

SAWYER CHASSIS

BASIC SETUP INSTRUCTIONS

Before starting you will need to gather a few items, which are necessary to setup your Sawyer Chassis:

- ✓ A set of reliable scales
- ✓ A clean, LEVEL, floor. Try to place the scales in the same spot on the floor each time you setup your car for consistency. Also, mark the scales according to which wheel they will be used on and use them on the same wheel each time you use them.
- ✓ Two Sawyer setup blocks (wood blocks will work), one measuring 3-11/16" tall and one measuring 2-3/4" tall.
- ✓ A 1/2" wrench to adjust the torsion bars with.
- ✓ The driver of the car or enough ballast to duplicate the weight of the driver.

Now that you've gathered the necessary tools you'll need to do some preparation to the car.

- The amount of stagger required for a typical Feature at your home track needs to be put on the car.
 - Heavy or Tacky tracks = 9-1/2" to 11"
 - Slick or Dry tracks = 7-1/2" to 9"
- The air pressure needs to be set in the tires. Typical settings are as follows:
 - LF: 6PSI RF: 8PSI
 - LR: 4PSI RR: 6PSI
- The fuel needs to be set at approximately 3 gallons.

After you have gathered the tools needed and have prepared the car with the correct stagger, tire pressure and fuel level, you are ready to begin the basic setup process.

- 1) Place the car on the scales and be sure to center each wheel on the scales.
- 2) Disconnect the rear shocks from the torsion arms in order to allow the torsion bars to support the weight of the car.
- 3) Allow the driver to get into the car, being careful not to let the car roll off of the scales or become un-centered.
- 4) Now you'll need the 3-11/16" block and the 1/2" wrench you were asked to get earlier. You need to get the 3-11/16" block to slide between the rear axle and the bottom frame rail. To do this, use the 1/2" wrench to adjust the torsion stops until the block slides between, as mentioned above. Keep in mind, the block needs to slide between the axle and frame ON BOTH SIDES.
- 5) After you've completed step 4 and the rear of the car is blocked at 3-11/16", get your 2-3/4" block and go to the right front wheel of the car. Just like in the rear, this 2-3/4" block needs to fit snugly between the front axle and the bottom frame rail on the right front of the car. To do this, simply raise or lower the car using the coil adjuster on the right front shock until the 2-3/4" block slides as mentioned above.
 - ❖ **HIGHLIGHT:** It is very likely that after you get the 2-3/4" block to fit under the right front, the rear of the car will need to be adjusted again in order for the 3-11/16" blocks to fit correctly. It is very important that both blocks fit in their designated areas before moving on.

6) Now it's time to read the scales. What you're trying to get to is 50/50 cross weight. You get this when the weight of the right rear (RR) + left front (LF) is equal to the weight of the left rear (LR) + right front (RF).

- For example:

$$\begin{array}{ll} \text{LF} = 180 \text{ lbs.} & \text{RF} = 120 \text{ lbs.} \\ \text{LR} = 250 \text{ lbs.} & \text{RR} = 210 \text{ lbs.} \end{array}$$

- $\text{LR} + \text{RF} = 370 \text{ lbs.}$ – This is the amount of "LEFT BIAS" you have.
- $\text{RR} + \text{LF} = 390 \text{ lbs.}$ - This is the amount of "RIGHT BIAS" you have.

❖ So, according to these weights we have a total of 20 pounds of 'RIGHT BIAS' weight in the car. We want these weights to be equal if possible so we need to adjust this 20 pounds of "RIGHT BIAS" out of the car.

7) In order to adjust this weight out and get to 50/50 cross weight, you need to go to the left front shock of the car. By adjusting the coil adjuster on the left front shock you can either add or take away 'RIGHT BIAS' weight.

- To add "RIGHT BIAS", add turns into the coil adjuster.
- To take away "RIGHT BIAS", remove turns from the coil adjuster.

❖ In this example, since we have too much "RIGHT BIAS". In the car, we need to turn the left front coil adjuster counterclockwise. How much adjustment is needed will be different from car to car.

❖ Typically 1 turn equals 1% on scales.

8) After you make the appropriate adjustments to the left front shock coil, to get the correct cross weight, repeat steps 4 & 5 until both blocks fit in the appropriate places, then check the scales again to see if the adjustments you made in step 7 got you to your target of 50/50 cross weight.

Initially, it may be necessary to repeat steps 4 through 7 several times in order to get your car setup correctly. However, after you become more familiar with this process and do it a few times, it will become much easier and should not take more than 15 minutes to do.

Hopefully this will be a helpful guide that will give you a better idea about how to prepare your Sawyer Chassis to go to the race track. Remember that no matter what shocks, springs, torsion bars, or tires you choose to run, follow these steps when setting up your Sawyer Chassis.

If you have any questions regarding these procedures or are unclear as to what we mean in some of the steps, please call Monday through Thursday from 9 a.m. to 6 p.m., CST.

Suggestions

This is also a good time to troubleshoot your car. A few things to look for are:

- Bent shocks - take shocks off and move by hand to see if they operate smoothly.
- Steering shaft - make sure the shaft is telescoping in and out properly and is not bound up.
- Rod ends - check all rod ends looking for bent ones or for loose jam nuts.
- Nuts & Bolts - wrench on ALL nuts and bolts to make sure you don't have anything loose.

Sawyer Chassis now sells digital scales for use in setting up your car as described above. Take the guesswork out of your chassis setup and know exactly what weight you have, and where. A great investment if you want to go fast. Call for pricing, 918-258-2944.

Instructions for adjusting E-model eye on 2014 Sawyer Micro-sprint shocks

Adjusting

Dampening of the shock can be adjusted by turning the detent wheel to any location on the 9 position adjusting range. To increase the dampening, turn the wheel clockwise and to decrease dampening turn counter-clockwise. Initially start adjusting wheel from the full clockwise position (full stiff) and then turn wheel to the desired shock dampening position. A small setscrew in the detent wheel creates a stop for full stiff and full soft position. This setscrew must not be removed at any time.

Setting Gas Pressure in Shocks

Gas pressure is to be set with shock fully extended.

The shock is pressurized through the Schrader valve on the shock by using the A.R.S. #40887 inflation tool that screws on the Schrader valve of the shock with a special fitting.

1. Back the Wing Nut off all the way (counter-clockwise) on the Pressurizing Tool before screwing it on to the Schrader Valve of the shock.
2. Tighten the Hex Nut Coupler on to the Schrader Valve. Do not over tighten and damage valve or tool.
3. Screw Wing Nut all the way clockwise so it pierces the valve core of the Schrader Valve on the shock.
4. Pressurize the shock to your desired pressure through the valve stem on the tool using Nitrogen Gas Only.
5. After the gas pressure is set in the shock, back the Wing Nut all the way out, (counter-clockwise) so the valve core is seated in valve stem of the shock.
6. Put an open-end wrench on the Hex nut of the Schrader Valve to insure that it does not loosen out of the shock when removing the Pressurizing Tool from the shock.

**** You will hear gas pressure escape when you remove the tool from the shock. If the wing nut was backed off before removing the hex nut from Schrader Valve this gas you hear is only gas stored in the line of the tool.

