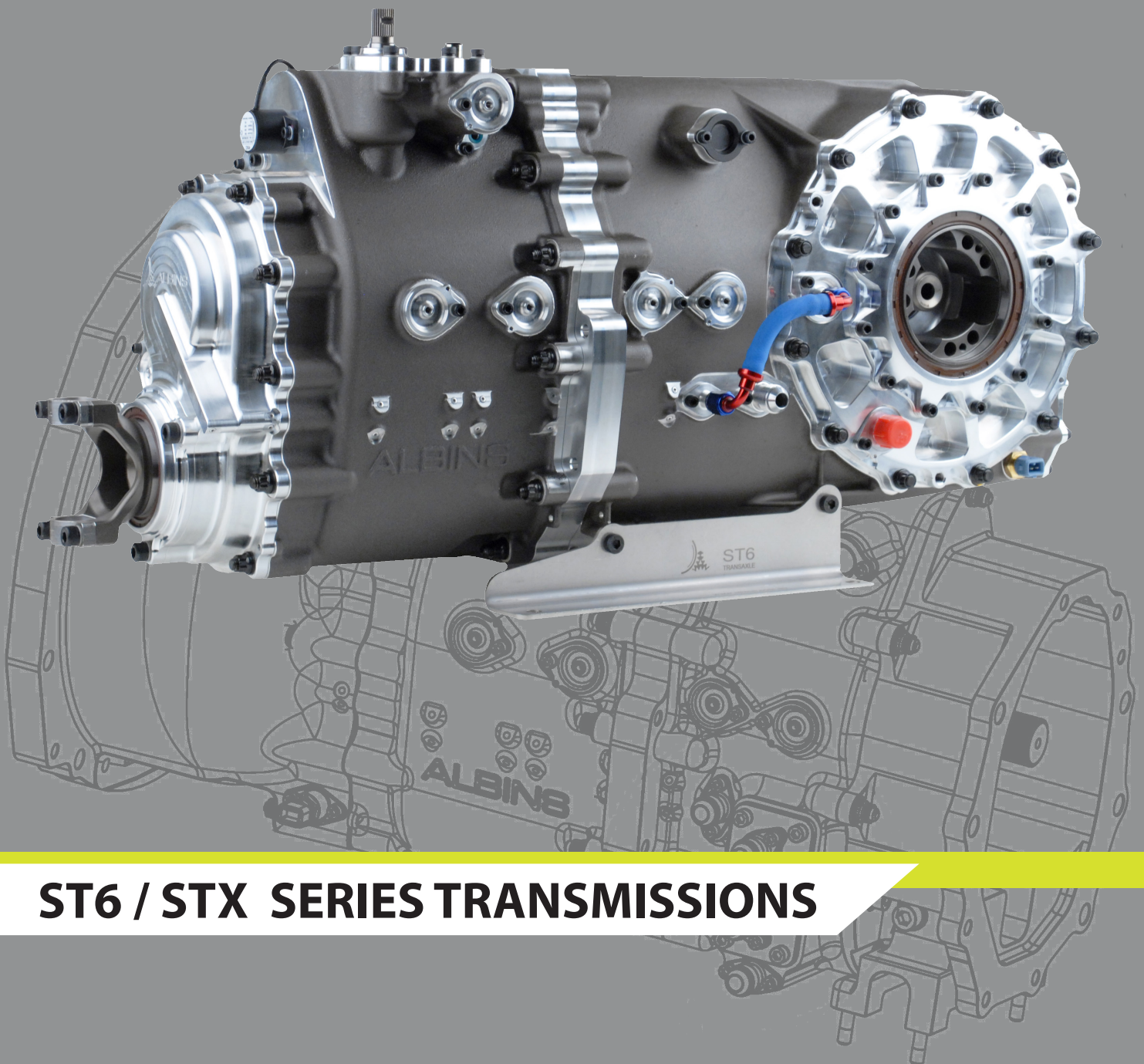




# ALBINS

PERFORMANCE TRANSMISSIONS



## ST6 / STX SERIES TRANSMISSIONS

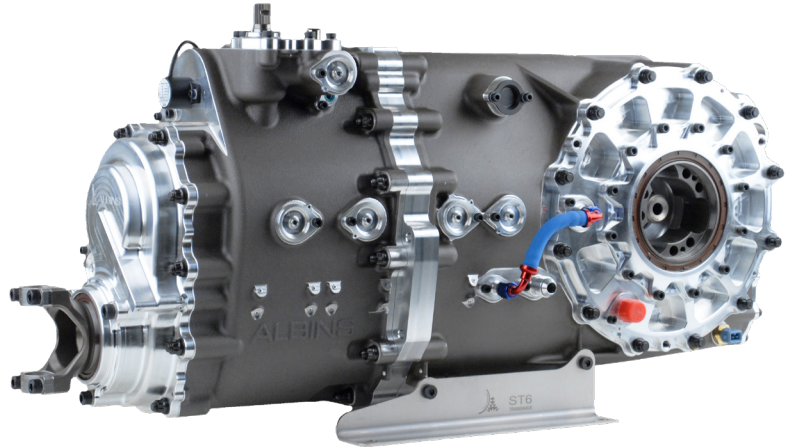
[WWW.ALBINS.COM.AU](http://WWW.ALBINS.COM.AU)

## ST6 SERIES

The Albins ST6 has a global reputation as a robust, compact sequential transmission for motorsport applications including circuit racing, drag racing, drift competition and off-road competition.

It delivers extremely short shift event times with positive gear engagement. The base gearstack was designed for Australian V8 Supercar Racing and can be configured as an inline transmission, rear-mount transaxle or mid-mount transaxle.

A range of adaptors allows the ST6 to be tailored to suit a wide range of engines and vehicle applications.



## STX VARIANT

The Albins STX variant has increased tooth width delivering increased tooth surface area and a greater degree of strength.

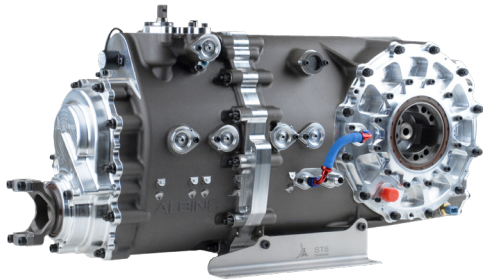
