

EMISSION APPLICATIONS
2021 Jeep - Gladiator - Diesel

EMISSION APPLICATIONS

2021 Gladiator

Engine & Fuel System	<u>(1)</u> Emission Control Systems & Devices	<u>(2)</u> EGR Test No.
3.0L (182") V6 Turbo Diesel	CCV, EGR, OC, DPF, SCR, <u>(3)</u> NO_x, HO₂S, CEC, MIL	2
(1) Major emission control systems and devices are listed in bold type; components and other related devices are listed in light type. (2) See CHRYSLER LLC under DOMESTIC CARS & TRUCKS in EGR FUNCTION TESTING - DIESEL section. Use test number specified in table. (3) Equipped with 2.		

EMISSION APPLICATIONS

2021 Jeep - Gladiator

EMISSION APPLICATIONS

2021 Gladiator

Engine & Fuel System	(1) Emission Control Systems & Devices	EGR Test No.
3.6L V6 (220") 6-Cyl. SFI	PCV, EVAP, (4) TWC, FR, SPK, (5) HO2S, CEC, MIL, EVAP-CPCS, EVAP-LDP, EVAP-ORVR, EVAP-VC	...
(1) Major emission control systems and devices are listed in bold type; components and other related devices are listed in light type. (2) System uses a vacuum controlled (PCV) valve. (3) FWD equipped with 1 TWC. AWD equipped with 2 TWC. (4) Equipped with 2. (5) Equipped with 4.		

EMISSION CONTROL ABBREVIATIONS

Gasoline & Diesel

"A"

A/C

Air Conditioning

A/C-ISUS

A/C Idle Speed-Up Solenoid

A/F

Air/Fuel

AAI

Air Assist Injector

ACL

Air Cleaner (Thermostatic Air Cleaner)

ACL-BMS

ACL Bimetallic Sensor

ACL-CKV

ACL Check Valve

ACL-DV

ACL Delay Valve

ACL-ESC

Electronic Spark Control

ACL-PVS

ACL Ported Vacuum Switch

ACL-RDV

ACL Reverse Delay Valve

ACL-RDVS

ACL Reverse Delay Valve (Single)

ACL-TCV

ACL Thermal Control Valve

ACL-TS

ACL Temperature Sensor

ACL-TSOV

ACL Temperature Sensor Override Valve

ACL-TVS

ACL Thermal Vacuum Switch

ACL-TVV

ACL Thermal Vacuum Valve

ACL-VCDV

ACL Vacuum Control Delay Valve

ACL-VCV

ACL Vacuum Control Valve

ACL-VM

ACL Vacuum Motor

ACL-WP

ACL Wax Pellet Type Motor

ADS

Anti-Dieseling Solenoid

AFR

Air/Fuel Ratio Sensor

AFS

Air/Fuel Ratio Sensor

AIH

Air Intake Heaters

AIH-TS

AIH Temperature Sensor

AIR

Air Injection System

AIS

Air Injection System

AIS-ACV

AIS Air Control Valve

AIS-AF

Air Injection System Air Filter

AIS-AMV

AIS Air Management Valve

AIS-ASV

AIS Air Switching Valve

AIS-BPV

AIS By-Pass Valve

AIS-CC

AIS Computer Controlled

AIS-CKV

AIS Check Valve

AIS-CSV

AIS Control Solenoid Valve

AIS-CV

AIS Combination Valve

AIS-DV

AIS Diverter Valve

AIS-IMCV

AIS Intake Manifold Change-Over Valve

AIS-MCV

AIS Manifold Change-Over Valve

AIS-OWV

AIS One Way Valve

AIS-PAF

AIS Pulse Air Feeder

AIS-PM

AIS Pump Motor

AIS-PV

AIS Pneumatic Valve

AIS-RV

AIS Relief Valve

AIS-SAV

AIS Secondary Air Valve

AIS-SOL

AIS Solenoid

AIS-SV

AIS Solenoid Valve

AIS-VCV

AIS Vacuum Control Valve

AIS-VSV

AIS Vacuum Switching Valve

AIS-VT

AIS Vacuum Tank

AIS-VCV

AIS Vacuum Control Valve

AIS-VSV

AIS Vacuum Switching Valve

AIV

Air Injection Valve

AIV-SOL

Air Injection Valve Solenoid

ALVW

Adjusted Loaded Vehicle Weight

AMV

Air Management Valve

AP

Air Pump Injection System

AP-ABV

Air Pump Air Bypass Valve

AP-ACV

AP Air Control Valve

AP-AMV

AP Air Management Valve

AP-ASRV

AP Air Switching Relief Valve

AP-ASS

AP Air Switching Solenoid

AP-ASV

AP Air Switching Valve

AP-BP

AP By-Pass Valve

AP-BPV

AP By-Pass Valve

AP-CKV

AP Check Valve

AP-CS

AP Control Solenoid

AP-CV

AIR Cut-Off Valve

AP-DCTO

AP Dual Coolant Temperature Override

AP-DLY

AP Delay Valve

AP-DV

AP Diverter Valve

AP-EADV

AP Electric Air Control Diverter Valve

AP-EAMR

AP Electric Air Management Relay

AP-EAMS

AP Electric Air Management Solenoid

AP-EAP

AP Electric Air Pump

AP-EC

AP Electromagnetic Clutch

AP-ERLY

AP Electric Air Pump Relay

AP/PAIR

Pulsed Secondary Air Injection

AP-RDV

AP Reed Valve

AP-RV

AP Relief Valve

AP-SOL

AP Solenoid

AP-SOV

AP Shut-Off Valve

AP-SV

AP Solenoid Valve

AP-SWV

AP Switchover Valve

AP-TV

AP Transmitting Valve

AP-VCS

AP Vacuum Control Solenoid

AP-VCSV

AP Vacuum Controlled Air Shut-Off Valve

AP-VCV

AP Vacuum Control Valve

AP-VSV

AP Vacuum Switching Valve

A/T

Automatic Transmission

ATCV

Air Temperature Control Valve

"B"

BP/EGR

Backpressure EGR System

BP/EGR-BPS

BP/EGR Backpressure Sensor

BP/EGR-BPT

BP/EGR Backpressure Transducer

BP/EGR-BPV

BP/EGR Backpressure Valve

BP/EGR-BS

BP/EGR Bleed Solenoid

BP/EGR-BVSV

BP/EGR Bimetallic Vacuum Switching Valve

BP/EGR-C

BP/EGR Controller

BP/EGR-CLR

BP/EGR Cooler

BP/EGR-CS

BP/EGR Control Solenoid

BP/EGR-CTO

BP/EGR Coolant Temperature Override

BP/EGR-CV

BP/EGR Control Valve

BP/EGR-DCTO

BP/EGR Dual Coolant Temperature Override

BP/EGR-DS

BP/EGR Diagnostic Solenoid

BP/EGR-DSOL

BP/EGR Duty Solenoid

BP/EGR-DTVSW

BP/EGR Distributor Thermal Vacuum Switch

BP/EGR-DV

BP/EGR Delay Valve

BP/EGR-EET

BP/EGR Electric Transducer

BP/EGR-EPV

BP/EGR External Pressure Valve

BP/EGR-FDV

BP/EGR Forward Delay Valve

BP/EGR-LCV

BP/EGR Vacuum Control Valve

BP/EGR-LC

BP/EGR Load Control Valve

BP/EGR-OVS

BP/EGR Orifice Valve Sensing

BP/EGR-PS

BP/EGR Position Sensor

BP/EGR-PT

BP/EGR Pressure Transducer

BP/EGR-PVS

BP/EGR Ported Vacuum Switch

BP/EGR-RES

BP/EGR Reservoir

BP/EGR-RST

BP/EGR Restrictor

BP/EGR-SOL

BP/EGR Solenoid

BP/EGR-TCTVS

BP/EGR Torque Converter Thermal Vacuum Switch

BP/EGR-TCV

BP/EGR Thermal Control Valve

BP/EGR-TCVLV

BP/EGR Temperature Control Valve

BP/EGR-T

BP/EGR Temperature Sensor

BP/EGR-TS

BP/EGR Temperature Sensor

BP/EGR-TVC

BP/EGR Thermal Control Valve

BP/EGR-TVS

BP/EGR Thermal Vacuum Switch

BP/EGR-TVV

BP/EGR Thermal Vacuum Valve

BP/EGR-VC

BP/EGR Diagnostic Valve

BP/EGR-VCV

BP/EGR Vacuum Control Valve

BP/EGR-VM

BP/EGR Vacuum Modulator

BP/EGR-VRV

BP/EGR Vacuum Regulator Valve

BP/EGR-VS

BP/EGR Vacuum Switch

BP/EGR-VSOL

BP/EGR Vent Solenoid

BP/EGR-VSV

BP/EGR Vacuum Switching Valve

"C"

C-4

Computer Controlled Catalytic Converter

CAC

Charge Air Cooler

CAS

Clean Air System

CB

Crankcase Breather

CB-VC

Crankcase Breather-Vapor Canister

CBPS

Coasting By-Pass System

CBVC

Crankcase Breather Vapor Canister

CCIEV

Coolant Controlled Idle Enrichment Valve

CCO

Computerized Engine Controls

CCS

Controlled Combustion System

CCV

Closed Crankcase Ventilation

CD-REGVLV

Crankcase Depression Regulator Valve

CDRV

Crankcase Depression Relief Valve

CEAB

Cold Engine Air Bleed

CEAB-TVS

CEAB Thermal Vacuum Switch

CEAB-TVV

CEAB Thermal Vacuum Valve

CEC

Computerized Engine Controls

CESS

Cold Engine Sensor Switch

CETS

Cold Engine Temperature Switch

CFI

Continuous Fuel Injection

CMH

Cold Mixture Heater

CNG

Compressed Natural Gas

CO

Carbon Monoxide

CO2

Carbon Dioxide

CPI

Central Port Injection

CRV

Coasting Richer Valve

CSI

Central Sequential Injection

CTAVS

Cold Temperature Activated Vacuum System

CTOX

Continuous Trap Oxidizer

CVOT

Crankcase Ventilation Orifice Tube

CVOT-CKV

Crankcase Ventilation Orifice Tube Check Valve

"D"

DCLV

Deceleration Valve

DCS

Deceleration Control System

DDI

Direct Diesel Injection

DFI

Direct Diesel Injection

DI

Direct Injection

DKV

Deceleration Kick Valve

DLCV

Deceleration Mixture Control Valve

DM-TL

Diagnostic Module Tank Leakage

DMS

Dual Manifold System

DOC

Diesel Oxidation Catalyst

DOHC

Dual Overhead Cam

DPD

Dual Point Distributor

DPF

Diesel Particulate Filter

DPF/TWC

Combination Diesel Particulate Filter and Three Way Catalyst

DPFE

Differential Pressure Feedback EGR Valve

DPFEGR

Differential Pressure Feedback EGR Valve

DTM

Deceleration Throttle Modulator

"E"

EAIR

Electric Air Injection System

EAIR-DV

EAIR Diverter Valve

EC

Computerized Engine Controls

ECM

Electronic Control Module

ECU

Electronic Control Unit

EDC

Electronic Diesel Control

EDS

Electronic Diesel System

EEC

Electronic Engine Control

EFE

Early Fuel Evaporation

EFE-CKV

EFE Check Valve

EFE-CV

EFE Control Valve

EFE-DTVS

EFE Delay Thermal Vacuum Switch

EFE-HTR

EFE Heater

EFE-HCV

EFE Heat Control Valve

EFE-OTS

EFE Oil Temperature Switch

EFE-PTC

EFE Positive Temperature Coefficient (Intake Heater Grid)

EFE-PVS

EFE Ported Vacuum Switch

EFE-SOL

EFE Solenoid

EFE-TVS

EFE Thermal Vacuum Switch

EFE-TVV

EFE Thermal Vacuum Valve

EFE-VSV

EFE Vacuum Switching Valve

EFI

Electronic Fuel Injection

EFI-MA

EFI Mass Airflow Sensor

EFI-MAF

EFI Mass Airflow Sensor

EGR

Exhaust Gas Recirculation System

EGR-BCS

EGR Boost Check Solenoid

EGR-BPBV

EGR By-Pass Backpressure Valve

EGR-BPT

EGR Backpressure Transducer

EGR-BPV

EGR By-Pass Valve

EGR-BS

EGR Bleed Solenoid

EGR-BSSV

EGR Boost Sensor Solenoid Valve

EGR-BV

EGR Bypass Valve

EGR-BVSV

EGR Bimetallic Vacuum Switching Valve

EGR-C

EGR Controller

EGR-CC

EGR Coolant Controlled

EGR-CLR

EGR Cooler

EGR-VSOL

EGR Vacuum Solenoid

EGR-CKV

EGR Check Valve

EGR-CS

EGR Control Solenoid

EGR-CSOL

EGR Cut-Off Solenoid

EGR-CSV

EGR Control Solenoid

EGR-CTO

EGR Coolant Temperature Override

EGR-CTS

EGR Charge Temperature Sensor

EGR-CTSW

EGR Charge Temperature Switch

EGR-CTTS

EGR Coolant Temperature Thermostwitch

EGR-CV

EGR Control Valve

EGR-CVCV

EGR Constant Vacuum Control Valve

EGR-CVS

EGR Control Vent Solenoid

EGR-DC

EGR Digital Control

EGR-DCTO

EGR Dual Coolant Temperature Override

EGR-DPFE

Differential Pressure Feedback EGR Sensor

EGR-DPFS

EGR Differential Pressure Feedback Sensor

EGR-DS

EGR Diagnostic Solenoid

EGR-DSOL

EGR Duty Solenoid

EGR-DTVS

EGR Delay Thermal Vacuum Switch

EGR-DTVSW

EGR Distributor Thermal Vacuum Switch

EGR-DV

EGR Delay Valve

EGR-EPRS

EGR Exhaust Pressure Regulator Solenoid

EGR-EPRV

EGR Exhaust Pressure Regulator Valve

EGR-EPV

EGR External Pressure Valve

EGR/EVAP-CSV

EGR/EVAP Control Solenoid Valve

EGR-EVR

EGR Vacuum Regulator

EGR-EVRV

EGR Electronic Vacuum Regulator Valve

EGR-FDV

EGR Forward Delay Valve

EGR-FJS

EGR Floor Jet System

EGR-FPS

EGR Feedback Pressure Sensor

EGR-LCV

EGR Load Control Valve

EGR-MAP

EGR Manifold Absolute Pressure Sensor

EGR-PFE

EGR-PFE Sensor

EGR-PS

EGR Position Sensor

EGR-PSW

EGR Pulse Switch

EGR-PVS

EGR Ported Vacuum Switch

EGR-REG

EGR Regulator

EGR-RES

EGR Reservoir

EGR-RST

EGR Restrictor

EGR-SC

EGR Signal Converter

EGR-SEC

EGR, Secondary

EGR-SEN

EGR Sensor

EGR-SM

EGR Stepper Motor

EGR-SOL

EGR Solenoid

EGR-SU

EGR Switchover Valve

EGR-SUB

Sub-EGR Valve

EGR-SV

EGR Switchover Valve

EGR-SVV

EGR Solenoid Vacuum Valve

EGR-T

EGR Temperature Sensor

EGR-TC

EGR Transmission Controlled

EGR-TCTVS

EGR Torque Converter Thermal Vacuum Switch

EGR-TCV

EGR Thermal Control Valve

EGR-TCVLV

EGR Temperature Control Valve

EGR-TRANS

EGR Transducer

EGR-TS

EGR Temperature Sensor

EGR-TSW

EGR Temperature Switch

EGR-TV

EGR Thermal Valve

EGR-TVD

EGR Throttle Valve Diaphragm

EGR-TVS

EGR Thermal Vacuum Switch

EGR-TVSOL

EGR Throttle Valve Solenoid

EGR-TVV

EGR Thermal Vacuum Valve

EGR-V

EGR Valve

EGR-VA

EGR Vacuum Amplifier

EGR-VCV

EGR Vacuum Control Valve

EGR-VM

EGR Vacuum Modulator

EGR-VR

EGR Vacuum Regulator

EGR-VRS

EGR Vacuum Regulator Solenoid

EGR-VRSV

EGR Vacuum Regulator Solenoid Valve

EGR-VRV

EGR Vacuum Regulator Valve

EGR-VS

EGR Vacuum Switch

EGR-VSDV

EGR Vacuum Switch Dump Valve

EGR-VSEN

EGR Vacuum Sensor

EGR-VSOL

EGR Vent Solenoid

EGR-VSS

EGR Vacuum Switching Solenoid

EGR-VST

EGR Vacuum Surge Tank

EGR-VSV

EGR Vacuum Switching Valve

EGR-VVCS

EGR Venturi Vacuum Control System

EGRB

EGR Boost Sensor

EGRC

EGR Control Solenoid

EGRC-BPT

EGR Control Backpressure Transducer

EGRC-SV

EGR Control Solenoid Valve

EHOC

Electronically Heated Oxidation Catalyst

EHTWC

Electronically Heated Three-Way Catalyst

EI

Electronic Ignition System

EIS

Electronic Ignition System

ELB

Electronic Lean Burn

EPR

Exhaust Pressure Regulator

EPR-SOL

EPR Solenoid

ESA

Electronic Spark Advance

ESIM

Evaporative System Integrity Monitor

EVAP

Fuel Evaporative System

EVAP-AAC

EVAP Auxiliary Air Control

EVAP-BPSV

EVAP By-Pass Solenoid Valve

EVAP-BVSV

EVAP Bimetallic Vacuum Switching Valve

EVAP-CAV

EVAP Canister Air Valve

EVAP-CCV

EVAP Control Canister Close Valve

EVAP-CCVSV

EVAP Control Canister Vent Shut Valve

EVAP-CCVSVS

EVAP Closed Canister Valve Vacuum Switching Valve

EVAP-CDCV

EVAP Canister Drain Cut Valve

EVAP-CKV

EVAP Check Valve

EVAP-CPCS

EVAP Canister Purge Control Solenoid

EVAP-CPCSV

EVAP Canister Purge Control Solenoid Valve

EVAP-CPCV

EVAP Canister Purge Control Valve

EVAP-CPRV

EVAP Canister Purge Regulator Valve

EVAP-CPSV

EVAP Canister Vent Shut Valve

EVAP-CPT

EVAP Canister Purge Timer

EVAP-CPTVS

EVAP Canister Purge Thermal Vacuum Switch

EVAP-CPV

EVAP Canister Vent Valve

EVAP-CPVCSV

EVAP Canister Purge Volume Control

EVAP-CPVCV

EVAP Canister Purge Volume Control Valve

EVAP-CPVDV

EVAP Canister Purge Vacuum Delay Valve

EVAP-CPVR

EVAP Canister Purge Valve Resonator

EVAP-CS

EVAP Control Solenoid

EVAP-CSPS

EVAP Control System Pressure Sensor

EVAP-CSPV

EVAP Canister Purge Valve

EVAP-CST

EVAP Canister Surge Tank

EVAP-CSV

EVAP Control Solenoid Valve

EVAP-CT

EVAP Catch Tank

EVAP-CV

EVAP Control Solenoid Valve

EVAP-CVCS

EVAP Canister Vent Control Solenoid

EVAP-CVCSV

EVAP Canister Vent Control Solenoid Valve

EVAP-CVCV

EVAP Canister Vent Control Valve

EVAP-CVS

EVAP Canister Vent Solenoid

EVAP-CVSV

EVAP Carburetor Vent Switching Valve

EVAP-CVV

EVAP Canister Vent Valve

EVAP-DCTO

EVAP Dual Coolant Temperature Override

EVAP-DF

EVAP Drain Filter

EVAP-DPS

EVAP Differential Pressure Sensor

EVAP-DV

EVAP-Drain Valve

EVAP-ESIM

Evaporative System Integrity Monitor

EVAP-EV

EVAP Emission Valve

EVAP-FBVV

EVAP Fuel Bowl Vent Valve

EVAP-FBVS

EVAP Fuel Bowl Vent Solenoid

EVAP-FCV

EVAP Fuel Cut Valve

EVAP-FLS

EVAP Fuel Level Sensor

EVAP-FOLV

EVAP Fuel Overflow Limiter Valve

EVAP-FR/FTPS

EVAP Rollover Valve/Fuel Tank

EVAP-FS

EVAP Flow Switch

EVAP-FSV

EVAP Flow Switchover Valve

EVAP-FTCV

EVAP Tank Pressure Control Valve

EVAP-FTEV

EVAP Fuel Tank EVAP Valve

EVAP-FTPCSV

EVAP Fuel Tank Pressure Control Solenoid Valve

EVAP-FTPS

EVAP Fuel Tank Pressure Sensor

EVAP-FTS

EVAP Fuel Temperature Sensor

EVAP-FVCV

EVAP Fuel Vapor Control Valve

EVAP-FVS

EVAP Fuel Vapor Separator

EVAP-FVTS

EVAP Fuel Vapor Temperature Sensor

EVAP-FVV

EVAP Fuel Vent Valve

EVAP-FVVV

EVAP Fuel Vapor Vent Valve

EVAP-FWV

EVAP Fuel Vent Valve

EVAP-IVS

EVAP Inner Vent Solenoid

EVAP-LDAF

EVAP Leak Detection Pump Air Filter

EVAP-LDP

EVAP Leak Detection Pump

EVAP-LDPAF

EVAP Leak Detection Pump Air Filter

EVAP-LDPF

EVAP Leak Detection Pump Filter

EVAP-LDPVV

EVAP Leak Detection Pump Vent Valve

EVAP-LSEP

EVAP Liquid Separator

EVAP-NVLD

EVAP Natural Vacuum Leak Detection

EVAP-ORVR

Evaporative On-Board Refueling Vapor Recovery System

EVAP-ORVRCV

Evaporative On-Board Refueling Vapor Recovery Check Valve

EVAP-ORVRFTVRV

EVAP-ORVR Fuel Tank Vapor Recirculation

EVAP-OVCV

EVAP Outer Vent Control Valve

EVAP-OWV

EVAP One-Way Valve

EVAP-PCDV

EVAP Purge Control Diaphragm Valve

EVAP-PCS

EVAP Purge Control Solenoid Valve

EVAP-PCSV

EVAP Purge Cut-Off Solenoid Valve

EVAP-PFS

EVAP Purge Flow Sensor

EVAP-PFSVVS

EVAP Purge Flow Switching Valve Vacuum Switching Valve

EVAP-PPS

EVAP Proportional Purge Solenoid

EVAP-PR

EVAP Purge Resonator

EVAP-PRRV

EVAP Pressure Relief Rollover Valve

EVAP-PRV

EVAP Pressure Relief Valve

EVAP-PS

EVAP Purge Solenoid

EVAP-PSOL

EVAP Purge Solenoid

EVAP-PSSV

EVAP Pressure Switching Solenoid

EVAP-PSVVS

EVAP Pressure Switching Valve Vacuum Switching Valve

EVAP-PV

EVAP Purge (Frequency) Valve

EVAP-PVS

EVAP Ported Vacuum Switch

EVAP-RV

EVAP Rollover Valve

EVAP-RV/FTPS

EVAP Rollover Valve/Fuel Tank

EVAP-RVSV

EVAP Rollover Vapor Separator Valve

EVAP-SNR

EVAP Canister Sensor

EVAP-SOL

EVAP Solenoid

EVAP-SOV

EVAP Shutoff Valve

EVAP-SSV

EVAP Shut-Off Solenoid Valve

EVAP-SV

EVAP Solenoid Valve

EVAP-TC

EVAP Trap Canister

EVAP-TS

EVAP Temperature Switch

EVAP-TPBPV

EVAP Tank Pressure By-Pass Valve

EVAP-TPCS

EVAP Tank Pressure Control Solenoid

EVAP-TPCV

EVAP Tank Pressure Control Valve

EVAP-TRWV

EVAP Tree-Way Valve

EVAP-TV

EVAP Thermal Valve

EVAP-TVS

EVAP Thermal Vacuum Switch

EVAP-TVV

EVAP Thermal Vacuum Valve

EVAP-TWV

EVAP Two-Way Valve

EVAP-VC

EVAP Vapor Canister

EVAP-VCAT

EVAP Vapor Canister Air Tank

EVAP-VCF

EVAP Vapor Canister Filter

EVAP-VCSV

EVAP Vapor Canister Shut-off Valve

EVAP-VCTV

EVAP Vacuum Control Valve

EVAP-VCV

EVAP Vacuum Canister Valve

EVAP-VCVS

EVAP Vapor Canister Vent Solenoid

EVAP-VLFR

EVAP Vent Line Flow Restrictor

EVAP-VM

EVAP Vacuum Motor

EVAP-VMV

EVAP Vapor Management Valve

EVAP-VPS

EVAP Vapor Pressure Sensor

EVAP-VPSVSV

EVAP Vapor Pressure Sensor Vacuum Switching Valve

EVAP-VS

EVAP Vacuum Sensor

EVAP-VSOL

EVAP Ventilation Solenoid

EVAP-VSOL/LDP

EVAP Ventilation Solenoid/Leak Detection Pump

EVAP-VST

EVAP Vacuum Surge Tank

EVAP-VSV

EVAP Vacuum Switching Valve

EVAP-VV

EVAP Ventilation Valve

EVRS

EGR Vacuum Regulator Solenoid

"F"

FBC

Feedback Carburetor

FCOV

Fuel Change Over Valve

FF

Flex Fuel

FF-CKV

Fuel Fill Check Valve

FF-FCV

Fuel Tank Fuel Cut-Off Valve

FF-FLVV

Fuel Tank Fill Limit Vent Valve

FFC-PVRV

Fuel Fill Cap Pressure Vacuum Relief Valve

FGOV

Fuel Gravity/Overflow Valve

FGVV

Fuel Gravity Vent Valve

FI

Fuel Injected

FICD

Fast Idle Control Device

FISR

Fast Idle Solenoid Relay

FLV

Fill Limit Valve

FLVV

Fill Limiting Vent Valve

FP-CKV

Fill Pipe Check Valve

FP-RV

Fill Pipe Rollover Valve

FR

Fill Pipe Restrictor

FT-FLVV

Fuel Tank Fill Limit Vent Valve

FT-GVV

Fuel Tank Grade Vent Valve

FT-OPRV

Fuel Tank Over Pressure Vent Valve

FT-PCV

Fuel Tank Pressure Control Valve

FT-VCV

Fuel Tank Vapor Control Valve

FT-VRV

Fuel Tank Vapor Recirculation Valve

FTCV

Fuel Tank Check Valve

FTDPS

Fuel Tank Differential Pressure Sensor

FTEV

Fuel Tank EVAP Valve

FTPS

Fuel Tank Pressure Sensor

FTT

Fuel Tank Temperature Sensor

FTTS

Fuel Tank Temperature Sensor

FTV/LSV

Fuel Tank Vapor/Liquid Separation Valve

FTVCV

Fuel Tank Vapor Control Valve

FTVPRV

Fuel Tank Ventilation Pressure Retention Valve

FVPS

Fuel Vapor Pressure Sensor

FTVV

Fuel Tank Vent Valve

FVV

Fuel Vapor Valve

"G"

GVWR

Gross Vehicle Weight Rating

"H"

HAC

High Altitude Compensator

HAFS

Heated Air Fuel Ratio Sensor

HAI

Hot Air Intake

HAS

High Altitude System

HC

Hydrocarbons

HCAC-VSV

Hydrocarbon Absorber Catalyst Vacuum Switching Valve

HDC

Heavy Duty Cooling

HDC-CTO

HDC Coolant Temperature Override

HFM-SFI

Hot Film Engine Management SFI

HIC

Hot Idle Compensator

HIM

Heated Intake Manifold

HO

High Output

HO2S

Heated Oxygen Sensor

HP

High Performance

HP

Horsepower

HPCA

Housing Pressure Cold Advance

HSC

High Swirl Combustion

"I"

IAC

Idle Air Control Valve

IACV-SW

IACV Switch

ICOM

Idle Compensator

IDI

Indirect Diesel Injection

IES

Idle Enrichment System

IMCO

Improved Combustion System

"K"

KS

Knock Sensor

"L"

LH-SFI

Hot Wire Sequential Multiport Fuel Injection

LVFD

Liquid/Vapor Fuel Discriminator

LVW

Loaded Vehicle Weight

"M"

MD-TICS

Timing & Injection rate Control System

MDP

Manifold Differential Pressure sensor

ME-SFI

Motor Electronics Sequential Fuel Injection

MFI

Multiport Fuel Injection

MFI-MAF

MFI Mass Airflow Sensor

MFLS

Main Fuel Level Sensor

MI

Mechanical Fuel Injection

MIL

Malfunction Indicator Light

M/T

Manual Transmission

"N"

NAC

Nitrogen Oxides (NO_x) Adsorbing Catalyst

NLV

Non-Linear Valve

NOS

NO_x Sensor

NO_x

NO_x Emission Control

NO_xATWC

NO_x Adsorptive TWC

NO_xC

Nitrogen Oxide Catalyst

NO_xS

Nitrogen Oxide Sensor

NO_xTWC

NO_x Adsorptive TWC

NSC

Nitrogen Oxides (NO_x) Storage Catalyst

"O"

OBD

On-Board Diagnostic System

PBD (F)/(P)

Full/Partial On-Board Diagnostic

OC

Oxidation Catalytic Converter

OHC

Overhead Cam

ORVR

On-Board Refueling Vapor Recovery

ORVR-COV

ORVR Cut-Off Valve

ORVR-CV

ORVR Control Valve

ORVR-FAV

ORVR Fresh Air Valve

ORVR-FMV

ORVR Flow Management Valve

ORVR-FTVCV

ORVR Fuel Tank Vapor Control Valve

ORVR-FTVRV

ORVR Fuel Tank Vapor Recirculation Valve

ORVR-FVRS

ORVR Fuel Vapor Recovery System

ORVR-FVV

ORVR Fuel Vent Valve

ORVR-LV

ORVR Leveling Valve

ORVR-OCKV

ORVR Overfill Check Valve

ORVR-RCV

ORVR Refueling Control Valve

ORVR-VCV

ORVR Vapor Cut Valve

ORVR-VRV

ORVR Vapor Recirculating Valve

ORVR-VSV

ORVR Vent Shut Valve

ORVR-VV

ORVR Vent Valve

OVCV

Outer Vent Control Valve

O2S

Oxygen Sensor

"P"

PAIR

Pulsed Secondary Air Injection

PAIR-ABV

PAIR Anti-Backfire Valve

PAIR-ACOV

PAIR Air Cut-Off Valve

PAIR-ACS

PAIR Air Control Solenoid

PAIR-ACV

PAIR Air Control Valve

PAIR-AIV

PAIR Air Injection Valve

PAIR-ASCS

PAIR Air Suction Control Solenoid

PAIR-ASOV

PAIR Air Shutoff Valve

PAIR-ASS

PAIR Air Switching Solenoid

PAIR-ASV

PAIR Air Switching Valve

PAIR-ASVL

PAIR Air Suction Valve

PAIR-AVCS

PAIR Air Valve Control Solenoid

PAIR-CSV

PAIR Control Solenoid Valve

PAIR-CKV

PAIR Check Valve

PAIR-DV

PAIR Diverter Valve

PAIR-PAF

PAIR Pulse Air Feeder

PAIR-PAV

PAIR Pulse Air Valve

PAIR-RES

PAIR Resonator

PAIR-RV

PAIR Reed Valve

PAIR-SCSV

PAIR Swirl Control Solenoid Valve

PAIR-SCV

PAIR Swirl Control Valve

PAIR-SOL

PAIR Solenoid

PAIR-VSV

PAIR Vacuum Switching Valve

PCM

Powertrain Control Module

PCV

Positive Crankcase Ventilation

PCV-DOV

PCV Dual Orifice Valve

PCV-HCB

PCV Heated Crankcase Breather

PCV-HE

PCV Heating Element

PCV-PRV

PCV Pressure Regulator Valve

PCV-SOL

PCV Solenoid

PEVR

Power Enrichment Vacuum Regulator

PPM

Parts Per Million

PTOX

Periodic Trap Oxidizer

PURCV

Purge Crankcase Ventilation

PVCS

Ported Valve Control System

PVCS-A

PVCS Actuator

PVCS-CS

PVCS Control Solenoid

PVLCS

Power Valve Control System

"R"

RC

NOx Reduction Catalyst

ROV

Rollover Valve

"S"

SAI-SV

Secondary Air Injection Shutoff Valve

SAIR-CV

Secondary Air Injection Control Valve

SC

Supercharged or Super Charger

SC MFI

Supercharged Multiport Fuel Injection

SCR

Selective Catalytic Reduction

SCSV

Swirl Control Solenoid Valve

SCV

Swirl Control Valve

SCV-A

SCV Actuator

SFI

Sequential Multiport Fuel Injection

SFI-MAF

SFI Mass Airflow Sensor

SFLS

Sub-Fuel Level Sensor

SOHC

Single Overhead Cam

SPK

Spark Controls

SPK-AVM

SPK Advance Vacuum Modulator

SPK-BVSV

SPK Bimetal Vacuum Switching Valve

SPK-CC

SPK Computer Controlled

SPK-CKV

SPK Check Valve

SPK-CSSA

SPK Cold Start Spark Advance System

SPK-CSSH

SPK Cold Start Spark Hold System

SPK-CTO

SPK Coolant Temperature Override

SPK-DAVS

SPK Distributor Vacuum Advance Solenoid

SPK-DCKV

SPK Distributor Check Valve

SPK-DCTO

SPK Dual Coolant Temperature Override

SPK-DDD

SPK Dual Diaphragm Distributor

SPK-DMV

SPK Distributor Modulator Valve

SPK-DPD

SPK Dual Point Distributor

SPK-DPVS

SPK Distributor Ported Vacuum Switch

SPK-DRCV

SPK Distributor Retard Control Valve

SPK-DRS

SPK Distributor Retard Solenoid

SPK-DSVMV

SPK Distributor Spark Vacuum Modulator Valve

SPK-DTVS

SPK Distributor Thermal Vacuum Switch

SPK-DTVV

SPK Distributor Thermal Vacuum Valve

SPK-DV

SPK Delay Valve

SPK-DVA

SPK Distributor Vacuum Advance

SPK-DVAS

SPK Distributor Vacuum Advance Solenoid

SPK-DVCS

SPK Distributor Vacuum Control Solenoid

SPK-DVCSW

SPK Distributor Vacuum Controlled Switch

SPK-DVCV

SPK Distributor Vacuum Control Valve

SPK-DVDV

SPK Distributor Vacuum Delay Valve

SPK-DVRS

SPK Distributor Vacuum Retard Switch

SPK-DVRV

SPK Distributor Vacuum Regulating Valve

SPK-DVVV

SPK Distributor Vacuum Vent Valve

SPK-EAVS

SPK Electronically Actuated Vacuum Switch

SPK-EDM

SPK Electronic Distributor Modulator

SPK-EI

SPK Electronic Ignition

SPK-ESA

SPK Electronic Spark Advance

SPK-ESC

SPK Electronic Spark Control (Retard)

SPK-ESS

SPK Electronic Spark Selection

SPK-EST

SPK Electronic Spark Timing

SPK-FDV

SPK Forward Delay Valve

SPK-HPCA

SPK Housing Pressure Cold Advance

SPK-ITCS

SPK Ignition Timing Control System

SPK-ITVS

SPK Ignition Timing Vacuum Switch

SPK-NLVR

SPK Non-Linear Vacuum Regulator

SPK-OSAC

SPK Orifice Spark Advance Control

SPK-PVA

SPK Ported Vacuum Advance

SPK-PVS

SPK Ported Vacuum Switch

SPK-RDO

SPK Retard Delay Orifice

SPK-RDV

SPK Reverse Delay Valve

SPK-RDVD

SPK Reverse Delay Valve (Dual)

SPK-RDVLV

SPK Retard Delay Valve

SPK-RDVS

SPK Reverse Delay Valve (Single)

SPK-RETS

SPK Retard Switch

SPK-SC

SPK Speed Controlled

SPK-SDV

SPK Spark Delay Valve

SPK-SOL

SPK Solenoid

SPK-SRRV

SPK Spark Relay Regulator Valve

SPK-TAVIA

SPK Temperature Activated Vacuum Ignition Advance

SPK-TCS

SPK Transmission Controlled Spark

SPK-TCSYS

SPK Timing Control System

SPK-TIDC

SPK Thermostatic Ignition Distributor Control

SPK-TV

SPK Thermal Valve

SPK-TVS

SPK Thermal Vacuum Switch

SPK-VACTO

SPK Vacuum Advance Coolant Temperature Override

SPK-VAS

SPK Vacuum Advance Solenoid

SPK-VAV

SPK Vacuum Advance Valve

SPK-VR

SPK Vacuum Retard

SPK-VRSW

SPK Vacuum Retard Switch

SPK-VSV

SPK Vacuum Switching Valve

SPK-VTCS

SPK Vacuum Timing Control System

SPL

Smoke Puff Limiter

SRI

Service Reminder Indicator

SSCA

Stepped Speed Control Actuator

SSCS

Stepped Speed Control Solenoid

STS

Service Throttle Soon Light

STVS

Secondary Throttle Valve System

SUB-HO2S

Sub-Heated Oxygen Sensor (after CAT)

SUB-O2S

Sub-Oxygen Sensor

SUB-TWC

Sub Three-Way Catalytic Converter

"T"

TAA

Turbo Air-To-Air

TAA

Throttle Actuator Assembly

TAB

Thermactor Air By-Pass

TAD

Thermactor Air Diverter

TAC

Thermostatic Air Cleaner

TBI

Throttle Body Injection

TBPCS

Throttle By-Pass Control System

TC

Turbo Charger

TCC

Torque Converter Clutch

TCCL

Torque Converter Control

TCD

Throttle Closing Dashpot

TC-DV

TC Delay Valve

TC-TVC

TC Thermal Vacuum Switch

TC-VS

TC Vacuum Switch

TD

Thermactor Diverter

TFT

Tank Fuel Temperature Sensor

THOS2

Third Heated Oxygen Sensor

TICV

Thermal Ignition Control Valve

TIV

Thermal Idle Valve

TK

Throttle Kicker

TLUC

Transmission Lock-Up Converter

TLUC-TVS

TLUC Thermal Vacuum Switch

TLUC-VS

TLUC Vacuum Switch

TM

Throttle Modulator

TOS

Throttle Opener System

TP

Throttle Positioner

TPI

Tuned Port Fuel Injection

TPV

Throttle Poppet Valve

TR

Thermal Reactor

TRC

Throttle Return Control

TRCS

Throttle Return Control Solenoid

TRCTL

Throttle Return Control Throttle Lever Actuator

TRSCV

Throttle Return Solenoid Control Valve

TRTVV

Temperature Regulator Thermal Vacuum Valve

TRVV

Transmission Vacuum Valve

TSOL

Throttle Solenoid

TVISD

Throttle Vacuum Idle Speed Diaphragm

TVM

Transmission Vacuum Modulator

TVS

Thermal Vacuum Switch

TWC

Three-Way Catalytic Converter

TWC+OC

Three-Way + Oxidation Catalytic Converter

"V"

VA

Vacuum Advance Unit

VAC-AMP

Vacuum Amplifier

VA-CTO

VA Coolant Temperature Override

VC

Vapor Canister

VCV

Vacuum Cut Valve

VCV-BV

VCV By-Pass Valve

VLFR

Vent Line Flow Restrictor/Anti-Trickle Fill Valve

"W"

WU

Warm-Up Catalyst

WU-OC

Warm-Up Oxidation Converter

WU-TWC

Warm-Up Three-Way Catalytic Converter

2021 GENERAL INFORMATION

Power Accessories - Gladiator

UNIVERSAL TRANSMITTER

DESCRIPTION AND OPERATION

HOMELINKB®

DESCRIPTION



COMPONENT INDEX

1.	Refer to HOMELINKB® TRANSCEIVER .
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Some vehicles are equipped with the HomeLinkB® transceiver (1). The transceiver is located in the drivers side sun visor assembly (2). The only visible component of the HomeLinkB® transceiver are the three push buttons. The buttons are marked with one, two or three dots, respectively, for identification of each channel.

