5524 10 Shaft Seal - Standard - Tan Cold Option:5526 - Soft Durometer 5526 11 Shaft Seal - Standard - Tan Cold Option:5526 - Soft Durometer 5540 12 Piston Stop Washer 5550 15 "A" Shirin(s) 5551 16 JOI", JOZ", JOS", JOS" Preload 5541 14 "B" Shirin(s) 5553 16 JOI", JOZ", JOS", JOS" Preload 5543 17 4-40 x 3/16" Set Screw to deleth feed as necessary. 5543 18 Piston 5549 19 O-Ring, Piston to Glyde Ring 5547 21 Piston Nut with bleed jet hole. 55850 22 O-Ring, Check Valve 55850 22 O-Ring, Check Valve 55850 23 Bleed Piate .048" to .116" 5519 25 Spirol Retaining Ring 5519 25 Spirol Retaining Ring	5520	4	Shaft, Standard Length - 2.8" Strok Option: 55202 - 2.3" Stroke				
5527 6 Shaft Wiper 5525 7 Seal Screw - Closure Nut 5524 8 Closure Nut - Complete - With Seal Screw. 5532 9 O-Ring. Closure Nut to Body 5526 10 Shaft Seal - Standard - Tan Cold Option:S522 - Soft Durometer Blue Color 5528 11 Shaft Seal - Standard - Tan Cold Option:S522 - Soft Durometer Blue Color 5540 12 Piston Stop Washer 5540 13 Spacer, Piston 200" Hick 5541 14 "B" Shirn(s) 5554 14 "B" Shirn(s) 5554 16 .001"002", .003", .005" Preload Shifts 5543 18 Piston 5544 19 O-Ring, Piston to Clyde Ring 5543 18 Piston 5544 20 Glyde Ring 5545 21 Piston Nut with bleed jet hole. (Bare Nut) 55860 22 O-Ring, Check Valve 55854 24 Internal Snap Ring. Check Valve 55854 24 Beadring 5519 25 Spiral Retaining Ring 5533 27 Air Valve, Optional 5538-Assembly 29 Bed Valve, Ring, Air Valve 5538-Assembly 29 Spiral Retaining Ring	5529	5	O-Ring, Movement Indicator				
5525 7 Seal Screw - Closure Nut 5524 8 Closure Nut - Complete - With Sc Bushing, Wiper or Seal Screw. 5532 9 O-Ring, Closure Nut to Body 5526 10 Shaft Seal - Standard - Tan Cold Option:S522. Soft Durometer Site Color 5528 11 Shaft Seal - Standard - Tan Cold Option:S522. Soft Durometer Site Color 5540 12 Piston Stop Washer 5550 13 Spacer, Piston. 2021 thick 5541 14 "B"Shirn(s) 55530 15 "A"Shirn(s) 5541 16 .001"002"003"005" Preload Shirns 5541 18 Piston 5543 18 Piston 5544 19 O-Ring, Piston to Glyde Ring 5543 18 Piston 5544 20 Glyde Ring 5545 21 Piston Nut with bleed jet hole. (Bare Nut') 55850 22 O-Ring, Check Valve 55851 24 Internal Snap Ring. Check Valve 55854 24 Internal Snap Ring. Check Valve 55854 24 Internal Snap Ring. Check Valve 55854 26 Bearing 5533 27 Air Valve, Optional 5533 27 Air Va	5527	6	Shaft Wiper				
5524 8 Closure Nut - Complete - With Se Bushing, Wiper or Seal Screw. 5532 9 O-Ring, Closure Nut to Body 5532 10 Shaft Seal - Standard - Ton Cold Option:S5222 - Soft Durometer Bible Color 5526 11 Shaft Seal - Standard - Ton Cold Option:S522 - Soft Durometer Bible Color 5526 11 Shaft Seal - Standard - Ton Cold Option:S522 - Soft Durometer Bible Color 5540 12 Piston Stop Washer 5540 13 Spacer, Piston .020 Thick 5554 14 B'Shim(s) 5550 15 'A'Shim(s) 5554 14 B'Shaft Seal - Standard 5554 14 B'Shaft Seal - Standard 5561-5555 16 .001''002'', .003''', .003''', .003''' 5543 17 4-40 x 3/16'' Set Screw to deleth feed as necessary. 5543 18 Piston 5543 17 O-Ring, Piston to Glyde Ring 5543 20 Glyde Ring 5544 20 Glyde Ring 55567 21 Piston Nut with bleed jet hole. (Bare Nut')	5525	7	Seal Screw - Closure Nut				
