# ILLUSTRATION ALBUM

**VAZ - 21213, VAZ - 21214**

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2001
ENGINE
(sectional longitudinal view)

Specification

- Engine model: VAZ - 21213
- Cylinder bore and piston stroke, mm: 80 x 80
- Displacement, l: 1.69
- Compression ratio: 9.3
- Rated power as per GOST 14846-89 (net) and ISO 1585-82 at crankshaft rate 5,200 rpm, kW (HP): 59 (80.2)

Diagram items:
1. Crankshaft
2. Main bearing shell
3. Crankshaft sprocket
4. Crankshaft front oil seal
5. Crankshaft pulley
6. Ratchet
7. Timing cover
8. Coolant pump / alternator drivebelt
9. Alternator pulley
10. Oil pump / ignition distributor / fuel tank / drive sprocket
11. Oil pump / ignition distributor / fuel tank drive shaft
12. Engine cooling system fan
13. Cylinder block
14. Cylinder head
15. Timing chain
16. Camshaft sprocket
17. Exhaust valve
18. Inlet valve
19. Camshaft bearing housing
20. Camshaft
21. Valve operating lever
22. Valve cover
23. Coolant temperature gauge sender
24. Spark plug
25. Piston
26. Gudgeon pin
27. Crankshaft rear oil seal retainer
28. Crankshaft thrust half-ring
29. Flywheel
30. Upper compression ring
31. Lower compression ring
32. Oil ring
33. Clutch bellhousing cover plate
34. Oil sump
35. Power unit front mounting
36. Connecting rod
37. Front mounting bracket
38. Power unit
39. Power unit rear mounting
ENGINE
(cross-sectional view)

1. Big end cap
2. Shell bearing
3. Connecting rod
4. Starter motor
5. Starter motor heat shield
6. Exhaust manifold
7. Inlet pipe drain tube
8. Inlet pipe
9. Oil deflector cap
10. Valve collet
11. Valve spring cap
12. Valve operating lever spring
13. Valve operating lever
14. Valve adjuster bolt
15. Ignition distributor
16. Adjuster bolt bush
17. Valve guide
18. Valve seat
19. Oil pump / ignition distributor / fuel pump drive shaft
20. Fuel pump
21. Oil pump / ignition distributor drive gear
22. Oil filter
23. Oil pump drive shaft
24. Oil pump body
25. Oil pump driven gear shaft
26. Oil pump drive gear
27. Oil pump cover
28. Reducing valve spring
29. Reducing valve
30. Oil pump driven gear
31. Oil pump inlet pipe
32. Camshaft sprocket
33. Chain damper
34. Oil pump / ignition distributor / fuel pump drive sprocket
35. Valve chain
36. Crankshaft sprocket
37. Chain stop pin
38. Chain tensioner shoe
39. Chain tensioner
40. Timing mark

A. Mounting lug on camshaft bearing housing
B. Camshaft sprocket timing mark
C. Cylinder block timing mark
D. Timing mark on crankshaft sprocket
E. TDC pointer on crankshaft pulley
F. P timing mark
G. TDC mark
H. __° timing mark
I. Firing order
   a. Induction
   b. Compression
   c. Power
   d. Exhaust
COMPONENTS OF CRANK MECHANISM AND TIMING GEAR

1. Tensioner housing
2. Cap nut
3. Tensioner rod
4. Circlip
5. Clamping block
6. Plunger
7. Spring, tensioner
8. Washer
9. Spring, plunger
10. Camshaft sprocket
11. Thrust flange
12. Camshaft bearing housing
13. Camshaft
14. Big-end bearing shells
15. Big end cap
16. Connecting rod
17. Bush, conrod small end
18. Circlip
19. Piston
20. Top compression ring
21. Bottom compression ring
22. Oil ring
23. Gudgeon pin
24. Thermodradiator plate
25. Bolt, conrod
26. Starter ring gear
27. Flywheel
28. Thrust half-ring, rear
29. Front bearing, gearbox input shaft
30. Thrust half-ring, front
31. Centre main bearing (No 3) shells
32. Crankshaft oil gallery plug &
33. 1st, 2nd, 4th and 5th crankshaft bearing shells
34. Crankshaft
35. Crankshaft sprocket
36. Alternator drive / coolant pump pulley
37. Nut
38. Inlet valve
39. Inlet valve guide
40. Exhaust valve guide
41. Exhaust valve
42. Seat, outer spring
43. Seat, inner spring
44. Inner valve spring
45. Outer valve spring
46. Spring seat
47. Valve collet
48. Outer cap
49. Circlip
50. Washer, adjusting bolt
51. Locknut
52. Spring
53. Push rod
54. Stop plate, push rod spring
55. Adjusting bolt, valve

