

## AGENDA REPORT

TO: Mayor & City Commission  
FROM: Ken Hibl, City Manager  
DATE: September 2, 2009  
RE: Tractor Purchase



For the Agenda of September 8, 2009

---

Background. At the scheduled meeting of April 6, 2009, the City Staff proposed to the City Commission that the City purchase a replacement tractor (a demonstrator model Holder tractor for \$77,000) for its aging 1997-vintage Holder. The Commission rejected (*see copy of att'd minutes*) the staff recommendation and set aside (tabled) the matter asking that the City staff provide additional information regarding available options, e.g., research other models of compatible equipment and other feasible alternatives to purchasing a new Holder.

Since that meeting we have visited the neighboring communities of Farwell and Harrison to determine the equipment they are using for snow removal; compared the respective sidewalk inventory (to include sidewalk mileage, width, and proximity to streets and curbs); contacted vendors offering other equipment options (Bobcat, John Deere, and Kubota); obtained a list of Michigan municipalities currently using Holder equipment and discussed a realm of snow-removal topics with them, to include their rationale for using Holder tractors versus other comparable equipment, equipment usage, and equipment replacement cycles; and discussed the possibility of rehabilitating our existing Holder. We are now bringing this matter back to the City Commission for further consideration.

But prior to considering whether we should purchase a new tractor for sidewalk snow removal, I believe it is imperative that we first consider/reconsider whether the City should continue providing the service of residential sidewalk snow removal in Clare. A determination by the City Commission to terminate or retain this service should be a major factor in determining the type of equipment the City needs for sidewalk snow removal.

Once this decision is made, I ask that the City Commission consider the following information:

- The City has approximately 20 miles of residential sidewalks, the majority being four feet in width.
- If a decision is made to terminate residential sidewalk snow removal, we will still require a tractor to clear DDA sidewalks, trails and pathways, and sidewalks adjacent to City/public buildings.
- It takes us approximately ten hours to clear snow from existing sidewalks with the snow plow attachment on our existing Holder; this time is nearly doubled if snowfall requires that we use a blower attachment due to the slower snow removal speeds.

- Our standard is to clear snow from all residential sidewalks on the day of/not later than the day after a snowfall greater than two inches.
- The existing Holder has a 60-horsepower diesel motor, is articulated, is 50” in width, and has a “hard”, heated cab.
- In addition to snow removal, the Holder with a brush hog attachment is our primary vehicle to mow street and public rights-of-way in the City.

Attachments to this Agenda Report include general information pertaining to three alternative tractors (John Deere, Kubota, and Bobcat) that have a wheel width of 50 inches or less. All have approximately one-half the horsepower of our existing or a new Holder. All have a heated canvas cab – thus a potential concern for extended operator time in sustained frigid temperatures. All can be equipped with the additional equipment (broom, blade, blower) we need to remove sidewalk snow. All but the Bobcat can be equipped with a brush hog. The estimated cost range of all three alternative tractors is approximately \$24K to \$38K (dependent on the make of the tractor and the attachments purchased). Multiple, detailed brochures for all three items of equipment will be available at Monday’s meeting.

A list of municipalities currently using the Holder for sidewalk snow removal is attached.

A price quote for a new Holder is attached.

A price quote to rehabilitate our existing Holder is attached.

Three tractors (our current Holder, a new Holder, and a 29-horsepower Kubota) will be available for Commissioner review in the parking lot west of City Hall prior (commencing at 5pm) to Tuesday’s scheduled meeting to allow the Commissioners to personally view and compare the equipment.

Issues & Questions Specified.

1. Should the City Commission terminate or continue residential sidewalk snow removal?
2. If the Commission elects to continue residential sidewalk removal, what tractor should be purchased?
3. If the Commission elects to terminate residential sidewalk removal, what tractor should be purchased?

Alternatives.

1. Terminate residential sidewalk snow removal and purchase a tractor other than a Holder or rehabilitate our currently-owned Holder.
2. Continue residential sidewalk snow removal and purchase a new Holder.
3. Continue residential sidewalk snow removal and rehabilitate our currently-owned Holder.
4. Continue residential sidewalk snow removal and purchase a tractor other than a Holder.

5. Set the matter aside for further consideration, deliberation, and decision at a subsequently scheduled Commission meeting.

Financial Impact.

1. If the decision is made to terminate residential sidewalk snow removal and purchase a tractor other than a Holder or to rehabilitate the Holder, the price range will be from approximately \$24K - \$38K.
2. If the decision is made to continue residential sidewalk removal and purchase a new Holder, the cost will be approximately \$88K.
3. If the decision is made to continue residential sidewalk snow removal and rehabilitate our currently-owned Holder, the cost will be in a range of \$30-\$36K.
4. If the decision is made to continue residential sidewalk snow removal and purchase a tractor other than the Holder, the price range will be approximately \$24K - \$38K.

Recommendations. If the Commission elects to terminate residential sidewalk snow removal, I recommend that we rehabilitate our currently-owned Holder. If the Commission decides to continue residential sidewalk snow removal, I recommend purchase of a new Holder; my primary alternative recommendation would be to rehabilitate our currently-owned Holder. A resolution (2009-027) will be prepared outlining the decision(s) made by the City Commission.

Attachments.

1. Minutes.
2. Informational brochures for Kubota, John Deere, Bobcat, and Holder.
3. List of municipalities currently owning/using Holder tractors.
4. Holder price quote.
5. Holder rehabilitation price quote.

The regular meeting of the Clare City Commission was called to order by Mayor Pat Humphrey in the Commission Chambers, at 6:00 p.m., who led the Pledge of Allegiance. Present were: Commissioners Bill Horwood, John Koch, Tom Koch, Jean McConnell and Pat Humphrey. Absent: none. Also present were Ken Hibel, City Manager; Steven Kingsbury, Finance Director/Treasurer; Dwayne Miedzianowski, Police Chief; and Lori Schuh, Main Street Manager.

2. CONSENT AGENDA:

Moved by Commissioner Bill Horwood second by Commissioner Tom Koch to approve the items listed with an asterisk (\*) that are considered to be routine by the City Commission (Minutes, Agenda, Department Reports, Communications and Approval of Bills). Roll call vote: Yeas: Commissioners Bill Horwood, John Koch, Tom Koch, Jean McConnell and Pat Humphrey. Nays: none. Absent: none. Motion approved.

3. \*APPROVAL OF MINUTES:

Consent Agenda Approval.

4. \*APPROVAL OF AGENDA:

Consent Agenda Approval.

5. PUBLIC COMMENT:

Mr. Dick Haynak commented expressing his approval regarding the appointment of James L. Chapman as the Chief of the Clare Fire Department.

6. OLD BUSINESS/UNFINISHED BUSINESS: - None

7. NEW BUSINESS:

A. "Make America Work" Resolution.

Mr. Rick Massengill was present to make a request that the Commission adopt a "Make America Work" Resolution. Motion by Commissioner Jean McConnell second by Commissioner John Koch to approve the request for a Make America Work Resolution putting this resolution in the City's standard resolution format by adoption of Resolution 2009-025. Roll call vote: Yeas: Commissioners John Koch, Jean McConnell, Tom Koch, Bill Horwood and Pat Humphrey. Nays: none. Absent: none. Motion approved.

B. Consent of City Manager Appointment – Clare Fire Chief.

Motion by Commissioner Tom Koch second by Commissioner Jean McConnell to consent to the appoint of James L. Chapman as Chief of the Clare Fire Department by adoption of Resolution 2009-026. Roll call vote: Yeas: Commissioners John Koch, Jean McConnell, Tom Koch, Bill Horwood and Pat Humphrey. Nays: none. Absent: none. Motion approved.

C. Negotiated Settlement Proposal – Disputed Engineering Invoice.

Mr. Craig Schripsema, the Senior Project Manager for Rowe Incorporated was present to answer any questions regarding the disputed invoice. Motion by Commissioner Jean McConnell second by Commissioner Bill Horwood to approve

the negotiated settlement to Rowe, Incorporated in the amount of \$16,259 by adoption of Resolution 2009-034. Roll call vote: Yeas: Commissioners Bill Horwood, John Koch, Jean McConnell, Tom Koch and Pat Humphrey. Nays: none. Absent: none. Motion approved.

