

# TOSS-UP



## NEWSLETTER

THOUSAND OAKS SOARING SOCIETY A.M.A. CHARTERED CLUB #1493

FEBRUARY 1995

PUBLISHER: LARRY JIMENEZ 1943 CHANNEL DR. VENTURA, CA. 93001

**PRESIDENT:**

Edgar Weisman (805) 498-8878  
752 Camino Valles Thousand Oaks, CA. 91360

**VICE PRESIDENT:**

Mike Reagan (805) 529-5513  
14705 Loyola Street Moorpark, CA. 93021

**SECRETARY:**

Bob Swet (805) 388-9619  
2600 Ponderosa Camarillo, CA. 93010

**TREASURER:**

Larry Jimenez (805) 652-1937  
1943 Channel Drive Ventura, CA. 93001

**PUBLISHER:**

Larry Jimenez (805) 652-1937  
1943 Channel Dr. Ventura, CA. 93001

**CLUB WINCHES:**

Mike Stern	(805) 492-8452
Art McNamee	(805) 526-6292
Edgar Weisman	(805) 496-0611

**NEXT CLUB CONTEST:**

DATE:	March 12th., 1995
PLACE:	Redwood School
TIME:	9:00 a.m.
C/D	Myles Moran

**NEXT CLUB MEETNG:**

DATE:	February 22nd., 1995
DAY:	Wednesday
PLACE:	Cameron Center
TIME:	7:30p.m.

# TOSS TALK

MEETING NOTES January 25, 1995

## OLD BUSINESS

- 1) None was presented to the floor.

## NEW BUSINESS

- 1) Edgar Weisman and Larry Jimenez will do the Non-Profit Organization Tax Forms as a joint effort.
- 2) Mike Reagan presented the new rules for SC2. In brief, here is what's new. a) The standard (default) contest will be 4 minute or 8 minute rounds timed duration with at least one round being 8 minutes. A 4 minute flight will count as 800 points and the 8 minute flight will be worth 900 points. Landings for a 4 minute flight will be worth a maximum of 200 points whereas the 8 minute round(s) landing will be worth a maximum of 100 points. All landings scores will be based on a graduated 25 foot tape. b) Bunching of the tape or placing of hats (or similar markers) will not be allowed. c) There will be a new class of pilots known as 'Masters'. To qualify for the class, all that you have to do is place in the top 5 at any SC2 contest. The top five finishers of the 1994 season are automatically qualified in the 'Masters' class. d) Trophies will be awarded according to the following schedule: Masters - 3, Expert - 3, Sportsman - 3, 65 plus - 1.
- 3) TOSS will hold another TOP GUN contest in July on a Sunday (Date to be announced). It will be open to all classes of sailplanes. Final details are to be submitted by B.J. Weisman (Contest Director).
- 4) The question was raised by Edgar Weisman if TOSS wanted to hold a Cross-Country Contest sometime during 1995. Based upon the previous years turnout, the attending group decided not to hold one.
- 5) Don Northern presented his pitch for a one design sub-class of the Sportplane class at the TOSS monthly contest. It would be based upon the stock Paragon and be run under the standard Sportplane rules. The selection of the Paragon was based upon the number of planes already existing in the club. Hopefully, with one design, it would serve as an indicator of the pilots skill. We already have six Paragons in flyable or nearly flyable conditions. Rumor has it, that there still are few more being built by other members. The use of a Paragon does not dictate that your flight would count in the Sportplane class. You are welcomed to use it the Open class as well. The Sportplane class is still open to anyone with a three channel (rudder, elevator and flaps / spoilers) sailplane that does not have electrical or mechanical compensation. Prizes for Sportplane class will be awarded as previous and will not be based upon whether you are flying a Paragon or not. Don would like to hear anyone's comments about this subject (pro or con) or if you have any questions.
- 6) During the end of April or beginning of May, Mike Reagan will be attempting to establish new LSF / AMA record flights for R/C Sailplanes. Anyone interested in participating or helping, please contact Mike.
- 7) Larry announced that he can no longer be responsible for holding the Monthly Raffle during the club meetings. Luckily for everyone, Charles Babcock volunteered to take over the task. Thanks....Charlie.
- 8) On the matter of trophies for our monthly contests, Larry Jimenez will investigate the costs of awarding ribbons with the TOSS logo. B.J. will donate a number of wood plaques. The club then can add the appropriate engraved metal plates. The suggestion was that the wood plaques would be given to the First Place finishers and all others placers would receive ribbons. Another possibility for trophies is being researched by Edgar Weisman. That is, the availability and cost of clear transfers with the TOSS logo.
- 9) As part of our club's ongoing search for a slope site, Edgar Weisman has located a satisfactory site on private land. The owner is known and Edgar will be attempting to contact her at first available chance.

