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## TERMINOLOGY

Bump	Also called , compression or jounce. When the shock is traveling, with the spherical bearings getting closer. Measurement of minimum length is spherical	
	bearing center to center at the fully compressed position.	
Rebound	Also called droop or extension, when the shock is traveling with the spherical bearings getting farther apart. Measurement of full extension is when the spherical bearings are farthest apart.	trange
1. Shock Body	The black hard anodized threaded portion of the shock assembly.	
2. Base Cap	Also called body cap, located at the end of the shock body with a spherical bearing installed.	
3. Eye Mount	Also called eyelet or rod end, this is the assembly at the end of the piston rod.	
4. Spring Seat	A large nut that is threaded to hold and to adjust the spring height.	
5. Eye mount spring seat	Is used to position the stationary end of the spring, this is a fixed position.	
6. Bump Adjuster (blue)	Also called compression adjuster or jounce adjuster, used to adjust the compression forces.	5
7. Rebound Adjuster (red)	Also called Extension adjuster, used to adjust the rebound forces.	
8. Rod Guide	The area on the shock that the piston rod exits and goes into the shock body, contains the seal and piston rod bearing.	
9. Gas Fill Screw	The cover screw for the self sealing rubber valve.	

10. Oil Fill Screw The screw that allows for adding oil to the shock

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## INTRODUCTION

Strange Engineering brings advanced shock technology into the Drag Racing market. As racers become more knowledgeable in chassis tuning, many are seeking qualities normally reserved for tier one vehicles used in other forms of motorsports. These double adjustable shocks address the internal events that normally occur during use, drastically reducing undesired changes in shock dampening.

- Monotube construction is lighter (and less unsprung weight) than a twin tube design.
- Dissipates heat more efficiently.
- The shock features a hollow shock rod, which has less inertia making it more responsive to changes in direction; In addition, the shaft is optimally hardened for increased strength, chromed, and super finished to provide superior life and reduce both deflection and friction.
- The ultra low friction guide and seal are self aligning that reduces low speed abrasion and wear that occurs during side loading and temperature changes.
- The large 48mm piston is manufactured from billet aluminum, hard anodized, and Teflon<sup>®</sup> coated.
- The larger piston area achieves higher dampening forces with lower internal pressures.
- A thin Teflon<sup>®</sup> coated piston band further reduces friction while allowing a straighter port design that minimizes changes in fluid direction.

The result is faster frequency response and lowered hysteresis, which permits a more progressive dampening force without the downside of additional lag that would normally accompany it. The extension and compression oil paths are completely sealed from each other eliminating any cross talk between them.

### **Distinguishing Features**

#### Piggyback

- Inline
- Easily converted to air adjustable
- Accepts longer springs
- Shorter dead length

- Shorter oil path for quicker compression response time
- More compact design (Internal Reservoir)

Inline Re	Inline Reservior					
Part Number	Extended Length	Collapsed Legth without Bumper	Recommended Ride height	Stroke	Suggested Spring Length	
S7210I	25.68"	16.30"	18.50"-22.50"	9.38"	14"-16"	
S7209I	23.45"	15.20"	17.50"-20.50"	8.25"	14"	
S7207I	19.59"	13.26"	15.25"-16.50"	6.33"	12"	
S7205I	16.69"	11.81"	13.25"-14.25"	4.88"	10"	
S7204I	15.30"	11.14"	12.50"-13.50"	4.16"	8"	
S7203I	13.79"	10.36"	11.50"-12.25"	3.43"	7"	

#### Intergral (Piggyback) Reservior

Part Number	Extended Length	Collapsed Legth without Bumper	Recommended Ride height	Stroke	Suggested Spring Length
S7210S	25.15"	15.80"	18"-22"	9.35"	14"-16"
S7209S	22.95"	14.70"	17"-20"	8.25"	14"-16"
S7207S	19.00"	12.80"	14.75"-16.00"	6.20"	12"-14"
S7205S	16.28"	11.28"	12.75"-13.75	5.00"	10"-12"
S7204S	14.94"	10.64"	12"-13"	4.30"	8"-10"
S7203S	13.38"	9.85"	11"-11.75"	3.53"	7"-8"



Bearing options			
Part Number	Bearing Width		
S5000KU	1/2"		
S5000KT	1"		

