



USED ON  
**MANITOU**

# USED ON MANITOU



JOYSTICKS & CONTROL BOXES

## ELECTRONIC JOYSTICKS



Dual-axis

Used on 160ATJ, 160ATJPLUS, 160ATJE3, 180ATJE3

REF [163TA8270](#)



Dual-axis

Used on 120 AETJ L, 150AETJ L BI ENERGY

REF [163TA8284](#)



Dual-axis

Used on 80VJR

REF [163TA8294](#)



Dual-axis

Used on 90V AIR, 120AETJL, 150AETJL, 170AETJL, 80VJR

REF [163TA8371](#)



Single-axis

Used on 150ATS2, 150ATS20, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 165ATJ, 165ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ, 78XE, 81XE, MAN GO 12

REF [163TA8271](#)



Single-axis

Used on 160ATJ, 160ATJPLUS, 78XE

REF [163TA8272](#)



Single-axis

Used on 120AETJ COMPACT

REF [163TA8277](#)



Single-axis

Used on 80VJR, 150VJR2, 110VJR2

REF [163TA8373](#)



Single-axis

Used on 80VJR, 150VJR2, 110VJR2

REF [163TA8376](#)



Dual-axis

Used on 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E2, 180ATJ E3, 200ATJ, 260TJ, 280TJ, MAN GO 12

REF [163TA8269](#)

# USED ON MANITOU



## MOTOR CONTROLLERS



- Variable speed unit
- Length: 200 mm
- Width: 150 mm

Used on 100VJR EVOLUTION, 80VJR EVOLUTION, 90V AIR

**REF 160TA6272**

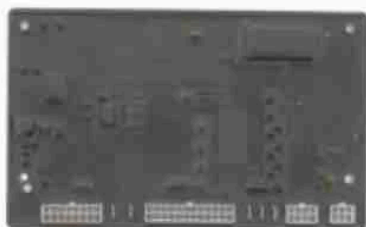


- Electronic plate
- Length: 266 mm
- Width: 145 mm

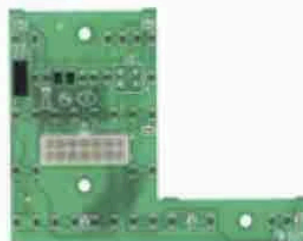
Used on 120 AETJ

**REF 163TA8374**

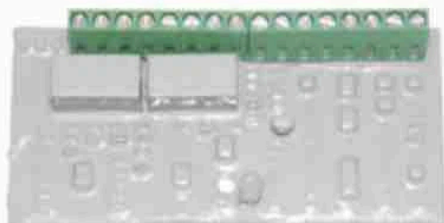
## PRINTED CIRCUIT BOARDS



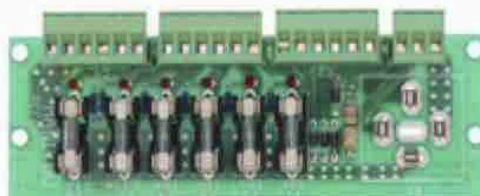
Electronic card



Electronic plate



Module



Plate

**Although these electronic cards may resemble the one fitted on your mobile elevating work platform there can be a big difference. Therefore we always ask you to supply us with part number or full vehicle details before ordering a similar unit.**

**This is just a small selection of our electronic boards. For all other types, please feel free to call us!**

CONTROLLERS & PRINTED CIRCUIT BOARDS

# USED ON MANITOU



ELECTRICAL PARTS

## BACK-UP ALARM



- Voltage: 12-80 V
- Volume: 97 dB
- Tone: slow pulse
- Dimensions: 101,5 x 41,3 x 69,4 mm

Used on 80VJR, 90V AIR, 105VJR, 105VJR2, 110VJR2, 120AETJ, 120AETJL, 150 ATS2, 150AETJL, 150TP, 165ATJS, 170AETJL, 180ATJ, 180ATJS, 260TJ, 280TJ, D80E, D80ER, D80ERS, MANGO12

REF [161TA4486](#)

## BUZZER



- Voltage: 6-30 V
- Volume: 85 dB
- Tone: continuous and fast pulse
- Dimensions: 43,7 x 42,8 x 27 mm

Used on 100VJR EVOLUTION, 105VJR, 105VJR2, 110VJR2, 120AETJ, 120AETJ COMPACT, 120AETJL, 150AETJ COMPACT, 150AETJL, 150ATS2, 150TP, 160ATJ, 160ATJ PLUS E3, 160ATJS, 165ATJ, 165ATJS, 170AETJL, 180ATJ, 200ATJ, 78XE, 80VJR, 81XE, 90V AIR, MAN GO 12

REF [163TA8458](#)

## HORN



- Volume: 113 dB
- Voltage: 12 V
- Type of mounting: L-bracket
- Diameter: 101,5 mm


Used on 100SC, 100SC2, 120SC, 120SC2, 140SC2

REF [163TA8421](#)

# USED ON MANITOU



ELECTRICAL PARTS

COMPLETE CONTACTORS							
	Voltage	Maximum current interrupted	Maximum current uninterrupted	Magnetic blowouts	Dust cover	Used on	REF
	V	A	A				
	12	80	80	No	Enclosed version	150ATS2, 150TP, 160ATJ, 165ATJ, 165ATJS, 180ATJ, 200ATJ, 260TJ, 280TJ	<a href="#">163TA8455</a>
	24	150	150	No	Yes	120AETJ Compact2	<a href="#">163TA8406</a>
	24	150	200	Yes	Enclosed version	120AETJ, 150AETJL, Bi-Energy, 170AETJL, Bi-Energy	<a href="#">160TA3449</a>

### CONVERTER



- Minimum voltage: 48 V
- Type of voltage: AC/DC
- Outgoing voltage: 24 V
- Number of terminals: 4

Used on 120AETJ C

**REF [164TA6928](#)**

### HOUSING CONNECTOR



- Length: 42,5 mm
- Number of pins: 26

Used on 80VJR

**REF [163TA8359](#)**

### BATTERY CONNECTION



Bolt-on battery terminal

**REF [163TA8419](#)**

# USED ON MANITOU



ELECTRICAL PARTS

## RELAYS

	Type of relay	Voltage V	Type of voltage	Current A	Used on	REF
	Mini-relay	12	DC	35/20	160ATJ E3, 160ATJS E3, 180ATJ2 E3	<a href="#">164TA1119</a>
	Mini-relay	12	DC	40/30	160ATJ E3, 160ATJS E3, 180ATJ2 E3	<a href="#">136TA8355</a>
	Mini-relay	24	DC	20/30	100XEL, 150VJR, 105VJR2, 110VJR2, 120XEL, 80VJR, 80XEL, 90V AIR	<a href="#">163TA8472</a>
	Printed circuit board	24	DC	12	105VJR, 105VJR2, 110VJR2, 120AETJ, 120TH, 150AETJL, 170AETJL, 80VJR	<a href="#">163TA8339</a>
		24	DC	80	120AETJ COMPACT	<a href="#">163TA8345</a>

## RELAY MOUNTING BRACKET



Relay socket 5-pin 6,3 mm

Used on 80VJR, 110VJR2, 100XEL, 120XEL, 80XEL,  
90V AIR, 105VJR2, 150AETJL

REF [163TA8471](#)

# USED ON MANITOU



## DASHBOARD WARNING LIGHTS



- Length: 44,8 mm
- Built-in diameter: 8 mm
- Outer diameter: 9,5 mm

Used on 150TP, 160ATJ, 160ATJPLUS, 160ATJ E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJE3, 180ATJS E3, 200ATJ, 260 TJ, 280TJ, MOB170 EVOLUTION

**REF 163TA8331** – Green

**REF 163TA8343** – Yellow

**REF 163TA8333** – Red



- Length: 35,5 mm
- Faston terminals: 2,8 mm
- Lens colour: white

Used on 100XEL, 105VJR, 105VJR2, 110VJR2, 120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120AETJL, 120XEL, 150AETJ COMPACT, 150AETJL, 170AETJL, 80VJR

**REF 163TA8297**



- Length: 35,5 mm
- Faston terminals: 2,8 mm
- Lens colour: green

Used on 105VJR; 105VJR2, 110VJR2, 120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 170AETJL, 170AETJL BI ENERGY, 80VJR

