**VOLVO ARTICULATED HAULERS** 

# A35Frs, A40Frs 33.5-39.0t 447-476hp







### A PASSION FOR PERFORMANCE.

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

#### Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

#### Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



#### You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

#### We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

#### We have a passion for performance.











Volvo Trucks

Renault Trucks

Mack Trucks















Volvo Buses Volvo Construction Equipment

Volvo Penta

Volvo Financial Services

# TAKE CONTROL OF YOUR PRODUCTIVITY.



A typical work cycle for an articulated hauler includes loading, travel, maneuvering and dumping. The Volvo A35Frs and A40Frs machines perform these operations in the most efficient and safe way, excelling all others.

#### Volvo's Unique Steering System

The steering system design provides high steering force, even at low engine speeds for the toughest off-road operating conditions, e.g. deep mud. Hydraulic damping prevents the transmission of impacts and jolts to the steering wheel and operator. The system also ensures precise steering and directional stability at high-speed hauling on roads, so there is no need for the operator to compensate with the steering wheel.

#### Volvo's Unique Load & Dump Brake

The patented user-friendly Load & Dump Brake enhances productivity and safety, improving ease of operation and reducing operator fatigue. When in position for loading or dumping, the operator presses a single button which results in automatic application of the service brakes and shifting the transmission to neutral. Once completed, selecting a gear then deactivates the function, releasing the brakes.



#### **Beneficial Body Design**

A strategically located body hinge provides a long distance between the rear bogie axle and the chute's rear edge together with high dump clearance when the body is raised. Allowing placement of the load directly in the right position, it maximizes productivity while dumping over an edge, into a hopper or stockpiling. The high tipping angle and design of the body, made from high strength steel, promote efficient material ejection.

#### Powerful Hydraulics and Effective Dumping

The load sensing hydraulic system with variable displacement axial-piston pumps, powering the double acting single-stage hoist cylinders, allows easy rising of the fully loaded body even on very steep grades. Precise dumping control ensures short cycle times and safety in all applications.

### SMOOTH AND STEADY, ALWAYS.

Off-road hauling performance is enhanced when every wheel is firmly on the ground. Stable and smooth, Volvo's Full Suspension haulers keep you moving ahead in full control, even in the worst operating conditions.

#### **Full Suspension System**

Hydraulic fluid is supplied to the suspension cylinders via the hydraulic system and oil is "free-to-flow" to and from the tank and cylinders as needed, unlike gas hydraulic cylinders. The front suspension consists of two hydraulic cylinders and two accumulators. The bogie beam and rubber springs has been replaced with four hydraulic cylinder coupled with four accumulators; two high pressure and two low pressure accumulators.

Six level sensors, two on each A-frame, electronically monitor the frame movement in relation to the axles and signal the hydraulic system to adjust the suspension. This optimizes stability during travel, loading and dumping. The cross flow between the hydraulic cylinders stabilize both the bogie and the tractor. All this together allows higher average speeds over poor ground structures, maximizing your comfort and productivity.





#### Better comfort, higher productivity

The benefit with the Full Suspension system is the increased operator comfort and enhanced machine stability, allowing higher average speed. A normal work cycle consist of five steps; maneuvering for loading, travel loaded, maneuvering for dump, dump, travel unloaded. The Full Suspension system provides increased comfort that allows higher speeds traveling unloaded, maximizing productivity and comfort.

#### On Board Weighing (Optional Equipment)

Volvo's unique load weighing system uses the pressure sensors from the Full Suspension system to weigh the load. This allows the system to messure the load several times during each machine cycle, increasing the accuracy of the system. OBW-equipped haulers are fitted with load indicator lights on the outside of the machine. This helps load nominal and prevent overloading, avoiding machine and tyre wear as well as excessive fuel consumption. The load information can also be accessed remotely via CareTrack, the Volvo Construction Equipment telematics system.





#### Volvo Care Cab

Good all-around visibility is essential for both high safety and productivity. Comfortable Volvo Care Cab with centrally positioned operator station, sloping hood, large rear-view mirrors, wide front windshield and a full-glass door feature excellent visibility. A new instrument panel, Contronics and tipping lever ensure ease of operation.

