Malou osmsetpadesátku netřeba představovat. Velmi úspěšný italský automobil si našel mnoho příznivců i na našich silnicích. Redaktorům Road&Track se v květnu 1968 do rukou dostala verze u nás neznámá, totiž s poloautomatickou převodovkou, kterou výrobce montoval k motoru 850 Super se 42HP při 5300 ot. (37 evropských koní při 5200 ot.). Za oceánem se automobil prodával se jmenovkou Idromatic, na starém kontinentu Idroconvert.

Základní výsledky testu:

max. rychlost	124 km/h
zrychlení 0 -96 km/h	25,5 s
průměrná spotřeba v testu	8,4 l/100 km

FIAT 850 IDROMATIC

Fiat's entry into the growing group of economy cars with semi-automatic transmissions

THE 850 IDROMATIC is Fiat's entry in the growing group of economy cars that offer semi-automatic transmissions. You can get it on the Volkswagen Beetle in a 3-speed version, Chevrolet offers something similar in a 2-speed used with a 6-cyl engine and Fiat has it with four.

Like the system used in the VW Beetle, the Idromatic combines a fully synchronized, manually operated gearbox with a torque converter and electrically activated clutch. The overall effect is that of manually selecting the gear through the use of a conventional shift lever but without having to operate a clutch pedal. It is simplicity itself for the driver to operate. For normal getaways, the factory manual recommends starting off in 2nd gear and shifting up as the needle touches the red marks on the speedometer face at roughly 36 and 52 mph.

The switch that activates the solenoid which in turn actuates the hydraulic circuit that engages-disengages the clutch, is in the head of the shift lever. When it is pivoted from its normal heads-up position, the clutch is disengaged. When it is released and allowed to return to its normal position, the →

ROAD & TRACK R&T ROAD TEST

CAM WARREN PHOTOS

FIAT 850 IDROMATIC

clutch is re-engaged. The shift linkage on our test car was not impressive. First was difficult to engage from rest; the clutch could be beaten on hard shifts and was then a bit slow and oozy during re-engagement afterward.

The Idromatic offers a couple of features not found in the VW system. The clutch is included in the torque converter and thus operates wet whereas the VW clutch operates dry in the normal manner. The Fiat also has a one-way clutch in the converter, which permits push-starting and gives full engine braking. Comparing the two systems, we have to say that in the examples we tried, the VW's semi-automatic worked more smoothly.

The car itself is the basic Fiat 850 sedan in "super" form, which means that it has 42 bhp instead of 40. It is a pleasant looking machine, appropriately straightforward and utilitarian for an everyday, workaday economy car. The overall design is intelligent, the space utilization is excellent and the seats are unusually comfortable for being so small. There are a number of nice touches in the design; for instance, grab handles for the three passengers and, in the back, coathanger hooks as well. There is a surprising amount of luggage space in front and the rear seat also folds forward to create additional parcel-carrying area.

It is difficult to assign the Fiat 850 Idromatic a place in the scheme of things so far as American driving conditions are concerned. As you would expect, it is a very modest performer and offers standing-quarter acceleration times on the order of 23 sec. This makes it the slowest car we've tested since our encounter with the Renault Dauphine automatic 5 years ago. For strictly around-town light-traffic driving it is pleasant enough to drive as it is responsive to steering-wheel input and the braking and maneuverability make it fun. In anything thicker than light traffic, though, the driver begins to feel somewhat menaced, as it is necessary to wind it to maximum revs in each gear just to keep from blocking traffic. And for big-city, heads-up, let's-go traffic common to rush hours everywhere, the acceleration isn't sufficient to keep up. The 850 Idromatic is also limited as a highway cruiser as it has very little margin of power left when belting along at 65-70 mph (the engine is right on its power peak, 5300 rpm, at an actual 70) and the flat sides of the somewhat boxy shape assure that it isn't exactly unaffected by sidewinds, not to mention its rear engine location.

In general, then, it's not ideally suited for all-around use in American driving conditions. It is cheap, though, with a just-over $1600 list price, the gas mileage is good, the construction sound and the handling and braking fine. As a strictly low-speed 2nd car it deserves consideration.

FIAT 850 IDROMATIC

ROAD TEST RESULTS

PRICE

List price	$1515
Price as tested	$1689

ENGINE & DRIVE TRAIN

Engine	4-cyl, inline, ohv
Bore x stroke, mm/in	63.9 x 63.5/ 2.52 x 2.50
Displacement, cc/cu in.	817/49.9
Compression ratio	8.8:1
Bhp @ rpm	42 @ 5300
Equivalent mph	70
Torque @ rpm, lb-ft	44 @ 3600
Equivalent mph	46
Transmission: Semi-automatic with electrically actuated hydraulic clutch, torque converter, 4-speed all-synchromesh gearbox	
Gear ratios, 4th (0.96)	4.46:1
3rd (1.41)	6.52:1
2nd (2.06)	9.50:1
1st (3.64)	16.8:1
Synchromesh	on all 4
Final drive ratio	4.63:1

GENERAL

Curb weight, lb	1530
Weight distribution (with driver), front/rear, %	36/64
Wheelbase, in	79.8
Track, front/rear	45.1/44.1
Overall length	140.7
Width	56.1
Height	54.5
Frontal area, sq ft	17.0
Steering type	worm & sector
Turns, lock-to-lock	3.75
Brakes	drums

ACCOMMODATION

Seating capacity, persons	4
Seat width, front/rear	18.5/49.5
Head room, front/rear	40.0/37.0
Seat back adjustment, degrees	0
Driver comfort rating (scale of 100):	
For driver 69 in. tall	95
For driver 72 in. tall	85
For driver 75 in. tall	85

PERFORMANCE

Top speed, high gear, mph	77
Acceleration, time to distance, sec:	
0-100 ft	4.4
0-250 ft	8.0
0-500 ft	12.6
0-750 ft	16.4
0-1000 ft	19.8
0-1320 ft (¼ mile)	23.3
Speed at end, mph	58
Time to speed, sec:	
0-30 mph	7.3
0-40 mph	11.5
0-50 mph	17.3
0-60 mph	25.5
0-70 mph	37.0

BRAKE TESTS

Panic stop from 70 mph:	
Deceleration rate, % g	87
Control	excellent
Fade test: percent of increase in pedal effort required to maintain 50%-g deceleration rate in six stops from 60 mph	32
Overall brake rating	very good

SPEEDOMETER ERROR

30 mph indicated	actual 28.2
40 mph	38.0
60 mph	57.2

CALCULATED DATA

Lb/hp (test weight)	44.4
Cu ft/ton mi	71.2
Mph/1000 rpm (high gear)	13.0
Engine revs/mi	4600
Piston travel, ft/mi	1920
Rpm @ 2500 ft/min	6000
Equivalent mph	80
R&T wear index	88

FUEL

Type fuel required	regular
Fuel tank size, gal	7.9
Normal consumption, mpg	28