5532 9 O-Ring. Closure Nut to Body 5526 10 Shaft Seql - Standard - Tan Cold Option:S5282 - Soft Durometer Bille Color 5528 11 Shaft Seql - Standard - Tan Cold Option:S5282 - Soft Durometer Bille Color 5540 12 Piston Stop Washer 5540 13 Spacer, Piston 200" thick 5554 14 "B" Shim(s) 5550 15 "A" Shim(s) 5540 16 .001"002", .003", .005" Preload Shims 5541 16 .001"002", .005" Preload Shims 5543 18 Piston 5544 19 O-Ring, Piston to Chyde Ring 5543 18 Piston 5544 20 Glyde Ring 5545 21 Piston Nut with bleed jet hole. (Bare Nut) 55860 22 O-Ring, Check Valve 55851 25 Spiral Retaining Ring 5519 25 Spiral Retaining Ring 5533 27 Air Valve, Optional 5534 28 O-Ring, Air Valve 5533 <	5524	8	Closure Nut - Complete - With Sec Bushing, Wiper or Seal Screw.				
5524 10 Shaft Seci-Standard - Tan Colo Option:S522 - Soft Durometer Site Color 5528 11 Shaft Seci-Standard - Tan Colo Option:S522 - Soft Durometer Site Color 5540 12 Piston Stop Washer 5550 13 Spacer. Piston .020' thick 5550 15 "A" Shim(s) 5550 16 .001''002''003''005'' Pieload Shims 5541-5565 16 .001''002''003''005'' Pieload Shims 5543 18 Piston 5543 18 Piston 5543 19 O-Ring. Piston to Glyde Ring 5543 19 O-Ring. Piston to Glyde Ring 5543 20 Glyde Ring 5545 21 Piston Nut with bleed jet hole. (Bare Nut') 55850 22 O-Ring. Check Valve 55850 22 O-Ring. Check Valve 55851 26 Bearing 5519 25 Spiral Retaining Ring 5533 27 Air Valve, Optional 55351-Sody Assembly 29 Spiral Retaining Ring	5532	9	O-Ring, Closure Nut to Body				
5528 11 Shaft Bushing 5540 12 Piston Stop Washer 5540 13 Spacer. Piston .020" thick 5550 13 Spacer. Piston .020" thick 5550 15 "A"Shim(s) 5551 5553 16 .001"002"003"005" Preload Shims 5541-5565 16 .001"002"003"005". Preload Shims 5541-5565 16 .001"002"003"005". Preload Shims 5543 18 Piston 5543 18 Piston 5543 19 O-Ring. Piston to Glyde Ring 5549 20 Glyde Ring 5547 21 Piston Nut with bleed jet hole. (Bare Nut] 55860 22 O-Ring. Check Valve 55850 22 O-Ring. Check Valve 55851 26 Bearing 5519 25 Spiral Retaining Ring 5533 27 Air Valve. Optional 5534 28 O-Ring. Air Valve 5535 29 Body with: Base Valve, Roating	5526	10	Shaft Seal - Standard - Tan Color. Option:55262 - Soft Durometer - Blue Color				
S540 12 Piston Stop Washer 5560 13 Spacer, Piston .020" thick 5554 14 "B"Shim(s) 5553 15 "A"Shim(s) 5554 14 "B"Shim(s) 5550 15 "A"Shim(s) 5561-5365 16 .001", .002", .003", .005" Preloce Shims 5543 17 4-40 x 3/16" Set Screw to delete feed as necessary. 5543 18 Piston 5543 19 O-Ring, Fiston to Glyde Ring 5549 19 O-Ring, Fiston to Glyde Ring 5546 20 Glyde Ring 5547 21 Piston Nut with bleed jet hole. (Bare Nut) 55860 22 O-Ring, Check Valve 55864 24 Internal Snap Ring, Check Valve 5518 26 Bearing 5533 27 Air Valve, Optional 5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5533 29 Body with: Base Valve, Floating Piston at End Cap Installed Option: Stas	5528	11	Shaft Bushing				