Spacious interior, large storage compartments, conveniently located pedals, controls and switches minimize operator fatigue throughout the whole shift. Optional Electronic Climate Control (ECC) system automatically maintains the desired temperature. The well-designed cab is built from high strength steel, meeting ROPS/FOPS safety standards.

Volvo offers a world-class operator environment for low fatigue, high productivity and safety. Just enter the legendary Care Cab and look around. All instruments are in view, all controls are within reach – right where you want them. The steering wheel and seat can be easily adjusted for optimum comfort.

#### **User-Friendly Operator Communication System**

Contronics continuously provides valuable information on the machine's systems and operation, with early warning via easy to understand malfunction indicators, alerting abnormal machine or operator behavior, improving availability. A new large color monitor is visible at a glance and a new keypad, located on the right instrument panel, allow easier navigation between different screens and functions.

#### Comfort for Advanced Off-Road Hauling

Volvo's unique Full Suspension system effectively reduces bouncing, shaking and vibration to ensure a smooth and safe ride, providing excellent working conditions for the operator. The levelling sensors constantly monitor the axles' position and the system adjusts the hydraulic struts to keep the whole machine level, ensuring load retention when travelling on uneven ground. The stabilizer function improves dynamics and maximizes the vehicle's stability.



#### Safe and Easy Cab Access

Designed for safe, easy entry and exit, the Care Cab features a wide door opening with no threshold, correctly positioned non-slip steps and new, convenient handrails.

#### **Dumping Functionality**

A35FFs and A40FFs feature new dumping functions, improving ease of operation, safety and productivity – detent body lowering and adjustable tipping angle. The angle can be easily set by the operator, using Contronics to limit the machine height, when operating under electrical wires, in tunnels or underground.

#### **Noise Reduction**

The Care Cab features very effective sound insulation and is mounted on optimally positioned rubber pads to reduce vibration. Comfortably low internal noise level (only 74 dB (A) – ISO 6396) reduces fatigue to help boost operator productivity.

# LESS MAINTENANCE FOR MORE UPTIME.

Volvo articulated haulers help you get more out of each working day. They feature a low need for maintenance, long service intervals, excellent serviceability and availability. All this contributes to more uptime for productive hauling.

#### **Brake and Retardation Systems**

A35FFs and A40FFs are equipped with oil cooled wet multiple disc brakes on all wheels. The design ensures high braking performance and long service life, even on very dusty or muddy sites. Additionally, both machines feature easy to operate retardation system, using the wheel brakes and VEB (Volvo Engine Brake – compression brake plus exhaust retarder EPG). Powerful retarders are used to control speed while hauling downhill, slowing down before curves or cross roads, reducing the need for service brakes use. It ensures low operating costs plus fast and safe hauling.

#### Service Friendly

Engine oil filters are grouped and easily accessed via the swing-down front grill. The special valve in the belly plate and a dedicated drainage hose, stored in the front grill, ensure oil change without spillage, reducing environmental impact. Remote-mounted drains are located for convenient reach. All service and grease points are easily accessed either from ground level via non-slip platforms. Daily and weekly maintenance is not required. Excellent serviceability and long service intervals reduce machine downtime.



#### **Automatic On-Board Monitoring**

The Contronics system electronically monitors fluid levels, providing warnings for any deviations and scheduled service reminders, which minimizes downtime and increases machine availability.

#### Maintenance Free Rotating Hitch

All F-series haulers feature 100% maintenance free, completely sealed, durable hitch with permanently greased tapered roller bearings. No need for maintenance means reduced downtime and operating costs.



# A QUICK LOOK AT THE BEST HAULER.



#### CareTrack\*

CareTrack is the Volvo telematics system. It is equipped as standard on this

machine and is designed to provide information to help improve productivity and efficiency.



#### **Full Hydraulic Suspension**

Volvo's unique Full Hydraulic suspension on all wheels, with automatic levelling and stabilizer,

allows higher speeds on rough haul roads, whether the vehicle is loaded or empty, ensuring increased productivity combined with maximum operator comfort and excellent off-road performance.