**REF 163TA8279**

## INDICATOR LIGHT



- Cable length: 2475 mm
- Built-in diameter: 22 mm
- Outer diameter: 28,6 mm

Used on 100VJR EVOLUTION, 100XEL, 120XEL, 78XE, 80VJR EVOLUTION, 80XEL

**REF 164TA1131**

## CABLE LOOM



- Cable type: < 6 mm<sup>2</sup>
- Type of loom: multiple cables
- Total length: 725 mm
- Number of plugs: 1

Used on 80VJR, 105VJR, 105VJR2

**REF 163TA8386**

# USED ON MANITOU



## SWITCHES

### CONTACT BLOCK



- Voltage: 240 V
- Current: 3 A
- Number of NO contacts: 2

Used on 120AETJ, 120AETJ COMPACT

REF [163TA8365](#)

### CONTACT



- Voltage: 2 x 240 V
- Current: 3 A
- Number of NO contacts: 1

Used on 80VJR, 105VJR, 105VJR2, 110VJR2

REF [146TA4574](#)

### EMERGENCY STOP BUTTON SWITCHES



- Single pole
- Current: 200 A
- Voltage: 24 V
- Magnetics blowouts: no
- Dust cover: no

Used on 120AETJ Compact

REF [163TA8411](#)



- Single pole
- Current: 300 A
- Voltage: 24 V
- Magnetics blowouts: no
- Dust cover: no

Used on 80VJR, 90V AIR, 100VJR

REF [161TA2832](#)

### FOOT SWITCHES



- Length: 215 mm
- Width: 65 mm
- Height: 57 mm

Used on 150ATS

REF [146TA4544](#)



- Length: 220 mm
- Width: 70 mm
- Height: 60 mm

Used on 120AETJ 160ATJ, 180ATJ, 200ATJ

REF [146TA4566](#)



- Length: 250 mm
- Width: 156 mm
- Height: 145 mm

Used on 160ATJPLUS, 160ATJE3, 180ATJE3, 200ATJ, 260TJ, 280TJ, MAN GO 12

REF [163TA8301](#)



# USED ON MANITOU



SWITCHES

## HORN BUTTON



- Length: 15 mm
- Height: 40 mm
- Number of NO contacts: 1

Used on 105VJR, 105VJR2, 110VJR2, 120AETJ, 150AETJL, BI ENERGY, 150TP, 160ATJ, 160ATJS, 170AETJL, 180ATJ, 200ATJ, 260TJ, 280TJ, 78XE, 80VJR, 81XE, MAN GO 12, MOB170

**REF [163TA8475](#)**

## IGNITION SWITCHES



- Number of positions: 3
- Built-in diameter: 22 mm
- Total length: 110 mm
- Key number: 455

Used on 120 AETJ L, 150AETJ L, BI ENERGY

**REF [141TA2595](#)** - Without key  
**REF [163TA8493](#)** - Key



- Number of positions: 3
- Built-in diameter: 22 mm
- Total length: 52 mm
- Key number: E30 Bosch

Used on 150TP, 160ATJ, 160ATJS, 180ATJ, 200ATJ

**REF [141TA2760](#)** - Without key  
**REF [141TA2659](#)** - Key

## OPERATING HEADS



- Number of positions: 3
- Built-in diameter: 20 mm
- Key number: 455
- Material: plastic
- With key

Used on 80VJR, 105VJR, 105VJR2, 110VJR2

**REF [163TA8474](#)** - Without key  
**REF [110TA3210](#)** - Key



- Number of positions: 3
- Built-in diameter: 22 mm
- Key number: 455
- Material: metal
- With key

Used on 100VJR EVOLUTION, 100XEL, 120XEL, 78XE, 80VJR EVOLUTION, 80XEL

**REF [164TA1126](#)** - Without key  
**REF [110TA3210](#)** - Key



- Number of positions: 3
- Built-in diameter: 22 mm
- Key-number: 455
- Material: plastic
- With key

Used on 120AETJ COMPACT

**REF [164TA1120](#)**

## USED ON MANITOU



SWITCHES

## KEYS



- Key number: 6896
- Supplied keys: 1

Used on 160ATJE3, 180ATJE3,  
260 TJ, 200ATJ, 260TJ, 280TJ

**REF [141TA3306](#)**



- Key number: 455
- Supplied keys: 1

Used on MT830-1230(S)CP,  
MT1530SCP(T), 150ATS, 28EVM,  
81XE, 150AET-170AET, 100XEL,  
80/100VJR EVOLUTION

**REF [165TA4363](#)**



- Supplied keys: 1
- Length: 57 mm
- Inner diameter: 11,5 mm

Used on 150ATS, 150ATS2,  
160ATJ, 160ATJS, 165ATJ,  
165ATJS, 180ATJ, 200ATJ

**REF [163TA8477](#)**

## LIMIT SWITCHES



- Number of NO contacts: 0
- Number of NC contacts: 1
- Current: 0,1 A

Used on 160ATJ, 160ATJPLUS,  
160ATJE3, 180ATJE3, 200ATJ

**REF [147TA5260](#)**



- Number of NO contacts: 0
- Number of NC contacts: 1
- Current: 1,5 A

Used on 150ATS2, 165ATJ,  
165ATJS

**REF [146TA4543](#)**



- Number of NO contacts: 1
- Number of NC contacts: 1
- Current: 1,5 A

Used on 80VJR, 105VJR,  
105VJR2, 110VJR2, 120AETJ  
COMPACT

**REF [146TA4486](#)**



- Number of NO contacts: 2
- Number of NC contacts: 2
- Current: 3 A

Used on 120 AETJ L, 150AETJ L  
BI ENERGY

**REF [147TA5491](#)**

## USED ON MANITOU



SWITCHES

## PUSH BUTTONS



- Diameter: 22 mm
- Length: 30 mm
- Button colour: red

Used on 78XE, 80VJR, 81XE, 90V AIR, 100VJR, 150AET2, 171AET

**REF [163TA8350](#)**



- Diameter: 22 mm
- Length: 42 mm
- Button colour: black

Used on 80VJR, 105VJR, 105VJR2, 110VJR2, 120AETJ COMPACT

**REF [146TA4576](#)**



- Diameter: 22 mm
- Length: 47 mm
- Button colour: green

Used on 150ATS, 150ATS2, 150ATS20, 150ATT, 165ATJ, 165ATJS

**REF [164TA1139](#)**



- Diameter: 27 mm
- Length: 78 mm
- Button colour: red

Used on 65EX, 75EX, 78XE, 80ELX, 80EX, 80XEL, 100AE, 100DLX, 100ELX, 100XEL, 110ELX, 120AE, 120DLX, 120ELX, 120TM, 120XEL, 145DLX, 150AET, 150AET2, 150ATS, 150ATT, 150TP, 160ATJ, 160ATJ E3, 165ATJ, 171AET, 180ATJ, 180ATJ E3, 200ATJ, 261TJ, 280TJ

**REF [163TA8344](#)**

# USED ON MANITOU



## SWITCHES

### RUBBER BELLOWS SWITCH



Rubber protector for toggle switches

Used on 150AETJ, 150ATS, 160ATJ, 170AETJ, 180ATJ, 200ATJ, MAN GO 12

REF [160TA4104](#)

### SECURITY SWITCH



- Thread: 3/4" UNF
- Wrench size: 22 mm

Used on 280TJ

REF [163TA8432](#)

### BATTERY DISCONNECT SWITCH



- Current: 150 A
- Number of poles: 1
- Auxilliary switch present: yes

Used on 100XEL, 105VJ, 105VJR, 105VJR2, 110VJR2, 120AETJ, 120AETJL, 120XEL, 150AETJL, 150ATS, 150ATS2, 150ATT, 165ATJ, 165ATJS, 170AETJL, 78XE, 80V, 80VJR, 80VR, 80XEL, 81XE

REF [163TA8470](#)

### TOGGLE SWITCHES



- Positions: on-off-on
- Number of connections: 3
- Voltage: 125-250 V
- Current: 6 A

Used on 150TP, 160ATJPLUS, 160ATJE3, 180ATJE3, TMT25I, 200ATJ, 260 TJ, 280TJ, MAN GO 12

REF [146TA4609](#)



