

Business Systems Information Portal (BSIP)

VMRS Codes – Introduction

Vehicle Maintenance Reporting Standards (VMRS) is the system used to track bus and vehicle maintenance throughout the state. These codes were created by the American Trucking Associations (ATA) as a uniform system of reporting and tracking maintenance across many different types of equipment.

Proper use of VMRS codes in BSIP is important for revealing problem areas in particular vehicle models and identifying areas of increased maintenance costs.

A VMRS code is nine digits in the form: 123-456-789.

1. The first three digits are the most important as they indicate the major system

Examples:

013 – Brakes	044 – Fuel System
017 – Tires, Tubes, Liners & Valves	174 – Bus Body
024 – Drive Shafts	...etc

2. The second three digits indicate the area within the larger systems:

Brake Examples:

013-001 – Front Brakes & Drums
013-002 – Rear Brakes & Drums
013-003 – Parking Brakes
013-006 – Brake Master Cylinder
...etc

Bus Body Examples:

174-005 – Standard Side Window Components
174-013 – Bus Rear Emergency Door Components
174-017 – School Bus Stop Arm Components
174-022 – Bus Seat Components
...etc

3. The final three digits indicate the actual item being serviced:

Front Brake Examples:

013-001-005 – Guide – Front Brake Shoe
013-001-015 – Lining – Brake Front
013-001-023 – Drum – Front Brake
013-001-025 – Damper Spring – Front Brake Drum
013-001-123 – Stop – Slack Adjuster
...etc

Bus Seat Component Examples:

174-022-004 – Frame – Bus Seat
173-022-008 – Cushion, Back – Bus Seat
174-022-011 – Cover, Seat – Bus Seat
174-022-014 – Hinge – Bus Flip Seat
174-022-029 – Panel – Bus Seat
...etc

The follow pages contain a one page list of primary system codes for buses (and other trucks) as well as a list of second level codes which apply to buses.

Primary System Level Codes for Buses:

001	AIR CONDITIONING, HEATING & VENTILATING SYSTEM
002	CAB & SHEET METAL
003	INSTRUMENTS, GAUGES, WARNING & SHUTDOWN DEVICES, & METERS
010	CHASSIS GROUP
011	AXLES - FRONT STEERING
013	BRAKES
014	FRAME COMPONENTS
015	STEERING
016	SUSPENSION
017	TIRES, TUBES, LINERS & VALVES
018	WHEELS, RIMS, HUBS & BEARINGS
022	AXLES - DRIVEN, REAR
024	DRIVE SHAFTS
027	TRANSMISSION - AUTOMATIC
031	CHARGING SYSTEM
032	CRANKING SYSTEM
033	IGNITION SYSTEM
034	LIGHTING SYSTEM
037	MODULES/RELAYS - ELECTRICAL
041	AIR INTAKE SYSTEM
042	COOLING SYSTEM
043	EXHAUST SYSTEM
044	FUEL SYSTEM
045	POWER PLANT
051	GENERAL ACCESSORIES
052	ELECTRICAL ACCESSORIES
053	EXPENDABLE ITEMS
054	HORNS & MOUNTINGS & REVERSE SIGNAL ALARMS
055	CARGO HANDLING, RESTRAINTS, & LIFT SYSTEMS
174	BUS BODY

Extra System Level Codes For Other Trucks:

012	AXLES - NON-DRIVEN, REAR
021	AXLES - DRIVEN, FRONT STEERING
023	CLUTCH SYSTEM
025	TRANSFER CASE
026	TRANSMISSION - MAIN, MANUAL
056	POWER TAKE-OFF
058	VEHICLE WINCHING SYSTEM
059	VEHICLE COUPLING SYSTEM
071	BODY
078	TRIM & MISCELLANEOUS HARDWARE
096	POWER SHAFT - POWER TAKE-OFF

Second Level VMRS Codes for Buses:

001 - AIR CONDITIONING, HEATING & VENTILATING SYSTEM	
001-001-xxx	AIR CONDITIONING ASSEMBLY – COMPLETE
001-002-xxx	HEATING & VENTILATING
001-005-xxx	AUXILIARY FAN – DEFROSTER
002 - CAB & SHEET METAL	
002-001-xxx	RADIATOR GRILLE
002-002-xxx	FENDERS & MUD FLAPS - FRONT WHEEL
002-004-xxx	HOOD
002-005-xxx	COWL PANELS
002-006-xxx	ROOF PANEL & REINFORCEMENTS
002-007-xxx	PILLAR & REINFORCEMENTS
002-008-xxx	INSTRUMENT PANEL
002-009-xxx	SUN VISOR - EXTERIOR & INTERIOR
002-010-xxx	MIRRORS
002-012-xxx	FLOOR PAN
002-013-xxx	FLOOR COVERINGS
002-014-xxx	PANEL DEADENERS
002-027-xxx	SEAT FRAMES & SPRINGS (Driver's Seat Only)
002-028-xxx	ADJUSTER - FRONT SEAT (Driver's Seat Only)
002-035-xxx	WINDSHIELD WIPER & WASHER
003 - INSTRUMENTS, GAUGES, WARNING & SHUTDOWN DEVICES, & METERS	
003-001-xxx	GAUGES & WARNING DEVICES
003-002-xxx	SPEEDOMETER
003-004-xxx	SHUTDOWN DEVICES
011 - AXLES - FRONT STEERING	
011-001-xxx	AXLE COMPONENTS - NON-DRIVEN, FRONT
013 - BRAKES	
013-001-xxx	FRONT BRAKES & DRUMS
013-002-xxx	REAR BRAKES & DRUMS
013-003-xxx	PARKING BRAKES
013-004-xxx	SPRING PARKING BRAKE (SEPARATE OR COMBINATION W/SERVICE BRAKE)
013-005-xxx	PEDAL ASSEMBLY - SERVICE BRAKE
013-006-xxx	BRAKE MASTER CYLINDER
013-007-xxx	BRAKE LINES & FITTINGS - HYDRAULIC & AIR
013-009-xxx	AIR COMPRESSOR
013-010-xxx	AIR TYPE POWER BRAKES
013-011-xxx	ABS, ANTI-LOCK SYSTEM
013-013-xxx	AIR DISC BRAKES
013-015-xxx	AIR BRAKE MONITORING SYSTEM
013-016-xxx	HYDRAULIC MOTOR BRAKE SYSTEM

014 - FRAME COMPONENTS	
014-001-xxx	FRAME ASSEMBLY COMPONENTS
014-002-xxx	BUMPERS & ATTACHING PARTS
014-003-xxx	ENGINE MOUNTINGS
014-004-xxx	CAB & BODY MOUNTINGS
014-005-xxx	BATTERY SUPPORT
014-006-xxx	FUEL TANK SUPPORT
014-007-xxx	LICENSE CARRIER (Plate Holder)
014-008-xxx	ATTACHING DEVICES - HOSES, LINES, TUBES & WIRE
014-014-xxx	MUD FLAPS - REAR WHEEL
015 - STEERING	
015-001-xxx	STEERING WHEEL
015-002-xxx	STEERING SHAFT SUPPORT
015-003-xxx	STEERING GEAR
015-004-xxx	STEERING LINKAGE
015-005-xxx	POWER STEERING PUMP
016 - SUSPENSION	
016-002-xxx	FRONT SPRINGS
016-003-xxx	FRONT SHOCK ABSORBERS
016-004-xxx	FRONT STABILIZER
016-005-xxx	SUSPENSION - REAR (NON-AIR)
016-006-xxx	SHOCK ABSORBER - REAR
016-007-xxx	STABILIZER - REAR
016-008-xxx	AIR RIDE SUSPENSION
016-009-xxx	AIR LEAF SUSPENSION
016-012-xxx	HENDRICKSON SUSPENSION
016-019-xxx	LOCKING DEVICE - RIDE HEIGHT
017 - TIRES, TUBES, LINERS & VALVES	
017-001-xxx	TIRE - PNEUMATIC
017-004-xxx	INNER TUBE - PNEUMATIC TIRE
017-006-xxx	LINER (FLAP) - PNEUMATIC TIRE
017-008-xxx	VALVE ASSEMBLY - TIRE
018 - WHEELS, RIMS, HUBS & BEARINGS	
018-001-xxx	FRONT STEER AXLE WHEEL END COMPONENTS
018-002-xxx	DRIVE AXLE WHEEL END COMPONENTS
018-003-xxx	WHEELS
018-005-xxx	BEARINGS - GENERAL
022 - AXLES - DRIVEN, REAR	
022-001-xxx	AXLE HOUSING COMPONENTS - DRIVEN, REAR
022-002-xxx	SHAFT - REAR AXLE
022-003-xxx	DIFFERENTIAL CARRIER
024 - DRIVE SHAFTS	
024-002-xxx	DRIVE SHAFT, BEHIND MAIN TRANSMISSION