**CLUB DUES ARE  
DUE NOW!!!!**

## SERVO LISTING EXPANDED

During the latter part of 1994, I published a listing of servos offered by various manufacturers. It has been expanded to include several other manufacturers and some new offerings for 1995. The listing is meant to be a quick reference guide for size, torque and weights. Periodically, it will be updated with new data and to correct any known errors. Also new for this revision, are those servos which have been indicated by a manufacturer as no longer available. These are highlighted by a "gray" background. I hope that you find this information useful. The listing serves only as a reference. Myself, nor the TOSS-UP newsletter or any member of TOSS claim any responsibility to its accuracy. You should always check with the manufacturer or one its representatives about the correct specifications, current pricing and the products availability. The absence or inclusion of a manufacturer's product is not to be interpreted as an endorsement of any kind.

*Bob Swet*

## DUES ARE DUE

If you have not paid your dues for this year, do so now. If I don't receive them by March 15th, you will not get a newsletter. Please see TOSS roster. If your name has an "A" next to it you are paid-up for this year. Anyone that has paid and your name does not have an "A" next to it, please call me ASAP !!!!!

## NEW RAFFLE COORDINATOR

I would like to thank Charlie Babcock for taking over as the Raffle Coordinator. Here is a short list of some of the prizes for the monthly raffle.

Zona saw set  
 Monokote trim iron  
 Hobbico volmeter  
 Ungar soldering iron  
 Monokote trimming tool  
 Monokote stripe cutting tool  
 Monokote covering  
 automatic camera  
 and more.....

## TREASURER'S REPORT

We have \$475.00 in the TOSS checking account. After a long search and with a little help from Charlie Babcock, I found a bank that offers a

checking account with *NO* monthly service charge. This will save the club \$96.00 per year.

## WANT ADS

Please send me your want ads. You can list any of your extra stuff here. The only thing I ask is to get your ads to me before the 15th of each month.

*Larry*

## CONTEST RESULTS AND STANDINGS

1/22/95		OPEN CLASS STANDINGS		HIGH SCORE - 2901.4	
pos	NAME	CLUB	TOTAL	JAN	
1	GREG NIKOLA	SCSA	1000	1000	
2	HANK SCHORZ	SCSA	996	996	
3	DEVIN HOLZER	TOSS	975	975	
4	MIKE REAGAN	TOSS	972	972	
5	LOWELL NORENBURG	SCSA	955	955	
6	DON McNAMEE	TOSS	953	953	
7	ART McNAMEE	TOSS	897	897	
8	MYLES MORAN	TOSS	875	875	
9	DON NORTHERN	TOSS	865	865	
10	DANE VANNETT	TOSS	836	836	
11	BOB SWET	TOSS	790	790	
12	B.J. WEISMAN	TOSS	653	653	

1/22/95		2 METER CLASS STANDINGS		HIGH SCORE - 2730.2	
pos	NAME	CLUB	TOTAL	JAN	
1	EDGAR WEISMAN	TOSS	1000	1000	
2	JONATHAN SPOER	TOSS	882	882	
3	B.J. WEISMAN	TOSS	718	718	

1/22/95		SPORT CLASS STANDINGS		HIGH SCORE - 2815.9	
pos	NAME	CLUB	TOTAL	JAN	
1	DON NORTHERN	TOSS	1000	1000	
2	BOB SWET	TOSS	847	847	