Tuning the Gas Pressure

The nitrogen gas pressure in the 3200 series mono-tube shock is required at all times in the shock to make it function properly under racing conditions. The gas pressure in the shock can be adjusted to accommodate various racetrack conditions.

Decreasing the pressure in the rear shocks allows for more weight transfer to the rear suspension and provides for more traction on the rear tires. Increasing the gas pressure in the rear shocks can loosen or free the chassis up throughout the corner of the race track.

The nitrogen gas pressure in this shock can be adjusted from 5 p.s.i. to 30 p.s.i. to accommodate various race conditions.

Left Front (10psi.)

Counter-clockwise <-----> Clockwise

FULL SOFT

FULL STIFF

POSITION #1	POSITION #2	POSITION #3	POSITION #4	POSITION #5	POSITION #6	POSITION #7	POSITION #8	POSITION #9
		Dry Slick		Average	Heavy			

Right Front (10psi.)

Counter-clockwise <-----> Clockwise

FULL SOFT

FULL STIFF

POSITION #1	POSITION #2	POSITION #3	POSITION #4	POSITION #5	POSITION #6	POSITION #7	POSITION #8	POSITION #9
		Dry Slick		Average	Heavy			

Left Rear (10psi.)

Counter-clockwise <-----> Clockwise

FULL SOFT

FULL STIFF

POSITION #1	POSITION #2	POSITION #3	POSITION #4	POSITION #5	POSITION #6	POSITION #7	POSITION #8	POSITION #9
				Heavy		Average	Dry Slick	

Right Rear

Counter-clockwise <-----> Clockwise

FULL SOFT

FULL STIFF

POSITION #1	POSITION #2	POSITION #3	POSITION #4	POSITION #5	POSITION #6	POSITION #7	POSITION #8	POSITION #9
	Heavy			Average		Dry Slick		

20 psi.

15 psi.

10 psi.

Recommended Pressure

Sawyer Chassis Track Sheets

Track & Size: _____

Track City & State: _____

Air Temp: _____ ADR: _____

Stumble _____

Main _____

High Speed _____

HEAT RACE

FEATURE RACE

Fuel Start: _____ Fuel End: _____

Fuel Start: _____ Fuel End: _____

Gear: _____

Gear: _____

Tire Compound: _____

Tire Compound: _____

Right Rear Spacing: _____

Right Rear Spacing: _____

PRESSURE

Left Rear _____ Right Rear _____

PRESSURE

Left Rear _____ Right Rear _____

TIRE SIZE

Left Rear _____ Right Rear _____

TIRE SIZE

Left Rear _____ Right Rear _____

Stagger: _____

Stagger: _____

TURNS IN CAR

Left Front _____ Right Front _____
Left Rear _____ Right Rear _____

TURNS IN CAR

Left Front _____ Right Front _____
Left Rear _____ Right Rear _____

SPRING/BAR

Left Front _____ Right Front _____
Left Rear _____ Right Rear _____

SPRING/BAR

Left Front _____ Right Front _____
Left Rear _____ Right Rear _____

Start Pos: _____

Finish Pos: _____

Start Pos: _____

Finish Pos: _____

NOTES:

Engler Fuel Injection Data Record

TRACK _____

DATE _____

AIR DENSITY READINGS

ADR % _____ ADR FT. _____

ADR % _____ ADR FT. _____

PILL SIZE/PSI. START

PILL SIZE/PSI. START

STUMBLE _____ PSI. _____

STUMBLE _____ PSI. _____

MAIN _____ PSI. _____

MAIN _____ PSI. _____

HIGH SPEED _____ PSI. _____

HIGH SPEED _____ PSI. _____

LAMBDA

LAMBDA

RPM

RPM

MIN _____ MAX _____

MIN _____ MAX _____

0-7200 _____ STUMBLE

0-7200 _____ STUMBLE

8000-16500 _____ MAIN

8000-16500 _____ MAIN

12000-16500 _____ HIGH SPEED

12000-16500 _____ HIGH SPEED

Torsion Bar Spring Rates

SOLID BARS	Bar Size	Left Arm Length		Right Arm Length	
		Front Hole	Rear Hole	Front Hole	Rear Hole
	650	69.27	83.09	83.09	101.50
675	80.55	96.63	96.63	118.00	
700	93.17	111.18	111.18	136.50	
725	107.2	128.60	128.60	157.10	
750	122.8	147.30	147.30	179.90	

HOLLOW BARS	Bar Size	Left Arm Length		Right Arm Length	
		Front Hole	Rear Hole	Front Hole	Rear Hole
	650	69.27	83.09	83.09	101.50
675	80.55	96.63	96.63	118.00	
700	93.17	111.18	111.18	136.50	
725	107.2	128.60	128.60	157.10	
750	122.8	147.30	147.30	179.90	



How long do torsion bars last?

That depends on the application and how much the bars are twisted. Bars will start to lose performance as they deteriorate. The car might lose some ride height. On most dirt applications bars will usually last 15-20 races while pavement applications will last several seasons, since they don't twist as far.

Can I twist a torsion bar one way then turn it around and twist it the other way?

It is not recommended, but it can be done. Typically a bar will take a set in the direction of twist. When you turn it around, it will unwind and take a set in the other direction.

How come my hollow torsion bars say one size, but when I measure it the size is bigger than the size stamped on the end of the bar?

Bars are always rated at what spring rate would be if it was a solid bar. The diameter on hollow bars has to be increased to achieve the same spring rate as a solid bar.

Which bars are better, solid or hollow?

