

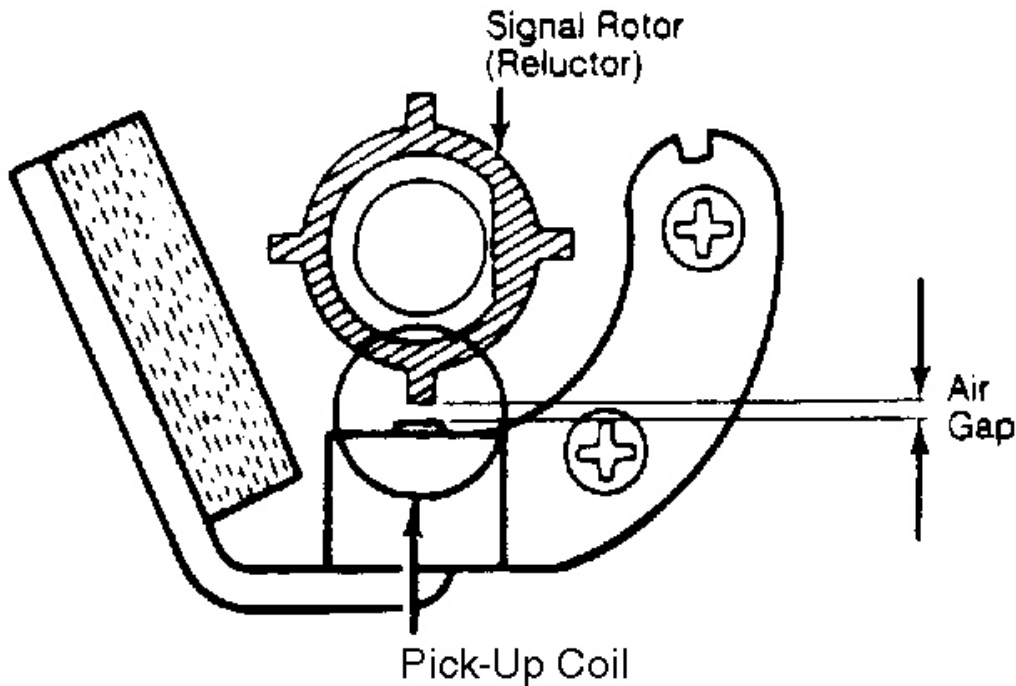
1984 Toyota Pickup

IGNITION SYSTEM - NIPPONDENSO ELECTRONIC '1984 ELECTRICAL Toyota Ignition System - Nippondenso
Electronic Ignition

ADJUSTMENTS

PICK-UP COIL-TO-SIGNAL ROTOR (RELUCTOR) AIR GAP

1. Using a flat, non-magnetic feeler gauge, check air gap between pick-up coil pole piece and each reluctor tooth. Gaps should be equal and within specification. Pick-up coil air gap should be .008-.016" (0.2-0.4 mm).
2. If not, loosen screws, and adjust pick-up coil air gap to specification. Tighten screws, and recheck air gap. On Sprint models, remove control module before loosening pick-up coil. See **Fig. 4**.



29021

Fig. 4: Checking Signal Rotor-to-Pick-Up Coil Air Gap Use flat, non-magnetic feeler gauge to check clearance.

TESTING

PRELIMINARY INSPECTION

CAUTION: The following precautions should be observed while servicing or testing a



1984 Toyota Pickup

IGNITION SYSTEM - NIPPONDENSO ELECTRONIC' '1984 ELECTRICAL Toyota Ignition System - Nippondenso
Electronic Ignition

Nippondenso ignition system.

- Ensure all connections are correct, reverse battery polarity may damage ignitor (ignition control unit).
- DO NOT disconnect battery while engine is running or transistors may be damaged.
- If a tachometer is connected to system, connect tachometer positive lead to coil negative terminal.
- Use care when checking systems, as variations may occur between models. Connectors and wire colors also may vary.
- Illustrations, may not apply to all models.
- DO NOT allow water to enter ignitor.

RESISTANCE TESTS

NOTE: All resistance tests should be made with an ohmmeter with ignition off. If resistance for any test is not within specifications, replace faulty component.

Primary Coil Resistance

Isolate coil from remainder of system. Connect ohmmeter, set in x 1 range. Attach leads to coil positive and negative primary terminals. See **IGNITION COIL RESISTANCE** table.

Secondary Coil Resistance

With coil isolated from system, set ohmmeter to x 100 range. Connect leads to coil positive terminal and to coil tower (high tension terminal). See **IGNITION COIL RESISTANCE** table.

