

Document Title: Machine EC450, description	Function Group: 00	Information Type: Service Information	Date: 3/13/2026
Profile:			

Machine EC450, description

EC450 is a 360°-rotating tracked excavator with an operating weight of 44 – 46 tonnes.

The machine is equipped with a Volvo TD 122 KKE low-emission engine which is customized for this excavator model.

The engine drives the machine's working pumps via a pump gearbox. The standard version has three pumps for the working hydraulics. A separate pump for the servo hydraulic circuit is driven by the engine's cam transmission.

The machine has 3-circuit hydraulics with a unique Volvo-designed priority system and COS (Capacity Optimized System). This means that all three pumps can be used for independent digging movements. Use of the pumps is controlled by a Mode Selector with the following three modes: HLD (Heavy Lift Device), ECO (Economy) and CAP (Capacity).

Propulsion of the machine is provided by hydraulic axial piston motors and planetary gears.

The pumps are controlled by SSC (Speed Sensing Control) to prevent overloading of the engine.

The travel gearboxes are equipped with negative-action hydraulic brakes, which means they are applied automatically by spring force and released by hydraulic pressure.

The brakes are released when the pedals are activated. The brakes are of the multi-disk type in an oil bath and are maintenance-free.

Rollers and idlers are permanently lubricated.

The superstructure is slewed by means of an axial piston motor via a 2-stage planetary gearbox with slew pinion. The gearbox is equipped with a hydraulic slew brake with negative action, i.e. it is applied automatically by spring force and released by servo pressure.

The slew pinion drives against a slew ring with inner toothed rim. The slew ring joins the superstructure to the undercarriage.

A centre passage connects the superstructure to the undercarriage hydraulically.

The cab is equipped with an ergonomical operator's seat, ventilation, filter system and a computerized monitoring system for the diesel engine and hydraulic system. It is furthermore equipped for air conditioning.

There is a distribution box underneath the operator's seat where most of the fuses and relays are located.

The boom cylinder circuit is equipped with a float position.

Each boom cylinder is equipped with a hose rupture valve.

Different combinations of boom, dipper arm and attachment can be offered. This manual describes the most common standard alternatives.

When ordering spare parts and making inquiries by telephone or correspondence, always state the model designation and manufacturing number. Where applicable, state the stamped data on individual parts as well.

Document Title: Machine signs, cab	Function Group: 00	Information Type: Service Information	Date: 3/13/2026
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Machine signs, cab

The product sign with model designation and Product Identification Number (PIN) is located on the outside of the cab under the left rear side window.



Figure 1
Cab

1. Product sign

Document Title: Machine signs, digging equipment	Function Group: 00	Information Type: Service Information	Date: 3/13/2026
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Machine signs, digging equipment

The hydraulic cylinders' article and change numbers are stamped on the cylinder barrel next to the oil connection on the piston rod side.

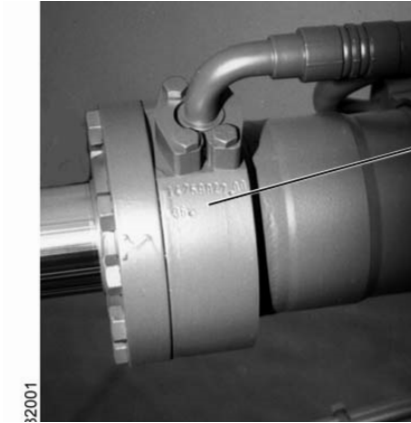


Figure 1
Hydraulic cylinder

1. Article and change numbers

The piston rods' article and change numbers are stamped on the end surface of the piston rods.

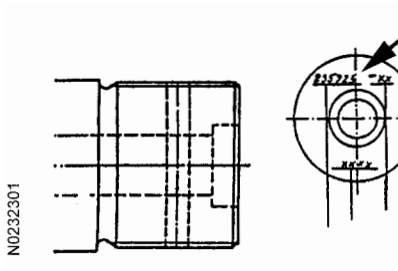


Figure 2
Piston rod

1. Article and change numbers

The bucket's sign with article number, weight and volume is located on the top of the bucket to the left of the bucket hinge.

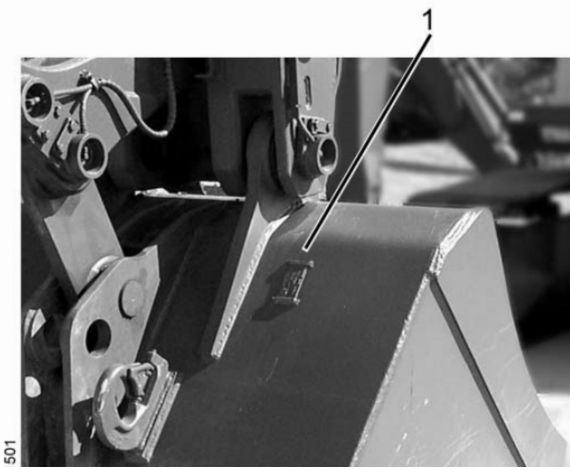


Figure 3
Bucket

1. Sign

Document Title: Machine superstructure	Function Group: signs, 00	Information Type: Service Information	Date: 3/13/2026
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Machine signs, superstructure

The superstructure's article and change numbers and the machine's manufacturing number are stamped on the right boom bracket.