OPERATION

HOMELINKB® TRANSCEIVER

HOMELINKB® TRANSCEIVER

Refer to COMPONENT INDEX .
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The HomeLinkB® transceiver operates on a switched source of battery current. The unit will only function when the ignition is ON for security purposes. For more information on the features, programming procedures and operation of the HomeLinkB® transceiver, see the service information in the vehicle glove box.

Each of the three HomeLinkB® transceiver push buttons controls an independent radio transmitter channel. Each of these three channels can be trained to transmit a different radio frequency signal for the remote operation of garage door openers, motorized gate openers, home or office lighting, security systems or just about any other device that can be equipped with a radio receiver in the 280 to 435 MegaHertz (MHz) frequency range for remote operation. The transceiver is capable of operating systems using either rolling code or non-rolling code technology. The system will not transmit operating signals if the Vehicle Theft Security System is armed.

The HomeLinkB® transceiver cannot be repaired, and is available for service only with the visor assembly. If any part of the component is inoperative or damaged, the complete visor assembly must be replaced. Refer to [VISOR, REMOVAL AND INSTALLATION](#).

For more information on the features, programming procedures and operation of the HomeLinkB® transceiver, see the service information in the vehicle glove box.

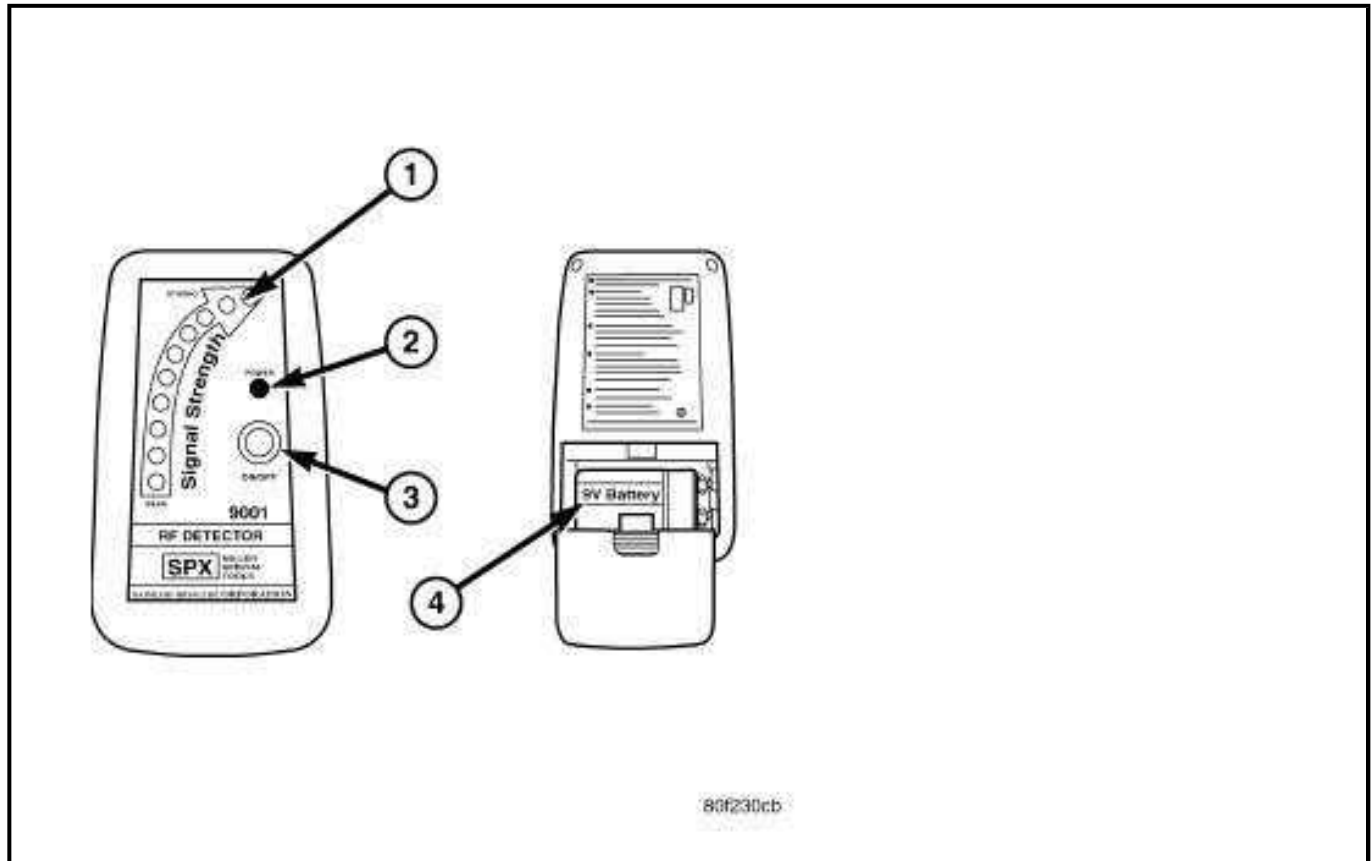
The Body Control Module (BCM) sends an enable signal to the transceiver when the following conditions are met:

- Commanded ignition state is RUN
- Vehicle Theft Alarm (VTA) is disarmed

If either of these conditions are not met, the BCM will send a disable signal to the transceiver.

DIAGNOSIS AND TESTING

DIAGNOSIS AND TESTING - HOMELINKB® TRANSCEIVER



If the HomeLinkB® transceiver is inoperative, retrain the transceiver with a known good transmitter. Refer to **UNIVERSAL TRANSMITTER, STANDARD PROCEDURE**. Test the universal transmitter operation again. If the unit is still inoperative, test the universal transmitter with Radio Frequency Detector special tool as described below:

1. Turn the Radio Frequency (RF) Detector ON (3). A "chirp" will sound and the green power Light Emitting Diode (LED) will light (2). If the green LED does not light, replace the battery (4).
2. Hold the RF detector within one inch of the TRAINED universal transmitter and press any of the transmitters buttons.
3. The red signal detection LEDs (1) will light and the tool will beep if a radio signal is detected. Repeat this test for all three transmitter buttons. If the tool does not detect a radio signal for any of the three buttons, replace the inoperative HomeLinkB® transceiver assembly. The HomeLinkB® transceiver is only available for service with the overhead console. If any part of the component is inoperative or damaged, the complete overhead console assembly must be replaced.

STANDARD PROCEDURE

ERASING HOMELINKB® TRANSCEIVER CODES

NOTE: Individual channels cannot be erased. Erasing the HomeLinkB® transceiver codes will erase ALL programmed codes.

To erase programming from all three buttons (individual buttons cannot be erased but can be reprogrammed), press and hold the two outer HomeLinkB® transceiver buttons until the indicator light begins to flash after about 20 seconds. Release both buttons. Do not hold for longer than 30 seconds. HomeLinkB® is now in the train (or learning) mode and can be programmed at any time beginning with Programming. Refer to **UNIVERSAL TRANSMITTER, STANDARD PROCEDURE.**

PROGRAMMING HOMELINKB® TRANSCIVER CODES

WARNING: Vehicle exhaust contains carbon monoxide, a dangerous gas. Do not run the engine while training the universal transmitter. Failure to follow these instructions may result in possible serious or fatal injury.

WARNING: Your motorized door or gate may open and close while you are training the universal transmitter if the vehicle is in range of the motorized device. Do not train the universal transmitter if people or pets are in the path of the door or gate. A moving door or gate can cause serious injury or death to people and pets or damage to objects.

NOTE: When programming a garage door opener, it is advised to park outside the garage. It is also recommended that a new battery be placed in the hand-held transmitter of the device being programmed to the HomeLinkB® transceiver for quicker training and accurate transmission of the radio-frequency signal.

NOTE: If programming the HomeLinkB® transceiver is unsuccessful using the following procedure, refer to the service information for the current customer assistance phone number.

1. Press and hold the two outer HomeLinkB® transceiver buttons, and release only when the indicator light begins to flash (after 20 seconds). **Do not** hold the buttons for longer than 30 seconds and **do not** repeat step one to program a second and/or third hand-held transmitter to the remaining two HomeLinkB® transceiver buttons.
2. Position the end of your hand-held transmitter 3-8 cm (1-3 inches) away from the HomeLinkB® transceiver buttons while keeping the indicator light in view.
3. Simultaneously press and hold both the HomeLinkB® transceiver button that you want to train and the hand-held transmitter button. **Do not release the buttons until step 4 has been completed.**

NOTE: Some gate openers and garage door openers may require you to replace this Programming Step 3 with procedures noted in the **CANADIAN PROGRAMMING/GATE PROGRAMMING** section.

4. The HomeLinkB® transceiver indicator light will flash slowly and then rapidly after HomeLinkB® successfully receives the frequency signal from the hand-held transmitter. Release both buttons after the indicator light changes from the slow to rapid flash.
5. Press and hold the just trained HomeLinkB® transceiver button and observe the indicator light. If the indicator light **stays on constantly, programming is complete** and your device should activate when the button is pressed and released.

NOTE: To program the remaining two buttons, begin with "Programming" step 2. Do not repeat step 1.

If the indicator light blinks rapidly for two seconds and then turns to a constant light, continue with "Programming" steps 6-8 to complete the

programming of a rolling code equipped device (most commonly a garage door opener).

6. At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit.
7. Firmly press and release the "learn" or "smart" button. (The name and color of the button may vary by manufacturer.)

NOTE: **There are 30 seconds in which to initiate step 8.**

8. Return to the vehicle and firmly **press, hold for two seconds and release** the programmed HomeLinkB® transceiver button. Repeat the "**press/hold/release**" sequence a second time, and, depending on the brand of the garage door opener (or other rolling code equipped device), repeat this sequence a third time to complete the programming.

The HomeLinkB® transceiver should now activate your rolling code equipped device.

NOTE: **To program the remaining two HomeLinkB® transceiver buttons, begin with "Programming" step 2. Do not repeat step 1.**

CANADIAN PROGRAMMING/GATE PROGRAMMING

Canadian radio-frequency laws require transmitter signals to "time-out" (or quit) after several seconds of transmission which may not be long enough for the HomeLinkB® transceiver to pick up the signal during programming. Similar to this Canadian law, some U.S. gate openers are designed to "time-out" in the same manner.

If located in Canada or are having difficulties programming a gate opener by using the "Programming" procedures (regardless of location), **replace "Programming HomeLinkB® Transceiver Codes" step 3** with the following:

NOTE: **When programming a garage door opener or gate opener, it is advised to unplug the device or move the vehicle out of range during the "cycling" process to prevent possible overheating.**

3. Continue to press and hold the HomeLinkB® transceiver button while **pressing and releasing every two seconds** ("cycle") the hand-held transmitter until the frequency signal has successfully been accepted. The indicator light will flash slowly and then rapidly. Proceed with "Programming" step 4 to complete.

REPROGRAMMING HOMELINKB® TRANSCIVER CODES

WARNING: **Vehicle exhaust contains carbon monoxide, a dangerous gas. Do not run the engine while training the universal transmitter. Failure to follow these instructions may result in possible serious or fatal injury.**

WARNING: **Your motorized door or gate may open and close while you are training the HomeLinkB® transceiver if the vehicle is in range of the motorized device. Do not train the HomeLinkB® transceiver if people or pets are in the path of the door or gate. A moving door or gate can cause serious injury or death to people and pets or damage to objects.**

NOTE: **If programing the HomeLinkB® transceiver is unsuccessful using the following procedure, refer to the service information for the current customer assistance phone number.**

REPROGRAMMING COMMON UNIVERSAL TRANSMITTER CODES

To program a device to the HomeLinkB® transceiver using a button previously trained, follow these steps:

1. Press and hold the desired HomeLinkB® transceiver button. **DO NOT** release the button. The indicator light will begin to flash after 20 seconds. Without releasing the HomeLinkB® transceiver button, proceed to step 2.
2. Position the end of the hand-held transmitter 3-8 cm (1-3 inches) away from the HomeLinkB® transceiver button while keeping the indicator light in view.
3. Simultaneously press and hold both the HomeLinkB® transceiver button that are to be trained and the hand-held transmitter buttons. **Do not release the buttons until step 4 has been completed.**

NOTE: Some gate openers and garage door openers may require replacing this Reprogramming Step 3 with procedures noted in the **CANADIAN PROGRAMMING/GATE PROGRAMMING** section.

4. The HomeLinkB® transceiver indicator light will flash slowly and then rapidly after it successfully receives the frequency signal from the hand-held transmitter. Release both buttons after the indicator light changes from the slow to the rapid flash.
5. Press and hold the just trained HomeLinkB® transceiver button and observe the indicator light. If the indicator light **stays on constantly, reprogramming is complete** and the device should activate when the button is pressed and released.

NOTE: If the indicator light blinks rapidly for two seconds and then turns to a constant light, continue with "Reprogramming" steps 6-8 to complete the programming of a rolling code equipped device (most commonly a garage door opener).

6. At the garage door opener receiver (motor-head unit) in the garage, locate the "learn" or "smart" button. This can usually be found where the hanging antenna wire is attached to the motor-head unit.
7. Firmly press and release the "learn" or "smart" button. (The name and color of the button may vary by manufacturer.)

NOTE: There are 30 seconds in which to initiate step 8.

8. Return to the vehicle and firmly **press, hold for two seconds and release** the reprogrammed HomeLinkB® transceiver button. Repeat the "**press/hold/release**" sequence a second time, and, depending on the brand of the garage door opener (or other rolling code equipped device), repeat this sequence a third time to complete the reprogramming.

The HomeLinkB® transceiver should now activate the rolling code equipped device.

CANADIAN PROGRAMMING/GATE PROGRAMMING

Canadian radio-frequency laws require transmitter signals to "time-out" (or quit) after several seconds of transmission which may not be long enough for the HomeLinkB® transceiver to pick up the signal during programming. Similar to this Canadian law, some U.S. gate openers are designed to "time-out" in the same manner.

If located in Canada or are having difficulties programming a gate opener by using the "Programming" procedures (regardless of location), **replace "Reprogramming HomeLinkB® Transceiver Codes" step 3** with the following:

NOTE: When programming a garage door opener or gate opener, it is advised to **unplug the device or move the vehicle out of range during the "cycling" process to prevent possible overheating.**

3. Continue to press and hold the HomeLinkB® transceiver button while **pressing and releasing every two seconds** ("cycle") the hand-held transmitter until the frequency signal has successfully been

accepted. The indicator light will flash slowly and then rapidly. Proceed with "Programming" step 4 to complete.

REMOVAL AND INSTALLATION

REMOVAL AND INSTALLATION

The Universal Transmitter is located in the driver side visor. The Universal Transmitter cannot be adjusted or repaired. If Universal Transmitter becomes inoperative or damaged, the entire driver side visor must be replaced. Refer to **VISOR, REMOVAL AND INSTALLATION** .

REMINDER INDICATOR (RESET PROCEDURES)

Jeep - 1988-22

ENGINE OIL REPLACEMENT REMINDER

NOTE: To determine the appropriate reset procedure, refer to [ENGINE OIL REPLACEMENT REMINDER RESET INDEX](#).

ENGINE OIL REPLACEMENT REMINDER RESET INDEX

Model & Year	Reset Procedure
Cherokee	
2014-22	Engine Oil Replacement Reminder Reset - Procedure 01
Commander	
2008-10	Engine Oil Replacement Reminder Reset - Procedure 01
Compass	
2008-22	Engine Oil Replacement Reminder Reset - Procedure 01
Grand Cherokee	
2008-22	⁽¹⁾ Engine Oil Replacement Reminder Reset - Procedure 01
Wagoneer / Grand Wagoneer	
2022	Engine Oil Replacement Reminder Reset - Procedure 01
Liberty	
2008-12	Engine Oil Replacement Reminder Reset - Procedure 01
Patriot	
2008-17	Engine Oil Replacement Reminder Reset - Procedure 01
Renegade	
2015-22	Engine Oil Replacement Reminder Reset - Procedure 01
Wrangler	
2008-22	Engine Oil Replacement Reminder Reset - Procedure 01
(1) On some models Engine Oil Replacement Reminder Reset - Procedure 02 may also reset the Engine Oil Replacement Reminder.	

ENGINE OIL REPLACEMENT REMINDER RESET - PROCEDURE 01

NOTE: On some models [Procedure 2](#) may also reset the Engine Oil Replacement Reminder.

Manual Reset

NOTE: This procedure applies to all models.

1. Turn ignition ON, with engine OFF.

NOTE: On vehicles with Keyless Enter-N-Go™, push the ENGINE START/STOP button and cycle the ignition to the ON/ RUN position.

2. Fully depress the accelerator pedal, slowly, 3 times within 10 seconds.
3. Turn ignition switch to OFF/LOCK position.

NOTE: On vehicles with Keyless Enter-N-Go™, push the ENGINE START/STOP button once to return the ignition to the OFF/LOCK position.

4. If indicator message illuminates when engine is started, repeat the reset procedure.

Electronic Vehicle Information Center (EVIC) Reset

NOTE: This procedure applies to some models.

1. Without pushing the brake pedal, cycle the ignition to the ON/RUN position (DO NOT start the engine).
2. Push the OK button (on the left side of steering wheel) to enter the EVIC menu screen.
3. Push and release the DOWN arrow button to access the OIL LIFE MENU screen.
4. Push the LEFT or RIGHT arrow button to access the OIL LIFE submenu
5. Push the OK button to reset the "OIL LIFE" to 100%.
6. Push the UP arrow button to exit the EVIC menu screen.

ENGINE OIL REPLACEMENT REMINDER RESET - PROCEDURE 02

NOTE: The manufacturer describes this procedure as a "Secondary Method For Oil Change Reset". This method may not be appropriate for all vehicles.

1. Without pushing the brake pedal, push the engine START/STOP button and cycle the ignition to the ON/RUN position (DO NOT START the engine).
2. Navigate to "Oil Life" submenu in "Vehicle Info" on DID.
3. Push and Hold the OK button until the gauge resets to 100%.

NOTE: If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

EMISSIONS MAINTENANCE REMINDER (EMISS MAINT)

NOTE: To determine the appropriate reset procedure, refer to [EMISSIONS MAINTENANCE REMINDER RESET INDEX](#).

EMISSIONS MAINTENANCE REMINDER RESET INDEX

Model & Year	Reset Procedure
Cherokee	
1988-90	Emissions Maintenance Reminder Reset Procedure
Comanche	
1988-90	Emissions Maintenance Reminder Reset Procedure
Wagoneer	
1988-90	Emissions Maintenance Reminder Reset Procedure
Wrangler	
1988-90	Emissions Maintenance Reminder Reset Procedure

EMISSIONS MAINTENANCE REMINDER RESET PROCEDURE

1. Vehicles are equipped with a EMISS MAINT indicator light on the instrument cluster. This light will come on one time at 82, 500 miles to alert driver that emission service is required. At this time, oxygen sensor and PCV valve must be replaced and all other emission components should be inspected, and serviced or replaced as necessary.
2. The Service Reminder Indicator (SRI) timer is located under dash, near accelerator pedal or to right of steering column. Timer cannot be reset. To turn off light, timer must be replaced or disconnected. Since timer and sensor are interdependent, if timer should fail prematurely, oxygen sensor should be replaced at same time to preserve correct replacement interval.

3. To replace timer on Cherokee, Comanche and Wagoneer models, remove cruise control module (if equipped). Remove timer mounting screws. Disconnect electrical connector. On Wrangler models, remove timer mounting screws. Disconnect electrical connector. To install, reverse removal procedure.

EMISSIONS MAINTENANCE REMINDER (MAINT REQD)

NOTE: To determine the appropriate reset procedure, refer to [EMISSIONS MAINTENANCE REMINDER RESET INDEX](#).

EMISSIONS MAINTENANCE REMINDER RESET INDEX

Model & Year	Reset Procedure
Cherokee	
1991-92	Emissions Maintenance Reminder Reset Procedure
Comanche	
1991-92	Emissions Maintenance Reminder Reset Procedure
Grand Cherokee	
1993	Emissions Maintenance Reminder Reset Procedure
Wrangler	
1991-92	Emissions Maintenance Reminder Reset Procedure

EMISSIONS MAINTENANCE REMINDER RESET PROCEDURE

Vehicles may be equipped with a MAINT REQD on the instrument cluster. This light will come on one time at 82, 500 miles to alert driver that emission service is required. At this time, oxygen sensor must be replaced and all other emission components should be inspected, and serviced or replaced as necessary. Chrysler's Diagnostic Readout Box (DRB-II) tester is required to reset the service reminder indicator system.

Using DRB-II tester, access SELECT SYSTEMS. Select appropriate engine. Select with or without A/C. Select FUEL & IGNITION. Select ADJUSTMENTS. Select RESET SRI LIGHT. Reset SRI light. When DRB-II is finished resetting light, DRB-II display will read SRI LIGHT IS RESET.

FUEL FILTER LIFE REMINDER (DIESEL)

NOTE: To determine the appropriate reset procedure, refer to [FUEL FILTER LIFE REMINDER RESET INDEX](#).

FUEL FILTER LIFE REMINDER RESET INDEX

Model & Year	Reset Procedure
Grand Cherokee	
2015-17	Fuel Filter Life Reminder Reset Procedure

FUEL FILTER LIFE REMINDER RESET PROCEDURE

NOTE: This procedure applies to diesel vehicles.

The cluster will display the "Fuel System Service Required - See Dealer" or "Service Fuel Filter" message when the fuel filter maintenance life is less than 5%. To verify if this is a fuel filter change event, go to the "Fuel Filter Life" screen in the "Vehicle Info" menu. When this message appears, the fuel filters should be replaced.

NOTE: Use the steering wheel display controls for the following procedure.

1. Without pushing the brake pedal, cycle the ignition to the ON/RUN position (do not start the engine).
2. Push and release the DOWN ARROW button to scroll downward through the main menu to VEHICLE INFO.

3. Push and release the RIGHT ARROW button to access the FUEL FILTER LIFE screen.
4. Push and hold the OK button for one second to access the FUEL FILTER LIFE RESET screen.
5. Push and release the DOWN ARROW button to select YES, then push and release the OK button to select reset of FUEL FILTER LIFE.
6. Push and release the UP ARROW button to exit the Instrument Cluster Display screen.

NOTE: If the indicator message illuminates when you start the vehicle, the fuel filter indicator system did not reset. If necessary, repeat this procedure.

MAINTENANCE SERVICE REMINDER

NOTE: To determine the appropriate reset procedure, refer to [MAINTENANCE SERVICE REMINDER RESET INDEX](#).

MAINTENANCE SERVICE REMINDER RESET INDEX

Model & Year	Reset Procedure
Grand Cherokee	
1994-98	Maintenance Service Reminder Reset - Procedure 01
1999-07	Maintenance Service Reminder Reset - Procedure 02
Liberty	
2003-07	Maintenance Service Reminder Reset - Procedure 02

MAINTENANCE SERVICE REMINDER RESET - PROCEDURE 01

This vehicle may be equipped with an optional Vehicle Information Center (VIC). A PERFORM SERVICE message is displayed when "miles/kms to service" is zero, indicating that regular service and maintenance is due. To reset counter, turn ignition on, then press SELECT button momentarily, then press and hold SET button for at least 2 seconds.

MAINTENANCE SERVICE REMINDER RESET - PROCEDURE 02

1. The Electronic Vehicle Information Center (EVIC) displays a PERFORM SERVICE message when distance to service interval has been reached, indicating that regular service and maintenance is due. After performing necessary services, reset service distance by selecting a distance to service interval.
2. To program EVIC, turn ignition switch to ON position. Depress and release MENU push button until SERVICE INTV. = is displayed. Press and release STEP button to step through available options. The last selected distance option displayed becomes the service interval at which the PERFORM SERVICE message will be displayed.
3. If a new distance interval is selected, RESET SERVICE DISTANCE? with a yes or no option. When YES is selected, the accumulated distance since the last previous PERFORM SERVICE message will be reset to zero because the service interval has been changed. When NO is selected, the distance until the next PERFORM SERVICE message is reduced by the accumulated distance since the last previous message.
4. EVIC exits programming mode and returns to its normal operation mode when the C/T button is depressed or when the end of the programmable feature menu list is reached, whichever occurs first.

TIRE PRESSURE MONITOR SYSTEM REMINDER

NOTE: To determine the appropriate reset procedure, refer to [TPMS REMINDER RESET INDEX](#).

TPMS REMINDER RESET INDEX

Model & Year	Reset Procedure
Cherokee	

Model & Year	Reset Procedure
2014-22	<u>TPMS Reminder Reset - Procedure 01</u>
Commander	
2006-10	<u>TPMS Reminder Reset - Procedure 01</u>
Compass	
2007-22	<u>TPMS Reminder Reset - Procedure 01</u>
Grand Cherokee	
2002-04	<u>TPMS Reminder Reset - Procedure 02</u>
2005-22	<u>TPMS Reminder Reset - Procedure 01</u>
Wagoneer / Grand Wagoneer	
2022	<u>TPMS Reminder Reset - Procedure 01</u>
Liberty	
2002-04	<u>TPMS Reminder Reset - Procedure 02</u>
2005-12	<u>TPMS Reminder Reset - Procedure 01</u>
Patriot	
2007-17	<u>TPMS Reminder Reset - Procedure 01</u>
Renegade	
2015-22	<u>TPMS Reminder Reset - Procedure 01</u>
Wrangler	
2007-22	<u>TPMS Reminder Reset - Procedure 01</u>

TPMS REMINDER RESET - PROCEDURE 01

NOTE: There is no formal retraining procedure necessary. Each sensor transmits tire pressure data approximately once every minute. Each sensor's (transmitter) broadcast is uniquely coded so that the WCM can monitor the state of each of the sensors on the 4 rotating road wheels. The WCM automatically learns and stores the sensor's ID while driving after a sensor has been replaced.

Once the vehicle has remained stationary for more than 20 minutes, drive vehicle for a minimum of 10 minutes while maintaining a continuous speed above 15 mph (24 km/h). During this time, the system will learn the new sensor ID.

TPMS REMINDER RESET - PROCEDURE 02

NOTE: Use the following procedure to retrain all 4 road wheel tire pressure sensors. No attempt should be made to retrain individual sensors.

1. Retrieve Relearn Magnet (8821).
2. Press MENU Button on EVIC until "RETRAIN TIRE SENSORS - NO" is displayed.
3. Press STEP button to select "YES".

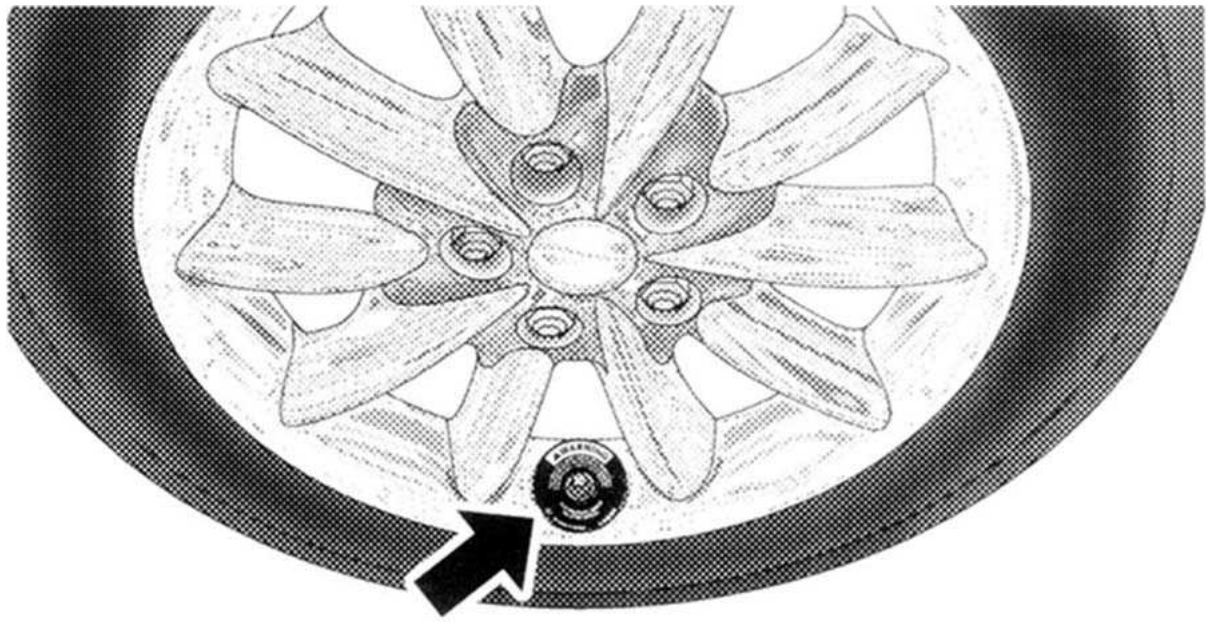
NOTE: There is a 60-second timer for training the first sensor, and a 30-second timer between training the remaining sensors. If either of these timers expire, the EVIC will abort the training procedure.

NOTE: If at any time the EVIC display reads "TRAINING ABORTED", move the vehicle ahead at least one foot and repeat the entire retraining procedure.

4. Press MENU button to start retraining. Display will read "TRAIN LEFT FRONT TIRE". The order for retraining all 5 sensors is: Left Front, Right Front, Right Rear, Left Rear, Spare (if so equipped).
5. Starting at left front tire, place relearn magnet over valve stem. See [Fig. 1](#). Within approximately 5 seconds, vehicle horn will chirp indicating training complete at that particular sensor. Remove the

magnet.

6. Repeat this step on remaining sensors as indicated by EVIC until all TPM sensors positions are trained.
7. Once EVIC displays "TRAINING COMPLETE", pressing either STEP, C/T, RESET or MENU button will exit training routine.



Relearn Magnet

G00170162

Fig. 1: Placing Training Magnet Around Valve Stem
Courtesy of DAIMLERCHRYSLER CORPORATION

GENERAL INFORMATION

State Emission Standards - Gasoline

ALASKA

NOTE: Because of frequent revisions in state emission standards, the emission standards listed in this article should only be used as a guide.

NOTE: As of March 1, 2012, Alaska is not testing for tailpipe emissions.

ALASKA EMISSION STANDARDS - ANCHORAGE & FAIRBANKS (2-SPEED IDLE TEST)

Application	Idle HC ppm (CO %)	2500 RPM HC ppm (CO %)
Passenger Cars ⁽¹⁾		
1968-71	1000 (5.0)	1000 (4.0)
1972-74	1000 (4.0)	1000 (3.0)
1975-80	1000 (2.0)	1000 (2.0)
1981-83	1000 (1.0)	1000 (1.0)
1984-93	750 (1.0)	750 (1.0)
1994-	200 (0.5)	200 (0.5)
Light & Medium Duty Trucks ⁽¹⁾		
1968-72	1000 (5.0)	1000 (4.0)
1973-78	1000 (4.0)	1000 (3.0)
1979-83	1000 (2.0)	1000 (2.0)
1984-93	750 (1.0)	750 (1.0)
1994-	220 (0.5)	220 (0.5)
Heavy Duty Vehicles ⁽²⁾		
1968-73	1000 (5.0)	1000 (5.0)
1974-93	1000 (4.0)	1000 (4.0)
1994-	220 (1.0)	220 (1.0)
(1) 8500 GVWR or less. (2) 8500 GVWR or more.		

ARIZONA

NOTE: Curb idle only test are for vehicles with full-time 4WD, non-defeatable traction control and motorcycles. Curb idle and loaded cruise tests are performed on 1967-80 light-duty gasoline powered vehicles and all heavy-duty gasoline powered vehicles.

ARIZONA EMISSION STANDARDS - PHOENIX AREA (CURB IDLE & LOADED CRUISE TESTS)

Application ⁽¹⁾	Idle HC ppm (CO %)	⁽²⁾ Loaded/Cruise HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)		
1967-71 4-Cyl. Or Less	500 (5.50)	500 (4.20)
1967-71 More Than 4-Cyl.	450 (5.00)	450 (3.75)
1972-74 4-Cyl. Or Less	400 (5.50)	400 (4.20)
1972-74 More Than 4-Cyl.	400 (5.00)	400 (3.75)
1975-78 4-Cyl. Or Less	250 (2.20)	250 (1.65)

Application ⁽¹⁾	Idle HC ppm (CO %)	⁽²⁾ Loaded/Cruise HC ppm (CO %)
1975-78 More Than 4-Cyl.	250 (2.00)	250 (1.50)
Light Duty Vehicles (8500 GVWR Or Less)		
1979 4-Cyl. Or Less	220 (2.20)	220 (1.65)
1979 More Than 4-Cyl.	220 (2.20)	220 (1.50)
1980	220 (1.20)	220 (1.20)
1981 & Newer	220 (1.20)	.....
Light Duty Trucks (6000 GVWR Or Less)		
1967-80	⁽³⁾	⁽³⁾
Light Duty Trucks (6001-8500 GVWR)		
1967-74	⁽³⁾	⁽³⁾
1975-78	350 (4.00)	350 (3.00)
1979 4-Cyl. Or Less	220 (2.20)	220 (1.65)
1979 More Than 4-Cyl.	220 (2.00)	220 (1.50)
1980	220 (1.20)	220 (1.20)
1981 & Newer	220 (1.20)	.....
Heavy Duty Trucks (Greater Than 8500 GVWR)		
1967-74	⁽³⁾	⁽³⁾
1975-78	350 (4.00)	350 (3.00)
1979 & Newer	300 (4.00)	300 (3.00)
Motorcycles		
1967 & Newer	1800 (5.50)	.....
(1) 4-stroke engines only.		
(2) Except AWD, non-defeatable traction control and motorcycles.		
(3) Same as light duty vehicles.		

ARIZONA EMISSION STANDARDS - PHOENIX AREA (IM147 TEST)

Application	HC gpm (CO gpm)	NOx gpm
Light Duty Vehicles		
1981-82	3.0 (25.0)	3.5
1983-85	2.4 (20.0)	3.5
1986-89	1.6 (15.0)	2.5
1990-93	1.0 (12.0)	2.5
1994 & Newer	0.8 (12.0)	2.0
Light Trucks (6000 GVWR Or Less)		
1981-85	4.0 (40.0)	5.5
1986-89	3.0 (25.0)	4.5
1990-93	2.0 (20.0)	4.0
1994 & Newer	1.6 (20.0)	3.0
Light Duty Trucks (6000-8500 GVWR)		
1981-85	4.4 (48.0)	7.0
1986-87	4.0 (40.0)	5.5
1988-89	3.0 (25.0)	5.5
1990-93	3.0 (25.0)	5.0
1994 & Newer	2.4 (25.0)	4.0

NOTE: Curb idle test only for 1967-80 light-duty gasoline vehicles, all vehicles with full-time 4WD and/or non-defeatable traction control and motorcycles. Curb idle

and loaded cruise tests are performed on all 1981 and later vehicles except those with full-time 4WD and/or non-defeatable traction control.

ARIZONA EMISSION STANDARDS - TUCSON AREA (CURB IDLE & LOADED CRUISE TESTS)

Application ⁽¹⁾	Idle HC ppm (CO %)	⁽²⁾ Loaded/Cruise HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)		
1967-71 4-Cyl. Or Less	500 (5.50)	.....
1967-71 More Than 4-Cyl.	450 (5.00)	.....
1972-74 4-Cyl. Or Less	400 (5.50)	.....
1972-74 More Than 4-Cyl.	400 (5.00)	.....
1975-78 4-Cyl. Or Less	250 (2.20)	.....
1975-78 More Than 4-Cyl.	250 (2.00)	.....
Light Duty Vehicles (8500 GVWR Or Less)		
1979 4-Cyl. Or Less	220 (2.20)	.....
1979 More Than 4-Cyl.	220 (2.20)	.....
1980	220 (1.20)	.....
1981 & Newer	220 (1.20)	220 (1.20)
Light Duty Trucks (6000 GVWR Or Less)		
1967-80	⁽³⁾	⁽³⁾
Light Duty Trucks (6001-8500 GVWR)		
1967-74	⁽³⁾	⁽³⁾
1975-78	350 (4.00)	.....
1979 4-Cyl. Or Less	220 (2.20)	.....
1979 More Than 4-Cyl.	220 (2.00)	.....
1980	220 (1.20)	.....
1981 & Newer	220 (1.20)	220 (1.20)
Heavy Duty Trucks (Greater Than 8500 GVWR)		
1967-74	⁽³⁾	⁽³⁾
1975-78	350 (4.00)	.....
1979-80	300 (4.00)	.....
1981 & Newer	300 (4.00)	300 (3.00)
Motorcycles		
1967 & Newer	1800 (5.50)	.....
(1) 4-stroke engines only.		
(2) Except AWD, non-defeatable traction control and motorcycles.		
(3) Same as light duty vehicles.		

CALIFORNIA

CALIFORNIA EMISSION STANDARDS ASM TESTS

Specific vehicle cutpoints are available on the California BAR web site at www.bar.ca.gov under the Industry tab, then Cutpoints Application.

