

Choosing Your Shift System

Below you will find the differences and features of the shifting systems to help you make a decision on which system will be best suited for you.

All Shift Systems

- Constructed of all corrosion resistant materials.
- Shift on the fly (no need to stop).
- Compatible with mechanical lock up tool as a backup shift mechanism should your shifting system fail or become damaged.

Manual Shift System

Pros and Features:

- Simple 100% mechanical design.
- Not vulnerable to electric or pneumatic system failure or extreme environmental conditions.
- Wide range of cable lengths for desired shifter mounting locations, custom lengths available.
- No EMI (electromagnetic interference).
- Manual shifter lockout feature can be engaged preventing unwanted shifting transitions.

Cons:

- A clean looking and convenient shifter mounting location can be tricky to lie out in some vehicles.

Notes:

- Proper cable routing is the key to unlimited trouble free operation. Poor cable routing and protection are the causes for almost all manual shifting system troubles.

Air Shift System

Pros and features:

- Easy clean cabin friendly installation with no setup adjustments.
- Standard system uses no electric for a higher level of dependability.
- Most economical when used for front and rear installations.
- No rotating air seals that are a common point of failure in other systems.
- Air compressors can be used for other purposes (tires etc.).
- Option available for electrical switch operation.

Cons:

- Electrical and pneumatic systems vulnerabilities introduced.
- Requires air compressor that may introduce EMI. (no concern to civilian vehicle)
- Air supply systems have been known to become problematic in extreme cold environments due to freezing moisture.

Notes:

- The pneumatic shifting has proven to be extremely reliable when coupled with a quality air source.
- Our backup mechanical locking tool is very easy to install and use with this system, less than 90 seconds to mechanically lock the differential should pneumatic system fail.

Electric Shift System

Pros:

- Easy cabin friendly installation.
- Illuminated lock indication switch giving indication of actuator position (not just a switched on light).
- Not vulnerable to extreme environmental conditions.
- Requires no power in lock or unlock, only for shift transition.
- Thermally protected shift actuator motor with Delphi weather pack environmentally sealed connectors.

Cons:

- Higher cost option due to electric actuator motor.
- More sensitive adjustment required at installation.
- Electrical system vulnerabilities introduced.

Notes:

- The electric shift system is a great option for the user who does not desire, or cannot find a suitable place to mount the manual shifter assembly(s) into their vehicle.