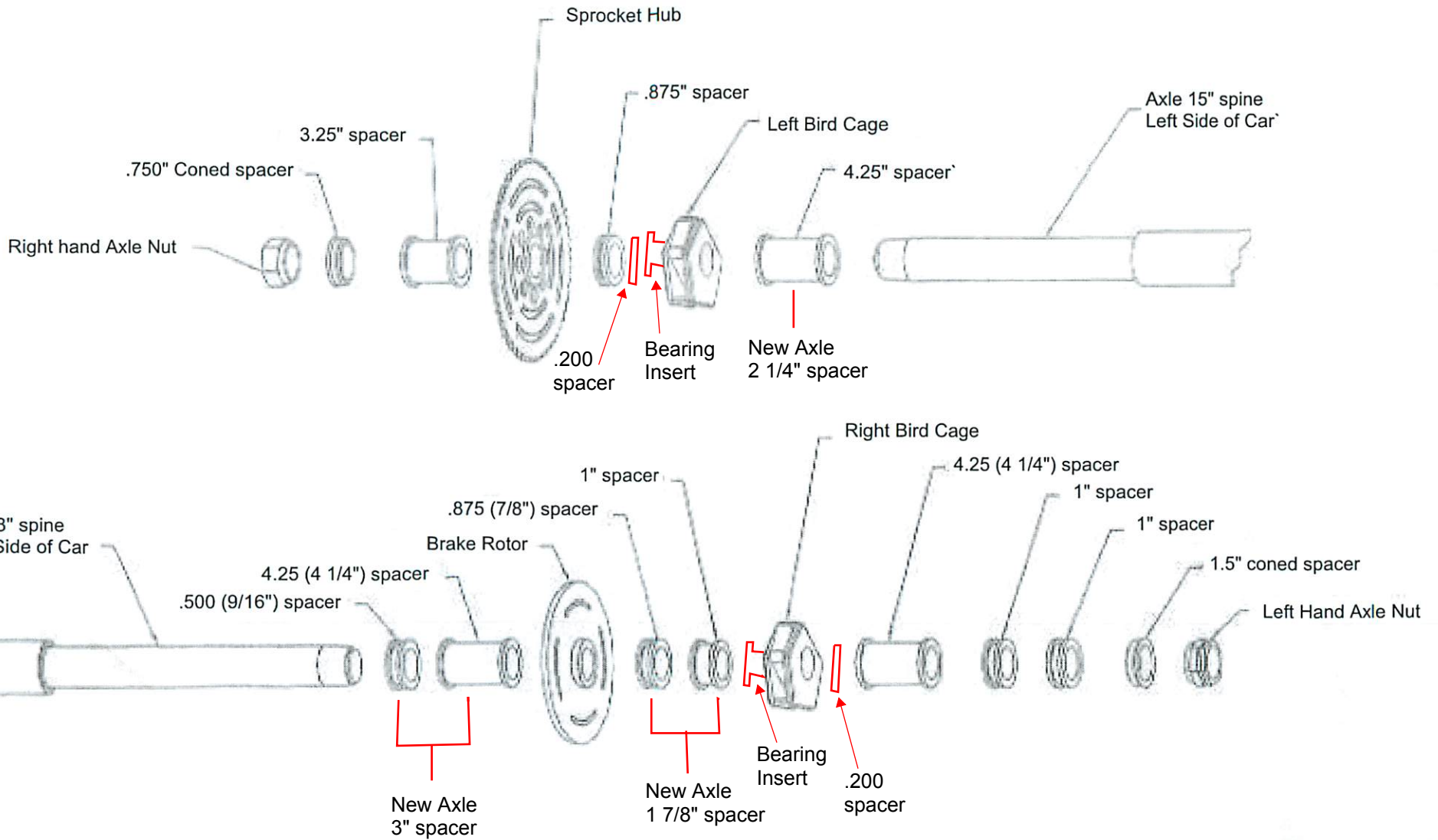
It depends on the application. Solid bars hold up better under extreme travel conditions. Hollow bars react faster, which makes them superior on certain track conditions.

What's the difference between hollow bars and gundrilled bars?

Gundrilled bars are made of a different material than tubing bars. This will allow the bar to twist more and last longer than tubular bars.

