

**FSA20-EQU18.0, ITEM# 390**  
**SWEEPER: Self-Propelled Hydrostatic Broom - Center Slung**  
**BROCE RTC-350 SHERIFF'S CONTRACT WORKSHEET**

RTC-350

150 GAL. WATER SPRINKLER SYSTEM w/LOW PROFILE POLY TANK

HYDRULIC TEMPERATURE GAUGE

AMBER BEACON

WORK LIGHTS, SIDE OR REAR (2 SINGLE BEAM)

CAB w/FRONT WIPER

HEAVY DUTY HEATER & DEFROSTER

AIR CONDITIONING

WEST COAST MIRRORS

## **CRT 350 BROOM SPECIFICATIONS**

### **GENERAL**

It is the intent of these specifications to describe a self-propelled road sweeper in sufficient detail to secure bids on comparable equipment. All parts not specifically mentioned which are necessary to provide a complete sweeper shall be included in the bid and shall conform in strength; quality of material and workmanship to what is usually provided the trade in general.

### **ENGINE**

Rear mounted for better visibility. Minimum 268 cubic inch (4.4 liter), 82 HP diesel at 2200 RPM. Tier III compliant diesel engine. Air cleaner to be dual element dry-type with pre-cleaner at cab height, 12-volt electrical system, 85 ampere alternator and 950 CCA battery. Also equipped with an ignition key start, variable speed governor and a 27-gallon fuel tank. Engine shall be completely covered with hinged solid metal cover that has a lockable option.

### **INSTRUMENTS**

All gauges to be assembled on a common dash with easy visibility from operator's seat. To include hour meter, tachometer, oil, water temperature and fuel gauge. Traffic horn with horn button and a minimum of 95 decibel reverse alarm.

### **TRANSMISSIONS**

Shall be fully hydrostatic, with speeds infinitely variable to 34 MPH. A 10-micron suction filter will provide oil to the hydrostatic pump. Hydrostatic transmission shall be a closed loop, variable speed Sauer-Danfoss direct engine driven pump, with a fixed displacement Sauer-Danfoss motor coupled with a two-speed manual transmission, to provide gradability up to 45 degrees and neutral position for towing. Closed loop cooling is enhanced by a hot oil shuttle built into the motor and the case drain in the hydrostatic pump, returned to the tank through the oil cooler. Foot control shall be used for forward and reverse, as well as dynamic braking. Hydrostatic control to be spring loaded to return to positive neutral position when foot is removed. This prevents inadvertent movement when sitting stationary, with the engine running.

## **CRT 350 BROOM SPECIFICATIONS**

## **FRAME**

All shall be solid weld heavy structural steel, minimum 6" tube style front and rear bumpers. Rollover protection structure tested to SAE J1040 standards and canopy with rear view mirror.

## **STEERING**

Shall be open center orbital type power steering unit, with power beyond and dead steering capabilities.

## **TIRES**

P225/75R16 radial, on 6-bolt 5.5" X 16" steel automotive grade wheels. All wheels must interchange front and rear.

## **BRAKES**

Shall be self-adjusting hydraulic drum on rear axle and disc on front axle, with dual master cylinder, for safety backup. A mechanical type parking brake with indicator light shall be furnished.

## **WEIGHT**

The weight of the unit excluding optional equipment shall be a minimum of 5,000 pounds.

## **OVERALL LENGTH**

172 Inches

## **OVERALL HEIGHT**

Shall be 102 inches including ROPS and cab.

# **CRT 350 BROOM SPECIFICATIONS**

## **OVERALL WIDTH**

Shall be a maximum of 98 inches for transport.

## **RADIUS**

Maximum inside turning radius of 13.5 feet.

## **BRUSH CORE**

Shall be steel constructed for use with 32" diameter wafer type brush segments. Shall be 10" in diameter by 8" in length, filled with polypropylene wafers or combination steel wire and polypropylene wafers. (Specify which one is desired). Brush to be powered by hydraulic motor independent of travel speed, with direct drive motor located inside brush core. A heavy-duty shock absorber to be installed on core support frame to maintain core balance. Rubber shield shall be provided to deflect flying debris from damaging other parts of the sweeper. Brush assembly shall have a wrap-around type of 16 gauge metal shield the length of brush core and covering 140 degrees.

## **SWEEPING ANGLE**

Unit shall be capable of sweeping angles from 45 degrees left to 45 degrees right. A round 41-inch turntable constructed of 5/8" plate steel supported by 9 heavy-duty ball bearings shall be provided for even brush wear and core balance.

