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**Automobile parts — Devices and
parts of electric equipment
— Nomenclature**

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Automobile parts—Devices and parts of electric equipment—Nomenclature

Introduction This Japanese Industrial Standard is prepared based on **ISO 7227, Road vehicles—Lighting and light signalling devices—Vocabulary** published in 1987 as the first edition, without any modification in technical contents. However, terms and their definitions not specified in the corresponding International Standard are added as the Japanese Industrial Standard.

1 Scope This Japanese Industrial Standard specifies nomenclature of principal devices and parts in automobile electric equipment (hereafter referred to as “parts names”).

Remarks: The International Standard corresponding to this Standard is given below.

ISO 7227 *Road vehicles—Lighting and light signalling devices—Vocabulary*

2 Classification The parts names are classified as stated below.

- (1) Electric equipment related with engine
 - (a) Charging and generating equipment
 - (b) Starting equipment
 - (c) Ignition equipment and preheating equipment
- (2) Lighting equipment
 - (a) External illumination equipment
 - (b) Room illumination equipment
 - (c) Signalling and marking equipment
 - (d) Equipment related with lighting
- (3) Equipment to keep driver's field of view
- (4) Equipment related with instrument
- (5) Circuit switching component
 - (a) Switch (classification by structure)
 - (b) Switch (classification by use)
 - (e) Relay
 - (d) Flasher
- (6) Sound signalling equipment

(7) Wiring apparatus

(8) Electronic equipment

(a) Control equipment

(b) Audio equipment and visual equipment

3 Parts name and description The parts name and the definition are stated below, further English equivalent and name commonly used are shown below for informative reference.

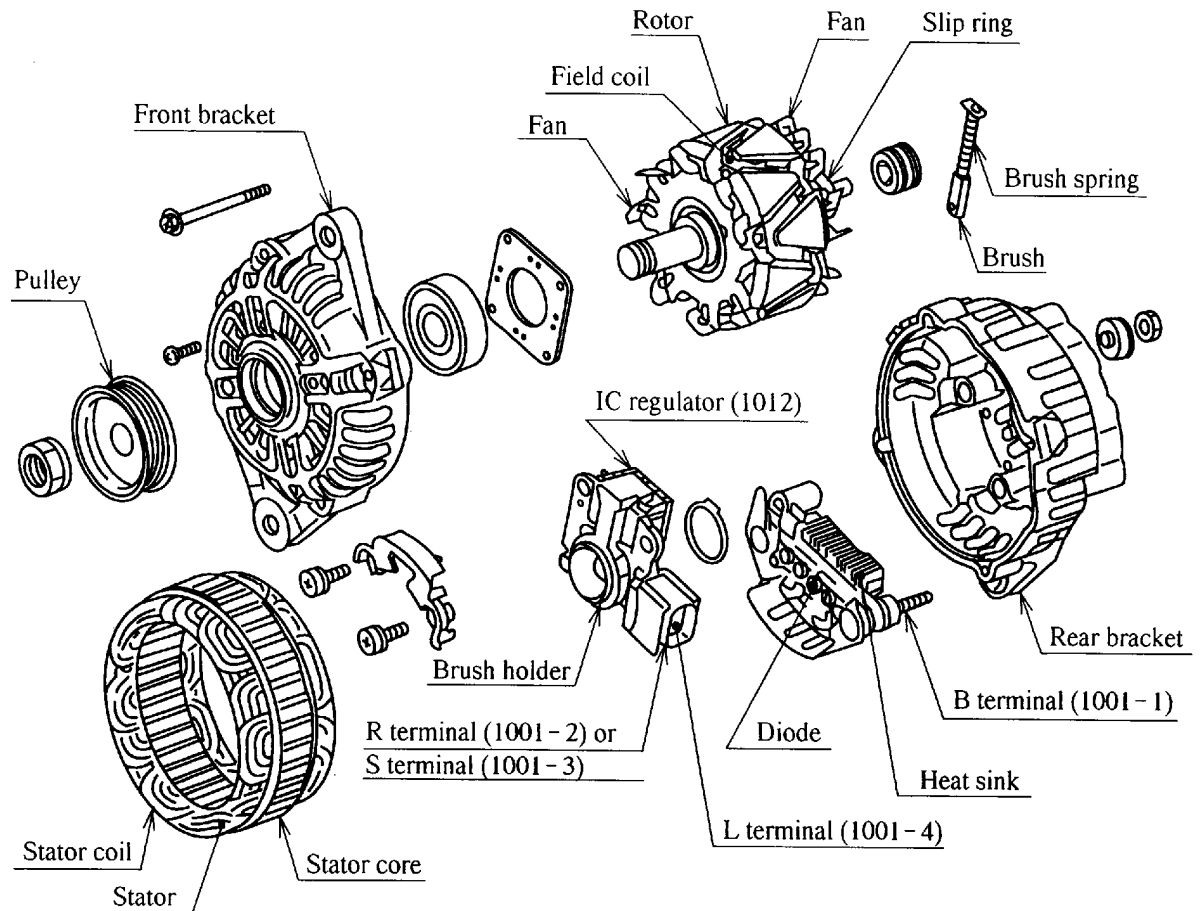
- Remarks 1 When a portion of a parts name is placed in [], it means that the portion in [] is generally omitted.
- 2 The expression stated below the parts name in () means how to read the name.
- 3 Name commonly used should not be used as far as possible from now.
- 4 The informative figure shows an example.

(1) Electric equipment related with engine

(a) Charging and generating equipment

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
1000	ゼネレータ	Generic name of generators which supply electric energy to electrical load of automobile and to charge the batteries. Remarks: This is called 充電発電機 (charging generator) in laws and regulations.	—	generator, dynamo	ダイナモ
1001	オルタネータ	A generator which produces d.c. output by carrying out the rectification with the diode accommodated. In some cases this accommodates vacuum pump and IC regulators.	Fig. 1.01	alternator, AC dynamo	ACゼネレータ, ACダイナモ
1001-1	Bターミナル	The terminal of a generator to be connected with the battery.		output terminal	バッテリー端子, 出力端子
1001-2	Rターミナル	The terminal of a generator to be connected with the auxiliary diodes via a resistor.		resistor terminal	—
1001-3	Sターミナル	The terminal of a generator to be connected with the voltage sensing point.		sensing terminal	電圧検出端子
1001-4	Lターミナル	The terminal of a generator to be connected with the charge indicator.	—	indicator lamp terminal	—
1001-5	Nターミナル	The terminal of a generator being connected with the neutral point.		neutral terminal	中性点端子
1001-6	Pターミナル	The terminal of a generator being connected with the stator coil.		relay terminal	固定子端子
1001-7	IGターミナル (あいじー——)	The terminal of a generator to be connected with the ignition switch.		ignition switch terminal	—
1002	フライホイ尔多極 ACG (——えーしーじー)	A generator which produces a.c. output of such structure that 12 poles are generally provided on the rotor side and three-phase winding is provided on the stator side. This is mainly used in two-wheeled vehicles, and the rotor also serves as the fly wheel of engine. Remarks: This is abbreviated as "multi-pole ACG".	Fig. 1.02	flywheel type multi pole AC generator	フライホイール形 ACダイナモ

