

# Identification of Transmission Type

We are frequently asked to help our customers identify the type of transmission they have. The following table may be of some assistance:

## Hewland MK 4

15 spline pinion shaft, splines extending only 1/3 of pinion shaft. Pinion hubs keyed together by lugs. Ball bearings support differential. Differential has Ford logo on casting.

## Hewland MK 5

Same as MK 4 except that layshaft is 1- 1/8" in diameter. Gear teeth, including reverse, are coarser than the MK 4. (5 speed only)

## Hewland MK 6

Internally the same as MK 4, but is fitted with side plates specially designed for specific manufacturers. Example is the Lotus 23/51/61 side plate.

## Hewland MK 7

Very rare, 6-speed version of MK 4.

## Hewland MK 8

6-spline pinion shaft, splined full length of shaft. Open differential has "LEYS" logo on casting. Differential supported by roller bearings. Stub axles have 18 splines, which are larger in diameter than the shaft.

## Hewland MK 9

Same as MK 8, except that side plates have mountings for inboard brakes. Stub axle is supported by double row ball bearings.

## Webster 400 Early Model

Has mountings for inboard brakes the same as MK 9. Internally similar to MK 4, except that an American made differential is used, and the differential is carried by roller bearings. Only 9:31 ring and pinions were installed.

## Webster 400 Russell Model

Made only with 10:31 ring and pinion. The main identifying feature is the pinion shaft which has 15 splines which go the full length of the shaft, and requires hubs unique to this gearbox.

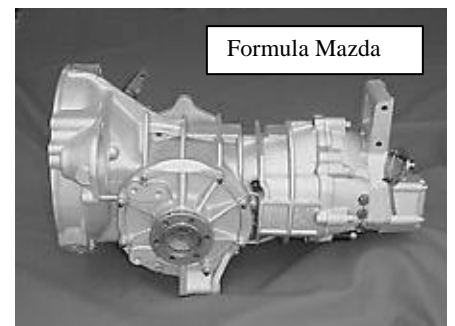
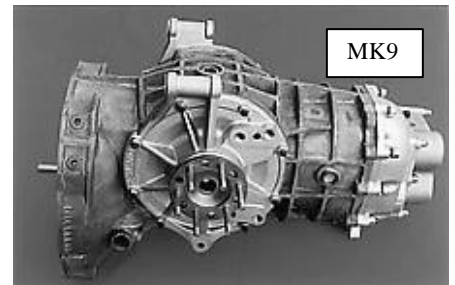
This transmission was fitted to some early production SWIFT DB 1 Formula Fords.

## Webster 400 Late Model

Identical internally and externally to the Hewland MK 9. All parts are interchangeable with the MK 9, except the differential bearings which are stronger than the MK 9.

## Formula Mazda Gearbox

A derivative of the MK series, the Formula Mazda gearbox has a unique bearing carrier, shift forks, and shift rails, and a purpose built shifter housing/rear cover. Internally, the gearbox is identical to the Webster 300 Late Model. It is mounted with the input shaft above the pinion shaft. HP Capacity 180 when using "M" type MK gears.



### Horsepower Capacities of MK type gearboxes

MK4-7 120 HP

MK5 (Limited by output stub axle strength) 160 HP

MK8/MK9 (if using earlier gearsets) 120 HP

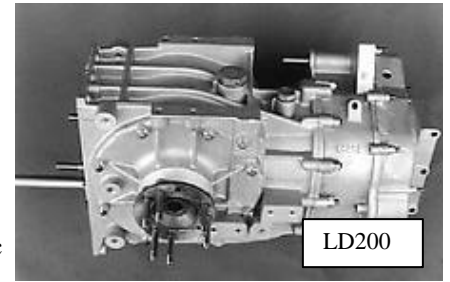
MK8/MK9 (If using "M" type MK gearsets) 180 HP

MK8/MK9 (if using "M" type MK5 gearsets) 240 HP

and Quaife or Salisbury Differential)

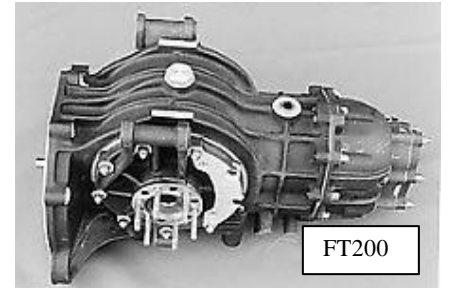
### **LD200 Gearbox**

The LD200 gearbox is the replacement for the MK series. Few parts are interchangeable with the MK9, although the shaft center-to-center distance is the same as the MK series. The designer must provide a bell housing to adapt the engine to the gearbox. Both four and five speed variants are available. HP Capacity rated at 170HP (165 ft-lb).



### **FT200 gearbox**

A MK9 on steroids, the FT200 was the successful development of the problematic HD5. Features magnesium case, available oil pump, and 3.010" center to center gears. 300HP is its rating, limited by the ring and pinion. By using a larger differential and ring and pinion, the FG400/FGA/FGB variants can handle up to 500 HP.

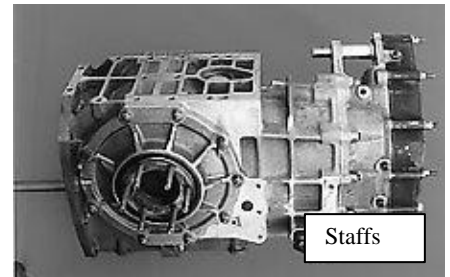


### **Staffs gearbox**

Designed for March, the Staffs gearbox has excellent designer features. Extremely narrow, square, many mounting points for suspension, and good strength. Its major drawback has been variable quality of manufacture, requiring that the gearbox be prepared prior to its first run. Available in 4-speed or 5-speed with oil pump. HP capacities:

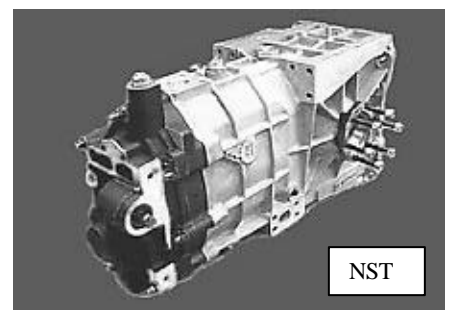
With MK type, "M" style gearsets 180 HP

With MK5 type, "M" style gearsets 240 HP



### **NST Gearbox**

Hewland's New Small Transmission is fitted to the Swift 008 Formula Atlantic. A sequential 5-speed, it is based on the European Formula 3 box, and MK5 gears. It features a heavy aluminum case, FT ring gear, and multiple suspension mounting options. HP capacity is 250.



**Price range of gearboxes** (Price variance caused by options: R&P, Diff, Gearsets etc.)

MK8/MK9/Model 400 \$4900 - \$6600

Formula Mazda \$6400

LD200 4-speed \$4000 - \$5600

FT200 \$10,500 - 12,000

Staffs 5-speed with pump \$7500-8000

Staffs 4-speed \$4800-6000

NST Call for current pricing