**Note:** While unadjustable shocks are available, they ArtMorrision specific



# **ADJUSTERS**

### In-Line Reservoir Double Adjustable

- The Compression and Rebound rotational adjusters are located on the Eye Mount at the end of the piston rod.
- Each adjuster has 25 positions and uses a 5/32nds hex wrench.
- The adjuster closest to the Eye Mount spherical bearing is the compression adjuster.
- The adjuster closest to the Rod Guide is the rebound adjuster.
- The detented clicks are referred to as 1 through 24.
- Rotating the 5/32nds hex adjuster clockwise will increase dampening force.
- Rotating the 5/32nds hex adjuster counter-clockwise will decrease dampening force. WARNING: Do not rotate the 3/4 inch nut anchoring the 5/32nds hex nut. This calibration nut is already set.



### Integral (Piggyback) Reservoir Double Adjustable

- The Compression rotational adjuster is located on the End Cap on the Shock Body with the reservoir attached.
- The Rebound rotational adjuster is located on the Eye Mount at the end of the piston rod.
- Each adjuster has 25 positions and uses a 5/32nds hex wrench.
- The detented clicks are referred to as 1 through 24.
- Rotating the 5/32nds hex adjuster clockwise will increase dampening force.
- Rotating the 5/32nds hex adjuster counter-clockwise will decrease dampening force.
  WARNING: Do not rotate the 3/4inch nut anchoring the 5/32nds hex nut. This calibration nut is already set.





### SHOCK DYNO GRAPHS

The following graphs show the average resistance of the shock extension and compression forces as velocity increases.





# **INLINE PARTS LIST**

ltem Num.	Description	Quantity	Part Number
1	Base cup Annular style	1	SST301-X
2	Shock Body	1	SST303-XXXX
3	Top spring seat	1	SST128
4	Eye mount	1	SST212-XX
5	Spherical bearing	2	S5000KT
6	Snapring	4	S5000L
7	Resevior cap	1	SST306
8	Spring seat nut	1	SST129
9	Enclosure Cap	1	SST104
10	Compression bumper	1	SST350
11	Rebound adjuster screw	1	SST214
12	Rod jet	1	SST255
13	Piston Nut	1	SST244
14	Shims		SST1628.25
15	Piston	1	SST187-1
16	Check valve plate	2	SST171
17	Check valve spring	2	SST172
18	Rebound spacer	1	SST311
19	Needle- Inline	1	SST252
20	Adjuster Cup	1	SST248
21	1x8mm Buna O-ring	4	SST258
22	1x4mm Buna O-ring	2	SST229
23	Piston stop clip	1	SST232
24	1x13mm Buna O-ring	1	SST259
25	Piston Band 48mm bore	1	SST149-1
26	-007 Buna O-ring	3	SST157
27	8-32 x 1/4" BHCS SS	3	SST156
28	Base valve nut	1	SST265
29	Base valve	1	SST263-X
30	Shock spacer 0.858 dia	1	
31	Base valve screw	1	SST264
32	Retainer wire ring	1	SST308
33	A50 Durameter O-ring	1	SST160
34	8-32 X 7/64 HSS	1	SST159
35	1/4-20 X 3/4 SHCS		SST161
36	Base valve support ring	1	SST304
37	6-32 x 1/8" Set screw	2	SST158
38	Seperating piston	1	SST305
39	-149 Quad ring	1	SST315
40	-140 Quad ring	1	SST316
41	-039 O-ring	1	SST319

ltem Num.	Description	Quantity	Part Number
42	-149 O-ring	1	SST317
43	-035 Buna O-ring	1	ADC104D
44	-140 O-ring	1	SST318
45	Shock rod - Monotube	1	SST310-X
46	Adjuster tube	1	SST282-X
47	Push rod	1	S3800T-X
48	-125 O-ring	1	SST133
49	MB1608DU Bushing	1	SST348
50	#031 O-ring	2	S510P
51	Guide for 16mm rod	1	SST101-16
52	16mm Enclosure cap seal	1	SST174-X
53	Jam nut 16mm	1	SST392
54	Rebound Adj Wedge	1	SST213
55	Eye Adjuster jam nut	2	SST220
56	Eye Adj Housing	2	SST215
57	Compression Adj screw	1	SST216
58	-011 Buna O-ring	2	SST152
59	Compression knob Spring	2	S5000W
60	3mm Chrome steel ball	4	S5000V