Figure 1
Superstructure

1. Article and change numbers

The engine's type designation, product and serial numbers are stamped on the left side of the engine in the top edge of the engine block.

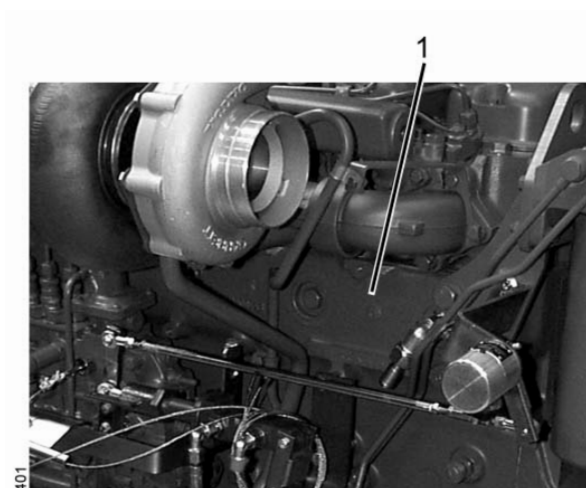


Figure 2
Engine

1. Product and serial numbers

Document Title: Machine undercarriage	Function Group: signs, 00	Information Type: Service Information	Date: 3/13/2026
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Machine signs, undercarriage

The undercarriage's article and change numbers are stamped in front of the slew gear.



Figure 1
Undercarriage

1. Article and change numbers

Document Title: Cylinder data	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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Cylinder data

Cylinder	Boom	Dipper arm	Bucket
Cylinder bore	160 mm	180 mm	160 mm
Piston rod diameter	110 mm	125 mm	105 mm
Stroke	1 600 mm	1 900 mm	1 300 mm
Piston force, out	1 247 kN/127.1 Mgf	789 kN/80.4 Mgf	623 kN/63.5 Mgf
Piston force, out in HLD	1 407 kN/143.4 Mgf	891 kN/90.8 Mgf	740 kN/71.8 Mgf

Cylinder times in seconds			
Mode	Boom cylinder	Dipper arm cylinder	Bucket cylinder
HLD -	1.9	5.5	3.3
HLD +	8.7	10.5	5.8
ECO -	1.9	2.9	1.9
ECO +	4.4	5.3	3.0
CAP -	1.9	2.3	1.6
CAP +	3.5	4.1	2.4

Document Title: Digging data	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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Digging data

Boom length	6.65 m	6.65 m	7.25 m	7.25 m
Dipper arm length	2.5 m	3.5 m	3.5 m	4.0 m
Max. reach	11.3 m	12.3 m	12.9 m	13.3 m
Max. reach at ground level	11.1 m	12.0 m	12.7 m	13.1 m
Max. digging depth	6.8 m	7.8 m	7.9 m	8.4 m
Max. height, ground – tooth tip	10.6 m	11.2 m	12.3 m	12.3 m
Max. dump height	7.3 m	7.8 m	8.7 m	8.8 m
Max. practical dump height	5.7 m	5.4 m	6.1 m	6.1 m
Practical digging depth when the material's angle of repose is 45°	5.7 m	6.3 m	6.8 m	7.1 m
Max. vertical digging depth	3.7 m	5.4 m	5.8 m	5.7 m
Max. height, ground – bucket hinge	9.2 m	9.7 m	10.7 m	10.7 m
Min. front slew radius	5.1 m	5.1 m	5.0 m	5.0 m

Document Title: Digging equipment	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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Digging equipment

Bearing point	Bearings							
	Degree of wear (mm)							
	Shaft – Lug				Total			
	25%	50%	75%	100%	25%	50%	75%	100%
Boom – Base machine	0.4	0.7	1.1	1.5	0.9	1.3	1.9	2.5
Dipper arm – Bucket	0.8	1.4	2.1	2.9	1.8	2.7	3.8	4.9
Boom – Dipper arm	0.6	1.1	1.6	2.2	1.4	2.1	2.9	3.8
Hydraulic cylinders	0.6	1.1	1.6	2.2	1.4	2.1	2.9	3.8
Bucket link system	0.8	1.4	2.1	2.9	1.8	2.7	3.8	4.9

New dimensions	
Shaft diameter (mm)	Total theoretical max. clearance (mm)
80 – 90	0.26
110	0.28

Document Title: Main dimensions	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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Main dimensions

