

The following labor guide should be used by Stewards in setting teardown bonds. The rate per hour charged should be based on the prevailing shop per hour rate for the area. There could be unique types of automobiles or engines that could take longer than these schedules. The bond would be for removal and replacing of items and associated gaskets. As far as Showroom Stock and Touring automobiles, the Tech Department recommends contacting a dealership for a specific automobile and using their time and rate book.

<b>Spec Miata</b>	
1. Remove and Replace Cylinder Head	7.3 hour
2. Remove and Replace Camshafts (both)	3.2 hour
3. Remove and Replace Transmission, Clutch and Flywheel	4.3 hour
4. Remove and Replace Intake Manifold	3.0 hour
5. Remove and Replace Exhaust Manifold	2.0 hour
6. Remove and Replace Mass Airflow Sensor	.5 hour
7. Remove and Replace Starter	1.2 hour
8. Remove and Replace One Front Shock (**)	1.0 hour
9. Remove and Replace One Rear Shock (**)	.5 hour
10. Remove and Replace Rear Differential Assembly	2.5 hour
11. Remove and Replace Oil Pan (****)	2.0 hour
12. Remove and Replace Pan, Head, Crank, Pistons, Rods, Cams (****)	7.0 hour
(**) Add .5 hour if removing and replacing both front or both rear shocks	
(****) Add 10 hours if the engine needs to be removed	

<b>Formula Ford</b>	
1. Carburetor: Remove and Replace; disassemble and reassemble	1.2 hour
2. Valve Cover: remove and replace	.2 hour
3. Valve Train: Remove/replace valve cover rocker assembly and pushrods	1.0 hour
4. Intake Manifold: remove and replace	.5 hour
5. Exhaust manifold: remove and replace	.5 hour
6. Distributor: remove and replace	.5 hour
7. Cylinder head: remove and replace, includes R&R manifolds, valve cover and rocker assembly	1.5 hour
8. Valves: remove (each)	.1 hour
9. Oil Pan: remove and replace (**)	.5 hour
10. Pistons and rods: remove and replace all four (**)	2.0 hour
11. Camshaft: remove and replace (**)	2.0 hour
12. Crankshaft: remove and replace (**)	2.0 hour
13. Clutch plate and disc: remove and replace (**)	.2 hour
14. Flywheel: remove and replace (**)	.2 hour
15. Clutch plate and disc: remove and replace (****)	.2 hour
16. Flywheel: remove and replace (**)	.2 hour
17. Transaxle gear cluster: remove and replace	.75 hour

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<b>Formula Ford</b>	
(**) Add 4 hours if engine needs to be removed	
(****) Add 2 hours if transaxle needs to be removed	

<b>Formula Continental &amp; Sports 2000</b>	
1. Carburetor: remove and replace, disassemble and reassemble	1.2 hour
2. Valve cover: remove and replace	.5 hour
3. Valve cover and rocker arms: remove and replace	1.0 hour
4. Intake Manifold: remove and replace	.5 hour
5. Exhaust Manifold: remove and replace	.5 hour
6. Cylinder head: remove and replace (includes R&R manifolds and valve cover)	1.5 hour
7. Camshaft: remove and replace	1.0 hour
8. Rocker arms: remove and replace all	.5 hour
9. Valves: remove (each)	.1 hour
10. Oil pan: remove and replace (**)	.5 hour
11. Pistons and rods: remove and replace (all four) (**)	2.0 hour
12. Crankshaft: remove and replace (**)	2.0 hour
13. Clutch plate and disc: remove and replace (**)	.2 hour
14. Flywheel: remove and replace (**)	.2 hour
15. Oil pan: remove and replace in chassis	2.0 hour
16. Clutch plate and disc: remove and replace (****)	.2 hour
17. Flywheel: remove and replace (****)	.2 hour
18. Transaxle gear cluster: remove and replace	.75 hour
(**) Add 5 hours if engine needs to be removed	
(****) Add 3 hours if transaxle needs to be removed	

<b>Formula V</b>		
ITEM	HOURS	COMMENTS
1. Remove and replace engine	2.5	It is recognized that engine removal time varies widely with various makes of Vee's. This figure should be adequate for the great majority of them. Cost includes all connections and exhaust headers.
2. Carburetor remove and replace	.4	
3. Intake manifold: R&R	1.0	
4. Head One R&R Two R&R	1.8 2.7	Costs are based on initial starting point of a completely assembled engine. If engine removal is required, add Item 1.
5. Rocker arms remove and replace	.9	Includes complete disassembly of rocker mechanism
6. Flywheel and/or R&R	3.4	Includes engine R&R
7. Split case	9.9	Assumes flywheel and heads are removed. Cost is identical for any inspection requiring splitting of the case.

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<b>Production and GT</b>			
1. Remove and Replace Cylinder Head			
Number of Cylinders	Pushrod	Single Overhead Cam	Double Overhead Cam
4	3.4 hour	4.0 hour	4.5 hour
6	4.3 hour	5.0 hour	6.0 hour
Opposed Motor – 4 Cylinder Push Rod (**)			3.0 hour
Opposed Motor – 6 Cylinder Push Rod (**)			4.0 hour
(**) Includes R&R engine + 1 hour for second head			
2. Remove and Replace Carburetors (each)			.5 hour
3. Split Case			
6 Cylinder Chain (+ 2 hour for second set of head)			10.0 hour
356/914 Porsche (down)			5.0 hour
356/914 Porsche (back)			12.0 hour
911 Porsche (down)			15.0 hour
911 Porsche (back)			30.0 hour

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## Club Racing Labor Rate Guide

The following price schedule should be used by Stewards in setting teardown bonds if the component(s) and/or assembly are to be shipped to the SCCA Tech Department for inspection and analysis.

Service	Price	Notes
1. Cylinder Head	500	Includes: Port Volume (IN & EX), Valve Train Inspection, Combustion Chamber Volume, Camshaft and Cam Gear Inspection
2. Short Block (**)	250	Includes: Bore and Stroke, Crankshaft Inspection, Rod and Piston Assembly Inspection, General Block Inspection
(**) Add 2 hours if long block		
3. Crankshaft Inspection	25	
4. Rod & Piston Assembly Inspection	75	
5. Port Volume (IN & EX)	75	
6. Valve Train Inspection	175	
7. Combustion Chamber Volume	50	
8. Camshaft (Includes Gears) (each)	100	
9. Flywheel & Clutch Inspection	25	
10. Intake & Exhaust Manifold Inspection (each)	25	
11. Throttle Body Inspection (includes restrictor if applicable)	25	
12. Mass Air Flow Meter Inspection	25	
13. Shock dyno (1 shock)	25	\$15 each additional shock

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