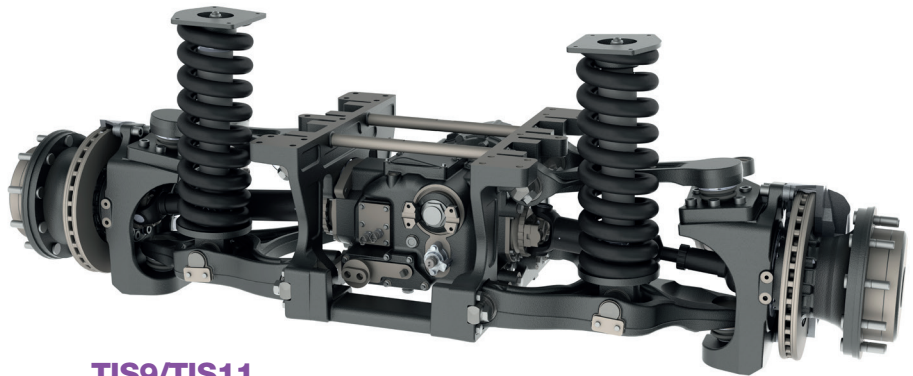


# JAWS™ - THE NEXT GENERATION OF HIGH PERFORMING INDEPENDENT SUSPENSION SYSTEMS FROM TIMONEY

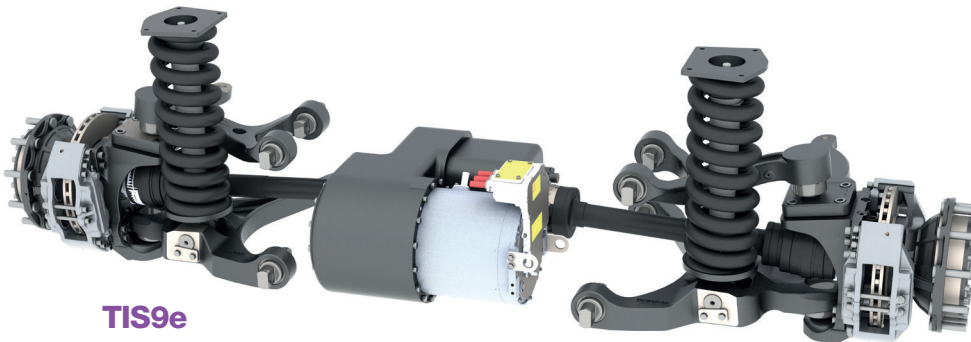
**The original heavy duty Independent Suspension system gets even better.**

With the introduction of the JAWS™ generation, Timoney takes a major leap forward in the world of heavy duty Ride & Handling.

Timoney's new range of Independent Suspension systems is the result of over 50 years of experience in vehicle mobility and adopts the latest technologies available to deliver unparalleled durability and performance.



**TIS9/TIS11**



**TIS9e**

## Benefits of Superior Ride & Handling



### PRODUCTIVITY

Increased driver confidence reduces cycle times.



### SAFETY

Improved control and stability. Protect the occupants.



LONG LIFE

### DURABILITY

Reduce vehicle damage caused by shock loads and vibrations.



### CROSS COUNTRY MOBILITY

Get from point A to point B over the toughest terrain.



### COMFORT

Reduces the effects of harmful vibrations and shock loads.



### MANOEUVRABILITY

Deploy quicker. Take the fastest, most direct route.

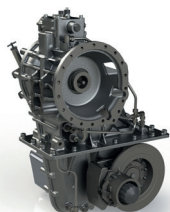
# JAWS™ - SPECIFICATIONS\*

Description	TIS9/TIS11	TIS9e
Gross Axle Weight Rating (GAWR)	See Chart	
Ratios	5.38:1 - 10.463:1	16/38/80
Peak Output Torque	65,000Nm	
Suspension Travel	Up to 400mm	
Suspension Medium	Coil spring and damper or strut (various control modes available)	
Service Brake	Air or hydraulic disc	
Steering Backlock	Up to 37°	
Differential Locks	Driver controlled differentials with air actuated locks	
Minimum rim size	20"	
Ground Clearance (16 R20 tyres)	488mm	
System Weight	Application Dependent	
Other features	ABS and CTIS ready	
Available Options	Cradle assembly Sensor Pack Integrated Cooling Pack Multi-axle Steering System All Wheel Steer Systems Transfer Cases Integration Support	



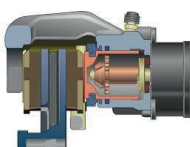
\*Subject to application approval. Specifications subject to change.