**D. Approval to Purchase Tractor.**

Motion by Commissioner Bill Horwood second by Commissioner Jean McConnell to approve the purchase of the demo-model Holder Tractor at a purchase price not to exceed \$77,000 by adoption of Resolution 2009-027. Roll call vote: Yeas: Commissioner Bill Horwood. Nays: Commissioners John Koch, Jean McConnell, Tom Koch and Pat Humphrey. Absent: none. Motion defeated. Item tabled.

**E. Private Well Request – Todd Witbeck.**

Motion by Commissioner Tom Koch second by Commissioner Tom Koch to approve the permit after-the fact to allow Todd Witbeck to drill new water well. Roll call vote: Yeas: Commissioners Jean McConnell, Tom Koch, Bill Horwood, John Koch and Pat Humphrey. Nays: none. Absent: none. Motion approved.

**F. Consideration of Ballot Language – Streets Millage.**

Motion by Commissioner Tom Koch second by Commissioner Bill Horwood to approve the proposed ballot language for .75 mils for improvement of streets throughout the City of Clare by adoption of Resolution 2009-029. Roll call vote: Yeas: Commissioners John Koch, Jean McConnell, Tom Koch, Bill Horwood, and Pat Humphrey. Nays: none. Absent: none. Motion approved.

**G. Letter of Understanding: Central Michigan University & the City of Clare.**

Motion by Commissioner John Koch second by Commissioner Bill Horwood to approve the letter of understanding between Central Michigan University Department of Recreation, Parks, and Leisure Services and the City of Clare by adoption of Resolution 2009-030. Roll call vote: Yeas: Commissioners Bill Horwood, John Koch, Jean McConnell, Tom Koch and Pat Humphrey. Nays: none. Absent: none. Motion approved.

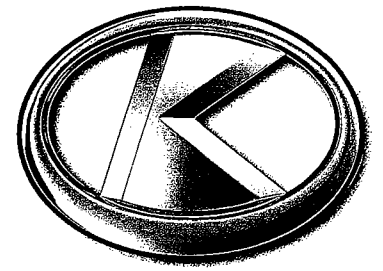
**H. Diagnosis of Well # 5.**

Motion by Commissioner Jean McConnell second by Commissioner Tom Koch to approve the expenditure of not more than \$6,000 to televise and diagnose the pumping problems related to Well #5 by Peerless-Midwest of Ionia, Michigan by adoption of Resolution 2009-031. Roll call vote: Yeas: Commissioners Tom Koch, Bill Horwood, John Koch, Jean McConnell and Pat Humphrey. Nays: none. Absent: none. Motion approved.

**I. Fireworks Permit.**

Motion by Commissioner Jean McConnell second by Commissioner John Koch to approve the issuance of a Permit for Fireworks Display to the Clare Summerfest Committee by adoption of Resolution 2009-032. Roll call vote: Yeas: Commissioners Jean McConnell, Tom Koch, Bill Horwood, John Koch and Pat Humphrey. Nays: none. Absent: none. Motion approved.

# Kubota



## KUBOTA DIESEL TRACTOR

# B

# B2320/B2620/B2920

## New Standard Tractors

Kubota's new B-Series standard tractors boast more power, more versatility, more work with fewer hours.



# TRACTOR SPECIFICATIONS

Model		B2320	B2620	B2920
<b>Engine</b>				
Type		E-TVCS, liquid cooled, 3-cylinder diesel		
Make, Model		Kubota D1005	Kubota D1105	Kubota D1305
PTO horsepower	HP (kW)	DT:18.0 (13.4)/HSD:17.0 (12.7)	19.0 (14.2)	21.0 (15.7)
Engine gross horsepower	HP (kW)	23.0 (17.2)	26.0 (19.4)	29.0 (21.6)
Rated RPM	rpm		2800	
Bore and stroke	in. (mm)	3.0 x 2.9 (76 x 73.6)	3.1 x 3.1 (78 x 78.4)	3.1 x 3.5 (78 x 88)
Displacement	cu. in. (cc)	61.1 (1001)	68.5 (1123)	77.0 (1261)
Air cleaner			Dual paper element	
Lubrication			Forced lubrication	
Cooling system			Pressurized radiator	
Radiator fan			Radial air flow	
<b>Capacities</b>				
Fuel tank	gal (ℓ)		6.9 (26)	
Cooling system	qts. (ℓ)		4.1 (3.9)	
Engine oil	qts. (ℓ)		3.3 (3.1)	3.7 (3.5)
Transmission case	gal (ℓ)	DT:3.7 (14)/HSD:4.0 (15)		4.0 (15)
<b>Drive train</b>				
Clutch			Dry single plate	
Transmission		Gear (9 Forward, 3 Reverse) / HST (3 range)		HST (3 range)
Differential lock			Standard	
Final drive			Spur gear	
Brake			Multi-plate wet disc	
PTO		DT: Transmission driven with one way clutch / HSD: Live		Live
Rear	rpm		540, 960	
Mid	rpm		2500	
<b>Hydraulics</b>				
Type			Open center	
Pump			Dual pump	
Total pump output	gpm (ℓ/min.)		8.3 (31.4)	
Hydraulic outlet			Front outlet (w/ standard valve)	
3-point hitch			Category I	
Hydraulic control system			Quarter inching valve	
Lift capacity at lift point	lbs. (kg)		1356 (615)	
24" behind LP	lbs. (kg)		1058 (480)	
Steering			Power steering	
<b>Standard tire size</b>				
Front		6-12		7-12
Rear		9.5-16		11.2-16
<b>Traveling speeds (at rated engine rpm)</b>				
Forward	mph (km/h)	DT 9th:11.2 (18)/HSD:0-11.7 (0-18.9)		0-12.6 (0-20.2)
Reverse	mph (km/h)	DT 3rd:5.4 (8.7)/HSD:0-9.4 (0-15.1)		0-10.0 (0-16.1)
<b>Dimensions</b>				
Overall length (w/o 3P)	in. (mm)	93.9 (2385)		95.1 (2415)
Overall width (min. tread)	in. (mm)	45.1 (1145)		49 (1245)
Wheelbase	in. (mm)		61.5 (1563)	
Ground clearance	in. (mm)	12.0 (305)		12.8 (325)
Turning radius with brake	feet (m)		6.9 (2.1)	
Weight	lbs. (kg)	DT:1433 (650)/HSD:1477 (670)		1554 (705)

The company reserves the right to change the above specifications without notice. This brochure is for descriptive purposes only. Please contact your local Kubota dealer for warranty information. For your safety, Kubota strongly recommends the use of a Rollover Protective Structure (ROPS) and seat belt in almost all applications. For complete operational information, the operator's manual should be consulted.