## **BRUSH MOUNTING**

Bush shall be mounted in such a manner that it is "pulled" permitting it to "float" through a range of 15 inches to follow the contour of the pavement plus able to be locked in any position, for extra heavy sweeping.

## **OPERATOR CONTROLS**

Joystick control shall be conveniently located on operator's station and it shall include the following controls for the brush: stop, raise, lower, float or lock in any desired position. A single control lever will activate brush rotation. Any optional equipment controls, including throttle, shall be located conveniently to the operator.

# **CRT 350 BROOM SPECIFICATIONS**

## **BRUSH HYDRAULICS**

A gear pump attached to the rear of transmission pump, with a built in priority flow divider to provide steering, with power-beyond capabilities which power a tow-spool valve that controls the lift, float, down pressure and sweeping angle. The exhaust port of the flow divider supplies oil to a single spool valve that controls the brush rotation. (192 RPM) under load. A 100-mesh screen will be provided for oil exiting the tank and a 10-micron filter for oil returning to the tank. Hydraulic tank shall be 27-gallon capacity with a sight level, temperature gauge. Tank shall be a separate unit and not part of the sweeper frame. Three (3) shut-off valves shall be located on the hydraulic tank to close while changing filters.

## **FRONT AXLE**

The front axle shall be oscillating type, with hydraulic disc brakes and a minimum tread distance of 65 inches. Axle shall be mounted to a heavy-duty bolster, which oscillates on a center-mounted pin, connected to the front bumper.

## **REAR AXLE**

The rear axle shall be Dana model 44-truck type, with hydraulic drum brakes, powered by a fixed displacement hydrostatic motor through a two-speed gearbox (a low gear to provide sweeping power and a high gear for road use). Maximum road speed shall be at least 34 MPH. Rear axle to have a minimum 3,500-pound load-carrying capacity.

## **PAINT**

To be prime painted, with rust inhibitor primer and two (1) finish coat, of lead free DuPont two-part urethane orange paint, with an automotive finish.

## **MANUALS**

A Parts Book and complete Operator's Instruction Manual will be provided.

# **CRT 350 BROOM SPECIFICATIONS**

## **WARRANTY**

Manufacturer warrants each broom against operational failure caused by defective material or faulty workmanship that occur during normal use and operation within one year, or 1000 hours for date of purchase you the user, with the exception of municipal purchases, which are warrantable for one year, with unlimited hours.

Extended warranty is available, consult factory.

## **OPTIONAL EQUIPMENT**

- Lights including two headlamps, stop, tail and turn signals with controller and flasher (including 4-way flashers).
- Amber beacon or strobe light.
- Cab with heavy duty tinted safety glass, two full view doors (one on each side), door locks, windshield wiper, padded insulation, floor mat, rollover protection structure, heater and defroster fan, windshield washer, pressurized air conditioner and West Coast mirrors. Deluxe suspension seat with gas shock absorbing. Additionally, any openings on the floor of the cab must be sealed, with a rubber boot, rubber grommet or like material to inhibit dust from entering.
- Air conditioning system shall have a condenser mounted inside the hood on the outside of the radiator. Air conditioner must have an exterior remote filter system. AC system shall incorporate a pressurized system with a blower fan.
- Front scraper blade to be 7 12/ feet in width by 25 inches in height and hydraulic angle 22 degrees left to right, with hydraulic lift and float. A hydraulic two-spool control valve to be mounted inside cab, within easy reach of the operator. Moldboard to be equipped with a replaceable 6 inch cutting edge, three adjustable heavy-duty trip springs and quick couplers on hydraulic lines. Due to the additional weight from the scraper blade, bidders will provide certification on rollover protection structure, in accordance with SAE J1040.

## **CRT 350 BROOM SPECIFICATIONS**

- Brush watering attachment shall have an 8' galvanized spray bar and electric pump, with 100-mesh strainer, 8 spray nozzles and back-flow valve to prevent drainage when not in use. Tank to be 150-gallon low profile polyethylene tank, with vented filler cap.
- Curb and gutter brush attachment
- Tilt and telescoping steering column
- Hand Control for forward and reverse
- Variable speed brush control
- Spare tire with mount
- Tow bar with safety chains
- Audible engine alarm
- Heavy-duty rear axle
- AM/FM/CD radio

OVER 50 YEARS OF SERVICE TO THE INDUSTRY

# Broce Broom

## THE LEADER 350 Series



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CR-350



RJ-350



RCT-350



KR-350

**ASK YOUR  
NEAREST BROCE  
DEALER FOR A  
DEMONSTRATION  
TODAY!**



## OPTIONAL CURB SWEEPER



## EASY TO OPERATE WITH CONTROLS AT OPERATOR'S STATION

The Broce Curb Sweeper is a special option available on all 4-wheel model Broce Brooms. This attachment has been designed to help clean in places that are tough to reach and are outside the sweeping radius of the main broom core.