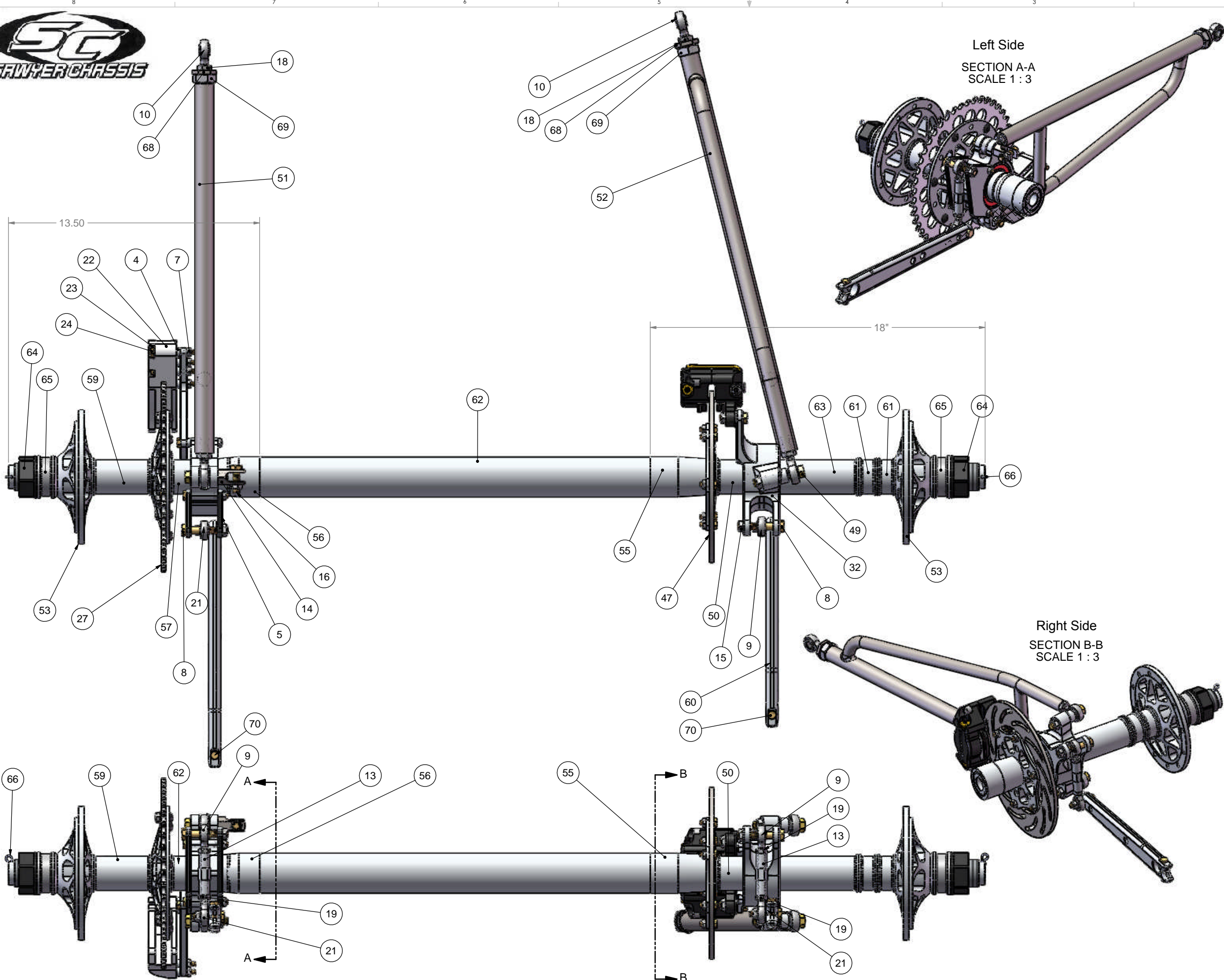


800 S 12th St | Broken Arrow, OK 74012 | Ph: 918.258.2944





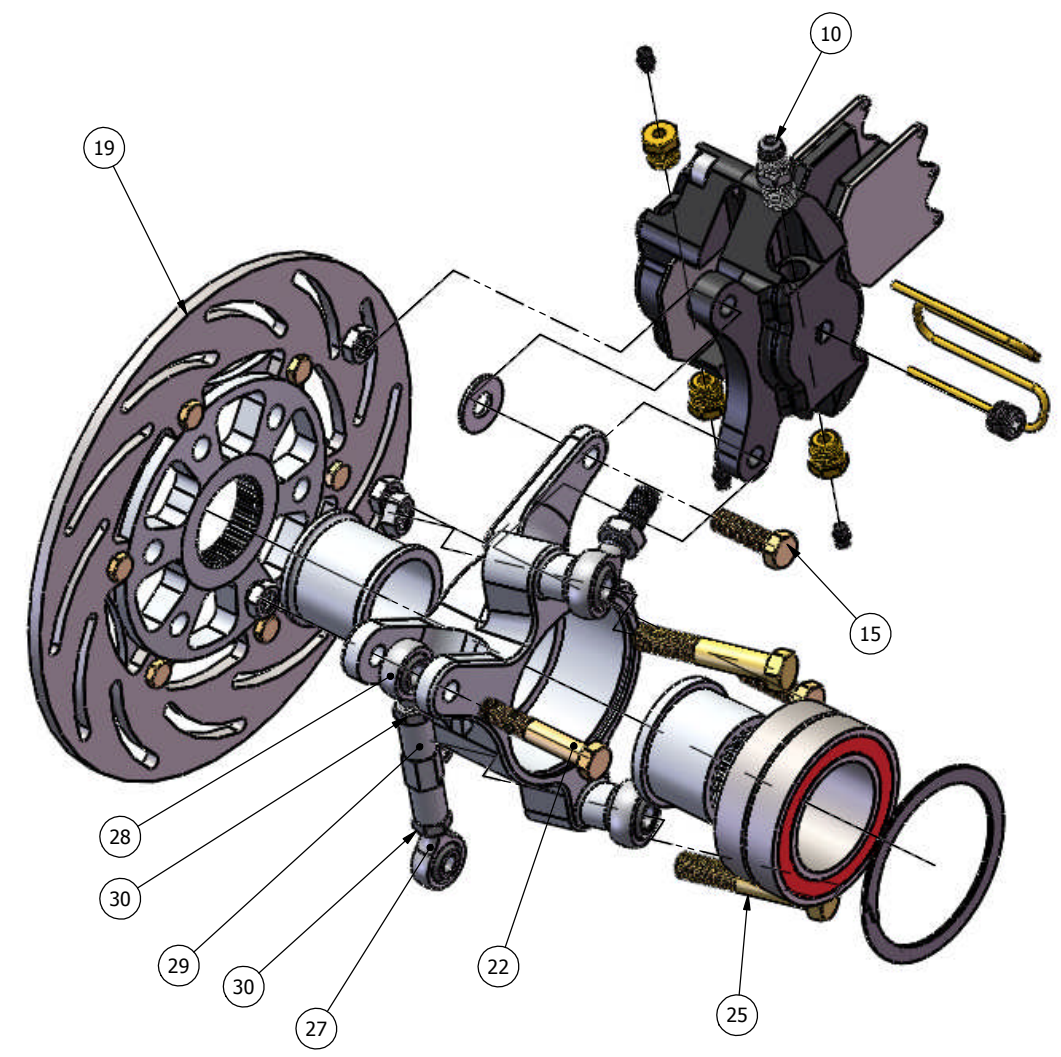
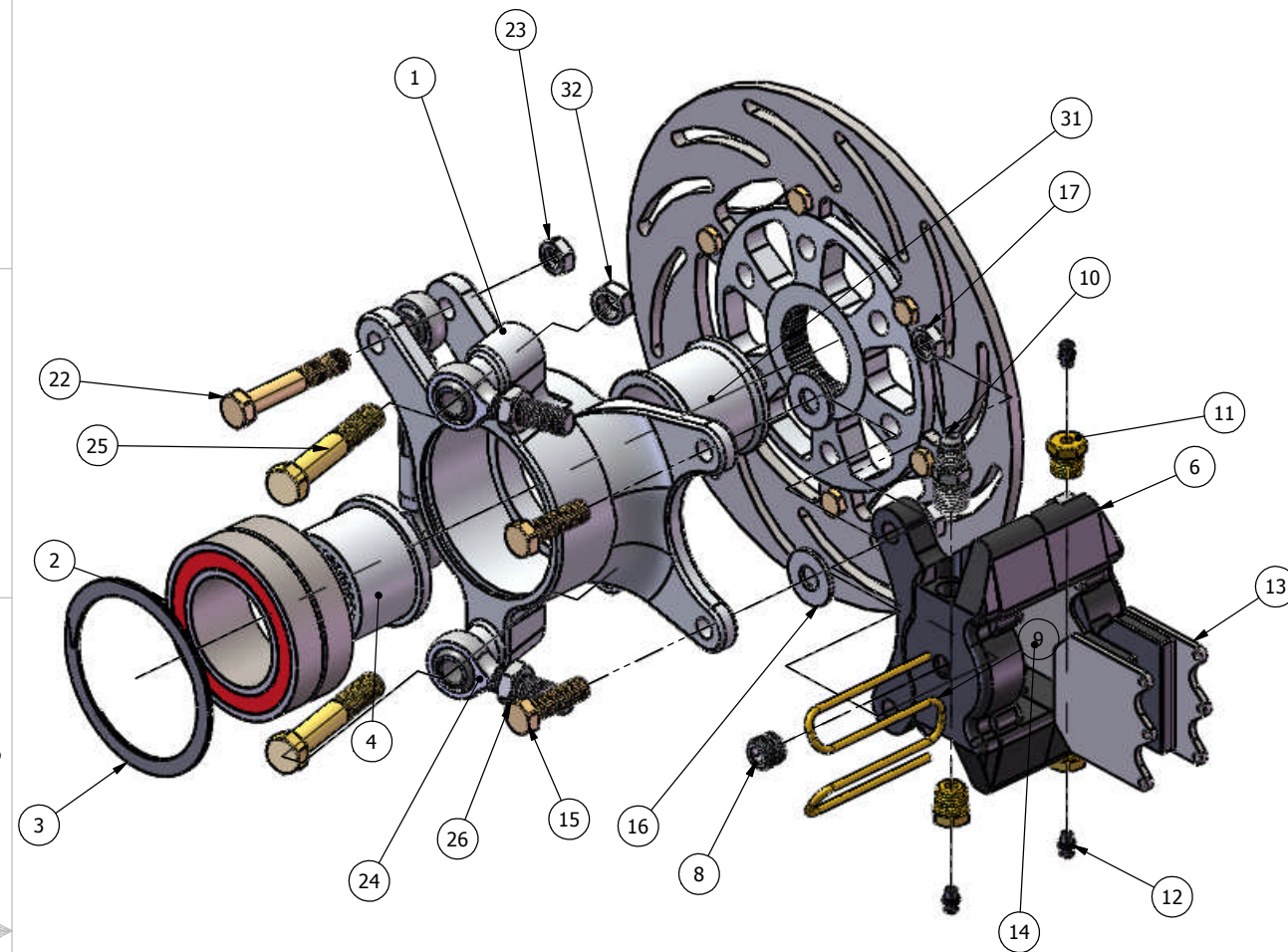
13.50



