Dodge's Fastback Fullback Plays Offense and Defense

S

corerboard lights read: "Third down, three yards to go." In the
tackle, the quarterback eagerly

and his lips will automatically, silently

form that word, "CHARRRRRGE!!"

Driving the Dodge Hemi Charger

is like quarterbacking the Green Bay

Packers. Call the play, and the job is
gone with great speed, strength and

ability. The power and speed of the

Hemi Charger stem directly from what

is understood—simply the current

NASCAR champion engine in its

twin 4-barrel carbureted, 10.25:1

compression street form. In this time,

the 426-cu. in. engine is rated at 425

bhp at 5,000 rpm (1,100 mph), with
torque delivered maximum of 490 lb-ft.
at 4,000 rpm (89 mph), but proves

emphatically irresistible for the best of

a given set of circumstances.

In addition to the Hemi/Crager

Dodge Division makes available en-
gine options to create the Demi/Crager

and the Magna/Crager. The Demi

category includes Cragers powered by

the 2-barrel carbureted, 318-cu. in.

in 230hp engine, or 383-cu. in. V-8s

rated at 270 hp in single 2-barrel trim

or 325bhp with a single 4-barrel car-

buretor. The Magna/Crager is distin-
guished by installation of the largest of

all Chrysler Corp. engines, the 440-cu.
in. V-8, rated at 375 bhp with one 4-

barrel carburetor.

But for brute strength for a Charger, the

426-cu. in. hemispherical combus-
tion chamber engine is the choice. Its
cylinder block, for example, carries

special reinforcement at the main

bearing webs, and main bearings No.

2, 3 and 4 are secured with hollow

bolts through the sides of the block
to the bearing caps. Heads have addi-
tional tie-downs by special studs and

nuts that are tightened from inside the

tappet chamber. Domed pistons are of

extruded aluminum.

The Hemi's crankshaft is forged in

carbon steel. Added strength

comes in the form of shot-peened fil-
clets and a special nitriding dip to hard-

en the entire surface of the crank to

aid in resistance to fatigue. Extra-wide

oil grooves in main bearings help pro-
tect this strength in high speed opera-
tion. The high lift camshafts, driven off

Not nestling in the wee aluminum

tanks is the manifold. Branches of

the manifold are shaped to provide free

flow of fuel to the fuel/air charge to all

cylinders at every speed and to wide

range of engine speeds for street and

strip flexibility. (The 440-cu. in. version

of the Hemi employs a ram manifold,
tuned for peak performance in a much

less broad engine speed range.) Above

the manifold are two Carter carburetors,

an AFB-412A4S forward, an AFB-412S

at the rear. Staged throttle linkage permits

the primary throttle blades of the for-

ward carburetor to remain closed until

the rear-carbureter's primary blades

are 40% open. After this point is

reached, both sets of primary blades

travel in unison, reaching full open po-

sition simultaneously. The secondary

barrels of both carburetors are velocity

activated by the flow of incoming air.

Weights hold the valves closed until

the air velocity pressure drop over-

comes the counterweights and the sec-

ondaries swing open.

Mandats and carburetors are isolat-

ed from the top of the cylinder block

by a heat shield that minimizes trans-

fer of heat from engine oil to the in-

coming fuel/air charge. Heat rer-

tubes, when the engine is cold, carry

hot exhaust gas from heat pas-

sages in the intake manifold. As engine

heat increases, a thermostatically con-
trolled valve reduces gas flow through

the riser tubes, thus regulating mixture

temperature for smoother warm-up

operation.

Gasoline from the engine's internal

activity are dumped through cast iron

exhaust headers and thence into dual

2.5-in. exhaust pipes. A 4-speed manu-

ual gearbox is available with the Hemi

engine, but a TorqueFlite 3-speed

automatic was tested by 40 LIFE's

test car.

This engine can be likened to a

fullback, then this transmission must

be compared to the fleet halfback who

can run the sweeps and the tricky

veers on quick opens, who can catch

the fullback's passes and the bomb, who

can run the pass option and who comes

in to kick the extra points as well. The

TorqueFlite transmission, if allowed to

remain in "Drive" position, shifts for

itself, plays the field, chooses the

right gear for tackling through traffic, pass-

ing on a short stretch of straight, or

shuffling up the draft to get for

automatic gear change quarter-mile times of

under 15 sec. But when called upon by

the driver to do so, the transmission can

be held in first and second gears

for so long as it is desired. CL, with

some prudence, chose 6000 rpm as the

maximum shift point for the automatic and

therewith recorded top time in accel-

eration runs concluded at Carlsbad

(Calif.) Raceway.