No slip, no wear, "dog clutch" type differential locks provide 100% locking capability. "Dog clutch" longitudinal differential lock in drop box.



#### **Fuel Efficiency**

Environmentally-friendly, electronically controlled,

powerful diesel engine. High torque at low rpm, well matched drivetrain and ATC reduce fuel consumption.





Volvo Care Cab

Quiet, spacious, comfortable, with excellent visibility and ergonomically

#### On Board Weighing

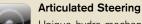
OBW logs all transported loads. The information can also be accessed remotely thanks to Volvo's advanced telematic system, CareTrack. This allows complete payload management.



#### **Easy Service Access**

90 degree tilting hood and swing down front grill with

integrated steps, acts as a service platform. All grease points and remote mounted drains are accessible from ground level or non-slip platforms. No daily or weekly greasing.



Unique, hydro-mechanical, self-compensating system. High

steering force, accurate steering, directional stability for productive and safe operation.

# EFFICIENT HAULING. DEFINED.



Customer trust is not just given, but earned over years. Volvo developed the hauler concept in the 1960s and retains its position as the world's leading articulated hauler manufacturer. When choosing A35F<sub>FS</sub> or A40F<sub>FS</sub>, you can be sure – the job will be done quickly, cost effectively and safely, with low environmental impact.

#### Automatic Traction Control (ATC) System is Standard on All F-Series Volvo Articulated Haulers

Constantly changing underfoot conditions are quite common when operating an articulated hauler. To keep the traction and mobility, ATC system automatically selects the optimal drive combination on the move. The possibility to shift between 6x4 mode (lower fuel consumption, less tire wear) and 6x6 mode (maximum rimpull) is a Volvo exclusive.

Since operators do not have to engage/disengage differential locks manually, they can focus on proper operation, which improves safety and reduces operating costs. The ATC system not only simplifies operation, maximizing off-road performance, but also protects the drivetrain from misuse and unnecessary wear, prolonging machine service life.



#### **Environmentally-Friendly Engine**

A35FFs and A40FFs are equipped with electronically controlled, low emission diesel engines. Powerful engines are characterized by high torque at low rpm, resulting in excellent fuel efficiency, high performance, quick response, less wear and long life. Purpose built by Volvo, they optimally match the drivetrain, ensuring maximum utilization of power and torque even in the most demanding applications.

#### **Differential Locks**

F-series Volvo articulated haulers are equipped with "dog clutch" type differential locks, featuring 100 % locking capability and a no-slip, no-wear design. When locked, all wheels rotate at the same speed, maximizing traction in severe operating conditions. The differential locks can be engaged or disengaged on the move for greater productivity and performance.

### TOP PERFORMANCE DESERVES SUPPORT.

The day you receive your new Volvo Articulated Hauler is just the start of your working relationship with Volvo. From Customer Support Agreements and CareTrack to Genuine Volvo Parts and Volvo Service Technicians – Volvo keeps on adding value to your business.

Volvo designed and built your machines, so no-one knows how to keep them working in top condition more than us. When it comes to your machine, our Volvo trained technicians are the experts.

Our technicians work with industry leading diagnostic tools and techniques, using only Genuine Volvo Parts to deliver the highest levels of quality and service. Talk to your Volvo dealer about how genuine Volvo services can best provide the service and maintenance plan that is the right fit for you and your business.





State-of-the-art machines require state-of-the-art support and your Volvo dealer can provide a catalogue of services designed to get the most out of your machine, helping you maximise uptime, productivity and residual value. Your Volvo dealer can provide a number of sophisticated support offers, including:

Service plans ranging from routine wear inspections, through to comprehensive maintenance and repair agreements.

Analysis and diagnostics to help you understand how your machine is running, highlight potential maintenance issues and identify where performance can be improved.

Eco Operator training courses can help your operators work towards a safer, more productive and fuel efficient performance.



