

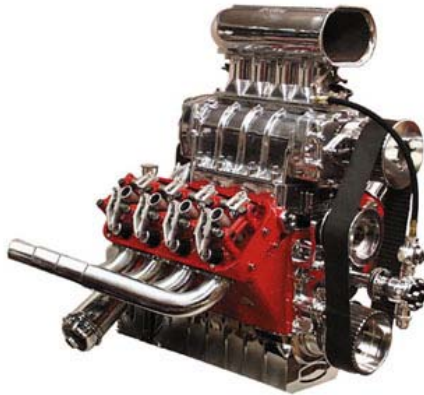
Manual transaxle powerflow.

Matthew Whitten
Brookhaven College

Choose your ride.



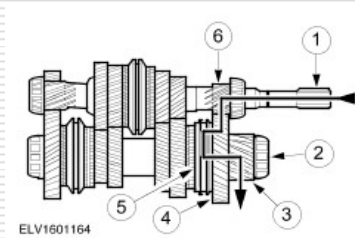
Escort wagon power!!!



MTX-75

- ❑ M = manual
 - ❑ TX = transaxle
 - ❑ 75 = 75 mm from input shaft to output shaft.
 - ❑ Applications:
 - Contour
 - Cougar (fwd)
 - Focus
 - ❑ Characteristics
 - Cable shifted
 - Hydraulic clutch
 - Full mesh 1,2,3,4,5, and reverse.
-

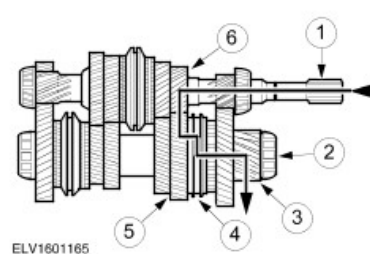
1st gear



1. Input shaft
2. Output shaft
3. Output gear
4. 1st speed gear
5. 1/2 synchronizer assembly
6. 1st input gear

1. Input shaft
2. 1st input gear
3. 1st speed gear
4. 1st speed gear clutching teeth
5. 1/2 synchro sleeve
6. 1/2 synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. Differential

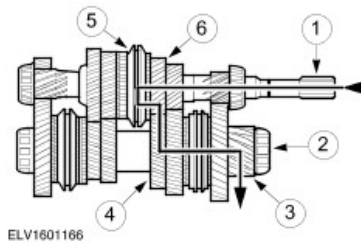
2nd gear



1. Input shaft
2. Output shaft
3. Output gear
4. 1/2 synchronizer assembly
5. 2nd speed gear
6. 2nd input gear

1. Input shaft
2. 2nd input gear
3. 2nd speed gear
4. 2nd speed gear clutching teeth
5. 1/2 synchro sleeve
6. 1/2 synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. Differential

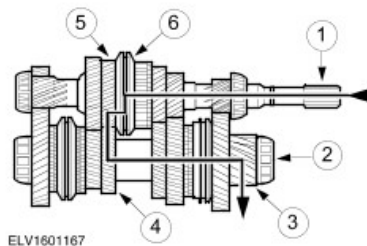
3rd gear



1. Input shaft
2. Output shaft
3. Output gear
4. 3rd output gear
5. $\frac{3}{4}$ synchronizer assembly
6. 3 speed gear

1. Input shaft
2. $\frac{3}{4}$ synchro hub
3. $\frac{3}{4}$ synchro sleeve
4. 3rd speed gear clutching teeth
5. 3rd speed gear
6. 3rd output gear
7. Output shaft
8. Output gear
9. Final drive ring gear
10. differential

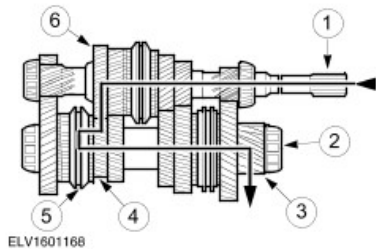
4th gear



1. Input shaft
2. Output shaft
3. Output gear
4. 4th output gear
5. 4th speed gear
6. $\frac{3}{4}$ synchronizer assembly

1. Input shaft
2. $\frac{3}{4}$ synchro hub
3. $\frac{3}{4}$ synchro sleeve
4. 4th speed gear clutching teeth
5. 4th speed gear
6. 4th output gear
7. Output shaft
8. Output gear
9. Final drive ring gear
10. differential

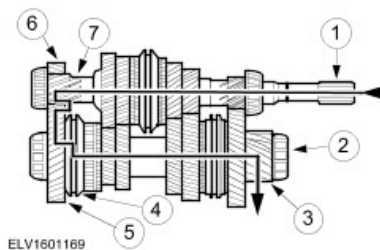
5th gear



1. Input shaft
2. Output shaft
3. Output gear
4. 5th speed gear
5. 5/rev synchronizer assembly
6. 5th input gear

1. Input shaft
2. 5th input gear
3. 5th speed gear
4. 5th speed gear clutching teeth
5. 5/rev. synchro sleeve
6. 5/rev. synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. Differential

Reverse



1. Input shaft
2. Output shaft
3. Output gear
4. 5/rev synchronizer assembly
5. Rev. speed gear
6. Rev. idler gear
7. Rev. input gear.

