

4L80E

FAMILY OF 4-SPEED AUTOMATIC TRANSMISSIONS

POWERING THE FAMOUS HUMVEE®



RENOWNED FOR ROBUST DESIGN, RELIABILITY, DURABILITY AND PERFORMANCE

GENERAL TRANSMISSION PRODUCTS

General Transmission Products (GTP) is a wholly owned subsidiary of AM General LLC, manufacturer of the legendary HUMVEE®. Formed in 2008, GTP produces and provides global distribution of the long-lasting and low maintenance 4L80E family of automatic transmissions.

Heavy Duty Service Applications

Originally designed by General Motors®, the 4L80E Transmission is robust, durable, reliable and known for smooth shifting and extremely low warranty costs.

The 4L80E Transmission family meets all AM General®, General Motors® and Department of Defense (DoD) requirements. This is why the 4L80E is used in a wide range of rugged applications around the world, including the HUMVEE® and HUMMER H1® and fleet delivery trucks.

Now the exclusive provider of 4L80E transmissions for the military HUMVEE® for AM General®, GTP also offers 4L80E transmissions for OEM sales to commercial markets. The company is also the sole source of NEW 4L80E service transmissions to General Motors Service Parts Operations (GMSPO).

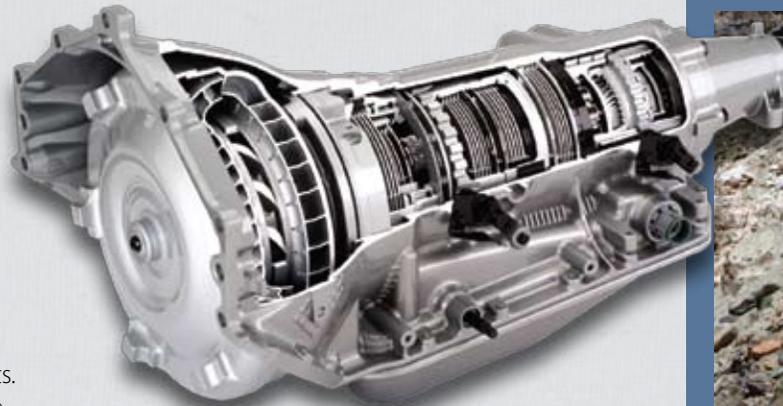
Global Distribution

With the prowess of AM General's Service Parts and Logistics Organization to support General Transmission Products, the company's global distribution and service parts network is unrivaled in the wheeled vehicle military and commercial industries.

Engine Compatibility and Powertrain Offerings

A clear advantage of the popular 4L80E automatic transmission is its broad V8 engine compatibility. It can be mated to most of General Engine Products' Optimizer 6500® family of engines, as well as many other V8 engines.

General Engine Products (GEP), also a subsidiary of AM General, builds the Optimizer 6500® V8 diesel engine family. The GEP Optimizer 6500® engine mated to the GTP 4L80E transmission is a powerful powertrain choice. This is the same powertrain chosen for the HUMVEE®.



▲ Offering HUMVEE® tested tough durability and low maintenance, the 4L80E 4-speed automatic transmission is a smart choice for many applications.

Full Engineering and Service Support

GTP Engineering maintains its offices in Livonia, Michigan. The engineering group provides full support for the 4L80E family of transmissions.

- Specialty powertrain development
- Vehicle integration engineering
- Electronic controls development
- Program design, development, testing and validation
- Prognostics and diagnostics
- Web-based service support



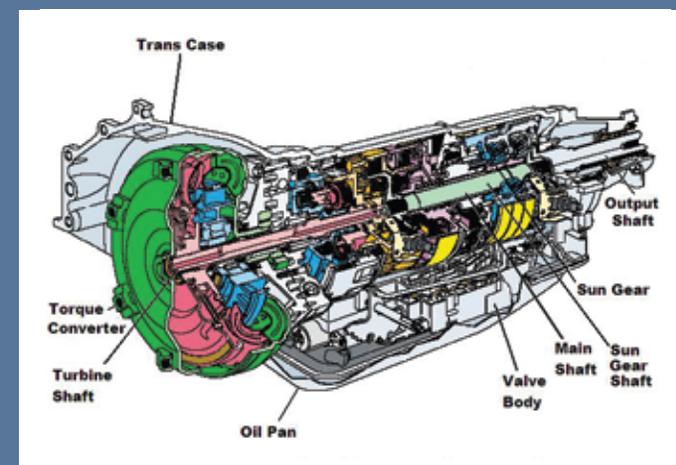
▲ The Optimizer 6500® engine mated to the 4L80E Transmission is the powertrain of choice for a variety of commercial vehicle applications.