### **VOLVO A35Ffs, A40Ffs IN DETAIL.**









#### **Engine**

Fuel efficient, environmentally friendly, powerful, 6-cylinder, V-ACT diesel engine with 4 valves per cylinder, variable geometry turbo (VGT) and external exhaust gas recirculation (EGR).

High pressure fuel injection system (2500 bar).

High torque at low rpm. Long service life.

Diesel particulate filter (DPF) with thermal regeneration.

Two-stage incoming air filtration is standard.

Cooling system: high capacity cooling system with easy accessible, power and fuel saving, variable speed hydraulically driven fans.

A35Frs	Volvo D1	3H-A / D13H-B (	Tier 4i / Stage IIIB)
Max power at		r/s	31.7
SAE J1995 Gross		kW	329
Flywheel power at		r/s	31.7
ISO 9249, SAE J1	349 Net	kW	327
Max torque at		r/s	20
SAE J1995 Gross		Nm	2 360
ISO 9249, SAE J1	349 Net	Nm	2 345
Displacement		I	12.8

A40Frs	Volvo D16H-A / D1	6H-B (Tier 4i / Stage IIIB)
Max power at	r/s	30
SAE J1995 Gross	kW	350
Flywheel power at	r/s	30
ISO 9249, SAE J13	349 Net kW	347
Max torque at	r/s	17.5
SAE J1995 Gross	Nm	2 525
ISO 9249, SAE J13	Net Nm	2 500
Displacement	1	16.1

#### **Drivetrain**

Torque converter with built-in lock-up function.

Transmission: Volvo PowerTronic planetary fully automatic transmission with 9 forward gears and 3 reverse gears.

Dropbox: Volvo-developed, in-line design with high ground clearance and 100% longitudinal "dog clutch" type differential lock. Axles: heavy duty, purpose built Volvo design with planetary type hub reductions and 100% "dog clutch" type differential locks. Automatic traction control system (ATC).

A35Frs/A40Frs	
Torque converter	2.1:1
Transmission, Volvo	PT 2519
Dropbox, Volvo	IL2 ATC
Axles, Volvo	ARB H35/H40

#### **Electrical System**

Powerful halogen lights.

Cables are enclosed in protective plastic conduits, secured to the frame

All cables, sockets and pins are identified. Prewired for options. Connectors meet IP67 standard for water-proofing. Easy accessed battery disconnect switch.

A35Frs/A40Frs		
Voltage	V	24 (2x12)
Battery capacity	Ah	2x170/2x225
Alternator	kW (A)	2.26 (80)
Starter motor	kW	9.0





#### **Brake System**

Complies with ISO 3450.

Fully hydraulic, wet brakes with enclosed, oil-cooled multiple discs on all wheels. Seperate brake cooling for each axle.

Two independent circuits: one for front axle and one for bogie axles. Parking brake: spring-applied disc brake on the propeller shaft. Retarders: using wet brakes in axles and Volvo Engine Brake. Volvo Engine Brake: compression brake and exhaust retarder (EPG).

#### **Steering System**

Hydro-mechanical, self compensating design. Two double-acting steering cylinders.

Steering angle: 3.4 steering wheel turns lock-to-lock, ±45°. Steering system, including secondary steering fulfills ISO 5010.

#### Chassis

Frames: box type, heavy duty. High strength steel, robot welded. Rotating hitch: 100% maintenance free, fully sealed, with permanently greased tapered roller bearings.

#### Suspension

Unique, full hydraulic, on all wheels with automatic leveling and stabilizer. Part of the machine's hydraulic system, uses the same hydraulic oil.

#### A35Frs/A40Frs

Hydraulic cylinders (struts), front/rear	2/4
Accumulators, oil-nitrogen, high pressure, front	2
Accumulators, oil-nitrogen, high/low pressure, rear	2/2
Levelling sensors	2+2+2

#### Cab

Mounted on rubber pads. Ergonomically designed. Easy entry and exit. Wide angle forward view. Operator centerally positioned above the front axle. Adjustable operators seat with retractable seat belt. Tilt/telescopic steering wheel. Ergonomically positioned controls. Heating and ventilation system with all windows defroster. Filtered air. Optional automatic climate control (ACC).