# ONE STOP SHOP FOR ALL YOUR DRIVELINE NEEDS



## TRANSFER CASES

Off-the shelf or bespoke solutions to best suit your vehicle requirements.



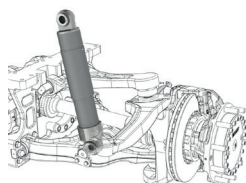
## STRATEGIC SOURCING

Through our network of suppliers, Timoney can specify and source driveline products for your vehicle.



## STEERING SYSTEMS

Geometry optimized for the high wheel travel associated with independent suspension systems.



## SUSPENSION MEDIUM

Our Ride & Handling expertise ensures the suspension medium is specified to provide optimum performance.

## AFTERMARKET

Timoney provides a comprehensive aftermarket service to support your vehicle maintenance, repair and overhaul.

Our aftermarket team provides support throughout the life of our product, giving you the assurance that your product will perform as per the initial design intent.

Our aim is to be with you every step of the journey through the product life cycle.



## WHY CHOOSE TIMONEY?



### EXPERTISE

Since 1967, involved in the development of over 100 different vehicles for customers in over 30 countries.



### TECH TRANSFER

A unique solution to building local knowledge and expertise.



### AGILITY

Our agile processes and flexible approach allow us to adapt and succeed in complex projects with demanding deadlines.



**Timoney Technology**  
IDA Technology Park  
Johnstown, Navan,  
Co. Meath, C15 PX45  
Ireland

[www.timoneygroup.com](http://www.timoneygroup.com)

# JAWS™ - HIGH PERFORMING SUSPENSION APPLICATIONS

For over 50 years, Timoney has developed high performing suspension systems for the Defence, Fire and Construction industries. Timoney is more than just a driveline supplier, working closely with your team, we can take charge of vehicle Ride & Handling performance, allowing our clients to focus their efforts on other areas of the vehicle.

## CONSTRUCTION



Safety is an absolute priority in the construction sector and can always be improved. Superior Ride & Handling reduces safety risks, increases productivity and improves product durability.

ROKBAK RA30



## FIRE



Every second counts in the Airport Rescue and Firefighting (ARFF) sector. Reaching the crash site quickly and safely is a matter of life-and-death, the ultimate test of heavy-duty vehicle Ride & Handling.

P23 8x8



## DEFENCE



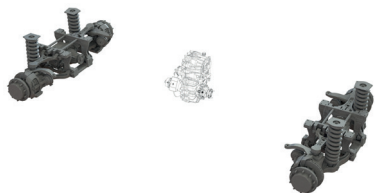
Defence vehicles are designed for the toughest operational environments. Superior Ride & Handling increases crew comfort, maneuverability and cross-country performance.

Wisent 8x8

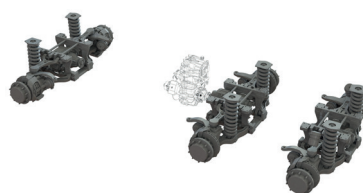


## MODULARITY ACROSS VEHICLE APPLICATIONS

Commonality between 4x4, 6x6 and 8x8 variants reduces the range of the inventory required to service a fleet of vehicles.



