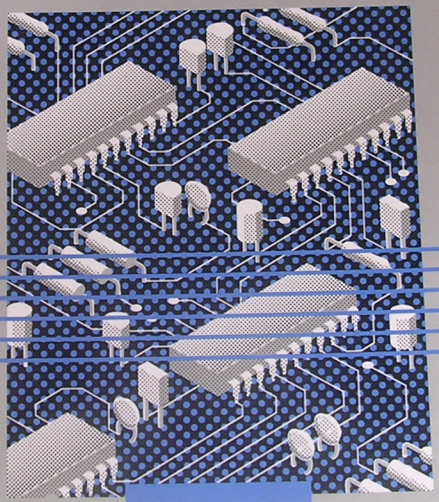
TOYOTA

CROWN

电 路 图

GRS182 系列　　2004年 11月



CROWN
电路图

A 导言

本手册由以下 13 章组成：

号码	章节	简述
A	索引	本手册内容的索引。
	导言	每一章节的简要解释。
B	如何使用本手册	说明如何使用本手册。
C	故障排除	描述电路的基本检查步骤。
D	缩写词汇	定义本手册中使用的缩写词汇。
E	术语和符号表	定义主要零件的符号和功能。
F	继电器位置分布图	标示电子控制装置、继电器、继电器盒等的位置。 这一章与系统电路紧密相关。
G	电路图	描述零件连接器、接点、接地点等的位置。 这一章与系统电路紧密相关。
H	索引	系统电路的索引。
	系统电路	各系统电路图显示的是从电源开始到接地点的全部电路。根据连接方法通过代码来显示和分类电路连接和它们的位置（参见“如何使用本手册”一章）。本章中也包括用于故障排除的“系统概述”和“维修提示”。
I	接地点	显示本手册中所述的所有零件的接地位置。
J	电源（电流流程图）	描述从电源到各个电力负载的电源分配情况。
K	连接器表	描述本书中出现的零件的连接器形状。 这一章与系统电路紧密相关。
L	连接器零件号	说明本手册中使用的连接器的零件号。
M	总电路图	提供表示电路连接的电路图。

本手册将车辆上安装的电路按所属系统划分，提供关于它们的资料。

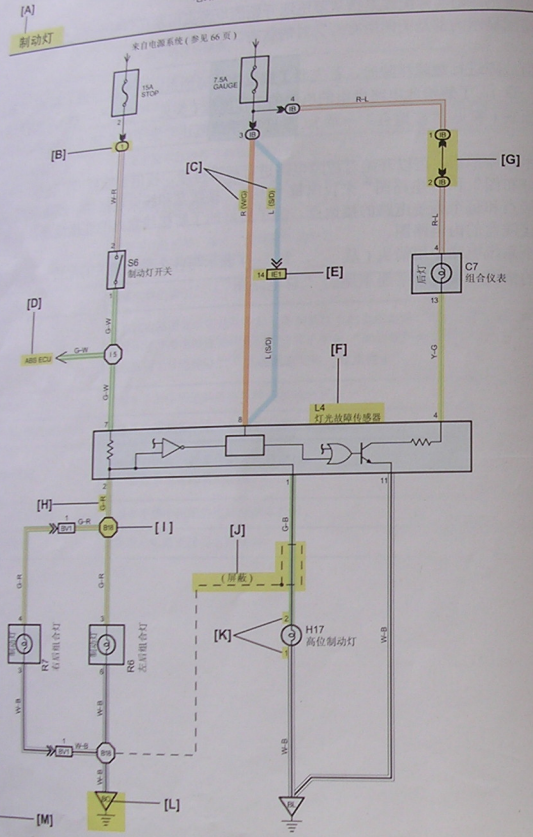
每个系统电路的实际配线是指从蓄电池开始的电源点出发直到每个接地点结束。（所有电路图显示的都是关闭所有开关时的状态。）

对任何故障进行故障排除时，首先要了解发生故障的电路的工作原理（参见“系统电路”一章），了解给此电路供电的电源的工作原理（参见“电源”一章），和接地点的工作原理（参见“接地点”一章）。参见“系统概述”来了解电路工作原理。

了解电路原理后，可以开始对故障电路进行故障排除，找出故障原因。使用“继电器位置分布图”和“电路图”来找出每个零件、接线盒和线束连接器、线束和线束连接器、接点和每个系统电路的接地点。为了更好的了解接线盒内的连接情况，也提供了每个接线盒的内电路图。

在每个系统电路中用箭头（从 ___，到 ___）表示与各个系统相关的配线。如果需要连接的情况，参见本手册末尾的“总电路图”。

*此系统图仅为参考示样图，不同于“系统电路”一章中的实际电路。



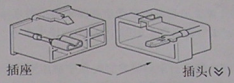
[A] ：系统名称

[B] ：表示继电器盒。无阴影表示且只给出继电器盒号以区别接线盒
例：①表示 1 号继电器盒

[C] ：当车辆型号、发动机类型或规格不同时，用（）来表示不同的配线和连接器。

[D] ：表示相关系统。

[E] ：表示线束和线束连接器。带插头端子的线束用箭头（≫）表示。
外侧数字为引脚号。



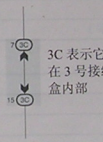
每个线束和线束连接器代码的第一个字母表示组件位置，如“发动机室”的“E”，仪表板和周围区域的“1”和车身及周围区域的“B”。

当两个以上的代码第 1 和第 2 个字母相同时，就增加数字（如 IH1、IH2），表示它们是相同类型的线束和线束连接器。

[F] ：表示零件（所有零件用天蓝色表示）。此代码与零件位置图中所用的代码相同。

[G] ：接线盒（圈内的数字是接线盒号，连接器代码在它旁边）。接线盒用阴影标出，以便将它与其它零件清楚地区别开来。

例：

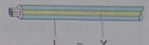


[H] ：表示配线颜色。
配线颜色用字母表示。

B = 黑色	W = 白色	BR = 褐色	
L = 蓝色	V = 紫色	SB = 天蓝色	
R = 红色	G = 绿色	LG = 浅绿色	
P = 粉色	Y = 黄色	GR = 灰色	
O = 橙色			

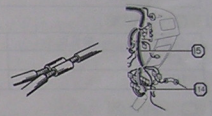
第一个字母表示基本配线颜色，第二个字母表示条纹的颜色。

例：L - Y



[I] ：表示配线接点（发动机室的代码为“E”、仪表板的代码为“1”、车身的代码为“B”）。

例：

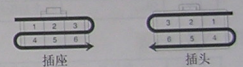


接点 I5 的位置是阴影部分表示。

[J] ：表示屏蔽电缆。

[K] ：表示连接器引脚的编号。
这个编号系统对于插头和插座连接器是不同的。

例：从左上到右下依次标出编号　　从右上到左下依次标出编号



[L] ：表示接地点。
每个接地点的代码的第一个字母表示组件位置，如“发动机室”的“E”，仪表板和周围区域的“1”和车身及周围区域的“B”。

[M] ：页码

[N]

系统概述

始终将电流通过制动灯保险丝加到制动灯开关的端子 2 上。

打开点火开关，电流从仪表保险丝流到灯光故障传感器的端子 8，同时也经过后灯警告灯流到灯光故障传感器的端子 4。

制动灯断开警告

打开点火开关并踩下制动踏板 (制动灯开关 ON)，如果制动灯电路开路，且从灯光故障传感器的端子 7 流到端子 1、2 的电流改变，则灯光故障传感器检测到这个断开，并且灯光故障传感器的警告电路被激活。因此，电流从灯光故障传感器的端子 4 流到端子 11，再流到接地，并点亮后灯警告灯。通过踩下制动踏板，流到灯光传感器的端子 8 的电流保持警告电路 ON，并在关闭点火开关之前一直点亮警告灯。

[O]

维修提示

S6 制动灯开关

2 - 1: 踩下制动踏板时关闭

L4 灯光故障传感器

1、2、7 - 接地 : 制动灯开关打开时大约 12 V

4、8 - 接地 : 点火开关 ON 时大约 12 V

11 - 接地 : 始终导通

[P] ○ : 零件位置

代码	参见页	代码	参见页	代码	参见页
C7	34	L4	36	R7	37
H17	36	R6	37	S6	35

[Q] ⬭ : 继电器盒

代码	参见页	继电器盒 (继电器盒位置)
1	18	1 号继电器盒 (左仪表板支架)

[R] ⬭ : 接线盒和线束连接器

代码	参见页	接线盒和线束 (连接器位置)
IB	20	仪表板配线和仪表板接线盒 (下饰板)
3C	22	仪表板配线和 3 号接线盒 (左仪表板支架)

[S] □ : 连接线束的连接器和线束

代码	参见页	连接线束和线束 (连接器位置)
IE1	42	地板配线和仪表板配线 (左踏脚板)
BV1	50	行李箱配线和地板配线 (左行李箱)

[T] ▽ : 接地点

代码	参见页	接地点位置
BL	50	左侧中立柱下方
BO	50	中间后端板

[U] ◯ : 接点

代码	参见页	带接点的线束	代码	参见页	带接点的线束
I5	44	前围板配线	B18	50	行李箱配线

[N] : 解释系统概述。

[O] : 显示参考值或解释故障排除中要参考的功能。

[P] : 显示系统电路中的零件在车辆上的位置的参考页码。

例 : 零件 “L4”(灯光故障传感器) 在手册的 36 页。

* 代码中的字母是零件的第一个字母，数字表示此零件在以此字母开始的零件中的序列中的位置。

例 : L4
- 4 — 零件是序列中的第四个
- L — 灯光故障传感器

[Q] : 显示系统电路中的继电器盒连接器在车辆上的位置的参考页码。

例 : 在本手册的 18 页中描述了连接器 “1”，它被安装在仪表板的左侧。

[R] : 显示系统电路中的接线盒和线束在车辆上的位置的参考页码。

例 : 连接器 “3C” 连接仪表板配线和 3 号接线盒。在本手册的 22 页中描述了此连接器，它被安装在仪表板的左侧。

[S] : 显示描述线束和线束连接器 (首先显示插座线束，然后显示接头线束) 的参考页码。

例 : 连接器 “IE1” 连接地板配线 (插座) 和仪表板配线 (插头)。在本手册的 42 页中描述了此连接器，它被安装在左侧踏脚板上。

[T] : 显示车辆上接地点位置的参考页码。

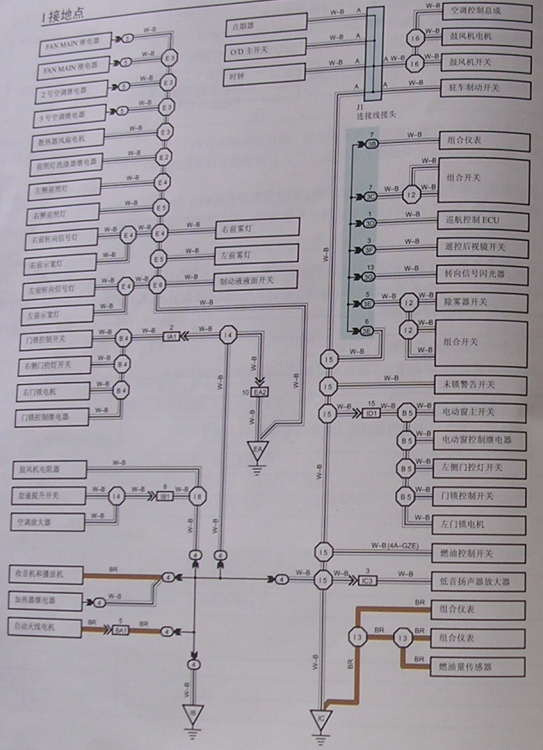
例 : 在本手册的 50 页描述了接地点 “BO”，它安装在中间后端板上。

[U] : 显示车辆上接点位置的参考页码。

例 : 接点 “I5” 位于前围板线束上，在本手册的 44 页给予说明。

接地点电路图显示从所有主要零件到各个接地点的连接情况。对故障接地点进行故障排除时，检查共用接地点的系统电路将有助于快速确认故障接地。也可用此种方法检查接地点（下面用 E7、E8 和 E9 表示）间的关系。

I 接地点

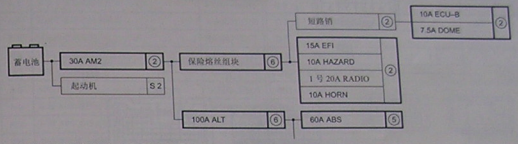


* 此系统图仅为参考示样图，不同于“系统电路”一章中的实际电路。

“电流流程图”一章描述每个电源（保险丝、保险熔丝和断路器）输送电流到哪个零件。在电源电路图中，解释了当给每个系统提供蓄电池电源时的情况。因为所有的系统电路图都与电源有关，因此必须对电源系统有全面的了解。

J 电源（电流流程图）

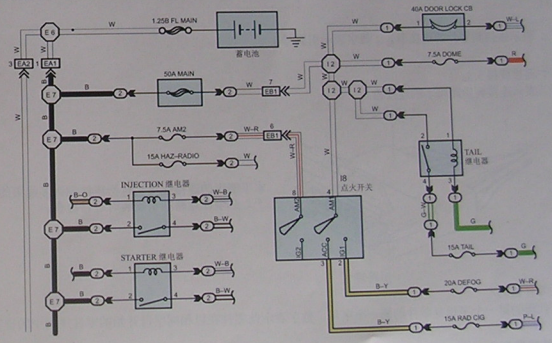
下图显示电流从蓄电池流到每个电源（保险熔丝、断路器、保险丝等）和其它零件的路径。



发动机室继电器盒（参见 20 页）

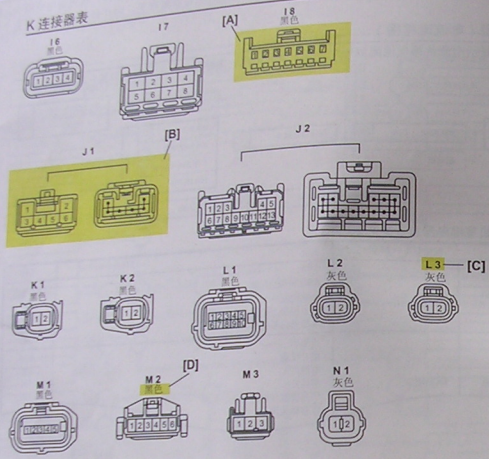
保险丝		系统	页码
20A	STOP	ABS	194
		ABS 和牵引控制	187
		巡航控制	180
		电子控制变速器	166
		多路通信系统	210
10A	DOME	点烟器	214
		组合仪表	230
		前照灯	112
		车内灯	122
		钥匙提醒和座椅安全带警告灯自动关闭	

电源



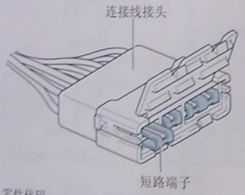
* 此系统图仅为参考示样图，不同于“系统电路”一章中的实际电路。

K 连接器表



[A] ：表示连接到零件的连接器。（数字表示引脚号）

[B] ：连接线接头
表示连接到短路端子的连接器。



本手册中的连接线接头包括连接到许多线束的短路端子。必须在短路端子安装时进行检查。

[C] ：零件代码
代码的第一个字母是零件的第一个字母，数字表示此零件在以相同字母开始的零件序列中的位置。

[D] ：连接器颜色
凡没有标明的连接器都是乳白色。

L 连接器零件号

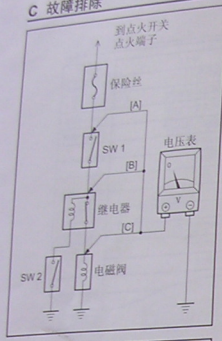
代码	零件名	零件号	代码	零件名	零件号
A 1	空调环境温度传感器	90980–11070	D 4	二极管（门控灯）	90980–11608
A 2	空调冷凝器风扇电机	90980–11237	D 5	二极管（车内灯）	90980–10962
A 3	空调冷凝器风扇电阻器	90980–10940	D 6	二极管（月亮天窗）	90980–11608
A 4	空调冷凝器风扇电阻器	90980–10928	D 7	门锁控制继电器	90980–10848
A 5	空调电磁离合器	90980–11271	D 8	左侧门锁控制开关	90980–11148
A 6	自动变速器油温传感器	90980–11413	D 9	右侧门锁控制开关	
[A]	ABS 执行器[B]	909[C] 151	D10	左侧门控灯开关	90980–11097
A 8	ABS 执行器	90980–11009	D11	右侧门控灯开关	
A 9	左前 ABS 速度传感器	90980–10941	D12	左前门门控灯开关	90980–11156
A10	右前 ABS 速度传感器	90980–11002	D13	右前门门控灯开关	
A11	左前空气囊传感器	90980–11856	D14	左后门门控灯开关	
A12	右前空气囊传感器		D15	右后门门控灯开关	
A13		90980–11194	D16		90980–11170
		90980–11[illegible]			

[A] ：零件代码

[B] ：零件名

[C] ：零件号
显示丰田零件号。

不能完全提供上述所有的连接器零件号。



电压检查

(a) 在如下情况下检查点存在电压。

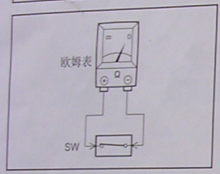
例：

[A] - 点火开关 ON

[B] - 点火开关和 SW 1 打开

[C] - 点火开关、SW 1 和继电器打开 (SW 2 关闭)

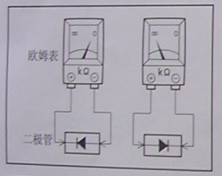
(b) 用电压表将负极导线连接到好的接地点或蓄电池负极端子上，正极导线连接到连接器或组件端子上。
用测试灯代替电压表也能进行电压检查。



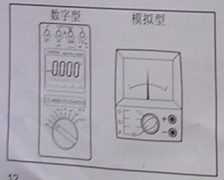
导通性和电阻检查

(a) 断开蓄电池端子或配线，从而使检查点间没有电压。

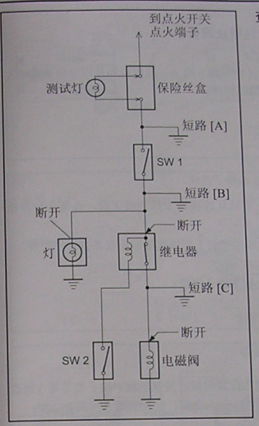
(b) 用欧姆表的两根导线接触检查点两端。



如果电路有二极管，则反接两根导线，再次进行检查。
将负极导线接触二极管正极侧，正极导线接触负极侧，应显示导通。
如果将两根导线反接，则应显示不导通。



(c) 用高阻抗 (最小 10 kΩ/V) 电压表 / 欧姆表对电路进行故障排除。



查找短路电路

(a) 拆下熔断的保险丝并断开保险丝的所有载荷。

(b) 在保险丝的位置连接测试灯。

(c) 在如下情况下测试灯亮。

例：

[A] - 点火开关 ON

[B] - 点火开关和 SW 1 打开

[C] - 点火开关、SW 1 和继电器开 (连接继电器) 和 SW 2 关闭 (或断开 SW 2)

(d) 查看测试灯时，断开和重新连接连接器。
短路位于测试灯仍点亮的连接器和测试灯熄灭的连接器之间。

(e) 沿车身轻微晃动故障配线以准确找出短路位置。

注意：

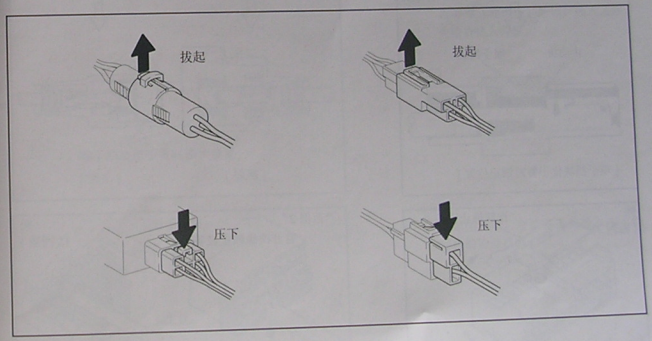
(a) 除非绝对有必要不要打开盖或 ECU 的壳。(如果接触 IC 端子，静电可能会损坏 IC。)

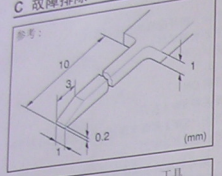
(b) 更换数字仪表的内部机构 (ECU 部分) 时，小心身体或衣物的任一部分不要与更换零件 (备用零件) IC 等的导线的端子接触。

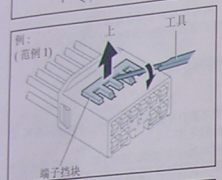
插头和插座连接器的断开

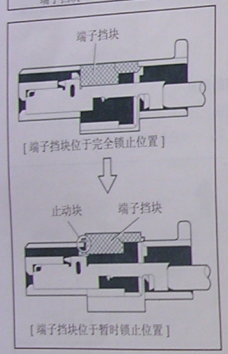
为了扯开连接器，只是拉连接器自身，而不是线束。

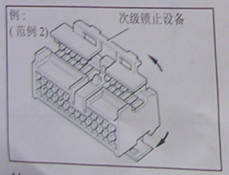
提示：扯开之前，先要检查要断开的是哪类连接器。











如何更换端子
(带端子挡块或次级锁止设备)

1. 准备专用工具

   提示：为了从连接器上拆下端子，请建构和使用专用工具或左图所示的类似物体。

2. 断开连接器

3. 分开次级锁止设备或端子挡块。

   (a) 释放端子锁止夹或从连接器上拆下端子前，必须先分开锁止设备。

   (b) 使用专用工具或端子起子开锁次级锁止设备或端子挡块。

小心：

不要从连接器体上拆下端子挡块。

[A] 非防水型连接器

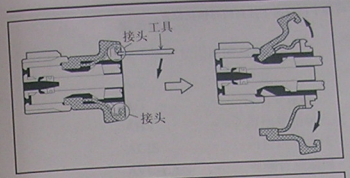
提示：探针插入位置根据连接器形状 (端子数等等) 而改变，所以，插入之前，先检查插入位置。

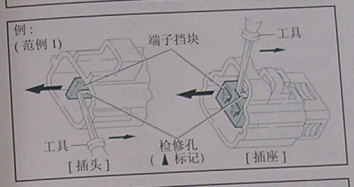
“范例 1”

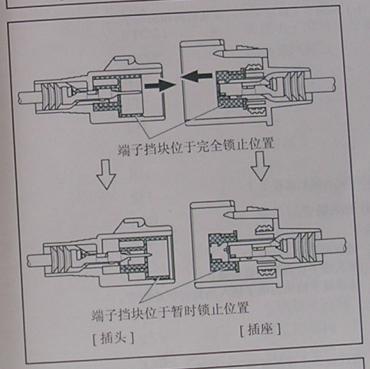
将端子挡块升高到暂时锁止位置。

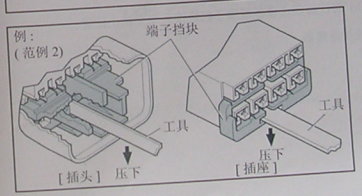
“范例 2”

打开次级锁止设备。









[B] 防水型连接器

提示：端子挡块颜色根据连接器体颜色不同而不同。

例：

端子挡块 ：连接器体

黑色或白色 : 灰色

黑色或白色 : 深灰色

灰色或白色 : 黑色

“范例 1”

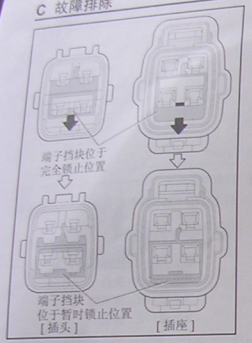
端子挡块被拔起到暂时锁止位置的类型 (拔起型)。

将专用工具插入端子挡块检修孔 (▲ 标记) 并将端子挡块拉起到暂时锁止位置。

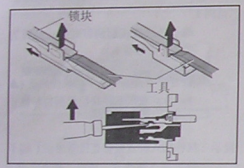
提示：探针插入位置根据连接器形状 (端子数等等) 而改变，所以，插入之前，先检查插入位置。

“范例 2”

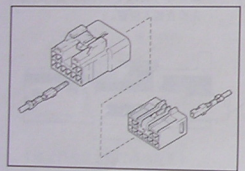
如图所示，直接将工具插入端子挡块的检修孔内。



将端子挡块向下推到暂时锁止位置。



(c) 从端子上释放锁块，并从后部拉出端子。

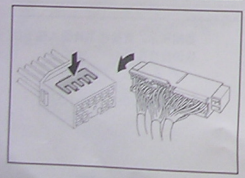


4. 将端子安装到连接器上

(a) 插入端子。

提示：

1. 确保端子被正确定位。
2. 插入端子直到锁块紧固锁止。
3. 将带端子挡块的端子插入到暂时锁止位置。



(b) 将次级锁止设备或端子挡块推入完全锁止位置。

5. 连接连接器

缩写词汇

本手册中使用的缩写词汇如下。

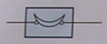
A/C	=	空调
A/T	=	自动变速器
ABS	=	防抱死制动系统
ACIS	=	声控进气系统
AVC-LAN	=	视频音频通信 - 局域网
BA	=	制动辅助
BEAN	=	车身电子局域网
CAN	=	控制器局域网
DLC3	=	数据链路连接器 3
ECT	=	电子控制变速器
ECU	=	电子控制装置
EPS	=	电机动力转向
ESA	=	电子点火提前
ETCS-i	=	智能电子节气门控制系统
EVAP	=	燃油蒸汽排放
IC	=	集成电路
J/B	=	接线盒
LH	=	左侧
R/B	=	继电器盒
RH	=	右侧
SFI	=	连续多点燃油喷射
SRS	=	乘员保护辅助系统
SW	=	开关
TEMP.	=	温度
TRC	=	牵引控制
VSC	=	车辆稳定控制
VSV	=	真空控制阀
VVT-i	=	智能可变气门正时
w/	=	带
w/o	=	不带

* 组件中给出的名称是端子名称（端子代码），但不能被认为是缩写词汇。

蓄电池
存储化学能并将之转化为电能。给汽车的各个电路提供直流电。

电容器（电容器）
小型临时电压保持装置。

点烟器
电阻加热元件。

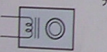


断路器
断路器是一根可重新使用的保险丝，如果流经的电流过强，断路器将变热并断开。冷却之后一些装置自动重新设定，而另一些必须手动重新设定。

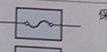
二极管
仅允许电流单向流通的半导体。

二极管，稳压二极管
此二极管仅直到规定电压时允许电流单向流通并阻滞逆向流动。超过该电压，则由其分流余压。它可以简单地起调压器的作用。

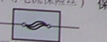
光敏二极管
光敏二极管是根据光线的多少控制电流的半导体。



分电器，IIA
将高压电流从点火线圈引导到每个火花塞。



（中等电流保险丝）



（强电流保险丝或保险熔丝）

保险丝
这是一薄的金属片，如果太多的电流经过，就会熔断，从而切断电流来保护电路免受损坏。

保险熔丝
这是位于强电流电路中的粗导线，如果电流超载将会熔断，从而保护电路。数字表示导线的横截面面积。

接地
指配线连接车身的点，从而给电路提供一个回路；如果没有接地，则电流不能流动。

1. 单丝
2. 双丝

前照灯
电流导致前照灯灯丝加热并发光。前照灯即可以有一根 (1) 灯丝也可以有两根 (2) 灯丝

喇叭
发出高频音频信号的电子设备。

点火线圈
将低压直流电转换为点燃火花塞的高压点火电流。

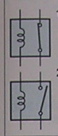
灯
流经灯丝的电流加热灯丝并使之发光。

LED（发光二极管）
基于电流，这些二极管不同于一般的灯，它发光但不产生热量。

模拟型仪表
电流将起动一个电磁线圈，这将会导致探针的移动，从而，提供一个相对于背景刻度的相关显示。

数字型仪表
电流起动 LED、LCD 或荧光显示器的一个或数个，将提供一个相关或数字的显示。

电机
这是将电能转换为机械能的电源装置，特别是对于旋转运动。

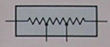


1. 正常关闭
2. 正常打开

继电器
基本上，这是可以正常关闭 (1) 或打开 (2) 的电子操作开关。
流经小线圈的电流将产生电磁场，会打开或关闭附属的开关。

双投继电器
这是电流流经一组接点或其它组的继电器。

电阻器
这是具有固定电阻的电子元件，安装在电路中来将电压降低到规定值。



抽头电阻器
这是有两个或多个不同不可调电阻值的电阻器。

滑变电阻器或可变电阻器
这是可调电阻比的可控电阻器。
有时也将之称为电位计或变阻器。

传感器（热敏电阻）
这个电阻器可以根据温度而改变它的电阻。

（舌簧开关型）

速度传感器
此传感器使用电磁脉冲来打开和关闭产生起动其它部件的信号的开关。

短路销
用于在接线盒中提供不可断的连接。

电磁阀
这是电磁线圈，当电流流经时，会形成一个磁场来移动活塞等等。

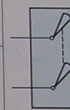
扬声器
这是可以根据电流产生声波的机电设备。

手动开关

1. 正常打开
2. 正常关闭

打开或关闭电路，从而停止 (1) 或流通 (2) 电流。

双投开关
这是电流持续流经一组接点或其它组的开关。



点火开关
这是键操作开关，它有数个位置允许各个电路变为可操作的，特别是初级点火电路。

刮水器停止开关
关闭刮水器开关时，此开关自动经刮水器返回到停止位置。

晶体管
这是典型的被用作电子式继电器的固体电路设备；根据“基数”提供的电压切断或流通电流。

配线

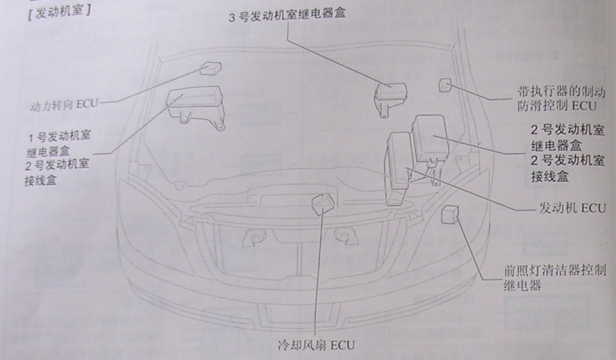
(1) 没有连接

(2) 接合

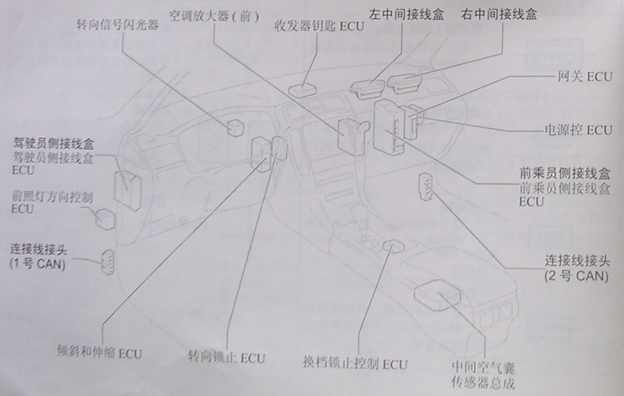
在电路图中，配线通常用直线表示。
在汇合处没有黑色圆点的交叉配线 (1) 没有接合。
在汇合处有黑色圆点或八角形 (○) 标记的交叉配线 (2) 结合。

F 继电器位置分布图

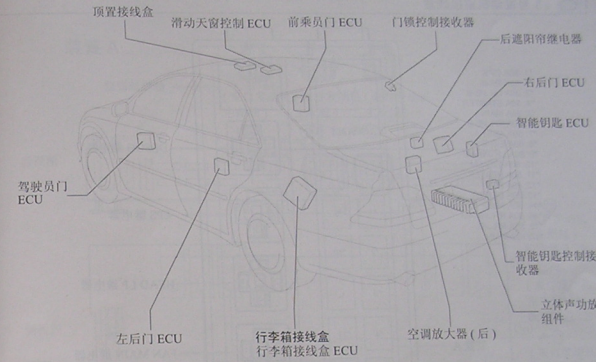
[发动机室]



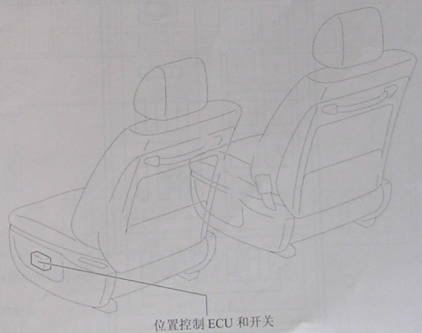
[仪表板]



[车身]



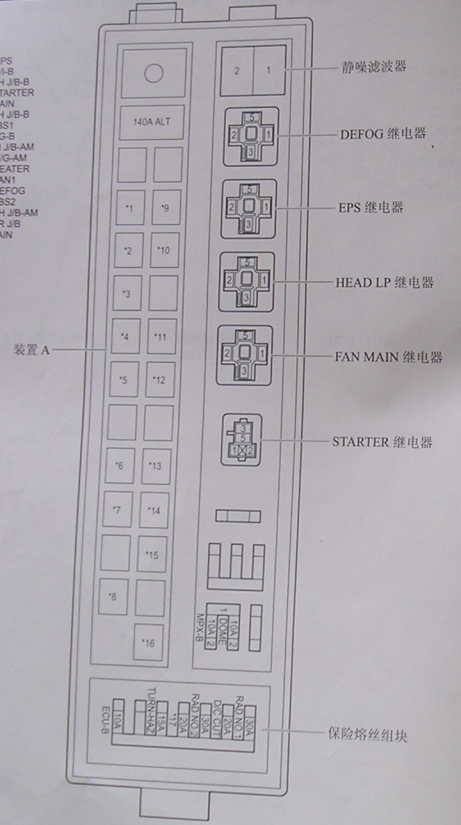
[座椅]



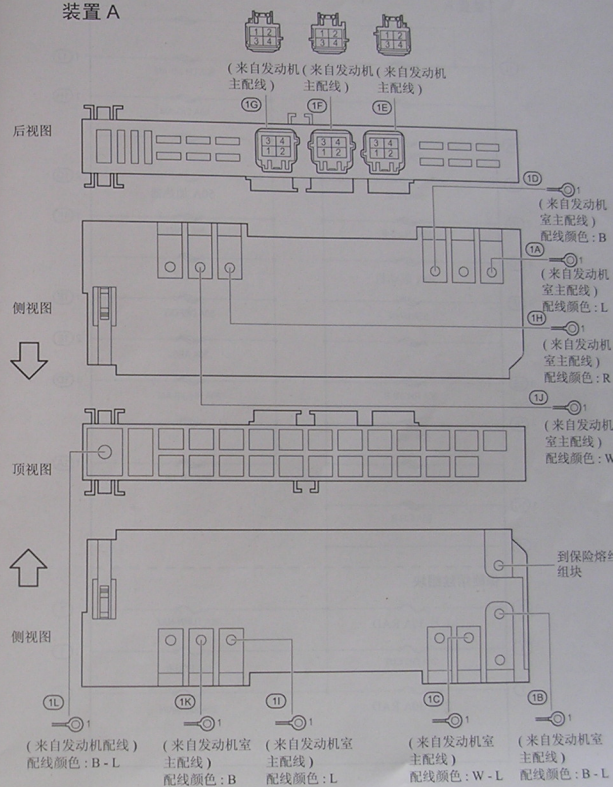
F 继电器位置分布图

① : 1 号发动机室继电器盒 ○ : 1 号发动机室接线盒	前悬架右支撑罩附近 (参见 20 页)

*1: 80A EPS
*2: 60A P/I-B
*3: 30A LH J/B-B
*4: 30A STARTER
*5: 30A MAIN
*6: 30A RH J/B-B
*7: 50A ABS1
*8: 60A E/G-B
*9: 80A LH J/B-AM
*10: 60A E/G-AM
*11: 50A HEATER
*12: 40A FAN1
*13: 50A DEFOG
*14: 30A ABS2
*15: 80A RH J/B-AM
*16: 80A RR J/B
*17: IG2 MAIN

