



## **BARKO 695MH SPECIFICATIONS**

**Updated January 14, 2009**

### **Engine**

- Isuzu 6HK 7.8L - Tier 3
- 220 HP (164 kW) at 1800 RPM
- Dual element air cleaner
- Exhaust muffler w/fire wrap on exposed surfaces
- 65 amp alternator
- 24 volt system

### **Radiator:**

- Remote mounted Water Cooler/Charge Air Cooler with direct drive fan
- Flex-Aire fan as option

### **Fuel Reservoir**

- 125 gallon fuel tank (475 L) (19 hours @ 60% duty cycle)

### **Shroud:**

- Hinged right side access panels for engine maintenance with gas springs
- Bolt on covers over and under engine for further access
- Hinged access to electrical box and fuel fill
- Walking space behind lifting cab tower for access to magnet controller

### **Hydraulic System**

- Main pumps – two variable displacement load sense piston pump (Sauer 45 Series 100cc)
  - 2 x 100cc => 112 gpm (425 L/min) @ 4495 PSI (310 bar)
  - Electronic Horsepower limiter
  - Dedicated Swing Pump
- Generator pump – Denison Axial Piston Pump
  - 34.25 cc => 14 GPM (53 L/min) @ 2100 PSI (145 bar)
- Steering/Brake pump – Eaton Piston Pump
  - 16 cc => 7.6 GPM (29 L/min) @ 2100 PSI (145 bar)
- Heavy wall tubing and multi-wire braided hose throughout system
- O-ring Face Seals on all fittings

## Control Valves

### Upper

- Main
- Stick
- Swing
- Head Pivot
- Grapple Rotate
- Grapple open/close

### Lower

- Travel
- Stabilizers
- Brake

## Collector

- Hydraulic - 10 port
- Electric - 20 pass

## Hydraulic Reservoir

- 161 gallon (610 L), 25 gallon (95 L) expansion
- Clean-out/inspection covers
- Return line filters
- Shut off valve on pump suction line
- Oil level and temp sending unit

## Oil Cooler

- Remote oil cooler with dual electric fans

## Swing

- Continuous rotation on internal tooth turntable bearing.
- Driven by two 40 cc hydraulic motors through planetary gear boxes with swing brake
- Swing Speed: 7.1 RPM Maximum
- Swing torque:
  - Accelerating: 74,962 ft. lbs. (102 kN-m)
  - Starting: 57,346 ft. lbs. (77.7 kN-m)
  - Braking: 97,990 ft. lbs (132.8 kN-m)
- Swing Pressure: 3600 PSI (250 bar) operating pressure, 3600 PSI port relief (250 bar)
- Tail Swing: 121" (3.07 m)
- Energy saving accumulators

## Counterweight

- 19,800 lbs (9000 kg) standard
- Protective cavity allowing up to 33kw generator to be mounted inside

## **Elevating Cab**

- Eye level 17.5' (5.3 m)
- 95" (2.4 m) of travel in 10 seconds
- Parallel linkage system
- Accumulators for comfort
- Load locks and emergency release for safety

## **Platform**

- Low Profile
- Low stack height
- Guarding on underside standard
- Solid bottom to block out noise

## **Boom Data**

- Main 29' (8.8 m)
- Stick 17.3' (5.3 m)
- Stick 22' (6.7 m) optional
- All welded boom construction with fabricated box type design
- Bronze bushings with grease grooves at boom pivot points
- Dual sided boom lights optional

## **Boom Reach (center line of bearing to lifting pin)**

- 46' Boom (14 m)
  - Vertical Boom Reach: 50'-9" (15.5 m)
  - Horizontal Reach: 46'-5" (14.1 m)
- 51' Boom (15.5 m)
  - Vertical Boom Reach: 55'-8" (17 m)
  - Horizontal Reach: 51'-0" (15.5 m)

## **Cylinders**

- Dual outboard main and stick cylinders
- Wear rings on glands and pistons for extended life
- Made of heavy wall steel tubing
- Induction hardened cylinder rods with heavy chrome plating
- All cylinders have bolt on glands
- Hose break protection valves standard