IGNITION COIL RESISTANCE (OHMS)

Application	Primary Resistance	Secondary Resistance
Camry, Corolla & Van	0.3-0.5	7500-10,500
Celica	0.8-1.1	10,700-14,500
Cressida, Supra	0.4-0.5	8500-11,500
Land Cruiser	0.5-0.7	11,500-15,500
Pickup & 4Runner (Type IV)	0.8-1.1	10,700-14,500
Pickup & 4Runner (Type III)	0.4-0.5	8500-11,500
Starlet	1.3-1.7	10,700-14,500
Tercel	0.4-0.5	7700-10,400

Insulation Resistance

Connect ohmmeter leads to coil positive terminal and coil mounting bracket. Reading on all models should exceed 10 megohms (infinity).

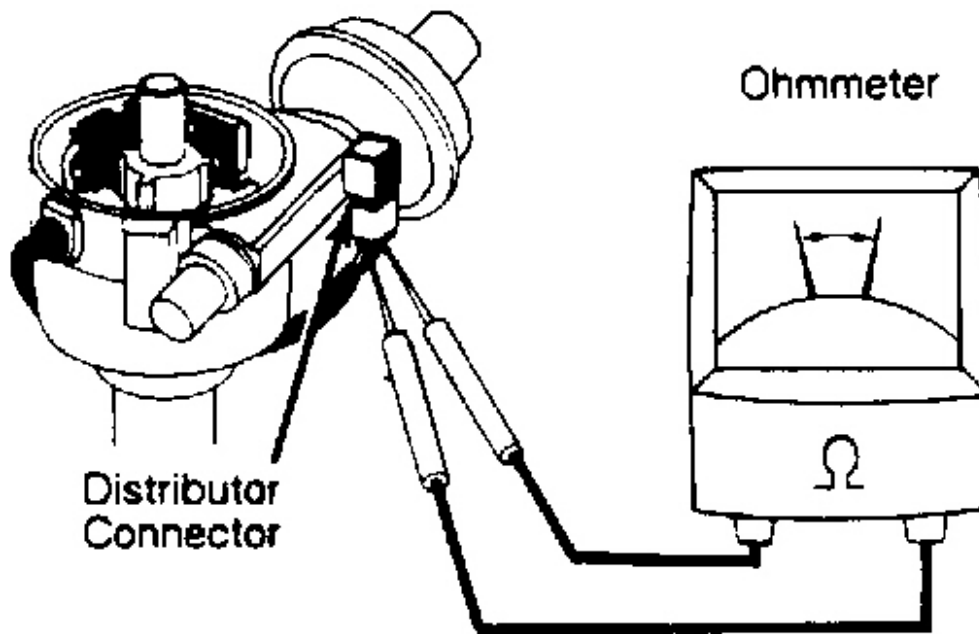
--	--	--

1984 Toyota Pickup

IGNITION SYSTEM - NIPPONDENSO ELECTRONIC '1984 ELECTRICAL Toyota Ignition System - Nippondenso
Electronic Ignition

High Tension Wire Resistance

1. Set ohmmeter to x 1000 range and attach leads to each end of high tension wire. On Isuzu I'Mark and P'UP, resistance should not exceed 73,500 ohms per foot.
2. On all other models, resistance should not exceed 25,000 ohms per wire. If it does, replace wires.



29022

Fig. 5: Checking Pick-Up Coil Resistance Connect ohmmeter leads to distributor connector terminals.

Pick-Up Coil Resistance

Set ohmmeter to x 100 range, measure pick-up coil resistance at distributor connector. See **Fig. 5** and **PICK-UP COIL (SIGNAL GENERATOR) RESISTANCE** table. Also check wires for shorts or opens.

NOTE: On Toyota Celica, Starlet, 4Runner and Pickup models, a signal generator is used in place of a pick-up coil.

PICK-UP COIL (SIGNAL GENERATOR) RESISTANCE (OHMS)

