

HD1400



General description

With its new HD 1400 model Corgi, inventor of and world leader in heavy-duty tyre changers, offers **performance, reliability and safety achieved over years of experience**, creating a machine with top-range characteristics intended for specialists in the sector and designed for intensive service.

The HD 1400 is an Automatic tyre changer able to mount and demount all types of truck, bus and agricultural and construction equipment wheels up to a maximum wheel width of 1470 mm. It is **electrohydraulically** operated and the controls are all located together on a new, even more ergonomic, portable low-voltage control unit.

The new hydraulic power unit is installed on the machine to reduce floor-space requirements. Its special rotational movement and the vertical position of the solenoid valve unit make any servicing quicker and more convenient.

The standby function introduced on this version assures considerable energy saving and cuts power unit noise emissions.

Turntable rotation is powered by a hydraulic motor capable of delivering an impressive torque smoothly and constantly even as the working speed changes, thanks to the three different rotation speeds. The three different speeds mean the operator can always work in the most effective way for the wheel size. There is even a creeper speed, provided by a micrometer regulator, needed when regrooving tyres.

The new-design clamps are able to operate on all types of rim, and above all allow a diameter of 110 mm to be clamped without any need for special adapters.

The tool arm is fully automated and moves in synchrony with the spindle carriage (although in the opposite

direction) for quicker operation.

The tool support has a mobile, overhanging bead breaker disc mounted on **self-lubricated bushings** to ensure durability and smooth travel.

The disc's unusual design and new working angle have been specifically developed to allow the best possible penetration between the rim edge and tyre bead. What's more, its rounded outer profile prevents damage to or jamming against the tyre wall.

Tool rotation is automatically controlled. The **HD 1400** tyre changer is available with commands transmitted by cable or radio.

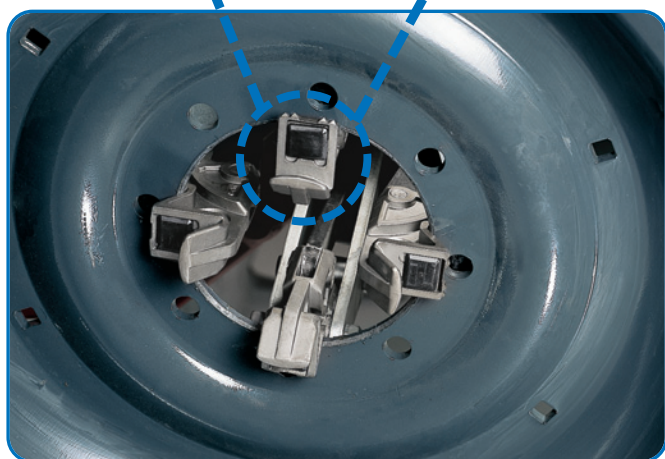
The new radio kit for use on the machine has become an optional accessory, independent from the machine itself.

This product is approved by:



»»» Main characteristics

- **Automatic Tyre Changer** for drop-centre and tubeless-tyre van, truck and bus wheels, and wheels with cylindrical rim with rim loop
- **Electrohydraulic** operation
- Ergonomic portable control unit separate from the machine
- **Hydraulic power unit installed on the machine** to take up less space.
- **The new standby function** assures the user considerable energy saving and lower power unit noise emissions.
- Wheel clamping by means of hydraulic turntable
- Tool arm has just one position on the carriage for quicker, simpler operation.
- Automatic tool rotation
- Overhanging mobile bead breaker disc mounted on self-lubricating bushings
- With pressure gauge for monitoring the hydraulic pressure
- Independent radio version kit installed on request.



