# HX60A With TIER 4 FINAL Engine Installed



**Gross Power** 48.5 kW / 65.9 HP Net Power 47 kW / 63.9 HP

**HD** HYUNDAI CONSTRUCTION EQUIPMENT

#### Head Office(Sales Office)

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#### PLEASE CONTACT



Bucket Capacity 0.18 m<sup>3</sup>

**Operating Weight** 5,990 kg/13,210 lb ~ 6,160 kg/13,580 lb

# WHAT'S NEWEST AND BEST

## THE BEST PRODUCTIVITY AND FUEL EFFICIENCY

- Tier 4 Final Engine
- Fuel efficiency
- Thumb Option
- Angle Dozer Option
- Heavy Counterweight Option

# EASY CONTROL AND COMFORTABLE OPERATION

- 7-inch LCD Cluster with Flow Rate Control NEW
- Centralized Switch Console NEW
- Proportional Auxiliary Hydraulic System
- Aux. Hydraulic Line Pressure Control
- Pattern Change Valve with Better Accesibility
- Optimized Air Duct System
- Spacious & Comportable New Cabin
- Auto-Shift Travel Speed

## THE ULTIMATE SAFE ENVIRONMENT

- Auto Safety Lock NEW
- Safety Belt Warning Alarm NEW
- Emergency Engine Stop Switch
- Travel Alarm
- LED Work Light & Beacon Lamp Option
- Boom and Arm Safety Valves Option
- Anti-theft System





## NEW EXTERIOR DESIGN FOR ROBUSTNESS AND SAFETY

- ROPS/FOPS Cabin
- ROPS/FOPS Canopy Option
- OPG Level 2 (top) Option
- OPG Level 2 (front + top) Option
- Standard Boom/Arm/Bucket Cylinder Guard NEW
- New Designed Attachment For Durability
- Optimized Hydraulic Layout

# SERVICEABILITY AND TELEMATICS

- Hi MATE NEW Option
- Mobile Fleet App
- Fully Accessible MCV & Engine NEW
- 2-Piece Dozer Hose NEW

\* Photo may include optional equipment.

## **TIER 4 FINAL Certified Engine**

The new engine meets TIER 4 FINAL emission regulations without DPF and AdBlue, allowing for reduced maintenance costs for after-treatment devices.

#### **Optimal counterweight**

Lifting force has been increased massively by installing a heavy counterweight. It also enables the best working stability in its class.

#### Improved engine cowl air vent

Increasing the vent hole of the engine cowl by 76% has improved engine cooling and durability and reduced noise.

#### **Reinforced bushing application**

Durability is enhanced by applying dimple bushing to the boom pin area.

#### Complete durability

A double layer air cleaner blocks dust from the engine, which optimises the air filter replacement and the engine's durability.

### Optimal hydraulic pipeline layout

The hydraulic pipes are placed at the top of the boom to prevent damage when working in narrow trenches.

#### Seamless performance

By designing everything in-house, Hyundai has created the perfect synergy between engine and machine, with reduced noise and vibration enhancing operator comfort.



Photo may include optional equipment

HXGOA

# **NEW EXTERIOR DESIGN FOR ROBUSTNESS AND SAFETY**

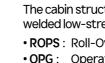
The true value of HX A Series lies in its durability and high productivity. The robust upper and lower frame structure can endure external shock and heavy work loads. Attachment performance has been proven through rigorous field testing. No matter how tough the working environment is, you can always rely on the HYUNDAI Excavator HX A Series.

HYUNDAI



#### Max visibility

Visibility is key while working. That's why the HX60A is equipped with a rear-view camera as standard with the option of a side-view camera.





#### LED lamps

For added safety, LED lamps are used in all the worklights with the boom worklights recessed to help prevent damage when working.

#### Seat belt warning alarm

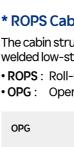
If the seat belt is not buckled when the ignition key is turned, an alarm is sounded, along with a continuous visual alert.

#### Auto Safety Lock

The Auto Safety Lock prevents unintended operation due to the excavator not being controlled solely by the RCV lever.

#### No additives required

The HX60A can be used without additional additives through fuel line reinforcement.