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
1003	レクチファイア	The rectifier to be installed separately that rectifies an a.c. output and converts it into a d.c.	—	rectifier	—
1010	レギュレータ	An equipment which controls the generator output. Remarks: This is called 電圧電流調整器 (voltage and current regulator) in laws and regulations.	—	generator regulator	—
1011	接点式レギュレータ	The regulator which controls the generator output by closing and opening the contact. Remarks: This is called チリル式電圧電流調整器 (turrill voltage regulator) in laws and regulations.	Fig. 1.03	contact type regulator	接点式電圧調整器
1011-1	ボルテージ レギュレータ	A regulator which controls the generator output voltage to a constant value.		voltage regulator	電圧調整器
1011-2	チャージランプリレー	A relay which operates corresponding to existence or non-existence of generation of a generator and puts on and off the charge indicator.		charge lamp relay	ランプリレーチャージ
1011-3	レジスタ	A resistor which is inserted in series with the field coil due to opening and closing of the contact for the control of generator output.	Fig. 1.01	resistor	制御抵抗
1012	ICレギュレータ (あいしー—)	A regulator which controls the generator output by using IC (integrated circuit) technique. This is generally built in an alternator and a hybrid IC is used. Remarks: This is called IC式電圧電流調整器 (IC voltage regulator) in laws and regulations.		IC regulator	—
1020	バッテリー	A lead-acid storage battery to be used for starting, ignition, lighting, etc. of automobile. Remarks: This is called 蓄電池 (storage battery) in laws and regulations.	—	battery	—

**Fig. 1.01 Alternator (1001)**

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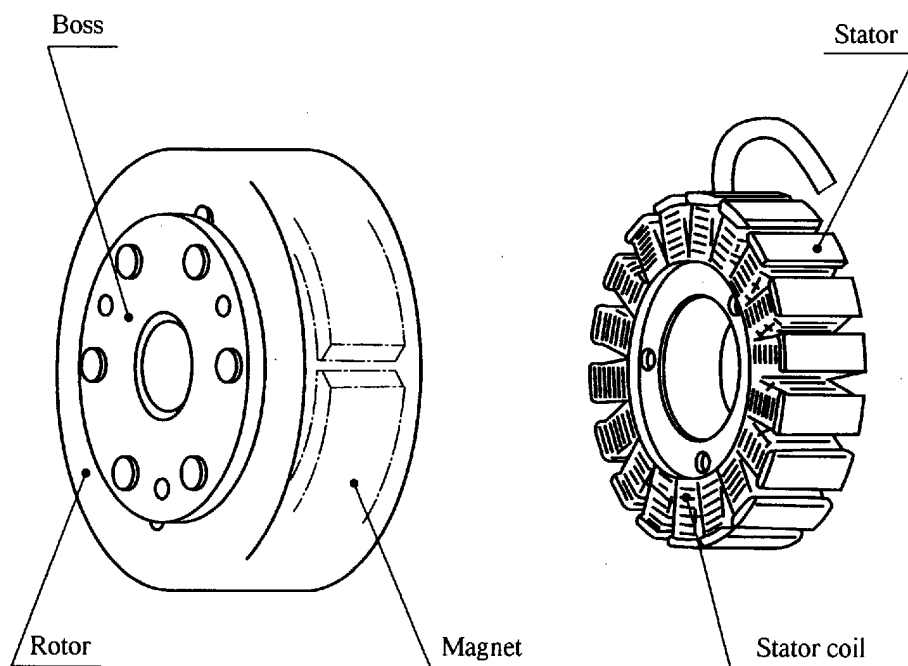


Fig. 1.02 Flywheel type multi pole ACG (1002)

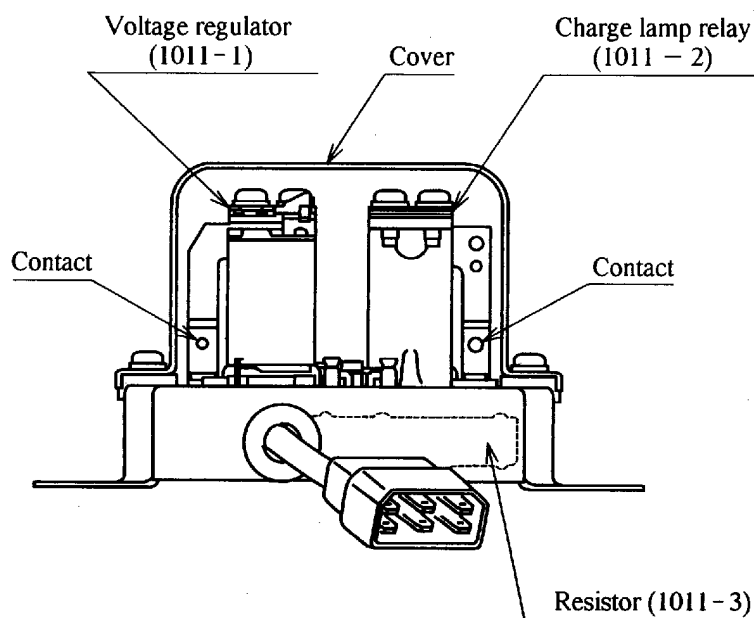


Fig. 1.03 Contact type regulator (1011)

(b) Starting equipment

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
1100	スタータ	A d.c. motor operated by battery to start engine.	—	starting motor, cranking motor, starter	始動電動機
1101	ソレノイドシフト スタータ	A starter of such system that the pinion is engaged with the ring gear by moving and pushing the pinion into the ring gear by means of magnetic switch.	—	solenoid shift starter, solenoid operated starter	押込式始動電動機
1102	イナーシャドライブ スタータ	A starter of such system that engaging and disengaging of pinion and ring gear are carried out by means of inertia of pinion.	—	inertia drive starter	慣性摺動式始動電動機
1103	ダイレクトドライブ スタータ	A starter in which the motor shaft also serves as the pinion shaft.	Fig. 1.04	direct drive starter	—
1104	セーフティリレー	A starter protective device which automatically disengages starter pinion after start of engine, prevents pinion from engaging while engine is running, and also prevents from engaging while starter is running due to inertia.	—	safety relay	—
1105	リダクションスタータ	A starter of such structure that the motor power is transmitted through a reduction gear to the pinion.	Fig. 1.05	gear reduction starter, reduction drive starter	減速ギヤ付始動電動機
1106	遊星歯車減速 スタータ	A starter of such structure that the motor power is transmitted through a planetary gear reduction mechanism to the pinion.	Fig. 1.06	planetary gear reduction starter	—
1106-1	マグネット	A permanent magnet which forms the field.		magnet	永久磁石



