325
328

Bobcat®

Operation & Maintenance Manual

325 – S/N 232311001 & Above
328 – S/N 232411001 & Above
(D Series)



An Ingersoll-Rand business

6901018 (3–03) Revised (5–03)

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CALIFORNIA
PROPOSITION 65 WARNING

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

REFERENCE INFORMATION

Write the correct information for YOUR Bobcat Excavator in the spaces below. Always use these numbers when referring to your Excavator.

Bobcat Excavator
Serial Number ..... _____
Engine Serial Number ..... _____
_____
_____
_____

NOTES: _____
_____
_____
_____
_____

YOUR BOBCAT EXCAVATOR DEALER: _____
ADDRESS: _____
PHONE: _____

Bobcat Company
P.O. Box 128
Gwinner, ND 58040–0128

Bobcat Company Europe
J. Huysmanslaan 59
B–1651 LOT
BELGIUM

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Fasten the seat belt **[A]**.



Lower the control console **[B]**.

NOTE: There is a control lock switch in the left console which deactivates the hydraulic control levers (joysticks) and the traction drive system when the control console is raised. The console must be in the locked down position for the hydraulic control levers (joysticks) and traction system to operate.

NOTE: If the control lock switch does not deactivate the control levers and traction system when console is raised, see your Bobcat dealer for service.



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LUBRICATION OF THE HYDRAULIC EXCAVATOR

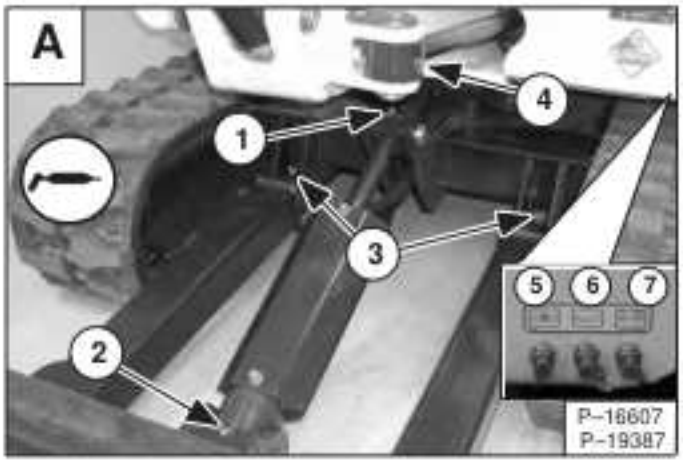
Lubricate the Hydraulic Excavator as specified in the *SERVICE SCHEDULE*, Page 35 for the best performance of the machine.

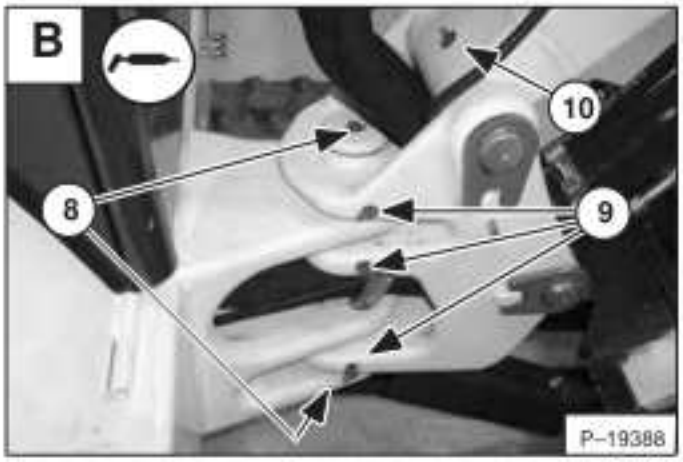
Always use a good quality lithium based multipurpose grease when lubricating the machine. Apply the lubricant until extra grease shows.

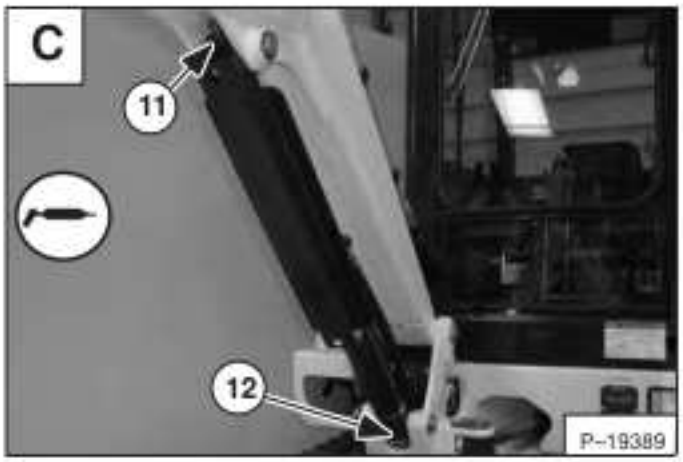
Lubricate the following locations on the Hydraulic Excavator **EVERY 8–10 HOURS:**

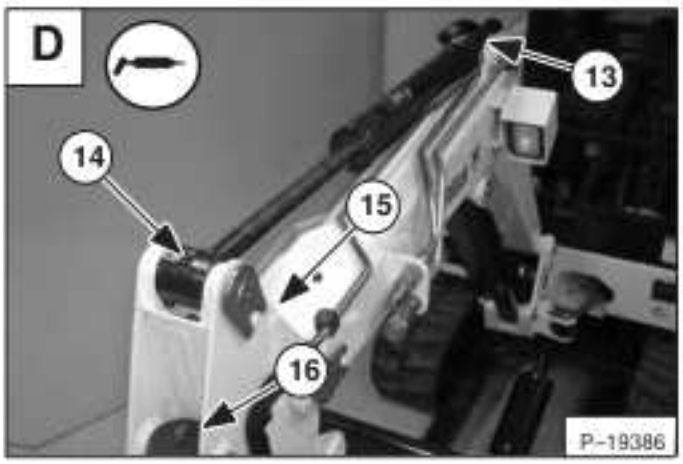
Ref.	Description (# of Fittings)
1.	Blade Cylinder Rod End (1) **[A]**.
2.	Blade Cylinder Base End (1) **[A]**.
3.	Blade Pivots (2) **[A]**.
4.	Boom Swing Cylinder Rod End (1) **[A]**.
5. *	Swing Circle Pinion (1) **[A]**.
6. *	Swing Circle Bearing (1) **[A]**.
7.	Boom Swing Cylinder Base End (1) **[A]**.
8.	Boom Swing Pin (1) **[B]**.
9.	Boom Swing Pivot (3) **[B]**.
10.	Boom / Swing Frame Pivot (1) **[B]**.
11.	Boom Cylinder Base End (1) **[C]**.
12.	Boom Cylinder Rod End (1) **[C]**.
13.	Arm Cylinder Base End (1) **[C]**.
14.	Arm Cylinder Rod End (1) **[D]**.
15.	Arm / Boom Pivot (1) **[D]**.
16.	Bucket Cylinder Base End (1) **[D]**.

* Lubricate every 50 hours. Use 4 to 5 pumps from a grease gun, rotate the upperstructure 180° and add another 4 to 5 pumps of grease.









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EXCAVATOR SPECIFICATIONS

325 Lifting Capacity

⚠ WARNING

OVERLOAD CAN TIP THE EXCAVATOR AND CAUSE INJURY OR DEATH

- Do not lift or hold any load that exceeds these ratings at their specified load radii and height.
- Total rated load is shown. The weight of all lifting devices must be deducted to determine the net load that can be lifted.

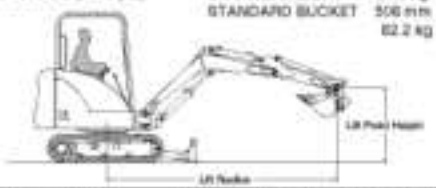


Where applicable, specifications conform to ISO Standards. Specifications are subject to change without notice. Lift Point is bucket hinge point with standard bucket attached and bucket cylinder fully extended.

EXCAVATOR MODEL 325

CIRCUIT PRESSURES
WORKING 172 bar (2500 psi)
HOLDING 203 bar (2950 psi)

BOOM LENGTH	2000 mm	(78.7 in)
ARM LENGTH	1050 mm	(41.3 in)
COUNTERWEIGHT	24.9 kg	(55.0 lb)
STANDARD BUCKET	508 mm	(20.0 in)
	82.2 kg	(181.3 lb)



LIFT POINT HEIGHT	RATED LIFT CAPACITY OVER BLADE, BLADE DOWN - kg (lb)			RATED LIFT CAPACITY OVER BLADE, BLADE UP - kg (lb)			RATED LIFT CAPACITY OVER SIDE, BLADE UP - kg (lb)		
	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in)	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in)	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in)
mm (in)	2000 (78.7)	3000 (118.1)		2000 (78.7)	3000 (118.1)		2000 (78.7)	3000 (118.1)	
3000 (118.1)			*325 (719) @ 2670 (113)			*311 (686) @ 2670 (113)			*326 (719) @ 2670 (113)
2000 (78.7)		*365 (806)	*350 (772) @ 3510 (138)		*355 (782)	*335 (738) @ 3510 (138)		*361 (796)	*343 (756) @ 3510 (138)
1000 (39.4)	*909 (2004)	*494 (1088)	*374 (825) @ 3710 (146)	*886 (1955)	*474 (1044)	260 (618) @ 3710 (146)	705 (1553)	*470 (1036)	267 (588) @ 3710 (146)
Ground	*1111 (2449)	*567 (1249)	*414 (913) @ 3560 (140)	777 (1714)	405 (893)	305 (672) @ 3560 (140)	660 (1455)	367 (808)	274 (603) @ 3560 (140)
-1000 (-39.4)	*936 (2063)	*446 (983)	*437 (964) @ 3010 (118)	*936 (2063)	*446 (983)	*433 (954) @ 3010 (118)	748 (1648)		*431 (951) @ 3010 (118)

* Rated Hydraulic Lift Capacity

328 Lifting Capacity (Also 325 when equipped with long arm.)

⚠ WARNING

OVERLOAD CAN TIP THE EXCAVATOR AND CAUSE INJURY OR DEATH

- Do not lift or hold any load that exceeds these ratings at their specified load radii and height.
- Total rated load is shown. The weight of all lifting devices must be deducted to determine the net load that can be lifted.

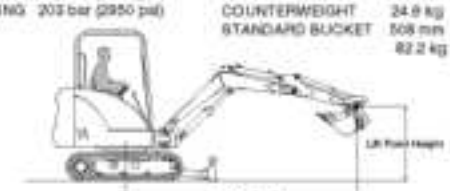


Where applicable, specifications conform to ISO Standards. Specifications are subject to change without notice. Lift Point is bucket hinge point with standard bucket attached and bucket cylinder fully extended.

EXCAVATOR MODEL 328 (AND MODEL 325 EQUIPPED WITH LONG ARM)

CIRCUIT PRESSURES
WORKING 172 bar (2500 psi)
HOLDING 203 bar (2950 psi)

BOOM LENGTH	2000 mm	(78.7 in)
ARM LENGTH	1350 mm	(53.1 in)
COUNTERWEIGHT	24.9 kg	(55.0 lb)
STANDARD BUCKET	508 mm	(20.0 in)
	82.2 kg	(181.3 lb)



LIFT POINT HEIGHT	RATED LIFT CAPACITY OVER BLADE, BLADE DOWN - kg (lb)			RATED LIFT CAPACITY OVER BLADE, BLADE UP - kg (lb)			RATED LIFT CAPACITY OVER SIDE, BLADE UP - kg (lb)		
	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in)	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in)	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS, kg (lb) @ mm (in)
mm (in)	2000 (78.7)	3000 (118.1)		2000 (78.7)	3000 (118.1)		2000 (78.7)	3000 (118.1)	
3000 (118.1)			*270 (594) @ 3240 (128)			*266 (586) @ 3240 (128)			*270 (594) @ 3240 (128)
2000 (78.7)		*295 (651)	*296 (652) @ 3800 (150)		*267 (632)	*285 (629) @ 3800 (150)		*290 (639)	*294 (649) @ 3800 (150)
1000 (39.4)	*785 (1731)	*425 (938)	*322 (709) @ 3990 (157)	*756 (1666)	*412 (908)	*313 (689) @ 3990 (157)	*768 (1693)	*422 (931)	*320 (706) @ 3990 (157)
Ground	*1049 (2313)	*532 (1174)	*346 (763) @ 3850 (152)	827 (1822)	*516 (1137)	*345 (761) @ 3850 (152)	781 (1721)	399 (880)	279 (615) @ 3850 (152)
-1000 (-39.4)	*975 (2149)	*479 (1057)	*379 (835) @ 3360 (132)	*964 (2125)	*481 (1061)	*378 (833) @ 3360 (132)	783 (1727)	*484 (1067)	*374 (825) @ 3360 (132)

* Rated Hydraulic Lift Capacity

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BEFORE OPERATING THE BOBCAT COMPACT EXCAVATOR

Safety Alert Symbol

This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.

The Bobcat excavator and attachment must be in good operating condition before use.

Check all of the items on the Bobcat Service Schedule Decal under the 8–10 hour column or as shown in this Manual.

WARNING

Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

W–2001–0502

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

I–2019–0284

WARNING

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause injury or death.

W–2044–1285

SAFE OPERATION NEEDS A QUALIFIED OPERATOR *

A QUALIFIED OPERATOR MUST DO THE FOLLOWING:

- **UNDERSTAND THE WRITTEN INSTRUCTIONS, RULES AND REGULATIONS**
  - The written instructions from Bobcat Company include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, Safety Manual and machine signs (decals).
  - Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.
- **HAVE TRAINING WITH ACTUAL OPERATION**
  - Operator training must consist of a demonstration and verbal instruction. This training is given by your Bobcat dealer before the product is delivered.
  - The new operator must start in an area without bystanders and use all the controls until he can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.
  - Operator Training Courses are available from your Bobcat dealer in English and Spanish. They provide information for safe and efficient equipment operation. Safety videos are also available.
  - Service Safety Training Courses are available from your Bobcat dealer. They provide information for safe and correct service procedures.
- **KNOW THE WORK CONDITIONS**
  - Know the weight of the materials being handled. Avoid exceeding the Rated Lift Capacity of the machine. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of load if handling dense material.
  - The operator must know any prohibited uses or work areas, for example, he needs to know about excessive slopes.
  - Know the location of any underground lines. Call local utilities or the TOLL FREE phone number found in the *SAFETY INSTRUCTIONS* Section of this manual.
  - Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, hearing protection or special applications kit are required for some work. See your dealer about Bobcat Safety equipment.

* For an operator be qualified, he must not use drugs or alcoholic drinks which impair his alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he can safely operate a machine.

S123–0502

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