Operator communication system: Contronics. Large color display, user-friendly and easy-to-understand information, all vital machine functions are constantly monitored.

Instructor seat with seat belt.

Safety: ROPS/FOPS standards approved according to ISO3471, SAE J1040 / ISO3449, SAE J231. Sound level in cab according to ISO 6396: 74 dB(A). External sound level\* according to ISO 6395: 110 dB(A).

#### **Hydraulic System**

Pumps: Six engine-driven variable displacement piston pumps driven by the flywheel PTO. One ground-dependent piston pump mounted on the dropbox for emergency steering.

Two return oil filters with magnetic cores provide effective oil filtration. System max pressure is 25 MPa.

Full suspension system max pressure is 23,5 MPa.

#### **Dumping System**

Patented Load and Dump Brake.

Dumping Cylinders: two single stage double acting.

A35Frs/A40Frs		
Tipping angle	0	72/70
Tipping time with load	s	12
Lowering time	s	10

Body		
Plate thickness:		
Front	mm	8
Sides	mm	12
Bottom	mm	14
Chute	mm	16
Material: HB400 stee	el	
Yield strength	N/mm <sup>2</sup>	1 000
Tensile strength	N/mm <sup>2</sup>	1 250

Load Capacity			
		A35Frs	A40Frs
Standard Body			
Load capacity	kg	33 500	39 000
Body, struck	$m^3$	16.0	18.4
Body, heaped 2:1	$m^3$	20.5	24.0
With overhung tailgate			
	3	16.4	100
Body, struck	m <sup>3</sup>	16.4	18.8
Body, heaped 2:1	m <sup>3</sup>	21.4	24.7

<sup>\*</sup> with Noise Reduction Kit

## **SPECIFICATIONS.**

Fill capacities				
		A35Frs	A40F <sub>F</sub> s	
Crankcase	1	50.0	54.0	
Fuel tank	- 1	480.0	545.0	
Cooling system	1	95.0	95.0	
Transmission, total	- 1	45.5	45.5	
Dropbox	- 1	9.2	9.2	
Axles, front/bogie	- 1	28.0/57.0	29.0/59.0	
Brake cooling tank	1	121.0	121.0	
Hydraulic tank	1	262.0	262.0	

Speed			
		A35Frs	A40Frs
Forward			
1	km/h	6	6
2	km/h	9	9
3	km/h	11	10
4	km/h	15	15
5	km/h	22	22
6	km/h	28	27
7	km/h	37	36
8	km/h	49	48
9	km/h	57	57
Reverse			
1	km/h	7	7
2	km/h	10	9
3	km/h	18	18

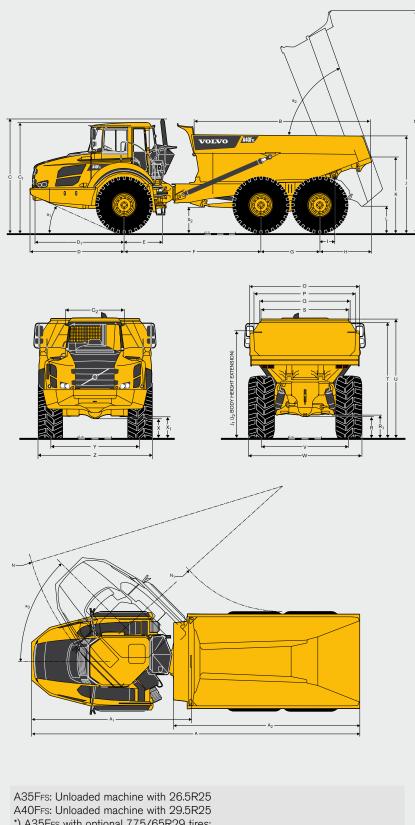
Operating weight unloaded					
		A35Frs	A40Frs		
Tires		26.5R25*	29.5R25**		
Front	kg	15 400	16 400		
Rear	kg	13 700	14 600		
Total	kg	29 100	31 000		
Payload	kg	33 500	39 000		