# IMPLEMENTS SPECIFICATIONS

## FRONT LOADER

Model		LA304 (B2320)	LA364 (B2620/B2920)
Maximum lift height (to bucket pivot pin)	in. (mm)	74.0 (1880)	78.5 (1995)
Clearance w/ attachment dump	in. (mm)	56.2 (1428)	60.9 (1548)
Reach at maximum height (ROPS/CAB)	in. (mm)	23.5 (598)	22.7 (576)
Maximum dump angle	degrees	45	40
Attachment rollback angle	degrees	25	25
Digging depth at bucket leveled	in. (mm)	3.9 (100)	3.9 (100)
Overall height in carry position	in. (mm)	43.4 (1102)	43.4 (1102)
Material bucket width	in. (mm)	48 (1219)	50 (1270)
Lift capacity (pivot pin)	lbs. (kg)	771 (350)	952 (432)
Lift capacity (19.7 in. forward)	lbs. (kg)	545 (247)	661 (300)
Breakout force (19.7 in. forward)	lbs. (kg)	1172 (532)	1520 (689)
Breakout force (pivot pin)	lbs. (kg)	1648 (748)	2144 (973)
Raising time to full height w/o load	sec	2.8	3.7
Lowering time w/o load (powerdown)	sec	2.0	2.7
Attachment rollback time	sec	1.9	2.6
Attachment dumping time	sec	1.5	1.9
Rated flow	GPM (l/min.)	4.4 (16.6)	4.7 (17.9)
Rated pressure	psi	2000	2000
Boom cylinder size (Bore x Stroke)	in. (mm)	1.57 x 13.2 (40 x 336)	1.77 x 13.7 (45 x 348)
Bucket cylinder size (Bore x Stroke)	in. (mm)	1.57 x 13.2 (40 x 336)	1.77 x 13.2 (45 x 336)
Bucket roll breakout force at ground line	lbs. (N)	1222 (5434)	1741 (7744)

## BACKHOE

Model		BH65
Bucket cylinder digging force	lbs. (N)	2585 (11500)
Dipperstick cylinder digging force	lbs. (N)	1686 (7500)
Transport height	in. (mm)	72.8 (1849)
Stabilizer spread transport	in. (mm)	50.4 (1280)
Ground clearance	in. (mm)	11.6 (294)
Overall width	in. (mm)	49.6 (1260)
Maximum digging depth	in. (mm)	80.1 (2034)
Digging depth, 2ft. flat bottom	in. (mm)	78.8 (2001)
Digging depth, 8ft. flat bottom	in. (mm)	56.4 (1432)
Operating height, fully raised	in. (mm)	105.4 (2677)
Loading height	in. (mm)	64.4 (1637)
Loading reach	in. (mm)	39.7 (1009)
Reach from swing pivot	in. (mm)	108.9 (2767)
Swing pivot to rear axle center line	in. (mm)	31.4 (797)
Bucket rotation	deg	172
Stabilizer spread operating	in. (mm)	73.0 (1854)
Angle of departure per SAE J 1234	deg	19
Leveling angle	deg	11.8
Swing arc	deg	150

## MID-MOUNT MOWER

Model		RCK54-29B	RCK60-29B
Type		Side discharge	
Number of blades		3	
Blade length	in. (mm)	18.7 (475)	20.6 (523)
Mounting method		Suspended	
Cutting width	in. (mm)	54 (1372)	60 (1524)
Cutting height	in. (mm)	1.0 to 5.0 (25 to 127)	
Adjustment of cutting height		Dial	
Weight (approx.)	lbs. (kg)	309 (140)	322 (146)

Capital Equipment Clare  
302 N. McEwan • Clare, MI 48617  
989-386-2192

©2008 Kubota Corporation

# Kubota®

## KUBOTA TRACTOR CORPORATION

Kubota Tractor Corporation, 3401 Del Amo Boulevard, Torrance CA 90503  
Western Division: 1175 S. Guild Ave., Lodi, CA 95240 Tel (209) 334-9910  
Central Division: 14855 FAA Boulevard, Fort Worth, TX 76155 Tel (817) 571-0900  
Northern Division: 6300 at One Kubota Way, Groveport, OH 43125 Tel (614) 835-1100  
Southeast Division: 1025 Northbrook Parkway, Suwanee, GA 30024 Tel (770) 995-8855

Visit our web site at: [www.kubota.com](http://www.kubota.com)





**Bobcat**®

**S100 SKID-STEER LOADER**

**S100**

**Bobcat**



# Bobcat® S100 Skid-Steer Loader

## Specifications

### Performance

Rated Operating Capacity<sup>1</sup>  
Tipping Load  
Hydraulic Pump Capacity  
Travel Speed  
Operating Weight

### S100

1000 lb. (453 kg)  
2039 lb. (925 kg)  
13.1 gpm (49.6 L/min.)  
6.5 mph (10.4 km/hr.)  
4110 lb. (1864 kg)

### Dimensions

Length (with bucket)  
Width (with bucket)  
Height  
Height to Bucket Pin

110.2 in. (2800 mm)  
50 in. (1270 mm)  
73.9 in. (1878 mm)  
103.6 in. (2633 mm)

### Engine

Model  
Fuel/Cooling  
Cylinders  
SAE NET HP/Displacement  
Fuel Tank Capacity

V1505  
Diesel/Liquid  
4  
33.5/94.4 cu. in. (1498 cc)  
11.9 gal. (45 L)

### Operation

Steering and Drive  
Hydraulics  
Transmission

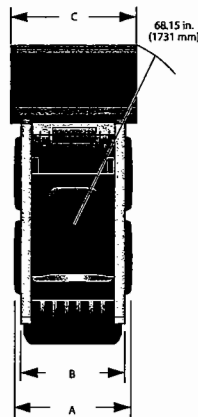
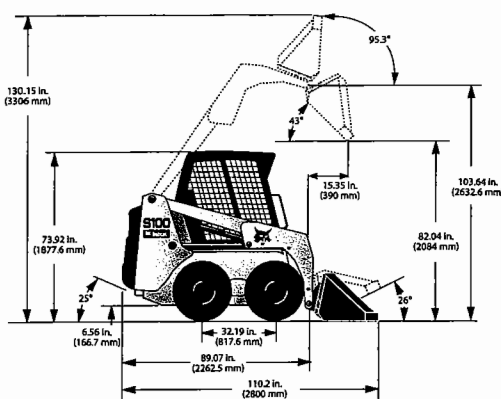
Forward, reverse, travel speed and steering controlled by two hand levers.  
Raise/lower lift arms and dump/rollback bucket controlled by two foot pedals.  
Hydrostatic, four-wheel drive.

### Standard Features

Adjustable Cushion Seat  
Automatically Activated Glow Plugs  
Bobcat Interlock Control System (BICS™)  
Bob-Tach™  
Deluxe Cab  
Engine/Hydraulic Shutdown  
Front Auxiliary Hydraulics  
Front & Rear Lights  
Lift Arm Support  
Meters/Gauges/Warning Lights  
Parking Brake  
Seat Bar  
Seat Belt  
Spark Arrestor Muffler  
27x8.5-15 Heavy-Duty Tires

### Options/Accessories

Attachment Control Kit  
Backup Alarm  
Cab Enclosure with Heater  
Catalytic Purifier  
Flasher/Strobe Lights  
Flotation Tire 27x10.5-15  
Horn  
Hydraulic Bucket Positioning<sup>2</sup>  
Service Safety Training Course  
Skid-Steer Loader Operator Training Kit  
Sound Cab (Reduces noise at operator's ear)  
Special Applications Kit<sup>3</sup>  
Suspension Seat



## LOTS OF SKID-STEER MUSCLE IN A SMALLER PACKAGE!

Got to get the work done, but don't have much space to maneuver? Give the Bobcat® S100 skid-steer loader a try!

The S100 delivers 1,000 pounds of lift capacity, yet easily fits through narrow openings. It weighs only 4,110 pounds for easy trailering.

With a travel speed up to 6.5 mph, you'll get your longer-run jobs done faster. And this peppy S100 loader is also better balanced for greater work efficiency.

It features proven safety technology — the Bobcat Interlock Control System (BICS™). BICS requires the operator to be seated in the loader with the seat bar in place and the engine running. After the "press to operate loader" button is pushed, the hydraulic lift/tilt functions and traction-drive system can be operated.

Plus, with the S100 you get more than an exceptional skid-steer loader — you get unmatched support from a worldwide network of Bobcat dealers offering industry-leading attachments, accessories and parts availability. Their factory-trained service technicians are equipped to handle all your parts and service requirements, including engine and hydrostatic/hydraulic components. There's also an excellent warranty program.

See your Bobcat dealer for details.

**The Bobcat S100 — it's the agile, reliable loader that can improve your tight-fit job efficiency!**

**1,000 LB.**  
Rated Operating Capacity

**103.6 IN.**  
Lift Height

**33.5 HP**  
Liquid-Cooled Diesel Engine

NOTE - Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. Pictures of Bobcat skid-steer loaders may show other than standard equipment. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. Bobcat Company complies with the requirements of ISO 9001 as registered with BSI.