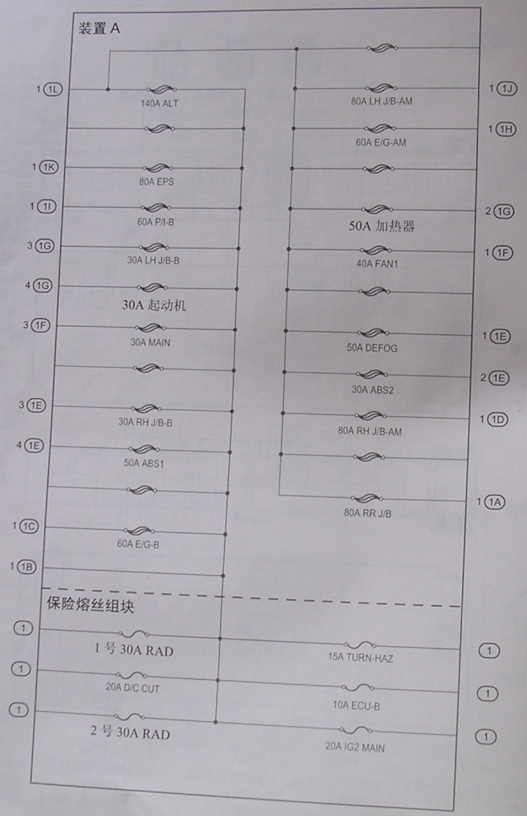


装置 A



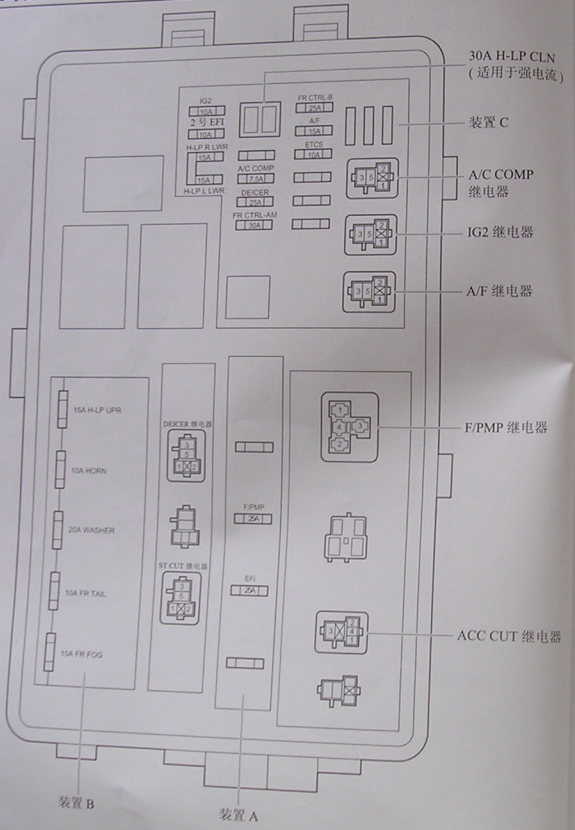
F 继电器位置分布图

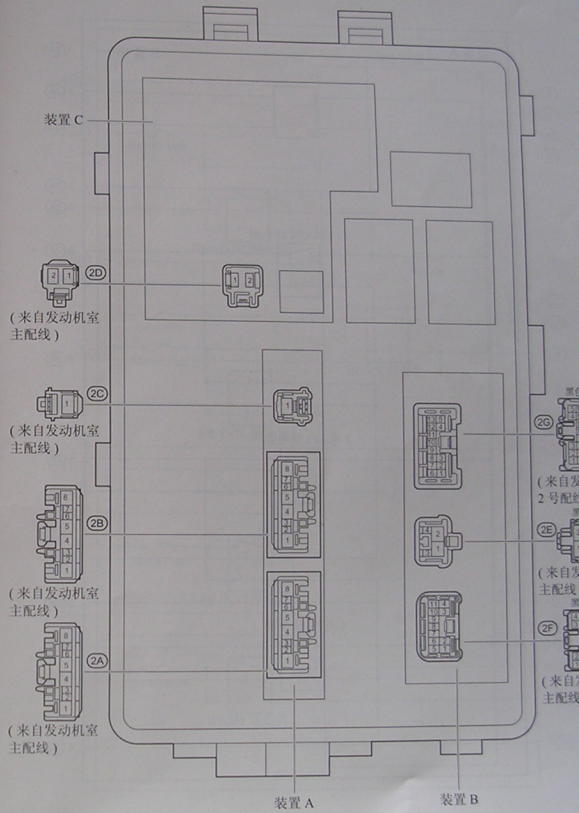
[1 号发动机室继电器盒和 1 号发动机室接线盒内电路]



F 继电器位置分布图

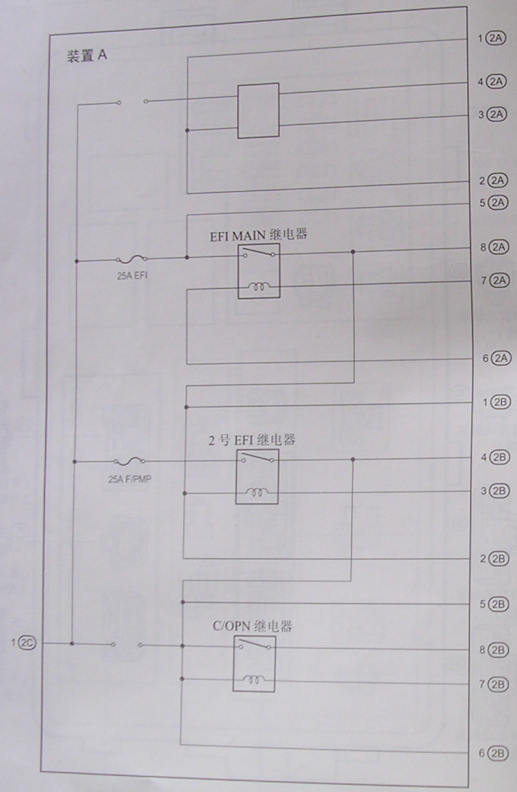
① : 2 号发动机室继电器盒 ⬭ : 2 号发动机室接线盒	左发动机室 (参见 20 页)

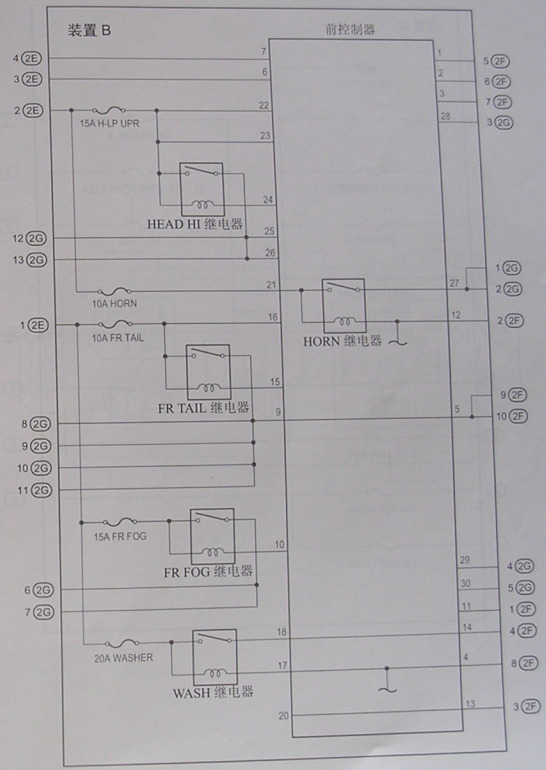




F 继电器位置分布图

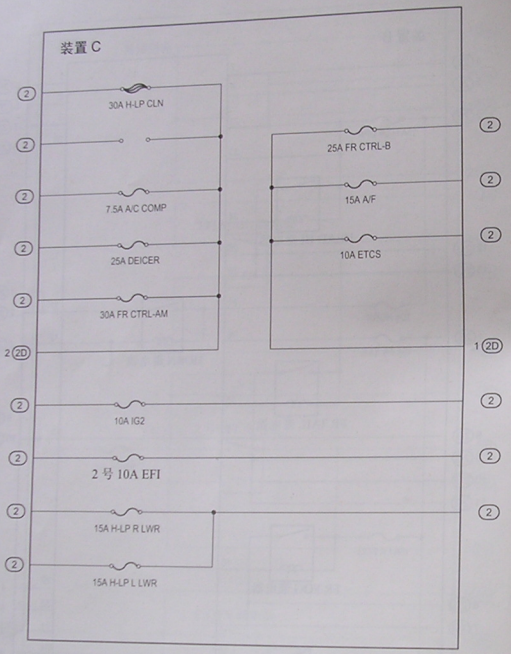
[2 号发动机室继电器盒和 2 号发动机室接线盒内电路]



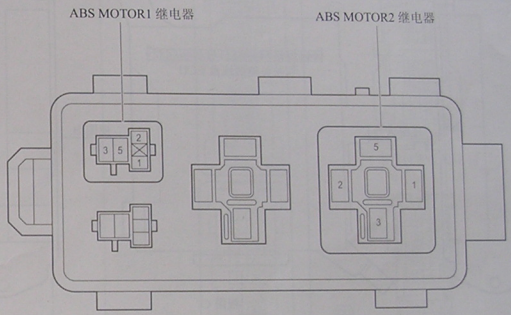


F 继电器位置分布图

[2 号发动机室继电器盒和 2 号发动机室接线盒内电路]



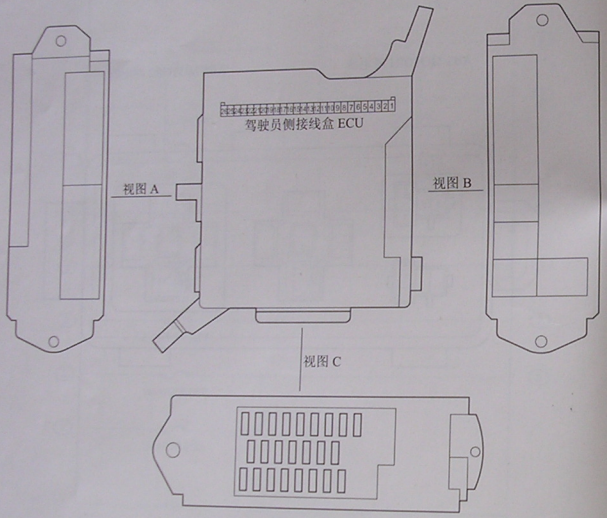
③ ：3 号发动机室继电器盒	前悬架左支撑罩附近 (参见 20 页)



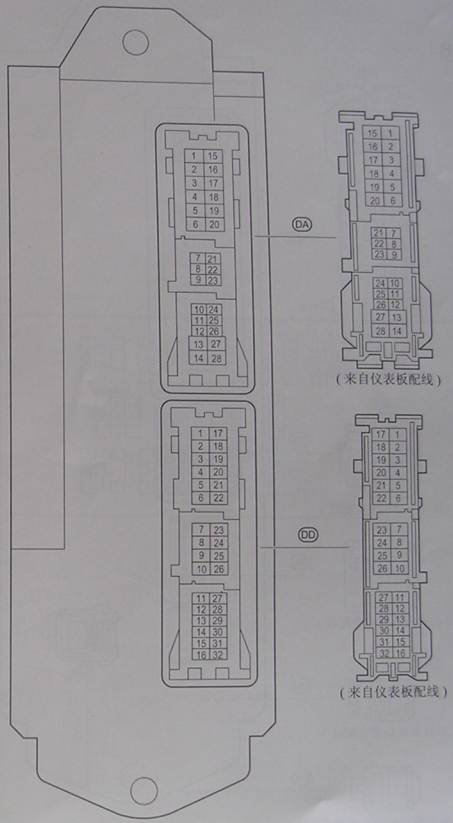
F 继电器位置分布图

：驾驶员侧接线盒

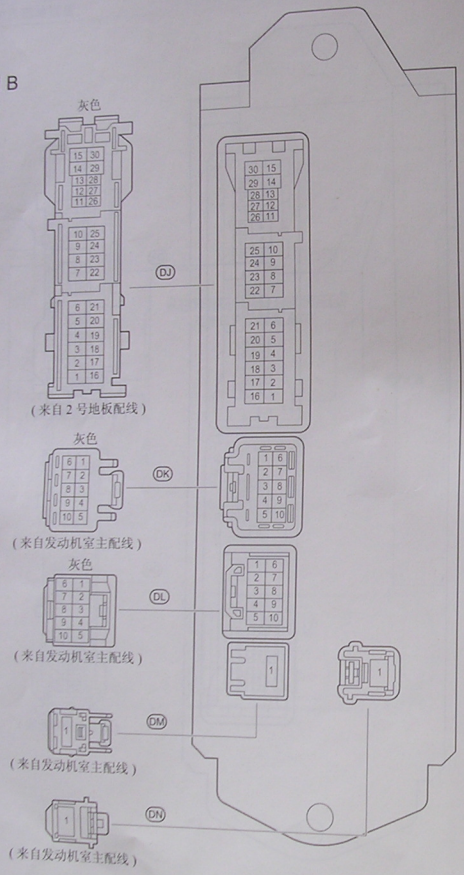
左前围板侧板（参见 20 页）



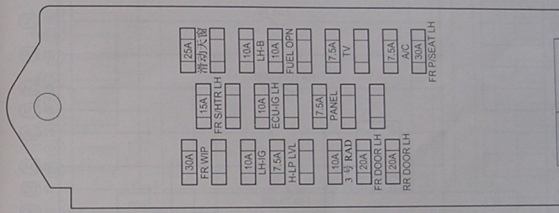
视图 A



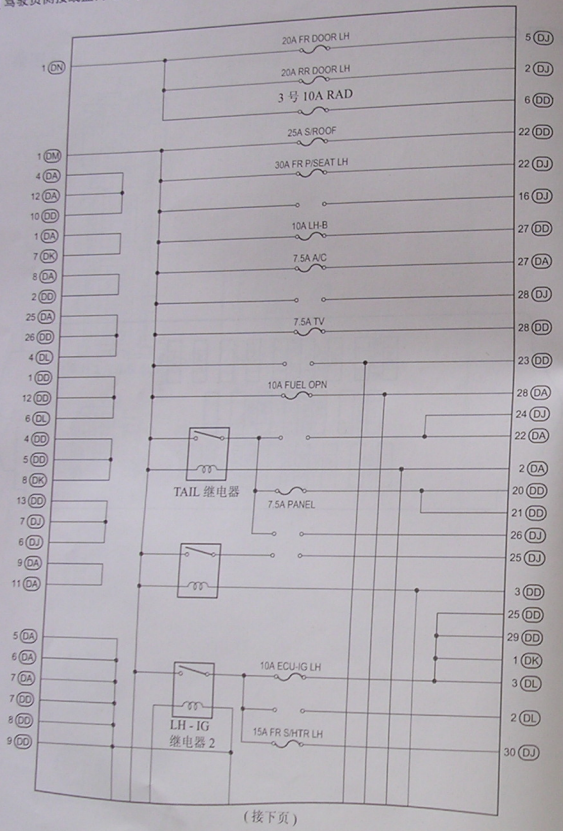
视图 B


灰色
(来自 2 号地板配线)
DJ
灰色
DK
(来自发动机室主配线)
灰色
DL
(来自发动机室主配线)
DM
(来自发动机室主配线)
DN
(来自发动机室主配线)

视图 C


25A 滑动门电机
10A LH-B
10A FUEL OPN
7.5A TV
7.5A A/C
30A FR P/SEAT LH
15A FR SHTR LH
10A ECU-IG LH
7.5A PANEL
30A FR WIP
10A LH-IG
7.5A H-LP LVL
10A 3 号 RAD
20A FR DOOR LH
20A RR DOOR LH

[驾驶员侧接线盒内电路]



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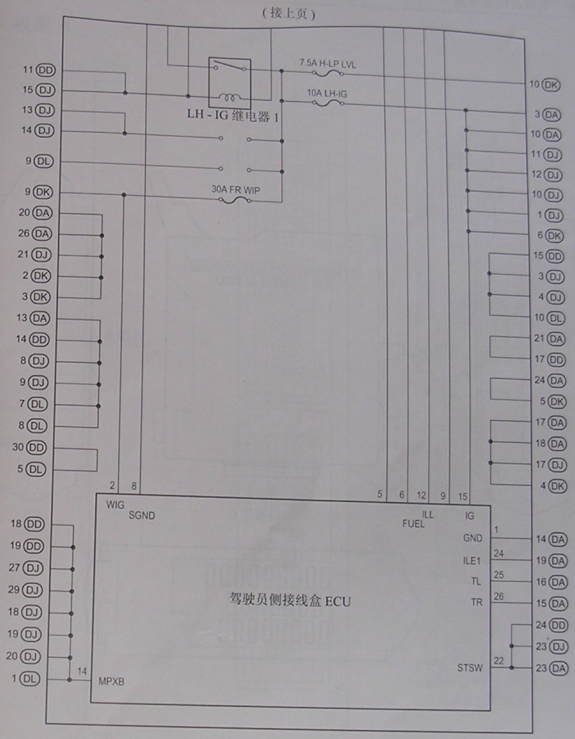
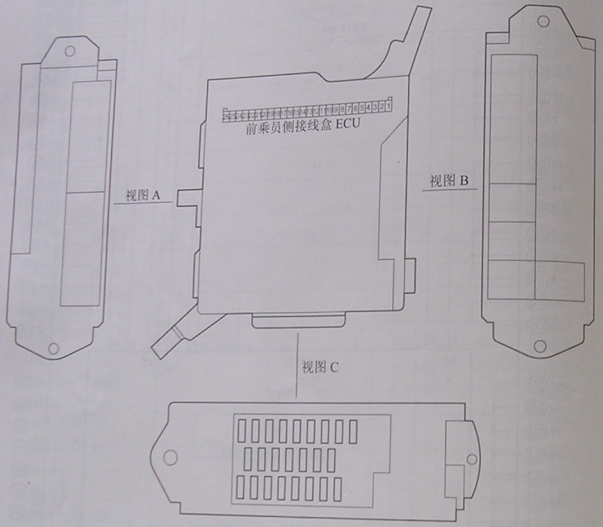


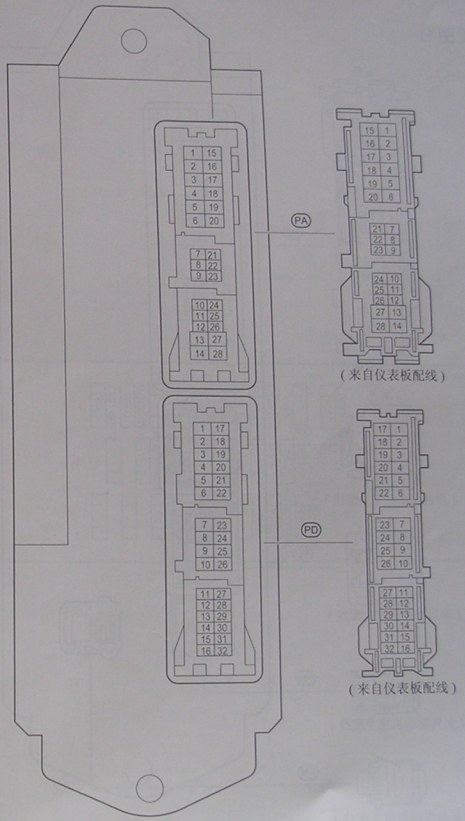
F 继电器位置分布图

：前乘员侧接线盒

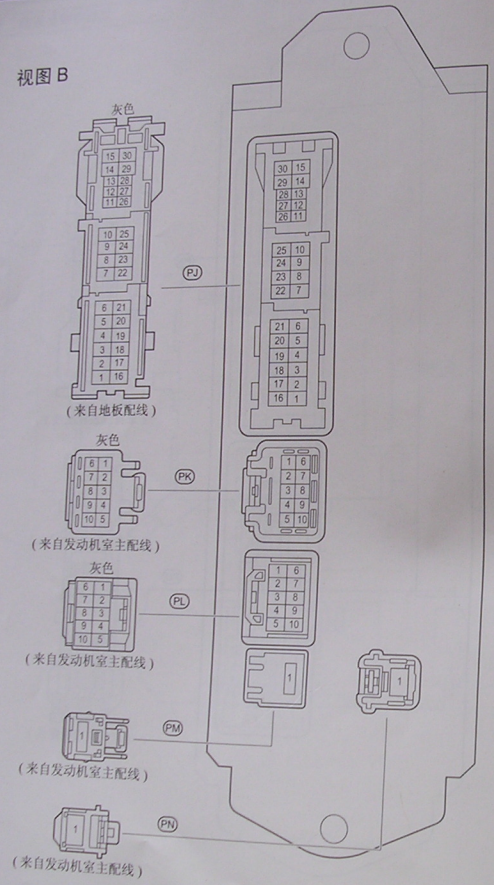
右前围板侧板（参见 20 页）



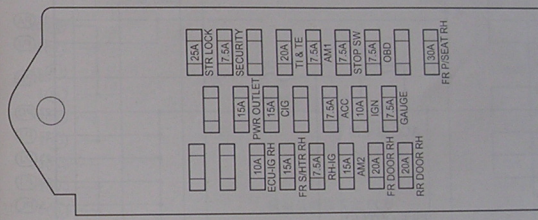
视图 A



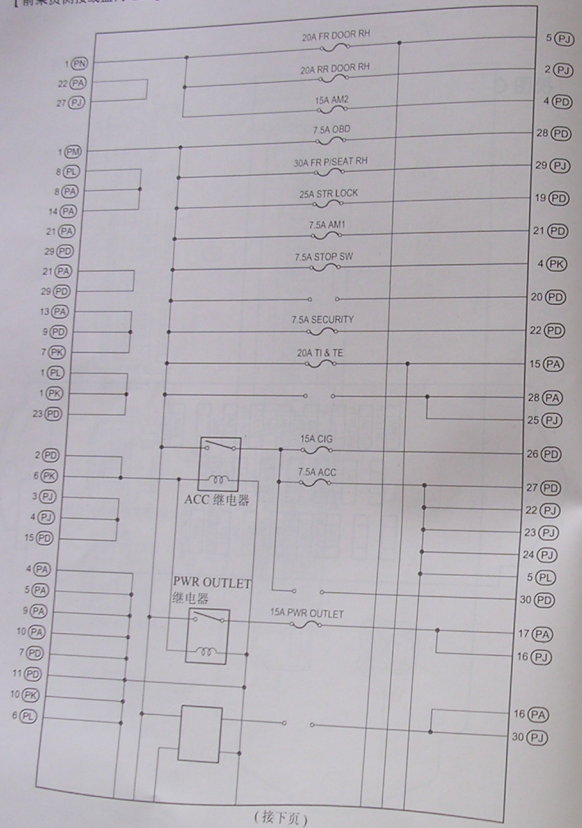
视图 B


灰色
PJ
（来自地板配线）
灰色
PK
（来自发动机室主配线）
灰色
PL
（来自发动机室主配线）
PM
（来自发动机室主配线）
PN
（来自发动机室主配线）

视图 C


25A STR LOCK
7.5A SECURITY
20A TI& TE
7.5A AM1
7.5A STOP SW
7.5A OBD
30A FR P/SEAT RH
15A PWR OUTLET
15A CIG
7.5A ACC
10A IGN
7.5A GAUGE
10A ECU-IG RH
15A FR SHTR RH
7.5A RH-IG
15A AM2
20A FR DOOR RH
20A RR DOOR RH

[前乘员侧接线盒内电路]



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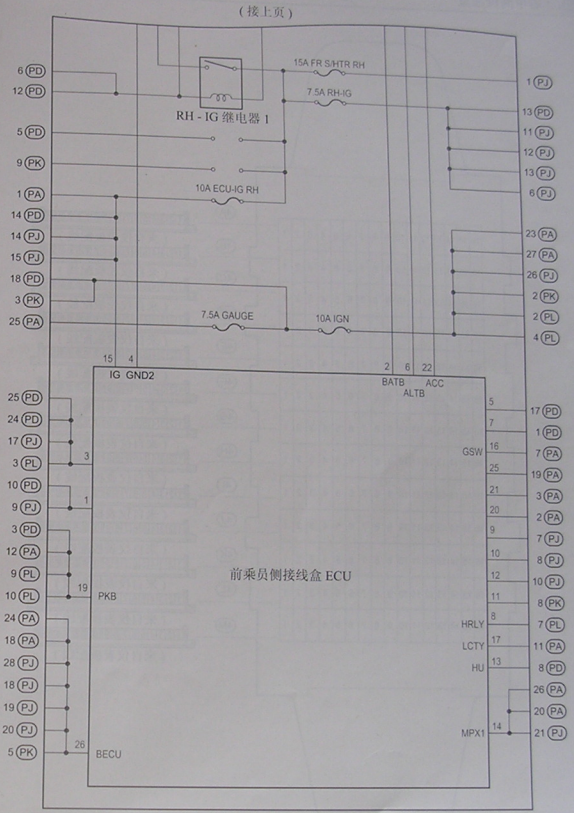
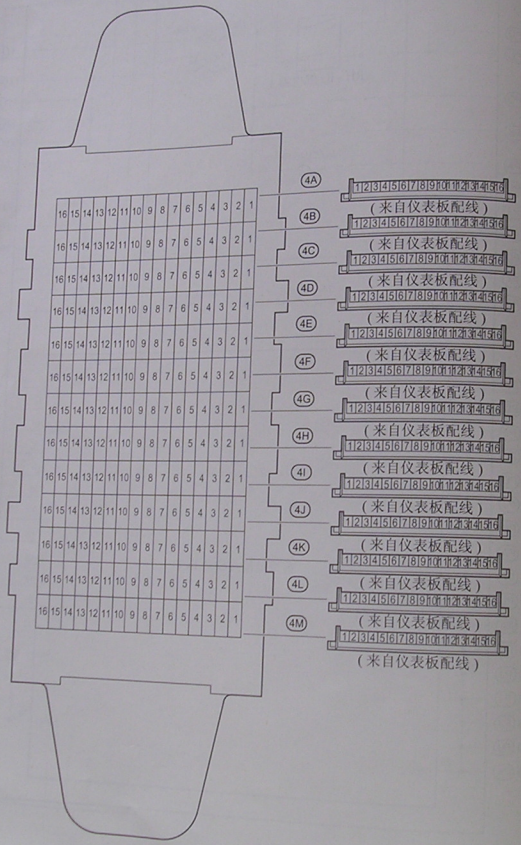


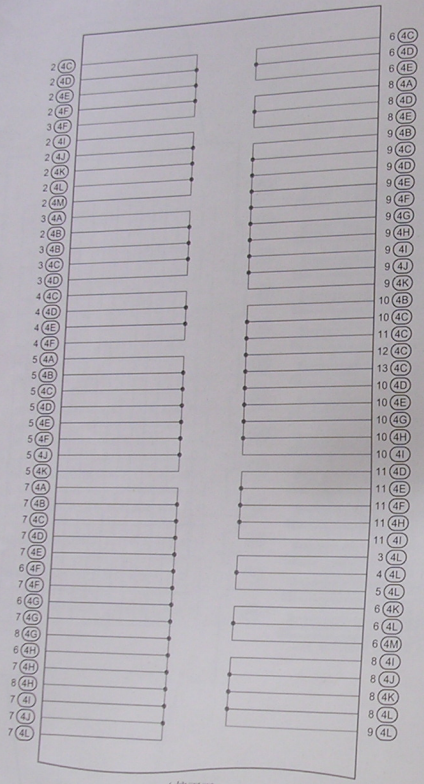
F 继电器位置分布图

：右中间接线盒

仪表板加强件右侧（参见 20 页）



[右中间接线盒内电路]



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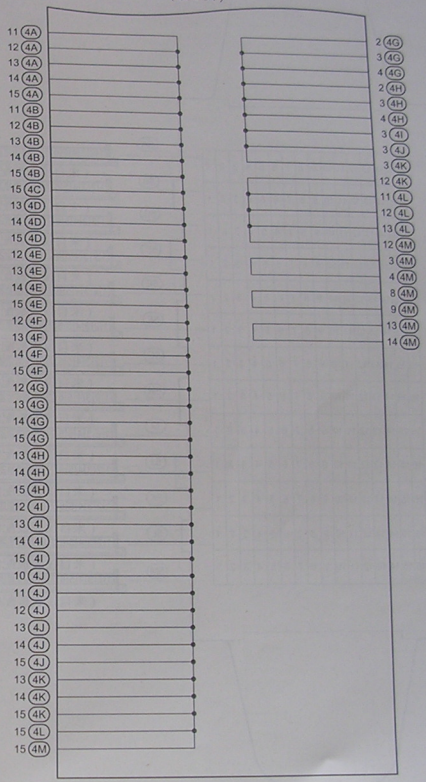
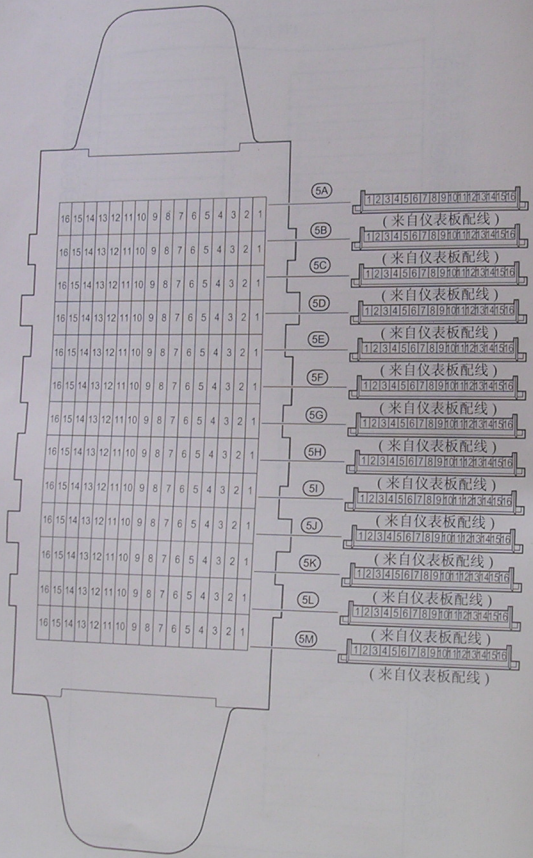


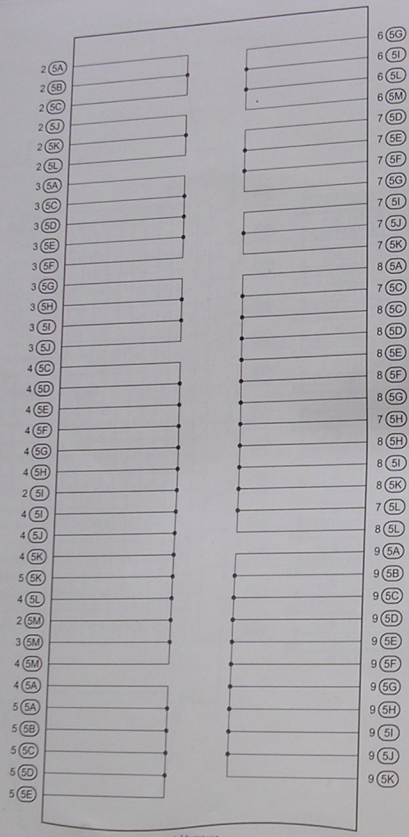
F 继电器位置分布图

：左中间接线盒

仪表板加强件右侧（参见 20 页）



[左中间接线盒]



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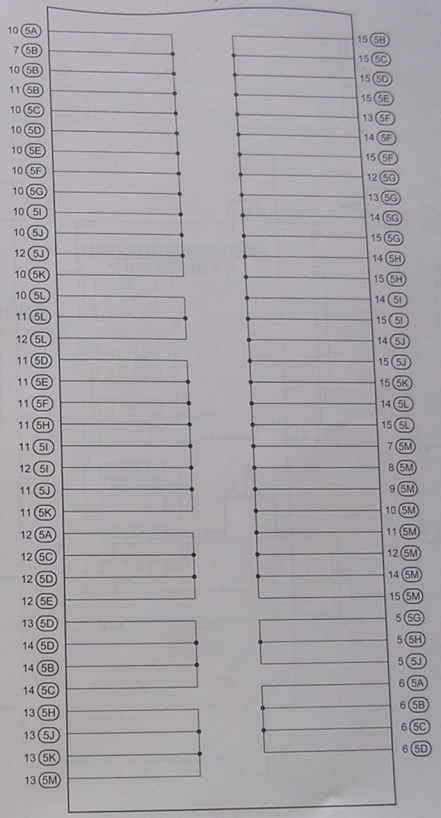
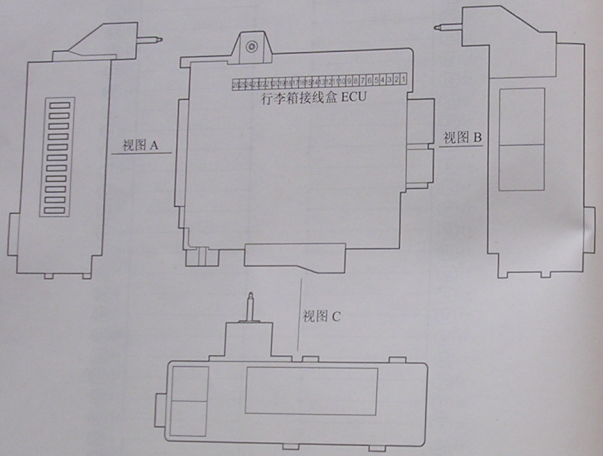


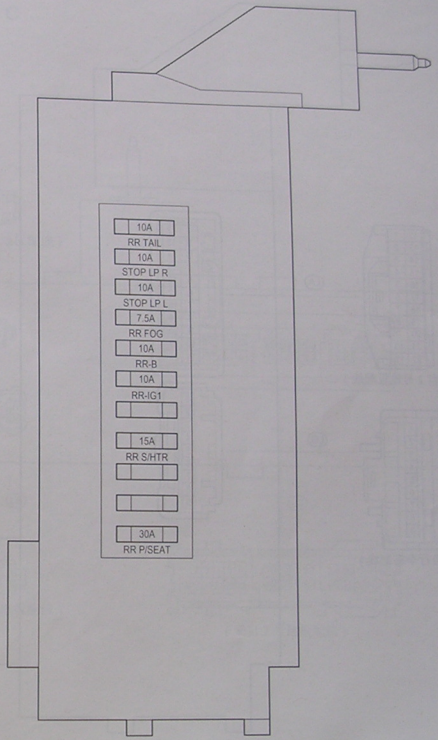
F 继电器位置分布图

：行李箱接线盒

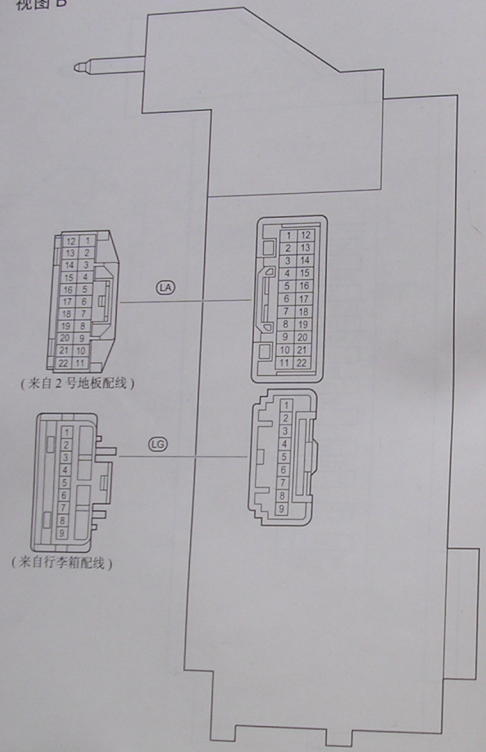
行李箱左侧（参见 21 页）



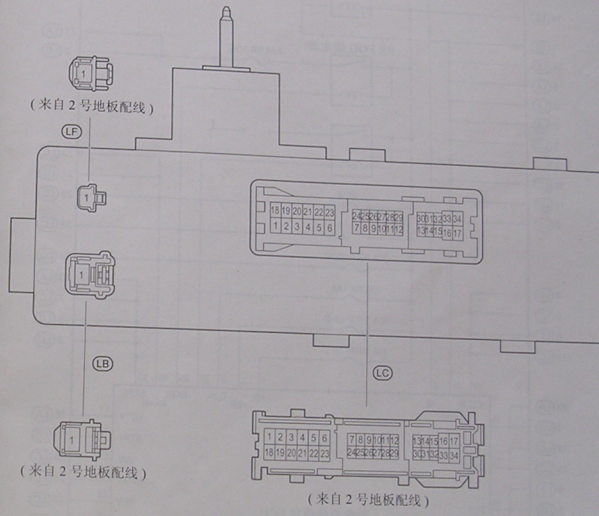
视图 A



视图 B

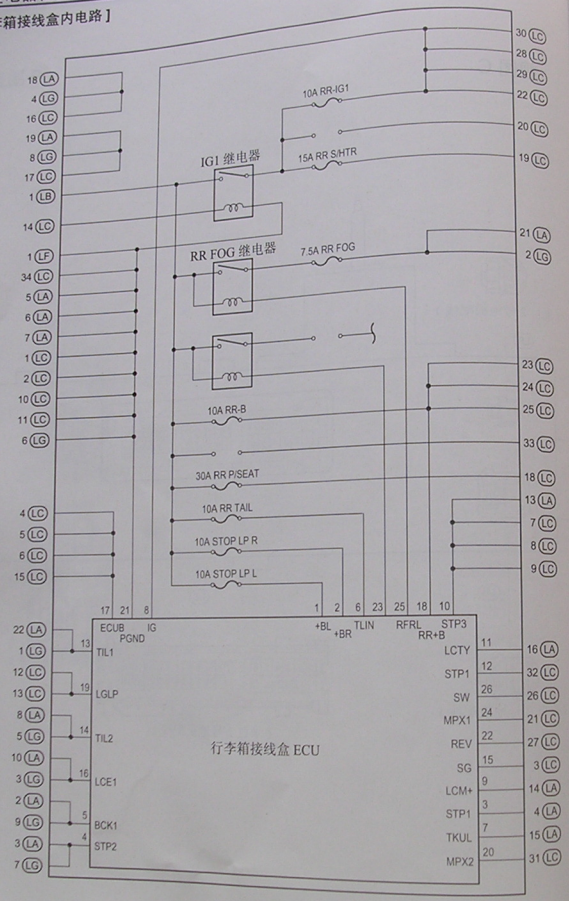


视图 C



F 继电器位置分布图

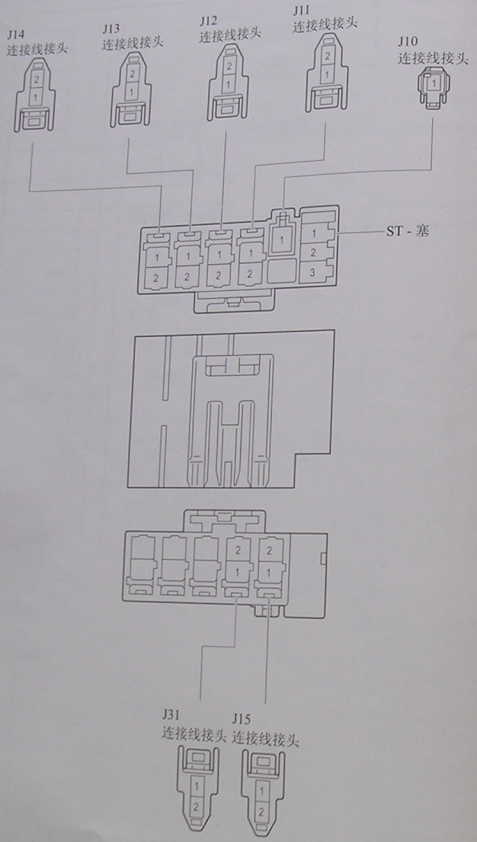
[行李箱接线盒内电路]