- Positions: on-on-on
- Number of connections: 6
- Voltage: 250 V
- Current: 10 A

Used on 120 AETJ L, 150AETJ L BI ENERGY

REF [146TA4580](#)



- Positions: on-on
- Number of connections: 3
- Voltage: 125-250 V
- Current: 6 A

Used on 150TP, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ, 90V AIR

REF [164TA1134](#)



- Positions: on-on
- Number of connections: 3
- Voltage: 25 V
- Current: 12 A

Used on 160ATJPLUS, 160ATJE3, 180ATJE3, 260 TJ, 200ATJ

REF [146TA4608](#)

## USED ON MANITOU



SENSORS

## GAUGE



- Length: 370 mm
- Full resistance: 30 Ω
- Empty resistance: 244 Ω

Used on 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3

REF [163TA8341](#)

## PRESSURE CONTACTS

	Thread	Connection	Switch mode	Pressure Bar	Length mm	Used on	REF
	1/4" BSP x 19 Pi	1 x loose connector	NO	26	61,5	120AE, 120AETJ L, 120AETJ COMPACT, 150AETJ L BI ENERGY, 170AETJL, D80ER, D80ERS	<a href="#">163TA8310</a>
	1/4" BSP x 19 Pi	2 x blade	Signal	Settable	55,5	80V, 80VR, 80VJR, 105VJ, 105VJR, 105VJR2, 110VJR2	<a href="#">163TA8316</a>
	1/4" BSP x 19 Pi	2 x blade	NO	Settable 15-150	53,8	80VJR, 105VJR, 105VJR2, 110VJR2	<a href="#">163TA8336</a>
	1/4" BSP x 19 Pi	2 x blade	NO	112	55	80VJR, 105VJR, 105VJR2, 110VJR2	<a href="#">163TA8319</a>
	1/8" BSP x 28 Pi (conical)	1 x screw	NO	0,5	35	160ATJE3, 180ATJ2	<a href="#">163TA8357</a>
	M10 x 1 mm	1 x fixed connector	NO	0,5	61	150TP, 160ATJ, 160ATJPLUS, 180ATJ, 200ATJ	<a href="#">163TA8340</a>

# USED ON MANITOU



## SENSORS

### PROXIMITY SENSORS



- Height: 38 mm
- Diameter: 18 mm
- Switch type: normally open
- Voltage: 18-36 V

Used on 120 AETJ L, 150AETJ L  
BI ENERGY

REF [163TA8289](#)



- Height: 43 mm
- Diameter: 18 mm
- Switch type: normally open
- Voltage: 10-36 V

Used on 80VJR, 120AETJ  
COMPACT

REF [163TA8313](#)



- Height: 43 mm
- Diameter: 18 mm
- Switch type: normally open
- Voltage: 10-36 V

Used on 160ATJ, 160ATJ  
PLUS E3, 160ATJS, 180ATJ,  
180ATJ E3

REF [163TA8463](#)



- Height: 43 mm
- Diameter: 18 mm
- Switch type: normally open
- Voltage: 10-36 V

Used on 160ATJ, 160ATJPLUS,  
180ATJE3, 200ATJ

REF [163TA8311](#)



- Height: 46 mm
- Diameter: 18 mm
- Switch type: normally open
- Voltage: 8-30 V

Used on 160ATJPLUS, 160ATJE3,  
180ATJE3, 200ATJ, 260 TJ

REF [163TA8275](#)

### TEMPERATURE SENSORS



- Thread: 3/8"
- Switch temperature: 98,9 °C
- Maximum temperature:  
107 °C
- Length: 64,5 mm

Used on 100SC2, 120SC2,  
140SC2

REF [163TA8429](#)



- Thread: M16 x 1,5 mm
- Switch temperature: 105 °C
- Maximum temperature:  
250 °C
- Length: 50 mm

Used on 160ATJ, 160ATJS,  
180ATJ

REF [161TA3290](#)

## USED ON MANITOU



SENSORS

## TILT SENSORS



- Height: 85 mm
- Diameter: 85 mm
- Switch type: NC
- Voltage: 12-24 V
- Detection: 5°/5° (X/Y)

Used on 150ATS2, 160ATJ,  
160ATJS, 165ATJ, 165ATJS,  
180ATJ

REF [163TA8462](#)



- Height: 85 mm
- Diameter: 63,3 mm
- Switch type: NC
- Voltage: 12-24 V
- Detection: 3°/3° (X/Y)

Used on 120 AETJ L, 120AETJ  
COMPACT, 150AETJL, 170AETJL

REF [163TA8299](#)



- Height: 85 mm
- Diameter: 63,3 mm
- Switch type: NC
- Voltage: 12-24 V
- Detection: 3/3° (X/Y)

Used on 120 AETJL, 150AETJ  
COMPACT, 150AETJL, 170AETJL

REF [163TA8287](#)



- Height: 85 mm
- Diameter: 63,3 mm
- Switch type: NC
- Voltage: 12-24 V
- Detection: 3°/3° (X/Y)

Used on 120AE, 150AET2,  
171AET, D80ER, D80ERS

REF [163TA8378](#)



- Height: 85 mm
- Diameter: 63,3 mm
- Switch type: NC
- Voltage: 12-24 V
- Detection: 2°/2° (X/Y)

Used on 80VJR, 90V AIR, 100VJR

REF [161TA2992](#)



- Height: 85 mm
- Diameter: 63,3 mm
- Switch type: NC
- Voltage: 12-24 V
- Detection: 3°/3° (X/Y)

Used on 80VJR, 105VJR,  
105VJR2, 110VJR2

REF [163TA8280](#)



- Height: 115 mm
- Diameter: 97 mm
- Switch type: NC
- Voltage: 7-48 V
- Detection: 5° 1-sec

Used on 160ATJ E3, 160ATJS E3,  
180ATJ2 E3, 180ATJS E3, 200ATJ

REF [163TA8483](#)



- Height: 117,6 mm
- Diameter: 96,5 mm
- Switch type: NC
- Detection: 3° 2-sec

Used on 100AE, 105VJ, 105VJR,  
120AE, 120TH, 120TM, 150AET,  
150AET2, 150ATS, 150ATT,  
165ATJ, 165ATJS, 171AET, 80V,  
80VR, D80E, D80ER, D80ERS

REF [163TA8451](#)

# USED ON MANITOU



INDICATORS & HOUR METERS

## BATTERY DISCHARGE INDICATOR



- Voltage: 12 V
- Built-in diameter: 52 mm
- Lift lock-out: yes
- Number of connections: 6

Used on 80/100VJR EVOLUTION, ES410FR AC/ES412FR

REF [164TA6926](#)

## COMBINATION GAUGES

**CURTIS** 



- Voltage: 12 V
- Built-in diameter: 52 mm
- Lift lock-out: yes
- BDI and hour meter

Used on 150ATS, 150ATS2, 150ATT, 165ATJ, 165ATJS

REF [163TA8450](#)



- Voltage: 24-48 V
- Built-in diameter: 52 mm
- Lift lock-out: yes
- BDI and hour meter

Used on 100AE, 100XEL, 105VJ, 105VJR, 105VJR2, 110VJR2, 120AE, 120AETJ, 120XEL, 150AET, 150AET2, 171AET, 80V, 80VJR, 80VR, 80XEL, D80E, D80ER, D80ERS

REF [163TA8473](#)

## OPTICAL OIL INDICATOR



- Diameter: 52 mm
- Without thermometer

Used on 105VJR, 105VJR2, 110VJR2, 120AETJ, 150AETJL, BI ENERGY, 150TP, 160ATJ, 160ATJS, 170AETJL, 180ATJ, 200ATJ, 280TJ, 78xE, 80VJR, 81XE

REF [152TA1971](#)

## DASHBOARD METER



- Voltage: 12 V
- Digital hour counter
- Built-in diameter: 56 mm

Used on 120 AETJ L, 150AETJ L, BI ENERGY, 170AETJL

REF [163TA8288](#)



# USED ON MANITOU



HYDRAULIC PARTS

## BREATHER VALVE



- Type of thread: 1/8" NPT RH
- Maximum diameter: 15,2 mm
- Width across flats: 14 mm

Used on 150ATS, 150ATS2, 150ATT, 160ATJ E3, 160ATJS E3, 165ATJ, 165ATJS, 180ATJ2 E3

REF [163TA8369](#)

## CARTRIDGE WITH COIL



- Voltage: 24 VDC
- Power: 30 W

Used on 80VJR, 105VJR2, 110VJR2

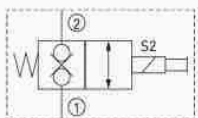
REF [163TA8291](#)

Cartridges exist in a variety of dimensions and wiring diagrams. When placing an order, always provide the necessary info with regard to the wiring diagram, as cartridges may have identical dimensions yet be connected in different ways.