<sup>1</sup>Operating capacity rated with standard digging bucket according to SAE standard J818 — OPERATING CAPACITY TO EQUAL NO MORE THAN ONE HALF THE TIPPING LOAD.

<sup>2</sup>Bucket positioning helps operator keep the same tilt of the load during lifting.

<sup>3</sup>Includes polycarbonate front door, top and rear windows.

A. 27 x 10.50 - 15 Tires - 45.94 in. (1167 mm)

B. 27 x 10.50 - 15 Tires - 38.07 in. (967 mm)

C. Bucket Width - 50 in. (1270 mm)

Bobcat Company  
P.O. Box 6000 • West Fargo, ND 58078  
www.bobcat.com



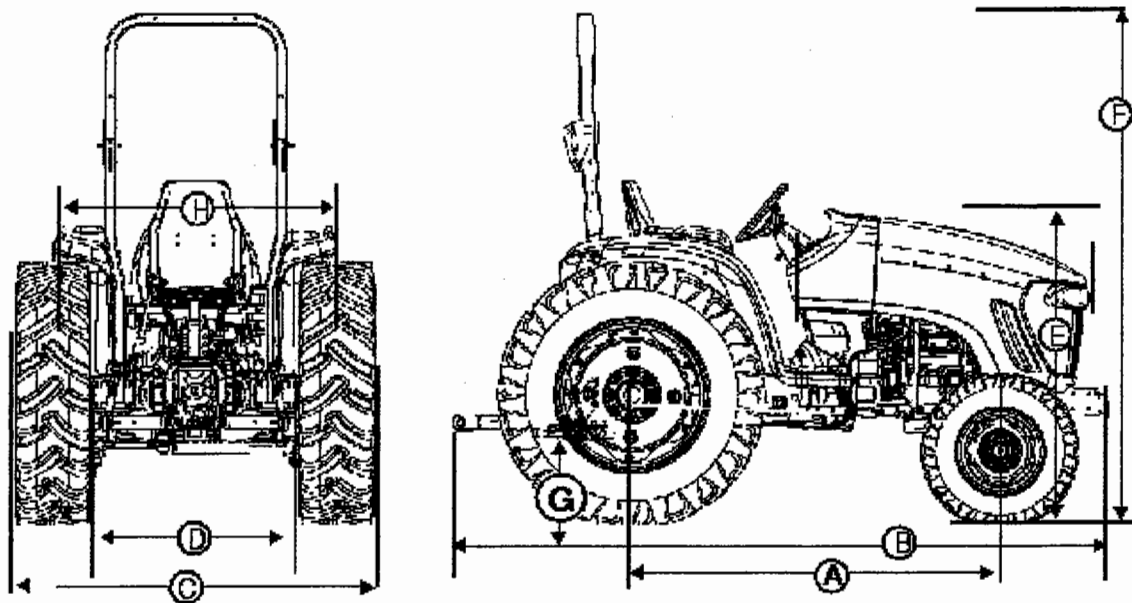
### Bobcat Attachments for this model:

Angle Broom\*  
Auger  
Backhoe  
Bale Fork  
Breaker  
Brush Saw  
Buckets  
Digger  
Dumping Hopper  
Landplane  
Pallet Fork  
Scarifier  
Scraper  
Snow Blade  
Snowblower\*  
Snow V-Blade\*  
Soil Conditioner\*  
Sweeper  
Three-Point Hitch  
Tiller  
Tree Fork  
Trencher  
Utility Fork

\*Attachment Control Kit required.

**Dimensions - Open Station Tractors (3120, 3320, 3520, 3720)**

Print



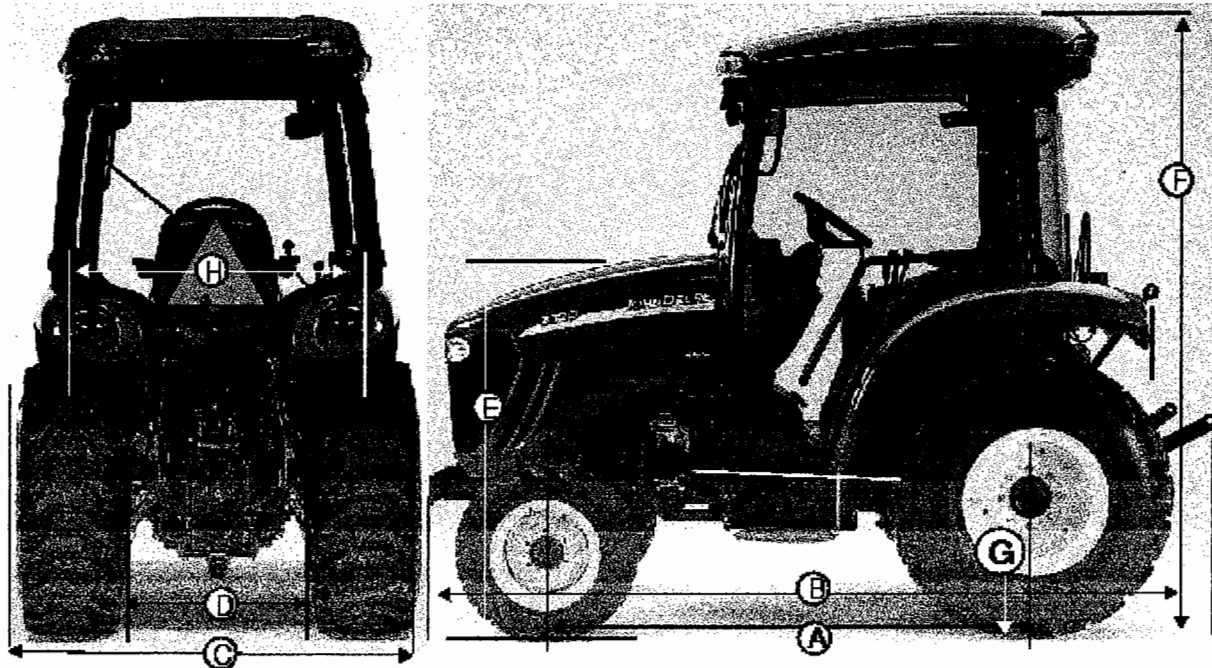
3020 Tractor dimensions (open-station)

<b>Tires (wheel position):</b>	<b>R1 Bar</b>	<b>R3 Turf</b>	<b>R4 Industrial</b>	<b>R3 Turf Special</b>	<b>R4 Industrial</b>
Front	7-14 (2-position)	27x8.5-15 (2-position)	25x8.5-14 (2-position)	25x10.5LL-15 (2-position)	27x8.5-15 (2-position)
Rear	11.2-24 (8-position)	41x14-20 (2-position)	15-19.5 (2-position)	41x18LL-16.1 (2-position)	43x16-20 (2-position)
<b>Dimensions:</b>					
(A)-Wheelbase—in. (m)	68.0 (1.7)	68.0 (1.7)	68.0 (1.7)	68.0 (1.7)	68.0 (1.7)
(B)-Overall length w/3-point hitch—in. (m)*	120.2 (3.0)	120.2 (3.0)	120.2 (3.0)	120.2 (3.0)	120.2 (3.0)
(C)-Overall width (min)—in. (m)	52.4 (1.3)	53.9 (1.4)	57.3 (1.4)	59.5 (1.5)	58.1 (1.5)
Overall width (max)—in. (m)	68.4 (1.7)	59.1 (1.5)	58.9 (1.5)	64.7 (1.6)	59.7 (1.5)
(D)-Inside width (min)—in. (m)	40.6 (1.03)	40.4 (1.02)	34.2 (0.8)	35.6 (0.9)	42 (1.1)
Inside width (max)—in. (m)	56.6 (1.4)	45.6 (1.2)	57.7 (1.5)	40.8 (1.0)	43.7 (1.2)
<b>Height from ground:</b>					
(E)-To top of hood—in. (m)	57.0 (1.44)	56.6 (1.44)	55.5 (1.41)	56.2 (1.43)	56.2 (1.43)
(F)-To top of folding ROPS—in. (m)	93.3 (2.37)	92.9 (2.36)	91.8 (2.33)	92.5 (2.35)	92.5 (2.35)
(G)-Ground clearance, rear axle—in. (mm)	12.2 (309.88)	11.5 (291.88)	10.5 (265.88)	10.6 (268.88)	11.6 (296.88)
<b>Wheel treads (center-to-center in narrow position):</b>					
(H)-Rear wheels—in. (mm)-position 2	40.6 (1.03)	40.4 (1.03)	42.1 (1.06)	40.3 (1.03)	40.3 (1.03)