[RETURN](#)

1. Input shaft
2. Rev. input gear
3. Idler
4. Rev. speed gear
5. Rev. speed gear clutching teeth
6. 5/rev. synchro sleeve
7. 5/rev. synchro hub
8. Output shaft
9. Output gear
10. Final drive ring gear
11. Differential

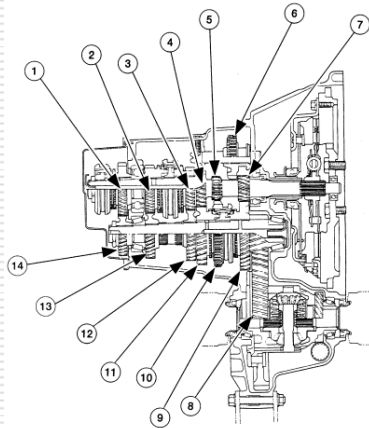
G15-MR

□ Applications

- Escort (even HIPO wagons)

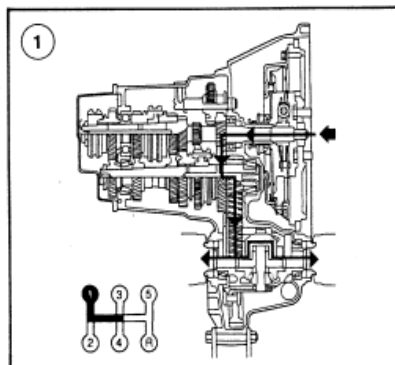
□ Characteristics

- Full mesh 1,2,3,4, and 5.
- Rod shifted.
- Slider reverse idler.
- Fully synchronized. (rev. is done in same manner as T50/D)



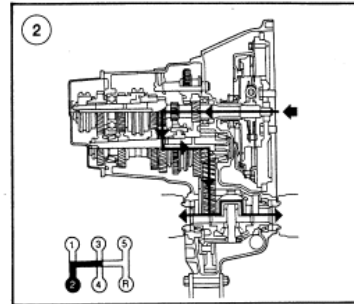
1st gear

1. Input shaft
2. 1st input gear
3. 1st speed gear
4. 1st speed gear clutching teeth
5. 1/2 synchro sleeve
6. 1/2 synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. Differential



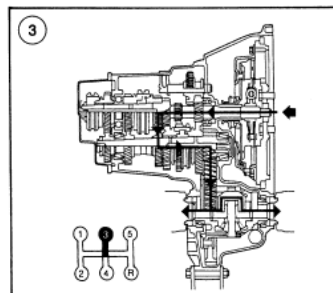
2nd gear

1. Input shaft
 2. 2nd input gear
 3. 2nd speed gear
 4. 2nd speed gear clutching teeth
 5. ½ synchro sleeve
 6. ½ synchro hub
 7. Output shaft
 8. Output gear
 9. Final drive ring gear
 10. Differential
-



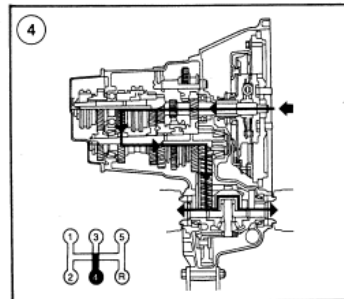
3rd gear

1. Input shaft
 2. ¾ synchro hub
 3. ¾ synchro sleeve
 4. 3rd speed gear clutching teeth
 5. 3rd speed gear
 6. 3rd output gear
 7. Output shaft
 8. Output gear
 9. Final drive ring gear
 10. differential
-



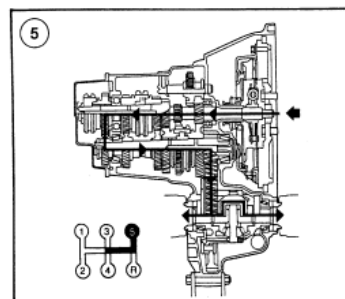
4th gear

1. Input shaft
 2. $\frac{3}{4}$ synchro hub
 3. $\frac{3}{4}$ synchro sleeve
 4. 4th speed gear clutching teeth
 5. 4th speed gear
 6. 4th output gear
 7. Output shaft
 8. Output gear
 9. Final drive ring gear
 10. differential
-