ESC	MODEL YEAR GROUP	VEHICLE TYPE (by GVWR and LVW)					PASS/FAIL EMISSION STANDARD						GROSS POLLUTER STANDARD					
		PC	LDT1	LDT2	MDV		ASM 5015			ASM 2525			ASM 5015			ASM 2525		
							HC	CO	NO	HC	CO	NO	HC	CO	NO	HC	CO	NO
1	1974-		X	X	X		A 235.4	2.56	1301.5	185.4	2.36	1161.5	A 435.4	4.26	2659.3	A 385.4	4.06	2459.3
						B	436041.7	4453.19	1192593.0	436041.7	4453.19	1192593.0	436041.7	4453.19	1703703.7	436041.7	4453.19	1703703.7
2	1975-1980	X					A 123.0	0.91	1016.3	90.3	0.71	876.3	A 315.3	2.51	2051.9	A 265.3	2.31	1851.9
						B	273316.7	1362.96	1043519.0	273316.7	1362.96	1043519.0	273316.7	1362.96	1490740.7	273316.7	1362.96	1490740.7
3	1981-1983	X					A 63.2	0.64	850.0	42.1	0.44	680.0	A 253.1	2.14	1844.4	A 192.4	1.94	1644.4
						B	234259.3	1064.81	894444.5	212963.0	1064.81	894444.5	234259.3	1064.81	1277777.8	212963.0	1064.81	1277777.8
4	1984-1986	X					A 67.0	0.52	850.0	42.1	0.32	680.0	A 242.4	2.02	1744.4	A 192.4	1.82	1544.4
						B	212963.0	979.63	894444.5	212963.0	979.63	894444.5	212963.0	979.63	1277777.8	212963.0	979.63	1277777.8
5	1987-1992	X					A 57.0	0.48	608.0	31.7	0.32	547.0	A 231.7	1.98	1729.6	A 181.7	1.82	1529.6
						B	191666.7	851.85	596296.3	191666.7	851.85	596296.3	191666.7	851.85	851851.9	191666.7	851.85	851851.9
6	1993-1995	X					A 59.0	0.29	617.1	24.3	0.23	547.0	A 234.3	1.79	1759.3	A 184.3	1.73	1559.3
						B	89951.3	724.07	271314.8	89951.3	724.07	271314.8	89951.3	724.07	553703.7	89951.3	724.07	553703.7
7	1996-2000	X					A 16.8	0.29	260.0	0.5	0.23	547.0	A 234.3	1.79	1759.3	A 184.3	1.73	1559.3
						B	128501.9	724.07	596296.3	128501.9	724.07	596296.3	128501.9	724.07	553703.7	128501.9	724.07	553703.7
8	2001-2003	X					A 16.8	0.29	260.0	0.5	0.23	547.0	A 234.3	1.79	1759.3	A 184.3	1.73	1559.3
						B	128501.9	724.07	596296.3	128501.9	724.07	596296.3	128501.9	724.07	553703.7	128501.9	724.07	553703.7
9	2004+	X					A 16.8	0.29	260.0	0.5	0.23	547.0	A 234.3	1.79	1759.3	A 184.3	1.73	1559.3
						B	128501.9	724.07	596296.3	128501.9	724.07	596296.3	128501.9	724.07	553703.7	128501.9	724.07	553703.7
10	1975-1978		X				A 139.4	1.08	1320.9	105.0	0.88	1180.9	A 330.0	2.58	2487.0	A 280.0	2.38	2287.0
						B	225000.0	2025.00	745370.4	225000.0	2025.00	745370.4	225000.0	2025.00	1064814.8	225000.0	2025.00	1064814.8
11	1979-1983		X				A 139.4	0.88	1315.7	80.0	0.68	1175.7	A 320.0	2.38	2479.6	A 255.0	2.18	2279.6
						B	225000.0	2025.00	596296.3	150000.0	2025.00	596296.3	225000.0	2025.00	851851.9	150000.0	2025.00	851851.9
12	1984-1987		X				A 91.3	0.41	945.0	63.1	0.50	840.0	A 280.0	1.71	1850.0	A 230.0	1.80	1700.0
						B	150000.0	1725.00	525000.0	150000.0	2250.00	1050000.0	150000.0	1725.00	750000.0	150000.0	2250.00	1050000.0
13	1988-1992		X				A 83.0	0.27	875.0	63.1	0.43	735.0	A 270.0	1.57	1600.0	A 220.0	1.73	1400.0
						B	150000.0	1725.00	525000.0	150000.0	1875.00	525000.0	150000.0	1725.00	750000.0	150000.0	1875.00	750000.0
14	1993-1995		X				A 68.3	0.30	377.0	33.3	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	78750.0	1350.00	525000.0	78750.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
15	1996-2000		X				A 22.1	0.30	377.0	5.8	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	112500.0	1350.00	525000.0	112500.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
16	2001-2003		X				A 22.1	0.30	377.0	5.8	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	112500.0	1350.00	525000.0	112500.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
17	2004+		X				A 22.1	0.30	377.0	5.8	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	112500.0	1350.00	525000.0	112500.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
18	1975-1978			X			A 139.4	1.08	1320.9	105.0	0.88	1180.9	A 330.0	2.58	2487.0	A 280.0	2.38	2287.0
						B	225000.0	2025.00	745370.4	225000.0	2025.00	745370.4	225000.0	2025.00	1064814.8	225000.0	2025.00	1064814.8
19	1979-1983			X			A 139.4	0.88	1315.7	80.0	0.68	1175.7	A 320.0	2.38	2479.6	A 255.0	2.18	2279.6
						B	225000.0	2025.00	596296.3	150000.0	2025.00	596296.3	225000.0	2025.00	851851.9	150000.0	2025.00	851851.9
20	1984-1987			X			A 91.3	0.41	945.0	63.1	0.50	840.0	A 280.0	1.71	1850.0	A 230.0	1.80	1700.0
						B	150000.0	1725.00	525000.0	150000.0	2250.00	1050000.0	150000.0	1725.00	750000.0	150000.0	2250.00	1050000.0
21	1988-1992			X			A 83.0	0.27	875.0	63.1	0.43	735.0	A 270.0	1.57	1600.0	A 220.0	1.73	1400.0
						B	150000.0	1725.00	525000.0	150000.0	1875.00	525000.0	150000.0	1725.00	750000.0	150000.0	1875.00	750000.0
22	1993-1995			X			A 68.3	0.30	377.0	33.3	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	78750.0	1350.00	525000.0	78750.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
23	1996-2000			X			A 22.1	0.30	377.0	5.8	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	112500.0	1350.00	525000.0	112500.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
24	2001-2003			X			A 22.1	0.30	377.0	5.8	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	112500.0	1350.00	525000.0	112500.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
25	2004+			X			A 22.1	0.30	377.0	5.8	0.40	630.0	A 247.5	1.60	1350.0	A 197.5	1.70	1400.0
						B	112500.0	1350.00	525000.0	112500.0	1500.00	525000.0	112500.0	1350.00	750000.0	112500.0	1500.00	750000.0
26	1978-				X		A 173.3	2.90	1703.3	123.3	2.70	1563.3	A 423.3	5.40	3233.3	A 373.3	5.20	3033.3
						B	583333.3	3500.00	1633333.3	583333.3	3500.00	1633333.3	583333.3	3500.00	5833333.3	583333.3	3500.00	2333333.3
27	1979-1983				X		A 139.4	0.88	1315.7	80.0	0.68	1175.7	A 320.0	2.38	2479.6	A 255.0	2.18	2279.6
						B	225000.0	2025.00	596296.3	150000.0	2025.00	596296.3	225000.0	2025.00	851851.9	150000.0	2025.00	851851.9
28	1984-1987				X		A 91.3	0.41	945.0	63.1	0.50	840.0	A 280.0	1.71	1850.0	A 230.0	1.80	1700.0
						B	150000.0	1725.00	525000.0	150000.0	2250.00	1050000.0	150000.0	1725.00	750000.0	150000.0	2250.00	1050000.0
29	1988-1992				X		A 83.0	0.27	875.0	63.1	0.43	735.0	A 270.0	1.57	1600.0	A 220.0	1.73	1400.0
						B	150000.0	1725.00	525000.0	150000.0	1875.00	525000.0	150000.0	1725.00	750000.0	150000.0	1875.00	750000.0
30	1993-1995				X		A 83.0	0.30	875.0	60.0	0.70	735.0	A 300.0	1.60	1750.0	A 250.0	2.00	1550.0
						B	150000.0	1350.00	525000.0	150000.0	1500.00	525000.0	150000.0	1350.00	750000.0	150000.0	1500.00	750000.0
31	1996-2000				X		A 71.2	0.30	875.0	60.0	0.70	735.0	A 300.0	1.60	1750.0	A 250.0	2.00	1550.0
						B	150000.0	1350.00	525000.0	150000.0	1500.00	525000.0	150000.0	1350.00	750000.0	150000.0	1500.00	750000.0
32	2001-2003				X		A 71.2	0.30	875.0	60.0	0.70	735.0	A 300.0	1.60	1750.0	A 250.0	2.00	1550.0
						B	150000.0	1350.00	525000.0	150000.0	1500.00	525000.0	150000.0	1350.00	750000.0	150000.0	1500.00	750000.0
33	2004+				X		A 71.2	0.30	875.0	60.0	0.70	735.0	A 300.0	1.60	1750.0	A 250.0	2.00	1550.0
						B	150000.0	1350.00	525000.0	150000.0	1500.00	525000.0	150000.0	1350.00	750000.0	150000.0	1500.00	750000.0

Fig. 1: California Emission Standards - Enhanced & Partially Enhanced Program Areas - Light & Medium Duty Vehicles (ASM Test)

ESC	MODEL YEAR GROUP
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MDV - Medium-Duty Vehicle, GVWR from 6001 to 8500 lbs.

HC - Hydrocarbon, ppm

CO - Carbon Monoxide, %

NO - Nitric Oxide, ppm

PASS/FAIL EMISSION STANDARDS = A+B / VTW

PASS/FAIL STANDARDS - Emission standards used to determine if a vehicle passes the emission inspection. A vehicle passes if the emission levels are equal to or less than the standards for HC, CO and NO for ASM 5015 and ASM 2525.

GROSS POLLUTER STANDARDS - Emission standards used to designate a vehicle as a gross polluter. A vehicle is designated as a gross polluter if the emission levels at the time of the initial inspection, before repairs are greater than the gross polluter standards for HC, CO or NO for ASM 5015 or ASM 2525.

NOTE: If test data on emission pass/fail rates or gross polluter identification rates indicate adjustments are required, the emission standards may be increased or decreased by the bureau by 30% or by the following tolerances, or standards may be set for any specific vehicle and engine configuration which the bureau determines has excessive errors of commission or omission, whichever is necessary to comply with Section 44001.5 of the Health and Safety Code.

COLORADO

COLORADO EMISSION STANDARDS - ENHANCED PROGRAM (IM240)

Application	HC gpm	CO gpm	NOx gpm
Passenger Cars			
1982	3.5	45	5.0
1983	3.5	30	4.5
1984	3.0	30	4.5
1985	2.5	20	4.5
1986	2.5	20	4.5
1987	2.5	20	4.0
1988 & 1989	2.0	20	4.0
1990	2.0	20	3.5
1991	1.5	20	3.5
1992	1.5	15	3.5
1993	1.5	15	3.5
1994	1.2	15	3.0
1995	1.2	15	2.5
1996	1.2	15	2.0
1997	1.2	15	2.0
1998 & Newer	1.2	15	1.5
Light Duty Vehicles			
1982	6.0	65	6.0
1983	6.0	65	6.0
1984	5.0	55	6.0
1985	4.5	45	6.0
1986	4.0	40	6.0
1987	3.5	30	5.5
1988 & 1989	3.0	25	5.0
1990	3.0	25	5.0

Application	HC gpm	CO gpm	NOx gpm
1991	2.5	25	4.5
1992	2.5	25	4.5
1993	2.5	25	4.5
1994	2.0	20	4.0
1995	2.0	20	4.0
1996	1.2	15	3.5
1997	1.2	15	3.0
1998	1.2	15	2.0
1999 & Newer	1.2	15	2.0

COLORADO EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm	CO %
Passenger Cars & Light Duty Trucks		
1970 & Earlier	1000	3.5
1971	1000	3.0
1972	1000	3.0
1973	1000	3.0
1974	1000	3.0
1975	600	2.0
1976	600	2.0
1977	400	1.5
1978	400	1.5
1979	400	1.5
1980	400	1.5
1981 & Newer	220	1.2
Heavy Duty Trucks (6000 GVWR Or Greater)		
1967 Or Earlier	1500	7.0
1968-69	1200	6.5
1969	1200	6.5
1970	1000	5.5
1971	1000	5.5
1972	1000	5.5
1973	1000	5.5
1974	1000	5.5
1975	1000	5.5
1976	1000	5.5
1977	1000	5.5
1978	1000	5.5
Heavy Duty Trucks (8501 GVWR Or Greater)		
1979	800	4.0
1980	800	3.5
1981	600	3.0
1982	600	3.0
1983	600	3.0
1984	600	3.0
1985	600	3.0
1986 & Newer	300	2.0

CONNECTICUT

CONNECTICUT EMISSION STANDARDS - IDLE TEST

Application	HC ppm (CO)
10,000 GVWR Or Less	
1979	250 (2.1)
1980	225 (2.0)
1981-82	200 (1.2)
1983	175 (1.0)
1984-87	150 (1.0)
1988 & Newer	125 (1.0)

DELAWARE**DELAWARE EMISSION STANDARDS - KENT, NEW CASTLE & SUSSEX COUNTIES (IDLE TEST)**

Application	HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)	
1968-70	900 (9.0)
1971-74	600 (6.0)
1975-79	400 (4.0)
1980	220 (2.0)
1981 & Newer	220 (1.2)
Light Duty Trucks (6001-8500 GVWR)	
1970-72	900 (9.0)
1973-78	600 (6.0)
1979-83	400 (4.0)
1984 & Newer	220 (1.2)

DISTRICT OF COLUMBIA**DISTRICT OF COLUMBIA EMISSION STANDARDS - IDLE TEST**

Application	HC ppm (CO %)
Light Duty Vehicles & Trucks (26000 GVWR Or Less)	
1968-70	1250 (11.0)
1971-74	1200 (9.0)
1975-79	600 (6.5)
1980	300 (1.5)
1981 & Newer	220 (1.2)

GEORGIA

NOTE: The Georgia program incorporates original U.S. EPA recommended start-up ASM2525 and ASM5015 standards for 1995 and older model year vehicles. Refer to appropriate model year range in appropriate table. See [U. S. EPA ASM2525 & ASM5015 START-UP EMISSION STANDARDS](#).

GEORGIA EMISSION STANDARDS - 2-SPEED IDLE TEST

Application ⁽¹⁾	HC ppm (CO %)
1979	500 (5.0)
1980	350 (3.5)
1981-83	250 (1.5)
1984 & Newer	220 (1.2)

Application ⁽¹⁾	HC ppm (CO %)
(1) 8500 GVWR or less.	

IDAHO

IDAHO EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles	
8500 GVWR Or Less	
1965-74	900 (5.0)
1975-79	700 (3.0)
1980	400 (1.5)
1981 & Newer	220 (1.2)
Heavy Duty Trucks	
8501 GVWR Or More	
1965-74	900 (6.0)
1975-80	700 (5.0)
1981 & Newer	500 (3.0)

ILLINOIS

ILLINOIS EMISSION STANDARDS - IM240 TEST

Application	HC gpm	CO gpm
Light Duty Vehicles (6000 GVWR Or Less)		
1981-82	2.00	60.0
1983-87	2.00	30.0
1988-95	0.80	15.0
1996 & Newer	0.60	10.0
Light Duty Trucks (6000 GVWR Or Less)		
1981-83	7.50	100.0
1984-87	3.20	80.0
1988-95	1.60	40.0
1996 & Newer (3750 LVW Or More) ⁽¹⁾	0.80	13.0
1996 & Newer (3750 LVW Or Less) ⁽¹⁾	0.60	10.0
Light Duty Trucks (6001-6500 GVWR)		
1981-83	7.50	100.0
1984-87	3.20	80.0
1988-95	1.60	40.0
1996 & Newer (5750 ALVW Or More)	0.80	15.0
1996 & Newer (5750 ALVW Or Less)	0.80	13.0
(1) Loaded Vehicle Weight (LVW) is vehicle curb weight plus 300 lbs.		

ILLINOIS EMISSION STANDARDS - IDLE TEST

Application	HC ppm (CO %)
Passenger Vehicles (6000 GVWR Or Less)	
1968-71	900 (9.0)
1972-74	800 (8.0)
1975-77	700 (7.0)
1978-79	600 (6.0)

Application	HC ppm (CO %)
1980	300 (3.0)
1981 & Newer	220 (1.2)
Light Duty Vehicles (8000 GVWR Or Less)	
1968-71	900 (9.0)
1972-74	800 (8.0)
1975-78	700 (7.0)
1979-80	600 (6.0)
1981-83	300 (3.0)
1984 & Newer	220 (1.2)
Heavy Duty Vehicles (8001 GVWR Or More)	
1968-71	1500 (9.5)
1972-78	900 (9.0)
1979-84	700 (7.0)
1985 & Newer	300 (3.0)

INDIANA

INDIANA EMISSION STANDARDS - IM93 TEST

Application	HC gpm (CO gpm)	NOx (gpm)
Passenger Cars		
1981-82	2.0 (60)	3.0
1983-86	2.0 (30)	3.0
1987-90	1.4 (20)	3.0
1991-95	0.8 (15)	2.5
1996 & Newer	0.6 (10)	2.5
Light Duty Trucks (6000 GVWR Or Less)		
1981-83	5.0 (80)	7.0
1984-86	3.2 (70)	7.0
1987-90	2.2 (55)	3.5
1991-95	1.6 (40)	3.0
1996 & Newer	0.8 (20)	3.0
Light Duty Trucks (6001-8500 GVWR)		
1981-83	5.0 (80)	7.0
1984-86	3.2 (70)	7.0
1987-90	2.2 (55)	5.0
1991-96	1.6 (40)	4.5
1997 & Newer	0.8 (20)	4.5
Heavy Duty Trucks (8501-9000 GVWR)		
1981-82	7.5 (100)	8.0
1983-84	6.0 (100)	8.0
1985-86	5.0 (75)	8.0
1987-90	3.0 (60)	8.0
1991-97	2.4 (40)	8.0
1998 & Newer	2.0 (30)	6.0

INDIANA EMISSION STANDARDS - IDLE TEST

Application	HC ppm (CO %)
Passenger Cars	
1976-79	350 (3.5)

Application	HC ppm (CO %)
1980	250 (2.0)
1981 & Newer	220 (1.2)
Light Duty Trucks (6000 GVWR Or Less)	
1976-78	500 (5.0)
1979-83	350 (3.5)
1984 & Newer	220 (1.2)
Medium Duty Trucks (6001-8500 GVWR)	
1976-78	500 (5.0)
1979-83	350 (3.5)
1984 & Newer	220 (1.2)

KENTUCKY

NOTE: Currently, there is no emission testing in Kentucky.

KENTUCKY EMISSION STANDARDS - BOONE, CAMPBELL & KENTON COUNTIES (IDLE TEST)

Application	HC ppm (CO)
Passenger Cars (Automobiles)	
1968	950 (8.5)
1969	900 (8.5)
1970	850 (8.1)
1972	800 (8.0)
1973	800 (7.8)
1974	800 (7.6)
1975	700 (7.5)
1976	700 (6.5)
1977	650 (6.3)
1978	600 (5.5)
1979	600 (4.5)
1980	250 (2.5)
1981 & Newer	220 (1.2)
Light Duty Trucks (6000 GVWR Or Less)	
1968	1300 (8.0)
1969	1200 (8.0)
1970-71	1100 (8.0)
1972-73	1000 (7.8)
1974	950 (7.8)
1975	900 (7.0)
1976-77	700 (7.0)
1978	700 (6.3)
1979	450 (5.5)
1980	450 (4.0)
1981	350 (1.7)
1982 & Newer	220 (1.2)
Light Duty Trucks (6001-10,000 GVWR)	
1969	1500 (9.0)
1970	1100 (8.0)
1971	1000 (8.0)

Application	HC ppm (CO)
1972-75	950 (7.5)
1976	900 (7.5)
1977	850 (7.5)
1978	700 (6.0)
1979	650 (5.5)
1980	550 (5.0)
1981	450 (4.0)
1982	400 (2.5)
1983	350 (2.0)
1984	220 (1.5)
1985 & Newer	220 (1.2)
Heavy Duty Trucks (10,001-18,000 GVWR)	
1968	1500 (9.0)
1969-70	1300 (8.5)
1971	1200 (8.5)
1972-76	1000 (7.0)
1977-80	900 (6.5)
1982-83	400 (3.0)
1984 & Newer	250 (1.5)

MARYLAND

MARYLAND EMISSION STANDARDS - IM240 TEST

Application	HC gpm (CO gpm)	NOx gpm
Light Duty Vehicles (6000 GVWR Or Less)		
1984-87	1.80 (30.0)	2.8
1988-90	1.40 (30.0)	2.5
1991-93	1.00 (20.0)	2.2
1994-95	0.90 (20.0)	2.1
Light Duty Trucks (6000 GVWR Or Less)		
1984-87	2.80 (80.0)	5.8
1988-90	2.40 (80.0)	3.0
1991-93	2.00 (60.0)	2.7
1994-95	1.80 (60.0)	2.6
Light Duty Trucks (6001-8500 GVWR)		
1984-87	2.90 (80.0)	6.6
1988-90	2.40 (80.0)	4.2
1991-93	2.00 (60.0)	4.0
1994-95	1.80 (60.0)	3.7
Heavy Duty Trucks (8501-9999 GVWR)		
1984	5.80 (100.0)	7.7
1985-86	4.70 (80.0)	7.7
1987	3.00 (80.0)	7.7
1988-90	2.60 (80.0)	7.0
1991-97	2.50 (60.0)	5.5
1998 & Newer	2.20 (60.0)	4.0

MARYLAND EMISSION STANDARDS - IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)	
1977	500 (6.0)
1978	430 (5.5)
1979	400 (4.0)
1980	220 (1.7)
1981 & Newer	220 (1.2)
Light Duty Trucks (6001-9999 GVWR)	
1977	580 (7.0)
1978	550 (6.7)
1979	470 (5.0)
1980	350 (5.0)
1981	250 (3.0)
1982	220 (2.5)
1983	220 (1.5)
1984 & Newer	220 (1.2)
Heavy Duty Trucks (10,000-26,000 GVWR)	
1977-78	650 (7.0)
1979	650 (6.5)
1980-82	500 (6.0)
1983	500 (3.5)
1984-85	440 (3.0)
1986	280 (2.5)
1987 & Newer	220 (1.2)

MASSACHUSETTS**MASSACHUSETTS EMISSION STANDARDS - MA31 TEST**

Application	HC gpm (CO gpm)	NOx gpm
Passenger Cars		
1984-90	2.0 (30)	3.0
1991-95	1.2 (20)	2.5
1996 & Newer	0.8 (13)	2.0
Light Duty Trucks (6000 GVWR Or Less)		
1984-87	3.2 (80)	7.0
1988-1990	3.2 (80)	3.5
1991-95	2.4 (60)	3.0
1996 & Newer (3750 LVW <u>(1)</u> Or Less)	0.8 (15)	2.0
1996 & Newer (3751 LVW <u>(1)</u> Or Greater)	1.0 (20)	2.5
Light Duty Trucks (6001-8500 GVWR)		
1984-87	3.2 (80)	7.0
1988-90	3.2 (80)	5.0
1991-95	2.4 (60)	4.5
1996 & Newer (5750 ALVW <u>(2)</u> Or Less)	1.0 (20)	2.5
1996 & Newer (5751 ALVW <u>(2)</u> Or Greater)	2.4 (60)	4.0
Heavy Duty Trucks (8501-10,000 Or Greater)		
1984-87	3.2 (80)	7.0
1988-90	3.2 (80)	5.0

Application	HC gpm (CO gpm)	NOx gpm
1991-95	2.4 (60)	4.5
1996 & Newer	2.4 (60)	4.0
(1) Loaded Vehicle Weight (LVW).		
(2) Adjusted Loaded Vehicle Weight (ALVW).		

MASSACHUSETTS EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
All Vehicles	
1984-86	220 (0.80)
1987 & Newer	100 (0.60)

MISSOURI

MISSOURI EMISSION STANDARDS - JEFFERSON, ST. CHARLES & ST. LOUIS COUNTIES - IM240 TEST

Application	HC gpm (CO gpm)	NOx gpm
Light Duty Vehicles (6000 GVWR Or Less)		
1981-82	0.80 (30.0)	2.0
1983-95	0.80 (15.0)	2.0
1996 & Newer	0.60 (10.0)	1.5
Light Duty Trucks (6000 GVWR Or Less)		
1981-83	3.40 (70.0)	4.5
1984-87	1.60 (40.0)	4.5
1988-95	1.60 (40.0)	2.5
1996 & Newer (Less Than 3750 LVW)	0.80 (13.0)	1.8
1996 & Newer (3750 LVW Or Less)	0.60 (10.0)	1.5
Light Duty Trucks (6001-8500 GVWR)		
1981-83	3.4 (70.0)	4.5
1984-87	1.6 (40.0)	4.5
1988-95	1.60 (40.0)	3.5
1996 & Newer (5750 ALVW Or Less)	0.80 (13.0)	1.8
1996 & Newer (5750 ALVW Or More)	0.80 (15.0)	2.0

MISSOURI EMISSION STANDARDS - FRANKLIN, JEFFERSON, ST. CHARLES & ST. LOUIS COUNTIES - IDLE TEST

Application ⁽¹⁾	HC ppm (CO %)
1971-74	700 (7.0)
1975-79	600 (6.0)
1980	300 (3.0)
1981 & Newer	220 (1.2)
(1) 8500 GVWR or less.	

MISSOURI EMISSION STANDARDS - FRANKLIN, JEFFERSON, ST. CHARLES & ST. LOUIS COUNTIES - REMOTE SENSING CLEAN SCREEN TEST

Application ⁽¹⁾	HC ppm (CO %)	NOx ppm
All Vehicles (8500 GVWR Or Less)		
1971 & Newer	200 (0.5)	2000
(1) 8500 GVWR or less.		

NEVADA

NEVADA EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (8500 GVWR Or Less)	
1968-69	800 (4.0)
1970-74	700 (3.5)
1975-78	500 (2.5)
1979-80	500 (2.0)
1981 & Newer	220 (1.2)
Heavy Duty Vehicles (8501 GVWR Or More)	
1968-69	1400 (7.0)
1970-78	1400 (6.0)
1979	1000 (5.0)
1980	1000 (4.0)
1981 & Newer	1000 (3.5)

NEW JERSEY

NOTE: The New Jersey program incorporates original U.S. EPA recommended start-up ASM5015 standards for 1981 and newer model year vehicles. Refer to appropriate model year range in appropriate table. See [U. S. EPA ASM2525 & ASM5015 START-UP EMISSION STANDARDS](#).

NEW JERSEY EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	Idle HC ppm (CO %)	2500 RPM HC ppm (CO %)
Light Duty Vehicles (8500 GVWR Or Less)		
1967 & Earlier	1400 (8.5)	.....
1968-70	700 (7.0)	.....
1971-74	500 (5.0)	.....
1975-80	300 (3.0)	.....
1981 & Newer	220 (1.2)	100 (0.5)
Heavy Duty Vehicles (8501 GVWR Or Greater)		
1967 & Earlier	1400 (8.5)	.....
1968-70	1200 (8.5)	.....
1971-74	700 (6.0)	.....
1975-78	500 (4.0)	.....
1979 & Earlier	300 (3.0)	.....

NEW MEXICO

NEW MEXICO EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	Idle HC ppm (CO %)	2500 RPM HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)		
1975-78	500 (5.0)	500 (5.0)
1979-80	400 (4.0)	400 (4.0)
1981-85	220 (1.2)	220 (1.2)
1986-90	200 (1.2)	200 (1.2)
1991-95	180 (1.2)	180 (1.2)
Light Duty Trucks (6001-8000 GVWR)		
1975-78	600 (6.0)	600 (6.0)

Application	Idle HC ppm (CO %)	2500 RPM HC ppm (CO %)
1979-80	600 (4.5)	600 (4.5)
1981-82	400 (2.7)	400 (3.0)
1983-88	300 (1.2)	300 (3.0)
1989-95	220 (1.2)	220 (1.2)
Medium Duty Trucks (8001-10,000 GVWR)		
1975 & Newer	650 (6.5)	650 (6.5)

NEW YORK

NEW YORK EMISSION STANDARDS - IM240 TEST

Application	HC gpm Composite	HC gpm Phase 2	CO gpm Composite	CO gpm Phase 2	NOx gpm Both
Light Duty Vehicles					
1981-82	0.80	0.50	30.0	24.0	2.0
1983-95	0.80	0.50	15.0	12.0	2.0
1996 & Newer	0.60	0.40	10.0	8.0	1.5
Light Duty Trucks (6000 GVWR Or Less)					
1981-83	3.40	2.00	70.0	56.0	4.5
1984-87	1.60	1.00	40.0	32.0	4.5
1988-95	1.60	1.00	40.0	32.0	2.5
1996 & Newer (3750 LVW Or Less)	0.60	0.40	10.0	8.0	1.5
1996 & Newer (3751 LVW Or More)	0.80	0.50	13.0	10.0	1.8
Light Duty Trucks (6501-8500 GVWR)					
1981-83	3.40	2.00	70.0	56.0	4.5
1984-87	1.60	1.00	40.0	32.0	4.5
1988-95	1.60	1.00	40.0	32.0	3.5
1996 & Newer (5750 ALVW Or Less)	0.80	0.50	13.0	10.0	1.8
1996 & Newer (5751 ALVW Or More)	0.80	0.50	15.0	12.0	2.0

NEW YORK EMISSION STANDARDS - IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (8500 GVWR Or Less)	
1978	300 (3.0)
1979-80	300 (2.5)
1981 & Newer	220 (1.2)
Heavy Duty Vehicles (8501 GVWR Or More)	
1978	600 (4.5)
1979 & Newer	300 (3.0)

NORTH CAROLINA

NORTH CAROLINA EMISSION STANDARDS - IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (8500 GVWR Or Less)	
1977	450 (4.5)
1978-79	350 (3.5)

Application	HC ppm (CO %)
1980	250 (2.0)
1981 & Newer	250 (1.2)
Heavy Duty Trucks (8501 GVWR Or More)	
1977-78	500 (5.0)
1979 & Newer	400 (4.0)

OHIO

NOTE: The Ohio program incorporates original U.S. EPA recommended start-up ASM2525 standards for all model year vehicles. Refer to appropriate model year range in appropriate table. See [U. S. EPA ASM2525 & ASM5015 START-UP EMISSION STANDARDS](#).

OHIO EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
1978	350 (4.0)
1979	275 (3.0)
1980	230 (2.0)
1981 & Newer	220 (1.2)

OREGON

OREGON EMISSION STANDARDS - METROPOLITAN PORTLAND ENHANCED AREA - BAR31

Application	HC gpm (CO gpm)	NOx gpm
Light Duty Passenger Cars		
1981-82	2.0 (64)	3.70
1983-89	2.0 (32)	3.70
1990-95	1.2 (30)	3.00
1996 & Newer	OBD-II Test	OBD-II Test
Light Duty Trucks (6000 GVWR Or Less)		
1981-83	8.5 (149)	8.32
1984-87	4.0 (85)	8.32
1988-89	4.0 (85)	4.62
1990-95	2.4 (80)	3.75
1996 & Newer	OBD-II Test	OBD-II Test
Light Duty Trucks (6001-8500 GVWR)		
1981-83	8.5 (149)	8.32
1984-87	4.0 (85)	8.32
1988-89	4.0 (85)	6.47
1990-95	2.4 (80)	5.25
1996 & Newer	OBD-II Test	OBD-II Test

OREGON EMISSION STANDARDS - METROPOLITAN PORTLAND & ROGUE VALLEY AREA BASIC TEST - 2-SPEED IDLE TEST

Application	Idle HC ppm (CO %)	2500 RPM HC ppm (CO %)
Light Duty Passenger Cars (6000 GVWR Or Less)		
1975-80 (No Catalyst)	300 (2.5)	-
1975-80 (Catalyst)	220 (1.0)	-
1981 & Newer (All)	220 (1.0)	220 (1.0)

Application	Idle HC ppm (CO %)	2500 RPM HC ppm (CO %)
1975 & Newer (2-Stroke)	n/a (7.0)	-
Light Duty Trucks (6001-8500 GVWR)		
1975-78 (All)	350 (2.5)	-
1979-80 (No Catalyst)	300 (2.5)	-
1979-80 (Catalyst)	220 (1.0)	-
1981 & Newer (All)	220 (1.0)	220 (1.0)
1996 & Newer (3750 LVW Or Less)	0.9 (20)	2.25
Heavy Duty Trucks (8501 GVWR Or More)		
1975-78 (Carbureted)	500 (4.0)	n/a (3.0)
1975-78 (Fuel Injection)	500 (4.0)	-
1979-84 (Carbureted)	350 (3.0)	n/a (3.0)
1979-84 (Fuel Injection)	350 (3.0)	-
1985 & Newer (No Catalyst)	350 (3.0)	n/a (3.0)
1985 & Newer (W/Catalyst)	220 (1.0)	220 (1.0)

OREGON EMISSION STANDARDS - METROPOLITAN PORTLAND & ROGUE VALLEY AREA BASIC TEST - EXHAUST OPACITY TEST

Application	Opacity % @ Idle	Opacity % @ High Idle
1975 & Newer		
2-Cycle Engines	20	.....
Gasoline Engines	0	0

PENNSYLVANIA

NOTE: The Pennsylvania (in Philadelphia area) program incorporates original U.S. EPA recommended start-up ASM5015 standards for 1981 and newer model year vehicles. Refer to appropriate model year range in appropriate table. See [U. S. EPA ASM2525 & ASM5015 START-UP EMISSION STANDARDS](#).

PENNSYLVANIA EMISSION STANDARDS - PITTSBURGH & OLDER PHILADELPHIA VEHICLES - IDLE TEST

Application	HC ppm (CO %)
6000 GVWR Or Less	
1975-79	400 (4.0)
1980	300 (3.0)
1981-92	220 (1.2)
1993 & Newer	130 (1.0)
6001-9000 GVWR	
1975-78	650 (6.0)
1979	400 (4.0)
1980	300 (3.0)
1981-92	220 (1.2)
1993 & Newer	180 (1.0)

RHODE ISLAND

RHODE ISLAND EMISSION STANDARDS - RI2000 TEST

Application	HC gpm (CO gpm)	NOx gpm
Light Duty Vehicles		

Application	HC gpm (CO gpm)	NOx gpm
1974 & Earlier	15.92 (132.44)	14.92
1975-76	6.74 (96.21)	9.92
1977-79	6.74 (96.21)	6.59
1980	2.25 (45.48)	6.59
1981-82	2.25 (45.48)	3.25
1983-95	2.25 (23.74)	3.25
1996 & Newer	1.84 (16.50)	2.42
Light Duty Trucks (6000 GVWR Or Less)		
1975 & Earlier	16.94 (175.92)	14.92
1975-78	8.78 (117.95)	9.92
1979-83	7.55 (103.45)	7.42
1984-87	3.88 (59.97)	7.42
1988-90	3.88 (59.97)	4.09
1991-95	3.88 (59.97)	4.09
1996 & Newer (3750 LVW Or Less)	1.84 (16.50)	2.42
1996 & Newer (3751 LVW Or More)	2.25 (20.84)	2.92
Light Duty Trucks (6001-8500 GVWR)		
1974 & Earlier	16.94 (175.92)	14.92
1975-78	8.78 (117.95)	9.92
1979-83	7.55 (103.45)	7.42
1984-87	3.88 (59.97)	7.42
1989-90	3.88 (59.97)	5.75
1991-95	3.88 (59.97)	5.75
1996 & Newer (5750 LVW Or Less)	2.25 (20.84)	2.92
1996 & Newer (5751 LVW or More)	5.51 (23.74)	3.25

RHODE ISLAND EMISSION STANDARDS - 2-SPEED IDLE TEST

Application Idle ⁽¹⁾	HC ppm (CO %)
1967 & Earlier	800 (7.0)
1968-74	700 (6.0)
1975-78	300 (3.0)
1979-80	300 (2.5)
1981 & Newer	220 (1.2)
(1) 8500 GVWR or less.	

TENNESSEE

TENNESSEE EMISSION STANDARDS - MEMPHIS - IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (9000 GVWR Or Less)	
1971 & Older	900 (8.9)
1972-74	700 (8.2)
1975-79	600 (7.5)
1980	400 (4.7)
1981 & Newer	220 (1.2)
Heavy Duty Trucks (9001-25,999 GVWR)	
1971 & Older	1000 (8.9)
1972-74	1000 (8.2)

Application	HC ppm (CO %)
1975-79	1000 (8.0)
1980	800 (6.0)
1981 & Newer	400 (4.0)

TENNESSEE EMISSION STANDARDS - DAVIDSON & NASHVILLE COUNTIES - IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)	
1975-77	500 (5.0)
1978-79	400 (4.0)
1980	300 (3.0)
1981 & Newer	220 (1.2)
Medium Duty Trucks (6001-8500 GVWR)	
1975-77	750 (6.5)
1978-79	600 (6.0)
1980	400 (4.5)
1981 & Newer	400 (4.0)

TENNESSEE EMISSION STANDARDS - FOUR COUNTY AREA SURROUNDING NASHVILLE - IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)	
1975-77	500 (5.0)
1978-79	400 (4.0)
1980	300 (3.0)
1981 & Newer	220 (1.2)
Medium Duty Trucks (6001-8500 GVWR)	
1975-77	750 (6.5)
1978-79	600 (6.0)
1980	400 (4.5)
1981 & Newer	400 (4.0)

TEXAS

NOTE: The Texas program incorporates original U.S. EPA recommended start-up ASM2525 and ASM5015 standards for 1995 and newer model year vehicles. Refer to appropriate model year range in appropriate table. See [U. S. EPA ASM2525 & ASM5015 START-UP EMISSION STANDARDS](#).

TEXAS EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (8500 GVWR Or Less)	
1979	600 (6.0)
1980	400 (4.0)
1981 & Newer	220 (1.2)
Heavy Duty Vehicles (8501 GVWR Or More)	
1979-81	700 (7.0)
1982-84	500 (5.0)
1985 & Newer	300 (3.0)

UTAH

UTAH EMISSION STANDARDS - DAVIS COUNTY - DC98 TEST

Application	HC gpm (CO gpm)	NOx gpm
Light Duty Vehicles (6000 GVWR Or Less)		
1989-90	2.00 (30)	3.0
1991-95	1.2 (20)	2.5
Light Duty Trucks (6000 GVWR Or Less)		
1989-90	3.2 (80)	3.5
1991-95	2.4 (60)	3.0
Light Duty Trucks (6001-8500 GVWR)		
1989-90	3.2 (80)	5.0
1991-95	2.4 (60)	4.5

UTAH EMISSION STANDARDS - DAVIS COUNTY - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)	
1968-69	800 (6.0)
1970-74	700 (5.0)
1975-76	600 (4.0)
1977-79	500 (3.0)
1980	300 (2.0)
1981-95	220 (1.2)
Light Duty Vehicles (6001-8500 GVWR)	
1968-69	1500 (7.0)
1970-78	1200 (5.0)
1979	500 (3.0)
1980	300 (2.0)
1981-95	220 (1.2)
Heavy Duty Vehicles (8501 GVWR Or More)	
1968-69	1500 (7.0)
1970-78	1200 (5.0)
1979-80	1000 (4.0)
1981 & Newer	800 (3.5)

NOTE: The Salt Lake County program incorporates California style ASM2525 and ASM5015 standards for 1968 and newer model year vehicles; however, actual cutpoints are unique to this program and current information is not available at this time.