This variant has been used successfully in ultra high horsepower drag racing applications in the Middle East and in high powered off road racing in the USA.

Both the ST6 and STX share a large amount of the same casing architecture and shift mechanism.

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## ST6 RANGE



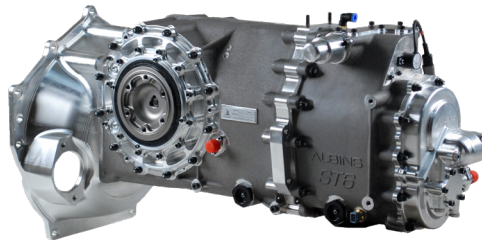
### ST6

For front-engine rear transaxle applications.

6 Speed Sequential

Weight: 68kg

Available as ST6-C with integral clutch and alternator units mounted to transmission

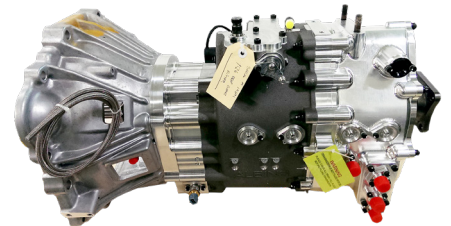


### ST6-M

For mid-engine RWD applications.

6 Speed Sequential

Weight: 76kg



### ST6-I

For front-engine rear-drive applications.

6 Speed Sequential

Weight: 56kg (transmission only)

Facilitates low engine mounting

4WD transfer case adapter available

## ST6 RANGE -RATIOS

A large range of ratios is available including custom ratios for all gears.