# **INLINE PARTS DIAGRAM**





# **PIGGYBACK PARTS LIST**

Num.      Basecup      1      SST260        2      Snap ring #HOI-100      4      S5000LT        3      Sperical bearing      2      S5000KT        4      Shock body      1      SST103-XXXX        5      Spring seat nut      1      SST104        6      1/4-20 X 3/4 SHCS      1      SST104        7      Enclosure cap      1      SST104        8      Compression bumper      1      SST20        9      Top spring seat      1      SST213        10      Eye mount      1      SST20        11      Remote resevior spacer      1      SST269        13      Remote resevior screw      1      SST260        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST272        19      46x1.5mm Wire ring      1      SST160        21      8/32" x 7/64" HHS      1      SST101-X        23      8/32" x 7/64" HHS      1      SST101-X        24      #031 Buna O-ring      3	Item	Description	Quantity	Part Number
Image:	NUM.	Pasagun	1	SST260
2      Shap Hing #HOF100      4      SS000L        3      Sperical bearing      2      S5000KT        4      Shock body      1      SST103-XXXX        5      Spring seat nut      1      SST129        6      1/4-20 X 3/4 SHCS      1      SST104        8      Compression bumper      1      SST350        9      Top spring seat      1      SST128        10      Eye mount      1      SST221        11      Remote resevior spacer      1      SST269        13      Remote resevior spacer      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST272        19      46x1.5mm Wire ring      1      SST160        20      O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST160        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST160        24      #031 Buna O-ring      1		Spap ring #UOL 100	1	551200
3      Sperical bearing      2      S5000K1        4      Shock body      1      SST103-XXXX        5      Spring seat nut      1      SST129        6      1/4-20 X 3/4 SHCS      1      SST104        7      Enclosure cap      1      SST104        8      Compression bumper      1      SST350        9      Top spring seat      1      SST212        10      Eye mount      1      SST261        11      Remote resevior spacer      1      SST269        13      Remote resevior screw      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST267        18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST157        23      8/32" x 1/4" BHCS SS	2		4	SSUUUL
4      Shock body      1      SST103-XXXX        5      Spring seat nut      1      SST104        6      1/4-20 X 3/4 SHCS      1      SS161        7      Enclosure cap      1      SS1104        8      Compression bumper      1      SST350        9      Top spring seat      1      SST221        10      Eye mount      1      SST270        12      Remote resevior spacer      1      SST269        13      Remote resevior screw      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST277        19      46x1.5mm Wire ring      1      SST273        20      AS0 Durameter 0.139"      1      SST160        21      8/32" x 1/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST133        26      MB1608DU Bushing	3	Sperical bearing	2	S5000KT
Spring seat nut      1      SS1129        6      1/4-20 X 3/4 SHCS      1      SS161        7      Enclosure cap      1      SS104        8      Compression bumper      1      SST350        9      Top spring seat      1      SST221        11      Remote resevior spacer      1      SST270        12      Remote resevior screw      1      SST269        13      Remote resevior screw      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST273        20      A50 Durameter 0.139"      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1	4	Shock body	1	SST103-XXXX
6      1/4-20 X 3/4 SHCS      1      SS161        7      Enclosure cap      1      SST104        8      Compression bumper      1      SST350        9      Top spring seat      1      SST350        9      Top spring seat      1      SST221        11      Remote resevior spacer      1      SST269        13      Remote resevior screw      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST160        24      #031 Buna O-ring      1      SST133        26      MB1608DU Bushing <td>5</td> <td>Spring seat nut</td> <td>1</td> <td>551129</td>	5	Spring seat nut	1	551129
7      Enclosure cap      1      SST104        8      Compression bumper      1      SST350        9      Top spring seat      1      SST221        10      Eye mount      1      SST221        11      Remote resevior spacer      1      SST270        12      Remote resevior screw      1      SST269        13      Remote resevior screw      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST267        18      -326 Buna O-ring      1      SST277        19      46x1.5mm Wire ring      1      SST273        20      A50 Durameter 0.139"      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST157        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1      SST144        27      Guide	6	1/4-20 X 3/4 SHCS	1	55161
8      Compression bumper      1      SST350        9      Top spring seat      1      SST128        10      Eye mount      1      SST221        11      Remote resevior spacer      1      SST270        12      Remote resevior screw      1      SST269        13      Remote resevior screw      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST267        18      -326 Buna O-ring      1      SST273        20      A50 Durameter 0.139"      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST348        27      Guide      1	7	Enclosure cap	1	SST104
9      Top spring seat      1      SST128        10      Eye mount      1      SST221        11      Remote resevior spacer      1      SST270        12      Remote resevior screw      1      SST269        13      Remote resevior      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST277        18      -326 Buna O-ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST150        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST348        27      Guide      1      SST348        27      Guide      1	8	Compression bumper	1	SST350