**HX60A** 



## Built for tough working

The HX60A is designed to with stand harsh treatment, increased thickness lower frame, wet track link, full track guards give maximum protection and durability. Dozer, boom and engine hood guarding give extra protection.

Powerful driving motor

o may include optional equipment.

1X60A

## We make the best performance in rough working conditions without any unsureness with trustworthy

HX A Series is equipment with eco-friendly, high-performance engines that meet the TIER 4 FINAL emission requirement. Become a true leader on the ground with HX A Series.

### \* ROPS Cabin and Canopy

The cabin structure of Hyundai HX A Series is using integrally welded low-stress, high strength steel to meet ROPS and OPG certification. • ROPS : Roll-Over Protective Structures ISO12117-2

• OPG : Operator Protective Guard, ISO10262 Option

### Boom Robust Cylinder Guard NEW

We have added Robust cylinder guards to the boom of our excavator to provide increased protection for the hydraulic cylinders. These guards effectively shield the cylinders from damage caused by debris and other external factors, reducing the risk of downtime and costly repairs.

Powerful track motors provide unrivaled performance and traction.

# **COMFORT & EASE OF USE**

In the new HX60A, comfort and efficiency go hand in hand. The standard proportional joysticks improve operating while the new 7- inch cluster makes diagnosing your machine as easy as possible. More space, better visibility and enhanced features make sure the operator enjoys a comfortable working environment.

#### New 7-inch touchscreen cluster

The new cluster maximises operator productivity by providing integrated, easy access to all necessary information, from the outside temperature to the power modes and hydraulics settings, on a highly readable screen.





## Intelligent & wide cluster

The new layout increases the operator's comfort and productivity thanks to an increase in space, better visibility and new tools.

A Comfort in all weathers

your attachments.

Bluetooth Radio

The proportional joysticks as

standard will greatly improve the

operability of your machine and

Audio and hands free functions are conveniently located.



#### Smooth operation

A proven, high-quality RCV (Remote Control Valve) lever has been added to improve operating and let you personalise settings such as attachment control.

#### Comfort in all weathers

Standard air conditioning has been improved in the front and rear, while a 3-level, adjustable heated seat ensures maximum comfort.



#### Push button start

An innovative machine requires convenient modern functions like the button-type ignition key with start & stop function, plus added USB ports.

# SERVICEABILITY **AND TELEMATICS**

IoT / ICT / AI-based digital technology. Creating a smart construction site. Maximizes connectivity, productivity, and safety for successful businesses.





\* Photo may include optional equipment.

Himste Option

## **IT'S CONVENIENT,** EASY AND VALUABLE

Hi MATE Hyundai's newly developed remote management system, utilizes GPS-satellite technology to provide customers with the highest level of service and product support available. Hi MATE enables users to remotely evaluate machine performance, access diagnostic information, and verify machine locations at the touch of a button.

## WHAT IS BENEFITS



#### **Increase Productivity**

It helps you operate machines in efficient. You can check the difference between total engine hours and actual working hours. See how productive your machines are and plan any required cost saving solutions. Hi MATE offers working information such as working / idling hours, fuel consumption and rate.



#### Convenient and Easy Monitoring

There is nothing much to do to monitor your machines. Just log on to the Hi MATE website or mobile application. Hi MATE allows you to watch your machines whenever and wherever you are.



#### Security

Protect your machines from theft or unauthorized usage with Hi MATE. If the machine moves out of the Geo-fence boundary, you will get alerts.



The new Mobile App is optimized to fleet management. It provides productivity, health insights based on telematics technology and enables fleet owner just focus on most wanted equipment in view of economical usage, utilization, fault codes and maintenance. The new Mobile App sorts equipment in order of eco-index, utilization-index and fault code level automatically so that urgent equipment pops up automatically.

## 2-Piece Dozer Hose NEW

HX60A dozer is designed with a hydraulic hose that is a 2-piece type, providing easy and convenient maintenance. This design allows for easy replacement of individual hoses in case of damage, reducing maintenance time and costs.

## **Optimal placement of filters**

Large engine hood and easy ground level access to daily checks and filters.

#### Fully Accessible MCV & Engine NEW

The cowl, which is a full open type, allows for easy access to both the MCV and engine. In addition, the layout of the MCV and engine has been optimized for better serviceability.