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5554 14 "B" Shim(s) 5550 15 "A" Shim(s) 5561-5565 16 .001". 002". 003". 005" Preloce Shims 5543 17 4-40 x 3/16" Set Screw to delete feed as necessary. 5543 18 Piston 5549 19 O-Ring. Fiston to Glyde Ring 5548 20 Glyde Ring 5547 21 Piston Nut with bleed jet hole. (Bare Nut) 55850 22 O-Ring. Check Valve 55860_55869 23 Bleed Plate .048" to .116" 55851 24 Internal Snap Ring. Check Valve 5518 26 Bearing 5533 27 Air Valve. Optional 5533 28 O-Ring. Air Valve	5560	13	Spacer, Piston .020" thick				
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5561-5565 16 .001", .002", .003", .005" Preload Shims 55435 17 4-40 x 3/16" Set Screw to delete the das necessary. 5543 18 Piston 5543 18 Piston 5549 19 O-Ring, Piston to Glyde Ring 5546 20 Glyde Ring 5547 21 Piston Nut with bleed jet hole. (Bare Nut] 55860 22 O-Ring, Check Valve 55850 22 O-Ring, Check Valve 55860 23 Bleed Plate048" to .11.6" 55854 24 Internal Snap Ring, Check Valve 5518 26 Bearing 5533 27 Air Valve. Optional 5533 27 Air Valve. Optional 5533 28 O-Ring, Air Valve 5538-Assembly 29 Bedrom d fror Carp Installed Option: .5358- Body Assembly with Air Valve installed 55501-55504 30 Optional Bleed Shim(S), 1-4 dot Starsettee Yettee Starsettee Starsettee Starsete Starsettee <td< td=""><td>5550</td><td>15</td><td>"A" Shim(s)</td></td<>	5550	15	"A" Shim(s)				
55435 17 4-40 x 3/16" Set Screw to deletivited as necessary. 5543 18 Piston 5549 19 O-Ring, Fiston to Glyde Ring 5548 20 Glyde Ring 5547 21 Piston Nut with bleed jet hole. (Bare Nut) 55850 22 O-Ring, Check Valve 55850 23 Bleed Plate .048" to .116" 55850 23 Bleed Plate .048" to .116" 55854 24 Internal Snap Ring. Check Valve 5519 25 Spiral Retaining Ring 5533 27 Air Valve, Optional 5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5530-55504 30 Optional Bleed Shim(s), 1-4 stot (See Valving Code) 55501-55504 30 Optional Bleed Shim(s), 1-4 stot State #5500 DRAWN BY: MMETZ MMETZ	5561-5565	16	.001", .002", .003", .005" Preload Shims				
18 Piston 5543 18 Piston 5549 19 O-Ring, Piston to Glyde Ring 5548 20 Glyde Ring 5547 21 Piston Nut with bleed jet hole. (Bare Nut) 55850 22 O-Ring, Check Valve 55860_55869 23 Bleed Plate .048' to .116'' 55854 24 Internal Snap Ring, Check Valve 5518 26 Spiral Retaining Ring 5533 27 Air Valve. Optional 5533 27 Air Valve. Optional 5533 28 O-Ring, Air Valve 5533 29 Bedriv With Baze Valve, Eptating 5533 29 Optional Bleed Shim(s), 1-4 stated 55501-55504 30 Optional Bleed Shim(s), 1-4 stated S5501-55504 30 Optional Bleed Shim(s), 1-4 stated S5501-55504 30 Optional Bleed Shim(s), 1-4 stated RACING SUSPENSION INCC. DRAWN BY: MMETZ	55435	17	4-40 x 3/16" Set Screw to delete feed as necessary.				