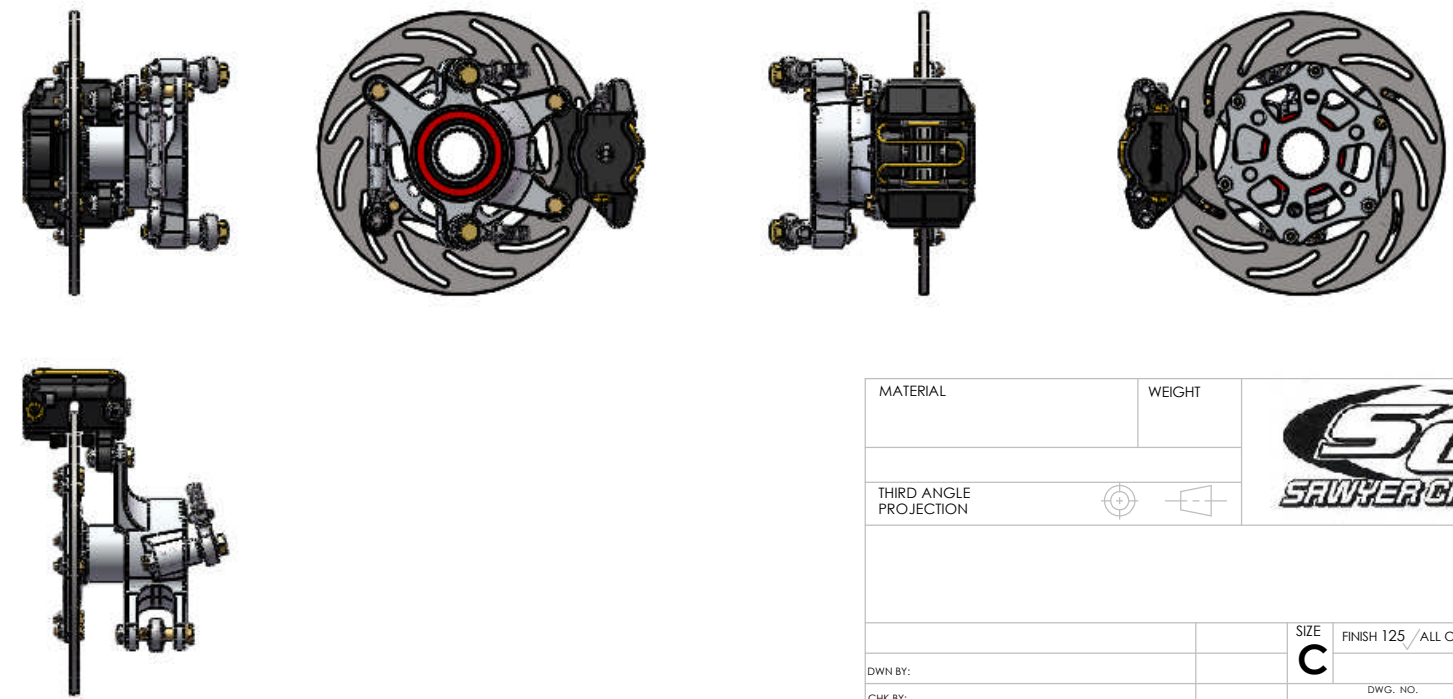
Left Side
SECTION A-A
SCALE 1 : 3

Right Side
SECTION B-B
SCALE 1 : 3

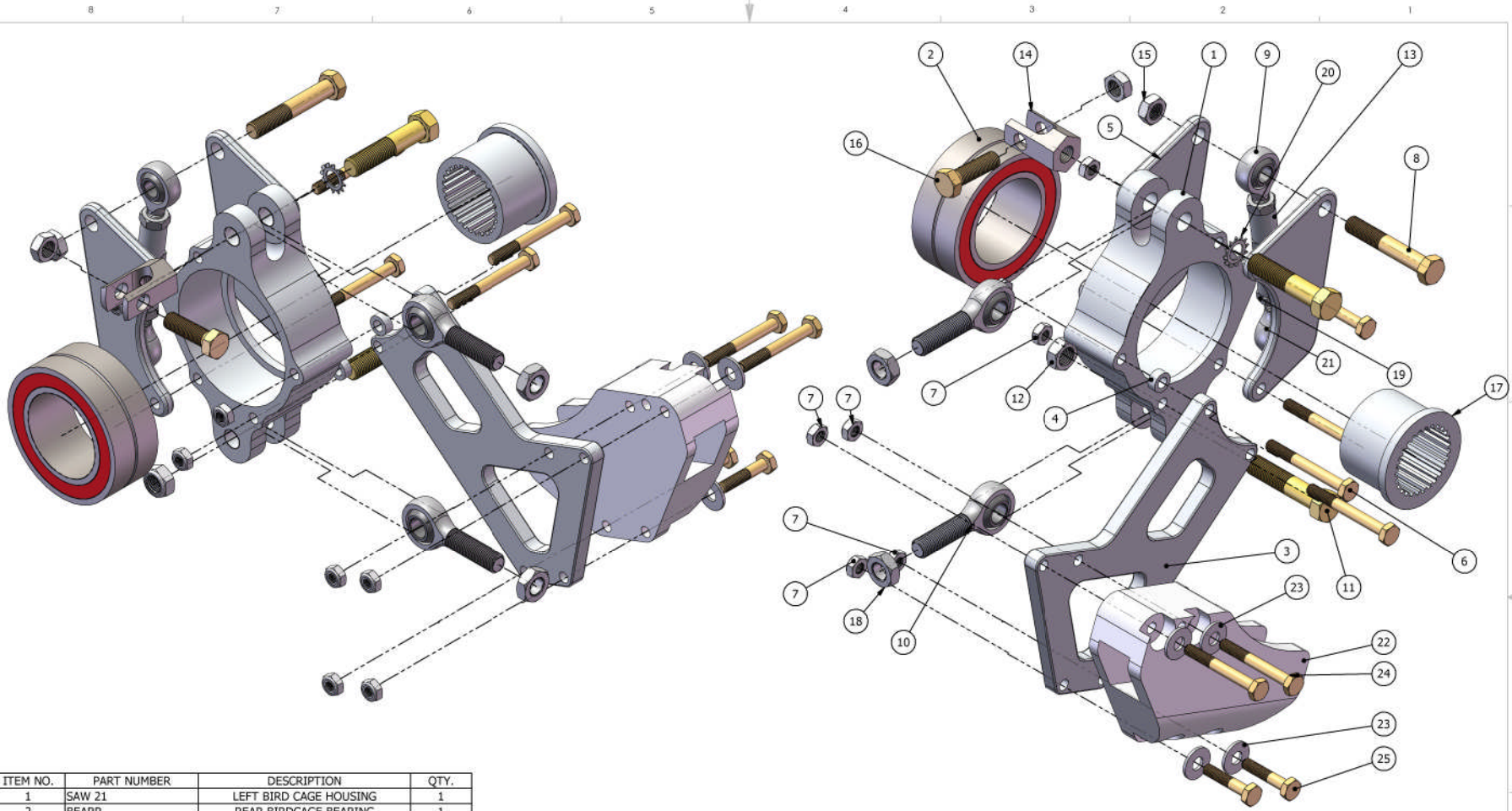
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SAW		1
2			2
3			1
4			6
5			2
6			4
7			16
8			2
9			2
10			6
11			2
12			3
13			2
14			1
15			3
16			3
17			2
18			6
19			4
20			1
21			2
22			1
23			4
24			2
25			2
26			1
27		SROKET	1
28			3
29			3
30			5
31			3
32			1
33		SPIRAL RETAINING RING	1
34			1
35			1
36			4
37			1
38			1
39			1
40			3
41			3
42			2
43			2
44			2
45			2
46			1
47		BRAKE ROTOR ASSEMBLY	1
48			6
49			2
50			1
51			1
52			1
53			2
54			1
55			1
56			1
57			1
58			1
59			1
60			1
61			2
62			1
63			1
64			2
65			2
66			2
67			2
68			2
69			2
70			2