When a Plymouth Satellite with a

similar Stille engine under-

hood was tested (CL, July 30) the

transmission's torque convertor max-

imum ratio at stall was 2.62:1. Auto-

matons being installed with the Hemi

engines in Chrysler Corp. cars now

have torque convertor maximum ratio

at stall of 2.0:1. This means the 1967

TorqueFlite unit is a little lighter and

is inclined toward creep at engine idl
—but to some enthusiasts, convert-

er creep means a more responsive,
one Dodge division representative described this sort of suspension system: "The handling package, the police package, the trailer towing package, the only package, it's the same thing, whatever you want to call it, but it's a damn good system."

He proved correct in his statement.

The suspension system, though immensely flexing, was not harsh and allowed sufficient suspension to smooth out minor roadway irregularities. The system also provided enough bite for some measure of cornering capability and thoroughly eliminated the inactive instability which plagued some of the more softly sprung Chrysler Corp. cars.

Power-assisted steering, optional on all Chargers, is welcome on this front-heavy Hemi/Charger as it took the effort out of changing the car's direction, yet was quick enough for smooth maneuvering.

In short, suspension and steering of the Hemi/Charger could be likened to the professional football lineman. There's not much glory in the job, but the job must be done, surely and well.

O N Y E R W H E R E V E R ther's an offense, there must be a defense to make it up a balanced team. Where the Hemi/Charger is concerned, 387 sq. in. of braking swept area seems a fairly adequate defense. When CAR LIFE testers twice applied the defensive mechanism in all-wheel stops from 80 mph, the result was smooth deceleration at the rate of 27 ft./sec. — both times the charger did what other, lighter cars haven't been able to do. Test drivers added repeated stops at 27 ft./sec. — all accomplished without untoward directional changes, including a slight grab here and there, but no extreme rear wheel lockup and only minor vacuum ronout on the third and fourth steps.

Generating this outstanding stopping power was a disc front-drum rear, 2-circuit, vacuum-boosted braking system of the type normally available as optional, or in some cases standard, equipment on all U.S.-made passenger cars. This sort of brake efficiency was a long time coming, but is heartily welcomed by car enthusiasts and safety-conscious family men, along with those who would enter automotive competitions.

The regrettable part of the entire matter of brakes is that some manufacturers persist in retention of small diameter drum brakes as standard equipment. This paladinum braking equipment has time and again proven less effective, less capable of stopping even than a disc or even disc/drum systems such as that of the Hemi/Charger. Until the latter is made standard equipment, the defensively oriented purchaser must continue to shift out additional cash for the best available defensive team. Those small diameter drums should go the way of the flying wedge.

T he 1967 Hemi/Charger supplied to CAR LIFE showed only minor trim changes from 1966, the Charger's introduction year. Perhaps because 1967 is the second year of production for the Charger, the test car displayed a more finished exterior — more smoothly applied paint and less wide gaps between panels, for example. Full-width taillights, and the roll-up headlamps remain the same as last year. Rear fender panels, smooth in 1966, for 1967 carry notched indentations just forward of the wheel. These faintly recall Buck Rogers comic strip rocket ships of the 1930s. The incongruity approaches that of a Green Bay Packer turning up for a ballgame in ballet slippers.

The interior of the Charger also is little changed from that of the Improv. Changes include improved steering, including speedometer/odometer, tachometer and gauges are located in four circular pods arranged across the dash in front of the driver. Numerals and letters, i.e. E-F for fuel, are back-lighted cutouts in the circumference of the pods. These do not lend themselves well to daylight visibility, but they are illuminated a fluorescent green for nighttime operation, they prove quite satisfactory. On the console of the test Hemi/Charger, where other manufacturers often locate tachometers, was a clock, its face angled toward the driver. The clock was useful — once the driver became accustomed to its odd position.

Two perennial complaints were noticed within the Hemi-Charger. Carpeting seemed more backed to size than cut to fit, giving the floor of the car a rag-tag appearance. And, a headliner molding along the curve of the pillar, expense of side glass was loose, and hummed and fluttered in the wind when windows were open. The same condition was noted in the Charger tested earlier (IC, June '66).

One of the advertised selling points of the Charger fastback is the fold-down seating and the flip-down luggage compartment transverse bulkhead which create a seemingly vast expanse of straight-through cargo area behind the driver's compartment. Usefulness of this cargo space, however, is debatable. If an item of cargo a cooler chest containing 25 lb. of ice, three cartons of soft drinks and lunch, for example — will not fit into the narrow, shallow luggage compartment, it must be placed inside the car, on the folded-down cargo deck. If one isn't a defensive tackle who has

_ORNAMENTAL BARS across the Charger's seatbacks were a source of passenger irritation and complaint.

