

# TV380 COMPACT TRACK LOADER

## ENGINE

Model	Case 432	T / M3	
Туре	Diesel 4-stroke, Turk	oo, D.I.	
Cylinder		4	
Bore/Stroke	3.9 x 4.1 in (99 x 10	)4 mm)	
Displacement	195 cu in	(3.2 L)	
Fuel injection		Direct	
Fuel	#2	diesel	
Fuel filter In-line strair		strainer	
Air intake Turbocharged w/ external EG		al EGR	
Cooling		Liquid	
Engine speeds			
High idle - no	load (rpm) 2675	+/- 75	
Rated -full loa	ad (rpm)	2500	
Low idle (rpm	i) 1075	5+/- 75	
Horsepower per SAE J1349			
Gross	90 hp (67 kW) @ 250	00 rpm	
Net	84 hp (63 kW) @ 250	00 rpm	
Peak torque	251 lb-ft (340 Nm) @ 140	00 rpm	

## **ENGINE COOLING**

Radiator –			
Core type	All aluminum		
Core size area	a 0.266 m <sup>2</sup>		
Rows of tubes	s 42		
Cap pressure	16 +/-2 psi		
Fan –			
Diameter	20.4 in (518 mm)		
Ratio	0.96:1		
Water pump			
Style	Centrifugal		
Flow	29 gpm (110 L/min)		
Engine lubricatio	on		
Pump	Rotor pump w/ deep sump pan,		
	plate cooler, and pressurized		
	under-piston nozzles		
Pump operating angle ratings			
Side to side	45°		
Bucket up	35°		
Bucket down	45°		
Oil filtration	Replaceable, full-flow cartridge		

## POWERTRAIN

Drive pump – Ele	ctro Hydr	raulic	
Pump to engin	e ratio		1:1
Displacement of	cc (cu in)	2.81 cu ir	ו (46 cc)
Flow at rated e	ngine rpr	n	
@100% effic	iency	30.4 gpm (11	5 L/min)
Charge Pressu	re	363 psi	(25 bar)
System relief		5,220 psi (	360 bar)
Control		Electro H	ydraulic
Drive motors			
Drive motors			
Max. displacer	nent	3.1 cu in (	50.9 cc)
Displacement -	- optional	l	
high speed		2.0 cu in (	33.1 cc)
Speed @ high i	0	•	
(100% eff. at		0 1 /	105
Speed @ optio	0		161
Torque @ max.	•		
pressure (calcu	lated, 34	, .	635 lb-ft
		(62	83 N-m)
Travel speed -			
Low range			5.8 mph
High range (op	tional)		8.3 mph
Final drive		Planetary re	eduction
Parking brake			
Туре			applied,
		hydraulic rele	
Engagement		ess on/off brak	
		le or instrumer	
	raise	e seat bar, get	off seat,
		or stop	o engine

## **HYDRAULIC SYSTEM**

Standard equipment	pump –
Туре	Gear
Displacement –	
Standard Aux.	2.08 cu in (34.1 cc)
High Flow Aux.	1.12 cu in (18.3 cc)
Pump flow @ rated	engine rpm
@ 100 % efficien	cy 22.5 gpm (85 L/min)
Optional high flow	@ rated engine rpm
@ 100 % efficien	cy 12.1 gpm (46 L/min)
Loader control valve -	-
Type 3 S	pool / Open Center / Series
Relief pressure 3	000 (+145/-0) PSI (207 Bar)
Port relief pressures -	-
Loader raise	3263 psi (225 bar)
Bucket dump	3481 psi (240 bar)
Bucket curl 3336 psi (230 b	
Hydraulic lines –	
Tubing	37° JIC Flare
Loop hoses	SAE 100 R13
Hydraulic oil cooler -	
Number of fins	10 per inch (3.94 per cm)
Number of Tubes	11
Area	130.7 sq in (843 cm <sup>2</sup> )
Hydraulic filter	6 micron / Spin on

## INSTRUMENTATION

Indicators
Digital Hourmeter
Fuel level LCD bar graph with alarm
Warning lights with alarms
Engine coolant temperature
Engine oil pressure
Engine Malfunction
Hydraulic charge pressure
Hydraulic filter restriction
Hydraulic oil temperature
Warning alarms
Battery voltage (plus display)
Indicator light
Engine preheat
Parking brake
Seat bar reminder