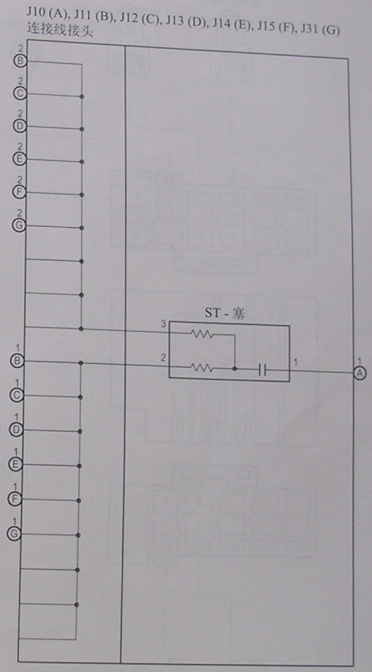
F 继电器位置分布图

连接线接头　　左踏脚板 (参见 20 页)

(1 号 CAN)



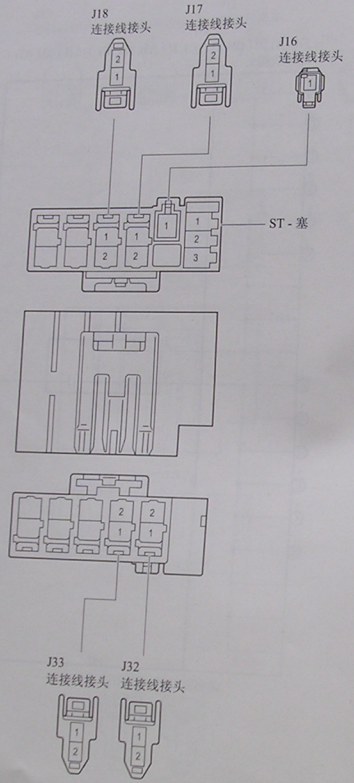
[连接线接头 (1 号 CAN) 内电路]



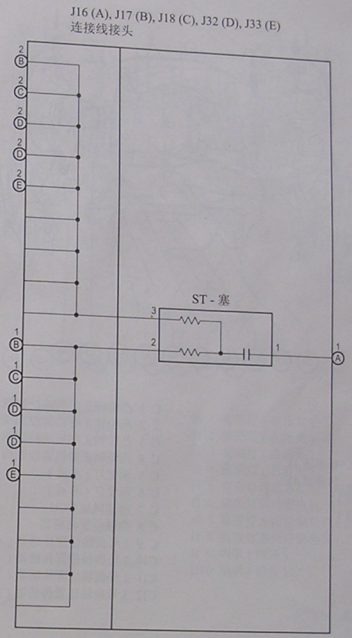
F 继电器位置分布图

连接线接头 (2 号 CAN)

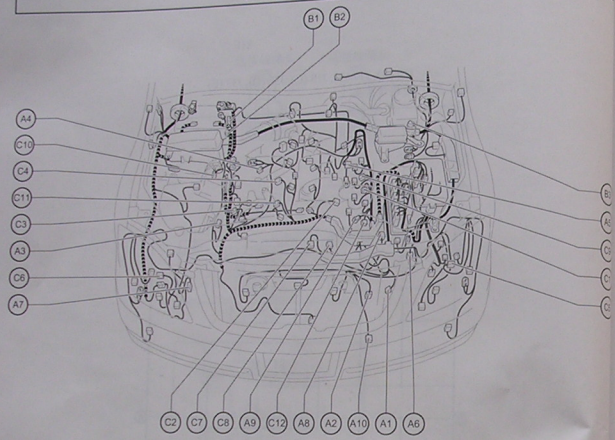
右踏脚板 (参见 20 页)



[连接线接头 (2 号 CAN) 内电路]



发动机室内零件的位置

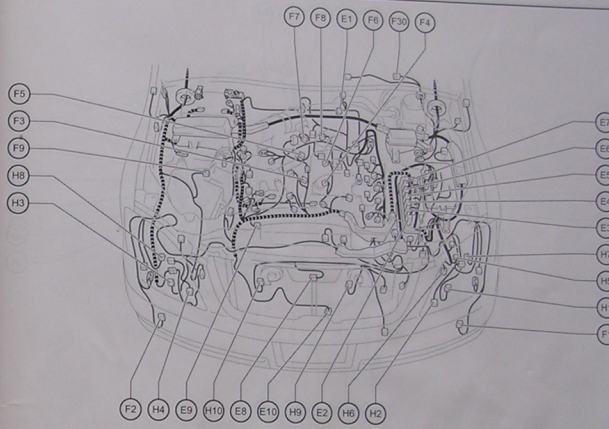


A 1 空调压缩机
A 2 空调压力传感器
A 3 空气流量计
A 4 空燃比传感器 (1 排，传感器 1)
A 5 空燃比传感器 (2 排，传感器 1)
A 6 空气囊传感器 (左前)
A 7 空气囊传感器 (右前)
A 8 交流发电机
A 9 交流发电机
A10 环境温度传感器

B 1 蓄电池电流传感器
B 2 蓄电池温度计传感器
B 3 制动液液面警告开关

C 1 凸轮轴正时机油控制阀 (左侧排气)
C 2 凸轮轴正时机油控制阀 (左侧进气)
C 3 凸轮轴正时机油控制阀 (右侧排气)
C 4 凸轮轴正时机油控制阀 (右侧进气)
C 5 示宽灯 (左前)
C 6 示宽灯 (右前)
C 7 冷却风扇 ECU
C 8 曲轴位置传感器
C 9 2 号曲轴位置传感器 (左侧排气)
C10 2 号曲轴位置传感器 (右侧排气)
C11 2 号曲轴位置传感器 (右侧进气)
C12 3 号曲轴位置传感器 (左侧进气)

发动机室内零件的位置

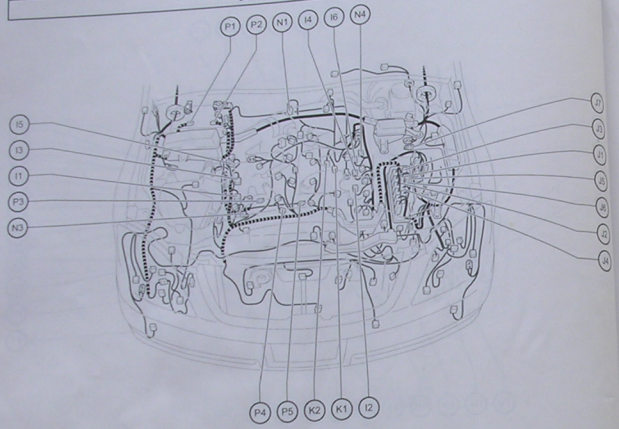


E 1 ECT 电磁阀
E 2 发动机 ECU
E 3 发动机 ECU
E 4 发动机 ECU
E 5 发动机 ECU
E 6 发动机 ECU
E 7 发动机 ECU
E 8 发动机罩灯控开关
E 9 机油油位传感器
E10 机油压力开关

F 1 雾灯 (左前)
F 2 雾灯 (右前)
F 3 喷油嘴 (1 号)
F 4 喷油嘴 (2 号)
F 5 喷油嘴 (3 号)
F 6 喷油嘴 (4 号)
F 7 喷油嘴 (5 号)
F 8 喷油嘴 (6 号)
F 9 燃油泵电阻器
F30 前刮水器除冰器

H 1 前照灯 (左远光)
H 2 前照灯 (左近光)
H 3 前照灯 (右远光)
H 4 前照灯 (右近光)
H 5 前照灯清洁器控制继电器
H 6 前照灯清洁器电机
H 7 前照灯方向控制电机 (左)
H 8 前照灯方向控制电机 (右)
H 9 喇叭 (高音)
H10 喇叭 (低音)

发动机室内零件的位置



I 1 点火线圈 (1 号)
I 2 点火线圈 (2 号)
I 3 点火线圈 (3 号)
I 4 点火线圈 (4 号)
I 5 点火线圈 (5 号)
I 6 点火线圈 (6 号)

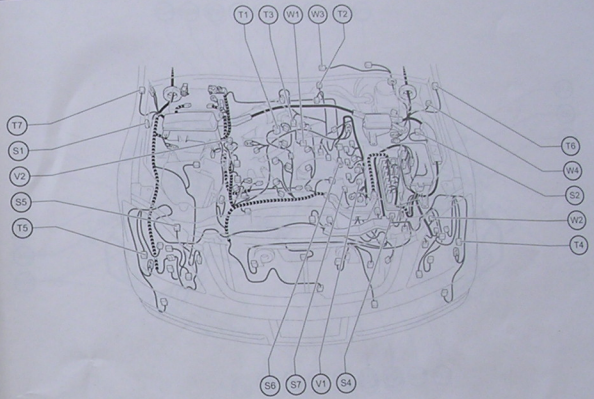
J 1 连接线接头
J 2 连接线接头
J 3 连接线接头
J 4 连接线接头
J 5 连接线接头
J 6 连接线接头
J 7 连接线接头

K 1 爆震控制传感器 (1 排)
K 2 爆震控制传感器 (2 排)

N 1 空档起动开关
N 3 静噪滤波器 (1 排点火)
N 4 静噪滤波器 (2 排点火)

P 1 动力转向 ECU
P 2 动力转向 ECU
P 3 动力转向电机
P 4 动力转向电机
P 5 动力转向扭矩传感器

发动机室内零件的位置



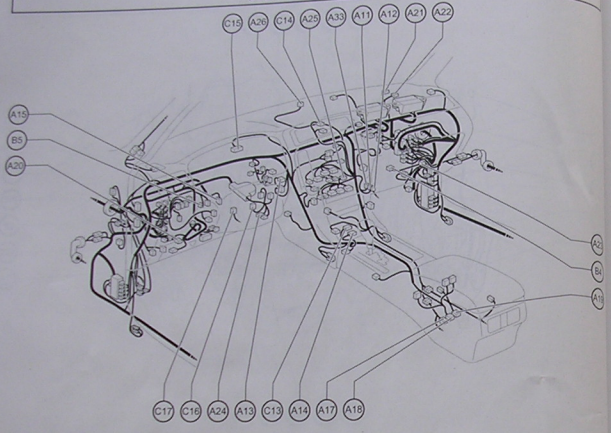
S 1 安全喇叭
S 2 带执行器的制动防滑控制 ECU
S 4 速度传感器 (左前)
S 5 速度传感器 (右前)
S 6 起动机
S 7 起动机

T 1 节气门体总成
T 2 变速器转速传感器 (中间轴齿轮)
T 3 变速器转速传感器 (涡轮)
T 4 转向信号灯 (左前)
T 5 转向信号灯 (右前)
T 6 转向信号灯 (左前侧)
T 7 转向信号灯 (右前侧)

V 1 VSV (ACIS)
V 2 VSV (EVAP)

W 1 水泵传感器
W 2 风挡玻璃洗涤器电机
W 3 风挡玻璃刮水器电机
W 4 无线门锁蜂鸣器

仪表板内零件的位置

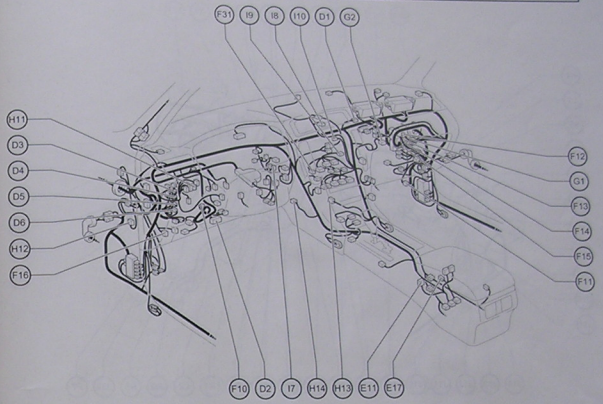


A11 空调放大器 (前)
A12 空调放大器 (前)
A13 空调室内温度传感器
A14 自动变速器换档杆照明
A15 加速踏板位置传感器
A17 中央空气囊传感器总成
A18 中央空气囊传感器总成
A19 中央空气囊传感器总成
A20 空气囊引爆管 (驾驶员侧膝盖空气囊)
A21 空气囊引爆管 (前乘员侧空气囊总成)
A22 空气囊引爆管 (前乘员侧空气囊总成)
A23 空气囊引爆管 (前乘员侧膝盖空气囊)
A24 空气囊引爆管 (方向盘衬垫)
A25 天线放大器
A26 自动灯控传感器
A33 空调放大器 (前)

B 4 鼓风机电机 (前)
B 5 制动踏板踏感开关

C13 点烟器
C14 时钟
C15 组合仪表
C16 组合开关
C17 组合开关

仪表板内零件的位置



D 1 二级管
D 2 DLC3
D 3 驾驶员侧接线盒 ECU
D 4 驾驶员侧接线盒 ECU
D 5 驾驶员侧接线盒 ECU
D 6 驾驶员侧接线盒 ECU

E11 ECT 模式选择开关
E17 电子钥匙振荡器 (后控制台)

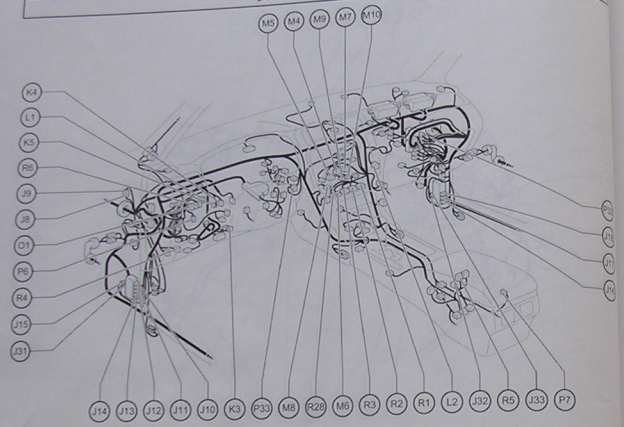
F10 足部照明灯 (左前)
F11 足部照明灯 (右前)
F12 前乘员侧接线盒 ECU
F13 前乘员侧接线盒 ECU
F14 前乘员侧接线盒 ECU
F15 前乘员侧接线盒 ECU
F16 加油口盖开启器开关
F31 前刮水器除冰器开关

G 1 网关 ECU
G 2 手套箱灯

H11 前照灯清洁器开关
H12 前照灯方向控制 ECU
H13 加热型氧传感器 (1 排，传感器 2)
H14 加热型氧传感器 (2 排，传感器 2)

I 7 点火开关
I 8 仪表板调节器总成
I 9 集成控制面板总成
I 10 离子发生器

仪表板内零件的位置



J 8 连接线接头
J 9 连接线接头
J 10 连接线接头
J 11 连接线接头
J 12 连接线接头
J 13 连接线接头
J 14 连接线接头
J 15 连接线接头
J 16 连接线接头
J 17 连接线接头
J 18 连接线接头
J 31 连接线接头
J 32 连接线接头
J 33 连接线接头

K 3 钥匙取消开关
K 4 钥匙孔
K 5 钥匙孔

L 1 灯控可变电阻器
L 2 行李箱门开启器取消开关

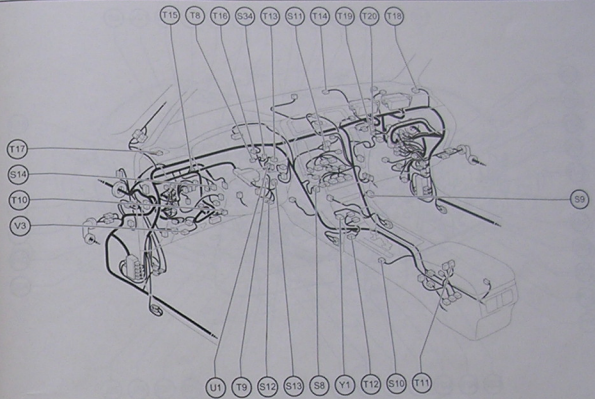
M 4 复式显示器
M 5 复式显示器
M 6 复式显示器
M 7 复式显示器
M 8 复式显示器
M 9 复式显示器
M10 复式显示器

O 1 外后视镜开关

P 6 驻车制动开关
P 7 电源插座 (前)
P 32 电源控制 ECU
P 33 电源开关

R 1 收音机总成
R 2 收音机总成
R 3 收音机总成
R 4 后电动座椅开关 (回位控制)
R 5 后遮阳帘开关
R 6 后视镜收缩器开关
R 28 收音机总成

仪表板内零件的位置



S 8 座椅加热器开关 (左前)
S 9 座椅加热器开关 (右前)
S10 换档锁止控制 ECU
S11 扬声器 (中间)
S12 螺旋电缆
S13 转向传感器
S14 制动灯开关
S34 转向锁止 ECU

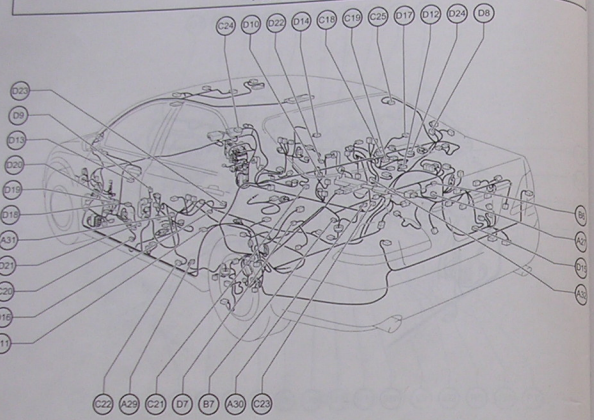
T 8 倾斜和伸缩 ECU
T 9 倾斜电机
T10 轮胎压力警告开关
T11 牵引控制开关
T12 变速器控制开关
T13 收发器钥匙放大器
T14 收发器钥匙 ECU
T15 计程器开关
T16 转向信号闪光器
T17 高音喇叭 (左前)
T18 高音喇叭 (右前)
T19 电视摄像头控制器
T20 电视摄像头控制器

U 1 未锁警告开关

V 3 VSC 警告蜂鸣器

Y 1 偏移率传感器

车身内零件的位置



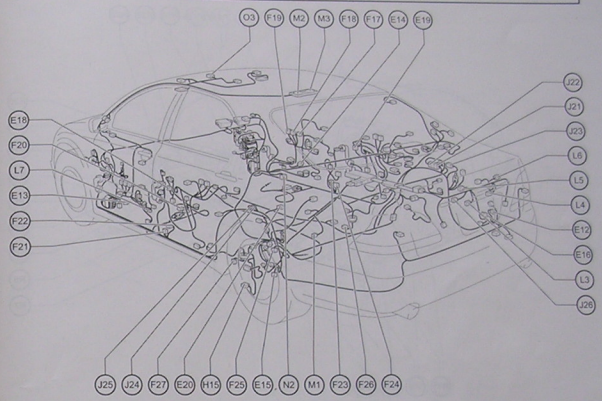
A27 空调放大器 (后)
A29 空气囊传感器 (左后)
A30 空气囊传感器 (右后)
A31 烟灰缸照明 (左后)
A32 烟灰缸照明 (右后)

B 6 鼓风机电机 (后)
B 7 鼓风机电阻器 (后)

C18 中央制动灯
C19 中央制动灯
C20 门控灯 (左前门)
C21 门控灯 (右前门)
C22 门控灯 (左后门)
C23 门控灯 (右后门)
C24 帘式空气囊引爆管 (左)
C25 帘式空气囊引爆管 (右)

D 7 阻尼器伺服电机 (后空气混合)
D 8 门控接收器
D 9 门控灯开关 (驾驶员侧)
D10 门控灯开关 (前乘员侧)
D11 门控灯开关 (左后)
D12 门控灯开关 (右后)
D13 门锁总成 (驾驶员侧)
D14 门锁总成 (前乘员侧)
D15 门锁总成 (行李箱)
D16 门锁总成 (左后)
D17 门锁总成 (右后)
D18 驾驶员门 ECU
D19 驾驶员门 ECU
D20 驾驶员门 ECU
D21 车门外侧把手 (左前)
D22 车门外侧把手 (右前)
D23 车门外侧把手 (左后)
D24 车门外侧把手 (右后)

车身内零件的位置



E12 电子钥匙天线 (行李箱)
E13 电子钥匙振荡器 (左前门)
E14 电子钥匙振荡器 (右前门)
E15 电子钥匙振荡器 (行李箱内侧)
E16 电子钥匙振荡器 (行李箱外侧)
E18 电子钥匙振荡器 (左后门)
E19 电子钥匙振荡器 (右后门)
E20 电子钥匙振荡器 (后座椅)

F 17 前乘员门 ECU
F 18 前乘员门 ECU
F 19 前乘员门 ECU
F 20 前座椅内安全带 (驾驶员侧)
F 21 前座椅外安全带 (左)
F 22 前座椅外安全带 (左)
F 23 前座椅外安全带 (右)
F 24 前座椅外安全带 (右)
F 25 加油口盖开启器电机
F 26 燃油量传感器
F 27 吸油泵和计量表总成

H15 高度控制传感器

J 21 连接线接头
J 22 连接线接头
J 23 连接线接头
J 24 连接线接头
J 25 连接线接头
J 26 连接线接头

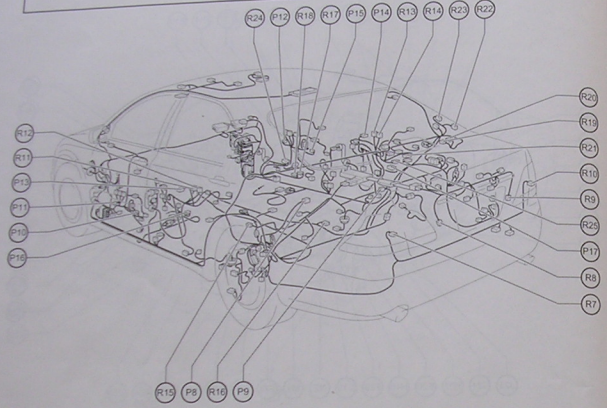
L 3 牌照灯 (左)
L 4 牌照灯 (右)
L 5 行李箱门锁芯
L 6 行李箱门锁
L 7 行李箱门开启器开关 (左前门)

M 1 电磁阀 (后)
M 2 地图灯 (左)
M 3 地图灯 (右)

N 2 静噪滤波器 (中央制动灯)

O 3 顶置接线盒

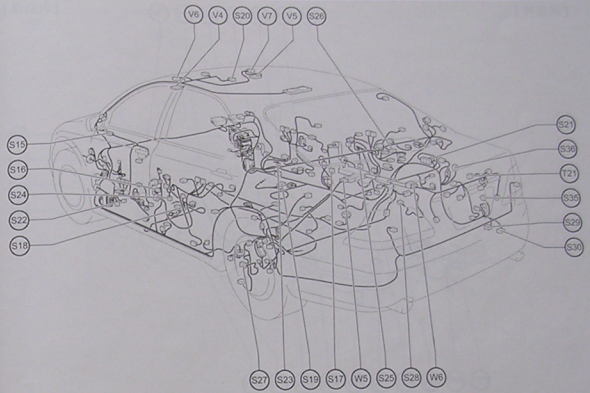
车身内零件的位置



P 8 电动座椅电机(左后座椅倾斜控制)
P 9 电动座椅电机(右后座椅倾斜控制)
P10 电动窗主开关
P11 电动窗升降调节器电机(驾驶员侧)
P12 电动窗升降调节器电机(前乘员侧)
P13 电动窗升降调节器电机(左后)
P14 电动窗升降调节器电机(右后)
P15 电动窗开关(前乘员侧)
P16 电动窗开关(左后)
P17 电动窗开关(右后)

R 7 后组合灯(左)
R 8 后组合灯(左)
R 9 后组合灯(右)
R10 后组合灯(右)
R11 左后门 ECU
R12 左后门 ECU
R13 右后门 ECU
R14 右后门 ECU
R15 后座椅内安全带(左)
R16 后座椅内安全带(右)
R17 后座椅外安全带(左)
R18 后座椅外安全带(左)
R19 后座椅外安全带(右)
R20 后座椅外安全带(右)
R21 后遮阳帘继电器
R22 后窗除雾器
R23 后窗除雾器
R24 后窗除雾器
R25 室内灯(行李箱)

车身内零件的位置



S15 座椅位置存储器开关
S16 侧空气囊传感器(左)
S17 侧空气囊传感器(右)
S18 侧空气囊引爆管(左)
S19 侧空气囊引爆管(右)
S20 滑动天窗控制 ECU
S21 烟雾传感器
S22 扬声器(左前门)
S23 扬声器(右前门)
S24 扬声器(左后门)
S25 扬声器(右后门)
S26 扬声器(低音喇叭)
S27 速度传感器(左后)
S28 速度传感器(右后)
S29 立体声功放组件
S30 立体声功放组件
S35 智能钥匙控制接收器
S36 智能钥匙 ECU

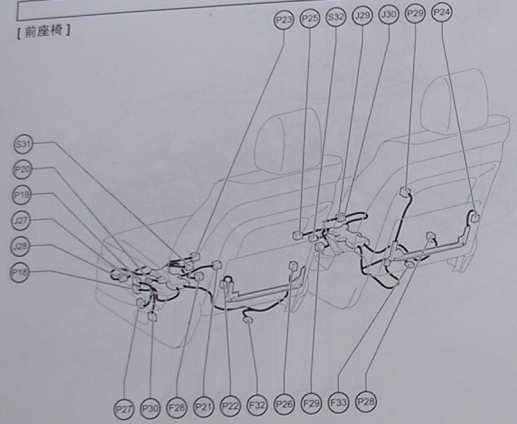
T21 电视摄像头(后)

V 4 梳妆灯(左)
V 5 梳妆灯(右)
V 6 梳妆灯开关(左)
V 7 梳妆灯开关(右)

W 5 线束轴
W 6 线束轴

座椅内零件的位置

[前座椅]



F28 前座椅内安全带 (驾驶员侧)
F29 前座椅内安全带 (前乘员侧)
F32 足部照明灯 (左后)
F33 足部照明灯 (右后)

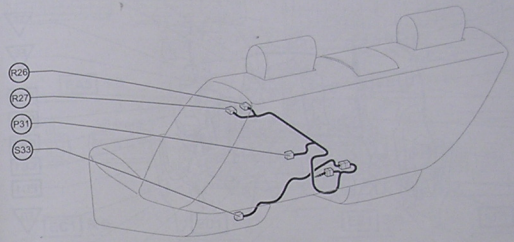
J27 连接线接头
J28 连接线接头
J29 连接线接头
J30 连接线接头

P18 位置控制 ECU 和开关
P19 位置控制 ECU 和开关
P20 电动座椅电机 (驾驶员座椅前垂直控制)
P21 电动座椅电机 (驾驶员座椅后垂直控制)
P22 电动座椅电机 (驾驶员座椅倾斜控制)
P23 电动座椅电机 (驾驶员座椅滑动控制)
P24 电动座椅电机 (前乘员座椅倾斜控制)
P25 电动座椅电机 (前乘员座椅滑动控制)
P26 电动座椅电机 (腰部支撑)
P27 电动座椅开关 (驾驶员座椅)
P28 电动座椅开关 (前乘员座椅)
P29 电动座椅开关 (前乘员座椅)
P30 电动座椅开关 (腰部支撑)

S31 座椅加热器 (左前)
S32 座椅加热器 (右前)

座椅内零件的位置

[后座椅]



P31 电源插座 (后)

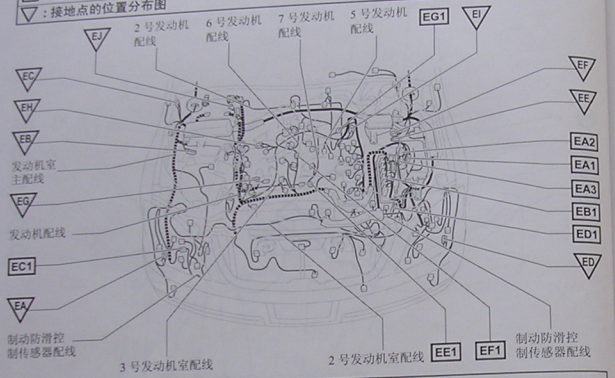
S33 座椅加热器 (后)

R26 后控制器
R27 后控制器

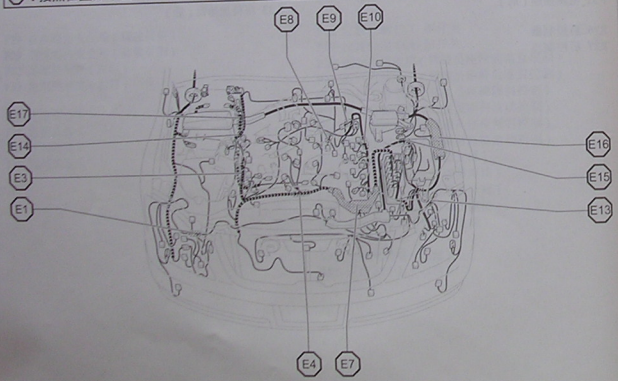
G 电路图

□：连接线束的连接器和线束位置分布图

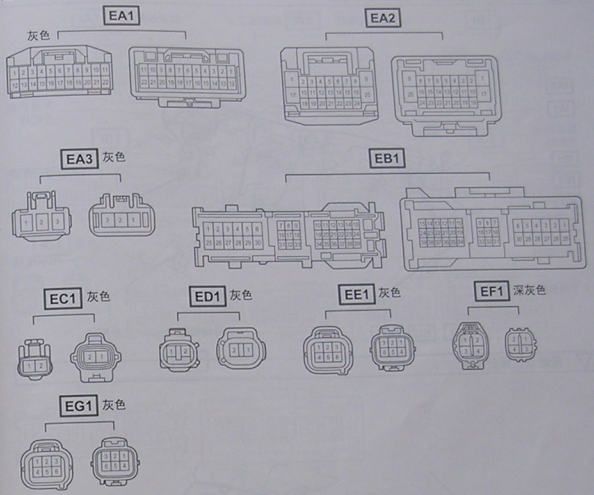
▽：接地点的位置分布图



○：接点位置分布图

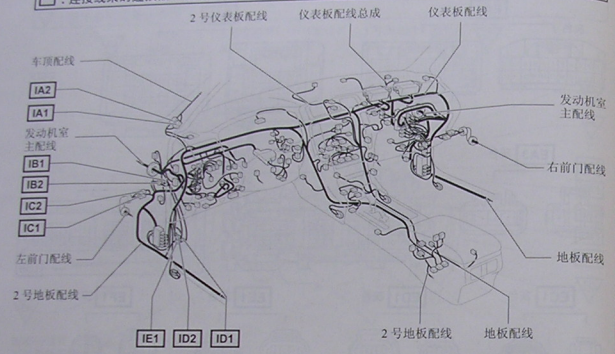


连接线束的连接器和线束

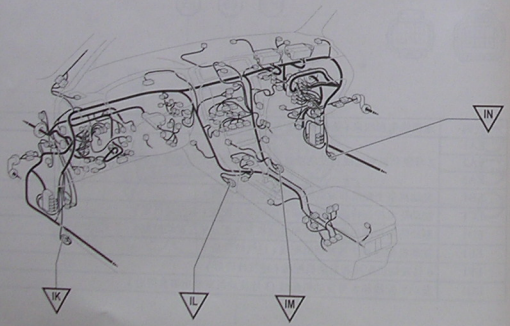


代码	连接线束和线束（连接器位置分布图）
EA1	2 号发动机室配线和发动机室主配线 (2 号发动机室继电器盒内侧)
EA2	
EA3	
EB1	发动机室主配线和发动机配线 (ECU 盒内侧)
EC1	制动防滑控制传感器配线和发动机室主配线 (右发动机室)
ED1	制动防滑控制传感器配线和发动机室主配线 (左发动机室)
EE1	发动机配线和 7 号发动机配线 (进气歧管后)
EF1	6 号发动机配线和发动机配线 (进气歧管后)
EG1	发动机配线和 5 号发动机配线 (3 号发动机室继电器盒附近)

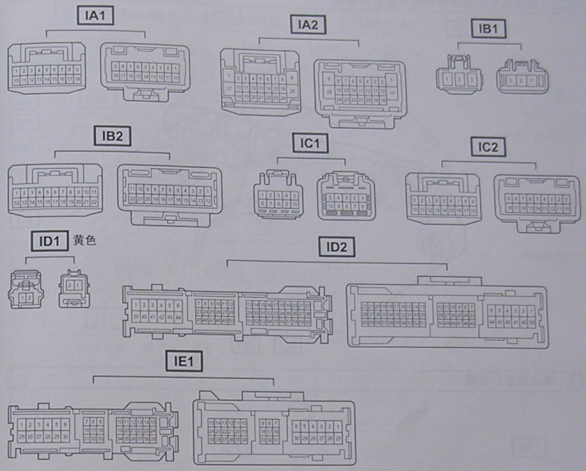
□：连接线束的连接器和线束位置分布图



▽：接地点位置分布图



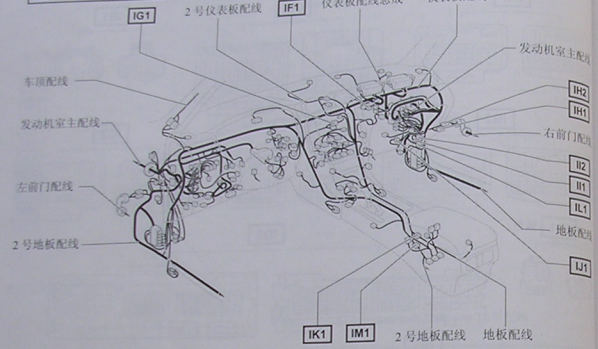
连接线束的连接器和线束



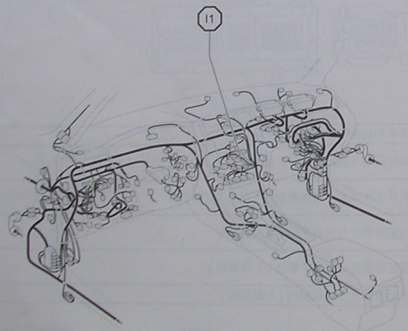
代码	连接线束和线束（连接器位置分布图）
IA1	仪表板配线和车顶配线（仪表板左侧）
IA2	
IB1	发动机室主配线和 2 号地板配线（左前围板侧板）
IB2	
IC1	左前门配线和 2 号地板配线（左踏脚板）
IC2	
ID1	仪表板配线和发动机室主配线（左踏脚板）
ID2	
IE1	仪表板配线和 2 号地板配线（左踏脚板）

