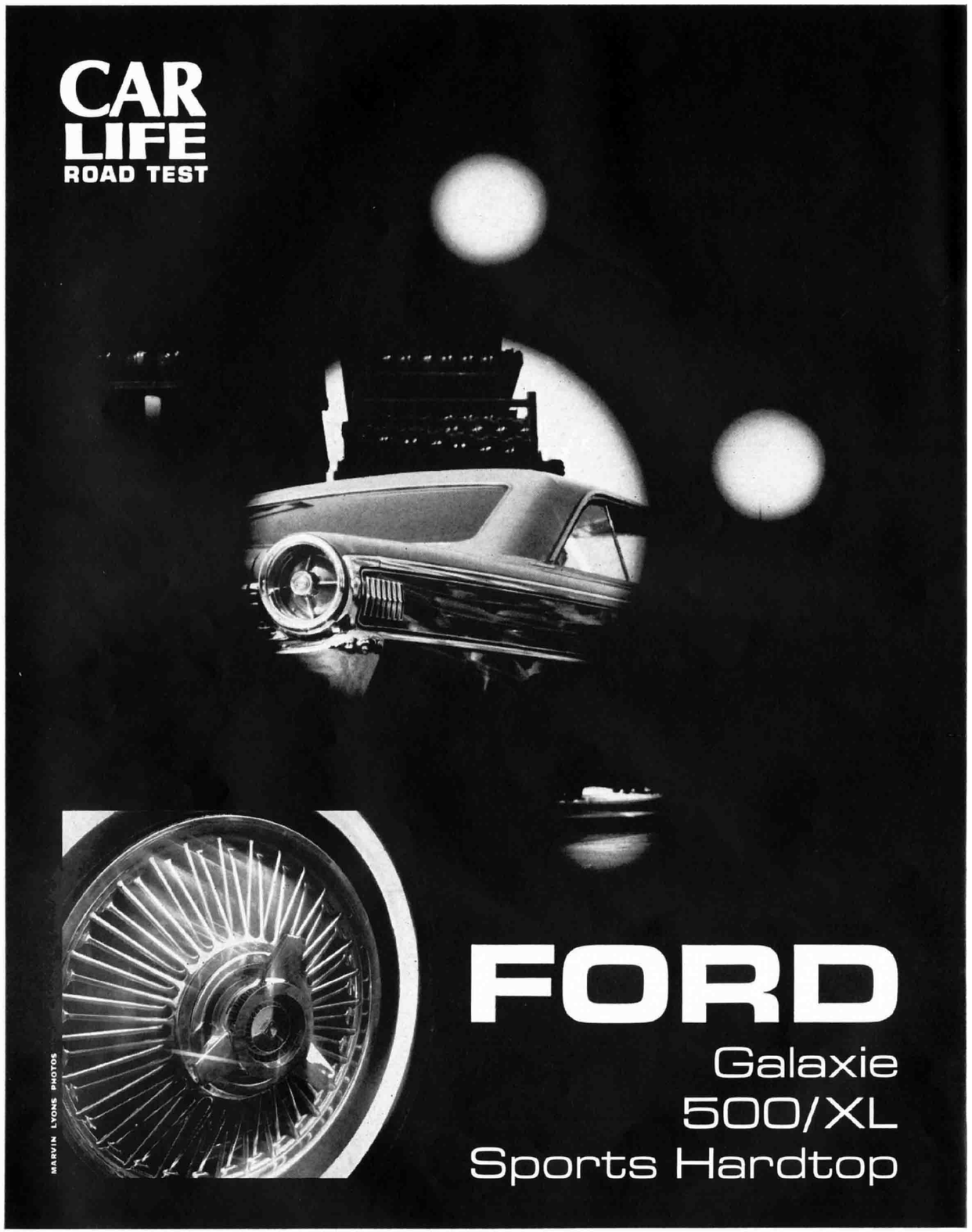
CAR LIFE
ROAD TEST



MARVIN LYONS PHOTOS

FORD
Galaxie 500/XL Sports Hardtop

AS A RULE of thumb for estimating the relative performance of an automobile, one can hardly do better than to figure its weight-to-power ratio. The higher the numerical ratio, the poorer the performance; the lower the ratio, the better the performance. Simply dividing the curb weight by the advertised horsepower will provide this magic number.

