



FLORIDA SHERIFFS ASSOCIATION BID FSA20-EQU18.0
ITEM #39 TELESCOPIC EXCAVATOR TRACK TYPE

XL4200 6X6 Excavator Base Machine
80655007 Bucket-Ditching 60"
80769034 Adjustable travel Alarm
80865008 Fire Extinguisher

GRADALL®

XL 4200 V

HYDRAULIC EXCAVATOR



SPECIFICATIONS

Engine

- Volvo TAD571 VE, Tier 4f, 4 cycle, inline 4 cylinder, liquid cooled, electronic controlled
- Vertical canister style lube filter attached to engine
- Vertical canister style main fuel filter and fuel/water separation with manual feed pump attached to engine
- Water in fuel indicator and alarm

Gross Rating: 173 hp @ 2200 rpm (129kW)
590 ft lb torque @ 1100-1500 rpm (800Nm)

Net Rating: 153 hp @ 2200 rpm (114kW)

- Variable viscous fan clutch system
- Vertical stacked hydraulic oil cooler, charge air cooler and radiator
- Block heater

Maximum slope: 30°

- 24 volt starter
- 100 amp alternator
- Two SAE #C31-S 1000 CCA batteries
- Two-stage air cleaner with high-efficiency pre-cleaner, vacuator valve and remote service indicator

Fuel tank capacity: 99 gallons (375 L)

Operator Cab

- All-weather cab with tinted safety glass windows
- Skylight
- Acoustical lining
- Four-way adjustable operator's seat
- Seat belt
- AM/FM radio
- Filtered fresh air heater
- Defroster and A/C
- Front window slides to overhead storage
- Rearview mirrors on right and left sides
- Windshield wiper and washer
- LED swing lights
- LED work lights

Controls

- Two electronic joysticks (hoist and bucket, telescope and swing)
- One rocker switch (tilt) control upperstructure
- Joysticks mounted on arm pods
- Quick change joystick pattern switch located on instrument panel
- Joysticks are self-centering; when controls are released, power for movement disengages and swing and tilt brake set automatically
- Two electric foot pedals (with handles) control crawler travel speed and direction, crawler steering and crawler brakes
- Toggle switch on arm pod allows selection of two crawler speed ranges

Engine Controls and Instrumentation

- Key operated ignition/starter switch, throttle and main battery disconnect switch
- Air cleaner condition indicator
- Electronic monitor indicates fuel level, low battery charge, lube oil pressure, high coolant temperature, engine rpm and engine hours
- Fuel saving auto idle feature sends engine rpm to idle when control circuits are in neutral for seven seconds

Boom

- Two piece triangular telescoping boom
- Adjustable boom rollers with eccentric shafts
- 220° boom tilt
- 105° boom pivot angle
- Auxiliary hydraulics

Hydraulic System

Pumps

- One load-sensing, axial piston pump; oil flow 0-110 gpm (0-416 L/min)
- Gear pump, pilot, 6 gpm (23L/min)

System Monitor

- Electronic monitor in cab indicates
 - Low hydraulic fluid level
 - High hydraulic fluid temperature
 - System working pressure
 - System pilot pressure

SYSTEM SPECIFICATIONS

Four Cylinders

- One tool: 5.0" ID, 3.0" rod (127 mm x 76 mm), 25.9" (658 mm) stroke
- Two hoist: 4.25" ID, 3.15" rod (108 mm x 80 mm), 31.0" (787 mm) stroke
- One telescope: 3.5" ID, 2.559" rod (89 mm x 65 mm), 12'6" (3.81 m) stroke

Four Hydraulic Motors

- Swing, 64 hp (48 kW)
- Tilt, 21 hp (16 kW)
- Two propel motors, 120 hp (89 kW) each

Operating Pressures:

- Hoist.....4,900 psi (331 BAR)
- Tilt.....2,500 psi (172 BAR)
- Swing.....4,200 psi (290 BAR)
- Tool.....4,900 psi (331 BAR)
- Telescope.....4,900 psi (331 BAR)
- Propel.....4,900 psi (331 BAR)
- Pilot System.....550 psi (38 BAR)

Oil Capacity

- Reservoir system 65 gal (246 L)
- Pressurized reservoir with visual oil level gauges

Filtration System

- 10 micron return filter
- 10 micron pilot filter
- Fin and tube-type oil cooler with thermal by-pass and relief valves
- Pressure-compensated, load-sensing valves with circuit reliefs in all circuits