#### Mobile Fleet App. Option



#### Hi MATE Fleet App

HCE-DT<sup>AIR</sup> App



# **SPECIFICATIONS**

ENGINE			
Maker / Model	HYUNDAI / DM02VB		
Туре	4-cycle, turbocharged, intercooled, electronic controlled diesel engine		
Rated flywheel horse pov	ver		
J1995 (gross)	65.0 hp (48.5 kW) at 2,400 rpm		
SAE J1349 (net)	63.0 hp (47 kW) at 2,400 rpm		
Max. torque	248 N·m (183 lb·ft) at 1,600 rpm		
Bore x stroke	90 mm x 94 mm (3.5" x 3.7")		
Piston displacement	2,392 cc (146 cu in)		
Batteries	12 V - 100 Ah		
Starting motor	12 V - 2.5 kW		
Displacement	13.5 V - 90 Amp		
HYDRAULIC SYSTEM			
MAIN PUMP			
Туре	Variable Alternator tandem axial piston pumps		
Max. flow	2x60.5 lpm (16.0 gpm) at 2,200 rpm		
Sub-pump for pilot circuit	36.6 lpm (9.7 gpm) + 9.0 lpm (2.4 gpm) 40.3 lpm (10.6 gpm) + 10 lpm (2.6 gpm) at 2,200 rpm		
HYDRAULIC MOTORS			
Travel	Two fixed displacement axial piston motors		
Swing	Fixed displacement axial piston motor		
RELIEF VALVE SETTING			
Implement circuits	220 kgf/cm <sup>2</sup> (3,130 psi)		
Travel circuit	350 kgf/cm <sup>2</sup> (4,980 psi)		
Swing circuit	230 kgf/cm <sup>2</sup> (3,280 psi)		
Pilot circuit	30 kgf/cm <sup>2</sup> (430 psi)		
HYDRAULIC CYLINDERS			
Boom	1-110 x 715 mm (4.3" x 28.1")		
Arm	1-90 x 850 mm (3.5" x 33.5")		
Bucket	1-80 x 660 mm (3.1" x 26.0")		
Boom swing	1-95 x 527 mm (3.7" x 20.7")		
Dozer blade (STD)	1-110 x 224 mm (4.3" x 8.8")		
Dozer blade (Angle)	1-115 x 212 mm (4.5" x 8.3")		
Angle swing	1-95 x 335 mm (3.7" x 13.2")		
TRAVEL SYSTEM			
Drive method	Fully hydrostatic type		
Drive motor	Two fixed displacement axial piston motors		
Reduction system	2-stage planetary		
Max. drawbar pull	5,221 kgf (11,510 lbf)		
Max. travel speed (high / low)	4.2km/hr(2.6mph)/2.2km/hr(1.4mph)		
Gradeability	35°(70%)		
Parking brake	Automatic, spring applied hydraulic released		
CONTROLS			

Pilot pressure operated joysticks and pedals with detachable lever provide almost effortless and fatigueless operation.

Two joysticks with one safety lever (LH) : Arm and Swing (RH) : Boom and Bucket (ISO)
Two levers with pedals
Electric, dial type

#### SWING SYSTEM Swing motor Fixed displacement axial piston motor Swing reduction 2 - stage planetary Swing bearing lubrication Grease-bathed Swing brake Multi wet disc Swing speed 9.4 rpm **COOLANT & LUBRICANT CAPACITY** US gal liter Fuel tank 125 33.0 Engine coolant 11 2.9 Engine oil 8.6 2.3 Final drive (each) 1 0.3 Hydraulic tank 70 18.5 Hydraulic system 120 31.7 (including tank)

**UNDERCARRIAGE** x-leg type center frame is integrally welded with reinforced box-section track frames. the undercarriage includes lubricated rollers, track adjusters with shock absorbing springs and sprockets, and rubber shoes. Center frame x-leg type Track frame pentagonal box type No. of upper roller on each side 1 No. of lower roller on each side 5 **OPERATING WEIGHT (APPROXIMATE)** Operating weight, including 3,000 mm (9'10") boom, 1,900 mm (6'3") long arm, SAE heaped 0.18 m<sup>3</sup> (0.24 yd<sup>3</sup>) digging bucket, 400 mm (1'4") rubber track, lubricant, coolant, full fuel tank, full hydraulic tank, 435 kg (960 lb) counterweight and all standard equipment. Operating weight 6,160 kg (13,580 lb) Ground pressure 0.36 kgf/cm<sup>2</sup> (5.08 psi) SOUND LEVEL Exterior sound level (2000/14/EC – ISO

99 dB (EU only) 6395:2008) LWA Interior sound level (ISO 6396:2008) LPA 76 dB

#### AIR CONDITIONING SYSTEM

The air conditioning system contains fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.65 kg of refrigerant representing a CO2 equivalent of 0.93 metric tonnes.

