



SERVICE LABOR TIME STANDARDS

1030050

MAR 2010

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FORWARD

The Service Labor Time Standards in this book represent the standard time required to perform a repair, replacement and/or adjustment operation on Engine Distributor Inc products within basic and extended warranty coverage. They are representative of the average mechanic in a typical Distributorship or Service Dealer using normally available hand tools and equipment, and all available special service tools and/or test equipment required to perform quality repairs and all necessary testing. Genuine parts marketed by Ford for service during warranty, and repair procedures prescribed in applicable shop manuals are the basic for these standards where appropriate.

Normal accessibility time is included in each Service Labor Time Standard operation. Abnormal accessibility time is reimbursable ONLY when fully explained, on the claim, by the Distributorship and acknowledged by the Company as being necessary and unavoidable. Maximum allowable time shall not exceed the published time for removal and installation of a major component, also, abnormal accessibility time cannot be added to a claim showing a removal and installation time.

STANDARDS CONTENT

Each standard includes the total time required to perform all elements of a repair operation as follows:

Repair time

That portion of the repair operation associated with the actual removal, disassembly, cleaning, reassembly, installation and/or adjustment of the affected component or assembly. This is the “do work” portion of the repair operation.

Performance test

Time to perform a post-repair road or performance test when required to assure correction of the problem.

Applied standard times

Time to perform all other associated elements required to complete a repair operation. This includes: prepare unit for service (removing and replacing normal sheet metal), procure special tools and parts and make in-job tests. These times may be included only once as applicable in a basic repair operation.

Personal allowance

To provide for the personal needs of the mechanic during a repair operation, a 5% allowance is added to the total of the time required to do the work.

Supplemental time allowance

To account for variations in unit age and condition, seized or broken fastenings, delays due to mechanic fatigue, etc., a 20% allowance is provided. Routine, normal diagnosis requiring only limited time and no special equipment is also covered by this allowance. As this allowance is added to the total time required to do the repair plus the 5% personal allowance, an effective total allowance of 26% is provided in each basic repair operation:

Example

Time to do the job (includes “do work” and applied standard times)	= 100 minutes(1.7 hours)
add 5% for personal allowance	+ 5 minutes
	subtotal = 105 minutes
add 20% more for supplemental time allowance	+ 21 minutes
	Total developed time = 126 minutes (2.1 hours)

* Call Engine Distributors Inc. for Prior Approval when Additional Time is believed to be Necessary.

DEFINITIONS

Throughout this book, the following terms are used to define the type of repair involved:

REPLACE	The removal of the part being replaced, the installation of the new part, and any inspection, adjustment, cleaning and lubrication operations which may be required.
REMOVE AND INSTALL	The removal of a part and the re-installation of the same part in its original position, and any inspection, adjustment, cleaning and lubrication operations which may be required.
INSTALL	The installation of any part, or kit which has not previously been part of, or attached to the unit.
OVERHAUL	The disassembly, inspection, cleaning, machining as required, replacement of any or all parts as necessary, and reassembly of an assembly. All necessary adjustments are included.
PROBLEM CODING	A system of coding component failure for each repair. This problem coding is applied to the “causal part” considered responsible for the failure.

OPERATION ORGANIZATION

Repair procedures are categorized into basic operations. These are complete and include all steps needed to perform the operation as described. An operation number (OP #) is assigned to each operation. It may be necessary to combine operations in order to figure the total time of your particular repair procedure. (ex. To get the time for oil pump replacement, you add “Oil Pump - Remove & Install” and also “Oil Pan - Remove & Install”).

Sometimes **additional** operations are listed within the basic operation, which are performed in conjunction with a related basic operation. These are assigned a different suffix which is to be added to the basic operation number for warranty identification. The time for an additional operation is added to the time specified for the basic. When one or more additions to a basic operation are used, the basic operation time may only be used once.

NOTE: Throughout this book, if an operation is not applicable to a particular unit, the column space will be left blank.

SERVICE LABOR TIME STANDARD REVIEW PROCEDURE

Although the same methods of service labor time standard preparation are applied from one unit to the next, the actual time required to make a repair on a like component may vary. It should be understood that a time change is never made from an arbitrary standpoint. Each time change is associated with one or more of the following:

- Design change of the component.
- Design change in other components which affect accessibility to repair a component.
- Change in the procedure or method of repair.
- Change in the tools or equipment used to make the repair.
- Final review and verification of times or review of dealer reappraisal requests.

In many instances, a component may appear unchanged from a superficial inspection but may actually differ internally in construction, or externally in method of mounting or location.

REVIEW POLICY

A formal system is established to provide assistance regarding the service labor time standards in this book. It is the intent of Engine Distributors Inc. to provide all possible assistance in understanding the development process, the content of individual standards, the means for accomplishing repairs within the times established, and the assurance that every effort has been made to maintain the accuracy of these times. Engine Distributors Inc. stands ready to review, and adjust if appropriate, any standard which is inconsistent with the average time actually being spent in Distributors during warranty repairs which are within the scope and definitions described in this book.

REVIEW PROCEDURE

In order to assure an accurate appraisal of problems encountered, which can be beneficial to the technician, the Distributor and Engine Distributors Inc., the following steps are required:

Distributor action

- Use the Request for Labor Time Standard Review form included with this book. This form assures the review of the specific standard in question by describing such standard accurately.
- Use one form only for each standard in question (or combination of standards representing one repair job).
- Provide specific performance data for three separate accomplishments to assist in helping determine the appropriateness of the identified average time.
- Identify individual mechanic involved as it may be necessary to review the process with him.
- Provide all pertinent comments which may help in identifying the problem area.
- Forward the form (it is pre-addressed) to Ford Power Products.

Engine Distributors Inc. action

Upon receipt of request, Engine Distributors Inc. will take some or all of the following actions:

- Review the service labor time standard in question by either analysis or restudy. Recommendations and assistance will be offered according to the findings of this review.
- Conduct in-distributor review if necessary. Comparative reviews at additional distributors will be conducted as required to provide statistically valid results.
- Maintain continuing communication with the distributor.



