

OPT or BUB								
Input file name	Solution cost	LA						
		SHUFFLED = TRUE				SHUFFLED = FALSE		
		Cost	%	Time		Cost	%	Time
ga250a-1	257957	257957	0.000%	34.63298		257957	0.000%	36.85705
ga250a-2	257502	257502	0.000%	33.61322		257502	0.000%	32.70652
ga250a-3	257953	257953	0.000%	23.75295		257953	0.000%	24.82797
ga250a-4	257987	257987	0.000%	25.41439		257987	0.000%	34.91243
ga250a-5	258190	258195	0.002%	38.0619		258190	0.000%	46.61344
ga500b-1	538060	538060	0.000%	134.35203		538060	0.000%	119.57654
gs750c-1	900363	900363	0.000%	705.94758		900363	0.000%	847.41114
average	389716.00	389716.71	0.000%	142.25		389716.00	0.000%	163.27

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		SHUFFLED = TRUE				SHUFFLED = FALSE		
		Cost	%	Time		Cost	%	Time
ga250a-1	257957	257957	0.000%	49.56888		257957	0.000%	51.06197
ga250a-2	257502	257502	0.000%	38.70881		257502	0.000%	33.09543
ga250a-3	257953	257966	0.005%	40.54342		257966	0.005%	52.17342
ga250a-4	257987	257987	0.000%	36.14573		258005	0.007%	61.54651
ga250a-5	258190	258199	0.003%	39.21279		258204	0.005%	15.16912
ga500b-1	538060	538060	0.000%	117.8047		538060	0.000%	117.60361
gs750c-1	900363	900363	0.000%	792.16512		900363	0.000%	948.50652
average	389716.00	389719.14	0.001%	159.16		389722.43	0.002%	182.74

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Input file name	Solution cost	LA						
		SHUFFLED = TRUE				SHUFFLED = FALSE		
		Cost	%	Time		Cost	%	Time
ga250a-1	257957	257957	0.000%	92.18385		257957	0.000%	66.57788
ga250a-2	257502	257502	0.000%	52.89083		257502	0.000%	50.41796
ga250a-3	257953	257988	0.014%	41.17504		257976	0.009%	45.52293
ga250a-4	257987	257987	0.000%	52.73642		257987	0.000%	45.94105
ga250a-5	258190	258201	0.004%	64.48314		258199	0.003%	55.05377
ga500b-1	538060	538060	0.000%	157.95941		538060	0.000%	148.99236
gs750c-1	900363	900454	0.010%	775.03547		900454	0.010%	743.92859
average	389716.00	389735.57	0.004%	176.64		389733.57	0.003%	165.20

OPT or BUB								
Input file name	Solution cost	LA						
		SHUFFLED = TRUE				SHUFFLED = FALSE		
		Cost	%	Time		Cost	%	Time
ga250a-1	257957	257971	0.005%	23.78391		257971	0.005%	22.29555
ga250a-2	257502	257502	0.000%	35.93845		257502	0.000%	35.87189
ga250a-3	257953	258057	0.040%	16.38533		257987	0.013%	20.79724
ga250a-4	257987	257987	0.000%	25.87852		258005	0.007%	24.34254
ga250a-5	258190	258201	0.004%	17.21732		258204	0.005%	10.72152
ga500b-1	538060	538060	0.000%	155.51465		538060	0.000%	152.00073
gs750c-1	900363	900363	0.000%	1443.84459		900454	0.010%	763.37017
average	389716.00	389734.43	0.007%	245.51		389740.43	0.006%	147.06

	map_TS								
	SHUFFLED = TRUE				SHUFFLED = FALSE			SHUFFLED =	
	Cost	%	Time		Cost	%	Time	Cost	%
	258011	0.021%	6.4475		258011	0.021%	5.37697	257957	0.000%
	257580	0.030%	6.75536		257580	0.030%	5.34225	257502	0.000%
	258120	0.065%	6.57272		258120	0.065%	5.19614	257953	0.000%
	258108	0.047%	6.14588		258098	0.043%	5.34206	257987	0.000%
	258204	0.005%	6.29093		258204	0.005%	5.21125	258190	0.000%
	538060	0.000%	30.68329		538060	0.000%	25.20356	538060	0.000%
	900836	0.053%	86.968		900836	0.053%	98.11423	900363	0.000%
	389845.57	0.032%	21.41		389844.14	0.031%	21.40	389716.00	0.000%