All gears are constant mesh, with 1-5 being change gears. The overall ratios of the change gears are determined by the constant gear ratio. Various drop gears are available and if changed will affect the overall ratio. To calculate the overall ratio of the gear train:

1st – 5th: [drop gear] x [constant mesh ratio] x [gear ratio] x final drive

6th: [drop gear] x 1 (direct) x [final drive]

1st:	2.357:1	(2.36 x 1.09*)
2nd:	1.824:1	(1.82 x 1.09*)
3rd:	1.474:1	(1.47 x 1.09*)
4th:	1.238:1	(1.24 x 1.09*)
5th:	1.043:1	(1.04 x 1.09*)
6th:	1.000:1	(direct)

*Constant mesh:	1.09:1		
Ring and pinion:	3.273:1		
Drop gear ratios:			
.96:1	1.00:1	1.07:1	1.13:1



## ST6 RANGE (cont)

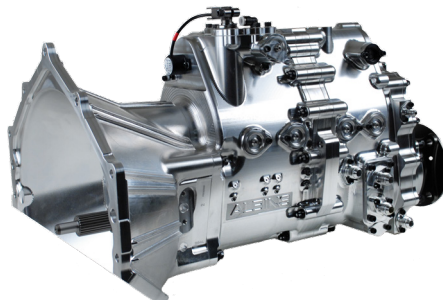


### ST6-LP

For front-engine rear-drive applications.

A low-profile version of the ST6-L, this compact design allows for easier installation and additional transmission tunnel clearance.

The LP has a revised shifter actuation location from the traditional ST6 transmission.



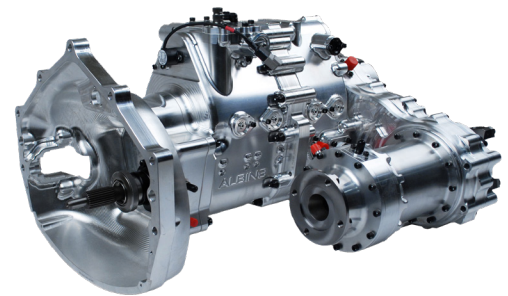
### ST6-TT

For Trophy Truck applications.

Using the competition-proven ST6 gearstack, the ST6-TT is specifically designed for the rigours of Trophy Truck racing.

Various bellhousings and adapters are available to suit a range of engines.

Weight: 56kg



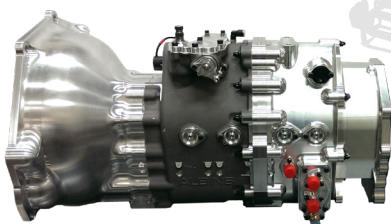
### ST6-I4

For front-engined 4WD applications

The ST6 gearstack in an inline transmission with 4WD transfer case, designed for off-road competition and extreme duty 4WD applications.

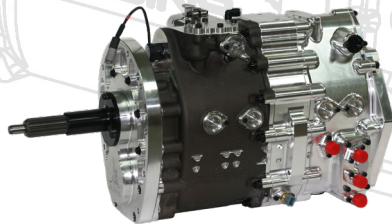
## MODEL-SPECIFIC OPTIONS

### ST6-IR32



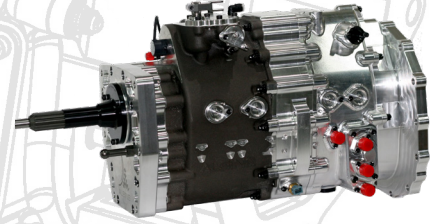
For Nissan R32/R33 GTR

### STX-L



For Toyota 200 Series Landcruiser

### STX-P



For Nissan GU Patrol

## ST6 TRANSAXLE

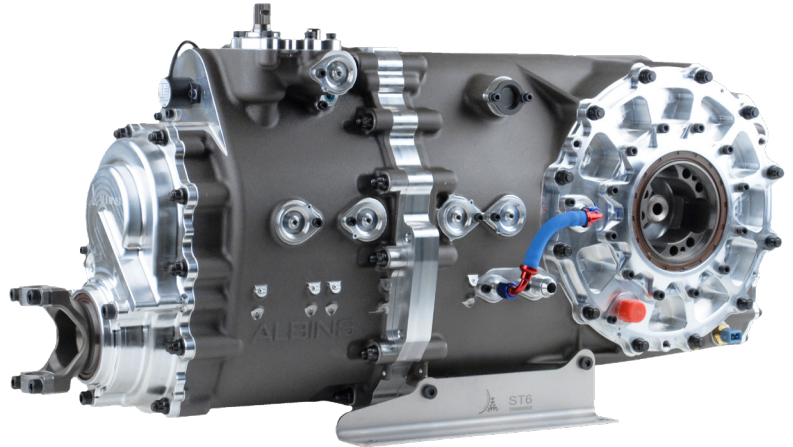
For front-engine rear transaxle applications.