Crawler Drive

- Dual range, high torque piston motor powers each track
- Three-stage planetary drive with integral speed limiting valve and automatic spring-set/hydraulic release wet disc parking brake

Travel Speed: on flat, level surface:

High Speed: 3.4 mph (5.5 kmh)

Low Speed: 1.9 mph (3.1 kmh)

- Automatic two-speed control shifts crawler drive into low speed under difficult travel conditions
- Manual override switch for loading the machine for transport

Gradeability:

- 58%, limited by engine lubrication requirements

Drawbar Pull

- 38,324 lb (170 kN)

Individual Track Control

- Tracks counter-rotate to pivot machine about the swing centerline
- Electronically operated travel alarm signals crawler movement in either direction

Swing

- Priority swing circuit with axial piston motor
- Planetary transmission

Swing speed: 7.0 rpm

Swing Brake

- Automatic spring-set/hydraulic release wet-disc parking brake
- Dynamic braking is provided by the hydraulic system

Weight

- Approximate working weight with 36" (914 mm) excavating bucket, fuel tank half full and no operator

Pad Size	Weight	Bearing Pressure
31.5" 800 mm	46,862 lb (21,256 kg)	5.7 psi (39.3 kPa)
23.6" 600 mm	45,746 lb (20,750 kg)	7.3 psi (50.3 kPa)

Function Forces

Rated Boom Force: 22,075 lbs (98.2 kN)

Rated Bucket Breakout Force: 25,405 lbs (113 kN)

GRADALL Model XL 4200 V Excavator Lift Capacity: LB (KG)

LOAD POINT HEIGHT		LOAD RADIUS										
		10' 0" (3.0 m)		15' 0" (4.6 m)		20' 0" (6.1 m)		25' 0" (7.6 m)		Maximum Radius		
		Over End	Over Side	Over End	Over Side	Over End	Over Side	Over End	Over Side		Over End	Over Side
Above Ground Level	15' 0" (4.6 m)			9850 (4470)	9850 (4470)	6955 (3155)	6955 (3155)	5110 (2320)	5110 (2320)	25' 6" (7.8 m)	4965 (2250)	4965 (2250)
	10' 0" (3.0 m)			11800 (5350)	11800 (5350)	7910 (3590)	7910 (3590)	5655 (2565)	5655 (2565)	26' 11" (8.2 m)	5030 (2280)	5030 (2280)
	BOOM LEVEL 7' 9" (2.4 m)			12375 (5615)	12375 (5615)	8190 (3715)	8190 (3715)	5820 (2640)	5820 (2640)	27' 2" (8.3 m)	5080 (2305)	5080 (2305)
	5' 0" (1.5 m)			12590 (5710)	12590 (5710)	8345 (3785)	8345 (3785)	5930 (2690)	5930 (2690)	27' 3" (8.3 m)	5155 (2340)	5155 (2340)
At Ground Level				11475 (5205)	11475 (5205)	8045 (3650)	8045 (3650)	5850 (2655)	5850 (2655)	26' 8" (8.1 m)	5310 (2410)	5310 (2410)
Below Ground Level	5' 0" (1.5 m)	10845 (4920)	10845 (4920)	9320 (4225)	9320 (4225)	7160 (3250)	7160 (3250)			24' 11" (7.6 m)	5475 (2485)	5475 (2485)
	10' 0" (3.0 m)	7130 (3235)	7130 (3235)	7190 (3260)	7190 (3260)	6035 (2735)	6035 (2735)			21' 10" (6.7 m)	5580 (2530)	5580 (2530)
	15' 0" (4.6 m)	4745 (2150)	4745 (2150)	5445 (2470)	5445 (2470)					16' 7" (5.1 m)	5345 (2425)	5345 (2425)

NOTE: The above loads are in compliance with the SAE standard J1097 DEC2005. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity.