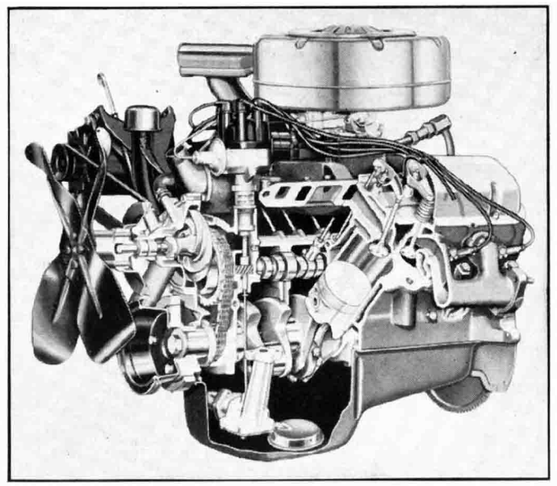
The weight-to-power range for the domestic automobile runs, generally, from 30:1 down to 10:1—there are a few over and a few under, but this covers 99% of U.S. cars. In the Ford Motor Company line, for instance, the 6-cyl. Fairlane has a weight-to-power ratio of 30.6:1 (3100 lb. curb weight, 101 bhp), some 427-cu. in. V-8 equipped Galaxies run as low as 8.7 lb./bhp (3700 lb., 425 bhp). Obviously, from this scale it becomes apparent that any car with less than about 20 lb./bhp is going to be lively in its accelerative ability; a car with more than 20 lb./bhp will tend to be sluggish.

For instance, Ford's Falcon V-8, (2800 lb. curb weight) equipped with the Fairlane-descendant 260-cu. in., 164-bhp engine, is a quick and lively car; its weight/power ratio is 17.1 The same engine in the bigger Fairlane (3100 lb. curb) is still fairly vigorous, although the ratio has crept to 18.9:1. But in the still-larger Galaxie, with its curb weight of 3800 lb., the engine had its hands full with a bulky 23.2 lb./bhp. Where the Falcon can accelerate over a standing ¼-mile in less than 17 sec., the Fairlane takes almost 19 sec. and the Galaxie more than 20 sec.

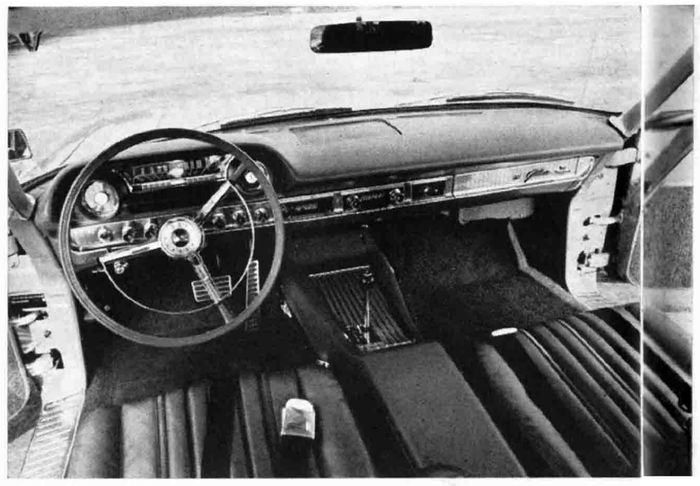
In the case of the Galaxie, designed and manufactured as a "big" car (in box volume, it is larger than a Lincoln), there was just too much weight for that standard V-8 engine. Although plenty of power options are available, up to 425 bhp, it was the basic product Ford found suffering from too much weight/power. The 260 V-8 just wasn't doing the job, particularly in view of Chevrolet's 195-bhp 283-cu. in. V-8, which at the onset of the model year was rated at 31 bhp more than the Ford.