UTAH EMISSION STANDARDS - SALT LAKE COUNTY - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)	
1968-69	800 (6.0)
1970-74	700 (5.0)
1975-76	600 (4.0)
1977-79	500 (3.0)
1980	300 (2.0)
1981 & Newer	220 (1.2)
Light Duty Trucks (6000 GVWR Or Less)	
1968-99	800 (6.0)
1970-74	700 (5.0)

Application	HC ppm (CO %)
1975-76	600 (4.0)
1977-79	500 (3.0)
1980	300 (2.0)
1981 & Newer	220 (1.2)
Light Duty Trucks (6001-8500 GVWR)	
1968-69	1500 (7.0)
1970-78	1200 (5.0)
1979	500 (3.0)
1980	300 (2.0)
1981 & Newer	220 (1.2)
Heavy Duty Trucks (8500 GVWR Or More)	
1968-69	1500 (7.0)
1970-78	1200 (5.0)
1979-80	1000 (4.0)
1981 & Newer	800 (3.5)

UTAH EMISSION STANDARDS - UTAH & WEBER COUNTIES - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
Light Duty Vehicles (6000 GVWR Or Less)	
1968-69	800 (6.0)
1970-74	700 (5.0)
1975-76	600 (4.0)
1977-79	500 (3.0)
1980	300 (2.0)
1981-95	220 (1.2)
Light Duty Trucks (6000 GVWR Or Less)	
1968-99	800 (6.0)
1970-74	700 (5.0)
1975-76	600 (4.0)
1977-79	500 (3.0)
1980	300 (2.0)
1981 & Newer	220 (1.2)
Light Duty Trucks (6001-8500 GVWR)	
1968-69	1500 (7.0)
1970-78	1200 (5.0)
1979	500 (3.0)
1980	300 (2.0)
1981 & Newer	220 (1.2)
Heavy Duty Trucks (8500 GVWR Or More)	
1968-69	1500 (7.0)
1970-78	1200 (5.0)
1979-80	1000 (4.0)
1981 & Newer	800 (3.5)

VIRGINIA

NOTE: The Virginia program incorporates original U.S. EPA recommended start-up ASM2525 and ASM5015 standards for 1981 and newer model year vehicles.

Refer to appropriate model year range in appropriate table. See [U. S. EPA ASM2525 & ASM5015 START-UP EMISSION STANDARDS](#).

VIRGINIA EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
8500 GVWR Or Less	
1975-90	400 (4.0)
1980	220 (2.0)
1981-89	220 (1.2)
1990-95	125 (1.0)
1996 & Newer	100 (0.75)
8501-10,000 GVWR	
1975-79	400 (4.0)
1980	220 (2.0)
1981-90	220 (1.2)
1991-96	150 (1.0)
1997 & Newer	125 (0.75)

WASHINGTON

WASHINGTON EMISSION STANDARDS - ASM2525 TEST

Application	HC ppm (CO %)
1980 & Earlier (Light-Duty Vehicles)	
1750 GVWR	400 (4.2)
1875 GVWR	380 (4.0)
2000 GVWR	350 (3.8)
2125 GVWR	340 (3.6)
2250 GVWR	320 (3.4)
2375 GVWR	300 (3.2)
2500 GVWR	290 (3.0)
2625 GVWR	270 (2.9)
2750 GVWR	260 (2.8)
2875 GVWR	250 (2.7)
3000 GVWR	240 (2.6)
3125 GVWR	230 (2.5)
3250 GVWR	220 (2.4)
3375 GVWR	220 (2.3)
3500 GVWR	210 (2.2)
3625 GVWR	200 (2.1)
3750 Or Greater GVWR (Passenger Cars Only)	200 (2.1)
3750 Or Greater GVWR (Light Duty Trucks)	300 (2.5)
1981 & Newer (Light-Duty Vehicles)	
1750 GVWR	250 (1.8)
1875 GVWR	240 (1.7)
2000 GVWR	220 (1.6)
2125 GVWR	210 (1.5)
2250 GVWR	200 (1.5)
2375 GVWR	190 (1.4)
2500 GVWR	180 (1.3)
2625 GVWR	180 (1.3)

Application	HC ppm (CO %)
2750 GVWR	171 (1.2)
2875 GVWR	160 (1.2)
3000 GVWR	160 (1.1)
3125 GVWR	150 (1.1)
3250 GVWR	150 (1.0)
3375 GVWR	150 (1.0)
3500 GVWR	150 (1.0)
3625 GVWR	150 (1.0)
3750 Or Greater GVWR (Passenger Cars Only)	150 (1.0)
3750 Or Greater GVWR (Light Duty Trucks)	300 (2.5)

WASHINGTON EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	Idle/2500 RPM HC ppm (CO %)
Light Duty Vehicles (8500 GVWR Or Less)	
1980 & Earlier	600 (3.0)
1981 & Newer	220 (1.2)
Heavy Duty Trucks (8500 GVWR Or More)	
1981 & Newer	400 (3.0)

WISCONSIN

WISCONSIN EMISSION STANDARDS - IM240 TEST

Application	HC gpm (CO gpm)	NOx gpm
Light Duty Vehicles (6000 GVWR Or Less)		
1968-72	7.0 (120)	7.0
1973-74	7.0 (120)	6.0
1975-76	3.0 (65)	6.0
1977-79	3.0 (65)	4.0
1980	2.0 (60)	4.0
1981-82	2.0 (60)	3.0
1983-86	2.0 (30)	3.0
1987-93	0.8 (15)	2.0
1991-95	0.8 (15)	2.0
1996 & Newer	0.6 (10)	1.5
Light Duty Trucks (6000 GVWR Or Less)		
1968-72	7.0 (120)	7.0
1973-74	7.0 (120)	6.0
1975-78	4.0 (80)	6.0
1979-83	3.4 (70)	4.5
1984-86	3.2 (70)	4.5
1987	1.6 (40)	4.5
1988-95	1.6 (40)	2.5
1996 & Newer (3750 LVW Or Less)	0.6 (10)	1.5
1996 & Newer (3751 LVW Or More)	0.8 (13)	1.8
Light Duty Trucks (6001-8500 GVWR)		
1968-72	7.0 (120)	7.0
1973-74	7.0 (120)	6.0
1975-78	4.0 (80)	6.0
1979-83	3.4 (70)	4.5

Application	HC gpm (CO gpm)	NOx gpm
1984-86	3.2 (70)	4.5
1988-96	1.6 (40)	3.5
1997 & Newer (5750 ALVW Or Less)	0.8 (13)	1.8
1997 & Newer (5751 ALVW Or More)	0.8 (15)	2.0
Heavy Duty Trucks (8501-10,000 GVWR)		
1968-69	20.0 (200)	15.0
1970-73	10.0 (175)	10.0
1974-78	10.0 (150)	10.0
1979-84	7.5 (100)	8.0
1985-86	5.0 (80)	8.0
1987-90	2.0 (40)	6.0
1991-97	2.0 (40)	5.0
1998 & Newer	2.0 (30)	4.0
Heavy Duty Trucks (10,001 GVWR or More)		
1968-69	24.0 (250)	30.0
1970-73	13.0 (175)	20.0
1974-78	13.0 (150)	20.0
1979-84	11.5 (150)	16.0
1985-86	10.0 (150)	16.0
1987-90	3.5 (70)	11.0
1991-97	3.5 (70)	9.0
1998 & Newer	3.5 (60)	7.0

WISCONSIN EMISSION STANDARDS - 2-SPEED IDLE TEST

Application	HC ppm (CO %)
Passenger Cars	
1968-71	800 (8.0)
1972-74	550 (7.0)
1975-77	450 (5.5)
1978	350 (4.0)
1979	275 (3.0)
1980	230 (2.0)
1981 & Newer	220 (1.2)
Light Duty Trucks (6000 GVWR Or Less)	
1968-71	800 (8.0)
1972-74	700 (7.0)
1975-77	500 (6.0)
1978	450 (5.0)
1979	300 (3.0)
1980	275 (2.5)
1981-84	250 (2.0)
1985 & Newer	220 (1.2)
Light Duty Trucks (6001-8500 GVWR)	
1968-69	1450 (9.0)
1970-71	800 (8.0)
1972-74	700 (7.0)
1975-77	550 (6.5)
1978	450 (5.5)
1979	300 (3.0)

Application	HC ppm (CO %)
1980	275 (2.5)
1981-84	250 (2.0)
1985 & Newer	220 (1.2)
Heavy Duty Trucks (8501 GVWR Or More)	
1968-71	1500 (9.5)
1972-78	900 (9.0)
1979-84	700 (7.0)
1985 & Newer	300 (3.0)

U. S. EPA ASM2525 & ASM5015 START-UP EMISSION STANDARDS

U.S. EPA ASM EMISSION STANDARDS - 1968-72 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	1118 (8.02)	4990	1098 (9.90)	4990
1875	1052 (7.56)	4990	1034 (9.90)	4990
2000	992 (7.14)	4990	975 (9.90)	4990
2125	938 (6.75)	4990	921 (9.66)	4990
2250	887 (6.40)	4990	872 (9.14)	4990
2375	841 (6.07)	4990	827 (8.67)	4990
2500	800 (5.78)	4990	786 (8.25)	4990
2625	761 (5.51)	4990	748 (7.85)	4990
2750	726 (5.26)	4990	714 (7.50)	4772
2875	695 (5.03)	4892	683 (7.17)	4556
3000	666 (4.83)	4680	654 (6.87)	4359
3125	639 (4.64)	4488	628 (6.60)	4180
3250	615 (4.47)	4311	604 (6.35)	4016
3375	593 (4.31)	4150	583 (6.13)	3866
3500	573 (4.17)	4002	563 (5.92)	3728
3625	554 (4.04)	3867	544 (5.73)	3602
3750	537 (3.91)	3741	527 (5.55)	3485
3875	521 (3.80)	3625	512 (5.39)	3377
4000	506 (3.70)	3517	497 (5.24)	3276
4125	492 (3.60)	3416	484 (5.09)	3182
4250	479 (3.51)	3321	471 (4.96)	3094
4375	467 (3.42)	3230	459 (4.83)	3010
4500	455 (3.34)	3145	447 (4.71)	2930
4625	444 (3.26)	3063	436 (4.60)	2854
4750	433 (3.18)	2983	425 (4.49)	2780
4875	423 (3.11)	2907	415 (4.38)	2709
5000	412 (3.03)	2833	405 (4.28)	2540
5125	402 (2.97)	2760	395 (4.18)	2573
5250	393 (2.90)	2690	386 (4.08)	2507
5375	383 (2.83)	2621	376 (3.98)	2443
5500	374 (2.77)	2554	367 (3.89)	2381
5625	365 (2.70)	2489	359 (3.80)	2321
5750	357 (2.64)	2426	350 (3.71)	2262
5875	348 (2.59)	2366	342 (3.62)	2206

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
6000	341 (2.53)	2308	334 (3.54)	2152
6125	333 (2.48)	2254	327 (3.47)	2102
6250	326 (2.43)	2204	320 (3.40)	2056
6375	320 (2.39)	2159	314 (3.34)	2014
6500	315 (2.35)	2119	309 (3.28)	1977
6625	310 (2.32)	2087	304 (3.23)	1947
6750	307 (2.29)	2062	301 (3.20)	1924
6875	305 (2.28)	2046	299 (3.17)	1909
7000	304 (2.27)	2040	298 (3.17)	1904
7125 Or More	304 (2.27)	2045	298 (3.17)	1904

U.S. EPA ASM EMISSION STANDARDS - 1973-74 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	1118 (8.02)	4990	1098 (9.90)	4980
1875	1052 (7.56)	4990	1034 (9.90)	4906
2000	992 (7.14)	4919	975 (9.90)	4838
2125	938 (6.75)	4853	921 (9.66)	4776
2250	887 (6.40)	4792	872 (9.14)	4720
2375	841 (6.07)	4736	827 (8.67)	4668
2500	800 (5.78)	4685	786 (8.25)	4620
2625	761 (5.51)	4639	748 (7.85)	4577
2750	726 (5.26)	4596	714 (7.50)	4374
2875	695 (5.03)	4484	683 (7.17)	4176
3000	666 (4.83)	4290	654 (6.87)	3996
3125	639 (4.64)	4114	628 (6.60)	3832
3250	615 (4.47)	3952	604 (6.35)	3681
3375	593 (4.31)	3804	583 (6.13)	3544
3500	573 (4.17)	3669	563 (5.92)	3418
3625	554 (4.04)	3544	544 (5.73)	3302
3750	537 (3.91)	3429	527 (5.55)	3195
3875	521 (3.80)	3323	512 (5.39)	3096
4000	506 (3.70)	3224	497 (5.24)	3003
4125	492 (3.60)	3131	484 (5.09)	2917
4250	479 (3.51)	3044	471 (4.96)	2836
4375	467 (3.42)	2961	459 (4.83)	2759
4500	455 (3.34)	2883	447 (4.71)	2686
4625	444 (3.26)	2807	436 (4.60)	2616
4750	433 (3.18)	2735	425 (4.49)	2549
4875	423 (3.11)	2665	415 (4.38)	2483
5000	412 (3.03)	2597	405 (4.28)	2420
5125	402 (2.97)	2530	395 (4.18)	2359
5250	393 (2.90)	2466	386 (4.08)	2298
5375	383 (2.83)	2403	376 (3.98)	2240
5500	374 (2.77)	2341	367 (3.89)	2183
5625	365 (2.70)	2282	359 (3.80)	2127

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
5750	357 (2.64)	2224	350 (3.71)	2074
5875	348 (2.59)	2168	342 (3.62)	2022
6000	341 (2.53)	2116	334 (3.54)	1973
6125	333 (2.48)	2066	327 (3.47)	1927
6250	326 (2.43)	2020	320 (3.40)	1884
6375	320 (2.39)	1979	314 (3.34)	1846
6500	315 (2.35)	1943	309 (3.28)	1813
6625	310 (2.32)	1913	304 (3.23)	1785
6750	307 (2.29)	1890	301 (3.20)	1764
6875	305 (2.28)	1875	299 (3.17)	1750
7000	304 (2.27)	1870	298 (3.17)	1745
7125 Or More	304 (2.27)	1874	298 (3.17)	1745

U.S. EPA ASM EMISSION STANDARDS - 1975-76 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	774 (3.92)	4990	761 (5.45)	4980
1875	729 (3.70)	4990	717 (5.14)	4906
2000	688 (3.49)	4919	676 (4.85)	4838
2125	650 (3.31)	4853	638 (4.58)	4776
2250	615 (3.13)	4792	604 (4.34)	4720
2375	583 (2.98)	4736	573 (4.12)	4668
2500	554 (2.83)	4685	544 (3.91)	4620
2625	528 (2.70)	4639	518 (3.73)	4577
2750	503 (2.58)	4596	495 (3.56)	4374
2875	481 (2.47)	4484	473 (3.41)	4176
3000	461 (2.37)	4290	453 (3.27)	3996
3125	443 (2.28)	4114	435 (3.14)	3832
3250	426 (2.20)	3952	419 (3.02)	3681
3375	411 (2.12)	3804	404 (2.91)	3544
3500	397 (2.05)	3669	390 (2.82)	3418
3625	384 (1.99)	3544	377 (2.73)	3302
3750	372 (1.93)	3429	365 (2.64)	3195
3875	361 (1.87)	3323	355 (2.57)	3096
4000	351 (1.82)	3224	345 (2.49)	3003
4125	341 (1.77)	3131	335 (2.43)	2917
4250	332 (1.73)	3044	326 (2.36)	2836
4375	323 (1.68)	2961	318 (2.31)	2759
4500	315 (1.64)	2883	310 (2.25)	2686
4625	308 (1.61)	2807	302 (2.19)	2616
4750	300 (1.57)	2735	295 (2.14)	2549
4875	293 (1.53)	2665	288 (2.09)	2483
5000	286 (1.50)	2597	281 (2.04)	2420
5125	279 (1.46)	2530	274 (2.00)	2359
5250	272 (1.43)	2466	267 (1.95)	2298
5375	266 (1.40)	2403	261 (1.90)	2240

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
5500	259 (1.37)	2341	255 (1.86)	2183
5625	253 (1.34)	2282	248 (1.82)	2127
5750	247 (1.31)	2224	243 (1.78)	2074
5875	241 (1.28)	2168	237 (1.74)	2022
6000	236 (1.25)	2116	232 (1.70)	1973
6125	231 (1.23)	2066	227 (1.66)	1927
6250	226 (1.20)	2020	222 (1.63)	1884
6375	222 (1.18)	1979	218 (1.60)	1846
6500	218 (1.16)	1943	214 (1.57)	1813
6625	215 (1.15)	1913	211 (1.55)	1785
6750	213 (1.14)	1890	209 (1.54)	1764
6875	211 (1.13)	1875	207 (1.52)	1750
7000	211 (1.12)	1870	207 (1.52)	1745
7125 Or More	211 (1.12)	1874	206 (1.52)	1745

U.S. EPA ASM EMISSION STANDARDS - 1977-79 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	774 (3.92)	4990	761 (5.45)	4950
1875	729 (3.70)	4990	717 (5.14)	4655
2000	688 (3.49)	4707	676 (4.85)	4384
2125	650 (3.31)	4441	638 (4.58)	4136
2250	615 (3.13)	4197	604 (4.34)	3909
2375	583 (2.98)	3974	573 (4.12)	3701
2500	554 (2.83)	3771	544 (3.91)	3512
2625	528 (2.70)	3585	518 (3.73)	3339
2750	503 (2.58)	3416	495 (3.56)	3181
2875	481 (2.47)	3261	473 (3.41)	3037
3000	461 (2.37)	3120	453 (3.27)	2906
3125	443 (2.28)	2992	435 (3.14)	2787
3250	426 (2.20)	2874	419 (3.02)	2677
3375	411 (2.12)	2767	404 (2.91)	2577
3500	397 (2.05)	2668	390 (2.82)	2486
3625	384 (1.99)	2578	377 (2.73)	2401
3750	372 (1.93)	2494	365 (2.64)	2323
3875	361 (1.87)	2417	355 (2.57)	2251
4000	351 (1.82)	2345	345 (2.49)	2184
4125	341 (1.77)	2277	335 (2.43)	2122
4250	332 (1.73)	2214	326 (2.36)	2063
4375	323 (1.68)	2154	318 (2.31)	2007
4500	315 (1.64)	2096	310 (2.25)	1953
4625	308 (1.61)	2042	302 (2.19)	1903
4750	300 (1.57)	1989	295 (2.14)	1854
4875	293 (1.53)	1938	288 (2.09)	1806
5000	286 (1.50)	1889	281 (2.04)	1760
5125	279 (1.46)	1840	274 (2.00)	1715

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
5250	272 (1.43)	1793	267 (1.95)	1672
5375	266 (1.40)	1747	261 (1.90)	1629
5500	259 (1.37)	1703	255 (1.86)	1587
5625	253 (1.34)	1659	248 (1.82)	1547
5750	247 (1.31)	1617	243 (1.78)	1508
5875	241 (1.28)	1577	237 (1.74)	1471
6000	236 (1.25)	1539	232 (1.70)	1435
6125	231 (1.23)	1503	227 (1.66)	1401
6250	226 (1.20)	1469	222 (1.63)	1371
6375	222 (1.18)	1439	218 (1.60)	1343
6500	218 (1.16)	1413	214 (1.57)	1318
6625	215 (1.15)	1391	211 (1.55)	1298
6750	213 (1.14)	1374	209 (1.54)	1283
6875	211 (1.13)	1364	207 (1.52)	1273
7000 Or More	211 (1.12)	1360	207 (1.52)	1269

U.S. EPA ASM EMISSION STANDARDS - 1980 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	291 (2.78)	4990	282 (3.64)	4950
1875	275 (2.63)	4990	266 (3.43)	4655
2000	260 (2.48)	4707	252 (3.24)	4384
2125	246 (2.35)	4441	239 (3.06)	4136
2250	234 (2.23)	4197	227 (2.90)	3909
2375	223 (2.12)	3974	216 (2.76)	3701
2500	212 (2.02)	3771	206 (2.62)	3512
2625	203 (1.92)	3585	197 (2.50)	3339
2750	194 (1.84)	3416	189 (2.39)	3181
2875	187 (1.76)	3261	181 (2.29)	3037
3000	180 (1.69)	3120	174 (2.19)	2906
3125	173 (1.63)	2992	168 (2.11)	2787
3250	167 (1.57)	2874	162 (2.03)	2677
3375	162 (1.52)	2767	157 (1.96)	2577
3500	157 (1.47)	2668	152 (1.89)	2486
3625	152 (1.42)	2578	148 (1.84)	2401
3750	148 (1.38)	2492	144 (1.78)	2323
3875	144 (1.34)	2417	140 (1.73)	2251
4000	140 (1.31)	2345	137 (1.68)	2184
4125	137 (1.27)	2277	133 (1.64)	2122
4250	134 (1.24)	2214	130 (1.60)	2063
4375	131 (1.21)	2154	127 (1.56)	2007
4500	128 (1.18)	2096	124 (1.52)	1953
4625	125 (1.15)	2042	122 (1.48)	1903
4750	122 (1.13)	1989	119 (1.45)	1854
4875	120 (1.10)	1938	117 (1.42)	1806
5000	117 (1.08)	1889	114 (1.38)	1760

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
5125	115 (1.05)	1840	112 (1.35)	1715
5250	112 (1.03)	1793	110 (1.32)	1672
5375	110 (1.01)	1747	107 (1.29)	1629
5500	108 (0.99)	1703	105 (1.26)	1587
5625	106 (0.97)	1659	103 (1.24)	1547
5750	104 (0.94)	1617	101 (1.21)	1508
5875	102 (0.92)	1577	99 (1.18)	1471
6000	100 (0.91)	1539	97 (1.16)	1435
6125	98 (0.89)	1503	95 (1.13)	1401
6250	96 (0.87)	1469	94 (1.11)	1371
6375	95 (0.86)	1439	92 (1.09)	1343
6500	93 (0.84)	1413	91 (1.08)	1318
6625	92 (0.83)	1391	90 (1.06)	1298
6750	91 (0.82)	1374	89 (1.05)	1283
6875	91 (0.82)	1364	89 (1.04)	1273
7000	91 (0.82)	1360	88 (1.04)	1269
7125 Or More	90 (0.81)	1360	88 (1.04)	1269

U.S. EPA ASM EMISSION STANDARDS - 1981-82 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	291 (2.78)	2272	282 (3.64)	2114
1875	275 (2.63)	2181	266 (3.43)	1991
2000	260 (2.48)	2058	252 (3.24)	1877
2125	246 (2.35)	1944	239 (3.06)	1774
2250	234 (2.23)	1839	227 (2.90)	1678
2375	223 (2.12)	1744	216 (2.76)	1592
2500	212 (2.02)	1657	206 (2.62)	1512
2625	203 (1.92)	1577	197 (2.50)	1440
2750	194 (1.84)	1504	189 (2.39)	1374
2875	187 (1.76)	1438	181 (2.29)	1313
3000	180 (1.69)	1378	174 (2.19)	1258
3125	173 (1.63)	1323	168 (2.11)	1208
3250	167 (1.57)	1273	162 (2.03)	1163
3375	162 (1.52)	1227	157 (1.96)	1121
3500	157 (1.47)	1184	152 (1.89)	1082
3625	152 (1.42)	1146	148 (1.84)	1047
3750	148 (1.38)	1110	144 (1.78)	1014
3875	144 (1.34)	1077	140 (1.73)	984
4000	140 (1.31)	1046	137 (1.68)	956
4125	137 (1.27)	1017	133 (1.64)	930
4250	134 (1.24)	990	130 (1.60)	905
4375	131 (1.21)	964	127 (1.56)	882
4500	128 (1.18)	939	124 (1.52)	859
4625	125 (1.15)	916	122 (1.48)	838
4750	122 (1.13)	893	119 (1.45)	818

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
4875	120 (1.10)	872	117 (1.42)	798
5000	117 (1.08)	850	114 (1.38)	778
5125	115 (1.05)	830	112 (1.35)	760
5250	112 (1.03)	810	110 (1.32)	741
5375	110 (1.01)	790	107 (1.29)	723
5500	108 (0.99)	771	105 (1.26)	706
5625	106 (0.97)	752	103 (1.24)	689
5750	104 (0.94)	734	101 (1.21)	673
5875	102 (0.92)	717	99 (1.18)	657
6000	100 (0.91)	701	97 (1.16)	642
6125	98 (0.89)	685	95 (1.13)	628
6250	96 (0.87)	671	94 (1.11)	615
6375	95 (0.86)	658	92 (1.09)	604
6500	93 (0.84)	647	91 (1.08)	593
6625	92 (0.83)	638	90 (1.06)	585
6750	91 (0.82)	631	89 (1.05)	578
6875	91 (0.82)	626	89 (1.04)	574
7000	91 (0.82)	624	88 (1.04)	573
7125 Or More	90 (0.81)	625	88 (1.04)	573

U.S. EPA ASM EMISSION STANDARDS - 1983-90 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	291 (1.64)	2272	282 (1.83)	2114
1875	275 (1.55)	2181	266 (1.72)	1991
2000	260 (1.47)	2058	252 (1.63)	1877
2125	246 (1.39)	1944	239 (1.54)	1774
2250	234 (1.31)	1839	227 (1.47)	1678
2375	223 (1.26)	1744	216 (1.39)	1592
2500	212 (1.20)	1657	206 (1.33)	1512
2625	203 (1.15)	1577	197 (1.27)	1440
2750	194 (1.10)	1504	189 (1.21)	1374
2875	187 (1.05)	1438	181 (1.16)	1313
3000	180 (1.01)	1378	174 (1.12)	1258
3125	173 (0.98)	1323	168 (1.08)	1208
3250	167 (0.94)	1273	162 (1.04)	1163
3375	162 (0.91)	1227	157 (1.00)	1121
3500	157 (0.88)	1184	152 (0.97)	1082
3625	152 (0.86)	1146	148 (0.94)	1047
3750	148 (0.83)	1110	144 (0.92)	1014
3875	144 (0.81)	1077	140 (0.89)	984
4000	140 (0.79)	1046	137 (0.87)	956
4125	137 (0.77)	1017	133 (0.85)	930
4250	134 (0.75)	990	130 (.83)	905
4375	131 (0.74)	964	127 (0.81)	882
4500	128 (0.72)	939	124 (0.79)	859

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
4625	125 (0.70)	916	122 (0.77)	838
4750	122 (0.69)	893	119 (0.76)	818
4875	120 (0.67)	872	117 (0.74)	798
5000	117 (0.66)	850	114 (0.73)	778
5125	115 (0.65)	830	112 (0.71)	760
5250	112 (0.63)	810	110 (0.70)	741
5375	110 (0.62)	790	107 (0.68)	723
5500	108 (0.61)	771	105 (0.67)	706
5625	106 (0.59)	752	103 (0.65)	689
5750	104 (0.58)	734	101 (0.64)	673
5875	102 (0.57)	717	99 (0.63)	657
6000	100 (0.56)	701	97 (0.62)	642
6125	98 (0.55)	685	95 (0.61)	628
6250	96 (0.54)	671	94 (0.60)	615
6375	95 (0.53)	658	92 (0.59)	604
6500	93 (0.52)	647	91 (0.58)	593
6625	92 (0.52)	638	90 (0.57)	585
6750	91 (0.51)	631	89 (0.57)	578
6875	91 (0.51)	626	89 (0.56)	574
7000	91 (0.51)	624	88 (0.56)	573
7125	90 (0.51)	625	88 (0.56)	573
7250 Or More	90 (0.50)	625	88 (0.56)	573

U.S. EPA ASM EMISSION STANDARDS - 1991-95 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	224 (1.26)	1819	216 (1.22)	1642
1875	212 (1.19)	1713	205 (1.16)	1547
2000	201 (1.13)	1616	194 (1.09)	1460
2125	191 (1.07)	1527	184 (1.04)	1380
2250	182 (1.02)	1446	175 (0.99)	1307
2375	173 (0.97)	1372	167 (0.94)	1240
2500	166 (0.93)	1304	160 (0.90)	1179
2625	159 (0.89)	1242	153 (0.86)	1123
2750	152 (0.85)	1186	147 (0.82)	1072
2875	146 (0.82)	1134	141 (0.79)	1026
3000	141 (0.79)	1088	136 (0.76)	984
3125	136 (0.76)	1045	132 (0.73)	945
3250	132 (0.73)	1006	127 (0.71)	910
3375	128 (0.71)	970	123 (0.69)	878
3500	124 (0.69)	937	120 (0.67)	848
3625	120 (0.67)	907	117 (0.65)	821
3750	117 (0.65)	879	114 (0.63)	796
3875	114 (0.63)	853	111 (0.61)	773
4000	112 (0.62)	829	108 (0.60)	751
4125	109 (0.60)	807	106 (0.58)	731

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
4250	107 (0.59)	786	103 (0.57)	712
4375	104 (0.58)	766	101 (0.56)	694
4500	102 (0.57)	747	99 (0.55)	677
4625	100 (0.55)	728	97 (0.54)	661
4750	98 (0.54)	711	95 (0.53)	645
4875	96 (0.53)	694	93 (0.52)	630
5000	94 (0.52)	677	92 (0.51)	615
5125	93 (0.51)	661	90 (0.50)	600
5250	91 (0.50)	646	88 (0.49)	586
5375	89 (0.49)	631	86 (0.48)	573
5500	87 (0.48)	616	85 (0.47)	559
5625	86 (0.47)	601	83 (0.46)	546
5750	84 (0.46)	587	82 (0.45)	534
5875	83 (0.45)	574	80 (0.44)	522
6000	81 (0.44)	561	79 (0.44)	510
6125	80 (0.44)	549	78 (0.43)	499
6250	79 (0.43)	538	76 (0.42)	489
6375	77 (0.42)	528	75 (0.42)	480
6500	76 (0.42)	519	74 (0.41)	473
6625	76 (0.41)	512	74 (0.41)	466
6750	75 (0.41)	507	73 (0.41)	461
6875	75 (0.40)	503	73 (0.40)	458
7000 Or More	74 (0.40)	502	72 (0.40)	457

U.S. EPA ASM EMISSION STANDARDS - 1994 & NEWER + TIER 1 LIGHT DUTY VEHICLES

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	142 (0.80)	1212	136 (0.77)	1095
1875	134 (0.75)	1142	129 (0.73)	1031
2000	127 (0.71)	1077	123 (0.69)	973
2125	121 (0.68)	1018	116 (0.66)	920
2250	115 (0.64)	964	111 (0.62)	871
2375	109 (0.61)	915	106 (0.59)	827
2500	105 (0.59)	869	101 (0.57)	786
2625	100 (0.56)	828	97 (0.54)	749
2750	96 (0.54)	791	93 (0.52)	715
2875	92 (0.52)	756	89 (0.50)	684
3000	89 (0.50)	725	86 (0.48)	656
3125	86 (0.48)	696	83 (0.46)	630
3250	83 (0.46)	670	80 (0.45)	607
3375	81 (0.45)	647	78 (0.43)	585
3500	78 (0.44)	625	76 (0.42)	566
3625	76 (0.42)	605	74 (0.41)	547
3750	74 (0.41)	586	72 (0.40)	531
3875	72 (0.40)	569	70 (0.39)	515
4000	71 (0.39)	553	68 (0.38)	501

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
4125	69 (0.38)	538	67 (0.37)	487
4250	67 (0.37)	524	65 (0.36)	475
4375	66 (0.36)	510	64 (0.35)	463
4500	65 (0.36)	498	63 (0.35)	440
4625	63 (0.35)	486	61 (0.34)	440
4750	62 (0.34)	474	60 (0.33)	430
4875	61 (0.34)	463	59 (0.33)	420
5000	60 (0.33)	452	58 (0.32)	410
5125	58 (0.32)	441	57 (0.31)	400
5250	57 (0.32)	431	56 (0.31)	391
5375	56 (0.31)	420	55 (0.30)	382
5500	55 (0.30)	410	54 (0.30)	373
5625	54 (0.30)	401	53 (0.29)	364
5750	53 (0.29)	391	52 (0.29)	356
5875	52 (0.29)	383	51 (0.28)	348
6000	51 (0.28)	374	50 (0.28)	340
6125	50 (0.28)	366	49 (0.27)	333
6250	50 (0.27)	359	48 (0.27)	326
6375	49 (0.27)	352	48 (0.26)	320
6500	48 (0.26)	346	47 (0.26)	315
6625	48 (0.26)	341	46 (0.26)	311
6750	47 (0.26)	338	46 (0.26)	307
6875	47 (0.26)	335	46 (0.25)	305
7000 Or More	47 (0.25)	335	46 (0.25)	305

U.S. EPA ASM EMISSION STANDARDS - 1968-72 LIGHT DUTY TRUCKS (6000 GVWR OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	1118 (8.02)	4990	1098 (9.90)	4990
1875	1052 (7.56)	4990	1034 (9.90)	4990
2000	992 (7.14)	4990	975 (9.90)	4990
2125	938 (6.75)	4990	921 (9.66)	4990
2250	887 (6.40)	4990	872 (9.14)	4990
2375	841 (6.07)	4990	827 (8.67)	4990
2500	800 (5.78)	4990	786 (8.25)	4990
2625	761 (5.51)	4990	748 (7.85)	4990
2750	726 (5.26)	4990	714 (7.50)	4772
2875	695 (5.03)	4892	683 (7.17)	4556
3000	666 (4.83)	4680	654 (6.87)	4359
3125	639 (4.64)	4488	628 (6.60)	4180
3250	615 (4.47)	4311	604 (6.35)	4016
3375	593 (4.31)	4150	583 (6.13)	3866
3500	573 (4.17)	4002	563 (5.92)	3728
3625	554 (4.04)	3867	544 (5.73)	3602
3750	537 (3.91)	3741	527 (5.55)	3485
3875	521 (3.80)	3625	512 (5.39)	3377

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
4000	506 (3.70)	3517	497 (5.24)	3276
4125	492 (3.60)	3416	484 (5.09)	3182
4250	479 (3.51)	3321	471 (4.96)	3094
4375	467 (3.42)	3230	459 (4.83)	3010
4500	455 (3.34)	3145	447 (4.71)	2930
4625	444 (3.26)	3063	436 (4.60)	2854
4750	433 (3.18)	2983	425 (4.49)	2780
4875	423 (3.11)	2907	415 (4.38)	2709
5000	412 (3.03)	2833	405 (4.28)	2540
5125	402 (2.97)	2760	395 (4.18)	2573
5250	393 (2.90)	2690	386 (4.08)	2507
5375	383 (2.83)	2621	376 (3.98)	2443
5500	374 (2.77)	2554	367 (3.89)	2381
5625	365 (2.70)	2489	359 (3.80)	2321
5750	357 (2.64)	2426	350 (3.71)	2262
5875	348 (2.59)	2366	342 (3.62)	2206
6000	341 (2.53)	2308	334 (3.54)	2152
6125	333 (2.48)	2254	327 (3.47)	2102
6250	326 (2.43)	2204	320 (3.40)	2056
6375	320 (2.39)	2159	314 (3.34)	2014
6500	315 (2.35)	2119	309 (3.28)	1977
6625	310 (2.32)	2087	304 (3.23)	1947
6750	307 (2.29)	2062	301 (3.20)	1924
6875	305 (2.28)	2046	299 (3.17)	1909
7000	304 (2.27)	2040	298 (3.17)	1904
7125 Or More	304 (2.27)	2045	298 (3.17)	1904

U.S. EPA ASM EMISSION STANDARDS - 1973-74 LIGHT DUTY TRUCKS (6000 GVWR OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	1118 (8.02)	4990	1098 (9.90)	4980
1875	1052 (7.56)	4990	1034 (9.90)	4906
2000	992 (7.14)	4919	975 (9.90)	4838
2125	938 (6.75)	4853	921 (9.66)	4776
2250	887 (6.40)	4792	872 (9.14)	4720
2375	841 (6.07)	4736	827 (8.67)	4668
2500	800 (5.78)	4685	786 (8.25)	4620
2625	761 (5.51)	4639	748 (7.85)	4577
2750	726 (5.26)	4596	714 (7.50)	4374
2875	695 (5.03)	4484	683 (7.17)	4176
3000	666 (4.83)	4290	654 (6.87)	3996
3125	639 (4.64)	4114	628 (6.60)	3832
3250	615 (4.47)	3952	604 (6.35)	3681
3375	593 (4.31)	3804	583 (6.13)	3544
3500	573 (4.17)	3669	563 (5.92)	3418
3625	554 (4.04)	3544	544 (5.73)	3302

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
3750	537 (3.91)	3429	527 (5.55)	3195
3875	521 (3.80)	3323	512 (5.39)	3096
4000	506 (3.70)	3224	497 (5.24)	3003
4125	492 (3.60)	3131	484 (5.09)	2917
4250	479 (3.51)	3044	471 (4.96)	2836
4375	467 (3.42)	2961	459 (4.83)	2759
4500	455 (3.34)	2883	447 (4.71)	2686
4625	444 (3.26)	2807	436 (4.60)	2616
4750	433 (3.18)	2735	425 (4.49)	2549
4875	423 (3.11)	2665	415 (4.38)	2483
5000	412 (3.03)	2597	405 (4.28)	2420
5125	402 (2.97)	2530	395 (4.18)	2359
5250	393 (2.90)	2466	386 (4.08)	2298
5375	383 (2.83)	2403	376 (3.98)	2240
5500	374 (2.77)	2341	367 (3.89)	2183
5625	365 (2.70)	2282	359 (3.80)	2127
5750	357 (2.64)	2224	350 (3.71)	2074
5875	348 (2.59)	2168	342 (3.62)	2022
6000	341 (2.53)	2116	334 (3.54)	1973
6125	333 (2.48)	2066	327 (3.47)	1927
6250	326 (2.43)	2020	320 (3.40)	1884
6375	320 (2.39)	1979	314 (3.34)	1846
6500	315 (2.35)	1943	309 (3.28)	1813
6625	310 (2.32)	1913	304 (3.23)	1785
6750	307 (2.29)	1890	301 (3.20)	1764
6875	305 (2.28)	1875	299 (3.17)	1750
7000	304 (2.27)	1870	298 (3.17)	1745
7125 Or More	304 (2.27)	1874	298 (3.17)	1745

