

**SHANDONG TAVOL MACHINERY CO.,LTD**  
**8F+2R 304-504 series tractor main technical specifications**

Model		304	404	504	
Complete machine parameters	Type		4×4 wheel type		
	Power output shaft maximum		20	25	31
	Calibrated traction force kN		6.7	8.4	10.5
	Structure mass kg		1265	1295	1295
	Mass distribution kg	Front Axle	590	608	608
		Rear Axle	830	912	912
	Minimum use mass kg		1420	1520	1520
	Counterweigh t kg	Front		45	
		Rear		48	
	Wheelbase mm	Front Wheel		1250	
		Front wheel		Non-adjustable	
		Rear Wheel		1000-1300	
		Rear wheel		Steplessly adjustable	
	Wheelbase mm			1885	
	Radius of steering circle	Unilateral		≤4.0	
		Single-sided		≤3.5	
	Minimum ground clearance and		295 (Bottom of front axle oil plug)		
	Dimension mm	Long		3315	
		wide		1570	
		High (to		2010	
High (to			1500		
High (to safety			2230		
Theoretical speed km/h	Low-speed gear	I	1.70/1.76		
		II	2.58/2.68		
		III	4.05/4.21		
		IV	5.59/5.80		
	High-speed gear	I	7.84/8.14		
		II	11.95/12.40		
		III	18.74/19.46		
		IV	25.84/26.82		

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Model		304	404	504
Theoretical speed km/h	Invert I	2.23/2.32		
	Reverse II	10.32/10.71		
	Note: This theoretical speed is calculated based on the calibrated engine speed of 2300r/min and the rear drive wheels of 9.5-24/11.2-24.			
Safety frame or cab type/model		Folding		
Engine	Engine and clutch connection method	Direct connection		
	Air filter type/model	Three-stage oil bath type, MY-120×50/MY-125×75/MY-160×80/MY-130×100/MY-155×105		
	Lubrication method	Pressure and splash compound		
	Cooling method	Forced water cooling		
	Starting method	Electric start		
	Emission level	Non-road National II		
	Crankshaft rotation direction (facing the power output)	Counterclockwise		
Fuel Tank	Model	250.50.011		
	Volume L	25		
	Design pressure (kpa)	30		
Model		304	404	504
Muffler	Anechoic chamber size (length × width × thickness)	465×Φ124		
	Muffler weight kg	4.48		
Drive line	Clutch	Single piece, dry type, coil spring compression type, normally combined, single acting		
	Transmission	(4+1)×2 combination type		
	Central drive (front/rear)	Spiral Bevel Gear Type / Spiral Bevel Gear Type		
	Differential (front/rear)	Closed type, 2 planetary bevel gears / Closed type, 2 planetary bevel gears		
	Differential Lock	Dental Inlay		
	Brakes	Built-in, single-pole straight cylindrical gear		
	Trailer Brake Manipulation	Ventilated, pneumatic brake		
Final drive (front/rear)	Spiral bevel gear pair / straight cylindrical gear external mesh type			
Working device	Hydraulic Lifter	Type	Semi-split type	
		Tillage depth adjustment method	Integrated regulation	

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		Maximum lifting force KN at 610mm	4.95	6.62	8.3
		Safety valve opening pressure Mpa	17±0.5		
		Sensing method	Upper Tie Rod Sensing		
		Hydraulic oil pump	CBN-E314 Gear Pump		
		Dispenser	External unloading control type		
		Hydraulic cylinder type	Horizontal single acting plunger type		
		Hydraulic cylinder bore mm	63 or 70		
		Hydraulic cylinder stroke mm	100		
Suspension mechanism	Type	Rear-mounted, three-point suspension I class			
	Upper suspension point pin hole diameter mm	19	+0.51		
			+0.30		
	Lower suspension point pin hole diameter mm	22	+0.73		
+0.40					

Model		304		404		504		
Working device	Power output shaft	Type	Rear freestanding					
		Rotational speed r/min	540-1000/540-760(option)					
		Spline Size mm	8D-28.4	0	×38	-0.032	×6	-0.240
				-0.28		-0.10		-0.300
		or 6D-28.91±0.05×34.79±0.06×8.69		-0.09 -0.16				
Steering system		Rack	Rackless					
		Front Suspension	Rigid suspension type					
		Front Axle	Bevel gear type drive axle					
	Tires	Front Wheel Specifications	6.00-16/6.50-16			6.50-16		
		Rear Wheel Specifications	9.5-24			11.2-24		

