

**RD 320** 

ENGLISH

04-2006

- Engine
- Power
- Transmission
- G.V.W.
- Payload
- Capacity Struck
- Headped (SAE 2:1)

Iveco Cursor 10 **TIER 3** 280kW (381 hp) Automatic 54.000 kg 32.000 kg (35 Sht) 15,8 m<sup>3</sup> 20,1 m<sup>3</sup>



ENGINE Diesel with 6 cylinders in line, direct electronic injection, pump

injectors, turbo charger with intercooler, variable geometry turbine. Emissions: EPA - CARB - OFF ROAD TIER 3

Make and type:	IVECO CURSOR 10-F3A
Bore x stroke:	125x140 mm (4.9"x5.5")
Total displacement:	
	280 KW ( 381 HP) @ 2100 rpm
	1800 Nm (183 Kgm) @ 1000 rpm
Integrated engine brake:	Iveco Turbo Brake
Cold start - 25° C	





With 18.00R25 tyres

gears	gears ratio	Km/h	mph
1	4.70	8,9	5 5
2	4,70 2,21	19,0	5.5 11.8
3	1,53	27,4	17.0
4	1,00	41,9	26.0
5	0,76	55,2	34.0
6	0,67	62,6	38.8
1 RM	5,55	7,6	4.7



## TRANSMISSION

Automatic transmission Allison HD4560 with incorporated retarder on gear output.

6 forward speeds and one reverse.

Possibility to set Power or Economy mode.



**KESSLER** axle.

Dual reduction: central by bevel gear pair and final in wheel hubs by epicyclic train.

Central reduction ratio:	 1:2.,43
Final reduction ratio:	 1:6,00
Total reduction ratio:	 1:14,58



### TYRFS

Interchangeable wheels with steel disk 13.00-25/2.5 Tubeless radial tyres 18.00R25



## **STEERING**

Conformity to ISO 5010, SAE J 53

Hydraulic power steering with double action cylinder. Gear pump with flow regulator in tandem with tipping pump. Max working pressure: 170 Bar (17 Mpa) Radial piston emergency pump driven by the transmission. Adjustable steering column/wheel.



## BRAKES

With independent circuits, conforming to ISO 3450 SAE J 1473. Disk brakes, two callipers per axle, hydraulic control with gear pump

controlled by engine and two pressure accumulators. Pneumatically controlled parking disk brake on transmission shaft, rear

axle power take-off

Electronically controlled integrated management of engine brake and retarder (6-position lever).



## **SUSPENSION**

Front: wheels with independent steering, hydro-pneumatic suspension cylinders (oil-nitrogen) acting as suspension/shock absorber. Rear: semi-independent with three reaction rods plus Panhard type cross bar. Two hydro-pneumatic cylinders (oil/nitrogen) acting as suspension/shock absorber.

Optional: front suspension gas charger kit .



## **ELECTRICAL SYSTEM**

2 batteries:	12 V / 170 Ah
Voltage:	24 V
Alternator:	
Starter motor :	4.5 kW
All cables have identification number, sheath prote	ection and are
fastened to the chassis.	
Multiplex system with CAN bus communication betw	veen engine

Multiplex system with CAN bus communication between engine control unit, transmission, body computer and peripheral input/output. Dashboard with incorporated multi-function graphic display .



# **PNEUMATIC SYSTEM**

Single cylinder compressor.

Air dryer. Air tanks ..... Pneumatic circuit for parking brake, seat suspension, horn and to take up air in the cab.



## **BODY TIPPING SYSTEM**

Two single acting telescopic hydraulic cylinders, with 4 pullers and hydraulic brake on fourth puller. Uprights on ball joints outside the chassis.

Gear pump driven by engine PTO (capacity: 210 I/min at 2100 RPM) in tandem with steering pump.

Proportional control of body lowering and rising with possibility to have manual or automatic setting and with automated slowing down at end of travel (down/up).

Proportional electro-pneumatically controlled tipping box and mechanical lever for emergency action and service.

Body lowered safety switch.



BODY

Walls and bottom in high abrasion resistance steel.

Hardness:	HB 400
Tensile strenath:	1000 N/ mm <sup>2</sup>
UTS:	1250 N/ mm <sup>2</sup>
Bottom thickness:	15 mm 0.59 in
Side walls thickness:	
Front panel thickness:	10 mm 0.39 in
Elastic pads between body and chassis.	
Tipping angle:	56°
Rising time:	10"
Lowering time:	8"
Potentiometer angle sensor to control rising/lowering.	
Body heating system.	
Body capacity:	
Struck:	15,8 m <sup>3</sup> 20.6 yd <sup>3</sup>
heaped (SAE 2:1):	20,1 m <sup>3</sup> 26.2 yd <sup>3</sup>
Optional:	
Rear board with mechanical opening	

Rock version reinforced body.



#### CHASSIS

Built in high resistance steel, it has two rectangular section extruded side members joined by stiffening cross members that support the front and the rear suspensions systems.



## **GREASING SYSTEM**

Optional: automatic central greasing system with an amount of grease that varies according to the conditions in which the vehicle is used.



Conforming to ROPS SAE J 1040, ISO 3471 / FOPS SAE J231, ISO 3449. Compressed air quick coupling to clean cab. In steel, sound-proofed and mounted on the left side . Athernic glasses. Working lamps over cab. Door with glazing in the lower part to give maximum visibility. Central driver's seat with universal adjustment and pneumatic suspension. Instructor's seat. Cab suspension with hydrostatic pads. Operating instrumentation and accessories . Windscreen sun screen. **Optional:** RDS car radio Automatic climate control with pollen filter. Extinguisher. Rotary light on cab. Refrigerator. Reverse gear videocamera.



On-board computer to manage all the indications and information regarding vehicle functioning (levels, filter clogging, overheating warning lights, faults on assemblies, sensor and valve failures, etc.). High-tech vehicle diagnostics system: management, display and data storage of engine, transmission, steering system, braking , body tipping and service pneumatic system, reversing buzzer. **Optional:** 

Weighting by means of 4 pressure transducers on the suspension, data displayed on vehicle display

Trip Computer to analyse vehicle productivity.



## FLUID TANKS CAPACITIES

For specifications of the fluids, see the Use and Maintenance Manual.

Engine oil:	30,5 I	8USG
Gearbox oil:	481	12.6USG
Cooling circuit:	47 I	12.4USG
Fuel tank:	390 I	103.0USG
Rear axle:	35 I	9.2USG
Hydraulic system oil:	243 I	64.1USG
Final reductions oil (each):	4,5 I	1.2USG



	TAF	RE (*)	PAYL		TOTAL WEIGHT					
	kg	lb	kg	lb	kg	lb				
Front axle	11.480	25.309	6.945	15.311	18.425	40.620				
Rear axle	10.520	23.192	25.055	55.236	35.575	78.429				
Total	22.000	48.501	32.000(35Sht)	70.547	54.000	119.049				
* Tare including fuel, lubricants and driver (			1		1					

Rigid Dumper RD 32C

From the meeting between the vehicle M.T.T. and the sloped line corresponding to the total resistance %, cross to the left to determine the corresponding gear and coming down, the vehicle maximum speed.



Beaten snow Soft snow

Sand - Gravel



Rigid Dumper RD 32C







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#### Characteristics and equipment are subject to changes without prior notice

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DEALER