## 1995 SC2 CONTEST SCHEDULE

FEBRUARY 26th.....ISS  
 MARCH 26th.....NCC  
 APRIL 30th.....SULA  
 MAY 28th.....TPG  
 JUNE 25th.....EDSF  
 JULY.....OPEN DATE.....  
 AUGUST 27th.....SWSA  
 SEPTEMBER 24th.....HSS  
 OCTOBER 29th.....TOSS  
 NOVEMBER 19th.....PSS

TOSS MEMBERSHIP (800) 531-9442 BEAR VALLEY  
 531-9442 13666 RD MOORPARK  
 13666 RD MOORPARK 93021

PAID_95	LAST_NAME	FIRST_NAME	PHONE_NO	STREET	CITY	STATE	ZIP	AMA_No.	CHT	CH2	CH3	CH4	CH5	CH6	FREQ1	FREQ2
A X	BACCOCK	CHARLES	(805) 495-3093	1807 HENDRIX	THOUSAND OAKS	CA	91360	497854	48							
	BICK	WADE	(805) 379-4471	799 ST. CHARLES DR #4	THOUSAND OAKS	CA	91360	501688	58							
	BUSBY	H.DUANE	(805) 491-1014	1212 ENCINO VISTA CT.	THOUSAND OAKS	CA	91362	305216	22	38	54	52				
	BUTKOVICH	DAVID	(818) 549-0302	1449 EL RITO AVE.	GLENDAL	CA	91208	409751								
	COSGROVE	ROBERT	(818) 341-8459	10709 OKLAHOMA AVE.	CHATSORTH	CA	91311	169026	24	35	39	56				
X	COUNCIL	BILL	(805) 499-6561	3837 CORONADO CIRCLE	NEWBURY PARK	CA	91320	466415	16	21						
A	DEBOER	CHARLES	(805) 492-1868	775 BRIGHTSTAR	THOUSAND OAKS	CA	91360									
A X	FENNEY	CHRISTOPHER	(805) 482-2428	2759 McCULLOCH AVENUE	CAMARILLO	CA	93010	432321	38							
A X	GRAY	BOB	(805) 985-8247	2700 KELP STREET	OXNARD	CA	93035	331637	42	55						
	GRISWOLD	CHUCK	(805) 495-1409	1646 LA JOLLA DR.	THOUSAND OAKS	CA	91362	12108	22	46						
A X	HINMAN	BILL	(805) 482-8513	1195 N. MODESTO AVENUE	CAMARILLO	CA	93010	15233	28							
A X	HOLZER	DEVIN	(805) 496-3555	1482 FEATHER AVENUE	THOUSAND OAKS	CA	91360		47							
A X	COSGROVE	ROBERT	(805) 552-7682	790 E. HOMESTEAD ROAD	SUNNYVALE	CA	94087	474171	19	51						
A X	HSIEH	LARRY	(805) 652-1937	1943 CHANNEL DR.	VENTURA	CA	93001	378742	11	30	49	56				
A	JIMENEZ	LARRY	(818) 876-0602	4532 PARK MONACO	CALABASAS	CA	91302	122971	19	41						
A X	KARP	BILL	(805) 492-0757	2991 TEAL CT.	THOUSAND OAKS	CA	91360	482474	22							
A X	KEIGHTLEY	KEN & HANS	(805) 987-6443	542 SAN CLEMENTE WY.	CAMARILLO	CA	93010		34							
	KIM	CHASE	(805) 523-3436	15266 #A CAMPUS PARK DRIVE	MOORPARK	CA	93021	437956	18	52	54	56	59			
	KLUSS	SONNY	(805) 497-2120	1368 MORROW CIRCLE	THOUSAND OAKS	CA	91362	15036	36							
	LANKARD	BILL	(805) 485-7217	P.O. BOX 24606	VENTURA	CA	93002		18							
