

TOYOTA

SERVICE NEWS

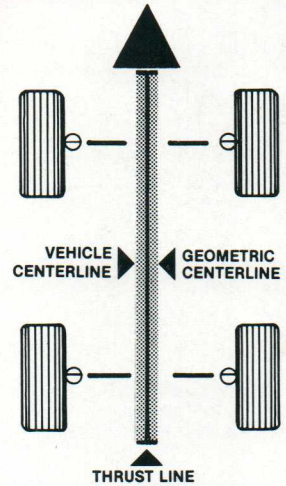
Bulletin No. 16

Summer 1985

introducing . . .



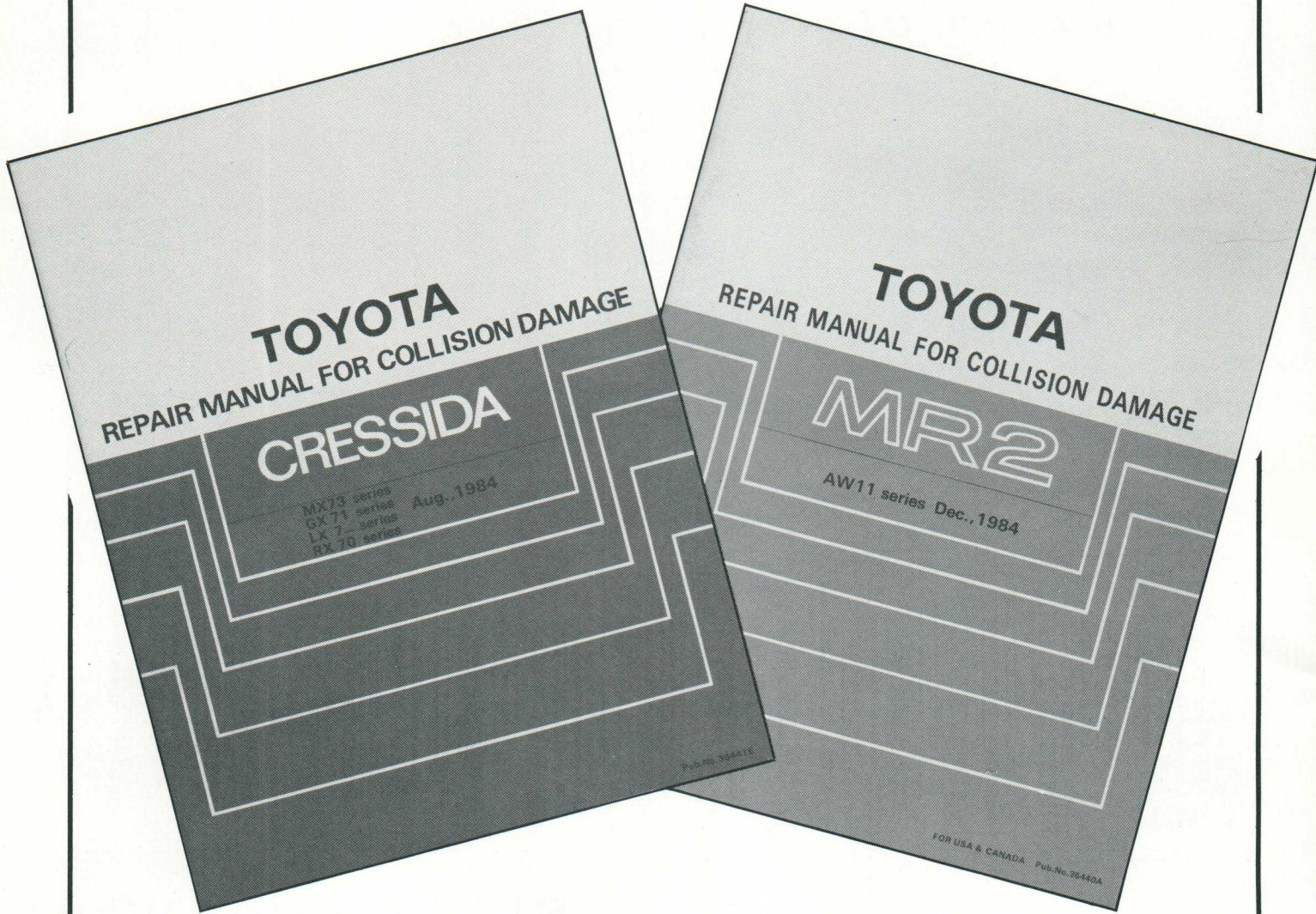
TOYOTA
GENUINE PARTS
WHOLESALE



FOURTH ANNIVERSARY ISSUE

**STRAIGHTENING
OUT 4-WHEEL
ALIGNMENT
PROBLEMS**

introducing . . .



*2 New
Repair Manuals
for Collision Damage*


TOYOTA SERVICE NEWS

Bulletin No. 16

Summer 1985

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WE REALLY 
ABOUT YOU



**PLEASE
BUCKLE UP**

TOYOTA
GENUINE PARTS
WHOLESALE

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TOYOTA SERVICE NEWS INDEX

As part of our 4th Anniversary Special Edition, Toyota Service News presents an index referencing the articles appearing in the preceding 15 issues.

See your Toyota STAR wholesaler for available past issues of Toyota Service News.

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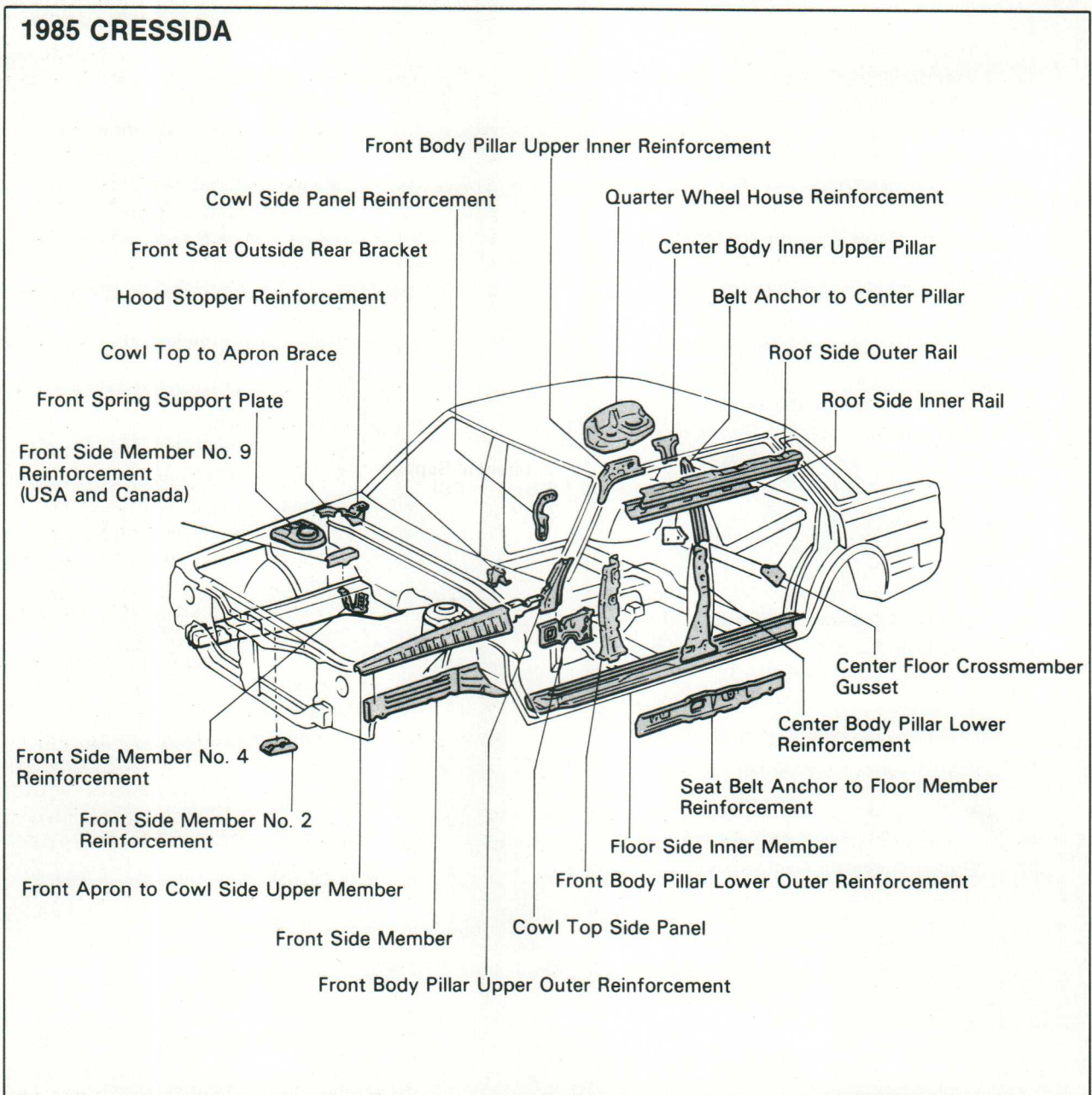
HIGH STRENGTH STEEL (HSS)

High Strength Steel (HSS) that is used in Toyota Vehicles is characterized as being very light weight and having a tensile strength of at least 50,000 pounds per square inch (PSI).