A	B	C	D	F	G	H1	H2
2.90 m	3.60 m	2.60 m	3.77 m	0.44 m	2.33 m	3.49 m	3.35 m

L	M	N	O	P	R	S	U	X
4.26 m	5.26 m	0.70 m	0.62 m	1.02 m	0.49 m	0.82 m	3.10 m	1.19 m

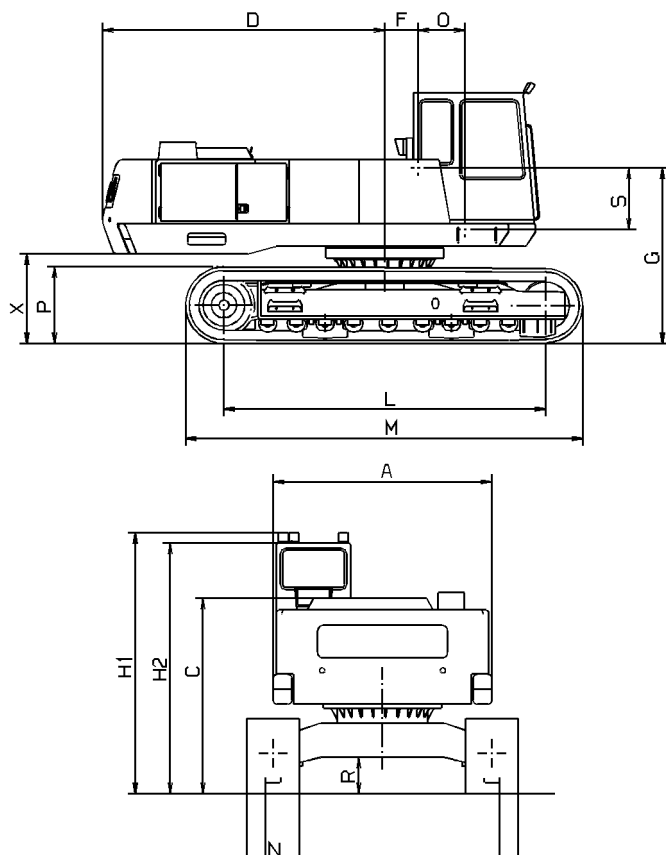
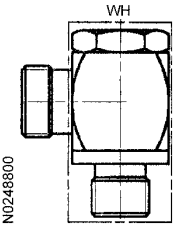


Figure 1
Main dimensions

Document Title: Tightening torque, banjo fittings	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Tightening torque, banjo fittings

	Thread (inch/mm)	Pressure class	Pipe o.d. (mm)	Width across flats (mm)	Torque (Nm) *)
14 026 430	G 1/4	Low	8	19	50
14 026 431	G 1/4	Low	10	19	50
14 026 152	G 1/2	Low	15	30	130
14 214 142	G 1/4	High	8	19	50
14 211 073	G 3/4	High	20	36	250
14 213 319	M 12x1.5	Low	8	19	50
14 213 320	M 14x1.5	Low	10	19	60
14 213 321	M 16x1.5	Low	12	24	90
14 026 454	M 18x1.5	Low	15	27	110
14 215 499	M 22x1.5	Low	18	30	150
Low = 31.5 MPa High = 40 MPa *) Prerequisites: Oiled thread and contact surface.					

Document Title: Tightening torque, bolts and nuts	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Tightening torque, bolts and nuts

Thread	Flange bolt					Hex socket and hexagonal bolts						Blind rivet nut
	Width across flats Torque (Nm)					Width across flats Torque (Nm)						Torque (Nm)
	8.8 Fe/Zn-Fe Dry	8.8 Fe/Zn-Fe Lubricated	10.9 Phosphatized	10.9 Phosphatized Lubricated		Hexagonal	Hex socket	8.8 Bright-galvanized & Fe/Zn-Fe-dry Untreated-lubr. hot-dip-galvanized-lubr.	8.8 Bright-galvanized & Fe/Zn-Fe Lubricated	10.9 Untreated Lubricated	12.9 Untreated Lubricated	
M5	8	7	6			8	4	6	5			6
M6	10	12	10			10	5	10	9		20	10
M8	12	28	24			13	6	25	22		40	24
M10	14	56	48	70	60	16	8	50	44	60	80	48
M12	17	100	85	125	105	18	10	85	75	105	140	82
M14	18	160	140	200	175	21	12	135	125	175	220	
M16	21	250	220	320	275	24	14	205	190	275	340	
M20						30	17	370	350	540	650	
M24						36	19	700	640	900	1120	
M27						41	–	1100	940	1350	1620	
M30						46	22	1500	1280	1840	2210	
M36						55		2500	2300	3210	3850	
1/4						7/16	3/16	12	10	15	20	
5/16						1/2	1/4	25	21	30	40	
3/8						9/16	5/16	45	38	55	70	
7/16						5/8		65	55	90		
1/2						3/4	3/8	100	85	130	170	
9/16						13/16		145	123	190		

The pretensioning force achieved at a given tightening torque depends on the coefficient of friction of the bolted joint.

The coefficient of friction in turn depends on the length of engagement, the material finish and the surface texture under the bolt head, surface treatment, lubrication etc. The values are calculated assuming a coefficient of friction of 0.2 for a dry chromated flange bolt and 0.15 for a lubricated chromated flange bolt.

Hex socket bolts and traditional hexagonal bolts have a 10% lower torque owing to the smaller contact surface under the bolt head.

Lubricated untreated and lubricated hot-dip-galvanized bolts of class 8.8 have approximately the same coefficient of friction as dry chromated 8.8 bolts and are listed in the same column.

NOTE!

When using a Nordloc washer, increase the torque by 20%.

NOTE!

Tighten bolts with liquid or micro-encapsulated thread lock or thread seal to the same torque as lubricated bolts of the same type.

Document Title: Tightening torque, general	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Tightening torque, general

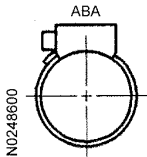
Before fitting pipe fittings, plugs and hoses:

- Make sure that the sealing surfaces are clean, free of pores and scratches and have the prescribed surface texture.
- Check elastic sealing rings for defects.
- Oil threads, tapers, sealing and contact surfaces.