Parts Only -
Warranty Request -
Dealers Only
-

400 University Court , Blackwood NJ 08012

800-220-2700

Company Name: _____

Contact: _____

Address: _____

Phone: _____

Fax: _____

Type of Engine: Ford _____

Type of Application: _____

Date of Parts Purchase / Inv# _____

Date Failed: _____

Engine Model Number: _____

Machine Model Number: _____

Hours or Miles: _____

Name of Manufacturer: _____

Complaint and Cause: _____

Repair and Action: _____

Part responsible: _____

Price of Replacement Part(s): _____

Owner's Name: _____

Address: _____

Phone: _____

Fax: _____

Date of Repair _____

Engine Serial Number # _____

Machine Serial Number# _____

All warranty claims must be accompanied by a proof of purchase for engine or piece of machinery. *All old parts must be returned* with this form and proof of purchase to EDI in blackwood,NJ,attn:Warranty Dept.

All items must be received within 15 days of repair or claim cannot be processed.

***THIS FORM MUST BE COMPLETELY FILLED OUT
FAILURE TO DO SO WILL RESULT IN CLAIM BEING REJECTED***

ENGINE - Gasoline		Application (liters)		1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)						
Engine Assembly (6007) - Remove and Install Includes time to remove hood and radiator, if necessary. Also includes time to mount the engine on a work stand, change over components, and make necessary adjustments after completion of installation. For difficult accessibility, it may be necessary to add up to 2 additional hours. Documentation must be on claim form.	6007-A	3	3	3	3	3	3	3
Cylinder Assembly - Short Block (6009) - Replace Includes disassemble and clean oil pump, transfer and clean all other components (without disassembly) and adjust ignition timing. Do not use with operations 6007-A2, 9424-A.	6007-A1	4.4	4.2	5.4	4	4.2		
Cylinder Assembly - Bare Block (6010) - replace Includes disassemble and clean oil pump, transfer and clean all other components (without disassembly), replace rings and bearings, check and correct clearances, adjust ignition timing. Do not use with operations 6007-A1, 6007-A5, 9424-A.	6007-A2	7.4	7.2	8	8.8	6.5		
Camshaft Bearing (6261) - Replace Includes disassemble and clean oil pump, adjust ignition.	6007-A3	3	2.1	3.3	3.3			
Crankshaft Assembly (6303) - Replace Includes disassemble and clean oil pump, replace all bearings, check all bearing clearances and adjust ignition timing.	6007-A4	3.7	3.7	2.3	4.4	6.8		
Valves Springs or Stem Seals (6513/6571)- Replace (Cylinder Head Removed) May only be used with operations 6007-A1 or -A2. If valve springs or seals are the primary repair, use operations 6584-A and -A6 for an in unit repair.	6007-A6	0.4	0.4	0.5	0.6	1.1		
Valves (6505, 6507) - Grind May only be used with operations 6007-A1 or -A2. If grinding valves is the primary repair, use operations 6051-A and -A1.	6007-A7							
One/two valves	-A7	1.3	1.3	0.6	0.6	0.7		
All one side	-A7TA	1.8	1.8	1.3	2.7	1.8		
All	-A7T			2.5		3.5		

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Inspect and Determine Engine Condition - Check (engine removed) Includes time to "remove" oil pan, main and rod bearing caps and inspect crankshaft bearing journals, cylinder walls and engine block for damage. May only be used with operation 6007-A when used in combination with operations 6007-A1, -A2 or -A4 Only use with operations 6007-A, -A1, -A2, -A4 and/or 6149-A8.	6007-A8	0.8	0.8	1	1	1.2	
Cover Assembly or Gasket, Cylinder Front (6019/6020) - Replace	6007-A9	0.3	0.2	0.4	0.4	0.8	
Oil Pump (6600), Externally Mounted - Replace May add operation 6007-A9.	6007-A10		0.3				
Timing Belt, Camshaft Sprocket and/or Crankshaft Sprocket (6268/6256/6306) - Replace May add operation 6007-A9. For timing chain, use Operation 6020-A2	6007-A11		0.3				
Pulley Assembly, Crankshaft (6A312) - Replace	6007-A12			0.3	0.3	0.3	
Seal, Crankshaft Front (6700) - Replace May add operation 6007-A9 if necessary.	6007-A13	0.3	0.3	1	0.3	1	
Gasket, Oil Pan (6781) - Replace	6007-A15	0.9	1.1	1	1.1	1	
Oil Pump - R&I	6007-A16	0.1	0.1	0.3	0.1	0.2	
Cylinder Wall Ridge (6010) - Remove		One cylinder	0.1	0.1	0.1	0.1	0.1
		All cylinders	0.4	0.4	0.6	0.6	1
Engine Oil Leaks - Diagnosis Includes time to tighten bolts, nuts or fittings. Requires use of Rotunda Black Light Oil Leak Detector (112-00021) or equivalent.	6007-D	0.7	0.7	0.5	0.7	0.5	
Gasket or Cylinder Front Cover (6020/6019) - Replace Includes remove radiator when required, adjust belt tension and replace oil seal.	6020-A	1.8	1.8	3.1	1.7	4.2	
Front Seal, Crankshaft - Replace	6020-A1	0.1	0.1	0.1	0.1	0.1	

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T	
Description	Op. #	Maximum Allowable Time (hours)						
Timing Chain and/or Gears (6268/6256) - Replace Single Chain Dual chain - right side Dual chain - both sides	6020-A2	0.4		0.5	0.8			
						0.5		
						1		
Timing Chain Tensioner - Replace (each)	6020-A3	0.1		0.1			0.2	
Timing Chain Guides - R&I (per side)	6020-A4						0.1	
Plug, Cylinder Block Expansion (6026) - Replace This operation may be used in combination with other operations when necessary to gain access. Includes drain and refill cooling system.	6026-A							
		One	-AA	0.3	0.3	0.2	0.3	0.2
		Two	-AB	0.4	0.4	0.3	0.4	0.3
		Three	-AC	0.5	0.5	0.4	0.5	0.4
		Four	-AD	0.6	0.6	0.5	0.6	0.5
		All	-AT	0.8	0.8	0.7	0.8	0.7
Plug, Cylinder Head Expansion (6026) - Replace This operation may be used in combination with other operations when necessary to gain access. Includes drain and refill cooling system.	6026-B							
		One	-BA	0.3	0.3	0.2	0.3	0.2
		Two	-BB	0.4	0.4	0.3	0.4	0.3
		Three	-BC	0.5	0.5	0.4	0.5	0.4
		Four	-BT	0.6	0.6	0.5	0.6	0.5