However, it took only one more pass of the Ford boring bar to bring the Fairlane 260 out to a more competitive, 289 cu. in. displacement and this, with its ratings of 195 bhp @ 4400 rpm and 282 lb.-ft. of torque @ 2400 rpm, Ford hopes will be more competitive with the Chevrolet 283 V-8. Actually, although horsepower ratings are the same, Chevrolet has a slight edge in the torque department, as the Chevrolet is rated at 285 lb.-ft. @ 2400 rpm.

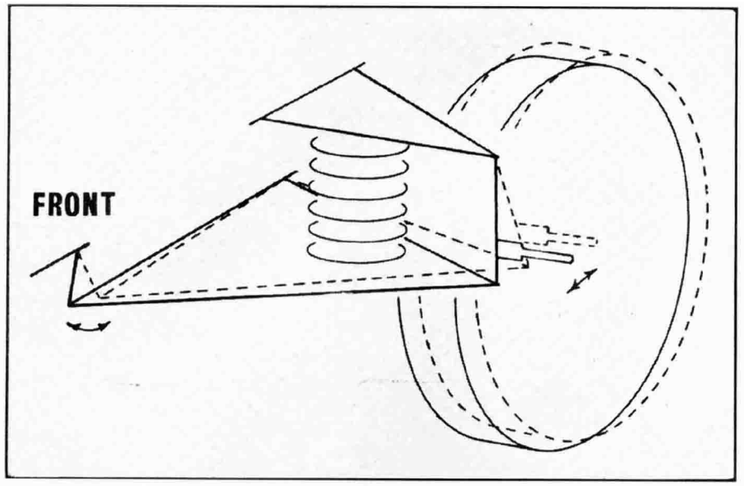
The new 289 actually started its public life less than two years ago with the introduction of the then-new Fairlane series. Featured in the Fairlane as an optional engine to the inline 6-cyl. borrowed from the Falcon was a 221-cu. in. V-8 of extremely compact exterior dimension. Although its bore and stroke statistics were 3.50 x 2.87 in., the overall width of the 90° V block (with heads) was less than 20 in. Length was only 20.84 in. Even ▶



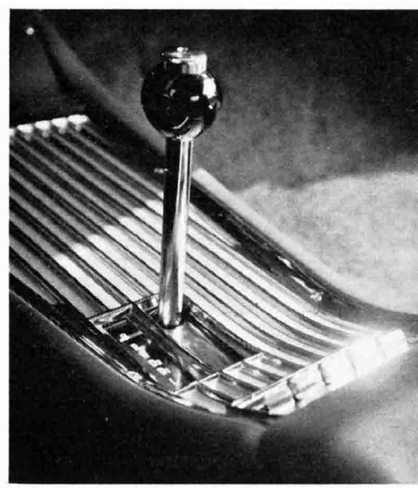
NEW GALAXIE 289 cu. in. V-8 is bored out 221-260, has ball-stud rocker pivots, thinwall castings and ultra-short stroke, is 20 in. wide.



HOODED INSTRUMENT panel prevents glare in windshield, but better arrangement would be helpful. Interior is long-wearing vinyl and chrome.



COMPLIANCE LINK in front suspension allows slight fore-and-aft wheel movement along with usual up-and-down motion, thereby giving better absorption of a bump.



CONSOLE contains shift lever for automatic, door window lift buttons, parcel locker.

FORD

more significant was the fact that the complete engine weighed less than 450 lb., making it perhaps the lightest cast iron ohv V-8 ever produced in this country.