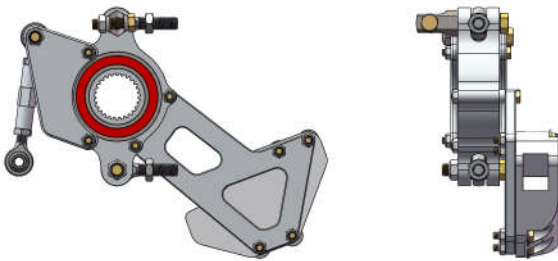
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RRB	RIGHT REAR BIRDCAGE	1
2	BEARL	LEFT REAR BIRDCAGE BEARING	1
3		SPIRAL RETAINING RING	1
4	SAW 88	BEARING INSERT	1
6		CALIPER ASSEMBLY	1
8		1/4" NPT SOCKET HEX HEAD PLUG	1
9		BRAKE PAD CLIP	1
10		BREAK LINE FITTING	1
11		BLEEDER FITTING	3
12		BLEEDER PLUG	3
13		BRAKE PAD	2
14		BRAKE PAD SHIM	2
15		3/8-24X1.25" GRADE 8 HEX HEAD BOLT	2
16		3/8 FLAT WASHER	2
17		3/8-24 HALF LOCK NUT	2
19		BRAKE ROTOR ASSEMBLY	1
22		3/8-24X2.25" GRADE 8 HEX HEAD BOLT	1
23		3/8-24 HALF LOCK NUT	1
24		7/16 ROD END RIGHT	2
25		3/8-24X2.5" GRADE 8 HEX HEAD BOLT	2
26		7/16 JAM NUT RIGHT	2
27		3/8 ROD END W/ 5/16 BALL RIGHT	1
28		3/8 ROD END RIGHT	1
29	SAW 24	SHACKLE W/ NO ROD END	1
30	3/8-24 RIGHT	3/8-24 RIGHT JAM NUT	2
31		BRAKE ROTOR/BIRDCAGE SPACER	1
32		3/8-24 HALF LOCK NUT	2



MATERIAL	WEIGHT	
THIRD ANGLE PROJECTION		
DWN BY:		SIZE C FINISH 125 / ALL OVER EXCEPT AS NOTED DWG. NO. REV
CHK BY:		
APP BY:		



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SAW 21	LEFT BIRD CAGE HOUSING	1
2	BEARR	REAR BIRDCAGE BEARING	1
3	SAW 19	CHAIN GUIDE BRACKETT	1
4	SAW 80	CHAIN GUIDE SPACER	2
5	SAW 8	REAR TORSION MOUNT ON BIRDCAGE	2
6	1/4-28X2.25	TORSION MOUNT BOLT	4
7	1/4-28 HALF NUT	TORSION MOUNT NYLON HALF NUT	8
8	3/8-24X3	TORSION MOUNT BOLT CUT TO 2.25"	1
9	RE3L	3/8 LEFT HAND ROD END	1
10	RE7L	7/16 RIGHT HAND ROD END	2
11	7/16-20X2.0	BIRD CAGE TO WISHBONE BOLT	2
12	7/16-20 NUT	BIRD CAGE TO WISHBONE FULL NUT	1
13	SAW 24	SHACKEL W/NO ROD ENDS	1
14	SAW 20	LEFT BIRD CAGE CLEVIS	1
15	3/8-24 NUT	TORSION MOUNT NYLON HLAIF NUT	2
16	3/8-24X1.25	CLEVIS BOLT	1
17	SAW 88	BEARING INSERT	1
18	7/16-20 RIGHT	7/16 JAM NUT	2
19	3/8-24 RIGHT JAM NUT	3RIGHT JAM NUT	2
20			1
21	RE3-5R	3/8 ROD END W/ 5/16 BALL RIGHT	1
22	PCG	PLASTIC CHAIN GUIDE	1
23			4
24			2
25			2



MATERIAL	WEIGHT 4.29 (lbs)	
SolidWorks		
THIRD ANGLE PROJECTION		
SCALE: 1:2		DATE
OWN BY:		SIZE C
CHK BY:		FINISH 125 / ALL OVER EXCEPT AS NOTED
APP BY:		SHEET 2 OF 2

Suzuki 06-10 GSX-R 600

SUZUKI GSX-R 2006-2010

RATIOS		1.974	2.053	1.714	1.5
FRONT	REAR	2ND	3RD	4TH	
11	45	16.58	13.84	12.11	
	46	16.95	14.15	12.38	
	47	17.32	14.46	12.65	
	48	17.68	14.76	12.92	
	49	18.05	15.07	13.19	
	50	18.42	15.38	13.46	
	51	18.79	15.69	13.73	
	52	19.16	15.99	14.00	
	53	19.53	16.30	14.27	

FRONT	REAR	2ND	3RD	4TH
14	45	13.03	10.88	9.52
	46	13.32	11.12	9.73
	47	13.61	11.36	9.94
	48	13.89	11.60	10.15
	49	14.18	11.84	10.36
	50	14.47	12.08	10.58
	51	14.76	12.33	10.79
	52	15.05	12.57	11.00
	53	15.34	12.81	11.21

12	45	15.20	12.69	11.10
	46	15.54	12.97	11.35
	47	15.87	13.25	11.60
	48	16.21	13.53	11.84
	49	16.55	13.82	12.09
	50	16.89	14.10	12.34
	51	17.22	14.38	12.58
	52	17.56	14.66	12.83
	53	17.90	14.94	13.08

15	45	12.16	10.15	8.88
	46	12.43	10.38	9.08
	47	12.70	10.60	9.28
	48	12.97	10.83	9.48
	49	13.24	11.05	9.67
	50	13.51	11.28	9.87
	51	13.78	11.50	10.07
	52	14.05	11.73	10.26
	53	14.32	11.95	10.46