#### DIGGING FORCE

JIGGING FOR	CE			
Boom	Length	mm	3,0	000
Arm	Length	mm	1,600	1,900
		kN	37	37
Bucket	SAE	kgf	3,763	3,763
digging		lbf	8,295	8,295
force	ISO	kN	42	42
TOICE		kgf	4,292	4,292
		lbf	9,461	9,461
		kN	27	24
A ====	SAE	kgf	2,779	2,476
Arm crowd		lbf	6,126	5,459
force		kN	28	25
TOICE	ISO	kgf	2,886	2,561
		lbf	6,363	5,646

# **LIFTING CAPACITY**

#### LIFTING CAPACITIES HX60A

						Lift-poin	t radius					At	max. reac	h
Lift-po		1.0 m (	3.3 ft)	2.0 m (	6.6 ft)	3.0 m (	9.8 ft)	4.0 m (1	13.1 ft)	5.0 m (1	6.4 ft)	Сара	city	Reach
heigh (m/ft		ŀ	-£0	þ	-60	ŀ	-£0	ŀ	-50	ŀ	-50	þ	-£0	m (ft)
5.0m	kg											*1,200	*1,200	3.64
16.4 ft 4.0m	lb kg							*1.060	*1,060			*2,650 *1.080	*2,650 1,070	<u>(11.9</u> 4.63
4.011 13 ft	lb							*2,340	*2,340			*2,380	2,360	(15.2
3.0m	kg							*1,140	*1,140	*1,160	950	*1,020	890	5.19
10 ft	lb							*2,510	*2,510	*2,560	2,090	*2,250	1,960	(17.0
2.0m	kg					*1,730	*1,730	*1,380	1,300	*1,240	930	*1,020	810	5.4
7 ft	lb					*3,810	*3,810	*3,040	2,870	*2,730	2,050	*2,250	1,790	(18.0
1.0m	kg					*2,430	1,870	*1,680	1,250	*1,360	910	*1,080	780	5.5
3ft	lb			+4 400	+1 100	*5,360	4,120	*3,700	2,760	*3,000	2,010	*2,380	1,720	(18.2
0.0m	kg Ib			*1,480	*1,480	*2,810	1,800	*1,880	1,200	*1,440	880	*1,210	800	5.3
0.0ft -1.0m		*1,920	*1,920	3,460 *2,710	2,780 *2,710	*6,190 *2,820	3,970 1,770	*4,140 *1,920	2,650 1,180	*3,170	1,940 880	*2,670 *1,380	1,760 880	<u>(17.7</u> ) 5.0
-1.0111 -3 ft	kg Ib	*4,230	*4,230	*5,970	*5,970	*6,220	3,900	*4,230	2,600	*3,040	1,940	*3,040	1,940	(16.4
-2.0m	kg	*3,140	*3,140	*4,070	3,440	*2,480	1,790	*1,670	1,190	3,040	1,940	*1,440	1,940	4.3
-7 ft	lb	*6,920	*6,920	*8,970	7,580	*5,470	3,950	*3,680	2,620			*3,170	2,380	(14.1
-3.0m	kg	2,020	2,020	*2,450	*2,450	*1,430	*1,430	2,000	_,0_0			*1400	*1,400	3.0
-9.8 ft	lb			*5,400	*5,400	*3,150	*3,150					*3,090	*3,090	(9.9

#### Boom : 3.0 m (9' 10") / Arm : 1.9 m (6'3") / No Bucket / Counterweight : 435 kg (960 lb) / Rubber track : 400 mm (1' 4") / Angle dozer down position

