

**SWIFT DB4**

Original Initial set-up  
(but use pyro & t.p.g. to get best results)

<b>Wheel alignment:</b>	<i>front</i>	<i>rear</i>
Camber:	.63*	.30* (degrees) <i>use pyrometer</i>
Caster:	2.5* to 3*	0*
Toes:	out 7-10 min. each (.06" at wheel) (.08" at tyre OD)	in 18-20 min. each (.14" at wheel) (.25" at tyre OD)
Ride height:	1.5" at bulkhead	2" at flywheel 7.7" at lower rear wing end plate bolt c-
Springs: (6")	500 lb.	700 lb. ( <i>heavier later</i> )
Shocks: (Fox)	bump: #4 rebound: -10 clicks	bump: #4 rebound: -8 clicks
Roll bars: or	1" OD x .75" ID @ 75% .95" at 100%	1" OD x .75" ID @ 50% 1.125" at 50%
Brake bias:	2 turns to front	(adjust for track conditions)
Wings:	0* on top surface .25" tab (adjust to get balance for track & conditions)	side plate in top holes flap full up, .25" tab

**Torques:** wheel nuts: 140 ft/lbs. (use clips)  
Front axle nut: 180 lb/lbs.  
Rear axle nut: 210 lb/lbs. (use modified axles) LH/RH NB. use locking screw in hole.

<u>Adjustment sensitivities:</u>	<i>front</i>	<i>rear</i>
Camber shims: A .016"	.12*	.08*
B .023"	.23*	.17*
C .062"	.44*	.32*
D .125"	.90*	.65*
Toes: 1 turn =	68 min.	41 min.
1 flat =	11 min.	7 min.
Caster: 1 turn in and 1 turn out on Lower A arm rod ends =	.97* change (also .074" change in bump steer shims)	N/A
Push rod length:	23.07"	16.82"
Shock length: at ride height:	12.42"	12.93"
Ride height: at spring platform: 1 turn =	.08" at wheel	.08" at wheel
At pushrod: 1 turn of rod end =	.12" at wheel	.08" at wheel

Front bump steer is adjusted by washer shims at the outboard end of the steering link:

Rear bump steer is adjusted by washer shims at the inboard ball joints of upper A arm:

Rack clevis extension is 1.25" from end of rack to bolt center:

**Others:**

Cars originally had 9:31 ring & pinion, later changed to 9:35. (SMT-03-003/4 for 9:31)

They bend reverse idler bolt, if rammed into reverse!

Clean gearbox filter all the time & change oil regularly

**Staffs gear ratio's:**      **Very important:** make sure they are a matching set

	Combo spacer = .800"	4-5 <sup>th</sup> spacer = .903"
<b>1st- 2<sup>nd</sup> combo's:</b>	<b>First gears:</b>	<b>Second only gears:</b>
13-38 = 2.923 *	13-38 = 2.923	14-31 = 2.214
16-35 = 2.187	14-38 = 2.714	16-35 = 2.187 *
	<u>12-31</u> = 2.583	<u>16-34</u> = 2.125 **
12-35 = 2.916 *	14-36 = 2.571 *	13-27 = 2.076 *
15-34 = 2.266	12-29 = 2.416 *	<u>17-35</u> = 2.059 *
	15-36 = 2.400 *	<u>15-30</u> = 2.00 ** (also 17-34)
13-35 = 2.692	15-34 = 2.267	17-33 = 1.941 *
16-35 = 2.187	16-35 = 2.188	14-27 = 1.928 *
		18-34 = 1.888 *
12-31 = 2.583		14-26 = 1.857 *
16-35 = 2.187		18-33 = 1.833
		18-32 = 1.777
12-31 = 2.583	* (we had)	15-26 = 1.733
16-34 = 2.125		(NB: 2 <sup>nd</sup> gears are 1.463" but some Hewlands are 1.50")

**Top gears:**

16-34 = 2.125	16-26 = 1.625 *	<u>18-24</u> = 1.333 **	short
17-35 = 2.059	20-32 = 1.600 *	22-29 = 1.318 *	
15-30 = 2.00	17-27 = 1.588 *	19-25 = 1.315 *	
17-34 = 2.00	16-25 = 1.562 *	20-26 = 1.300	
14-27 = 1.928	20-31 = 1.550	<u>22-28</u> = 1.272 *	
18-34 = 1.888	17-26 = 1.529	19-24 = 1.264 *	
14-26 = 1.857	16-24 = 1.50 *	20-25 = 1.250	
18-33 = 1.833 *	<u>20-30</u> = 1.50 *	21-26 = 1.238	
15-27 = 1.800	<u>17-25</u> = 1.470 *	18-22 = 1.222 *	
18-32 = 1.777 *	16-23 = 1.437 *	<u>19-23</u> = 1.210	
15-26 = 1.733 *	21-30 = 1.428 *	21-25 = 1.190	
17-29 = 1.705 *	19-27 = 1.421 *	<u>23-27</u> = 1.174 **	
19-32 = 1.684 *	21-29 = 1.381	24-28 = 1.166	
15-25 = 1.666 *	<u>19-26</u> = 1.368 **	19-22 = 1.158 *	
<u>19-31</u> = 1.631 *	22-30 = 1.363	24-27 = 1.125	tall

<u>Pukekohe</u>	<u>Manfield</u>	<u>Wigram</u>	<u>Timaru</u>	<u>Teretonga</u>
12-31	12-31	12-31	12-31	12-31
15-30	16-34	15-30	17-35	15-30/17-35
19-31	19-31	17-27/19-31	19-31	19-31
18-24	20-30	22-29	17-25	18-24/19-26
23-27	22-28	19-22/23-27	22-28	23-27/19-23

tailwind/no wind