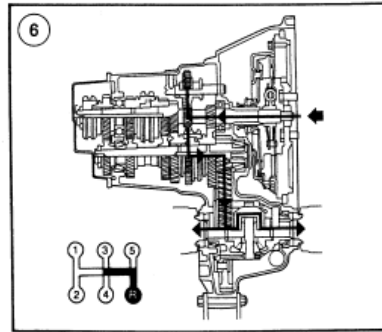
5th gear

1. Input shaft
 2. 5/rev. synchro hub
 3. 5/rev. synchro sleeve
 4. 5th speed gear clutching teeth
 5. 5th speed gear
 6. 5th output gear
 7. Output shaft
 8. Output gear
 9. Final drive ring gear
 10. Differential
-



Reverse gear

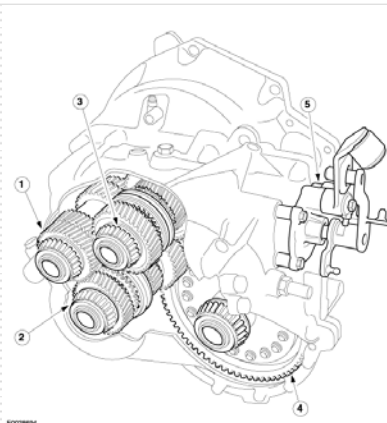
1. Input shaft
2. Rev. input gear
3. rev/. Idler gear
4. 1/2 synchro sleeve (gear)
5. 1/2 synchro hub
6. Output shaft
7. Output gear
8. Final drive ring gear
9. differential



GC0362-A

[RETURN](#)

Getrag MT285



- ☐ Applications:
 - SVT Focus
- ☐ Characteristics:
 - Full mesh
 - Cable shifted
 - Fully synchronized
 - Two output shafts
 - O1 1,2,5,and 6.
 - O2 3,4,and rev.
 - Input shaft has no speed gears or synchronizer assemblies.
- ☐ Not repaired only serviced as an assembly.

[RETURN](#)

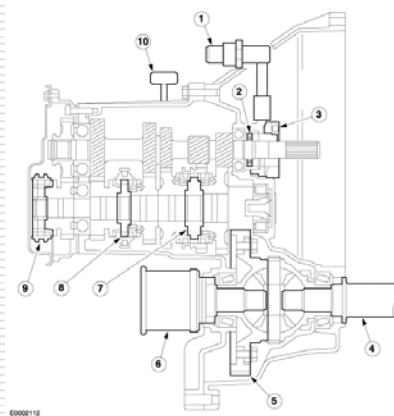
IB5

□ Applications

- Focus

□ Characteristics:

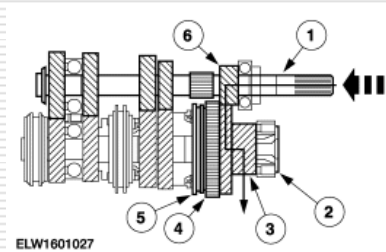
- Fully synchronized
- Cable shifted



E000112

1st gear

1. Input shaft
2. 1st input gear
3. 1st speed gear
4. 1st speed gear clutching teeth
5. ½ synchro sleeve (gear)
6. ½ synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. differential

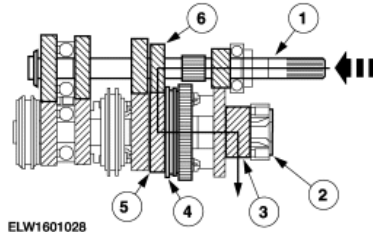


ELW1601027

1. Input shaft
2. Output shaft
3. Output gear
4. 1st speed gear
5. ½ synchronizer assembly
6. 1st input gear

2nd gear

1. Input shaft
2. 2nd input gear
3. 2nd speed gear
4. 2nd speed gear clutching teeth
5. ½ synchro sleeve (gear)
6. ½ synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. differential

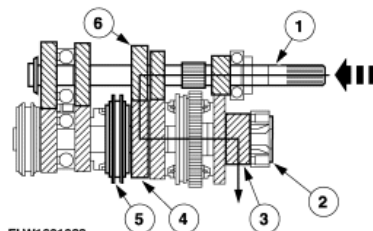


ELW1601028

1. Input shaft
2. Output shaft
3. Output gear
4. ½ synchronizer assembly
5. 2nd speed gear
6. 2nd input gear

3rd gear

1. Input shaft
2. 3rd input gear
3. 3rd speed gear
4. 3rd speed gear clutching teeth
5. ¾ synchro sleeve
6. ¾ synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. differential