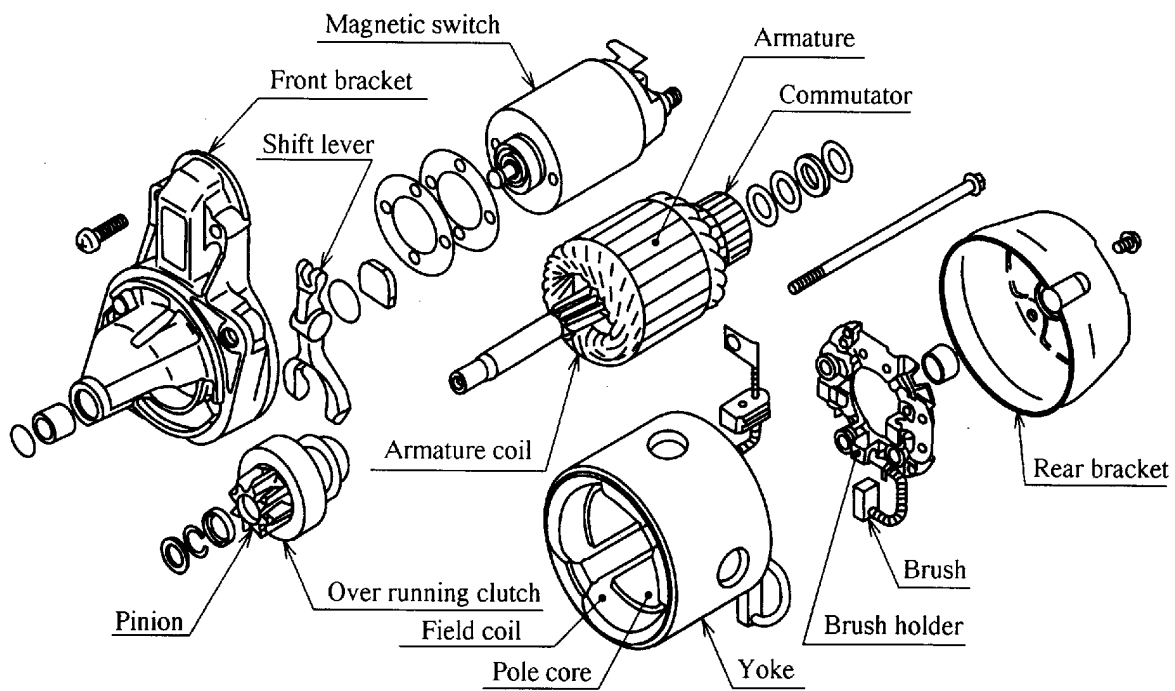


Fig. 1.04 Direct drive starter (1103)

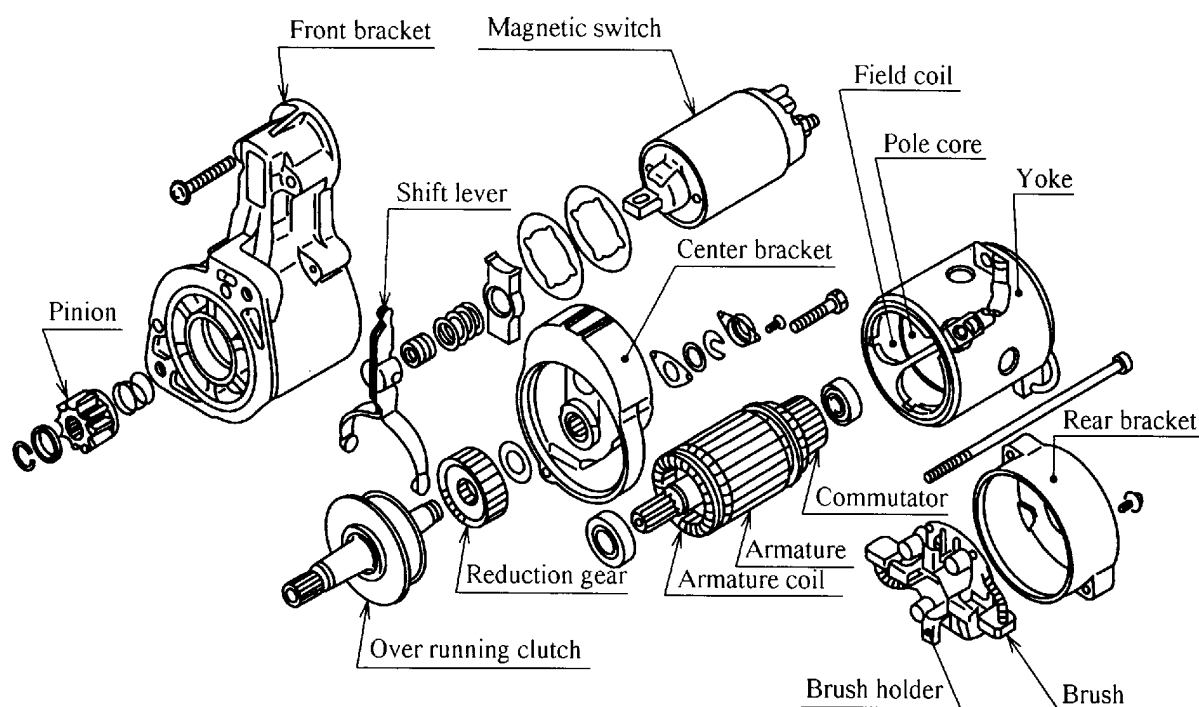


Fig. 1.05 Gear reduction starter (1105)

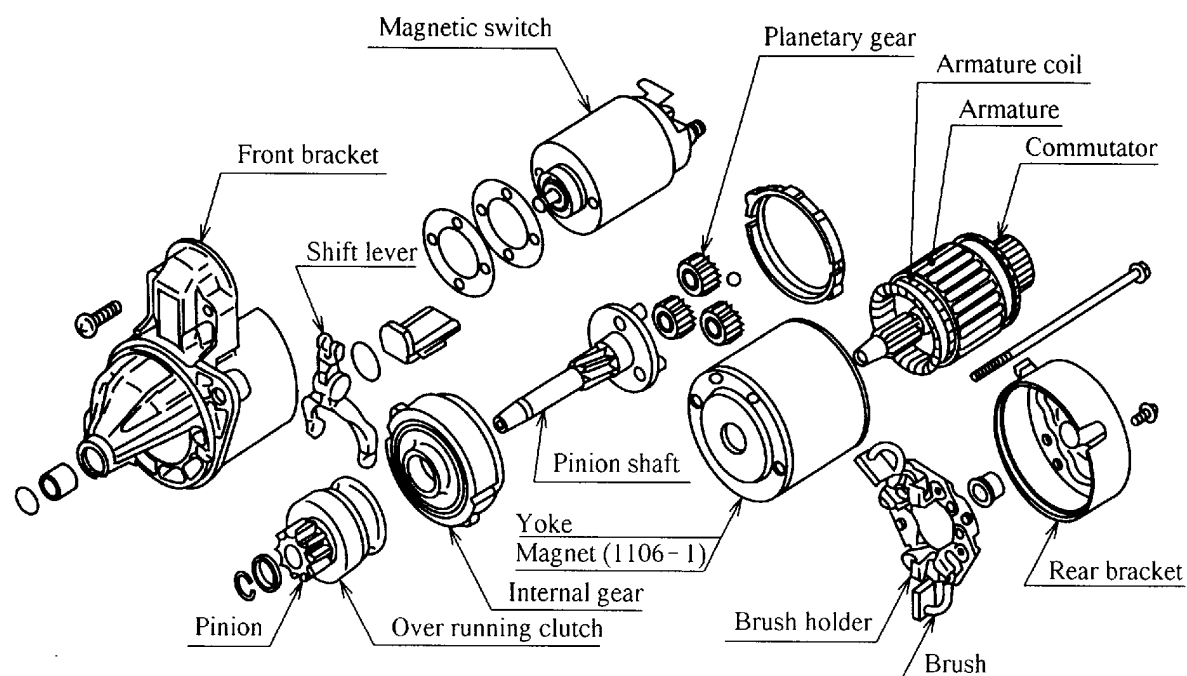


Fig. 1.06 Planetary gear reduction starter (1106)