Front wheels—in. (m)	44.9 (1.14)	44.8 (1.13)	45.9 (1.16)	47.6 (1.20)	47.6 (1.20)
<b>Turning radius:</b>					
With brakes, 4WD off—ft (m)	8.8 (2.7)	8.8 (2.7)	8.8 (2.7)	8.8 (2.7)	8.8 (2.7)
Without brakes, 4WD off—ft (m)	9.2 (2.8)	9.2 (2.8)	9.2 (2.8)	9.2 (2.8)	9.2 (2.8)

\* Overall length is from 3-point hitch in level position to front bumper. Subtract 7.6-in. for tractors without 3-point hitch.

**Dimensions - Cab Tractors (3320, 3520, 3720)**



3020 Tractor dimensions (cab)

Tires (wheel position):	R1 Bar	R3 Turf	R4 Industrial	R3 Turf Special	R4 Industrial
Front	7-14 (2-position)	27x8.5-15 (2-position)	25x8.5-14 (2-position)	25x10.5LL-5 (2-position)	27x8.5-15 (2-position)
Rear	11.2-24 (8-position)	41x14-20 (2-position)	15-19.5 (2-position)	41x18LL-16.1 (2-position)	43x16-20 (2-position)
<b>Dimensions:</b>					
(A)-Wheelbase—in. (m)	68.0 (1.7)	68.0 (1.7)	68.0 (1.7)	68.0 (1.7)	68.0 (1.7)
(B)-Overall length w/3-point hitch—in. (m)*	120.2 (3.1)	120.2 (3.1)	120.2 (3.1)	120.2 (3.1)	120.2 (3.1)
(C)-Overall width (min)—in. (m)	52.4 (1.3)	53.9 (1.4)	57.3 (1.4)	59.5 (1.5)	58.1 (1.5)
Overall width (max)—in. (m)	68.4 (1.7)	59.1 (1.5)	58.9 (1.5)	64.7 (1.6)	59.7 (1.5)
(D)-Inside width (min)—in. (m)	40.6 (1.03)	40.4 (1.02)	42 (1.1)	40.4 (1.02)	42 (1.1)
Inside width (max)—in. (m)	56.6 (1.4)	45.6 (1.2)	43.7 (1.2)	45.6 (1.2)	43.7 (1.2)
Height from ground:					

<b>(E)-To top of hood—in. (m)</b>	57.0 (1.44)	56.6 (1.44)	55.5 (1.41)	56.2 (1.43)	56.2 (1.43)
<b>(F)-To top of cab—in. (m)</b>	89.4 (2.27)	88.1 (2.24)	87.2 (2.21)	87.8 (2.23)	88.9 (2.26)
<b>(G)-Ground clearance, rear axle—in. (mm)</b>	12.2 (309.88)	11.5 (291.88)	10.5 (265.88)	10.6 (268.88)	11.6 (296.88)
<b>Wheel treads (center-to-center in narrow position):</b>					
<b>(H)-Rear wheels—in. (mm)-position 2</b>	40.6 (1.03)	40.4 (1.03)	42.1 (1.06)	40.3 (1.03)	40.3 (1.03)
<b>Front wheels—in. (m)</b>	44.9 (1.14)	44.8 (1.13)	45.9 (1.16)	47.6 (1.20)	47.6 (1.20)
<b>Turning radius:</b>					
<b>With brakes, 4WD off—ft (m)</b>	8.8 (2.7)	8.8 (2.7)	8.8 (2.7)	8.8 (2.7)	8.8 (2.7)
<b>Without brakes, 4WD off—ft (m)</b>	9.2 (2.8)	9.2 (2.8)	9.2 (2.8)	9.2 (2.8)	9.2 (2.8)

**Provide feedback about this page**

**Last Updated : 18-Aug-2009**

**Holder Michigan Based Users List**  
(Partial Listing, Complete List Available Upon Request)

<b><u>CUSTOMER</u></b>	<b><u>CONTACT</u></b>	<b><u>PHONE</u></b>
City of Harbor Beach, MI*	Gary Shedd	989-479-6730
Wayne County Airport Authority	Joe Galea	734-485-6672
City of Midland, MI*	Craig Barnt	989-837-6922
City of Ann Arbor, MI	Tom Gibbons	734-994-2666
City of Petoskey, MI*	Mike Robbins	231-347-2500
Village of Mackinaw City, MI*	Jim Tamlyn	231-436-5351
City of Grosse Pointe Farms, MI*	Ken Beaupre	313-343-2343
City of Traverse City, MI*	Scott Meteer	231-922-4902
City of Manistee, MI*	Jack Garber	231-723-7132
City of Rochester, MI*	Dave Kowaleski	248-651-9061
City of Manton, MI*	Bryan Vincent	231-824-3572
City of Charlevoix, MI*	Pat Elliot	231-547-3276
City of Roosevelt Park, MI*	Matthew Farrar	231-755-3721

\* Indicates sidewalk applications.

# Bell

## Equipment Company

**Michigan Office:**  
78 Northpointe Drive  
Lake Orion, Michigan 48359  
Phone: (248) 370-0000  
Fax: (248) 370-0011

August 11, 2009

**Ohio Office:**  
4137 Park Ave. West  
Mansfield, Ohio 44903  
Phone: (419) 589-2355  
Fax: (419) 589-5525

Mr. Bob Bonham  
Superintendent  
City of Clare DPW  
202 West Fifth Street  
Clare, MI 48617

Dear Bob,

Per your request, I am pleased to provide the following revised proposal for your review and consideration. As discussed, we recently took delivery of a new Holder Stock Unit and have completed only one demonstration to date and the unit has less than two actual hours of operation.

**Holder C4.74 Municipal Articulating Tractor – *Bell Stock/ Demonstrator Unit*  
(Serial # 204000330)**



- Deutz 2011F (80 H.P.) turbocharged diesel powered engine.
- Four wheel hydrostatic drive.
- Air conditioning.
- AM/FM/CD stereo.
- New unit warranty, one (1) year parts and labor.
- 2 hours as of 8-11-09.

Price as Equipped	\$ 89,900.00
Less: Demonstrator Discount	- 1,800.00
Revised Purchase Price	<b><u>\$ 88,100.00</u></b>

# **HOLDER**

**OF NORTH AMERICA INC.**

1351 Barfield Road, Greely, ON CANADA K4P 1A1  
Tel: 613 821-4171 Fax: 613 821-1939  
Email: info@holder.on.ca Web site: www.holder.on.ca

April 15, 2009

To Whom It May Concern:

Re: C9700 Recondition Program

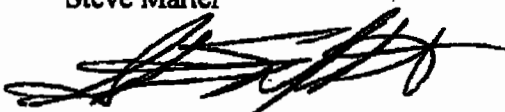
Below is an approximate cost of inspection, repair, parts and labour involved in a factory reconditioning of a C9700 tractor.

- remove cab and replace hoses, cables, linkages and cab mounts as necessary
- remove axles, replace seals, bearings, inspect differentials and repair or replace.
- disassemble center section, replace bearings, pins and shims as needed, replace hoes at center, remove steering cylinders and replace bearings, pins and seals.
- Engine; compression test, remove head and inspect valves and cylinders, install new head and valve cover gaskets, replace fuel injectors, timing and hydraulic pump belts.
- remove hydrostatic pump and motor, inspect and repair/ rebuild, test solenoids and rack.
- Full service includes all oils, filters etc.