Application	Resistance

1984 Toyota Pickup

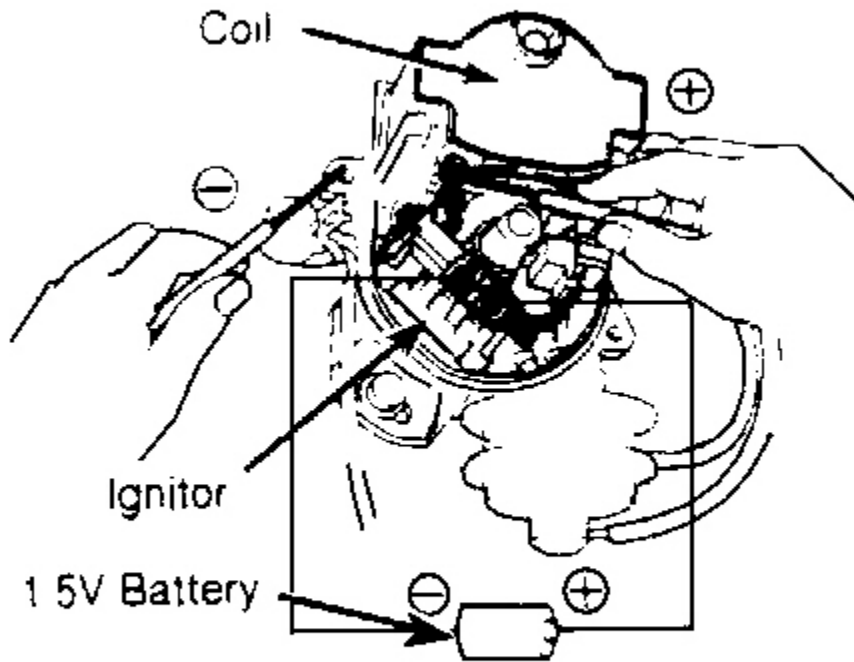
IGNITION SYSTEM - NIPPONDENSO ELECTRONIC' '1984 ELECTRICAL Toyota Ignition System - Nippondenso
Electronic Ignition

Camry, Celica, Cressida, Corolla, Starlet Supra & Van	140-180
Pickup & 4Runner	140-180
Tercel	130-190

IGNITOR TESTS

All Except Cressida & Supra

1. Turn ignition on. Connect voltmeter negative lead-to- ground and positive lead-to-ignition coil positive terminal. Refer to **Fig. 6** and **Fig. 7** . Voltage reading should be 12 volts.

