

Reducing pit stop time		Step 1	Step 2		Step 3		Step 4		
No	Operation Description	Current Time	Current Internal	Current External	Current Internal	Current External	Waste Countermeasure	New Internal	New External
	Stop Car								
1	Open fuel filler cap	8	8			8	Cap opens automatically with pit lane limiter		1
2	Attach fuel line and start fill	6	6		6		1 man takes weight, 2nd clips on	4	
3	Bring wheel brace	15		15		15	check air gun by pit lane		3
4	Loosen 4x wheel nuts	32	32		32		go to one wheel nut and use air gun	4	
5	Bring jack	15		15		15	check wheeled jack by mark in pit lane		3
6	Align jack to jacking point	7	7		7		finely adjust when car stopped	1	
7	Jack up car	10	10		10		use wheeled one-lift jack	3	
8	Remove 4x wheel nuts by hand	40	40		40		use air gun (as no. 2)	0	
9	Remove wheel	5	5		5		one stud, practise routine	4	
10	Take wheel to garage	10		10		10	done after pit stop		10
11	Bring new wheel	10		10		10	brought out of heater covers just before pit stop		10
12	Fit new wheel to car	5	5		5		one stud, practise routine	4	
13	Start 4x wheel nuts by hand	40	40		40		one nut, air gun	4	
14	Let car down	3	3		3		quicker with wheeled one lift jack	1	
15	Tighten 4x wheel nuts with wheel brace	24	24		24		(combined with no. 13)	0	
16	Take jack & brace back to garage	10		10		10	return air gun and jack at end of race		5
17	Bring pressure gauge	7		7		7	wheel unit checked in garage before race		0
18	Check tyre pressure	10		10		10	(combine with no. 11)		0
19	Remove fuel line	6	6		6		1 man takes weight, 2nd clips off	4	
20	Close filler cap	8	8			8	Cap closes automatically on pit exit		1
	Drive Away								
	Total	271	194	77	178	93		29	33
	% Saving, in time that car is stopped		28%		34%			89%	