G 电路图

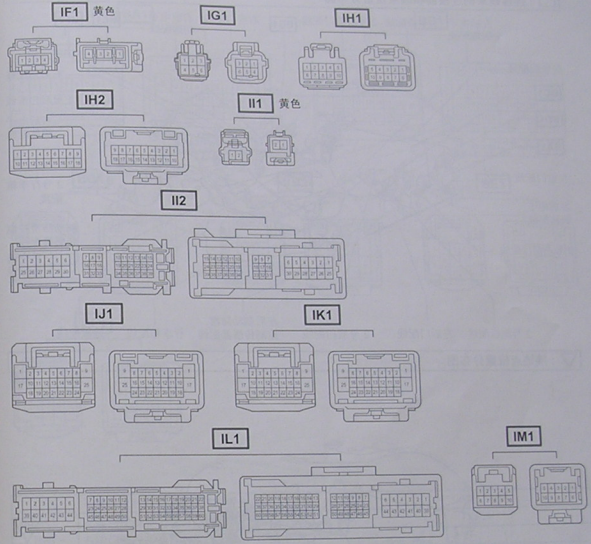
□：连接线束的连接器和线束位置分布图



○：接点位置分布图



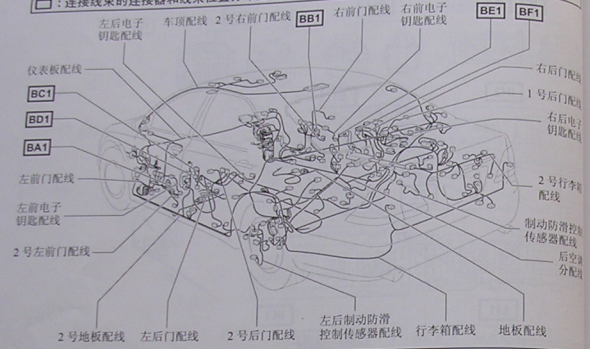
连接线束的连接器和线束



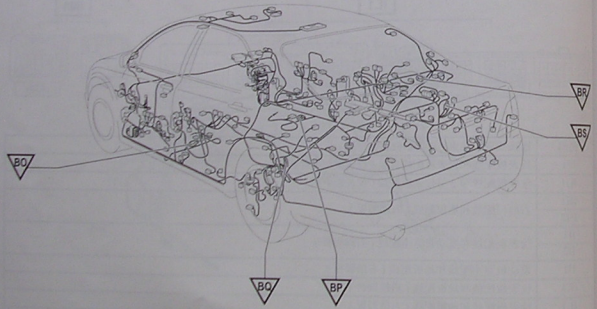
代码	连接线束和线束（连接器位置分布图）
IF1	仪表板配线和仪表板配线总成（仪表板加强件右侧）
IG1	仪表板配线和 2 号仪表板配线（仪表板中间）
IH1	右前门配线和地板配线（右踏脚板）
IH2	
II1	仪表板配线和发动机室主配线（右踏脚板）
II2	
IJ1	发动机室主配线和地板配线（右踏脚板）
IK1	仪表板配线和地板配线（后控制台下）
IL1	仪表板配线和地板配线（右踏脚板）
IM1	仪表板配线和 2 号地板配线（后控制台下）

G 电路图

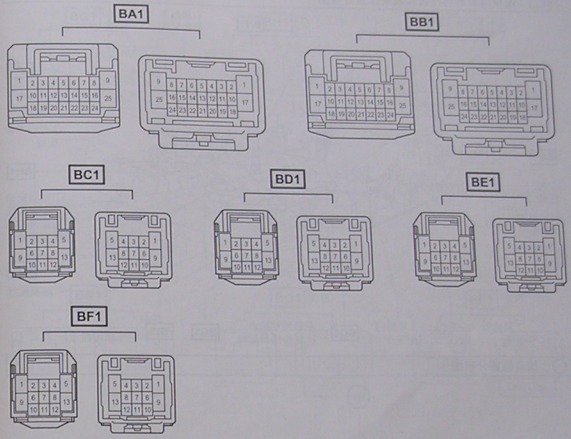
□：连接线束的连接器和线束位置分布图



▽：接地点位置分布图



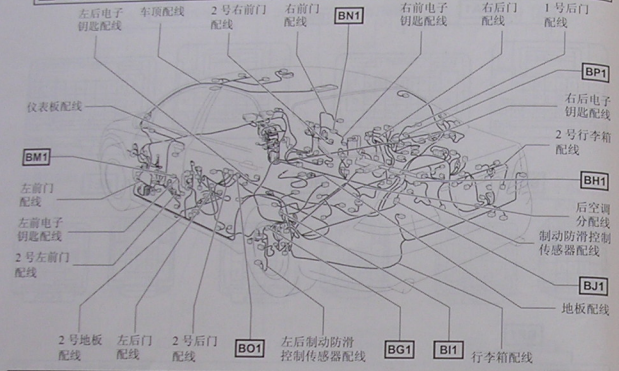
连接线束的连接器和线束



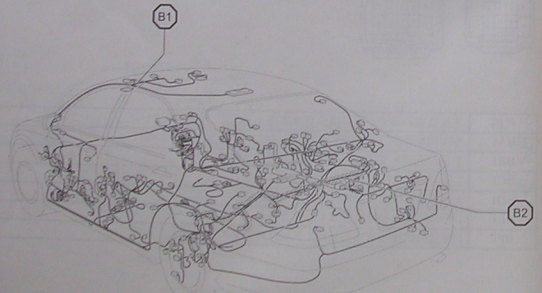
代码	连接线束和线束（连接器位置分布图）
BA1	左前门配线和2号左前门配线（左前门内侧）
BB1	右前门配线和2号右前门配线（右前门内侧）
BC1	2号后门配线和左后门配线（左后门内侧）
BD1	2号后门配线和2号地板配线（左中立柱）
BE1	1号后门配线和地板配线（右中立柱）
BF1	1号后门配线和右后门配线（右后门内侧）

G 电路图

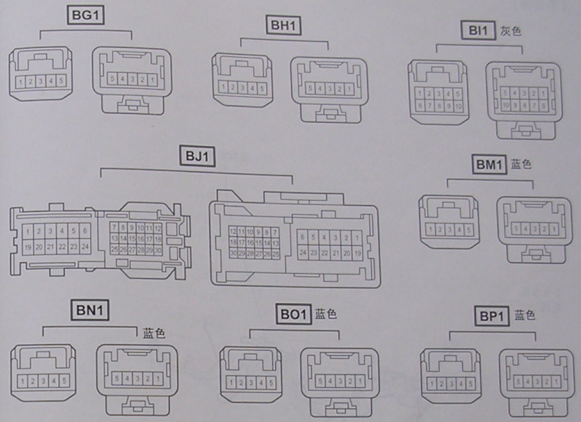
□：连接线束的连接器和线束位置分布图



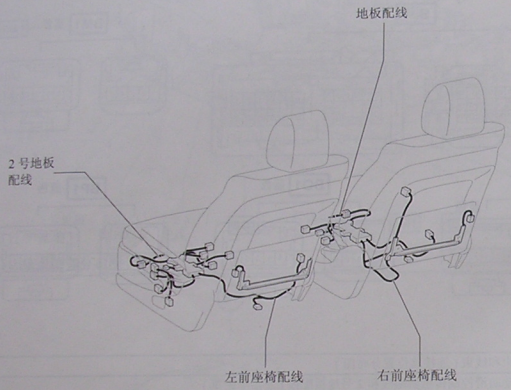
○：接点位置分布图



连接线束的连接器和线束



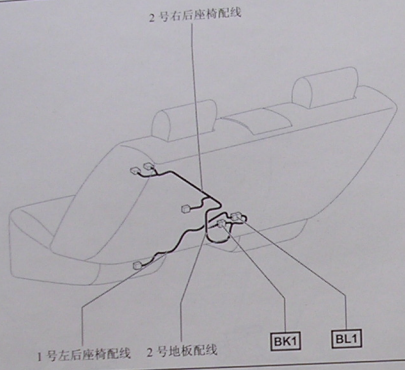
代码	连接线束和线束（连接器位置分布图）
BG1	左后制动防滑控制传感器配线和 2 号地板配线（左后车轮罩）
BH1	制动防滑控制传感器配线和地板配线（右后车轮罩）
BI1	2 号地板配线和后空调分配线（左后地板隔板）
BJ1	地板配线和 2 号地板配线（右后地板隔板）
BM1	左前门配线和左前电子钥匙配线（左前门内侧）
BN1	右前门配线和右前电子钥匙配线（右前门内侧）
BO1	左后电子钥匙配线和 2 号后门配线（左后门内侧）
BP1	右后电子钥匙配线和 1 号后门配线（右后门内侧）


地板配线
2 号地板
配线
左前座椅配线
右前座椅配线

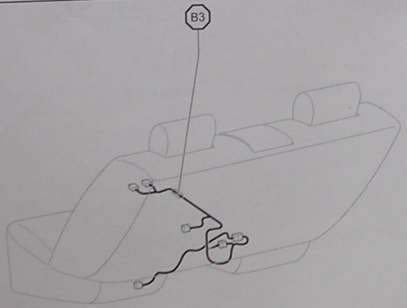
G 电路图

□：连接线束的连接器和线束位置分布图

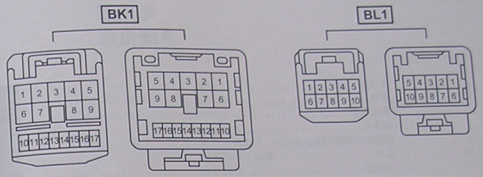
[后座椅]



○：接点位置分布图

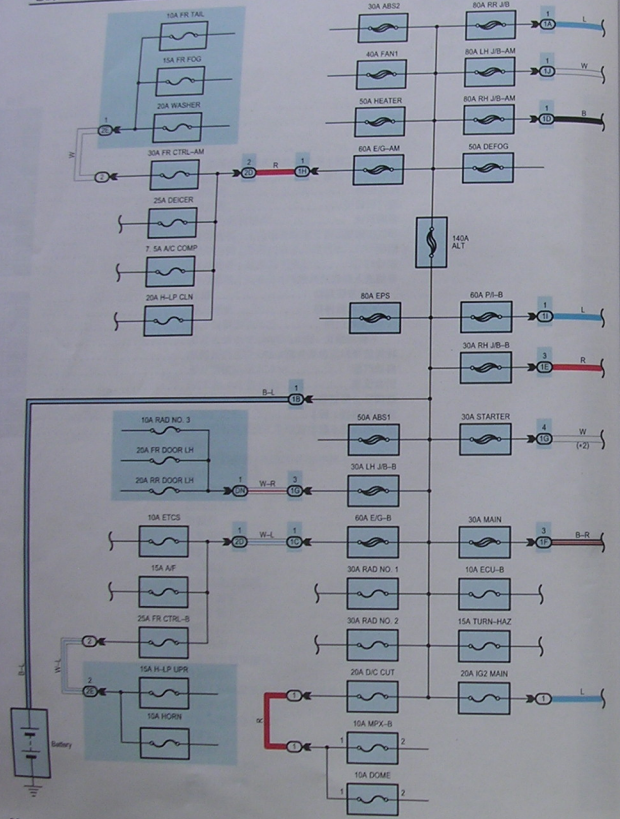


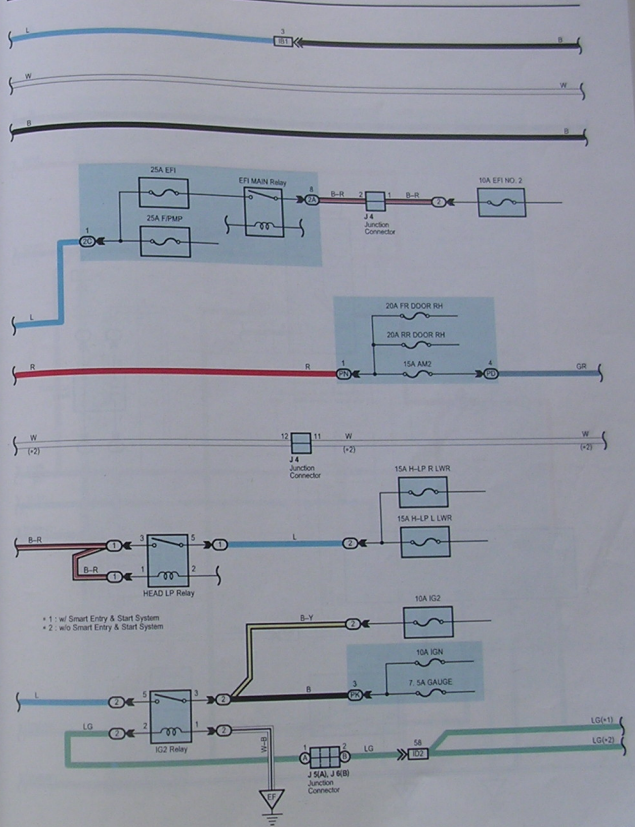
连接线束的连接器和线束

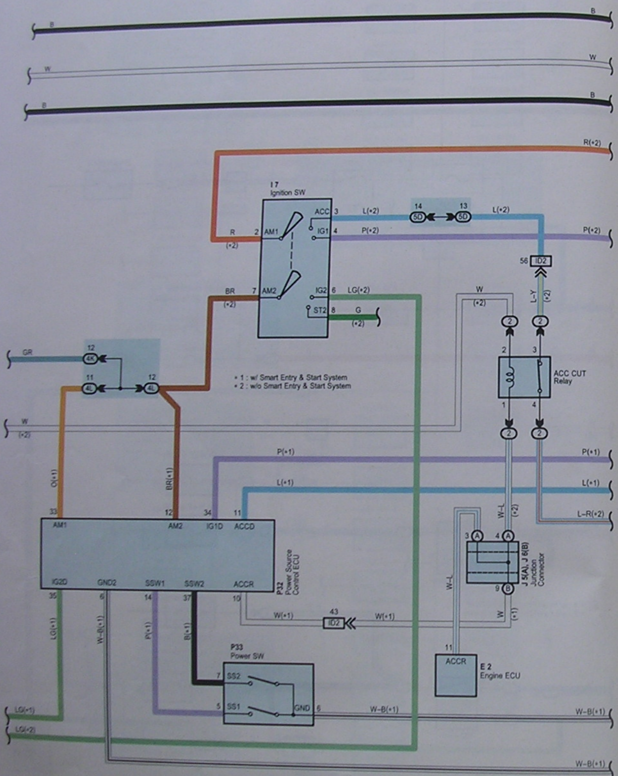


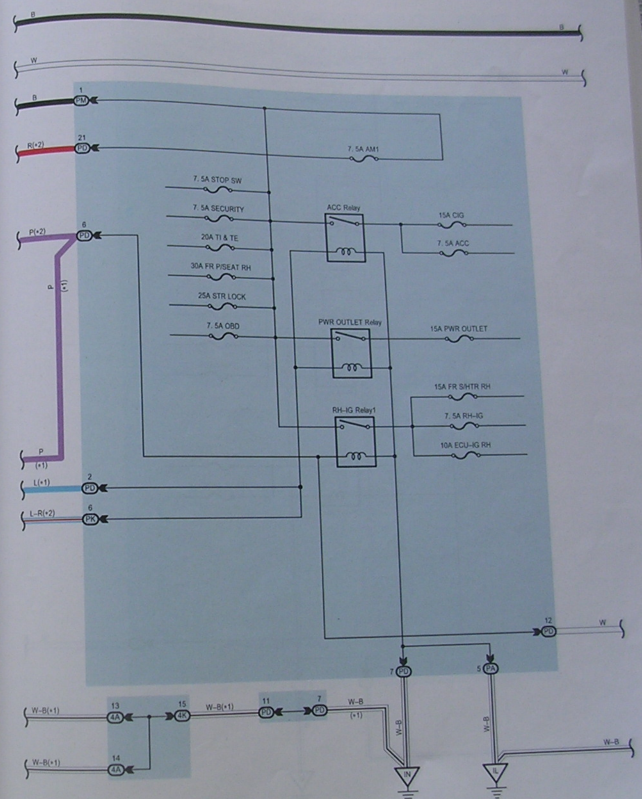
代码	连接线束和线束（连接器位置分布图）
BK1	2 号右后座椅配线和 2 号地板配线（左后座椅背面）
BL1	2 号右后座椅配线和 1 号左后座椅配线（右后座椅背面）

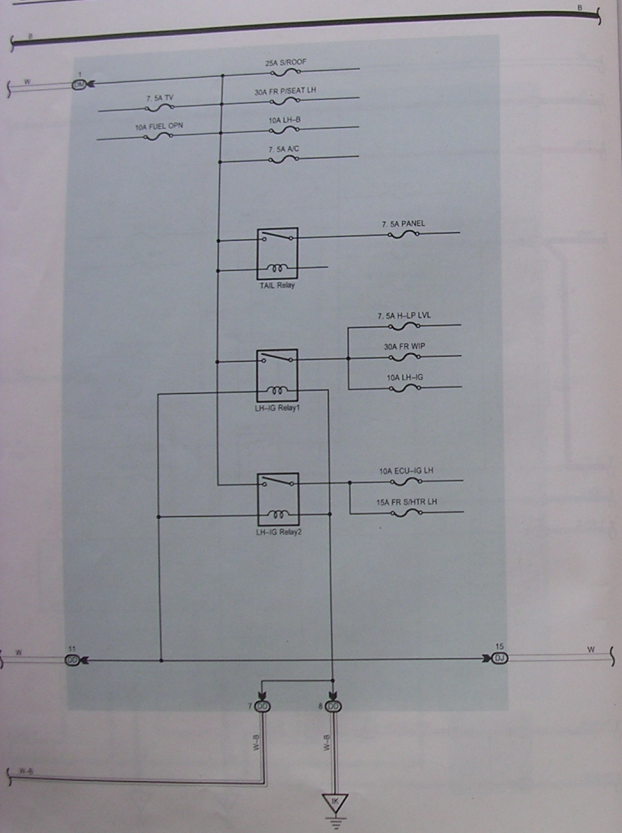
CROWN
电路图
系统电路

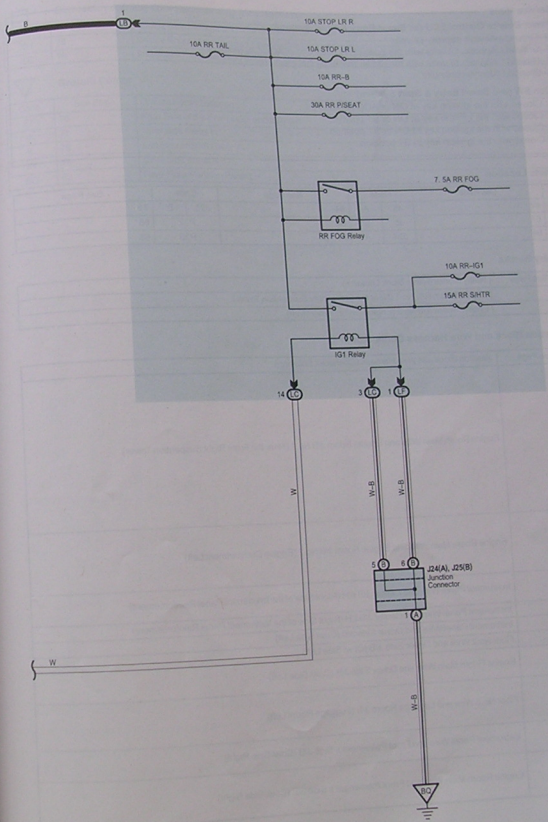

10A FR TAIL
15A FR FOG
20A WASHER
30A FR CTRL–AM
25A DEICER
7.5A A/C COMP
20A H–LP CLN
30A ABS2
40A FAN1
50A HEATER
60A E/G–AM
80A EPS
50A ABS1
10A RAD NO. 3
20A FR DOOR LH
20A RR DOOR LH
10A ETCS
15A A/F
25A FR CTRL–B
15A H–LP UPR
10A HORN
Battery
80A RR J/B
80A LH J/B–AM
80A RH J/B–AM
50A DEFOG
140A ALT
60A P/I–B
30A RH J/B–B
30A STARTER
30A LH J/B–B
60A E/G–B
30A RAD NO. 1
30A RAD NO. 2
20A D/C CUT
10A MPX–B
10A DOME
30A MAIN
10A ECU–B
15A TURN–HAZ
20A IG2 MAIN


25A EFI
25A F/PMP
EFI MAIN Relay
10A EFI NO. 2
J 4
Junction Connector
20A FR DOOR RH
20A RR DOOR RH
15A AM2
J 4
Junction Connector
15A H–LP R LWR
15A H–LP L LWR
HEAD LP Relay
* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System
10A IG2
10A IGN
7.5A GAUGE
IG2 Relay
J 5(A), J 6(B)
Junction Connector


I 7
Ignition SW
ACC
IG1
AM1
AM2
IG2
ST2
L(*2)
P(*2)
R(*2)
BR
LG(*2)
G
5D
ID2
L–Y
W
ACC CUT
Relay
GR
4K
4L
* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System
P(*1)
L(*1)
L–R(*2)
W–L
J 5(A), J 6(B)
Junction
Connector
AM1
AM2
IG1D
ACCD
IG2D
GND2
SSW1
SSW2
ACCR
P32
Power Source
Control ECU
W(*1)
P33
Power SW
SS2
SS1
GND
W–B(*1)
E 2
Engine ECU
LG(*1)
LG(*2)


B
W
PM
R(*2)
PD
7. 5A AM1
7. 5A STOP SW
7. 5A SECURITY
20A TI & TE
30A FR P/SEAT RH
25A STR LOCK
7. 5A OBD
ACC Relay
15A CIG
7. 5A ACC
P(*2)
PWR OUTLET Relay
15A PWR OUTLET
15A FR S/HTR RH
RH–IG Relay1
7. 5A RH–IG
10A ECU–IG RH
L(*1)
L–R(*2)
PK
PA
W–B(*1)
4A
4K
W–B
IN
IL


B
W
1
EA1
25A S/ROOF
7. 5A TV
30A FR P/SEAT LH
10A FUEL OPN
10A LH-B
7. 5A A/C
7. 5A PANEL
TAIL Relay
7. 5A H-LP LVL
30A FR WIP
10A LH-IG
LH-IG Relay1
10A ECU-IG LH
15A FR S/HTR LH
LH-IG Relay2
11
EA7
15
EA1
W
7
EA6
8
EA6
W-B
E2


B
1
EA1
10A STOP LR R
10A RR TAIL
10A STOP LR L
10A RR-B
30A RR P/SEAT
7. 5A RR FOG
RR FOG Relay
10A RR-IG1
15A RR S/HTR
IG1 Relay
14
EA6
3
EA6
1
EA6
W
W-B
W-B
5
6
J24(A), J25(B)
Junction
Connector
1
A
W
W-B
E2

电源

Service Hints

P32 Power Source Control ECU (w/ Smart Entry & Start System)

12, 33–Ground : Always approx. 12 volts
11–Ground : Approx. 12 volts with the power SW at IG ON or ACC ON position
34, 35–Ground : Approx. 12 volts with the power SW at IG ON position
6–Ground : Always continuity

I7 Ignition SW (w/o Smart Entry & Start System)

2–3 : Closed with the ignition key at ON or ACC position
2–4 : Closed with the ignition key at ON or ST position
7–6 : Closed with the ignition key at ST position
7–8 : Closed with the ignition key at ST position

○ : Parts Location

Code	See Page	Code		See Page	Code		See Page
E2	63	J5	A	64	J25	B	71
I7	67	J6	B	64	P32		68
J4	64	J24	A	71	P33		68

▢ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)
2	26	Engine Room R/B No.2 (Engine Compartment Left)

▢ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
1B		
1C		
1D		
1E		
1F		
1G		
1H		
1I		
1J		
2A	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2C		
2D		
2E		
4A	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4K		
5D	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
DD	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DJ	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
DM	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
DN		
LB	55	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
LC		
LF		
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)
PM		
PN		

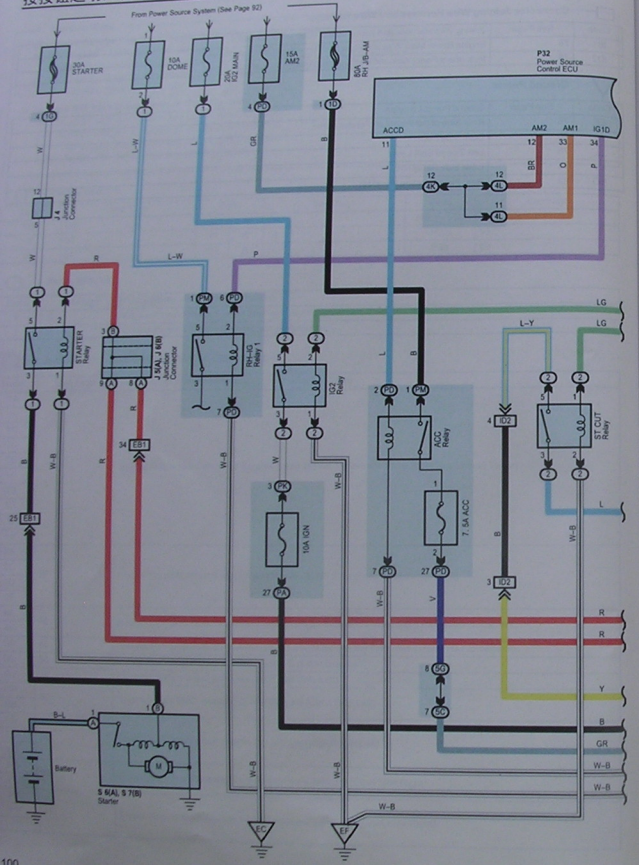
▢ : Connector Joining Wire Harness and Wire Harness

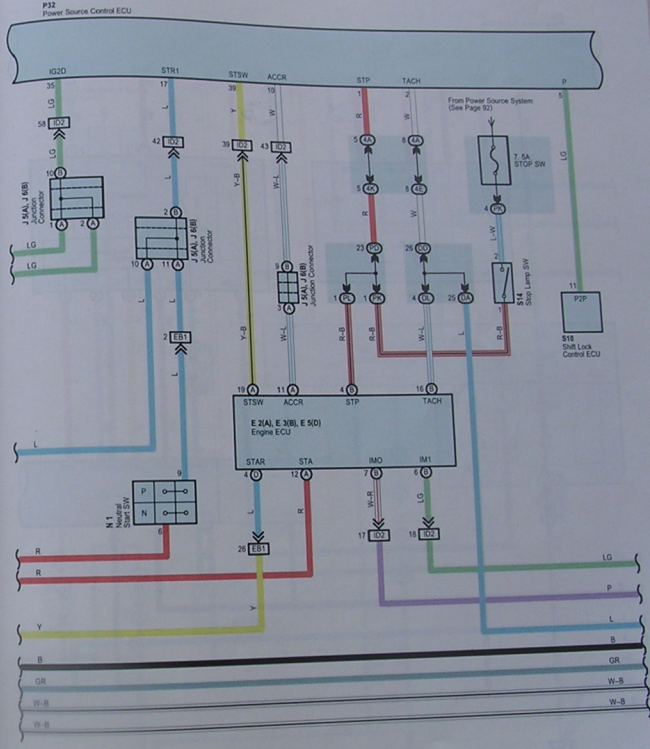
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	78	Engine Room Main Wire and Floor No.2 Wire (Left Cowl Side Panel)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)

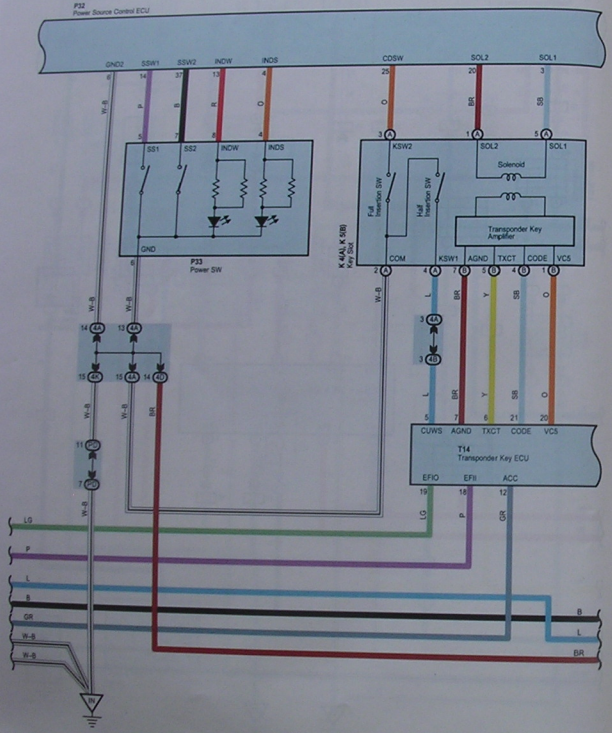
▽ : Ground Points

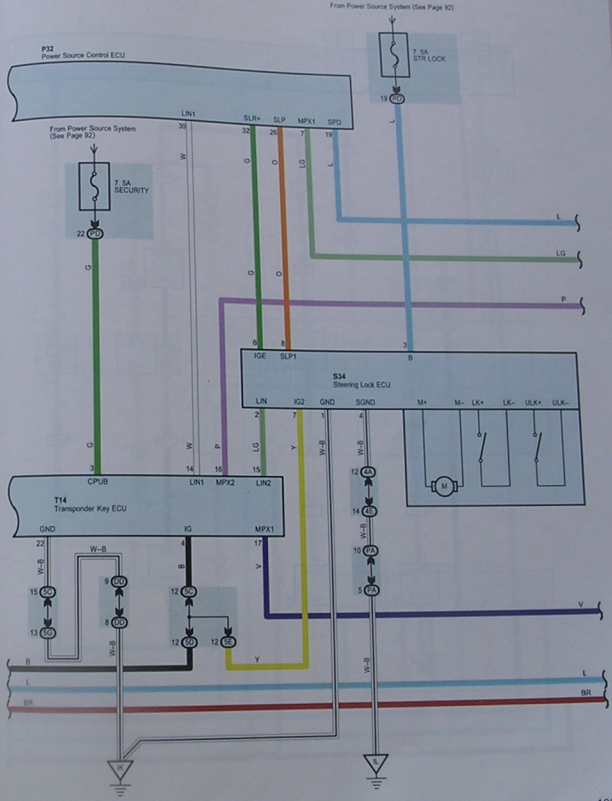
Code	See Page	Ground Points Location
EF	76	Rear Side of the Front Left Fender Apron
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH
BQ	82	Rear Floor Partition Panel LH

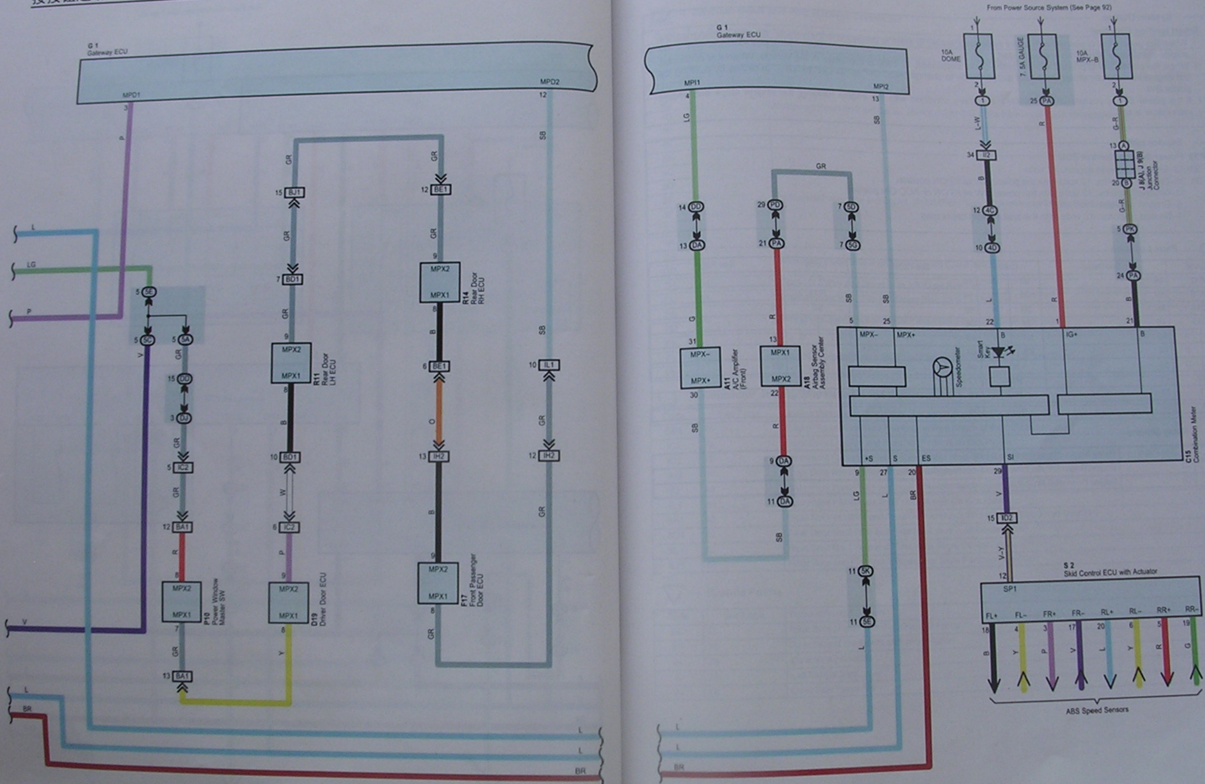
按按钮起动，发动机停机和转向锁止






P32
Power Source Control ECU
GND2
SSW1
SSW2
INDW
INDS
CDSW
SOL2
SOL1
SS1
SS2
INDW
INDS
GND
P33
Power SW
KSW2
SOL2
SOL1
Solenoid
Full Insertion SW
Half Insertion SW
Transponder Key Amplifier
COM
KSW1
AGND
TXCT
CODE
VC5
K-ALI, K-SBI
K-ALO, K-SBO
T14
Transponder Key ECU
CUWS
AGND
TXCT
CODE
VC5
EFIO
EFII
ACC


From Power Source System (See Page 92)
P32
Power Source Control ECU
7.5A
STR LOCK
LIN1
SLR+
SLP
MPX1
SPD
From Power Source System
(See Page 92)
7.5A
SECURITY
S34
Steering Lock ECU
IGE
SLP1
LIN
IG2
GND
SGND
M+
M-
LK+
LK-
ULK+
ULK-
T14
Transponder Key ECU
CPUB
LIN1
MPX2
LIN2
GND
IG
MPX1


G 1
Gateway ECU
MPD1
MPD2
P10
Power Window
Master SW
D19
Driver Door ECU
R11
Rear Door
LH ECU
R14
Rear Door
RH ECU
F17
Front Passenger
Door ECU
MPX2
MPX1
MPI1
MPI2
From Power Source System (See Page 92)
10A
DOME
7.5A GAUGE
10A
MPX-B
J 8(A), J 9(B)
Junction
Connector
A11
A/C Amplifier
(Front)
A18
Airbag Sensor
Assembly Center
C15
Combination Meter
MPX−
MPX+
Speedometer
Smart
Key
IG+
+S
S
ES
SI
S 2
Skid Control ECU with Actuator
SP1
FL+
FL−
FR+
FR−
RL+
RL−
RR+
RR−
ABS Speed Sensors

按按钮起动，发动机停机和转向锁止

System Outline

Smart Ignition Function

- When the power SW is pushed with brake pedal depressed, ID code is confirmed in the vehicle. When it is confirmed, the engine immobilizer allows the engine to start.
- When the power SW is pushed without brake pedal depressed, ID code is confirmed in the vehicle. When it is confirmed, the engine immobilizer allows the power supply mode to change "ACC ON" to "IG ON" to "OFF" in circles by pushing the power SW.
- If the power SW is pushed under vehicle's stationary condition with the engine running, the engine stops and engine immobilizer is set.