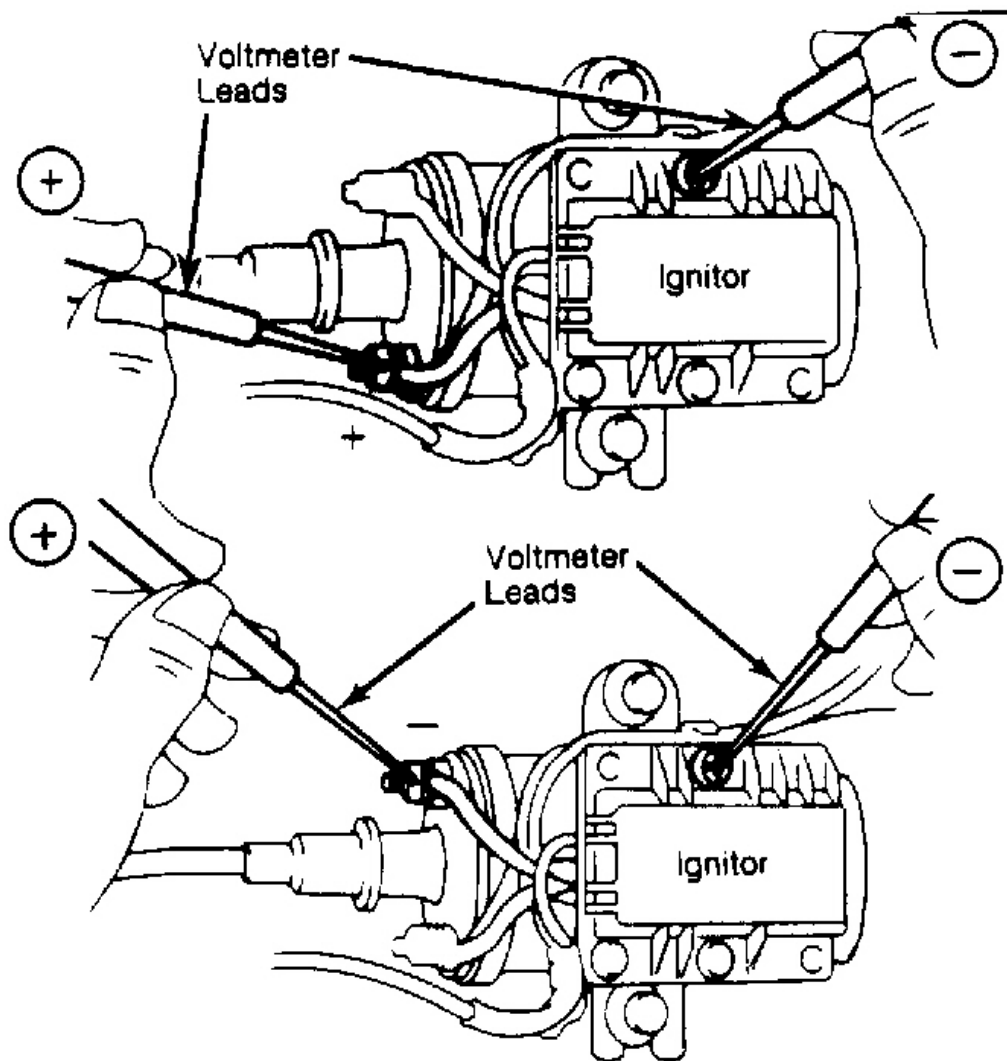


29023

Fig. 6: Checking Toyota with Internal Coil & Ignitor

1984 Toyota Pickup

IGNITION SYSTEM - NIPPONDENSO ELECTRONIC' '1984 ELECTRICAL Toyota Ignition System - Nippondenso
Electronic Ignition



29024

Fig. 7: Checking Toyota with Coil-Mounted Ignitor (Except Van/Wagon) Check voltage at both positive and negative coil terminals.

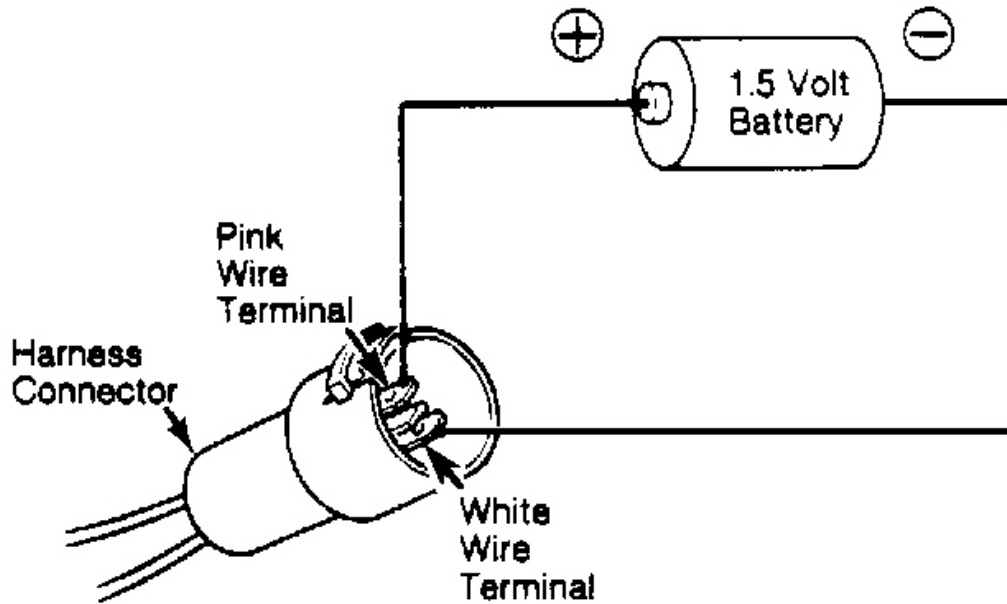
2. With negative lead still attached to ground, connect voltmeter positive lead-to-ignition coil negative terminal. Refer to **Fig. 6** and **Fig. 7** . Voltage should read 12 volts. Unplug wiring harness connector from distributor.

CAUTION: In step 3) below, DO NOT apply voltage for more than 5 seconds.

1984 Toyota Pickup

IGNITION SYSTEM - NIPPONDENSO ELECTRONIC' '1984 ELECTRICAL Toyota Ignition System - Nippondenso
Electronic Ignition

- Using a 1.5-volt dry cell battery (no more than 3-volt battery), connect battery positive pole-to-Pink wire terminal. See **Fig. 6** and **Fig. 8** . Connect negative pole-to-White wire terminal.



29025

Fig. 8: Ignitor Operation w/1.5 Volt Battery Check (Except Van/Wagon Apply voltage less than 5 seconds.

- Voltage at negative terminal of coil should be as indicated in **IGNITOR TEST VOLTAGE SPECIFICATIONS** table.