a, b, c – TDC marks, 1st and 4th cylinder pistons
ENGINE LUBRICATION SYSTEM

1. Sprocket hole for chain lubrication
2. Camshaft main oil gallery
3. Cam lobe oilway
4. Camshaft centre bearing journal oil recess
5. Oil filter rack
6. Cam shaft journal oilway
7. Inclined oilway in cylinder head
8. Oilway to timing gear
9. Cylinder block main oil gallery
10. Oil pressure warning light sender
11. Oilway to main bearing
12. Oilway to big end bearing
13. Oil sump
14. Oil filter
15. By-pass valve
16. Paper filter element
17. Check valve
18. Oil pump
19. Oil pump - to - oil filter gallery
20. Oilway from oil filter to main oil gallery
21. Oilway to oil pump drive gear bush
22. Front crankshaft grease seal
23. Oilway to main bearing and to oil pump drive gear shaft
24. Oil pump / ignition distributor drive shaft
25. Inlet pipe
26. Throttle valve, carburettor secondary barrel
27. Throttle valve, carburettor primary barrel
28. Air cleaner unit
29. Discharge ventilation manifold
30. Flame arrester
31. Hose to draw crankcase gases behind carburettor throttle valve
32. Discharge hose
33. Oil level dipstick
34. Oil separator cover
35. Oil separator
36. Drain pipe

I. Engine crankcase ventilation diagram
COOLING SYSTEM

1. Temperature sensor for fuel injection system
2. Radiator top hose
3. Expansion tank filler cap
4. Expansion tank
5. Radiator cap
6. Fluid return hose to expansion tank
7. Cooling water jacket
8. Filler neck
9. Inlet valve
10. Exhaust (steam) valve
11. LH fluid cooler
12. Radiator matrix
13. RH fluid cooler
14. Fan impeller
15. Swirler
16. Radiator mounting rubber
17. Fan cowl
18. Fan belt
19. Radiator outlet hose
20. Coolant pump
21. Coolant pump supply hose
22. Thermostat
23. Thermostat by-pass hose
24. Coolant return hose from heater radiator
25. Coolant return pipe from part throttle channel heater
26. Coolant supply hose to part throttle channel heater
27. Coolant return hose from heater radiator
28. Coolant supply hose to heater radiator
29. Rubber insert
30. Inlet elbow (from radiator)
31. Main valve
32. Thermostat housing
33. By-pass valve
34. By-pass hose pipe
35. Coolant return pipe
36. Coolant pump supply pipe
37. Piston
38. Water pump cover
39. Oil seal thrust sealing ring
40. Oil seal collar
41. Water pump shaft bearing outer ring
42. Fan pulley hub
43. Stop screw
44. Water pump cover
45. Water pump shaft
46. Water pump housing
47. Inlet pipe

I. Thermostat operation diagram
   A. Coolant temperature below 80°C
   B. Coolant temperature within 80 to 94°C
   C. Coolant temperature over 94°C.
CARBURETTOR
1. Part throttle channel heater
2. Primary throttle
3. Crankcase emission suction union
4. Accelerator pump operating lever
5. Accelerator pump rocker arm
6. Accelerator pump diaphragm
7. Fuel jet, part throttle enrichment
8. Ball valve, part throttle enrichment
9. Diaphragm, part throttle enrichment
10. Electromagnetic shut-off valve
11. Idling fuel jet
12. Return pipe to fuel tank
13. Carburettor cover
14. Supply union
15. Primary barrel main air jet
16. Choke valve plate
17. Accelerator pump atomizers
18. Pull-down diaphragm
19. Adjustment screw
20. Throttle stop screw