Even though high strength steel has many properties which are similar to mild cold rolled steel, the following precautions should be observed.

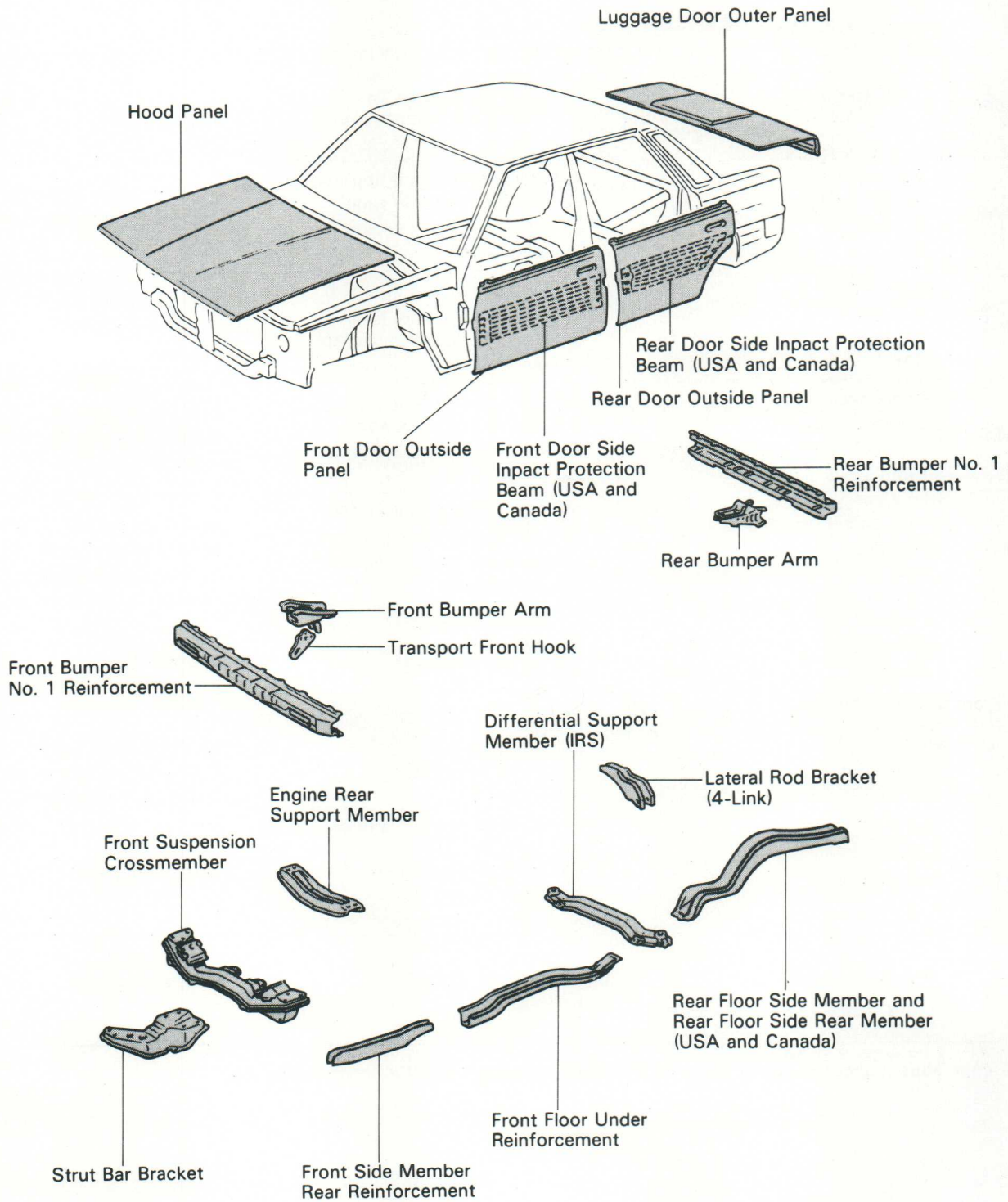
1. **Panel Hammering:** Because HSS is thinner than mild steel, care should be taken to avoid warping during hammering operations.
2. **Removing Spot Welds:** Because HSS is tougher than mild steel, damage will occur more easily to a regular drill. Therefore, an HSS Spot Cutter is recommended. Also, use a high-torque drill at low speed, and supply grinding oil to the drill during use.
3. **Panel Welding:** Panel welding procedures for HSS should be done with a MIG welder. Do not gas weld or braze panels at areas other than specified.
4. The use of high strength steel for Toyota autobodies has been increasing rapidly in recent years and we predict that future models will use a larger percentage of this type of steel.

The following illustrations indicates the location of High Strength Steel components on the 1985 Cressida:



HIGH STRENGTH STEEL (HSS) (cont.)

1985 CRESSIDA



PLASTICS USED BY TOYOTA

THEIR IDENTIFICATION CODES AND HANDLING PRECAUTIONS

The newer Toyota Models are using more and more plastic materials.

Toyota currently uses 18 different plastic materials. Each plastic part is identified with a code on the part to indicate the specific material.

Code	Material Name	Heat * Resisting Temperature °C (°F)	Resistance To Alcohol or Gasoline	Notes
AAS	Acrylonitrile Acrylic Rubber Styrene Resin	80 (176)	Alcohol is harmless if applied only for short time in small amounts (ex., quick wiping to remove grease).	Avoid gasoline and organic or aromatic solvents.
ABS	Acrylonitrile Butadian Styrene Resin	80 (176)	Alcohol is harmless if applied only for short time in small amounts (ex., quick wiping to remove grease).	Avoid gasoline and organic or aromatic solvents.
AES	Acrylonitrile Ethylene Rubber Styrene Resin	80 (176)	Alcohol is harmless if applied only for short time in small amounts (ex., quick wiping to remove grease).	Avoid gasoline and organic or aromatic solvents.
AS	Acrylonitrile Styrene Resin	80 (176)	Alcohol is harmless if applied only for short time in small amounts (ex., quick wiping to remove grease).	Avoid dipping or immersing in alcohol, gasoline, solvents, etc.
PA	Polyamide (Nylon)	80 (176)	Alcohol and gasoline are harmless.	Avoid battery acid.
PC	Polycarbonate	120 (248)	Alcohol is harmless.	Avoid gasoline, brake fluid, wax, wax removers and organic solvents.
PE	Polyethylene	80 (176)	Alcohol and gasoline are harmless.	Most solvents are harmless.
POM	Polyoxymethylene (Polyacetal)	100 (212)	Alcohol and gasoline are harmless.	Most solvents are harmless.

* Temperature higher than those listed here may result in material deformation during repair.

PLASTICS USED BY TOYOTA

THEIR IDENTIFICATION AND HANDLING PRECAUTIONS (cont.)