U.S. EPA ASM EMISSION STANDARDS - 1975-78 LIGHT DUTY TRUCKS (6000 GVWR OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	843 (5.07)	4990	828 (7.26)	4980
1875	794 (4.78)	4990	780 (6.84)	4906
2000	749 (4.51)	4919	736 (6.45)	4838
2125	707 (4.26)	4853	695 (6.10)	4776
2250	669 (4.04)	4792	658 (5.78)	4720
2375	635 (3.83)	4736	624 (5.48)	4668
2500	603 (3.65)	4685	593 (5.21)	4620
2625	574 (3.48)	4639	564 (4.96)	4577
2750	548 (3.32)	4596	539 (4.73)	4374
2875	524 (3.18)	4484	515 (4.53)	4176
3000	502 (3.05)	4290	493 (4.34)	3996
3125	482 (2.93)	4114	474 (4.17)	3832
3250	464 (2.82)	3952	456 (4.01)	3681
3375	447 (2.72)	3804	440 (3.87)	3544

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
3500	432 (2.63)	3669	424 (3.74)	3418
3625	418 (2.55)	3544	411 (3.62)	3302
3750	405 (2.47)	3429	398 (3.51)	3195
3875	393 (2.40)	3323	386 (3.40)	3096
4000	382 (2.33)	3224	375 (3.31)	3003
4125	371 (2.27)	3131	365 (3.22)	2917
4250	361 (2.21)	3044	355 (3.13)	2836
4375	352 (2.16)	2961	346 (3.05)	2759
4500	343 (2.11)	2883	337 (2.98)	2686
4625	335 (2.06)	2807	329 (2.90)	2616
4750	327 (2.01)	2735	321 (2.83)	2549
4875	319 (1.96)	2665	313 (2.77)	2483
5000	311 (1.92)	2597	305 (2.70)	2420
5125	304 (1.87)	2530	298 (2.64)	2359
5250	296 (1.83)	2466	291 (2.58)	2298
5375	289 (1.79)	2403	284 (2.51)	2240
5500	282 (1.75)	2341	277 (2.46)	2183
5625	276 (1.71)	2282	271 (2.40)	2127
5750	269 (1.67)	2224	264 (2.34)	2074
5875	263 (1.63)	2168	258 (2.29)	2022
6000	257 (1.60)	2116	252 (2.24)	1973
6125	251 (1.57)	2066	247 (2.19)	1927
6250	246 (1.54)	2020	242 (2.15)	1884
6375	242 (1.51)	1979	237 (2.11)	1846
6500	238 (1.48)	1943	233 (2.07)	1813
6625	234 (1.46)	1913	230 (2.04)	1785
6750	232 (1.45)	1890	227 (2.02)	1764
6875	230 (1.44)	1875	225 (2.00)	1750
7000	229 (1.43)	1870	225 (2.00)	1745
7125 Or More	229 (1.43)	1874	225 (2.00)	1745

U.S. EPA ASM EMISSION STANDARDS - 1979-83 LIGHT DUTY TRUCKS (6000 GVWR OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	774 (4.31)	4990	761 (6.06)	4960
1875	729 (4.06)	4990	717 (5.70)	4738
2000	688 (3.83)	4778	676 (5.38)	4535
2125	650 (3.63)	4578	638 (5.09)	4349
2250	615 (3.44)	4395	604 (4.82)	4179
2375	583 (3.26)	4228	573 (4.57)	4024
2500	554 (3.10)	4076	544 (4.35)	3881
2625	528 (2.96)	3936	518 (4.14)	3752
2750	503 (2.83)	3809	495 (3.95)	3579
2875	481 (2.71)	3669	473 (3.78)	3417
3000	461 (2.60)	3510	453 (3.62)	3270
3125	443 (2.50)	3366	435 (3.48)	3135

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
3250	426 (2.40)	3234	419 (3.35)	3012
3375	411 (2.32)	3113	404 (3.23)	2899
3500	397 (2.24)	3002	390 (3.12)	2796
3625	384 (2.17)	2900	377 (3.02)	2701
3750	372 (2.11)	2806	365 (2.93)	2614
3875	361 (2.05)	2719	355 (2.58)	2533
4000	351 (1.99)	2638	345 (2.77)	2457
4125	341 (1.94)	2562	335 (2.69)	2387
4250	332 (1.89)	2490	326 (2.62)	2320
4375	323 (1.84)	2423	318 (2.55)	2258
4500	315 (1.80)	2359	310 (2.49)	2198
4625	308 (1.76)	2297	302 (2.43)	2140
4750	300 (1.72)	2238	295 (2.37)	2085
4875	293 (1.68)	2180	288 (2.32)	2032
5000	286 (1.64)	2125	281 (2.26)	1980
5125	279 (1.60)	2070	274 (2.21)	1930
5250	272 (1.56)	2017	267 (2.16)	1881
5375	26 (1.53)	1966	261 (2.11)	1833
5500	259 (1.49)	1916	255 (2.06)	1786
5625	253 (1.46)	1867	248 (2.01)	1740
5750	247 (1.43)	1820	243 (1.96)	1697
5875	241 (1.40)	1774	237 (1.92)	1654
6000	236 (1.37)	1731	232 (1.88)	1614
6125	231 (1.34)	1690	227 (1.84)	1577
6250	226 (1.31)	1653	222 (1.80)	1542
6375	222 (1.29)	1619	218 (1.77)	1510
6500	218 (1.27)	1590	214 (1.74)	1483
6625	215 (1.25)	1565	211 (1.72)	1460
6750	213 (1.24)	1546	209 (1.70)	1443
6875	211 (1.23)	1534	207 (1.68)	1432
7000	211 (1.23)	1530	207 (1.68)	1428
7125 Or More	211 (1.22)	1531	206 (1.68)	1428

U.S. EPA ASM EMISSION STANDARDS - 1984-87 LIGHT DUTY TRUCKS (6000 GVWR OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	390 (3.54)	4990	381 (4.85)	4960
1875	368 (3.34)	4990	359 (4.57)	4738
2000	348 (3.16)	4778	339 (4.31)	4535
2125	329 (2.99)	4578	321 (4.08)	4349
2250	312 (2.83)	4395	305 (3.86)	4179
2375	297 (2.69)	4228	290 (3.66)	4024
2500	283 (2.56)	4076	276 (3.48)	3881
2625	270 (2.44)	3936	263 (3.32)	3752
2750	258 (2.33)	3809	252 (3.17)	3579
2875	247 (2.23)	3669	241 (3.03)	3417

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
3000	237 (2.14)	3510	232 (2.91)	3270
3125	228 (2.06)	3366	223 (2.79)	3135
3250	220 (1.99)	3234	215 (2.69)	3012
3375	213 (1.92)	3113	208 (2.60)	2899
3500	206 (1.86)	3002	201 (2.51)	2796
3625	200 (1.80)	2900	195 (2.43)	2701
3750	194 (1.74)	2806	189 (2.36)	2614
3875	188 (1.69)	2719	184 (2.29)	2533
4000	183 (1.65)	2638	179 (2.22)	2457
4125	179 (1.61)	2562	175 (2.16)	2387
4250	174 (1.56)	2490	170 (2.11)	2320
4375	170 (1.53)	2423	166 (2.06)	2258
4500	166 (1.49)	2359	162 (2.01)	2198
4625	162 (1.46)	2297	159 (1.96)	2140
4750	159 (1.42)	2238	155 (1.91)	2085
4875	155 (1.39)	2180	152 (1.87)	2032
5000	152 (1.36)	2125	148 (1.82)	1980
5125	148 (1.33)	2070	145 (1.78)	1930
5250	145 (1.30)	2017	142 (1.74)	1881
5375	142 (1.27)	1966	139 (1.70)	1833
5500	139 (1.24)	1916	136 (1.66)	1786
5625	136 (1.12)	1867	133 (1.62)	1740
5750	133 (1.19)	1820	130 (1.59)	1697
5875	130 (1.16)	1774	127 (1.55)	1654
6000	127 (1.14)	1731	124 (1.52)	1614
6125	125 (1.11)	1690	122 (1.49)	1577
6250	123 (1.09)	1653	120 (1.46)	1542
6375	120 (1.07)	1619	118 (1.43)	1510
6500	119 (1.06)	1590	116 (1.41)	1483
6625	117 (1.04)	1565	114 (1.39)	1460
6750	116 (1.03)	1546	113 (1.37)	1443
6875	115 (1.02)	1534	113 (1.36)	1432
7000	115 (1.02)	1530	112 (1.36)	1428
7125 Or More	115 (1.02)	1531	112 (1.36)	1428

U.S. EPA ASM EMISSION STANDARDS - 1988-90 LIGHT DUTY TRUCKS (6000 GVWR OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	390 (3.54)	2725	381 (4.85)	2587
1875	368 (3.34)	2649	359 (4.57)	2435
2000	348 (3.16)	2499	339 (4.31)	2295
2125	329 (2.99)	2360	321 (4.08)	2167
2250	312 (2.83)	2232	305 (3.86)	2050
2375	297 (2.69)	2115	290 (3.66)	1943
2500	283 (2.56)	2009	276 (3.48)	1845
2625	270 (2.44)	1912	263 (3.32)	1756

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
2750	258 (2.33)	1823	252 (3.17)	1675
2875	247 (2.23)	1742	241 (3.03)	1601
3000	237 (2.14)	1668	232 (2.91)	1533
3125	228 (2.06)	1601	223 (2.79)	1471
3250	220 (1.99)	1539	215 (2.69)	1415
3375	213 (1.92)	1483	208 (2.60)	1363
3500	206 (1.86)	1432	201 (2.51)	1316
3625	200 (1.80)	1384	195 (2.43)	1273
3750	194 (1.74)	1340	189 (2.36)	1233
3875	188 (1.69)	1300	184 (2.29)	1195
4000	183 (1.65)	1262	179 (2.22)	1161
4125	179 (1.61)	1227	175 (2.16)	1126
4250	174 (1.56)	1194	170 (2.11)	1098
4375	170 (1.53)	1162	166 (2.06)	1069
4500	166 (1.49)	1132	162 (2.01)	1042
4625	162 (1.46)	1104	159 (1.96)	1015
4750	159 (1.42)	1076	155 (1.91)	990
4875	155 (1.39)	1049	152 (1.87)	966
5000	152 (1.36)	1023	148 (1.82)	942
5125	148 (1.33)	998	145 (1.78)	919
5250	145 (1.30)	974	142 (1.74)	896
5375	142 (1.27)	950	139 (1.70)	874
5500	139 (1.24)	926	136 (1.66)	853
5625	136 (1.12)	904	133 (1.62)	832
5750	133 (1.19)	882	130 (1.59)	812
5875	130 (1.16)	860	127 (1.55)	793
6000	127 (1.14)	840	124 (1.52)	774
6125	125 (1.11)	822	122 (1.49)	757
6250	123 (1.09)	804	120 (1.46)	741
6375	120 (1.07)	788	118 (1.43)	727
6500	119 (1.06)	775	116 (1.41)	714
6625	117 (1.04)	763	114 (1.39)	704
6750	116 (1.03)	755	113 (1.37)	696
6875	115 (1.02)	749	113 (1.36)	691
7000 Or More	115 (1.02)	747	112 (1.36)	689

U.S. EPA ASM EMISSION STANDARDS - 1991-95 LIGHT DUTY TRUCKS (6000 GVWR OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	324 (2.78)	2272	315 (3.64)	2114
1875	306 (2.63)	2181	297 (3.43)	1991
2000	289 (2.48)	2058	281 (3.24)	1877
2125	274 (2.35)	1944	267 (3.06)	1774
2250	260 (2.23)	1839	253 (2.90)	1678
2375	247 (2.12)	1744	241 (2.76)	1592
2500	236 (2.02)	1657	230 (2.62)	1512

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
2625	225 (1.92)	1577	219 (2.50)	1440
2750	216 (1.84)	1504	210 (2.39)	1374
2875	207 (1.76)	1438	210 (2.29)	1313
3000	199 (1.69)	1378	194 (2.19)	1258
3125	191 (1.63)	1323	186 (2.11)	1208
3250	185 (1.57)	1273	180 (2.03)	1163
3375	179 (1.52)	1227	174 (1.96)	1121
3500	173 (1.47)	1184	169 (1.89)	1082
3625	168 (1.42)	1146	164 (1.84)	1047
3750	163 (1.38)	1110	159 (1.78)	1014
3875	159 (1.34)	1077	155 (1.73)	984
4000	155 (1.31)	1046	151 (1.68)	956
4125	151 (1.27)	1017	147 (1.64)	930
4250	147 (1.24)	990	143 (1.60)	905
4375	144 (1.21)	964	140 (1.56)	882
4500	141 (1.18)	939	137 (1.52)	859
4625	137 (1.15)	916	134 (1.48)	838
4750	134 (1.13)	893	131 (1.45)	818
4875	132 (1.10)	872	128 (1.42)	798
5000	129 (1.08)	850	126 (1.38)	778
5125	126 (1.05)	830	123 (1.35)	760
5250	123 (1.03)	810	120 (1.32)	741
5375	121 (1.01)	790	118 (1.29)	723
5500	118 (0.99)	771	115 (1.26)	706
5625	116 (0.97)	752	113 (1.24)	689
5750	113 (0.94)	734	111 (1.21)	673
5875	111 (0.92)	717	108 (1.18)	657
6000	109 (0.91)	701	106 (1.16)	642
6125	107 (0.89)	685	104 (1.13)	628
6250	105 (.087)	671	102 (1.11)	615
6375	103 (0.86)	658	101 (1.09)	604
6500	102 (0.84)	647	99 (1.08)	593
6625	101 (0.83)	638	98 (1.06)	585
6750	100 (0.82)	631	97 (1.05)	578
6875	99 (0.82)	626	97 (1.04)	574
7000	99 (0.82)	624	96 (1.04)	573
7125 Or More	98 (0.81)	625	96 (1.04)	573

U.S. EPA ASM EMISSION STANDARDS - 1994 + TIER 1 LIGHT DUTY TRUCKS (3750 LVW OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	142 (0.80)	1212	136 (0.77)	1095
1875	134 (0.75)	1142	129 (0.73)	1031
2000	127 (0.71)	1077	123 (0.69)	973
2125	121 (0.68)	1018	116 (0.66)	920

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
2250	115 (0.64)	964	111 (0.62)	871
2375	109 (0.61)	915	106 (0.59)	827
2500	105 (0.59)	869	101 (0.57)	786
2625	100 (0.56)	828	97 (0.54)	749
2750	96 (0.54)	791	93 (0.52)	715
2875	92 (0.52)	756	89 (0.50)	684
3000	89 (0.50)	725	86 (0.48)	656
3125	86 (0.48)	696	83 (0.46)	630
3250	83 (0.46)	670	80 (0.45)	607
3375	81 (0.45)	647	78 (0.43)	585
3500	78 (0.44)	625	76 (0.42)	566
3625	76 (0.42)	605	74 (0.41)	547
3750	74 (0.41)	586	72 (0.40)	531
3875	72 (0.40)	569	70 (0.39)	515
4000	71 (0.39)	553	68 (0.38)	501
4125	69 (0.38)	538	67 (0.37)	487
4250	67 (0.37)	524	65 (0.36)	475
4375	66 (0.36)	510	64 (0.35)	463
4500	65 (0.36)	498	63 (0.35)	440
4625	63 (0.35)	486	61 (0.34)	440
4750	62 (0.34)	474	60 (0.33)	430
4875	61 (0.34)	463	59 (0.33)	420
5000	60 (0.33)	452	58 (0.32)	410
5125	58 (0.32)	441	57 (0.31)	400
5250	57 (0.32)	431	56 (0.31)	391
5375	56 (0.31)	420	55 (0.30)	382
5500	55 (0.30)	410	54 (0.30)	373
5625	54 (0.30)	401	53 (0.29)	364
5750	53 (0.29)	391	52 (0.29)	356
5875	52 (0.29)	383	51 (0.28)	348
6000	51 (0.28)	374	50 (0.28)	340
6125	50 (0.28)	366	49 (0.27)	333
6250	50 (0.27)	359	48 (0.27)	326
6375	49 (0.27)	352	48 (0.26)	320
6500	48 (0.26)	346	47 (0.26)	315
6625	48 (0.26)	341	46 (0.26)	311
6750	47 (0.26)	338	46 (0.26)	307
6875	47 (0.26)	335	46 (0.25)	305
7000 Or More	47 (0.25)	335	46 (0.25)	305

U.S. EPA ASM EMISSION STANDARDS - 1994 + TIER 1 LIGHT DUTY TRUCKS (3751 LVW OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	224 (1.26)	1819	216 (1.22)	1642
1875	212 (1.19)	1713	205 (1.16)	1547

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
2000	201 (1.13)	1616	194 (1.09)	1460
2125	191 (1.07)	1527	184 (1.04)	1380
2250	182 (1.02)	1446	175 (0.99)	1307
2375	173 (0.97)	1372	167 (0.94)	1240
2500	166 (0.93)	1304	160 (0.90)	1179
2625	159 (0.89)	1242	153 (0.86)	1123
2750	152 (0.85)	1186	147 (0.82)	1072
2875	146 (0.82)	1134	141 (0.79)	1026
3000	141 (0.79)	1088	136 (0.76)	984
3125	136 (0.76)	1045	132 (0.73)	945
3250	132 (0.73)	1006	127 (0.71)	910
3375	128 (0.71)	970	123 (0.69)	878
3500	124 (0.69)	937	120 (0.67)	848
3625	120 (0.67)	907	117 (0.65)	821
3750	117 (0.65)	879	114 (0.63)	796
3875	114 (0.63)	853	111 (0.61)	773
4000	112 (0.62)	829	108 (0.60)	751
4125	109 (0.60)	807	106 (0.58)	731
4250	107 (0.59)	786	103 (0.57)	712
4375	104 (0.58)	766	101 (0.56)	694
4500	102 (0.57)	747	99 (0.55)	677
4625	100 (0.55)	728	97 (0.54)	661
4750	98 (0.54)	711	95 (0.53)	645
4875	96 (0.53)	694	93 (0.52)	630
5000	94 (0.52)	677	92 (0.51)	615
5125	93 (0.51)	661	90 (0.50)	600
5250	91 (0.50)	646	88 (0.49)	586
5375	89 (0.49)	631	86 (0.48)	573
5500	87 (0.48)	616	85 (0.47)	559
5625	86 (0.47)	601	83 (0.46)	546
5750	84 (0.46)	587	82 (0.45)	534
5875	83 (0.45)	574	80 (0.44)	522
6000	81 (0.44)	561	79 (0.44)	510
6125	80 (0.44)	549	78 (0.43)	499
6250	79 (0.43)	538	76 (0.42)	489
6375	77 (0.42)	528	75 (0.42)	480
6500	76 (0.42)	519	74 (0.41)	473
6625	76 (0.41)	512	74 (0.41)	466
6750	75 (0.41)	507	73 (0.41)	461
6875	75 (0.40)	503	73 (0.40)	458
7000 Or More	74 (0.40)	502	72 (0.40)	457

U.S. EPA ASM EMISSION STANDARDS - 1968-72 LIGHT DUTY TRUCKS (6001 GVWR OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	1118 (8.02)	4990	1098 (9.90)	4990

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1875	1052 (7.56)	4990	1034 (9.90)	4990
2000	992 (7.14)	4990	975 (9.90)	4990
2125	938 (6.75)	4990	921 (9.66)	4990
2250	887 (6.40)	4990	872 (9.14)	4990
2375	841 (6.07)	4990	827 (8.67)	4990
2500	800 (5.78)	4990	786 (8.25)	4990
2625	761 (5.51)	4990	748 (7.85)	4990
2750	726 (5.26)	4990	714 (7.50)	4772
2875	695 (5.03)	4892	683 (7.17)	4556
3000	666 (4.83)	4680	654 (6.87)	4359
3125	639 (4.64)	4488	628 (6.60)	4180
3250	615 (4.47)	4311	604 (6.35)	4016
3375	593 (4.31)	4150	583 (6.13)	3866
3500	573 (4.17)	4002	563 (5.92)	3728
3625	554 (4.04)	3867	544 (5.73)	3602
3750	537 (3.91)	3741	527 (5.55)	3485
3875	521 (3.80)	3625	512 (5.39)	3377
4000	506 (3.70)	3517	497 (5.24)	3276
4125	492 (3.60)	3416	484 (5.09)	3182
4250	479 (3.51)	3321	471 (4.96)	3094
4375	467 (3.42)	3230	459 (4.83)	3010
4500	455 (3.34)	3145	447 (4.71)	2930
4625	444 (3.26)	3063	436 (4.60)	2854
4750	433 (3.18)	2983	425 (4.49)	2780
4875	423 (3.11)	2907	415 (4.38)	2709
5000	412 (3.03)	2833	405 (4.28)	2640
5125	402 (2.97)	2760	395 (4.18)	2573
5250	393 (2.90)	2690	386 (4.08)	2507
5375	383 (2.83)	2621	376 (3.98)	2443
5500	374 (2.77)	2554	367 (3.89)	2381
5625	365 (2.70)	2489	359 (3.80)	2321
5750	357 (2.64)	2426	350 (3.71)	2262
5875	348 (2.59)	2366	342 (3.62)	2206
6000	341 (2.53)	2308	334 (3.54)	2152
6125	333 (2.48)	2254	327 (3.47)	2102
6250	326 (2.43)	2204	320 (3.40)	2056
6375	320 (2.39)	2159	314 (3.34)	2014
6500	315 (2.35)	2119	309 (3.28)	1977
6625	310 (2.32)	2087	304 (3.23)	1947
6750	307 (2.29)	2062	301 (3.20)	1924
6875	305 (2.28)	2046	299 (3.17)	1909
7000	304 (2.27)	2040	298 (3.17)	1904
7125 Or More	304 (2.27)	2045	298 (3.17)	1904

U.S. EPA ASM EMISSION STANDARDS - 1973-74 LIGHT DUTY TRUCKS (6001 GVWR OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	1118 (8.02)	4990	1098 (9.90)	4980
1875	1052 (7.56)	4990	1034 (9.90)	4906
2000	992 (7.14)	4919	975 (9.90)	4838
2125	938 (6.75)	4853	921 (9.66)	4776
2250	887 (6.40)	4792	872 (9.14)	4720
2375	841 (6.07)	4736	827 (8.67)	4668
2500	800 (5.78)	4685	786 (8.25)	4620
2625	761 (5.51)	4639	748 (7.85)	4577
2750	726 (5.26)	4596	714 (7.50)	4374
2875	695 (5.03)	4484	683 (7.17)	4176
3000	666 (4.83)	4290	654 (6.87)	3996
3125	639 (4.64)	4114	628 (6.60)	3832
3250	615 (4.47)	3952	604 (6.35)	3681
3375	593 (4.31)	3804	583 (6.13)	3544
3500	573 (4.17)	3669	563 (5.92)	3418
3625	554 (4.04)	3544	544 (5.73)	3302
3750	537 (3.91)	3429	527 (5.55)	3195
3875	521 (3.80)	3323	512 (5.39)	3096
4000	506 (3.70)	3224	497 (5.24)	3003
4125	492 (3.60)	3131	484 (5.09)	2917
4250	479 (3.51)	3044	471 (4.96)	2836
4375	467 (3.42)	2961	459 (4.83)	2759
4500	455 (3.34)	2883	447 (4.71)	2686
4625	444 (3.26)	2807	436 (4.60)	2616
4750	433 (3.18)	2735	425 (4.49)	2549
4875	423 (3.11)	2665	415 (4.38)	2483
5000	412 (3.03)	2597	405 (4.28)	2420
5125	402 (2.97)	2530	395 (4.18)	2359
5250	393 (2.90)	2466	386 (4.08)	2298
5375	383 (2.83)	2403	376 (3.98)	2240
5500	374 (2.77)	2341	367 (3.89)	2183
5625	365 (2.70)	2282	359 (3.80)	2127
5750	357 (2.64)	2224	350 (3.71)	2074
5875	348 (2.59)	2168	342 (3.62)	2022
6000	341 (2.53)	2116	334 (3.54)	1973
6125	333 (2.48)	2066	327 (3.47)	1927
6250	326 (2.43)	2020	320 (3.40)	1884
6375	320 (2.39)	1979	314 (3.34)	1846
6500	315 (2.35)	1943	309 (3.28)	1813
6625	310 (2.32)	1913	304 (3.23)	1785
6750	307 (2.29)	1890	301 (3.20)	1764
6875	305 (2.28)	1875	299 (3.17)	1750
7000	304 (2.27)	1870	298 (3.17)	1745
7125 Or More	304 (2.27)	1874	298 (3.17)	1745

U.S. EPA ASM EMISSION STANDARDS - 1975-78 LIGHT DUTY TRUCKS (6001 GVWR OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	843 (5.07)	4990	828 (7.26)	4980
1875	794 (4.78)	4990	780 (6.84)	4906
2000	749 (4.51)	4919	736 (6.45)	4838
2125	707 (4.26)	4853	695 (6.10)	4776
2250	669 (4.04)	4792	658 (5.78)	4720
2375	635 (3.83)	4736	624 (5.48)	4668
2500	603 (3.65)	4685	593 (5.21)	4620
2625	574 (3.48)	4639	564 (4.96)	4577
2750	548 (3.32)	4596	539 (4.73)	4374
2875	524 (3.18)	4484	515 (4.53)	4176
3000	502 (3.05)	4290	493 (4.34)	3996
3125	482 (2.93)	4114	474 (4.17)	3832
3250	464 (2.82)	3952	456 (4.01)	3681
3375	447 (2.72)	3804	440 (3.87)	3544
3500	432 (2.63)	3669	424 (3.74)	3418
3625	418 (2.55)	3544	411 (3.62)	3302
3750	405 (2.47)	3429	398 (3.51)	3195
3875	393 (2.40)	3323	386 (3.40)	3096
4000	382 (2.33)	3224	375 (3.31)	3003
4125	371 (2.27)	3131	365 (3.22)	2917
4250	361 (2.21)	3044	355 (3.13)	2836
4375	352 (2.16)	2961	346 (3.05)	2759
4500	343 (2.11)	2883	337 (2.98)	2686
4625	335 (2.06)	2807	329 (2.90)	2616
4750	327 (2.01)	2735	321 (2.83)	2549
4875	319 (1.96)	2665	313 (2.77)	2483
5000	311 (1.92)	2597	305 (2.70)	2420
5125	304 (1.87)	2530	298 (2.64)	2359
5250	296 (1.83)	2466	291 (2.58)	2298
5375	289 (1.79)	2403	284 (2.51)	2240
5500	282 (1.75)	2341	277 (2.46)	2183
5625	276 (1.71)	2282	271 (2.40)	2127
5750	269 (1.67)	2224	264 (2.34)	2074
5875	263 (1.63)	2168	258 (2.29)	2022
6000	257 (1.60)	2116	252 (2.24)	1973
6125	251 (1.57)	2066	247 (2.19)	1927
6250	246 (1.54)	2020	242 (2.15)	1884
6375	242 (1.51)	1979	237 (2.11)	1846
6500	238 (1.48)	1943	233 (2.07)	1813
6625	234 (1.46)	1913	230 (2.04)	1785
6750	232 (1.45)	1890	227 (2.02)	1764
6875	230 (1.44)	1875	225 (2.00)	1750
7000	229 (1.43)	1870	225 (2.00)	1745
7125 Or More	229 (1.43)	1874	225 (2.00)	1745

U.S. EPA ASM EMISSION STANDARDS - 1979-83 LIGHT DUTY TRUCKS (6001 GVWR OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	774 (4.31)	4990	761 (6.06)	4960
1875	729 (4.06)	4990	717 (5.70)	4738
2000	688 (3.83)	4778	676 (5.38)	4535
2125	650 (3.63)	4578	638 (5.09)	4349
2250	615 (3.44)	4395	604 (4.82)	4179
2375	583 (3.26)	4228	573 (4.57)	4024
2500	554 (3.10)	4076	544 (4.35)	3881
2625	528 (2.96)	3936	518 (4.14)	3752
2750	503 (2.83)	3809	495 (3.95)	3579
2875	481 (2.71)	3669	473 (3.78)	3417
3000	461 (2.60)	3510	453 (3.62)	3270
3125	443 (2.50)	3366	435 (3.48)	3135
3250	426 (2.40)	3234	419 (3.35)	3012
3375	411 (2.32)	3113	404 (3.23)	2899
3500	397 (2.24)	3002	390 (3.12)	2796
3625	384 (2.17)	2900	377 (3.02)	2701
3750	372 (2.11)	2806	365 (2.93)	2614
3875	361 (2.05)	2719	355 (2.58)	2533
4000	351 (1.99)	2638	345 (2.77)	2457
4125	341 (1.94)	2562	335 (2.69)	2387
4250	332 (1.89)	2490	326 (2.62)	2320
4375	323 (1.84)	2423	318 (2.55)	2258
4500	315 (1.80)	2359	310 (2.49)	2198
4625	308 (1.76)	2297	302 (2.43)	2140
4750	300 (1.72)	2238	295 (2.37)	2085
4875	293 (1.68)	2180	288 (2.32)	2032
5000	286 (1.64)	2125	281 (2.26)	1980
5125	279 (1.60)	2070	274 (2.21)	1930
5250	272 (1.56)	2017	267 (2.16)	1881
5375	26 (1.53)	1966	261 (2.11)	1833
5500	259 (1.49)	1916	255 (2.06)	1786
5625	253 (1.46)	1867	248 (2.01)	1740
5750	247 (1.43)	1820	243 (1.96)	1697
5875	241 (1.40)	1774	237 (1.92)	1654
6000	236 (1.37)	1731	232 (1.88)	1614
6125	231 (1.34)	1690	227 (1.84)	1577
6250	226 (1.31)	1653	222 (1.80)	1542
6375	222 (1.29)	1619	218 (1.77)	1510
6500	218 (1.27)	1590	214 (1.74)	1483
6625	215 (1.25)	1565	211 (1.72)	1460
6750	213 (1.24)	1546	209 (1.70)	1443
6875	211 (1.23)	1534	207 (1.68)	1432
7000	211 (1.23)	1530	207 (1.68)	1428
7125 Or More	211 (1.22)	1531	206 (1.68)	1428

U.S. EPA ASM EMISSION STANDARDS - 1984-87 LIGHT DUTY TRUCKS (6001 GVWR OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	390 (3.54)	4990	381 (4.85)	4960
1875	368 (3.34)	4990	359 (4.57)	4738
2000	348 (3.16)	4778	339 (4.31)	4535
2125	329 (2.99)	4578	321 (4.08)	4349
2250	312 (2.83)	4395	305 (3.86)	4179
2375	297 (2.69)	4228	290 (3.66)	4024
2500	283 (2.56)	4076	276 (3.48)	3881
2625	270 (2.44)	3936	263 (3.32)	3752
2750	258 (2.33)	3809	252 (3.17)	3579
2875	247 (2.23)	3669	241 (3.03)	3417
3000	237 (2.14)	3510	232 (2.91)	3270
3125	228 (2.06)	3366	223 (2.79)	3135
3250	220 (1.99)	3234	215 (2.69)	3012
3375	213 (1.92)	3113	208 (2.60)	2899
3500	206 (1.86)	3002	201 (2.51)	2796
3625	200 (1.80)	2900	195 (2.43)	2701
3750	194 (1.74)	2806	189 (2.36)	2614
3875	188 (1.69)	2719	184 (2.29)	2533
4000	183 (1.65)	2638	179 (2.22)	2457
4125	179 (1.61)	2562	175 (2.16)	2387
4250	174 (1.56)	2490	170 (2.11)	2320
4375	170 (1.53)	2423	166 (2.06)	2258
4500	166 (1.49)	2359	162 (2.01)	2198
4625	162 (1.46)	2297	159 (1.96)	2140
4750	159 (1.42)	2238	155 (1.91)	2085
4875	155 (1.39)	2180	152 (1.87)	2032
5000	152 (1.36)	2125	148 (1.82)	1980
5125	148 (1.33)	2070	145 (1.78)	1930
5250	145 (1.30)	2017	142 (1.74)	1881
5375	142 (1.27)	1966	139 (1.70)	1833
5500	139 (1.24)	1916	136 (1.66)	1786
5625	136 (1.12)	1867	133 (1.62)	1740
5750	133 (1.19)	1820	130 (1.59)	1697
5875	130 (1.16)	1774	127 (1.55)	1654
6000	127 (1.14)	1731	124 (1.52)	1614
6125	125 (1.11)	1690	122 (1.49)	1577
6250	123 (1.09)	1653	120 (1.46)	1542
6375	120 (1.07)	1619	118 (1.43)	1510
6500	119 (1.06)	1590	116 (1.41)	1483
6625	117 (1.04)	1565	114 (1.39)	1460
6750	116 (1.03)	1546	113 (1.37)	1443
6875	115 (1.02)	1534	113 (1.36)	1432
7000	115 (1.02)	1530	112 (1.36)	1428
7125 Or More	115 (1.02)	1531	112 (1.36)	1428

U.S. EPA ASM EMISSION STANDARDS - 1988-90 LIGHT DUTY TRUCKS (6001 GVWR OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	390 (3.54)	4084	381 (4.85)	4005
1875	368 (3.34)	4054	359 (4.57)	3767
2000	348 (3.16)	3824	339 (4.31)	3548
2125	329 (2.99)	3609	321 (4.08)	3348
2250	312 (2.83)	3411	305 (3.86)	3165
2375	297 (2.69)	3231	290 (3.66)	2998
2500	283 (2.56)	3066	276 (3.48)	2845
2625	270 (2.44)	2916	263 (3.32)	2706
2750	258 (2.33)	2779	252 (3.17)	2579
2875	247 (2.23)	2654	241 (3.03)	2463
3000	237 (2.14)	2539	232 (2.91)	2357
3125	228 (2.06)	2435	223 (2.79)	2260
3250	220 (1.99)	2340	215 (2.69)	2172
3375	213 (1.92)	2253	208 (2.60)	2092
3500	206 (1.86)	2174	201 (2.51)	2018
3625	200 (1.80)	2100	195 (2.43)	1950
3750	194 (1.74)	2033	189 (2.36)	1887
3875	188 (1.69)	1970	184 (2.29)	1829
4000	183 (1.65)	1912	179 (2.22)	1775
4125	179 (1.61)	1857	175 (2.16)	1724
4250	174 (1.56)	1806	170 (2.11)	1677
4375	170 (1.53)	1757	166 (2.06)	1632
4500	166 (1.49)	1711	162 (2.01)	1589
4625	162 (1.46)	1666	159 (1.96)	1548
4750	159 (1.42)	1624	155 (1.91)	1508
4875	155 (1.39)	1583	152 (1.87)	1470
5000	152 (1.36)	1542	148 (1.82)	1433
5125	148 (1.33)	1503	145 (1.78)	1397
5250	145 (1.30)	1465	142 (1.74)	1362
5375	142 (1.27)	1428	139 (1.70)	1327
5500	139 (1.24)	1392	136 (1.66)	1294
5625	136 (1.12)	1357	133 (1.62)	1261
5750	133 (1.19)	1323	130 (1.59)	1230
5875	130 (1.16)	1290	127 (1.55)	1199
6000	127 (1.14)	1259	124 (1.52)	1171
6125	125 (1.11)	1230	122 (1.49)	1144
6250	123 (1.09)	1203	120 (1.46)	1119
6375	120 (1.07)	1179	118 (1.43)	1096
6500	119 (1.06)	1158	116 (1.41)	1077
6625	117 (1.04)	1140	114 (1.39)	1060
6750	116 (1.03)	1127	113 (1.37)	1048
6875	115 (1.02)	1118	113 (1.36)	1040
7000 Or More	115 (1.02)	1115	112 (1.36)	1037

U.S. EPA ASM EMISSION STANDARDS - 1991-95 LIGHT DUTY TRUCKS (6001 GVWR OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	324 (2.78)	3631	315 (3.64)	3532
1875	306 (2.63)	3586	297 (3.43)	3323
2000	289 (2.48)	3383	281 (3.24)	3131
2125	274 (2.35)	3192	267 (3.06)	2955
2250	260 (2.23)	3018	253 (2.90)	2794
2375	247 (2.12)	2859	241 (2.76)	2646
2500	236 (2.02)	2714	230 (2.62)	2512
2625	225 (1.92)	2581	219 (2.50)	2389
2750	216 (1.84)	2460	210 (2.39)	2277
2875	207 (1.76)	2350	210 (2.29)	2175
3000	199 (1.69)	2249	194 (2.19)	2082
3125	191 (1.63)	2157	186 (2.11)	1997
3250	185 (1.57)	2073	180 (2.03)	1920
3375	179 (1.52)	1997	174 (1.96)	1849
3500	173 (1.47)	1926	169 (1.89)	1784
3625	168 (1.42)	1862	164 (1.84)	1724
3750	163 (1.38)	1802	159 (1.78)	1669
3875	159 (1.34)	1747	155 (1.73)	1618
4000	155 (1.31)	1695	151 (1.68)	1570
4125	151 (1.27)	1647	147 (1.64)	1526
4250	147 (1.24)	1602	143 (1.60)	1484
4375	144 (1.21)	1559	140 (1.56)	1444
4500	141 (1.18)	1518	137 (1.52)	1406
4625	137 (1.15)	1479	134 (1.48)	1370
4750	134 (1.13)	1441	131 (1.45)	1336
4875	132 (1.10)	1405	128 (1.42)	1302
5000	129 (1.08)	1369	126 (1.38)	1269
5125	126 (1.05)	1335	123 (1.35)	1237
5250	123 (1.03)	1031	120 (1.32)	1206
5375	121 (1.01)	1269	118 (1.29)	1176
5500	118 (0.99)	1237	115 (1.26)	1147
5625	116 (0.97)	1206	113 (1.24)	1118
5750	113 (0.94)	1176	111 (1.21)	1090
5875	111 (0.92)	1147	108 (1.18)	1064
6000	109 (0.91)	1120	106 (1.16)	1039
6125	107 (0.89)	1094	104 (1.13)	1015
6250	105 (.087)	1070	102 (1.11)	993
6375	103 (0.86)	1049	101 (1.09)	973
6500	102 (0.84)	1030	99 (1.08)	956
6625	101 (0.83)	1014	98 (1.06)	941
6750	100 (0.82)	1003	97 (1.05)	931
6875	99 (0.82)	995	97 (1.04)	924
7000	99 (0.82)	992	96 (1.04)	921
7125 Or More	98 (0.81)	992	96 (1.04)	921

U.S. EPA ASM EMISSION STANDARDS - 1994 + TIER 1 LIGHT DUTY TRUCKS (5750 LVW OR LESS)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	224 (1.26)	1819	216 (1.22)	1642
1875	212 (1.19)	1713	205 (1.16)	1547
2000	201 (1.13)	1616	194 (1.09)	1460
2125	191 (1.07)	1527	184 (1.04)	1380
2250	182 (1.02)	1446	175 (0.99)	1307
2375	173 (0.97)	1372	167 (0.94)	1240
2500	166 (0.93)	1304	160 (0.90)	1179
2625	159 (0.89)	1242	153 (0.86)	1123
2750	152 (0.85)	1186	147 (0.82)	1072
2875	146 (0.82)	1134	141 (0.79)	1026
3000	141 (0.79)	1088	136 (0.76)	984
3125	136 (0.76)	1045	132 (0.73)	945
3250	132 (0.73)	1006	127 (0.71)	910
3375	128 (0.71)	970	123 (0.69)	878
3500	124 (0.69)	937	120 (0.67)	848
3625	120 (0.67)	907	117 (0.65)	821
3750	117 (0.65)	879	114 (0.63)	796
3875	114 (0.63)	853	111 (0.61)	773
4000	112 (0.62)	829	108 (0.60)	751
4125	109 (0.60)	807	106 (0.58)	731
4250	107 (0.59)	786	103 (0.57)	712
4375	104 (0.58)	766	101 (0.56)	694
4500	102 (0.57)	747	99 (0.55)	677
4625	100 (0.55)	728	97 (0.54)	661
4750	98 (0.54)	711	95 (0.53)	645
4875	96 (0.53)	694	93 (0.52)	630
5000	94 (0.52)	677	92 (0.51)	615
5125	93 (0.51)	661	90 (0.50)	600
5250	91 (0.50)	646	88 (0.49)	586
5375	89 (0.49)	631	86 (0.48)	573
5500	87 (0.48)	616	85 (0.47)	559
5625	86 (0.47)	601	83 (0.46)	546
5750	84 (0.46)	587	82 (0.45)	534
5875	83 (0.45)	574	80 (0.44)	522
6000	81 (0.44)	561	79 (0.44)	510
6125	80 (0.44)	549	78 (0.43)	499
6250	79 (0.43)	538	76 (0.42)	489
6375	77 (0.42)	528	75 (0.42)	480
6500	76 (0.42)	519	74 (0.41)	473
6625	76 (0.41)	512	74 (0.41)	466
6750	75 (0.41)	507	73 (0.41)	461
6875	75 (0.40)	503	73 (0.40)	458
7000 Or More	74 (0.40)	502	72 (0.40)	457

U.S. EPA ASM EMISSION STANDARDS - 1994 + TIER 1 LIGHT DUTY TRUCKS (5751 LVW OR MORE)

Test Weight	ASM5015		ASM2525	
	HC ppm (CO %)	NOx ppm	HC ppm (CO %)	NOx ppm
1750	324 (2.78)	3178	315 (3.64)	3060
1875	306 (2.63)	3117	297 (3.43)	2879
2000	289 (2.48)	2941	281 (3.24)	2713
2125	274 (2.35)	2776	267 (3.06)	2561
2250	260 (2.23)	2625	253 (2.90)	2422
2375	247 (2.12)	2487	241 (2.76)	2295
2500	236 (2.02)	2361	230 (2.62)	2179
2625	225 (1.92)	2246	219 (2.50)	2073
2750	216 (1.84)	2142	210 (2.39)	1976
2875	207 (1.76)	2046	210 (2.29)	1888
3000	199 (1.69)	1959	194 (2.19)	1808
3125	191 (1.63)	1879	186 (2.11)	1734
3250	185 (1.57)	1806	180 (2.03)	1667
3375	179 (1.52)	1740	174 (1.96)	1606
3500	173 (1.47)	1679	169 (1.89)	1550
3625	168 (1.42)	1623	164 (1.84)	1498
3750	163 (1.38)	1571	159 (1.78)	1451
3875	159 (1.34)	1523	155 (1.73)	1407
4000	155 (1.31)	1479	151 (1.68)	1365
4125	151 (1.27)	1437	147 (1.64)	1327
4250	147 (1.24)	1398	143 (1.60)	1291
4375	144 (1.21)	1360	140 (1.56)	1257
4500	141 (1.18)	1325	137 (1.52)	1224
4625	137 (1.15)	1291	134 (1.48)	1193
4750	134 (1.13)	1259	131 (1.45)	1163
4875	132 (1.10)	1227	128 (1.42)	1134
5000	129 (1.08)	1196	126 (1.38)	1106
5125	126 (1.05)	1167	123 (1.35)	1078
5250	123 (1.03)	1138	120 (1.32)	1051
5375	121 (1.01)	1109	118 (1.29)	1025
5500	118 (0.99)	1082	115 (1.26)	1000
5625	116 (0.97)	1055	113 (1.24)	975
5750	113 (0.94)	1029	111 (1.21)	951
5875	111 (0.92)	1004	108 (1.18)	928
6000	109 (0.91)	980	106 (1.16)	906
6125	107 (0.89)	958	104 (1.13)	886
6250	105 (.087)	937	102 (1.11)	867
6375	103 (0.86)	919	101 (1.09)	850
6500	102 (0.84)	902	99 (1.08)	835
6625	101 (0.83)	889	98 (1.06)	823
6750	100 (0.82)	879	97 (1.05)	813
6875	99 (0.82)	872	97 (1.04)	807
7000	99 (0.82)	870	96 (1.04)	805
7125 Or More	98 (0.81)	870	96 (1.04)	805

U. S. EPA REVISED FINAL ASM EMISSION STANDARDS (ASM5015 & ASM2525)

NOTE: EPA has not published a revised final standards for High Altitude, Light Duty Trucks 2 (6000-8500 GVWR), or vehicles older than 1980 model year. EPA guidance as of February 2003 states that a program may choose to use combinations of the Original and the Revised Final Standards.