						Lift-poin	t radius					At	max. reac	h
Lift-po		1.0 m (	3.3 ft)	2.0 m (	6.6 ft)	3.0 m (	9.8 ft)	4.0 m (1	3.1 ft)	5.0 m (1	l6.4 ft)	Сара	city	Reach
heigh (m/ft		ŀ	-£0	Þ	-400	ŀ	-#0	ŀ	-450	ŀ	-60	ŀ	-	m (ft)
5.0m 16.4 ft	kg Ib											*1,200 *2,650	*1,200 *2,650	3.64 (11.9)
4.0m	kg							*1,060	*1,060			*1,080	*1,080	4.63
13 ft	lb							*2,340	*2,340			*2,380	*2,380	(15.2)
3.0m	kg							*1,140	*1,140	*1,160	970	*1,020	910	5.19
10 ft	lb							*2,510	*2,510	*2,560	2,140	*2,250	2,010	(17.0)
2.0m	kg					*1,730	*1,730	*1,380	1,340	*1,240	960	*1,020	830	5.47
7 ft	lb					*3,810	*3810	*3,040	2,950	*2,730	2,120	*2,250	1,830	(18.0)
1.0m	kg					*2,430	1,920	*1,680	1,280	*1,360	930	*1,080	800	5.54
3 ft	lb					*5,360	4,230	*3,700	2,820	*3,000	2,050	*2,380	1,760	(18.2)
0.0m	kg			*1,480	*1,480	*2,810	1,850	*1,880	1,240	*1,440	910	*1,210	820	5.39
0.0ft	lb			3,460	*3,260	*6,190	4,080	*4,140	2,730	*3,170	2,010	*2,670	1,810	(17.7)
-1.0m	kg	*1,920	*1,920	*2,710	*2,710	*2,820	1,820	*1,920	1,220	*1,380	900	*1,380	900	5.01
-3 ft	lb	*4,230	*4,230	*5,970	*5,970	*6,220	4,010	*4,230	2,690	*3,040	1,980	*3,040	1,980	(16.4)
-2.0m	kg	*3,140	*3,140	*4,070	3,540	*2,480	1,840	*1,670	1,230			*1,440	1,120	4.31
-7 ft	lb	*6,920	*6,920	*8,970	7,800	*5,470	4,060	*3,680	2,710			*3,170	2,470	(14.1)
-3.0m	kg	-	-	*2,450	*2,450	*1,430	*1,430		-			*1,400	*1,400	3.02
-9.8 ft	lb			*5,400	*5,400	*3,150	*3,150					*3,090	*3,090	(9.9)

| 1 | Lifting capacity are based on ISO 10567.

2 | Lifting capacity of HX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.

|3| The Lift-point is bucket pivot mounting pin on the arm(without bucket mass).

| 4 | (\*) indicates load limited by hydraulic capacity.

#### BUCKETS

#### All buckets are welded with high-strength steel

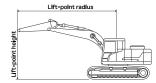
All Duckets al	buckets are welded with high-strength steel.										
Capacity m³ (yd³)		Width				Recommendation mm (ft.in)					
		mm	mm (in)		Tooth EA	3,000 ( 9' 10") Boom					
SAE heaped	CECE heaped	Without Side cutters	With Side cutters	kg (lb)		1,600 ( 5' 3") Arm	1,600 ( 5' 3") Arm	1,600 ( 5' 3") Arm	1,900 ( 6' 3") Arm	1,900 ( 6' 3") Arm	1,900 ( 6' 3") Arm
♦ 0.18 (0.24)	0.15 (0.20)	670 (26.4")	730 (28.7")	163	5	•	•	•	•	•	•

General Purpose ◆ Rock-Heavy duty bucket

★ Heavy duty bucket

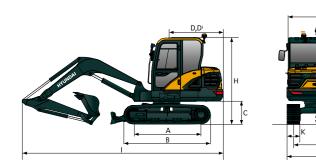
■ : Applicable for materials with density of 2,100 kgf/m<sup>3</sup> (3,500 lbf/yd<sup>3</sup>) or less • : Applicable for materials with density of 1,800 kgf/m<sup>3</sup> (3,000 lbf/yd<sup>3</sup>) or less • : Applicable for materials with density of 1,500 kgf/m<sup>3</sup> (2,500 lbf/yd<sup>3</sup>) or less ▲: Applicable for materials with density of 1,200 kgf/m<sup>3</sup> (2,000 lbf/yd<sup>3</sup>) or less  $\times$ : Applicable for materials with density of 1,200 kgf/m<sup>3</sup> (2,000 lbf/yd<sup>3</sup>) or less