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	Tire pressure Kpa	Front Wheel	Field: 194-245 Transport: 220-245
		Rear Wheel	Field: 98-109 Transportation: 98-120
	Steering method		Hydraulic steering
	Steering		Mechanical internal feedback happy non-responsive hydrostatic steering Hydraulic pump model: HLCB-D0606 left-handed constant flow pump Hydraulic steering type model: cycloidal closed-core full hydraulic steering/BZZ-80
	Front beam mm		4-8
	Front wheel camber		2°
	Main sales inward leaning		10°
	Main pin backward tilt		0°

Model		304	404	504
Instrumentation	Oil pressure gauge	YT-102(0-10)Mpa		
	Water temperature gauge	WT-2(0-100)°C		
	Ammeter	307(±30)A		
	Air pressure gauge	YT-102(0-10)Mpa		
Electrical equipment	Electrical system	12V single-wire system, negative override		
	Generators	JF11A, 14V, 350W		
	Starter motor	QD1308J, 12V, 2.5kw or QD1315D, 12V, 3.2kw or QDZ157, 12V, 3.2kw		
	Generator regulator	FJ70 or transistor regulator JFT144 (JFT149)		
	Battery	6-QW-120MF		
	Headlights	Taiwo-350.47.052 12V, 60/55w		
	Front turn signal	12V, 21w, one on each side		
	Rear headlights	Jeep type 12V, 21w		
Main refill volume	Engine cooling system L	10		
	Engine oil sump L	8-9		
	Injection pump L	0.3		
	Air Filter L	0.5		
	Transmission L	Rear-wheel drive10 Four-wheel drive11.8		
	Final Drive L	1.6×2		
	Lifter L	5.5-6.5		
	Front drive axle L	6 (four-wheel drive)		

**SHANDONG TAVOL MACHINERY CO.,LTD**  
**8F+8R 504-704 series tractor main technical specifications**

Model		Unit	504	604	704
Type			4×4 wheel type	4×4 wheel type	4×4 wheel type
Calibrated traction		kN	10	11	14
Power output shaft maximum power		kW	31	37	43
Size	Long (including after front counterweight hanging)	mm	3910	3910	3910
	Width (common wheelbase standard outside of the tire)	mm	1720		
	High (to the top of the silencer.) Calibrated tires)	mm	2030(Muffler optional)		
	High (to steering wheel)	mm	1680		
	High (with cab to driver) roof of the driving room)	mm	2600		
Wheel Distance	Front Wheel	mm	850/1100/1200/1300/1400		
	Front wheel adjustment method		4WD non-adjustable		
	Rear Wheel	mm	850, 1100, 1200, 1300, 1400 (factory 1200)		
	Rear wheel adjustment method		Limit adjustable or without Limit adjustable		
Axis distance		mm	1700	1700	1700
Ground Clearance	Minimum Ground Clearance	mm	380 (rear traction plate)		
	Agronomy Gap	mm	Four-wheel drive model:350		

Minimum steering Radius	Use of one-sided braking	m	Two-wheel drive:≤3.2Four-wheel drive:≤3.6		
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	No one-sided braking	m	Two-wheel drive:≤3.4Four-wheel drive:≤3.8		
Safety frame or cab type/model			Two-post type/704.46.001		
Structure Quality	No cab	kg	1965	2065	2065
	With cab		2165	2265	2265
Minimum Use quality	No cab	kg	2140	2270	2270
	With cab		2340	2440	2440
Quality Distribution	Front Wheel	No cab at the front wheel	945	970	970
		Front wheel with cab	1015	1065	1065
	Rear Wheel	Rear wheel without cab	1195	1300	1300
		Rear wheel with cab	1325	1375	1375
Ballast	Front Ballast	kg	48		
	Rear Ballast		1. 48		
Engine	Type		Direct connection		
	Brand		YTO		
	Cooling Type		Inline, four-stroke, direct injection, water-cooled		

Tank	Model		704.50.011		
	Volume	L(liters)	60		
	Design pressure	kpa	200		
Muffling	Size of muffling chamber	mm	Φ136×515		
	Weight	kg(kg)	6.3		
Transmission	Clutch type		Dry double acting		
	Transmission type	shift side style	4×2× (1+1) composition, shift		
	Rear Axle	Central	Spiral Bevel Gear Sub		

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		drive	
		Differentials	Quad planetary gear, closed type
		Differential Lock	Column pin type
		Rear final drive	Planetary gear type
	Precursors Dynamic Bridge	Drive Shaft	Mid-mounted drive shaft
		Front central drive	Enclosed bevel gear type
		Front differential	Closed type, two planetary bevel gears
		Front final drive	Spiral Bevel Gear
Engine	Rack	Rackless	
	Front Suspension	Rigid suspension type	
	Front Axle	Telescopic casing type	