Performance of the Fairlane, even with this 145-bhp V-8, was evidently not quite satisfactory, for Ford waited only six months before it offered, as another engine option, a 260-cu. in. variation. Actually, the 221's bore was increased to 3.80 in., while the stroke remained the same, to obtain the new displacement. This worked fine in the Fairlane, so last fall Ford made it the first V-8 option for the Galaxie, thus replacing the hard-worked 292 cu. in. V-8 which had been around since 1955. But, what's good for the Fairlane is not always good for the Galaxie and the poor 260 V-8 had to be pressed hard to deliver better performance than Ford's own 223 cu. in. ohv 6-cyl. basic engine.

So to improve the Galaxie's basic performance potential, Ford has enlarged the 260 to 289, again by boring the block. Although stroke remains the same at 2.87 in., the block now has a 4.00 in. bore, which surely must make it one of the most over-square engines ever designed. The present bore centers are 4.38 in. so it's doubtful that the engine could be bored out any more without redesign and resorting to siamesing or putting flats on the cylinders. However, increasing the stroke to only 3.00 in. would give a displacement of 303 cu. in., and this probably is the next step up if Ford decides again it needs more power from this tidy package. At 289, though, we feel this engine has reached its ideal specification.

There are few differences between the 221, 260 and 289 versions, other than in the pistons. Each engine has its own bore, but compression is kept to 8.7:1 so that regular grade fuel may be used. Valves are the same size, 1.59 in. intake, 1.39 in. exhaust, and the cams are the same 252° duration on all three engines. Carburetion is naturally a little richer, although the same Holley 2-barrel unit, with larger venturis, is used. The intake manifold is identical, but the Galaxie 289 has different exhaust headers (although 221-260 headers would bolt right onto the 289 heads).

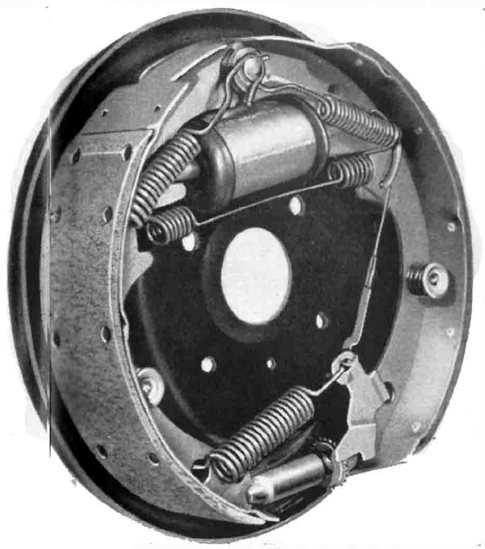
Car Life's test crew specified this new 289 cu. in. for its evaluation of the new Galaxie Sports Hardtop (also popularly called "Slantback, fastback or scatback" because of its fast-sloping rear roofline) for several reasons, the main one being that the 289 is the new standard Ford V-8. We attempted to obtain the 289 with another new (for '63) Ford item, the 3-speed all synchromesh transmission, but found this combination (standard engine and standard transmission), virtually impossible to locate among the cars assigned to the local district—it seems they all have either automatic transmissions or more powerful engines. But, as the 289 is specified with the 3-speed Cruise-O-Matic automatic transmission as standard equipment for the 500/XL series, we accepted this substitute with enthusiasm.

There are few transmissions smoother than this 3-speed-plus-converter unit built by Borg-Warner and supplied to Ford—and to Mercury (Merc-O-Matic), Studebaker (Flightomatic), Rambler (Flash-O-Matic) and Kaiser Jeep Wagoneer. The ratios are 1.47—2nd and 2.40—2nd and the converter has a maximum torque multiplication of 2.15:1. This gives a breakaway (starting) ratio of up to 5.16:1, where the 2-speed automatic (Fordo-) has 3.75 and the 3-speed manual has only 2.42:1. The 3-speed automatic, then, obviously can give better, more convenient performance in most instances, although it lacks the utter versatility of the manual transmission. After driving the Galaxie equipped with this automatic transmission, we wonder why, other than for economic reasons—it's $22 cheaper on most models—anyone would want to buy the 2-speed Fordomatic.