10      Eye mount      1      SST221        11      Remote resevior spacer      1      SST270        12      Remote resevior screw      1      SST269        13      Remote resevior      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST271        18      -326 Buna O-ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST159        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      1      SST348        27      Guide      1      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST348        27      Guide      1 <t< td=""><td>9</td><td>Top spring seat</td><td>1</td><td>SST128</td></t<>	9	Top spring seat	1	SST128
11      Remote resevior spacer      1      SST270        12      Remote resevior screw      1      SST269        13      Remote resevior      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST267        18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring      1      SST160        20      O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST145        28      Seal      1      SST147-X        29      Shock rod monotube      1      SST348        27      Guide      1      SST310-X	10	Eye mount	1	SST221
12      Remote resevior screw      1      SST269        13      Remote resevior      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST277        18      -326 Buna O-ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST348        27      Guide      1      SST310-X        30      Shock rod monotube      1      SST348        27      Guide      1      SST349        31      16mm Jam nut      1      SST202        32      Jam nut adjuster      1	11	Remote resevior spacer	1	SST270
13      Remote resevior      1      SST268        14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST267        18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST159        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST348        27      Guide      1      SST348        27      Guide      1      SST30-X        30      Shock rod monotube      1      SST30-X        31      16mm Jam nut      1      S	12	Remote resevior screw	1	SST269
14      -013 Buna O-ring      3      L7250H        15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST277        18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST159        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST348        27      Guide      1      SST310-X        30      Shock rod monotube      1      SST310-X        31      16mm Jam nut      1      SST320        32      Jam nut adjuster      1      SST215        34      Comp. adj. Needle      1 <td>13</td> <td>Remote resevior</td> <td>1</td> <td>SST268</td>	13	Remote resevior	1	SST268
15      Seperaing Piston      1      SST266        16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST267        18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST101-X        28      Seal      1      SST104-X        29      Shock rod monotube      1      SST348        30      Shock pushrod      1      SST292        32      Jam nut adjuster      1      SST210-X        31      16mm Jam nut      1      SST348        32      Jam nut adjuster      1      SST202        33      Eye adjuster housing      1 <td>14</td> <td>-013 Buna O-ring</td> <td>3</td> <td>L7250H</td>	14	-013 Buna O-ring	3	L7250H
16      -134 Quad ring      1      SST271        17      Resevior Cap      1      SST267        18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST10P        28      Seal      1      SST148        27      Guide      1      SST348        27      Guide      1      SST310-X        30      Shock rod monotube      1      SST310-X        31      16mm Jam nut      1      SST220        33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST253        36      Piston nut      1      SST244	15	Seperaing Piston	1	SST266
17      Resevior Cap      1      SST267        18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST159        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST10-X        28      Seal      1      SST10+X        29      Shock rod monotube      1      SST348        27      Guide      1      SST30-X        30      Shock pushrod      1      SST30-X        31      16mm Jam nut      1      SST220        32      Jam nut adjuster      1      SST215        34      Comp. adj. Needle      1      SST253        36      Piston nut      1      SST24	16	-134 Quad ring	1	SST271
18      -326 Buna O-ring      1      SST272        19      46x1.5mm Wire ring O-ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST159        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST348        27      Guide      1      SST101-X        28      Seal      1      SST348        27      Guide      1      SST310-X        30      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      SST392        32      Jam nut adjuster      1      SST215        34      Comp. adj. Needle      1      SST215        34      Comp. adj. Needle      1      SST244        37      Valve discs      SST1640.25        38      Piston nut      1      SST244<	17	Resevior Cap	1	SST267
19      46x1.5mm Wire ring O-ring      1      SST273        20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST159        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST333        26      MB1608DU Bushing      1      SST101-X        28      Seal      1      SST310-X        30      Shock rod monotube      1      SST3292        31      16mm Jam nut      1      SST220        33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST216        35      Rod jet - Piggyback      1      SST244        37      Valve discs      SST1640.25        38      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST280	18	-326 Buna O-ring	1	SST272
20      A50 Durameter 0.139" O-ring      1      SST160        21      8/32" x 7/64" HHS      1      SST157        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1      SST101-X        28      Seal      1      SST101-X        29      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      SST322        31      16mm Jam nut      1      SST215        34      Comp. adj. Needle      1      SST215        34      Comp. adj. Needle      1      SST216        35      Rod jet - Piggyback      1      SST244        37      Valve discs      SST1640.25        38      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST250	19	46x1.5mm Wire ring	1	SST273