Originally designed for Australia's V8 Supercar category, the ST6 is strong, compact and efficient, with short shift event times.

6-speed sequential featuring an efficient drop gear set for fast and simple ratio changes.

Weight: 68kg

Available with integral clutch unit fitted to the front of the transmission (ST6-C)



## FEATURES

- 1000 Nm rated
- Albins Klingelnberg Palloid ring and pinion set
- Plate type LSD (cartridge type) or spool options
- Tripod style output flanges standard
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Innovative design allows very low engine mounting
- Drop gear option for fast, economical gear changes
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Rod or cable shift activation – paddle shift option available
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Straight-cut drive gears and roller bearing internals minimise power loss
- Wide selection of drop gears available
- Custom input shafts and bellhousing available

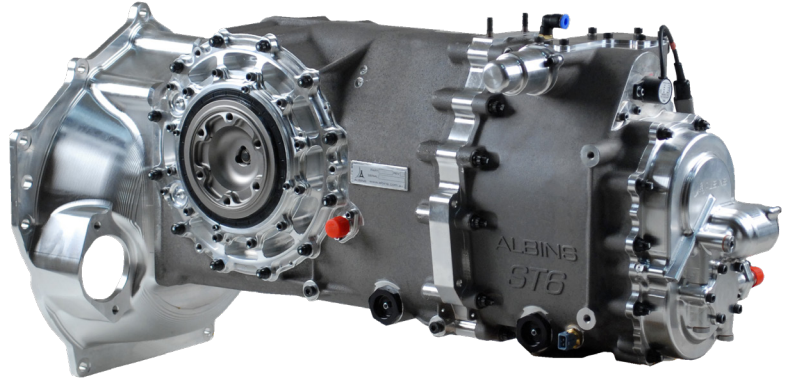
## ST6-M TRANSAXLE

For mid-engine RWD applications.

Using the same gearstack as the ST6, the ST6-M delivers all the benefits of the ST6 transaxle in a mid-engine configuration.

Various bellhousings and adapters are available to suit any engine.

Used and proven in Britcar 24-hour endurance racing.



## FEATURES

- 1100 Nm rated
- Albins Klingelnberg Palloid ring and pinion set
- Plate type LSD (cartridge type) or spool options
- Tripod style output flanges standard
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Innovative design allows very low engine mounting
- Drop gear option for fast, economical gear changes
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Rod or cable shift activation – paddle shift option available
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Straight-cut drive gears and roller bearing internals minimise power loss
- Wide selection of drop gears available
- Custom input shafts and bellhousing available



## ST6-LP

For front-engine rear-drive applications.

A low-profile version of the ST6-I, this compact design allows for easier installation and additional transmission tunnel clearance.

The shift actuator has been relocated to improve fitment in a wide range of vehicle applications.

This transmission is commonly used where fitment into an unmodified transmission tunnel is required.



## FEATURES

- 1100 Nm rated
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Innovative design allows very low engine mounting
- Drop gear option for fast, economical gear changes
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Rod or cable shift activation – paddle shift option available
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Straight-cut drive gears and roller bearing internals minimise power loss
- Wide selection of drop gears available
- Custom input shafts and bellhousings available

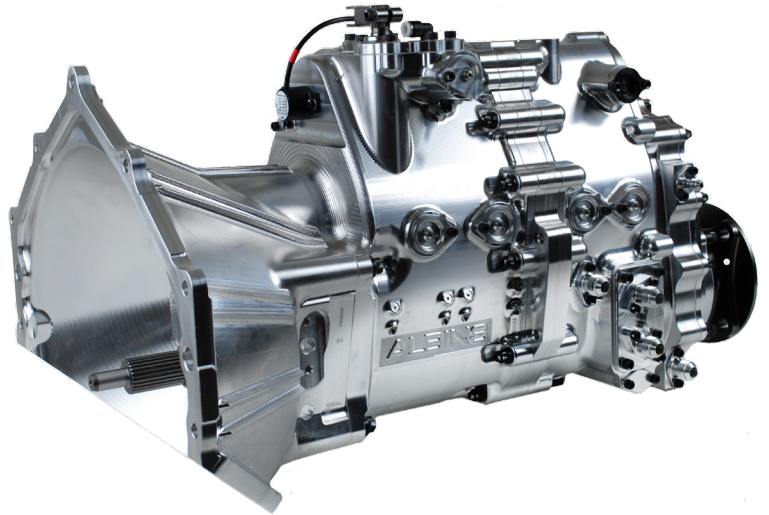
## ST6-TT

For Trophy Truck applications and Inline Transmission applications.

Using the competition-proven ST6 gearstack, the ST6-TT and ST6-I are specifically designed for the rigours of Trophy Truck racing.

Various bellhousings and adapters are available to suit a range of engines and it can also be used with our 4WD transfer case.

Can be ordered with high or low output at rear and drop gears at front or rear.



## FEATURES

- 1100Nm Rated
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Innovative design allows very low engine mounting
- Drop gear option for fast, economical gear changes
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Rod and cable shift activation – paddle shift option available
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Straight-cut drive gears and roller bearing internals minimise power loss
- Low input, low output, large rear drop gear set, 1480 output yoke
- Custom input shafts and bell housing available
- Also available as a low profile version . See the Albins ST6-LP



## ST6-I

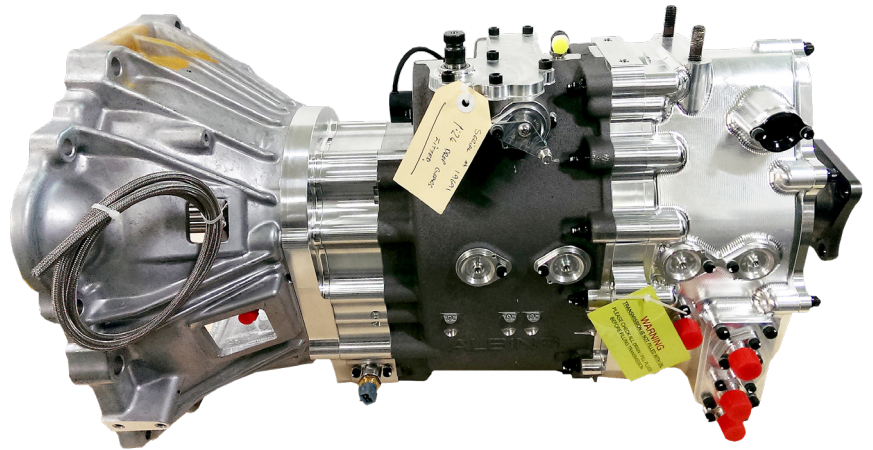
For Front Engined - Rear Drive Applications.

Using the competition-proven ST6 gearstack, the ST6-I is specifically designed for the rigours of high powered circuit racing but equally lends itself to other applications in the off road and time attack spaces.

Various bellhousings and adapters are available to suit a range of engines and it can also be used with our 4WD transfer case.

Can be ordered with high or low output at rear and drop gears at front or rear.

\* Picture at right shows ST6-I in Toyota 2JZ configuration with factory bellhousing



## FEATURES

- 1100Nm Rated
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Innovative design allows very low engine mounting
- Drop gear option for fast, economical gear changes
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Rod and cable shift activation – paddle shift option available
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Straight-cut drive gears and roller bearing internals minimise power loss
- Low input, low output, large rear drop gear set, 1480 output yoke
- Custom input shafts and bell housing available
- Also available as a low profile version . See the Albins ST6-LP