21. Vacuum discharge to EGR system
22. Vacuum discharge to ignition distributor vacuum control
23. Idle mixture adjusting screw
24. Primary throttle adjustment screw (pull-down unit)
25. Choke operating lever
26. Choke drive lever
27. Secondary barrel main air jet
28. Emulsion tube
29. Secondary barrel main fuel atomizer
30. Fuel filter
31. Float chamber needle valve
32. Float
33. Carburettor body
34. Secondary throttle
35. Secondary throttle lever
36. Secondary barrel main fuel jet
37. Secondary throttle operating lever
38. Float
39. Throttle valves operating lever
40. Secondary barrel lock lever
CARBURETTOR OPERATION DIAGRAM

1. Adjustment screw (choke pull-down unit)
2. Pull-down diaphragm
3. Pushrod
4. Electromagnetic shut-off valve
5. Idling fuel jet
6. Main air jet, primary barrel
7. Idling air jet
8. Main fuel atomizer, primary barrel
9. Choke valve plate
10. Accelerator pump nozzle
11. Main fuel atomizer, secondary barrel
12. Injection pipe, full throttle enrichment
13. Secondary main air jet
14. Air correction jet, secondary barrel
15. Carburettor top cover
16. Needle valve
17. Return line to fuel tank
18. Fuel-to-tank return jet
19. Fuel filter
20. Fuel supply to carburettor
21. Diaphragm, part throttle enrichment
22. Ball valve, part throttle enrichment
23. Fuel jet, part throttle enrichment
24. Float
25. Fuel jet and tube, full throttle enrichment
26. Secondary barrel fuel correction jet with tube
27. Secondary barrel main fuel jet
28. Secondary barrel fuel jet
29. Secondary throttle
30. Primary throttle
31. Part throttle channel heater
32. Idle mixture adjustment screw
33. Crankcase emission discharge pipe
34. Vacuum discharge to ignition distributor vacuum control
35. Vacuum discharge to EGR valve (second pipe is not shown)
36. Primary main fuel jet
37. Primary emulsion tube
38. Accelerator pump non-return ball valve
39. Accelerator pump diaphragm
40. Accelerator pump operating lever
41. Choke drive lever
42. Outer rod securing bracket
43. Primary throttle adjusting screw (pull-down unit)
44. Throttle valve operating lever
45. Choke control lever
46. Fuel supply ball valve
47. Accelerator pump operating cam

a. Air passage, pull-down unit
b. Float chamber balance passage
c. Air passage, part throttle enrichment
d. Fuel passage, part throttle enrichment
e. Secondary correction outlet ports
f. Idling air passage hole
g. Idling transients hole
h. Carburettor operation diagram at full throttle
i. Pull-down unit operation diagram
j. Carburettor operation diagram at idle speed
k. Carburettor operation diagram at part throttle
l. Acceleration pump operation diagram
AIR CLEANER, SILENCERS.

1. EGR valve thermo-vacuum switch
2. Exhaust manifold
3. EGR valve
4. EGR tube
5. Intake manifold
6. Carburettor
7. Cold air intake
8. Temperature flap
9. Warm air intake manifold
10. Pinch bolt
11. Air cleaner housing
12. Pointer for air filter cover alignment
13. Gauze
14. Filter element perforated plates
15. Paper filter element
16. Air cleaner cover mounting bracket
17. Securing nut
18. Discharge pipe
19. Air cleaner cover
20. Front exhaust pipe
21. Front exhaust pipe bracket
22. Clips
23. Intermediate silencer
24. Suspension rings
25. Main silencer
26. Tail pipe
27. Intermediate silencer rear perforated tube
28. Intermediate silencer rear baffle plate
29. Front baffle plate
30. Front perforated tube
31. Intermediate silencer housing
32. Main silencer front perforated tube
33. Main silencer inlet pipe
34. Main silencer outlet pipe
35. Main silencer housing
36. Rear baffle plate
37. Centre baffle plate
38. Rear perforated tube
39. Front baffle plate