Tightening torque in Nm							
Nm	5 – 10	11 – 50	51 – 100	101 – 200	201 – 400	401 – 1000	1001 –
Tolerance	±1.5	±4	±10	±20	±40	±80	±100

Document Title: Tightening torque, hose clamps	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Tightening torque, hose clamps

	For outside diameter (mm)	Width across flats (mm)	Torque (Nm)
943 469	10 – 13	7	3.0
943 470	(13) – 16	7	3.0
–	(16) – 19	7	4.5
943 472	(19) – 23	7	4.5
943 473	(23) – 27	7	4.5
943 474	(27) – 30	7	4.5
943 475	(30) – 36	7	4.5
943 476	(36) – 43	7	5.5
943 477	(43) – 49	7	5.5
943 478	(49) – 54	7	5.5
943 479	(54) – 64	7	5.5
943 480	(64) – 73	7	5.5
943 481	(73) – 83	7	5.5
943 482	(83) – 93	7	5.5
943 483	(93) – 110	7	5.5
943 484	(110) – 136	7	5.5
943 485	(136) – 163	7	5.5
14 016 541	(163) – 180	7	5.5
14 042 985	(205) – 231	7	5.5
PA – RI			
14 261 827	(39) – 45	5	5
14 261 828	(49) – 55	5	5
14 261 829	(61) – 67	5	5
14 261 830	(73) – 79	5	5

Document Title: Tightening torque, pipe fittings and hoses with DKO connections	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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Tightening torque, pipe fittings and hoses with DKO connections

Tighten DKO connections with an open-ended torque wrench. Each pipe size and pressure class has its own fixed tool.

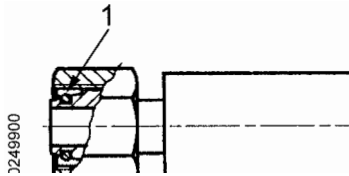
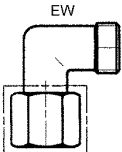
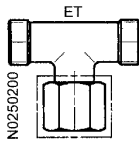


Figure 1

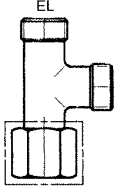
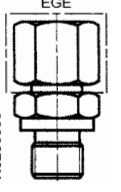
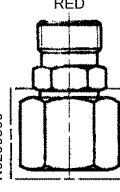
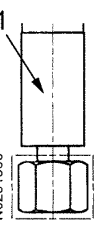
O-ring

1. O-ring

 EW	 ET	Thread (mm)	(inch/)	Pressure class *)	Pipe o.d. (mm)	Width across flats (mm)	Torque (Nm) **)
N0250100	N0250200	M14x1.5		L	8	17	30
14 012 391	14 012 387	M16x1.5		L	10	19	40
14 012 393	14 012 388	M22x1.5		L	15	27	75
14 012 395	14 012 389	M30x2.0		L	22	36	110
14 012 397	14 043 552	M16x1.5		S	8	19	40
14 012 392	–	M18x1.5		S	10	22	50
14 310 009	–	M24x1.5		S	16	30	80
14 012 396	14 211 064	M30x2.0		S	20	36	120
14 012 398	14 024 423	M36x2.0		S	25	46	170
–	–	M36x2.0		S	25	41	170
14 012 399	14 012 390	M42x2.0		S	30	50	250
14 016 972	–	M52x2.0		S	38	60	350

*) L = Low, S = High

**) For sizes 8-L, 10-L and 15-L, old hoses of type PARKER series 43 should have a torque of 15, 25 and 45.

 N0250300	 N0250500	 N0250800	 1. - Hydraulic hose	Thread (inch/mm)	Pressure class **)	Pipe o.d. (mm)	Width across flats (mm)	Torque (Nm) ***)
14 012 383	*)	*)	*)	M14x1.5	L	8	17	30
14 052 740	*)	*)	*)	M16x1.5	L	10	19	40
14 012 384	*)	*)	*)	M22x1.5	L	15	27	75
14 043 547	-	*)	*)	M30x2.0	L	22	36	110
14 215 487	-	-	*)	M16x1.5	S	8	19	40
-	-	*)	-	M18x1.5	S	10	22	50
14 341 816	-	-	-	M24x1.5	S	16	30	80
14 211 065	*)	*)	*)	M30x2.0	S	20	36	120
14 012 385	*)	*)	-	M36x2.0	S	25	46	170
-	-	-	*)	M36x2.0	S	25	41	170
14 012 386	*)	*)	*)	M42x2.0	S	30	50	250
14 016 554	*)	*)	*)	M52x2.0	S	38	60	350

*) There are several different art. nos. for each nominal pipe size.