21      8/32" x 7/64" HHS      1      SST159        22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST101-X        28      Seal      1      SST310-X        30      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      SST3292        31      16mm Jam nut      1      SST220        33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST253        36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST1640.25        39      Needle - Piggyback      1      SST250        40      Shim      1      SST250	20	A50 Durameter 0.139" O-ring	1	SST160
22      -007 Buna O-ring      3      SST157        23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST101-X        28      Seal      1      SST310-X        30      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      SST3292        31      16mm Jam nut      1      SST220        33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST253        36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST1640.25        39      Needle - Piggyback      1      SST250        40      Shim      1      SST250	21	8/32" x 7/64" HHS	1	SST159
23      8/32" x 1/4" BHCS SS      3      SST156        24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST10P-X        28      Seal      1      SST10-X        29      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      SST392        31      16mm Jam nut      1      SST215        34      Comp. adj. Needle      1      SST215        34      Comp. adj. Needle      1      SST253        36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST250        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	22	-007 Buna O-ring	3	SST157
24      #031 Buna O-ring      4      S510P        25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST101-X        28      Seal      1      SST174-X        29      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      SST392        31      16mm Jam nut      1      SST210        32      Jam nut adjuster      1      SST210        33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST244        37      Valve discs      SST1640.25        38      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	23	8/32" x 1/4" BHCS SS	3	SST156
25      -125 Buna O-ring      1      SST133        26      MB1608DU Bushing      1      SST348        27      Guide      1      SST101-X        28      Seal      1      SST174-X        29      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      S3800T-X        31      16mm Jam nut      1      SST220        32      Jam nut adjuster      1      SST215        34      Comp. adj. Needle      1      SST253        36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST250	24	#031 Buna O-ring	4	S510P
26      MB1608DU Bushing      1      SST348        27      Guide      1      SST101-X        28      Seal      1      SST174-X        29      Shock rod monotube      1      SST310-X        30      Shock pushrod      1      SST392        31      16mm Jam nut      1      SST220        33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST244.30	25	-125 Buna O-ring	1	SST133
27Guide1SST101-X28Seal1SST174-X29Shock rod monotube1SST310-X30Shock pushrod1S3800T-X3116mm Jam nut1SST39232Jam nut adjuster1SST22033Eye adjuster housing1SST21534Comp. adj. Needle1SST21635Rod jet - Piggyback1SST24437Valve discsSST1640.2538Piston1SST188-139Needle - Piggyback1SST25040Shim1SST1644.30	26	MB1608DU Bushing	1	SST348
28Seal1SST174-X29Shock rod monotube1SST310-X30Shock pushrod1S3800T-X3116mm Jam nut1SST39232Jam nut adjuster1SST22033Eye adjuster housing1SST21534Comp. adj. Needle1SST21635Rod jet - Piggyback1SST25336Piston nut1SST24437Valve discsSST1640.2538Piston1SST188-139Needle - Piggyback1SST25040Shim1SST1644.30	27	Guide	1	SST101-X
29Shock rod monotube1SST310-X30Shock pushrod1S3800T-X3116mm Jam nut1SST39232Jam nut adjuster1SST22033Eye adjuster housing1SST21534Comp. adj. Needle1SST21635Rod jet - Piggyback1SST24437Valve discsSST1640.2538Piston1SST188-139Needle - Piggyback1SST25040Shim1SST1644.30	28	Seal	1	SST174-X
30      Shock pushrod      1      S3800T-X        31      16mm Jam nut      1      SST392        32      Jam nut adjuster      1      SST220        33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST216        35      Rod jet - Piggyback      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	29	Shock rod monotube	1	SST310-X
3116mm Jam nut1SST39232Jam nut adjuster1SST22033Eye adjuster housing1SST21534Comp. adj. Needle1SST21635Rod jet - Piggyback1SST25336Piston nut1SST24437Valve discsSST1640.2538Piston1SST188-139Needle - Piggyback1SST25040Shim1SST1644.30	30	Shock pushrod	1	S3800T-X
32Jam nut adjuster1SST22033Eye adjuster housing1SST21534Comp. adj. Needle1SST21635Rod jet - Piggyback1SST25336Piston nut1SST24437Valve discsSST1640.2538Piston1SST188-139Needle - Piggyback1SST25040Shim1SST1644.30	31	16mm Jam nut	1	SST392
33      Eye adjuster housing      1      SST215        34      Comp. adj. Needle      1      SST216        35      Rod jet - Piggyback      1      SST253        36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	32	Jam nut adjuster	1	SST220
34      Comp. adj. Needle      1      SST216        35      Rod jet - Piggyback      1      SST253        36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	33	Eye adjuster housing	1	SST215
35      Rod jet - Piggyback      1      SST253        36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	34	Comp. adj. Needle	1	SST216
36      Piston nut      1      SST244        37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	35	Rod jet - Piggyback	1	SST253
37      Valve discs      SST1640.25        38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	36	Piston nut	1	SST244
38      Piston      1      SST188-1        39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	37	Valve discs		SST1640.25
39      Needle - Piggyback      1      SST250        40      Shim      1      SST1644.30	38	Piston	1	SST188-1
40 Shim 1 SST1644.30	39	Needle - Piggyback	1	SST250
	40	Shim	1	SST1644.30