Service Hints

P32 Power Source Control ECU

33, 12–Ground : Always approx. 12 volts
34, 35–Ground : Approx. 12 volts with the power SW at IG ON position
11–Ground : Approx. 12 volts with the power SW at IG ON or ACC ON position
6–Ground : Always continuity
1–Ground : Approx. 12 volts with the brake pedal depressed

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A11	66	J5 A	64	R11	72
A18	66	J6 B	64	R14	72
C15	66	J8 A	68	S2	65
D19	70	J9 B	68	S6 A	65
E2 A	63	K4 A	68	S7 B	65
E3 B	63	K5 B	68	S10	69
E5 D	63	N1	64	S14	69
F17	71	P10	72	S34	69
G1	67	P32	68	T14	69
J4	64	P33	68		

▢ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)
2	26	Engine Room R/B No.2 (Engine Compartment Left)

○ : Junction Block and Wire Harness Connector

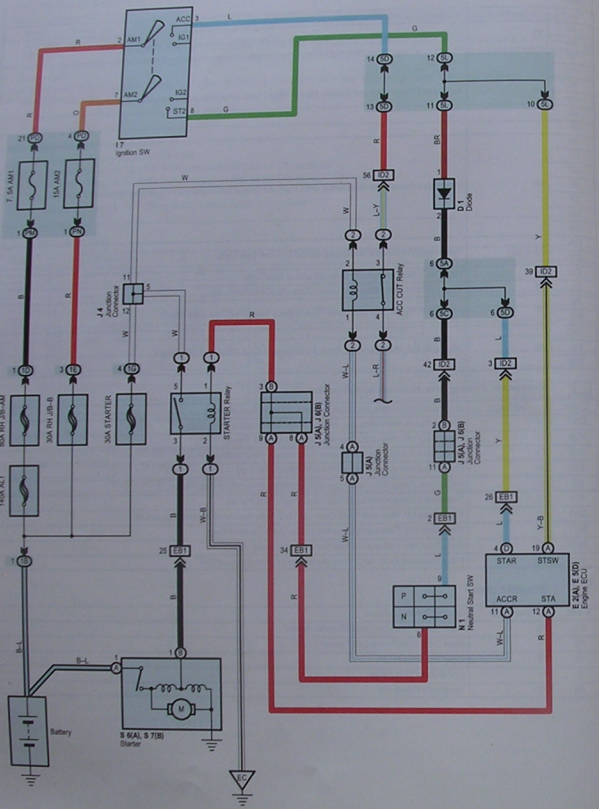
Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
1G		
4A	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4B		
4C		
4D		
4E		
4K		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5C		
5D		
5E		
5F		
5G		
5K		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DJ	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
DL	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)
PL		
PM		

▢ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Room Main Wire and Engine Wire (Inside of the ECU Box)
IC2	78	Front Door LH Wire and Floor No.2 Wire (Left Kick Panel)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IH2	80	Front Door RH Wire and Floor Wire (Right Kick Panel)
II2	80	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BA1	82	Front Door LH Wire and Front Door LH No.2 Wire (Inside of the Front Door LH)
BD1	82	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BE1	82	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

▽ : Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Side of the Front Right Fender Apron
EF	76	Rear Side of the Front Left Fender Apron
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH



Service Hints

N1 Neutral Start SW
9–6 : Closed with the shift lever in P or N position

S6 (A), S7 (B) Starter
Point closed with the neutral start SW at P or N position and the ignition SW at ST position

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
D1		67	J3		64	N1		64
E2	A	63	J4		64	S6	A	65
E5	D	63	J5	A	64	S7	B	65
I7		67	J6	B	64			

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)
2	26	Engine Room R/B No.2 (Engine Compartment Left)

⬭ : Junction Block and Wire Harness Connector

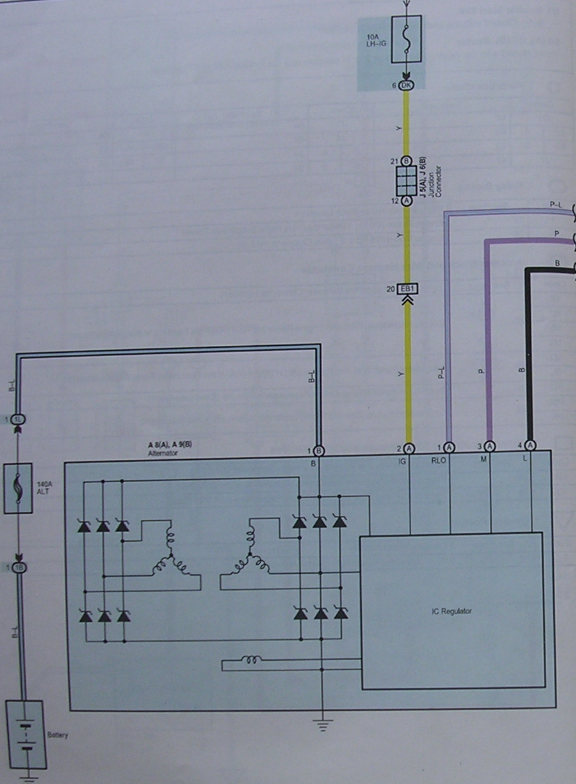
Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
1D		
1E		
1G		
5D	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5L		
PD	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PM	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)
PN		

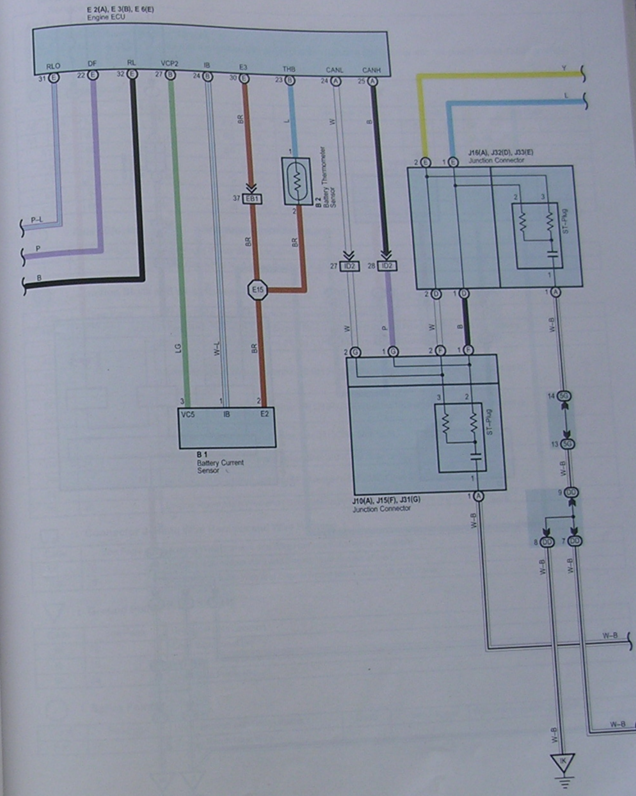
▭ : Connector Joining Wire Harness and Wire Harness

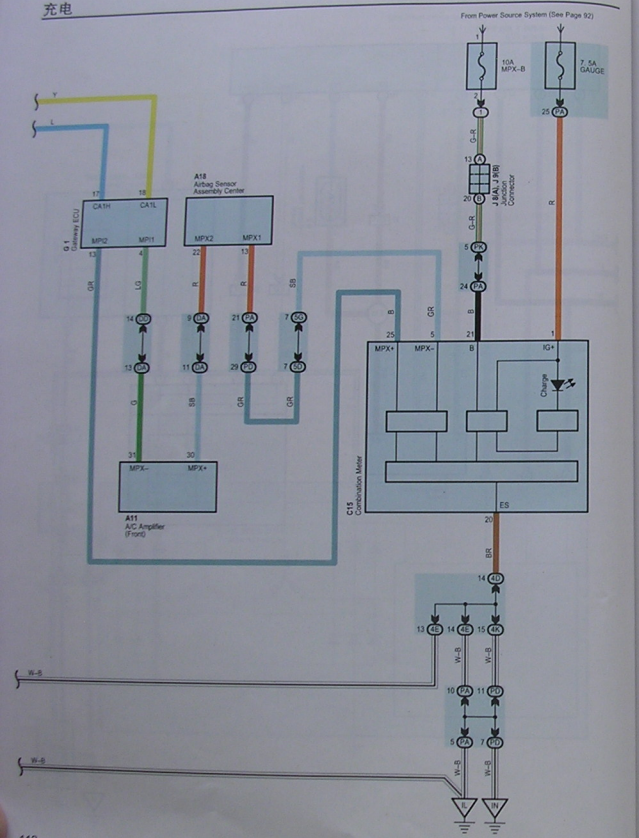
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Room Main Wire and Engine Wire (Inside of the ECU Box)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Side of the Front Right Fender Apron


From Power Source System (See Page 92)
10A
LH-IG
6 DK
Y
21 B
12 A
J 5(A), J 6(B)
Junction Connector
Y
20 EB1
Y
P-L
P
B
B-L
B-L
1 1L
140A
ALT
1 1B
B-L
Battery
A 8(A), A 9(B)
Alternator
1 B
B
2 A
IG
1 A
RLO
3 A
M
4 A
L
IC Regulator


E 2(A), E 3(B), E 6(E)
Engine ECU
RLO
DF
RL
VCP2
IB
E3
THB
CANL
CANH
31 E
22 E
32 E
27 B
24 B
30 E
23 B
24 A
25 A
P-L
P
B
BR
L
W
B
37 EB1
B 2
Battery Thermometer Sensor
E15
LG
W-L
BR
VC5
IB
E2
B 1
Battery Current Sensor
Y
L
J16(A), J32(D), J33(E)
Junction Connector
ST-Plug
27 ID2
28 ID2
W
P
W
B
W-B
J10(A), J15(F), J31(G)
Junction Connector
ST-Plug
14 5G
13 5G
9 DD
8 DD
7 DD
W-B
W-B
W-B
IK



Service Hints

A8 (A), A9 (B) Alternator

(B) 1–Ground : Always approx. 12 volts

(A) 2–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A8	A	62	E2	A	63	J9	B	68
A9	B	62	E3	B	63	J10	A	58, 68
A11		66	E6	E	63	J15	F	58, 68
A18		66	G1		67	J16	A	60, 68
B1		62	J5	A	64	J31	G	58, 68
B2		62	J6	B	64	J32	D	60, 68
C15		66	J8	A	68	J33	E	60, 68

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
1L	23	Engine Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
4D	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4E		
4K		
5D	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5G		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DK	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)

▭ : Connector Joining Wire Harness and Wire Harness

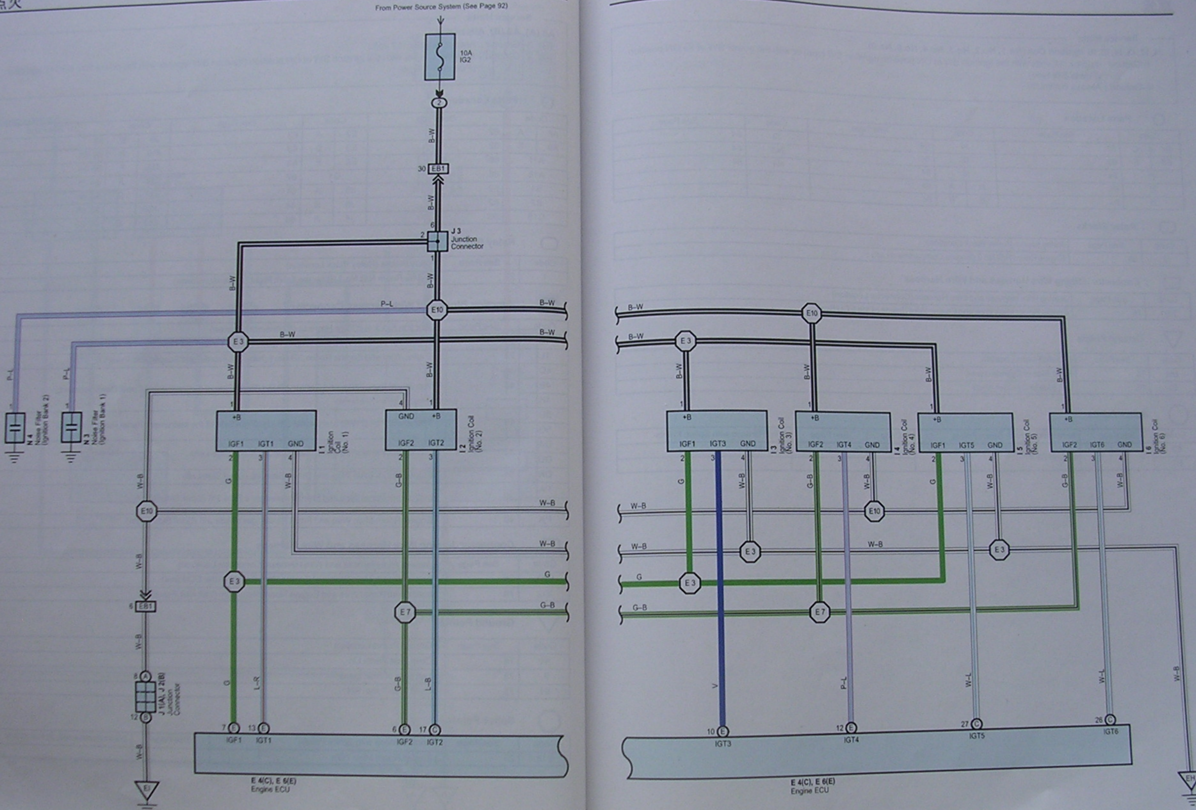
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Room Main Wire and Engine Wire (Inside of the ECU Box)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH

⬡ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E15	76	Engine Room Main Wire			


From Power Source System (See Page 92)
10A
IG2
B–W
EB1
J 3
Junction Connector
E10
E 3
P–L
B–W
N 4
Noise Filter (Ignition Bank 2)
N 3
Noise Filter (Ignition Bank 1)
+B
IGF1
IGT1
GND
I 1
Ignition Coil (No. 1)
GND
+B
IGF2
IGT2
I 2
Ignition Coil (No. 2)
IGT3
I 3
Ignition Coil (No. 3)
IGT4
I 4
Ignition Coil (No. 4)
IGT5
I 5
Ignition Coil (No. 5)
IGT6
I 6
Ignition Coil (No. 6)
W–B
G
G–B
L–R
L–B
V
P–L
W–L
E7
J 1(A), J 2(B)
Junction Connector
EI
EH
IGF1
IGT1
IGF2
IGT2
IGT3
IGT4
IGT5
IGT6
E 4(C), E 6(E)
Engine ECU

Service Hints

I1, I2, I3, I4, I5, I6 Ignition Coil (No.1, No.2, No.3, No.4, No.5, No.6)

1–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

4–Ground : Always continuity

○ : **Parts Location**

Code		See Page	Code	See Page	Code	See Page
E4	C	63	I4	64	J3	64
E6	E	63	I5	64	N3	64
I1		64	I6	64	N4	64
I2		64	J1 A	64		
I3		64	J2 B	64		

⬭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	26	Engine Room R/B No.2 (Engine Compartment Left)

□ : **Connector Joining Wire Harness and Wire Harness**

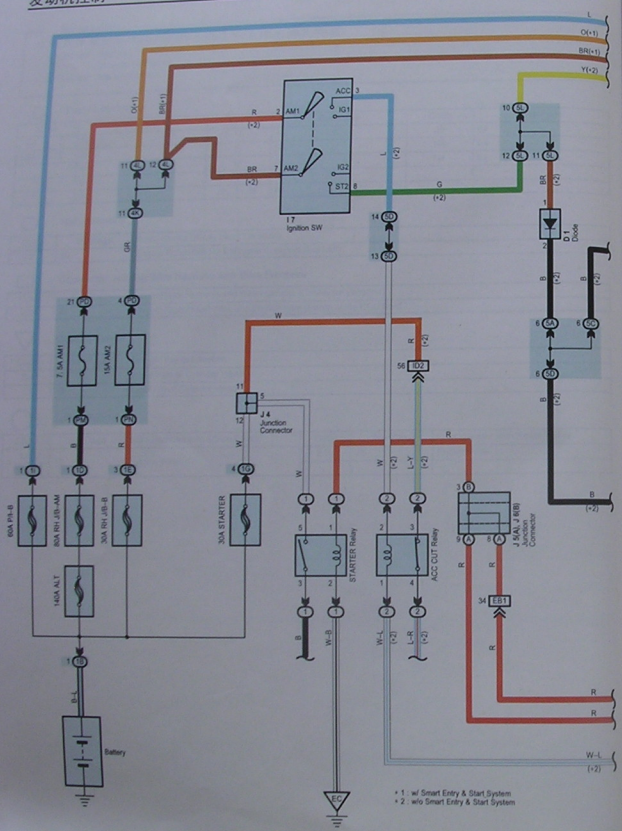
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Room Main Wire and Engine Wire (Inside of the ECU Box)

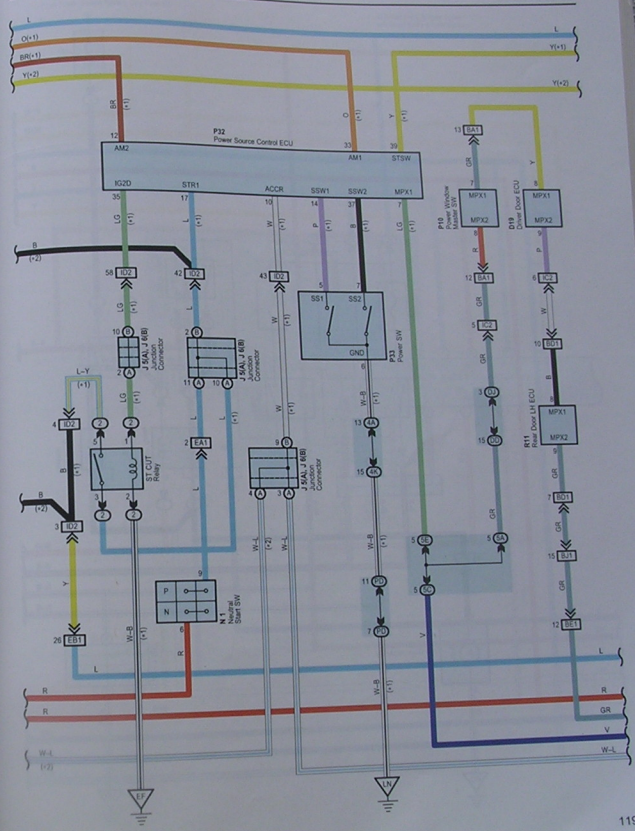
▽ : **Ground Points**

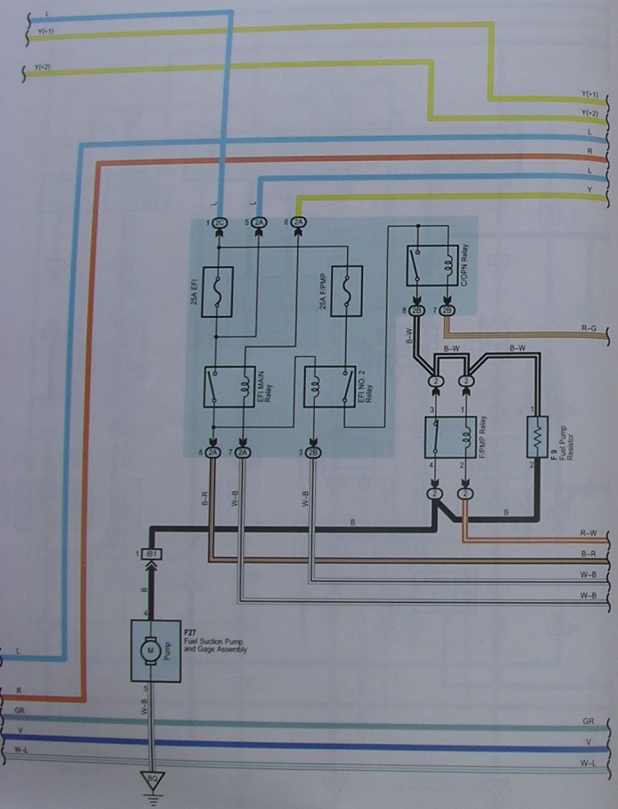
Code	See Page	Ground Points Location
EH	76	Right Side of Cylinder Head
EI	76	Left Side of Cylinder Head

◯ : **Splice Points**

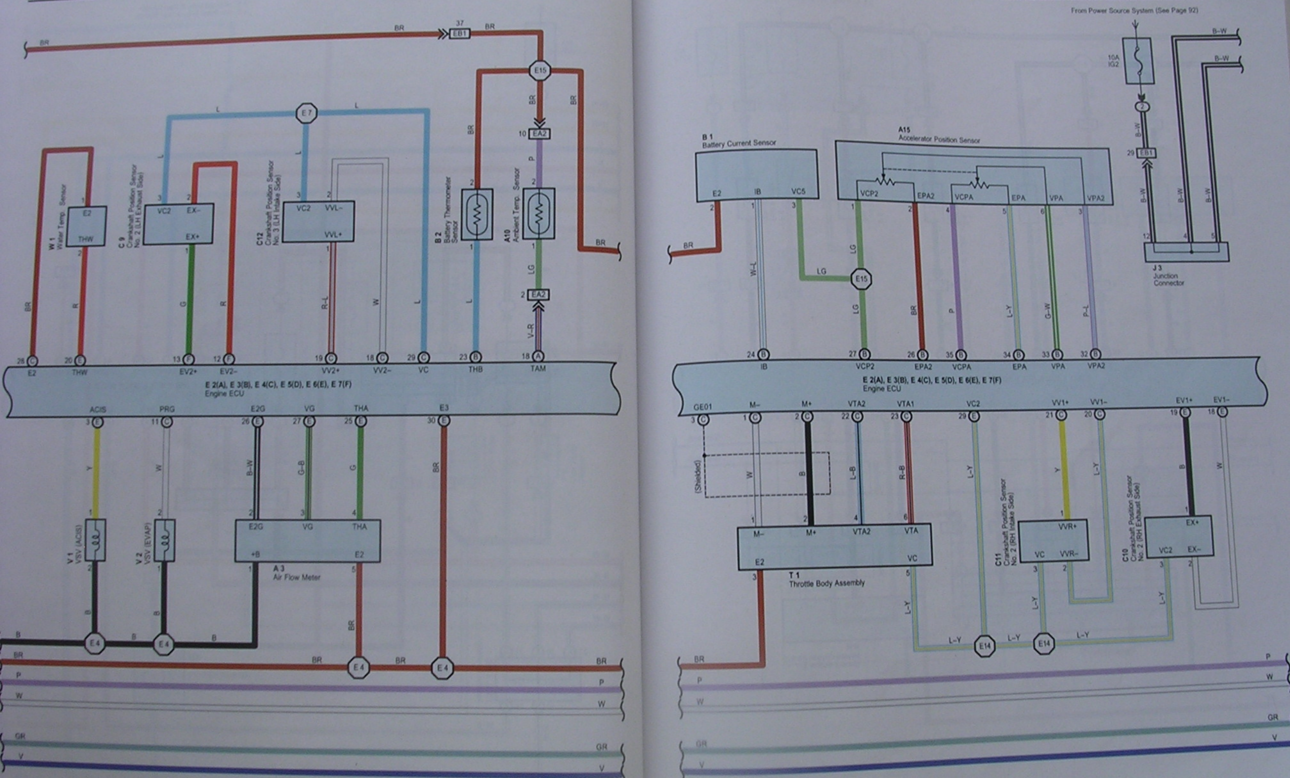
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	76	Engine Wire	E10	76	Engine Wire
E7					

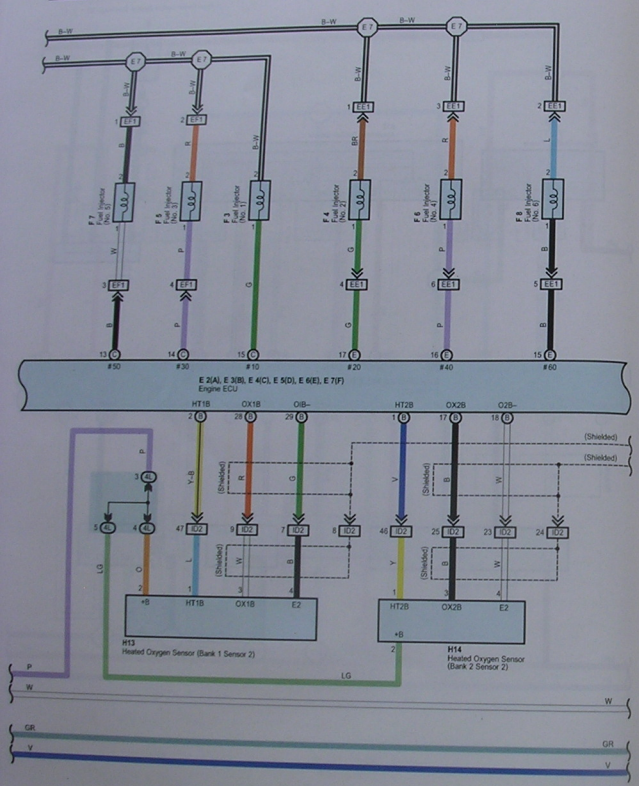

I7
Ignition SW
ACC
IG1
IG2
ST2
AM1
AM2
D1
Door
J4
Junction
Connector
7.5A AM1
15A AM2
60A PH-B
80A RH-JB-AM
30A RH-JB-B
140A ALT
30A STARTER
Battery
STARTER Relay
ACC CUT Relay
J 9(AL,J 6(B)
Junction
Connector
* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System

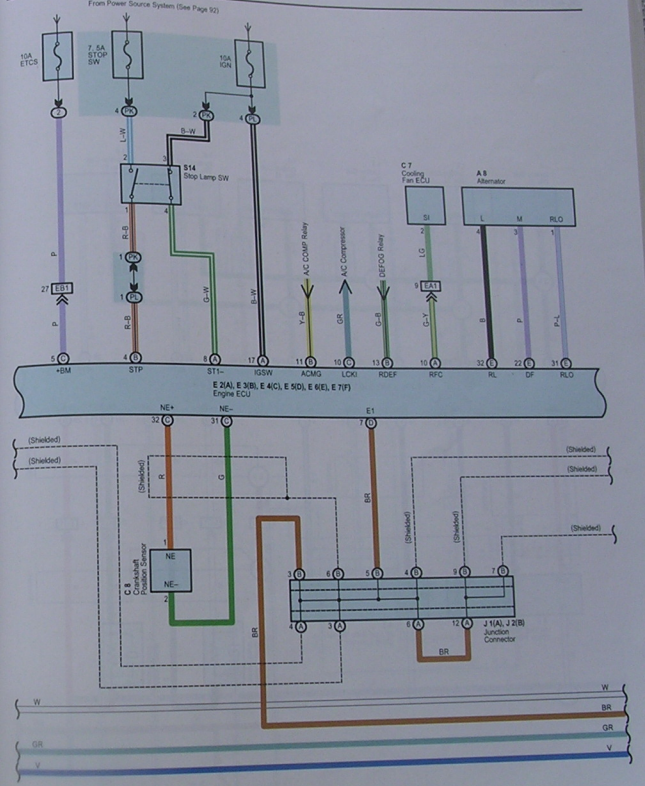

P32
Power Source Control ECU
AM2
AM1
STSW
IG2D
STR1
ACCR
SSW1
SSW2
MPX1
P33
Power SW
SS1
SS2
GND
J 9(AL,J 6(B)
Junction
Connector
STR CUT
Relay
N 1
Start SW
P18
Power Window
Master SW
D18
Door ECU
R11
Rear LH ECU
MPX1
MPX2

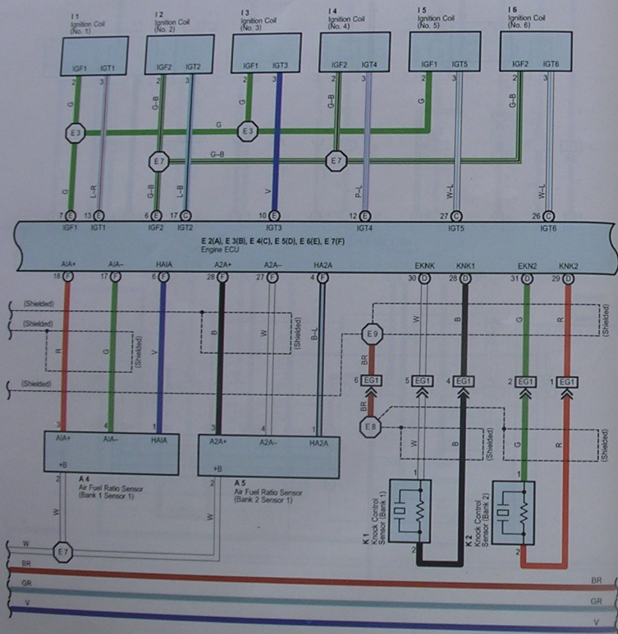


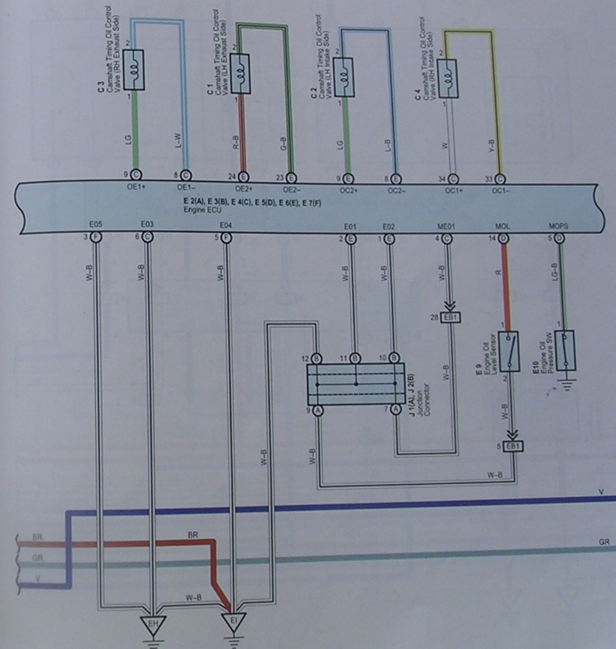
* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System

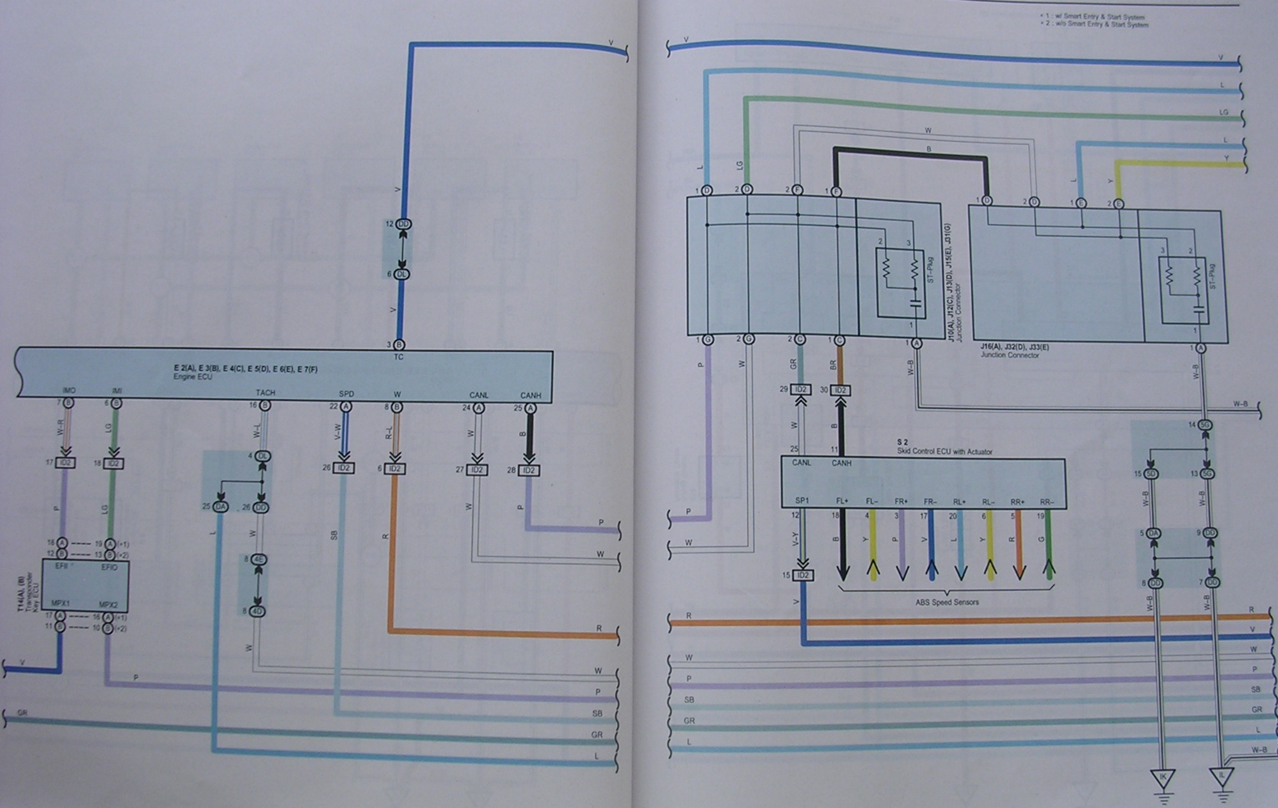

From Power Source System (See Page 92)
10A IG2
W 1 Water Temp. Sensor
E2
THW
C 9 Crankshaft Position Sensor No. 2 (LH Exhaust Side)
VC2
EX−
EX+
C12 Crankshaft Position Sensor No. 3 (LH Intake Side)
VVL−
VVL+
B 2 Battery Thermometer Sensor
A10 Ambient Temp. Sensor
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
THW
EV2+
EV2−
VV2+
VV2−
VC
THB
TAM
ACIS
PRG
E2G
VG
THA
E3
V 1 VSV (ACIS)
V 2 VSV (EVAP)
A 3 Air Flow Meter
+B
B 1 Battery Current Sensor
IB
VC5
A15 Accelerator Position Sensor
VCP2
EPA2
VCPA
EPA
VPA
VPA2
J 3 Junction Connector
GE01
M−
M+
VTA2
VTA1
VV1+
VV1−
EV1+
EV1−
(Shielded)
T 1 Throttle Body Assembly
VTA
C11 Crankshaft Position Sensor No. 2 (RH Intake Side)
VVR+
VVR−
C10 Crankshaft Position Sensor No. 2 (RH Exhaust Side)


F7 Fuel Injector No. 1
F5 Fuel Injector No. 3
F3 Fuel Injector No. 5
F4 Fuel Injector No. 2
F6 Fuel Injector No. 4
F8 Fuel Injector No. 6
#50
#30
#10
#20
#40
#60
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
HT1B
OX1B
O1B–
HT2B
OX2B
O2B–
H13
Heated Oxygen Sensor (Bank 1 Sensor 2)
H14
Heated Oxygen Sensor (Bank 2 Sensor 2)
(Shielded)

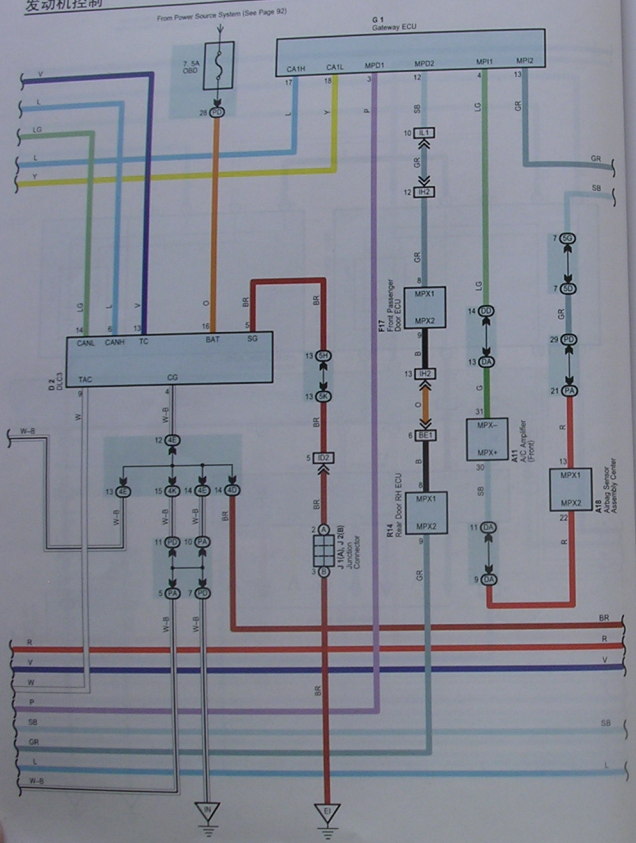

From Power Source System (See Page 92)
10A ETCS
7.5A STOP SW
10A IGN
S14 Stop Lamp SW
C 7 Cooling Fan ECU
A 8 Alternator
A/C COMP Relay
A/C Compressor
DEFOG Relay
+BM
STP
ST1–
IGSW
ACMG
LCKI
RDEF
RFC
RL
DF
RLO
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
NE+
NE–
E1
C 8 Crankshaft Position Sensor
J 1(A), J 2(B) Junction Connector
(Shielded)

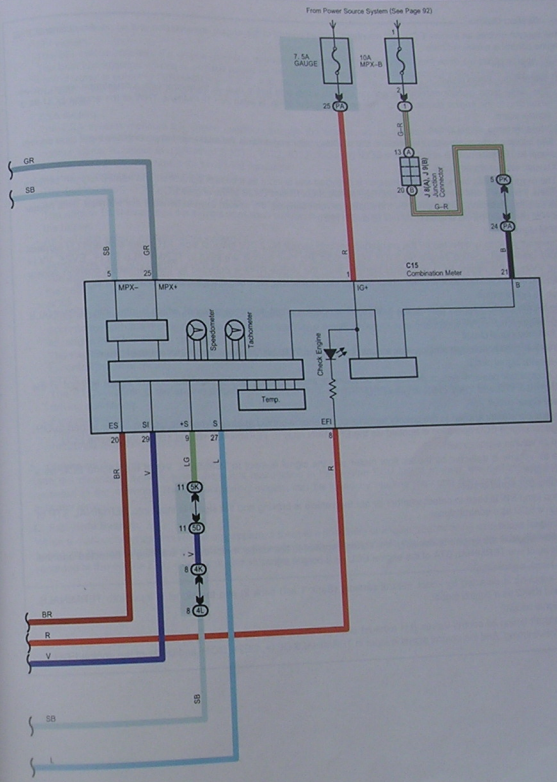

I 1 Ignition Coil (No. 1)
I 2 Ignition Coil (No. 2)
I 3 Ignition Coil (No. 3)
I 4 Ignition Coil (No. 4)
I 5 Ignition Coil (No. 5)
I 6 Ignition Coil (No. 6)
IGF1 IGT1
IGF2 IGT2
IGF1 IGT3
IGF2 IGT4
IGF1 IGT5
IGF2 IGT6
E3
E7
G
G–B
L–R
L–B
V
P–L
W–L
IGF1 IGT1 IGF2 IGT2 IGT3 IGT4 IGT5 IGT6
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
AIA+ AIA– HAIA A2A+ A2A– HA2A EKNK KNK1 EKN2 KNK2
(Shielded)
E9
E8
EG1
BR
R
B
W
B–L
A 4 Air Fuel Ratio Sensor (Bank 1 Sensor 1)
A 5 Air Fuel Ratio Sensor (Bank 2 Sensor 1)
AIA+ AIA– HAIA +B
A2A+ A2A– HA2A +B
K 1 Knock Control Sensor (Bank 1)
K 2 Knock Control Sensor (Bank 2)
W
BR
GR
V


C 3 Camshaft Timing Oil Control Valve (RH Exhaust Side)
C 1 Camshaft Timing Oil Control Valve (LH Exhaust Side)
C 2 Camshaft Timing Oil Control Valve (LH Intake Side)
C 4 Camshaft Timing Oil Control Valve (RH Intake Side)
LG
L–W
R–B
G–B
L–B
W
Y–B
OE1+ OE1– OE2+ OE2– OC2+ OC2– OC1+ OC1–
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
E05 E03 E04 E01 E02 ME01 MOL MOPS
W–B
R
LG–B
EB1
J 1(A), J 2(B) Junction Connector
E 9 Engine Oil Level Sensor
E10 Engine Oil Pressure SW
V
BR
GR
EH
EI



* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
TC
IMO
IMI
TACH
SPD
W
CANL
CANH
T14(A), (B)
Transponder Key ECU
EFII
EFIO
MPX1
MPX2
J10(A), J12(C), J13(D), J15(E), J31(G)
Junction Connector
J16(A), J32(D), J33(E)
Junction Connector
ST-Plug
S 2
Skid Control ECU with Actuator
CANL
CANH
SP1
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
ABS Speed Sensors


From Power Source System (See Page 92)
G 1
Gateway ECU
7.5A
OBD
CA1H
CA1L
MPD1
MPD2
MPI1
MPI2
D 2
DLC 3
CANL
CANH
TC
BAT
SG
TAC
CG
F17
Front Passenger Door ECU
MPX1
MPX2
R14
Rear Door RH ECU
A11
A/C Amplifier (Front)
A18
Airbag Sensor Assembly Center
J/A(L) 2 (RB)
Junction Connector


From Power Source System (See Page 92)
7.5A
GAUGE
10A
MPX-B
J/A(L) 3 (RB)
Junction Connector
C15
Combination Meter
MPX-
MPX+
IG+
Speedometer
Tachometer
Temp.
Check Engine
ES
SI
+S
S
EFI

System Outline

This system utilizes an engine ECU and maintains overall control of the engine, transmission and so on. An outline of the engine control is explained here.