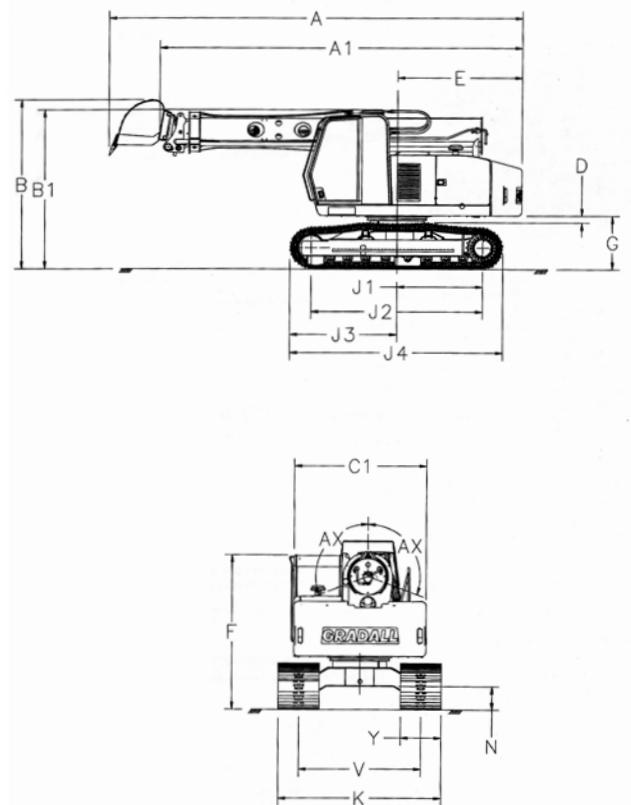
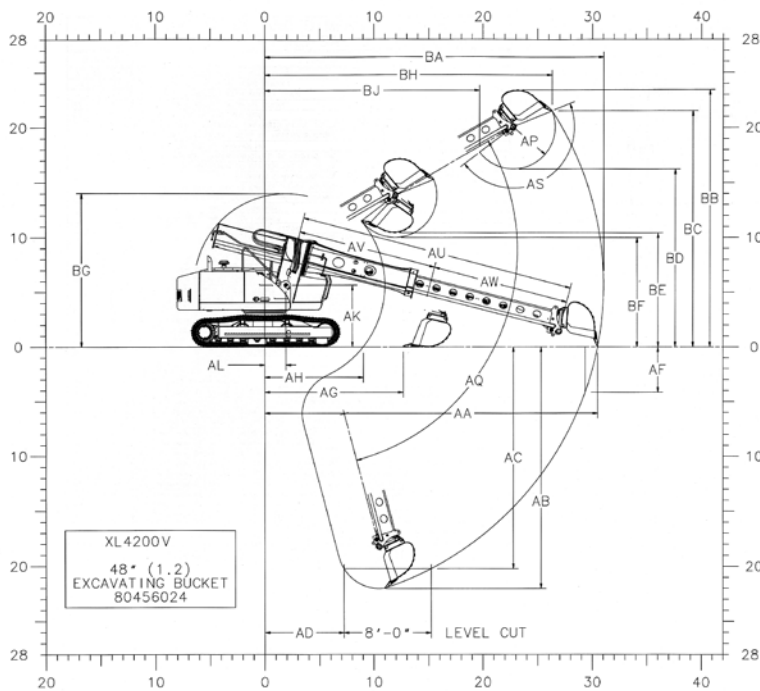
The rated lift capacity is based on the machine being equipped with 8,850 lb (4014 kg) counterweight, standard boom, standard tires, no auxiliary hydraulics and no bucket.

NOTE: Bucket adjustment values are 87% of the actual bucket weights.

The load point is located on the bucket pivot point, including loads listed for maximum radius.

Do not attempt to lift or hold any load greater than these rated values at specified load radii and heights. The weight of slings and any auxiliary devices must be deducted from the rated load to determine the net load that may be lifted.

ATTENTION: All rated loads are based on the machine being stationary and level on a firm supporting surface. The user must make allowance for particular job conditions such as soft or uneven ground, out of level conditions, side loads, hazardous conditions, experience of personnel, etc. The operator and other personnel must read and understand the operator manual before operating this machine. Rules for safe operation of equipment must be adhered to at all times.