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Gasket, Cylinder Head (6051) - R&I or Replace Includes check cylinder head and block flatness, adjust valves (if adjustable) and ignition timing. One Right Left Both	6051-A						
	One	1.8	2.8		3.1		
	Right			4.8		9.1	
	Left			4.6		9.2	
	Both			6.5		11.8	
Valves (6505, 6507) - Grind Includes check valve spring tension, valve seat and head runout, valve guide clearance, spring assembled height and cleaning carbon from cylinder head(s) and pistons. Also includes replace seals or springs when required. One/two valves All one side All	6051-A1						
	One/Two Valves -A1	1.3	1.3	0.5	0.6	1.1	
	All one side -A1TA	1.8	1.8	1.2	2.7	2.9	
	All -A1T			2.3		5.8	
Carbon - Clean from Cylinder Heads and Pistons (6049, 6108) Not to be used with operations 6051-A1, A3, A4 or A5.	6051-A2	0.5	0.5		0.8		
	One side -A2			0.4		1	
	Both sides -A2T			0.7		1.1	
Carbon - Clean from Top of All Pistons (6108) Do not use with operation 6051-A2.	6051-A3	0.2	0.2	0.2	0.3	0.4	
Cylinder Head - Bare - Replace (6049) Includes transfer all components, clean, reface, and lap valves, check valve spring height and valve head runout. One side Both sides	6051-A4						
	One side -A4	1.2	1.8	0.7	2.7	2.4	
	Both sides -A4T			1.4		2.7	
Bushing - Valve Guide (6510) - Install One	6051-A7						
	One -A7	0.7	0.7		1		
	All -A7T	1.8	1.8		2.4		

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Cylinder Head Assembly (6049) - Replace Includes time to clean and transfer necessary components from one head to another. Includes R&I camshaft & balance shaft when needed. to be used with operation 6051-A4.	Not	6051-A8					
	One	-A8	0.2	0.2	0.2	0.2	
	Right	-A8R					0.4
	Left	-A8L					0.6
	Both	-A8T			0.3		1
Valves, Valve Springs or Stem Seals (6513/6571) - Replace (Cylinder Head Removed) May only be used with operation 6051-A or when cylinder head gasket leakage has caused an overheating condition which may have damaged valve seals or spring tension. If valve springs or seals are the primary repair, use operations 6584-A and 6584-A6 for in-unit repair without removing cylinder head.	One	-A9	0.1	0.4	0.3	0.1	0.3
	All	-A9T	0.4	0.4	0.8	0.6	1.4
Cylinder Head Gasket - External Leakage Test Includes time to pressure test cooling system to verify external leakage of the cylinder head gasket. May only be used with operation 6051-A. May be requested only once per repair.		6051 A10	0.3	0.3	0.1	0.3	0.1
Compression Pressure - Check (wet or dry)		6051 A11	0.3	0.3	0.6	0.4	0.8
Valve Guides - Ream May only be used with operations 6051-A and 6051-A1.		6051 A14					
	Each		0.1	0.1	0.3	0.1	0.3
	All		0.8	0.8	0.8	1.2	1.4

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Piston Rings - Replace (6149/6148) Includes remove and install oil pan, intake manifold and cylinder heads, check rod bearing clearances, replace necessary bearings, adjust carburetor, ignition timing, replace oil filter, clean carbon and hone cylinder walls. Use operation 6007-A when necessary.	6149-A						
	One -A	5.2	7	7.8	7.5	10	
	One each side -AE			9.4		10.8	
	All -AT	6	7.8	10.4	8.7	12.9	
Valves (6505, 6507) - Grind (Cylinder Head Removed) If grinding valves is the "primary repair", use operations 6051-A and A1. Includes check valve spring tension, valve seat and head runout, valve guide clearance, spring assembly height and cleaning carbon from cylinder head(s) and pistons. Also includes replace seals or springs when required.	6149-A1						
	One/Two Valves -A1	1.3	1.3	0.5	0.6	1.1	
	All One Side -A1TA	1.8	1.8	1.2	2.7	2.1	
	All -A1T			2.3		4	
Valve Springs or Stem Seals (6513/6571) - Replace (Cylinder Head Removed) May only be used with operation 6149-A . If valve springs or seals are the primary repair, use operations 6584-A and -A6 for in-unit repair without removing cylinder head.	6149-A2	0.4	0.4	0.8	0.6	1.4	
Piston and/or Connecting Rod (6108/6200) - Replace 0.3 each - not to exceed listed time.	6149-A6	1.2	1.2	1.1	1.8	1.8	
Cylinder Wall Ridge (6010) - Remove	6149-A7						
	One cylinder	0.1	0.1	0.1	0.1	0.1	
All cylinders	0.4	0.4	0.6	0.6	1		
Bearings, Crankshaft Main - Replace (6333, 6337) Includes check bearing clearances.	6149-A8	1.3	1.3	1.7	1.6	2.4	
Camshaft (6250) - R&I or Replace Includes adjust curb idle speed, ignition timing and valves on applicable engines. Does not require oil pan removal on 5.0L or 5.8L engines. Add operation 6007-A when necessary. One Right Left Both	6250-A						
	One -A	2.5	3.7	6.4	4.8		
	Right -AR					6.4	
	Left -AL					6.2	
	Both -AT					8	