## **Recommended Attachments**

- Magnets
  - 58" diameter
- Grapples
  - ¾ cubic yard

## **Cab**

- FOPS certified
- Forward sloping window with windshield wiper and washer
- Egress through rear knock out window
- Fire extinguisher
- AM/FM CD radio with antenna and 2 speakers
- Self resetting circuit breakers
- A/C and heater combination creating pressurized cab with Cyclone air filter
- Four 55W front lights & 1 left side light, 1 right side light, and 2 rear lights
- Sun visor
- Rear hinging door
- Floor mat, closed cell non-absorbent foam with heavy textured vinyl surface
- Sound suppression
- Operators seat with “knee action” mechanical suspension, left and right hand joystick carriers, arm pads, 2 way adjustable lumbar support, mesh manual pocket on back, fully reclining high back with headrest, charcoal tuff-tex fabric seat and arm pads, and orange Barko “strong arm” logo on seat back
- Lap seat belt

## Controls

- Left hand joystick:
  - Left-Right: Swing
  - For-Aft: Stick Boom
  - Trigger button: Horn
  - For-aft slider for elevating cab up/down
  - Two spare buttons
- Right hand joystick:
  - Left-Right: Grapple Open/Close
  - For-Aft: Main Boom
  - Upper Right Button: Magnet On
  - Upper Left Button: Magnet Off
  - Lower Right Button: Grapple Rotate Right
  - Lower Left Button: Grapple Rotate Left
  - Trigger button: Speed Burst
- Right Foot Pedal: Travel
- Left foot pedal: Brake
- Steering wheel: Steering
- Front Panel
  - MD3 Display Module
  - Ignition Switch
  - Horn
  - Gear Selector
  - Wiper
  - Washer
  - Control Power On/Off Switch
- Overhead Panel

- Stabilizer switches including all switch
- Front Cab Lights
- Left Cab Lights
- Right Cab Lights
- Rear Lights
- Cab Riser Lights
- Boom Lights
- Fan Reverse
- Swing Brake
- Parking Brake
- A/C Controls
- 12V power outlets (2 – keyed, 1 - unkeyed)

## **Instrumentation**

- Throttle Control
- Warning Lights
  - Drain Filter
  - Tank Filter
  - Hydraulic Temperature
  - Hydraulic Oil Level
  - Fuel Level
  - Engine Warning Active
  - Engine Fault Code Active
- Indicator Lights
  - Control Power Indicator
  - Swing Brake On/Off
  - Gear Selector
  - Magnet On
  - Hydraulic Oil Low
  - Hydraulic Oil Hot
  - Speed Burst
  - Wait To Start
  - Shutdown Engine
  - Warning Indicator
- Hydraulic oil temp
- Fuel Level
- Engine Oil Pressure
- Hydraulic System
  - Machine Pumps Pressure
  - Load Sense Pressure
  - Pilot Pressure
  - Hydraulic Oil Temperature
- Engine Information
  - Engine Speed
  - Percent Load
  - Intake Manifold Temp

- Voltage
- Hours
- Engine Oil Pressure
- Engine Temperature
- Fuel Rate
- Service Screen
  - 100 Hour Service
  - 400 Hour Service
  - 1000 Hour Service

## **Undercarriage**

- Four wheel carrier
- 118" wheelbase (3.0 m)
- Four independently controlled stabilizers
- NAF Axles with 24:1 gear ratio
- Rear axle rigid to frame, front axle oscillating 6 degrees
- ZF 2 speed power shift transmission with 1.2:1 and 4.9:1 gear ratios remote mounted
  - SAHR parking brake integral to transmission
- Parker (160 cc) hydraulic drive motor
- Hydraulic wheel brakes on all four wheels as primary brakes
- Hydrostatic braking as secondary brakes
- 37 % gradability
- Setco 24" wide x 48" OD solid tires with staggered lug tread pattern
- Stabilizer cylinder protective covers
- Central ladders for cab and platform service access

## **Important Dimensions**

- 78,000 lbs (35,400 kg) without work attachment
- 133" (3.38 m) maximum shipping height with boom and cab
- 118" (3.0 m) maximum width
- 41' (12.5 m) overall shipping length with boom (46' or 51')
- 177" (4.5 m) stabilizer spread when fully extended
- 6" (15 cm) stabilizer pad penetration depth
- 204" (5.2 m) longitudinal stabilizer spread
- 229" (5.8 m) overall carrier length