Dimensions

- A** Overall length with bucket open: 26' 6" (8.1)
- A1** Overall length without bucket: 23' 3" (7.1)
- B** Overall height with bucket open: 10' 9" (3.3)
- B1** Overall height without bucket: 10' 1" (3.1)
- C1** Width of upperstructure: 8' 6" (2.6)
- D** Minimum clearance, upperstructure to undercarriage: 5" (130 mm)
- E** Swing clearance, rear of upperstructure: 8' 0" (2.4)
- F** Top of cab to groundline: 9' 10" (3.0)
- G** Clearance, upperstructure to groundline: 3' 5" (1.0)
- J1** Axis of rotation to centerline of drive sprockets: 5' 1" (1.7)
- J2** Nominal distance between centerlines of drive sprockets and idlers: 11' 0" (3.4)
- J3** Axis of rotation to end of track assembly: 6' 10" (2.1)
- J4** Nominal overall length of track assembly: 13' 8" (4.2)
- K** Width of crawler (Standard): 10' 6" (3.2)
Width of crawler (Optional): 9' 10" (3.0)
- N** Ground clearance (per SAE J1234): 18" (454 mm)
- V** Track gauge, roller centerline to roller centerline: 7' 10" (2.4)
- Y** Width of crawler track assembly (standard): 31' 5" (800 mm)
Width of crawler track assembly (optional): 23' 6" (600 mm)
- AA** Maximum radius at groundline (165° pivot): 30' 6" (9.3)
- AB** Maximum digging depth (165° pivot): 22' 0" (6.7)
- AC** Maximum depth for 8' level cut: 20' 3" (6.2)
- AD** Minimum radius for 8' level cut at depth "AC": 7' 3" (2.2)
- AF** Maximum depth of vertical wall which can be excavated: 4' 2" (1.3)
- AG** Minimum level cut radius with bucket flat on groundline: 12' 8" (3.9)
- AH** Minimum radius at groundline: 9' 0" (2.8)
- AK** Boom pivot to groundline: 5' 8" (1.7)
- AL** Boom pivot to axis of rotation: 1' 11" (585 mm)
- AP** Bucket tooth radius: 3' 10" (1.2)
- AQ** Boom pivot angle: 30° Up and 75° Down
- AS** Bucket pivot angle: 165°
- AU** Maximum telescoping boom length (boom pivot to bucket pivot): 25' 3" (7.7)
- AV** Minimum telescoping boom length (boom pivot to bucket pivot): 12' 9" (3.9)
- AW** Telescoping boom travel: 12' 6" (3.8)
- AX** Bucket tilt angle (both sides of center): 110°
- BA** Maximum radius of working equipment: 31' 0" (9.5)
- BB** Maximum height of working equipment: 23' 5" (7.1)
- BC** Maximum bucket tooth height: 21' 7" (6.6)
- BD** Minimum clearance of bucket teeth with bucket pivot at maximum height: 16' 3" (5.0)
- BE** Minimum clearance of fully curled bucket at maximum boom height: 10' 5" (3.2)
- BF** Minimum clearance of bucket teeth at maximum boom height: 10' 0" (3.0)
- BG** Maximum height of working equipment with bucket below groundline: 14' 0" (4.3)
- BH** Radius of bucket teeth at maximum height: 26' 4" (8.0)
- BJ** Minimum radius of bucket teeth at maximum bucket pivot height: 19' 8" (6.0)
- Transport dimensions without attachment**
Length: 23' 3" (7.1)
Height: 10' 1" (3.1)
Width: 10' 6" (3.2)

Optional Equipment

- Vandalism protection kit including window covers
- Strobe light

Attachments

- Quick change and reversible buckets fabricated using steel plate with high strength, low alloy cutting edges and wear strips
- Standard attachments available for wide range of applications
- Capacities shown are in heaped cubic yard



Excavating Bucket

		yd ³	m ³
8045-6020	24" (610mm) 603 lbs (274 kg)	3/8	0.31
8045-6021	30" (762mm) 660 lbs (300 kg)	1/2	0.41
8045-6022	36" (914mm) 741 lbs (336 kg)	5/8	0.54
8045-6023	42" (1.07m) 841 lbs (382 kg)	3/4	0.64
8045-6024	48" (1.22 m) 957 lbs (434 kg)	1	0.76
8065-6117	48" (1.1m) 959 lbs (435 kg)	1 1/2	1.15



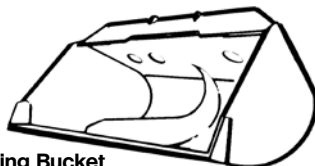
Trenching Bucket

		yd ³	m ³
8065-6104	15" (381mm) 897 lbs (407 kg)	1/5	0.15
8065-6012	21" (533mm) 982 lbs (445 kg)	1/4	0.19