(c) Ignition equipment and preheating equipment

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
1200	ディストリビュータ	A device which is mounted to an engine and distributes high voltage generated by ignition coil to spark plugs in correct sequence and timing. In general this is called "mechanical distribution system" or "high voltage distribution system". Remarks: This is called 配電器 (distributor) in laws and regulations.	Fig. 1.07	distributor, ignition distributor	-
1200-1	キャップ	A distribution component consisting of a central electrode which receives the high voltage produced by the ignition coil and side electrodes which correspond to respective cylinders.		distributor cap	配電キャップ
1200-2	ブレーカ	A component which is composed of a contact breaker arm and a contact breaker plate and makes and breaks the coil primary current by closing and opening the contact by the revolution of a cam.		contact breaker	断続器
1200-3	ブレーカアーム	A component which has the movable contact that operates synchronizing with the revolution of the cam.		contact breaker arm	-
1200-4	コンタクトベース	A base plate equipped with a fixed contact which serves as the earth side electrode.		contact breaker plate	-
1200-5	ロータ	A component which distributes the high voltage input to the central electrode of the cap to the side electrodes.		distributor rotor	配電子
1200-6	カム	A component which has projections corresponding to the number of cylinders and actuates the contact breaker arm.		contact breaker cam	-
1200-7	アドバンサ	Generic name of vacuum spark advancer and centrifugal spark advancer. Remarks: This is called 点火時期早め装置 (ignition timing advancer) in laws and regulations.		spark advancer	点火進角装置
1200-8	バキュームアドバンサ	A component which changes the ignition timing by moving the contact breaker plate corresponding to the engine load. Remarks: This is called 真空式点火時期早め装置 (vacuum type ignition timing advancer) in laws and regulations.		vacuum spark advancer, vacuum unit	真空進角装置

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
1200-9	ガバナ	A component which changes the ignition timing by moving the contact breaker cam corresponding to the rotational speed of engine. Remarks: This is called 遠心式点火時期早め装置 (centrifugal type ignition timing advancer) in laws and regulations.	Fig. 1.07	centrifugal spark advancer	遠心進角装置
1200-10	カップリング	A component which is fixed to the distributor shaft and engages with the cam shaft of engine.		distributor shaft coupling	-
1201	無接点式ディストリ ビュータ	A distributor in which opening and closing function of contact breaker is done without contact by means of a magneto generator.	-	breakerless distributor	-
1202	ICディストリビュータ (あいしー)	A device in which an ignition control circuit based on IC technique is integrated with a breakerless distributor.	Fig. 1.08	IC distributor	-
1203	クランク角センサ内蔵 ディストリビュータ	A distributor which accommodates a sensor to detect the position of engine crank shaft.	Fig. 1.09	crank angle sensor built-in distributor	-
1203-1	クランク角センサ モジュール	An electronic component which detects the position of engine crank shaft by means of transistors and/or ICs.		crank angle sensor module	-
1203-2	インタラプタ	A component which rotates with the shaft and actuates the photo- electric coupler or Hall element.		interrupter	ロータプレート
1204	コイル---体形 ディストリビュータ	A distributor made by integrating an ignition coil with a distributor of each kind.	Fig. 1.10	distributor with ignition coil	集積形ディストリ ビュータ
1205	フルトランジスタ イグナイタ	A device which controls the ignition coil by means of transistors, ICs, etc. employing the output of breakerless distributor as the input signal.	-	contactless transistor ignition, breakerless transistor ignition	無接点式トランジスタ イグナイタ, エレクト ロニクイグナイタ
1221	イグニッションコイル	A transformer which generates a high voltage to cause electric spark on spark plugs. There are can type which uses oils as the insulation, and molded type which uses epoxy resin as the insulation.	Fig. 1.11	oil filled ignition coil, molded type ignition coil, dry ignition coil	点火コイル
1222	同時点火コイル	An ignition coil in which both ends of secondary coil are connected to the respective spark plugs for such a distribution system that two cylinders in a multi-cylinder engine, one is in compression stage and the other is in exhaust stage, are ignited at the same time.	-	double ended ignition coil	-

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
1223	独立点火コイル	An ignition coil for independent distribution system in which one ignition coil is used for each cylinder of a multi-cylinder engine.	—	single ended ignition coil	—
1240	フライホイールマグネット	A generator which is used mainly for small engines, and supplies electric power for engine ignition, charging, and lamp operation. Some one has no circuit for charging and lamp operation.	Fig. 1.12	flywheel magneto	—
1240-1	ソースコイル	A coil which supplies electric power to the engine ignition circuit.		source coil	ローコイル
1240-2	アーマチュアコイル	A coil which is used for battery charging, lamp operation, etc.		armature coil	—
1240-3	ピックアップコイル	A coil which actuate ignition circuit by producing output at the time of ignition.		pick-up coil	—
1260	ハイテンションケーブル	A high voltage cable with terminals used for wiring of ignition circuit.	Fig. 1.13	high tension cable	ハイテンションコード, プラグコード
1260-1	高圧電線	A cable of such structure that it withstands the high voltage of ignition circuit. There are cables with radio noise suppression conductor and with copper conductor.		high voltage cable	—
1260-2	スパークプラグ側ターミナル	The terminal to be connected with spark plugs in a high tension cable.		spark plug terminal	スパークプラグ端子, プラグターミナル
1260-3	ディストリビュータ側ターミナル	The terminal to be connected with distributor cap in a high tension cable.		distributor terminal	ディストリビュータ端子, ディスビターミナル
1260-4	ターミナルキャップ	A cover for waterproof and dust-proof of joint with high tension cable.		spark plug cover, distributor cover	端子キャップ, プラグキャップ
1260-5	ラジオノイズサプレッサ	The resistor to be mounted separately for suppression of noise wave generated from ignition equipment. There are two types. One is inserted into high tension cable and the other is integrated with spark plug side terminal.		radio noise suppressor	雑音防止用外付抵抗器

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
1280	スパークプラグ	A plug which is to be attached to the cylinder head of a gasoline engine, and ignites the mixed gas of engine by causing electric spark between electrodes. Remarks: This is called 点火プラグ (ignition plug) in laws and regulations.	Fig. 1.14	spark plug	-
1281	抵抗入スパークプラグ	A spark plug in which a resistor for suppression of noise wave due to discharge between electrodes is built in.	Fig. 1.15	resistor spark plug	レジスタプラグ
1290	グロープラグ	Generic name of such plugs used for diesel engines that the injection fuel is preheated at starting to facilitate the ignition. Remarks: This is called 予熱プラグ (preheating plug) in laws and regulations.	-	glow plug	-
1291	コイル形グロープラグ	A glow plug in which the resistance wire of heat generating part is exposed in a coil form. Remarks: This is called コイル式予熱プラグ (coil type preheating plug) in laws and regulations.	Fig. 1.16	coil type glow plug	-
1292	シース形グロープラグ	A glow plug in which the heat generating part is protected by covering it with a heat resistant metal pipe. Remarks: This is called さや式予熱プラグ (sheath type preheating plug) in laws and regulations.	Fig. 1.17	sheath type glow plug	棒状グロープラグ
1293	セラミック形 グロープラグ	A glow plug in which the heat generating part is protected by covering it with heat resistant ceramics.	Fig. 1.18	ceramic type glow plug	セラミック グロープラグ
1294	グロープラグレジスタ	A resistor which reduces the voltage applied to a glow plug.	Fig. 1.19	glow plug resistor	-
1295	ヒータフランジ	An electric heater which is used for diesel engines and preheats the air in suction pipe at starting.	Fig. 1.20	heater flange	ヒートフランジ

