



# *m*DRIVE MAKE THE SHIFT.



BORN READY.

# A MANUAL TRANSMISSION WITH A BRAIN.

Mack *mDRIVE* is not an automatic transmission, it's a manual transmission that changes the gears for you. What's the difference? Instead of a gear stick that the driver uses to engage the gears, Mack *mDRIVE* has a set of electronically-controlled selectors on top of the transmission that automatically change the gears for the driver.

The electronics that control these selectors is connected to a series of sensors in the engine and around the truck that tell it exactly when to change gear, and which gear to select.



# SMOOTH AND INSTANT CHANGES, EVERY TIME.

As you're driving along, the transmission's electronic system is constantly gathering information from the engine, the road grade, road speed sensors and of course, the driver's accelerator and brake settings. It's also continually adapting to the load on the truck, and when it senses that a different gear is needed it switches it instantly and smoothly.

There's no over-revving, no straining, no missed gears and no crunching and grinding of gears. In short, *mDRIVE* makes all the gear changes a brilliant and highly-experienced driver would make, but its changes are smooth and perfectly timed to suit the engine speed, every time.



## LESS WEAR AND TEAR ON THE TRUCK

The result of smoother gear changes is not only a more fuel-efficient and smoother ride, but a dramatic reduction in wear on the transmission and driveline.

Let *mDRIVE* take away the additional concentration the driver would need to continually make smooth gear changes on demanding runs. Allowing the driver to focus on a safe journey and a smooth delivery. Macks fitted with *mDRIVE* avoid unintentional driver inputs, protecting your engine and gearbox, so your truck needs far less maintenance over its lifetime.

## LESS WEAR AND TEAR ON THE DRIVER

It's well known that constant gear changing is a major contributor to driver fatigue. It also forces the driver to think about the truck and the engine rather than focussing on the road environment. We know there are plenty of drivers out there who say they'll "never give up the manual", but in our experience, once they've tried the *mDRIVE*, 99% of them refuse to go back. Why? Because it makes their job so much easier and less tiring, every minute of every day.

Interestingly enough, the *mDRIVE* actually makes more gear changes than a driver typically does, but the driver doesn't have to make even one. Making the job easier also makes it easier to keep good operators.

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**"THE TRANSMISSION THINKS OF EVERYTHING WAY BEFORE I DO"**

Dave McKenna

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## A SHORT BURST OF HORSEPOWER

*mDRIVE* can handle many more pound-feet of torque from the engine than a typical manual transmission, but sometimes you may want a little extra power. This is why *mDRIVE* has two modes: Economy and Performance.

In Economy mode the transmission chooses gears that optimise fuel efficiency, delivering the right amount of torque and horsepower exactly when you need it.

In some circumstances you may need a burst of horsepower, so you can switch to Performance Mode at the click of a button. This changes the engine's RPM aspect so *mDRIVE* will hold higher revs before changing gears, making maximum use of the available horsepower. Need a bit of extra power to tackle a steep incline? Flick over to Performance mode to get the job done.

*mDRIVE* also has a 'kickdown' function, known as "MackCellerator" that cuts in when you overtake in slower traffic. If you push the throttle beyond 100%, it instantly switches to a lower gear (if there are enough RPMs available) and applies maximum power so you can get past quickly and safely and concentrate on the road.

## SOFTWARE SUITED TO THE TASK

*mDRIVE* comes with one of two software configurations: Maxi-Shift and Heavy-Duty Shift. Maxi-Shift is ideal for most applications, and is the standard factory-fitted package.

Heavy-Duty Shift is specifically designed for high-GCM applications with loads greater than 90 tonnes. This package promotes first gear for take-off and changes the engine's RPM aspect to apply higher revs before changing gear as a default setting. Giving your driver an effortless take-off with heavy loads.

Heavy-Duty Shift is an additional feature that allows you to switch back to the Maxi-Shift software at any time by holding the Performance button down for three seconds. Creating better fuel economy when changing to lighter loads.

## CONTROL IN TIGHT SPOTS

If you're manoeuvring at low speeds, *mDRIVE*'s Slow Speed feature, makes it possible to run your truck at the engine idle speed without slipping the clutch.

This is ideal for tight confined spaces, minimises clutch wear and allowing movement without halting to best maintain your speed.

Similarly, if you're doing a standing start on a hill, *mDRIVE*'s Hill Start Assist known as "Grade Gripper" prevents the truck from rolling backwards when you release the brake over a three second period.

## POWER TAKE-OFFS TO SUIT EVERY NEED

*mDRIVE* provides a range of power take-off output ratios to suit different applications. Speak with your authorised dealer to find the configuration best for you.

## *mDRIVE* – MAKING THE JOB EASIER FOR DRIVERS

Quality drivers are hard to come by these days, especially those with the experience to handle an 18-speed manual gearbox. With a Mack fitted with *mDRIVE* though, you can put a novice driver in the cab and say 'Off you go', confident that your truck and your load will arrive intact.

A lot of *mDRIVE* users have told us they were originally sceptical, but once they tried it they were immediately convinced. "Easier than driving my car" is something we hear just about everyday. What would you rather be driving?



FEATURES	BENEFITS
Manual Transmission with a brain	Intelligently selects the right gear for the job. Low driver input, maximum control output.
Smooth and Instant Changes Every-time	Less Wear and Tear.
Less Wear and Tear on the Driver	A less stressed driver is a safer and more productive driver.
Performance Mode	Takes the engine out of economy range and into the peak power range to maintain momentum on challenging terrain.
Maxi Shift and Heavy Duty Shift Options	Software to suit your load – intelligently operating to provide best shift strategy for the application.
Slow Speed Feature	Control in tight spots, increasing clutch life.
Power Take-Offs (PTO)	A number of ratios and pump options to suit your specific application.
No Driver Shifting required	Making Driving a delight for your drivers. – less driver fatigue, let them concentrate on the task at hand.
No Gear Stick in the Cab	Cabin configuration is much more comfortable. No gear stick means you've got more room to play with the layout of your cab and easier access to the sleeper cab.

The Mack *mDRIVE* automated manual transmission is not just a revolution in transmission design, it's a revelation to everyone who tries it. We've yet to meet a driver who wants to go back to shifting a stick after trying *mDRIVE*.



# WHEN YOU'VE GOT A MACK, WE'VE GOT YOUR BACK.



Mack Genuine Parts are as tough as your truck. With premium materials and precision engineering, they're built to take whatever the road can throw at them.

Mack Total Support gives you the added confidence of warranties, servicing and maintenance from the people who made your machine.

For more information on Mack Telematics  
Call 1300 MYMACK (1300 69 6225) or visit [macktrucks.com.au](http://macktrucks.com.au)



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