U.S. EPA REVISED FINAL ASM EMISSION STANDARDS

Application	ASM5015		ASM2525	
HC ppm (CO %)		NOx ppm	HC ppm (CO %)	NOx ppm
Passenger Cars				
1980	275 (1.3)	8500	500 (2.3)	4750
1981-82	275 (1.3)	3600	500 (2.3)	3500
1983-89	275 (1.1)	3600	500 (1.6)	3500
1990 & Newer	275 (1.1)	3600	300 (1.6)	3500
Light Duty Trucks (Less Than 6000 GVWR)				
1980-83	1140 (9.7)	14,145	340 (23.28)	32,200
1984-87	537 (5.4)	14,145	160 (12.96)	32,200
1988-95	537 (5.4)	7380	160 (12.96)	16,800
1996 & Newer	275 (1.1)	6150	82 (4.40)	14,000

U.S. EPA IM240 EMISSION STANDARDS

START-UP STANDARDS

Start-up standards should be used during the first 2 years of program operation. Tier 1 standards are recommended for all 1996 and newer vehicles and may be used for 1994 and newer vehicles certified to Tier 1 standards as well.

U.S. EPA IM240 HYDROCARBONS EMISSION START-UP STANDARDS

Application	Hydrocarbons (Grams/Mile)	
Composite		Phase 2
Light Duty Vehicles		
1996 & Newer	0.80	0.50
1991-95	1.20	0.75
1983-90	2.00	1.25
1980-82	2.00	1.25
1975-79	7.50	5.00
1968-74	10.0	6.00
High Altitude Light Duty Vehicles		
1983-84	2.00	1.25
1982	2.00	1.25
Light Duty Trucks (0-6000 Lbs. GVWR)		

Application	Hydrocarbons (Grams/Mile)	
Composite		Phase 2
1996 & Newer (Less Than 3750 LVW)	0.80	0.50
1996 & Newer (More Than 3750 LVW)	1.00	0.63
1991-95	2.40	1.50
1984-90	3.20	2.00
1979-83	7.50	5.00
1975-78	8.00	5.00
1968-74	10.0	6.00
High Altitude Light Duty Trucks (0-6000 Lbs. GVWR)		
1991 & Newer	3.00	2.00
1984-90	4.00	2.50
1982-83	8.00	5.00
Light Duty Trucks (6001-8500 Lbs. GVWR)		
1996 & Newer (Less Than 5750 ALVW)	1.00	0.63
1996 & Newer (More Than 5750 ALVW)	2.40	1.50
1991-95	2.40	1.50
1984-90	3.20	2.00
1979-83	7.50	5.00
1975-78	8.00	5.00
1968-74	10.0	6.00
High Altitude Light Duty Trucks (6001-8500 Lbs. GVWR)		
1991 & Newer	3.00	2.00
1984-90	4.00	2.50
1982-83	8.00	5.00
Heavy Duty Trucks (Greater Than 8500 Lbs. GVWR)		
1998 & Newer	2.00	1.30
1987-97	3.00	1.90
1985-86	5.00	3.10
1979-84	6.00	3.80
1970-78	10.0	6.30
1969 & Earlier	20.0	12.50

U.S. EPA IM240 CARBON MONOXIDE EMISSION START-UP STANDARDS

Application	Carbon Monoxide (Grams/Mile)	
Composite		Phase 2
Light Duty Vehicles		
1996 & Newer	15.0	12.0
1991-95	20.0	16.0
1983-90	30.0	24.0
1980-82	60.0	48.0
1975-79	90.0	72.0
1968-74	150.0	120.0
High Altitude Light Duty Vehicles		
1983-84	60.0	48.0
1982	75.0	60.0
Light Duty Trucks (0-6000 Lbs. GVWR)		
1996 & Newer (Less Than 3750 LVW)	15.0	12.0
1996 & Newer (More Than 3750 LVW)	20.0	16.0
1991-95	60.0	48.0

Application	Carbon Monoxide (Grams/Mile)	
Composite	Phase 2	
1984-90	80.0	64.0
1979-83	100.0	80.0
1975-78	120.0	96.0
1968-74	150.0	120.0
High Altitude Light Duty Trucks (0-6000 Lbs. GVWR)		
1991 & Newer	70.0	56.0
1984-90	90.0	72.0
1982-83	130.0	104.0
Light Duty Trucks (6001-8500 Lbs. GVWR)		
1996 & Newer (Less Than 5750 ALVW)	20.0	16.0
1996 & Newer (More Than 5750 ALVW)	60.0	48.0
1991-95	60.0	48.0
1984-90	80.0	64.0
1979-83	100.0	80.0
1975-78	120.0	96.0
1968-74	150.0	120.0
High Altitude Light Duty Trucks (6001-8500 Lbs. GVWR)		
1991 & Newer	70.0	56.0
1984-90	90.0	72.0
1982-83	130.0	104.0
Heavy Duty Trucks (Greater Than 8500 Lbs. GVWR)		
1998 & Newer	30.0	24.0
1987-97	60.0	48.0
1985-86	75.0	60.0
1979-84	100.0	80.0
1974-78	150.00	120.0
1970-73	175.00	140.00
1969 & Earlier	200.0	160.0

U.S. EPA IM240 OXIDES OF NITROGEN EMISSION START-UP STANDARDS

Application	Oxides Of Nitrogen (Grams/Mile)	
Composite	Phase 2	
Light Duty Vehicles		
1996 & Newer	2.0	2.0
1991-95	2.5	2.5
1981-90	3.0	3.0
1977-80	6.0	6.0
1973-76	9.0	9.0
1968-72	10.0	10.0
High Altitude Light Duty Vehicles		
1982-84	3.0	3.0
Light Duty Trucks (0-6000 Lbs. GVWR)		
1996 & Newer (Less Than 3750 LVW)	2.0	2.0
1996 & Newer (More Than 3750 LVW)	2.5	2.5
1991-95	3.0	3.0
1988-90	3.5	3.5
1979-87	7.0	7.0
1973-78	9.0	9.0

Application	Oxides Of Nitrogen (Grams/Mile)	
Composite	Phase 2	
1968-72	10.0	10.0
High Altitude Light Duty Trucks (0-6000 Lbs. GVWR)		
1991 & Newer	3.0	3.0
1988-90	3.5	3.5
1982-87	7.0	7.0
Light Duty Trucks (6001-8500 Lbs. GVWR)		
1996 & Newer (Less Than 5750 ALVW)	2.5	2.5
1996 & Newer (More Than 5750 ALVW)	4.0	4.0
1991-95	4.5	4.5
1988-90	5.0	5.0
1979-87	7.0	7.0
1973-78	9.0	9.0
1968-72	10.0	10.0
High Altitude Light Duty Trucks (6001-8500 Lbs. GVWR)		
1991 & Newer	4.5	4.5
1988-90	5.0	5.0
1982-87	7.0	7.0
Heavy Duty Trucks (Greater Than 8500 Lbs. GVWR)		
1998 & Newer	4.0	4.0
1991-97	6.0	6.0
1979-90	8.0	8.0
1970-78	10.0	10.0
1969 & Earlier	15.0	15.0

FINAL STANDARDS

Final standards are recommended for vehicles tested in calendar years 1997 and later. Tier 1 standards are recommended for all 1996 and newer vehicles and may be used for 1994 and newer vehicles.

U.S. EPA IM240 HYDROCARBONS EMISSION FINAL STANDARDS

Application	Hydrocarbons (Grams/Mile)	
Composite	Phase 2	
Light Duty Vehicles		
1996 & Newer	0.60	0.40
1980-95	0.80	0.50
1975-79	3.00	2.00
1968-74	7.00	4.50
High Altitude Light Duty Vehicles		
1982-84	1.20	0.75
Light Duty Trucks (0-6000 Lbs. GVWR)		
1996 & Newer (Less Than 3750 LVW)	0.60	0.40
1996 & Newer (More Than 3750 LVW)	0.80	0.50
1984-95	1.60	1.00
1979-83	3.40	2.00
1975-78	4.00	2.50
1968-74	7.00	4.50
High Altitude Light Duty Trucks (0-6000 Lbs. GVWR)		
1988 & Newer	2.00	1.25

Application	Hydrocarbons (Grams/Mile)	
Composite		Phase 2
1984-87	2.00	1.25
1982-83	4.00	2.50
Light Duty Trucks (6001-8500 Lbs. GVWR)		
1996 & Newer (Less Than 5750 ALVW)	0.80	0.50
1996 & Newer (More Than 5750 ALVW)	0.80	0.50
1984-95	1.60	1.00
1979-83	3.40	2.00
1975-78	4.00	2.50
1968-74	7.00	4.50
High Altitude Light Duty Trucks (6001-8500 Lbs. GVWR)		
1988 & Newer	2.00	1.25
1984-87	2.00	1.25
1982-83	4.00	2.50
Heavy Duty Trucks (Greater Than 8500 Lbs. GVWR)		
1998 & Newer	2.00	1.30
1987-97	2.00	1.30
1985-86	3.00	1.90
1979-84	5.00	3.10
1970-78	10.0	6.30
1969 & Earlier	20.0	12.50

U.S. EPA IM240 CARBON MONOXIDE EMISSION FINAL STANDARDS

Application	Carbon Monoxide (Grams/Mile)	
Composite		Phase 2
Light Duty Vehicles		
1996 & Newer	10.0	8.0
1983-95	15.0	12.0
1980-82	30.0	24.0
1975-79	65.0	52.0
1968-74	120.0	96.0
High Altitude Light Duty Vehicles		
1983-84	30.0	24.0
1982	45.0	36.0
Light Duty Trucks (0-6000 Lbs. GVWR)		
1996 & Newer (Less Than 3750 LVW)	10.0	8.0
1996 & Newer (More Than 3750 LVW)	13.0	10.0
1984-95	40.0	32.0
1979-83	70.0	56.0
1975-78	80.0	64.0
1968-74	120.0	96.0
High Altitude Light Duty Trucks (0-6000 Lbs. GVWR)		
1988 & Newer	60.0	48.0
1984-87	60.0	48.0
1982-83	90.0	72.0
Light Duty Trucks (6001-8500 Lbs. GVWR)		
1996 & Newer (Less Than 5750 ALVW)	13.0	10.0
1996 & Newer (More Than 5750 ALVW)	15.0	12.0
1984-95	40.0	32.0

Application	Carbon Monoxide (Grams/Mile)	
Composite		Phase 2
1979-83	70.0	56.0
1975-78	80.0	64.0
1968-74	120.0	96.0
High Altitude Light Duty Trucks (6001-8500 Lbs. GVWR)		
1984 & Newer	60.0	48.0
1982-83	90.0	72.0
Heavy Duty Trucks (Greater Than 8500 Lbs. GVWR)		
1998 & Newer	30.0	24.0
1987-97	40.0	32.0
1985-86	50.0	40.0
1979-84	75.0	60.0
1974-78	150.0	120.0
1970-73	175.0	140.0
1969 & Earlier	200.0	160.0

U.S. EPA IM240 OXIDES OF NITROGEN EMISSION FINAL STANDARDS

Application	Oxides Of Nitrogen (Grams/Mile)	
Composite		Phase 2
Light Duty Vehicles		
1996 & Newer	1.5	1.5
1981-95	2.0	2.0
1977-80	4.0	4.0
1973-76	6.0	6.0
1968-72	7.0	7.0
High Altitude Light Duty Vehicles		
1982-84	2.0	2.0
Light Duty Trucks (0-6000 Lbs. GVWR)		
1996 & Newer (Less Than 3750 LVW)	1.5	1.5
1996 & Newer (More Than 3750 LVW)	1.8	1.8
1988-95	2.5	2.5
1979-87	4.5	4.5
1973-78	6.0	6.0
1968-72	7.0	7.0
High Altitude Light Duty Trucks (0-6000 Lbs. GVWR)		
1988 & Newer	2.5	2.5
1982-87	4.5	4.5
Light Duty Trucks (6001-8500 Lbs. GVWR)		
1996 & Newer (Less Than 5750 ALVW)	1.8	1.8
1996 & Newer (More Than 5750 ALVW)	2.0	2.0
1988-95	3.5	3.5
1979-87	4.5	4.5
1973-78	6.0	6.0
1968-72	7.0	7.0
High Altitude Light Duty Trucks (6001-8500 Lbs. GVWR)		
1988 & Newer	3.5	3.5
1982-87	4.5	4.5
Heavy Duty Trucks (Greater Than 8500 Lbs. GVWR)		
1998 & Newer	4.0	4.0

Application	Oxides Of Nitrogen (Grams/Mile)	
	Composite	Phase 2
1991-97	5.0	5.0
1979-90	6.0	6.0
1970-78	10.0	10.0
1969 & Earlier	15.0	15.0

GENERAL INFORMATION
State Emission Standards

ARIZONA

NOTE: Because of frequent revisions in state emission standards, the emission standards listed in this article should only be used as a guide.

ARIZONA EMISSION STANDARDS - PHOENIX & TUCSON AREA (DIESEL OPACITY LOADED CRUISE TEST)

Application		Altitude (Feet)	Opacity (% For 10 Seconds)
Light Duty Vehicles (8500 GVWR Or Less)			
All Years		Less Than 2000	20 Or Less
B	B	2001-4000	30 Or Less
B	B	Greater Than 4000	40 Or Less

ARIZONA EMISSION STANDARDS - PHOENIX & TUCSON AREA (DIESEL J1667 SNAP IDLE TEST)

Application		Altitude (Feet)	Opacity (% For 10 Seconds)
Heavy Duty Vehicles (8500 GVWR Or Greater)			
1990 & Earlier		All	55
1991 & Newer		All	40

COLORADO

COLORADO EMISSION STANDARDS - DIESEL OPACITY

Application		Opacity %
14,000 GVWR Or Less		
Non-Turbo		40
Turbo		35
14,000 GVWR Or More		
Non-Turbo		35
Turbo		20

CONNECTICUT

CONNECTICUT EMISSION STANDARDS - DIESEL OPACITY

Application		Opacity %
10,000 GVWR Or Less		
1979 & Newer		20
26,000 GVWR Or More		
1974 & Earlier		70
1974-90		55
1991 & Newer		40

IDAHO

IDAHO EMISSION STANDARDS - DIESEL OPACITY

Application	Opacity %
All Weight Range	
1965-74	70
1975-91	55
1992 & Newer	40

KENTUCKY**KENTUCKY EMISSION STANDARDS - BOONE, CAMPBELL & KENTON COUNTIES (DIESEL OPACITY)**

Application	Opacity
18,000 GVWR Or Less	
All Years	10% @ Idle

MASSACHUSETTS**MASSACHUSETTS EMISSION STANDARDS - DIESEL OPACITY**

Application	Opacity %
Light Duty (8500 GVWR Or Less)	
1984 & Newer	20
Light Duty (8501-10,000 GVWR Or Less)	
1984 & Newer	40
Heavy Duty Buses (10,000 GVWR Or More)	
1984-93	40
1994 & Newer	30
Heavy Duty Trucks (10,000 Or Less GVWR)	
1984-90	55
1991 & Newer	40

NEW YORK**NEW YORK EMISSION STANDARDS - DIESEL OPACITY TEST**

Application	Opacity %
Heavy Duty Vehicles (8500 GVWR Or More)	
1973 & Earlier	70
1974-90	55
1991 & Newer	40

OHIO**OHIO EMISSION STANDARDS - DIESEL OPACITY TEST**

Application	Opacity %
Light Duty Diesel	20

RHODE ISLAND**RHODE ISLAND EMISSION STANDARDS - DIESEL OPACITY TEST**

Application	Opacity %
All Model Years (8500 GVWR Or Less)	20

UTAH

UTAH EMISSION STANDARDS - DAVIS COUNTY - DIESEL OPACITY TEST

Application	Opacity %
Light Duty Diesel - Turbo (16,000 GVWR Or Less)	30
Light Duty Diesel - Non-Turbo (16,000 GVWR Or Less)	35
Heavy Duty Diesel (16,000 GVWR Or More)	70

UTAH EMISSION STANDARDS - SALT LAKE COUNTY - DIESEL OPACITY TEST

Application	Opacity %
All Model Years - Turbo (16,000 GVWR Or Less)	30
All Model Years - Non-Turbo (16,000 GVWR Or Less)	35
All Model Years (16,000 GVWR Or More)	70

UTAH EMISSION STANDARDS - UTAH COUNTY - DIESEL OPACITY TEST

Application	Opacity %
All Model Years - Turbo (16,000 GVWR Or Less)	30
All Model Years - Non-Turbo (16,000 GVWR Or Less)	35
All Model Years (16,000 GVWR Or More)	70

WASHINGTON

WASHINGTON EMISSION STANDARDS - DIESEL OPACITY TEST

Application	Opacity %
Light Duty Diesel (8500 GVWR Or Less)	
All Model Years	20
Heavy Duty Diesel (8500 GVWR Or More)	
1991 & Earlier	55
1992 & Newer	40

TRACTION CONTROL, 4WD, & AWD

Jeep - 1974-22

TRACTION CONTROL DISABLE

WARNING: Placing a non-compatible vehicle on a single-axle dynamometer could result in a safety hazard to technicians and damage to vehicle. Vehicles which use All-Wheel Drive (AWD) or traction control may not be clearly marked. Use common sense and take all necessary precautions when placing any vehicle on the dynamometer. Determine between full-time 4WD and All-Wheel Drive (AWD) for testing purposes. The following tables include information related to full-time 4WD and AWD vehicles, and how to disable the traction control system (if disengageable).

WARNING: DO NOT operate vehicle on a 2-wheel dynamometer if the DO NOT TEST column is marked.

JEEP

Application	FWD	RWD	Part Time 4WD	Full Time 4WD	AWD	TCS	Do Not Test
CJ5 & CJ7							
1974-86	...	...	...	X ⁽¹⁾	...	...	X
1980-86	...	...	X	...	...	...	...
Cherokee							
1979 (4WD)	...	...	...	X ⁽¹⁾	...	...	X
1974-83 (AWD)	...	...	...	...	X	...	X
1974-01 (4WD)	...	...	X ⁽²⁾	...	...	...	...
1985-01 (RWD)	...	X	...	...	...	...	...
2014-22 (FWD)	X	...	X ⁽⁵⁾	...	...	X ⁽⁴⁾	...
2014-22 (AWD)	...	...	...	...	⁽⁶⁾	...	X
Comanche							
1986-92	...	...	X ⁽²⁾	...	...	...	...
1986-92	...	...	...	X ⁽¹⁾	...	...	X
Commander							
2006-10 (AWD)	...	...	...	...	X	...	X
2006-10 (4WD)	...	...	X	...	...	X ⁽⁴⁾	...
2006-10 (RWD)	...	X	...	...	...	X ⁽³⁾	...
Compass							
2007-22 (AWD)	...	...	...	...	X	...	X
2007-22 (FWD)	X	...	...	...	...	X ⁽⁴⁾	...
Grand Cherokee							
1993-04 (4WD)	...	...	X ⁽⁵⁾	...	...	...	...
1993-22 (AWD)	...	...	...	...	X	...	X
2005-22 (RWD)	...	X	...	...	...	X ⁽⁴⁾	...
Grand Wagoneer							
1984-91 (Selec Trac)	...	...	X	...	...	...	...
1993 (Quadra Trac)	...	...	...	X ⁽¹⁾	...	...	X
2022	...	...	...	X ⁽¹⁾	...	...	X

Application	FWD	RWD	Part Time 4WD	Full Time 4WD	AWD	TCS	Do Not Test
Liberty							
2002-12 (AWD)	...	...	...	B	X	...	X
2004-05 (4WD)	...	...	X ⁽⁵⁾	...	...	...	...
2004-12 (4WD)	...	...	X ⁽⁵⁾	...	...	X ⁽⁴⁾	...
Patriot							
2007-17 (AWD)	...	...	...	...	X	...	X
2007-17 (FWD)	X	...	...	...	...	X ⁽⁴⁾	...
Renegade							
2015-22 (AWD)	...	...	...	...	X	...	X
2015-22 (FWD)	X	...	...	...	...	X ⁽⁴⁾	...
Scrambler							
1981-85	...	...	...	X ⁽¹⁾	...	...	X
Wagoneer							
1980-82 (4WD)	...	...	...	X ⁽¹⁾	...	...	X
1983-90 (4WD)	...	...	X	...	...	...	...
1980-90 (AWD)	...	...	...	...	X	...	X
Wrangler							
1987-07 (Ex.Unlimited)	...	...	X ⁽²⁾	...	...	...	...
2007 (Unlimited)	...	X	X ⁽⁵⁾	...	...	X ⁽⁴⁾	...
2008-10	...	X	X ⁽⁵⁾	...	...	X ⁽⁴⁾	...
2011-22	...	...	X ⁽⁵⁾	...	...	X ⁽⁴⁾	...

(1) Cannot be shifted to 2WD.

(2) Shift transfer case lever into 2H position.

(3) Press ESP control switch (button with sliding car icon) located on center of instrument panel. ESP/TCS indicator light will illuminate.

(4) Partial Off ESC Mode: In "Partial Off" mode, the TCS portion of ESC, except for the limited slip feature, has been disabled and the "ESC Activation/Malfunction Indicator Light" will be illuminated. All other stability features of ESC function normally, with the exception of engine power reduction. "Partial Off" mode is intended to be used if the vehicle is in deep snow, sand, or gravel conditions and more wheel spin than ESC would normally allow is required to gain traction. Full Off ESC Mode (If Equipped): In this mode, all TCS and ESC stability features are turned OFF. To enter the "Full Off" mode, press and hold the "ESC Off" switch for five seconds while the vehicle is stopped with the engine running. After five seconds, a chime will sound, the "ESC Off Indicator Light" will illuminate, and the "ESC Off" message will display in the Electronic Vehicle Information Center (EVIC).

(5) This vehicle has several types of 4WD option; Selec-Trac, Command-Trac, and Quadra Trac. All option types can be shifted into 2WD

(6) Single Range All Wheel Drive (AWD) (If Equipped) This feature provides on-demand All-Wheel Drive (AWD). The system is automatic with no driver inputs or additional driving skills required. Under normal driving conditions, the front wheels provide most of the traction. If the front wheels begin to lose traction, power is shifted automatically to the rear wheels. The greater the front wheel traction loss, the greater the power transfer to the rear wheels.

2021 GENERAL INFORMATION
Vehicle Quick Reference - Gladiator

CAPACITIES AND RECOMMENDED FLUIDS

SPECIFICATIONS

3.0L ENGINE

Description	Capacities	Type	Part Number	Global Part Number
Engine Oil With Filter	9 Quarts / 8.5 Liters	We recommend you use 5W-40 synthetic engine oil such as Mopar that meets FCA Material Standard MS-12991 and the API SN engine oil category is required.	68231020AA	68231020GA
Cooling System *	Engine: 14.5 Quarts / 13.7 Liters	We recommend you use Mopar Antifreeze/Coolant 10 Year/150, 000 Mile Formula OAT (Organic Additive Technology) or equivalent meeting the requirements of Material Standard MS.90032.	68163848AB	68163848GB
Fuel Selection	19.0 Gallons / 72.0 Liters	Use good quality diesel fuel from a reputable supplier in your vehicle. Federal law requires that you must fuel this vehicle with Ultra Low Sulfur Highway Diesel fuel (15 ppm Sulfur maximum) and prohibits the use of Low Sulfur Highway Diesel fuel (500 ppm Sulfur maximum) to avoid damage to the emissions control system. For most year-round service, Number 2 diesel fuel meeting ASTM specification D-975 Grade S15 will provide good performance. We recommend you use a blend of up to 5% biodiesel, meeting ASTM specification D-975 with your diesel engine. This vehicle is compatible with biodiesel blends greater than 5% but	-	-

Description	Capacities	Type	Part Number	Global Part Number	
		no greater than 20% biodiesel meeting ASTM specification D-7467 provided the shortened maintenance intervals are followed as directed.			
AdBlueB® Fluid Tank	5.1 Gallons / 19.3 Liters	AdBlueB® (Urea-Water Solution) According To DIN 70 070 and ISO 22241-1.	-	-	
Diesel Exhaust Fluid (DEF)	5.1 Gallons / 19.3 Liters	Mopar Diesel Exhaust Fluid (API Certified) (DEF) or equivalent that has been API Certified to the ISO 22241 standard. Use of fluids not API Certified to ISO 22241 may result in system damage.	68035704AC	-	B
* Includes heater and coolant reservoir filled to MAX level.					

NOTE: If the vehicle is exposed to extreme cold (below 20B°F or -7B°C), or is required to operate at colder-than-normal conditions for prolonged periods, use climatized Number 2 diesel fuel or dilute the Number 2 diesel fuel with 50% Number 1 diesel fuel. This will provide better protection from fuel gelling or wax-plugging of the fuel filters.

3.6L ENGINE

Description	Capacities	Type	Part Number	Global Part Number
Engine Oil With Filter	5 Quarts / 4.7 Liters	We recommend you use API Certified SAE 0W-20 Engine Oil, meeting the requirements of FCA Material Standard MS-6395 such as Mopar, Pennzoil, and Shell Helix. Refer to your engine oil filler cap for correct SAE grade.	68218950AB	68218950GA
Cooling System *	13.0 Quarts / 12.3 Liters	We recommend you use MOPAR Antifreeze/Coolant 10 Year/150,000 Mile Formula OAT (Organic Additive Technology) or equivalent meeting the requirements of Material Standard MS.90032.	68163848AB	68218041GA
Fuel Selection	22 Gallons / 83 Liters	87 Octane (R+M)/2 Method, 0-15% Ethanol.	-	-
Spark Plugs	GAP 0.043 in / 1.1 mm	We recommend you use MOPAR Spark Plugs.	-	-

Description	Capacities	Type	Part Number	Global Part Number
* Includes heater and coolant reservoir filled to MAX level.				

A/C REFRIGERANT SYSTEM

Description	Charge Amounts	Type	Part Number	Global Part Number
Refrigerant	1.06 Pounds / 482 Grams	Use only refrigerant R-1234yf	68224028AA	68224028GA
Refrigerant Oil	-	FD46XG	05114554AC	05114554GC
Refrigerant Oil	5.0 oz / 150 ml	Total System Fill	-	-
Refrigerant Oil	2.0 oz / 60 ml	A/C Condenser	-	-
Refrigerant Oil	2.0 oz / 60 ml	A/C Evaporator	-	-
Refrigerant Oil	1.0 oz / 30 ml	A/C Receiver/Dryer	-	-
Refrigerant Oil	Refer to <u>OIL, REFRIGERANT, STANDARD PROCEDURE</u> .	A/C Compressor	-	-

TRANSMISSION

Description	Capacities	Type	Part Number	Global Part Number
Automatic				
8HP50	9.5 Quarts/ 9 Liters	Use only Mopar ZF 8&9 Speed ATF Automatic Transmission Fluid or equivalent. Failure to use the correct fluid may affect the function or performance of your transmission.	68218925AA	68218925GA
Manual				
AL6	4.76 Pints/2.25 Liters	We recommend you use Mopar ATF+4 Automatic Transmission Fluid.	68218057AB	68218057GC

Dry fill capacity. Depending on type and size of internal cooler, length and inside diameter of cooler lines, or use of an auxiliary cooler, these figures may vary. Refer to the appropriate service information for the correct procedures.

Approximate dry fill or fill to bottom edge of fill plug hole.

CAUTION:

Nominal refill capacities are shown. A variation may be observed from vehicle to vehicle due to manufacturing tolerance and

Description	Capacities	Type	Part Number	Global Part Number
refill procedure.				

TRANSFER CASE

Description	Capacities	Type	Part Number	Global Part Number
MP1622/MP1622-OR	3.38 Pints/1.6 Liters	We recommend you use Mopar ATF+4 Automatic Transmission Fluid.	68218057AB	68218057GB
MP3022C/MP3022C-OR	3.72 Pints/1.76 Liters	We recommend you use Mopar ATF+4 Automatic Transmission Fluid.	68218057AB	68218057GB

Approximate dry fill or fill to bottom edge of fill plug hole.

CAUTION:

Nominal refill capacities are shown. A variation may be observed from vehicle to vehicle due to manufacturing tolerance and refill procedure.

CHASSIS

Description	Capacities	Type	Part Number	Global Part Number
Axles (Front)				
210 FBI (Model 44) - Front Axle	2.18 Pints/1.03 Liters	We recommend you use Mopar Gear & Axle Lubricant (SAE 75W85) (API GL-5).	68378949AA	68378949GA
Axles (Rear)				
220 RBI (Model 44) Rear Axle - Electronic Locker	3.06 Pints/1.45 Liters	We recommend you use Mopar Gear & Axle Lubricant (SAE 75W85) (API GL-5).	68378949AA	68378949GA
/ 220 RBI (Model 44) Rear Axle - Limited Slip	2.87 Pints/1.36L Liters	We recommend you use Mopar Gear & Axle Lubricant (SAE 75W85) (API GL-5).	68378949AA	68378949GA

Description	Capacities	Type	Part Number	Global Part Number
		5). Models equipped with Trac-Lok Limited Slip Differential require a friction modifier additive.		
Chassis Systems				
Brake Master Cylinder	N/A	We recommend you use MOPAR DOT 3 Brake Fluid, SAE J1703. If DOT 3, SAE J1703 brake fluid is not available, then DOT 4 is acceptable.	04318080AD	04318080GD
Clutch Master Cylinder	N/A	We recommend you use MOPAR DOT 3 Brake Fluid, SAE J1703. If DOT 3, SAE J1703 brake fluid is not available, then DOT 4 is acceptable.	04318080AD	04318080GD
Power Steering Reservoir	N/A	We recommend you use MOPAR Electric Steering Pump Fluid	05154460AA	05154460GA
Limited-Slip Rear Axles require the addition of 70 ml (2.37 oz.) MOPARB® Limited Slip Additive.				
If equipped with Trailer Tow package use MOPARB® Synthetic Gear Lubricant, SAE 75W-140 (04874469AA)				
CAUTION: Nominal refill capacities are shown. A variation may be observed from vehicle to vehicle due to manufacturing tolerance and refill procedure.				

FUSE - RELAY LOCATIONS AND TYPES

SPECIFICATIONS

NOTE: Refer to the Wiring Application for Relay description and location information.