# ELECTRICAL SYSTEM

Alternator 95 amp
Starter 4.0 kW
Battery
12-volt low-maintenance 1000 cold-cranking
amps @ 0° F (-18° C)

## **OPERATOR ENVIRONMENT**

ROPS/FOPS level 1 canopy w/side screens
Tilt ROPS/FOPS
Rear window w/ emergency escape
Instrument panels
Suspension vinyl seat
2 in (51 mm) retractable seat belt
Hand throttle
Foot throttle
Alarm package
Headliner
Top window
Cup holder
Power plug socket
Foot rest
Storage tray
Low effort ergonomic hand controls
Padded seat bar w/integral armrests
Loader control lockout system
Electric parking brake control
Floor cleanout panel

# **CYLINDERS**

Lift cylinder –	
Bore diameter	2.5 in (63.5 mm)
Rod diameter	1.75 in (44.5 mm)
Stroke	35 in (891.5 mm)
Closed length	47.2 in (1200 mm)
Bucket cylinders –	
Bore diameter	3.0 in (76.2 mm)
Rod diameter	1.5 in (38.1 mm)
Stroke	16.14 in (410.0 mm)
Closed length	24 in (610.0 mm)

# WEIGHTS

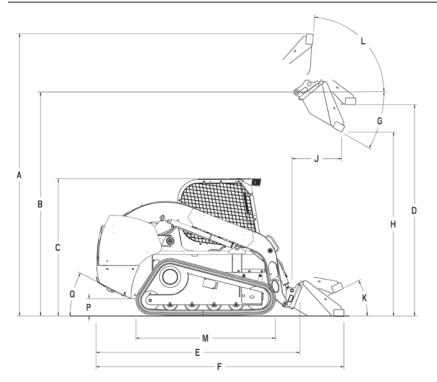
Operating weight	10,200 lb (4625 kg)
Shipping weight	9,865 lb (4475 kg)
Add-on weights –	
Side cab glass	46.9 lb (21.3 kg)
Lexan door	74 lb (33.6 kg)
Glass door with wiper	134 lb (60.8 kg)
Suspension seat	22.1 lb (10 kg)

## **SERVICE CAPACITIES**

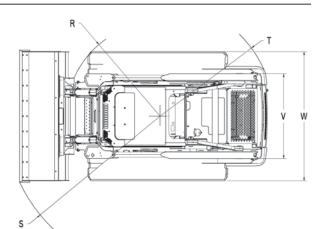
Fuel tank	25.5 gal (96.5 L )
Engine oil with filter	10.5 qt (9.5 L )
Hydraulic system –	
Reservoir	6 gal (22.75 L)
Total	11.75 gal (44.5 L)

## **TRACK SELECTION**

	Area sq in (cm²)	Ground pressure psi (kPa)	Width to Outside of track in (m)
15.7 in (400 mm)	2,038 (13 120)	5.0 (34.5)	74 (1.88)
17.7 in (450 mm)	2,293 (13 776)	4.5 (31)	76 (1.93)



A.	Overall operating height - in (mm) -	
	with foundry/excavating bucket short lip	161.9 (4.1)
	with low profile/standard lip bucket	166 (4.2)
	with low profile extended / long lip bucket	171 (4.3
	Height to - in (mm) –	
В.	Bucket hinge pin	131.6 (3.3)
C.	Top of ROPS	80.4 (2.0)
D.	Bottom of level bucket, fully raised	124.8 (3.2)
	Overall length - in (mm) –	
Е.	without attachment with coupler	118 (2.9)
F.	with foundry excavation bucket on ground	142 (3.6)
	with low profile bucket	146 (3.7)
	with low profile extended bucket	151 (3.8)
G.	Dump angle	53.5°
Н.	Dump height - in (mm) –	
	with foundry/excavating bucket short lip	104 (2.8)
	with low profile/standard lip bucket	102.2 (2.66)
J.	Dump reach (max. height) - in (mm)	31 (0.79)
_	Maximum attachment rollback –	
Κ.	Bucket on ground	34.2°
L.	Bucket at full height	86°
М.	Track on Ground - in (mm)	63.1 (1.6)
P.	Ground clearance (bottom of belly pan) - in (mm)	9.5 (243)
Q.	Angle of departure	32°
	Clearance circle - in (mm) –	
R.	without bucket	56.2 (1.4)
S.	with 78-inch (2.0 m) foundry bucket in carry position	84.8 (2.2)
	with 78-inch (2.0 m) low profile bucket on ground	88.4 (2.3)
	with 78-inch (2.0 m) extended low profile on ground	92.6 (2.4)
Т.	Clearance circle rear - in (mm)	70.4 (1.8)
V.	Track width	58.3 (1.5)
W.	Over the track width	76 (1.9