## ST6-I4

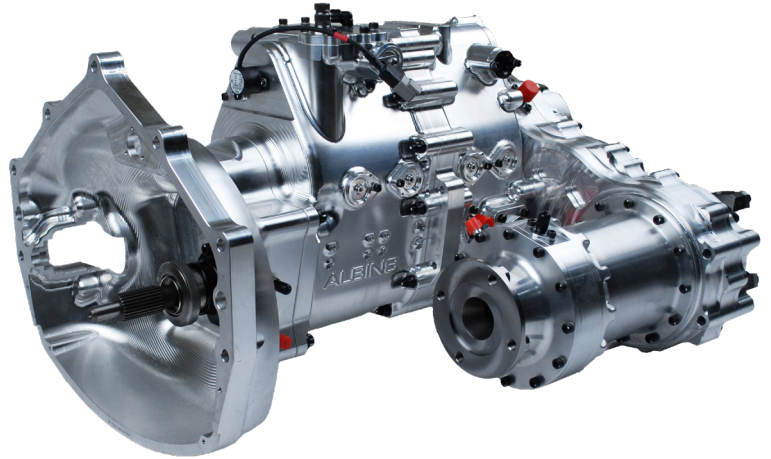
For front-engined 4WD applications

The ST6-I with integral heavy duty 4WD transfer case, designed for off-road competition and extreme duty 4WD applications.

Some floorpan modification may be required for fitment. Primarily designed for Trophy Truck competition.

Torque rated to 1100Nm

Transfer Case has a clutched front drive output which may be controlled independently.



## FEATURES

- Various Bellhousings available
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact design
- Billet Transfer Case and 4wd output
- Pneumatically controlled clutched front drive output, controllable by ECU with other ancillaries
- Drop gear option for fast, economical gear changes
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Rod and cable shift activation – paddle shift option available
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Straight-cut drive gears and roller bearing internals minimise power loss
- Custom input shafts and bellhousing available
- May require some modification to floor pan of vehicle
- Additional driveline components and accessory mount options available upon request

## ST6-IR32

For Nissan R32 GTR

A bolt-in 6 Speed Sequential Transmission for R32 and R33 GTR Skylines.

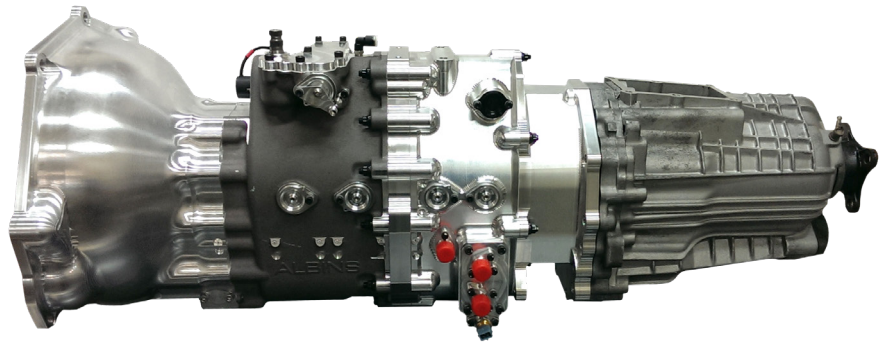
When ordered as a LP ( Low Profile Version) does not require transmission tunnel modifications

Retains standard crossmember and prop shaft lengths.

Designed for 1100Nm applications, commonly used in Time Attack and high power Hillclimb and Circuit applications.

Mates to standard R32/33 Nissan Transfer case or upgraded to R34 Transfer case by special order.

\* Does not include Transfer Case as shown



## FEATURES

- Billet Bellhousing
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Drop gear option for fast, economical overall gear ratio changes
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Rod or cable shift activation – paddle shift option available
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Straight-cut drive gears and roller bearing internals minimise power loss
- High input, high output, front located drop gears
- Custom input shafts available
- Weight 56 kgs
- May require some modification to floor pan of vehicle unless ordered as an LP version
- Transmission will also fit vehicles with pull-type clutch when fitted with a push type clutch conversion
- Additional driveline components and accessory mount options available upon request
- Includes crossmember mount