5549 19 O-Ring, Piston to Glyde Ring 5548 20 Glyde Ring 5547 21 Piston Nut with bleed jet hale, (Bare Nut) 55850 22 O-Ring, Check Valve 55860 23 Bleed Plate, 0.48" to .116" 55864 24 Internal Snap Ring, Check Valve 55854 24 Internal Snap Ring, Check Valve 5518 26 Bearing 5533 27 Air Valve, Optional 5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5533 29 Back with: Bace Valve, Floating Option and Fird Cape Installed Option; Sizes Rody Assided Option Sizes Rody Assided Option Sizes Rody Assided 55501-55504 30 Optional Bleed Shim(s), 1-4 slot (see Valving Code) State: Stat	5543	18	Piston				
5548 20 Glyde Ring 5557 21 Pieton Nut with bleed jet hole. (Bare Nut) 55850 22 O-Ring, Check Valve 55860 22 O-Ring, Check Valve 55860 23 Bleed Plate. 048" to .116" 55864 24 Internal Snap Ring, Check Valve 5518 26 Bearing 5533 27 Air Valve, Optional 55332 28 O-Ring, Air Valve 5533-Assembly 29 Body with Base Make, Expanding 55501-55504 30 Optional Bleed Shim(s), 1-4 state S5501-55504 30 Optional Bleed Shim(s), 1-4 state RACING SUSPENSION INC. Image: State State State State S5550-55504 30 Optional Bleed Shim(s), 1-4 state State State Image: State Image: State State 30 Optional Bleed Shim(s), 1-4 state State State Image: State State State Image: State State State Image: State State	5549	19	O-Ring, Piston to Glyde Ring				
5567 21 Piston Nut with bleed jet hole. (Bare Nut) 55860 22 O-Ring, Check Valve 55860 23 Bleed Plate. 048" to .116" 55864 24 Internal Snap Ring. Check Valve 55854 24 Internal Snap Ring. Check Valve 5518 26 Bearing 5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5538-Assembly 29 Body with: Base Valve, Floating Valve 55501-55504 30 Optional Bleed Stim(5), 1-4 slot S5501-55504 30 Optional Bleed Stim(5), 1-4 slot ADDVAADCEED RACING SUSPENSION INC.	5548	20	Glyde Ring				
55850 22 O-Ring, Check Valve 55860_55869 23 Bleed Plate .048" to .116" 55854 24 Internal Snap Ring, Check Valve 5519 25 Spiral Retaining Ring 5518 26 Bearing 5533 27 Air Valve, Optional 5533- 28 O-Ring, Air Valve 5538-Assembly 29 Bady with: Base Valve, Floating 5538-Assembly 29 Body with: Base Valve, Floating 55501-55504 30 Optional Bleed Shim(s), 1-4 stot (See Valving Code) 5550-55504 30 Optional Bleed Shim(s), 1-4 stot (See Valving Code) RACING SUSPENSION INC. DRAWN BY: MMETZ	5567	21	Piston Nut with bleed jet hole. (Bare Nut)				
55860_55869 23 Bleed Plate .048" to .116" 55854 24 Internal Snap Ring. Check Valv 5519 25 Spiral Retaining Ring 5518 26 Bearing 5533 27 Air Valve, Optional 5533 28 O-Ring. Air Valve 5538-Assembly 29 Body with: Base Valve, Floating Pfston and End Cap Installed Option: Socies Assembly with Air Valve installed 55501-55504 30 Optional Bleed Shim(s), 1-4 slot (See Valving Code) ADVAANCEED RACING SUSPENSION INC. DRAWN BY: MMETZ	55850	22	O-Ring, Check Valve				
55854 24 Internal Snap Ring, Check Valv 5519 25 Spiral Retaining Ring 5518 26 Bearing 5533 27 Air Valve, Optional 5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5538-Assembly 29 Body with Base Malve, Floating Option and End Coap Installed 55501-55504 30 Optional Rised Shim(s), 1-4 slot (See Valving Code) ADVAANCEED RACING SUSPENSION INC. DRAWN BY: MMETZ	55860_55869	23	Bleed Plate .048" to .116"				
5519 25 Spiral Retaining Ring 5518 26 Bearing 5533 27 Air Valve, Optional 5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5538-Assembly 29 Body with: Base Valve, Floating Pieton and End Cogo Installed. Option: S538- Body Assembly with Air Valve installed 55501-55504 30 Optional Bleed Shim(s), 1-4 slot (See Valving Code) RACING SUSPENSION INC. RACING SUSPENSION INC. Rs<#5500	55854	24	Internal Snap Ring, Check Valve				