***) L = Low, S = High

****) For sizes 8-L, 10-L and 15-L, old hoses of type PARKER series 43 should have a torque of 15, 25 and 45.

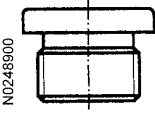
Document Title: Tightening torque, pipe nuts	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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Tightening torque, pipe nuts

Thread (mm)	Pressure class	Pipe o.d. (mm)	Width across flats	Torque (Nm)
M12x1.5	Low	6	14	25
M14x1.5	Low	8	17	35
M16x1.5	Low	10	19	45
M18x1.5	Low	12	22	75
M22x1.5	Low	15	27	110
M26x1.5	Low	18	32	180
M30x2.0	Low	22	36	280
M36x2.0	Low	28	41	300
M45x2.0	Low	35	50	450
M52x2.0	Low	42	60	680
M14x1.5	High	6	17	45
M16x1.5	High	8	19	65
M18x1.5	High	10	22	80
M20x1.5	High	12	24	100
M22x1.5	High	14	27	140
M24x1.5	High	16	30	160
M30x2.0	High	20	36	350
M36x2.0	High	25	46	450
M42x2.0	High	30	50	650
M52x2.0	High	38	60	800

Document Title: Tightening torque, pipe plugs	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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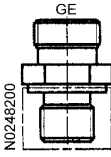
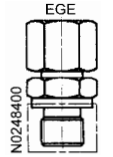
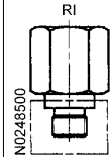
Tightening torque, pipe plugs

	Thread (inch/mm)	Pressure class (bar) *	Hex socket drive (mm)	Torque (Nm) **)
14 023 406	G 1/8	400	5	15
14 023 407	G 1/4	400	6	33
14 023 408	G 3/8	400	8	70
14 023 409	G 1/2	400	10	90
14 023 410	G 3/4	400	12	150
14 023 411	G 1	400	17	250
14 215 723	G 1 1/4	400	22	600
14 215 724	G 1 1/2	400	24	800
14 023 412	G 1 1/4	250	22	500
14 023 413	G 1 1/2	250	24	500
14 024 363	M 10x1.0	400	5	13
14 211 624	M 12x1.5	400	6	30
14 211 623	M 14x1.5	400	6	40
14 211 625	M 16x1.5	400	8	60
14 024 814	M 18x1.5	400	8	70
14 024 233	M 22x1.5	400	10	100
14 340 607	M 26x1.5	400	12	120
14 266 484	M 27x2.0	400	12	150
14 267 223	M 33x2.0	400	17	250
14 212 167	M 42x2.0	250	22	400

*) 250 bar = 25 MPa, 400 bar = 40 MPa.
 **) Prerequisites: Oiled thread and contact surface.

Document Title: Tightening torque, valve connections	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
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Tightening torque, valve connections

 N0248200	 N0248400	 N0248500	Thread (inch/mm)	Pressure class	Pipe o.d. (mm)	Width across flats (mm)	Torque (Nm) **)
14 012 413	14 023 056	*)	G 1/4	Low	8	19	40
14 012 418	14 023 611	*)	G 1/4	Low	10	19	40
14 012 423	14 012 381	*)	G 1/2	Low	15	27	90
14 012 431	–	*)	G 3/4	Low	22	32	180
14 215 486	–	–	G 1/4	High	8	19	54
14 012 428	14 211 062	*)	G 3/4	High	20	32	180
14 012 432	14 012 382	*)	G 1	High	25	41	315
14 012 433	14 042 775	*)	G 1 1/4	High	30	50	450
14 012 436	14 023 190	*)	G 1 1/2	High	38	55	540
14 025 136	–	–	M 12x1.5	Low	8	17	30
14 100 430	14 341 573	–	M 14x1.5	Low	10	19	45
14 213 266	14 340 537	–	M 16x1.5	Low	12	22	54
14 012 424	14 263 962	–	M 18x1.5	Low	15	24	80
14 012 430	–	–	M 26x1.5	Low	22	32	180
14 012 416	–	–	M 14x1.5	High	8	19	54
14 211 561	–	–	M 16x1.5	High	10	22	72
14 266 715	14 266 716	–	M 22x1.5	High	16	27	135
14 211 250	14 211 244	–	M 27x2.0	High	20	32	180
14 025 324	–	–	M 33x2.0	High	25	41	315
14 016 814	14 016 813	–	M 42x2.0	High	30	50	450
–	–	–	M 48x2.0	High	38	55	540

*) There are several different art. nos. and across-flats widths for each nominal pipe size.

***) Prerequisites: Oiled thread and contact surface.

Document Title: Transport data	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Transport data

Boom length	6.65 m	6.65 m	7.25 m	7.25 m
Dipper arm length	2.5 m	3.5 m	3.5 m	4.0 m
Extended digging equipment with bucket, height	3.67 m	3.79 m	3.65 m	3.85 m
Extended digging equipment with bucket, overall length	14.81 m	15.77 m	16.40 m	16.80 m
Extended digging equipment without bucket, height	3.50 m	3.72 m	3.60 m	3.77 m
Extended digging equipment without bucket, overall length	12.95 m	10.18 m	14.56 m	14.95 m
Retracted digging equipment with bucket, height	3.4 m	3.45 m	3.55 m	3.40 m
Retracted digging equipment with bucket, overall length	11.95 m	12.0 m	12.65 m	12.60 m
Retracted digging equipment without bucket, height	3.32 m	3.45 m	3.55 m	3.40 m
Retracted digging equipment without bucket, overall length	11.90 m	12.0 m	12.65 m	12.60 m

CAUTION

These heights apply to the digging equipment. Sometimes the height of the cab exceeds the height of the digging equipment.

