Запасная тормозная система	каждый контур гидравлического привода
Стояночная тормозная система	барабанный тормозной механизм, действующий на задний карданный вал
Привод	ручной, механический

ЭЛЕКТРООБОРУДОВАНИЕ

Система проводки	однопроводная, отрицательный полюс соединен с “массой” автомобиля
Напряжение в сети (номинальное), В	12
Генератор	переменного тока со встроенным выпрямителем и интегральным регулятором напряжения
УАЗ-3160, УАЗ-31601	
УАЗ-31605	16.3771 или 665.3701
УАЗ-31604	38522144F (фирма “BOSCH”, Германия)
Аккумуляторная батарея	
УАЗ-3160, УАЗ-31601	
УАЗ-31605	6СТ66А
УАЗ-31604	А 34770 или А24750 (торговая марка GNB Inc., США)
Стартер	
УАЗ-3160, УАЗ-31601	
УАЗ-31605	42.3708, или 4211.3708-01, или 62.3708
УАЗ-31604	В 001 116 104 (фирма “BOSCH”, Германия); с дистанционным управлением
Выключатель зажигания	оборудован противоугонным устройством, блокировкой повторного включения стартера и подсветкой
Стеклоочиститель ветрового стекла	электрический, с двумя щетками, трехрежимный, с регулировкой паузы в режиме прерывистой работы
Стеклоочиститель заднего стекла	моторедуктор, однорежимный, с одной щеткой
Фароочистители	два - электрические
Смыватель	электрический - для ветрового, заднего стекол и фар
Отопитель-подогреватель	в сочетании с системой охлаждения двигателя и системой отопления автомобиля предназначен для предпускового подогрева двигателя и обогрева салона, а также для устранения обледенения стекол; на УАЗ-3160, УАЗ-31601, УАЗ-31605 - модели В7W, на УАЗ-31604 - D7W (фирма "Eberspächer", Германия); управление - автоматическое, таймерное
Звуковой сигнал	электрический
Наружное освещение	головные фары; противотуманные фары; передние и боковые указатели поворота; задние фонари, включающие в себя секции стоп-сигнала, указателей поворота, фонаря заднего хода, габаритного и противотуманного огней; задние световозвращатели; фонари освещения номерного знака; фонарь дополнительного сигнала торможения; дверные катафоты; подкапотная лампа
Внутреннее освещение	плафоны внутреннего освещения салона; плафоны индивидуального освещения; лампа освещения вещевого ящика; плафон освещения монтажного блока; подсветка рычагов отопителя и выключателей приборов
Электростеклоподъемники	дистанционные
Система электроблокировки дверных замков	предназначена для одновременной блокировки замков всех дверей автомобиля при запирании ключом левой передней двери или при нажатии на кнопку блокировки замка левой передней двери
Приборы	спидометр со счетчиком пройденного пути и суточного пробега, тахометр, указатель уровня топлива в баках с сигнальной лампой резервного уровня топлива в левом баке, указатель температуры охлаждающей жидкости, указатель давления масла, указатель напряжения, часы или таймер
Контрольные лампы	включения дальнего света фар, включения указателей поворота, разряда аккумуляторной батареи, аварийного давления масла, аварийного перегрева охлаждающей жидкости, неисправности тормозной системы и включения стояночного тормоза, неисправности двигателя с впрыском топлива (на УАЗ-3160, УАЗ-31605), или прикрытия воздушной заслонки карбюратора (на УАЗ-31601), или включения свечей накаливания (на УАЗ-31603, УАЗ-31604)

