

COMPACT EXCAVATOR

TAKEUCHITM
From World First to World Leader

TB138FR



Operating Weight: 3,935 kg

Product Features & Specifications

ENGINE

- EU Stage III A / EPA Interim Tier 4 Emission Compliant
- Automatic Fuel Bleed System
- Double Element Air Cleaner (optional)
- Engine Preheat
- High Capacity Radiator and Hydraulic Oil Cooler
- High Capacity Fuel Filters
- Extended Life Coolant

ELECTRICAL

- Multi-Informational Display
- 12 volt System with 40 amp Alternator
- Work Lights: Canopy - ROPS and Boom
- Work Lights: Cab - Front Pillar and Boom
- Beacon Socket
- Battery Switch
- Travel Alarm (optional)
- Horn
- Hour Meter

OPERATOR'S STATION

- ROPS / TOPS / OPG Level I
- Deluxe High Back Suspension Seat
- Head Rest (optional)
- 2" Retractable Seat Belt
- Cab with Heat Defrost, Windshield Wiper and Washer, Skylight, AM / FM / MP3 Radio
- Air Conditioner (Cab optional)
- OPG Level I Front Guard (Cab optional)

UNDERCARRIAGE AND FRAME

- Triple Flanged Track Rollers
- 2-Speed Travel with Automatic Shift
- High Torque Planetary Final Drive
- Large Wraparound Counterweight
- 2" Retractable Seat Belt
- 350 mm Rubber Crawlers
- 350 mm Steel Crawlers (optional)

HYDRAULIC

- Variable Displacement, Open Center Hydraulics
- Straight Travel Circuit
- Large Hydraulic Reservoir with Fluid Level Sight Gauge
- Hydraulic Joystick Controls
- Service Port 1 with on/off Switch
- Proportional Control for Service Port 1 (optional)
- Proportional Control for Service Port 2 (optional)
- Service Port 3 for Quick Hitch (optional)
- Hydraulic Selector Valve (1-way / 2-way)
- Pilot Accumulator (optional)
- Air Breather, Hydraulic Tank (optional)

WORKING EQUIPMENT

- Full Rotation Capability and Patented STS Boom
- Cushioned Boom, Arm, and Offset Cylinders
- Auxiliary Hydraulic Circuit Plumbed to Arm
- 1,290 mm Arm
- 1,600 mm Arm (optional)
- Arm and Boom Holding Valve with Lift Alarm (optional)
- Patter Change Valve (ISO or G) (optional)



Side to Side Boom Design



Automotive Styled Interior

TOUGH, POWERFUL, RELIABLE



Hydraulic Pilot Joysticks



Wraparound Counterweight



Triple Flanged Track Rollers



Work Lights

The patented side-to-side (STS) offset boom combined with the tight tail swing on the TB138FR provides unmatched visibility to the work equipment and enables it to rotate fully with very little overhang.

Its low center of gravity and optimized counterweight placement creates an extremely stable platform with lifting capabilities similar to that of a conventional machine.

The TB138FR also come standard with 2 speed travel with automatic step down motors that provide torque on demand when pushing, climbing, or turning in high speed mode.

Serviceability on the TB138FR is simple with the tilt-up cab that provides access to the engine and hydraulic components. Rear access to the machine allows convenient access to daily checks and routine maintenance points.



A tilt-able cabin and large lockable service hoods provide outstanding maintenance access.

OPERATING PERFORMANCE

Operating Weight - Cab	3,935 kg
Operating Weight - Canopy	3,865 kg
Bucket Capacity (Heaped)	0.105 m ³
Slew Speed	9.8 min ⁻¹
Travel Speed	
1st	2.5 km/h
2nd	4.9 km/h
Gradeability	30°
Ground Pressure - Cab	30.4 kPa
Ground Pressure - Canopy	29.9 kPa
Maximum Bucket Breakout Force	26.5 kN
Maximum Arm Digging Force	18.0 kN
Traction Force	39.4 kN
Boom Swing Angle (Left/Right)	30° / 15°

ENGINE

Model	Yanmar / 3TNV88
Rated Output (ISO 14396)	22.0 kW / 2,400 min ⁻¹
Maximum Torque	107.1 Nm / 1,440 min ⁻¹
Displacement	1,642 ml
Alternator	12 V - 0.48 kW
Battery (IEC 60095-1)	12 V - 64 A·h

FLUID CAPACITY

Engine Lubrication	4.7 L
Cooling System	6.0 L
Fuel Tank Capacity	40.0 L
Hydraulic Reservoir Capacity	41.0 L
Hydraulic System Capacity	68.0 L

HYDRAULIC SYSTEM

P1, P2	Variavle Displacement Pump
Flow Rate	38.9 L/min
Relief Pressure	21.0 MPa
P3	Gear Pump
Flow Rate	22.8 L/min
Relief Pressure	19.6 MPa
Service Port 1	
Flow Rate	61.7 L/min
Hydraulic Pressure	21.0 MPa
Service Port 2	
Flow Rate	22.8 L/min
Hydraulic Pressure	19.6 MPa
Service Port 3	
Hydraulic Pressure	19.6 MPa

SAFETY and HEALTH

Vibration Levels	
Hand / Arm	≦ 2.5 m/s ²
Body	≦ 0.5 m/s ²
Noise Level	
Sound Power Level	LWA 95 dB