Document Title: Travel speed	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Travel speed

Mode	km/h
CAP	3.6
ECO	2.8
HLD	2.8

Document Title: Volumes	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Volumes

Fuel tank	770 l
Hydraulically driven fuel filling pump, capacity	approx. 90 l/min
Cooling system (incl. glycol) of which glycol	72 l 29 l
Hydraulic system, total	770 l
Hydraulic oil tank	530 l
Engine (lubricating oil), incl. filter	29 l
Pump gear	3.4 l
Slew ring	25 l
Slew gear	20 l
Slew gear (grease)	0.7 l
Travel gearbox	13 l

Document Title: Weights	Function Group: 030	Information Type: Service Information	Date: 3/13/2026
Profile:			

Weights

Undercarriage	700 mm*	15 400 kg
Superstructure		12 480 kg
Counterweight		8 500 kg
Base machine		36 380 kg
Boom cylinder		732 kg
Boom	6.65 m	2 900 kg
Boom	7.25 m	3 485 kg
Dipper arm cylinder		597 kg
Dipper arm	2.5 m	1 360 kg
Dipper arm	3.5 m	1 800 kg
Dipper arm	4.0 m	1 990 kg
Bucket cylinder		305 kg
Lever		140 kg
Link		70 kg
Quickfit		300 kg
* Undercarriage equipped with 700 mm track shoes.		

Working weights and ground pressures for complete excavator with: 6.65 m boom, 2.5 m dipper arm, 2 100 l bucket and 8 500 kg counterweight		
Track gauge	Ground pressure	Operating weight
700 mm	68.3 kPa/0.68 kgf/cm ²	45.0 tonnes
900 mm	54.3 kPa/0.54 kgf/cm ²	46.0 tonnes

Document Title: E-tool, NET 00011 Puller for track and slew brake	Function Group: 080	Information Type: Service Information	Date: 3/13/2026
Profile:			

E-tool, NET 00011 Puller for track and slew brake

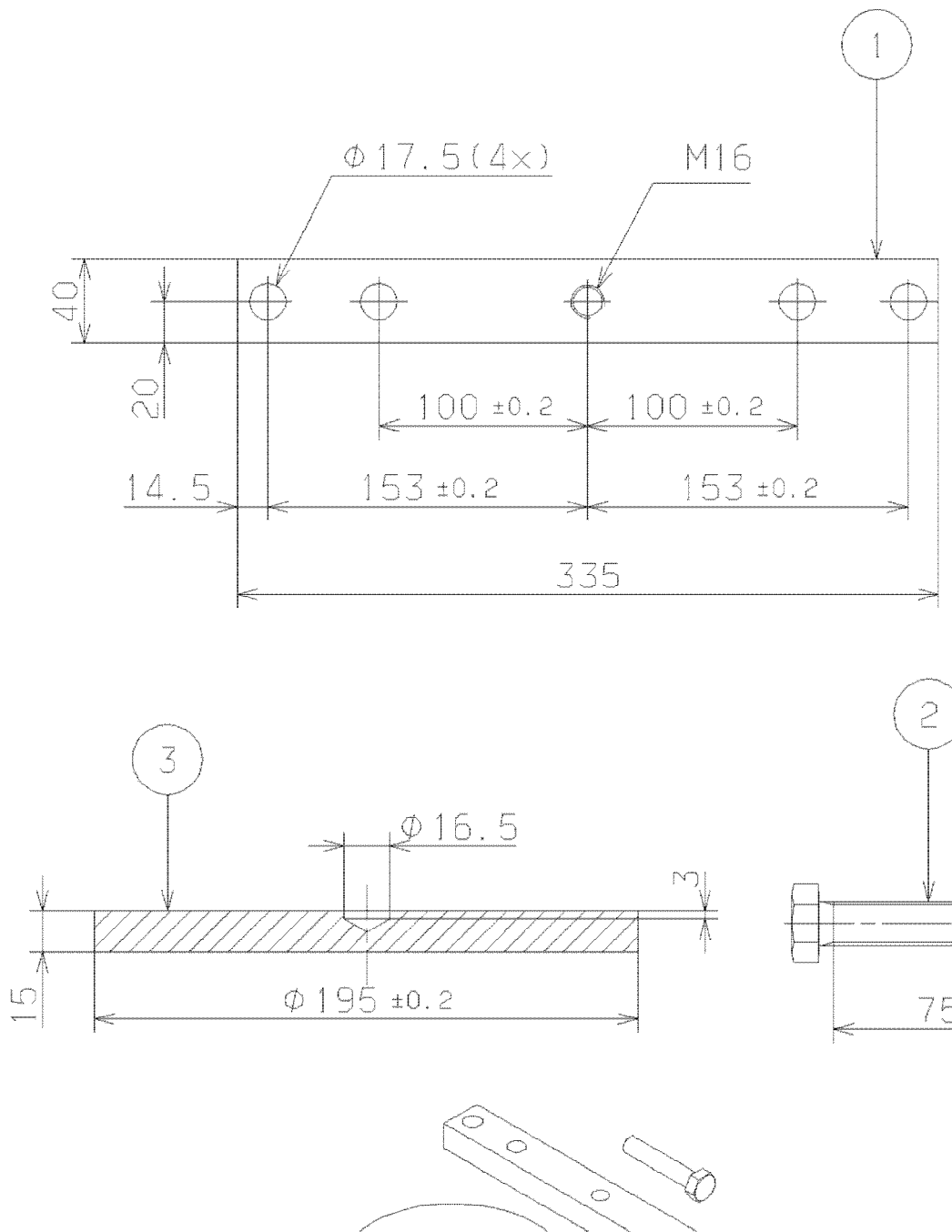


Figure 1
Puller

- 1. Flat bar 40x25, Steel 1312-00 (1)
- 2. Screw M6S 16x80 (1)