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Valve Guides (6049) - Ream	6250-A3			0.8	1.2	1.4	
Bushing, Valve Guides (6510) - Install	6250-A4				1		
One					2.4		
All							
Tensioner Assembly, Timing Belt (6K254) - Replace	6254-A	0.9	1.4				
Tensioner Assembly - Timing Chain (6L266) - Replace	6266-A						
One	-A			3			4.5
Both	-AT						4.6
Timing Belt - Replace	6268-A	1.1	1.3				
Oil Pump - Replace (external pump)	6268-A1		0.4				
Pulley Assembly, Crankshaft (6A312) - Replace	6312-A	0.3	0.3	0.8	0.5	0.8	
Damper Assembly, Crankshaft - Replace (6316)	6316-A	0.4	0.9	0.7	0.6	0.8	
Tappets, Followers or Hydraulic Lifters (6500/6C501) - Replace	6500-A						
Includes removal of components necessary to gain access to tappets, adjust curb idle and ignition/fuel pump timing. Add operation 6007-A when necessary.							
Right	-AR			3.4			2.8
Left	-AL			3.4	2.2		1.8
All	-AT	2.6	1.6	4.1	2.6		4.4
Rocker Arms and/or Shaft Assembly - R&I	6564-A	0.9					
Includes R&I rocker arm cover, and all necessary adjustments after reinstallation.							
Gasket, Rocker Arm Cover (6584) - R&I or Replace	6584-A	0.4	0.7		0.6		
One	-A						
Right	-AR						
Left	-AL			0.8 0.7			0.7 0.7
Both	-AT			1.3			1.3
Intake Manifold or Gaskets - R&I or Replace	6584-A1		1.6	2.4			
Valve Tappets - Adjust (6549)	6584-A3	0.2			0.3		
Stud, Rocker Arm - Replace (6A527)	6584-A4						
Includes ream oversize.							
Each					0.4		

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Rocker Arm or Push Rod (6564/6565)- Replace One All one side All	6584-A5						
	-A5	0.1		0.1	0.1	0.1	
	-A5E			0.3		0.5	
	-A5T	0.3		0.5	0.3	0.9	
Valve Springs or Stem Seals (6513/6571) - Replace Using air injection method. Per cylinder (two seals) One All	6584-A6						
		0.6	0.6		0.6		
	-A6			0.2		0.2	
	-AT			1.2		1.9	
Oil Pump (6600) - R&I or Replace All others use operations 6781-A and -A1.	6600-A		1.5	3.1		7.6	
Timing Belt - Replace	6600-A1		0.2				
Oil Pressure, Engine (6007/6600) - Check To be used with appropriate engine repairs.	6600-B	0.3	0.3	0.4	0.3	0.4	
Cooler, Oil (6A642) - R&I or Replace	6642-A				0.6		
Valve Assembly, Crankcase Ventilation Regulator - Replace (6A666)	6666-A	0.1	0.1	0.2	0.1	0.2	
Seal - Crankshaft Front (6700) - Replace Do not use with Operation 6007A1, or 6600A.	6700-A	1.3	0.8	0.9	1	0.9	
Seal, Crankshaft Rear Main (one piece) - Replace (6701)	6701-A	2.4	2.4	0.5	2.7	0.8	
Oil Filter Element - Replace	6731-A	0.1	0.1	0.3	0.1	0.2	
Drain & Refill Engine Oil	6731-A1	0.1	0.1	0.1	0.1	0.1	
Tube Assembly, Oil Level Indicator (6754) - Replace	6754-A	0.3	0.3	0.3	0.3	0.3	
Gasket, Oil Pan (6781, 6775, 6710) - R&I or Replace (In Unit) Includes clean oil pick up tube and screen and replace oil filter.	6781-A	1.3	1.5	3.4	1.5	3.7	
Oil Pump (6600) - Replace May be used with operation 6781-A.	6781-A1	0.1	0.1	0.3	0.1	0.2	
Oil Pump (6600)- Overhaul and Clean - Pump Removed May be used with operation 6781-A1	6781-A2	0.3	0.3	0.3	0.3	0.3	
Bearings, Crankshaft Main - Replace (6333, 6337) Includes check bearing clearances. Not to be used with operation 6781-A4 or -A6.	6781-A3	1.8	1.8	1.2	1.6	2.4	

ENGINE - Gasoline		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Oil Pick-up Tube and Screen Assembly (6622) - Replace	6781-A5	0.1	0.1	0.1	0.1	0.1	
Bearings, Main and Connecting Rod (6333/6211/6337) - Replace Includes check bearing clearances. Not to be used with operation 6781-A3 or -A4.	6781-A6	2.6	2.6	2.1	2.7	4.2	
Seal, Crankshaft Rear Main (Split Lip Type) (6701) - Replace	6781-A7						
Spark Plugs - Clean and Test or Replace (12405)	6785-A						
	One -A	0.2	0.3	0.4	0.3	0.3	
Two or More -B		0.3	0.6	1	0.6	1	

TRANSMISSION		Application	C6
Description	Op. #	Max Hours	
Transmission Assembly (Automatic) - Remove and Install Includes drain and replace pan gasket, refill, linkage adjustment, remove converter and drive shaft.	7000-A	3	
Bands, Front or Rear - Replace (7D034, 7D095)	7000-A1	1.1	
Transmission Assembly - Overhaul (Automatic) Includes check and correct end play, road test and the overhaul and cleaning of all internal components. Add operation 7005-A4 to clean converter and operation 7005-A11 to flush cooler and lines. Additional: Extra time to replace case. <u>Additional:</u> Extra time to replace case:	7000-A2	3.7	
	-A2S1	0.2	
Converter Assembly - Clean and Check (7902) Includes the use of Rotunda converter cleaner or equivalent.	7000-A4	0.5	
Front Pump - Overhaul or Clean (7A103) Included in operation 7000-A2.	7000-A5	0.6	
Front Pump - Replace (7A103)	7000-A6	0.4	
Front Oil Seal, Front Pump - Replace (7A248)	7000-A7	0.1	
Flywheel and Ring Gear Assembly (Automatic) - Replace (6375) Additional: R&I starter. Replace starter drive gear (Motorcraft). Replace end plate. Replace bearing bore plug. <u>Additional:</u> Replace starter drive gear (motorcraft). Replace end plate Replace bearing bore plug	7000-A9		
	-A9S2	0.2	
	-A9S3	0.1	
	-A9S6	0.2	
Transmission Case (Automatic) - Replace (7005) Includes transfer and clean all parts and perform all necessary adjustments. Use this operation when transmission case replacement is the primary repair. Do not use with operation 7000-A2.	7000A10	2.7	
Transmission Oil Cooler and Cooler Lines - Flush (7A030, 7AA031, 7A095) Includes the use of Rotunda converter cleaner or equivalent.	7000A11	0.2	