КУЗОВ

Тип	цельнометаллический, с четырьмя боковыми дверями и одной дверью задка
Сиденья	передние - раздельные, регулируемые продольном направлении, спинки имеют регулируемую поясничную поддержку и регулировку угла наклона и могут откидываться для организации спальных мест (при снятых подголовниках); заднее - трехместное, раздельное (два плюс одно независимых посадочных мест), складывающееся вперед для организации грузовой площадки, спинки могут откидываться для организации спальных мест (при сложенных задних боковых сиденьях); задние боковые - одноместные откидные; передние и заднее (каждое из трех посадочных мест) сиденья оборудованы съемными, регулируемыми по высоте подголовниками и ремнями безопасности
Вентиляция	воздухом, поступающим снаружи через опускные стекла передних и задних дверей или через воздухозаборник и отопитель, или вентиляционный люк, расположенный в крыше кузова
Отопление	воздухом, поступающим снаружи через воздухозаборник и проходящим через радиатор отопителя, включенный параллельно в систему охлаждения двигателя, с помощью вентилятора; теплый воздух поступает в кузов через воздуховоды обогрева ветрового стекла, боковых стекол, центральный, обогрева ног пассажиров трехместного сиденья и сопла обдува ног водителя и пассажира.

HOW TO USE THIS CATALOGUE?

This Catalogue familiarizes with automobiles of the УАЗ-3160 family and is an aid in drawing up orders for spare parts. The Catalogue is based on the technichal documents as of May 15, 2000.

Units and parts are grouped in the Catalogue according to their design and function. Groups and subgroups are arranged in the increasing order of their numerals. The illustrations of units and parts are arranged according to the assembling procedure and their interaction in the assembly which helps understand better the automobile design and proper disassembly and assembly of units. Stated next to the name of an illustration is the numeral of the subgroup to which the illustration is related. The Catalogue sections "List of Groups and Subgroups" and "List of Illustrations" facilitate the finding of required illustrations and parts in the Catalogue.

Units and parts shown in illustrations are given designations and reference numbers.

The Catalogue proper is actually a table giving number of illustration, reference number in illustration, designation of units and parts, code of ОКП (all-Russian classificator of products), quantity in subgroup per automobile, and description. Interrelated location of unit and part designations in illustrations and in the text substantially simplifies the finding of the required designation. Some units and parts are selected specially for spares, for example: sets of piston rings, sleeve with piston, set of connecting rod and main shells, etc.

A code of the all-Russian classificator of product (ОКП) of some fastening parts could be used for designation of a product. For example: 45 93XX XXXX - bolt...

The first two figures (on the right) denote a class of product:

45 denotes the automotive industry product.

The third figure denotes the subclass:

9 denotes the unified products.

The fourth and fifth figures denote the product type:

30-39 - bolts;
40-49 - screws;
50-54 - studs;
55-59 - nuts;
60-65 - self-tapping screws;
66-69 - wood screws;
70-79 - rivets;
80-81 - washers;
82 - stoppers;
83 - spring rings;
84-85 - set pins;
86 - pins;
87-89 - cotters, yokes;
90-99 - couplings

The sixth figure denotes the classes or groups of strength, of material mark, of heat treatment.

The seventh figure denotes code of coating:

0 - without coating (П)
1 - zink-plating and chromatizing (П29)
2 - cadmium-plating with chromatizing (П21)
3 - multilayer copper-nickel (П6)
4 - multilayer copper-nickel-chrome (П13)
5 - oxydation (П15)
6 - phosphation with oiling (П2)
7 - zink-plating with phosphation (П53)
9 - zink-plating (П8)

The eighth, ninth, tenth figures denote the ordinal-registration number of a product.

The standard products could be provided with six-digit numbers at the end of which is one of the above-mentioned in the brackets anti-corrosion coating code.

Also used the same as the six-digit designation of standardized parts is the eight-digit designation consisting of three groups divided by a slant line, for example: 1/32742/01. The part can be manufactured in various versions differing in material and coating. The main five-digit number determines the part and its size. The last, but one numeral in the eight-digit designation, is the code of material and the last numeral designates the coating.

