Midlife Classics

Classic Auto Restoration, Upgrades, Service & Sales

Princeton, TX
972-736-3560
www.midlifeclassics.com

1965 Mustang

Restoration Project Portfolio

for

John Q. Client


TEXAS
ZYV-82Y

Midlife Classics inc.

Classic & Exotic Car Restoration and Sales

2351 CR-447, Princeton, TX 75407

Phone: 972-736-3560
Fax: 972-736-3561
www.midlifeclassics.com

John Q. Client
1965 Mustang Drive
Dallas, TX 65289

March 12, 2010

Dear John,

Now that the date of delivery of your restored Mustang is finally here, I'd like to take the opportunity the thank you for entrusting your family heirloom to this young upstart company. Your car has the unique distinction of being the first full restoration to be completed by Midlife Classics, and I hope that you are as happy with what you will be driving home today as I am proud of what we have accomplished.

It has been a long journey for us, but for you the real fun is just about to start. Your patience and financial commitment have resulted in one very fine classic that is destined to pay you back with years of driving pleasure and more "thumbs up" than you'll be able to count.

This portfolio is both a record of the work that has gone into your treasure, and a guide to getting the most out of your investment. I suggest that you review it at your earliest opportunity and keep it in a safe place. If, for any reason, you ever need to take it to another shop, everything a mechanic would need to know about your Mustang that sets it apart from others is contained within this portfolio. You will also find a CD enclosed. On it you will find a copy of every photo that has been taken of your car along with copies of virtually every document created and every research item collected during the restoration process.

The amount of time we spend on a project like this makes the final "product" seem like a part of the family, and – by extension – so are you. I hope that you can feel free to contact me with any questions you may have and that we will see you periodically over the years as the car needs servicing or when we bump into each other at classic car events. Working with you has been a genuine pleasure and I could not have asked for a better client for this company's first full restoration.

Warmest regards,

Robert Carroll
President
Midlife Classics, Inc.

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for

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1965 Mustang

PROJECT PHOTO GALLERY

< As Received >


TEXAS
ZYV-82Y
THE LONE STAR STATE


TEXAS
ZYV-82Y

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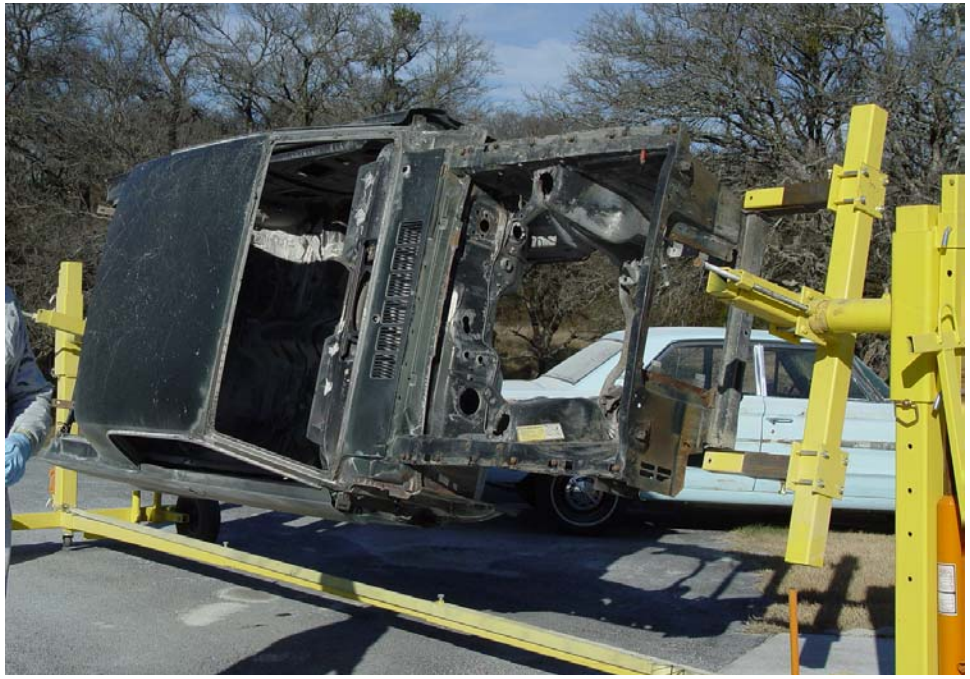
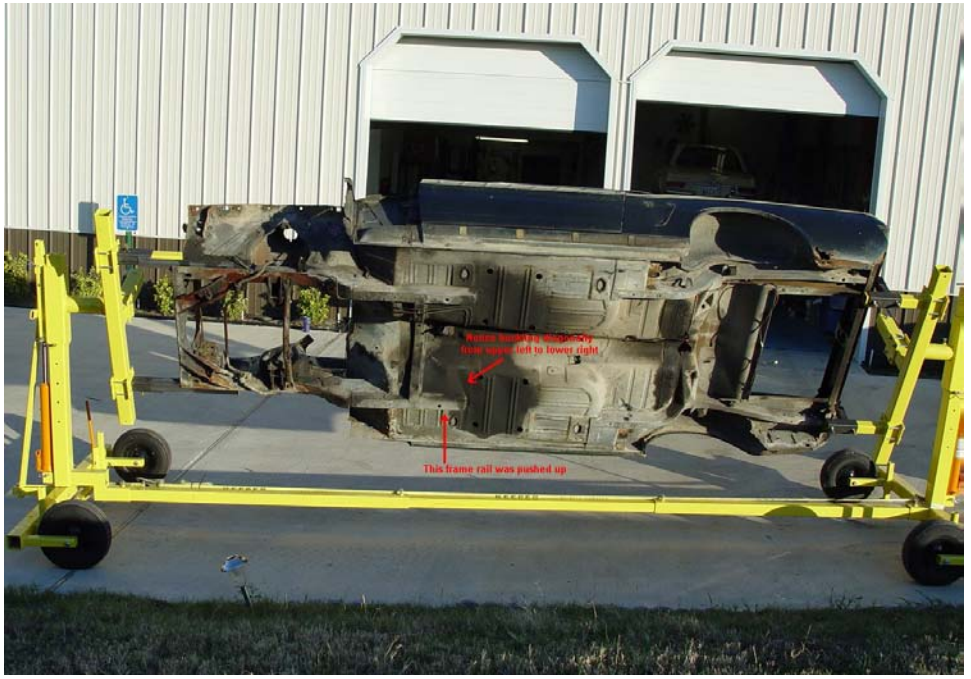
1965 Mustang

PROJECT PHOTO GALLERY

PHASE I - Disassembly & Strip




Notice buckling diagonally
from upper left to lower right


This frame rail was pushed up

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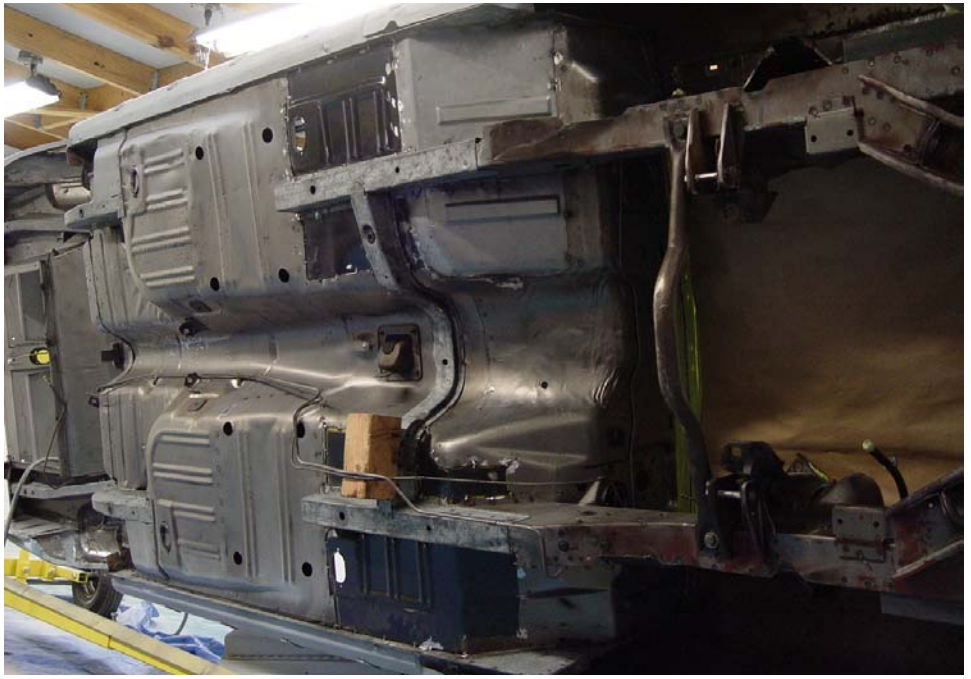
PROJECT PHOTO GALLERY

PHASE II - Body & Parts Preparation



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PROJECT PHOTO GALLERY

PHASE III - Reassembly & Testing


INDIANAPOLIS
Ford
MUSTAN


Official
INDIANAPOLIS 500 PACE CAR
Ford

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PROJECT PHOTO GALLERY

< Completed Project >


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1965 Mustang

Project Summary

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PROJECT SUMMARY

1965 Ford Mustang

for

John Q. Client

This was a total "rotisserie" restoration project John Client's 1965 Ford Mustang. The project was retrieved by Midlife Classics on August 9th, 2008 and completed on March 8th, 2010. Delivery to Mr. Client took place on March 12th, 2010 with an odometer reading of 62,312.1 miles.