The Broce Curb Sweeper features a 27" diameter brush, heavy-duty construction, a reversible hydraulic motor and hydraulically operated float and down pressure for heavy sweeping.



## WATER SPRAY SYSTEMS DUST CONTROL WHEN YOU NEED IT



## KEEP THE DUST TO A MINIMUM FOR CONVENIENCE AND SAFETY

Our 150 gallon rust proof water spray system consists of a low profile polyethylene tank, 2.1 gpm electric pump, strainer filter and 8 spray nozzles to control excessive dust with the push of a button. This system also includes a back flow valve to prevent tank drainage when not in use.

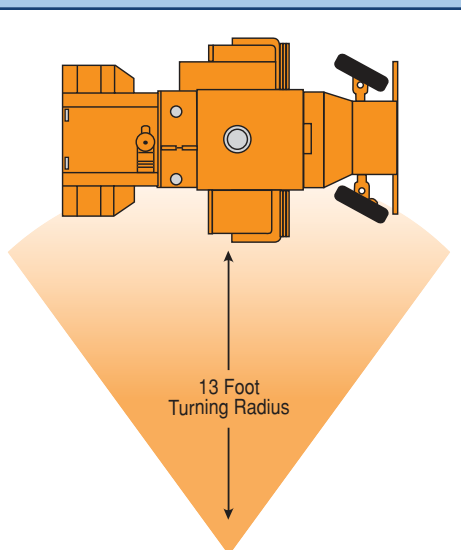


## EXCLUSIVE

Joystick broom control with easy access from operator's station.



## OPTIONAL Suspension seat.



With our compact wheel base, the Broce Broom offers better maneuverability for working in tight places.





## ENGINE OPTIONS & EASE OF MAINTENANCE

The enclosed engine cover is standard equipment on all Broce Brooms. With John Deere, Cummins, Caterpillar and Kubota diesel engines to choose from, we can meet your power unit requirements.



## HYDROSTATIC DRIVE WITH 2 SPEED GEAR BOX

All Broce Brooms are supplied with our unique hydrostatic drive train with a hot oil shuttle built into the drive motor for continuous oil flow back to the cooler.



## STANDARD

Front Disc Brakes



## DIRECT DRIVE CORE MOTOR

Broce uses a Danfoss HD High Torque Motor with two roller bearings designed for high side loads. Now a full 8 ft. brush.



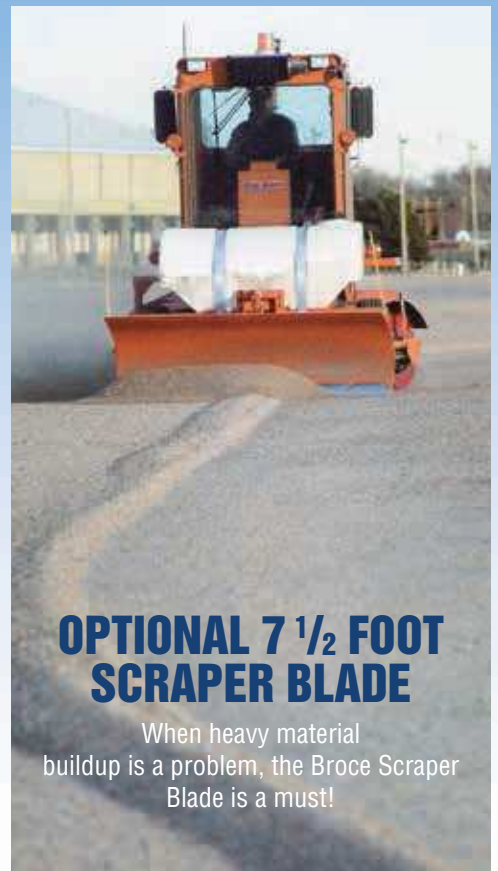
## DEFROSTER PLENUM

Plenum utilizes the fan and the warm air from the heater and has three vents to direct the warm air onto the windshield.



## USE THE BLADE FOR CLEANING BEHIND YOUR MILLING MACHINE OR CHIP AND SEAL JOBS

The blade will hydraulically lift vertically for clearance and angle right to left with a control located at operator's station. A quick coupling allows the blade to be removed when not in use. The replaceable cutting edge will give hours of continued use.



## OPTIONAL 7 1/2 FOOT SCRAPER BLADE

When heavy material buildup is a problem, the Broce Scraper Blade is a must!