	LEAL	KEN	(802) 749-4063	4910 NORTH CORD LANE	TUSCON	AZ	85749	334482	20	24	28					
	LOBER	MICHAEL	(805) 492-6789	3636 CALLE QUEBRACHO	THOUSAND OAKS	CA	91360		0	57						
A X	MARK	STEVEN		174 KNOLLWOOD	THOUSAND OAKS	CA	91360									
	MORAN	BILL	(818) 882-4687	10428 OSO AVE.	CHATSWORTH	CA	91311	18426	28	33						
A X	MORAN	MYLES	(805) 526-6292	2645 PLACERVILLE CT.	CHATSWORTH	CA	91311	7417	40							53.4
A X	MCNAMEE	ART	(805) 526-3145	2291 NORTH HETTER	SIMI VALLEY	CA	93063	48996	54	20	40	46				
A X	MCNAMEE	DON	(805) 523-1018	3977 WILLOW CREEK LANE	SIMI VALLEY	CA	93063									
A X	NORTHERN	DON	(805) 499-6354	261 EL GALLARDO	MOORPARK	CA	93021	28279	42	44	48	52				
A	OLDENBURG	ED	(818) 707-7220	29723 KIMBERLY DRIVE	NEWBURY PARK	CA	91320	106776								
	POND	BILL	(805) 644-1531	872 EMPIRE AVENUE	AGOURA HILLS	CA	91301	504464	12							
	PRAGER	MICHAEL	(805) 497-9681	207 SOMERSET CIRCLE	VENTURA	CA	93003		18	26	34					
	RAKE	GARY	(805) 493-1238	1855 BROOKTREE COURT	THOUSAND OAKS	CA	91362	437635	26							
A	REAGAN	MIKE	(805) 529-5513	14705 LOYOLA ST.	MOORPARK	CA	93021	93756	26	40	50					
	ROUSHAR	NORM	(818) 982-1771	6747 AGNES AVE #8	NORTH HOLLYWOOD	CA	91606	431725	29	50	56					
A X	SKOW	ED	(805) 646-6544	315 N. LA LUNA	OJAI	CA	93023		0	17						
	SPOER	JONATHAN	(818) 889-2788	30811 MAIN MAST	AGOURA HILLS	CA	91301	393152	46							
	ST. LAWRENCE	DON	(805) 497-9681	207 SOMERSET CIRCLE	THOUSAND OAKS	CA	91360	409441	28	48						
	STENDER	CHARLIE and MATT	(805) 499-5235	527 HIGHCREST COURT	NEWBURY PARK	CA	91320		55							
	STERN	MICHAEL	(805) 492-8482	745 LYNNMERE DR.	THOUSAND OAKS	CA	91360	131478								
A X	SUTTON	ROBERT	(805) 498-4342	3415 CRESTWOOD CT.	THOUSAND OAKS	CA	91320	81773	38	40	44					
A X	SWET	BOB	(805) 388-9619	2600 PONDEROSA DR. APT. 15	CAMARILLO	CA	93010	83283	16	25	31	34	42	54		
A X	TRIST	PAUL JR.	(818) 545-7551	1101 MELROSE #1	GLENDAL	CA	91202	28643								
	VANNETT	DANE	(805) 532-2473	4365 AMBERWICK	MOORPARK	CA	93021	433610	14	19	50	54				
A X	WEISMAN	EDGAR	(805) 371-4171	752 CAMINO VALLES	THOUSAND OAKS	CA	91360	67651	12	32	48					
																PLEASE IDENTIFY ANY CORRECTIONS / UPDATES REQUIRED TO: LARRY JIMENEZ AS SOON AS POSSIBLE.
																THANK YOU