1. Input Signals

(1) Water temp. signal circuit

The water temp. sensor detects the engine coolant temp. and has a built–in thermistor with a resistance which varies according to the engine coolant temp. The engine coolant temp. is input into TERMINAL THW of the engine ECU as a control signal.

(2) Intake air temp. signal circuit

The intake air temp. sensor is installed in the air flow meter and detects the intake air temp., which is input as a control signal to TERMINAL THA of the engine ECU.

(3) Oxygen sensor signal circuit

The oxygen density in the exhaust emission is detected and is input as a control signal from the heated oxygen sensors (Bank 1 sensor 2 and bank 2 sensor 2) to TERMINALS OX1B and OX2B of the engine ECU.

To stabilize detection performance by the heated oxygen sensors, the heated oxygen sensors are warmed. This heater is also controlled by the engine ECU (HT1B and HT2B).

(4) RPM signal circuit

Camshaft position is detected by the crankshaft position sensor No.2 (RH exhaust side, RH intake side and LH exhaust side), crankshaft position sensor No.3 (LH intake side) and their signals are input to TERMINALS EV1+, EV2+, VV1+ and VV2+ of the engine ECU as control signals. Also, the engine RPM is detected by the crankshaft position sensor installed in the cylinder block and the signal is input into TERMINAL NE+ of the engine ECU as a control signal.

(5) Throttle signal circuit

The throttle position sensor detects the throttle valve opening angle as a control signal, which is input into TERMINALS VTA1 and VTA2 of the engine ECU.

(6) Air fuel ratio signal circuit

The air fuel ratio is detected and input as a control signal into TERMINALS A1A+ and A2A+ of the engine ECU.

(7) Accelerator signal circuit

The Accelerator position sensor detects the accelerator pedal opening degree. And the control signal is input in the TERMINALS VPA and VPA2 of the engine ECU.

(8) Battery signal circuit

Voltage is constantly applied to the battery terminal of the engine control module. When the ignition SW is turned to ON, voltage for engine ECU operation is applied via the EFI MAIN relay to TERMINALS +B and +B1 of the engine ECU.

(9) Intake air volume signal circuit

Intake air volume is detected by the air flow meter and the signal is input to TERMINAL VG of the engine ECU as a control signal.

(10) Stop lamp SW signal circuit

The stop lamp SW is used to detect whether or not the vehicle is braking and the signal is input into TERMINAL STP of the engine ECU as a control signal.

(11) Starter signal circuit

To confirm whether the engine is cranking, the voltage applied to the starter motor during cranking is detected and the signal is input into TERMINAL STA of the engine ECU as a control signal.

(12) Engine knock signal circuit

Engine knocking is detected by knock control sensors (Bank 1 and bank 2) and the signal is input into TERMINALS KNK1 and KNK2 as a control signal.

(13) VVT–i signal circuit

The camshaft timing oil control valves (LH exhaust side, LH intake side, RH exhaust side and RH intake side) detects the real valve timing. And the control signal is input in TERMINALS OE1+, OE2+, OC1+ and OC2+ of the engine ECU.

2. Control System

- SFI system

The SFI system monitors the engine condition through the signals, which are input from each sensor to engine ECU. The best fuel injection volume is decided based on this data and the program memorized by the engine ECU, and the control signal is output to TERMINALS #10, #20, #30, #40, #50 and #60 of the engine ECU to operate the injector (Inject the fuel). The SFI system produces control of fuel injection operation by the engine ECU in response to the driving conditions.

- ESA system

The ESA system monitors the engine condition through the signals, which are input to the engine ECU from each sensor. The best ignition timing is decided according to this data and the memorized data in the engine ECU, and the control signal is output to TERMINALS IGT1, IGT2, IGT3, IGT4, IGT5 and IGT6. This signal controls the igniter to provide the best ignition timing for the driving conditions.

- Heated oxygen sensor heater control system

The heated oxygen sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emissions is low), and warms up the heated oxygen sensor to improve detection performance of the sensor.

The engine ECU evaluates the signals from each sensor, current is output to TERMINALS HT1B and HT2B, controlling the heater.

- Air fuel ratio sensor heater control system

The air fuel ratio sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emission is low), and warms up the air fuel ratio sensor to improve detection performance of the sensor.

The engine ECU evaluates the signals from each sensor, current is output to TERMINALS HA1A and HA2A, controlling the heater.

- ACIS

ACIS includes a valve in the bulkhead separating the surge tank into two parts. This valve is opened and closed in accordance with the driving conditions to control the intake manifold length in two stages for increased engine output in all ranges from low to high speeds.

The engine ECU judges the engine speed by the signals from each sensor and outputs signals to the TERMINAL ACIS to control the VSV (ACIS).

- ETCS–i

The ETCS–i controls the engine output at its optimal level corresponding to the opening of the throttle valve under all driving conditions.

- Fuel pump control

The engine ECU outputs current to TERMINAL FPR and controls the F/PMP relay and fuel pump drive speed in response to driving conditions.

3. Diagnosis System

With the diagnosis system, when there is a malfunction in the engine ECU signal system, the malfunctioning system is recorded in the memory. The malfunctioning system can be found by reading the code displayed by the check engine indicator lamp.

4. Fail–Safe System

When a malfunction has occurred in any system, if there is a possibility of engine trouble being caused by continued control based on the signals from that system, the fail–safe system either controls the system by using data (Standard values) recorded in the engine ECU memory or else stops the engine.

Service Hints

W1 Water Temp. Sensor

1–2 : Approx. 15.04 kΩ (–20°C, –4°F)
Approx. 5.74 kΩ (0°C, 32°F)
Approx. 2.45 kΩ (20°C, 68°F)
Approx. 1.15 kΩ (40°C, 104°F)
Approx. 0.584 kΩ (60°C, 140°F)
Approx. 0.318 kΩ (80°C, 176°F)

E2 (A), E3 (B), E4 (C), E5 (D), E6 (E), E7 (F) Engine ECU

BATT–E1 : Always 9.0–14.0 volts
+B–E1 : 9.0–14.0 volts (Ignition SW at ON position (Ignition SW type) or power SW at IG ON position (Power SW type))
VC–E1 : 4.5–5.5 volts (Ignition SW at ON position (Ignition SW type) or power SW at IG ON position (Power SW type))
VTA1–E3 : 0.5–1.1 volts (Ignition SW on (Ignition SW type) or power SW IG on (Power SW type) and throttle valve fully closed)
: 3.2–4.8 volts (Ignition SW on (Ignition SW type) or power SW IG on (Power SW type) and throttle valve fully open)
VTA2–E3 : 2.1–3.1 volts (Ignition SW on (Ignition SW type) or power SW IG on (Power SW type) and throttle valve fully closed)
: 4.5–5.5 volts (Ignition SW on (Ignition SW type) or power SW IG on (Power SW type) and throttle valve fully open)
VG–E2G : 0.5–3.0 volts (Engine idling)
THA–E3 : 0.5–3.4 volts (Engine idling and intake air temp. 20°C, 68°F)
THW–E2 : 0.2–1.0 volts (Engine idling and engine coolant temp. 80°C, 176°F)
IGF1–E1 : Pulse generation (Engine idling)
IGF2–E1 : Pulse generation (Engine idling)
VV1+ –VV1– : Pulse generation (Engine idling)
VV2+ –VV2– : Pulse generation (Engine idling)
NE+ –NE– : Pulse generation (Engine idling)
STA–E1 : 6.0 volts or more (Engine cranking)
FC–E1 : 9.0–14.0 volts (Ignition SW at ON position (Ignition SW type) or power SW at IG ON position (Power SW type))
0–3.0 volts (Engine idling)
PRG–E01 : 9.0–14.0 volts (Ignition SW at ON position (Ignition SW type) or power SW at IG ON position (Power SW type))
Pulse generation (Engine idling)
TACH–E1 : Pulse generation (Engine idling)
STP–E1 : 7.5–14.0 volts (Ignition SW on (Ignition SW type) or power SW IG on (Power SW type) and brake pedal depressed)
0–1.5 volts (Ignition SW on (Ignition SW type) or power SW IG on (Power SW type) and brake pedal released)
KNK1, KNK2–E1 : Pulse generation (Engine idling)
HT1B, HT2B–E1 : 9.0–14.0 volts (Ignition SW at ON position (Ignition SW type) or power SW at IG ON position (Power SW type))
0–3.0 volts (Engine idling)
IGT1, IGT2, IGT3, IGT4, IGT5, IGT6–E1 : Pulse generation (Engine idling)
#10, #20, #30, #40, #50, #60–E01 : Pulse generation (Engine idling)

: Parts Location

Code	See Page
A3	62
A4	62
A5	62
A8	62
A10	62
A11	66
A15	66
A18	66
B1	62
B2	62
C1	62
C2	62
C3	62
C4	62
C7	62
C8	62
C9	62
C10	62
C11	62
C12	62
C15	66
D1	67
D2	67
D19	70
E2 A	63
E3 B	63
E4 C	63
E5 D	63

Code	See Page
E6 E	63
E7 F	63
E9	63
E10	63
F3	63
F4	63
F5	63
F6	63
F7	63
F8	63
F9	63
F17	71
F27	71
G1	67
H13	67
H14	67
I1	64
I2	64
I3	64
I4	64
I5	64
I6	64
I7	67
J1 A	64
J2 B	64
J3	64
J4	64
J5 A	64

Code	See Page
J6 B	64
J8 A	68
J9 B	68
J10 A	58, 68
J12 C	58, 68
J13 D	58, 68
J15 E	58, 68
J16 A	60, 68
J31 G	58, 68
J32 D	60, 68
J33 E	60, 68
K1	64
K2	64
N1	64
P10	72
P32	68
P33	68
R11	72
R14	72
S2	65
S14	69
T1	65
T14 A	69
T14 B	69
V1	65
V2	65
W1	65

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)
2	26	Engine Room R/B No.2 (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
1D		
1E		
1G		
1I		
2A	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2B		
2C		
4A	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4D		
4E		
4K		
4L		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5C		
5D		
5E		
5G		
5K		
5L		
A	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
D		
J	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
L	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
A	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
D		
K		
L	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)
M		
N		

: Connector Joining Wire Harness and Wire Harness

de	See Page	Joining Wire Harness and Wire Harness (Connector Location)
1	76	Engine Room No.2 Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.2)
2		
1	76	Engine Room Main Wire and Engine Wire (Inside of the ECU Box)
1	76	Engine Wire and Engine No.7 Wire (Behind the Intake Manifold)
1	76	Engine No.6 Wire and Engine Wire (Behind the Intake Manifold)
1	76	Engine Wire and Engine No.5 Wire (Near the Engine Room R/B No.3)
1	78	Engine Room Main Wire and Floor No.2 Wire (Left Cowl Side Panel)
2	78	Front Door LH Wire and Floor No.2 Wire (Left Kick Panel)
2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
2	80	Front Door RH Wire and Floor Wire (Right Kick Panel)
1	82	Front Door LH Wire and Front Door LH No.2 Wire (Inside of the Front Door LH)
1	82	Rear Door No.2 Wire and Floor No.2 Wire (Let Center Pillar)
1	82	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

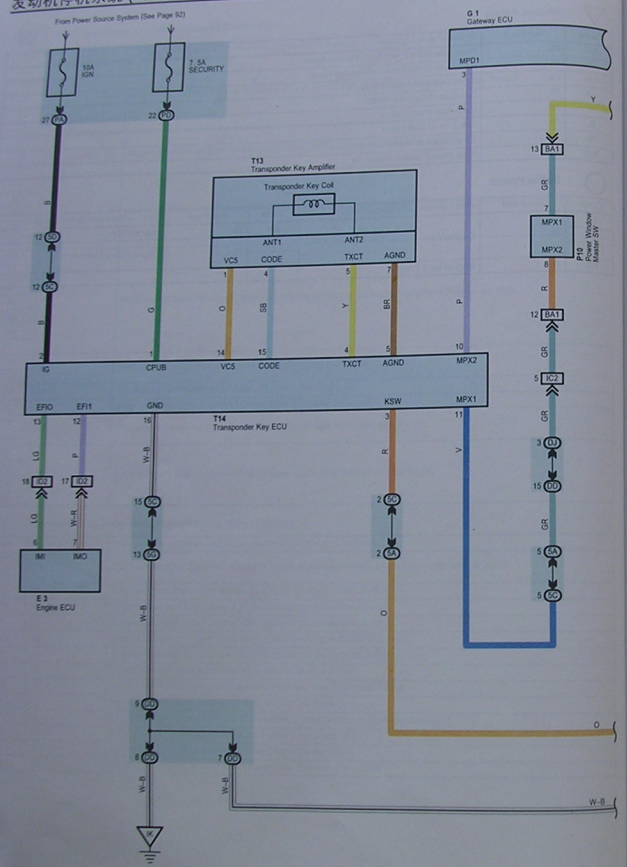
: Ground Points

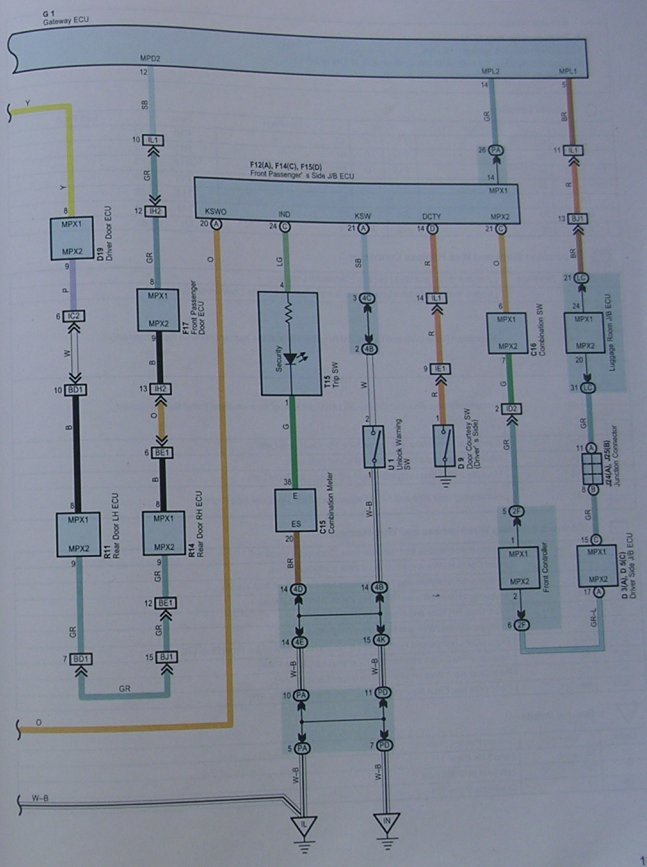
Code	See Page	Ground Points Location
EC	76	Rear Side of the Front Right Fender Apron
EE	76	Rear Side of the Front Left Fender Apron
EH	76	Right Side of Cylinder Head
EI	76	Left Side of Cylinder Head
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH
BQ	82	Rear Floor Partition Panel LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	76	Engine Wire	E9	76	Engine Wire
E4			E14	76	Engine Room Main Wire
E7			E15		
E8	76	Engine No.5 Wire			

发动机停机系统（不带智能进入和起动系统）





Service Hints

T14 Transponder Key ECU

1–Ground : Always approx. 12 volts
2–Ground : Approx. 12 volts with the ignition SW at ON position
16–Ground : Always continuity

○ : Parts Location

Code		See Page
C15		66
C16		66
D3	A	67
D5	C	67
D9		70
D19		70
E3		63
F12	A	67
F14	C	67
F15	D	67
F17		71
G1		67
J24	A	71
J25	B	71
P10		72
R11		72
R14		72
T13		69
T14		69
T15		69
U1		69

⬭ : Junction Block and Wire Harness Connector

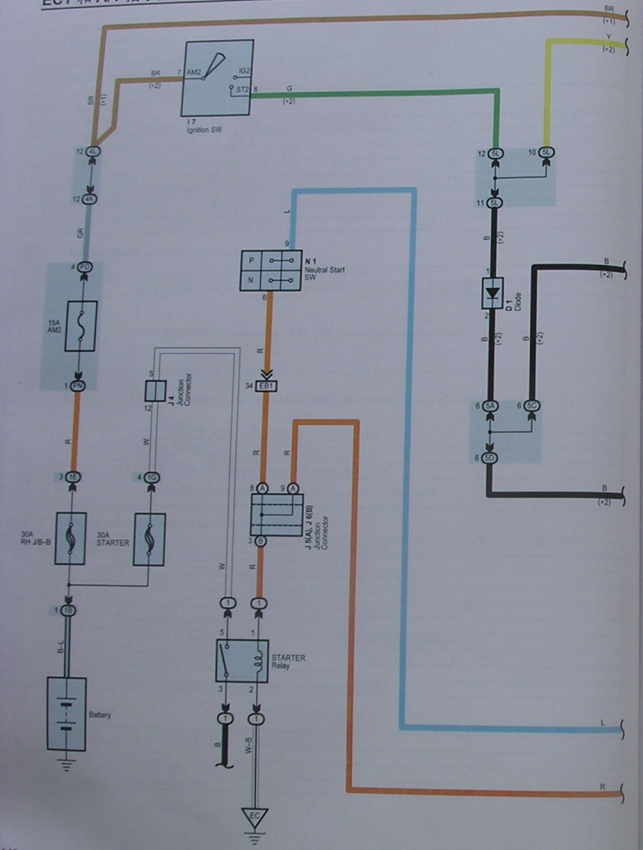
Code	See Page	Junction Block and Wire Harness (Connector Location)
2F	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
4B	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4C		
4D		
4E		
4K		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5C		
5D		
5G		
DD	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DJ	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
LC	55	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		

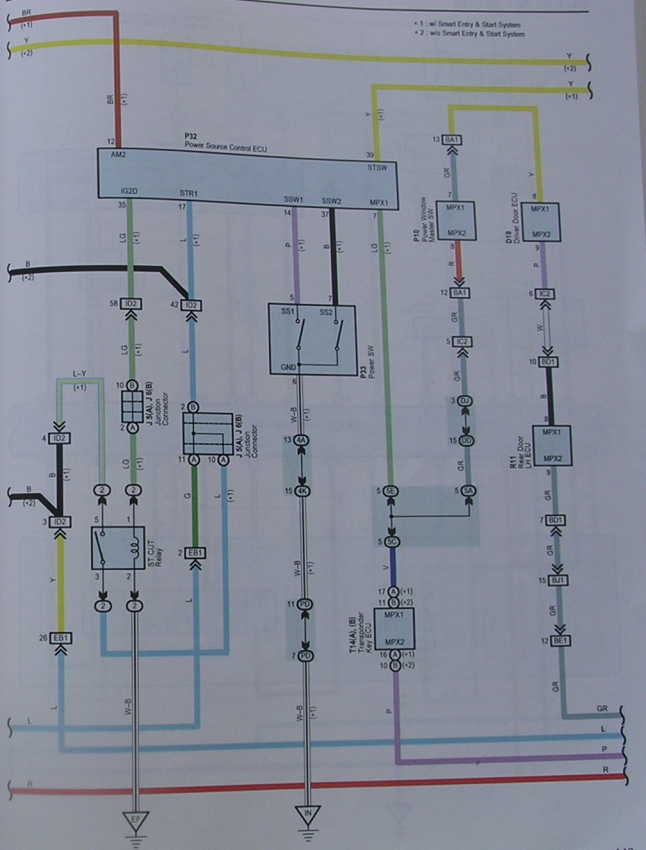
□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	78	Front Door LH Wire and Floor No.2 Wire (Left Kick Panel)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IE1	78	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH2	80	Front Door RH Wire and Floor Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BA1	82	Front Door LH Wire and Front Door LH No.2 Wire (Inside of the Front Door LH)
BD1	82	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BE1	82	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

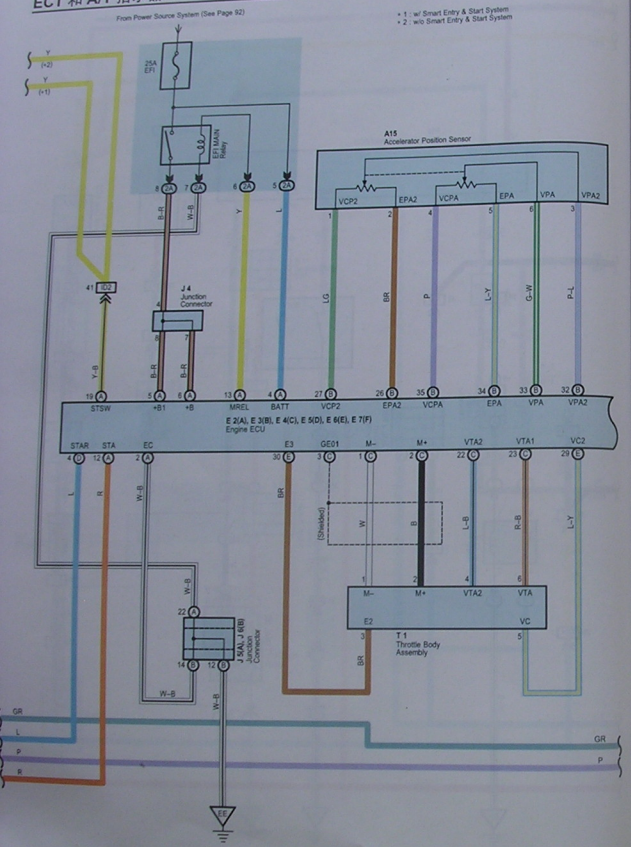
▽ : Ground Points

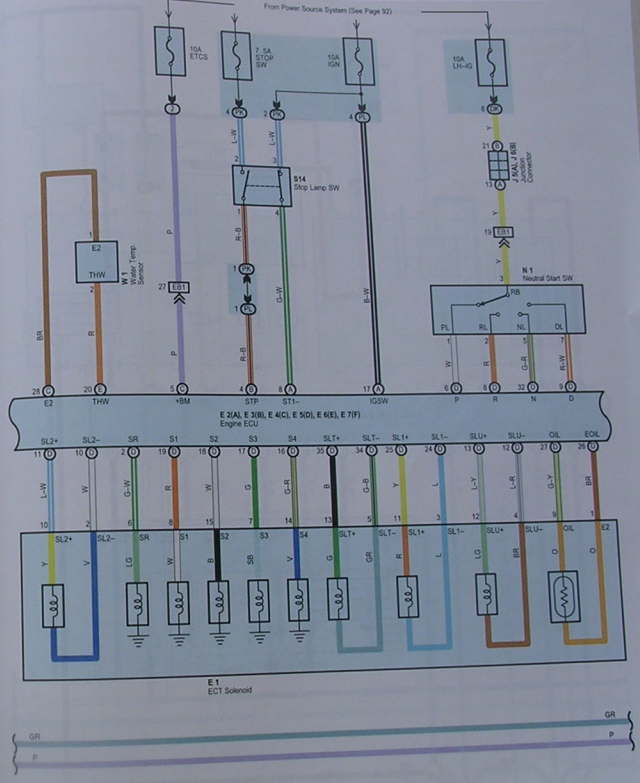
Code	See Page	Ground Points Location
IK	76	Cowl Side Panel LH
IL	76	Left Side of Shift Lever
IN	76	Cowl Side Panel RH

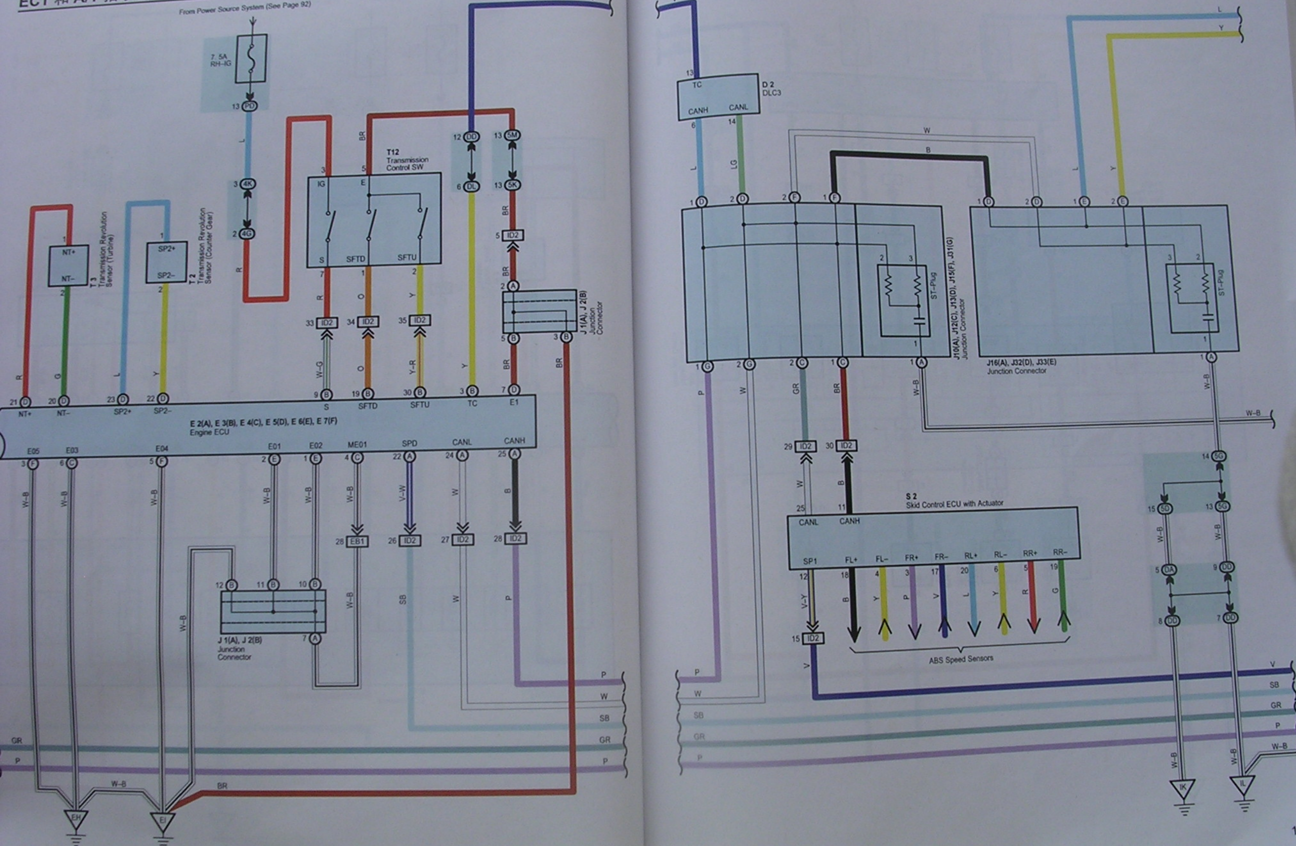

I 7
Ignition SW
N 1
Neutral Start SW
D 1
Diode
15A AM2
30A RH J/B-B
30A STARTER
J 4
Junction Connector
J 5A(J 6B)
Junction Connector
STARTER Relay
Battery
ECT


* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System
P32
Power Source Control ECU
AM2
IG2D
STR1
STSW
SSW1
SSW2
MPX1
MPX2
P33
Power SW
P18
Power Window Master SW
D13
Driver Door ECU
B11
Rear Door LH ECU
J 5A(J 6B)
Junction Connector
ST CUT Relay
T14A(J 8)
Transponder Key ECU
GND
IN

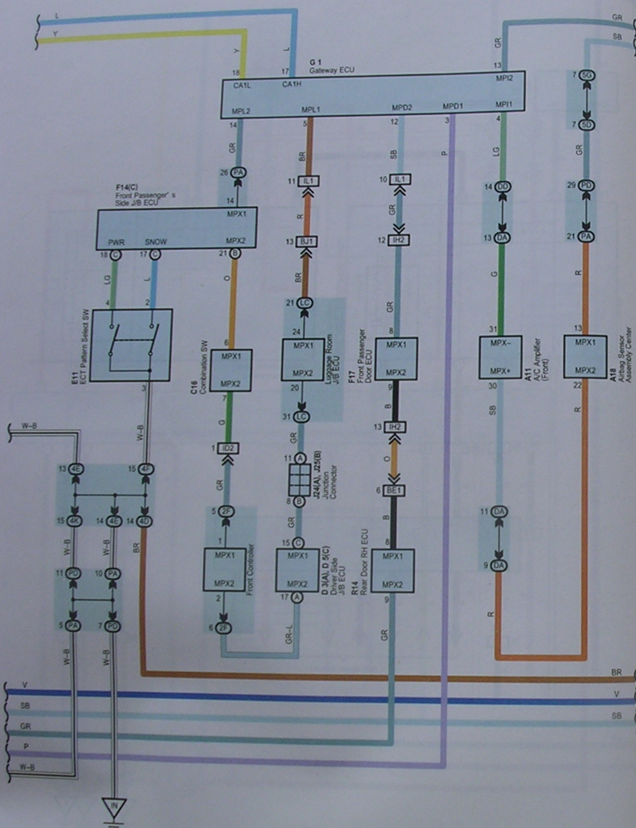
ECT 和 A/T 指示器

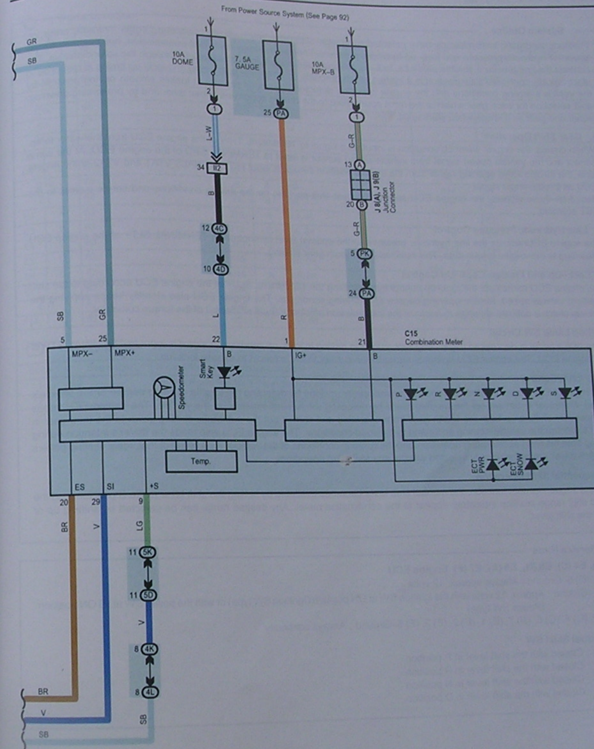

From Power Source System (See Page 92)
* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System
25A ETC
EFI Main Relay
A15
Accelerator Position Sensor
VCP2
EPA2
VCPA
EPA
VPA
VPA2
J 4
Junction Connector
STSW
+B1
+B
MREL
BATT
VCP2
EPA2
VCPA
EPA
VPA
VPA2
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
STAR
STA
EC
E3
GE01
M-
M+
VTA2
VTA1
VC2
(Shielded)
T 1
Throttle Body Assembly
M-
M+
VTA2
VTA
E2
VC
J 3(A), J 6(B)
Junction Connector
E7


From Power Source System (See Page 92)
10A ETCS
7.5A STOP SW
10A IGN
10A LH-IG
S14
Stop Lamp SW
J 3(A), J 6(B)
Junction Connector
W 1
Water Temp. Sensor
N 1
Neutral Start SW
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F)
Engine ECU
E2
THW
+BM
STP
ST1+
IGSW
P
R
N
D
E 1
ECT Solenoid



From Power Source System (See Page 92)
7. 5A RH–IG
T12 Transmission Control SW
IG
E
S
SFTD
SFTU
T3 Transmission Revolution Sensor (Turbine)
NT+
NT–
T2 Transmission Revolution Sensor (Counter Gear)
SP2+
SP2–
J 1(A), J 2(B) Junction Connector
E 2(A), E 3(B), E 4(C), E 5(D), E 6(E), E 7(F) Engine ECU
TC
E1
E05
E03
E04
E01
E02
ME01
SPD
CANL
CANH
D 2 DLC3
J10(A), J12(C), J13(D), J15(F), J31(G) Junction Connector
J16(A), J32(D), J33(E) Junction Connector
ST–Plug
S 2 Skid Control ECU with Actuator
SP1
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
ABS Speed Sensors
EH
EI
IK
IL


G 1
Gateway ECU
CA1L
CA1H
MPI2
MPL2
MPL1
MPD2
MPD1
MPI1
F14(C)
Front Passenger' s
Side J/B ECU
MPX1
PWR
SNOW
MPX2
E11
ECT Pattern Select SW
C16
Combination SW
Luggage Room
J/B ECU
F17
Front Passenger
Door ECU
A11
A/C Amplifier
(Front)
A18
Airbag Sensor
Assembly Center
J24(A), J25(B)
Junction
Connector
Front Controller
D 3(A), D 5(C)
Driver Side
J/B ECU
R14
Rear Door RH ECU
IN


From Power Source System (See Page 92)
10A
DOME
7. 5A
GAUGE
10A
MPX-B
J 8(A), J 9(B)
Junction
Connector
C15
Combination Meter
MPX-
MPX+
Smart
Key
Speedometer
IG+
Temp.
ECT
PWR
ECT
SNOW
ES
SI
+S

System Outline

Previous automatic transmissions have selected each gear shift using mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock–up hydraulic pressure. The electronically controlled transmission, however, electrically controls the line pressure, throttle pressure, lock–up pressure and accumulator pressure etc. through the solenoid valve. The electronically controlled transmission is a system which precisely controls gear shift timing and lock–up timing in response to the vehicle's driving conditions and the engine condition detected by various sensors. It makes smooth driving possible by shift selection for each gear which is the most appropriate to the driving conditions at that time, and by preventing downing, squat and gear shift shock when starting off.