OBJECTIVE: Mr. Client's desire was to restore the car to be capable of providing service as a safe and reliable "daily driver" with enough attention to detail to be capable of participating in local car shows without any intention of being competitive, yet still be proud of the car's appearance.

SCOPE: This was a complete bare-metal rotisserie restoration. Every component/system of the car was disassembled.

For maximum reliability and in the interest of long-term service, every major mechanical component was either replaced with a new or remanufactured replacement, or rebuilt in-house. The only notable exception is the differential – which was found to be in good condition and not in need of servicing or replacement.

Cosmetically, the car was refurbished to "like-new" condition. Prior to painting, the body was repaired as needed with flaws reduced to a quality standard equal to or better than from the factory. A two-stage basecoat/clearcoat urethane paint was applied, then colorsanded and buffed. The level of finish was dictated by the car's primary objective of being a daily driver where it will be subject to normal-to-high abuse – particularly in parking lot situations where it is expected to receive a high number of "door dings". The interior was replaced using an aftermarket reproduction kit consisting of seat upholstery, carpet, headliner and door panels. All remaining interior parts were refinished as appropriate.

The entire chassis was sodablasted inside and out. The undercarriage and engine compartment were finished with POR15 "Chassis Black" paint for maximum durability and rust protection.

Virtually every metal part on the car that was not replaced was stripped of all dirt, grease, paint and rust, and then refinished as appropriate.

UPGRADES: The following items/systems were upgraded or modernized to fit the stated project objective.

- **Brakes:** Upgraded to power-assisted front-disc brakes utilizing the industry-standard components from the Ford Granada and Corvette master cylinder/booster.
- **Steering:** Upgraded to power-assisted rack & pinion steering utilizing a conversion kit from Flaming River.
- **Suspension & Wheels:** KYB Gas-a-Just shock absorbers replaced the original oil dampers. Front springs were replaced with 540 lb/in units providing a 1" drop in ride height. Wider steel wheels (6" x 14") were utilized in order to provide clearance for the disc brake upgrade. Wider tires are also used (BF Goodrich T/A Radials – 205/70R x 14).
- **Tilt Steering Column:** As part of the rack & pinion kit, Flaming River provided a tilt steering column that (after some creative re-engineering) accommodates the original Mustang steering wheel and horn assembly.
- **Cooling System:** Overheating was the primary reason this Mustang sat idle for so many years and was likely the cause of the problems experienced with the engine. As a remedy, the radiator was replaced with an aluminum unit from Griffin Thermal Products. Additionally, Griffin provided a custom aluminum fan shroud and electric fan from Spal. The fan is controlled via a relay (mounted on the fender near the battery) and triggered via a sensor in the thermostat housing. The sensor triggers the relay to engage the fan when coolant temperature reaches 195 degrees (Fahrenheit) and then shuts if down when the temperature drops below 175 degrees. A coolant overflow/expansion tank was also installed.
- **Ignition System:** The points and condenser were replaced with a Pertronix "Ignitor" electronic ignition.
- **Fuel System:** The engine retains the standard two-barrel carbureted induction system. However, the carburetor has been replaced with a modern Holley 2300 unit.
- **Windshield Washer:** In 1965, the standard configuration for the windshield wiper system was a single-speed wiper motor with no provision for a washer system that sprays fluid on the windshield. Both the two-speed motor and washer system were optional. This car has been upgraded to include the factory windshield washer option. It retains the single-speed wiper motor.
- **Stereo Radio:** An AM/FM stereo manufactured by Custom Autosound (model USA-230) was installed in the original radio mounting aperature. It features digital tuning with multiple station presets, and a digital display that appears behind a classic-looking screen-painted analog face. An AUX input is included for use with an iPod or MP3 player. A dual dash speaker set had been installed prior to the restoration. A pair of 6" x 9" tri-axial speakers were installed in the rear package tray – for a total of four speakers.

- **Air Conditioning:** An under-dash A/C system was installed prior to this restoration project. The condenser unit was upgraded to a modern high-efficiency model provide by Vintage Air. The system was charged with R-134A refrigerant (1.8 lbs) and appears to function properly despite a bit of excessive noise generated by the rotary compressor.

MAJOR SYSTEMS & COMPONENTS: The following listing specifies the actions taken or items used to complete the major systems and components:

- **Body & Chassis:** The complete unibody chassis and all bolt-on body components were sodablasted to bare metal. Both front floorpans were replaced. The right front floorpan-to-firewall pan was replaced. The lower left quarter panel was replaced using a three-piece kit consisting of the outer and inner body panels and a panel for the wheel housing. The underbody and engine compartment were refinished POR15 Chassis Black rust-inhibitive paint. The outer body was finished in the original factory "Ivy Green" using a two-stage (basecoat/clearcoat) urethane paint. The final finish was colorsanded and buffed for best gloss.
- **Suspension:** The front suspension was rebuilt using all new components. Front springs were replaced with new units providing a 1" drop in ride height and a spring rate of 540 lb/in. The rear suspension received new bushing all around, but retained the original leaf springs. All four shock absorbers were replaced using KYB "Gas-a-Just" units. Following completion and initial test drives, a front end alignment was performed.
- **Steering:** Rack & pinion steering was installed using a conversion kit from Flaming River.
- **Brakes:** The front brakes are part of a power front disc conversion kit utilizing Ford Granada components. All wearable components in the brake system (excepting the rear drums – which were turned) were replaced with new components. All rubber hoses were replaced with new.
- **Power Train:** The car's power train is pretty-much all new with the exception of the differential.
    - Engine: The 289 V8 engine that was in the car was not the original engine. So, instead of rebuilding the engine (which had been seriously overheated), a remanufactured long-block engine was installed. The engine was provided by S&S Engine of Spokane, WA (www.hiperformer.com) and includes a 100,000 mile / 7-year warranty. All engine accessories (water pump, fuel pump, alternator, etc.) were replaced with new or remanufactured units. The original Autolite 2-barrell carburetor was replaced with a new Holley 2300. The ignition system retains the original distributor, but it has been upgraded with a Pertronix "Ignitor" electronic ignition system.

    - Transmission: The original C3 automatic transmission was rebuilt by Economy Transmission of McKinney. It carries a 12-month/12,000 mile warranty.
    - Rear Axle: The differential was cleaned, but remains otherwise untouched. Rear axle bearings were replaced. The pinion and rear axle seals were also replaced.
    - Cooling System: The entire cooling system has been replaced with new or remanufactured parts. The radiator is a high-capacity unit from Griffin Thermal Products and includes a custom shroud and thermally controlled electric fan. The heater core is new. All hoses are new. A new 180 degree thermostat and new thermostat housing were installed.
- **Interior:** The interior was refurbished using all new components for the seat upholstery, door panels, carpet and headliner. The car retains the original dash cover, gauge cluster and glove box door, but has a new glove box inner liner. The remaining interior components were stripped and refinished as appropriate.
- **Body Seals / Weatherizing:** All rubber seals, plugs, gaskets and weatherstripping were replaced with new reproduction replacements.

FINAL PRODUCT: The final product of the restoration is – for all intents and purposes – as close to a new 1965 Mustang as can be expected. The car runs and drives as you would have expected it to when new, except that it stops and handles much better due to upgrades to the brakes and steering. The overall impression is that the car is very solid and free of all the wear and age related symptoms you would expect of a car of this vintage. There are virtually no squeaks or rattles louder than the muted squeaking of the driver's seat's springs.

MIDLIFE CLASSICS COMMITMENT: At Midlife Classics, once we've restored a car, we are committed to seeing that the car and owner enjoy a long and pleasure-filled relationship. We are committed to helping the owner keep the car in top condition throughout its life and welcome every opportunity to perform maintenance and repairs when necessary. If, at any time, there is a question about the operation or condition of any part of the car, we are here to answer any questions and provide whatever assistance is necessary. All parts used in the restoration are covered by the manufacturers' warranties. Furthermore, Midlife Classics warrantees its workmanship for a period of 12 months or 12,000 miles (whichever comes first). This includes any labor related to the replacement of any failed parts covered by manufacturers' warranties during this 12-month/12,000 mile period. Subcontracted services are covered by the subcontracted companies for a period not to exceed Midlife Classics' 12 month / 12,000 mile coverage – with the exception of the remanufactured long-block engine which carries a 7-year / 100,000 mile warranty. Any and all warrantee services are to be performed by Midlife Classics and/or its subcontractors.