I. Recirculation diagram
II. Air cleaner unit
III. Intermediate silencer
IV. Main silencer
CLUTCH

1. Diaphragm spring
2. Clutch friction discs
3. Diaphragm spring rivet
4. Clutch disc
5. Rivet - damper tip
6. Disc adaptor
7. Retainer plate
8. Clutch disc hub
9. Damper spring
10. Pressure plate
11. Flywheel
12. Clutch cover
13. Clutch bellhousing
14. Gearbox input shaft
15. Pressure plate - to - clutch cover strap
16. Diaphragm spring clip
17. Diaphragm spring fulcrum ring
18. Thrust flange / clutch cover strap
19. Thrust flange friction washer
20. Strap rivet
21. Diaphragm spring thrust flange
22. Release bearing
23. Clutch release fork / bearing spring
24. Clutch release bearing
25. Damper friction washer
26. Spring washer bearing disc
27. Damper spring washer
28. Release fork ball pivot
29. Release fork spring
30. Release fork pushrod
31. Clutch release fork
32. Slave cylinder
33. Release fork return spring

I. Damper operation diagram
GEARBOX OPERATION DIAGRAM

1. Input shaft
2. Output shaft
3. Input shaft constant mesh gear
4. 4th speed synchro crown
5. 4th gear synchro baulk ring
6. 3rd and 4th synchro sleeve
7. 3rd and 4th gear selector fork
8. Synchro circlip

9. 3rd synchro baulk ring
10. Synchro spring
11. Synchro spring thrust washer
12. 3rd synchro gear and crown
13. 2nd synchro gear and crown
14. 1st and 2nd synchro sleeve
15. 1st and 2nd gear selector fork
16. 1st synchro gear and crown
17. Reverse gear
18. 5th synchro sleeve hub

19. 5th synchro sleeve
20. 5th and reverse gear selector fork
21. Gear change lever
22. 5th synchro gear and crown
23. Oil deflector washer
24. 5th gear bush
25. Distance sleeve
26. Flexible sleeve flange
27. 5th gear and reverse selector rod
28. 3rd and 4th selector rod

29. 1st and 2nd selector fork rod
30. Reverse light switch
31. Gear unit reverse gear
32. Reverse idler gear
33. End plug
34. 5th and reverse gear unit
35. Reverse idler gear shaft
36. Layshaft 1st speed gear
37. 1st synchro baulk ring
38. 1st and 2nd synchro sleeve hub

39. 2nd synchro baulk ring
40. Layshaft 2nd speed gear
41. Layshaft 3rd speed gear
42. 3rd and 4th synchro sleeve hub
43. Layshaft constant mesh gear
44. Circlip
45. Poppet spring

I. Neutral position
II. Beginning of 3rd gear engagement
III. Complete engagement of 3rd gear
PROPELLER SHAFT

1. LH wheel drive
2. Front axle
3. RH wheel drive
4. Forward propeller shaft
5. Gearbox
6. Engine
7. Layshaft flexible coupling
8. Layshaft constant velocity joint
9. Torque converter
10. Rear propeller shaft
11. Rear axle
12. Sliding yoke
13. Oiler
14. Retainer
15. Grease seal
16. Propeller shaft end
17. Propeller shaft tube
18. Balance plate
19. Propeller shaft joint fork
20. Propeller shaft trunnion
21. Needle bearing circlip
22. Needle roller housing
23. Flange - propeller shaft yoke
24. Washer
25. Needle roller
26. Needle bearing oil seal
27. Trunnion oil seal
28. Constant velocity joint shell
29. Ball
30. Boot
31. Protective shroud
32. Cage
33. Coupling flange securing bolt
34. Coupling flange
35. Coupling liner
36. Balance washer
37. Rubber sleeve
38. Centering bush
39. Clips
40. Plug
41. Oil seal splash guard ring
42. Outer joint shell
43. Circlip
44. Outer joint race
45. Thrust ring
46. Outer joint boot
47. Protective sleeve
48. Road wheel drive shaft
49. Inner joint boot
50. Detent
51. Inner joint race
52. Inner joint shell