POWER DISTRIBUTION CENTER

Cavity	Cartridge Fuse	Micro Fuse	Description
* If Equipped			
F01	-	-	Spare*
F02	40 Amp Green	-	Starter
F03	-	5 Amp Tan	Intelligent Battery Sensor (IBS)
F04	-	20 Amp Yellow	Fuel Pump MTR/FPCM
F05	-	5 Amp Tan	Security Gateway
F06	-	-	Spare*
F07	-	-	Spare*
F08	-	15 Amp Blue	Trans Control Module TCM-8HP CYGNUS
F09	-	-	Spare*
F10	-	15 Amp Blue	Key Ignition Node (KIN)/Radio Frequency Hub (RF HUB)/Electric Steering Column Lock (ESCL)
F11	-	10 Amp Red	UCI Port (USB & AUX)
F12	-	25 Amp Clear	HIFI Amplifier
F13	-	-	Spare*
F14	-	-	Spare*
F15	-	15 Amp Blue	Instrument Panel Cluster (IPC)/Switch Bank-Heavy Duty Electrical Pkg (SWITCH BANK-HD ELEC)
F16	-	-	Spare*
F17	-	-	Spare*
F18	-	10 Amp Red	Air Conditioning Clutch (AC CLUTCH)
F19	-	-	Spare*
F20	30 Amp Pink	-	Central Body Controller (CBC) 1- INTERIOR LIGHTS
F21	-	-	Spare*
F22	-	10 Amp Red	Engine Control Module (ECM)/Powertrain Control Module (PCM)
F23	-	10 Amp Red	Powertrain Control Module (PCM)/Engine Control Module (ECM)
F24	-	-	Spare*
F25	-	10 Amp Red	Module Shift By Wire (MOD_SBW)
F26	40 Amp Green	-	Central Body Controller (CBC) 2- EXTERIOR LIGHTS #1
F27	30 Amp Pink	-	Front Wipers
F28	40 Amp Green	-	Central Body Controller (CBC) 3-POWER LOCKS
F29	40 Amp Green	-	Central Body Controller (CBC) 4- EXTERIOR LIGHTS #2
F30	-	-	Spare*
F31	-	10 Amp Red	DIAGNOSTIC PORT
F32	-	10 Amp Red	Heating Ventilation Air Conditioning Mod (HVAC CTRL MOD)/Steering Column Lock (SCL)/Occupant Classification Module (OCM)/Driver Presence Detection Module (DPDM)
F33	-	10 Amp Red	ParkTronics System (PTS)/Infrared Camera Module (IRCM)/Airbag Disable

Cavity	Cartridge Fuse	Micro Fuse	Description
* If Equipped			
			Lamps (AIRBAG DISABLE LMPS)
F34	-	10 Amp Red	Electronic Stability Control (ESC)/Electric Hydraulic Power Steering (EHPS)/Smart Bar Control Module (SBCM) WAKE UP
F35	30 Amp Pink	-	BRAKE VAC PMP*
F36	30 Amp Pink	-	Trailer Tow Elec Brk Mod *
F37	30 Amp Pink	-	TRAILER TOW CONN 7W*
F38	20 Amp Blue	-	Engine Control Module (ECM)
F39	-	-	Spare*
F40	-	15 Amp Blue	Drivetrain Control Module (DTCM)/Axle Lock (AXLE LOC) FT_RR
F41	-	15 Amp Blue	Instrument Cluster (IC)/Security GateWay (SGW) WAKE UP
F42	-	10 Amp Red	Power Control Relay Control Feed (Electric Stop/Start)*
F43	-	-	Spare*
F44	-	10 Amp Red	Infrared Camera (IRCAM) HEATERS
F45	-	-	Spare*
F46	-	10 Amp Red	AUTO HDLP LVL MOD/LVL MTR/HDLP SW
F47	-	-	Spare*
F48	-	-	Spare*
F49	-	10 Amp Red	Occupant Restraint Controller (ORC)
F50	-	10 Amp Red	HD ACC*
F51	-	10 Amp Red	Humidity Light Rain Sensor (HLRS)/Inverter 400W Wake Up/USB/InSide RearView Mirror (ISRV)/Compass Module (CSGM)/DTV
F52	-	20 Amp Yellow	Cigar Lighter
F53	-	10 Amp Red	Wireless Speaker*
F54	-	-	Spare*
F55	-	10 Amp Red	Central Vision Processing Module (CVPM)*
F56	-	10 Amp Red	In-Car Temp Sensor/PTC Heater Coil Feed
F57	-	20 Amp Yellow	Frt Drvr Htd Seat
F58	-	20 Amp Yellow	Frt Pass Htd Seat
F59	-	-	Spare*
F60	-	15 Amp Blue	Comfort Steering Wheel Module (CSWM) (HTD STR WHEEL)
F61	-	10 Amp Red	Left Blind Spot Sensor (LBSS)/Right Blind Spot Sensor (RBSS)
F62	-	-	Spare*
F63	-	10 Amp Red	Occupant Restraint Controller (ORC)
F64	-	-	Spare*
F65	50 Amp Red	-	Power Inverter 400W *
F66	40 Amp Green	-	HVAC BLOWER MTR FRT
F67	-	-	Spare*
F68	-	-	Spare*
F69	-	-	Spare*

Cavity	Cartridge Fuse	Micro Fuse	Description
* If Equipped			
F70	-	25 Amp Clear	INJ/IGN COIL (GAS)/GLO PLUG MOD (DSL)
F71	-	-	Spare*
F72	-	10 Amp Red	HD ELEC ACC PKG*
F73	-	-	Spare*
F74	-	-	Spare*
F75	-	-	Spare*
F76	-	20 Amp Yellow	ECM (GAS)/PCM (DSL)
F77	-	10 Amp Red	Heated Mirrors
F78	-	-	Spare*
F79	-	20 Amp Yellow	SMART BAR CTRL MOD
F80	-	15 Amp Blue	Powertrain Control Module (PCM)/Solenoid 1 2 Block Shift
F81	30 Amp Pink	-	REAR DEFROSTER (EBL)
F82	30 Amp Pink	-	FUEL HTR*
F83	60 Amp Yellow	-	GLOW PLUG*
F84	30 Amp Pink	-	UREA HTR CTRL UNIT*
F85	-	10 Amp Red	PM SENSOR*
F86	-	-	Spare*
F87	-	10 Amp Red	SUPPLY/PURGING PMP*
F88	20 Amp Blue	-	NOx SENSOR #1/#2*
F89	-	10 Amp Red	Steering Column Control Module (SCCM)/Cruise Control (CRUISE CTL)/Digital TV (DTV)/Airbag Disable Lamp
F90	20 Amp Blue	-	TRAILER TOW PARK LMP*
F91	-	20 Amp Yellow	Horn
F92	40 Amp Green	-	HD ACCY #2*
F93	40 Amp Green	-	HD ACCY #1*
F94	-	-	Spare *
F95	-	-	Spare*
F96	-	10 Amp Red	PWR MIRROR SW
F97	-	20 Amp Yellow	RADIO/TBM
F98	-	10 Amp Red	SW BANK-HD ELEC/OFF ROAD
F99	-	-	Spare*
F100	30 Amp Pink	-	ESC-ECU & VALVES
F101	30 Amp Pink	-	Drivetrain Control Module (DTCM)
F102	-	15 Amp Blue	DUAL USB PORT
F103	-	15 Amp Blue	HD ACCY #3*
F104	-	-	Spare*
F105	-	10 Amp Red	Integrated Center Stack (ICS)/Heat Ventilation Air Conditioning (HVAC)
F106	50 Amp Red	-	Electronic Speed Control (ESC)/PUMP MTR
F107	-	20 Amp Yellow	TRAILER TOW STOP/TURN LT*
F108	-	15 Amp Blue	HD ACCY #4*
F109	-	20 Amp Yellow	TRAILER TOW STOP/TURN RT*
F110	30 Amp Pink	-	Power Inverter 150W*

Cavity	Cartridge Fuse	Micro Fuse	Description
* If Equipped			
F111	20 Amp Blue	-	TRAILER TOW BACKUP*

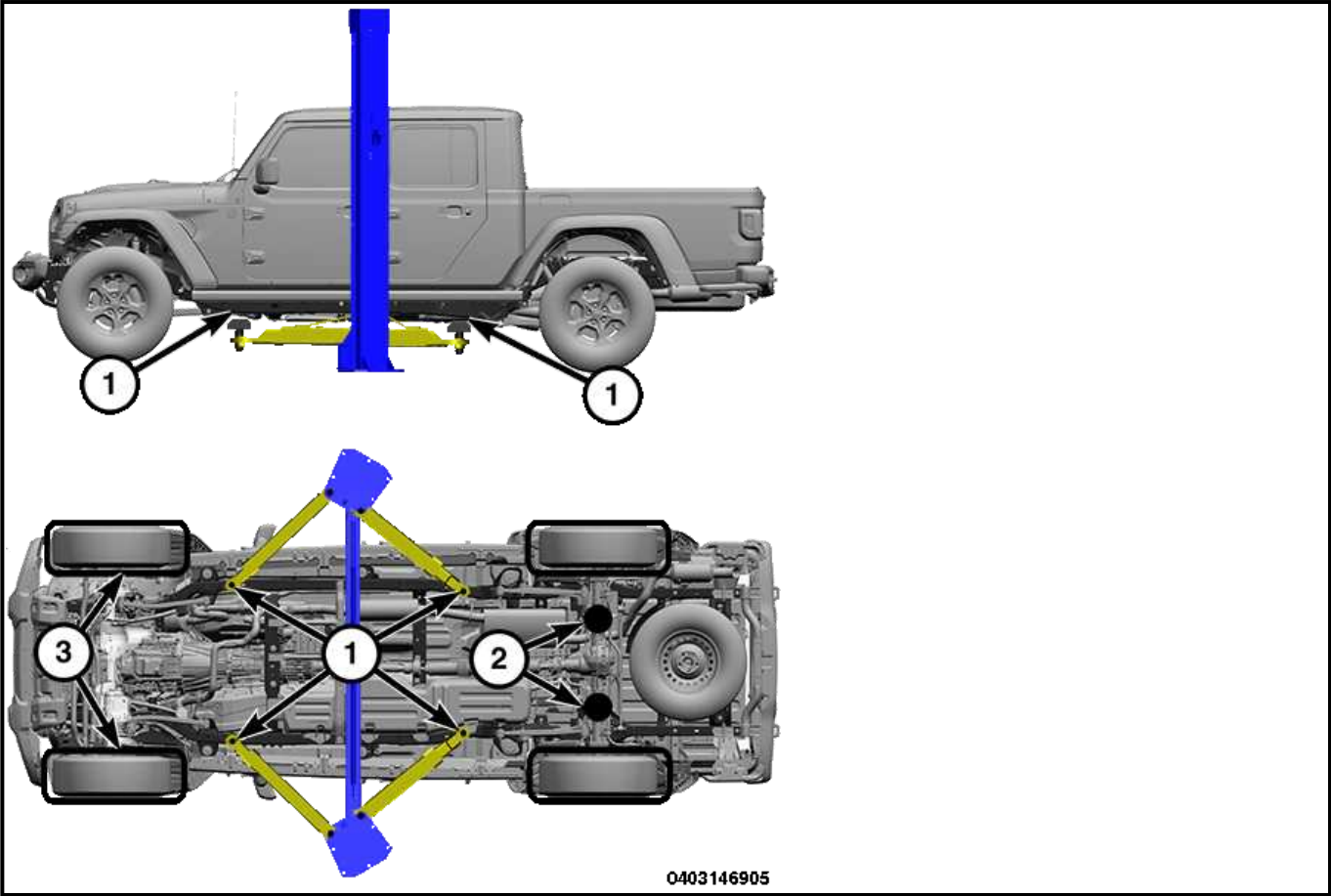
CAUTION:

- When installing the Integrated Power Module cover, it is important to ensure the cover is properly positioned and fully latched. Failure to do so may allow water to get into the Integrated Power Module, and possibly result in an electrical system failure.
- When replacing a blown fuse, it is important to use only a fuse having the correct amperage rating. The use of a fuse with a rating other than indicated may result in a dangerous electrical system overload. If a properly rated fuse continues to blow, it indicates a problem in the circuit that must be corrected.

HOISTING

STANDARD PROCEDURE

STANDARD PROCEDURE - HOISTING



- 1 - FRAME CONTACT LIFT (SINGLE POST)
- 1 - CHASSIS LIFT (DUAL LIFT)
- 1 - OUTBOARD LIFT (DUAL LIFT)
- 2 - ALTERNATE LIFTING LOCATIONS
- 2 - FLOOR JACK
- 3 - DRIVE ON HOIST

WARNING: The hoisting and jack lifting points provided are for a complete vehicle. When a chassis or drivetrain component is removed from a vehicle, the center of gravity is altered making some hoisting conditions unstable. Properly support or secure vehicle to hoisting device when these conditions exist.

Refer to the Owner's Information for emergency vehicle lifting procedures.

When properly positioned, a floor jack can be used to lift a Jeep vehicle. Support the vehicle in the raised position with jack stands at the front and rear ends of the frame rails.

CAUTION: Do not attempt to lift a Jeep vehicle with a floor jack positioned under:

- A body side sill.
- A steering linkage component.
- A drive shaft.
- The engine or transmission oil pan.
- The fuel tank.
- A front suspension arm.
- Transfer case.

NOTE: Use the correct sub-frame rail or frame rail lifting locations only.

A vehicle can be lifted with:

- A single-post, frame-contact hoist.
- A twin-post, chassis hoist.
- A ramp-type, drive-on hoist.

NOTE: When a frame-contact type hoist is used, verify that the lifting pads are positioned properly.

JUMP STARTING

STANDARD PROCEDURE

JUMP STARTING

WARNING: REVIEW ALL SAFETY PRECAUTIONS AND WARNINGS.

WARNING: DO NOT JUMP START A FROZEN BATTERY, PERSONAL INJURY CAN RESULT.

WARNING: DO NOT JUMP START WHEN MAINTENANCE FREE BATTERY INDICATOR DOT IS BRIGHT COLOR.

WARNING: DO NOT ALLOW JUMPER CABLE CLAMPS TO TOUCH EACH OTHER WHEN CONNECTED TO A BOOSTER SOURCE.

WARNING: DO NOT USE OPEN FLAME NEAR BATTERY.

WARNING: REMOVE METALLIC JEWELRY WORN ON HANDS OR WRISTS TO AVOID INJURY BY ACCIDENTAL ARCING OF BATTERY CURRENT.

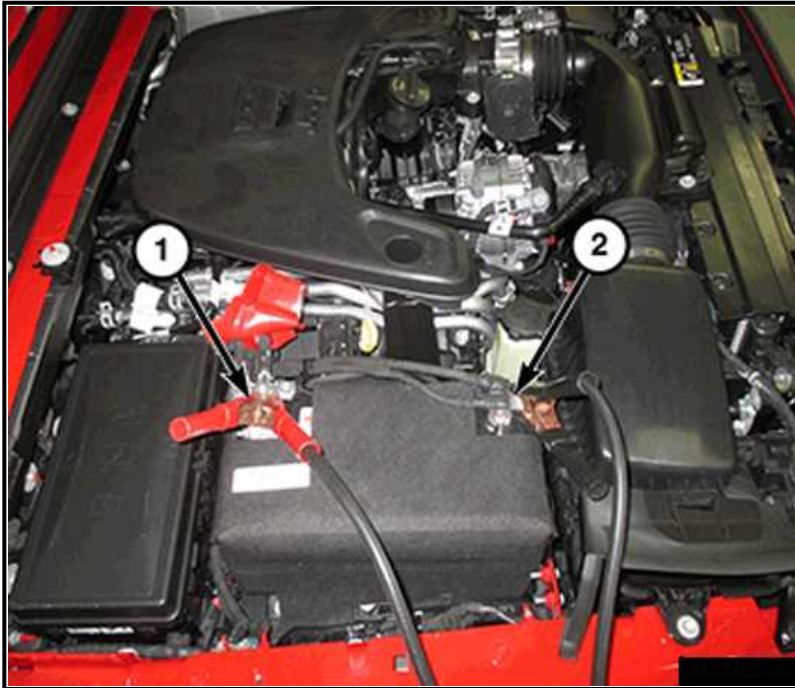
WARNING: WHEN USING A HIGH OUTPUT BOOSTING DEVICE, DO NOT ALLOW BATTERY VOLTAGE TO EXCEED 16 VOLTS.

WARNING: REFER TO INSTRUCTIONS PROVIDED WITH DEVICE BEING USED.

CAUTION: DO NOT ATTEMPT TO PUSH OR TOW THE VEHICLE TO START IT. THE VEHICLE CANNOT BE STARTED THIS WAY. PUSHING WITH ANOTHER VEHICLE MAY DAMAGE THE TRANSAXLE OR THE REAR OF THE VEHICLE.

CAUTION: Do not use a portable battery booster pack or any other booster source with a system voltage greater than 12 Volts or damage to the battery, starter motor, alternator or electrical system may occur.

VEHICLE JUMP STARTING



1. Raise the hood on the disabled vehicle and inspect the battery.
 - Inspect the battery cable terminal clamps for damage. Replace any battery cable that has a damaged or deformed terminal clamp.
 - Inspect the battery tray and battery hold down hardware for damage. Replace any damaged parts.
 - Slide the thermal guard off of the battery case, if equipped. Inspect the battery case for cracks or other damage that could result in electrolyte leaks. Also, check the battery terminal posts for looseness. Batteries with damaged cases or loose terminal posts must be replaced.
 - Inspect the battery thermal guard for tears, cracks, deformation or other damage. Replace any battery thermal guard that has been damaged.
 - Inspect the battery built-in test indicator sight glass (if equipped) for an indication of the battery condition. If the battery is discharged, charge as required. Refer to the appropriate service information .
2. Raise hood on disabled vehicle and visually inspect engine compartment for:
 - Generator drive belt condition and tension.

CAUTION: If the cause of starting problem on disabled vehicle is severe, damage to booster vehicle charging system can result.

3. When using another vehicle as a booster source, park the booster vehicle within cable reach. Turn off all accessories, set the parking brake, place the automatic transmission in PARK or the manual transmission in NEUTRAL and turn the ignition OFF.
4. On disabled vehicle, place gear selector in park or neutral and set park brake. Turn off all accessories.

5. Connect jumper cables to booster battery. RED clamp to positive terminal (+). DO NOT allow clamps to touch, electrical arc will result. Review all warnings in this procedure.
6. On the disabled vehicle, pull up and remove the protective cover over the remote positive (+) battery post.
7. Connect the RED jumper cable clamp (1) to positive (+) terminal.
8. Connect BLACK clamp of the jumper cable to the negative terminal of the booster battery.
9. Connect BLACK clamp (2) of the jumper cable to the negative terminal of the discharged battery.
10. Start the engine in the vehicle which has the booster battery, let the engine idle a few minutes, then start the engine in the vehicle with the discharged battery.

CAUTION: Do not crank starter motor on disabled vehicle for more than 15 seconds, starter will overheat and could fail.

11. Allow battery in disabled vehicle to charge to at least 12.4 volts (75% charge) before attempting to start engine. If engine does not start within 15 seconds, stop cranking engine and allow starter to cool (15 min.), before cranking again.

DISCONNECT CABLE CLAMPS AS FOLLOWS:

- Disconnect BLACK cable clamp from engine ground on disabled/discharged battery vehicle.
- When using a booster vehicle, disconnect BLACK cable clamp from battery negative terminal. Disconnect RED cable clamp from battery positive terminal.
- Disconnect RED cable clamp from battery positive terminal on disabled/discharged battery vehicle.

MAINTENANCE SCHEDULES

DESCRIPTION

NORTH AMERICA - DIESEL

2021

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions will cause the change oil message to illuminate more frequently. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km). An authorized dealer will reset the oil change indicator message after completing the scheduled oil change. If a scheduled oil change is performed by someone other than an authorized dealer, the message can be reset by referring to the steps described under "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information.

NOTE: Under no circumstances should oil change intervals exceed 10, 000 miles (16, 000 km) or 12 months, whichever comes first.

Engine Oil Filter Replacement

Residual oil in the housing may spill from the housing when the new filter is installed if the residual oil is not either removed from the housing or enough time has not elapsed to allow the oil to drain back into the engine. When servicing the oil filter on this engine, carefully remove the filter and use a suction gun to remove any residual oil left in the housing or wait about 30 minutes for the oil to drain back into the engine.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change

indicator system (after performing the scheduled maintenance) perform the following procedure:

1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Heavy Duty Use Of The Vehicle

- Change Engine Oil at 4, 000 miles (6, 500 km) if the vehicle is operated in a dusty and off road environment or is operated predominately at idle or only very low engine RPM's. This type of vehicle use is considered Severe Duty.

Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire pressures and look for unusual wear or damage, rotate at the first sign of irregular wear
- Check the fluid levels of the coolant reservoir, brake master cylinder, and power steering, and fill as needed
- Check function of all interior and exterior lights

Maintenance Plan - Diesel Fuel Up To B5 Biodiesel

Refer to the Maintenance Plans on the following pages for required maintenance.

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Completely fill the Diesel Exhaust Fluid tank.
- Drain water from fuel filter assembly.
- Rotate the tires.

NOTE: **Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.**

- Inspect battery, clean and tighten terminals as required.
- Inspect the CV/Universal joints.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions, replace engine air cleaner filter if necessary.

At Every Second Oil Change Interval As Indicated By Oil Change Indicator System:

- Change fuel filter.

MAINTENANCE CHART

Mileage or time passed (whichever comes first)	10,000	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	16,000	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Additional Inspections															
Completely fill the Diesel Exhaust Fluid tank.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect front suspension, tie rod ends, and replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect the front and rear axle fluid, change if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect the brake linings, parking brake function.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect transfer case fluid.	B	B	X	B	B	X	B	B	X	B	B	B	B	B	X
Additional Maintenance															
Drain water from fuel filter assembly.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Replace fuel filters and drain water from the fuel filter assembly	Fuel filter replacement intervals should be every second oil change and must not exceed 20, 000 miles (32 000 km) if using diesel fuel up to B5.														
Replace engine air cleaner filter.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Replace air conditioning/cabin air filter.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	X	B	B	B	B	X
Replace accessory drive belt(s).	B	B	B	B	B	B	B	B	B	X	B	B	B	B	B
Change transfer case fluid.	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B

Additional Maintenance - B6 To B20 Biodiesel

- Under no circumstances should oil change intervals exceed 8, 000 miles (12, 875 km) or six months, whichever comes first when using Biodiesel blends greater than 5% (B5).

- The owner is required to monitor mileage for B6-B20 biodiesel, the automatic oil change indicator system does not reflect the use of biofuels.
- Fuel filter change interval is maintained at every second oil change. This is especially important with biodiesel usage.

2022 TO 2023

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures will influence when the "Oil Change Required" message is displayed. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

NOTE: Under no circumstances should oil change intervals exceed 10, 000 miles (16, 000 km), 12 months, whichever comes first.

Engine Oil Filter Replacement

Residual oil in the housing may spill from the housing when the new filter is installed if the residual oil is not either removed from the housing or enough time has not elapsed to allow the oil to drain back into the engine. When servicing the oil filter on this engine, open the filter cap approximately six turns until the cap o-ring is visible and stop. Wait five minutes with the cap in this position to allow dirty engine oil to drain back into the engine. After five minutes, the cap and filter assembly can be removed and discarded.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire pressures and look for unusual wear or damage
- Check the fluid levels of the coolant reservoir, brake master cylinder, and fill as needed
- Check function of all interior and exterior lights

Maintenance Plan - Diesel Fuel Up To B5 Biodiesel

Refer to the Maintenance Plans on the following pages for required maintenance.

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Completely fill the Diesel Exhaust Fluid tank.
- Drain water from fuel filter assembly.
- Rotate the tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect battery, clean and tighten terminals as required.

- Inspect the CV/Universal joints.
- Inspect brake pads, shoes, rotors, drums, hoses and parking brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions, replace engine air cleaner filter if necessary.

At Every Second Oil Change Interval As Indicated By Oil Change Indicator System:

- Change fuel filter.

MAINTENANCE CHART

Mileage or time passed (whichever comes first)	10, 000	20, 000	30, 000	40, 000	50, 000	60, 000	70, 000	80, 000	90, 000	100, 000	110, 000	120, 000	130, 000	140, 000	150, 000
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	16, 000	32, 000	48, 000	64, 000	80, 000	96, 000	112, 000	128, 000	144, 000	160, 000	176, 000	192, 000	208, 000	224, 000	240, 000
Additional Inspections															
Completely fill the Diesel Exhaust Fluid tank.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect front suspension, tie rod ends, and replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect the front and rear axle fluid, change if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect the brake linings, parking brake function.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect transfer case fluid.	B	B	X	B	B	B	B	B	X	B	B	B	B	B	X
Additional Maintenance															
Drain water from fuel filter assembly.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Replace fuel filters and drain water from the fuel filter assembly.	Under normal conditions the diesel fuel filter should be replaced every other oil change and must not exceed 20, 000 miles (32, 000 km) if using diesel fuel up to B5. If the vehicle is being used in severe operating conditions, or in certain geographical areas of the country (Pennsylvania, New York, Ohio, Maryland, West Virginia, Arkansas, Oklahoma, Kansas, Iowa, Missouri and Nebraska) due to fuel cleanliness issues, it is recommended to replace the fuel filter every oil change and must not exceed 10, 000 miles.														
Replace engine air cleaner filter.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Replace the cabin air filter.	To be replaced every 12, 000 mi (19, 000 km).														
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	X	B	B	B	B	X
Replace accessory drive belt(s).	B	B	B	B	B	B	B	B	B	X	B	B	B	B	B

Mileage or time passed (whichever comes first)	10, 000	20, 000	30, 000	40, 000	50, 000	60, 000	70, 000	80, 000	90, 000	100, 000	110, 000	120, 000	130, 000	140, 000	150, 000
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	16, 000	32, 000	48, 000	64, 000	80, 000	96, 000	112, 000	128, 000	144, 000	160, 000	176, 000	192, 000	208, 000	224, 000	240, 000
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B

Additional Maintenance - B6 To B20 Biodiesel

- Under no circumstances should oil change intervals exceed 8, 000 miles (12, 875 km) or six months, whichever comes first when using Biodiesel blends greater than 5% (B5).
- The owner is required to monitor mileage for B6-B20 biodiesel, the automatic oil change indicator system does not reflect the use of biofuels.
- Fuel filter change interval is maintained at every second oil change. This is especially important with biodiesel usage.

NORTH AMERICA - GAS

2020

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, or extremely hot or cold ambient temperatures will influence when the "Change Oil" or "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate as early as 3, 500 miles (5, 600 km) since last reset. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km). On vehicles equipped with an instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On vehicles not equipped with an instrument cluster display, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary. An authorized dealer will reset the oil change indicator message after completing the scheduled oil change. If a scheduled oil change is performed by someone other than an authorized dealer, the message can be reset by referring to the steps described under "Instrument Cluster Display" in "Getting To Know Your Instrument Panel" for further information.

NOTE: Under no circumstances should oil change intervals exceed 10, 000 miles (16, 000 km), twelve months or 350 hours of engine run time, whichever comes first. The 350 hours of engine run or idle time is generally only a concern for fleet customers.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 - Turn the ignition switch to the ON position. Do not start the engine.
 - Fully depress the accelerator pedal slowly three times within 10 seconds.
 - Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Severe Duty All Models

- Change Engine Oil at 4, 000 miles (6, 500 km) or 350 hours of engine run time if the vehicle is operated in a dusty and off-road environment, or is operated predominately at idle or only very low engine RPM's. This type of vehicle use is considered Severe Duty.

Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire inflation pressures and look for unusual wear or damage
- Check the fluid levels of the coolant reservoir, brake master cylinder, and power steering, and fill as needed
- Check function of all interior and exterior lights

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Rotate the tires. **Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.**
- Inspect battery, clean and tighten terminals as required.
- Inspect automatic transmission fluid if equipped with dipstick.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner if using in dusty or off-road conditions.
- Inspect all door latches for presence of grease, reapply if necessary.

MAINTENANCE CHART

Mileage or time passed (whichever comes first)	20, 000	30, 000	40, 000	50, 000	60, 000	70, 000	80, 000	90, 000	100, 000	110, 000	120, 000	130, 000	140, 000	150, 000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32, 000	48, 000	64, 000	80, 000	96, 000	112, 000	128, 000	144, 000	160, 000	176, 000	192, 000	208, 000	224, 000	240, 000
Additional Inspections														
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect front suspension, tie rod ends, and replace if necessary.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect the front and rear axle fluid.	X	B	B	B	X	B	B	B	X	B	B	B	X	B
Inspect the brake linings, replace as necessary	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Adjust parking brake on vehicles equipped with four wheel disc brakes.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect transfer case fluid.	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Additional Maintenance														
Replace engine air cleaner filter.	B	X	B	B	X	B	B	X	B	B	X	B	B	X

Mileage or time passed (whichever comes first)	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Replace air conditioning/cabin air filter.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Replace spark plugs - 3.6L Engine **	B	B	B	B	B	B	B	B	X	B	B	B	B	B
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km) whichever comes first.	B	B	B	B	B	B	B	B	X	B	B	B	B	X
Change the manual transmission fluid if using your vehicle for any of the following: trailer towing, snow plowing, heavy loading, taxi, police, delivery service (commercial service), off-road, desert operation or more than 50% of your driving is at sustained high speeds during hot weather, above 90B°F (32B°C).	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	X	B	B	B	B	B	X	B	B	B
Inspect and replace PCV valve if necessary.	B	B	B	B	B	B	B	B	X	B	B	B	B	B
Change front and rear axle fluid if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.	B	B	X	B	B	B	X	B	B	B	X	B	B	B

** The spark plug change interval is mileage based only, yearly intervals do not apply.

Heavy Duty Use Of The Vehicle

- Change engine oil at 4, 000 miles (6, 500 km) or 350 hours of engine run time if the vehicle is operated in a dusty and off-road environment or is operated predominately at idle or only very low engine RPM's. This type of vehicle use is considered Severe Duty.

2021

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, or extremely hot or cold ambient

temperatures will influence when the "Change Oil" or "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate as early as 3, 500 miles (5, 600 km) since last reset. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km). On vehicles equipped with an instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On vehicles not equipped with an instrument cluster display, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

NOTE: Under no circumstances should oil change intervals exceed 10, 000 miles (16, 000 km), 12 months or 350 hours of engine run time, whichever comes first. The 350 hours of engine run or idle time is generally only a concern for fleet customers.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Severe Duty All Models

- Vehicles that are operated in a dusty and off-road environment, or predominately at idle or very low engine RPM are known as Severe Duty vehicles. It is recommended that you change Engine Oil at 4, 000 miles (6, 500 km) or 350 hours of engine run time.

Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire pressures and look for unusual wear or damage, rotate at the first sign of irregular wear
- Check the fluid levels of the coolant reservoir, brake master cylinder, and power steering, and fill as needed
- Check function of all interior and exterior lights

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Rotate the tires.

NOTE: Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.

- Inspect battery, clean and tighten terminals as required.
- Inspect the CV/Universal joints.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions, replace engine air cleaner filter if necessary.

- Inspect all door latches for presence of grease, reapply if necessary.

NOTE: Using white lithium grease, lubricate the door hinge joints twice a year to prevent premature wear.

MAINTENANCE CHART

Mileage or time passed (whichever comes first)	20, 000	30, 000	40, 000	50, 000	60, 000	70, 000	80, 000	90, 000	100, 000	110, 000	120, 000	130, 000	140, 000	150, 000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32, 000	48, 000	64, 000	80, 000	96, 000	112, 000	128, 000	144, 000	160, 000	176, 000	192, 000	208, 000	224, 000	240, 000
Additional Inspections														
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect front suspension, tie rod ends, and replace if necessary.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect the front and rear axle fluid.	X	B	B	B	X	B	B	B	X	B	B	B	X	B
Inspect the brake linings, replace as necessary	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Adjust parking brake on vehicles equipped with four wheel disc brakes.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect transfer case fluid.	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Additional Maintenance														
Replace engine air cleaner filter.	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Replace air conditioning/cabin air filter.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Replace spark plugs - 3.6L Engine (1)	B	B	B	B	B	B	B	B	X	B	B	B	B	B
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km) whichever comes first.	B	B	B	B	B	B	B	B	X	B	B	B	B	X
Change the manual transmission fluid if using your vehicle for any of the following: trailer towing, snow plowing, heavy loading, taxi, police, delivery service (commercial service), off-road, desert operation or more than 50% of your driving is at sustained high speeds during hot weather, above 90B°F (32B°C).	B	X	B	B	X	B	B	X	B	B	X	B	B	X

Mileage or time passed (whichever comes first)	20, 000	30, 000	40, 000	50, 000	60, 000	70, 000	80, 000	90, 000	100, 000	110, 000	120, 000	130, 000	140, 000	150, 000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32, 000	48, 000	64, 000	80, 000	96, 000	112, 000	128, 000	144, 000	160, 000	176, 000	192, 000	208, 000	224, 000	240, 000
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	X	B	B	B	B	B	X	B	B	B
Inspect and replace PCV valve if necessary.	B	B	B	B	B	B	B	B	X	B	B	B	B	B
Change front and rear axle fluid if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.	B	B	X	B	B	B	X	B	B	B	X	B	B	B

1. The spark plug change interval is mileage based only, yearly intervals do not apply.

Heavy Duty Use Of The Vehicle

- Change engine oil at 4, 000 miles (6, 500 km) or 350 hours of engine run time if the vehicle is operated in a dusty and off-road environment or is operated predominately at idle or only very low engine RPM's. This type of vehicle use is considered Severe Duty.

2022 TO 2023

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, or extremely hot or cold ambient temperatures will influence when the "Change Oil" or "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate as early as 3, 500 miles (5, 600 km) since last reset. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km). On vehicles equipped with an instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On vehicles not equipped with an instrument cluster display, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

NOTE: Under no circumstances should oil change intervals exceed 10, 000 miles (16, 000 km), 12 months or 350 hours of engine run time, whichever comes first. The 350 hours of engine run or idle time is generally only a concern for fleet customers.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check engine oil level
- Check windshield washer fluid level
- Check the tire pressures and look for unusual wear or damage, rotate at the first sign of irregular wear
- Check the fluid levels of the coolant reservoir, brake master cylinder, and power steering, and fill as needed
- Check function of all interior and exterior lights

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Rotate the tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect battery, clean and tighten terminals as required.
- Inspect the CV/Universal joints.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions, replace engine air cleaner filter if necessary.
- Inspect all door latches for presence of grease, reapply if necessary.

NOTE: Using white lithium grease, lubricate the door hinge joints twice a year to prevent premature wear.

MAINTENANCE CHART

Mileage or time passed (whichever comes first)	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Additional Inspections														
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect front suspension, rear suspension, tie rod ends, and replace if necessary.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect the front and rear axle fluid.	X	B	B	B	X	B	B	B	X	B	B	B	X	B
Inspect the brake linings, replace as necessary.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Adjust parking brake on vehicles equipped with four wheel disc brakes.	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect transfer case fluid.	B	X	B	B	B	B	B	X	B	B	B	B	B	X
Additional Maintenance														

Mileage or time passed (whichever comes first)	20,000	30,000	40,000	50,000	60,000	70,000	80,000	90,000	100,000	110,000	120,000	130,000	140,000	150,000
Or Years:	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	32,000	48,000	64,000	80,000	96,000	112,000	128,000	144,000	160,000	176,000	192,000	208,000	224,000	240,000
Replace engine air cleaner filter.	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Replace cabin air filter.	To be replaced every 12, 000 mi (19, 000 km).													
Replace spark plugs - 3.6L Engine. (1)	B	B	B	B	B	B	B	B	X	B	B	B	B	B
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km), whichever comes first.	B	B	B	B	B	B	B	B	X	B	B	B	B	X
Change the manual transmission fluid if using your vehicle for any of the following: trailer towing, snow plowing, heavy loading, taxi, police, delivery service (commercial service), off-road, desert operation or more than 50% of your driving is at sustained high speeds during hot weather, above 90B°F (32B°C).	B	X	B	B	X	B	B	X	B	B	X	B	B	X
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	X	B	B	B	B	B	X	B	B	B
Inspect and replace PCV valve if necessary.	B	B	B	B	B	B	B	B	X	B	B	B	B	B
Change front and rear axle fluid if using your vehicle for police, taxi, fleet, off-road or frequent trailer towing.	B	B	X	B	B	B	X	B	B	B	X	B	B	B

1. The spark plug change interval is mileage based only, yearly intervals do not apply.

The oil change indicator system (if equipped) will remind you that it is time to take your vehicle in for engine oil replacement. On vehicles equipped with an instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On non-instrument cluster display vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

NOTE:

- **The oil change indicator message will not monitor the time since the last oil change. Change your vehicle's oil if it has been six months since your last oil change even if the oil change indicator message is NOT illuminated.**
- **Change your engine oil more often if you drive your vehicle off-road for an extended period of time.**
- **Under no circumstances should oil change intervals exceed 7, 500 miles (12, 000 km) or six months, whichever comes first.**

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check the engine oil level about five minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.
- Check the windshield washer solvent and add if required.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear.
- Inspect the battery and clean and tighten the terminals as required.
- Check the fluid levels of coolant reservoir, brake master cylinder and power steering and fill as needed.
- Check all lights and other electrical items for correct operation.

At Each Oil Change

- Change the engine oil filter.
- Inspect the brake hoses and lines.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect the CV/Universal joints.

Mileage or time passed (whichever comes first)	7,500	15,000	22,500	30,000	37,500	45,000	52,500	60,000	67,500	75,000	82,500	90,000	97,500	105,000	112,500	120,000	127,500	135,000	142,500	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Or Kilometers:	12,000	24,000	36,000	48,000	60,000	72,000	84,000	96,000	108,000	120,000	132,000	144,000	156,000	168,000	180,000	192,000	204,000	216,000	228,000	240,000
Change engine oil and oil filter. (1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rotate tires.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect all door latches for presence of grease, reapply if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
If using your vehicle for any of the following: Dusty or off-road conditions. Inspect the engine air cleaner filter, replace if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect the brake linings, replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X
Inspect exhaust system.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B
Inspect the front suspension, rear suspension, tie rod ends and boot seals, replace if necessary.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B
Inspect the front and rear axle fluid, change if using your vehicle for police, taxi, fleet, offroad or frequent trailer towing.	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Inspect the transfer case fluid.	B	B	B	X	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	X
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Change brake fluid every 24 months if using DOT 4 brake fluid. (2)	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Adjust parking brake on vehicles	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X

Mileage or time passed (whichever comes first)	7,500	15,000	22,500	30,000	37,500	45,000	52,000	60,000	67,500	75,000	82,500	90,000	97,500	105,000	112,500	120,000	127,500	135,000	142,500	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Or Kilometers:	12,000	24,000	36,000	48,000	60,000	72,000	84,000	96,000	108,000	120,000	132,000	144,000	156,000	168,000	180,000	192,000	204,000	216,000	228,000	240,000
equipped with four-wheel disc brakes.																				
Replace engine air cleaner filter.	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Replace air conditioning/cabin air filter.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Replace spark plugs. (3)	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B	X	B	B
Replace accessory drive belt(s).	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B
Flush and replace the engine coolant at 10 years or 150,000 miles (240,000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	X	B	B	B	B
Inspect and replace PCV valve if necessary.	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B

1. See "Severe Duty Conditions" in this section.
2. DOT 4 brake fluid is time based only; mileage intervals do not apply.
3. The spark plug change interval is mileage based only, yearly intervals do not apply.

Severe Duty Conditions

- Change the engine oil and engine oil filter at every 4,500 miles (7,500 km) or six months if using your vehicle under any of the following severe duty conditions:
 - Stop and go driving.
 - Driving in dusty conditions.
 - Short trips of less than 10 miles (16 km).
 - Trailer towing.
 - Taxi, police, or delivery service (commercial service).
 - Off-road or desert operation.

The oil change indicator system (if equipped) will remind you that it is time to take your vehicle in for engine oil replacement. On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary. The oil change indicator message will illuminate approximately 10, 000 km after the most recent oil change was performed. Have your vehicle serviced as soon as possible, within 800 km. However, an earlier oil change at 5, 000 km may be required if the vehicle is operated under "Severe Duty Conditions" later in this section.

NOTE:

- **The oil change indicator message will not monitor the time since the last oil change. Change your vehicle's oil if it has been six months since your last oil change even if the oil change indicator message is NOT illuminated.**
- **Change your engine oil more often if you drive your vehicle off-road for an extended period of time.**
- **Under no circumstances should oil change intervals exceed 10, 000 km or six months, whichever comes first.**

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check the engine oil level about five minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.
- Check the windshield washer solvent and add if required.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect the battery and clean and tighten the terminals as required.
- Check the fluid levels of coolant reservoir, brake master cylinder and power steering and fill as needed.
- Check all lights and other electrical items for correct operation.

At Each Oil Change

- Change the engine oil filter.
- Inspect the brake hoses and lines.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect the CV/Universal joints.

[illegible]

Kilometers or time passed (whichever comes first)	5,000	15,000	25,000	35,000	45,000	55,000	65,000	75,000	85,000	95,000	105,000	115,000	125,000	135,000	145,000	155,000	165,000	175,000	185,000	195,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Replace accessory drive belt(s).	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X	B
Flush and replace the engine coolant at 120 months or 240,000 km whichever comes first.	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B	X	B
Inspect and replace PCV valve if necessary. (3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

1. The brake fluid change interval is time based only, mileage intervals do not apply.
2. The spark plug change interval is mileage based only, yearly intervals do not apply.
3. This maintenance is recommended by FCA to the owner, but is not required to maintain emissions warranty.

Severe Duty Conditions

- Change the engine oil and engine oil filter at every 7,500 km or six months if using your vehicle under any of the following severe duty conditions:
 - Stop and go driving.
 - Driving in dusty conditions.
 - Short trips of less than 16 km.
 - Trailer towing.
 - Taxi, police, or delivery service (commercial service).
 - Off-road or desert operation.