## **PERFORMANCE SPECS**

Rated Operating Load – Ib (kg)			
50%	3,800 (1723)		
35%	2,660 (1209)		
Tipping load	7,600 lb (3447 kg)		
Breakout forces (calculated @ 3150 psi) –			
Lift cylinder	4,940 lb (22.0 kN)		
Bucket cylinder	8,585 lb (38.2 kN)		
Cycle Times (seconds)–			
Raise	4.1		
Lower	2.6		
Dump	2.7		
Roll back	2.0		

## **OPTIONAL BUCKETS**

Туре	Width inch (m)	Weight Ib (kg)	Heaped Capacity ft <sup>3</sup> (m <sup>3</sup> )
Dirt &	78	435	18.4
Foundry	(2.0)	(197)	(0.52)
Low Profile Extended	78 (2.0) 84 (2.1)	502 (228) 607 (275)	18.6 (0.53) 20.2 (0.57)
Light	84	497	27.9
Material	(2.1)	(225)	(0.79)
Manure &	84	535	22.5
Slurry	(2.1)	(243)	(0.64)
Heavy Duty	78	527	15.9
	(2.0)	(239)	(0.45)
	84	758	25.7
	(2.1)	(344)	(0.473)

### STANDARD EQUIPMENT

#### **OPERATOR'S COMPARTMENT**

ROPS/FOPS level 1 canopy w/side screens **Tilt ROPS/FOPS** Rear window w/ emergency escape Instrument panels Suspension vinyl seat 2 in (51 mm) retractable seat belt Hand throttle Foot throttle Alarm package Headliner Top window Cup holder Power plug socket Foot rest Storage tray Low effort ergonomic hand controls Padded seat bar w/integral armrests Loader control lockout system Electric parking brake control Floor cleanout panel

#### LOADER

Radial loader arm design Mechanical attachment coupler Loader lift arm support strut

### ENGINE

Case/lveco 432T/M3 diesel No maintenance belt Over & under radiator and oil cooler Glow plug Integral engine oil cooling Fuel filter w/water trap Dual element air cleaner 95 amp alternator 1000 CCA 12-volt battery

#### POWERTRAIN

Switchable EH controls Planetary reduction final drive 2 speed ground drive SAHR disc parking brakes

#### HYDRAULICS

Auxiliary hydraulics 3050 psi (210 bar) – 23.8 gpm (90 L/min) Hydraulic circuit pedal lock Loader arm-mounted ISO flat face connectors Auxiliary function lockout override Loader function lockout system Loader lift lockout override 3-spool loader control valve Heavy-duty oil cooler Loader arm float position

#### OTHER

Deluxe instrument panel Add-on counterweights Lockable service access hood Single-point daily servicing Halogen lights, 2-front, 2 side, 2-rear (halogen) Rear tail lights Remote oil drain

### **OPTIONAL EQUIPMENT**

#### **OPERATOR'S COMPARTMENT**

Deluxe cloth suspension seat w/ heater and lumbar support Interior mirror Electric auxiliary hydraulic control Glass front door w/wiper & washer Sliding side windows 3 inch retractable seat belt Heater and AC Radio Demolition door

## LOADER

Auxiliary front electric control Ride control Hydraulic attachment coupler Hydraulic one-way self-leveling

## HYDRAULICS

High-flow auxiliary hydraulics 3050 psi (210 bar) – 33.2 gpm (126 L/min) Second auxiliary hydraulics Attachment case drain plumbing ENGINE Coolant block heater Battery disconnect switch

#### OTHER

Road lights Rotating beacon Lift hooks Special paint Language decals Buckets – see page 3 Bolt-on bucket cutting edges



NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

NOTE: All engines meet current EPA emissions requirements.

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All Case construction equipment is biodiesel ready.