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CASE

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# 400 SERIES 410/420/430/440 AT A GLANCE

#### **BIG VALUE IN A COMPACT PACKAGE**

Superior design features in the new Case 400 Series Skid Steers reflect the longstanding Case commitment to customer values such as low cost of ownership, outstanding operator comfort and productivity.

#### LOW COST OF OWNERSHIP

The 400 Series Skid Steers are designed to save you time and money. Smart design features like a "flexing" unitized chassis and loader arms that use the chassis to increase support and maximize durability of these skid steers. Hydraulic pumps directly coupled to the engine help prevent power loss and costly belt maintenance. These units are also easy and cost-effective to maintain thanks to their industry-exclusive easy tilt ROPS.

#### **OPERATOR COMFORT**

Low-effort servo-hydrostatic controls make Case Skid Steers easy to operate. The controls swing away for easy entry and exit. Optional Ride Control, an industry first on skid steer loaders, reduces operator fatigue, enabling you to get more done in a day. Unobstructed visibility to the bucket, tyres and curb line, and other features, like optional push-button activation of auxiliary hydraulics and a foot throttle, make operation even easier. And two cab options offer heat and air conditioning for superior comfort in any weather.

#### PRODUCTIVITY

Case 400 Series Skid Steers are designed for high productivity. The loweffort, servo-hydrostatic controls and an extensive selection of attachments contribute to faster cycle times. Optional Ride Control lets you travel faster while improving material retention - a smoother ride means less material bouncing out of the bucket. With only two bolts to remove to tilt the ROPS, routine maintenance can be done quickly, getting you back to work.





## **OPERATOR ENVIRONMENT**



#### **OPERATOR COMFORT**

Case 400 Series Skid Steers are designed with features that help protect the operator, such as the standard retractable seat belt and ROPS/FOPS canopy with side screens. In addition to serving as an armrest, the seat bar locks out the drive system and loader control levers, and engages the parking brake when raised. There is a comfortable operator environment to suit every preference:

#### **ROPS/FOPS**

The standard ROPS/FOPS has side screens and a rear window. For overhead protection from the elements, add the top window. Or, if you'd like a little more protection on the sides, add side windows.

#### CAB/FOPS "DELUXE"

This deluxe cab option includes heat, sound pads, front door, and top and side windows.

#### CAB/FOPS "PREMIUM DELUXE"

The premium deluxe cab option, available on the 430 and 440, includes a heater and air conditioning, sound pads, front door, and top and side windows.

#### EASY IN, EASY OUT

The 400 Series Skid Steers offer easy entry and exit. Low-effort controls swing away. A standard, vinyl water-shedding seat (suspension seat optional) keeps you comfortable during long days on the job. An optional heavy-duty rear door is available if you're working in harsh environments, such as heavily wooded areas where protruding tree limbs are an issue.

#### NEW INSTRUMENTATION PANEL

Easy-to-read instrumentation is well-positioned on all 400 Series models. Now located on the right upright post for better visibility, this panel is now at the operator's line of sight for quick reference to system functions. The push-button park brake is located in this instrument panel. Overall, visibility is exceptional from the 400 Series seat: you can easily see the bucket, tyres and curb line.







**RIDE CONTROL** an industry first, reduces fatigue, while allowing you to travel faster from task to task. Ideal for loader-intensive applications, Ride Control also reduces the shock to the skid steer structure, attachment coupler, hydraulic system and any product or attachments carried by the loader.

# 400 SERIES DO MORE WITH ONE MACHINE

The productivity story on the Case 400 Series Skid Steers starts with the rugged business end. A compact, yet powerful radial arm loader linkage provides excellent digging and material handling capabilities. Built around a unitized, one-piece welded chassis that features several stress relief points that allow the chassis to flex without cracking or breaking, the 400 Series Skid Steers have the strength and versatility to handle many tasks, making these machines outstanding investments.

And the Case 400 Series Skid Steers aren't just for pushing or digging. The bucket hinge-pin height and forward reach make them ideal for material-handling tasks such as loading rock or mulch into a truck or placing items, such as logs or pipe, onto trailers.