## ELECTRIC CARTRIDGES



- Voltage: 24 VDC
- Length: 150 mm



Used on 80V, 80 VR, 80VJR, 105VJ, 105VJR, 105VJR2, 110VJR2

REF [163TA8317](#)

## PRESSURE VALVE (FLOW)



- Thread: M20 x 1,5 mm
- Length: 105 mm

Used on 165ATJ, 165ATJS

REF [163TA8389](#)

## USED ON MANITOU



HYDRAULIC PARTS

COILS							
	Voltage V	AC/DC	Resistance $\Omega$	Diameter mm	Height mm	Used on	REF
	12	DC	5,4	18,3	50	150ATS, 150ATT, 165ATJ	<a href="#">163TA8394</a>
	12	DC	5,7	14,35	40,75	150TP, 260/280TJ, 200ATJ/RC, 160/180ATJ(S) (2)E3(RC), 180ATJ(RC) (S) EURO, 160ATJ PLUS (RC), MT1440/1840 HA ST3B, MT1440,1840(EP) PRIVILEGE	<a href="#">164TA6936</a>
	12	DC	7,5	13	39	MHT 790/MHT X790, MHT780/X780, MRT2540+/MRT-X2540+, MRT2150 E3 PRIVILEGE, MRT2150+/-MRT-X215	<a href="#">164TA6935</a>
	24	DC	15,2	16,2	50,2	105VJ, 105VJR, 105VJR2, 110VJR2, 80V, 80VJR, 80VR	<a href="#">164TA1136</a>
	24	DC	17,5	19,3	56		<a href="#">131TA8240</a>
	24	DC	19,8	13	47	80V, 80VR, 80VJR, 105VJ, 105VJR, 105VJR2, 110VJR2	<a href="#">131TA8378</a>
	24	DC	28	13	40	28EVM, 80VJR2/110VJR2, 105VJ(R)/80V(R)	<a href="#">164TA6933</a>
	24	DC	28	36,5	40	150/170AETJL BI ENERGY, 120/150/170AETJL	<a href="#">164TA6934</a>
	36	DC	62	44	51,6	MLT625-75H ST3B, MLT840-115/MLT1040-13, MT1440, MAN GO 12, MT-835/1135*1335 ST3B, 1440/1840 E3	<a href="#">131TA8276</a>

# USED ON MANITOU



HYDRAULIC PARTS

## GEARS



- Outer diameter: 192,3 mm
- Total height: 25 mm
- Number of teeth: 70

Used on 200ATJ

**REF [163TA8293](#)**



- Outer diameter: 78,5 mm
- Total height: 39,8 mm
- Number of teeth: 27

Used on 150TP, 160ATJ, 160ATJ E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ

**REF [163TA8276](#)**

## HYDRAULIC INTEGRATED CIRCUITS WITH CARTRIDGE



- Length: 114 mm
- Width: 70 mm

Used on 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 160ATJ, 160ATJS, 170AETJL, 170AETJL BI ENERGY, 180ATJ, 180ATJ E3, 180ATJS E3

**REF [163TA8286](#)**



- Length: 151 mm
- Width: 70 mm

Used on 160ATJ, 160ATJPLUS, 160ATJS, 180ATJ, 180ATJ E3, 180ATJS E3

**REF [163TA8329](#)**



- Length: 180 mm
- Width: 83,6 mm

Used on 160ATJ, 160ATJ E3, 160ATJPLUS, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJS E3, 200ATJ, 280 TJ

**REF [163TA8314](#)**



- Length: 208 mm
- Width: 60 mm

Used on 80VJR, 105VJR, 105VJR2, 110VJR2

**REF [163TA8308](#)**

## HYDRAULIC TEST COUPLING



- Length: 53 mm
- Test system: M16 x 2 mm
- Test connection: M16 x 1,5 mm for diameter tube 8 mm

Used on 100VJR EVOLUTION, 80VJR EVOLUTION, 90V AIR

**REF [163TA8368](#)**

# USED ON MANITOU



## HYDRAULIC PARTS

### HYDRAULIC CYLINDERS



- Rotation cylinder
- Total measured length: 215 mm
- Diameter internal: 25,5 mm
- Diameter external: 117 mm

Used on 160ATJ, 160ATJS, 180ATJ, 180ATJ E3, 180ATJS E3, 200ATJ

**REF [164TA1138](#)**



- Steering cylinder
- Total measured length: 615 mm
- Diameter tube: 100 mm

Used on 200ATJ, 260TJ, 280TJ

**REF [163TA8485](#)**



- Tilt cylinder
- Total measured length: 720 mm
- Diameter tube: 93 mm
- Diameter rod: 50 mm

Used on 160ATJ, 160ATJS, 180ATJ, 180ATJ E3, 180ATJS E3

**REF [164TA1135](#)**

### HYDRAULIC MOTOR



Total length: 300 mm

Used on MAN GO 12, TMT25 I/P/S, TMT27P

**REF [165TA4364](#)**

### MANUAL HAND PUMPS



- Manual hand pump
- Length: 150 mm

Used on 120 AETJ L, 150AETJ L BI ENERGY, 170AETJL, MOB170

**REF [163TA8337](#)**



- Manual pump
- Length tiller arm: 605 mm

Used on 100VJR, 120AETJ COMPACT2, 150AETJL, 170AETJL, 80VJR, 90V AIR, MAN GO 12

**REF [163TA8342](#)**

# USED ON MANITOU



HYDRAULIC PARTS

## HYDRAULIC PUMPS



- Total length: 129 mm
- Neck diameter: 82,5 mm
- Direction of rotation: CCW
- Material of the housing: aluminium

Used on 100XEL, 105VJR, 105VJR2, 110VJR2, 120AE, 120AETJ, 120AETJL, 120XEL, 150AET, 150AET2, 150AETJL, 170AETJL, 171AET, 78XE, 80VJR, 80XEL, 81XE, D80ER, D80ERS

**REF [163TA8320](#)**



- Total length: 89 mm
- Neck diameter: 63 mm
- Direction of rotation: CW
- Material of the housing: aluminium

Used on 150ATS2, 160ATJ, 160ATJS, 165ATJ, 165ATJS, 180ATJ

**REF [163TA8454](#)**



- Total length: 99 mm
- Neck diameter: 52 mm
- Direction of rotation: CCW
- Material of the housing: aluminium

Used on 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 170AETJL

**REF [163TA8399](#)**

## HYDRAULIC PUMP GROUPS



- Voltage: 12 V
- Power: 1,3 kW

Used on 150ATS2, 160ATJ, 160ATJS, 165ATJ, 165ATJS, 180ATJ

**REF [163TA8457](#)**



- Voltage: 12 VDC
- Power: 1,3 kW

Used on 150TP, 160ATJ, 160ATJ E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ

**REF [163TA8464](#)**



- Voltage: 24 V
- Power: 80 A

Used on 120AETJ, 120AETJ COMPACT

**REF [163TA8274](#)**

# USED ON MANITOU



ENGINE PARTS

ELECTRICAL MOTORS					
	Minimum voltage VDC	Revolutions/minute rpm	Power kW	Used on	REF
	12	3000	1,3	150TP, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 240TJ, 280TJ	<a href="#">164TA1137</a>
	24		4,5	100VJR EVOLUTION, 80VJR EVOLUTION, 90V AIR	<a href="#">164TA1132</a>
	48			120AETJ, 120AETJ COMPACT, 120AETJL, 150AETJ COMPACT, 150AETJL, 170AETJL	<a href="#">164TA1125</a>
	48	2800	2,06	120AETJ, 120AETJ COMPACT, 150AET, 150AET2, 171AET	<a href="#">164TA1124</a>