Last-Name First-Name AMA-Number  
 Phone-20 Street City State Zip

SERVO COMPARISON

February '95

MANUFACTURER	P/N	DESCRIPTION	TORQUE (oz.in)	WEIGHT (oz.)	SIZE W x L x H (in.)	SPEED sec/60	BALL BEARINGS	MOTOR	METAL GEARS	RETAIL 84-95	torque/wt
ACE	Micro 380	Micro	30	0.80	0.55x1.125x1.094	0.10	None		No *	39.95	50.0
ACE	Mini 310	Mini	28	0.95	0.55x1.25x1.20	0.22	None		No *	30.95	29.5
ACE	Sport 330	Standard	42	1.55	0.79x1.43x1.60	0.24	None		No	17.95	27.1
ACE	Pro 342	Pro	42	1.95	0.79x1.43x1.60	0.24	Bushing		No	22.95	27.1
ACE	Pro 342 HS	Pro High Speed	32	1.55	0.79x1.43x1.60	0.10	Bushing		No	26.95	20.8
ACE	Giant 370	Giant (90 degree)	130	3.50	1.14x1.97x2.30	0.23	Single		No	39.95	37.1
ACE	Giant 370	Giant (180 degree)	130	3.50	1.14x1.97x2.30	0.23	Single		No	48.95	37.1
Airtronics	94501	MicroLite	28	0.57	0.50x1.07x1.07	0.23	None	Coreless	No	79.95	50.8
Airtronics	94555		30	0.58	0.50x1.07x1.07	0.21			Al output	79.95	51.7
Airtronics	94407	Micro	28	0.86	0.60x1.23x1.23	0.23	Single	Standard 5-Pole	Mixed	68.95	30.2
Airtronics	94408	Micro for SG-XM gyro	28	0.86	0.60x1.23x1.23	0.23	Single	Standard 5-Pole	Mixed		30.2
Airtronics	94141	Micro	45	1.17	0.60x1.42x1.28	0.20	Single	Coreless	Yes	79.95	38.5
Airtronics	94143	Micro	33	1.06	0.60x1.42x1.28	0.08	Single	Coreless	No		31.1
Airtronics	94144	Precision High Speed Micro	33	1.17	0.60x1.42x1.28	0.08	Single	Coreless	No	79.95	28.2
Airtronics	94145		33	1.1	0.60x1.42x1.28	0.07	Single		Al output		30.0
Airtronics	94831	Mini	38	1.10	0.71x1.46x1.18	0.21	Single	Standard 3-Pole	No	48.95	34.5
Airtronics	94732	Contest Aircraft	68	1.80	0.79x1.54x1.38	0.19	Dual	Coreless	No	89.95	37.8
Airtronics	94734	Contest Retract	74	1.73	0.79x1.54x1.38	0.40	Dual	Standard 5-Pole	No	79.95	42.8
Airtronics	94735	Contest Helicopter	75	1.80	0.79x1.54x1.38	0.20	Dual	Coreless	No	89.95	41.7
Airtronics	94737	High Speed	57	1.95	0.79x1.54x1.38	0.15	Dual	Coreless	Mixed	89.95	29.2
Airtronics	94738	High Torque	71	1.95	0.79x1.54x1.38	0.21	Dual	Coreless	Yes	89.95	38.4
Airtronics	94739	Contest Proportional Retract	74	1.77	0.79x1.54x1.38	0.42	Dual	Standard 5-Pole	Yes	89.95	41.8
Airtronics	94741	Contest Standard	57	1.80	0.79x1.54x1.38	0.21	Dual	Standard 3-Pole	Yes	59.95	31.7
Airtronics	94102	Precision Heavy Duty Standard	50	1.59	0.79x1.54x1.42	0.22	None	Standard 3-Pole	No	34.95	31.4
Airtronics	94103	Precision HD Standard for SG-X	50	1.59	0.79x1.54x1.42	0.22	None	Standard 3-Pole	No	34.95	31.4
Airtronics	94322	Precision Heavy Duty Standard	50	1.80	0.79x1.54x1.42	0.22	Single	Standard 3-Pole	No	44.95	31.3
Airtronics	94151	Pro High Speed	75	1.87	0.79x1.54x1.48	0.08	Dual	Coreless	Mixed	129.95	40.1