# BROCE BROOM HYDROSTATIC DRIVE SPECIFICATIONS

## Standard Equipment Specs

- Certified Roll Over Structure and Canopy complies with ISO3471
- Main Frame - All Welded 6" Channel
- Heavy Structural Steel with Gussets at Stress Points
- 6" Rectangular Tubing - Front and Rear Bumpers
- Front Fenders are Standard Equipment on Some Configurations
- Weight (standard unit) - 5,000 lbs.
- Overall Length - 172 inches
- Overall Width for Transport - 98 inches
- Overall Height - 102 inches
- Inside Turning Radius - 13 feet
- Brakes - Equipped with Dual Master Cylinder, Four Wheel Hydraulic Self Adjusting on Rear and Disc on Front, and Mechanical Parking Brake
- Brush Core - 8' all Steel Welded Construction
- Brush Filler - 10" x 32" Wafers - Prostran
- Sweeping Width - 96"
- Brush Drive - Direct Drive Motor enclosed in Core, 192 RPM under load
- Core Cover - 140 degrees 14 Gauge Steel with Rock Deflector
- Swing Frame - Mounted on 10 Heavy Duty Sealed Ball Bearings
- Sweeping Angle - 45 degrees Left or Right
- Broom Controls - Single Lever Joystick Control Valve w/Adjustable Down Pressure and Float Position
- Hydraulic Tank Capacity - 27 US Gallons w/100 Mesh Suction Strainer
- Operating Pressure - 3,000 PSI
- Pump Capacity - 26 GPM at 2400 RPM
- Filter - Two 10 Micron Replaceable Element (suction and return)
- Fuel Capacity - 27 US Gallons
- Front Axle - Heavy Duty Oscillating w/Disc Brakes
- Rear Axle - Dana Heavy Duty Truck Type w/Drum Brakes
- Wheels - 6 x 16 - 6 Bolt on 5 1/2 Centers
- Tires - LT225X75X 16 Load Range E
- Steering - Orbital Type Power Steering
- Padded Seat with Arm Rest and Seat Belts Complies with ISO 6683
- Cross-Link Electrical Wiring Complies with SAE J-1128
- Instruments and Controls - Water Temperature, Oil Pressure, Volt Meter, Tachometer, Hour Meter, Fuel Gauge, Reverse Alarm, Rear View Mirror, Controls for Broom Drive, Core Angling, Core Height, Electric Core Lock, Engine Throttle, Brakes, Directional Control, Parking Brake with Engaging Light, Traffic Horn
- Transmission - Hydrostatic Pump and Motor coupled to a 2-Speed Gearbox with Neutral Shift for Towing. Low Gear 13 MPH, High Gear 34 MPH
- Air Cleaner - Donaldson Dual Element Type with Precleaner
- Engine Options: Model  
RCT-350 Cummins Tier 4 Final Coming in 2015  
RJ-350 4.5 Turbocharged John Deere Diesel, 4 Cylinder, 74 HP @2400  
CR-350 4.4 Turbocharged Caterpillar Diesel, 4 Cylinder, 82 HP @2200  
KR-350 3.62 Turbocharged Kubota Diesel, 4 Cylinder, 74 HP @2400

*In an effort to improve the product, Broce Mfg. reserves the right to change without prior notice or obligation any specifications and/or features.*

## Optional Equipment

- 150 Gallon Water Sprinkling System w/Poly Tank
- Tilt & Telescoping Steering
- 7 1/2 Ft. Scraper Blade
- Canopy Windshield
- Light Group - Turn Signals, Warning Lights, Halogen Headlights and Taillights
- Work Lights - Side or Rear
- Amber Beacon or Strobe Light
- Turbo II Precleaner or Sy-Klone
- Extension Air Cleaner Stack
- Spare Tire with Mount
- Enclosed Cab with Safety Glass and Wiper
- Cab Heater and Defroster Plenum
- Pressurized Air Conditioning
- Rear Windshield Wiper
- Windshield Washer - Front or Rear
- Hydraulic Temperature Gauge
- Tow Hitch with Safety Chains - Surge Brake Available
- Suspension Seat
- Audible Engine Alarm System
- 96" Poly Tube Broom
- Hydrostatic Hand Control
- Heavy Duty Rear Axle
- Curb and Gutter Brush
- Safety Engine Shut Down System
- Block Heater
- AM/FM Stereo Package
- Vari-Speed Brush
- Down Pressure Limit Valve
- 41 Gallon Fuel Tank
- Hanging Rock Gaurd

Servicing Dealer

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