### ENGINE OIL LEVEL GAUGE



Length: 503 mm  
Used on 100SC, 120SC  
**REF [163TA8425](#)**

### FAN BELT



- Type of belt: V-belt, toothed open flank
- Belt width: 10 mm
- Belt height: 7,5 mm
- Outside length: 950 mm

Used on 100SC2, 120SC2, 140SC2  
**REF [152TA5002](#)**

# USED ON MANITOU



## FILLER CAP



- Height: 40 mm
- Outer diameter: 73 mm
- Inner diameter: 37 mm

Used on 150ATS2, 150ATT, 160ATJ, 160ATJS, 165ATJ, 165ATJS, 180ATJ

REF [163TA8304](#)

## FUEL FILLER CAP



- Height: 41,4 mm
- Outer diameter: 74,5 mm
- Inner diameter: 30,7 mm

Used on 150AETJL BI ENERGY, 150ATS2, 150TP, 160ATJ, 160ATJ E3, 160ATJS E3, 165ATJ, 170AETJL BI ENERGY, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ

REF [127TA2804](#)

## RADIATOR CAP



- Length: 51,2 mm
- Width: 21,4 mm
- Height: 30 mm

Used on 160ATJ E3, 160ATJS E3, 180ATJ2 E3, 200ATJ, 260TJ, 280TJ, MAN GO 12

REF [163TA8442](#)

## FILTER



- Application: air filter
- Outer diameter: 74 mm
- Inner diameter: 38 mm
- Height: 148 mm

Used on 150ATS2, 150ATS20, 150TP, 160ATJ, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS, 165ATJ, 165ATJS, 180ATJ, 180ATJ E3, 180ATJS E3, 200ATJ

REF [163TA8480](#)

## FUEL LEVEL GAUGE



Length: 370 mm

Used on 160 ATJ, 160ATJ PLUS, 160ATJ E3, 160ATJ PLUS E3, 160ATJS E3, 180ATJ, 180ATJ2 E3, 180ATJS E3

REF [163TA8341](#)

## FUEL PUMP



- Total height: 90 mm
- Centre distance: 36 mm
- Number of holes: 2

Used on 160ATJ E3, 160ATJS E3, 180ATJ2 E3, MAN GO 12

REF [163TA8445](#)

## GLOW PLUG



- Type: sheated glow plug
- Voltage: 11 V
- Thread: M10
- Total length: 84,8 mm

Used on 160 ATJPLUS, 180 ATJS, 180 ATJ, 200ATJ, 260TJ, 280TJ

REF [163TA8434](#)

# USED ON MANITOU



ENGINE PARTS

## INJECTORS



Length: 39,3 mm

Used on 160ATJ PLUS,  
160ATJ PLUS E3, 180ATJ E3,  
180ATJS E3, 200ATJ, 260 TJ,  
280TJ

REF [163TA8436](#)



Length: 77 mm

Used on 160ATJ PLUS,  
160ATJ PLUS E3, 180ATJ E3,  
180ATJS E3, 200ATJ, 260 TJ,  
280TJ

REF [163TA8435](#)

## ENGINE STOP SOLENOIDS



- Function: pull
- Mounting side: both sides
- Length: 104,3 mm

Used on MSI25-35T, MH254T  
BUGGIE, MSI20-35T (BUGGIE),  
200ATJ/RC

REF [165TA4365](#)



- Voltage: 12 V
- Type of current: DC
- Function: pull
- Mounting side: both sides
- Length: 131 mm

Used on 150TP, 160ATJ,  
160ATJS, 180ATJ

REF [164TA1382](#)



- Voltage: 12 V
- Type of current: DC
- Function: pull
- Mounting side: both sides
- Length: 131 mm

Used on 150AETJL BI ENERGY,  
160ATJ, 170AETJL BI ENERGY,  
180ATJ, 180ATJS, 200ATJ

REF [163TA8482](#)



- Voltage: 12 V
- Type of current: DC
- Function: pull
- Mounting side: both sides
- Length: 71 mm

Used on MAN GO 12

REF [165TA4367](#)



- Voltage: 12 V
- Type of current: DC
- Function: pull
- Mounting side: without
- Length: 64,5 mm

Used on MLT627 TURBO  
EVOLUTION, MLT635T/  
MT940-1740, MLT742 H TURBO  
LSU, MT732-932 S.E.E3,  
MRT1742

REF [165TA4366](#)



- Voltage: 12 V
- Type of current: DC
- Function: pull
- Mounting side: without
- Length: 82,7 mm

Used on 150TP, SLT415  
S.2-E2-SLT420BS, 200AJ/  
RC, BT420/425/BT1220/225-S,  
TM25.15-25 (S.SR.XT.C.CR)

REF [165TA4368](#)



# USED ON MANITOU



## THERMOSTAT



- Outer diameter: 43,9 mm
- Bypass valve diameter: 31 mm
- Height engine side: 42 mm
- Opening temperature: 71 °C

Used on 160ATJ PLUS, 160ATJ PLUS E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260 TJ, 280TJ

REF [163TA8355](#)

## ALTERNATORS



- Voltage: 12 V
- Current: 40 A

Used on 160ATJ E3, 160ATJS E3, 180ATJ2 E3

REF [163TA8444](#)



- Voltage: 12 V
- Current: 90 A

Used on 160ATJPLUS, 180ATJ E3, 180ATJS E3, 200ATJ

REF [163TA8322](#)

## PULLEY ALTERNATOR



- Inner diameter: 17 mm
- Maximum outer diameter: 73 mm
- Number of belts: 1
- Height: 22 mm

Used on 150TP, 160ATJ, 160ATJ PLUS, 160ATJS, 180ATJ, 200ATJ

REF [163TA8312](#)

# USED ON MANITOU



ENGINE PARTS

## STARTERS



- Voltage: 12 V
- Power: 2,2 kW
- Number of teeth: 10

Used on MSI/MH20-35 (-4)  
T(BUGGIE), MSI20T-MH25-4T  
BUGGIE (4ST3B)

**REF [107TA9566](#)**



- Voltage: 12 V
- Power: 1,4 kW
- Number of teeth: 9

Used on 160/180ATJ(S)(2)E3(RC),  
160ATJ(RC)(S) EURO 3

**REF [165TA4370](#)**



- Voltage: 12 V
- Power: 2 kW
- Number of teeth: 9

Used on 150TP, SLT415  
S.2E2SLT420BS, 200AT J/RC,  
TMT25.15-25(S.SR.XT.CR)

**REF [165TA4369](#)**

## TRANSMISSION DISCS



- Type: steel plate (both sides)
- Outer diameter: 199,5 mm
- Inner diameter: 114 mm
- Number of teeth: 4
- Position of teeth: outer
- Material: steel

Used on 150TP, 160ATJ,  
160ATJ E3, 160ATJ PLUS, 160ATJ  
PLUS E3, 160ATJS E3, 160ATJS,  
180ATJ, 180ATJ2 E3, 180ATJ E3,  
180ATJS E3

**REF [163TA8446](#)**



- Type: with sunburst texture
- Outer diameter: 200,8 mm
- Inner diameter: 41 mm
- Number of teeth: 16
- Position of teeth: inner
- Material: graphite

Used on 200ATJ, 260TJ, 280TJ

**REF [163TA8438](#)**



- Type: with waffle texture
- Outer diameter: 75,7 mm
- Inner diameter: 57,3 mm
- Number of teeth: 36
- Position of teeth: outer
- Material: bronze (sintend)

**REF [164TA6927](#)**

# USED ON MANITOU



## CLUTCH DISC KIT



- Diameter: 84,8 mm
- Number of teeth: 27

### Content:

- 1 x end plate (inner teeth)
- 4 x steel plate
- 1 x half plate

Used on 200ATJ, 260TJ, 280TJ

REF [163TA8437](#)

ENGINE PARTS

## UNIVERSAL JOINT



- No key spline – no circlips groove
- Length: 107 mm
- Diameter: 30 mm
- No grease nipple

Used on 150ATS, 150ATS2, 150ATS20, 150ATT, 150TP, 160ATJ, 160ATJ E3, 160ATJ PLUS E3, 160ATS E3, 160ATJS, 165ATJ, 165ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ

REF [163TA8439](#)

# USED ON MANITOU



BODY & CHASSIS PARTS

## BAR FOR SAFETY CAGE



- Length: 762 mm
- Diameter: 30 mm

Used on 100VJR EVOLUTION, 160ATJ PLUS, 160ATJ PLUS E3, 260 TJ, 280TJ, 80VJR EVOLUTION

REF [164TA1128](#)

## CABLE TRACKS



- Outside dimensions: 105 x 35 mm
- Inside dimensions: 89 x 25 mm
- Material: plastic

Used on 100VJR EVOLUTION, 80VJR EVOLUTION, 90V AIR

REF [161TA5322](#)



- Outside dimensions: 119,5 x 35 mm
- Inside dimensions: 103,5 x 26,5 mm
- Material: plastic

Used on 165ATJ, 165ATJS

REF [163TA8383](#)



- Outside dimensions: 96 x 50 mm
- Inside dimensions: 75 x 36 mm
- Material: plastic

Used on 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 170AETJL, 170AETJL BI ENERGY, 180ATJ, 180ATJ E3, 180ATJS E3

REF [163TA8296](#)



- Outside dimensions: 97,5 x 50 mm
- Inside dimensions: 75 x 37 mm
- Material: plastic

Used on 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJS E3, 160ATJS, 170AETJL, 170ATJL BI ENERGY, MAN GO 12

REF [163TA8303](#)

## REPAIR LINK FOR CABLE TRACK



Used on 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 170AETJL, 180ATJ, 180ATJ2 E3, 200ATJ

REF [164TA1129](#)

# USED ON MANITOU



## CABLE GUIDE LINKS



- Outside dimensions: 120 x 58 mm
- Inside dimensions: 118 x 58 mm
- Material: plastic

Used on 165ATJ, 165ATJS

**REF [163TA8403](#)**



- Outside dimensions: 119,5 x 35 mm
- Inside dimensions: 103,5 x 26,5 mm
- Material: plastic

Used on 165ATJ, 165ATJS

**REF [163TA8404](#)**



- Outside dimensions: 143,5 x 64 mm
- Inside dimensions: 125 x 43,5 mm
- Material: plastic

**REF [163TA8417](#)**



- Outside dimensions: 97 x 50 mm
- Inside dimensions: 75 x 38 mm
- Material: plastic

Used on 150ATJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 170AETJL, 170AETJL BI ENERGY, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, MAN GO 12

**REF [163TA8324](#)**

## CHAIN SET



- Length: 140 mm
- Width: 94 mm

Used on 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 160ATJ, 160ATJS, 170AETJL, 170AETJL BI ENERGY, 180ATJ, 180ATJ E3, 180ATJS E3, MAN GO 12

**REF [163TA8348](#)**

# USED ON MANITOU



BODY & CHASSIS PARTS

## DOOR HANDLES



- Length: 79,5 mm
- Width: 29 mm

Used on 100VJR EVOLUTION, 120AETJ, 120AETJ COMPACT2, 120AETJL, 150AETJL COMPACT, 150AETJL, 150AETL BI ENERGY, 160ATJ, 160ATJ E3, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 170AETJL, 170AETJL BI ENERGY, 180ATJ, 180ATJ2 E3, 200ATJ, 260TJ, 280TJ, 80VJR EVOLUTION, 90V AIR, MOB170, MOB170 EVOLUTION

**REF [163TA8338](#)**



- Length: 127 mm
- Width: 45 mm

Used on 105VJ, 105VJR, 105VJR2, 110VJR2, 120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 150AET, 150AET2, 150AETJL BI ENERGY, 150ATT, 160ATJ, 160ATJS, 170AETJL BI ENERGY, 171AET, 180ATJ, 200ATJ, 80V, 80VJR, 80VR, 81XE

**REF [163TA8479](#)**

## HANDLES



- Length: 122 mm
- Width: 64 mm

Used on 150ATS, 150ATS2, 150ATT, 160ATJ, 160ATJS, 165ATJ, 165ATJS, 180ATJ, 200ATJ

**REF [163TA8478](#)**



- Length: 139 mm
- Width: 24 mm
- Diameter holes: 6,5 mm

Used on 120AETJL, 150AET, 150AET2, 150AETJL, 150AETJL BI ENERGY, 150ATS2, 150TP, 160ATJ, 160ATJ E3, 160ATJS E3, 160ATJS, 165ATJ, 165ATJS, 170AETJL, 170AETJL BI ENERGY, 171AET, 180ATJ, 180ATJ2 E3, 200ATJ, MAN GO 12

**REF [163TA8449](#)**

# USED ON MANITOU



## FLOOR PLATE – SAFETY CAGE



- Length: 920 mm
- Width: 736 mm
- Height: 42 mm

Used on 80VJR, 105VJR2, 110VJR2

REF [164TA6924](#)

## LEVER



- Length: 156 mm
- Thread: M8 x 1,25 mm

Used on 150ATS2, 150ATS20, 150TP, 160ATJ, 160ATJS, 165ATJ, 165ATJS, 180ATJ, 180ATJ E3, 180ATJS E3

REF [163TA8398](#)

## POTENTIOMETER



- Resistance: 11 Ω
- Cable length: 390 mm
- Built-in diameter: 10 mm
- Number of connections: 3

Used on 100VJR EVOLUTION, 80VJR EVOLUTION, 90V AIR

REF [160TA5999](#)

## STEERING AXLES



- Steering axle including hub with bearings and bolt
- 4 wheelbolts M14 x 1,5 mm
- Outside diameter hub: 150 mm
- Steering connection diameter: 30 mm

Used on 105VJ, 105VJR, 105VJR2, 110VJR2, 80V, 80VJR, 80VR

REF [163TA8465](#)



- Steering axle including hub with bearings and bolt
- 4 wheelbolts M14 x 1,5 mm
- Outside diameter hub: 150 mm
- Steering connection diameter: 30 mm

Used on 105VJ, 105VJR, 105VJR2, 110VJR2, 80V, 80VJR, 80VR

REF [164TA9967](#)

## TIE ROD



- Length: 525 mm
- Diameter: 37 mm

Used on 261/895455 200ATJ

REF [165TA4371](#)

## USED ON MANITOU



## BODY &amp; CHASSIS PARTS

WEAR PADS				
	Length mm	Material	Used on	REF
	100	Plastic	105VJ, 105VJR, 105VJR2, 110VJR2, 80V, 80VJR, 80VR	<a href="#">163TA8292</a>
	100	Plastic	80/100VJR EVOLUTION	<a href="#">164TA6937</a>
	100,5	Plastic	105VJ, 105VJR, 105VJR2, 110VJR2, 80V, 80VJR, 80VR	<a href="#">163TA8330</a>
	140	Plastic	160ATJ, 160ATJPLUS, 180ATJE3, 160ATJE3, 200ATJ,	<a href="#">163TA8300</a>
	140	Plastic	120 AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 150AETL BI ENERGY, 160ATJ E3, 160ATJS E3, 170AETJL, 170AETJL BI ENERGY, 180ATJ2 E3, MAN GO 12	<a href="#">163TA8328</a>
	150	Plastic	160/180ATJ(S)[2]E3(RC), 160ATJ/180ATJ (RC)[S] EURO3, 150/170AETJL BI ENERGY, 120AETJ C	<a href="#">163TA8332</a>
	150	Plastic	120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 170AETJL, 170AETJL BI ENERGY, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, MAN GO 12	<a href="#">163TA8332</a>
	90	Plastic	150AET-170AET	<a href="#">164TA6941</a>



# USED ON MANITOU



## GAS SPRINGS



- Type: push type
- Force: 350 N
- Centre distance: 365 mm

Used on 120AE, 150ATS, 150ATS2, 150ATS20, 150ATT, 150TP, 160ATJ, 160ATJS, 165ATJ, 165ATJS, 180ATJ, 200ATJ

**REF [163TA8307](#)**



- Type: push type
- Force: 500 N
- Centre distance: 590 mm

Used on 260TJ, 280TJ

**REF [161TA6130](#)**

COVERS & ACCESSORIES

## HINGE



- Length: 105 mm
- Width: 50 mm
- Diameter holes: 6,5 mm

Used on 105VJ, 105VJR, 150AET, 150AET2, 150ATS, 150ATS2, 150ATS20, 150ATT, 160ATJ, 160ATJS, 165ATJ, 165ATJS, 171AET, 180ATJ, 200ATJ, 80V, 80VR, D80E, D80ER, D80ERS, MAN GO 12