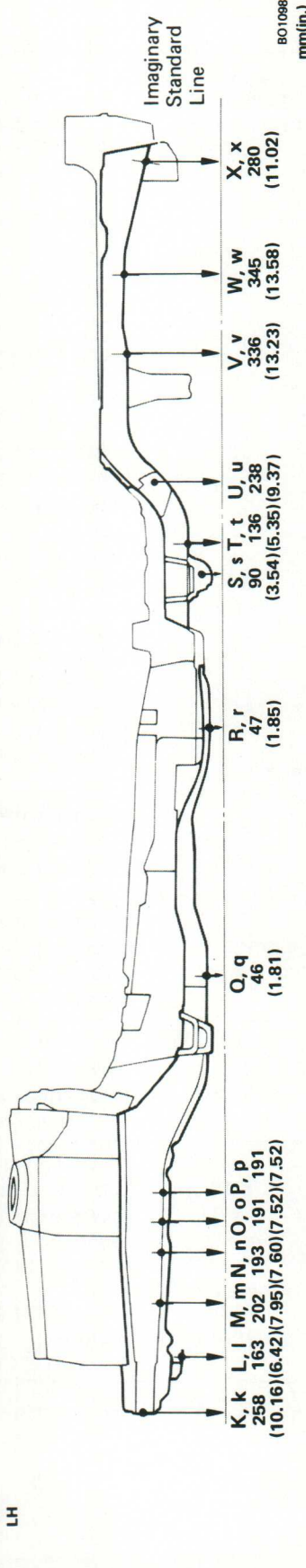
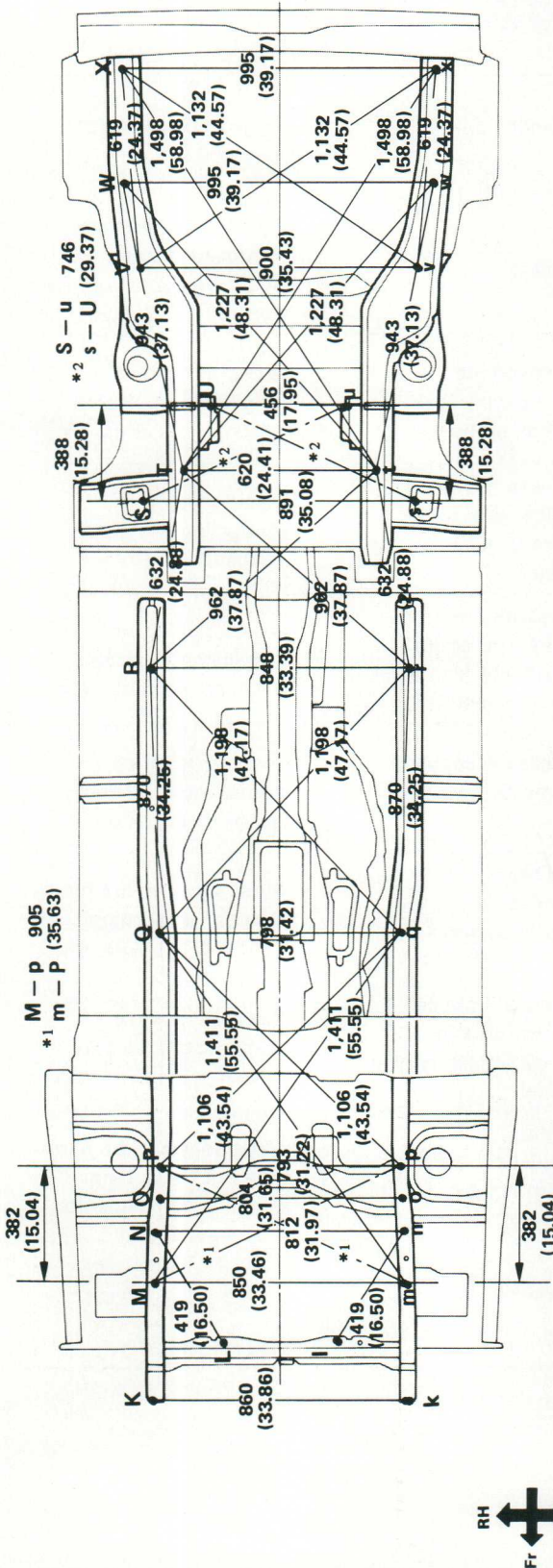
Code	Material Name	Heat * Resisting Temperature °C (°F)	Resistance To Alcohol or Gasoline	Notes
PP	Polypropylene	80 (176)	Alcohol and gasoline are harmless.	Most solvents are harmless.
PPO	Modified Polyphenylene Oxide	100 (212)	Alcohol is harmless.	Gasoline is harmless if applied only for quick wiping to remove grease.
PS	Polystyrene	60 (140)	Alcohol and gasoline are harmless if applied only for short time in small amounts.	Avoid dipping or immersing in alcohol, gasoline, solvents, etc.
PUR	Thermosetting Polyurethane	80 (176)	Alcohol is harmless if applied only for very short time in small amounts (ex., quick wiping to remove grease).	Avoid dipping or immersing in alcohol, gasoline, solvents, etc.
PVC	Polyvinylchloride (Vinyl)	55 (131)	Alcohol and gasoline are harmless if applied only for short time in small amounts (ex., quick wiping to remove grease).	Avoid dipping or immersing in alcohol, gasoline, solvents, etc.
PMMA	Polymethyl Methacrylic Acrylate	80 (176)	Alcohol is harmless if applied only for short time in small amounts.	Avoid dipping or immersing in alcohol, gasoline, solvents, etc.
TPE	Thermoplastic Elastomer	60 (140)	Alcohol is harmless. Gasoline is harmless if applied only for short time in small amounts.	Most solvents are harmless but avoid dipping in gasoline, solvents, etc.
TPUR	Thermoplastic Polyurethane	60 (140)	Alcohol is harmless if applied only for very short time in small amounts (ex., quick wiping to remove grease).	Avoid dipping or immersing in alcohol, gasoline, solvents, etc.
TPR	Thermoplastic Rubber (EPDM)	60 (140)	Alcohol is harmless. Gasoline is harmless if applied only for short time in small amounts.	Most solvents are harmless but avoid dipping in gasoline, solvents, etc.
UP	Unsaturated Polyester	180 (356)	Alcohol and gasoline are harmless.	Avoid alkali

* Temperature higher than those listed here may result in material deformation during repair.