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1965 Mustang

Project Worksheets

John Q. Client

1965 Ford Mustang

Restoration Project
Estimate

PROJECT SUMMARY

Job Start: 8/9/2008

CHARGES

SHOP LABOR (by job)		
PHASE I		
PHASE II		
PHASE III		
JOB 4		$ -
ADDS		
SUBLET		
	TOTAL:	
PARTS		
MILEAGE		
SHIPPING		
SALES TAX		
	TOTAL:	

PAYMENTS RECEIVED

08/30/08	Check #1713	
09/29/08	Check #7630	
11/13/08	Check #7659	
12/27/08	Check #7684	
04/09/09	Check #7746	
06/15/09	Check #7792	
09/29/09	Check #7853	
01/29/10	Check #7896	
03/12/10	Check #7909	
	TOTAL:	

CREDITS ISSUED

	TOTAL:	$ -

BALANCE DUE

LABOR

John Q. Client

1965 Ford Mustang

Estimate

							LABOR RATE:						
	HOURS						**JOB APPLICATION**						
DESCRIPTION	**BOB**	**GLENN**	**ANDY**	**TOTAL**	**PRICE**	**J**	**PHASE I**	**PHASE II**	**PHASE III**	**JOB 4**	**ADDS**	**SUBLET**
Pickup & Transport to Shop - 8/9/2008	2.00			2.00	$0.00	1	$ -					
Initial Inspection and Start-Up	3.00			3.00	$150.00	1	$ 150.00					
Compression Test	1.00			1.00	$50.00	1	$ 50.00					
Install New Ignition & Diagnose Engine		6.50		6.50	$325.00	1	$ 325.00					
Remove Front Clip		7.50		7.50	$375.00	1	$ 375.00					
Remove Transmission	1.50	1.50		3.00	$150.00	1	$ 150.00					
Remove Engine	1.50	1.50		3.00	$150.00	1	$ 150.00					
Remove Radiator, Condenser Etc.		1.50		1.50	$75.00	1	$ 75.00					
Remove Fuel Tank & Rear Facia	2.00			2.00	$100.00	1	$ 100.00					
Remove Exterior Lights & Trim		4.00		4.00	$200.00	1	$ 200.00					
Strip Interior		5.00		5.00	$250.00	1	$ 250.00					
Remove Dash, Heat & A/C		5.00		5.00	$250.00	1	$ 250.00					
Remove Front & Rear Suspension	0.50	7.50		8.00	$200.00	1	$ 200.00					
Remove Windows & Door Hardware		5.00		5.00	$250.00	1	$ 250.00					
Mount on Rotisserie	2.00	3.00		5.00	$250.00	1	$ 250.00					
Project Clean-Up	1.00	2.00		3.00	$60.00	1	$ 60.00					
Prep Chassis for Blasting	2.50			2.50	$50.00	1	$ 50.00					
Receive Parts Order	4.00			4.00	$0.00	1	$ -					
Sodablaster Rental (transport)	4.00			4.00	$200.00	1	$ 200.00					
Sodablaster Rental (unit rental)				0.00	$250.00	O						$ 250.00
Media Blast Chassis		5.50		5.50	$275.00	2		$ 275.00				
Dissassembly of Engine Parts		1.50		1.50	$75.00	2		$ 75.00				
Blast & Clean Engine Parts		4.50		4.50	$225.00	2		$ 225.00				
Blast Bolts		1.00		1.00	$50.00	2		$ 50.00				
Swap over engines on stands		1.50		1.50	$75.00	2		$ 75.00				
Sodablast Chassis		10.00		10.00	$500.00	1	$ 500.00					
Assemble Engine		8.00		8.00	$400.00	2		$ 400.00				
Blast Headers & Header Bolts		1.50		1.50	$75.00	2		$ 75.00				
Paint Brackets & Pulleys		1.50		1.50	$75.00	2		$ 75.00				
Refurbish Engine Accessories		3.50		3.50	$175.00	2		$ 175.00				
Clean up core support opening		3.00		3.00	$150.00	2		$ 150.00				
Media Blast Front Trim Parts	1.00	1.50		2.50	$125.00	1	$ 125.00					
Body Repair - Filler/Sand		13.00		13.00	$650.00	2		$ 650.00				
Remove Door W/Strip & Clean		3.50		3.50	$175.00	1	$ 175.00					
Seal Driprails		4.00		4.00	$200.00	2		$ 200.00				
Prep Chassis for Etch Primer	8.00	15.00		23.00	$0.00	2		$ -				
Prep Engine for Paint		5.00		5.00	$250.00	2		$ 250.00				
Etch Prime Chassis & Trim Parts		3.00		3.00	$150.00	2		$ 150.00				
Paint Engine		7.00		7.00	$140.00	2		$ 140.00				
Fill Prime Chassis & Trim Parts		4.50		4.50	$225.00	2		$ 225.00				
Bodywork & Sand (non-metal patching)		199.50		199.50	$2,992.50	2		$ 2,992.50				
Replace Front Floor Pans		35.00		35.00	$525.00	2		$ 525.00				
Repair Holes in Rear Floor Pan		3.00		3.00	$150.00	2		$ 150.00				
Replace LR Lower Quarter Panel		30.00		30.00	$450.00	2		$ 450.00				
POR15 Underbody & Eng. Compartment		17.00		17.00	$850.00	2		$ 850.00				
Paint Body				0.00	$2,500.00	O						$ 2,500.00
Rebuild Rear Axle & Brakes		14.00		14.00	$700.00	2		$ 700.00				
Resurface Rear Brake Drums				0.00	$50.00	O						$ 50.00
Mount & Balance 4 New Tires				0.00	$30.00	O						$ 30.00
Tire Purchase (to/from dealer + wait)	1.50			1.50	$75.00	3			$ 75.00			
Rebuild Front Suspension		6.00		6.00	$300.00	3			$ 300.00			
Convert to Rack & Pinion Steering		5.00		5.00	$250.00	3			$ 250.00			
Replace Door & Side Window Wstrippg		12.00		12.00	$600.00	3			$ 600.00			
Replace Windshield & Rear Window Seals		8.00		8.00	$400.00	3			$ 400.00			
Replace Headliner	5.00	1.00		6.00	$300.00	3			$ 300.00			
Replace Carpet		5.00		5.00	$250.00	3			$ 250.00			
ReUpholster Front & Rear Seats		15.00		15.00	$750.00	2		$ 750.00				
Final Reassembly		40.00		40.00	$2,000.00	3			$ 2,000.00			
Install Rear Speakers		1.50		1.50	$75.00	5					$ 75.00	
Upgrade Wipers to include Washer	4.00			4.00	$200.00	5					$ 200.00	
Evacuate & Charge A/C		2.00		5.00	$250.00	3			$ 250.00			
Front End Alignment				0.00	$75.00	O						$ 75.00
Replace Stereo	2.00			2.00	$100.00	5					$ 100.00	
Transmission Rebuild (labor only)				0.00	$650.00	O						$ 650.00
Texas State Inspection - Labor	1.00			1.00	$50.00	3			$ 50.00			
Texas State Inspection - Sublet				0.00	$14.50	O						$ 14.50
				0.00								
				0.00								
				0.00								
				0.00								
TOTAL:	**47.50**	**542.00**	**0.00**	**592.50**								

PARTS LISTING

John Q. Client

1965 Ford Mustang

Estimate

QTY	DESCRIPTION	ITEM NO.	VENDOR	PRICE	SHIP	TOTAL
FRONT SUSPENSION						
1.00	Front End Rebuild Kit	CA64K 01	M/U	$348.60		$348.60
1.00	Lower Control Arm Bolt Kit	CAB1 01	M/U	$17.44		$17.44
1.00	Upper Control Arm Bolt Kit	CAB2 01	M/U	$17.44		$17.44
1.00	Shock Absorbers - Set of 4	SHOCK2	M/U	$181.10		$181.10
1.00	Front Shock Mounting Hdwre	HH423 01	M/U	$4.85		$4.85
1.00	Sway Bar Bushing Set	037655	Autozone	$11.24		$11.24
4.00	Grease Zerk Fittings		Inventory	$0.50		$2.00
1.00	Front Coil Springs - Pair - 1" drop	GWS23	M/U	$129.95	$13.00	$142.95
REAR SUSPENSION & AXLE						
1.00	Leaf Spring Bushing Kit	42101 01	M/U	$62.44		$62.44
2.00	Leaf Spring Front Bolt	5600A 01	M/U	$29.75		$59.50
1.00	Rear Axle Pinion Seal	8181NA 01	M/U	$18.95		$18.95
2.00	Rear Axle Wheel Seal	51322 01	M/U	$29.94		$59.88
2.00	Rear Axle Wheel Bearing (2)	RW207CCRA 01	M/U	$21.19		$42.38
STEERING						
1.00	Power Rack & Pinion Conversion	FR3014	M/U	$2,399.55		$2,399.55
1.00	1/2" to 1/2" Barb Fitting (P/S reservoir)	29383	Lowes	$6.16		$6.16
1.00	1/4" MPT to 6AN Fitting	2404-0604	Nortex	$5.95		$5.95
1.00	V-Belt	GAT 9355	Big G	$15.11		$15.11
1.00	Pressure Hose - Custom		Big G	$47.96		$47.96
1.00	Return Hose - Custom		Big G	$47.51		$47.51
1.00	Power Steering Fluid	TEC4610	Big G	$4.20		$4.20
BRAKES						
1.00	Frt. Disc Brake Kit	(623)-772-0053	Direct Fit Brakes	$895.00	$85.00	$980.00
1.00	Brake Shoes	PAB151 01	M/U	$43.69		$43.69
1.00	Brake Wheel Cylinder - LH	EW28804 01	M/U	$31.19		$31.19
1.00	Brake Wheel Cylinder - RH	EW28805 01	M/U	$31.19		$31.19
1.00	Brake Hardware Kit (1)	H7102 01	M/U	$21.19		$21.19
1.00	Brake Shoe Self Adj Kit - LH	H2514	M/U	$17.44		$17.44
1.00	Brake Shoe Self Adj Kit - RH	H2515	M/U	$17.44		$17.44
2.00	14" X 6" Steel Rims		eBay (Yami76)	$37.49	$39.00	$113.98
4.00	14" X 6" Steel Rims		eBay (fmaxa1)	$19.68	$98.46	$177.18
1.00	Rear Brake Hose	DOR H36529	Big G	$40.28		$40.28
ENGINE						
1.00	Long-Block Remanufactured 289 Engine	Ordered via Reid 11/19	http://www.hiperfo	$1,500.00	$255.00	$1,755.00
1.00	Pertronix Ignition	91281 01	M/U	$124.94		$124.94
8.00	Spark Plugs	BSF42C	M/U	$3.06		$24.48
1.00	Ignition Wires	708105	M/U	$49.94		$49.94
1.00	Distributor Cap	512106	M/U	$16.19		$16.19
1.00	Distributor Rotor	DR5B	M/U	$7.44	$18.44	$25.88
1.00	Ignition Coil		O'Reilly	$41.90		$41.90
1.00	Air Filter		O'Reilly	$12.69		$12.69
1.00	Oil Filter		O'Reilly	$8.97		$8.97
5.00	Oil	Rotella T	Autozone	$4.95		$24.75
1.00	Engine Mount - LH	2220 01	M/U	$22.44		$22.44
1.00	Engine Mount - RH	2221 01	M/U	$22.44		$22.44
1.00	Exhaust System	EK10	M/U	$500.00		$500.00
1.00	Water Pump		O'Reilly	$30.61	$10.00	$40.61
1.00	Fuel Pump		O'Reilly	$48.93		$48.93
1.00	Thermostat		O'Reilly	$6.76		$6.76
	Gasket Kits (intake, valve covers, oil pan)			$62.50		
1.00	Fuel Filter		O'Reilly	$5.92		$5.92
2.00	POR-15 Engine Paint - Ford Medium Blue	POR EEPFMB	English	$27.50		$55.00