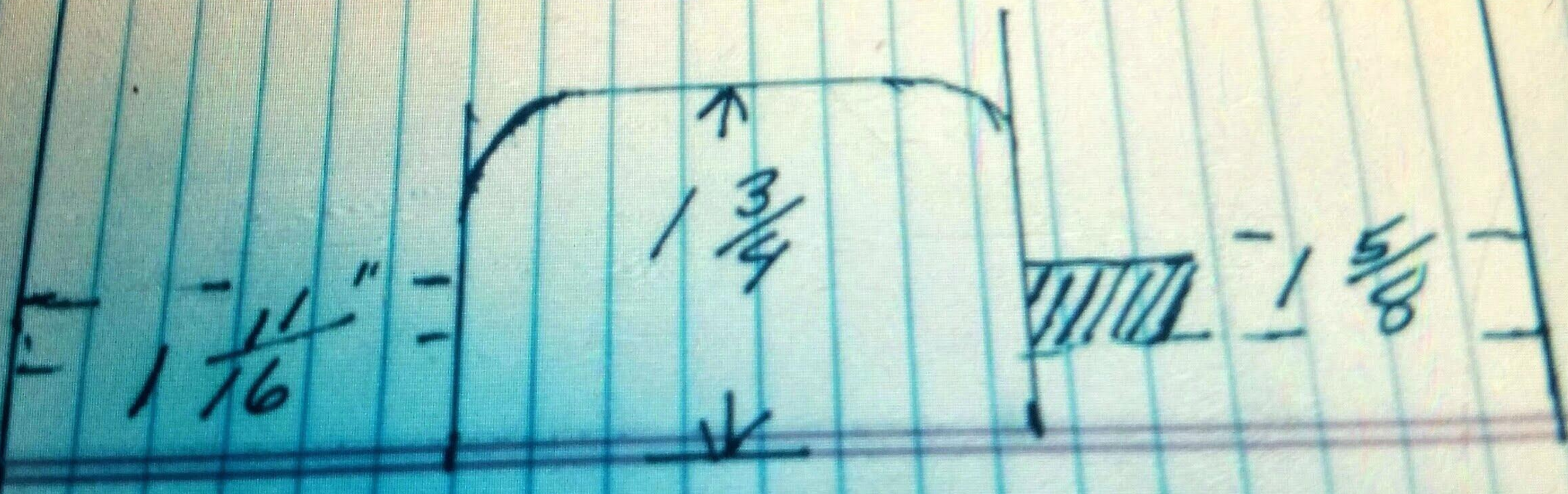
13	45	14.03	11.71	10.25
	46	14.34	11.97	10.48
	47	14.65	12.23	10.71
	48	14.96	12.49	10.93
	49	15.28	12.75	11.16
	50	15.59	13.01	11.39
	51	15.90	13.27	11.62
	52	16.21	13.53	11.84
	53	16.52	13.79	12.07

16	45	11.40	9.52	8.33
	46	11.65	9.73	8.51
	47	11.90	9.94	8.70
	48	12.16	10.15	8.88
	49	12.41	10.36	9.07
	50	12.66	10.57	9.25
	51	12.92	10.78	9.44
	52	13.17	11.00	9.62
	53	13.42	11.21	9.81



07 - 13

SUZUKI motor
cut



**SAW 115
LEFT FRONT
MOTOR MOUNT PLATE**

**3/8 - 20 X 2" BOLT
W/ AN WASHER
& HALF NUT**

**SAW 27
.750 SPACER**

**SAW 97
LOWERED FRONT
MOTOR MOUNT PLATE**

**7/16 - 20 X 2 1/2" BOLT
W/ AN & LOCK WASHERS**

**7/16 - 20 X 2 3/4 BOLT
W/ HALF NUT**

**SAW 114
REAR
MOTOR MOUNT PLATE**

**3/8 - 20 X 8.1/2" BOLT
W/ (2) AN WASHERS
& FULL NUT**

**M10 - 1.25 X 35 MM BOLT (X2)
W/ AN & LOCK WASHERS**

**SAW 38
1" SPACER**

METRIC BOLT GOES
THROUGH SIDE
STAMPED
"M"

**SAW 116
.1875 SPACER**

**7/16 - 20 X 1"
TAPERED BOLT**

**SAW 38
1" SPACER**

**SAW 28
.560 SPACER**

**SAW 114-1
FRONT INSIDE
MOTOR MOUNT**

**3/8 - 20 X 1 1/2" BOLT
W/ HALF NUT**

**SAW 114
REAR
MOTOR MOUNT PLATE**

**7/16 - 20 X 1 1/2" BOLT
W/ AN & LOCK WASHERS
(X2)**

06 - 13 SUZUKI MOTOR MOUNT



Black & Silver

YAMAHA R6 1999-2005

YAMAHA R6 1999-2005

RATIOS	1.955	1.947	1.556	1.333
FRONT	REAR	2ND	3RD	4TH
11	45	15.57	12.44	10.66
	46	15.92	12.72	10.90
	47	16.26	13.00	11.13
	48	16.61	13.27	11.37
	49	16.96	13.55	11.61
	50	17.30	13.83	11.85
	51	17.65	14.10	12.08
	52	17.99	14.38	12.32
	53	18.34	14.66	12.56

FRONT	REAR	2ND	3RD	4TH
14	45	12.23	9.78	8.38
	46	12.51	10.00	8.56
	47	12.78	10.21	8.75
	48	13.05	10.43	8.93
	49	13.32	10.65	9.12
	50	13.59	10.86	9.31
	51	13.87	11.08	9.49
	52	14.14	11.30	9.68
	53	14.41	11.52	9.87

12	45	14.27	11.41	9.77
	46	14.59	11.66	9.99
	47	14.91	11.91	10.21
	48	15.23	12.17	10.42
	49	15.54	12.42	10.64
	50	15.86	12.67	10.86
	51	16.18	12.93	11.08
	52	16.49	13.18	11.29
	53	16.81	13.44	11.51

15	45	11.42	9.13	7.82
	46	11.67	9.33	7.99
	47	11.93	9.53	8.17
	48	12.18	9.73	8.34
	49	12.43	9.94	8.51
	50	12.69	10.14	8.69
	51	12.94	10.34	8.86
	52	13.20	10.55	9.03
	53	13.45	10.75	9.21

13	45	13.18	10.53	9.02
	46	13.47	10.76	9.22
	47	13.76	11.00	9.42
	48	14.05	11.23	9.62
	49	14.35	11.47	9.82
	50	14.64	11.70	10.02
	51	14.93	11.93	10.22
	52	15.23	12.17	10.42
	53	15.52	12.40	10.62

16	45	10.71	8.56	7.33
	46	10.94	8.75	7.49
	47	11.18	8.94	7.66
	48	11.42	9.13	7.82
	49	11.66	9.32	7.98
	50	11.89	9.51	8.14
	51	12.13	9.70	8.31
	52	12.37	9.89	8.47
	53	12.61	10.08	8.63



**SAW 108
LEFT FRONT
MOTOR BRACKET**

**3/8 - 24 X 2" BOLT
W/ FULL NUT**

**SAW 97
LOWERED FRONT
MOTOR MOUNT PLATE**

**7/16 - 20 X 2 1/4"
BOLT W/ WASHER
& STAR WASHER**

Black & Silver

03-05 Yamaha R6S Motor Mount Kit



**M10 X 1.25 X
35MM
(X2)
w/ washers
& Star
Washers**

**7/16 - 20 X2"
W/ FULL NUT**

**SAW 106
FRONT INSIDE MOUNT**

M10 X 1.25 X 35MM

**SAW 25
.375 SPACER**

**SAW 26
.500 SPACER**

**SAW 96
LOWERED
MOTOR MOUNT PLATE**

**SAW 37
.250 SPACER**

**7/16 - 20 X 3"
BOLT W WASHER
& FULL NUT**

**7/16 - 20 X 1 3/4"
BOLT (X2)
W/ WASHER
& STAR WASHER**

**SAW 38
1" SPACER**

**SAW 25
.375 SPACER**

**7/16-20
TAPPED
MOTOR MOUNT
BOLT (X2)**

**LONG MOTOR MOUNT
BOLT
3/8 X 24 X 8/12"
W/ FULL NUT**

**SAW 27
.750 SPACER**

**SAW 107
.125 SPACER**

**SAW 25
.375 SPACER**

All Black

YAMAHA R6 2006-2009

YAMAHA R6 2006-2009

RATIOS	2.073	2.000	1.667	1.444
FRONT	REAR	2ND	3RD	4TH
11	45	16.96	14.14	12.25
	46	17.34	14.45	12.52
	47	17.71	14.77	12.79
	48	18.09	15.08	13.06
	49	18.47	15.39	13.33
	50	18.85	15.71	13.61
	51	19.22	16.02	13.88
	52	19.60	16.34	14.15
	53	19.98	16.65	14.42