BODY DIMENSION DRAWINGS

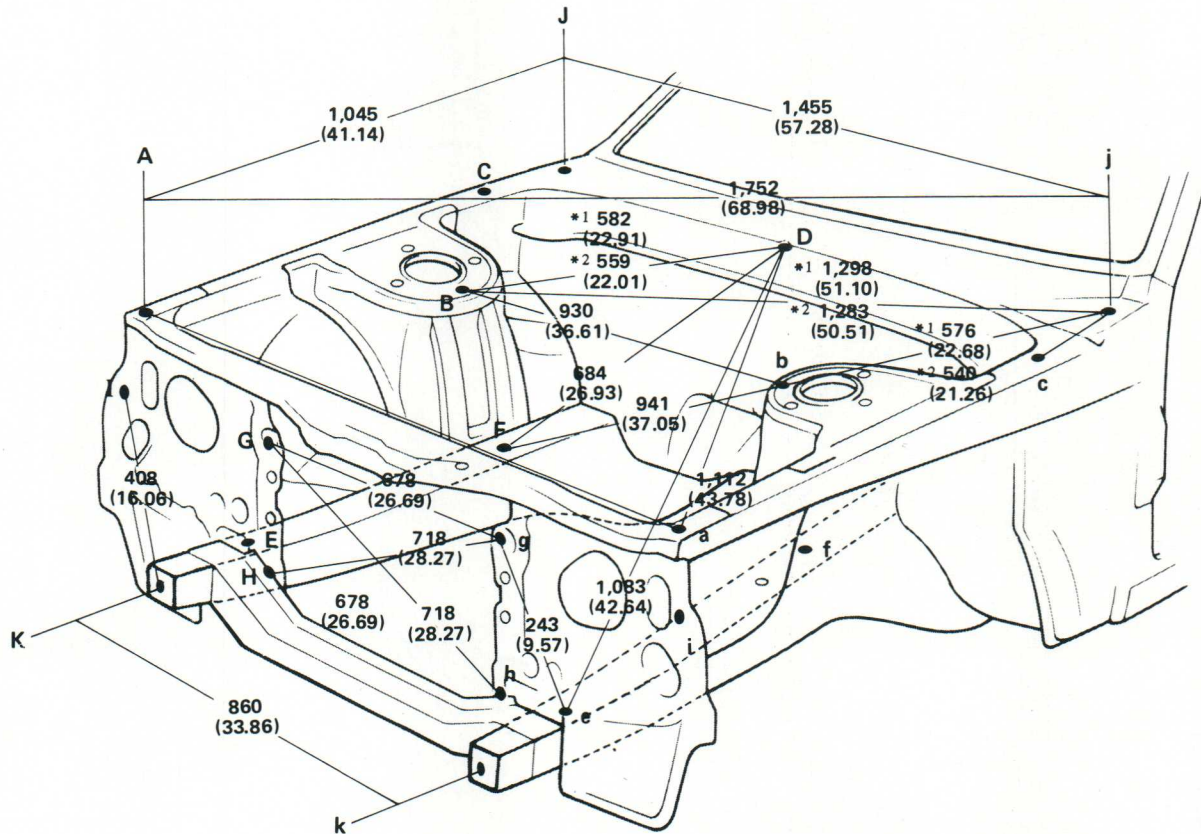
1985 CRESSIDA STATION WAGON



Symbol	Nomenclature	Hole dia.	Symbol	Nomenclature	Hole dia.
K, k	Front side member bumper installation nut-front	12 (0.47) nut	S, s	Lower control link bracket hole-inner	14 (0.55)
L, l	Strut bar bracket installation nut-front side, inner	12 (0.47) nut	T, t	Rear floor side member standard hole	17 (0.67)
M, m	Front side member standard hole	15 (0.59)	U, u	Upper control link bracket hole-inner	14.5 (0.57)
N, n	Strut bar bracket installation nut-rear side, rear	12 (0.47) nut	V, v	Rear floor side member standard hole	13 (0.51)
O, o	Suspension member installation hole-front side, lower	15 (0.59)	W, w	Rear floor side member standard hole	11 (0.43)
P, p	Suspension member installation hole-rear side, lower	15 (0.59)	X	Tail pipe bracket installation hole-RH	13 (0.51)
Q, q	Front floor under reinforcement standard hole-front	15 (0.59)	x	Tail pipe bracket installation hole-LH	13 (0.51)
R, r	Front floor under reinforcement standard hole-rear	15 (0.59)			

BODY DIMENSION DRAWINGS (cont.)

1985 CRESSIDA SEDAN AND STATION WAGON



*1 w/o PS

*2 w/ PS

mm (in.)

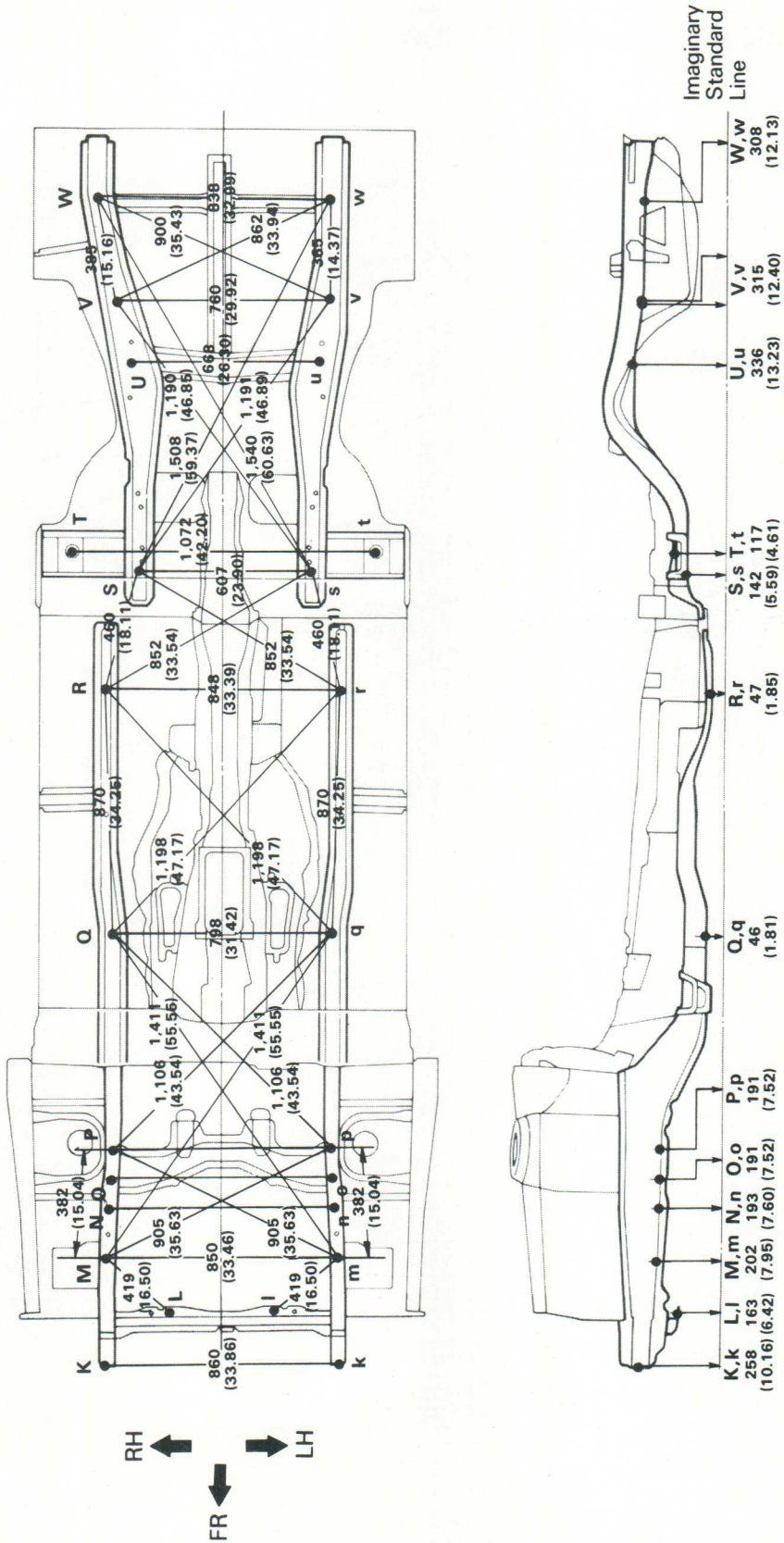
Symbol	Nomenclature	Hole dia.
A, a	Front fender installation nut-front	6 (0.24) nut
B, b	Front spring support hole-inner	11 (0.43)
C, c	Front fender installation nut-rear	6 (0.24) nut
D	Cowl top panel center mark	—
E, e	Front side member bumper installation nut-rear	12 (0.47) nut
F, f	Suspension member installation hole-rear side, upper	15 (0.59)
G, g	Cooler condenser installation nut-upper	6 (0.24) nut
H, h	Cooler condenser installation nut-lower	6 (0.24) nut
I, i	Radiator support standard hole	9 (0.35)
J, j	Cowl top side panel standard hole	9 (0.35)
K, k	Front side member front bumper installation nut-front	15 (0.59)

BO1097

BODY DIMENSION DRAWINGS (cont.)

1985 CRESSIDA SEDAN

N-n: 812 (31.97) O-o: 804 (31.65) P-p: 793 (31.22)



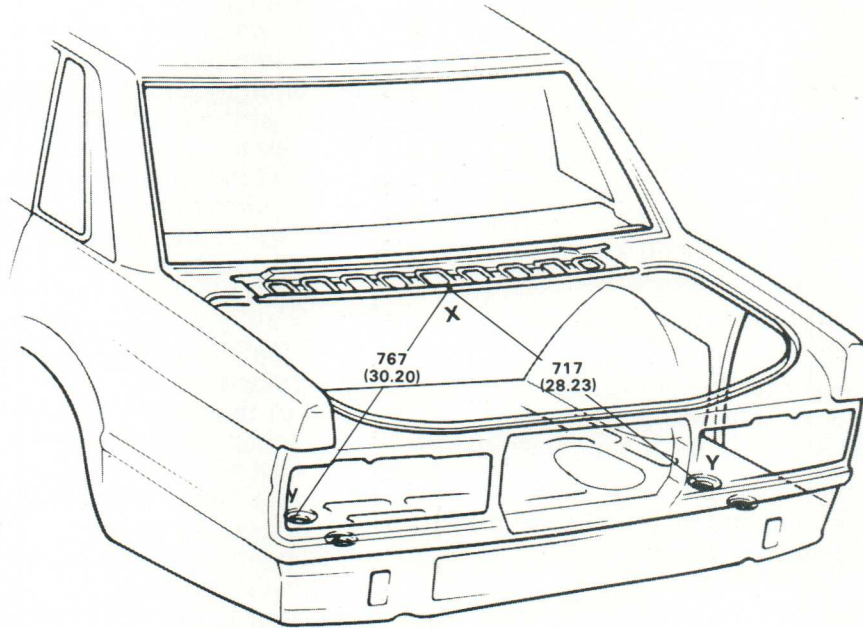
Symbol	Nomenclature	Hole dia.	Symbol	Nomenclature	Hole dia.
K, k	Front side member front bumper installation nut - front	15 (0.59) nut	R, r	Front floor reinforcement rear standard hole	15 (0.59)
L, l	Front strut bar bracket installation nut - frontside, inner	12 (0.47) nut	S, s	Rear floor side member standard hole	15 (0.59)
M, m	Front side member standard hole	15 (0.59)	T, t	Rear suspension member installation nut	20 (0.79) nut
N, n	Front strut bar bracket installation nut - rear side, rear	12 (0.47) nut	U, u	Rear stabilizer installation nut	14 (0.55) nut
O, o	Front suspension member installation hole - frontside, lower	15 (0.59)	V, v	Rear floor side member standard hole	15 (0.59)
P, p	Front suspension member installation hole - rear side, lower	15 (0.59)	W, w	Rear floor side member standard hole	15 (0.59)
Q, q	Front floor reinforcement front standard hole	15 (0.59)	-	-	-

