

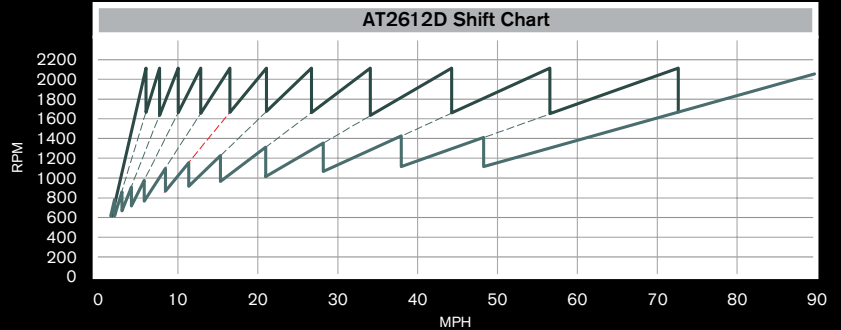


VOLVO I-SHIFT

DIRECT DRIVE, FOR VOLVO D11, D13

AT2612D

Having the right ratio for the right speed at the right time is what transmission technology is all about. And it's what makes Volvo I-Shift the most advanced — and most fuel efficient — automated manual transmission on the road today.



shown with 275/80R22.5 tires; 2.64:1 rear axle

SPECIFICATIONS

| AT2612D | 2-pedal Automated Manual Transmission with Direct Drive |
|--------------------------|---|
| Designed to be Mated to | Volvo D11, D13 |
| Number of Forward Speeds | Twelve |
| Ratios, Forward Gears | |
| 1 | 14.94:1 |
| 2 | 11.73:1 |
| 3 | 9.04:1 |
| 4 | 7.09:1 |
| 5 | 5.54:1 |
| 6 | 4.35:1 |
| 7 | 3.44:1 |
| 8 | 2.70:1 |
| 9 | 2.08:1 |
| 10 | 1.63:1 |
| 11 | 1.27:1 |
| 12 | 1.00:1 |
| Overall Ratio | 14.94:1 |

SPECIFICATIONS

| Ratios, Reverse Gears | |
|---|--|
| R1 | 17.48:1 |
| R2 | 13.73:1 |
| R3 | 4.02:1 |
| R4 | 3.16:1 |
| Maximum input Torque, Lb-Ft (N-m) | 1920 (2600) |
| Maximum Gross Combination Weight, Lbs. (Tonnes) | 110,000 (50) - Higher with application approval |
| Dry weight, Lbs. (kg) | 597 (271) |
| Clutch | Volvo 17" Single Plate Organic with Single Mass Flywheel |
| Oil Capacity, Qts (L) | 16 (15) |
| Oil Drain Interval, miles (km) | 500,000 (800,000) On-Highway, <=80k GCW |
| Gear Selector Positions | R - Reverse, N - Neutral, D - Drive, M - Manual |
| Driving Modes | E - Economy, P - Performance, B - Maximum Braking, L - Limp Home |
| Power Take-Offs Available Clutch Dependent | Transmission Mounted Shaft (SAE 13-1400), Pump (Parker / DIN 5462) |
| Clutch Independent | Engine Mounted Shaft (SAE 13-1400), Pump (Parker / DIN 5462) |





AT2612D

| FEATURE | BENEFIT |
|---|--|
| High Level of Intelligence - (Continuously monitors numerous parameters to predict most optimum operation over next seconds and chooses ratios appropriately) | Saves fuel and improves performance |
| Eco-Roll® lets the engine drop to idle speed on slight downhill grades unless Eco-Roll® disabled by driver | Lowers parasitic consumption by up to 30 HP when enabled to save fuel |
| Integrated with I-VEB through Engine Brake Control Stalk | Outstanding, predictable performance ("Downhill Cruise") |
| Idle Governor Driving Mode allows driving slowly (for example, stalled traffic or backing) without cycling clutch | Provides driver comfort and excellent low speed operation while prolonging clutch life |
| Programmable Kick-Down switch provides optimum acceleration | Maximizes driver input into truck performance |
| Programmable Economy and Performance modes available | Offers a "Dual Personality" transmission with optimized shift points for fuel economy or performance |

| FEATURE | BENEFIT |
|---|--|
| Informative Driver Display gives driver extra information | More satisfying driving experience yields better driver retention |
| Adaptable for vocational and heavy haul applications | Optional Performance Plus (P+) mode includes functions that adapt gearshifts to off-road conditions and offer extra torque when starting from a standstill |
| Pumped lubrication rather than splash lubrication | Provides lubrication to where it's needed, even at low speeds for longer life |
| Two shifters and multiple software feature packages available | Allows custom-tailoring to the customer's wants and needs |
| Upgradeability throughout engine's displacement ratings | Allows re-programming to any engine rating for maximum resale value |
| Ultra smooth clutch and launch control | Easy for driver to fully master the vehicle speed in any low speed situation, for example when backing up to a trailer or a loading dock |

I-Shift Feature Packages

| Features | Family 1 | | Family 2 | |
|--|----------------|-------------------|----------------|----------------|
| | Fuel Economy | Performance | Comprehensive | Gentle-Shift |
| Ergonomic seat mounted shifter | X | X | X | X |
| Basic Shifter type without manual controls | X | | | |
| Premium Shifter type with manual controls | | X | X | X |
| Manual gear shifting in Drive mode | | X | X | X |
| Manual gear shifting in Manual mode | Hold only | X | X | X |
| Manual selection of start gear | | X | X | X |
| Idle Governor driving mode | X | X | X | X |
| Manual selection of idle driving gears | | X | X | X |
| Economy mode | X | X | X | X |
| Performance / Performance Plus (P+) mode | | X ^{A, D} | X ^A | X ^A |
| Kick-Down | X ^B | X ^B | X ^B | X ^B |
| Eco-Roll® | X ^C | | X ^C | X ^C |
| Engine Brake Performance mode | X | X | X | X |
| Auto Neutral when parking brake applied | X | X | X | X |
| Auto Neutral at key-off if gear engaged | X | X | X | X |
| Hill Start Assist | Optional | Optional | Optional | Optional |
| STD PTO features | X | X | X | X |
| Enhanced PTO features | Optional | Optional | Optional | Optional |

Functionality of features programmable per customer preference:

- A 1. Available
- 2. Available with auto return to Economy
- 3. Available with Performance Bonus Reward
- 4. Not available

- B 1. Available
- 2. Available in Economy mode only
- 3. Available with Performance Bonus Reward
- 4. Not available

- C 1. Available
- 2. Not available

- D 1. The P+ mode includes various functions that adapt gearshifts and gear selection to poor or hilly driving conditions

| | |
|------------------------------|---|
| Feature upgradeability | Unlimited within family and between families with gear shifter change |
| Engine Torque upgradeability | Unlimited by clutch, transmission and prop shaft |

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VOLVO