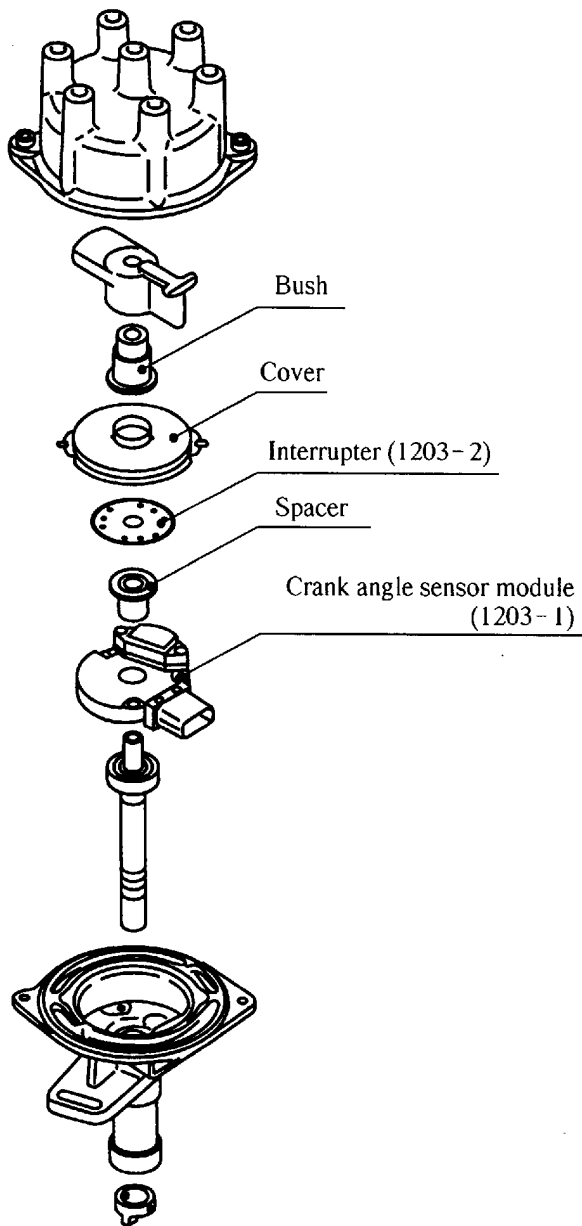


Fig. 1.09 Crank angle sensor
built-in distributor(1203)

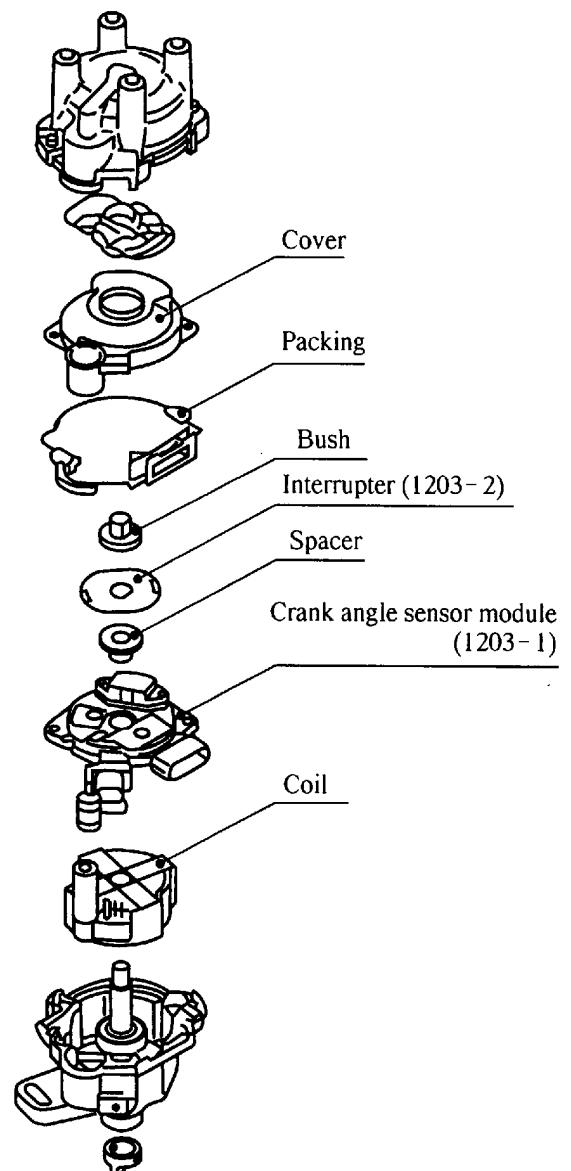


Fig. 1.10 Distributor with
ignition coil(1204)