800839



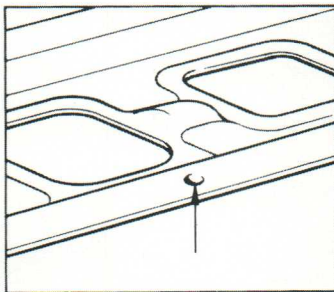
BODY DIMENSION DRAWINGS (cont.)

1985 CRESSIDA SEDAN

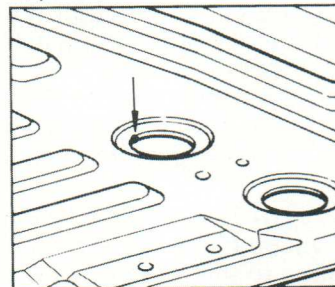


mm (in.)

X Point



Y, y Point



NOTE: The luggage compartment measurement is performed between the two dot-marked point as shown in the figure above.

Symbol	Nomenclature	Hole dia.
X	Upper back reinforcement standard mark	2R
Y, y	Rear floor pan bumper installation hole - front	40 (1.57)

800891

THE MR2 COOLING SYSTEM

The newly introduced Toyota MR2 is a mid-engine, rear wheel drive vehicle, and its cooling system is different than the typical Toyota and requires special procedures for draining, filling and bleeding. Failure to do so could result in serious engine damage.

COOLING SYSTEM

The radiator, located in the front of the car, is connected to the engine by stainless steel coolant lines that run through the center tunnel. Due to the length of the lines, extra care must be taken when changing engine coolant to bleed all air bubbles from the system.

To help with this, three air bleed valves are incorporated into the lines.

- At the top left-hand side of the radiator.
- Next to the heater valve in the front trunk.
- Next to the transmission in the engine compartment.

The following procedures are also included in the MR2 Owner's and Service Manuals.

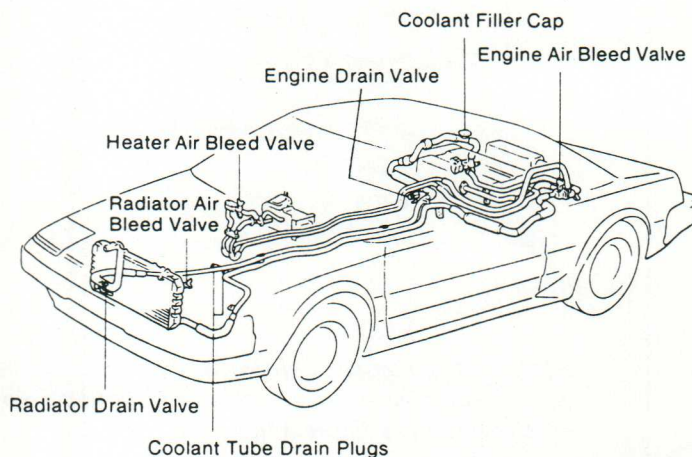
DRAINING

1. Remove the trim panel from the front trunk, and disconnect the linkage between the heater valve lever and the heater valve actuator. Then manually open the heater valve.
2. Locate the two vinyl hoses located in the front trunk. One should be connected to the heater air bleeder. Connect the other to the engine block coolant drain plug next to the oil filter.
3. Remove the coolant filler cap.
4. Remove the fuel tank protector under the body.
5. Drain the coolant by:
 - a. Loosening the engine coolant drain plug.
 - b. Removing the two drain plugs in the coolant lines underneath the car.
 - c. Loosening the radiator drain plug.
6. After draining, retighten all plugs securely. *If the gaskets are damaged, replace them with new ones.*
7. Remove the vinyl hose from the engine drain plug. If you will be filling the system right away, attach the hose to the radiator air bleed plug. If not, return it to its original position in the front trunk.

FILLING AND BLEEDING

1. Attach the free end of the *heater* air bleeder hose high on the front trunk lid.
2. Attach the other hose to the *radiator* air bleeder, with the free end taped high on the front trunk support rod. *Make sure the hoses are not kinked or folded.*

3. Loosen the air bleeder plugs at the heater, the radiator, and water inlet in the engine compartment, about three turns.
4. Pour new coolant into the coolant filler hole in the engine compartment, until it overflows from the water inlet air bleeder. Then close *that* bleeder plug securely.
5. Continue adding coolant until it reaches the top of the filler hole. *At this point, the coolant levels in both hoses in the front trunk should be about the same as the filler hose level. If they're not, check the hoses for kinks.*
6. Continue to add coolant every few minutes until the level stops dropping. Then close all the air bleeder plugs securely.
7. Install the filler cap and turn it to its first "click" stop. NOTE: Do not turn the cap fully clockwise.
8. Start the engine and run it at a fast idle until it reaches normal operating temperature. Then turn it off.
9. Check the coolant level in the filler hole, and top it off as needed.
10. Repeat steps 7 through 9 until the coolant level remains constant.
11. Install the filler cap to the lock position. Then fill the engine coolant reservoir to the FULL mark.
12. Start the engine once more, and check for leaks around the drain and bleeder plugs.
13. Reinstall the vinyl hoses, front trunk trim panel, spare tire and fuel tank protector.
14. After changing the engine coolant, the coolant level should again be checked one or two times within one week or 300 miles, to see if additional coolant is needed.



THE MR2 COOLING SYSTEM

MR2 REAR COOLING

The engine compartment cooling fan is thermostatically controlled by a thermo sensor supplying electrical signals to the cooling fan relay. The sensor, located behind the cylinder head, automatically switches the fan on when the air temperature in the compartment rises above 167°F. It shuts the fan off when the temperature drops below 160°.

To aid in troubleshooting, the fan relay incorporates a self-diagnostic function. With this function, if the fan motor seizes, or if there's a loose connection in the fan motor or its circuitry, causing the strength of the current to the fan motor to be either higher or lower than normal, the relay will automatically cut power to the fan.

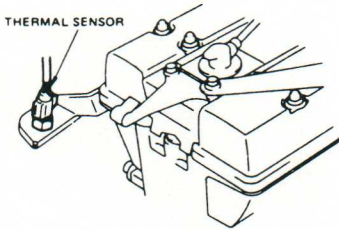
Simultaneously, the relay will illuminate a warning lamp on the dash, to let the driver know a problem has developed.

The cooling fan relay is also provided with a "fail-safe" function. Should a malfunction in the thermo sensor occur, or if there's a loose connection at the relay — resulting in no input signal from the sensor — the relay will operate the fan continuously to prevent the engine compartment temperature from rising too high.