Engine	Tires Pneumatic pressure	Front Wheel kpa	The front wheel is the guide wheel model: 167-186 (field work)/225-245 (transport work), the front wheel is the driving wheel model: 118-138 (field work)/167-168 176 (Transport operations)		
		Rear Wheel kpa	118-138 (field operations) 167-176 (transport operations)		
	Tires	Front Wheel	6.5-16	7.5-16	8.3-20
		Rear Wheel	11.2-24	12.4-28	
		Optional front wheel	7.5-16 Paddy Tires		
Optional rear wheel	11.2-28 Paddy Tires				
Moving	Travel brake system		Dry shoe brakes		
	Parking brake		Manipulator brake		
	Trailer Brake Manipulation		Ventilated, pneumatic brake		
Steering system	Mode		Hydraulic front wheel steering		
	Steering form		Cycloidal rotary valve type fully hydraulic steering gear		
PTO	Type		Semi-independent		

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		Specification / Number of Splines		I type (Φ35×6 teeth or Φ38×8 teeth)		
		Rotational Speed r/min(rev/min)		540/760 or 540/1000		
Working device		Hydraulic system type		Semi-split type		
		Hydraulic oil pump		Gear pump,312-PHL/CBJ30-F10HZ,Displacement:10ml/r(ml/rev) CBN-E316,Displacement:16 ml/r(ml/rev)		
Working device	Cylinder	Diameter x Stroke	mm	80 × 110		
		Type		Single role		
	Suspension Device	Type		Rear-mounted three-point suspension		
		Category		Class I		
		Adjustment method		Force adjustment, position adjustment, individual control of force and position		
		Hanging point size	mm	Coupling hole×width:Upper suspension pointΦ19.3×44Lower suspension pointΦ22.4×35		
		Maximum Force (after suspension point) at 610mm)	kN	8.8	10.5	12
	Safety valve safe opening pressure		Mpa	17.5-18		
	Hydraulic Output	Device		Simple hydraulic output		
		Quantity		1 pair or 2 pairs (optional)		
Specification			M22×1.5			
Pulling and towing	Pulling	Type		Pendulum type (optional)		
		Height from the ground	mm	344		
	Towing device			U-shaped hook (optional)		
Driver's seat			Mechanical suspension, PVC surface, height, front and back adjustable			
Electrical Instrumentation System	Electrical system			12V negative hitch single wire system		
	Motor Machine	Model		See engine manual		
		Voltage		14V		
		Power		0.35, 0.5, 0.75		

# SHANDONG TAVOL MACHINERY CO.,LTD

## Theoretical speed of tractor Unit:km/h

Model	8F+8R	
	Forward gear	reverse gear
Low I	2.46	2.15
Low II	3.56	3.12
Low II I	4.86	4.26
Low IV	7.56	6.62
High I	10.64	9.33
High II	15.43	13.53
High III	21.06	18.47
High IV	32.73	28.69

Notes:

- 1、 The above table value is the theoretical speed when the engine is 2400 r/min (rpm) and with 12.4-28 standard rear tires:
- 2、 If you choose to install other rear tires, you need to multiply the corresponding coefficient a on the basis of the above table values:
- 3、 The parameters in the technical specification table are the values under the standard configuration.

**SHANDONG TAVOL MACHINERY CO.,LTD**  
**12F+12R 504-1004 series tractor main technical specifications**

Model		Unit	504	604	704	804	904	1004
Type			4×4	4×4	4×4	4×4	4×4	4×4
Calibrated traction		kN	12	11	14	17	13.5	15
Power output shaft maximum power		kW	31	37	43	50	43.6	43.6
Size	Long (including front ballast )	mm	3910	3910	3910	3910	3910	3910
	Width ( outside of the tire)	mm	1720					
	High (to the top of the silencer.)	mm	2030(Muffler optional)					
	High (to steering wheel)	mm	1680					
	High (with cab to driver) roof of the driving room)	mm	2720					
Wheel Distance	Front Wheel	mm	1350/1450 /1550					
	Front wheel adjustment method		4WD non-adjustable					
	Rear Wheel	mm	1300, 1400, 1500 (factory 1300)					
	Rear wheel adjustment method		Stepped adjustable or stepless adjustable					
Axis distance		mm	2016	2040	2016	2040	2040	2040
Ground Clearance	Minimum Ground Clearance	mm	400 (rear traction plate)					
	Agronomy Gap	mm	Four-wheel drive model:370					
Min. steering Radius	Use of one-sided braking	m	Two-wheel drive:≤3.6Four-wheel drive:≤4					
	No one-sided braking	m	Two-wheel drive:≤4.0Four-wheel drive:≤4.6					