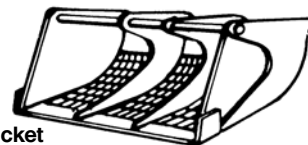
Pavement Removal Bucket

8065-6102	40" (1.0 m) 1262 lbs (573 kg)
8065-6115	18" (0.457 m) 929 lbs (421 kg)
8065-6116	24" (0.610 m) 1,219 lbs (553 kg)
8065-6114	28" (0.711 m) 1,310 lbs (594 kg)



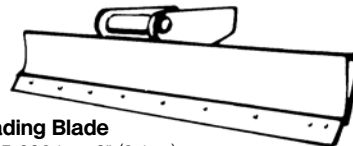
Ditching Bucket

		yd ³	m ³
8065-6040	30" (0.762 m) 521 lbs (236 kg)	3/8	0.3
8065-6007	60" (1.52m) 807 lbs (366 kg)	7/8	0.73
8065-6006	66" (1.68m) 892 lbs (405 kg)	1	0.76
8065-6002	72" (1.83 m) 944 lbs (428 kg)	1 1/8	0.87
8065-6118	72" (1.83m) 1148 lbs (521 kg)	1 3/5	1.22



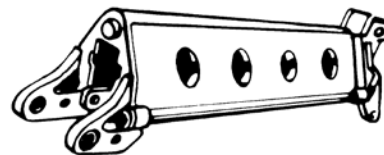
Dredging Bucket

		yd ³	m ³
8065-6013	72" (1.83m) 1114 lbs (505 kg)	1 1/8	0.87



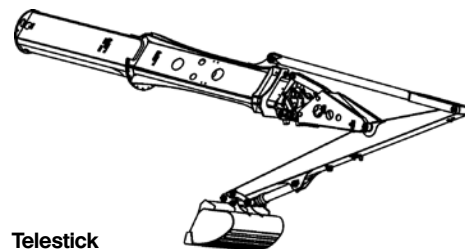
Grading Blade

8065-6024	8" (2.4 m) 630 lbs (285 kg)
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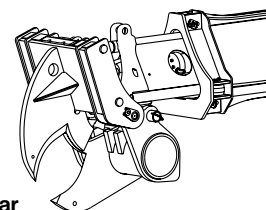
Boom Extension

8065-5028	4' (1.2 m) 1,090 lbs (495 kg)
8065-5029	6' (1.8 m) 1,250 lbs (560 kg)
8065-5030	8' (2.4 m) 1,389 lbs (631 kg)



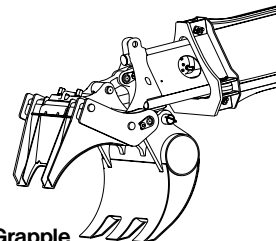
Telestick

8075-5045	3,600 lbs (1,633 kg)
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Tree Limb Shear

8045-5052	1,948 lbs (884 kg)
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Fixed Thumb Grapple

8075-5023	1,574 lbs (714 kg)
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It is Gradall Policy to continually improve its products. Therefore designs, materials and specifications are subject to change without notice and without incurring any liability on units already sold. Units shown may have optional equipment.

GRADALL®

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Form No. 11819 12/19
Printed in USA

Model Options

XL4200 V

Upperstructure

80725014	360 Degree Boom Tilt
80729002	Aux Tube Adapter
80705003	Aux. Hyd. Plumbing - w/ Cylinder Spool 80739025
80769125	Beacon Light - "GREEN" -LED- Upper - w/Branch Guard
80769125	Beacon Light- "GREEN" -LED- Upper - w/o Branch Guard
80769025 & 80769076	Beacon Light -LED- Upper - w/Branch Guard
80769025	Beacon Light-LED- Upper - w/o Branch Guard
	Boom Hole Covers for Tele Boom
80434319	Bucket Hold Open Kit- Hydraulic
80769091	Camera System (2 cameras)
	CE Certification Documents
80795029	CE Sound Certification Items and Testing
80465068	Cigarette Lighter - Upper
80715016	D-Rings (2) Lift Points Mounted On Counterweight
	Engine Volvo Penta Stage V TAD581 173 HP
80505005	Escape Hammer
80505005	Escape Hammer - (CE Spec)
80865008	Fire Extinguisher 10# - Upper
80775022	Fire Resistant Hydraulic Fluid (Echosafe 68)
80845004	Fire Suppression System - Manual Operation
80819016	Foot Pedal Auxiliary Hydraulics
80365084	Front Window Guard (Hinged) - Upper Cab
80769077	Front Window Guard (Rigid)- Upper Cab
80719019	ISO Decal Installation - 4200 V
80735014	Low Pressure Aux. Return To Tank
	Lube Chart - Upper, Permanent Outside & Visible
	Main Boom Hole Covers
	Paint, Special, One Color, Black Cabs (Please Provide RAL # to factory)
	Paint, Special, One Color, Including Cabs (Please Provide RAL # to factory)
80769089	Pressurized Cab Air Filter
82175006K	Rexroth Bodas Software & Cable Kit
80769048	Roof Guard For Upper Cab - Bars
80763161	ROPs Integrated Upper Cab
80465058	Sun Visor - Upper Cab
80755015	Tool Hold Open Lock - Mechanical
80769034	Travel Alarm - Adjustable Volume
80763114	Vandal Cover - Upper Cab