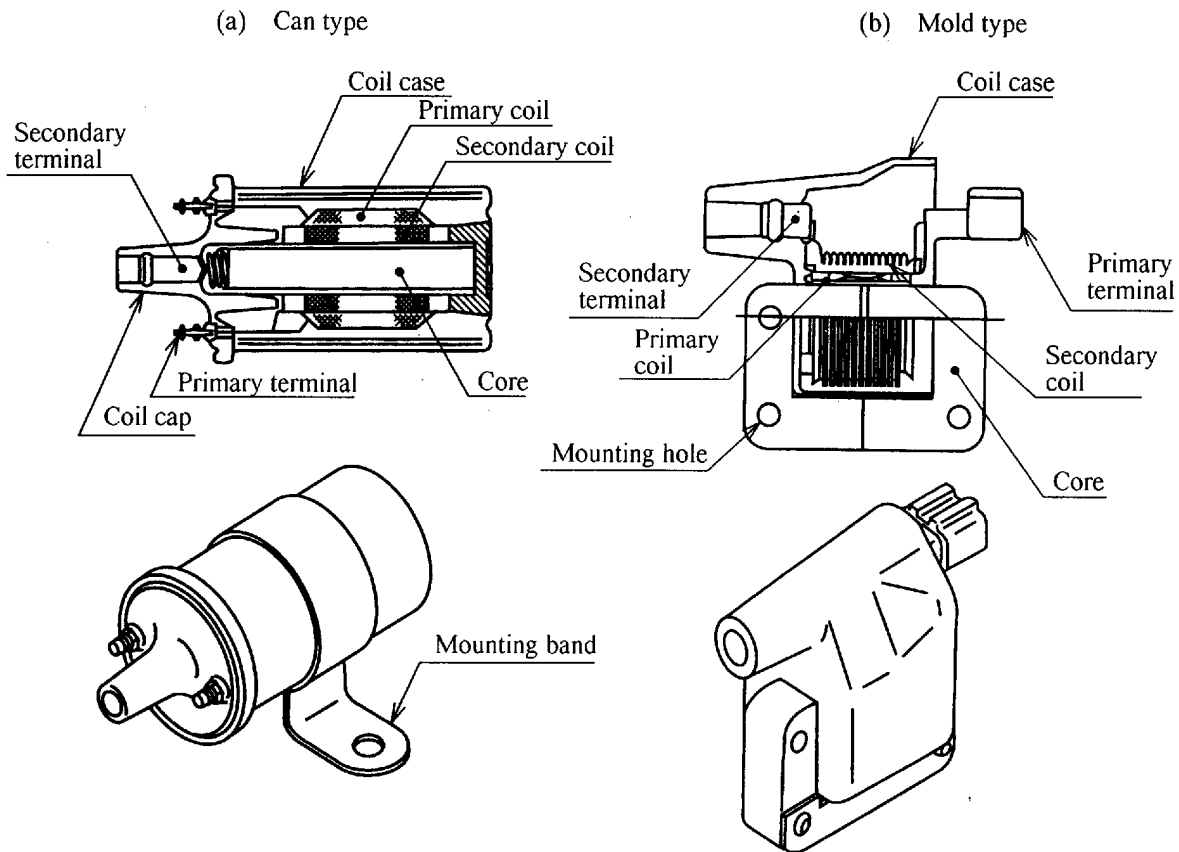


Fig. 1.11 Ignition coil (1221)

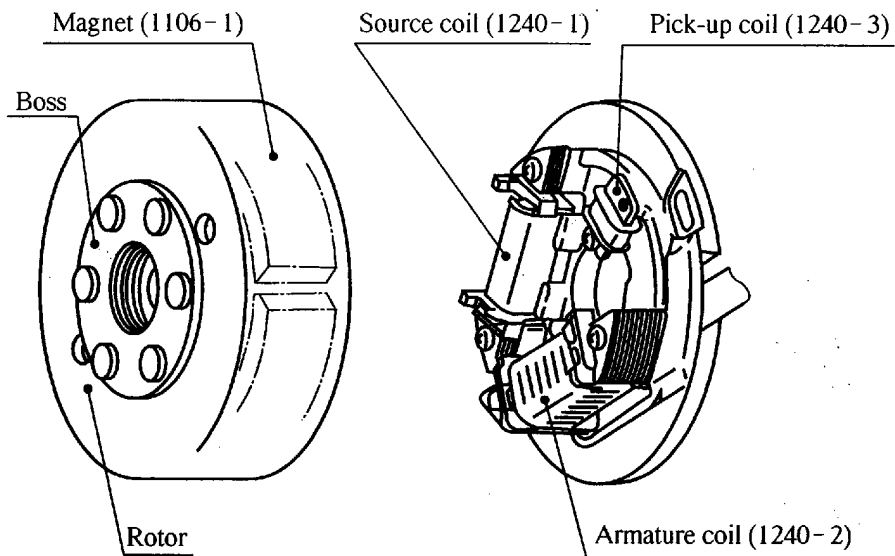


Fig. 1.12 Flywheel magneto (1240)

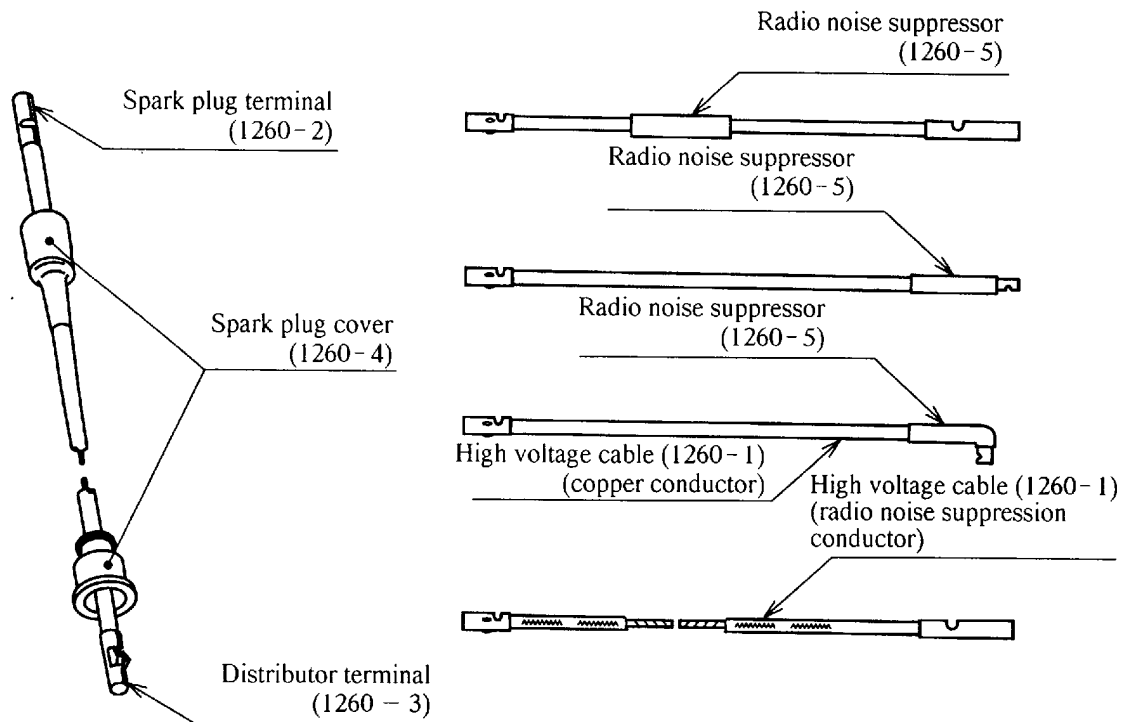


Fig. 1.13 High tension cable (1260)

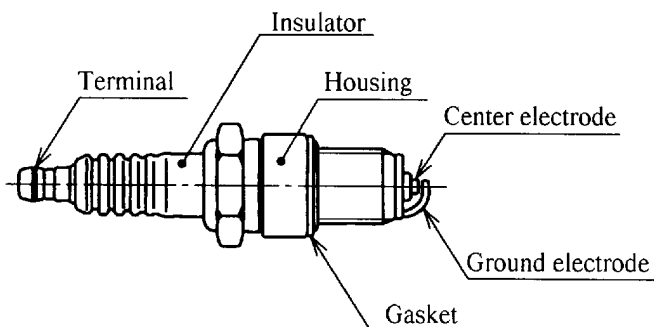


Fig. 1.14 Spark plug (1280)

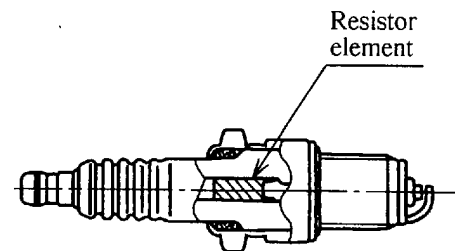


Fig. 1.15 Resistor spark plug (1281)

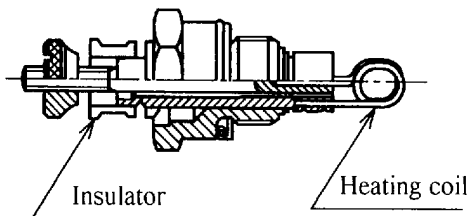


Fig. 1.16 Coil type glow plug (1291)