TRANSMISSION		Application	C6
Description		Op. #	Max Hours
Automatic Transmission Diagnosis Combination Includes pressure, stall and road/performance test, adjust idle speed, dashpot, vacuum diaphragm, manual and throttle linkage. To be used in combination with overhaul, valve body, or governor operations only. Not to be used in combination with external transmission leak correction.		7000-D	0.8
Diagnosis - Transmission Oil Leaks Requires use of Rotunda Black Light Oil Leak Detector 072-00007 or equivalent.		7000-E	0.5
Thread Repair - Install Helicoil (one or two)		7000HEI	0.3
Oil Cooler Lines - Replace (7A031)		7030-A	
	Pressure	-BP	1
	Return	-AR	1
	Both	-AT	1.3
Repair Fittings Pressure Return Both		7030-B	
	Pressure	-BP	0.7
	Return	-BR	0.7
	Both	-BT	1
Bushing, Extension Housing - Replace Includes replace seal when needed.		7034-A	0.5
Shaft assembly coupling - R&I		7034-A1	0.2
Extension Housing - Replace		7039-A	1
Seal, Extension Housing - Replace		7052-A	0.5
Governor Assembly - Replace Additional: Road/Performance test after repair.		7053-A	1.2
	<u>Additional:</u> Performance Test after repair:	-A21	0.3
Gasket, Extension Housing - Replace		7086-A	1.1
Indicator, Transmission Control Selector - Replace (column shift)		7110-A	0.4
Indicator, Transmission Control Selector - Align (column shift)		7110-B	0.3
Front Band - Adjust		7162-D	0.2
Kickdown Linkage Rod or Cable - Adjust		7187-A	0.3

TRANSMISSION		Application	C6
Description	Op. #	Max Hours	
Oil Pan Gasket - Replace (7A194, 7A191) Includes drain and refill. Additional: Replace main control valve body Clean main control valve body Road/Performance test after repair Linkage adjustment Band adjustment NOTE: 7191-A1 is not to be used with 7191-A1.	7191-A	0.7	
	-A1	0.7	
	-A2	1.2	
	-A1S1	0.3	
	-A1S3	0.2	
	-A1S4	0.1	
Seals and /or Levers, Throttle and Manual - Replace (7A115, 7A256, 7B598) Includes removal and installation of main control valve. Also includes time to adjust linkage.	7192-A5	0.4	
Automatic Transmission Manual Linkage - Adjust Includes adjust neutral switch.	7326-C	0.3	
Manual and Kickdown Linkages - Adjust (7A187, 7326) Includes adjust dashpot, idle speed and accelerator pedal height if adjustable.	7326-D	0.3	
Front Servo (intermediate) - Overhaul (external) Includes adjust band.	7357-A	1	
Vacuum Diaphragm Unit - Replace (7A377) * For diesels, see note at end of transmission section. <u>Additional:</u> Performance Test after repair:	7377-A	0.3	
	-AS1	0.3	
Vacuum Diaphragm Unit - Adjust (7A377) Includes pressure test. * For diesels, see note at end of transmission section.	7377-B	0.5	
Converter Assembly - Replace Additional: Equipped with coupling shaft. <u>Additional:</u> Equipped with coupling shaft	7902-A	3.1	
	-AS13	0.2	

POWER TAKE OFF (PTO)		Application	ALL
Description	Op. #	Max Hours	
Power Take Off - R&I Add operation 16605-A if hood removal is necessary. IF EDI installed ONLY.	7004-A	1	
Pulley & Shaft - Remove	7004-A1	0.5	
Pulley & Shaft - Reassemble and Install Includes lubrication.	7004-A2	0.5	
Handle w/ Brackets - R&I	7004-A3	0.3	
Pressure Plate, Disk or Pilot Bearing , PTO Clutch - R&I	7004-A4	0.4	
SAE Housing - R&I Includes R&I starter motor.	7004-A6	0.4	
Flywheel and Ring Gear (PTO) - R&I or Replace (6375, 6384) Additions: Replace ring gear only. Replace end plate. Replace rear bearing bore plug. Replace starter drive.	7004-A7	0.1	
<u>Additions:</u>			
Replace ring gear only:	-A7B	0.3	
Replace end plate:	-A7C	0.1	
Replace rear bearing bore plug:	-A7D	0.2	
Replace Starter Drive	-A7E	0.2	

COOLING SYSTEM		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Radiator - Replace Includes drain and refill cooling system, transfer draincock and remove and install radiator shell.	8005-A	0.8	0.8	1.1	0.8	1	
Engine Mount, Front - R&I	8005-A1	0.6	0.6	0.6	0.6	0.6	
Fan Blade Assembly - Replace (8600)	8005-A2	0.1	0.1	0.1	0.1	0.1	
Cooling System - Flush	8005-B	0.6	0.6	0.5	0.6	0.6	
Cooling System - Pressure Test Includes time to pressure test cooling system for individual component leakage and tighten loose clamps, hoses or fittings related to the cooling system.	8005-D	0.3	0.3	0.2	0.3	0.2	
Expansion or Recovery Tank	8080-A	0.2	0.2	0.2	0.2	0.4	
Fan Shroud - Replace	8146-A	0.3	0.3	0.5	0.4	0.5	
Fan Shroud - Align	8146-B	0.2	0.2	0.2	0.2	0.2	
Shell, Radiator (Grille) - Replace	8200-A	0.5	0.5	0.5	0.5	0.5	
Radiator Upper Hose - Remove and Install	8260-A	0.2	0.2	0.5	0.2	0.5	
Radiator Lower Hose - Remove and Install	8260-A1	0.2	0.2	0.4	0.2	0.4	
Heater Pipe - Rear (inlet) - R&I Includes partial drain and refill cooling system.	8265-A			0.2			
Heater Pipe - Front (outlet) - R&I Includes partial drain and refill cooling system. <u>Additional:</u> Replace o-ring (if necessary)	8265-B 0			0.3		0.3 0.1	
Hose Clamp - Radiator (8287) - Replace One All	8287-A -A -AT			0.5 0.6		0.5 0.7	
Water Pump or Gasket - Replace (8501, 8507) Includes drain and refill cooling system and adjust belt tension.	8501-A	0.8	1.1	1.2	0.9	0.8	
Pulley - Water Pump (8509) - Replace	8509-A			0.6		0.8	
Thermostat - Remove and Install Includes R&I thermostat cover and gasket, drain and refill coolant.	8575-A	0.5	0.5	0.5	0.5	0.4	
Fan Blade Assembly - R&I	8600-A	0.3	0.3	0.3	0.3	0.3	
R&I V-Belts	8620-A				0.3		