PARTS LISTING

John Q. Client

1965 Ford Mustang

Estimate

1.00	POR-15 Solvent	SVQ	English	$14.69		$14.69
1.00	Breather	C5ZZ6766CR	M/U	$21.19		$21.19
1.00	Water Neck	84831	M/U	$18.69		$18.69
1.00	Balancer Oil Sleeve	FEL 16213	Big G	$10.76		$10.76
1.00	Starter - Remanufactured	336701	Autozone	$62.49		$62.49
4.00	Exhaust Clamp	401430	Autozone	$2.99		$11.96
4.00	Exhaust Hangar	5932	Autozone	$4.36		$17.44
1.00	Coolant Temp Sensor	STD TS24	Big G	$10.09		$10.09
2.00	Chrome Exhaust Tips	62-0266	Autozone	$12.49		$24.98
1.00	Accelerator Return Spring		Autozone	$2.99		$2.99
1.00	Oil Pressure Switch	PS95	Autozone	$9.99		$9.99
2.00	Exhaust Manifold Pipe Gasket	FEL8194	Big G	$3.03		$6.06
1.00	Carburetor Rebuild Kit	HYG586	Big G	$20.78		$20.78
1.00	Holley 2300 Carburetor	HLY-0-7448	Summit	$322.95		$322.95
1.00	Holley Choke Conversion Kit	HLY-45-224	Summit	$54.95	$12.95	$67.90
1.00	Steel T-Fitting (Vac Source for Carb)	EDE127444	Big G	$7.21		$7.21
1.00	Brass Nipple (Vac Source for Carb)	EDE821450	Big G	$3.46		$3.46
1.00	Fuel Filter	AXF616-33032	Big G	$6.64		$6.64
1.00	Intake Manifold Gasket (N/C)	MS90103-1	Autozone			$0.00
DRIVETRAIN						
1.00	Transmission Rear Seal	7692S 01	M/U			$0.00
2.00	Rear Axle Flange Gasket (2)	55001 01	M/U	$2.44		$4.88
1.00	Shifter Seal	F2421 01	M/U			$0.00
1.00	Transmission Filter Kit	FT36A 01	M/U	$14.94		$14.94
1.00	Transmission Front Seal	331107N 01	M/U			$0.00
1.00	Transmission Mount	2253 01	M/U	$18.69		$18.69
1.00	Clutch Rebuild Kit		Economy Trans..	$239.95		$239.95
1.00	Torque Converter		Economy Trans..	$174.95		$174.95
8.00	Mercon/Dextron Transmission Fluid			$4.99		$39.92
COOLING SYSTEM						
1.00	Aluminum Radiator		Griffin Thermal	$645.00	$40.00	$685.00
1.00	Upper Radiator Hose	KM615 01	M/U	$18.69		$18.69
1.00	Lower Radiator Hose	KM308 01	M/U	$16.19		$16.19
1.00	Heater Bypass Hose	KM614	M/U	$11.19		$11.19
8.00	Heater Hose per ft.	GAT24032	Big G	$1.45		$11.60
2.00	Antifreeze		Big G	$16.24		$32.48
2.00	Antifreeze		Autozone			$0.00
2.00	Thermostat Gasket (N/C)	FEL35067	Big G			$0.00
3.00	Vinlyl Tubing 5/16" - Overflow	3129138	Tractor Supply	$1.45		$4.35
1.00	Griffin Radiator Shroud/Fan/Thermal Switch		Griffin Thermal	$360.00	$35.00	$395.00
ELECTRICAL						
1.00	Battery			$102.30		$102.30
1.00	Alternator Harness	AH12	M/U	$27.44		$27.44
1.00	Engine Gauge Feed Harness	EGH5	M/U	$37.44		$37.44
1.00	Horn Ring Retainer	754197	M/U	$2.44		$2.44
1.00	Battery Cable - Positive	STD A16-4	Big G	$11.06		$11.06
1.00	Battery Cable - Ground	STD A23-1	Big G	$16.28		$16.28
1.00	Battery Cable - Switch to Starter	COL SS32-4	Big G	$7.54		$7.54
1.00	Alternator - Reman	7078	Autozone	$43.74		$43.74
1.00	Voltage Regulator	VR730	Autozone	$19.99		$19.99
1.00	Battery Hold-Down Bracket	COL975	Big G	$4.15		$4.15
1.00	Battery Hold-Down J-Bolts	COL966-12	Big G	$3.20		$3.20
1.00	Battery Quick-Disconnect			$8.33		$8.33
1.00	Radio	USA230A	M/U	$212.44		$212.44
1.00	Horn Set (pair)	MHK1	M/U	$74.85		$74.85
INTERIOR						

PARTS LISTING
John Q. Client
1965 Ford Mustang
Estimate

1.00	Complete Interior Kit - Black	76565BLK	M/U	$449.85		$449.85
1.00	Headliner - White	HL65MU65-05	Autokrafters	$49.94	$9.95	$59.89
1.00	Uphostery Installation Kit	HH044KIT	M/U	$11.10		$11.10
1.00	Water Shield Kit	M111	M/U	$14.94		$14.94
2.00	Door Panel Mounting Kit	31N	M/U	$7.44		$14.88
1.00	Door Sill Kit	53207	M/U	$34.85		$34.85
1.00	Firewall Insulation Pad w/Retainers & Adhesiv	109	M/U	$49.94		$49.94
1.00	Carpet Underlayment Kit	1011	M/U	$81.10		$81.10
1.00	Rear Seat Divider	M110	M/U	$16.19		$16.19
1.00	Glove Box Insert	6010A	M/U	$12.44		$12.44
1.00	Headliner Pad	M247	M/U	$21.19		$21.19
1.00	Windlace - Black	W16BLK	M/U	$16.19		$16.19
1.00	Interior Screw Kit	HH010	M/U	$13.60		$13.60
1.00	Steering Wheel - STD Black	3600A	M/U	$174.94		$174.94
1.00	Door Lock Grommets (stainless steel)	D0DZ-6221999	Autokrafters	$9.94		$9.94
BODY & TRIM						
1.00	Front Bumper Kit	BK5	M/U	$206.10		$206.10
1.00	Rear Bumper Kit	BK7	M/U	$174.85		$174.85
1.00	Lower Quarter Patch Kit - LH	113LK	M/U	$62.35		$62.35
1.00	Weatherstrip Kit	65650 01	M/U	$199.85		$199.85
1.00	Vent Window Seal Kit - Pair	VWK1 01	M/U	$66.10		$66.10
1.00	Roof Rail Weatherstrip Screw Set	PE766 01	M/U	$8.69		$8.69
1.00	Body Plug Set with A/C	HH651 01	M/U	$28.60		$28.60
1.00	Windshield - Green w/Tint Strip	FW1000S 01	M/U	$249.94		$249.94
1.00	Front Driver Floor Pan	A106ELH	M/U			$0.00
1.00	Front Passenger Floor Pan	A106ERH	M/U			$0.00
1.00	Splash Shield Kit	65102D	M/U	$74.85		$74.85
1.00	Body Gasket Kit	GK1	M/U	$72.35		$72.35
1.00	Steering Column Seal	5513A	M/U	$3.69		$3.69
4.00	Window Regulator Rollers (kit of 4)	38N	M/U	$4.50		$18.00
1.00	Front Valance	F1432	M/U	$99.94		$99.94
1.00	Rear Valance	505441	M/U	$41.19		$41.19
1.00	Front Floor Panel LH	A106LH	M/U	$31.19		$31.19
1.00	Front Floor Panel RH	A106RH	M/U	$31.19		$31.19
1.00	Floor to Firewall Panel RH	99126	M/U	$34.30	$10.48	$44.78
2.00	POR 15 Chassis Black			$43.75		$87.50
1.00	LH 1/4 Window Regulator (broken spring)	530307	M/U	$81.19	$6.50	$87.69
1.00	Backup Light Kit	155111	M/U	$62.48		$62.48
1.00	Quarter Glass Weatherstrip RH	61414	M/U	$11.19		$11.19
1.00	Quarter Glass Weatherstrip LH	61415	M/U	$11.19		$11.19
1.00	Door Glass Run Kit	M219	M/U	$106.19		$106.19
2.00	Tail Light Bezel	53489	M/U	$18.69		$37.38
2.00	Windshield Clips - 12 pk	67N	M/U	$4.94		$9.88
2.00	Windshield Clip Screws - 12 pk	68N	M/U	$3.69		$7.38
1.00	Door Window Stop Bumper	521762	M/U	$4.94		$4.94
1.00	Beltline Weatherstrip	65B:T6576	M/U	$89.95		$89.95
1.00	Back Glass Weatherstrip	C5ZZ-6542084	M/U			$0.00
1.00	Hood to Cowl Seal	C5ZZ-16740	M/U	$8.69		$8.69
1.00	Mirror - Inside Day/Nite	C5ZZ-17700DN	M/U	$37.44	$9.95	$47.39
1.00	Mirror Mounting Bracket - Interior	MS4061	M/U	$16.81		$16.81
1.00	Windshield Wiper Switch - w/Washer	F1429	M/U	$44.94		$44.94
1.00	Radio Antenna - Ford Style	MISAW-FD80	Big G	$12.50		$12.50
1.00	License Plate Screw Kit	MTM49258	Big G	$3.88		$3.88
2.00	Hood Adjustment Bumpers	F1417R	M/U	$4.92		$9.84
1.00	Shifter Rubber Trim	C5ZZ7D351	M/U	$6.58		$6.58
1.00	Shifter Mounting Set Screw (6mm)		Groom	$3.25		$3.25
MISCELLANEOUS						
5.00	Premium Gasoline - Pre-Restoration			$4.49		$22.45
3.00	R-134A Air Conditioning Refrigerant (3)			$8.46		$25.38
1.00	Trunk Liner Kit	TM102	M/U	$74.85		$74.85