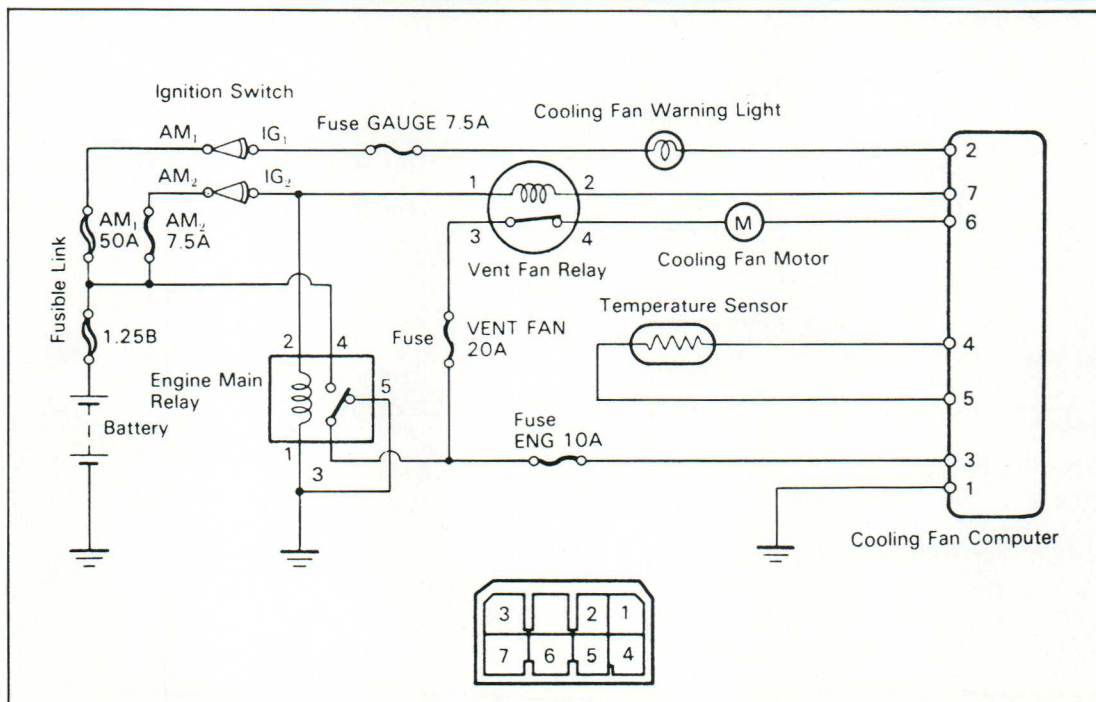
In this case, the warning light will not come on, but you'll know there's a problem because the fan will run as soon as the key is turned on.

Complete testing procedures for the system is included in the MR2 service manual. (To order manual see your Local Toyota Star Dealer and order manual #36254A.)

Using a volt-ohm meter, test at terminals of cooling fan computer connector shown below.



Terminals	Condition	Result: indicates normal condition
1 — body ground	—	Continuity
1 — 3	Ignition S/W ON	There is battery voltage.
4 — 5	Less than 64°C More than 80°C (Temp. sensor)	More than 380Ω (Sensor resistance) Less than 300Ω
1 — 2	Ignition S/W ON	The cooling fan warning light lights
1 — 6		Fan motor runs and warning light lights
1 — 6	Ignition S/W ON and Continuity 7-1	Fan motor stops



TOWING, LIFT AND SUPPORT LOCATIONS FOR THE MR2

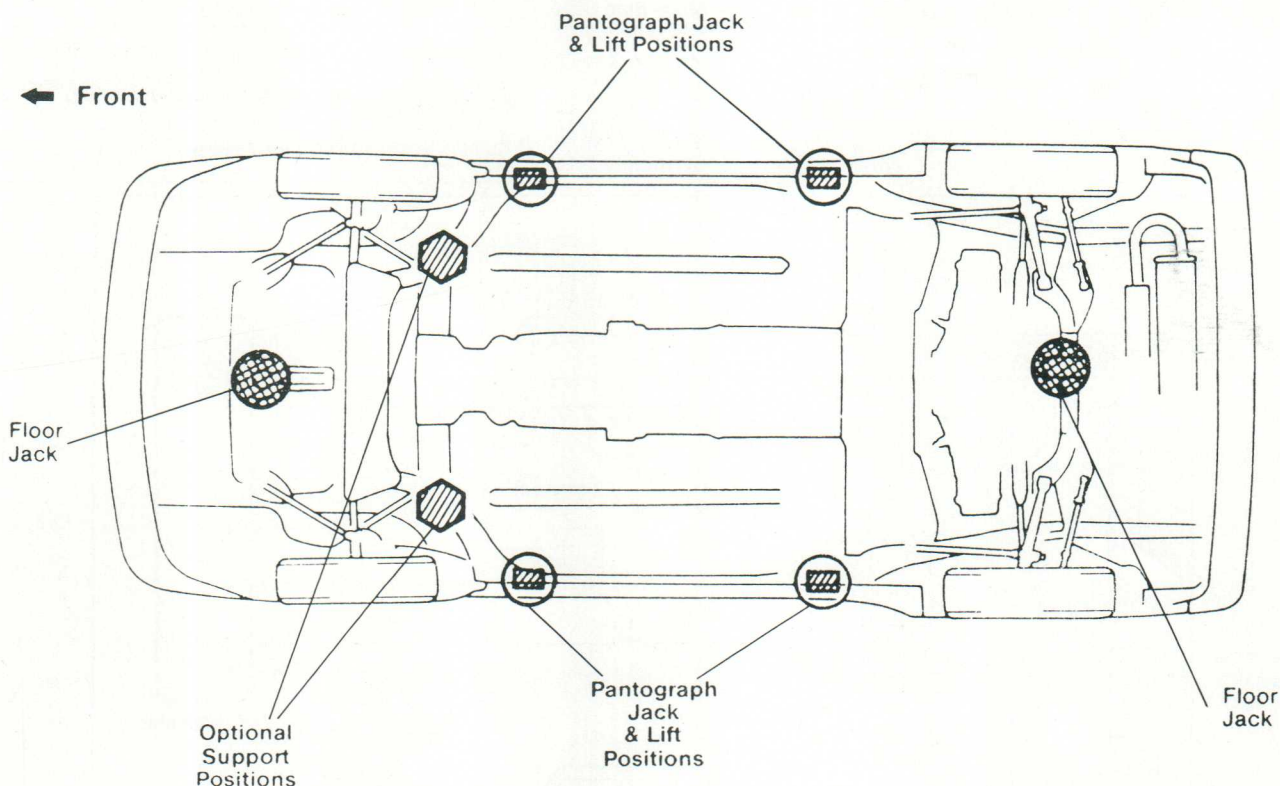
TOWING

- Using a sling type tow truck the MR2 should be towed from the rear only.
 - Be sure the front wheels and axle are in good condition.
 - The ignition key must be in the "ACC" position.
 - Towing with the front end raised with sling type equipment the front body trim, air dam or front trunk lid may damage.
- If the car cannot be towed from the rear using the above method, a wheel cradle or dolly should be used.

- The front towing eyes, located under the front bumper, should be used for emergency flat towing only. *They cannot be used for sling-type towing.*
 - Use only on hard-surfaced roads.
 - A driver must be in the car to steer it and operate the brakes. NOTE: With the engine off, the braking will be much harder than usual.
 - This can only be done if the wheels, drivetrain, steering, and brakes are in good condition.
 - The parking brakes must be off, the transmission in neutral, and the key in "ACC" or "ON."

MR2 LIFT AND SUPPORT LOCATIONS

As with many sports cars, the MR2 is fairly low to the ground, especially in the air dam area. To avoid possible damage when lifting it, be sure you have adequate clearance at all times, and always use the proper lift points, as shown below.



AIR CONDITIONING SYSTEMS TROUBLESHOOTING HINT

VEHICLES:

Tercel, Corolla, Celica, Camry, Van and Pickups.

CONDITIONS:

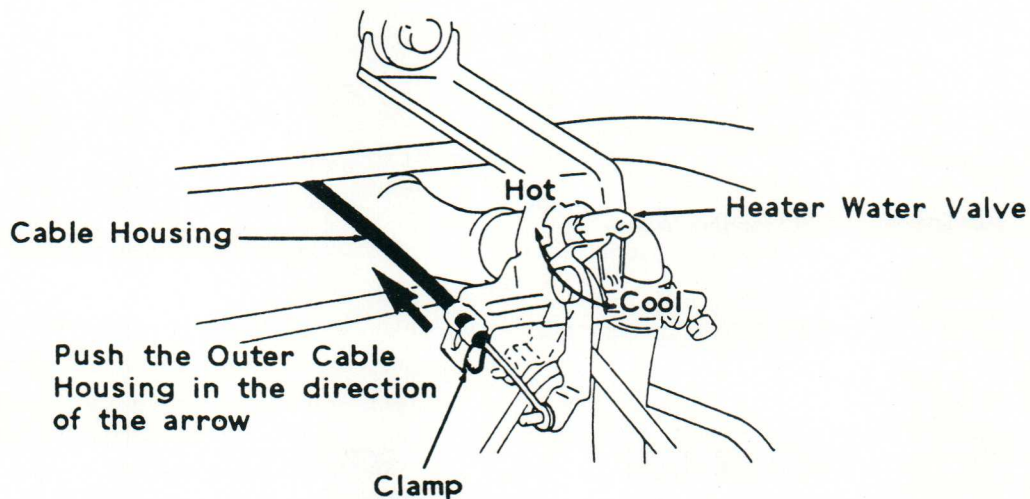
Air conditioning does not cool sufficiently even after inspecting and servicing the air conditioning unit. All pressure readings are normal.