IGNITOR TEST VOLTAGE SPECIFICATIONS

Application	Volts
Camry, 4Runner & Pickup (Type III)	5-8
Corolla, Tercel	5-10
Celica, Land Cruiser, 4Runner Pickup (Type IV)	5-8
Starlet & Van	0-3

Cressida & Supra

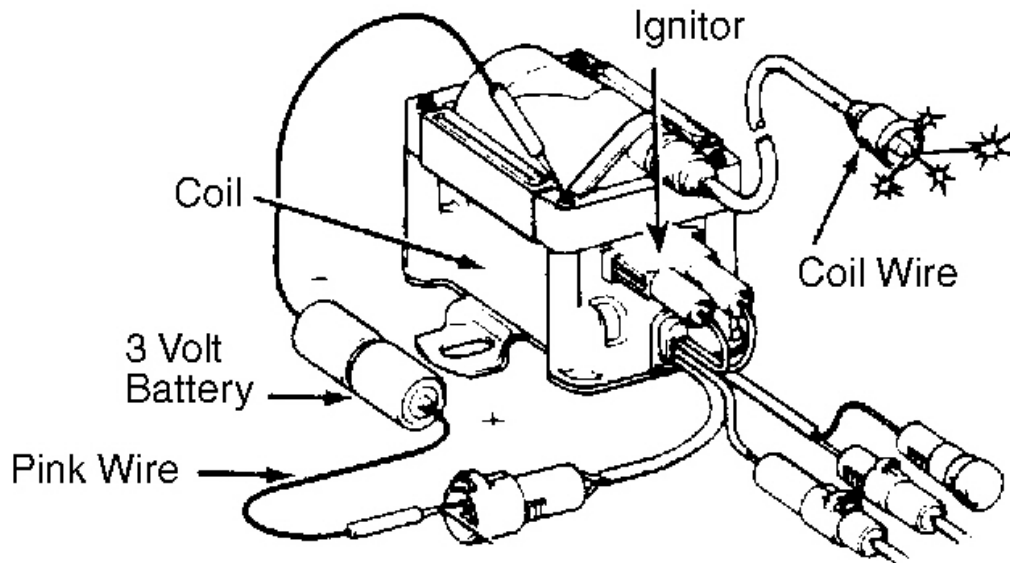
- Turn ignition on. Disconnect Brown and Yellow wire connector. Use a voltmeter to check for 12 volts. If not, check wiring or fuse. Reconnect Brown wire.

--	--	--

1984 Toyota Pickup

IGNITION SYSTEM - NIPPONDENSO ELECTRONIC '1984 ELECTRICAL Toyota Ignition System - Nippondenso Electronic Ignition

2. Disconnect coil wire at distributor. Place coil wire about 1/4" from a good ground. Disconnect Pink and White wiring connector.
3. Using a 3-volt dry cell battery (no more than 5-volt battery), connect battery positive pole-to-Pink wire terminal. See **Fig. 9** . Connect negative pole-to-coil ground.
4. Check for spark from coil wire after 1 second delay. If no spark occurs, replace ignitor.



29026

Fig. 9: Checking Ignitor Operation with 3-Volt Battery Do not use more than 5-volt battery.

TROUBLE SHOOTING

NOTE: See the **TROUBLE SHOOTING - BASIC PROCEDURES** article in the **GENERAL INFORMATION** section.

OVERHAUL

NOTE: Procedures may vary between models with integral ignitor and/or coil and other models.

DISASSEMBLY

1. Remove distributor cap. Mark position of ignition rotor and remove distributor. Remove rotor, dust cover,



1984 Toyota Pickup

IGNITION SYSTEM - NIPPONDENSO ELECTRONIC' '1984 ELECTRICAL Toyota Ignition System - Nippondenso
Electronic Ignition

and packing. Remove pick-up coil assembly, ignitor and/or coil (if equipped), vacuum advance mechanism and breaker plate.

2. Remove drive pinion. On all Toyota models, grind drive pinion and pin. On Toyota Camry, Corolla and Tercel models, use a screwdriver to pry off signal rotor (reluctor) and spring. Remove 2 screws from bottom of distributor housing.
3. Using a plastic hammer, carefully drive out shaft. Remove thick washer, bearing, thin washer, spring and blue washer from shaft. Note location of thin and thick governor springs, and remove springs (if equipped). Remove cam cap, signal rotor (reluctor), weight snap rings and weights.

REASSEMBLY

1. Assemble in reverse order of disassembly. Lightly grease signal rotor (reluctor) inner surface.
2. Install on shaft aligning proper mark on stopper plate ("10.5" on Celica, 4Runner and Pickup; and "8.5" on Starlet). On all other Toyota models, align drill mark on drive pinion with punch mark on distributor housing. Install new drive pinion and pin.
3. When installing breaker plate, align 4 clips of plate with 4 grooves in housing.
4. When replacing pinion, replace pin and drive pinion as a set. Peen both ends of pin in a vise. Adjust air gap between signal rotor and pick-up coil. Install distributor and adjust timing.