PARTS LISTING

John Q. Client

1965 Ford Mustang

Estimate

1.00	Trunk Filler Panel	5229A	M/U	$6.19		$6.19
16.00	Sodablasting Media			$27.50		$440.00
1.00	Heater/Defroster Rebuild Kit	HRK1	M/U	$124.85		$124.85
1.00	Heater Core End Caps	HC185	M/U	$13.69		$13.69
1.00	A/C Condenser	03260-VUC	Vintage Air	$173.75		$173.75
1.00	6X9 Coaxial/Triaxial Stereo Speakers (pr)	SPUV69	M/U	$74.99	$8.96	$83.95
1.00	Speaker Wire (spool)		Misc	$12.00		$12.00
4.00	Tires 205/70x14 or 215/70x14 (4)	BFGoodrich T/A?	Discount Tire	$104.29		$417.16
4.00	Rattle-Can Build Primer	UP0791	English	$24.38		$97.52
1.00	High Build Primer (gallon)	K38	English	$217.00		$217.00
2.00	Primer/Surfacer Catalyst	K201	English	$88.63		$177.26
1.00	Fast Thinner	89	English	$10.26		$10.26
1.00	Etch Primer	DPX171	English	$190.63		$190.63
1.00	Catalyst (etch primer)	DPX172	English	$141.44		$141.44
2.00	Seam Sealer	8505	English	$22.90		$45.80
1.00	Base Coat - Custom Mix - Ivy		English	$149.66		$149.66
1.00	Fast Hardener		English	$43.44		$43.44
1.00	Clear Coat		English	$64.38		$64.38
0.50	Hi Build Primer		English	$217.00		$108.50
0.50	Catalyst - Hi Build Primer		English	$24.38		$12.19
12.00	Spray Paint (Engine/Chassis)		Autozone	$7.11		$85.32
1.00	Windshield Washer Reservoir	WWR2	M/U	$21.69		$21.69
1.00	Windshield Washer Hose Kit	HH037	M/U	$6.48		$6.48
1.00	Windshield Washer Nozzle Pair	57603	M/U	$21.69		$21.69
1.00	Windshield Washer Pump	WG2	M/U	$43.69	$7.48	$51.17
1.00	Windshield Washer Reservoir Bracket	X00	M/U	$6.69		$6.69
1.00	Reservoir Bracket Mounting Screws	86N	M/U	$1.29		$1.29
1.00	Windshield Sealer	8511	M/U	$22.44		$22.44
2.00	Windshield Wiper Blades (correct style)	57528	M/U	$14.58	$6.95	$36.11
1.00	Windshield Washer Pump Feed Wire	WWH1	M/U	$6.69		$6.69
1.00	Polarseal Coupling (A/C line)	GATG45592-0606	Big G	$6.71		$6.71
5.00	Premium Gasoline - Initial Refill		Allsups	$3.61		$18.05
1.00	Base Coat - Cust. Mix - Ivy - Pint (touchup)	DBU 43337	Big G	$66.75		$66.75
1.00	Misc Fasteners			$45.00		$45.00
10.00	Premium Gasoline		Allsups	$2.86		$28.60
1.00	Jack & Handle	used	eBay	$85.00	$12.92	$97.92
1.00	Spare Tire Hold-Down Nut	B9AZ1462A	Autokrafters	$3.69		$3.69
1.00	Spare Tire Hold-Down Plate	C5ZZ-1424A	Autokrafters	$3.69	$9.95	$13.64
1.00	Spare Tire Hold-Down Bolt		Big G	$1.63		$1.63
			TOTAL:			

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1965 Mustang

Project Checklists

CHECKLISTS
John Q. Client
1965 Ford Mustang

SYSTEM	ITEM	TEST	PASS	FAIL	BY	NOTES
SUSPENSION & STEERING						
	Ball Joints	Check Bolts Tight & Lubed	X		RC	
	Tie Rod Ends	Check Tight & Lubed	X		RC	
	Control Arm Pivots	Check Tight & Lubed	X		RC	
	Steering Rack/Box	Check All Tight & Lubed	X		RC	
	Axle Bearings & Nuts	Check Adj & Grease. Rotates Freely	X		RC	
	Rear Springs	Check Bolts & Seats	X		RC	
	Shocks	Check Bolts Tight	X		RC	
	Steering Wheel	Check Attach & Centered	X		RC	
	Power Steering	Check Leaks, Belt, Fluid	X		RC	
	Suspension Action	Check Range & Damping	X		RC	
	Steering Action	Check Lock-to-Lock	X		RC	
BRAKES						
	Front Pads/Shoes	Check Wear, Fittment, Adjustment	X		RC	
	Rear Pads/Shoes	Check Wear, Fittment, Adjustment	X		RC	
	Front Rotors/Drums	Check Wear & Secure	X		RC	
	Rear Rotors/Drums	Check Wear & Secure	X		RC	
	Reservoir	Check Fluid Level	X		RC	
	Booster	Check Vacuum Connections	X		RC	
	Warning System	Check Switch Connected & Centered	N/A			
	Pedal	Check Pedal Travel & Feel	X		RC	
	Emergency/Parking	Check if Holds Vehicle & Releases	X		RC	
	Braking Action	Test Holds & Locking	X		RC	
COOLING SYSTEM						
	Hoses	Check for Aging, Splits & Clamps	X		RC	
	Routing	Verify Hose Routing is Correct	X		RC	
	Coolant	Check Radiator Full & Proper Mix	X		RC	
	Leaks	Inspect for Leaks	X		RC	
	Radiator Cap	Verify Cap Secure & Proper Press.	X		RC	
	Overflow	Verify Hose/Container in Place	X		RC	
	Monitoring	Verify Any Gauges/Lights Connected	X		RC	
	Pressure Test	Inspect for Leaks	X		RC	

CHECKLISTS
John Q. Client
1965 Ford Mustang

SYSTEM	ITEM	TEST	PASS	FAIL	BY	NOTES
FLUIDS						
	Engine Oil	Check Level & Correct Fluid	X		RC	
	Transmission Fluid	Check Level & Correct Fluid	X		RC	
	Power Steering Fluid	Check Level & Correct Fluid	X		RC	
	Coolant	Check Level & Correct Fluid	X		RC	
	Brake Fluid	Check Level & Correct Fluid	X		RC	
	Rear Axle Gear Oil	Check Level & Correct Fluid	X		RC	
	Windshield Washer	Check Level & Correct Fluid	X		RC	
	Fuel	Add 5+ Gallons for Testing	X		RC	
ELECTRICAL SYSTEM						
	Pre-Powered Overview	Verify Connections Match Diagrams	X		RC	
	- Alternator	Verify Connections Correct	X		RC	
	- Ignition Coil	Verify Connections Correct	X		RC	
	- Spark Plug Wires	Verify Connections Correct	X		RC	
	- Horn(s)	Verify Connections Correct	X		RC	
	- Oil Pressure Sensor	Verify Connections Correct	X		RC	
	- Water Temp Sensor	Verify Connections Correct	X		RC	
	- Heat & A/C	Verify Connections Correct	X		RC	
	- Exterior Lighting	Verify Connections Correct	X		RC	
	- Gauge Cluster	Verify Connections Correct	X		RC	
	- Accessories	Verify Connections Correct	X		RC	
	- Fuse Box/Panel	Verify Fuses Installed & Correct	X		RC	
	CONNECT BATTERY	CHECK FOR SMOKE!	X		RC	
	KEY OFF Testing					
	- Parking Lights	Check Proper Operation	X		RC	
	- Headlights Low	Check Proper Operation	X		RC	
	- Headlights High	Check Proper Operation	X		RC	
	- Tail Lights	Check Proper Operation	X		RC	
	- Brake Lights	Check Proper Operation	X		RC	
	- Hazard Flashers	Check Proper Operation	X		RC	
	- Panel Lights	Check Proper Operation	X		RC	
	- Horn(s)	Check Proper Operation	X		RC	Horns Weak (replaced)
	- Clock	Check Proper Operation	X		RC	
	- Interior Lighting	Check Proper Operation	X		RC	
	- Cigarette Lighter	Check Proper Operation	X		RC	
	- Glove Box Light	Check Proper Operation	X		RC	