027 - TRANSMISSION - AUTOMATIC	
027-001-xxx	CASE - AUTOMATIC TRANSMISSION
027-002-xxx	CONVERTER
027-006-xxx	FORWARD CLUTCH ASSEMBLY
027-008-xxx	INTERMEDIATE CLUTCH & CENTER SUPPORT
027-013-xxx	PLANET CARRIER &/OR OUTPUT SHAFT ASSEMBLY
027-017-xxx	SUN GEAR & SHAFT ASSEMBLY
027-019-xxx	MAIN SHAFT ASSEMBLY & REAR INTERNAL GEAR
027-024-xxx	VALVE BODY ASSEMBLY - MAIN CONTROL
027-025-xxx	SOLENOID ASSEMBLY - DETENT, AUTOMATIC TRANSMISSION
027-026-xxx	MODULATOR ASSEMBLY
027-027-xxx	VALVE BODY ASSEMBLY - STATOR CONTROL
027-028-xxx	SOLENOID ASSEMBLY - VARIABLE PITCH STATOR CONTROL
027-029-xxx	OIL PUMP ASSEMBLY - AUTOMATIC TRANSMISSION
027-031-xxx	REAR BEARING RETAINER OR CASE EXTENSION ASSEMBLY
027-033-xxx	RANGE SELECTOR OR MANUAL LINKAGE
027-034-xxx	GOVERNOR ASSEMBLY - AUTOMATIC TRANSMISSION
027-035-xxx	OUTPUT DRIVE TRANSFER GEARING
027-036-xxx	OIL PAN & SCREEN ASSEMBLY
027-037-xxx	TRANSMISSION ASSEMBLY - AUTOMATIC
027-038-xxx	ELECTRONIC CONTROLS, TRANSMISSION, AUTOMATIC
027-039-xxx	COOLER - MANIFOLD
031 - CHARGING SYSTEM	
031-001-xxx	GENERATOR/ALTERNATOR
031-002-xxx	REGULATOR
032 - CRANKING SYSTEM	
032-001-xxx	BATTERY & CABLES
032-002-xxx	STARTER
032-003-xxx	PRE-HEATER
033 - IGNITION SYSTEM	
033-001-xxx	IGNITION SWITCH
033-003-xxx	COIL & SPARK PLUGS
034 - LIGHTING SYSTEM	
034-001-xxx	HEADLAMPS
034-002-xxx	LAMPS - TAIL, STOP, TURN & LICENSE, REAR
034-003-xxx	SIGNAL, PARKING, & BACKUP LAMPS
034-004-xxx	BULBS, FUSES & WIRING - CLEARANCE / MARKER / INTERIOR LAMPS
034-005-xxx	ELECTRICAL GROUNDS
034-006-xxx	WARNING & EMERGENCY LIGHTING/DEVICES - SPECIAL APPLICATIONS
034-007-xxx	SIGNALING DEVICES
037 - MODULES/RELAYS - ELECTRICAL	
037-001-xxx	MODULES - ELECTRICAL, MULTIPLE USE

041 - AIR INTAKE SYSTEM	
041-001-xxx	AIR CLEANER
041-002-xxx	INTAKE MANIFOLD
041-004-xxx	INTERCOOLER
041-005-xxx	ETHER INJECTOR ASSEMBLY
042 - COOLING SYSTEM	
042-001-xxx	SHUTTERS
042-002-xxx	RADIATOR
042-003-xxx	FAN - ENGINE COOLING
042-004-xxx	WATER PUMP
042-006-xxx	THERMOSTAT - ENGINE COOLING SYSTEM
042-007-xxx	COOLANT FILTER
042-009-xxx	COOLANT PRE-HEATER (IN BLOCK) - EXTERNAL ELECTRIC POWER SUPPLY
043 - EXHAUST SYSTEM	
043-001-xxx	EMISSION CONTROLS
043-002-xxx	EXHAUST MANIFOLD
043-003-xxx	MUFFLER ASSEMBLY
043-004-xxx	TURBOCHARGER ASSEMBLY
043-006-xxx	EXHAUST AFTER-TREATMENT DEVICES
043-007-xxx	SELECTIVE CATALYTIC REDUCTION SYSTEM (SCR)
044 - FUEL SYSTEM	
044-001-xxx	TANK - FUEL, LIQUID
044-002-xxx	FILTERS
044-003-xxx	FUEL PUMP
044-004-xxx	INJECTORS - MECHANICAL
044-005-xxx	CARBURETOR
044-006-xxx	GOVERNOR - GASOLINE ENGINES
044-007-xxx	THROTTLE CONTROLS
044-008-xxx	ENGINE SHUTDOWN
044-011-xxx	SPEED CONTROL SYSTEM
044-012-xxx	TANK - FUEL, GASEOUS
044-013-xxx	ELECTRONIC ENGINE CONTROL
044-014-xxx	INJECTORS - ELECTRONIC