Item	Description	Quantity	Part Number
Num.			
41	16x22x1mm Shim	2	N/A
42	Rebound spacer	1	SST311
43	1x8mm Buna O-ring	2	SST258
44	Piston stop clip	1	SST232
45	Piston band	1	SST149-1
46	1x13mm Buna O-ring	2	SST259
47	Compression Adj. needle	1	SST224
48	Comp. high speed adjuster	1	SST223
49	Comp. high speed adj. nut	1	SST222
50	Comp. knob spring	2	S5000W
51	3mm Chrome steel ball	5	S5000V
52	10-24 X 3/16" Set Screw	1	SST274
53	Comp. high speed adj. cap	1	SST225
54	Repl. valve spring	1	S5000SR
55	Retainer disk	1	S5000SON
56	Compression valve plate	1	SST230
57	Shock valve spring	1	S510L
58	Retainer disc - Comp.chk.v	1	SST226
59	Retainer ring	1	SST231
60	-011 Buna O-ring	1	SST152
61	-004 Buna O-ring	1	SST278
62	-012 Buna O-ring	1	SST228



# PIGGYBACK PARTS DIAGRAM





# GAS CHARGE TOOL PROCEDURE

Thank you for purchasing the Strange Ultra Shock Gas Charging Tool. This tool is designed for gas charged shocks that use the self sealing rubber valves. We recommend using Nitrogen for gas charging the shocks. Nitrogen tanks and regulators are available at welding supply stores. This tool is designed to be threaded into a gas charging tool or used with a tire inflation chuck.

#### **INSTRUCTIONS FOR USE:**

- 1. Set your Nitrogen Tank regulator to 80 psi
- 2. Remove the gas filling screw on the Strange Ultra shock
- 3. Remove the cap from the schrader valve tool and the needle safety cap.
- 4. If using a tire chuck for gas charging insert the gas charging tool into the rubber seal.
- 5. If using a a gas schrader valve charger, thread the tool into the charger needle tool.
- 6. Insert the needle into the rubber seal valve as straight as possible.
- **7.** Pressurize the charging needle, shock must be fully extended during and after charge.
- 8. Turn off pressure and pull the needle from the shock.
- 9. Replace the filling screw on the shock and the protective safety cap on the needle.

**Note:** Check shock for pressure by compressing and releasing to watch shock extend.



**WARNING**: Wear eye protection, never point the needle towards yourself or others.

Item Number	Description	Quantity	Part Number
1	Gas fill adapter	1	SST550A
2	Gas fill cap	1	SST550B
3	21G x 1-1/2" Needle	1	SST550C