4x4



6x6



8x8

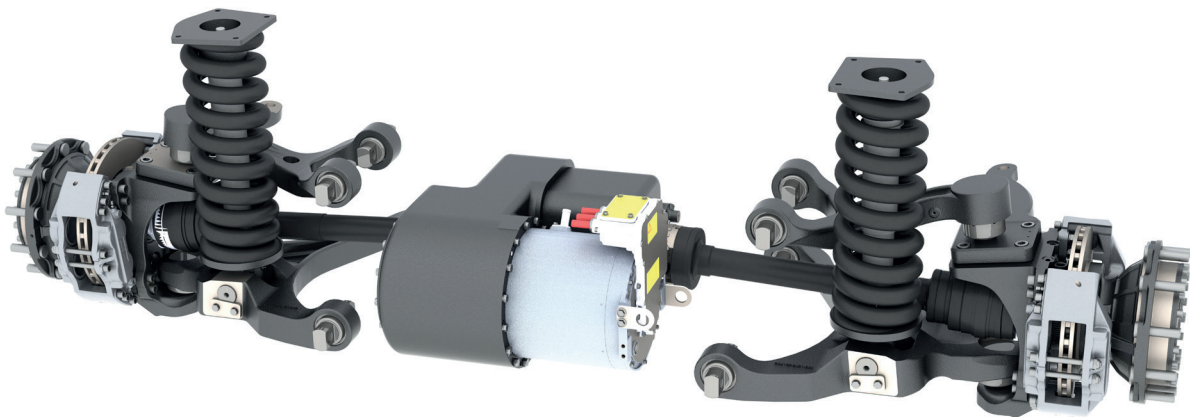


**An optimised suspension system reduces the effects of harmful vibrations, allowing the operator to drive faster, safer and also improves productivity and durability.**

## **ELECTRIC DRIVE**

The TIS9e is a series hybrid powertrain, providing independent power and torque control at each axle. The high-power density motor provides a compact design for ease of packaging and installation.

Compatible with any fuel source that can be used to generate electricity at the appropriate voltage level, the central e-axle replaces the TIS9/TIS11 mechanical axle with no change to suspension and hubs.

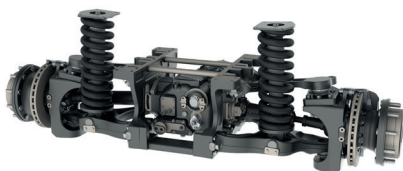


## **PRODUCT MODULARITY**

Product modularity is a key feature of the JAWS™ portfolio. All models are optimised for the Gross Axle Weight Rating (GAWR). By maintaining common components across the portfolio, carrying capacity can be increased with minimum changes to the vehicle architecture. Likewise, vehicle electrification can be offered as an option with no change to suspensions and hubs.

Common interfaces between spring/damper and struts means the spring medium can be optimised and upgraded with minimal changes.

Multiple drive ratio options enable the selection of the optimal driveline ratio for the required vehicle performance.



**TIS9**



**TIS11**

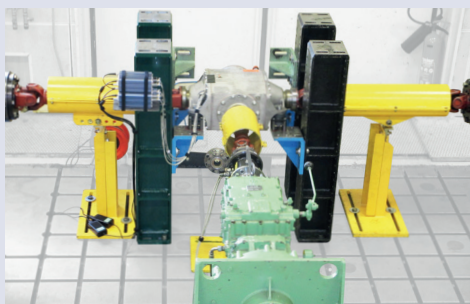


**TIS9e**

## THE ORIGINAL HEAVY DUTY INDEPENDENT SUSPENSION GETS EVEN BETTER

Independent suspension provides superior performance off-road vehicles, ensuring best in class safety, mobility, driver confidence and comfort.

Ride & Handling is also important for unmanned vehicles. Occupant comfort is less of a factor but the sensitive electronic control equipment still needs to be protected from high shock loads and vibrations.



## DESIGNED AND TESTED FOR DURABILITY

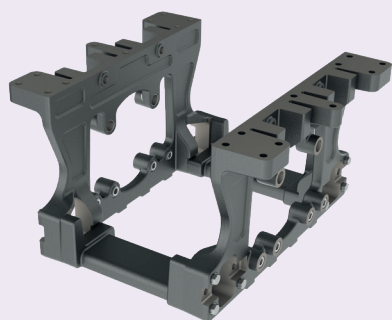
Timoney's design criteria and test processes have been proven in the Defence, Construction and Fire sectors. Through successive product developments, we have listened to our customers and used that feedback to improve our products.

All sub-systems and components are subjected to an exhaustive series of bench tests that guarantee performance and durability in the toughest off-road conditions.

## INTEGRATION OF COTS COMPONENTS

Commercial Off The Shelf (COTS) differentials and wheel ends assemblies have been integrated into the JAWST™ portfolio.

These components are used in a variety of heavy-duty applications with proven reliability, durability and improved delivery times.



## CAST MOUNTING CRADLE

A bolt-on design that facilitates quick installation and removal.

Integrated anti-vibration mountings reduces noise and vibration to improve occupant comfort and productivity.

## EASE OF MAINTENANCE

Customised sensor packs makes monitoring oil levels easier for customers – up to 8 times faster than manual inspection.

Temperature sensors can automatically activate a cooling system.

Maintenance free driveshafts, kingpins and straddle bearings for improved serviceability.