COOLING SYSTEM		Application (liters)		1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)						
R&I Serpentine Belt	8620-B		0.2	0.2				0.2
Tensioner, Serpentine Belt (6B209) - R&I	8678-A		0.3	0.3				0.3
Bracket, Tensioner - R&I Includes drain and refill radiator.	8678-A1		0.8					
Idler Pulley (8678/6C348/8679) - Replace	8678-B			0.2				0.2
Heater, Block (6A051) - Replace Also includes drain and refill cooling system.	8700-A	0.4	0.4	0.4	0.4			0.4
Temperature Gauge, Safety or Direct Reading (12A680) - Replace Includes drain and refill cooling system.	8720-A	0.4	0.4	0.4	0.4			0.4

FUEL SYSTEM & EMISSION		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Fuel Filter Assembly - Replace	9155-A	0.1	0.1	0.5	0.1	0.4	
Oil Pressure Gauge - Replace (9272, 9273)	9273-A	0.3	0.3	0.3	0.3	0.3	
Oil Pressure Gauge Sending Unit - Replace	9278-A	0.3	0.3	0.4	0.3	0.3	
Fuel Lines (9291) - Clean	9282-A			0.5		0.5	
Fuel Lines - Repair or Replace Fitting (9A520)	9282-B	0.2	0.2	0.2	0.2	0.2	
Fuel Pump Test - On Vehicle or Equipment May be used with 9350-A & 9350-E.	9350-A	0.2	0.2	0.2	0.4	0.2	
Fuel Pump, Mechanical - R&I	9350-A1				0.3		
Fuel Pump, Electric - R&I	9350-E	0.3	0.3	0.3	0.3	0.3	
Intake Manifold - Remove and Install or Replace Gaskets (9424, 9433) Includes adjust carburetor and ignition timing when distributor is removed. For EFI engines, use operation 9424-AUP OR -ALW. EFI - Upper -AUP EFI - Upper & Lower -ALW <u>Additional:</u> Transfer carburetor and related components -A1	9424-A	0.5	0.5		1.1	2.6	
			0.6	1.4			
			1.2	2.4			
			0.3	0.3		0.3	
Exhaust Manifold and/or Gasket - Replace (9430, 9448) Right -AR Left -AL Both -AT	9430-A	0.5	0.5		1.1		
				1		0.9	
				0.9		0.8	
				1.5		1.3	

FUEL SYSTEM & EMISSION		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Positive Crankcase Ventilation Valve - R&I	9480-A	0.1	0.1	0.2	0.1	0.2	
Carburetor - Adjust	9500-A1	0.3	0.3		0.3		
Governor - Adjust No Load Cut-off Speed (12450) Mechanical	9501-A5	0.5	0.5		0.5		
Governor - Replace Includes adjust no load cut-off speed. Velocity Mechanical Electronic Actuator	9501-A6						
		0.7	0.7		0.7		
		0.8	0.8		0.8		
			0.5	0.5		0.5	
Carburetor Assembly - Remove and Install or Replace (9510) Includes adjust.	9510-A	0.5	0.5		0.5		
Spacer, Carburetor to Intake Manifold - Replace (9A589)	9510-A2						
Carburetor Accelerator Pump, Diaphragm, Piston or Rod - Replace (9B559)	9559-A	0.2	0.2		0.2		
Valve Assembly , Fuel Enrichment - Replace (9A565)	9565-B						
Accelerator Cable - Replace (9A758)	9758-A	0.3	0.3		0.3		
Foot Pedal (D.B.W.) - R&I	9758-B			0.3			
Throttle cable - R&I	9758-C	0.3	0.3	0.3	0.3	0.3	
Choke Cable - R&I	9759-A	0.3	0.3		0.3		
Thermostatic Choke Cover (Spring and Gasket), Carburetor Replace <u>Additional:</u> Equipped with breakaway screws	9848-A	0.2	0.2		0.2		
Throttle Body - Air Intake (9E926) - Replace	9926-A			0.5		0.5	
Regulator Assembly - Fuel Pressure (9C968/9K061) - Replace	9968-A		0.3	0.3		0.3	

FUEL SYSTEM & EMISSION		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Replace Catalytic Muffler - EDI enclosure only	EDI 1001	0.5	0.5		0.5	0.5	
Replace Mixer	EDI 1002	0.3	0.3		0.3	0.5	
Replace EPR	EDI 1003	0.5	0.5				
Replace DEPR	EDI 1004	0.25	0.25		0.25	0.25	
Replace EPR Hose	EDI 1005	0.1	0.1				
Replace Vapor Regulator	EDI 1006	0.3	0.3		0.3	0.3	
Replace Vapor Regulator Hose	EDI 1007	0.1	0.1		0.1	0.1	
Replace Lockoff Valve	EDI 1008	0.2	0.2		0.2	0.2	
Replace Manual Pressure Regulator non-certified units	EDI 1009	0.2	0.2	0.2	0.2	0.2	