I. Drive line view
II. Front wheel drive
1. Driven gear
2. Differential bearings
3. Spring washer
4. Circlip
5. Differential locking coupling
6. Differential carrier crown
7. Front axle drive shaft crown
8. Front axle drive shaft bearing
9. Oil slinger
10. Splash guard
11. Front axle drive shaft
12. Flange
13. Oil seal
14. Oil drain plug
15. Speedometer driven gear
16. Speedometer drive gear
17. Plug, oil level inspection / top-up orifice
18. Torque converter front cover
19. Layshaft roller bearing
20. Bracket, torque converter mount
21. Input shaft bearing cover
22. Bearing thrust ring
23. Input shaft bearings
24. Top gear
25. Gear shift clutch hub
26. Gear shift clutch
27. Torque converter casing
28. Low gear
29. Low gear bush
30. Input shaft
31. Rear cover
32. Layshaft ball bearing
33. Layshaft
34. Differential housing
35. Rear axle differential gear thrust washer
36. Rear axle drive shaft bearing
37. Rear axle differential gear
38. Pinion
39. Pinion thrust washer
40. Circlip
41. Pinion shaft
42. Spring washer
43. Front axle differential gear
44. Suspension mounting bracket rubber
45. Shaft, torque converter mount
46. Differential locking clutch yoke
47. Yoke stop bolt
48. Locked differential warning light switch
49. Boot
50. Spring
51. Differential locking fork rod
52. Front axle case cover
53. Lock washer
54. Lever shaft bush
55. Lever shaft
56. Differential locking lever
57. Gear shift fork rod
58. Gear lever bracket
59. Gear lever
60. Gear lever knob
61. Gear shift clutch fork
62. Spacer sleeve
63. Detent ball
64. Detent spring bush
65. Detent spring

1. Torque converter operating system
TORQUE CONVERTER OPERATION DIAGRAM

1. Grease seal
2. Thrust ring, input shaft front bearing
3. Front bearing cover
4. Input shaft front bearing
5. Torque converter front cover
6. Top gear
7. Gear engagement clutch hub
8. Gear engagement clutch
9. Low gear
10. Torque converter case
11. Input shaft rear bearing
12. Input shaft
13. Torque converter rear cover
14. Layshaft
15. Layshaft rear bearing
16. Differential rear bearing
17. Rear axle drive shaft retaining ring
18. Rear axle drive shaft bearing
19. Oil slinger
20. Rear axle drive shaft flange
21. Rear axle drive shaft
22. Bearing thrust ring
23. Differential housing
24. Rear axle drive gear
25. Pinion
26. Differential pinion shaft
27. Differential pinion shaft circlip
28. Spring washer
29. Driven gear
30. Differential front bearing circlip
31. Differential lock coupling
32. Rear axle drive shaft
33. Front axle casing
34. Circlip, front axle drive shaft bearing
35. Differential front bearing spring washer
36. Differential front bearing
37. Speedometer driven gear
38. Speedometer drive unit housing
39. Layshaft front bearing
40. Gearbox
41. Coupling
42. CV joint
43. Torque converter
44. Shims
45. Bracket, torque converter mounting
46. Bracket, engine rear mounting

I. Top gear engaged
II. Low gear engaged
III. Low gear engaged, differential locked up
FRONT AXLE

1. Differential case
2. Differential pinion
3. Differential pinion shaft
4. Half-shaft gear
5. Crown wheel
6. Bearing cover retaining stud
7. Front axle casing
8. Drain plug
9. Casing lower cover
10. Casing cover
11. Bracket, engine front mounting
12. Front axle securing stud
13. Front axle securing bracket, LH
14. Pinion bearings
15. Pinion, final drive
16. Spacer sleeve
17. Pinion oil seal
18. Oil seal splash guard
19. Pinion flange
20. Flange securing nut
21. Road wheel drive inner joint
22. Inner joint bearing
23. Bearing locating ring
24. Spring washer
25. Circlip
26. Differential bearing adjuster nut
27. Differential bearing
28. Differential bearing cover
29. Adjuster nut lockplate
30. Inner joint shell, RH halfshaft
31. Breather
32. RH bracket, front axle
33. Drive gear shim
34. Bearing oil deflector
35. Filter plug
36. LH half-shaft, inner joint shell
37. Inner joint shell bearing cover
38. Oil seal
39. Differential bearing cover
40. Adjuster nut lockplate
FRONT SUSPENSION