#### HYDRAULIC SELF-LEVELLING OPTION

For even greater productivity levels, add the hydraulic self-levelling option, available on the 410, 420, 430 and 440 Skid Steer Loaders. With hydraulic self-levelling, the bucket maintains a level position while the loader arms are raised, reducing spillage and improving cycle times.

An optional lift cylinder cover protects the cylinder from damage in harsh environments.



#### DESIGNED FOR LONG LIFE

The 400 Series Skid Steers feature straddle-mounted pins and bushings to provide uniform support and strength to the loader arms. Competitive models with cantilevered pins allow excessive bushing wear and side-to-side play, causing stress that leads to fatigue and wear. Case Skid Steer Loader arms use the chassis for additional support when the bucket is in the digging position. This prevents loader arm stress and maximizes durability.





## ENGINES

You can depend on the Case 400 Series Skid Steers for outstanding performance, thanks to the power plants at the heart of these models. The 410 and 420 feature the Case 422/M2 4-cylinder, 2.2 liter, Tier 2 certified engine that is quiet and powerful. A 41A alternator provides electrical power in the 410 and 420 models.

A large displacement, high torque engine powers the 430 and 440. The Case Family III 445/M2 4-cylinder, 4.5 liter, Tier 2 certified engine offers plenty of torque rise to get you through tough jobs. The 430 and 440 feature a 95 A alternator. The engines in the 410 and 430 Skid Steers are naturally aspirated, providing smooth, economical operation.

Turbocharged engines in the 420 and 440 provide additional torque and quick response. They are ideal for high-altitude operation, excavating, or running high horsepower hydraulic attachments.



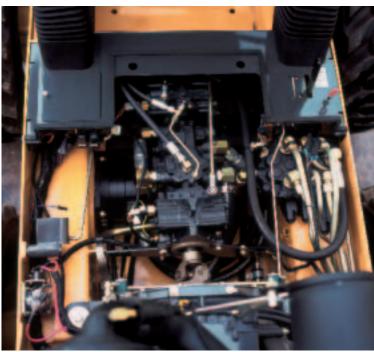
#### ENGINEERED FOR LOW OPERATING COSTS

The Case Family III engines on the 430 and 440 models figure well into the low cost of ownership equation, getting the job done with low RPMs for less wear and longer life. The integral water pump and oil cooler are easily accessed for service, getting you back on the job quickly. All skid steer engines feature a 500-hour oil change recommendation.

The cooling system on the 400 Series Skid Steers features an oil cooler next to the fan, helping to cool both the engine and the hydraulic system. A spark-arresting muffler is standard on all 400 Series Skid Steers. Jump start terminals, combined with the master disconnect switch, aid in long-term storage, convenient cold weather starting and theft prevention.

An engine grid heater option also is available on the 430 and 440 models to aid cold weather engine start-ups. On the two smaller models, glow plugs are standard. A power plug socket is also available as an option on all models to power two-way radios and cell phones.

# 400 SERIES POWERTRAIN



## Tandem hydrostatic drive pumps are coupled directly to the engine flywheel,

delivering 100% of available engine power to pumps and components. Hydrostatic motors efficiently transfer power to the wheels through extra heavyduty drive chains. Heavy-duty, single-piece, forged, induction-hardened carbon steel axles ensure reliability. Lubed-for-life axle housings with protective seal guards offer long life and dependable performance. Heavy-duty radial piston drive motors offer greater tractive effort, improved reliability and efficiency. The 430 and 440 models, equipped with the two-speed option, provide faster travel speeds from a push-button, two-speed drive. These two machines accelerate 11.8 Km/h in low range to 19.2 Km/h in high range.



### PUSH-BUTTON BRAKE ACTIVATION

All Case 400 skid steers have push-button brake activation to allow operation of the loader arms without having to steady the machine, an excellent feature when working on slopes. The spring-applied hydraulic release disc parking brake can be applied three ways: press the brake button on the right-hand instrument panel, raise the seat bar, or stop the engine.

#### LOW-EFFORT CONTROLS

The low-effort, controls give you precise control, improving your productivity. And the controls swing away for easy entry and exit. For the ultimate in versatility, standard auxiliary hydraulics allow you to operate a number of attachments. A locking lever for the foot pedal provides constant hydraulic flow for backhoe or trencher work.