1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine ECU from the water temp. sensor and the vehicle speed signal from vehicle speed sensor is input to TERMINAL SPD of the engine ECU. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1 and VTA2 of the engine ECU as throttle angle signal.

Based on these signals, the engine ECU selects the best shift position for the driving conditions and sends current to the ECT solenoid.

2. Line Hydraulic Pressure Control

The engine ECU adjusts the line hydraulic pressure to the optimal level by controlling TERMINAL SLT+ of the engine ECU according to the engine torque data. This realizes the smooth gear shifting.

3. Lock–Up and Flexible Lock–Up Control

The engine ECU carries out the lock–up control by controlling the TERMINAL SLU+ of the engine ECU according to the shift position, vehicle speed, throttle opening degree and running conditions. The engine ECU also steadily keeps applying the lock–up clutch a delicate slippage to improve the transmission efficiency (Fuel efficiency) of the torque converter.

4. Stop Lamp SW Circuit

If the brake pedal is depressed (Stop lamp SW on) when driving in lock–up condition, a signal is input to TERMINAL STP of the engine ECU. The engine ECU operates and cuts the current to the solenoid to release lock–up.

5. AI–Shift Control

The engine ECU judges whether the road is downslope or upslope by detecting the throttle opening degree or the vehicle's speed. Moreover it can expect the winding roads by detecting the turning condition of the vehicle. The engine ECU keeps unnecessary shifting up from the fourth gear from operating and carries out the automatic shifting down to the third gear in order to control the vehicle running according to the road conditions. The engine ECU also reads the driver's intention during driving from his (her) accelerating operation and the running conditions of the vehicle. As a result of that, ideal shifting patters for each driver are automatically selected without any switching operations.

6. Sequential Shift Operation

With the sequential shift function, the manual shift lever becomes available by setting the shift lever to the S position, and the S and shift range position indicators appear in the combination meter. Any desired range can be selected by shifting up or down the shift lever.

Service Hints

E2 (A), E4 (C), E5 (D), E6 (E), E7 (F) Engine ECU

(A) 4, (C) 5–Ground : Always approx. 12 volts

(A) 17–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

(A) 2, (C) 4, (C) 6, (D) 7, (E) 1, (E) 2, (F) 3, (F) 5–Ground : Always continuity

N1 Neutral Start SW

3–1 : Closed with the shift lever in P position
3–2 : Closed with the shift lever in R position
3–5 : Closed with the shift lever in N position
3–7 : Closed with the shift lever in D position

○ : **Parts Location**

Code		See Page
A11		66
A15		66
A18		66
C15		66
C16		66
D1		67
D2		67
D3	A	67
D5	C	67
D19		70
E1		63
E2	A	63
E3	B	63
E4	C	63
E5	D	63
E6	E	63
E7	F	63
E11		67
F14	C	67
F17		71
G1		67
I7		67
J1	A	64
J2	B	64
J3		64
J4		64
J5	A	64
J6	B	64
J8	A	68
J9	B	68
J10	A	58, 68
J12	C	58, 68
J13	D	58, 68
J15	E	58, 68
J16	A	60, 68
J24	A	71
J25	B	71
J31	G	58, 68
J32	D	60, 68
J33	E	60, 68
N1		64
P10		72
P32		68
P33		68
R11		72
R14		72
S2		65
S14		69
T1		65
T2		65
T3		65
T12		69
T14	A	69
	B	69
W1		65

○ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)
2	26	Engine Room R/B No.2 (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
1E		
1G		
2A	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2F		
4A	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4C		
4D		
4E		
4F		
4G		
4K		
4L		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5C		
5D		
5E		
5G		
5K		
5L		
5M		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DJ	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
DK	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
DL		
LC	55	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)
PL		
PN		

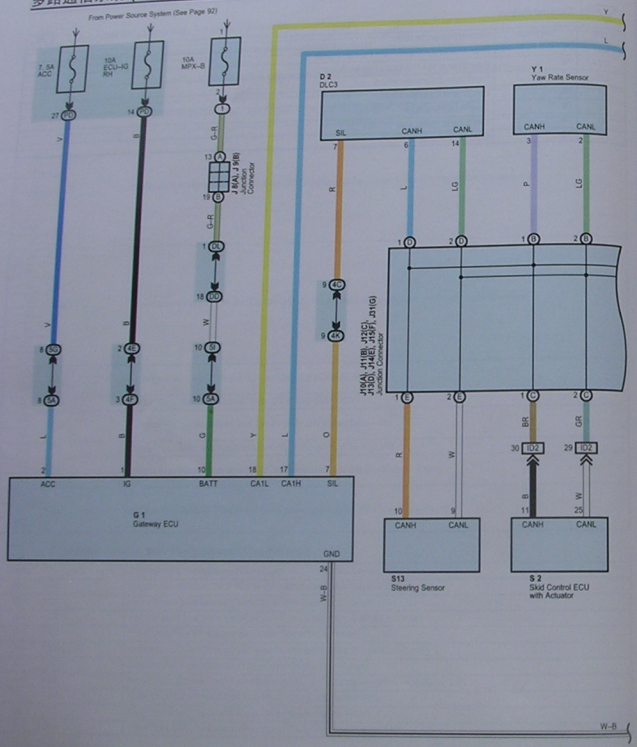
: Connector Joining Wire Harness and Wire Harness

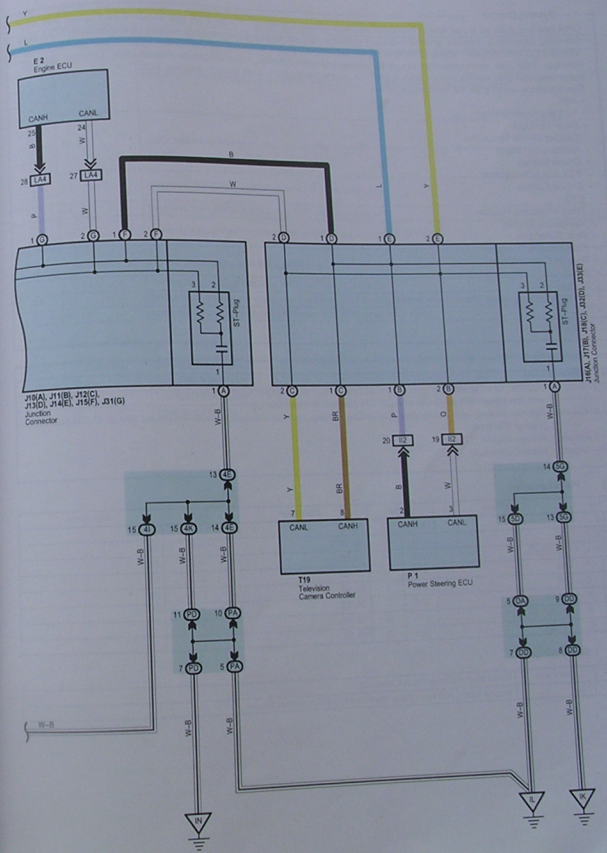
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Room Main Wire and Engine Wire (Inside of the ECU Box)
IC2	78	Front Door LH Wire and Floor No.2 Wire (Left Kick Panel)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IH2	80	Front Door RH Wire and Floor Wire (Right Kick Panel)
II2	80	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BA1	82	Front Door LH Wire and Front Door LH No.2 Wire (Inside of the Front Door LH)
BD1	82	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BE1	82	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

: Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Side of the Front Right Fender Apron
EE	76	Rear Side of the Front Left Fender Apron
EH	76	Right Side of Cylinder Head
EI	76	Left Side of Cylinder Head
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH

多路通信系统 (CAN)


From Power Source System (See Page 92)
7.5A ACC
10A ECU-IG RH
10A MPX-B
J14(A), J18(B) Junction Connector
D 2 DLC3
SIL
CANH
CANL
Y 1 Yaw Rate Sensor
J10(A), J11(B), J12(C), J13(D), J14(E), J15(F), J31(G) Junction Connector
G 1 Gateway ECU
ACC
IG
BATT
CA1L
CA1H
SIL
GND
S13 Steering Sensor
S 2 Skid Control ECU with Actuator
W-B


E 2 Engine ECU
CANH
CANL
ST-Plug
J10(A), J11(B), J12(C), J13(D), J14(E), J15(F), J31(G) Junction Connector
J14(A), J18(B), J19(C), J33(D), J33(E) Junction Connector
T19 Television Camera Controller
P 1 Power Steering ECU
W-B

多路通信系统 (CAN)

System Outline

CAN has two lines as a pair which make communication with operating voltage. CAN has excellent data speed and error detecting capacity. It consists of vehicle control systems such as engine ECU, yaw rate sensor, power steering ECU, skid control ECU with actuator, steering sensor, DLC3, television camera controller (w/ navigation system) and gateway ECU. Gateway ECU has communication circuit to correspond with different types of communication data. Different types of communication data can be shared among communication parts after it goes through gateway ECU.

This system is working for the following systems:

- ABS
- Air Conditioner (Front)
- Back-Up Light
- Cellular Mobile Telephone
- Combination Meter
- Cruise Control
- ECT and A/T Indicator
- Engine Control
- EPS
- Front Wiper and Washer
- Navigation System
- Rear Sunshade
- Rear Window Defogger
- Remote Control Mirror
- SRS
- Starting
- TOYOTA Parking Assist (Back Guide Monitor)
- TRC
- VSC

Service Hints

G1 Gateway ECU

2–Ground : Approx. 12 volts with the ignition SW at ON or ACC position (Ignition SW type) or with the power SW at IG ON or ACC ON position (Power SW type)

1–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

10–Ground : Always approx. 12 volts

24–Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
D2	67	J13 D	58, 68	J33 E	60, 68
E2	63	J14 E	58, 68	P1	64
G1	67	J15 F	58, 68	S2	65
J8 A	68	J16 A	60, 68	S13	69
J9 B	68	J17 B	60, 68	T19	69
J10 A	58, 68	J18 C	60, 68	Y1	69
J11 B	58, 68	J31 G	58, 66		
J12 C	58, 68	J32 D	60, 66		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
4C	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4E		
4F		
4I		
4K		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5D		
5G		
5I		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
DL	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PA		
PD		

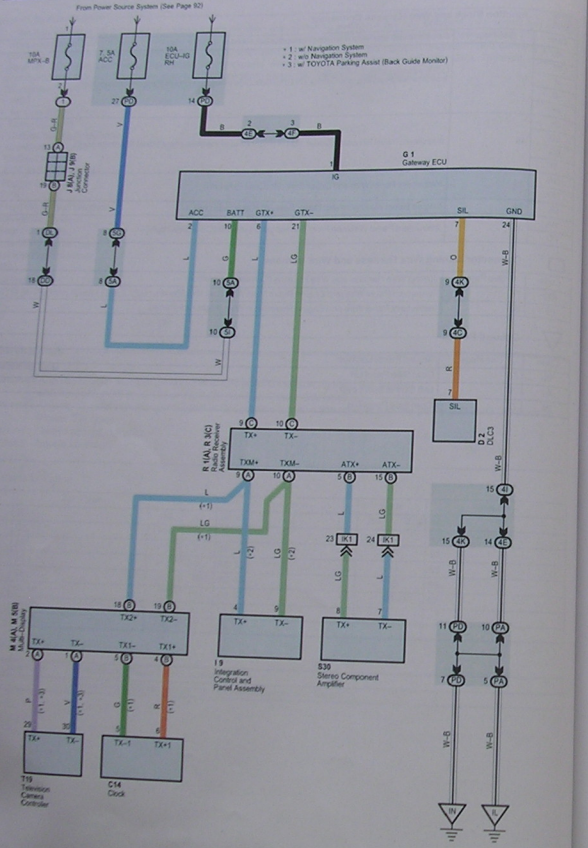
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
II2	80	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH

多路通信系统 (AVC-LAN)



System Outline

AVC–LAN consists of audio visual systems such as radio receiver assembly, multi–display (w/ navigation system), integration control and panel assembly (w/o navigation system), clock (w/ navigation system), stereo component amplifier, television camera controller (w/ navigation system), clock (w/ navigation system) and gateway ECU. Gateway ECU has communication circuit to correspond with different types of communication data. Different types of communication data can be shared among communication parts after it goes through gateway ECU.

This system is working for the following systems:

- Air Conditioner (Front)
- Air Conditioner (Rear)
- Audio System
- Clock (w/ Navigation System)
- Mirror Heater
- Navigation System
- Rear Window Defogger
- TOYOTA Parking Assist (Back Guide Monitor)

Service Hints

G1 Gateway ECU

2–Ground : Approx. 12 volts with the ignition SW at ON or ACC position (Ignition SW type) or with the power SW at IG ON or ACC ON position (Power SW type)
1–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
10–Ground : Always approx. 12 volts
24–Ground : Always continuity

○ : Parts Location

Code	See Page	Code		See Page	Code		See Page
C14	66	J8	A	68	R1	A	68
D2	67	J9	B	68	R3	C	68
G1	67	M4	A	68	S30		73
I9	67	M5	B	68	T19		69

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

▭ : Junction Block and Wire Harness Connector

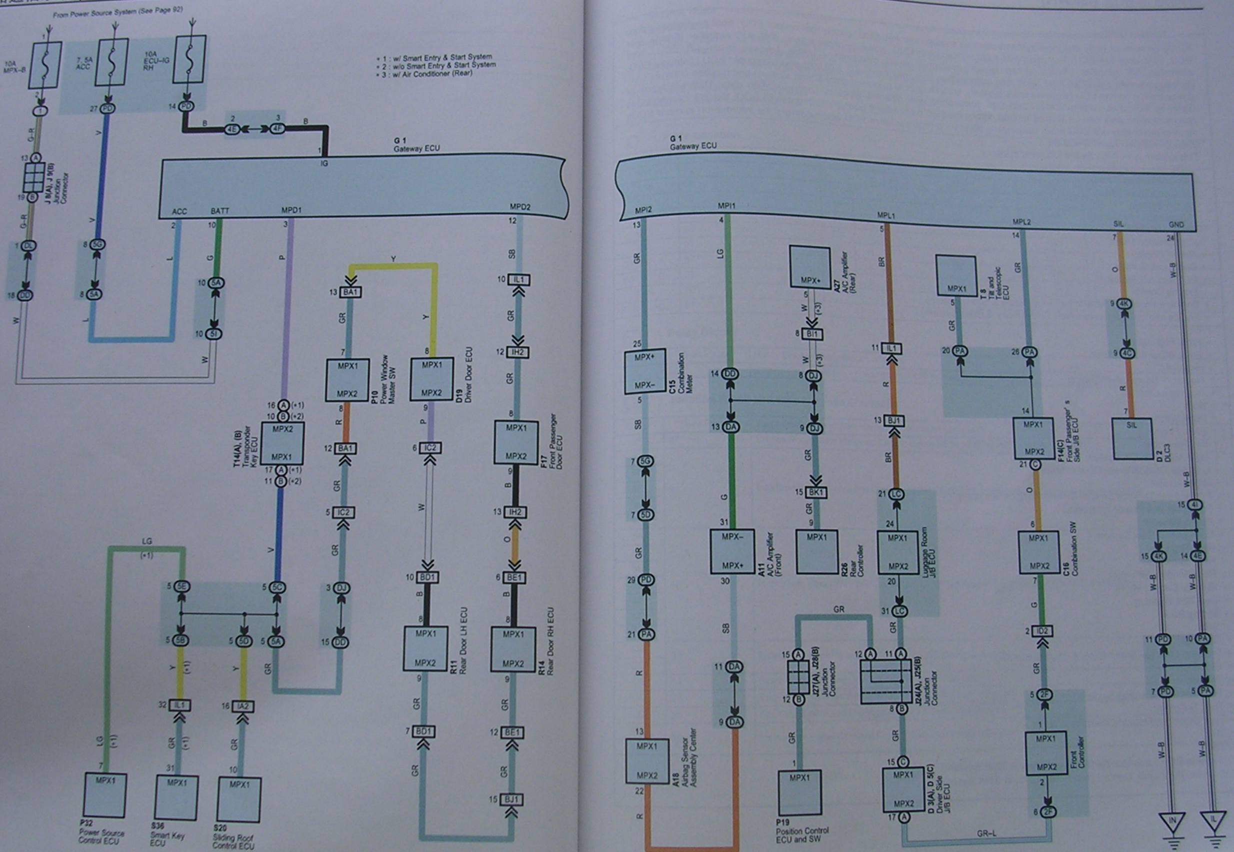
Code	See Page	Junction Block and Wire Harness (Connector Location)
4C	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4E		
4F		
4I		
4K		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5G		
5I		
DD	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DL	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		

▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK1	80	Instrument Panel Wire and Floor Wire (Under the Rear Console)

▽ : Ground Points

Code	See Page	Ground Points Location
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH


From Power Source System (See Page 92)
10A MPX-B
7.5A ACC
10A ECU-IG RH
* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System
* 3 : w/ Air Conditioner (Rear)
G 1 Gateway ECU
IG
ACC
BATT
MPD1
MPD2
MPI2
MPI1
MPL1
MPL2
SIL
GND
J 8(A), J 9(B) Junction Connector
T14(A), (B) Transponder Key ECU
P10 Power Window Master SW
D19 Driver Door ECU
F17 Front Passenger Door ECU
R11 Rear Door LH ECU
R14 Rear Door RH ECU
P32 Power Source Control ECU
S36 Smart Key ECU
S20 Sliding Roof Control ECU
C15 Combination Meter
A18 Airbag Sensor Assembly Center
A11 A/C Amplifier (Front)
A27 A/C Amplifier (Rear)
R26 Rear Controller
P19 Position Control ECU and SW
J27(A), J28(B) Junction Connector
J24(A), J25(B) Junction Connector
Luggage Room J/B ECU
D 3(A), D 5(C) Driver Side J/B ECU
T 8 Tilt and Telescopic ECU
F14(C) Front Passenger's Side J/B ECU
C16 Combination SW
Front Controller
D 2 DLC3
MPX1
MPX2
MPX+
MPX-
GR-L
IN
IL

多路通信系统 (BEAN)

System Outline

BEAN consists of body electrical systems such as transponder key ECU, sliding roof control ECU, front passenger's door ECU, rear door LH ECU, rear door RH ECU, driver door ECU, power window master SW, A/C amplifier (Front), rear controller, A/C amplifier (Rear), airbag sensor assembly center, combination meter, luggage room J/B ECU, front passenger's side J/B ECU, front controller, combination SW, driver side J/B ECU, tilt and telescopic ECU, gateway ECU, power source control ECU (w/ smart entry system), smart key ECU (w/ smart entry & start system) and position control ECU. Gateway ECU has communication circuit to correspond with different types of communication data. Different types of communication data can be shared among communication parts after it goes through gateway ECU. Vehicle information is input to driver side J/B ECU at an assembling plant as a representative ECU which delivers the information to other ECUs through multiplex communication.

This system is working for the following systems:

- ABS
- Air Conditioner (Front)
- Air Conditioner (Rear)
- Audio System
- Automatic Light Control
- Back-Up Light
- Combination Meter
- Cruise Control
- Door Lock Control
- ECT and A/T Indicator
- Engine Control
- Engine Immobilizer System (w/ Smart Entry & Start System)
- Engine Immobilizer System (w/o Smart Entry & Start System)
- EPS
- Front Fog Light
- Front Wiper and Washer
- Headlight
- Headlight Beam Level Control
- Headlight Cleaner
- Horn
- Illumination
- Interior Light
- Key Reminder
- Light Auto Turn Off System
- Luggage Compartment Door Opener
- Mirror Heater
- Power Seat (Driver's Seat w/ Driving Position Memory)
- Power Tilt and Power Telescopic
- Power Window
- Push Button Start System
- Rear Fog Light
- Rear Sunshade
- Rear Window Defogger
- Remote Control Mirror
- Seat Belt Warning
- Sliding Roof
- SRS
- Starting
- Steering Lock (w/ Smart Entry & Start System)
- Stop Light
- Taillight
- Tire Pressure Warning System
- Theft Deterrent
- Turn Signal and Hazard Warning Light
- TRC
- VSC
- Wireless Door Lock Control (w/ Smart Entry & Start System)
- Wireless Door Lock Control (w/o Smart Entry & Start System)

Service Hints

G1 Gateway ECU

2–Ground : Approx. 12 volts with the ignition SW at ON or ACC position (Ignition SW type) or with the power SW at IG ON or ACC ON position (Power SW type)
1–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
10–Ground : Always approx. 12 volts
24–Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A11	66	F17	71	P32	68
A18	66	G1	67	R11	72
A27	70	J8 A	68	R14	72
C15	66	J9 B	68	R26	75
C16	66	J24 A	71	S20	73
D2	67	J25 B	71	S36	73
D3 A	67	J27 A	74	T8	69
D5 C	67	J28 B	74	T14 A	69
D19	70	P10	72	T14 B	69
F14 C	67	P19	74		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

⬭ : Junction Block and Wire Harness Connector

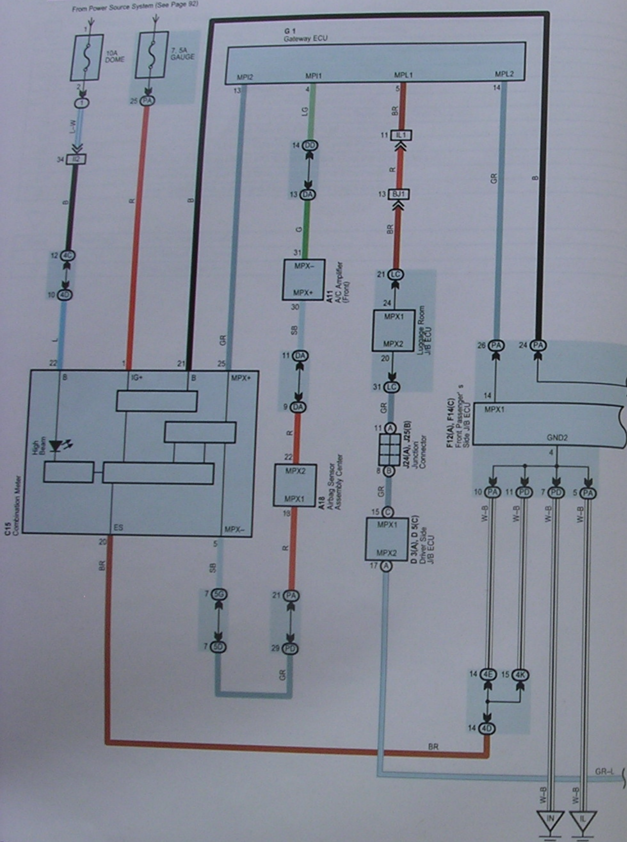
Code	See Page	Junction Block and Wire Harness (Connector Location)
2F	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
4C	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4E		
4F		
4I		
4K		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5B		
5C		
5D		
5E		
5G		
5I		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DJ	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
DL	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
LC	55	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		

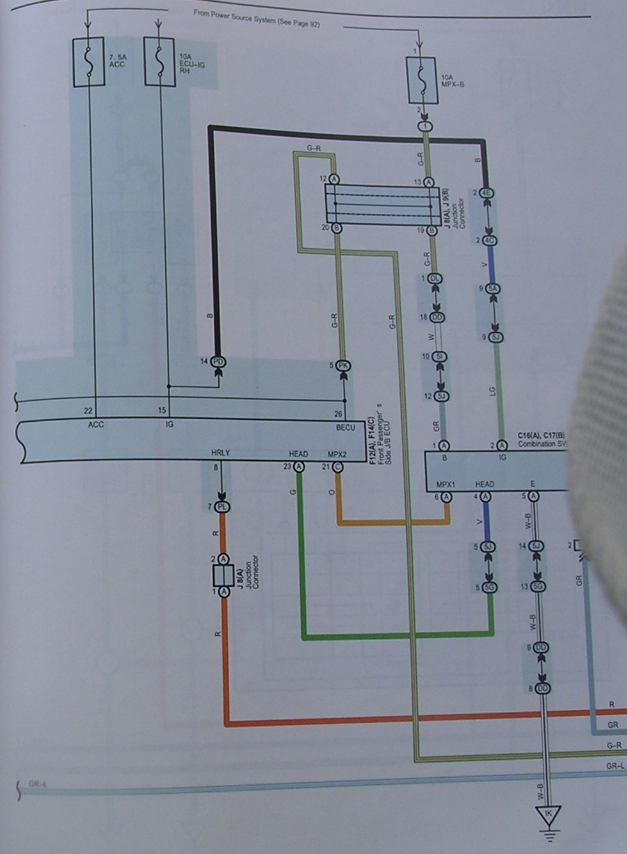
Connector Joining Wire Harness and Wire Harness

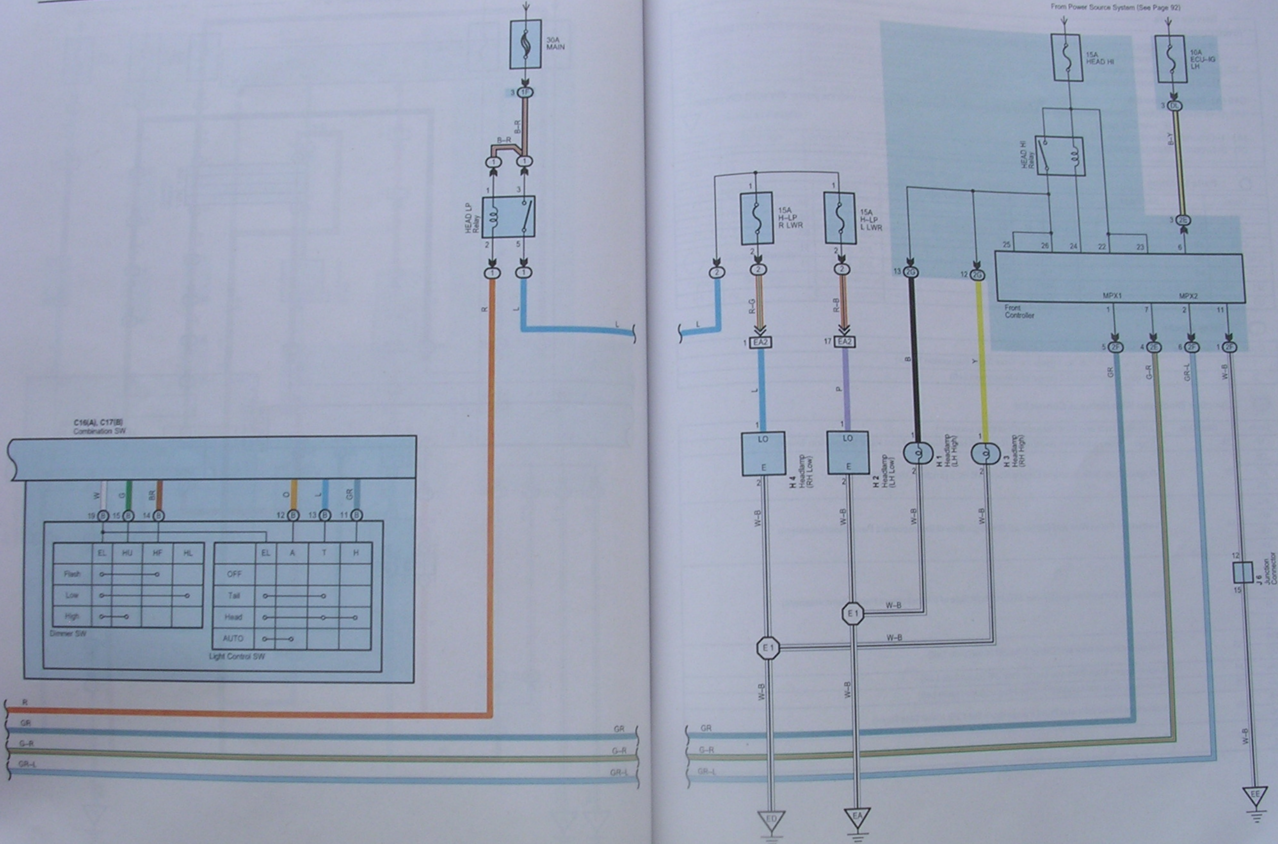
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	78	Instrument Panel Wire and Roof Wire (Left Side of the Instrument Panel)
IC2	78	Front Door LH Wire and Floor No.2 Wire (Left Kick Panel)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IH2	80	Front Door RH Wire and Floor Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BA1	82	Front Door LH Wire and Front Door LH No.2 Wire (Inside of the Front Door LH)
BD1	82	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BE1	82	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BI1	84	Floor No.2 Wire and Rear A/C Sub Wire (Rear Floor Partition Panel LH)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)
BK1	88	Rear Seat RH No.2 Wire and Floor No.2 Wire (Back the Rear Seat LH)

Ground Points

Code	See Page	Ground Points Location
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH


From Power Source System (See Page 92)
10A DOME
7. 5A GAUGE
G 1 Gateway ECU
MPI2
MPI1
MPL1
MPL2
L-W
B
R
GR
LG
G
BR
SB
W-B
A11 A/C Amplifier (Front)
MPX-
MPX+
Luggage Room J/B ECU
MPX1
MPX2
A18 Airbag Sensor Assembly Center
J24(A), J25(B) Junction Connector
D 3(A), D 5(C) Driver Side J/B ECU
F12(A), F14(C) Front Passenger's Side J/B ECU
GND2
C15 Combination Meter
High Beam
IG+
ES
GR-L


From Power Source System (See Page 92)
7. 5A ACC
10A ECU-IG RH
10A MPX-B
G-R
B
V
W
LG
GR
J 8(A), J 9(B) Junction Connector
ACC
IG
BECU
HRLY
HEAD
MPX2
F12(A), F14(C) Front Passenger's Side J/B ECU
C16(A), C17(B) Combination SW
MPX1
E
J 8(A) Junction Connector
R
O
W-B
GR-L


From Power Source System (See Page 92)
30A MAIN
1F
B–R
HEAD LP Relay
R
L
C16(A), C17(B) Combination SW
W
G
BR
O
L
GR
EL
HU
HF
HL
Flash
Low
High
Dimmer SW
OFF
Tail
Head
AUTO
EL
A
T
H
Light Control SW
R
GR
G–R
GR–L
From Power Source System (See Page 92)
15A HEAD HI
10A ECU–IG LH
HEAD HI Relay
DL
B–Y
2B
15A H–LP R LWR
15A H–LP L LWR
R–G
R–B
EA2
L
P
LO
E
H 4 Headlamp (RH Low)
H 2 Headlamp (LH Low)
2G
B
Y
H 1 Headlamp (LH High)
H 3 Headlamp (RH High)
Front Controller
MPX1
MPX2
2F
GR
G–R
GR–L
W–B
J 6 Junction Connector
E1
W–B
ED
EA
EE

Service Hints

Front Controller

6–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

22, 23–Ground : Always approx. 12 volts

11–Ground : Always continuity

C16 (A) Combination SW

(A) 2–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

(A) 1–Ground : Always approx. 12 volts

(A) 5–Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A11		66	F12	A	67	J6		64
A18		66	F14	C	67	J8	A	68
C15		66	G1		67	J9	B	68
C16	A	66	H1		63	J24	A	71
C17	B	66	H2		63	J25	B	71
D3	A	67	H3		63			
D5	C	67	H4		63			

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)
2	26	Engine Room R/B No.2 (Engine Compartment Left)

▭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
2E	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2F		
2G		
4C	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4D		
4E		
4K		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5D		
5G		
5I		
5J		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DL	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
LC	55	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)
PL		

▭ : Connector Joining Wire Harness and Wire Harness

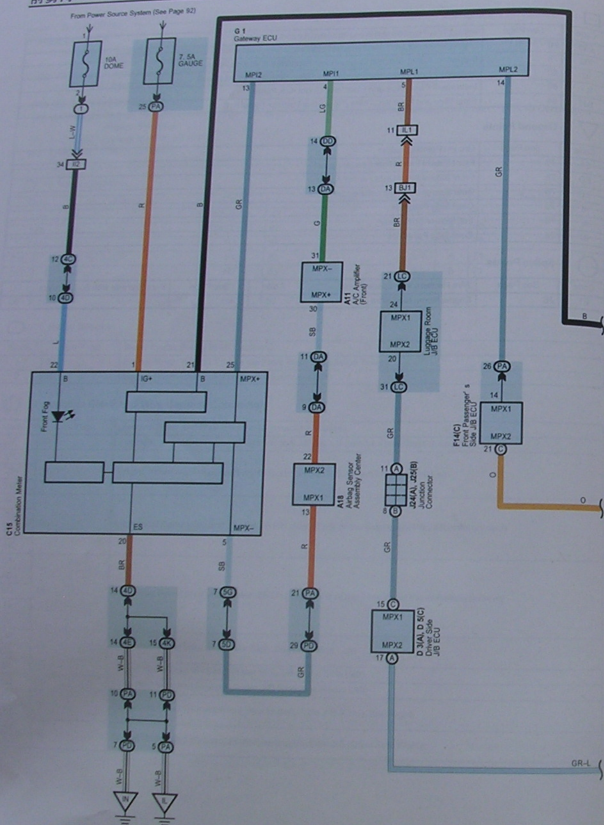
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	76	Engine Room No.2 Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.2)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
II2	80	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

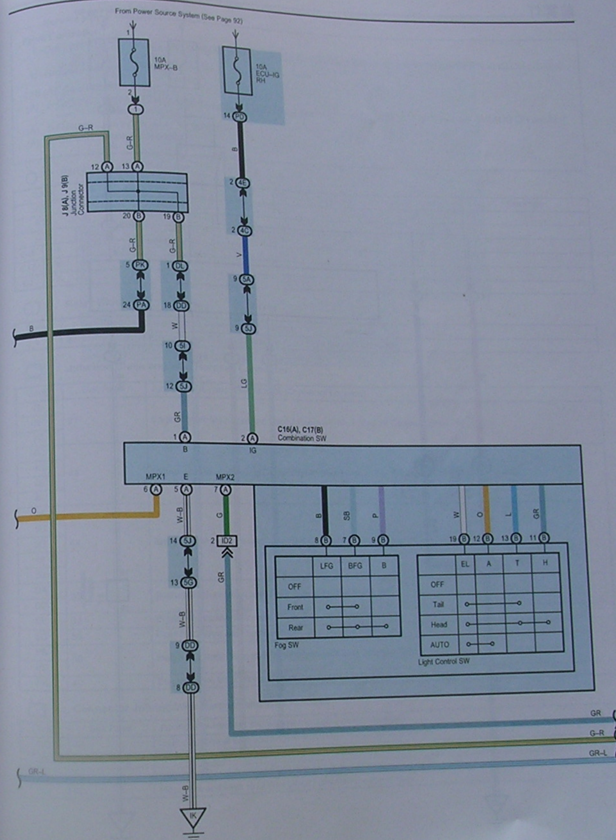
▽ : Ground Points

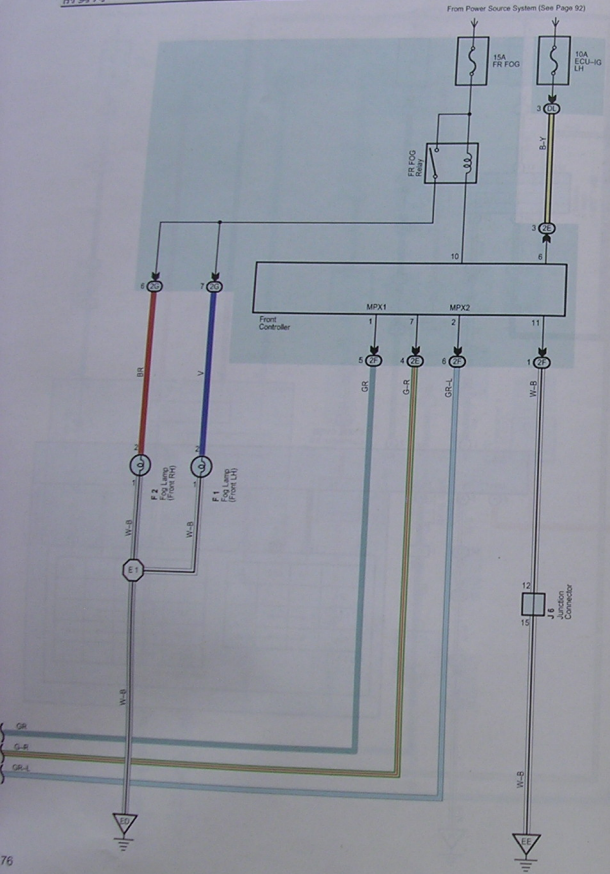
Code	See Page	Ground Points Location
EA	76	Front Side of Front Right Fender Apron
ED	76	Front Side of Front Light Fender Apron
EE	76	Rear Side of the Front Left Fender Apron
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH

○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	76	Engine Room No.2 Wire			


From Power Source System (See Page 92)
10A DOME
7.5A GAUGE
G 1 Gateway ECU
MPI2
MPI1
MPL1
MPL2
A11 A/C Amplifier (Front)
Luggage Room J/B ECU
F14(C) Front Passenger's Side J/B ECU
A18 Airbag Sensor Assembly Center
J24(A), J25(B) Junction Connector
D 3(A), D 5(C) Driver Side J/B ECU
C15 Combination Meter
Front Fog
IG+
MPX+
MPX−
ES
MPX1
MPX2
GR-L


From Power Source System (See Page 92)
10A MPX-B
10A ECU-IG RH
J 8(A), J 9(B) Junction Connector
C16(A), C17(B) Combination SW
Fog SW
LFG
BFG
OFF
Front
Rear
Light Control SW
EL
Tail
Head
AUTO
GR
G-R
GR-L



Service Hints

Front Controller

6–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

11–Ground : Always continuity

C16 (A) Combination SW

(A) 2–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)

(A) 1–Ground : Always approx. 12 volts

(A) 5–Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A11	66	D5 C	67	J8 A	68
A18	66	F1	63	J9 B	68
C15	66	F2	63	J24 A	71
C16 A	66	F14 C	67	J25 B	71
C17 B	66	G1	67		
D3 A	67	J6	64		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2F		
2G		
4C	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4D		
4E		
4K		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5D		
5G		
5I		
5J		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DL	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
LC	55	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)

: Connector Joining Wire Harness and Wire Harness

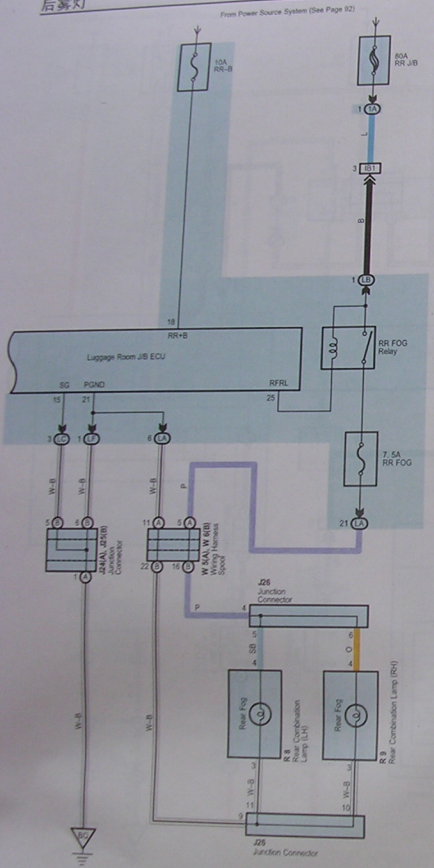
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
II2	80	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

▽ : **Ground Points**

Code	See Page	Ground Points Location
ED	76	Front Side of Front Light Fender Apron
EE	76	Rear Side of the Front Left Fender Apron
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH

○ : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	76	Engine Room No.2 Wire			



Service Hints

Luggage Room J/B ECU

17, 18–Ground : Always approx. 12 volts
8–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
15, 21–Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A11		66	D5	C	67	J25	B	71
A18		66	F14	C	67	J26		71
C15		66	G1		67	R8		72
C16	A	66	J8	A	68	R9		72
C17	B	66	J9	B	68	W5	A	73
D3	A	67	J24	A	71	W6	B	73

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

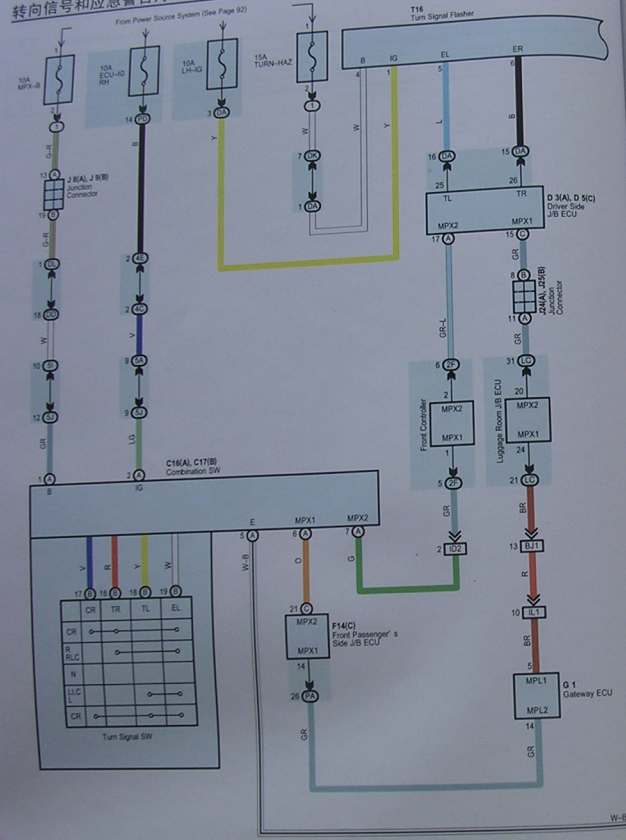
⬭ : Junction Block and Wire Harness Connector

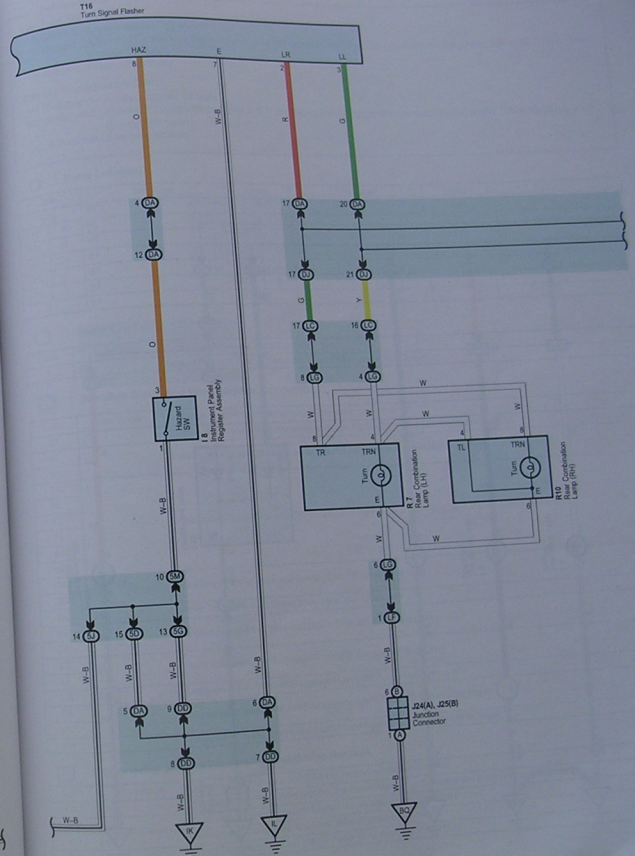
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	23	Engine Room Main Wire and Engine Room J/B No.1 (Near the Front Right Suspention Tower)
2F	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
4C	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4D		
4E		
4K		
5D	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5G		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DJ	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
DL	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
LA	54	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
LB	55	
LC		
LF		
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)

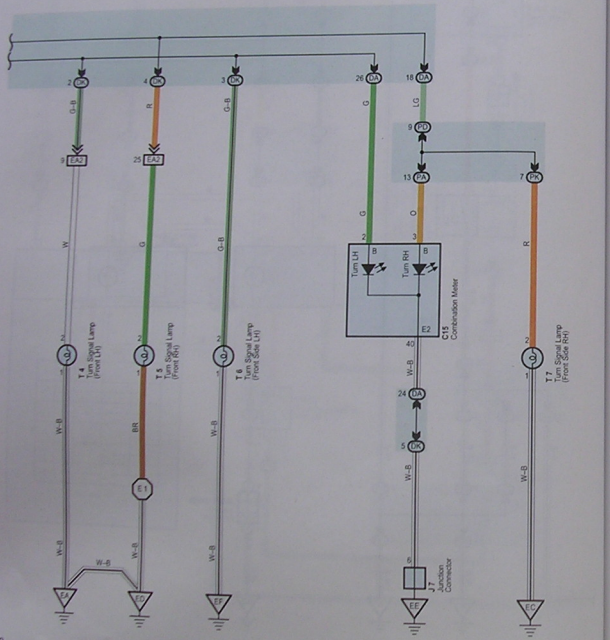
□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	78	Engine Room Main Wire and Floor No.2 Wire (Left Cowl Side Panel)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
II2	80	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

转向信号和应急警告灯


From Power Source System (See Page 92)
10A MPX-B
10A ECU-IG RH
10A LH-IG
15A TURN-HAZ
T16
Turn Signal Flasher
B
IG
EL
ER
J1(A), J(B)
Junction Connector
D 3(A), D 5(C)
Driver Side J/B ECU
MPX2
MPX1
J4(A), J4(B)
Junction Connector
Front Controller
Luggage Room J/B ECU
C16(A), C17(B)
Combination SW
E
IG
F14(C)
Front Passenger's Side J/B ECU
G 1
Gateway ECU
MPL1
MPL2
CR
TR
TL
EL
R
RLC
N
LLC
L
CH
Turn Signal SW
W-B


T16
Turn Signal Flasher
HAZ
E
LR
LL
Hazard SW
I8
Instrument Panel Register Assembly
R7
Rear Combination Lamp (LH)
R10
Rear Combination Lamp (RH)
TR
TRN
TL
Turn
J24(A), J25(B)
Junction Connector
W-B



Service Hints

T16 Turn Signal Flasher

4–Ground : Always approx. 12 volts
1–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
7–Ground : Always continuity

C16 (A) Combination SW

(A) 1–Ground : Always approx. 12 volts
(A) 2–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
(A) 5–Ground : Always continuity

: Parts Location

Code		See Page	Code		See Page	Code	See Page
C15		66	I8		67	R10	72
C16	A	66	J7		64	T4	65
C17	B	66	J8	A	68	T5	65
D3	A	67	J9	B	68	T6	65
D5	C	67	J24	A	71	T7	65
F14	C	67	J25	B	71	T16	69
G1		67	R7		72		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2F	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
4C	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4E		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5D		
5G		
5I		
5J		
5M		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD		
DJ	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
DK	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
DL		
LC	55	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
LF		
LG	54	Luggage Room Wire and Luggage Room J/B (Luggage Room Left)
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD		
PK	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)

: Connector Joining Wire Harness and Wire Harness

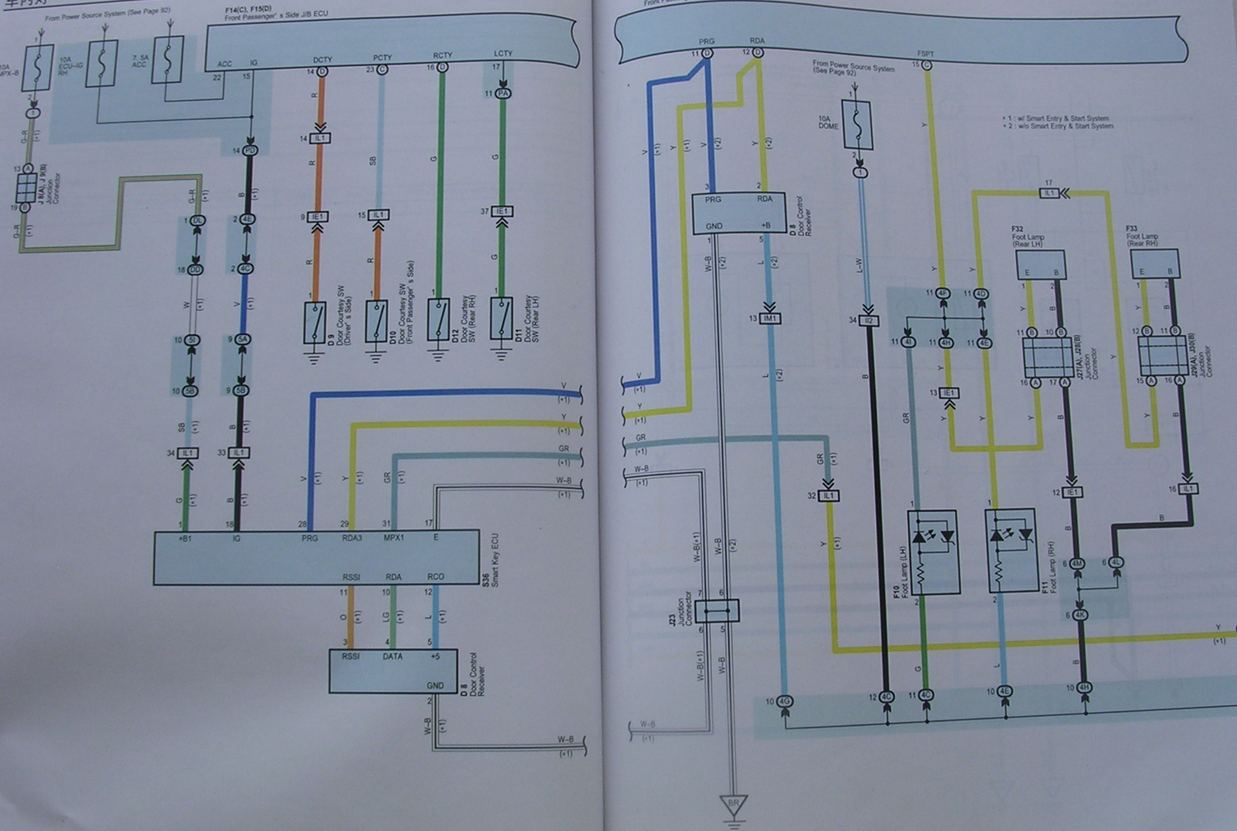
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	76	Engine Room No.2 Wire and Engine Room Main Wire (Inside of the Engine Room R/B No.2)
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

▽ : **Ground Points**

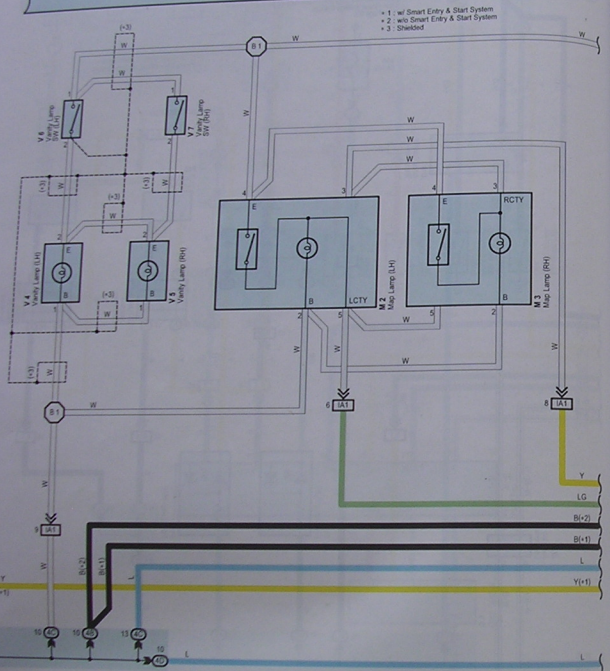
Code	See Page	Ground Points Location
EA	76	Front Side of Front Right Fender Apron
EC	76	Rear Side of the Front Right Fender Apron
ED	76	Front Side of Front Light Fender Apron
EE	76	Rear Side of the Front Left Fender Apron
EF		
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
SQ	82	Rear Floor Partition Panel LH

◯ : **Splice Points**

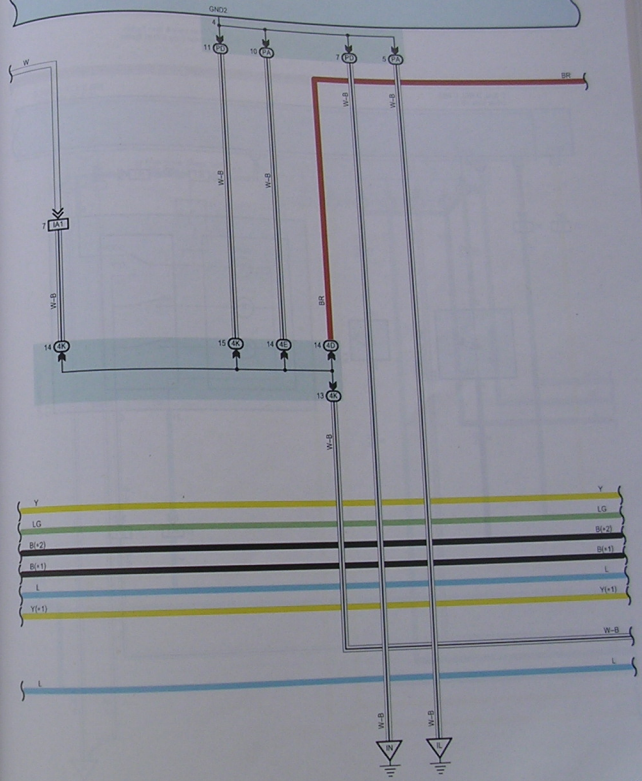
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	76	Engine Room No.2 Wire			


From Power Source System (See Page 92)
F14(C), F15(D)
Front Passenger' s Side J/B ECU
10A MPX-B
10A ECU-IG RH
7.5A ACC
ACC
IG
DCTY
PCTY
RCTY
LCTY
J 8(A), J 9(B) Junction Connector
D 9 Door Courtesy SW (Driver' s Side)
D10 Door Courtesy SW (Front Passenger' s Side)
D12 Door Courtesy SW (Rear RH)
D11 Door Courtesy SW (Rear LH)
+B1
IG
PRG
RDA3
MPX1
E
RSSI
RDA
RCO
S36 Smart Key ECU
RSSI
DATA
+5
GND
D 8 Door Control Receiver
PRG
RDA
FSPT
GND
+B
10A DOME
* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System
F32 Foot Lamp (Rear LH)
F33 Foot Lamp (Rear RH)
J27(A), J28(B) Junction Connector
J29(A), J30(B) Junction Connector
F10 Foot Lamp (LH)
F11 Foot Lamp (RH)
J23 Junction Connector
BR

F14(C), F15(D)
Front Passenger' s Side J/B ECU



F14(C), F15(D)
Front Passenger' s Side J/B ECU



车内灯

F14(C), F15(D)
Front Passenger' s Side J/B ECU

* 1 : w/ Smart Entry & Start System
* 2 : w/o Smart Entry & Start System

D 3(A), D 5(C), D 6(D)
Driver Side J/B ECU

RCTY LCTY ILE ILE

GR 31 IE1 GR 15 IA1 GR

CTY

DOME
MAP RH
MAP LH
DOOR
D
OFF
ON
MR
ML

+B1 GND3

D13
Overhead J/B

T13
Transponder Key Amplifier
Ignition Key
ILL-
ILL+

K5
Key Slot

LG (+2) LG (+1)

B (+2) B (+1)

Y LG B(+2) B(+1) L Y(+1) W-B L

15 IA2 17 IA1

L W-B Y (+1) L W-B

F14(C), F15(D)
Front Passenger' s Side J/B ECU

D 3(A), D 5(C), D 6(D)
Driver Side J/B ECU

GND SGND IG MPXB MPX1 MPX2

From Power Source System
(See Page 52)

10A
LH-IG

W-B W-B

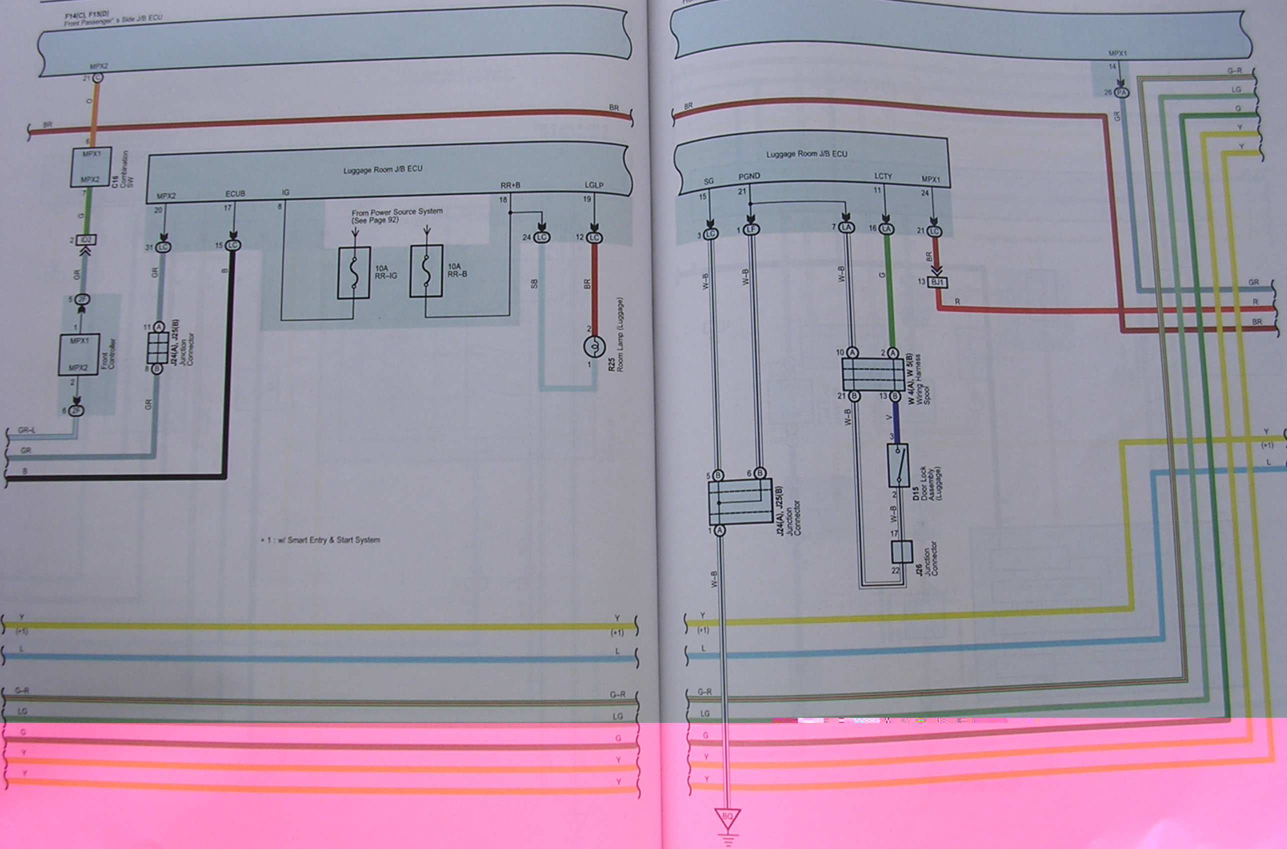
Y Y G LG G-R B GR GR-L

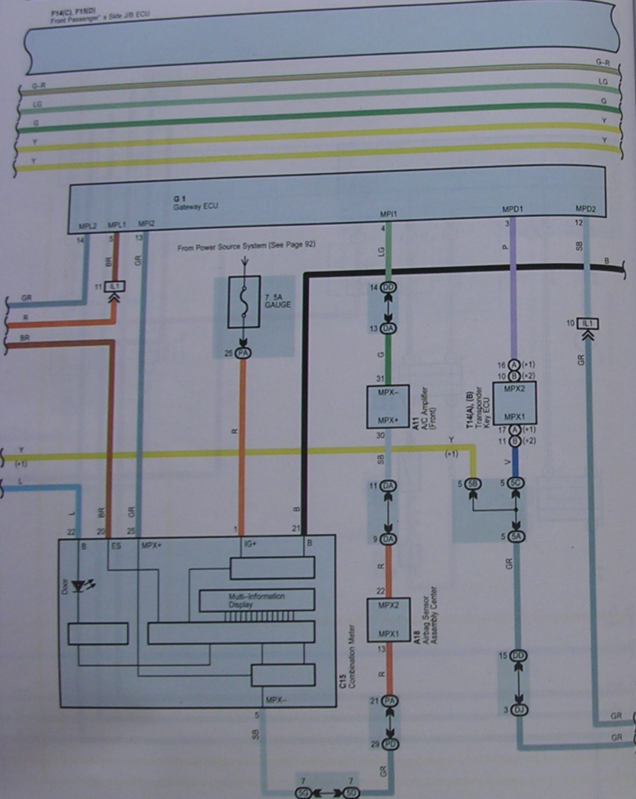
GR-L GR B

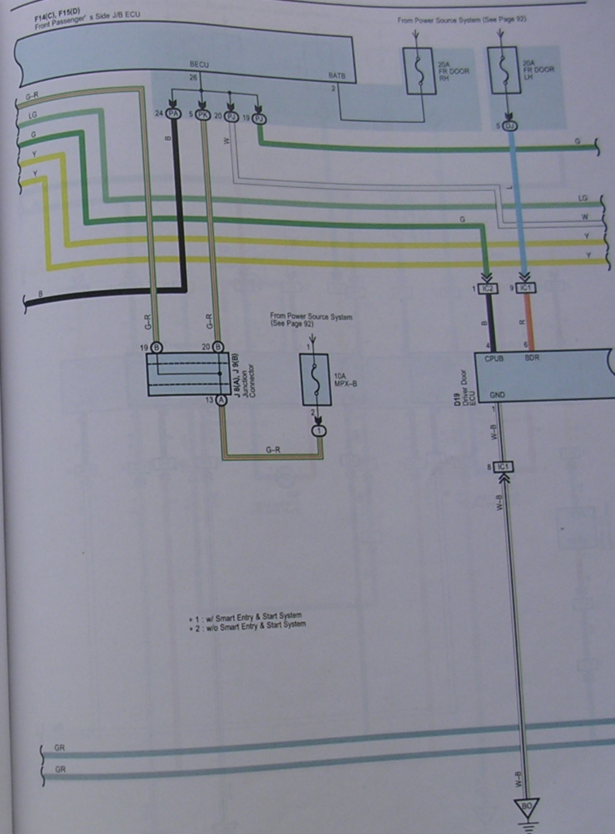
Y (+1) L G-R LG G Y Y

W-B W-B

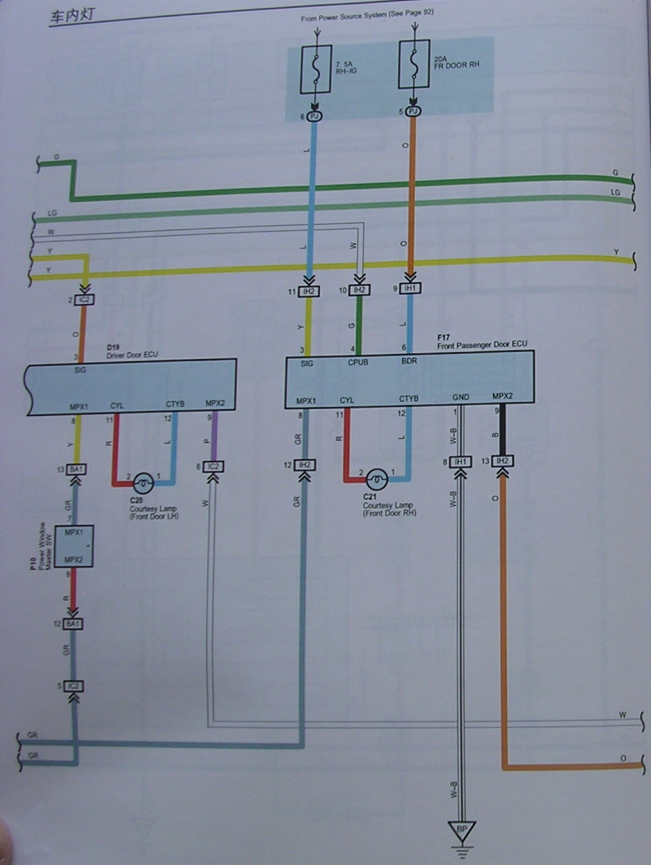
车内灯

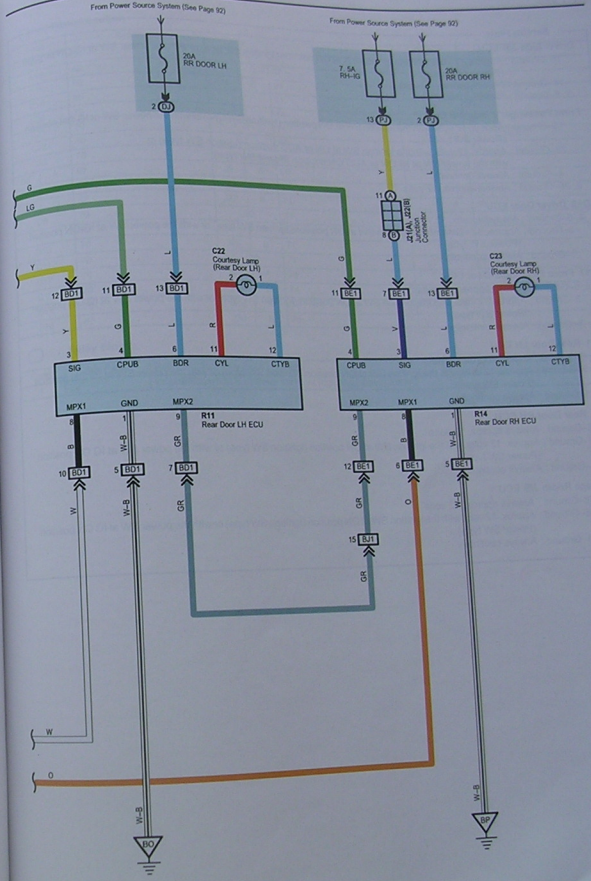

F14(C), F15(D)
Front Passenger' s Side J/B ECU
MPX2
21 C
O
BR
BR
6
MPX1
MPX2
C16 Combination SW
7
G
2 ID2
GR
5 2F
1
MPX1
MPX2
Front Controller
2
6 2F
GR–L
GR
B
Luggage Room J/B ECU
MPX2
ECUB
IG
RR+B
LGLP
20
17
8
18
19
From Power Source System
(See Page 92)
10A
RR–IG
10A
RR–B
31 LC
15 LC
24 LC
12 LC
GR
B
SB
BR
11 A
J24(A), J25(B) Junction Connector
8 B
GR
2
R25 Room Lamp (Luggage)
1
* 1 : w/ Smart Entry & Start System
Y
(*1)
L
G–R
LG
G
Y
Y
F14(C), F15(D)
Front Passenger' s Side J/B ECU
MPX1
14
26 PA
GR
G–R
LG
G
Y
Y
BR
Luggage Room J/B ECU
SG
PGND
LCTY
MPX1
15
21
11
24
3 LC
1 LF
7 LA
16 LA
21 LC
W–B
W–B
W–B
G
BR
13 BJ1
R
GR
R
BR
10 A
2 A
W 4(A), W 5(B) Wiring Harness Spool
21 B
13 B
W–B
V
3
D15 Door Lock Assembly (Luggage)
2
W–B
17
J26 Junction Connector
22
5 B
6 B
J24(A), J25(B) Junction Connector
1 A
W–B
Y
(*1)
L
BQ


F14(C), F15(D)
Front Passenger' s Side J/B ECU
G 1
Gateway ECU
MPL2
MPL1
MPI2
MPI1
MPD1
MPD2
From Power Source System (See Page 92)
7. 5A
GAUGE
MPX–
MPX+
A11
A/C Amplifier (Front)
MPX2
MPX1
T14(A), (B)
Transponder Key ECU
(+1)
(+2)
Door
Multi–Information Display
IG+
ES
MPX+
MPX–
C15
Combination Meter
A18
Airbag Sensor Assembly Center


F14(C), F15(D)
Front Passenger' s Side J/B ECU
BECU
BATB
From Power Source System (See Page 92)
20A
FR DOOR
RH
20A
FR DOOR
LH
J 8(A), J 9(B)
Junction Connector
From Power Source System (See Page 92)
10A
MPX–B
CPUB
BDR
GND
D19
Driver Door ECU
＊1 : w/ Smart Entry & Start System
＊2 : w/o Smart Entry & Start System

车内灯


From Power Source System (See Page 92)
7.5A RH-IG
20A FR DOOR RH
D19 Driver Door ECU
F17 Front Passenger Door ECU
C20 Courtesy Lamp (Front Door LH)
C21 Courtesy Lamp (Front Door RH)
P10 Power Window Master SW
SIG
MPX1
CYL
CTYB
MPX2
CPUB
BDR
GND


From Power Source System (See Page 92)
20A RR DOOR LH
7.5A RH-IG
20A RR DOOR RH
C22 Courtesy Lamp (Rear Door LH)
C23 Courtesy Lamp (Rear Door RH)
21(A), 22(B) Junction Connector
R11 Rear Door LH ECU
R14 Rear Door RH ECU
SIG
CPUB
BDR
CYL
CTYB
MPX1
MPX2
GND

Service Hints

Driver Side J/B ECU

15–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
14–Ground : Always approx. 12 volts
1, 8–Ground : Always continuity

Front Passenger's Side J/B ECU

15–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
22–Ground : Approx. 12 volts with the ignition SW at ON or ACC position (Ignition SW type) or with the power SW at IG ON or ACC ON position (Power SW type)
4–Ground : Always continuity
2, 26–Ground : Always approx. 12 volts

D19 Driver Door ECU

4, 6–Ground : Always approx. 12 volts
3–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
1–Ground : Always continuity

F17 Front Passenger Door ECU

4, 6–Ground : Always approx. 12 volts
3–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
1–Ground : Always continuity

R11 Rear Door LH ECU

4, 6–Ground : Always approx. 12 volts
3–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
1–Ground : Always continuity

R14 Rear Door RH ECU

4, 6–Ground : Always approx. 12 volts
3–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
1–Ground : Always continuity

Luggage Room J/B ECU

17, 18–Ground : Always approx. 12 volts
8–Ground : Approx. 12 volts with the ignition SW at ON position (Ignition SW type) or with the power SW at IG ON position (Power SW type)
15, 21–Ground : Always continuity

: Parts Location

Code	See Page
A11	66
A18	66
C15	66
C16	66
C20	70
C21	70
C22	70
C23	70
D3 A	67
D5 C	67
D6 D	67
D8	70
D9	70
D10	70
D11	70
D12	70
D15	70
D19	70
F10	67
F11	67
F14 C	67
F15 D	67
F17	71
F32	74
F33	74
G1	67
J8 A	68
J9 B	68
J21 A	71
J22 B	71
J23	71
J24 A	71
J25 B	71
J26	71
J27 A	74
J28 B	74
J29 A	74
J30 B	74
K5	68
M2	71
M3	71
O3	71
P10	72
R11	72
R14	72
R25	72
S36	73
T13	69
T14 A	69
T14 B	69
V4	73
V5	73
V6	73
V7	73
W4 A	65
W5 B	73

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B No.1 (Near the Front Right Suspention Tower)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2F	27	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
4B	44	Instrument Panel Wire and Center J/B RH (Right Side of the Instrument Panel Reinforcement)
4C		
4D		
4E		
4F		
4G		
4H		
4I		
4K		
4L		
4M		
5A	48	Instrument Panel Wire and Center J/B LH (Right Side of the Instrument Panel Reinforcement)
5B		
5C		
5D		
5G		
5I		
DA	33	Instrument Panel Wire and Driver Side J/B (Cowl Side Left)
DD	34	Floor No.2 Wire and Driver Side J/B (Cowl Side Left)
DJ	34	Engine Room Main Wire and Driver Side J/B (Cowl Side Left)
DL	54	Floor No.2 Wire and Luggage Room J/B (Luggage Room Left)
LA	55	
LC		
LF		
PA	39	Instrument Panel Wire and Front Passenger's Side J/B (Cowl Side Right)
PD	40	Floor Wire and Front Passenger's Side J/B (Cowl Side Right)
PJ	40	Engine Room Main Wire and Front Passenger's Side J/B (Cowl Side Right)
PK		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	78	Instrument Panel Wire and Roof Wire (Left Side of the Instrument Panel)
IA2		
IC1	78	Front Door LH Wire and Floor No.2 Wire (Left Kick Panel)
IC2		
ID2	78	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IE1	78	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	80	Front Door RH Wire and Floor Wire (Right Kick Panel)
IH2		
II2	80	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IL1	80	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IM1	80	Instrument Panel Wire and Floor No.2 Wire (Under the Rear Console)
BA1	82	Front Door LH Wire and Front Door LH No.2 Wire (Inside of the Front Door LH)
BD1	82	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BE1	82	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BJ1	84	Floor Wire and Floor No.2 Wire (Rear Floor Partition Panel RH)

: Ground Points

Code	See Page	Ground Points Location
IK	78	Cowl Side Panel LH
IL	78	Left Side of Shift Lever
IN	78	Cowl Side Panel RH
BO	82	Under the Driver's Seat
BP	82	Under the Front Passenger's Seat
BQ	82	Rear Floor Partition Panel LH
BR	82	Rear Floor Partition Panel RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	84	Roof Wire			