3. Washer Ø 200, Steel 2172-00 (1)

Document Title: E-tool, NET 00002 Disassembly tool	Function Group: 080	Information Type: Service Information	Date: 3/13/2026
Profile:			

E-tool, NET 00002 Disassembly tool

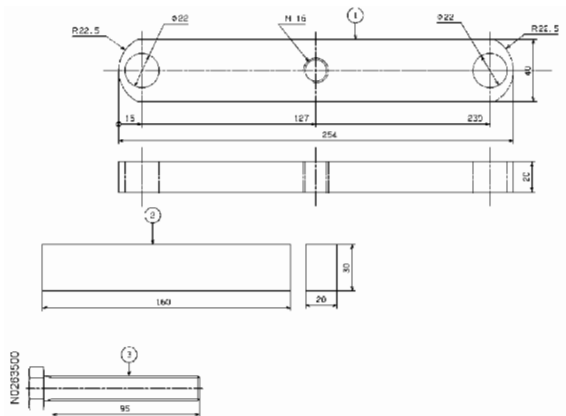
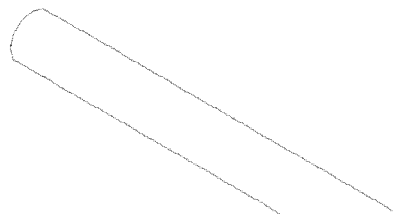
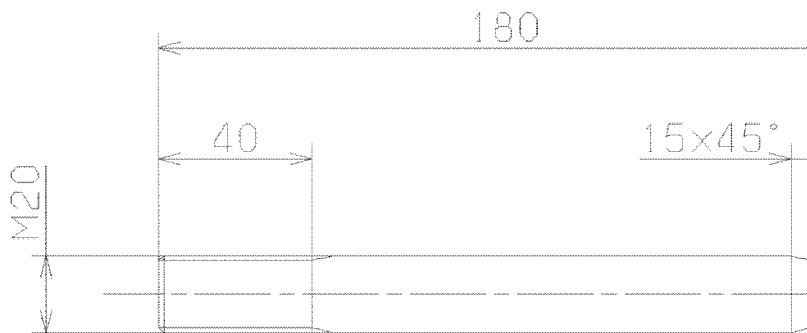


Figure 1

Disassembly tool

1. Flat bar 40x20, Steel 1312-00, (1)
2. Flat bar 30x20, Steel 1312-00, (1)
3. Screw M6S 16x100, (1)

Document Title: E-tool, NET 00005 Guide pin for travel motor	Function Group: 080	Information Type: Service Information	Date: 3/13/2026
Profile:			

E-tool, NET 00005 Guide pin for travel motor

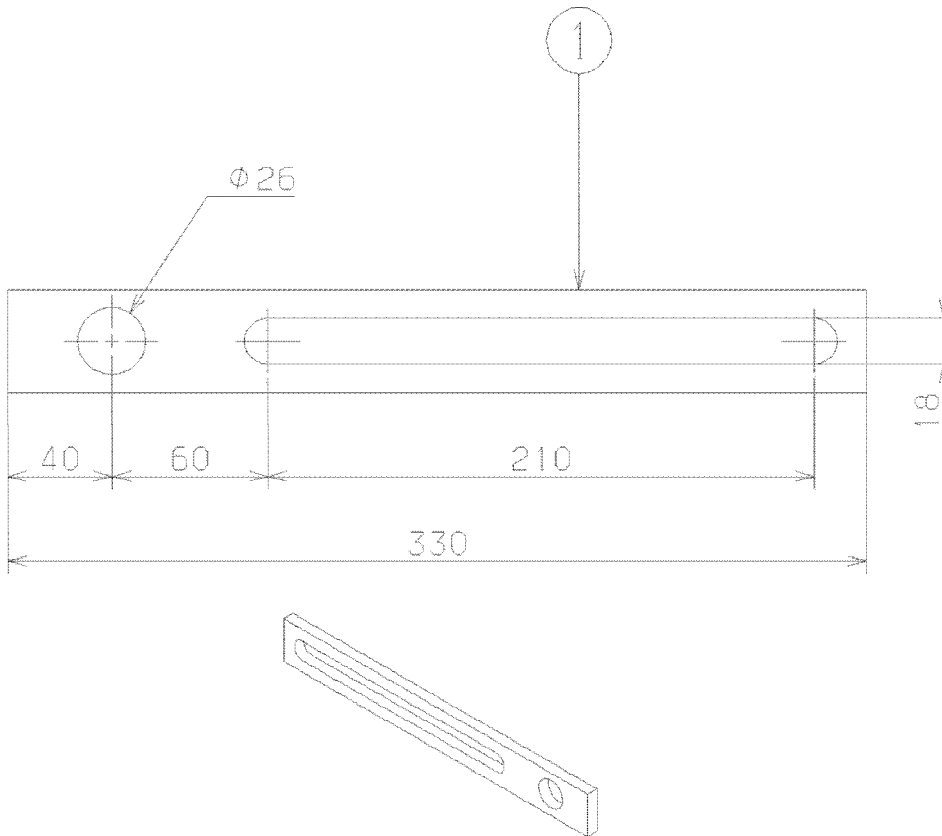
3700

Figure 1
Guide pin

1. Round bar $\varnothing 20$, Steel 2172-06 (2)

Document Title: E-tool, NET 00009 Support	Function Group: 080	Information Type: Service Information	Date: 3/13/2026
Profile:			