LED room in abundance is provided for driver and passengers.
1967 DODGE CHARGER
2-DOOR HARDTOP

CHASSIS/SUSPENSION
Front suspension type: Independent by MacPherson struts
Rear suspension type: Beam axle
Steering type: Rack and pinion
Brakes: Front disc/rear drum

CAPACITIES
Fuel capacity: 21 gallons

ENGINE
Type: V8
Displacement: 440 cubic inches
Horsepower: 375 bhp
Torque: 480 lb-ft
Compression ratio: 11.0:1
Fuel type: Gasoline

DRIVE-TRAIN
Transmission type: Automatic
Clutch: 4-speed

DIMENSIONS
Height: 53.7 inches
Width: 71.3 inches
Length: 215 inches
Wheelbase: 123 inches

PRICES
List price: $3,080

MINIMUM TRUNK space and maximum interior height both are attributable to the Charger's roomy forward, cramped rearward fastback configuration.

With the rear seats locked in position, cargo space becomes minimal, and rear passenger space absolutely is for no more than two persons—adults or children. The Charger truth is a 2 plus 2 car. Space for heads, legs, knees, hips and shoulders is more than adequate for four persons within the Charger fastback body, CL's tall tester, the chronic complainer about lack of leg room, was satisfied with the Charger accommodations for his frame after a long, loopying Sunday circuit.

One gripe stated vehemently by several test crew persons, their friends, families and other occasional passengers was with a very hard ornamental bar across all four seat backs. This useless styling filler was thoughtlessly placed exactly where spines curve and where shoulder blades rest. Fitting purgatory for the stylist who sketched in that little bar would be for him to sit, just sit, in that seat for 1000 miles.

A BIT OF HUMAN engineering also could well have been expended on placement of restraint belts. The manner in which shoulder belts for front seat passengers were installed would be termed, in the vernacular of foot- ball, "a busted play." While lap belts were anchored by the conventional fashion, the shoulder belts were 6 feet in length, were secured to the body behind the rear seats. This meant that each time cross- chest belts were removed, they were placed on the floor to be kicked and tangled on exit and entry back into the car. The grill was to gather up all the belts, match buckles and tags, hitch the lap belt, unfasten and fasten the shoulder strap, in a state of maximum gropes, then discover that the driver thus trussed could not release the parking brake, tune a bit of music on the Radio or set the clock.

Upholstery was in an ochre shade of vinyl, contrasted with the deep green of the exterior paint, and the black of the nylon carpeting, chromium accent- ed dashboard and vinyl covered dash- board padding. The scheme was sport- ing, rather than sedate, as is fitting for a car with the ability to "BRRRREEEIIII!"

A NO CHARGING is where the Hemi-/Charger seems most at home. The simple chore of matching freeway speeds from inchled on-camplows allows short unrealistic of the 426 cu. in. engine that are purely delightful. Passing slower vehicles on steep, straight up- grades involves the driver in the pleasures of 8-barrel carburetion! The knowledge that the car is king at the stoplight, but making no arrogant display of this supremacy is the onecupshipmanship of Hemi/Charger.

Only once in a great while does the opportunity present itself to CAR L's test crew to have a little bootytos-the-ground automobile racing. The day CL's test team took the Hemi/Charger to Carlsbad Raceway, who should appear but the lads from next door, the Road & Track magazine test crew with a 440 cu. in. Magnum- ened Dodge R/T in hand. Solo runs against the electronic timers were the order of the day until, as if by mere chance, the Hemi Charger and the R/T somehow appeared simultaneously at the staging lights. CL in Hemi/Charger eyes R/T in R/T.

The nods signified mutual agreement. A hand was raised, then dropped.

The R/T holeshot the Hemi/Charger—but the advantage was shortlived. Beyond 70 mph, the Hemi began to unwind itself and the R/T faded to the rear. Over the rush of wind and roar of induction and ex- haust was heard a faint bugle call, "Ta-daa-dah-di-daaah!"

CAR LIFE ROAD TEST

CALCULATED DATA
L/100 km (high fuel) 13.8
Cl, sq. ft. nose 16.4
Max 1/4 mile (high speed) 28.8
Engine revs/mile (50 mph) 1212
Engine Type (cylinders) V-8
Engine revs/mile (40 mph) 340
Engine revs/mile (20 mph) 240
Front wheelbase 115.0
Front and rear wheelbase 100.0
Front track 57.0
Rear track 57.0
Overall length 170.0
Front overhang 30.0
Rear overhang 20.0
Overall width 76.0
Ground clearance 6.0

PERFORMANCE
Top speed (on flat) mph 124
0-60 mph 8.8
50 to 100 mph 17.5
1/4 mile (high speed) 12.4
Max 1/4 mile (high speed) 28.8
Max 1/4 mile (high speed) 1212

ACCELERATION
0-60 mph, sec. 8.8
50 to 100 mph, sec. 17.5
1/4 mile (high speed) 12.4
Max 1/4 mile (high speed) 28.8
Max 1/4 mile (high speed) 1212

FUEL CONSUMPTION
City mileage, mpg 10.0
Highway mileage, mpg 15.0

GRADABILITY
43%, % grade, mph 60 45 40 30 20

DRAG FACTOR
Total drag 0.60 mph 125