Airtronics	94152	Pro High Torque	105	2.30	0.79x1.54x1.48	0.12	Dual	Coreless	Yes	139.95	45.7
Airtronics	94155		80	2	0.79x1.54x1.48	0.07	Dual		Al output		40.0
Airtronics	94158		110	2.2	0.79x1.54x1.48	0.10	Dual		Yes		50.0
Airtronics	94181	Pro Large Scale	135	2.50	0.79x1.54x1.65	0.25	Dual	Standard 3-Pole	Yes	104.95	54.0
Airtronics	94510	Heavy Duty Large Scale	110	2.30	0.90x1.87x1.54	0.35	Single	Coreless	No	89.95	47.8
Airtronics	94581	Sail Winch - Arm Type	170	4.94	1.58x3.65x1.78	1.78	None	Standard 3-Pole	No	59.95	34.4
COX	80111	Micro	30	1.00	0.75x1.22x1.25		None		No	42.20	30.0
COX	801020	Standard	40	1.60	0.78x1.50x1.25		None		No	42.20	25.0
DAD	Tina	Micro	35	0.87	0.53x1.1x1.1	0.20	Acetal		No	38.95	52.2
DAD	Lite	Mini	35	1.1	0.7x1.4x1.25	0.20	Iron/Oxite		No	29.85	31.8
DAD	Pro	Standard	42	1.7	0.79x1.6x1.6	0.24	Iron/Oxite		No	19.95	24.7
DAD	Pro Plus	High Power	70	1.8	0.79x1.6x1.6	0.24	Iron/Oxite		No	34.95	38.9
DAD	Big Daddy	1/4 Scale	130	3.5	1.1x2.3x2	0.24	Iron/Oxite		No	39.95	37.1
Futaba	S133	Micro Precision	27.8	0.80	0.50x1.06x1.12	0.22	None		No	68.95	48.3
Futaba	S5102	Micro Precision w/metal gears	27.8	0.80	0.50x1.06x1.12	0.22	None		Yes	89.95	34.8
Futaba	S3002	Mini w/metal gears and BB	44	1.80	0.62x1.21x1.18	0.16	Single		Yes	89.95	24.4
Futaba	S9801	Mini w/metal gears and BB	38.1	1.10	0.62x1.21x1.18	0.17	Single	Coreless	Yes	89.95	32.8
Futaba	S132H	High Speed Mini	25	1.10	0.68x1.43x1.18	0.13	None		No	64.95	22.7
Futaba	S5101	Dual Ball Bearing	55.6	1.40	0.77x1.52x1.38	0.24	Dual		No	69.95	39.7
Futaba	S8101	Coreless w/ball bearings	41.7	1.50	0.77x1.52x1.38	0.17	Single	Coreless	No	89.95	27.8
Futaba	S148	Precision	42	1.50	0.77x1.59x1.41	0.22	None		No	39.95	28.0
Futaba	S3001	Precision Ball Bearing	42	1.80	0.77x1.59x1.41	0.22	Single		No	44.95	26.3
Futaba	S8401	Coreless w/ball bearing	44.5	1.70	0.79x1.59x1.40	0.16	Single	Coreless	No	84.95	28.2
Futaba	S8403	Coreless w/ball bearing	44.5	1.70	0.79x1.59x1.40	0.16	Single	Coreless	No	89.95	28.2
Futaba	S8201	Coreless w/ball bearing	68.5	1.70	0.79x1.59x1.40	0.22	Single	Coreless	No	79.95	40.9
Futaba	S8301	Coreless w/ball bearing	68.5	1.70	0.79x1.59x1.40	0.22	Single	Coreless	No	84.95	40.8
Futaba	S8202	Coreless w/ball bearing	68.5	1.70	0.79x1.59x1.40	0.22	Single	Coreless	No	89.95	40.9
Futaba	S8304	Coreless w/ball bearing	68.5	1.70	0.79x1.59x1.40	0.22	Single	Coreless	No	89.95	40.9
Futaba	S8302	Coreless w/metal gears	89	2.30	0.79x1.58x1.55	0.18	None	Coreless	Yes	89.95	43.0
Futaba	S8303	Coreless w/metal gears	89	2.30	0.79x1.58x1.55	0.18	None	Coreless	Yes	114.95	43.0
Futaba	S1366	Compact Retract	78.4	1.48	0.87x1.75x1.00	0.50	None		No	74.95	51.6