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Safety frame or cab type/model		Two-post type / 904.46.001							
Structure Quality	No cab		kg	1965	2065	2065	2065	1995	2165
	With cab			2165	2265	2265	2265	2210	2365
Min. Use quality	No cab		kg	2140	2270	2270	2270	2170	2340
	With cab			2340	2440	2440	2440	2370	2540
Quality Distribution	Front Wheel	no cab	kg	945	970	970	868	868	936
		with cab		1015	1065	1065	948	948	1016
	Rear Wheel	no cab	kg	1195	1300	1300	1302	1302	1404
		with cab		1325	1375	1375	1422	1422	1524
Ballast	Front Ballast		kg	144					
	Rear Ballast			60					
Engine	Type		Direct connection						
	Brand		YTO						
	Criminal style		Inline, four-stroke, direct injection, water-cooled						

Tank	Model		904.50.011						
	Volume		L	40					
	Design pressure		kpa	200					
Muffling	Size of muffling chamber(L×W)		mm	Φ136×515					
	Weight		kg	6.3					
Transmission	Clutch type		Dry double acting						
	Transmission type/shift side style		4×3× (1+1)Composition type,Engagement set shift						
	Rear Axle	Central drive		Spiral Bevel Gear Sub					
		Differentials		Quad planetary gear, closed type					
		Differential Lock		Column pin type					
Rear Final		Planetary gear type							

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	Front	Drive		
		Drive Shaft		Mid-mounted drive shaft
		Front central drive		Enclosed bevel gear type
		Front differential		Closed type, two planetary bevel gears
		Front final drive		Spiral Bevel Gear
Moving Department		Rack		Rackless
		Front Suspension		Rigid suspension type
		Front Axle		Telescopic casing type

	Tire pressure	Front Wheel	kpa	The front wheel is the guide wheel model: 167-186 (field work)/225-245 (transport work), the front wheel is the driving wheel model: 118-138 (field work)/167-168 176 (Transport operations)			
		Rear Wheel	kpa	118-138 (field operations) 167-176 (transport operations)			
Moving Department	Tires	Front Wheel		6.0-16	8.3-20	6.0-16	8.3-24
		Rear Wheel		12.4-28		12.4-32	
		Optional front wheel		8.3-20 Paddy Tires		8.3-20 Paddy Tires	9.5-24
		Optional rear wheel		11.4-28 Paddy Tires		11.4-28 Paddy Tires /13.6-28	14.9-30
		Travel brake system		Two-piece oil bath disc brake			
		Parking brake		Manipulator brake			
		Trailer Brake Manipulation		Ventilated, pneumatic brake			
Steering		Model		Hydraulic front wheel steering			
		Steering form		Cycloidal rotary valve type fully hydraulic steering gear			
PTO		Type		Semi-independent			
		Specification / Number of Splines		I type (Φ35×6 teeth or Φ38×8 teeth)			

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	Rotational Speed	r/min	540/760 or 540/1000				
Working	Hydraulic system type	One	Semi-split type				
	Hydraulic oil pump		Gear pump,312-PHL/CBJ30-F12HZ,Displacement:12ml/r(ml/rev) CBN-E316,Displacement:16 ml/r(ml/rev)				
	Dispenser		Slide valve type				
Work do Inst all place	Cylinder	Diameter x Stroke	mm	95 × 120			
		Type		Single role			
	3 point linkage	Type		Rear-mounted three-point suspension			
		Category		Class			
		Adjustment method		Force adjustment, position adjustment, individual control of force and position			
		Hanging point size	mm	Coupling hole×width:Upper suspension pointΦ19.3×44Lower suspension pointΦ22.4×35			
	Maximum Force at 610mm	kN		>9.1	9.5	6	13.5
	Safety valve safe opening pressure	Mpa	17.5-18				
	Hydraulic Output	Device	Simple hydraulic output				
		Quantity	1 pair or 2 pairs (optional)				
Specification		M22×1.5					
Pulling and towing Car	Pulling Device	Type	Pendulum type (optional)				
		Height	mm	344			
	Towing device		U-shaped hook (optional)				
Driver's seat			Mechanical suspension, PVC surface, height, front and back adjustable				
Electrical Instrumentation System	Electrical system			12V negative hitch single wire system			
	Hair Electricity Machine	Model		See engine manual			
		Voltage		14V			
	Power		0.35, 0.5, 0.75				

# SHANDONG TAVOL MACHINERY CO.,LTD

## Theoretical speed of tractor Unit:km/h

Model	12F+12R	
	Forward gear	reverse gear
Low I	2.46	2.15
Low II	3.56	3.12
Low II I	4.86	4.26
Low IV	7.56	6.62
Medium I	6.19	5.42
Medium II	8.98	7.87
Medium III	12.25	10.74
Medium IV	19.03	16.68
High I	10.64	9.33
High II	15.43	13.53
High III	21.06	18.47
High IV	32.73	28.69

Notes:

- 1、 The above table value is the theoretical speed when the engine is 2400 r/min (rpm) and with 12.4-28 standard rear tires:
- 2、 If you choose to install other rear tires, you need to multiply the corresponding coefficient a on the basis of the above table:  
With 11-28 water field rear tires, a = 1.04; with 14.9-30 ordinary rear tires, a = 1.123;
- 3、 The parameters in the technical specification table are the values under the standard configuration.