Approximately \$30,000.00 - \$36,000.00

Should you have any questions please call me at 1-888-TRACTOR (872-2867)

Steve Martel



Sales Manager

 Get the **HOLDER** Advantage!

# C4.74

HOLDER C4.74

# HOLDER



*Beat the Seasons — Get the HOLDER Advantage!*

# **BEAT THE SEASONS.**

## **THE TRUE 4-SEASON MULTI-PURPOSE TRACTOR.**

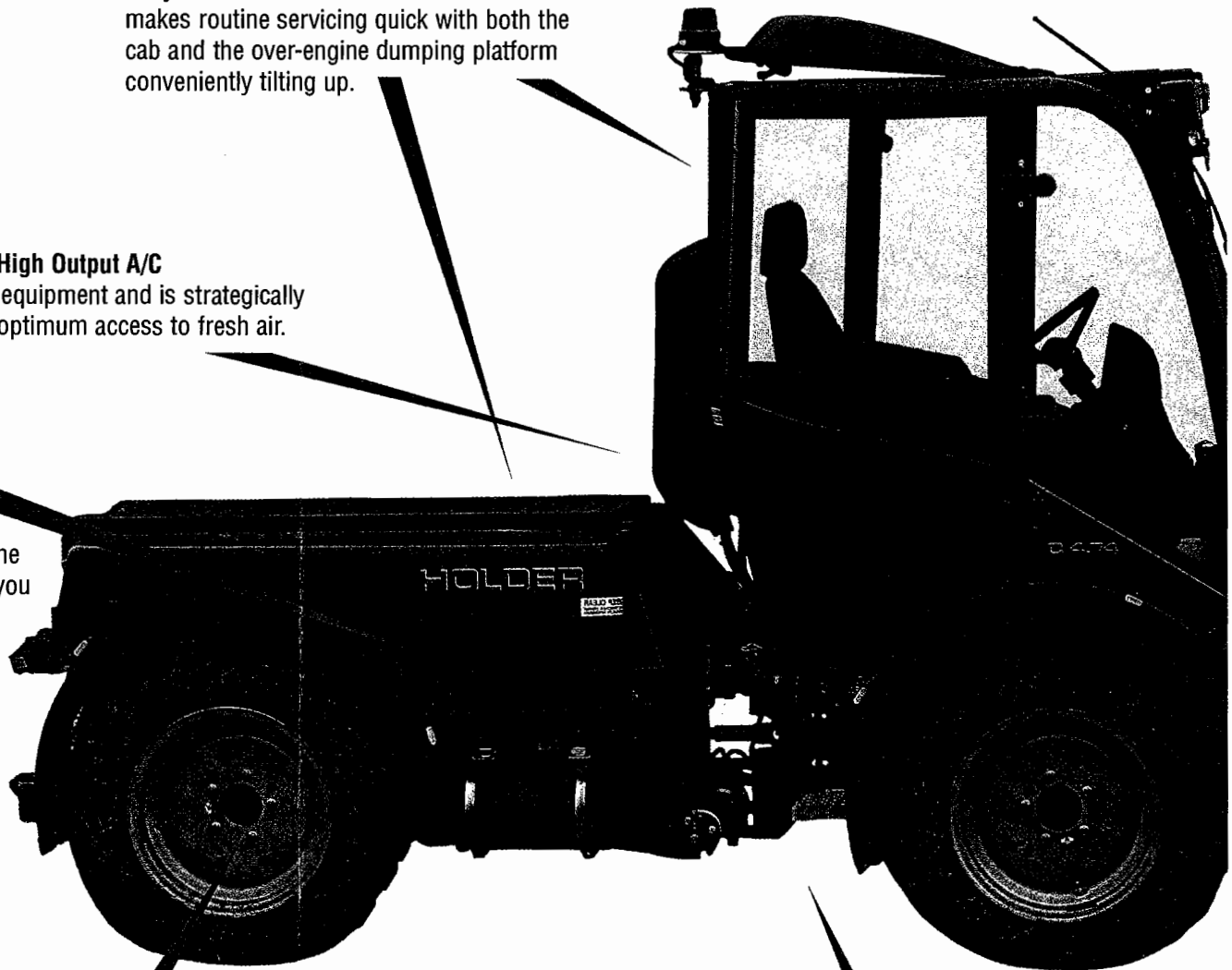
**Easy Maintenance Access**  
makes routine servicing quick with both the cab and the over-engine dumping platform conveniently tilting up.

**Integrated High Output A/C**  
is standard equipment and is strategically located for optimum access to fresh air.

**Reliable & Fuel Efficient**  
the Deutz 2011 engine provides the power you need to get the job done quickly.

**Hydrostatic Drive System**  
provides the convenience and versatility of two speed ranges, plus hand and foot controls. Benefit from the superior traction of constant 4-wheel drive and the C4.74's advanced hydraulic differential locking system.

**Redesigned Hydraulic Stabilizer, Articulating & Oscillating Center**  
HOLDER's patented articulation/oscillation system provides unparalleled maneuverability in virtually any situation. The hydraulic stabilizer assures exceptional control over rough terrain. The C4.74 mounts curbs easily while maintaining even ground pressure on all four wheels.



# BEAT THE SEASONS.

## SEASON MULTI-PURPOSE TRACTOR.

### Ergonomically Designed Cab

provides excellent 360° vision, overhead visibility for truck loading, and full visibility for attachment hook-up.

### 540 rpm PTO

with HOLDER's unique load-sensing system that automatically adjusts ground speed to maintain optimum attachment speed.

### Heavy Duty Front 3-point Arms

adjustable to Category 1 or 2 and feature HOLDER's Hydraulic Front Arm Oscillation for maximum efficiency on uneven contours.

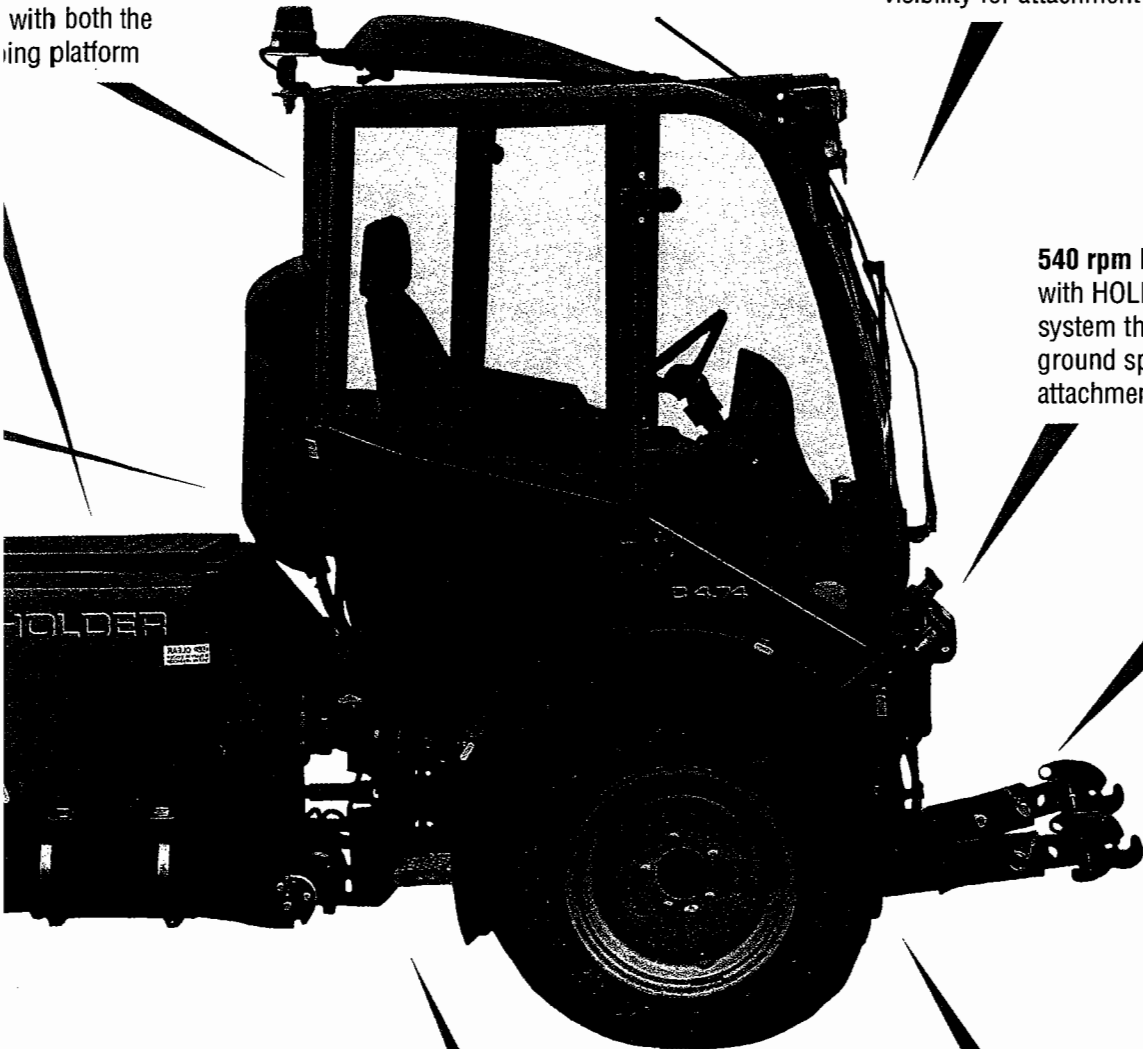
### Redesigned Hydraulic Stabilizer, Articulating & Oscillating Center

HOLDER's patented articulation/oscillation system provides unparalleled maneuverability in virtually any situation. The hydraulic stabilizer assures exceptional control over rough terrain. The C4.74 mounts curbs easily while maintaining even ground pressure on all four wheels.

### Hydraulic Accumulator

allows attachments to "float" independently of the tractor, prolonging the life of the tractor, improving handling and reducing operator fatigue.

with both the  
ing platform



# HOLDER C4.74

## SPECIFICATIONS

### WEIGHT (CURB)

4850 lbs. (2200 kg)

### STEERING

Articulated design 2-cylinder closed system

### HYDRAULIC SYSTEM

Bosch, gear type, driven by engine. Max operating pressure 190 bar (2800 PSI). Hydraulic Reservoir Capacity, 11.9 gallons (45 liters)

### FUEL TANK CAPACITY

15.8 gallons (60 liters), fitted with micronic fuel filter

### CONTROL EQUIPMENT

6-function hydraulic bank, single multi function joystick proportional unit. All functions are double acting with a float position, and function lockout

### CAB EQUIPMENT

- One-man cab, tested and approved ROPs certified
- One door with popout windows (L.H. and R.H.) and ventilation roof hatch for emergency exit
- Door is removable and replaceable without tools, door positioned with pressurized gas cylinders
- Interior temperature and sound-absorbing lining; test rating 79 dbA
- Tilt steering
- Tinted windows
- Air ride operator's seat is high back four-way adjustable
- 2 exterior breakaway rear view mirrors (L.H. and R.H.) adjustable from inside cab through windows
- 2 front headlights, 2 front top working lights, 1 reverse/rear working light, top strobe warning light, front and rear traffic lights, high low beam dash indicator light, brake lights, 4-way flasher, and wired 7-prong trailer plug
- Lower vision aids (windows) for front attachment hook-up.
- Overhead window for truck loading
- Windshield wiper and washer front; pantograph design 2 speed intermittent
- High-performance two-speed heater with pressurized air circulation system; fresh air filter; two-speed ventilation fan. Capable of defrosting front, side and rear windows. Heat transfers 22,000 BTU
- High output integrated air conditioner

### PTO

1 3/8" 6 spline dry clutch toggle switch actuation, front and rear. Direction of rotation (in direction of travel), front-clockwise and rear-counterclockwise. PTO RPM: front 540 @ 2260; rear 540 PTO optional

### CONSTRUCTION

Frame construction, 4-wheel drive, articulated steering with hydraulic wheel stabilizer

### AIR FILTER

Cartridge type with acoustical warning system

### ENGINE

Deutz, Diesel, 2732cc, Model 2011F Turbo, 4 cylinder. Gross HP 80 SAE at 2500 RPM. Direct injection, air/oil cooled, EPA Tier 2 Emissions approved

### COOLING SYSTEM

Integrated air/oil cooled

### DIFFERENTIAL LOCK

Differential lock; positive 4 wheel lock, electric over hydraulic, mechanically actuating on all 4 wheels by depressing a toggle switch

### TRANSMISSION

Hydrostatic transmission has automatic load sensing, with electro-mechanical 2 speed. Module varies ground speed to maintain PTO speed

### GROUND SPEED

Forward and reverse: Low 0-10 mph (14 kph)  
Forward and reverse: High 0-21 mph (31.7 kph)

### BRAKES

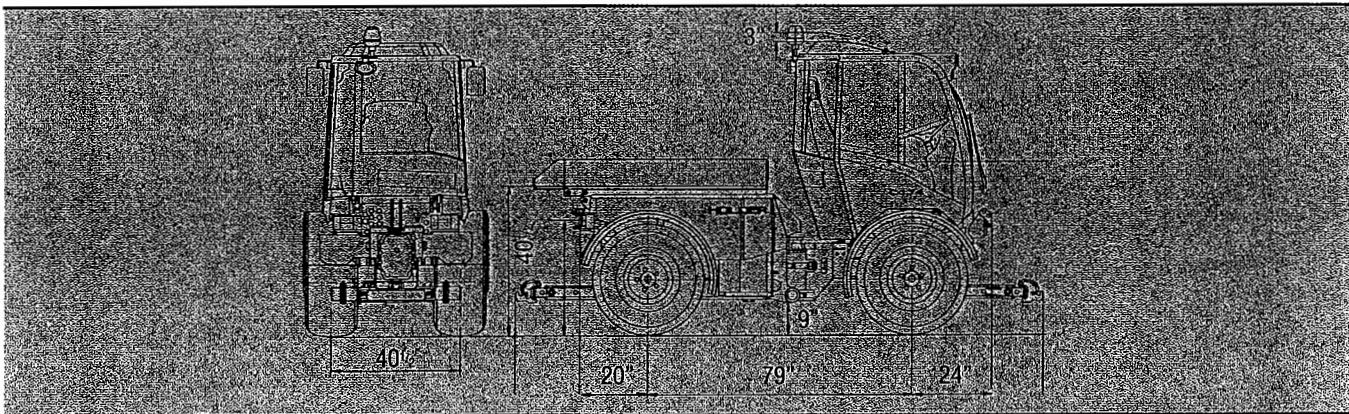
Front drum type, hydraulically actuated. Electro mechanical hand brake with dashboard indicator light

### TURNING RADIUS

7.6 ft. (2.3 meters)

### MAXIMUM ALLOWABLE AXLE LOAD

Front: 5511 lb (2500 kg)  
Rear: 5511 lb (2500 kg)



### HOLDER of North America Inc.

1351 Barfield Road, Greely, ON, Canada K4P 1A1

1-888-TRACTOR

Tel: 613 821-4171 Fax: 613 821-1939

www.holder.on.ca

info@holder.on.ca

# HOLDER

This information is intended to be of a general nature only; specifications are subject to change as we continue to improve our products.

Contact a **HOLDER** dealer to gain the advantage!

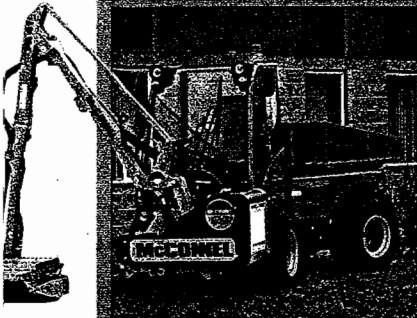
## Bell Equipment Co.

78 Northpointe Drive  
Lake Orion, Michigan 48359

(248) 370-0000

Fax (248) 370-0011

www.bellequip.com



**The ultimate in reach and maneuverability**

A boom mower set in front of the operator provides comfort, visibility and safety. The 6474's low center of gravity eliminates the need for dual wheels, allowing the equipment to operate right to guard rails and maximize the boom's impressive 17' reach. HOLLDER's ergonomic joystick control makes for simple and convenient operation. The boom mower's spring break-away system minimizes the danger of damage from impact.

Joystick control makes for simple and convenient operation. The boom mower's spring break-away system minimizes the danger of damage from impact.

**Virtually a 360° view**

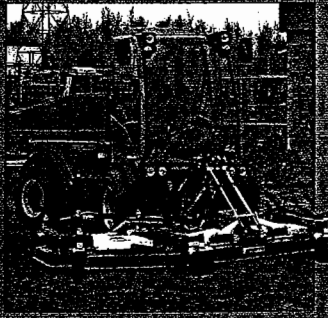
The 6474's new cab design surrounds the operator with safety glass, providing an unparalleled view of the attachment and surrounding area, including overhead, for optimal visibility when truck loading. Simple yet smart, a single joystick controls all functions. Standard features include air-graded air conditioning, intermittent 2-speed wipers, 4-way adjustable air-ride seat, tilt steering, AM/FM cassette, 600-ohm side windows and roof vent.



**We make mowing easy**

The operator can change HOLLDER's boomlift system from within the cab so that the boom arms can remain flat, allows the front attachment to exactly hug the contour of the ground, providing a close and even cut without scalping. HOLLDER offers a new, exclusive snow-mowing system — from 60" to 72" cut.

Low center of gravity and smart engineered weight transfer at the wheels effects superior traction and performance, even with a single set of skid tires. HOLLDER'S patented stabilizer system allows the tractor to safely negotiate 40° grades, eliminating the need for special slope cutting capabilities.

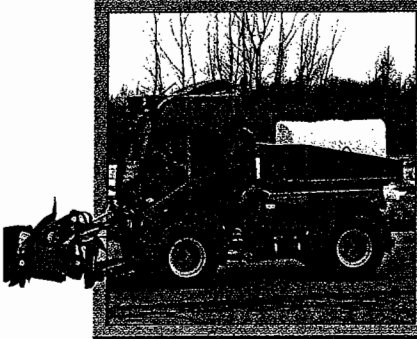


**Get the HOLLDER winter advantage**

With the 15-cubic yard capacity provided by the 6474's unique box combination, operators can clear ditches, dikes and ditches, the perimeter of building footprints. The 6474's controlled windshield and optional 5' truck blade make



roadside snow removal easy. Your choice of 50", 60" or 72" blowers and plows make this combination the most efficient and effective snow-removal package in the world. Even more versatility is gained with our variable plow — 125 lbs. clearing several plows in one!



**We make the cut**

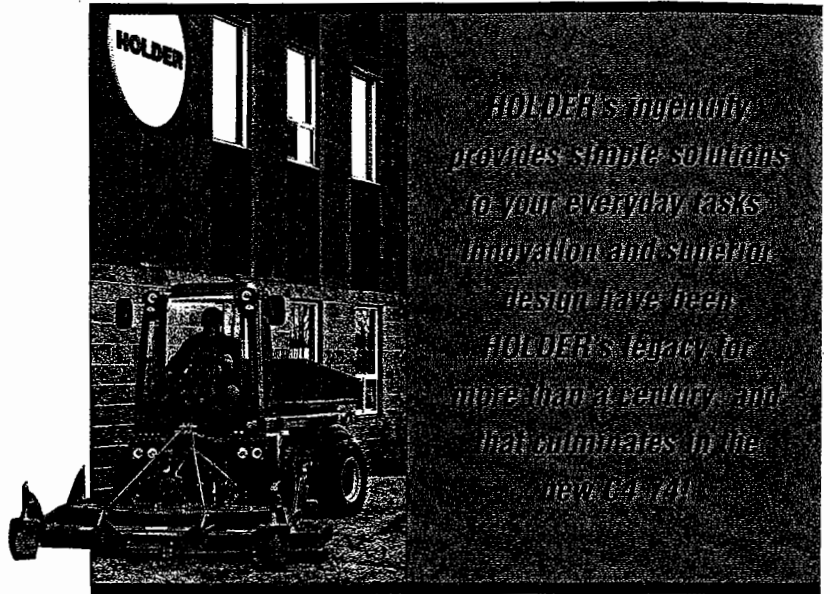
With less vibration and a controlled mowing speed, as low as 1 mph, you require HOLLDER's dust plow, allows hydraulically controlled angle, dent and dustfluff. Add our 150-gallon water tank for superior dust control.

**Maximize efficiency and minimize downtime**

HOLLDER's professional watering, with this control system, allows you to combine with four nozzles and a 150-gallon water tank. Available in widths of 30", 60" and 72" as well as PTO or hydraulic drive.



# HOLDER

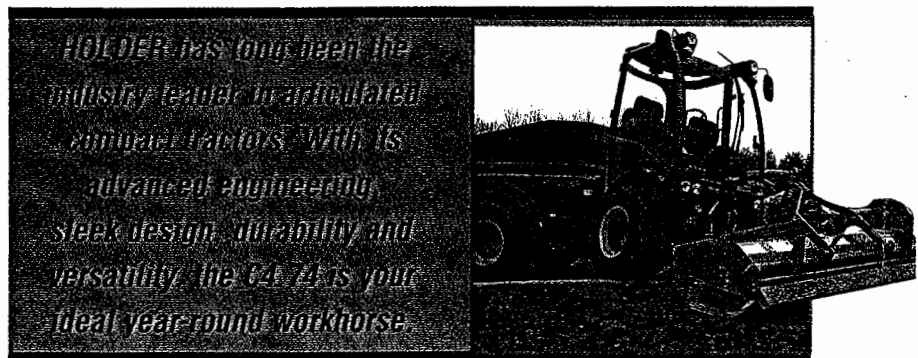


*HOLDER's ingenuity provides simple solutions to your everyday tasks. Innovation and superior design have been HOLDER's forte for more than a century, and that continues to be the new trend.*

## **SUPERIOR CONTROL AND POWER COMBINATION** **FOR EXCEPTIONAL MANEUVERABILITY**

HOLDER's patented articulation and oscillation technology provides the operator with unparalleled control and comfort. The patented oscillation/articulation system consists of two steering rams and two stabilizer rams. This articulated chassis creates a perfect twisting motion that applies even pressure to the ground. Complemented by four equal-sized wheels with an integrated stabilizer system, the C4.74 provides the ultimate in traction and maneuverability. Plus an incredible turning radius of only 7.6 feet! Rely on optimum traction, negotiate tight corners easily, work effectively in constrained areas, and handle terrain variations smoothly. Get equipment that will surpass your expectations – ***get the HOLDER advantage!***

**Beat the Seasons — Get the HOLDER Advantage!**



*HOLDER has long been the industry leader in articulated utility vehicles. With its advanced engineering, sleek design, durability and versatility, the C4.74 is your ideal year-round workhorse.*

### Optional Attachments

Salt Spreader/Sander (4150-SB)	\$ 3,200.00
Dump Body/Sander Extension (4434-35)	\$ 3,100.00
V-Plow 50" (4150-VP) (If a 60" V-Plow is desired in lieu of the 50", add \$ 1,000.00)	\$ 4,200.00
Summer Tires/Terra Softrac (4131-8)	\$ 2,400.00

### Optional Trade In

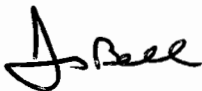
We will offer a \$ 3,200.00 trade in allowance on the City's existing Epoke PM1.4 drop spreader.

#### Notes:

1. Unit is available for immediate delivery.
2. Unit is subject to prior sale.
3. Payment terms are Net 30 Days after delivery and acceptance by the City of Clare.

If any additional information is needed, please do not hesitate to contact me. Thank you for your continued interest in Holder and Bell Equipment Company.

Sincerely,



James Bell Jr.  
President - Bell Equipment Company