Data shown is based on information available to author at time of entry and may not represent the manufacturers' current specifications or prices. Entire series based on various connectors are not shown.

SERVO COMPARISON

February '95

MANUFACTURER	P/N	DESCRIPTION	TORQUE (oz.in)	WEIGHT (oz.)	SIZE W x L x H (in.)	SPEED sec/60	BALL BEARINGS	MOTOR	METAL GEARS	RETAIL 94-95	torque/volt
Futaba	S9102	Wing Mount	50	1.80	0.87x1.85x1.05	0.13	Single	Coreless	No	124.95	31.3
Futaba	S125	Sail - Arm Type	129.3	2.30	0.89x1.56x1.89	0.62	None		No	89.95	56.2
Futaba	S194	Quarter Scale	112.6	2.70	1.14x2.32x1.97	0.22	None		No		41.7
Futaba	S134G	Quarter Scale Retract	173.8	2.80	1.14x2.32x1.97	0.33	None		No	79.95	62.1
Futaba	S3302	Quarter Scale w/metal gears	110	3.80	1.14x2.32x1.97	0.19	None		Yes	89.95	30.8
Futaba	S3801	Sail - Arm Type	200	3.80	1.14x2.32x1.97	0.22	None		Yes	94.95	52.6
Hitec RCD	HS-80	Micro Fast	30.8	0.82	0.5x1.1x1.1	0.15	None		No		49.7
Hitec RCD	HS-80 MG	Micro Fast w/metal gears	30.8	0.76	0.5x1.1x1.1	0.15	None		Yes		40.5
Hitec RCD	HS-101	Mini	23.8	0.93	0.5x1.3x1.2	0.20	None		No		25.6
Hitec RCD	HS-101 MG	Mini w/metal gears	23.8	1.07	0.5x1.3x1.2	0.20	None		Yes		22.2
Hitec RCD	HS-205 BB	Indirect Micro	43.3	0.98	0.7x1.3x1.2	0.20	Single		No		44.2
Hitec RCD	HS-205 MG	Indirect Micro w/metal gears	43.3	1.13	0.7x1.3x1.2	0.20	Single		Yes		36.3
Hitec RCD	HS-300	Standard	42	1.57	0.8x1.8x1.4	0.19	Nylon (1)		No		26.8
Hitec RCD	HS-422	Deluxe	43.4	1.85	0.8x1.8x1.4	0.20	Oilite (2)		No		26.3
Hitec RCD	HS-425 BB	Deluxe w/BB	43.4	1.85	0.8x1.8x1.4	0.20	Dual		No		26.3
Hitec RCD	HS-422F	Fast	30.8	1.80	0.8x1.8x1.4	0.15	Oilite (2)		No		19.3
Hitec RCD	HS-805 BB	Power w/BB	77	1.73	0.8x1.8x1.5	0.18	Dual		No		44.5
Hitec RCD	HS-805 MG	Power w/metal gears	77	2.12	0.8x1.8x1.5	0.18	Dual		Yes		36.3
Hitec RCD	HS-815	Ultra Power w/metal gears	107	2.12	0.8x1.8x1.5	0.23	Dual		Yes		50.5
Hitec RCD	HS-75 BB	Retract	82	1.23	0.9x1.7x1.0	0.50	Single		One		74.8
Hitec RCD	HS-700 BB	1/4 Scale	133	3.8	1.1x2.3x2.0	0.22	Single		No		36.9
Hitec RCD	HS-705 MG	1/4 Scale w/metal gears	181	4.05	1.1x2.3x2.0	0.27	Single		Yes		39.8
Hitec RCD	HS-725 BB	Ball Wrench - 4 Turns	181	3.80	1.1x2.3x2.0	0.27	Single		No		42.4
Hobby Lobby	HLS15652	Industrial Power	1344	8.75	2.80x3.31x1.50	0.20	Bushings		Yes	179.00	153.8
JR	341	Micro	31.8	0.83	0.50x1.12x1.17	0.24	None	5-Pole Ferrite	No		50.8