Total weight				
		A35Frs	A40Frs	
Tires		26.5R25*	29.5R25**	
Front	kg	18 400	20 400	
Rear	kg	44 200	49 600	
Total	kg	62 600	70 000	

Operating weight includes all fluids and operator
\*) A35Frs with tires 775/65R29, add 200 kg/axle
\*\*) A40Frs with tires 875/65R29, add 300 kg/axle

<b>Ground Pressure</b>					
		A35Fr	FS	A40	FFS
Tires		26.5R25	775/65R29	29.5R25	875/65R29
Unloaded					
Front	kPa	130	110	117	99
Rear	kPa	58	49	52	45
Loaded					
Front	kPa	156	131	146	122
Rear	kPa	187	157	177	148

A3:	5 <b>F</b> FS	A40Frs
Pos	mn	n
Α	11 180	11 263
A <sub>1</sub>	5 476	5 476
$A_2$	6 241	6 404
В	5 540	5 821
С	3 621	3 673
C <sub>1</sub>	3 546	3 597
$C_2$	1 772	1 772
D	3 101	3 101
$D_{\scriptscriptstyle{1}}$	2 941	2 942
E	1 277	1 277
F	4 578	4 518
G	1 820	1 940
Н	1 683	1 706
1	650	495
J	2 995	3 154
K	2 314	2 457
L	900	844
M	7 248	7 287
N	8 853	8 967
N <sub>1</sub>	4 395	4 307
0	3 106	3 374
O**	3 304	3 497
Р	2 870	3 074
Q	2 553	2 730
R	579	635
R,	604	644
S	2 422	2 653
Т	3 401	3 462
U	3 516	3 565
V	2 534	2 636
V*	2 625	2 709
W	3 258	3 433
W*	3 410	3 570
Χ	521	571
X,	617	671
$X_2$	754	807
Y	2 534	2 636
Y*	2 625	2 709
Z	3 258	3 433
Z*	3 410	3 570
a <sub>1</sub>	23,6°	25°
a <sub>2</sub>	72°	70°
a <sub>3</sub>	45°	45°



A35Frs: Unloaded machine with 26.5R25 A40Frs: Unloaded machine with 29.5R25 \*) A35Frs with optional 775/65R29 tires; A40Frs with optional 875/65R29 tires. \*\*) with overhung tailgate.

# **EQUIPMENT.**

#### STANDARD EQUIPMENT

STANDARD EQUI MENT	4055	4.40=
Cafaba	AJSFFS	A40Frs
Safety Anti-clim stone and platforms	_	
Anti-slip steps and platforms	•	•
Dump body lock	•	•
Handrails on steps and platforms	•	•
Hazard lights	•	•
Horn	·	·
Protective grill for cab rear window	•	•
Rear-view mirrors	•	•
Retractable 3-inch safety belt	•	•
ROPS/ FOPS protected Care Cab	•	•
Secondary steering	•	•
Steering joint lock	•	•
Windshield washers	•	•
Windshield wipers with interval function	•	•
Drivetrain		
6x4 and 6x6 automatically engaged drive modes	•	•
"Dog clutch" type 100% diff-locks in all axles	•	•
Full automatic transmission	•	•
Single stage dropbox with longitudinal diff-lock	•	•
Torque converter with automatic lock-up	•	•
Engine		
Direct injected, electronically controlled,		
turbocharged, intercooled	•	•
Grouped oil filters, for ease of change	•	•
Preheater for easier cold starts	•	•
Remote oil drain valve and hose for easy access	•	•
VEB (exhaust retarder EPG + compression brake)	•	•
Electrical system		
Electrical system	_	
80 A alternator	•	
Battery disconnect switch	•	•
Extra 24 V socket for lunch cooler	•	·
Lights:	_	
- Back-up light	•	•
- Brake lights	•	•
- Cab lighting	•	•
- Direction indicators	•	•
- Headlights	•	•
- Instrument lighting	•	•
- Parking lights	•	•
- Rear lights	•	•
Brake system		
Load & Dump Brake	•	•
Parking brake on propeller shaft	•	•
Two circuit, fully hydraulic brakes with enclosed, oil-cooled multiple discs on all axles	•	•
III I I I I I I I I I I I I I I I I I		