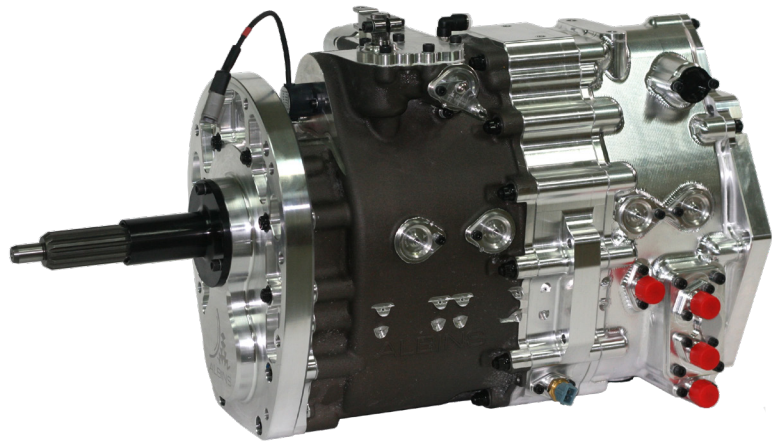
## STX-L

For Toyota 200 Series Landcruiser

6 Speed Sequential transmission which mates to existing Landcruiser Transfer Case.

Designed for use in sand-drag racing applications in the Middle East with power levels circa 1800hp.

The STX has increased gear strength and size compared to the ST6 series range.



## FEATURES

- 1350Nm Rated
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Drop gear option for fast, economical gear changes (1 set included)
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Straight-cut drive gears and roller bearing internals minimise power loss
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Rod shift activation – paddle shift option available
- High input, high output, front located drop gears
- Input shaft spline to suit OEM clutch (length to suit UAE diesel spec)
- Weight 56.5 kg without bellhousing
- Designed to accept OEM bellhousing, throwout bearing assembly and transfer case (not included)
- Total weight with OEM bellhousing 62.5kg
- May require some transmission tunnel modification
- Will require modified or fabricated crossmember

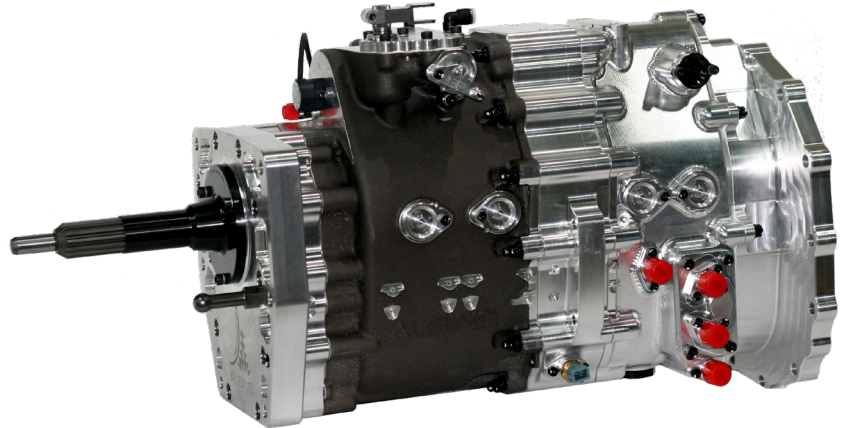
## STX-P

For Nissan GU Patrol.

6 Speed Sequential transmission which mates to existing Nissan Transfer Case.

Designed for use in sand-drag racing applications in the Middle East with power levels circa 1800hp.

The STX has increased gear strength and size compared to the ST6 series range.



## FEATURES

- 1350Nm Rated
- Cast LM25 aluminium housings heat treated to T6 condition & stainless shot blasted
- Compact, lightweight design
- Drop gear option for fast, economical gear changes (1 set included)
- Internal oil pump and lubrication/cooling system
- Inspection ports allow visual check of gear and dog wear
- Gears profile ground after heat treatment
- All gears shot peened and isotropically finished
- Straight-cut drive gears and roller bearing internals minimise power loss
- Heavy duty constant mesh reverse gear
- Exceptionally short shift event times
- Rod shift activation – paddle shift option available
- High input, high output, front located drop gears
- Includes large spline input gear to suit OEM transfer case and upgraded spline input shaft
- Weight 56.5 kgs without bellhousing
- Designed to accept OEM bellhousing and throwout bearing assembly (not included)
- Total weight with OEM bellhousing 78KG
- May require some transmission tunnel modification
- Will require modified or fabricated crossmember