045 - POWER PLANT	
045-001-xxx	FRONT COVERS
045-002-xxx	CYLINDER BLOCK & CRANKCASE
045-003-xxx	CRANKSHAFT
045-004-xxx	FLYWHEEL
045-005-xxx	CRANKSHAFT - HARMONIC BALANCER
045-006-xxx	CONNECTING ROD, PISTON & RINGS ASSEMBLY
045-007-xxx	CYLINDER HEAD
045-008-xxx	CAMSHAFT - ACCESSORY DRIVE & VALVE MECHANISM
045-009-xxx	OIL PUMP & DISTRIBUTION SYSTEM
045-010-xxx	OIL FILLER & LEVEL INDICATOR
045-011-xxx	FILTER ASSEMBLY - OIL
045-012-xxx	REGULATOR - OIL TEMPERATURE
045-013-xxx	OIL PAN
045-014-xxx	VENTILATING SYSTEM
045-019-xxx	OVERHAUL KIT - ENGINE
045-020-xxx	ENGINE ASSEMBLY
045-021-xxx	ELECTRONIC ENGINE CONTROLS
051 - GENERAL ACCESSORIES	
051-001-xxx	TACHOMETER
051-002-xxx	HUBODOMETER
051-003-xxx	HOURLY METER
051-006-xxx	ACCESSORY SAFETY DEVICES
051-007-xxx	FIRE DETECTION AND WARNING
051-008-xxx	NAVIGATION SYSTEM - GPS
052 - ELECTRICAL ACCESSORIES	
052-003-xxx	RADIO EQUIPMENT
052-010-xxx	FAN - AUXILIARY
052-011-xxx	AUXILIARY POWER
053 - EXPENDABLE ITEMS	
053-001-xxx	TIRE CHAINS
053-004-xxx	SAFETY EQUIPMENT
053-005-xxx	MARKINGS - VEHICLE
053-998-xxx	PAINT & PRESERVATIVES - VEHICLE
053-999-xxx	VEHICLE FLUIDS, LUBRICANTS, GASES, & PARTICULATES
054 - HORNS & MOUNTINGS & REVERSE SIGNAL ALARMS	
054-001-xxx	HORN & MOUNTING
054-002-xxx	ALARM
055 - CARGO HANDLING, RESTRAINTS, & LIFT SYSTEMS	
055-023-xxx	WHEELCHAIR LIFT

174 - BUS BODY	
174-001-xxx	BUS BODY ASSEMBLY
174-002-xxx	BUS ENTRY STEP COMPONENTS
174-003-xxx	BUS UNDERBODY STORAGE COMPARTMENT COMPONENTS
174-004-xxx	BUS UNDERBODY BATTERY COMPARTMENT COMPONENTS
174-005-xxx	BUS STANDARD SIDE WINDOW COMPONENTS
174-006-xxx	BUS PUSH-OUT SIDE WINDOW COMPONENTS
174-007-xxx	BUS REAR WINDOW COMPONENTS
174-008-xxx	BUS VISIBILITY WINDOW COMPONENTS
174-009-xxx	BUS DRIVER SLIDING WINDOW COMPONENTS
174-011-xxx	OUTWARD OPENING BUS ENTRY DOOR COMPONENTS
174-012-xxx	BUS SIDE EMERGENCY DOOR COMPONENTS
174-013-xxx	BUS REAR EMERGENCY DOOR COMPONENTS
174-014-xxx	BUS WHEELCHAIR ACCESS DOOR COMPONENTS
174-015-xxx	BUS ROOF EMERGENCY ESCAPE HATCH COMPONENTS
174-017-xxx	SCHOOL BUS STOP ARM COMPONENTS
174-018-xxx	BUS BARRIER COMPONENTS
174-019-xxx	BUS DRIVER SUN VISOR COMPONENTS
174-020-xxx	BUS DRIVER CONTROL CONSOLE COMPONENTS
174-021-xxx	BUS INTERIOR LUGGAGE RACK COMPONENTS
174-022-xxx	BUS SEAT COMPONENTS
174-023-xxx	MISCELLANEOUS BUS BODY ACCESSORIES
174-024-xxx	BUS BODY ELECTRICAL COMPONENTS
174-025-xxx	SCHOOL BUS CROSSING GATE COMPONENTS
174-026-xxx	BUS PASSENGER HEATER COMPONENTS
174-027-xxx	BUS ENTRANCE STEP HEATER COMPONENTS
174-028-xxx	BUS BODY A/C SYSTEM COMPONENTS
174-029-xxx	BUS DAVENPORT COMPONENTS
174-030-xxx	BUS UNDER PASSENGER SEAT STORAGE BOX COMPONENTS
174-031-xxx	BUS UNDER DRIVER SEAT STORAGE BOX COMPONENTS
174-032-xxx	BUS BODY WHEELCHAIR LIFT COMPONENTS
174-034-xxx	SEAT BELT ASSEMBLY
174-035-xxx	BULKHEAD ASSEMBLY - BUS BODY
174-037-xxx	MARKINGS - BUS BODY
174-038-xxx	BUS BODY SIGNALING DEVICES