Chassis

80783411	DEF Tank Cap - Locking w/Key
80713020	Salt Tracks 800MM Double Grouser
80416009	Track Pads 600 MM Flat
80416010	Track Pads 800 MM Flat

Attachments

80455049	24" Ditching Bucket with Bolt on Cutting Edge
06200851	50" Tiger Flail Mower
06102600	50" Tiger Rotary Mower
80656132	60" Dredging Bucket
80656037	Attachment Adapter - Blank
80655033	Aux. Hyd. Hoses For 4 Ft. Boom Extension
80655034	Aux. Hyd. Hoses For 6 Ft. Boom Extension
80655035	Aux. Hyd. Hoses For 8 Ft. Boom Extension
80755034	Boom Extension - 7' Adjustable Angle

80655028	Boom Extension - 4 Ft. w/o Aux Hoses
80655029	Boom Extension - 6 Ft. w/o Aux. Hoses
80655030	Boom Extension - 8 Ft. w/o Aux Hoses
80656064	Bucket - 42" Excavating -w/o Teeth
80656092	Bucket - 60" Ditching w/Bolt On Cutting Edge
80656093	Bucket - 66" Ditching - w/Bolt On Cutting Edge
80656040	Bucket - Ditching - 30"
80656058	Bucket - Ditching - 48"
80656007	Bucket - Ditching - 60"
80656034	Bucket - Ditching - 60" Constant Radius
80656006	Bucket - Ditching - 66" Constant Radius
80656002	Bucket - Ditching - 72"
80656118	Bucket - Ditching - 72" (1.6 Cu. Yd.)
80656094	Bucket - Ditching - 72" W/ Bolt On Cutting Edge
80656029	Bucket - Dredging - 108"
80656013	Bucket - Dredging - 72"
80456020	Bucket - Excavating - 24"
80456021	Bucket - Excavating - 30"
80456022	Bucket - Excavating - 36"
X4106093	Bucket - Excavating - 36" w/5 Teeth
80456023	Bucket - Excavating - 42"
80456024	Bucket - Excavating - 48"
80456064	Bucket - Excavating - 60"
80656065	Bucket - Excavating 24" w/o Teeth
80656086	Bucket - Excavating 36" w/o Teeth
80656115	Bucket - Pavement Removal - 18" (Curbing)
80656116	Bucket - Pavement Removal - 24" (Curbing)
80656114	Bucket - Pavement Removal - 28"
80656102	Bucket - Pavement Removal - 40"
80656119	Bucket - Pavement Removal - 48"
80656012	Bucket - Trenching - 21"
80755003	Conveyor Bucket (2184 MM) - Pin On
80755002	Conveyor Bucket (2800 MM) - Pin On
80385171	Emergency Kit - Flares & Triangles
80756028	Excavating Bucket - 18"
80755023	Fixed Thumb Grapple
80656024	Grading Blade - 8 Ft.
80656035	Guardrail Clean-Out
80709019	ISO Decal Installation - 4200 V
80455052	Limb Shear
80759012	Rammer Hammer 999 Installation - Bucket Adapter
80756038	Ripper - Single Tooth - Bucket Adapter Style
	Telestick Boom Extension w/Bucket
80656104	Trenching Bucket - 15"
Manual Instructions	
	Extra Set Of Keys (4): (2) 77384578 Ignition & (2) 91144470 Door & Covers
	Printed Set Of Parts, Service & Operator's Manuals