CHECKLISTS
John Q. Client
1965 Ford Mustang

SYSTEM	ITEM	TEST	PASS	FAIL	BY	NOTES
ELECTRICAL SYSTEM (Continued)						
	KEY ON Testing					
	- Check Above Items	Check Op of Any Failed Key Off Items	X		RC	
	- Turn Signals	Check Proper Operation	X		RC	
	- Backup Light(s)	Check Proper Operation	X		RC	
	- Parking Brake Warn	Check Proper Operation	N/A			
	- Charge Gauge/Light	Check Proper Operation	X		RC	
	- Temp Gauge/Light	Check Proper Operation	X		RC	
	- Oil Press Gauge/Light	Check Proper Operation	X		RC	
	- Fuel Gauge	Check Proper Operation	X		RC	
	- Windshield Wiper	Chech Proper Operation	X		RC	
	- Windshield Washer	Check Proper Operation	X		RC	
	- Heater Blower Fan	Check Proper Operation	X		RC	
	- Heater Valve (if elect.)	Check Proper Operation	N/A			
	- A/C Clutch	Check Proper Operation	X		RC	
	- A/C Fan (if separate)	Check Proper Operation	X		RC	
	- Radio & Access	Check Proper Operation	X	X	RC	No Freq Select (replaced)
	- Ignition Power to Coil	Check Proper Operation	X		RC	
	- Electric Choke	Check Proper Operation	N/A			
	- Starter Engage	Check Proper Operation	X		RC	**DISCONNECT COIL**
ENGINE						
	Electrical Verified	Verify Electrical Checklist Completed	X		RC	
	Fluids Verified	Verify Fluids Checklist Completed	X		RC	
	Cooling System Verifed	Verify Cooling Sys Chklst Completed	X		RC	
	Distributor Timing	Verify Static Timing - #1 TDC	X		RC	
	Accelerator Linkage	Verify Carburetor Opens/Closes	X		RC	
	Cold Start System	Verify Choke Function & Fast Idle	X		RC	
	Prime Fuel Pump	Open Fuel Line at Pump Inlet to Prime	X		RC	
	Secure For Start	Set Trans to Neutral or Park. Set Brake	X		RC	
	Start Engine	**30-SECOND RUN LIMIT**	X		RC	**NO REVVING!**
		< CHECK OIL PRESSURE>				**STOP if Not Good**
	Check Fluids					
	- Engine Oil	Top Off as Needed	X		RC	
	- Transmission Fluid	Top Off as Needed	X		RC	
	- Power Steering Fluid	Top Off as Needed	X		RC	
	- Coolant	Top Off as Needed	X		RC	

CHECKLISTS
John Q. Client
1965 Ford Mustang

SYSTEM	ITEM	TEST	PASS	FAIL	BY	NOTES
ENGINE (Continued)						
	Restart Engine					
	- Check Oil Pressure	Verify Oil Pressure Good	X		RC	STOP if Not Good
	- Rough Check Timing	Verify Near Timing (given fast idle)	X		RC	
	- Check Trans Fluid	Add Fluid As Needed	X		RC	
	- Warm to Op Temp	Use Laser Temp Gauge	X		RC	
	- Verify Cooling Fan	Check Elect Cooling Fan Function	N/A			Installed after testing
	- Verify Choke Opens	Check Choke Flap and Normal Idle	X		RC	
	- Set Ignition Timing	Adjust As Per Timing Specifications	X		RC	
	- Set Idle	Adjust As Per Specifications	X		RC	
	- Recheck Timing	Adjust Per Specs with Proper Idle	X		RC	
	- Verify Coolant Temp	Confirm Temp Maintained w/in Spec.	X		RC	
	- Shutdown	Turn Off Engine	X		RC	
	- Check for Leaks	Check Engine & Cooling Sys for Leaks	X		RC	
	Recheck Fluids					
	- Engine Oil	Top Off as Needed	X		RC	
	- Transmission Fluid	Top Off as Needed	X		RC	
	- Power Steering Fluid	Top Off as Needed	X		RC	
	- Coolant	Top Off as Needed	X		RC	
	Restart Engine					
	- Check Oil Pressure	Verify Oil Pressure Good	X		RC	STOP if Not Good
	- Warm to Op Temp	Use Laser Temp Gauge	X		RC	
	- Verify Cooling Fan	Check Elect Cooling Fan Function	N/A			
	- Verify Choke Opens	Check Choke Flap and Normal Idle	X		RC	
	- Verify Idle Speed	Adjust As Per Specifications	X		RC	
	- Verify Ignition Timing	Adjust As Per Timing Specifications	X		RC	
	- Recheck Idle Speed	Adjust As Per Specifications	X		RC	
	- Adjust Idle Mixture	Adjust Per Specs with Proper Idle	X		RC	
	- Recheck Idle Speed	Adjust As Per Specifications	X		RC	
	- Verify Coolant Temp	Confirm Temp Maintained w/in Spec.	X		RC	
	- Cycle Transmission	Move Through Gears to Circulate Fluid	X		RC	
	- Check Trans Fluid	Add Fluid As Needed	X		RC	
	- Shutdown	Turn Off Engine	X		RC	

ENGINE RUN COMMENTS
Engine fires up with no trouble after setting timing. Runs and idles smooth. Great throttle response.

CHECKLISTS
John Q. Client
1965 Ford Mustang

SYSTEM	ITEM	TEST	PASS	FAIL	BY	NOTES
SAFETY & CONVENIENCE						
	Seat Belts	Check Secure & Functional	**X**		**RC**	
	Seats	Secure & Move Fore/Aft Freely	**X**		**RC**	
	Mirrors	Verify Secure & Proper View	**X**		**RC**	
	Sun Visors	Check Secure & Functional	**X**		**RC**	
	Spare Tire & Tools	Check Present & Secured		**X**		Missing Components
BODY & TRIM						
	Doors	Check Movement, Latches & Locks	**X**		**RC**	
	Side Windows	Check Up/Down Movement	**X**		**RC**	
	Vent Windows	Check Open/Close Movment & Latch	**X**		**RC**	
	Windshield	Check Clean & Leak Free	**X**		**RC**	RF Btm Leak Fixed
	Rear Window	Check Clean & Leak Free	**X**		**RC**	
	Trunk/Boot	Check Open/Close & Latch/Lock	**X**		**RC**	
	Hood/Bonnet	Check Open/Close & Latch/Lock	**X**		**RC**	
	Convertible Top	Check Open/Close, Latch & Leaks	**N/A**			
	Trim & Badges	Check Installed, Correct & Secure	**X**		**RC**	
	Body Panel Alignment	Check & Adjust as Needed	**X**		**RC**	Hood Adjusted
	Paint	Touch Up As Needed, Buff to Shine	**X**		**RC**	
	Headliner	Secure & Taut	**X**		**RC**	
	Carpet	Secure & Free of Interference	**X**		**RC**	
	Interior Side Panels	Secure & Free of Interference	**X**		**RC**	

CHECKLISTS
John Q. Client
1965 Ford Mustang

SYSTEM	ITEM	TEST	PASS	FAIL	BY	NOTES
ROAD TEST						
	Verify All Secure	Check for Loose & Missing Parts/Tools	X		RC	
	Verify Documents	Registration & Insurance on Board?	X		RC	
	License Plates	Verify Properly Secured Front & Rear	X		RC	
	Document Mileage	Indicate Odometer Miles in Notes -->	X		RC	**62207.8**
	Start/Warm Engine	Allow to Reach Operating Temp	X		RC	
	Check Tire Pressured	Verify Pressures to Specifications	X		RC	
	Inspect Everything	Visually Inspect for Leaks & Problems	X		RC	
	Check Transmission	Circulate Through Gears Verify Ops	X		RC	
	Check Brakes Hold	Verify Brakes Hold and Stop Rolls	X		RC	
	Check Parking Brake	Verify Holds at Idle When In Drive	X		RC	
	Electrical Load	Check Idles With Full Electrical Load	X		RC	
	First Drive	45 MPH MAXIMUM	X		RC	
	- Engine	Noises, Smoothness, Misses, Power?	X		RC	Low on Power
	- Transmission	Shifts Through Gears & Reverse	X		RC	
	- Brakes	Light - Feel, Straight, Predictable	X		RC	Acceptable
	- Carburetion	Hesitation, Stumbling, Backfires?	X		RC	Flat on Acceleration
	- Steering	Correct, Precise, Sloppy, Chatter?	X		RC	Good
	- Suspension	Smooth, Noisy, Bottoming, Wallowing?	X		RC	
	- Noises	Rattles, Knocks, Sqeeks, Squeals?	X		RC	
	- Gauge Readings	Temp, Oil Pressure, Charging, Etc.	X		RC	High Temp at Idle
	- Post Drive Inspection	Check for Leaks & Loose Items	X		RC	
	Second Drive	60 MPH MAXIMUM	X		RC	
	- Engine	Noises, Smoothness, Misses, Power?	X		RC	
	- Transmission	Shifts Through Gears & Reverse	X		RC	
	- Brakes	Light - Feel, Straight, Predictable	X		RC	
	- Carburetion	Hesitation, Stumbling, Backfires?	X		RC	
	- Steering	Correct, Precise, Sloppy, Chatter?	X		RC	
	- Suspension	Smooth, Noisy, Bottoming, Wallowing?	X		RC	
	- Noises	Rattles, Knocks, Sqeeks, Squeals?	X		RC	
	- Gauge Readings	Temp, Oil Pressure, Charging, Etc.	X		RC	High Temp at Idle
	- Post Drive Inspection	Check for Leaks & Loose Items	X		RC	A/C Leak, Fixed