POSSIBLE CAUSE:

Improper adjustment of control cable for heater valve.

CORRECTION:

- Set the temperature control level on the instrument panel to the full cool position.
- Set the heater water valve on the firewall to the full cool position as shown below.
- Loosen clamp of water valve bracket (see below).
- Push cable housing in the direction of the arrow as shown below and hold in position.
- Re-tighten screw on clamp of water valve bracket.
- Recheck cable operation.



TRAILER TOWING INFORMATION

WIRING CODE & TRAILER LIGHTS

The wiring color code for 1985 Toyota vehicles is as follows:

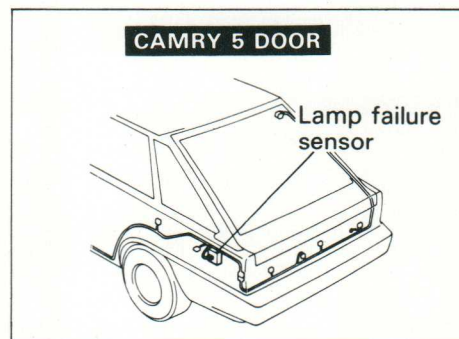
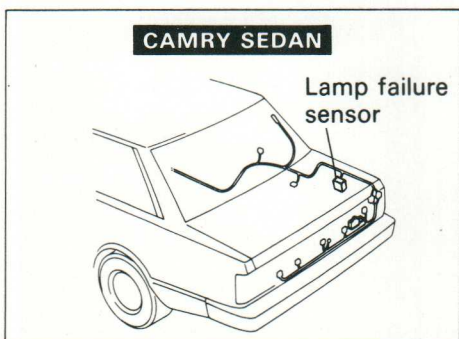
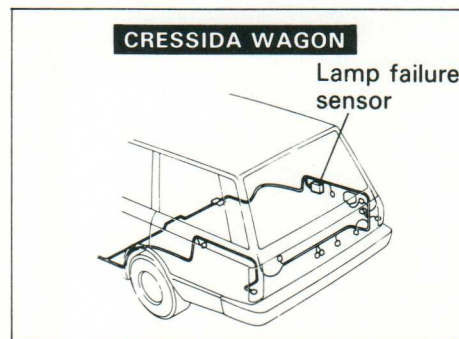
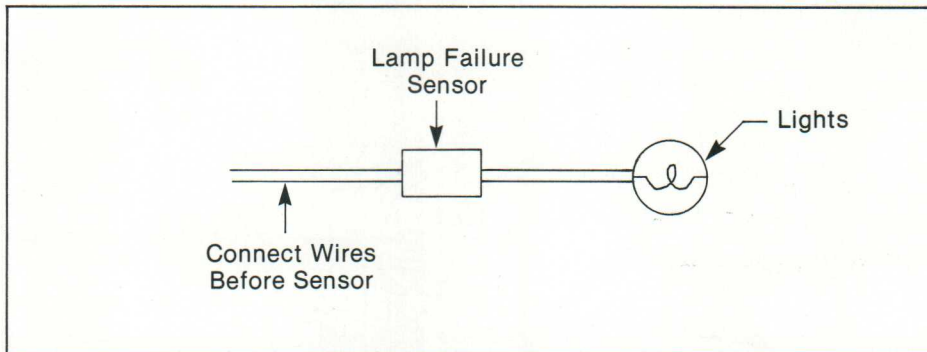
- Tail lights Green
- Stop lights Green with white stripe
- Right turn signal Green with yellow stripe
- Left turn signal Green with black stripe
- Back-up lights Red with black stripe
- Ground circuits White with black stripe

Check for correct operation of the turn signals, stop lights and tail lights each time you hitch up.

Direct splicing may damage your vehicle's electrical system and cause the lights to malfunction.

See your local recreational vehicle dealer or rental agency for the correct type of wiring, relays and tail-light converter for your trailer.

Connect wires before the lamp failure sensor on Cressida and Camry models as shown below:



TRAILER TOWING INFORMATION (cont.)

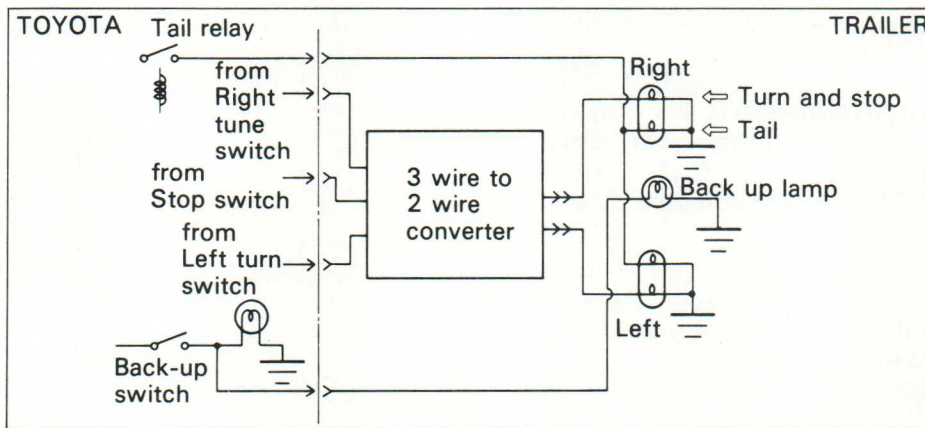
WIRING CONVERTERS

Many trailers manufactured in the U.S. utilize a common filament in a dual filament bulb for the stop and rear turn signal lights. The second filament is lower in intensity and is used for rear clearance lights. Toyotas have a dual filament bulb in the stop and tail lights and a separate single filament bulb and lense in the turn signals. The advantages of the Toyota system are:

1. Increased visibility of the stop lamp when stop and turn signals operate simultaneously.
2. Improved visibility of the turn signals as they do not compete with the tail lights for illumination.

3. Improved efficiency as loss of a filament only affects the stop or turn signals, never both at the same time.

When connecting a Toyota to a single bulb system, a three-wire to two-wire converter is necessary to connect the stop and turn signals (tail and back up lights can be connected without the converter). Since the stop and turn signals on the towing vehicle are separate, connecting the trailer's lights directly will result in all the lights being connected together. If a converter is not used, the turn signal will flash all the lamps on both the trailer and the towing vehicle. The excessive current draw could damage the vehicle wiring and/or the switches.

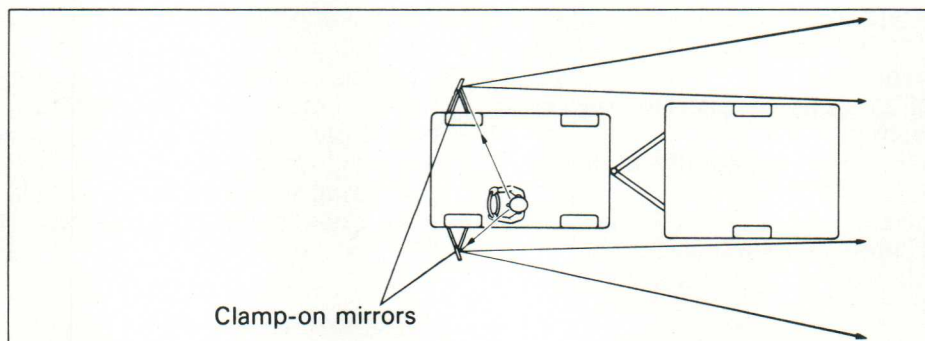


Most good quality three-wire to two-wire converters incorporate a solid state switch between the stop

and turn inputs which will accept either signal and transfer it to the appropriate output.

REAR VIEW MIRRORS

When the trailer obscures the driver's view to the rear, the towing vehicle should be equipped with mirrors on both the left and right-hand sides of the vehicle. These mirrors should be located to reflect the driver's view of the highway and the area behind the trailer. Depending on the overall width of the trailer, it frequently becomes necessary to use accessory clamp-on mirrors.



ALIGNING THE TOYOTA INDEPENDENT REAR SUSPENSION (IRS) VEHICLES

For many repair shops 4-wheel alignment is a relatively new area of service. It is both very important and very misunderstood by many service personnel. In this article, we hope to address what 4-wheel alignment is, why it is important and necessary, and what the technician has to be aware of.

Not to belabor the obvious, but it is important to remember that the four wheels of a vehicle are the only things in contact with the road (hopefully). These four wheels are going to take the car or truck down the road exactly where they are pointing and nowhere else.

This becomes especially important when you're working on a vehicle with 4-wheel independent suspension where alignment of the rear wheels can be adjusted readily. This new breed of IRS vehicles requires extremely accurate alignment of all four wheels. It's important to realize that as much as 50 percent of its handling ability and driving characteristics are affected by the rear wheels, which actually help steer the car and provide directional stability.

The only way to be sure the car or truck is *totally* aligned is with a *true* center-line 4-wheel alignment. What we are referring to is three separate lines:

1. The center line of the vehicle body.
2. The wheel center line created by a line which connects the mid-points of the front and rear axles.
3. The thrust line, which is a line parallel to and exactly half way between the directional lines of both rear wheels.

The object is to position all four wheels in such a manner that all three of these lines are identical (like one on top of another) and pointed in the same direction. Once this is accomplished, we have a perfectly rectangular vehicle. All wheels will be an equal distance from the center line, and all will point in the same direction. This will ensure proper directional stability under all driving conditions and minimize tire wear. Any condition which prevents these three lines from coinciding will cause an alignment problem with the car. The most commonly misunderstood of these conditions is *thrust angle*. Small thrust angle errors can create problems for the driver such as:

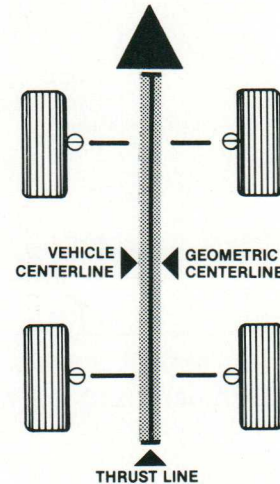
- poor directional stability, especially on ice, snow or wet pavement.
- vehicle pull on braking, especially at higher speeds.
- wear on the same side of both front tires (inside left and outside right).
- slight pull or drift even though the front end is within specs.

These are just some of the more common complaints or problems we have discussed many times with technicians. In all cases, the technician is

quick to point out that he has already checked the alignment, and that it is within specs.

This may be true when only the front end and its adjustments are considered, but when the vehicles in question were checked for total alignment of all four wheels, a thrust angle problem of the rear wheels was usually found to be the cause.

There seems to be a degree of misunderstanding as to how accurate thrust angle must be, and how small an error is allowable. Although we don't have room here to fully discuss how to figure alignment angles or how to perform a 4-wheel alignment, we will tell you a fact about all of the 1981 and newer model Toyotas with adjustable rear suspension and alignment: *the maximum allowable thrust angle is only .06°* — that's right, 6/100ths of a degree!

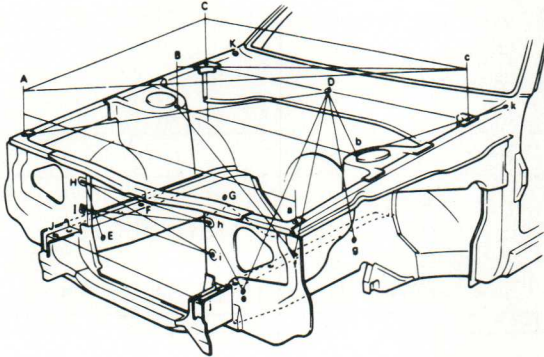


You can see that a very high degree of accuracy with sophisticated specialized alignment equipment is needed. Without making any equipment recommendations, as that is not the purpose of the article, we can state that if you are going to be successful in aligning all four wheels of new Toyotas, your equipment must measure and display *all four wheels simultaneously*, and you must be able to read, measure and accurately compute the following: front total toe; front individual toe in relation to geometric center line; front wheel setback/off-set; Camber, Caster and S.A.I. (Steering Axis Inclination); center-point steering; turning angle geometry; total rear toe; individual rear toe; rear wheel camber; geometric center line; angle between geometric and actual true vehicle center lines; and front wheel set back in relation to geometric center line and thrust line.

Think of these items the next time you work on a vehicle with a complaint of tire wear, drift, pull on braking, etc. You may be getting ready for another "simple front end alignment," but maybe, just maybe, the real problem is in the rear.

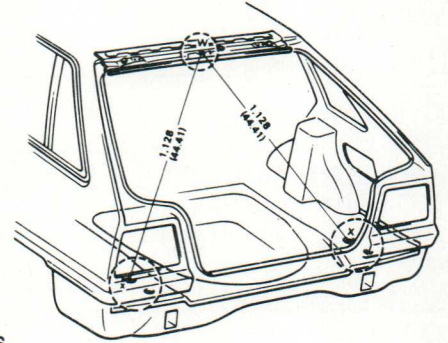


REPAIR MANUALS FOR COLLISION DAMAGE



FEATURING:

- Factory recommended repair procedures
- Weld locations & types
- Body dimensions
- Body sealing points
- Plastics type & locations



MODEL	MODEL YEAR	PUBLICATION NO.
Starlet	1981, 82, 83, 84	36158
Tercel	1980, 81, 82	98367
Tercel	1983, 84	36431E
Tercel 4 x 4	1983, 84	36432E
Corolla	1980, 81, 82, 83	36001
Corolla (RWD & FWD)	1984	36434E
Celica & Supra	1982, 83, 84	36182
Camry	1983, 84	36433E
Cressida	1981, 82, 83, 84	36118
Fundamental Painting Procedure	All	36438E
Cressida (New)	85	36441E
MR2 (New)	85	36440A

TO ORDER SEE YOUR TOYOTA STAR DEALER FOR DETAILS



NOW IT'S YOUR TURN!

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GENERAL REPAIR

- Engine Repair (— Gas — Diesel)
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- Brake Repair
- Suspension and Steering
- Electrical Systems
- Heating and Air Conditioning Repair
- (Other) _____

COLLISION REPAIR

- Refinishing Information
- Corrosion Protection Restoration
- High Strength Steel Locations
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- Welding Procedures
- Electrical Diagrams
- (Other) _____

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PRIMARY TYPE
OF BUSINESS HERE

TYPE	
A — Brake Shops	E — Body Shops
B — Garages (General Repair Shops)	F — Radiator Repair Shops
C — Gasoline Service Stations	G — Parts Stores
D — Muffler Shops	H — Transmission Repair Shops

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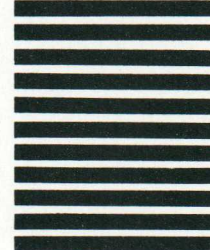
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Fire Power That's Patented

No other spark plug delivers the fire power of a Toyota "U" Groove. Because this plug is so different, it's patented. And no other plug can claim to be Genuine Toyota. Trust Toyota to bring you the latest breakthrough in spark plug technology and quality you can count on.

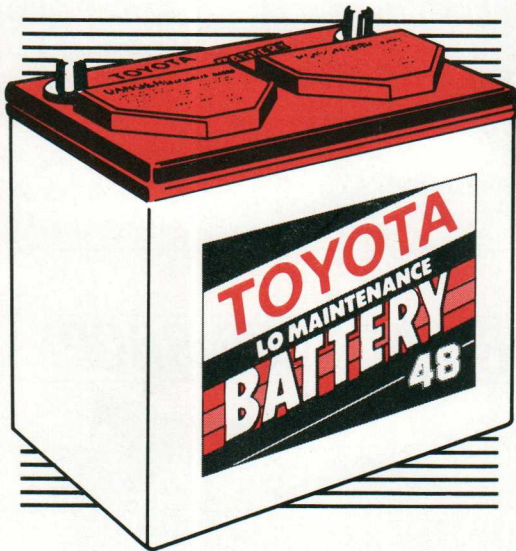
The "U" Groove

The difference is its uniquely shaped ground electrode. Without increasing the ground-to-electrode gap width, Toyota has designed a plug that captures the gas and provides plenty of room for the spark to develop. The result is a fireball — the kind of complete combustion you need for fast starts and top performance.

A Spark of Genius

The U.S. government gave it patent no. 3,970,885 for its design. You'll give it an A + for its performance. The Toyota "U" Groove Spark Plug — a spark of true genius.

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choose from:**

- The top-of-the-line 48
- The low maintenance 36
- And the economical 24

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