- Pi	Rating over-front	- <b>f</b> D	Rating over-side or 360 degree



# **DIMENSIONS & WORKING RANGE**

#### HX60A DIMENSIONS & WORKING RANGE



			Unit : mm (ftin)
Α	Tumbler distance	2,010	(6' 7")
В	Overall length of crawler	2,544	(8' 4")
С	Ground clearance of counterweight	687	(2'3")
D	Tail swing radius	1,680	(5'6")
D'	Rear-end length	1,675	(5'6")
Е	Overall width of upper structure	1,850	(6' 1")
F	Track gauge	1,500	(4' 11")
G	Min. ground clearance	271	(11")
Н	Overall height of cab	2,595	(8'6")
	Boom length	3,000	(9' 10")
	Arm length	1,600 (5' 3")	1,900 (6' 3")
I	Overall length	5,970 (19' 7")	5,995 (19' 8")
к	Track shoe width	Steel track	Rubber track
ĸ	IT ACK SIDE WILLI	380 (1'3")	400 (1' 4")
L	Overall Width	1,880 (6' 2")	1,900 (6' 3")

Unit · mm (ftin)

		A	_
		A'	
D	5m 5m 3m E 2m 1m		
вВ	C 2m	6m 5m 4m 3n 2n 1m	* (

			Unit : mm (ten)			
	Boom Length	3,000 (9' 10")				
	Arm Length	1,600 (5' 3")	1,900 (6' 3")			
А	Max. Digging Reach	6,150 (20' 2")	6,450 (21' 2")			
A'	Max. digging reach at ground	6,020 (19' 9")	6,320 (20' 9")			
Β'	Max. digging depth	3,770 (12' 4")	4,070 (13' 4")			
В	B' Max. digging depth (8' level)	3,380 (11' 1")	3,720 (12' 2")			
С	Max. vertical wall digging depth	3,230 (10'7")	3,600 (11' 10")			
D	Max. digging height	5,760 (18' 11")	5,980 (19'7")			
Е	Max. dumping height	4,000 (13' 1")	4,210 (13' 10")			
F	Min. swing radius	2,375 (7' 10")	2,410 (7' 11")			

\* Standard and optional equipment may vary. Contact your Hyundai dealer for more information. The machine may vary according to International standards.
\* The photos may include attachments and optional equipment that are not available in your area.

\* Materials and specifications are subject to change without advance notice.

\* All imperial measurements rounded off to the nearest pound or inch.

# **STANDARD/OPTIONAL EQUIPMENT**

ENGINE	STD	OPT
Hyundai DM02V	•	
-		
HYDRAULIC SYSTEM		
2 Power mode	•	
Engine auto idle	•	
CABIN & INTERIOR		
Radio & USB	•	
Standard key	•	
Smart key + Start button		•
Proportional joysticks	•	
Adjustable heatable seat (fabric)	•	
Adjustable heatable seat (pvc)		•
CABIN FOG		
FOG protection (top)		•
FOG protection (front+top)		•
SAFETY		
Boom LED light		•
Cabin LED lamp		•
Beacon LED lamp Boom safety valve		•
Arm safety valve		•
Rear view camera		•
		•
Travel alarm	•	
ATTACHMENT		
BOOMS		
3.00m, 9'10" Mono	•	
ARM		
1.60m, 5'3"	•	
1.90m, 6'3"		•
QUICK COUPLER		
Quick coupler (Push+Hook)		•
Quick coupler (Slide+Hook)		•

OTHERS	STD	OPT
Rotating piping		•
Quick coulper piping		•
Fuel filler pump		•
Hi Mate		•
Pattern change valve		•
COUNTERWEIGHT		
435kg CWT	•	
UNDERCARRIAGE		
Rubber track 400mm	•	
Track 380mm (Steel)		•
Track 450mm (Steel)		•
Track 400mm + Rubber pads		•

\* Standard and optional equipment may vary. Contact your HD Hyundai dealer for more information. The machine may vary according to International standards.

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