TEST DRIVE COMMENTS
Engine runs smoothly, but lacks power on acceleration…seems flat. Brake pedal travel seems excessive, but predictable - light stops only thus far. While driving, coolant temp in middle of gauge. Gets hot when left at idle - even for short periods (1-2 minutes). Believe that either an electric fan and/or a fan shroud would improve this significantly. Transmission does not kick-down into lower gear when accelerator floored. Subsequent work - new carb, shroud & fan & kickdown adjustment resolved running and cooling issues.

CHECKLISTS
John Q. Client
1965 Ford Mustang

SYSTEM	ITEM	TEST	PASS	FAIL	BY	NOTES
PRE-DELIVERY DETAILING						
	Wash Exterior	Wash As Needed	X	RC		
	Wax/Polish Exterior	Wax/Polish As Needed	X	RC		
	Polish Brightwork	Polish All Chrome & Stainless Trim	X	RC		
	Armorall Tires	Tire-Black or Similar Tire Treatment	X	RC		
	Vacuum Interior	Vacuum Carpet Etc.	X	RC		
	Armorall Interior	Armorall Dash, Seats, Side Panels Etc.	X	RC		
	Clean Windows	Clean Inside/Outside All Windows	X	RC		
	Detail Engine Bay	Clean as Necessary	X	RC		
	Clean/Organize Trunk	Clean & Secure Spare/Tools Etc.	X	RC		
	Detail Undercarriage	Clean Underneath & Check for Leaks	X	RC		
	Check All Fluids	Verify Fluid Levels	X	RC		
	Verify Documents	Registration & Insurance on Board?	X	RC		
	Document Odometer	Record Total Miles at Delivery	X	RC		**62312.1**
	Starting Odometer	As Documented Pre-Test Drive	X	RC		**62207.8**
	Miles Driven	Calculate Miles Driven Since Restored	X	RC		**104.3**

DELIVERY NOTES & COMMENTS

Car runs and drives like new. Return for oil and filter change after first 500 miles (62,803 miles). Use only ROTELLA T motor oil or other oil with zinc phosphate additives for classic car engines.

Watch Items:

- Keep an eye on engine temperature. Typically doesn't go beyond 5/8 of the range before the cooling fan kicks in, then cools back down to 1/3 of the range before fan shuts off. If temp exceeds 5/8 point of the range, shut down engine, turn key back on and ensure that fan is operating.
- Be alert for potential windshield leak (from top right) that depsosits water at bottom right of windshield. This leak should no longer be a problem, but it's best to keep an eye on it until certain.
- Rear 1/4 windows: The guide rollers for these window frames are worn and cannot be purchased without replacing the entire frame. This causes them to cant forward a bit when rolled up to the top limit and potentially interfere with the front windows when opening/closing the door. Be cautious to not apply much force when reaching the top of the windows' travel and watch for alignment.
- Driver's Wing Window: The optional remote-control sideview mirror was installed using the original mounting holes. After painting the car and reassembling the door, it was discovered that the (factory or dealer) installed location interferes with opening of the wing window.

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1965 Mustang

Operations Guide

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OPERATIONS GUIDE

1965 Ford Mustang

for

John Q. Client

This is a supplement to the original Ford owner's manual for the 1965 Mustang. It is not intended to be a comprehensive manual. This is to be used as a guide to those items, systems and/or procedures that may differ from the original car as delivered when new.

ENGINE START: It is important to note that this car's fuel system is managed via a mechanical carburetor – as opposed to most modern vehicles which utilize computer-controlled fuel injection. Therefore, it is not a simple matter of "start-and-go".

When the engine is cold, the carburetor's electrically-controlled choke mechanism enriches the fuel/air mixture to allow the engine to operate until it reaches normal operating temperature. This results in a period of time where the engine will be sluggish and overly sensitive to operator input via the accelerator pedal. It will also idle at a higher-than-normal RPM while the choke is active.

Cold Start: When starting the engine cold, the following procedure should be observed:

- Insert the key in the ignition and rotate it clockwise to the "RUN" position.
- Pump the accelerator 2 – 3 times.
- Rotate the ignition key clockwise to the "START" position to engage the starter.
- If the engine does not start immediately, pump the accelerator a couple more times while the starter is engaged.
- Once the engine starts, disengage the starter and allow the ignition key to return to the "RUN" position.
- Note that when cold, some "finessing" of the accelerator may be necessary to keep the engine running for the first 15 – 30 seconds before it can be allowed to idle on its own.

- When cold, it is not at all uncommon to have to start the engine 2 – 3 times before it will idle on its own.
- IMPORTANT: Do not keep the starter engaged (cranking the engine) for more than 15 seconds at a time or the starter may overheat. Allow sufficient time to pass between starting attempts so that the starter can cool down.
- Once started, allow the engine to run for 30 – 60 seconds before attempting to drive.
- Note that the engine will continue to run at a high idle for several minutes to prevent stalling until the engine reaches operating temperature. Keep this in mind as it will require increased braking pressure to keep the car from creeping when stopped.

Warm Start: When re-starting the engine after it has already warmed up, the following procedure should be observed:

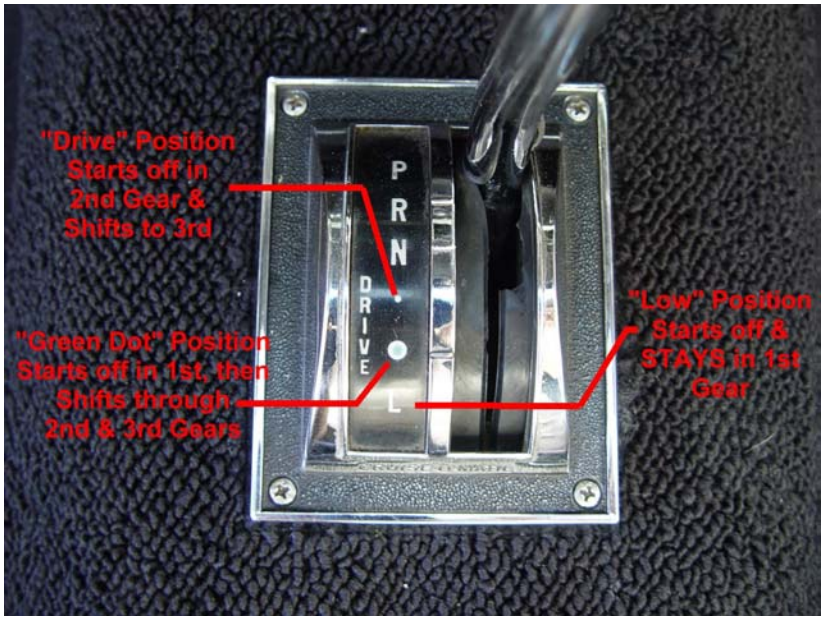
- Insert the key in the ignition and rotate it clockwise to the "RUN" position. *Without pumping the accelerator*, continue past the "RUN" position to the "START" position to engage the starter.
- If the engine starts immediately, release the ignition key and allow it to return to the "RUN" position. Once the engine stabilizes into a smooth idle, you are ready to go.
- If the engine does not start immediately, pump the accelerator lightly a few times to enrich the fuel/air mixture and once the engine starts, release the ignition key and allow it to return to the "RUN" position. Note that this may cause the choke to re-engage – resulting in the same high idle as when the engine is cold. This will resolve itself to a normal idle once the choke has heated up.

Flooded Start: If the engine does not start and you smell gasoline fumes, follow the procedure below:

- Insert the key in the ignition and rotate it clockwise to the "RUN" position. *Hold the accelerator to the floor* as you continue past the "RUN" position to the "START" position to engage the starter.
- If the engine starts immediately, release the ignition key and allow it to return to the "RUN" position while *simultaneously* releasing the accelerator. Once the engine stabilizes into a smooth idle, you are ready to go. Note that this may cause the choke to re-engage – resulting in the same high idle as when the engine is cold. This will resolve itself to a normal idle once the choke has heated up.

IMPORTANT NOTE: Do ***not*** leave the key in the "RUN" position for an extended period without the engine running. Doing so will damage the electric choke mechanism and the electronic ignition.

TRANSMISSION: Your car is equipped with an early version of the Ford C4 "Cruise-O-Matic" automatic transmission. It is also called the "Green Dot Transmission" because shifter mechanism on the floorboard differs somewhat from the later model transmissions in that it has a "green dot" position just below the "Drive" position.