E-tool, NET 00009 Support



NO260300

Figure 1
Support

1. Flat bar 40x10, Steel 1312-00 (1)

Document Title: E-tool, NET 00010 Puller for track brake	Function Group: 080	Information Type: Service Information	Date: 3/13/2026
Profile:			

E-tool, NET 00010 Puller for track brake

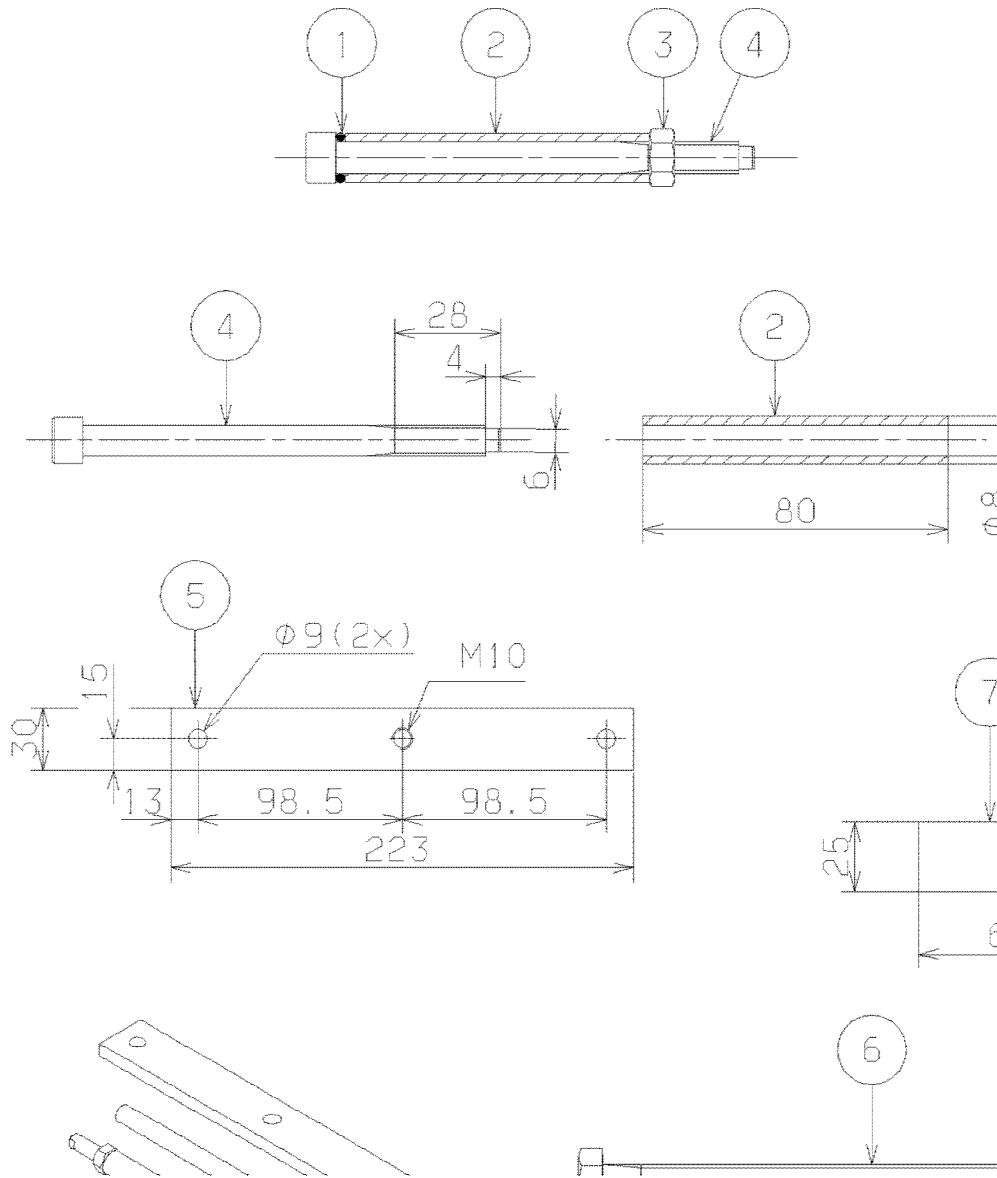


Figure 1
Puller

1. O-ring 13.1x2.4 (2)
2. Round bar \varnothing 16, Steel 2172-00 (2)
3. Nut M8, (4)
4. Bolt MC6S 8x110 (2)
5. Flat bar 30x8, Steel 1312-00, (1)
6. Screw M6S 10x130 (1)
7. Flat bar 25x5, Steel 1312-00, (1)