	map_TS								
	SHUFFLED = TRUE				SHUFFLED = FALSE			SHUFFLED =	
	Cost	%	Time		Cost	%	Time	Cost	%
	257983	0.010%	6.69562		257983	0.010%	5.6549	257957	0.000%
	257557	0.021%	5.98669		257583	0.031%	5.71772	257502	0.000%
	258120	0.065%	6.25967		258120	0.065%	5.2964	257953	0.000%
	258099	0.043%	6.29989		258098	0.043%	5.94199	257987	0.000%
	258204	0.005%	6.54343		258204	0.005%	5.24226	258190	0.000%
	538060	0.000%	39.53926		538060	0.000%	44.99957	538060	0.000%
	900363	0.000%	149.5746		900454	0.010%	124.17572	900363	0.000%
	389769.43	0.021%	31.56		389786.00	0.024%	28.15	389716.00	0.000%

	map_TS								
	SHUFFLED = TRUE				SHUFFLED = FALSE			SHUFFLED =	
	Cost	%	Time		Cost	%	Time	Cost	%
	257971	0.005%	51.65123		257971	0.005%	38.35237	257957	0.000%
	257502	0.000%	42.73099		257502	0.000%	46.57379	257502	0.000%
	258001	0.019%	57.51574		258024	0.028%	42.30576	257953	0.000%
	257987	0.000%	31.90432		258008	0.008%	32.74313	257987	0.000%
	258190	0.000%	46.62614		258204	0.005%	17.49031	258190	0.000%
	538060	0.000%	97.80715		538060	0.000%	94.29358	538060	0.000%
	900454	0.010%	578.96815		900454	0.010%	647.70563	900363	0.000%
	389737.86	0.005%	129.60		389746.14	0.008%	131.35	389716.00	0.000%

Crossover 4									
	map_TS								
	SHUFFLED = TRUE				SHUFFLED = FALSE			SHUFFLED =	
	Cost	%	Time		Cost	%	Time	Cost	%
	257975	0.007%	20.07342		257975	0.007%	24.75738	257957	0.000%
	257583	0.031%	18.02439		257571	0.027%	34.37349	257502	0.000%
	257992	0.015%	44.72279		258075	0.047%	27.98737	257953	0.000%
	258008	0.008%	59.81006		258005	0.007%	25.93411	257987	0.000%
	258204	0.005%	13.93627		258204	0.005%	11.84571	258190	0.000%
	538060	0.000%	139.65546		538060	0.000%	133.5859	538060	0.000%
	900363	0.000%	860.13406		900363	0.000%	789.25065	900363	0.000%
	389740.71	0.010%	165.19		389750.43	0.013%	149.68	389716.00	0.000%

Crossover 1							
TS				S			
= TRUE		SHUFFLED = FALSE			SHUFFLED = TRUE		
Time		Cost	%	Time	Cost	%	Time
71.33901		257957	0.000%	70.60363	257985	0.011%	8.91884
72.50905		257502	0.000%	71.61185	257502	0.000%	9.86032
62.14954		257953	0.000%	64.79658	257984	0.012%	13.10729
73.13182		257987	0.000%	68.57916	257987	0.000%	8.48838
73.76892		258190	0.000%	72.44221	258204	0.005%	6.2361
287.69509		538060	0.000%	281.62366	538060	0.000%	35.07972
1343.89144		900363	0.000%	1443.77242	900363	0.000%	162.43314
283.50		389716.00	0.000%	296.20	389726.43	0.004%	34.87

Crossover 2							
TS				S			
= TRUE		SHUFFLED = FALSE			SHUFFLED = TRUE		
Time		Cost	%	Time	Cost	%	Time
71.10052		257957	0.000%	62.6876	257971	0.005%	15.2485
73.52755		257502	0.000%	70.10949	257560	0.023%	10.96488
69.1034		257953	0.000%	76.83129	257990	0.014%	15.38069
80.85865		257987	0.000%	65.12492	257987	0.000%	12.31701
56.74427		258190	0.000%	67.38983	258195	0.002%	9.04714
279.83169		538060	0.000%	285.28119	538060	0.000%	66.416
1269.05194		900363	0.000%	1263.13811	900454	0.010%	228.90091
271.46		389716.00	0.000%	270.08	389745.29	0.008%	51.18

