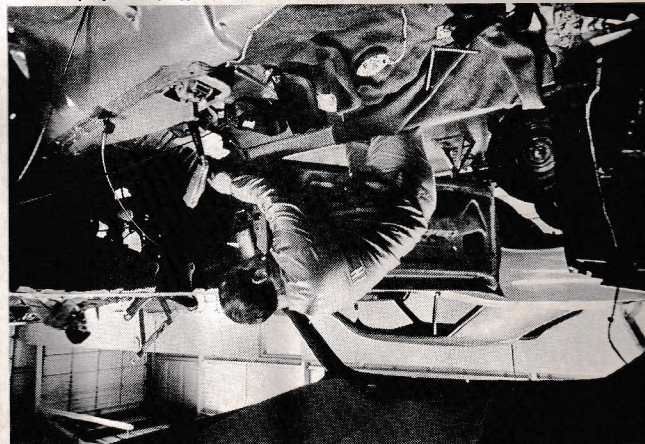




Photos by Don Hunter

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Two '70 'Cudas were used in the construction of the match racer. The car on the left was a stock Hemi 'Cuda off the showroom floor, while the car on the right was just a bare steel body.



Here's reason for two cars: The steel shell doesn't have to be stripped down and being able to swap parts from the stocker to the match racer insures that all necessary components and parts are on hand.

RUNNING GEAR - DRIVETRAIN - SUSPENSION

Changing the front crossmember, steering, spindles and brakes involved no problems. This was simply a bolt-on operation since all parts have to be in the stock location on the race car. Front end alignment and geometry is a neglected facet of many race cars, according to Ronnie Sox. Camber is set at one degree positive, caster at one degree positive, with toe in at 1/16-inch.

The 'Cuda employs the stock braking system on all four wheels. New NHRA Pro Stock rules require four-wheel brakes while AHRA requires use of a parachute if equipped with rear brakes. Rather than change from week to week, team manager Buddy Martin chose to use the four-wheel brakes all the time. Martin said additional stopping power is needed on many short tracks with a 3000-pound car and relying on a rear brake/chute combination is risky at times. Additional cooling was obtained by drilling vent holes in the backing plates on all wheels.

The heavy-duty 9-3/4 Dana rear end was fitted with a 4.89 third member. Rear springs, as used on the '68 Hemi 'Cuda, were installed for rear suspension. Rebound is controlled by Chrysler heavy-duty shocks. A Sox & Martin piston snubber was installed and adjusted to within 1/2-inch of the floor pan.

SOX & MARTIN 1970 Hemi Barracuda Specifications

Manufacturer	Plymouth
Body Style	Barracuda
Year	1970
Weight	2980 w/gas, oil, water
Engine	426 Hemi V-8
Bore	4.25 inches
Displacement	426 Cubic inches
Carburetors	Two Holley four-barrels
Intake Manifold	Magnesium - Ram type
Camshaft	Sox & Martin - Experimental
Crankshaft	Stock
Ignition System	Prestolite Transistor Type
Intake Valves	Stock
Exhaust Valves	Stock
Connecting Rods	Stock
Bearings	Federal-Mogul
Lifters	Stock
Rocker Arms	Stock
Pistons	TRW
Compression:	13-10
Piston Rings	Sox & Martin
Spark Plugs	Champion N-63Y
Exhaust Manifold	Hooker Headers (Tubular Type)
Transmission	Chrysler "Stick-Shift" four-speed w/aluminum housing
Shifter	Hurst Competition/Plus w/Reverse Loc/Out & Roll Control
Wheels	Front: Keystone Kustomag Rear: Keystone Kustomag
Tires	Front: Goodyear Rear: Goodyear
Rear End Type	Spicer
Pressure Plate	Stock
Scatter Shield	Lakewood Industries
Filters	Engine: Fram HP-1 Oil Filter Fuel: Fram HPG-1 Fuel Filters
Oil & Lubricants	Engine: Valvoline 40 weight Racing Oil Rear End: Valvoline Gear Lube
Instruments	Stewart Warner Cable-Drive Tachometer, Oil Pressure, Fuel Pressure gauges & Fuel Pump
Type Fuel	High Octane Premium Gasoline
Safety Features	Aircraft Type Quick-Release Shoulder Harness & Seat Belt
Special Features	Rubber Padded Chrome Moly Tubing Roll Bar Lakewood Industries - Roll Bar
Expected Performance	9.50 seconds 145 mph