Multi-Informational Display



Full Rotation Capability

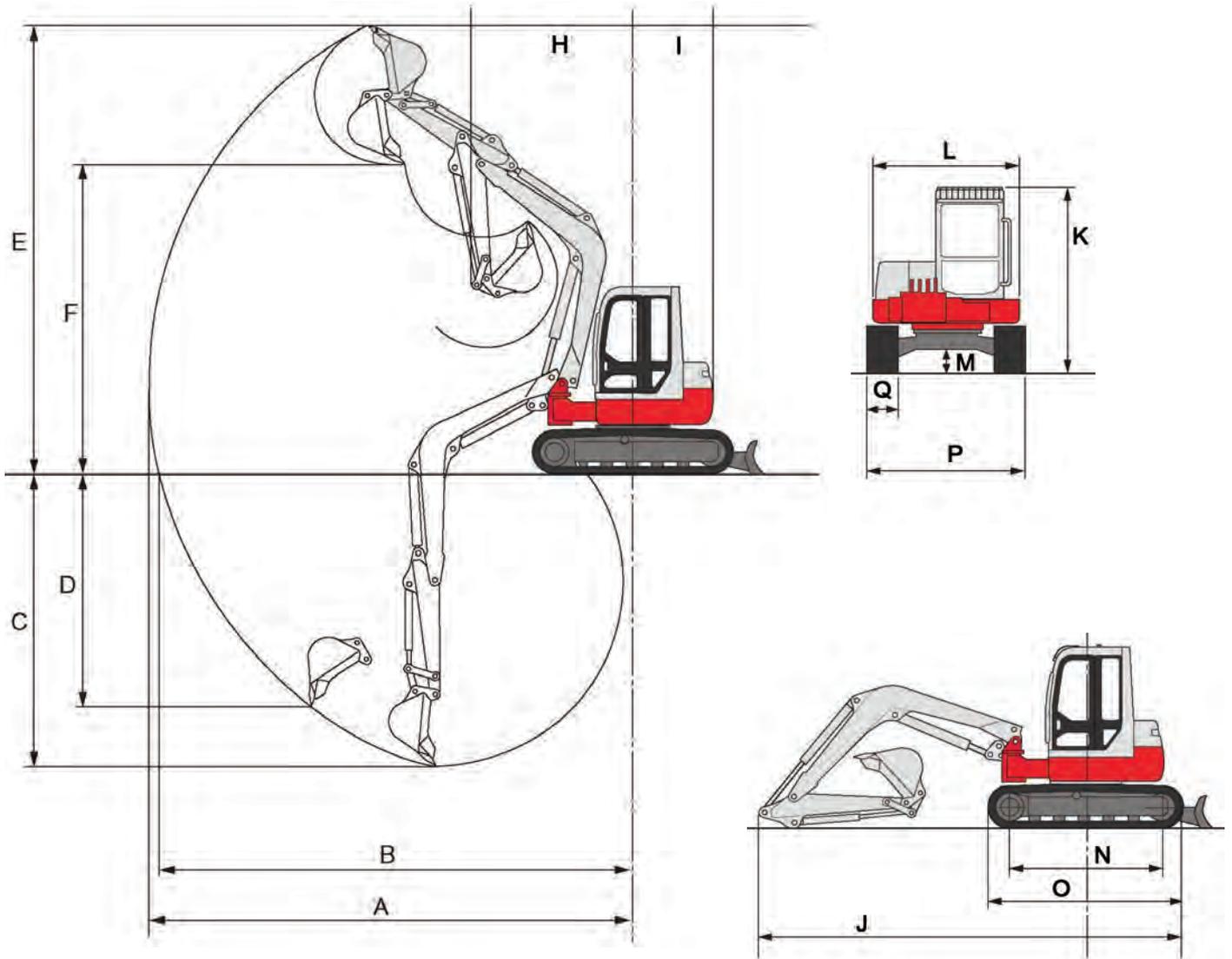


2 Speed Travel w/ Auto Shift



Auxiliary Hydraulic Lines

TB138FR Compact Excavator



MACHINE DIMENSIONS	1,290 mm ARM	1,600 mm ARM
A Maximum Reach	5,260 mm	5,550 mm
B Maximum Reach at Ground Level	5,130 mm	5,425 mm
C Maximum Digging Depth	3,110 mm	3,420 mm
D Maximum Vertical Digging Depth	2,365 mm	2,635 mm
E Maximum Height of Cutting Edge	5,020 mm	5,220 mm
F Maximum Dumping Height	3,595 mm	3,795 mm
H Front Swing Radius with Boom Offset	1,155 mm	1,325 mm
I Slew Radius	955 mm	955 mm
J Overall Length	4,715 mm	4,770 mm
K Overall Height (Cab / Canopy)	2,555 mm/2,565 mm	2,555 mm/2,565 mm
L Upper Structure Overall Width	1,640 mm	1,640 mm
M Ground Clearance	295 mm	295 mm
N Crawler Base	1,655 mm	1,655 mm
O Crawler Overall Length	2,110 mm	2,110 mm
P Crawler Overall Width	1,740 mm	1,740 mm
Q Crawler Shoe Width	350 mm	350 mm