JR	321	Mini	28.2	0.77	0.58x1.30x1.02	0.23	Single	5-Pole Ferrite	No		37.9
JR	3021	Mini (coreless)	37.5	0.84	0.58x1.30x1.02	0.22	Dual	Coreless	No		44.6
JR	3025	Mini Ultra Speed	28.2	1.81	0.58x1.30x1.02	0.15	Dual	Coreless	No		18.1
JR	3321	Glider Wing (coreless)	58.8	0.95	0.58x1.30x1.30	0.36	Dual	Coreless	No		62.9
JR	901	Mid-Size	43.1	1.33	0.71x1.37x1.32	0.27	Dual	5-Pole Ferrite	No		32.4
JR	9021	Mid-Size (coreless)	57.5	1.50	0.71x1.37x1.32	0.22	Dual	Coreless	No		38.3
JR	507	Standard	40.3	1.47	0.73x1.52x1.32	0.25	None	3-Pole Ferrite	No		27.4
JR	517	Standard w/Bearing	40.3	1.58	0.73x1.52x1.32	0.25	Single	3-Pole Ferrite	No		25.5
JR	4000	Ultra Linear	73.6	1.78	0.73x1.52x1.32	0.19	Dual	Coreless	No		41.8
JR	4131	Ultra Precision	80.4	1.50	0.73x1.52x1.32	0.23	Dual	Coreless	No		60.3
JR	4721	Ultra Torque	119.6	1.72	0.73x1.52x1.32	0.22	Dual	Coreless	No		69.5
JR	4735	Ultra Speed	80	1.72	0.73x1.52x1.32	0.15	Dual	Coreless	No		52.3
JR	7000	Ultra Linear Low Profile	82.8	1.45	0.88x1.73x0.93	0.19	Dual	Coreless	No		43.2
JR	703	Low Profile Retract	93.2	1.16	0.88x1.73x0.93	1.38	Dual	Cored	No		80.3
JR	7005	Low Profile	82.6	1.31	0.88x1.73x0.93	0.19	Dual	Coreless	No		47.8
JR	605	Monster FET	139.1	4.75	1.28x2.50x2.30	0.28	Dual	Cored	No		29.3
Royal	77-937	Micro	27	0.80	0.63x1.5x1.22	0.14	Bushings(2)		No	32.95	30.0
Royal	77-806	Mini	33.5	1.10	0.69x1.44x1.44	0.18	Bushings(2)		No	24.95	30.5
Royal	77-801	Shorty	44	1.40	0.75x1.89x1.83	0.23	Bushings(2)		No	18.45	31.4
Royal	79-376	Titan	48.7	1.80	0.75x1.89x1.83	0.24	Bushings(2)		No	15.99	27.1
Royal	77-852	Maxi	112	3.70	1.125x2.25x?	0.22			No	32.95	30.3
Tower	TS-11	Micro w/Bushing	30	0.81	0.54x1.1x1.1	0.15	Bushing			28.95	49.2
Tower	TS-31	Mini w/Bushing	20	0.93	0.6x1.3x1.2	0.22	Bushing			29.99	21.5
Tower	TS-51	Standard w/bushing	38	1.51	0.8x1.8x1.4	0.21	Bushing			14.99	25.2
Tower	TS-55	Deluxe w/Bushing	40	1.53	0.8x1.8x1.5	0.23	Bushing			16.99	26.1
Tower	TS-57	Deluxe Ball Bearing	40	1.80	0.8x1.8x1.5	0.23	Single			21.99	25.0
Tower	TS-72	1/4 Scale Ball Bearing	130	3.50	1.1x2.3x2.0	0.23	Single			40.99	37.1
		NOTES:									
											* - Available as replacement parts through dealer
											- Discontinued Servo

Data shown is based on information available to author at time of entry and may not represent the manufacturers' current specifications or prices. Entire servo based on various connectors are not shown.