I. Camber ($\alpha = 0^\circ \pm 30'$) and inclination ($\beta = 11^\circ \pm 30'$)
   - angles $D - C = 1 \ldots 5$ mm

II. Toe-in $A - B = 2 \ldots 4$ mm

III. Castor angle ($\gamma = 3^\circ \pm 30'$)
   - All wheel adjustment parameters are given for the vehicle loaded with 3136 N (320 kgf) being equal to 4 people weight and 392 N (40 kgf) boot luggage.
1. Track rod
2. Drop arm
3. Relay rod
4. Idler arm
5. Tie-rod adjuster pin
6. Lower balljoint
7. Stub axle
8. Upper balljoint
9. Upper shaft bearing
10. Steering wheel mounting bracket
11. Upper shaft
12. Idler bracket
13. RH chassis arm, underbody
14. Lower contact ring
15. Lower contact ring retainer
16. Horn clamp
17. Upper contact ring
18. Horn spring
19. Horn push button
20. Cover plate
21. Lead
22. Upper washer
23. Seal
24. Idler arm shaft bush
25. Lower washer
26. Oil filler plug
27. Protective cap
28. Steering box
29. Steering shaft seal
30. Middle shaft
31. Sealing plate, bracket front part
32. Upper column shroud
33. Wipe / wash lever
34. Steering wheel
35. Turn signal lever
36. Headlight lever
37. Lower column shroud
38. Pinch bolt
39. LH chassis arm, underbody
40. End cover
41. Shims
42. Roller spindle, drop arm shaft
43. Thrust washer
44. Roller
45. Adjuster screw plate
46. Lockwasher
47. Adjuster screw
48. Locknut
49. Top cover
50. Worm gear
51. Bearing
52. Worm shaft
53. Oil seal
54. Bush, drop arm shaft
55. Oil seal, drop arm shaft
56. Drop arm shaft
57. Ballpin protective cap
58. Ballpin liner
59. Ballpin
60. Spring
61. End plug
**ALTERNATOR 94.3701**  
(for injection vehicles)

**Specification**
- Maximum current at 13 v and rotor 6000 RPM, A: 80
- Adjustable range of voltage, v: 13.2–14.7
- Engine-to-alternator ratio: 1:2.4

**Part List**
1. Housing
2. "B+" terminal for power consumption
3. Interference suppression capacitor 2.2 μF
4. Common terminal of additional diodes (connected to "D+" terminal of voltage regulator)
5. Holder for rectifier positive diodes
6. Holder for rectifier negative diodes
7. Stator winding terminals
8. Voltage regulator
9. Brush holder
10. Rear cover
11. Front cover
12. Stator core
13. Stator winding
14. Spacer
15. Washer
16. Taper washer
17. Pulley
18. Nut
19. Rotor shaft
20. Rotor shaft bearing, front
21. Rotor pole ends
22. Rotor winding
23. Bush
24. Clamp screw
25. Rotor bearing, rear
26. Bush, bearing
27. Slip rings
28. Negative diode
29. Positive diode
30. Additional diode
31. "D" terminal (common terminal of additional diodes)
32. Battery
33. Alternator
34. Ignition relay
35. Ignition switch
36. Fusebox
37. Battery charge warning light
38. Brush
39. Earth terminal, voltage regulator
40. "DF" terminal, voltage regulator
41. "D+" terminal, voltage regulator
STarter Motor

Specification

Rated power, kW: 1.3
Current consumption at rated power, A, not greater: 260
Current consumption at "brake on", A, not greater: 500
Current consumption at idle, A, not greater: 60
Rotation direction (drive end): clockwise

1. Armature shaft
2. Bush, starter motor cover
3. Pinion stop collar
4. Driving pinion / clutch inner ring assy
5. Thrust half ring
6. Overrun clutch roller
7. Overrun clutch casing
8. Operating lever pivot pin
9. Plug
10. Relay armature drive link
11. Operating lever
12. Drive-end cover
13. Relay armature return spring
14. Starter motor relay armature
15. Front relay flange
16. Relay holding winding
17. Relay plunging winding
18. Armature core bar
19. Relay core
20. Core flange
21. Contact disc
22. Relay cover
23. Relay contact bolts
24. Commutator and cover
25. Positive brush holder
26. Starter motor cover bush
27. End float shim
28. Lock washer
29. Clamp bolt
30. Casing
31. Stator winding series coils pinout
32. Commutator
33. Stator winding series coil
34. Stator pole
35. Starter motor housing
36. Armature core
37. Limiter plate
38. Drive ring
39. Hub / clutch outer ring
40. Overrun clutch hub liner
41. Ignition switch
42. Alternator
43. Battery
44. Starter motor
45. Starter relay
46. Guide bar
47. Plunger
48. Flywheel