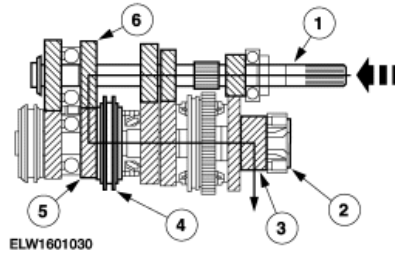


ELW1601029

1. Input shaft
2. Output shaft
3. Output gear
4. 3rd speed gear
5. ¾ synchronizer assembly
6. 3rd input gear

4th gear

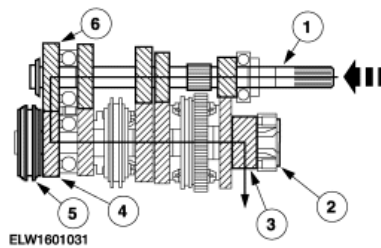
1. Input shaft
2. 4th input gear
3. 4th speed gear
4. 4th speed gear clutching teeth
5. $\frac{3}{4}$ synchro sleeve
6. $\frac{3}{4}$ synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. differential



1. Input shaft
2. Output shaft
3. Output gear
4. $\frac{3}{4}$ synchronizer assembly
5. 4th speed gear
6. 4th input gear

5th gear

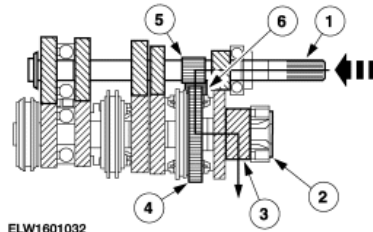
1. Input shaft
2. 5th input gear
3. 5th speed gear
4. 5th speed gear clutching teeth
5. 5/rev. synchro sleeve
6. 5/rev. synchro hub
7. Output shaft
8. Output gear
9. Final drive ring gear
10. differential



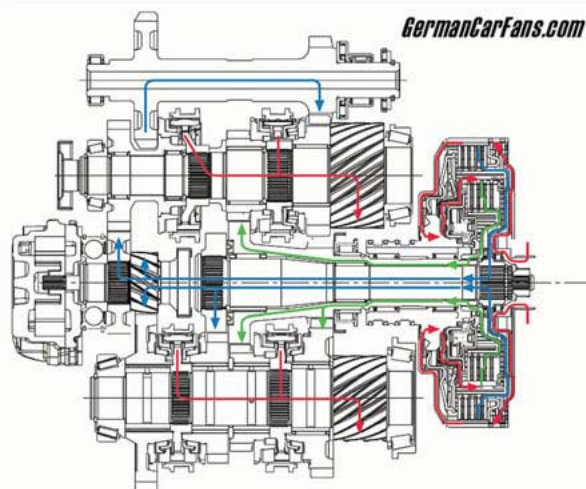
1. Input shaft
2. Output shaft
3. Output gear
4. 5th speed gear
5. 5/rev. synchronizer assembly
6. 5th input gear

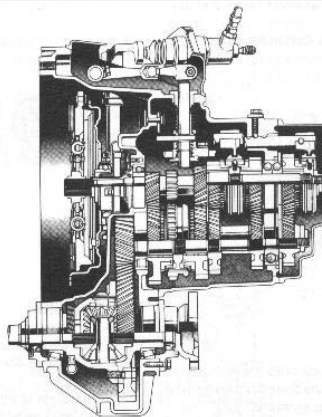
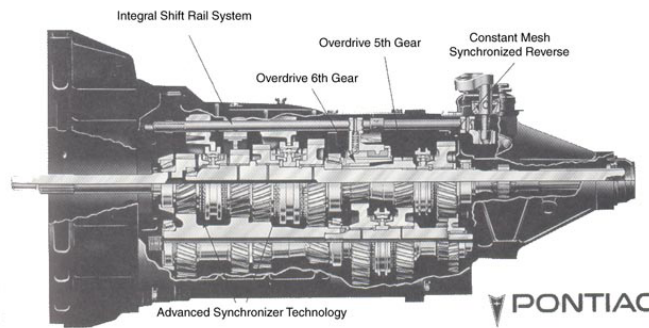
Reverse gear

1. Input shaft
2. Rev. input gear
3. rev/. Idler gear
4. ½ synchro sleeve (gear™ rustin corp.)
5. ½ synchro hub
6. Output shaft
7. Output gear
8. Final drive ring gear
9. differential



1. Input shaft
2. Output shaft
3. Output gear
4. ½ synchronizer sleeve
5. Reverse input gear
6. Reverse idler gear





Gearbox-differential and hydraulic control clutch - cross section view