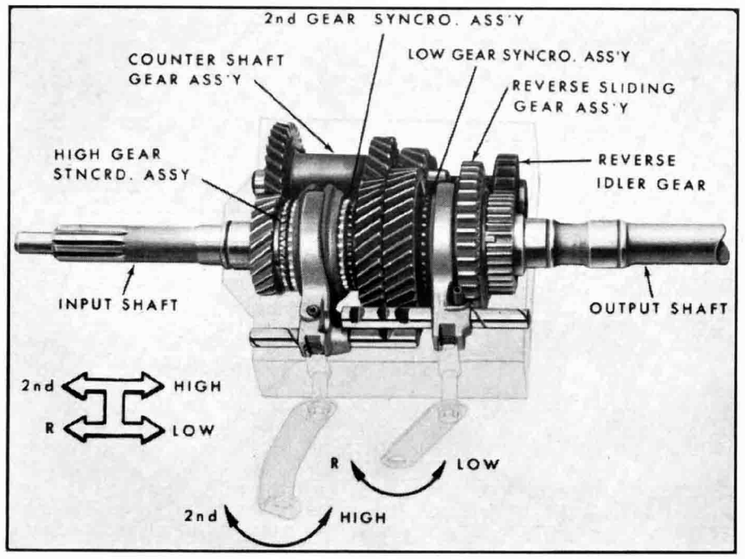
The Cruise-O-Matic works very well with the 289, as our test data show. Acceleration, fuel economy, ▶

SLANTBACK ROOFLINE of Galaxie 500/XL Sports Hardtop emphasizes Ford's new look of sporting performance. Knock-off-and-wire-wheel hubcaps are standard on the 500/XL.

BRAKES ON all Galaxies are self-adjusting; test car brakes faded on first crash stop.



THREE-SPEED, all-synchromesh transmission is standard on all Fords but 500/XL, which has Cruise-O-Matic. Manual unit is extremely simple, compact and durable.



FORD

and pulling power all fall into what we consider to be an acceptable range. The fuel economy was especially satisfying, after the siege of 9-12 mpg consumption we have experienced while testing the big 400-plus inchers; power, it would seem, must be paid for by high fuel consumption. Our 289-engined Galaxie covered nearly 1000 miles of testing at an average of 15.8 mpg, and we achieved 17 mpg on several tankfuls. This is virtually equal to the economy we achieved with a 260 Fairlane.

The slantback roofline also was a mid-year change and added two more models to the already impressive Galaxie line-up. Although not a true fastback (where the roofline arcs from windshield header to bumper bar), its

LARGE, FLAT floor gives lots of usable trunk space, but spare is hard to reach.

SURROUNDED BY components for more Fords, the Galaxie is ready to drive from factory.

sharply raked roof supposedly promotes better airflow characteristics — according to Ford publicists—although anyone who looks at the plan view will doubt it. Somewhat reminiscent of the Starliner series (1960-61), which had a more curving line, the flat-back "scatbacks" have at least two values: they provoke interest and promote conversation, two things essential to increased showroom traffic.

In other words, the slant back is an eye-catcher and the reflected glory of the three straight NASCAR victories which similar models have posted (Riverside, Daytona, Atlanta) enhances its ego-pleasing qualities. In standard form, as tested here, it costs $3268; with a few accessories added, $3473. If the engine ($109) and transmission ($212) were ordered with other, non-500/XL models, they would add $321 to the list price. Thus, the super-plush Galaxie 500/XL, with its bucket seats and all-plastic interior, is a good buy for the money.