I. Overrun clutch operating diagram
II. Starter motor connection diagram
IGNITION SYSTEM

1. Semiconductor element with integrated circuit
2. Permanent magnet
3. Insulator
4. Ignition coil housing
5. Secondary winding
6. Primary winding
7. Outer magnetic duct
8. Primary winding end "K" terminal
9. Cover
10. High tension terminal
11. "E" terminal, primary winding start / secondary winding end
12. Core
13. Contact nut
14. Spark plug insulator
15. Core bar
16. Spark plug body
17. Sealing ring
18. Heat screening washer
19. Centre electrode
20. Side electrode
21. Distributor shaft
22. Shaft oil slinger
23. Socket
24. Diaphragm
25. Vacuum advance cover
26. Vacuum advance housing
27. Vacuum unit operating arm
28. Advance unit bearing plate
29. Distributor rotor
30. Side electrode with terminal for lead to ignition switch
31. Ignition distributor cap
32. Centre electrode with terminal for coil lead
33. Centre electrode carbon contact
34. Centre rotor contact
35. 1000 Ohm resistor for interference suppression
36. Outer rotor contact
37. Centrifugal regulator plate
38. Advance unit governor weight
39. Screen
40. Hall sensor plate
41. Hall sensor
42. Distributor body
43. Oiler body
44. Bearing lock plate
45. Bearing
46. Spark plugs
47. Ignition coil
48. Ignition module
49. Ignition relay
50. Ignition switch
51. Vacuum advance unit performance:
   A - timing angle, degrees
   P - vacuum, gPa (Hg mm)
52. Centrifugal advance unit performance:
   A - timing angle, degrees
   n - distributor shaft rotation rate, RPM

IV. Hall sensor operation diagram:
   B - voltage pulses (U) at sensor output
   C - current pulses (I) in ignition coil primary winding; t - current accumulation time

V. Ignition system diagram

A - ignition timing, degrees
n - distributor shaft rotation rate, RPM

III. Centrifugal advance operation diagram:
   A - ignition timing
WINDSCREEN WIPER

1. Linking rod
2. LH operating arm
3. Inner mounting bush
4. Outer mounting bush
5. Shaft
6. Bushes
7. Felt
8. Bracket
9. Wiper arm
10. RH operating arm
11. Yoke
12. Wiper gear motor
13. Crank
14. Connecting rod
15. Spacer spring
16. Inserts
17. Relay casing
18. Relay armature
19. Conductive plate
20. Contact mounting plate
21. Base plate
22. Relay winding
23. Resistor
24. Breaker bracket
25. Breaker bimetal plate
26. Gear shaft
27. Gear motor wheel
28. Spring plate
29, 30 - Contact posts
31. Cover
32. Armature shaft
33. Gear motor cover
34. Blade
35. Blade holder
36. Permanent magnet
37. Felt ring
38. Thrust bearing
39. Bush
40. Housing
41. Armature, motor
42. Cover securing plate
43. Commutator
44. Windscreen washer motor
45. Windscreen wiper motor
46. Thermal bimetal fuse
47. Ignition switch
48. Ignition relay
49. Fuse box
50. Windscreen wiper/wash switch
51. Intermittent wipe relay

A. Pin numbers in relay / wiper motor connector
B. Pin numbers in wiper switch connector
I. Wiper gear motor M3-241
II. Windscreen wiper relay PC-514
III. Operation diagram of windscreen wipe / wash motors
BODY FITTINGS

1. Front seat cushion
2. Operating rod, seat back fold-down
3. Head restraint guide
4. Front seat back
5. Head restraint
6. Kind, seat back fold-down
7. Head restraint framework
8. Rear seat back
9. Seat back base
10. Trim