ELECTRICAL		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Generator Circuits - Test Includes test battery, regulator and Generator output. May be used in combination with all Generator electrical work only.	10200-A	0.3	0.3	0.2	0.3		
Generator Regulator- Replace (10505) - External	10200-A1	0.2	0.2		0.2		
Generator - R&I or Replace (10002)	10200-A2	0.4	0.4	0.4	0.4	0.5	
Generator - Overhaul Includes test validity of rotor field, stator windings and diode.	10200-A3	0.6	0.6	0.6	0.6	0.6	
Regulator, Generator (Motorcraft Internal) - Replace Operation 10200-A may be used when test is required.	10200-A4	0.1	0.1	0.1	0.1	0.1	
Generator V-Belt or Serpentine Belt - R&I Includes adjust belt tension when needed.	10200-A5	0.2	0.2	0.2	0.3	0.2	
Amp Gauge - R&I	10200-A6	0.3	0.3	0.3	0.3	0.3	
Amp Warning Light Assembly - R&I	10200-A7	0.3	0.3	0.3	0.3	0.3	
Bulb, Amp Warning Light Assembly - R&I	10200-A8	0.1	0.1	0.1	0.1	0.1	
Wiring Assemblies, Generator to Regulator - Repair *	10200-A9	0.3	0.3		0.3		
Bracket, Generator - Replace Includes R&I generator and adjust belt tension when needed.	10300-A	0.5	0.5	0.5	0.5		
Meter, Tach & Hour (17C360) - R&I	10700-A	0.3	0.3		0.3		
Ammeter/Voltmeter/gauge When testing is required, use operation 10200-A.	10850	0.3	0.3	0.3	0.3	0.3	
Temperature Gauge, Safety or Direct Reading - Replace Includes drain and refill cooling system.	10883-A	0.4	0.4	0.8	0.4	0.6	
Temperature Sending Unit - Replace Without draining cooling system.	10884-A	0.2	0.2	0.4	0.2	0.4	
Temperature Gauge - Replace	10970-A	0.3	0.3		0.3		
Starter Circuit - Check May be used in combination with starter work only.	11000-A	0.3	0.3	0.2	0.3	0.2	
Starter Motor - Remove and Install or Replace (11002)	11001-A	0.4	0.4	0.5	0.4	0.4	
Starter Drive - Replace (11350)	11001-A1	0.2	0.2	0.2	0.2	0.2	

ELECTRICAL		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Relay, Starter Solenoid - Replace	11450-A	0.3	0.3	0.4	0.3	0.4	
Ignition Switch - Replace	11572-A	0.3	0.3	0.6	0.3	0.3	
Ignition Safety Shut Down Switch - R&I Includes diagnosis.	11580-A	0.4	0.4		0.4		
Overspeed Safety Switch Includes diagnosis.	11585-A	0.4	0.4		0.4		
Coil, Ignition - Replace (12029) Includes DIS. NOTE: Coil on Plug -- use operation 12650-D64	12029-A	0.2	0.2	0.2	0.2		
Vacuum Control Valve, Distributor - Replace (12091)	12091-A				0.3		
Armature, Distributor - Replace (12A099)	12099-A				0.3		
Distributor Cap - Replace (12106)	12106-A				0.2		
Distributor Rotor - Replace	12107-A				0.1		
Profile Ignition Pick-up Sensor - Diagnosis (12A112) Also referred to as a starter assembly or hall-effect device. Applies to Dura-spark system only. Use operation 12650-D16 for EEC-IV systems.	12112-D				0.3		
Profile Ignition Pick-up Sensor - Replace (121A112)	12112-D1				0.4		
Distributor - Remove and Install or Replace (12127) Includes set timing.	12127-A				0.5		
Distributor - Adjust on Stroboscope	12127-A1				0.4		
Distributor - Overhaul Includes adjust distributor on stroboscope.	12127-A2				0.8		

ELECTRICAL		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Distributor Diaphragm - Replace (12370) Includes adjust vacuum advance on stroboscope.	12127-A3					0.3	
Timing, Ignition - Check or Adjust (Mechanical) For DIS engines refer to operation 12180-A.. <u>Additional:</u> Adjust idle speed to specifications	12127-B -BS1					0.2	
Camshaft Position (CMP) Sensor - R&I	12150-A		0.2	0.2			0.2
Camshaft Synchronizer Assembly and/or Shaft - R&I Includes R&I front heater pipe and adjust synchronizer. <u>Additional:</u> Replace o-ring seal	12150-A1 -A1A			0.6			
Camshaft Synchronizer - Adjust Do not use with Operation 12150-A1.	12150-A2			0.5			
Crankshaft Position Sensor (CKP) - R&I (Variable Reluctant Sensor) Includes if necessary: drain coolant, R&I Lower Radiator Hose and extension pipe, R&I Generator.	12150-B	0.2	1.5	0.2			0.2
Temperature Sensor - R&I Without draining coolant.	12150-C	0.2	0.2				
Ignition Module - R&I	12150-D	0.2	0.2				
Ignition Coil - R&I	12150-E	0.2	0.2				
DIS Ignition System - Diagnose	12150-F	0.4	0.4				
Breaker Points - Replace without Removing Distributor (12171)	12171-A					0.4	
Timing, Ignition - Check or Adjust (DIS) For mechanical distributor engines refer to operation 12127-B. <u>Additional:</u> Ground one pin - 6 or 7 Ground both pins - 6 and 7	12180-A -A1 -A2	0.2	0.2				
Module Assembly, Ignition - Diagnosis (12A199, 12A297) Includes use of Rotunda Ignition System Tester 007-00008 or equivalent. applies to Duraspark system only. Use operation 12650D15 for EEC systems. Additional: Replace module assembly <u>Additional:</u> Replace module assembly	12199-D -D1	0.3	0.3	0.3	0.3	0.3	0.3
		0.2	0.2	0.2	0.2	0.2	0.2