▲ The 4L80E 4-speed automatic transmission shows proven durability as the transmission of choice for AM General's HUMVEE®.



▲ The General Transmission Products 4-speed automatic transmission is ideal for commercial truck applications.



Specifications

GTP 4L80E/4L85E AUTOMATIC TRANSMISSIONS

THE 4L80E TRANSMISSION — HUMVEE® TESTED TOUGH

Product Description

General Transmission Products' 4L80E is a close-ratio four-speed automatic transmission that serves the heavy-duty service market, including AM General's HUMVEE®, HUMMER H1® SUV, full-size vans, shuttle buses, delivery trucks and light motor homes.

The transmission has been refined through 18 years of field experience and continuous engineering improvement. The 4L80E automatic transmission has been used in the HUMVEE® 15 years and continues to provide reliable performance on every terrain and climate condition.

Incorporating electronic controls that consist of using a transmission control module (TCM) interfacing with an engine control module (ECM), the 4L80E transmission provides consistent and precise shift points and shift quality. These controls continuously monitor shift timing, internal and external conditions and adjust shifts for consistency. Shift stabilization limits the amount of hunting between gears when traveling through mountains, with or without a trailer.

Low Maintenance Costs

The 4L80E transmission is one of the lowest maintenance cost transmissions in the industry. The only maintenance necessary consists of fluid changes at various duty cycles depending upon how rigorous the transmission is used in its application. The 4L80E transmission uses DEXRON®-VI automatic transmission fluid. DEXRON®-VI transmissions fluid was developed to behave more consistently during temperature and other environmental variations, as well as to provide even lubrication of the moving surfaces of the transmission.

Type:	Four speed rear-wheel-drive, electronically controlled, automatic overdrive transmission with torque converter clutch
Engine range:	4.8L - 6.0L gasoline
	6.5L - 6.6L diesel
Maximum engine torque:	440 lb.-ft. (597 Nm) 4L80E/ 460 lb.-ft. (624 Nm) 4L85E
Maximum gearbox torque:	885 lb.-ft. (1200 Nm)
Gear ratios:	
First:	2.48
Second:	1.48
Third:	1
Fourth:	0.75
Reverse:	2.07
Maximum shift speed:	1-2 5400 rpm
	2-3 5400 rpm
	3-4 5200 rpm
Maximum validated gross vehicle weight:	Up to 18,000 lb (8165 kg) (application & axle ratio dependent)
7-position quadrant:	P, R, N, OD, D, 2, 1
Case material:	Die cast aluminum
Shift pattern:	(2) two-way on/off solenoids
Shift quality:	Force motor control
Torque converter clutch:	Pulse width modulated solenoid control
Converter size:	310mm (reference) (diameter of torque converter turbine)
Fluid type:	DEXRON VI®
Transmission weight:	Wet: 115 kg (254 lb)
Fluid capacity (approximate):	Bottom pan removal: 4L - 6L (4.2 qt - 6.3 qt)
Pressure taps available:	Line pressure
Towing capacity:	Up to 22,000 lb (9979 kg) maximum gross combined vehicle weight (application & axle ratio dependent)
Applications:	AM General HUMVEE®
	Rolls Royce
	Jaguar
	Chevrolet Express Van
	GMC Savana
	General Motors' HUMMER H1®
	Package Delivery Trucks
	Shuttle Buses
	Light Motor Homes

◀ The 4L80E 4-speed automatic transmission features durable internal components and electronic controls for shift smoothness and ease of maintenance.



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