# SHANDONG TAVOL MACHINERY CO.,LTD

## 16F+8R 904-1504 Tractor Main Technical Specifications

Model		904	1004	1204	1504		
Type		four × 4-wheel type					
appearance Dimension (mm)	Long (including rear suspension)		4300	4300	4550	4750	
	wide		2350	2280	2300	2300	
	high	To steering wheel		1950	1950	1950	2040
		To the top of muffler (optional)		2900 (silencer optional)			
		To safety rack top (without cab)		2960			
To cab roof (with cab)		3000					
Wheel base (mm)		2200	2200	2475	2475		
Track width (mm)	front wheel		1650、1750、1850、1950				
	rear wheel		1620~2020 (ex factory 1620)				
Track adjustment mode (front/rear)		Stepless adjustable/stepless adjustable					
Minimum ground clearance (ground clearance) (mm)		365 (lower end of front drive axle oil plug)			400		
Turning circle radius (m)	No braking		≤4.8		≤5.8		
	Unilateral braking		≤4.3				
Structure mass (kg)	Model with cab		3880	3990	3990	4070	
	Vehicle without cab		3730	3645	3645	3645	
Minimum mass (kg)	Model with cab		4110	4220	4220	4300	
	Vehicle without cab		3860	3970	3970	3970	
Mass distribution (kg)	Model with cab	front	1650	1688	1688	1640	
		after	2460	2532	2532	2660	
	Vehicle without cab	front	1550	1588	1588	1588	
		after	2310	2382	2382	2382	
Ballast	Front Ballast		Maximum 200	Maximum 200	Maximum 200	350 max	
	Rear Ballast		490 max				

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Rated traction force (kN)		23.7/23.7/28/32	
Power of power take-off (kW)		60.8/63.95/75/87	
clutch		Monolithic, dry, double acting	
Transmission type		four × (2+1) combined, 8 forward gears, 4 reverse gears, 4 when creeper gear is selected × (2+1) × 2, 16 forward gears, 8 reverse gears	
Gearbox shifting mode		Both the main and auxiliary gearshifts are gear shifting with straight teeth engaging sleeve	
rear axle	Central drive	Spiral bevel gear	
	differential mechanism	Closed, 4 planet bevel gears	
	Differential lock	Meshing sleeve type	
	Rear final drive	Single stage planetary gear type	
Drive train	Front drive axle	Front central drive	Spiral bevel gear
		Front Differential	Closed, 2 planet bevel gears
		Front final drive	Single stage planetary gear type
	Transfer case		Spur gear with gear shifting mechanism



# SHANDONG TAVOL MACHINERY CO.,LTD

Adjustment mode	Comprehensive adjustment and floating control of force and position
Type/model of hydraulic oil pump	Gear pump CBT-E325FL/CBN-G325
cylinder diameter × Stroke (mm)	one hundred and ten × one hundred and twenty-eight
Opening pressure of safety valve (MPa)	16±0.5
Maximum lifting force of the system (KN) (610mm behind the suspension point)	16.8/17.7/25/29
Hydraulic output device	Two or three groups of multi way valve outputs
Output flow (L/min)	60
Power take-off type/speed (r/min)	Rear independent 540/1000 (760/1000 optional)
PTO shaft diameter (mm) and tooth profile	Φ 38, 8-tooth rectangular spline shaft (optional Φ 35, 6-tooth rectangular spline shaft or Φ 35, 21 tooth involute spline shaft)
Rotation direction of power take-off shaft	Clockwise (viewed from the rear of the tractor)
Traction device type	Optional tilting drawbar, adjustable drawbar position
Diameter of traction pin (mm)	Φ 30
Height of traction pin (mm)	460
Height of towing hook (mm)	654
Hook pin diameter (mm)	Φ 40