All parts and units are designated according to the common seven-digit system. For example, shock absorber reservoir in assy has the following designation: 3160-2905670, where:

3160 - first numerals before a hyphen denote the basic vehicle model or, in the parts of engine, chassis or body, respectively: model of engine, chassis or body.

29 - first two numerals of seven-digit number denote the number of subgroup, "Suspension" in the given case.

05 - two following numerals of seven-digit number denote the number of subgroup, "Front shock absorbers" in the given case.

670 - last three numerals of seven-digit number denote the ordinal number of part, "Shock absorber reservoir in assy" in the given case.

To indicate whether parts and units are interchangeable or not at all subsequent alterations the following numerical indices are used.

01 - first interchangeable version;
02 - second interchangeable version;
09 - ninth interchangeable version;
10 - first non-interchangeable version;
11 - first interchangeable version of non-interchangeable version10;
12-19 - subsequent interchangeable versions of non-interchangeable version10;
20 - second non-interchangeable version;
21-29 - interchangeable version of second

non-interchangeable version 20 etc.

Simultaneously with numerical indices are used letters suffixes А, Б, В, etc. Letters А, А1, А2, , etc. indicate that the modified parts retain their interchangeability with the main part (having no suffix) and between each other. Parts with suffixes Б, Б1, Б2, etc. are not interchangeable with earlier made parts without letter suffix or with parts having А, А1, А2, etc. but they are interchangeable with each other.

Units and parts borrowed from other models of vehicles retain their initial designations.

Parts and units used only for repair are given letter suffixes Р, Р1, Р2 or АР, АР1, etc. For example, ВК-24-1000100-АР - a set of piston rings oversized by 0.50 mm.

Sometimes an other designations are given which not correspond to an industry branch standards. These designations are given by the associate Manufacturers.

Sign "+" indicates that the part or unit can be manufactured in versions.

SPECIFICATIONS

The automobile УАЗ-3160 (Fig.1) is a passenger/cargo, two-axle all-wheel drive cross-country vehicle (4x4 wheel arrangement) with all-metal five-door body.

The automobile УАЗ-3160 is designed for transportation of people and loads on roads of all types.

The automobiles УАЗ-31601, УАЗ-31604, УАЗ-31605 are manufactured on the base of the automobile УАЗ-3160.

The automobiles are equipped with following engines:

УАЗ-3160 - gasoline engine, in-line four-cylinder with fuel injection, model УМЗ-420.1000400;

УАЗ-31601 - gasoline engine, in-line, four-cylinder, carburettor-type, model УМЗ-421.1000400-10;

УАЗ-31604 - diesel engine, in-line, four-cylinder, model "VM" (Italy) - 425LTRU;

УАЗ-31605 - gasoline engine, in-line, four-cylinder with fuel injection, model УМЗ-4213.1000400.

GENERAL DATA

Description	Automobile Models			
	УАЗ-3160	УАЗ-31601	УАЗ-31604	УАЗ-31605
Seating capacity	5+2			
Load carring capacity (driver and passengers included), kg	600			
Curb mass, kg	1930	1910	1975	1950
Gross mass, kg	2530	2510	2575	2550
Curb mass distribution, kg:				
front axle	946	936	1047	968
rear axle	984	974	928	982
Gross mass distribution, kg:				
front axle	1088	1079	1100	1090
rear axle	1442	1431	1475	1460
Permissible total tow weight, kg				
with brakes	1500*			
without brakes	750*			
Maximum speed, k/h	130	135	135	140
Braking path with full load at initial speed of 80 km/h (without trailer), not more, m	43			

Description	Automobile Models			
	УАЗ-3160	УАЗ-31601	УАЗ-31604	УАЗ-31605
Maximum turning radius of inner wheel, deg.	27			
Minimum turning radius by track of front outer wheel (relative to centre of turn), m	6.4			
Outer turning radius by point of automobile max. removed from centre of turning, m	6.8			
Maximum upgrade of full laden automobile, deg. (%)	31 (60)			
Angle of transversal static stability of full laden automobile on stand, deg. (%)	20 (36)			
Maximum depth of ford,	0.5			
Overall dimensions:				
length	4240			
width	2020			
height (empty)	2060			