#### PRE-STRESSED DRIVE CHAINS FOR RELIABILITY

Heavy duty, pre-stressed drive chains are featured on all 400 Series Skid Steers. The chains on the 410 and 420 units are ASA (American Standardization Association) n°80. On the 430 and 440 models, the chains are ASA n°100. Direct coupled hydraulic pumps prevent power loss and costly belt maintenance.

## EASE OF MAINTENANCE



Case 400 Series Skid Steers are designed to keep you on the job with built-in serviceability features for maximum uptime.

The easy-tilt ROPS is just one of the main features. It is exclusive on Case Skid Steers. Simply remove two bolts and tilt the ROPS, and you have full access to the engine and other major components in just a minute. With easy access to major components, maintenance, inspection, troubleshooting and service repair can be performed quickly, getting the skid steer back on the jobsite in the shortest time.

#### **SMART DESIGN**

Many components are designed to save money and prevent downtime. The hydraulic pumps are coupled directly to the engine to help prevent power loss and costly belt maintenance. Orderly hose routings keep hoses organized and safe from damage. Plated steel tubing is also used to promote long life and aid in hydraulic cooling.

#### **ONE-STOP DAILY CHECK POINTS**

A single location for daily check points saves time. All checkpoints are easily accessed from the rear of the machine under the lockable hood and behind the swing-out service door. There are no sides panels to remove. Open the rear hood to reach the fuel fill, oil fills, engine oil dipstick and the air cleaner. Swing out the rear service door for a quick check of the coolant and hydraulic oil levels. And you'll appreciate how easy it is to clean the cooling system. Just pull out the hydraulic oil cooler for easy access. And easy access means the checkpoints are more likely to be checked daily, contributing to longer machine life.

#### PREMIUM FILTRATION FOR LONGER LIFE

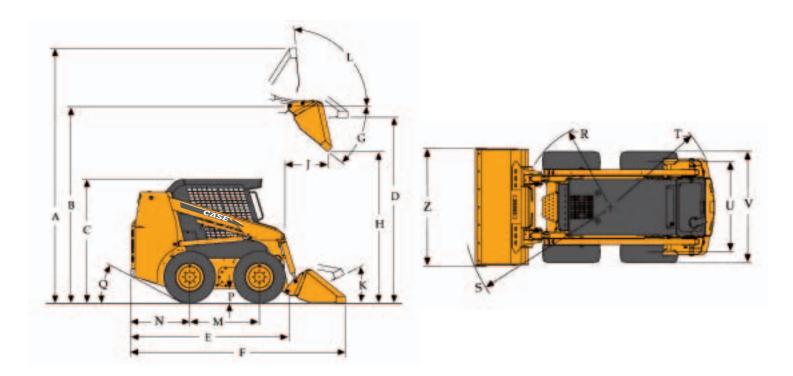
You'll get more years of operation from your skid steer, thanks to the filtration systems on the 400 Series. The standard dual-element air cleaner system ensures extended air filter life. A 6-micron hydraulic oil filter provides added protection.