# SHANDONG TAVOL MACHINERY CO.,LTD

## 16F+8R 1404-1804 tractor main technical specifications

Model		1404	1504	1604	1804		
Type		4×4 wheel type					
Shape Size (mm)	Long (including rear suspension)		5050	5050	5050	5050	
	wide		2180	2180	2180	2180	
	High	To steering wheel		1950	1950	1950	1950
		To silencer (optional) top		2900 (silencer optional)			
		To the top of the safety frame (without cab)		2960			
To the top of the cab (with cab)		3000					
Wheelbase (mm)		2520	2520	2520	2520		
Wheelbase (mm)	Front Wheel		1650, 1688, 1754, 1790, 1858, 1894				
	Rear Wheel		1620~2290				
Wheelbase adjustment method (front/rear wheel)		Stepped adjustable / stepless adjustable					
Minimum ground clearance (ground clearance part) (mm)		425 (Lower end of front drive axle oil plug)					
Radius of steering circle (m)	No braking		≤4.8		≤5.8		
	Single-sided braking		≤4.3				
Minimum usable mass (kg)	Models with cabs		4650	4800	4800	4800	
Counterweight (kg)	Front counterweight		440	440	440	440	
	Rear counterweight		160				
Rated tractive force (kN)		26/28/30/34					
Power output shaft power (kW)		87.6/93.8/100/112.6					
Clutch		Single piece, dry type, double acting					
Transmission type		4×(2+1) combination type, 8 forward gears, 4 reverse gears 4×(2+1)×2, 16 forward gears, 8 reverse gears when optional crawl gear is installed					
Transmission shift mode		Both primary and secondary gears are shifted with a helical gear set					
Rear Axle	Central drive		Spiral Bevel Gear				
	Differentials		Closed type, 4 planetary bevel gears				
	Differential Lock		Engagement sleeve type				
	Rear final drive		Single-stage planetary gear type				
Driveline	Front drive axle	Front central drive	Spiral Bevel Gear				
		Front differential	Closed type, 2 planetary bevel gears				
		Front final drive	Single-stage planetary gear type				
	Splitter box		Straight cylindrical gear with gearshift mechanism				

# SHANDONG TAVOL MACHINERY CO.,LTD

Electrical instrumentation system	Cab or safety frame	Model	1804	
		Type	Six-post, safety cab	
	Electrical system		12V negative latching two-wire system	
	Battery		6-QW-120/6-QA-180,12V,120/180Ah maintenance-free	
	Headlights		80 headlight assembly (12V,45/40W)	
	Front turn signal		12V,21W,2pcs	
	Rear combination light		Display width 10W, steering 21W, braking 21W, reflector (red) each 2	
	Rear working light		12V,50W,2pcs	
Trailer sockets		7-hole trailer socket		
Muffler	Anechoic chamber size (length × width × thickness) or (diameter × length) (mm)		Φ120×560/Φ135×850 (Taiwo-1100, 1104) Long shaft 290 short shaft 140 cavity length 600 (Taiwo-1204A)	
	Muffler weight (kg)		7.68/9.26 (Tevo-1204)/13.6 (1404)	
Fuel Tank	Model		Main fuel tank 800.50.015 Sub fuel tank 800.50.011	
	Design working pressure (kPa)		200	
	Volume (L)		150	
Perfusion capacity	Heat sink (L)		14	
	Engine oil sump (L)		17	
	Oil bath air filter (L)		Fill to the specified oil level as required	
	Oil for hydraulic steering (L)		2.5	
	Oil for brake (L)		0.6	
	Driveline oil (L)		38	
	Oil for lifter (L)		17	
	Front drive axle center drive (L)		6.1	
Front drive axle final drive (L)		1.2 (per side)		
Number of gears			8F+4R or 16F+8R (optional crawler gear)	
			Ordinary grade	crawl gear
Forward	low-grade	I	6.49	1.51
		II	8.63	2.01
		III	11.2	2.61
		IV	21.77	5.08
	high grade	I	9.6	2.24
		II	12.77	2.98
		III	16.57	3.87
		IV	32.23	7.52
reverse gear		I	9.88	2.3
		II	13.15	3.07
		III	17.05	3.98
		IV	33.16	7.74
Engine and clutch connection method			20	Direct connection

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		Rack	Rackless
		Front Axle	/
		Front drive axle transfer shaft	Mid-mounted drive shaft
Tire pressure (kPa)	Shipping	Front Wheel	180~250
		Rear Wheel	170~200
	Field work	Front Wheel	180~220
		Rear Wheel	170~200
Tire specification	Front Wheel		12.4-24
	Rear Wheel		16.9-34
Front wheel alignment	Front wheel front beam (mm)		1~5
	Front wheel camber		1°
	Main Pin Inclination		7°30'
	Main pin backlash angle		10°
		Front axle (bridge) swing angle	11°
		Steering form	Independent oil circuit, fully hydraulic front wheel steering
		Steering oil pump	HLCB-D14/16(right) constant flow overflow pump
		Displacement (ml/r)	16
		Flow rate (L/min)	14
		Safety valve setting pressure (MPa)	12.5
		Hydraulic steering	BZZ1-E160C fully hydraulic steering gear
		Diameter of steering cylinder (mm)	55
		Steering cylinder stroke (mm)	200
		Maximum front wheel turning angle	50°
		Driving Brake	Hydrostatic, disc type (double piece), human operated lower pedal
		Parking brake	Handle operated, multi-friction surface mechanical compression oil bath type
Working device	Hydraulic suspension system form		Semi-discrete or discrete
	Suspension type		Rear-mounted three-point suspension
	Suspension Category		Category 2
	Adjustment method		Integrated force level adjustment, floating control
	Hydraulic oil pump type/model		Gear Pump CBT-E325FL /CBN-G325
	Cylinder diameter × stroke (mm)		110×128
	Safety valve opening pressure (MPa)		16±0.5
	Maximum lifting force of the system (KN)		24.8/26.5/28.3/31.8