The illustration above shows the functions of each of the forward gear positions of the shifter. The function of each of the shifter positions are as follows:

- **"P" – PARK:** Used to secure the car when parked. This engages a parking "pawl" that prevents the car from rolling. However, it is *strongly* recommended that the parking position be augmented by using the parking brake. These C4 transmissions are notorious for having their parking pawls fail – resulting in driverless coaster cars. Shifting into *and* out of PARK requires pressing the detent knob on the left side of the shifter handle.
- **"R" – REVERSE:** This position is used for driving backwards – or "in reverse". Use appropriate caution. Shifting into REVERSE requires pressing the detent knob on the left side of the shifter handle.
- **"N" – NEUTRAL:** This position disengages the engine's rotational force from the driveline. There is little reason for using this position other than for pushing/towing the vehicle.
- **"DRIVE":** Back when the car was manufactured, this was considered the normal driving position for the transmission's shifter. However, that was based on the concept that drivers preferred to reduce the number of transmission shifts to improve overall comfort. This was done by forcing the transmission to start the car out from a standing start in *second* gear – thus resulting in just one shift from second to third gear during acceleration. ***This is <u>not recommended</u> for normal driving as it increases wear on the transmission's clutch.***

- **"GREEN DOT":** This position is the only one where the transmission will shift through all of its forward speeds during acceleration – thus providing maximum performance and reduced clutch wear. This is the recommended position for normal driving. It is easily reached without looking at the shifter since you can pull the shifter all the way back with the detent knob released and it will stop in this position.
- **"LOW":** This position is for *first* gear operation only. In this position, the transmission starts out and stays in first gear unless the shifter's position is changed. You can shift into LOW while moving, but caution is advised because the change into first gear can be sudden and when "downshifting" into this gear, the difference in gearing can cause engine over-revving and/or damage to the transmission. Shifting into LOW requires pressing the detent knob on the left side of the shifter handle. Shifting out of LOW does can be done without pressing the detent knob.

TILT STEERING WHEEL: The steering wheel has a tilt feature that is accessed via a stalk protruding from the left side of the steering column forward of the turn signal stalk. Pulling this stalk forward disengages the tilt lock and allows reposition of the steering wheel by a few degrees up or down. For the sake of safety, it is recommended that the tilt position be set before driving and not be altered while the car is moving.

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1965 Mustang

Specifications & Maintenance

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SPECIFICATIONS & MAINTENANCE

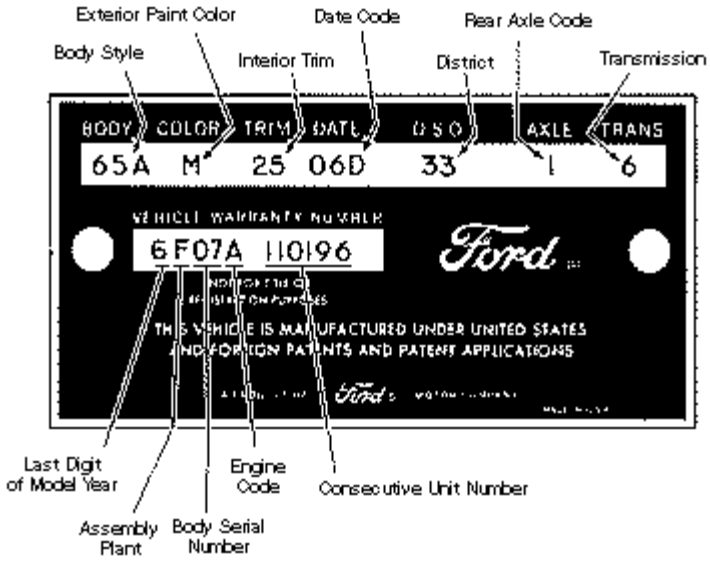
1965 Ford Mustang

for

John Q. Client

This document is intended to provide the specifications that are specific to this particular vehicle and is not all-inclusive. Consider it a supplement to the manufacturer's Owners Manual that was provided with the car when new.

VECHICLE IDENTIFICATION NUMBER (VIN) AND DATA PLATE: On the back edge of the driver's door, a data plate is affixed which specifies the vehicle's unique identification number (VIN) and other information related to the configuration of this particular example of a 1965 Ford Mustang. Below is an example of a data plate to be used for illustration.



The codes used on this particular vehicle decode as follows:

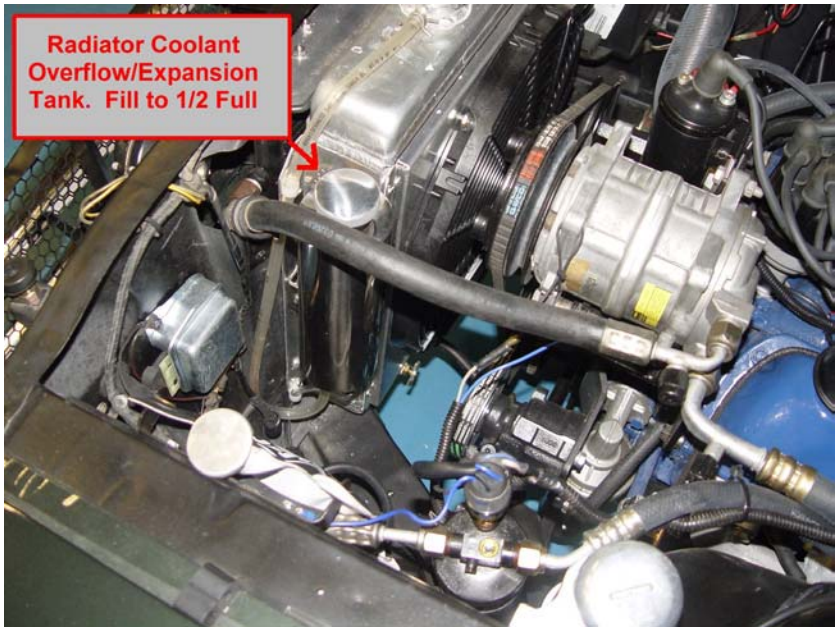
- **VIN:** 5R07C163609
  - Model Year: "5" = 1965
  - Assembly Plant: "R" = San Jose, California
  - Body Serial Number: "07" = Hardtop
  - Engine Code: "C" = 289 2V
  - Consecutive Unit Number: "163609"
- **Body Style:** "65" = Hardtop
- **Interior/Seats:** "A" = Standard
- **Exterior Paint:** "R" = Ivy Green
- **Interior Trim:** "26" = Black Vinyl w/Black Trim
- **Date Code:** "10M" = December 10th, 1964
- **District:** "71" = Los Angeles
- **Rear Axle:** "6" = 2.80:1
- **Transmission:** "6" = C4 Automatic

MAINTENANCE SPECIFICATIONS:

- **Ignition System:**
  - Spark Plugs: Motorcraft SP-420
  - Spark Plug Gap: 0.35"
  - Ignition Timing: 10 Degrees BTDC
- **Engine Oil:**
  - Oil Brand/Type: Shell Rotella T (or other with ZDDP additive)
  - Oil Viscosity: 15W40
  - Oil Capacity (w/filter change): 5 quarts
  - Oil Filter: WIX 51515 or Fram PH8A
- **Air Filter:** WIX 42061, Fram CA184, or STP SA184
- **Transmission Fluid:**
  - Type: Mercon/Dextron III
  - Capacity: 8-9 quarts

- **Engine Coolant:** The cooling system utilizes a Griffin aluminum radiator. It is augmented by an electric fan that is triggered by a sensor that turns the fan on at 195 degrees (Fahrenheit) and turns it off when the coolant temperature drops to 185 degrees. The fan is also triggered by the A/C system's pressure when that system is active.
    - Type: Any aluminum-compatible antifreeze.
    - Capacity: Approximately 8 quarts.
    - Mixture: 50/50 antifreeze/water recommended
    - Thermostat: 180 Degrees (F)

  The radiator should be check only when cold. Coolant level should be at the very bottom of the filler neck. There is also an expansion/overflow tank next to the radiator. Check to see that the coolant level in that tank is approximately ½ of the tank's capacity (see figure below).



- **Power Steering Fluid:** Note that the power steering system on this car is not original and uses *power steering fluid*, ***not*** transmission fluid. The fluid reservoir is located in the engine compartment on the driver's side inner fender. It is a polished aluminum canister with a screw-off top. Fill the reservoir to within ¼" of the bottom of the threads (see figure below).

- **Tires:**
  - Size: 205/70R-14
  - Recommended Inflation (cold):
    - *Front:* 30 psi
    - *Rear:* 28 psi
- **Brake Fluid:** Valvoline Synthetic Brake Fluid (NOT DOT3)
- **Differential Fluid:** 80W-90W Gear Oil

SERVICE INTERVALS: The following service intervals are recommended by Midlife Classics to keep your car in top condition:

- **Oil & Filter Change:** Every 3,000 miles or 12 months (whichever comes first)
- **Transmission Fluid & Filter Service:** Every 15,000 miles or 3 years (whichever comes first)
- **Air Filter:** Every 15,000 miles. More frequently in dusty conditions
- **Coolant (antifreeze):** Change every 2 years
- **Brake Fluid:** Change every 2 years.
- **Tire Rotation & Balancing:** Every 5,000 miles
- **Differential (rear axle) Fluid:** Every 15,000 miles
- **Replace Fuel Filters:** Every 15,000 miles (one in-line at carburetor, and one inside the fuel pump)