* - When automobiles are furnished with a draft gear of the ball type

ENGINE

Description	420.10	421.10-10	425LTRU	4213.10
Firing order	1-2-4-3	1-2-4-3	1-3-4-2	1-2-4-3
Cylinder bore, mm	92	100	92	100
Piston stroke, mm	92	92	94	92
Displacement, l	2.445	2.89	2.5	2.89
Compression ratio	8.2	8.2	21	8.2
Guaranteed gross power to ГОСТ-14846 at crankshaft speed of 4 000 min^{-1}, kW (hp):	65.5 (89)	72.1 (98)	-	75 (102)
	62.5* (85)*	-	-	73.5* (100)*
4200 min^{-1}, kW (hp)	-	-	76.0 (103)	-
Maximum gross torque to ГОСТ-14846 at crankshaft speed of 2800 min^{-1}, N · m (kgf · m)	175 (17.8)	-	-	211 (21.5)
	170* (17.3)*	-	-	206* (21.0)*
2200-2500 min^{-1}, N · m (kgf · m)	-	209 (21.3)	-	-
2000 min^{-1}, N · m (kgf · m)	-	-	235 (24.0)	
Minimum low idle speed of crankshaft, min^{-1}	700-750	700-800	700-750	700-750
Engine lubrication system	combination: forced and splash			
Crankcase ventilation	closed			
Fuel system	with forced fuel feed			
Fuel	АИ-93 or АИ-92		diesel	АИ-93 fuel
or				АИ-92
Cooling system	liquid, closed, forced circulation			
Exhaust system	rear l.h. exhaust pipe, neutralizer, resonator and muffler			

* - with neutralizer

POWER TRAIN

Clutch

Type — dry, single-plate, driven disk provided with friction linings and torsional vibration damper
Clutch release device — hydraulic

Gearbox

Type — mechanical, four- or five-speed with synchronizers for all forward speeds
Gear ratios:

	four-speed	five-speed
1st gear	3.78	3.78
2nd gear	2.0	2.60
3rd gear	1.55	1.55
4th gear	1.00	1.00
5th gear	-	0.82
Reverse	4.12	4.12

Transfer Box

Type — mechanical, two-range, installed on rear end of gearbox
Control — gear shifting and engaging of front axle by means of lever installed on transfer box cover
Gear ratios:
direct drive — 1.00
low range — 1.94 or 1.47[+]

Propeller Shaft Drive

Type — open, consists of two shafts; universal joints are provided with needle bearings
Front propeller shaft — combination with two universal joints (consists of tube and solid shaft)
Rear propeller shaft — tubular, with two universal joints

Front and Rear Drive Axle

Type — single-stage drive, unsplit housings; front axle is provided with wheel disengaging device
Axle drive — spiral bevel gearing
Gear ratio — 4.111
Differential — bevel-gear, with four planet pinions
Axle shafts — full floating
Steering knuckle joints — constant angular velocity, ball-mounted

CHASSIS

Frame

Type — stamped, channelsection side members with stiffeners provided with front and rear bumpers, side member front and rear ends are provided with towing eyes

Suspension

Type — dependent: front - spring with transverse stabilizer, hydraulic telescopic shock absorbers of double action, with two longitudinal arms and transverse arm;
rear - on two semielliptic small-leaf springs and hydraulic telescopic shock absorbers of double action

Wheels and Tyres

Wheels	disk with unsplitable rim, 6J×16 rim size
Mounting	by means of five nuts
Tyres	pneumatic, radial, 225/75R16 tube size
Tube size	225-16.