Crossover 3							
TS				LS			
= TRUE		SHUFFLED = FALSE			SHUFFLED = TRUE		
Time		Cost	%	Time	Cost	%	Time
70.85066		257957	0.000%	72.77617	257971	0.005%	26.47314
71.68435		257502	0.000%	73.52758	257502	0.000%	34.32623
81.10526		257953	0.000%	72.68346	257953	0.000%	36.78324
67.8586		257987	0.000%	73.60876	257987	0.000%	57.29874
80.64517		258190	0.000%	57.50255	258204	0.005%	18.91435
280.3257		538060	0.000%	297.18574	538060	0.000%	122.41359
1324.66797		900363	0.000%	1505.21913	900363	0.000%	932.4647
282.45		389716.00	0.000%	307.50	389720.00	0.002%	175.52

TS				LS			
= TRUE		SHUFFLED = FALSE			SHUFFLED = TRUE		
Time		Cost	%	Time	Cost	%	Time
70.07807		257957	0.000%	70.68715	258011	0.021%	11.93527
71.90096		257502	0.000%	71.11336	257533	0.012%	29.19541
93.00577		257953	0.000%	61.39907	257998	0.017%	34.77388
85.17191		257987	0.000%	71.63714	258108	0.047%	13.75317
78.34987		258190	0.000%	60.60232	258204	0.005%	8.75121
292.55503		538060	0.000%	297.90517	538060	0.000%	115.72098
1522.9439		900363	0.000%	1872.01493	900454	0.010%	603.95453
316.29		389716.00	0.000%	357.91	389766.86	0.016%	116.87

1			S2					
SHUFFLED = FALSE			SHUFFLED = TRUE			SHUFFLED = FALSE		
Cost	%	Time	Cost	%	Time	Cost	%	
257971	0.005%	9.80048	257957	0.000%	20.79953	257957	0.000%	
257502	0.000%	8.31129	257502	0.000%	20.37553	257502	0.000%	
257966	0.005%	11.40462	257953	0.000%	27.21113	257953	0.000%	
258044	0.022%	8.6537	257987	0.000%	17.23248	257987	0.000%	
258204	0.005%	6.33942	258190	0.000%	19.91194	258195	0.002%	
538060	0.000%	35.59483	538060	0.000%	81.46252	538060	0.000%	
900454	0.010%	152.9291	900363	0.000%	433.31565	900363	0.000%	
389743.00	0.007%	33.29	389716.00	0.000%	88.62	389716.71	0.000%	

1			S2					
SHUFFLED = FALSE			SHUFFLED = TRUE			SHUFFLED = FALSE		
Cost	%	Time	Cost	%	Time	Cost	%	
257991	0.013%	9.56068	257971	0.005%	16.00004	257957	0.000%	
257502	0.000%	11.7488	257502	0.000%	17.1354	257502	0.000%	
258022	0.027%	11.0309	257953	0.000%	25.93022	257953	0.000%	
257987	0.000%	10.89472	258005	0.007%	22.6718	257987	0.000%	
258204	0.005%	7.28689	258199	0.003%	14.7852	258190	0.000%	
538060	0.000%	48.09704	538060	0.000%	76.6385	538060	0.000%	
900454	0.010%	172.07533	900363	0.000%	370.0433	900363	0.000%	
389745.71	0.008%	38.67	389721.86	0.002%	77.60	389716.00	0.000%	

CF			map_G					
SHUFFLED = FALSE			SHUFFLED = TRUE			SHUFFLED = FALSE		
Cost	%	Time	Cost	%	Time	Cost	%	
257971	0.005%	38.31192	258011	0.021%	61.8776	257971	0.005%	
257506	0.002%	45.94736	257545	0.017%	183.3543	257583	0.031%	
257988	0.014%	68.23531	257988	0.014%	122.44191	258048	0.037%	
257987	0.000%	28.84881	258008	0.008%	114.81798	257987	0.000%	
258204	0.005%	15.49073	258204	0.005%	60.80103	258204	0.005%	
538060	0.000%	98.0812	538060	0.000%	171.34062	538060	0.000%	
900454	0.010%	539.21451	900454	0.010%	931.90163	900454	0.010%	
389738.57	0.005%	119.16	389752.86	0.011%	235.22	389758.14	0.013%	

CF		
SHUFFLED = FALSE		
Cost	%	Time
257983	0.010%	17.32589
257533	0.012%	31.46302
258120	0.065%	14.19215
258005	0.007%	16.05523
258204	0.005%	8.75519
538060	0.000%	94.5255
900454	0.010%	777.07853
389765.57	0.016%	137.06

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