

# RETRO SYSTEMS

## SENSOR™ Torch Height Control Software & RSVS-151 Lifter

**SENSOR™** plasma torch height control software is tightly integrated into Hypertherm® CNC controls. Together they deliver a full featured precision plasma torch height control system specifically designed to work with Hypertherm plasma systems. **SENSOR** will significantly increase the productivity and profitability of your shape cutting operation.

The machine operator selects Material Type, Process Current, Plasma/Shield Gas and Material Thickness from the CUT CHART SCREEN. The CNC control retrieves cutting parameters from factory **Look-Up Tables** stored within the CNC control. All plasma process parameters are set and automatically maintained during the cutting cycle.

### SENSOR SOFTWARE PARAMETERS:

- Pierce height
- Transfer height
- Pierce time
- Cutting height
- Cutting voltage
- Retract height after cut

### PLASMA CUT CHART SCREEN:

Plasma 1 Cut Chart - Rev A

PowerMax1650 - Process Selection

Material Type: Mid Steel

Process Current: 60A

Plasma / Shield: Air / Air

Material Thickness: 10GA, 16GA, 20GA, 24GA, 3/8", 1/2", 5/8", 3/4"

Cutoff Setting: 80 psi

Cut Speed: 211 ipm

Kerf: 0.07 in

Net Arc Current: 60 amps

Net Arc Voltage: 134 volts

Cut Height: 0.1 in

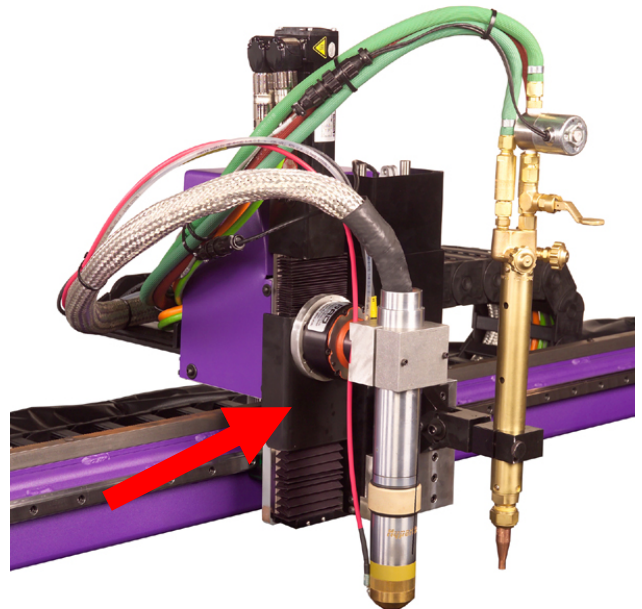
Pierce Height: 150 % (0.15 in)

Pierce Time: 0.1 sec

Creep Time: 0 sec

11:20:45 AM [Cancel] [Help] [OK]

[Save Process] [Reset Process] [Save Cut Charts] [Load Cut Charts] [Change Consumables]



RSVS-151 plasma torch lifter  
& 250 Watt AC Servo Motor

Selection of Material Type, Process Current, Plasma/Shield and Material Thickness automatically sets and maintains all torch height control parameters during the cutting cycle.

### RSVS-151 Lifter Features:

- Sets Initial Pierce Height and maintains torch to plate height during cut via voltage regulation
- Height Sensing using Ohmic or Position Error Stall Detection
- Ball Screw Drive with Dual Linear Guides
- 250 Watt AC Servo Motor
- 600 IPM (15.2m/min) positioning speed
- 6" (150mm) stroke travel for torch positioning
- 50-210 VDC Arc Voltage Range in 1 volt increments
- RAD Pneumatic plasma torch collision mount – additional charge
- Lifter dimensions (without RAD plasma mount): H 19" (480mm); W 3.5" (89mm); D 2.0" (50mm)
- Lifter dimensions (with RAD plasma mount): H 19" (480mm); W 3.5" (89mm); D 5.0" (127mm)

### Typical Applications:

- Light and Medium Duty Conventional plasma cutting