	A35Frs	A40Frs
Comfort		
Ashtray	•	•
Cab heater with filtered fresh air and defroster	•	•
Can holder /storage tray	•	•
Cigarette lighter	•	•
Instructor seat with seat belt	•	•
Overhead console for radio	•	•
Sliding window	•	•
Space for lunch cooler	•	•
Storage box	•	•
Sun visor	•	•
Tilt/telescopic steering wheel	•	•
Tinted glass	•	•
Operator information interface		
Gauges:		
- Brake pressure	•	•
- Fuel	•	•
- Speedometer	•	
- Tachometer	•	
- Wet disc brakes cooling oil temperature	•	
That dies Zianes essining on temperature		
Warning lights grouped and easy to read		
Central warning (3 levels) for all vital functions	•	•
Central positioned information display:		
- Automatic pre-start checks	•	•
- Clock	•	•
- Hour meter	•	•
- Operational information, easy-to-navigate menu	•	•
- Troubleshooting diagnostics	•	•
Body		
Body prepared for exhaust heating and		
optional equipment	•	•
Exterior		
Front mudguard wideners and rear mudflups	•	•
Tires		
26.5R25	•	
29.5R25		•
Service and maintenance		
CareTrack telematics system	•	•
Drainage hose stored in the front grill	•	•
Machine Tracking Information System MATRIS	•	•
Service platform integrated in the front grill	•	•
Tool box	•	•

#### **OPTIONAL EQUIPMENT**

	A35F <sub>FS</sub>	A40FF
Safety		
Fire-extinguisher and first aid kit	•	•
Warning triangle	•	•
Engine		
Air pre-cleaner, cyclone type	•	•
Air pre-cleaner, heavy-duty, dry type EON	•	•
Air pre-cleaner, oil bath type	•	•
Diesel engine heater, Eberspächer	•	•
Electric engine heater (120V or 240V)	•	•
Engine automatic shutdown	•	•
Engine shutdown timer	•	•
External emergency engine stop	•	•
High engine idle speed	•	•
Electrical system		
Anti-theft system (prevents engine start)	•	•
Rear vision system, colour LCD monitor in the cab	•	•
Reverse alarm	•	•
Rotating warning beacon, collapsible mount	•	•
Working lights, front-facing, roof mounted	•	•
Working lights, rear-facing, fender-mounted	•	•
Cab		
Air suspended, heated, fully adjustable seat	•	•
Armrest for operator seat	•	•
Cable kit for cab heater (120V or 240V)	•	•
Electrically heated and adjustable rear view mirrors	•	•
Electronic Climate Control (ECC)	•	•
Head restraint for operator seat	•	•
HEPA cab air filter	•	•
Radio installation kit, including loudspeakers Radio with CD player	•	•
Tradio Will OD playor		
Body		
Exhaust heating	•	•
Extra front spillguard, bolt-on	•	•
Light material extension, bolt-on kit	•	•
Overhung tailgate, wire or linkage operated	•	•
Side extensions 200 mm (8"), welded	•	•
Underhung tailgate, linkage operated Wear plates for heavy duty applications	•	•
Figure 15. The start appropriate 15.		
Tires		
775/65R29 875/65R20	•	
875/65R29		
Service and maintenance		
Automatic lubrication system	•	•
Electrical hood opening	•	•
Tool kit with tire inflation unit	•	•
Other		
On Board Weighing (OBW)	•	•
Arctic kit	•	•
Fast fuelling system, bolt-on kit	•	•
Lifting tools, wheel mounted	•	•
Siberian kit, -40°C Synthetic hydraulic oil (biologically degradable)	•	•
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#### **SELECTION OF VOLVO OPTIONAL EQUIPMENT**

Wear plates for heavy duty applications



On Board Weighing (OBW)



Electrically heated and adjustable rear view mirrors



Rear facing working lights, fender mounted



Rotating warning beacon



Head restraint for operator seat



### **VOLVO CONSTRUCTION EQUIPMENT**



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