# **SPECIFICATIONS**

		410	420	430	440
MAIN DATA					•
SAE operating weight	kg	2490	2640	3120	3170
Power (SAE J1349)	kW/hp	38/51	44/59	60/80	66/89
Net flywheel power (SAE J 1349)	kW/hp	37/49	42/56	52/70	61/82
Rated engine speed	rpm	2900	2900	2300	2300
Operating load	kg	681	794	908	998
Rated lift capacity	kg	1362	1588	1816	1996
Breakout force	Ν	18367	18367	24079	27571
ENGINE					
Model		CASE 422/M2	CASE 422T/M2	CASE FAMILY III 445/M2	CASE FAMILY III T445/M2
Туре		Diesel Tier 2	Diesel Tier 2	Diesel Tier 2	Diesel Tier 2
Cylinders	Nr.	4	4	4	4
Displacement		2.2	2.2	4.5	4.5
Aspiration		Natural	Turbo	Natural	Turbo
ELECTRICAL SYSTEM					
Voltage	V	12	12	12	12
Alternator	А	41	41	95	95
TRANSMISSION					
Туре		Hydrostatic	Hydrostatic	Hydrostatic	Hydrostatic
Number of speeds		1	1	1/2 opt.	1/2 opt.
Ground speed (forward-reverse)	km/h	11.0	11.0	11.8/19.2	11.8/19.2
Hydraulic pump		Variable displacement	Variable displacement	Variable displacement	Variable displacement
Hydraulic motors		Axial pistons	Axial pistons	Axial pistons	Axial pistons
Final reduction		Chain	Chain	Chain	Chain
Tyres (standard)		10.00 x 16.5	10.00 x 16.5	12.00 x 16.5	12.00 x 16.5
HYDRAULIC SYSTEM Type		Open centre	Open centre	Open centre	Open centre
Main pump	1/min	Gear type	Gear type	Gear type	Gear type
Total flow	l/min	<u>68</u>	68	80 101 (apt )	80
Total flow with auxiliary pump (high flow) Max. operating pressure	l/min bar	_ <u>121 (opt.)</u> 207	121 (opt.) 207	121 (opt.) 207	121 (opt.) 207
Control valve	bai	three-spools	three-spools	three-spools	three-spools
Lift cylinders	Nr.	2	2	2	2
bore x stroke	mm	57 x 893	57 x 893	64 x 910	64 x 910
Bucket cylinders	Nr.	2	2	2	2
bore x stroke	mm	64 x 370	64 x 370	70 x 370	76 x 370
CYCLE TIME					
Raise	sec.	4.0	4.0	4.5	4.1
Lower	sec.	2.4	2.4	3.0	3.2
Dump	Sec.	1.9	1.9	2.2	2.4
Rollback	Sec.	1.8	1.7	1.9	1.9
NOTE: SAE rated lift capacities.					
CAB					
Туре		ROPS/FOPS	ROPS/FOPS	ROPS/FOPS	ROPS/FOPS
CAPACITIES Fuel	I	83	83	83	83
Coolant		17	17	17	17
Engine oil (w/filter)	1	8.7	8.7	12	12
Hydraulic system	I	0.7	0.7	14	14
tank	I	32	32	32	32
	1	02	02	02	02

I

Total



## DIMENSIONS

			410/420	430/440
Α	Overall operating height			
	w/foundry/excavating bucket – short lip	m	3.69	3.87
	w/low profile bucket – standard lip	m	3.83	4.01
	w/low profile extended bucket – long lip	m	3.96	4.14
В	Height to bucket hinge pin	m	2.91	3.09
С	Height to top of rollover protective structure	m	1.92	1.95
D	Height to bottom of level bucket, loader arm fully raised	m	2.73	2.90
Ε	Overall length w/o attachment w/coupler	m	2.54	2.64
F	Overall length w/foundry/ excavating bucket on ground	m	3.13	3.23
	w/low profile bucket on ground	m	3.28	3.38
	w/low profile extended bucket on ground	m	3.40	3.50
G	Dump angle at maximum height		40°	39°
Н	Dump height – loader arm fully raised			
	w/foundry/excavating bucket	m	2.27	2.45
	w/low profile bucket	m	2.18	2.37
	w/low profile extended bucket	m	2.10	2.29
J	Reach – loader arm fully raised			
	w/foundry/excavating bucket	m	0.60	0.54
	w/low profile bucket	m	0.71	0.66
	w/low profile extended bucket	m	0.81	0.75
Κ	Bucket rollback on ground	m	32°	32°
L	Bucket rollback at full height		80°	84°
Μ		m	1.05	1.10
Ν	Rear axle to bumper	m	0.90	0.93
Ρ	Ground clearance	mm	203	229
Q	Angle of departure		27°	28°
R	Clearance circle front less bucket	m	1.22	1.28
S	Clearance circle front w/foundry/ exc. bucket on ground	m	1.86	1.95
	w/low profile bucket on ground	m	1.99	2.08
	w/low profile extended bucket on ground	m	2.11	2.20
Т	Clearance circle rear	m	1.46	1.50
U	Tread width, centreline to centreline	m	1.25	1.34
V	Width less bucket	m	1.50	1.64
Ζ	Bucket width	m	1.52	1.68

NOTES: 410/420 equipped with 10.00x16.5 tyres

430/440 equipped with 12.00x16.5 tyres

## **ATTACHMENTS**

Dozens of compatible attachments for Case 400 Series Skid Steers increase machine versatility, while handy options make switching and controlling attachments incredibly easy.