Among other points in the Galaxie's favor are the long lubrication and service intervals adopted by Ford, and the car's designed-in ability to take care of itself. Ford has been a leader in the fight to control corrosion and thus has developed considerably better body durability. Rocker panels are formed from galvanized steel and the whole underbody is sprayed with a zinc-rich primer before the car is painted. An extra 6-in. band of zinc primer is applied on the lower edge of the exterior and in other critical areas.

Along with this protection against corrosion, Ford has developed its sound insulation to an extremely high degree. By extensive use of mastic deadener, glass fiber mats and felt, amberlite and jute pads, the Galaxie has been transformed into one of the quietest, smoothest cars on four wheels.

Our test car, which was red, also had a red interior—a lovely combination for anyone who likes red. It was extremely comfortable, and appeared to be of durable stuff; long-wearing chrome protects the edges of the 500/-XL's interior. The individual bucket-type seats are comfortable, if a bit firm. We admired the new 16-in. steering wheel, which allows easier entrance and exit, but we gave the instrument (?) panel a few lumps. Although nicely shielded and padded, it is nonetheless difficult to read and poorly designed. Control knobs, arrayed below, are in much clearer order.

The ride characteristics also are a bit firm—but we're not complaining. The Galaxie 500/XL handles surprisingly well, for a big sedan, and part of this is undoubtedly due to "firm" suspension. We could ask for a bit more shock absorber control, but this can be ordered to suit any tastes (including those of a NASCAR racer), from the dealer's catalogue. ■

CAR LIFE ROAD TEST

1963 FORD
Galaxie 500/XL Sports Hardtop

SPECIFICATIONS

List price	$3268
Price, as tested	3473
Curb weight, lb	3765
Test weight	4070
distribution, %	53/47
Tire size	8.00-14
Tire capacity, lb @ 24 psi	4700
Brake swept area	346.5
Engine type	V-8, ohv
Bore & stroke	4.00 x 2.87
Displacement, cu in	289
Compression ratio	8.7
Bhp @ rpm	195 @ 4400
equivalent mph	105
Torque, lb-ft	282 @ 2400
equivalent mph	57
Carburetion	1 x 2

DIMENSIONS

Wheelbase, in	119.0
Tread, f and r	61.0/60.0
Over-all length, in	209.9
width	79.9
height	54.5
equivalent vol, cu ft	528
Frontal area, sq ft	24.2
Ground clearance, in	5.2
Steering ratio, o/a	23.0
turns, lock to lock	3.9
turning circle, ft	41.0
Hip room, front	62.1
Hip room, rear	63.1
Pedal to seat back, max.	38.0
Floor to ground	14.0
Luggage vol, cu ft	15.0
Fuel tank capacity, gal	20.0

EXTRA-COST OPTIONS

Power steering, radio, white sidewall tires, tinted windshield & windows, push-button radio.

GEAR RATIOS

3rd (1.00), overall	3.25
2nd (1.47)	4.78
1st (2.40)	7.80
1st (2.40 x 2.05)	16.0

PERFORMANCE

Top speed (4400), mph	105
Shifts, rpm–mph (forced)	
3rd ( )	
2nd (4000)	65
1st (4000)	40

ACCELERATION

0-30 mph, sec	4.3
0-40	6.1
0-50	9.1
0-60	12.3
0-70	17.3
0-80	24.7
0-100	
Standing ¼ mile	19.0
speed at end	73

FUEL CONSUMPTION

Normal range, mpg	15-18

SPEEDOMETER ERROR

30 mph, actual	25.5
60 mph	53.9
90 mph	81.8

CALCULATED DATA

Lb/hp (test wt)	20.9
Cu ft/ton mile	105.1
Mph/1000 rpm	23.8
Engine revs/mile	2520
Piston travel, ft/mile	1210
Car Life wear index	30.4

PULLING POWER

70 mph, maximum gradient, %	12.2
50	18.5
30	29.3
Total drag at 60 mph, lb	180