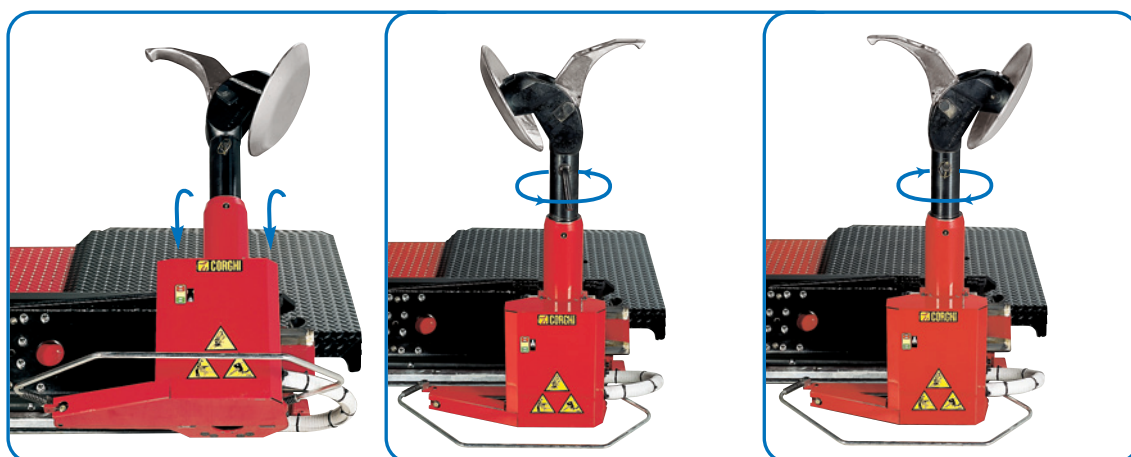
➤ New clamp



➤ Pneumatic bead breaking



➤ Demounting the tyre



➤ Sequence of automatic tool arm movements



➤ New control module with ergonomic controls

tool arm	demount mode	with lever
	lengthways stroke	1045 mm
	lengthways speed	140 mm/s
	working lengthways speed	50 mm/s
	bead breaking maximum lengthways force on inside	27100 N
	bead breaking maximum lengthways force on outside	30800 N
	radial stroke	130 mm
	rotation	automatic
	clamping	automatic
	clamping positions	1
spindle carriage	hydraulic lengthways stroke	1045 mm
	lengthways speed	140 mm/s
	working lengthways speed	50 mm/s
spindle	clamping system	hydraulic turntable
	rotation motor	hydraulic
	rotation speed	3 speed (3,5 - 4,5 - 7,5 rpm)
	rotation torque	4414 Nm
	clamping element	4 (clamps)
	clamping capacity	from 11" to 56"
	clamping positions	4
	maximum clamping force	59200 N
	maximum hydraulic pressure	140 bar
	maximum tyre diameter	2500 mm
	maximum tyre width	1470 mm
	maximum wheel weight	1200 kg
	wheel central hole minimum Ø	110 mm
	spindle shaft minimum working height	335 mm
power unit	Standby function	YES
	operation	electrohydraulic
	motor	4,8 kW
	adjustable hydraulic pressure	from 90 to 140 bar
control module	oil tank	35 l
	command transmission	by cable (radio on request)
	electrical voltage	24 V
	weight	8 kg
power supply	electrical 3ph	230/400 V -5 kW
noise	level in operating conditions	≤ 70 db (A)
weight		1160 kg



➤ Power unit (with standby function) installed on the machine

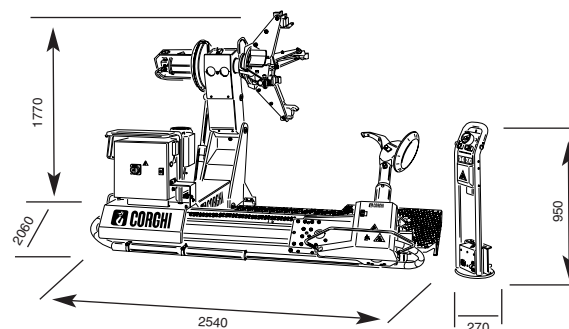


➤ Hydraulic motor combined with flow regulator valve



➤ New DV120 tyre bead presser support clamp (optional accessory)