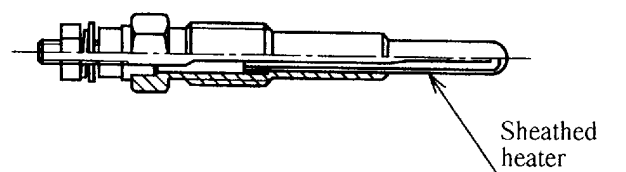


Fig. 1.17 Sheath type glow plug (1292)

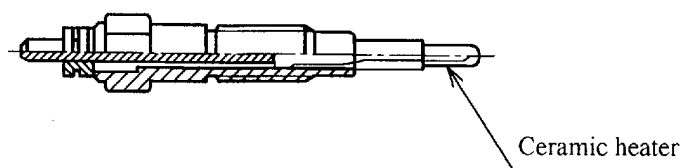


Fig. 1.18 Ceramic type glow plug (1293)

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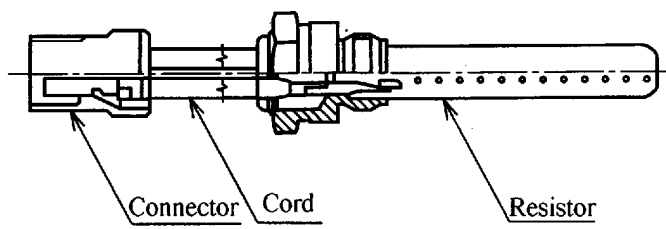


Fig. 1.19 Glow plug resistor (1294)

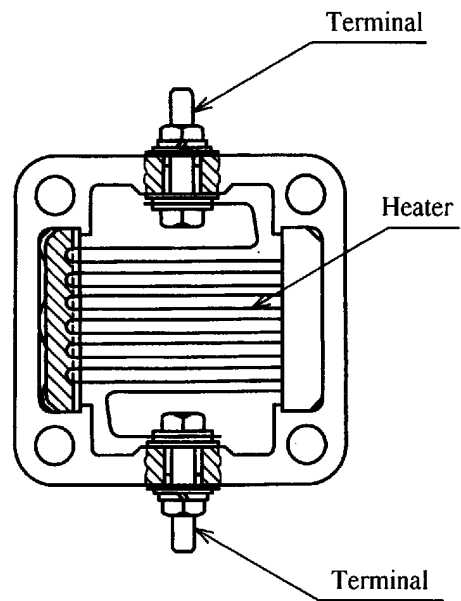


Fig. 1.20 Heater flange (1295)

(2) Lighting equipment

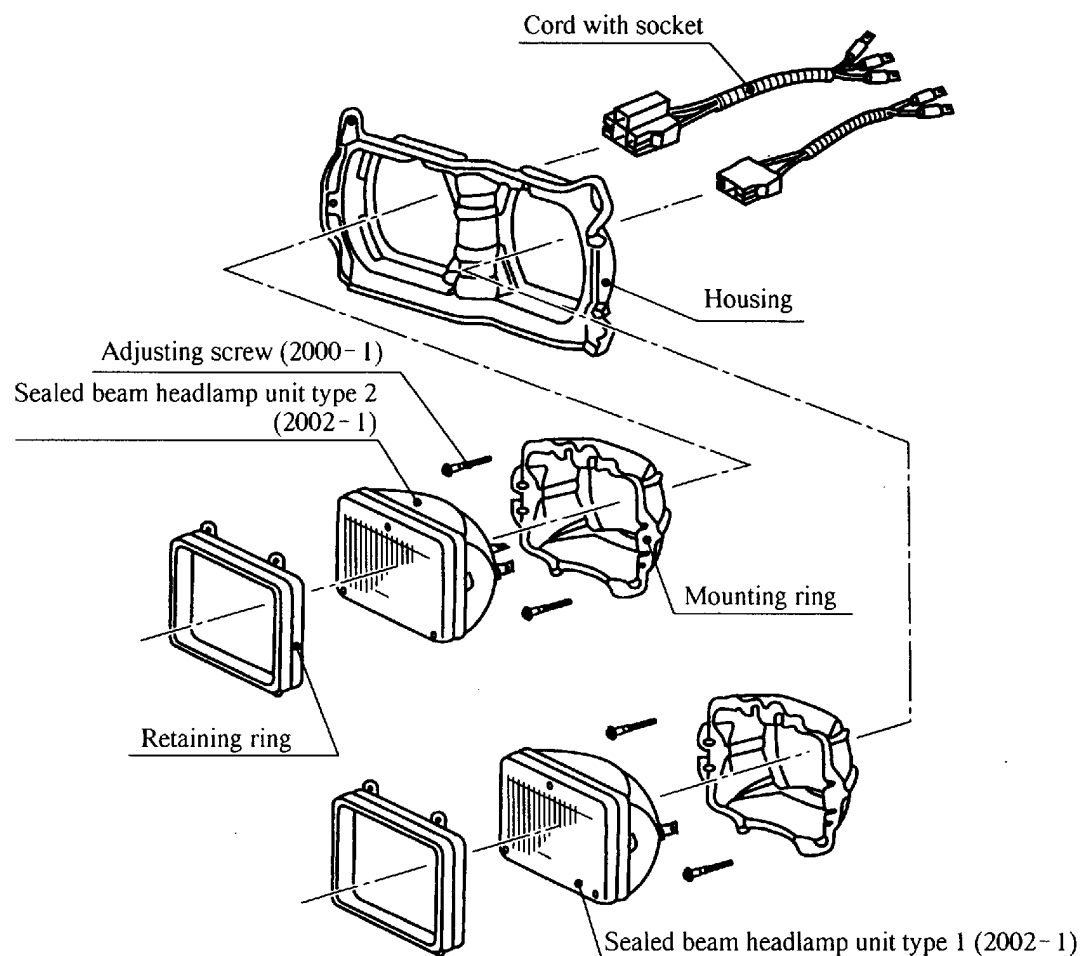
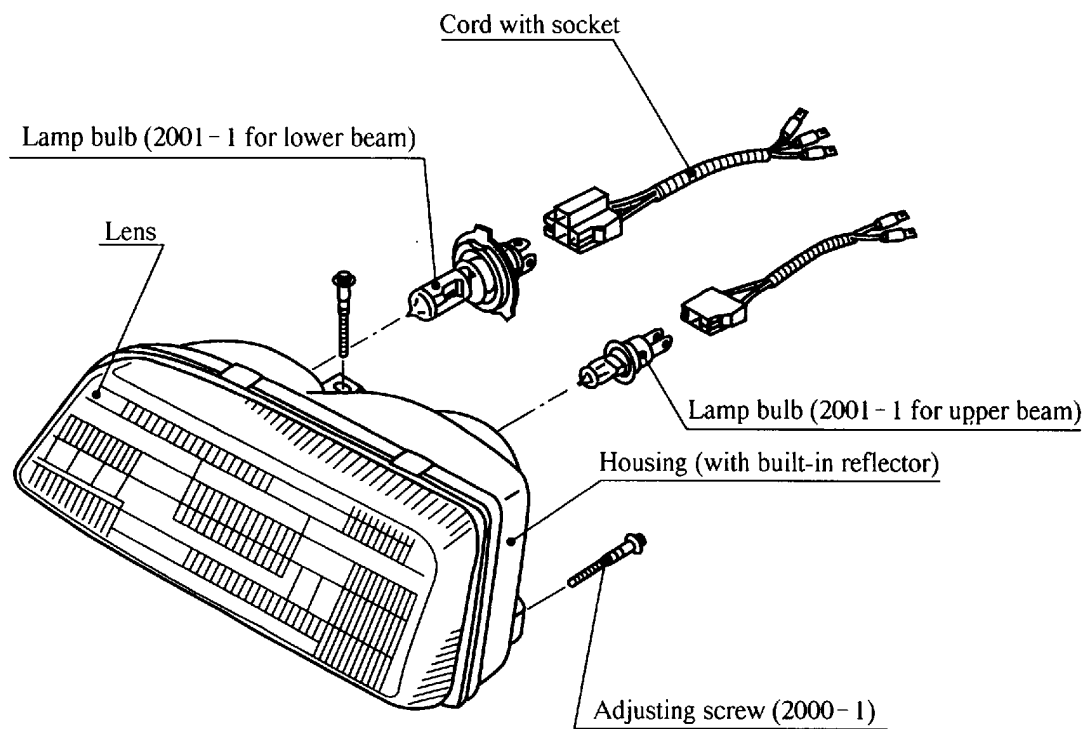
(a) External illumination equipment