11. Seat back brace
12. Seat back stop
13. Grommet
14. Rear seat cushion
15. Base plate
16. Cushion pan
17. Hinge
18. Seat back rake adjuster
19. Retainer
20. Slide trim
21. Front seat trim
22. Seat slide

23. Stop
24. Roller
25. Seat back with catch
26. Seat back crossmember
27. Adjuster handle, seat sliding
28. Cushion framework
29. Door inner handle
30. Handle bracket
31. Inner handle operating link
32. Inner control lever
33. Locking rod
34. Outer control lever
35. Lock striker retainer
36. Lock striker
37. Rotor
38. Centre shaft mounting
39. Lock release rod
40. Lock release shaft
41. Centre shaft
42. Ratchet
43. Handle trim cover
44. Operating shaft
45. Surround
46. Brake spring dog
47. Drum / driven gear
48. Window winder cover
49. Window winder mechanism
50. Cable
51. Door glass
52. Rollers
53. Window glass support channel
54. Cable retainer
55. Pinion
56. Drive shaft mounting
57. Brake spring
58. Winder handle
59. Control cable
60. Spring
61. Pusher
62. Hook
63. Lock housing
64. Operating handle
65. Bracket
66. Operating rod
67. Return arm
68. Arm
69. Lock housing
70. Rotor

I. Seats
II. Front door lock
III. Bonnet lock
IV. Tailgate lock
V. Window winder
HEATING AND VENTILATION.

WIPER/WASHER.
1. Washer jet
2. Tailgate washer fluid container
3. Windscreen/headlight washer fluid container
4. Gasket
5. Atomizer
6. Jet body
7. Tailgate washer pump motor
8. Windscreen washer pump motor
9. Headlight washer pump motor
10. Side vent
11. Side vent air duct
12. Windscreen defroster air duct
13. Air intake cover
14. Gasket
15. Supply and return pipes
16. Tap
17. Radiator
18. Impeller
19. Air distributor cover
20. Fan motor
21. Fan spring holder
22. Control cable
23. Windscreen vent flap control cable
24. Bracket, control levers
25. Air intake shutter control lever
26. Windscreen vent shutter control lever
27. Tap control lever
28. Air intake cover control cable
29. Centre vents
30. Rubber valve
31. Air box
32. Centre vent shutter
35. Heater unit

I. Washer locations
II. Windscreen and tailgate washer jet
III. Tailgate washer pump and fluid container
IV. Windscreen and headlight washer pump and fluid container
V. Ventilation system operation diagram
VI. Heater unit
INJECTION SYSTEM

1. Throttle valves housing, TBI unit
2. Idle speed adjuster
3. Throttle operation cam
4. Supply unit, TBI
5. Fuel pressure regulator
6. Injector
7. Securing clip
8. Pipe union, fuel supply
9. Fuel tank
10. Fuel pump with fuel level sender
11. Fuel supply pipe
12. Fuel return pipe
13. Fuel filter
14. TBI unit
15. Throttle position sensor
16. Fuel pressure regulator valve
17. Diaphragm
18. Throttle shaft
19. Throttle valve
20. Vacuum connection
21. Idle speed control valve
a. Fuel supply port
b. Fuel return port
c. Canister purge hose connection
d. Crankcase ventilation hose connection

I. Fuel pressure regulator operation diagram
II. Idle air control diagram:
A. air supply by-passing throttle valve

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WIRING DIAGRAM FOR INJECTION SYSTEM (GM)

1. Air temperature sensor
2. Idle speed adjuster
3. Electronic control unit (ECU)
4. Octane-rating potentiometer
5. Spark plugs
6. Ignition module
7. Crankshaft sensor
8. Fuel pump motor and fuel level sensor
9. Instrument cluster including tachometer and 'Check Engine' light
10. Main fuse box
11. Speed sensor
12. Diagnostic plug
13. Injector
14. Canister purge valve
15. Injection system fuse box
16. Ignition relay
17. Electric fuel pump 'on' relay
18. Intake manifold preheating relay
19. Intake manifold preheater
20. Intake manifold preheating fuse
21. Oxygen sensor
22. Coolant temperature sensor
23. Throttle position sensor
24. Manifold absolute pressure (MAP) sensor

A. To battery ‘+’ terminal
B. To ignition switch ‘15’ terminal