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(at 610mm after the suspension point)	
Hydraulic output device	2 or 3 groups of multi-valve outputs
Output flow rate (L/min)	72.6
Power output shaft type/speed (r/min)	Rear independent 760/850 (optional 540/760, 540/1000, 760/1000)
Power output shaft shaft diameter (mm) and tooth shape	Φ38, 8-tooth rectangular spline shaft (Φ35, 6-tooth rectangular spline shaft or Φ35, 21-tooth involute spline shaft can be installed as an option)
Power output shaft rotation direction	Clockwise (from the rear of the tractor)
Traction device type	Optional pendulum traction bar, adjustable traction bar position
Traction pin diameter (mm)	Φ30
Traction pin height (mm)	460
Tow hook height (mm)	654
Hook pin diameter (mm)	Φ40

**SHANDONG TAVOL MACHINERY CO.,LTD**  
**16F+16R 1804-2604 tractor main technical specifications**

Projects		Unit	1804	2004	2204	2404	2604
Type		/	4×4 wheel type				
Calibrated traction		kN	35	38	42	46	50
Power output shaft maximum power		kW	112.6	125	137	150	162
Dimension	Long	mm	5350				
	wide	mm	2200 (single)	2200 (single) 3400 (double)			
	Up to the steering wheel	mm	2150	2150	2150	2320	2320
High to silencer		mm	3100				
Up to the top of the cab		mm	3030	3030	3030	3300	3300
Wheelbase		mm	2668				
Wheelbase	Front Wheel	mm	1900 from the factory (see chapter 3.11.1 for adjustment range)				
	Front wheel adjustment method	/	Stepped adjustable				
	Rear Wheel	mm	Single tire model: 1700-2300 (1750 ex factory)				
			Twin tire model: 2300		Twin tire model: 2800		
	Rear wheel adjustment method	/	Infinitely adjustable (when single tire), non-adjustable (when dual tire)				
Minimum Ground Clearance		/	400 (bottom of traction plate)			480 (bottom of traction plate)	
Minimum turning circle radius	Single-sided braking	m	≤6.2				
	No unilateral braking	m	≤7.0				
Structural quality		kg	5800	6060		6020 (double) 6830 (double)	
Minimum useable mass		kg	6440	6400 (single) 7300 (double)		6660 (single) 7470 (double)	
Quality distribution	Front Wheel	kg	2576	2576 (single) 2600 (double)		2664 (single) 2340 (double)	
	Rear Wheel	kg	3864	3864 (single) 4700 (double)		3996 (single) 5130 (double)	
Ballast (Optional)	Front Ballast	kg	780				
	Rear Ballast	kg	480 (when singleton)				

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Engine and clutch coupling form		/	Direct Connect		
Cab or safety frame	Model	/	Tevo-2604		
	Type	/	Six-post, safety cab		
Fuel Tank	Model	/	2404.501		
Transmission	Clutch		/	Dry, single piece, double acting	
	Transmission		/	4×4×(1+1) composition type, synchronizer + engagement set shift	
	Rear Axle	Central drive	/	Spiral Bevel Gear Type	
		Differentials	/	Closed type, 4 planetary bevel gears	
		Differential Lock	/	Column pin type	
Rear final drive		/	Single-stage planetary gear		
Transmission	Front Axle	Drive Shaft	/	Mid-mounted drive shaft	
		Front central drive	/	Spiral Bevel Gear	
		Front differential	/	Closed type, 4 planetary bevel gears	
		Front final drive	/	Single-stage planetary gear	
Walking system	Frame type		/	Rackless	
	Tire pressure	Front Wheel	kPa	Field: 118-137 Transportation: 166-186	
		Rear Wheel	kPa	Field: 118-137 Transportation: 166-186	
	Tire pressure	Front Wheel	kPa	Field: 118-137 Transportation: 166-186	
Rear Wheel		kPa	Field: 118-137 Transportation: 166-186		
Tire specification	Front/rear wheels	/	14.9-28/18.4-38	16.9-28/ 18.4-42	16.9-28/ 20.8-38
	Option: front/rear wheels	/	14.9-28/18.4-38 (double row)	14.9-28/ 18.4-38	16.9-28/ 18.4-42
Steering system	Mode		/	Hydraulic front wheel steering	
	Steering		/	Cycloidal rotary valve type fully hydraulic steering gear	
	Steering Gear Pumps	Displacement	ml/r (ml/rev)	16	
		Rotation direction	/	With Weichai power models: left rotation / with Yuchai models: right rotation	
Brake	Travel brake		/	Disc type (single piece), hydraulic manipulation	