Technical Data



Technical data

tool arm	HD1400 MASTERONE		HD1400E	
	demount mode	"Leva la Leva"	with lever	with lever
	lengthways stroke	1045 mm	1045 mm	1045 mm
	lengthways speed	140 mm/s	140 mm/s	130 mm/s
	working lengthways speed	50 mm/s	50 mm/s	60 mm/s
	bead breaking maximum lengthways force on inside	27100 N	27100 N	27100 N
	bead breaking maximum lengthways force on outside	30800 N	30100 N	30800 N
	radial stroke	130 mm	130 mm	130 mm
	rotation	automatic	automatic	manual
	clamping	automatic	automatic	manual
	clamping positions	1	1	1
spindle carriage	hydraulic lengthways stroke	1045 mm	1045 mm	1045 mm
	lengthways speed	140 mm/s	140 mm/s	130 mm/s
	working lengthways speed	50 mm/s	50 mm/s	60 mm/s
spindle	clamping system	hydraulic turntable	hydraulic turntable	hydraulic turntable
	rotation motor	hydraulic	hydraulic	1.5/2.2 kW
	rotation speed	3 speeds (3,5 - 4,5 - 7,5 rpm)	3 speeds (3,5 - 4,5 - 7,5 rpm)	2 speeds (3,5 - 7 rpm)
	rotation torque	4414 Nm	4414 Nm	4900 - 4120 Nm
	clamping element	4 (clamps)	4 (clamps)	4 (clamps)
	clamping capacity	from 15" to 56"	from 11" to 56"	from 11" to 56"
	clamping position	4	4	4
	maximum clamping force	59200 N	59200 N	59200 N
	maximum hydraulic pressure	140 bar	140 bar	140 bar
	maximum tyre diameter	2500 mm	2500 mm	2500 mm
	maximum tyre width	1470 mm	1470 mm	1470 mm
	maximum wheel weight	1200 kg	1200 kg	1200 kg
	wheel central hole minimum Ø	110 mm	110 mm	110 mm
	spindle shaft minimum working height	335 mm	335 mm	335 mm
power unit	Standby function	YES	YES	YES
	operation	electrohydraulic	electrohydraulic	electrohydraulic
	motor	4,8 kW	4,8 kW	3,3/4 kW
	adjustable hydraulic pressure	from 90 to 140 bar	from 90 to 140 bar	from 90 to 140 bar
	oil tank	35 l	35 l	12 l
control module	command transmission	by cable/by radio (on request)	by cable/by radio (on request)	by cable/by radio (on request)
	electrical voltage	24 V	24 V	24 V
	weight	8 kg	8 kg	8 kg
power supply	electrical 3ph	230/400 V -5 kW	230/400 V -5 kW	230/400 V -6.5 kW
noise	level in operating conditions	≤ 70 db (A)	≤ 70 db (A)	≤ 70 db (A)
weight		1160 kg	1160 kg	1100 kg

Technical data

tool arm	demount mode	AG DOUBLE T.T.L.	
		HD1000	HD600
	lengthways stroke	with lever 893 mm	with lever 545 mm
	lengthways speed	150 mm/s	500 mm with roller/lever
	working lengthways speed	150 mm/s	65 mm/s manual
	bead breaking maximum lengthways force on inside	24000 N	65 mm/s manual
	bead breaking maximum lengthways force on outside	28000 N	21600 N 15100 N
	radial stroke	130 mm	20100 N 21000 N
	rotation	manual	190 mm NO/Fix
	clamping	manual	automatic manual
	clamping positions	1	automatic manual
spindle carriage	hydraulic lengthways stroke	495 mm	1
	lengthways speed	50 mm/s	3
	working lengthways speed	50 mm/s	540 mm 670 mm
spindle	clamping system	hydraulic turntable	65 mm/s 52 mm/s
	rotation motor	1.3/1.85 kW	hydraulic turntable manual turntable
	rotation speed	2 speeds (4 - 8 rpm)	1.5 kW 1.1 kW
	rotation torque	4120/2943 Nm	7 rpm 6 rpm
	clamping element	4 (clamps)	2943 Nm 1700 Nm
	clamping capacity	from 11 " to 56 "	4 (clamps) 4 (clamps)
	clamping positions	3	from 14 " to 25 " from 13 " to 26 "
	maximum clamping force	42000 N	1
	maximum hydraulic pressure	100 bar	-
	maximum tyre diameter	2200 mm	-
	maximum tyre width	980 mm	1280 mm 1300 mm
	maximum wheel weight	800 kg	700 mm 600 mm
	wheel central hole minimum Ø	100 mm	350 kg 1000 kg
	spindle shaft minimum working height	385 mm	120 mm 140 mm
power unit	Standby function	NO	370 mm 350 mm
	operation	electrohydraulic	NO
	motor	1.5 kW	electrohydraulic
	adjustable hydraulic pressure	from 60 to 100 bar	2.2 kW 1.1 kW
	oil tank	7.6 l	from 80 to 120 bar 110 bar
control module	command transmission	by cable	6 l
	electrical voltage	24 V	by cable
	weight	8 kg	24 V 24 V
power supply	electrical 3ph	230/400 V -3.6 kW	8 kg 8 kg
	level in operating conditions	≤ 70 db (A)	230/400 V -4 kW 230/400 V -2.2 kW
noise			≤ 70 db (A)
weight		855 kg	568 kg 390 kg