FRONT	REAR	2ND	3RD	4TH
14	45	13.33	11.11	9.62
	46	13.62	11.35	9.84
	47	13.92	11.60	10.05
	48	14.21	11.85	10.26
	49	14.51	12.09	10.48
	50	14.81	12.34	10.69
	51	15.10	12.59	10.90
	52	15.40	12.84	11.12
	53	15.70	13.08	11.33

12	45	15.55	12.96	11.23
	46	15.89	13.25	11.47
	47	16.24	13.53	11.72
	48	16.58	13.82	11.97
	49	16.93	14.11	12.22
	50	17.28	14.40	12.47
	51	17.62	14.69	12.72
	52	17.97	14.97	12.97
	53	18.31	15.26	13.22

15	45	12.44	10.37	8.98
	46	12.71	10.60	9.18
	47	12.99	10.83	9.38
	48	13.27	11.06	9.58
	49	13.54	11.29	9.78
	50	13.82	11.52	9.98
	51	14.10	11.75	10.18
	52	14.37	11.98	10.38
	53	14.65	12.21	10.58

13	45	14.35	11.96	10.36
	46	14.67	12.23	10.59
	47	14.99	12.49	10.82
	48	15.31	12.76	11.05
	49	15.63	13.03	11.28
	50	15.95	13.29	11.51
	51	16.27	13.56	11.74
	52	16.58	13.82	11.97
	53	16.90	14.09	12.20

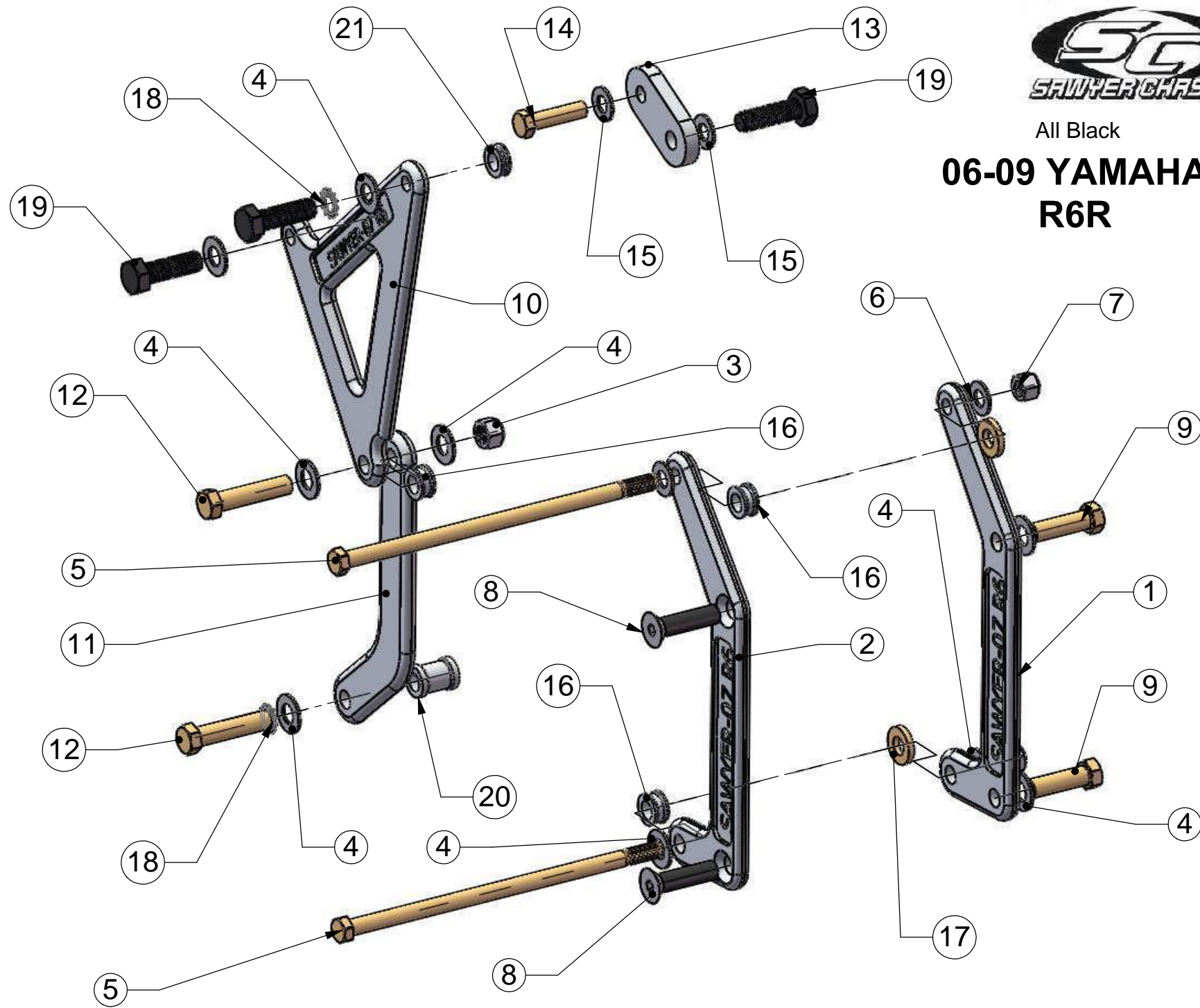
16	45	11.66	9.72	8.42
	46	11.92	9.94	8.61
	47	12.18	10.15	8.79
	48	12.44	10.37	8.98
	49	12.70	10.58	9.17
	50	12.96	10.80	9.35
	51	13.22	11.02	9.54
	52	13.47	11.23	9.73
	53	13.73	11.45	9.92





All Black

06-09 YAMAHA R6R



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	SAW 98	Rear Motor Mount (right)	1
2	SAW 98	Rear Motor Mount (left)	1
3		7/16-20 Lock nut	2
4		7/16 Flat Washer	9
5		3/8-24 x 8.5" Grade 8 Hex Bolt	2
6		3/8 Flat Washer	2
7		3/8-24 Lock Nut	1
8		M10 7/16-20 X 1" Tapered Bolt	2
9		7/16-20X1.5" Grade 8 Hex Bolt	2
10	SAW 99	front Motor Mount (top left)	1
11	SAW 97	front Motor Mount (bottom left)	1
12		7/16-20-1.75" Grade * Hex Bolt	2
13	SAW 106	front Motor Mount (right)	1
14		3/8-24 x 1" Grade 8 Hex Bolt	1
15		3/8 Flat Washer	2
16	SAW 25	.375" Spacer	3
17		7/16 x .1" Washer	3
18		7/16 Star Lock Washer	2
19		10MM-1.5MM x 35MM	3
20	SAW 38	1" Spacer	1
21	SAW 37	.25" Spacer	1