EUROPE - GAS

2021

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for engine oil replacement. On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate earlier than specified. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

NOTE:

- **The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument panel. In any case, it must never exceed 12, 500 miles (20, 000 km) or one year.**
- **Flush and replace the engine coolant at 120 months or 150, 000 miles (240, 000 km), whichever comes first.**
- **The maximum mileage is 75, 000 mi (120, 000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37, 500 miles (60, 000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.**

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check engine oil level.
- Check windshield washer fluid level.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Check the fluid levels of the coolant reservoir and brake master cylinder, fill as needed.
- Check function of all interior and exterior lights.

Demanding Vehicle Use

- Restore additive level for AdBlueB® Diesel emissions (UREA) (if equipped), when the lamp is illuminated or the message on the instrument panel.

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Rotate the tires.

NOTE:

- Inspect battery, clean and tighten terminals as required.
- Inspect brake pads, shoes, rotors, drums, hoses and park brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions.
- Inspect all door latches for presence of grease, reapply if necessary.
- Inspect coolant level.
- Inspect the CV/Universal joints.

NOTE:

MAINTENANCE CHART

[illegible]

Mileage or time passed (whichever comes first)	12,500	25,000	37,500	50,000	62,500	75,000	87,500	100,000	112,500	125,000	137,500	150,000	162,500	175,000	187,500
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	20,000	40,000	60,000	80,000	100,000	120,000	140,000	160,000	180,000	200,000	220,000	240,000	260,000	280,000	300,000
Change brake fluid every 24 months if using DOT 4 brake fluid. (3)	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Replace the engine fuel filter. We recommend you use Mopar fuel filter, which must meet a 3 micron rating. If the vehicle is being used in severe operating conditions, it is recommended to replace the fuel filter every 12,500 miles (20,000 km).	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect accessory drive and timing belt.	B	B	X	B	B	B	B	B	X	B	B	B	B	B	X
Replace accessory drive belt. (4)	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B
Flush and replace the engine coolant at 10 years or 150,000 miles (240,000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	X	B	X	B	B	B
Replace timing drive belt.	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B

1. The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument panel. In any case, it must never exceed 12,500 miles (20,000 km) or one year.
2. Consumption of additive AdBlueB® (UREA) depends on the condition of use of the vehicle and is indicated by LED and/or message on the instrument panel.
3. The brake fluid interval is time based only, mileage intervals do not apply.
4. The maximum mileage is 75,000 mi (120,000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37,500 miles (60,000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.

2022 TO 2023

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for engine oil replacement. On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary. On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary. Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate earlier than specified. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

NOTE:

- The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument panel. In any case, it must never exceed 12, 500 miles (20, 000 km) or one year.
- Flush and replace the engine coolant at 120 months or 150, 000 miles (240, 000 km), whichever comes first.
- The maximum mileage is 75, 000 mi (120, 000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37, 500 miles (60, 000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check engine oil level.
- Check windshield washer fluid level.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Check the fluid levels of the coolant reservoir and brake master cylinder, fill as needed.
- Check function of all interior and exterior lights.

Demanding Vehicle Use

- Restore additive level for AdBlueB® Diesel emissions (UREA) (if equipped), when the lamp is illuminated or the message on the instrument panel.

At Every Oil Change Interval As Indicated By Oil Change Indicator System:

- Change oil and filter.
- Rotate the tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect battery, clean and tighten terminals as required.
- Inspect brake pads, shoes, rotors, drums, hoses and parking brake.
- Inspect engine cooling system protection and hoses.
- Inspect exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions.
- Inspect all door latches for presence of grease, reapply if necessary.
- Inspect coolant level.
- Inspect the CV/Universal joints.

NOTE:

Once you have carried out the last intervention in the table, continue with the scheduled servicing, maintaining the frequency indicated in the plan by marking each operation with a dot or dedicated note. Simply restarting the maintenance from the start of the plan may cause the allowed interval to be exceeded for some operations.

MAINTENANCE CHART

[illegible]

Mileage or time passed (whichever comes first)	12, 500	25, 000	37, 500	50, 000	62, 500	75, 000	87, 500	100, 000	112, 500	125, 000	137, 500	150, 000	162, 500	175, 000	187, 500
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	20, 000	40, 000	60, 000	80, 000	100, 000	120, 000	140, 000	160, 000	180, 000	200, 000	220, 000	240, 000	260, 000	280, 000	300, 000
the fuel filter every 12, 500 miles (20, 000 km).															
Inspect accessory drive and timing belt.	B	B	X	B	B	B	B	B	X	B	B	B	B	B	X
Replace accessory drive belt. (4)	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	X	B	X	B	B	B
Replace timing drive belt. (4)	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B

1. The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument panel. In any case, it must never exceed 12, 500 miles (20, 000 km) or one year.
2. Consumption of additive AdBlueB® (UREA) depends on the condition of use of the vehicle and is indicated by LED and/or message on the instrument panel.
3. The brake fluid interval is time based only, mileage intervals do not apply.
4. The maximum mileage is 75, 000 mi (120, 000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37, 500 miles (60, 000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.

LATIN AMERICA - DIESEL

2021

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for engine oil replacement.

On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary.

On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate earlier than specified. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

NOTE:

- **The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument cluster. In any case, it must never exceed two years. If the vehicle is used mainly for city driving, change the engine oil and filter every year.**

- Flush and replace the engine coolant at 120 months or 150, 000 miles (240, 000 km) whichever comes first.
- The maximum mileage is 75, 000 mi (120, 000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37, 500 miles (60, 000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, using wiTECH -> pcm - misc. function -> Reset Oil Change Indicator.

Once A Month Or Before A Long Trip

- Check engine oil level.
- Check windshield washer fluid level.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Check the fluid levels of the coolant reservoir and brake master cylinder, fill as needed.
- Check function of all interior and exterior lights.

At Each Oil Change

- Change the engine oil filter.
- Rotate the tires

NOTE: **Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on**

- Inspect battery and clean and tighten terminals as required
- Inspect brake pads, shoes, rotors, drums, hoses and parking brake
- Inspect engine cooling system protection and hoses
- Inspect the exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions
- Inspect all door latches for presence of grease, reapply if necessary
- Inspect coolant level
- Inspect the CV/Universal joints

Demanding Vehicle Use

- Restore additive level for AdBlueB® Diesel emissions (UREA) (if equipped), when the lamp is illuminated or the message on the instrument panel.

MAINTENANCE CHART

Mileage or time passed (whichever comes first)	12, 500	25, 000	37, 500	50, 000	62, 500	75, 000	87, 500	100, 000	112, 500	125, 000	137, 500	150, 000	162, 500	175, 000	187, 500
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	20, 000	40, 000	60, 000	80, 000	100, 000	120, 000	140, 000	160, 000	180, 000	200, 000	220, 000	240, 000	260, 000	280, 000	300, 000
Additional Inspections															
Change the engine oil and engine oil filter.	(5)														
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect front suspension, boot seals, tie rod ends, and replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Visually inspect condition of: exterior bodywork, underbody protection, pipes and hoses (exhaust - fuel system - brakes), rubber elements (boots, sleeves, bushings, etc.).	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
If using your vehicle in dusty or off-road conditions, inspect the engine air cleaner filter, and replace if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect the brake linings, parking brake function.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Check and, if necessary, top up fluid levels. (1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Additional Maintenance															
Replace engine air cleaner filter.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Replace the cabin air filter.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Change brake fluid every 24 months if using DOT 4 brake fluid. (2)	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Replace the engine fuel filter. We recommend you use MoparB® fuel filter, which must meet a 3 micron rating. If the vehicle is being used in severe operating conditions, it is recommended to replace the fuel filter every 12, 500 miles (20, 000 km).	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect accessory drive and timing belt.	B	B	X	B	B	B	B	B	X	B	B	B	B	B	X
Replace accessory drive belt. (3)	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B

Mileage or time passed (whichever comes first)	12, 500	25, 000	37, 500	50, 000	62, 500	75, 000	87, 500	100, 000	112, 500	125, 000	137, 500	150, 000	162, 500	175, 000	187, 500
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	20, 000	40, 000	60, 000	80, 000	100, 000	120, 000	140, 000	160, 000	180, 000	200, 000	220, 000	240, 000	260, 000	280, 000	300, 000
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	X	B	X	B	B	B
Replace timing drive belt. (4)	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B

1. Consumption of additive AdBlueB® (UREA) depends on the condition of use of the vehicle and is indicated by LED and/or message on the instrument panel.
2. The brake fluid interval is time based only, mileage intervals do not apply.
3. The maximum mileage is 75, 000 mi (120, 000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37, 500 miles (60, 000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.
4. The maximum mileage is 75, 000 mi (120, 000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37, 500 miles (60, 000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.
5. The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument panel. In any case, it must never exceed 12, 500 miles (20, 000 km) or one year.

2022

Your vehicle is equipped with an automatic oil change indicator system. The oil change indicator system will remind you that it is time to take your vehicle in for engine oil replacement.

On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary.

On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

Based on engine operation conditions, the oil change indicator message will illuminate. This means that service is required for your vehicle. Operating conditions such as frequent short-trips, trailer tow, extremely hot or cold ambient temperatures will influence when the "Oil Change Required" message is displayed. Severe Operating Conditions can cause the change oil message to illuminate earlier than specified. Have your vehicle serviced as soon as possible, within the next 500 miles (805 km).

NOTE:

- The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument cluster. In any case, it must never exceed two years. If the vehicle is used mainly for city driving, change the engine oil and filter every year.
- Flush and replace the engine coolant at 120 months or 150, 000 miles (240, 000 km) whichever comes first.
- The maximum mileage is 75, 000 mi (120, 000 km). The belt must be replaced every five years regardless of distance traveled. The timing and

accessory belts must be changed every 37, 500 miles (60, 000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, using wiTECH -> pcm - misc. function -> Reset Oil Change Indicator.

Once A Month Or Before A Long Trip

- Check engine oil level.
- Check windshield washer fluid level.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Check the fluid levels of the coolant reservoir and brake master cylinder, fill as needed.
- Check function of all interior and exterior lights.

At Each Oil Change

- Change the engine oil filter.
- Rotate the tires

NOTE: Rotate at the first sign of irregular wear, even if it occurs before the oil indicator system turns on

- Inspect battery and clean and tighten terminals as required
- Inspect brake pads, shoes, rotors, drums, hoses and parking brake
- Inspect engine cooling system protection and hoses
- Inspect the exhaust system.
- Inspect engine air cleaner filter if using in dusty or off-road conditions
- Inspect all door latches for presence of grease, reapply if necessary
- Inspect coolant level
- Inspect the CV/Universal joints

Demanding Vehicle Use

- Restore additive level for AdBlueB® Diesel emissions (UREA) (if equipped), when the lamp is illuminated or the message on the instrument panel.

MAINTENANCE CHART

Mileage or time passed (whichever comes first)	12, 500	25, 000	37, 500	50, 000	62, 500	75, 000	87, 500	100, 000	112, 500	125, 000	137, 500	150, 000	162, 500	175, 000	187, 500
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	20, 000	40, 000	60, 000	80, 000	100, 000	120, 000	140, 000	160, 000	180, 000	200, 000	220, 000	240, 000	260, 000	280, 000	300, 000
Additional Inspections															
Change the engine oil and engine oil filter.	(5)														
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect front suspension, boot seals, tie rod ends, and replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Visually inspect condition of: exterior bodywork, underbody protection, pipes and hoses (exhaust - fuel system - brakes), rubber elements (boots, sleeves, bushings, etc.).	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
If using your vehicle in dusty or off-road conditions, inspect the engine air cleaner filter, and replace if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect the brake linings, parking brake function.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Check and, if necessary, top up fluid levels. (1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Additional Maintenance															
Replace engine air cleaner filter.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Replace the cabin air filter.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Change brake fluid every 24 months if using DOT 4 brake fluid. (2)	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Replace the engine fuel filter. We recommend you use MoparB® fuel filter, which must meet a 3 micron rating. If the vehicle is being used in severe operating conditions, it is recommended to replace the fuel filter every 12, 500 miles (20, 000 km).	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B
Inspect accessory drive and timing belt.	B	B	X	B	B	B	B	B	X	B	B	B	B	B	X
Replace accessory drive belt. (3)	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B

Mileage or time passed (whichever comes first)	12,500	25,000	37,500	50,000	62,500	75,000	87,500	100,000	112,500	125,000	137,500	150,000	162,500	175,000	187,500
Or Years:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Or Kilometers:	20,000	40,000	60,000	80,000	100,000	120,000	140,000	160,000	180,000	200,000	220,000	240,000	260,000	280,000	300,000
Flush and replace the engine coolant at 10 years or 150,000 miles (240,000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	X	B	X	B	B	B
Replace timing drive belt. (4)	B	B	B	B	B	X	B	B	B	B	B	X	B	B	B

1. Consumption of additive AdBlueB® (UREA) depends on the condition of use of the vehicle and is indicated by LED and/or message on the instrument panel.
2. The brake fluid interval is time based only, mileage intervals do not apply.
3. The maximum mileage is 75,000 mi (120,000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37,500 miles (60,000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.
4. The maximum mileage is 75,000 mi (120,000 km). The belt must be replaced every five years regardless of distance traveled. The timing and accessory belts must be changed every 37,500 miles (60,000 km) or three years for particularly demanding use (dusty areas, severe weather conditions, very low or very high temperatures for extended periods, city driving, long periods of idling). Under no circumstances should these intervals be exceeded.
5. The actual interval for changing engine oil and replacing the engine oil filter depends on the vehicle usage conditions, and is signaled by the warning light or message in the instrument panel. In any case, it must never exceed 12,500 miles (20,000 km) or one year.

LATIN AMERICA - GAS

2020

The scheduled services listed in this manual must be done at the times or mileages specified to protect your vehicle warranty and ensure the best vehicle performance and reliability. More frequent maintenance may be needed for vehicles in severe operating conditions, such as dusty areas and very short trip driving. Inspection and service should also be done anytime a malfunction is suspected.

The oil change indicator system will remind you that it is time to take your vehicle in for scheduled maintenance.

On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary.

On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

The oil change indicator message will illuminate approximately 7,000 miles (11,200 km) after the most recent oil change was performed. Have your vehicle serviced as soon as possible, within 500 miles (805 km). However, an earlier oil change at 4,500 miles (7,500 km) may be required if the vehicle is operated under "Severe Duty Conditions" later in this section.

NOTE:

- The oil change indicator message will not monitor the time since the last oil change. Change your vehicle's oil if it has been 6 months since your last oil change even if the oil change indicator message is NOT illuminated.

[illegible]

[illegible]

Mileage or time passed (whichever comes first)	7,500	15,000	22,500	30,000	37,500	45,000	52,500	60,000	67,500	75,000	82,500	90,000	97,500	105,000	112,500	120,000	127,500	135,000	142,500	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Or Kilometers:	12,000	24,000	36,000	48,000	60,000	72,000	84,000	96,000	108,000	120,000	132,000	144,000	156,000	168,000	180,000	192,000	204,000	216,000	228,000	240,000
Replace accessory drive belt(s).	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B	B
Flush and replace the engine coolant at 10 years or 150,000 miles (240,000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	X	B	B	B	B
Inspect and replace PCV valve if necessary.	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B

* The spark plug change interval is mileage based only, yearly intervals do not apply.

** DOT 4 brake fluid is time based only; mileage intervals do not apply.

Severe Duty Conditions

- ++ Change the engine oil and engine oil filter at every 4500 miles (7,500 km) or 12 months if using your vehicle under any of the following severe duty conditions:
 - Stop and go driving.
 - Driving in dusty conditions.
 - Short trips of less than 10 miles (16 km).
 - Trailer towing.
 - Taxi, police, or delivery service (commercial service).
 - Off-road or desert operation.

2021

The oil change indicator system (if equipped) will remind you that it is time to take your vehicle in for engine oil replacement.

On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed and a single chime will sound, indicating that an oil change is necessary.

On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary.

The oil change indicator message will illuminate approximately 7,000 miles (11,200 km) after the most recent oil change was performed. Have your vehicle serviced as soon as possible, within 500 miles (805 km).

However, an earlier oil change at 4, 500 miles (7, 500 km) may be required if the vehicle is operated under "Severe Duty Conditions" later in this section.

NOTE:

- **The oil change indicator message will not monitor the time since the last oil change. Change your vehicle's oil if it has been six months since your last oil change even if the oil change indicator message is NOT illuminated.**
- **Change your engine oil more often if you drive your vehicle off-road for an extended period of time.**
- **Under no circumstances should oil change intervals exceed 7, 500 miles (12, 000 km) or six months, whichever comes first.**

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check the engine oil level about five minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.
- Check the windshield washer solvent and add if required.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear.
- Inspect the battery and clean and tighten the terminals as required.
- Check the fluid levels of coolant reservoir, brake master cylinder and power steering and fill as needed.
- Check all lights and other electrical items for correct operation.

At Each Oil Change

- Change the engine oil filter.
- Inspect the brake hoses and lines.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect the CV/Universal joints.

[illegible]

Mileage or time passed (whichever comes first)	7,500	15,000	22,500	30,000	37,500	45,000	52,500	60,000	67,500	75,000	82,500	90,000	97,500	105,000	112,500	120,000	127,500	135,000	142,500	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Or Kilometers:	12,000	24,000	36,000	48,000	60,000	72,000	84,000	96,000	108,000	120,000	132,000	144,000	156,000	168,000	180,000	192,000	204,000	216,000	228,000	240,000
Inspect all door latches for presence of grease, reapply if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
If using your vehicle for any of the following: Dusty or off-road conditions. Inspect the engine air cleaner filter, replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X
Inspect the brake linings, replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X
Inspect exhaust system.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B
Inspect the front suspension, rear suspension, tie rod ends and boot seals, replace if necessary.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B
Inspect the front and rear axle fluid, change if using your vehicle for police, taxi, fleet, offroad or frequent trailer towing.	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Inspect the transfer case fluid.	B	B	B	X	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	X
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Change brake fluid every 24 months if using DOT 4 brake fluid. (2)	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Adjust parking brake on vehicles equipped with four-wheel disc brakes.	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X

Mileage or time passed (whichever comes first)	7,500	15,000	22,500	30,000	37,500	45,000	52,500	60,000	67,500	75,000	82,500	90,000	97,500	105,000	112,500	120,000	127,500	135,000	142,500	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Or Kilometers:	12,000	24,000	36,000	48,000	60,000	72,000	84,000	96,000	108,000	120,000	132,000	144,000	156,000	168,000	180,000	192,000	204,000	216,000	228,000	240,000
Replace engine air cleaner filter.	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Replace air conditioning/cabin air filter.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B
Replace spark plugs. (3)	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B	X	B	B
Replace accessory drive belt(s).	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B	B
Flush and replace the engine coolant at 10 years or 150,000 miles (240,000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	X	B	B	B	B
Inspect and replace PCV valve if necessary.	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B

1. See "Severe Duty Conditions" in this section.
2. DOT 4 brake fluid is time based only; mileage intervals do not apply.
3. The spark plug change interval is mileage based only, yearly intervals do not apply.

Severe Duty Conditions

- Change the engine oil and engine oil filter at every 4,500 miles (7,500 km) or six months if using your vehicle under any of the following severe duty conditions:
 - Stop and go driving.
 - Driving in dusty conditions.
 - Short trips of less than 10 miles (16 km).
 - Trailer towing.
 - Taxi, police, or delivery service (commercial service).
 - Off-road or desert operation.

2022 TO 2023

The oil change indicator system (if equipped) will remind you that it is time to take your vehicle in for engine oil replacement. On vehicles equipped with instrument cluster display, "Oil Change Required" will be displayed

and a single chime will sound, indicating that an oil change is necessary. On non-instrument cluster display equipped vehicles, "Change Oil" will flash in the instrument cluster odometer and a single chime will sound, indicating that an oil change is necessary. The oil change indicator message will illuminate approximately 7, 000 miles (11, 200 km) after the most recent oil change was performed. Have your vehicle serviced as soon as possible, within 500 miles (805 km). However, an earlier oil change at 4, 500 miles (7, 500 km) may be required if the vehicle is operated under "Severe Duty Conditions" later in this section.

NOTE:

- **The oil change indicator message will not monitor the time since the last oil change. Change your vehicle's oil if it has been six months since your last oil change even if the oil change indicator message is NOT illuminated.**
- **Change your engine oil more often if you drive your vehicle off-road for an extended period of time.**
- **Under no circumstances should oil change intervals exceed 7, 500 miles (12, 000 km) or six months, whichever comes first.**

Oil Change Indicator- Reset

- Unless reset, this message continues to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:
 1. Turn the ignition switch to the ON position. Do not start the engine.
 2. Fully depress the accelerator pedal slowly three times within 10 seconds.
 3. Turn the ignition switch to the LOCK position.
- If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary, repeat this procedure.

Once A Month Or Before A Long Trip:

- Check the engine oil level about five minutes after a fully warmed engine is shut off. Checking the oil level while the vehicle is on level ground will improve the accuracy of the oil level reading. Add oil only when the level is at or below the ADD or MIN mark.
- Check the windshield washer solvent and add if required.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear.
- Inspect the battery and clean and tighten the terminals as required.
- Check the fluid levels of coolant reservoir, brake master cylinder and power steering and fill as needed.
- Check all lights and other electrical items for correct operation.

At Each Oil Change

- Change the engine oil filter.
- Inspect the brake hoses and lines.
- Check tire pressure and look for unusual wear or damage. Rotate tires at the first sign of irregular wear, even if it occurs before the oil indicator system turns on.
- Inspect the CV/Universal joints.

Mileage or time passed (whichever comes first)	7,500	15,000	22,500	30,000	37,500	45,000	52,500	60,000	67,500	75,000	82,500	90,000	97,500	105,000	112,500	120,000	127,500	135,000	142,500	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Or Kilometers:	12,000	24,000	36,000	48,000	60,000	72,000	84,000	96,000	108,000	120,000	132,000	144,000	156,000	168,000	180,000	192,000	204,000	216,000	228,000	240,000
Change engine oil and oil filter. (1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rotate tires.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect all door latches for presence of grease, reapply if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
If using your vehicle for any of the following: Dusty or off-road conditions. Inspect the engine air cleaner filter, replace if necessary.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect the brake linings, replace if necessary.	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X	B	X
Inspect exhaust system.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B
Inspect the front suspension, rear suspension, tie rod ends and boot seals, replace if necessary.	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B	X	B	B
Inspect the front and rear axle fluid, change if using your vehicle for police, taxi, fleet, offroad or frequent trailer towing.	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Inspect the transfer case fluid.	B	B	B	X	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	X
Inspect the CV/Universal joints.	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Change brake fluid every 24 months if using DOT 4 brake fluid. (2)	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Adjust parking brake on vehicles	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X

Mileage or time passed (whichever comes first)	7,500	15,000	22,500	30,000	37,500	45,000	52,500	60,000	67,500	75,000	82,500	90,000	97,500	105,000	112,500	120,000	127,500	135,000	142,500	150,000
Or Months:	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Or Kilometers:	12,000	24,000	36,000	48,000	60,000	72,000	84,000	96,000	108,000	120,000	132,000	144,000	156,000	168,000	180,000	192,000	204,000	216,000	228,000	240,000
equipped with four-wheel disc brakes.																				
Replace engine air cleaner filter.	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X	B	B	B	X
Replace air conditioning/cabin air filter.	To be replaced every 12, 000 mi (19, 000 km).																			
Replace spark plugs. (3)	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B	X	B	B
Replace accessory drive belt(s).	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B	B
Flush and replace the engine coolant at 10 years or 150, 000 miles (240, 000 km) whichever comes first.	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	X
Change transfer case fluid if using your vehicle for any of the following: police, taxi, fleet, or frequent trailer towing.	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	X	B	B	B	B
Inspect and replace PCV valve if necessary.	B	B	B	B	B	B	B	B	B	B	B	X	B	B	B	B	B	B	B	B

1. See "Severe Duty Conditions" in this section.
2. DOT 4 brake fluid is time based only; mileage intervals do not apply.
3. The spark plug change interval is mileage based only, yearly intervals do not apply.

Severe Duty Conditions

- Change the engine oil and engine oil filter at every 4, 500 miles (7, 500 km) or six months if using your vehicle under any of the following severe duty conditions:
 - Stop and go driving.
 - Driving in dusty conditions. •
 - Short trips of less than 10 miles (16 km).
 - Trailer towing.
 - Taxi, police, or delivery service (commercial service).
 - Off-road or desert operation.

FCA International Operations LLC recommends that you return to the dealer from whom you bought your vehicle for all maintenance service both during and after the warranty periods. Returning to your selling dealer will help ensure that all your service needs are met and that you're completely satisfied. Authorized Repairer's technicians are specifically trained to proficiently perform maintenance and repair procedures on your FCA International Operations LLC vehicle.

Authorized Repairers will help ensure that all your service needs are met and that you are completely satisfied. FCA International Operations LLC strongly recommends you use genuine FCA International Operations LLC / MOPAR parts to maintain your vehicle.

Mandatory 5000 km service interval for SRT, Hellcat and Wrangler (if used in desert driving or modified vehicles).

OIL CHANGE INDICATOR - RESET

The vehicle is equipped with an engine oil change indicator system. The "Oil Change Required" message will flash in the EVIC display for approximately 10 seconds after a single chime has sounded to indicate the next scheduled oil change interval. The engine oil change indicator system is duty cycle based, which means the engine oil change interval may fluctuate dependent upon your personal driving style.

Unless reset, this message will continue to display each time you turn the ignition switch to the ON/RUN position. To turn off the message temporarily, press and release the Menu button. To reset the oil change indicator system (after performing the scheduled maintenance) perform the following procedure:

1. Turn the ignition switch to the "ON" position (Do not start the engine).
2. Fully depress the accelerator pedal slowly three times within 10 seconds.
3. Turn the ignition switch to the "LOCK" position.

NOTE: If the indicator message illuminates when you start the vehicle, the oil change indicator system did not reset. If necessary repeat this procedure.

REQUIRED MAINTENANCE INTERVALS

Perform Maintenance Every			Maintenance Items
(Where time and mileage are listed, follow the interval that occurs first.)			
Miles	Kilometers	Months	
6000	10000	6	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage
12000	20000	12	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Replace the air conditioning filter

Perform Maintenance Every			Maintenance Items
(Where time and mileage are listed, follow the interval that occurs first.)			
Miles	Kilometers	Months	
			• Replace the engine air filter
18000	30000	18	• Change the engine oil and engine oil filter. • Rotate the tires, rotate at the first sign of irregular wear. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage
24000	40000	24	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Replace the air conditioning filter • Inspect front & rear axle oil, change if using your vehicle for police, taxi, fleet, off-road, or frequent trailer towing • Replace the engine air filter
30000	50000	30	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Inspect engine air filter element, replace if necessary • Replace Spark Plugs
36000	60000	36	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses and brake linings • Check spare tire for proper pressure & correct stowage • Replace the air conditioning filter • Replace the engine air filter

Perform Maintenance Every			Maintenance Items
(Where time and mileage are listed, follow the interval that occurs first.)			
Miles	Kilometers	Months	
			• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps
			• Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage
48000	80000	48	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Inspect the PVC valve and replace if necessary** Recommended • Replace the air conditioning filter • Inspect front & rear axle oil, change if using your vehicle for police, taxi, fleet, off-road, or frequent trailer towing • Replace the engine air filter
54000	90000	54	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses and linings • Check spare tire for proper pressure & correct stowage
60000	100000	60	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Inspect the engine air filter element, replace if necessary • Replace the air conditioning filter • Inspect the PVC valve and replace if necessary** Recommended • Replace spark plugs • Inspect engine accessory drive belt, replace if necessary*** This maintenance is not required if belt was previously replaced • Drain transfer case & refill

Perform Maintenance Every			Maintenance Items
(Where time and mileage are listed, follow the interval that occurs first.)			
Miles	Kilometers	Months	
			• Flush & replace engine coolant/anti-freeze • Replace the engine air filter
66000	110000	66	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage
72000	120000	72	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Replace the air conditioning filter • Inspect front & rear axle oil, change if using your vehicle for police, taxi, fleet, off-road, or frequent trailer towing • Replace the engine air filter
78000	130000	78	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage
84000	140000	84	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses and brake linings • Check spare tire for proper pressure & correct stowage • Replace the air conditioning filter • Replace the engine air filter
90000	150000	90	• Change the engine oil and engine oil filter. • Rotate the tires.

Perform Maintenance Every			Maintenance Items
(Where time and mileage are listed, follow the interval that occurs first.)			
Miles	Kilometers	Months	
			• Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses and brake linings • Check spare tire for proper pressure & correct stowage • Inspect the engine air filter element, replace if necessary • Inspect the PVC valve and replace if necessary** Recommended • Replace spark plugs • Inspect engine accessory drive belt, replace if necessary*** This maintenance is not required if belt was previously replaced • Drain transfer case & refill
96000	160000	96	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Replace the air conditioning filter • Inspect front & rear axle oil, change if using your vehicle for police, taxi, fleet, off-road, or frequent trailer towing • Replace the engine air filter
102000	170000	102	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Flush and replace engine coolant, if not done at 100,000 km
108000	180000	108	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses and brake linings • Check spare tire for proper pressure & correct stowage

Perform Maintenance Every (Where time and mileage are listed, follow the interval that occurs first.)			Maintenance Items
Miles	Kilometers	Months	
			• Replace the air conditioning filter • Replace the engine air filter
114000	190000	114	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage
120000	200000	120	• Change the engine oil and engine oil filter. • Rotate the tires. • Check the coolant level, hoses and clamps • Inspect exhaust system • Inspect brake hoses • Check spare tire for proper pressure & correct stowage • Inspect engine air filter element, replace if necessary • Inspect PVC valve, replace if necessary*** Recommended • Replace Spark Plugs • Inspect engine accessory drive belt, replace if necessary**** This maintenance is not required if belt was previously replaced • Drain transfer case & refill • Flush and replace engine coolant, if not done at 100,000 miles • Replace the air conditioning filter • Inspect front & rear axle oil, change if using your vehicle for police, taxi, off-road, or frequent trailer towing • Replace the engine air filter
126000	210000	126	• Change the engine oil and engine oil filter. • Rotate the tires. • Inspect the front & rear axle fluid, change if using vehicle for police, taxi, fleet, off-road, or frequent trailer towing
132000	220000	132	• Change the engine oil and engine oil filter. • Rotate tires • If using your vehicle for any of the following: Dusty or off-road conditions. Inspect the engine air cleaner

Perform Maintenance Every (Where time and mileage are listed, follow the interval that occurs first.)			Maintenance Items
Miles	Kilometers	Months	
			filter; replace if necessary. • Inspect the brake linings, replace if necessary • Inspect the front suspension, tie rod ends and boot seals for cracks or leaks and all parts for damage, wear, improper looseness or end play; replace if necessary • Replace the air conditioning filter • Replace the engine air filter
138000	230000	138	• Change the engine oil and engine oil filter. • Rotate the tires.
144000	240000	144	• Change the engine oil and engine oil filter. • Rotate tires • If using your vehicle for any of the following: Dusty or off-road conditions. Inspect the engine air cleaner filter; replace if necessary. • Inspect the brake linings, replace if necessary • Inspect the front & rear axle fluid, change if using vehicle for police, taxi, fleet, off-road, or frequent trailer towing • Inspect exhaust system • Inspect the front suspension, tie rod ends and boot seals for cracks or leaks and all parts for damage, wear, improper looseness or end play; replace if necessary. • Replace the air conditioning filter • Inspect front & rear axle oil, change if using your vehicle for police, taxi, off-road, or frequent trailer towing • Replace the engine air filter
150000	250000	150	• Change the engine oil and engine oil filter. • Rotate the tires. • Replace the engine air cleaner filter. • Change the manual transmission fluid if using your vehicle for any of the following; trailer towing, snow plowing, heavy loading, taxi, police, delivery service (commercial service), off-road, desert operation or more than 50% of your driving is at sustained high speeds during hot weather, above 90B° F (32B° C) • Inspect the transfer case fluid

WARNING:

- You can be badly injured working on or around a motor vehicle. Do only service work for which you have the knowledge and the right equipment.

If you have any doubt about your ability to perform a service job, take your vehicle to a competent mechanic.

- Failure to properly inspect and maintain your vehicle could result in a component malfunction and effect vehicle handling and performance. This could cause an accident

Failure to follow these instructions may result in possible serious or fatal injury.

NEW VEHICLE PREPARATION INSTRUCTIONS

STANDARD PROCEDURE

TRANSIT FILM REMOVAL

- NOTE:** Transit Film may become more difficult to remove with extended storage time. Keep all protective Transit Film and Wheel Covers & Films on vehicle until sold, or up to 180 Days.
- NOTE:** Always wear rubber gloves and follow manufacturer's instructions when handling chemical substances.
- NOTE:** Never pour solvents onto the film for removal. The film will always come off with soap and water pressure.
- NOTE:** Place a wire screen over drain to stop the film from entering and clogging sewer drain. Transit film is a class II industrial non-hazardous waste and should be disposed of accordingly.

Transit Film Removal Process

1. Wet vehicle thoroughly using cool to warm water.

NOTE: Never use hot water to remove film: the film is designed to remove easily from the surface at ambient temperatures between 16B° C. and 32B° C. (60B° F. AND 90B° F.).

2. Peel the film off using cool to warm water from a garden hose. Combine the peeling of the film with one hand while directing the water pressure with the other.
3. Transit film may leave a wax haze on surface. Wash vehicle using Mopar Car Wash Soap Concentrate, p/n 05013677AB, or equivalent and water to remove.

Additional Steps When Transit Film:

- Has been on the vehicle for 6 months or longer
- When film is extremely dirty in appearance
- When film is stubborn to peel off by hand
- Leaves an adhesive residue on the paint

1. Wet vehicle thoroughly using cool to warm water.

NOTE: Never use hot water to remove film: the film is designed to remove easily from the surface at ambient temperatures between 16B° C. and 32B° C. (60B° F. and 90B° F.).

2. Soak film using cold to warm water and wash thoroughly using Mopar Car Wash Soap Concentrate, p/n 05013677AB, or equivalent and water. If film is extremely dirty, use "woolen" vehicle wash mitt, wet surface and pour Mopar Car Wash Soap Concentrate directly onto surface and thoroughly wash the film.
3. In extreme conditions, soak towels in warm soapy water and place directly on the film surface where the film is difficult to remove, keeping the surface wet for 10-15 minutes, remove towels and remove the film.

Removal of small film particles on paint surface:

- Use Mopar Windshield Washer Solvent (p/n 04318067AB) or equivalent (methyl alcohol, methanol based). Pour directly onto a clean soft dry cloth (do not dilute the solvent). The concentrated solvent will instantly dissolve the transit film particles from paint surfaces or acrylic lenses, acrylic emblems, polycarbonate, Lexan surfaces, or unsealed rubber surfaces.

Removal of moisture marks in paint:

- Painted surfaces of the vehicle that are covered for extended periods of time with transit film may appear to have a white "milky" spot(s) on dark colors, or a fogging, coffee colored spot(s) on lighter colors (front end covers or magnetic signs can cause the same condition) and can be corrected with the following steps:
 1. Place a heat gun approximately 100 to 150 mm (4 to 6 inches) from the effected area. A target surface temperature of 80B° to 107B° C. (180B° to 225B°F.) is preferred. DO NOT APPLY HEAT ABOVE 121B° C. (250B°F.) TO ANY PLASTIC PARTS.

NOTE: CIRCULATE THE HEAT GUN AROUND THE AFFECTED AREA. DO NOT ALLOW HEAT TO BE DIRECTED AT ONE AREA FOR TOO LONG, PAINT DAMAGE MAY OCCUR.

PARTS REQUIRED:

Qty.	Part No.	Description
AR	05013677AB	Car Wash Concentrate, 8 oz.
AR	05013678AB	Car Wash Concentrate, 5 gal.
AR	04318067AB	Windshield Washer Cleaner

TOWING

STANDARD PROCEDURE

STANDARD PROCEDURE - TOWING

CAUTION: DO NOT use sling-type equipment when towing. When securing the vehicle to a flatbed truck, do not attach to front or rear suspension components. Damage to your vehicle may result from improper towing.

CAUTION: Front or rear wheel lifts must not be used. Internal damage to the transmission or power transfer unit will occur if a front or rear wheel lift is used when towing.

CAUTION: Towing this vehicle in violation of the below requirements can cause severe transmission damage. Damage from improper towing is not covered under the New Vehicle Limited Warranty.

NOTE: This section describes procedures for towing a disabled vehicle using a commercial towing service. If the transmission and drivetrain are operable, disabled vehicles may also be towed as described under "Recreational Towing" in the "Starting And Operating" section.

Towing Condition	Wheels OFF The Ground	4WD MODELS
Flat Tow	NONE	• Automatic Transmission in PARK (P) • Manual Transmission in gear (NOT in NEUTRAL) • Transfer Case in NEUTRAL (N) • Tow in Forward direction
Wheel Lift Or Dolly Tow	Front	NOT ALLOWED
	Rear	NOT ALLOWED
Flatbed	ALL	BEST METHOD
NOTE: When towing your vehicle, always follow applicable state and provincial laws. Contact state and provincial Highway Safety offices for additional details.		

Towing A Disabled Vehicle

- Proper towing or lifting equipment is required to prevent damage to your vehicle. Use only tow bars and other equipment designed for this purpose, following equipment manufacturer's instructions. Use of safety chains is mandatory. Attach a tow bar or other towing device to main structural members of the vehicle, not to bumpers or associated brackets. State and local laws regarding vehicles under tow must be observed.
- If you must use the accessories (wipers, defroster, etc.) while being towed, the key must be in the ON/RUN position, not the ACC position.
- If the vehicle's battery is discharged, refer to "Manual Park Release" in this section for instructions on shifting the automatic transmission out of PARK in order to move the vehicle.

Without The Ignition Key

- Special care must be taken when the vehicle is towed with the ignition in the LOCK position. The only approved method of towing without the ignition key is with a flatbed truck. Proper towing equipment is necessary to prevent damage to the vehicle.

Four-Wheel Drive (FWD) Models

- The manufacturer recommends towing with all wheels OFF the ground. Acceptable methods are to tow the vehicle on a flatbed or with one end of the vehicle raised and the opposite end on a towing dolly. If flatbed equipment is not available and the transfer case is operable, the vehicle may be towed (in the forward direction, with ALL wheels on the ground), IF the transfer case is in NEUTRAL (N) and the transmission is in PARK (for automatic transmissions) or in gear (NOT in NEUTRAL, for manual transmissions). Refer to "Recreational Towing" in "Starting And Operating" for detailed instructions.