## SHANDONG TAVOL MACHINERY CO.,LTD

System	Parking brake		/	Independent hand brake				
	Trailer Brake Manipulation		/	Air break, pneumatic brake				
Working device	Hydraulic system type		/	Happy, split type				
	Hydraulic oil pump	Weichai	ml/r	Displacement 32/left-handed			Displacement 39.5/right-handed	
		Yuchai	ml/r	Displacement 32/right-handed			Displacement 36/left-handed	
	Dispenser		/	Strong pressure split models: four-position, six-way, mechanical slide valve type Electric control models: solenoid proportional valve				
	Cylinder	Diameter x Stroke	mm	Φ100×185			Φ110×185	
		Type	/	Strong pressure split model: double-action				
	Suspension mechanism		mm (mm)	Three point rear suspension, class 3 Upper suspension point, coupling hole×width : Φ32×51 Lower suspension point, coupling hole×width : Φ37.4×45				
	Deep tillage adjustment method		/	Strong pressure split lifter models: floating control, position control. Electronically controlled lifter models: force adjustment, bit adjustment, integrated force and bit control, floating control, lower tie rod sensing				
	Maximum lifting force (at 610mm behind the suspension)		kN	≥32	≥35	≥39	≥42	≥46

Working device	System safety valve opening pressure		MPa	17.5-18				
	Hydraulic output	Type	/	Rear-mounted multiway valve				
		Quantity	/	3 pairs				
		Specification	/	M12×1.5 or NPT1/2				
		Flow	Oriental Red	L/min (l/min)	75	75	75	75
Yuchai	75		75		75	75	75	
PTO		Type	/	Rear freestanding				
		Specification	/	Φ35,21-tooth involute spline shaft (Φ35,6-tooth rectangular spline shaft, Φ38,8-tooth rectangular spline shaft and Φ45,20-tooth involute spline shaft are optional)				

# SHANDONG TAVOL MACHINERY CO.,LTD

	Rotational Speed	r/min (rev/min)	540/1000	
Traction device	Type	/	Traction rack (optional swing bar type)	
	Height from the ground	mm (mm)	315	
Towing device		/	U-shaped hook	
Cab		/	Six-post safety cab with heater or air conditioning device	
Safety racks		/	None	
Seats		/	Mechanical suspension, PVC surface, adjustable height, front and rear and backrest	
Electrical instrumentation system	Electrical system		24V (volt) or 12V (volt) negative hitch two-wire system	
	Generators	Voltage	V	28 or 14
		Power	kW	1.5 or 1.4
	Regulator	Regulated voltage	V	28 or 14.2
	Start motor	Voltage	V	24 or 12
		Power	kW	6 or 4.2
		Model	/	6-QW-120
	Battery	Voltage	V	24 or 12
		Capacity	A-h	120 or 240
	Battery	Quantity	/	2 pieces in series (24 V circuit system) or 2 pieces in parallel (12 V circuit system)
Lighting and Signals	Headlights	/	24V (volt) system, 75/70W (watt) combination type or 12V (volt) system, 60/65W (watt) combination	
	Front turn signal	/	24V(volt) or 12V,21W(watt),2pcs	

Electrical instrumentation system	Lighting and Signals	Rear combination light	/	Rear position light 10W(watt), left and right turn signal 21W(watt), brake light 21W(watt) Reflectors (red) 2 each
		Rear working light	/	24V (V) - 70W (W) or 12V (V) - 55W (W), 2 pcs
	Device	Trailer sockets	/	7-hole trailer socket, 1pc
		Combination meter	/	With tachometer, water temperature gauge, oil pressure gauge, oil quantity gauge, 1pc

## SHANDONG TAVOL MACHINERY CO.,LTD

	Monitoring and warning devices	/	Instrument alarm indicator: air filter clogging alarm, brake oil bottle shortage alarm, air pressure alarm (optional for air brake models), hydraulic filter clogging alarm (optional for electro-hydraulic control), battery charging status light, preheat indicator, position indicator, parking brake indicator Signal lights and devices: brake lights, left and right turn signals, front and rear position lights, reflectors, safety warning signs
Perfusion capacity	Heat Sinks	L	28
	Fuel Tank	L	325
	Engine oil sump	L	22
	Brake oil	L	0.8
	Driveline oil	L	110
	Hydraulic oil tank	L	65
	Front drive axle center drive	L	6
Front drive axle side reduction	L	1.5 per side	