Cold planer

Pick-up Broom





Dozer blade



Hammer





### AUXILIARY HYDRAULICS OPTIONS FOR GREATER VERSATILITY

A high-flow auxiliary hydraulics option provides the flow and pressure needed to run high-flow attachments. The high-flow auxiliary hydraulic system is available for all models except the 410.

#### **QUICK COUPLER**

An optional hydraulic attachment quick coupler makes switching attachments fast and simple without leaving the operator compartment. You can even add a second front auxiliary hydraulics package to run for instance a trencher or cold planer. There is also an optional electric auxiliary hydraulic control for easy, fingertip control of attachments. A nine-pin electrical socket that controls the solenoid valves on the attachment and a case drain line are also available.

A large selection of buckets adds to the impressive versatility of the 400 Series Skid Steers. Bucket options include short lip buckets and long lip buckets, regular-duty and heavy-duty dirt buckets, and utility and light material buckets.





Roto Tiller



Snow blower

Trencher

### STANDARD EQUIPMENT

#### **Operator's compartment**

- ROPS/FOPS canopy w/side screens
- Tilt ROPS/FOPS
- Instrument panels
- Water-shedding vinyl seat
- 51 mm retractable seat belt
- Ergonomic hand controls
- Seat bar w/integral armrests
- Electric brake control
- Loader
- Radial loader arm design
- Engine
- Automatic fan belt tensioner
- Integral engine oil cooling
- Dual element air cleaner
- Heavy-duty radiator

### **Powertrain**

- Hydrostatic four wheel drive
- Disc type parking brakes

#### **Hydraulics**

- Hydraulic circuit pedal lock
- Loader arm-mounted ISO flat face connectors
- 3-spool loader control valve
- Heavy- duty oil cooler
- Loader arm float position

#### Other

- Lockable service access hood
- Halogen lights, 2-front, 1-rear
- Rear tail lights

- **Hydraulics**
- High-flow auxiliary hydraulics
- Second auxiliary hydraulics
- Attachment case drain plumbing

#### Engine

- Coolant block heater
- Grid heater (430/440)

- 2 speed ground drive (430/440)
- Backup alarm/horn package
- Lift hooks
- · Battery disconnect switch/jump start terminals

Standard equipment is subject to change in different countries



### WORLDWIDE CASE CONSTRUCTION EQUIPMENT CONTACT INFORMATION

EUROPE/AFRICA/MIDDLE EAST: CENTRE D'AFFAIRES EGB 5, AVENUE GEORGES BATAILLE - BP 40401 60671 LE PLESSIS-BELLEVILLE - FRANCE

NORTH AMERICA/MEXICO: 700 STATE STREET RACINE, WI 53404 U.S.A.

LATIN AMERICA: AV. GENERAL DAVID SARNOFF 2237 32210 - 900 CONTAGEM - MG BELO HORIZONTE BRAZIL

ASIA PACIFIC: UNIT 1 - 1 FOUNDATION PLACE - PROSPECT NEW SOUTH WALES - 2148 AUSTRALIA

DE BAO ROAD, WAIGAOQIAO FTZ, PUDONG, SHANGHAI, 200131, P.R.C.



NOTE: Standard and optional fittings can vary according to the demands and specific regulations of each country. The illustrations may include optional rather than standard fittings consult your Case dealer. Furthermore, CNH reserves the right to modify machine specifications without incurring any obligation relating to such changes.

SERVICE & SUPPORT

YOUR PROFESSIONAL PARTNER

THE CASE DEALER

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Conforms to directive 98/37/CE



**POSSIBLE ADDITIONAL OPTIONS** 

#### **Operator's compartment**

- Vinyl suspension seat w/51 mm retractable seat belt
- Vinyl suspension seat
- Glass front door w/wiper & washer
- Sliding side windows
- Air conditioning (430/440)
- Heater (deluxe)
- Rear window w/emergency escape
- Foot throttle

Accessory power outlet

- Loader
- Auxiliary front electric control
- Ride control
- Hydraulic attachment coupler

- Other

- Rotating beacon



CHINA:

