This press pack accompanied the launch of the fifth generation Hilux in 1989. Changes to the vehicle during its time on sale can be tracked using the Timeline feature on the Hilux archive web page. More information about the Hilux range can be obtained from the press office.

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TOYOTA

EMBARGO: NOT TO BE PUBLISHED OR BROADCAST PLEASE BEFORE

MARCH 8, 1989

THE NEW TOYOTA HILUX PICK UPS - MORE COMFORT

AND TOUGHER THAN EVER

The Toyota Hilux, available with two or four wheel drive, has been enormously popular on farms and with large and small businesses where the demand has been for a combination of rugged performance and easy load carrying capacity. A commercial vehicle should combine reliability, durability, economy and the right specification for the job, and the familiar Hilux has done this with considerable style; its chunky good looks have always made it stand out in any working environment.

The Hilux has now been completely redesigned, retaining all of its inherent strength and go-anywhere ability, but now more refined with saloon car-like comfort, lower noise levels and a smoother ride. The 1.8 and 2.2 litre petrol engines for the two wheel and four wheel drive versions are retained, but the 2.4 diesel engine in the 4WD has been substantially revised for more power, less vibration and noise and surprising economy.

more...

More extensive use of galvanealed anti-rust in the body makes the new Hilux even more resistant to corrosion and even the shape and construction of components has been changed to prevent the intrusion of water and mud. A highly rigid bodyshell has cut wind noise, vibration and road noise.

Inside, there is no feeling of being in any kind of utility vehicle. The interior has been completely redesigned with new instruments, improved seats and cloth upholstery, stereo push button radio, better heating and ventilation and a height adjustable steering column.

The new Hilux range is:

			Basic	VAT	Total
Toyota Hilux	משנ	(notrol)	£6390.00	£958.50	£7348.50
Toyota Hilux			£8690.00	£1303.50	£9993.50
Toyota Hilux	4WD	(diesel)	£9580.00	£1437.00	£11017.00

Background

There are many different versions of the Hilux available around the world including short and long wheelbases, double and Xtra cabs and other engine options but in Britain, the three 2-seater-cab pick ups are the workhorses of the Toyota commercial range.

The Hilux first appeared in 1967 and since then over five million have been produced. Most have been exported

from Japan with over 80 per cent of production in use in other countries of the world. Recent Hilux registrations in Britain have been as follows:

	2WD	4WD	Total
1988	446	2765	3211
1987	382	1994	2376
1986	426	1832	2258

In 1989, Toyota (GB) Ltd anticipates registering 400 2WD Hiluxes and 2000 4WD models, giving a total of 2,400 vehicles. Initially, all models will be produced in Japan, but later this year Toyota (GB) anticipates all supplies of the Hilux 2WD coming from the joint Toyota-VW production plant in Hanover.

The new Hilux models in detail

The new Hilux models are distinguishable from their predecessors by contemporary but more rounded styling. They look tough and strong with a deeper front grille area and a longer, wider look. But this is a slight optical illusion. The 2WD sits on the same wheelbase as the previous model and is the same height but it is 5 mm shorter and 30 mm wider. The wheelbase of the 4WD models is 10 mm longer than before but they are 10 mm shorter overall. Load capacity is as great as before and cab interior space is larger.

Four wheel drive models have a higher ground clearance with flared wheel arches, double body stripes and spoke-type wheels. The front grilles of the 4WD and 2WD also differ in detail.

The adoption of one-piece pressed doors gives a clean appearance and a reduction in wind noise. The doors are 50 mm longer for easier entry and exit. Flush door handles and carefully shaped door mirrors help keep wind noise down and door lock operation has been improved.

Windscreen wipers have been lengthened by 25 mm to clean a larger area of glass and wiper blades are now attached to the wiper arms at six points instead of four, for increased and even pressure when clearing water from the screen.

On four wheel drive models, more substantial front mudguards are fitted and resin stone chip protector panels are fixed just forward of the front wheel arches.

All models now have spot welded double skinned cargo decks with one-piece side panels for increased strength and durability and better rust resistance. The deck width has been increased by 20 mm.

Engines

The Hilux 2WD uses the well-proven Toyota 2Y petrol engine. It is a straight four cylinder with chain driven overhead valves and wedge shaped combustion chambers. The 2Y

engine develops 81.8 bhp at 4,800 rpm from a displacement of 1812 cc. Torque is 103 lb ft at 3,200 rpm.

The petrol-engined Hilux 4WD uses the 4Y engine of 2,237 cc. The engine is similar to the 2Y and develops 92.5 bhp at 4,400 rpm and 132 lb ft of torque at a low 2,400 rpm. Both petrol engined Hilux models will run on unleaded or leaded fuel without any adjustment.

The 2L diesel engine for the Hilux 4WD has been extensively modified for more power and smoother, quieter operation. Toyota engineers set out to make the engine even more reliable under the toughest conditions, reduce vibration and noise and give more power without sacrificing fuel economy.

Improvements in durability and reliability have been achieved by using plastic region tightening of cylinder head and connecting rod bolts for stronger and more even tightening, and relocating the piston cooling oil jets to the (hottest) combustion chamber side of the pistons. Piston weight has been reduced by 100g to 600g giving more power, better response and less vibration. The timing belt has been strengthened by increasing its width from 25 mm to 31 mm.

The valve mechanism is now directly driven rather than using rocker arms, with the camshaft positioned directly over the valves. More precise valve timing is achieved for more efficient combustion. The exhaust valve diameter has been increased from 35 mm to 36 mm.

Intake ports have been reshaped to give a smoother air flow and better intake efficiency. The intake manifold has increased in diameter by 10 mm, contributing to better air intake. The swirl-type combustion chambers of the 2L have been reshaped and the angle of the glow plugs has been changed with resulting benefits in combustion efficiency and gas flow. The compression height of the pistons has been lowered by 5 mm and the piston ring has been raised for a reduction in the wasted volumetric capacity of each cylinder. The pistons have also been modified with fibre reinforced metal (FRM) to reduce piston ring friction.

The oil pump and relief valve have been modified to improve oil circulation and warm-up during cold weather and multi-layer vibration absorbing steel sheets are now used in the oil pan. This construction consists of two layers of sheet steel sandwiching adhesive resin. This resin layer acts as a damper to suppress vibration. Similarly, the cylinder head cover has been changed from aluminium to dual layer sheet steel to reduce noise.

Cylinder block rigidity has been increased on the 2L engine with the aid of finite element method analysis and by adding ribbing at the appropriate points, but weight has not been increased because Toyota was able to reduce the thickness of the block walls.

Chassis and body

The new Hilux has been considerably refined not just in terms of reliability and durability, but for the benefit of the driver and passenger too. Standard-setting levels of quietness have been achieved by increasing body and cab rigidity, changing the shape of weather strips and the use of more sound deadening material.

The steering system is also more rigid for better steering response and the location points of the leaf springs have been made more rigid for better handling and control.

A highly rust resistant body was a major consideration when developing the new Hilux. There is much greater use of anti-rust steel sheet and the single panel doors and side panels have no joints where rust might gain a foothold.

Cab rigidity and a significant reduction in "body boom" have been achieved by reinforcing the rear bulkhead, floor, roof and screen pillars. The floor sound deadening material on 4WD models is a combination of asphalt and a new material called thermosetting resin.

Wind noise is reduced by the use of one piece doors and pressed-type, double layer weather strips. These ensure a greater contact area with the body and a reduction in the air escaping between the body and the weatherstrip. A relocated air outlet at the rear of the cab allows a free flow of air through the cabin without noise intrusion. A strengthened

and revised steering system allows much less steering vibration.

In addition to the wider use of anti-rust steel, some components have been altered in shape and construction to guard against corrosion. As far as possible, single sheet steel is used to minimize the number of joints. Apart from the outer side panels of the cargo deck which are now one-piece, the inner deck area is also one piece rather than being comprised of several sections as on the previous model. The headerboard, inner deck sides, wheel arches and floor corners are of one piece construction.

Some parts which could not be one-piece have been re-designed to prevent the intrusion of mud and water, and resin liners have been fitted to the inner wheel arches. Tailgate hinges are now located on the side panels where they are less likely to be damaged by the movement of cargo and sealer used on the tailgate is forced into a gulley so that it does not get worn away by cargo being shifted in and out. The body sills have been redesigned to give the doors better protection against stones and mud. Anti-chip paints and anti-rust paints are more extensively used. Where the suspension is located on the body frame, the chassis has been treated with a thick cathodic electro-deposition paint to reduce rusting.

Various improvements have been made to the braking, clutch and steering systems for better response and feel and

the clutch release bearing hub is now made of resin, making greasing unnecessary. To cope with the increased output of the 2L engine, the transmission of the diesel Hilux 4WD has been strengthened.

Interior

Comfort and ease of operation the major were considerations with firm seat padding and durable seat and trim material. Seat adjustment has been increased and the handbrake has been redesigned and is easier to operate. electronic, stereo push button radio is fitted with two speakers. Instruments are large and easy to read and switches are relocated for easy use.

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For further information please contact Simon Small, Redhill (0737) 768585.

TOYOTA HILUX - STANDARD EQUIPMENT

Illuminated hazard warning and rear fog lamp switches

Digital clock

Power assisted steering (4WD only)

Cigar lighter

Electronic stereo radio with 2 speakers

4 speed heater with side window demisters

2 separate cloth covered seats

Lights-on warning tone

Seat headrests

Vinyl chloride floor mats

Glove box

Halogen headlights

Door mirrors

Laminated windscreen

Body stripes

Transmission protection (4WD only)

Fuel tank guard

Mudguards (rear only on 2WD)

Foot rest (4WD only)

Lockable fuel flap

2 speed and intermittent wipers

TOYOTA HILUX MODELS

SPECIFICATION

HILUX 2WD (PETROL)

HILOX SMD (BELKOL)	
Engine	Type 2Y, 4 cylinder, water cooled, ohv. 5 main bearings
Bore and stroke	86 x 78 mm
Capacity	1812 cc
Compression ratio	8.8:1
Max power	81.8 bhp/4,800 rpm
Max torque	103 lb ft/3200 rpm
Fuel system	Twin choke downdraught carburettor
Fuel type	Leaded or unleaded
Transmission	Drive to rear wheels. Manual type G54
Clutch	Single dry plate
Gear ratios 1st 2nd 3rd 4th 5th reverse	4.452 2.398 1.414 1.000 0.802 4.472
Final drive	4.556. Semi-floating hypoid
Steering	Steering box, variable ratio 19.0 - 22.5:1. 4.2 turns lock to lock
Brakes	257 mm front discs 254 mm rear drums Dual circuit servo assisted with load sensitive proportioning and bypass valve
Suspension	
Front	Double wishbone, torsion bar, double

acting hydraulic dampers 23 mm anti-roll bar

Rigid live axle, leaf springs, double acting hydraulic dampers Rear

Wheels and tyres

5.5J x 14 steel wheels. 185R 14C - 8PR tyres

Dimensions

Overall length	4725 mm
Overall width	1650 mm
Overall height	1555 mm
Wheelbase	2850 mm
Track front	1355 mm
Track rear	1370 mm
Cargo deck length	2160 mm
Cargo deck width	1465 mm
Cargo deck height	405 mm
Ground clearance	190 mm
Overhang, front	735 mm
Overhang, rear	1140 mm
Approach angle	30°
Departure angle	24°
Turning circle	11.8 m
Fuel tank	56 litres

Weights

Kerb	1245	kg		
Gross vehicle weight	2305	kg		
Towing capacity	1500	kg	with	brake
	600	kg	with	out
Load capacity	1060	kg		

Performance

Max speed	87 mph
0-60 mph	22.9 sec
0-400 metres	25.8 sec
Fuel consumption	

56 mph 8.8 litres/100 km 75 mph 9.5 litres/100 km urban 11.0 litres/100 km

HILUX 4WD (PETROL)

Engine	Type 4Y, 4 cylinder, water cooled ohv, 5 main bearings	۱,
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Bore and stroke 91 x 86 mm

Capacity 2237 cc

Compression ratio 8.8:1

Max power 92.5 bhp/4,400 rpm

Max torque 132 lb ft/2,400 rpm

Fuel system Twin choke downdraught carburettor

Fuel type Leaded or unleaded

Transmission 2 or 4 wheel drive, 5 speed manual transmission, type G52. High and low

transfer gears. Manually locking front hubs for 4WD selection

Clutch Single dry plate

Gear ratios 3.928 lst 2.333 2nd 3rd 1.451 4th 1.000 5th 0.851 4.743 reverse

Transfer 2 speed constant mesh

low 2.276 high 1.000

Final drive Front Integral differential, 4.555

Rear Hypoid, 4.555

Steering Power assisted steering box, variable

ratio 22.3 - 25.5:1 4.6 turns lock to

lock

Brakes 302 mm front discs

295 mm rear drums

Dual circuit servo assisted with load sensitive proportioning and bypass

valve

Suspension

Front

Rigid axle leaf springs with double acting hydraulic dampers. 19 mm anti-roll bar

Rear

Rigid axle, leaf springs, double acting hydraulic dampers

Wheels and tyres

6J x 16 steel wheels

205R 16 tyres

Dimensions

Overall length	4720 mm
Overall width	1690 mm
Overall height	1745 mm
Wheelbase	2850 mm
Track front	1420 mm
Track rear	1400 mm
Cargo deck length	2160 mm
Cargo deck width	1.465 mm
Cargo deck height	405 mm
Ground clearance	220 mm
Overhang front	740 mm
Overhang rear	1130 mm
Approach angle	43°
Departure angle	35°
Turning circle	13.2 m
Fuel tank	65 litres

Weights

Kerb	1485	kg		
Gross vehicle weight	2350	kg		
Towing capacity	1500	kg	with brake	
			without	
Load capacity	865			

Performance

Max speed	87 mph
0-60 mph	22 sec
0-400 metres	23.6 sec

Fuel consumption			
56 mph	9.7	litres/100	km
75 mph	15.4	litres/100	km
urban	12.9	litres/100	km

HILUX 4WD (DIESEL) Engine Type 2L, 4 cylinder diesel, water cooled, belt drive ohc, 5 main bearings Bore and stroke 92 x 92 mm 2446 cc Capacity Compression ratio 22.2:1 Max power 81 bhp/4,200 rpm Max torque 121 lb ft/2,400 rpm Fuel system Diesel injection Transmission 2 or 4 wheel drive, 5 speed manual transmission, type G58, high and low transfer gears. Manually locking front hubs Single dry plate Clutch 3.928 Gear ratios lst 2nd 2.142 3rd 1.397 4th 1.000 5th 0.851 4.743 reverse Transfer 2 speed constant mesh 2.276 low 1.000 high Final drive Front Integral differential, 4.300 Hypoid, 4.300 Rear Power assisted steering box, variable Steering ratio 22.3 - 25.5:1. 4.6 turns lock to lock 302 mm front discs Brakes 295 mm rear drums Dual circuit servo assisted with load sensitive proportioning and bypass valve Suspension Front Rigid axle, leaf springs, double acting hydraulic dampers, 19 mm

anti-roll bar

Rear

Rigid axle, leaf springs, double

acting hydraulic dampers

Wheels and tyres

6J x 16 steel wheels 205R 16 tyres

Dimensions

Overall length	4720 mm
Overall width	1690 mm
Overall height	1745 mm
Wheelbase	2850 mm
Track front	1420 mm
Track rear	1400 mm
Cargo deck length	2160 mm
Cargo deck width	1465 mm
Cargo deck height	405 mm
Ground clearance	220 mm
Overhang front	740 mm
Overhang rear	1130 mm
Approach angle	43°
Departure angle	35°
Turning circle	13.2 m
Fuel tank	65 litres

Weights

Kerb	1630	kg		
Gross vehicle weight	2460	kg		
Towing capacity	1500	kg	with	brake
	600	kg	without	
Load capacity	830	kg		

Performance

Max speed	87 mph
0-60 mph	24.6 sec
0-400 metres	31.3 sec

Fuel consumption	
56 mph	9.8 litres/100 km
75 mph	13.5 litres/100 km
urban	13.0 litres/100 km