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
2000	ヘッドランプ	An illuminating lamp which illuminates the road ahead of the vehicle to securely observe obstacles on the road, in night time. In general the lamp has upper beam for illumination of far distant point and a lower beam which suppresses undue dazzle to oncoming drivers and other road-users, but some lamps have independent beam separately. Remarks: This is called 走行用前照灯 (driving headlamp) or すれ違い用前照灯 (passing headlamp) in laws and regulations.	—	headlamp	—
2000-1	アジャステイニング スクリュ	A screw which adjusts the direction of irradiation of headlamp beam.	Fig. 2.01	adjusting screw	調整ねじ
2001	セミシールドビーム ヘッドランプ	A headlamp which has such structure that the lens and housing or reflector are integrated into one body, and allows replacement of the lamp bulb.	Fig. 2.01 (a)	semi-sealed beam headlamp	—
2001-1	「白熱」電球	A light source which emits light in such a way that one or more filaments in glass bulb are heated to incandescence by passing a current(s).		filament bulb, incandescent lamp bulb	—
2002	シールドビーム ヘッドランプ	A headlamp in which sealed beam lamp is used.	Fig. 2.01 (b)	sealed beam headlamp	—
2002-1	シールドビーム形 「ヘッドランプ」電球	A special lamp manufactured by assembling a lens, reflector and light source into an airtight structure to have standardized shape and size. There are type I which exclusively emits upper beam and type II which emits both of upper beam and lower beam.		sealed beam headlamp unit	SBユニット
2003	組立式ヘッドランプ	A headlamp which is made by assembling individual lens, reflector, lamp bulb, etc. and capable of being disassembled.	—	open type headlamp	—

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
2010	四灯式ヘッドランプ (よんとうしき—)	Such a system of headlamps that the light source for upper-beam and the light source mainly for lower beam (in some cases also for upper beam) are combined with respective lenses and reflectors to form a set of lamps and this set is located on both sides of automobile symmetrically. In some systems the lenses and housings of upper-beam headlamp and lower-beam headlamp in one set are combined into one body.	Fig. 2.01	four-lamp system headlamp	—
2011	二灯式ヘッドランプ	Such a system of headlamps that a lamp which has upper-beam light source and lower-beam light source is used, a unit is composed using single lens and reflector so that both beams are available and this unit is located on both sides of automobile.	—	two-lamp system headlamp	—
2012	一灯式ヘッドランプ (いっとうしき—)	Such a system of headlamp that a lamp bulb which has upper-beam light source and lower-beam light source is used, a unit is composed using single lens and reflector so that both beams are available and this unit is used for two wheeled vehicles or the like for which one headlamp installation is allowed. There are headlamps of single beam with low luminous intensity for specific low speed vehicles.	—	single-lamp system headlamp	—
2020	格納式ヘッドランプ	A headlamp of such construction that it is accommodated in the body of automobile while not in use and it is lifted to irradiate front road when it is used.	—	concealment headlamp, retractable headlamp	—
2021	プロジェクタ ヘッドランプ	A headlamp of such construction that the illuminating light is obtained by a reflector of ellipsoid and a convex lens located in front of the light source. For lower beam, a shade is provided between the lamp bulb and the convex lens to get dazzle preventive luminous intensity distribution.	Fig. 2.02	projector headlamp, PES	—
2022	マルチフレクタ ヘッドランプ	A headlamp which distributes the illuminating light by means of a reflector composed of combination of small-area reflecting surface. The part corresponding to the front lens is a transparent cover.	—	multi reflector headlamp	—
2023	ディスチャージ ヘッドランプ	A headlamp which uses a discharge lamp of high luminous efficacy as the light source.	Fig. 2.03	discharge headlamp, HID headlamp	放電灯ヘッドランプ

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
2023-1	放電電球	A light source which emits light by means of discharge in the gas, metal vapour or mixture of gas and vapour in a glass tube.	Fig. 2.03	discharge lamp bulb, burner	メタルハライドランプ
2023-2	バラスト	An equipment to produce the high voltage necessary for starting a discharge lamp and maintain the stability of discharge. In some one starting circuit separated from discharge stabilizing circuit.		ballast	安定器
2030	[フロント] フォグランプ	An illuminating lamp which is operated to improve the visibility of the front in the case of fog or snow. Remarks: This is called 前部霧灯 (front fog lamp) in laws and regulations.	—	fog lamp	補助前照灯
2031	コーナリングランプ	An illuminating lamp which is operated so that the place near automobile in side front is easily seen when turning left or right at night. Remarks: This is called 側方照射灯 (side illuminating lamp) in laws and regulations.	—	cornering lamp	—
2050	バックアップランプ	An illuminating lamp which is operated so that the place near automobile in rear is easily seen at the time of reversing the automobile. It also serves as a signal lamp to tell other users of road that the vehicle is reversing or is desiring to reverse. Remarks: This is called 後退灯 (reversing lamp) in laws and regulations.	—	back-up lamp, reversing lamp	—
2051	ライセンスプレート ランプ	An illuminating lamp which irradiates rear license plate at night so that marking of license plate is easily identified. Remarks: This is called 番号灯 (number plate lamp) in laws and regulations.	—	license plate lamp, rear registration plate lamp	—
2090	路肩灯	An illuminating lamp which is mounted to trucks and buses and operated at night while the vehicle is standing still to surely observe the conditions of road in side rear of vehicle.	—	road verge lamp	—

No.	Parts name (Japanese characters)	Definition	Informative figure number	Informative reference	
				English equivalent	Name commonly used (Japanese characters)
2090-1	光拡散防止カバー	An apparatus which covers the luminaire so that the light emitted from the luminaire will not diffuse out of the intended irradiation range.	—	light diffusion prevent cover	—
2091	ワーキングランプ	An illuminating lamp which illuminates a certain area for night work.	—	working lamp	作業灯
2092	スポットランプ	An illuminating lamp which emits ray of light converged sufficiently parallel for observation of far distant place.	—	spot lamp, search lamp	—



(b) Sealed beam headlamp (2002)
Fig. 2.01 Four-lamp system headlamp (2010)