CONTROL SYSTEMS

Steering Arrangement

Steering arrangement	safety, with adjustable steering column
Steering mechanism	"screw-ball nut-sector“ type with hydraulic steering booster built-in in steering mechanism
Main gear ratio	17.3

Brakes

Service brake	disk brake-on front wheels and drum brake-on rear wheels; hydraulic actuated brake system is provided with vacuum booster and split into two separate circuit to front and rear wheels
Reserve brake system	each circuit of hydraulic actuated brake system
Parking brake system	brake drum actuated on rear propeller shaft
Braking system	hand, mechanical

ELECTRICAL EQUIPMENT

Circuitry	single-wire, negative earth return
Rated voltage, V	12
Alternator	built-in rectifier and integrated voltage regulator
УАЗ-3160, УАЗ-31601	
УАЗ-31605	16.3771 or 665.3701
УАЗ-31604	38522144F storage battery (BOSCH, Germany)
УАЗ-3160, УАЗ-31601	
УАЗ-31605	6CT66A
УАЗ-31604	A 34770 or A24750 (trade mark GNB Inc., USA)
Starter	
УАЗ-3160, УАЗ-31601	42.3708, or 4211.3708-01, or
УАЗ-31605	62.3708
УАЗ-31604	B 001 116 104 with remote control (BOSCH, Germany)
Ignition switch	equipped with antithief device, locking of starter repeating switching and illumination
Windshield wiper	electrical, two wiper blades, three operating modes, pause regulation in interrupting operating modes
Rear glass wiper	reductor, one operating mode, with one blade
Headlight wipers	two - electrical
Washer	electrical - for windshield, rear glass and headlights
Water heater	in conjunction with cooling system and heating system is intended for engine prestarting warm-up and for interior heating, and also for de-iceing of glasses; on УАЗ-3160, УАЗ-31601, УАЗ-31605 - model B7W, on УАЗ-31604 - D7W ("Eberspächer", Germany); control - automatic, timer
Horn	electrical
External lighting	headlights; fog lamps; front and side direction indicators; rear lamps including sections of stop light, turn indicator lamp, backing lamp, clearance lamp and fog lamp; rear reflecting optical units; licence plate lamps; lamp of additional stop light; door reflecting optical units; hood lamp
Interior lighting	dome lamps; individual lamps; glove box lamp; mounting unit dome lamp; heater levers and instrument switches lamps
Electrical window regulators	remote control
Door locking system	intended for simultaneous locking of all doors when locking l.h. front door with key or when pressing on door locking button of front door
Instruments	speedometer with odometer and trip mileage indicator, tachometer, fuel level gauge with fuel reserve level warning lamp in l.h. fuel tank, cooling temperature gauge, oil pressure gauge voltage indicator, angle gauge clock or timer
Warning lamps	high-beam warning lamps, direction indicator warning lamps, storage battery charge state warning lamp, oil emergency pressure warning lamp, coolant emergency overheating warning lamp, brake system failure and parking brake warning lamp, injection engine failure warning lamp (on УАЗ-3160, УАЗ-31605), or choke control warning lamp (on УАЗ-31601), or glow plugs warning lamp of diesel engine (on УАЗ-31603, УАЗ-31604)

BODY

Type	all-metal, with four side doors and one body rear end door
Seat	front - separate, to-and-fro adjustable, backrest rake adjustment, back incline angle adjustment and transformation for sleeping (when headrests are removed); rear seat - for three persons can be folded towards front seat backs, backrests can be folded for sleeping (when rear side seats are folded); rear side seats - single-person, tip-up; front and rear seats are equipped with removable, adjustable headrests and safety belts
Body ventilation	by outside air went through roll-down glasses of front and rear doors or through vent hole and heater housing ports, or vent hatch on body roof
Body heating	by outside air went through air intake and went through heater radiator parallel connected to engine cooling system; heated air entering body via vent hole ahead of windshield, side glasses defroster vents, central vents, to floor zone of three-person seat and nozzle for driver's and passenger's seats