5518 26 Bearing 5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5538-Assembly 29 Body with: Base Valve, Floating Petro and End Cop Installed. Option: 5338- Body Assembly with Air Valve installed 55501-55504 30 Optional Bleed Shim(s), 1-4 slot (See Valving Code) ADVAANCEDD RACING SUSPENSION INC. DRAWN BY: MMETZ	5519	25	Spiral Retaining Ring				
5533 27 Air Valve, Optional 5533 28 O-Ring, Air Valve 5538-Assembly 29 Body with: Base Valve, Floating Peton and End Cop Installed. Option: 3538- Body Assembliv with Air Valve installed 55501-55504 30 Optional Bleed Shim(s), 1-4 slot (See Valving Code) ADVANCED RACING SUSPENSION INC. DRAWN BY: MMETZ	5518	26	Bearing				
55332 28 O-Ring, Air Valve 5538-Assembly 29 Body with: Base Valve, Floating Piston and Cop Installed. Option: 55385-Body Assembly with Air Valve installed 55501-55504 30 Optional Bleed Shim(s), 1-4 slot (See Valving Code) ADVAANCEDD RACING SUSPENSION INC. DRAWN BY: MMETZ	5533	27	Air Valve, Optional				
5538-Assembly 29 Body with: Base Volve, Floating Pictor and End Cop Installed Option: 3538- Rody Aslend Option: 3538- Rody Aslend Optional Bleed Shim(s), 1-4 slot (See Valving Code) 55501-55504 30 Optional Bleed Shim(s), 1-4 slot (See Valving Code) ADVANCED RACING SUSPENSION INC. RACING SUSPENSION INC. 85 #5500 - ASM-2021_M1Y DRAWN BY: MMETZ	55332	28	O-Ring, Air Valve				
30 Optional Bleed Shim(9, 1-4 slot (See Valving Code) RACING SUSPENSION INC. RS #5500 DRAWN BY: MMETZ	5538-Assembly	29	Body with: Base Valve, Floating Piston and End Cap Installed. Option: 55385. Body Assembly with Air Valve installed Optional Bleed Shim(s), 1-4 slots. (See Valving Code)				
ADVANCED RACING SUSPENSION INC.	55501-55504	30					
RS #5500 M. A SM. 2021 - M1X	ADVANCED RACING SUSPENSION INC						
MALASMA2021-M1Y			DRAWN BY:				
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ADVANCED RACING SUSPENSIONS 5500 SERIES QUARTER MIDGET 2020 VERSION

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ITEM	ARS#	DESCRIPTION
1	5516	Eye with Bearing and Retaining Ring. Options: 5521750" Longer, 55162-Short Eye for 2.3" Stroke
2	5522	Jam Nut
3	5520	Shaft, Standard Length-2.8" Stroke Option: 55202-2.3" Stroke
4	5529	O-Ring, Movement Indicator
5	5527	Shaft Wiper
6	5524	Closure nut complete with seal, bushing, wiper, and seal screw
7	5526	Shaft Seal-Standard-Tan Color. Option: 55262-Soft Durometer-Blue Color
8	5528	Shaft Bushing
9	5540	Piston Stop Washer
10	5560	Spacer Piston .020" thick
11	5554	"B" Shim(s)
12	5550	"A" Shim(s)
13	5561-5565	.001", .002", .003", .005" Preload Shims
14	5543	Piston
15	5549	O-Ring, Piston to Glyde Ring
16	5548	Glyde Ring
17	55820-55823	Check Valve Housing .020" to .154" Bleed Compression
18	5584	Poppet
19	55852	Spring
20	55857	Washer
21	55850	O-Ring, Check Valve
22	55860-55869	Bleed Plate .020" to .140"
23	55854	Internal Snap Ring, Check Valve
24	Assembly 5538	Body with: Base Valve, Floating Piston and End Cap Installed. Option: 55385-Body Assembly with Air Valve installed
25	5533	Air Valve, Optional
26	55332	O-Ring, Air Valve
27	5532	O-Ring, Closure Nut to Body
28	5525	Seal Screw, Closure Nut
29	5518	Bearing
30	5519	Spiral Retaining Ring
31	5517	O-Ring, Spring Cup

- #11 AND #12 ARE "A" AND "B" SHIMS. REFER TO VALVING CODE FOR THEIR QUANTITY - #13 REPRESENTS THE NECESSARY SPACING SHIMS TO GET THE DESIRED SHIM STACK PRELOAD OR OFFSET AS SHOWN ON THE VALVING CODE

NOTE

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AIR VALVE OPTIONAL

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