**REF [163TA8476](#)**

## ENGINE COVERS



- Length: 1530 mm
- Width: 1020 mm
- Height: 540 mm

Used on 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 200ATJ

**REF [163TA8281](#)**



- Length: 1070 mm
- Width: 370 mm
- Height: 1700 mm

**REF [164TA6920](#)**

## USED ON MANITOU




## COVERS &amp; ACCESSORIES

PROTECTIVE COVERS				
	Length mm	Width mm	Used on	REF
	440	230	105VJR, 105VJR2, 110VJR2, 120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 170AETJL, 170AETJL BI ENERGY, 80VJR	<a href="#">163TA8285</a>
	790	1150	120 AETJ L, 150AETJL, 150AETJL BI ENERGY, 170AETJL, 170AETJL BI ENERGY	<a href="#">163TA8309</a>
	1070	710	105VJR, 105VJR2, 110VJR2	<a href="#">163TA8466</a>
	1230	780	80/100VJR EVOLUTION	<a href="#">163TA8325</a>
	1230	805	100VJR EVOLUTION	<a href="#">151TA1632</a>
	1250	540	MLT635T/MT940-1740, MT1335-1745(H)SLT, 1645HSLT/ MT940-1740	<a href="#">164TA6922</a>
	1250	1250	100VJR EVOLUTION, 90V AIR	<a href="#">163TA8327</a>

# USED ON MANITOU



PROTECTIVE COVERS				
	Length mm	Width mm	Used on	REF
	1380	920	160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3	<a href="#">163TA8382</a>
	1420	1020	160ATJ, 160ATJS, 180ATJ	<a href="#">163TA8377</a>
	1530	1020	105VJ, 105VJR, 105VJR2, 110VJR2, 80V, 80VR	<a href="#">163TA8467</a>

COVERS &amp; ACCESSORIES

SAFETY CAGES	
 <ul style="list-style-type: none"> <li>Length: 1080 mm</li> <li>Width: 770 mm</li> <li>Height: 1150 mm</li> </ul> <p><b>REF <a href="#">164TA6925</a></b></p>	 <ul style="list-style-type: none"> <li>Length: 1120 mm</li> <li>Width: 930 mm</li> <li>Height: 1240 mm</li> </ul> <p>Used on 80VJR EVOLUTION, 100VJR EVOLUTION</p> <p><b>REF <a href="#">164TA1127</a></b></p>

# USED ON MANITOU



DECALS

## DECALS



- Length: 100 mm
- Height: 100 mm

Used on 100ELX, 100XEL, 110ELX, 120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120ELX, 120XEL, 65EX, 75EX, 78XE, 80ELX, 80EX, 80XEL, 81XE

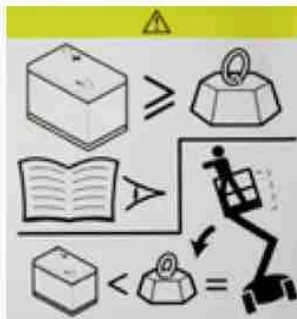
REF [163TA1107](#)



- Length: 100 mm
- Height: 100 mm

Used on 150VJR, 105VJR2, 110VJR2, 80VJR

REF [138TA2797](#)



- Length: 100 mm
- Height: 110 mm

Used on 100VJR EVOLUTION, 100XEL, 105VJR2, 110VJR, 120AE, 120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120AETJL, 120XEL, 150AET, 150AET2, 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 170AETJL, 170AETJL BI ENERGY, 171AET, 78XE, 80VJR, 80VJR EVOLUTION, 80XEL, 81XE, 90V AIR, D80E, D80ER, D80ERS

REF [163TA8352](#)



- Length: 100 mm
- Height: 170 mm

Used on 100VJR EVOLUTION, 80VJR EVOLUTION

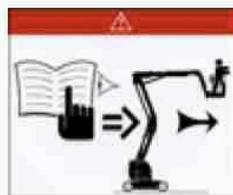
REF [163TA6791](#)



- Length: 100 mm
- Height: 80 mm

Used on 105VJ, 105VJR, 105VJR2, 110VJR2, 80V, 80VJR, 80vR

REF [163TA8349](#)



- Length: 100 mm
- Height: 80 mm

Used on 120 AETJL, 150AETJ COMPACT, 150AETJL, 170AETJL

REF [163TA6679](#)



- Length: 116 mm
- Height: 172 mm

Used on 160ATJE3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 180ATJ2 E3, 180ATJ E3 180ATJS E3, 200ATJ

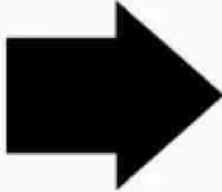
REF [163TA8481](#)

# USED ON MANITOU



DECALS

## DECALS



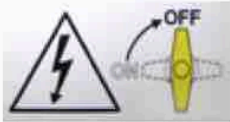
- Length: 120 mm
- Height: 110 mm

**REF 138TA2835**



- Length: 120 mm
- Height: 60 mm

**REF 163TA8326**



- Length: 120 mm
- Height: 60 mm

Used on 105VJR, 105VJR2, 110VJR2, 120AE, 120AETJ, 120AETJ COMPACT, 120AETJL, 150AET, 150AET2, 150AETJL, 150ATS, 170AETJL, 171AET, 78XE, 80VJR, 81XE, D80E, D80ER, D80ERS, MOB170, MOB170 RP

**REF 163TA8346**



- Length: 120 mm
- Height: 90 mm

Used on 150ATS2, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJS E3, 160ATJS, 165ATJ, 165ATJS 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ

**REF 163TA8360**



- Length: 139 mm
- Height: 209 mm

Used on 120AETJ, 120AETJ COMPACT

**REF 163TA1108**



- Length: 140 mm
- Height: 210 mm

Used on 160ATJ, 160ATJ E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ

**REF 162TA9742**



- Length: 168 mm
- Height: 195 mm

Used on 105VJR, 105VJR2, 110VJR2, 80VJR

**REF 163TA8356**



- Length: 168 mm
- Height: 195 mm

Used on 105VJR, 105VJR2

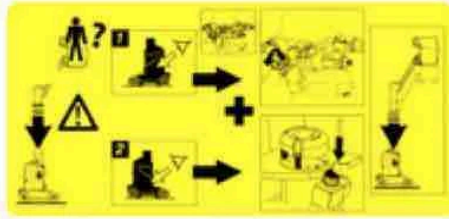
**REF 138TA2831**

# USED ON MANITOU



DECALS

## DECALS



- Length: 190 mm
- Height: 89 mm

Used on 100VJR EVOLUTION, 80VJR EVOLUTION

**REF 163TA7346**



- Length: 234 mm
- Height: 124 mm

Used on 100VJR EVOLUTION, 80VJR EVOLUTION

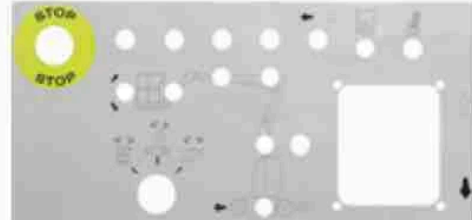
**REF 163TA4964**



- Length: 242 mm
- Height: 148 mm

Used on 80VJR EVOLUTION, 100VJR EVOLUTION

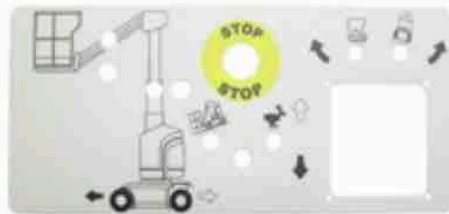
**REF 163TA8305**



- Length: 287 mm
- Height: 130 mm

Used on 120AETJ, 120AETJ COMPACT

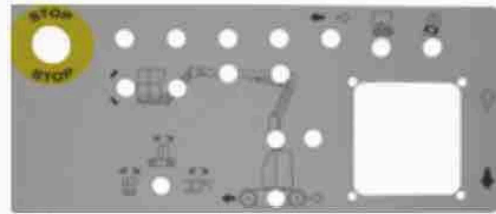
**REF 139TA1698**



- Length: 290 mm
- Height: 130 mm

Used on 105VJR, 105VJR2, 110VJR2, 80VJR

**REF 126TA4653**



- Length: 290 mm
- Height: 130 mm

Used on 120AETJL, 120AETJ COMPACT

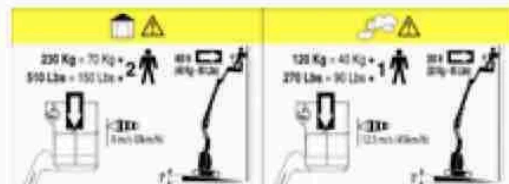
**REF 138TA2708**



- Length: 299 mm
- Height: 159,5 mm

Used on 120 AETJL, 150AETJ COMPACT, 160AETJL, 170AETJL

**REF 163TA1738**



- Length: 300 mm
- Height: 105 mm

Used on 120AETJ, 120AETJ COMPACT

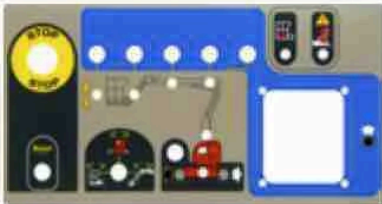
**REF 163TA6086**

# USED ON MANITOU



DECALS

## DECALS



- Length: 300 mm
- Height: 155 mm

Used on 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 170AETJL

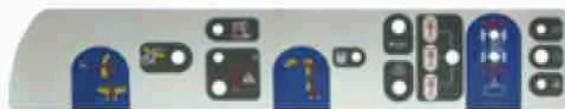
REF [163TA1921](#)



- Length: 48 mm
- Height: 48 mm

Used on 150TP, 100XEL/120XEL, 81XE, 150/170AETJL BI ENERGY, 160ATJ PLUS (RC), 120AETJ COMPACT

REF [138TA2823](#)



- Length: 488,5 mm
- Height: 92 mm

Used on 160ATJ, 160ATJS, 180ATJ

REF [163TA1592](#)



- Length: 490 mm
- Height: 122 mm

Used on 160ATJ, 160ATJS, 180ATJ

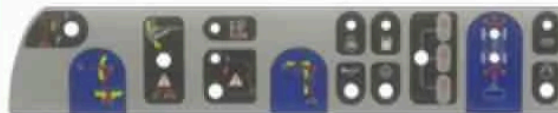
REF [162TA9490](#)



- Length: 490 mm
- Height: 122 mm

Used on 160ATJ, 160ATJ PLUS, 160ATJ E3, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ

REF [162TA8557](#)



- Length: 490 mm
- Height: 92 mm

Used on 160ATJ, 160ATJS, 180ATJ, 200ATJ

REF [139TA2888](#)



- Length: 491 mm
- Height: 92 mm

Used on 160ATJE3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 180ATJ E3, 180ATJS E3

REF [163TA6746](#)



- Length: 500 mm
- Height: 200 mm

Used on 150AET2

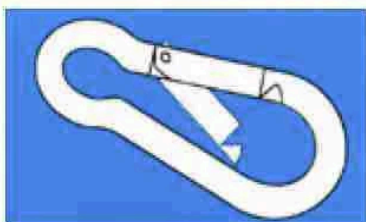
REF [163TA2474](#)

## USED ON MANITOU



DECALS

## DECALS



- Length: 60 mm
- Height: 35 mm

Used on 150TP, 260/280TJ, 80/100VJR EVOLUTION, 160/180ATJ(S)(2)E3(RC)

REF [163TA4321](#)



- Length: 60 mm
- Height: 60 mm

Used on 100SC, 100SC2, 100SEC, 120AETJ COMPACT2, 120AETJL, 120SC, 120SC2, 120SE, 140SC2, 150AETJ COMPACT, 150AETJL, 150TP, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJS E3, 170AETJL, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ, 60V 78SEC, MAN GO 12

REF [163TA4315](#)



- Length: 60 mm
- Height: 60 mm

Used on 100VJR EVOLUTION, 120AETJ COMPACT2, 120AETJL, 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 170AETJL, 170AETJL BI ENERGY, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ, 80VJR EVOLUTION, 90V AIR, MAN GO 12

REF [163TA1137](#)



- Length: 60 mm
- Height: 60 mm

Used on 100SC, 100SC2, 100SEC, 120AETJ COMPACT2, 120AETJL, 120SC, 120SC2, 120SE, 140SC2, 150AETJ COMPACT, 150AETJL, 150TP, 160ATJ E3, 160ATJ PLUS, 160ATJS E3, 170AETJL, 170AETJL BI ENERGY, 180ATJ2 E3, 180ATJ E3, 180ATJS E3, 200ATJ, 260TJ, 280TJ, 78SEC, 80VJR EVOLUTION, 90V AIR, MAN GO 12, MOB170, MOB170 EVOLUTION, MOB170RP

REF [163TA4318](#)



- Length: 80 mm
- Height: 60 mm

Used on 100SC2, 100SEC, 100VJR EVOLUTION, 100XEL, 105VJ, 105VJR, 105VJR2, 110VJR2, 120AE, 120AETJ, 120AETJ COMPACT, 120AETJ COMPACT2, 120AETJL, 120SC2, 120SE, 120TH, 120XEL, 140SC2, 150AET, 150AET2, 150AETJ COMPACT, 150AETJL, 150AETJL BI ENERGY, 150ATS, 150ATS2, 150TP

REF [138TA2838](#)



# USED ON MANITOU



WHEELS & TYRES

## ANTI-PUNCTURE TYRES



- Type: tubeless tyre
- Tyre size: 12,5 x 18

Used on 150TP, 160ATJ, 160ATJ E3, 160ATJ PLUS, 160ATJ PLUS E3, 160ATJS E3, 160ATJS, 180ATJ, 180ATJ2 E3, 180ATJ E3, 180ATJS E3

**REF [163TA8282](#)** - LH  
**REF [165TA4373](#)** - RH

## TRACTION WHEELS

	Diameter wheel mm	Width wheel mm	Number of bolt holes	Diameter shaft mm	Used on	REF
	404	125	5	96	100XEL, 120XEL, 80XEL	<a href="#">163TA8384</a>
	405	127	4	85	100XEL/120XEL	<a href="#">161TA2719</a>
	406	127	5	85	80ELX/100ELX/120ELX, 80EX	<a href="#">165TA4372</a>
	406	127	0	33	80/100VJR EVOLUTION	<a href="#">160TA5700</a>
	590	188	5	110		<a href="#">164TA6921</a>

# USED ON MANITOU





WHEELS & TYRES

TRACTION WHEELS						
	Diameter wheel mm	Width wheel mm	Number of bolt holes	Diameter shaft mm	Used on	REF
	600	190	5	110	120AETJ COMPACT2	<a href="#">163TA8298</a>
	600	190	6	160	120 AETJL, 150AETJL COMPACT, 150AETJL, 170AETJL	<a href="#">163TA8295</a>
	600	190	6	162	120AETJ COMPACT2	<a href="#">163TA8385</a>

## USED ON MANITOU



AXLES/PINS					
	Diameter mm	Length mm	Hardened	Used on	REF
	25	142	No	150AET2, 150ATT	<a href="#">163TA8408</a>
	39,3	114	No	160ATJ, 160ATJPLUS, 160ATJ PLUS E3, 160ATJS, 180ATJ, 180ATJ E3, 180ATJS E3, 200ATJ	<a href="#">163TA8306</a>

HARDWARE

# USED ON MANITOU



OTHER PARTS

## SERVICE HAND CONSOLES



Calibrator

Used on 150ATT, 170ATT, 150ATS, 165ATJ

**REF [163TA8381](#)**



- Sevcon
- Calibrator power pack
- Programming kit

Used on 80ELX, 80XEL, 100 ELX, 100XEL, 105VJR2, 120AETJ, 120ELX, 120XEL

**REF [163TA8453](#)**



- Sevcon
- Programmer for MOS90 series

Used on 105VJR, 120AE, 150AET, D80ER

**REF [163TA8452](#)**