ELECTRICAL		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Vacuum Tube/Hose - Repair Includes time to identify condition, locate specific defect and correct as necessary.	12226-A	0.1	0.1	0.4	0.2	0.4	
Spark Plug Wires - Replace (12259) Includes test wiring.	12259-A	0.2	0.2	0.3	0.3		
Spark Plugs - Clean, Test or Replace	One -A	0.2	0.3	0.4	0.3	0.3	
	Two or More -B	0.3	0.6	1	0.6	1	
Throttle Position Sensor (TPS) - Replace (9B989) Includes pin point tests.	12650-D1		0.4	0.2		0.2	
Idle Air Control (IAC) Valve - Replace (9F715) (Throttle Air By Pass Valve) Includes pin point tests.	12650-D3		0.2	0.2		0.2	
Heated Oxygen Sensor (HO2S) (9F472) - Replace	One -D4		0.2	0.2		0.3	
	Right -D4R						
	Left -D4L						
	Both -D4T					0.4	
Processor Assembly (EFI) - Replace (12A650) Includes pin point tests.	12650-D6		0.4	0.4			
Power Relay, Electronic Control (EFI) - Replace (12A646) Includes pin point tests.	12650-D7		0.2	0.2		0.1	

ELECTRICAL		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Engine Coolant Temperature (ECT) Sensor (EFI) - Replace (12A648) Includes pin point tests.	12650D10		0.2	0.3			3.2
Cylinder Head Temperature (CHT) Sensor (EFI) - Replace (6G004)	12650-D10C			0.2			3.3
Fuel Pump Relay (EFI) - Replace (9345) Includes pin point tests.	12650D11		0.2	0.2			0.2
Manifold Absolute Pressure (MAP) Sensor (EFI) - Replace (9F479) Includes pin point tests.	12650D13		0.4	0.4			0.4
Fuel Injectors (EFI) - Test (in equipment) (9F593) Using Rotunda Tester 113-00001 or equivalent. Not to be used with operation 12650-D20D.	12650-D20A		1	1			1
Fuel Injectors (EFI) - Test (on bench) (9F593) Using Rotunda Tester 113-00001 or equivalent. Time is for each injector.	12650-D20B		0.1	0.1			0.1
Fuel Injector (Gasoline) - Remove & Install or Replace (9F593) For diesel electrical injectors, use Operation 6058-B.	12650-D20C						
One injector	-D20CE		1.1	1.5			1.5
All injectors	-D20CT		1.2	1.7			1.7

ELECTRICAL		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Knock Sensor (EFI) - Replace (12A699) Includes pin point tests. Includes R&I Generator when needed.	12650D21						0.8
Air Charge Temperature (ACT) Sensor (EFI) - Replace (12A697) (Intake Air Temperature - IAT Sensor) Includes pin point tests.	12650D24		0.3	0.3			0.3
Manifold Skin Temperature (MST) Sensor (EFI) - Replace (12A697) Includes pin point tests.	12650D26		0.3	0.3			
Exhaust Gas Recirculation (EGR) Valve (EFI) - Replace (9D475) Includes pin point tests.	12650D30		0.2	0.3			0.4
Electrical Repairs - EEC Wiring, ECM Wiring & ICM Wiring Includes pin point tests. Includes time to correct wiring shorts/opens, clean pin connectors and replace terminals or hardshell connectors. Do not use in conjunction with operation 12650-D33 or component replacement operations.	12650D32		0.7	0.7			0.7
Vacuum Repairs Includes time to repair or replace vacuum tubes, hoses or fittings. Do not use with operation 12650-D32 or component replacement operations.	12650D33	0.1	0.1	0.1	0.1		0.2
Ignition Coil Assembly - Coil or Coil Pack (12029) - R&I or Replace For Coil on Plug refer to Operation 12650D64. This combination may be claimed without the base operation.	12650D63	0.2	0.2	0.2	0.2		
Electronic Control Actuator Use Operation 9501-A6.							
Ignition Coil Assembly - Coil on Plug (12029) - R&I or Replace For Coil Pack refer to Operation 12650D63. This operation may be claimed without the base operation. Time for each bank: One Two Three Four Five	12650D64 -D64A -D64B -D64C -D64D -64E						0.3 0.4 0.5 0.6 0.7
Wire(s) - Spark Plug High Tension (12259) - R&I or Replace	12650D65	0.3	0.3	0.3	0.3		

ELECTRICAL		Application (liters)	1.5/1.6	2.3/2.5	3.7/4.2	4.0/4.9	6.8NA/T
Description	Op. #	Maximum Allowable Time (hours)					
Wiring Assemblies, Engine Gauge Feed - Replace *	14289-A	0.5	0.5	0.5	0.5	0.5	
Wiring Assemblies, Engine - Repair *	14289-AA	0.4	0.4	0.4	0.4	0.4	
Cables, Battery to Relay - Replace *	14300-A	0.1	0.1	0.1	0.1	0.1	
Cables, Relay to Starter - Replace *	14431-A	0.1	0.1	0.1	0.1	0.1	
Fuse or Circuit Breaker - Replace	14526-A	0.1	0.1		0.1		
	One -A			0.2		0.2	
	Two or More -AT			0.3		0.2	
Fusible Link - Replace	14526-AA	0.2	0.2	0.2	0.2	0.2	
Powertrain Control Module (PCM) - Reprogramming Includes clearing codes.	15650-E4		0.3	0.3		0.3	
Check and Clear Diagnostic Codes	15650-E5		0.2	0.2		0.2	

*** THE ALLOWANCES FOR WIRING REPAIRS INCLUDE:**

- time to check or replace fuse
- locate, trace, isolate and correct condition by overlaying
- soldering connections
- replacing terminal ends
- rerouting the harness as necessary
- cutting wires and taping the ends in the multi-wire circuits
- replacing hard shell connectors
- correct the cause of condition through taping sharp edges
- removing or cutting off screws etc., which have penetrated the harness

Allowances do not include time to remove components or assemblies which may impede access to the wiring harness.

BODY		Application	ALL
Description		Op. #	Max Hours
Hood, Top - Remove and Install Includes remove and install muffler. Only for an EDI provided enclosure		16605-A	0.5
Panel, Rear - Replace	Additional: Additional: To transfer each gauge or switch	16924-A	0.6 0.1
Shell, Radiator (Grille) - Replace		8200-A	0.5