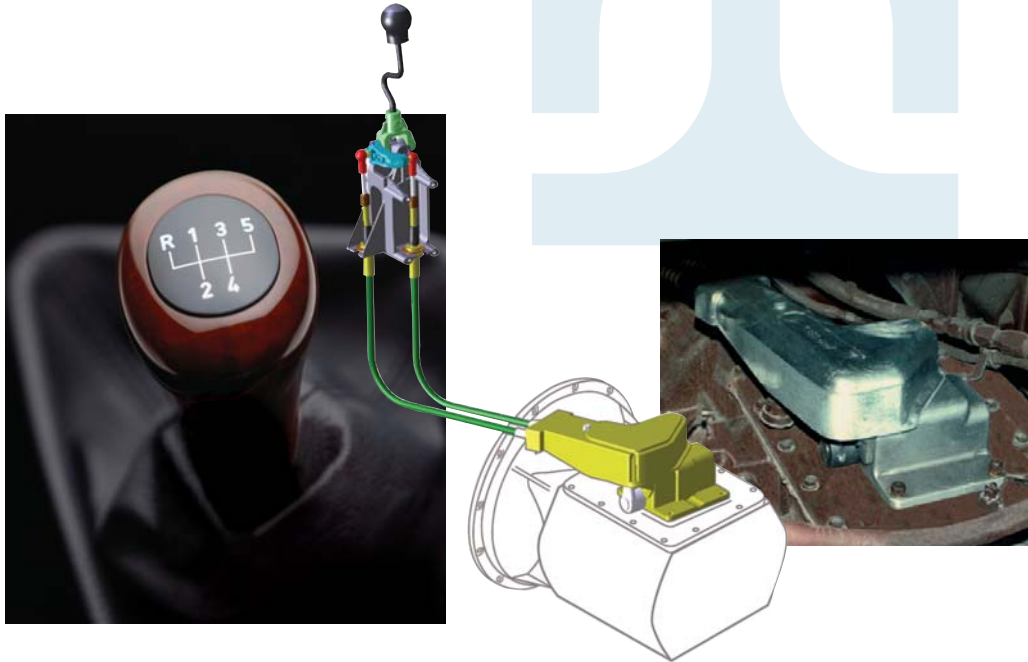


MTS Systems

Manual Transmission Shifter



MTS Industrial

The transportation industry has for many years searched for a reliable shift system to replace the cumbersome and maintenance-prone rod linkages commonly used in cab over trucks and rear engine buses. As the need has increased, vehicles become more refined to include the complexities of floating cabs, curb noise restrictions and specialty vehicles of all types.

Tuthill Controls has developed a systems approach that now makes remote shifting easier for both the vehicle builder and the operator.

Based on the proven quality and performance of Cablecraft® low friction control cables, this system provides a maintenance-free, cost-effective approach to remote manual transmission shifting.

Tuthill Controls stands ready to solve your most challenging shifting problems with a full line of cab units and transmission connecting hardware to suit most applications.



Description:

MTS Systems
Industrial Manual
Transmission Shifter

Applications:

- Bus/truck cabs, where operator is remote to transmission —
 - On or off road
 - Cab over engine
 - Low cab forward
- Heavy equipment, where operator is remote to transmission —
 - Tractors
 - Loaders
 - Agricultural sprayers
 - Telehandlers
- Specialty vehicles, where operator is remote to transmission —
 - Mobile cranes
 - Fire trucks
 - Garbage trucks
 - Oil field equipment
 - Mining equipment
 - Concrete pumps

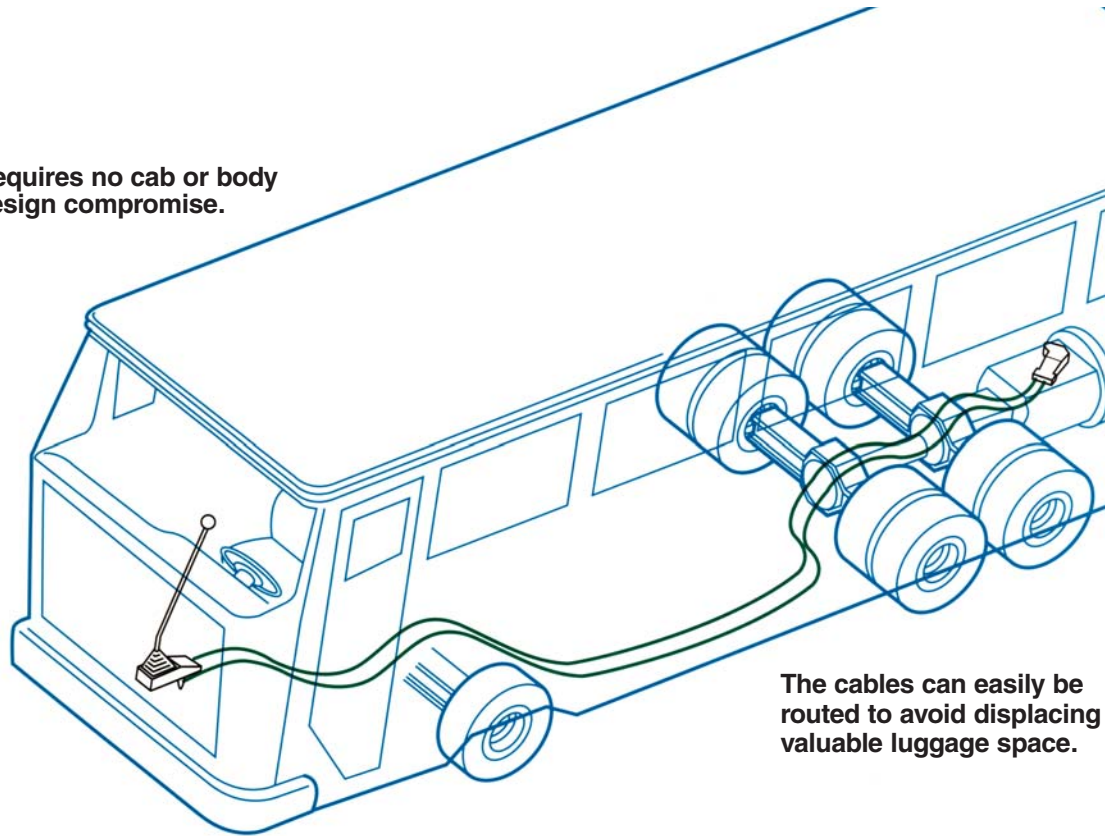
Features:

- Easy adjustment free install
- Maintenance-free life
- Ends gear jump out
- Clean precise shifts
- No knob-to-cab relative movement in floating cabs
- No action required to tilt cab
- Vibration from drive train is not transmitted to cab
- Reduced cab noise levels
- Low cost
- Installation design flexibility
- Ideal for rear engine buses

Other Related Products:

- Linkage Assemblies

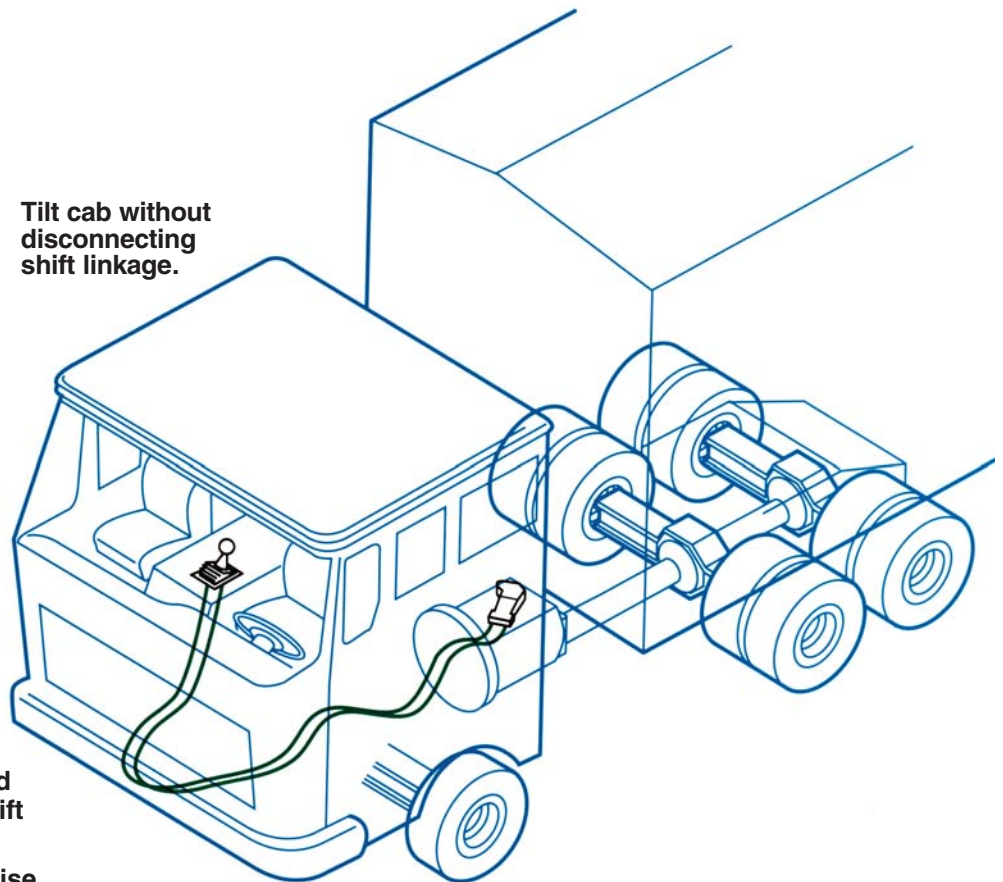
Requires no cab or body design compromise.



The cables can easily be routed to avoid displacing valuable luggage space.

No Maintenance Required.

Tilt cab without disconnecting shift linkage.

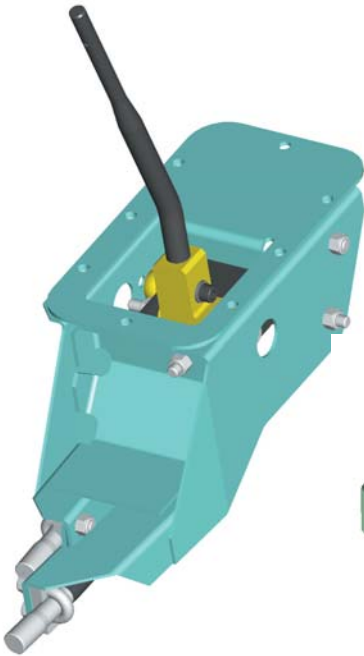


Cab sealed around shift linkage.

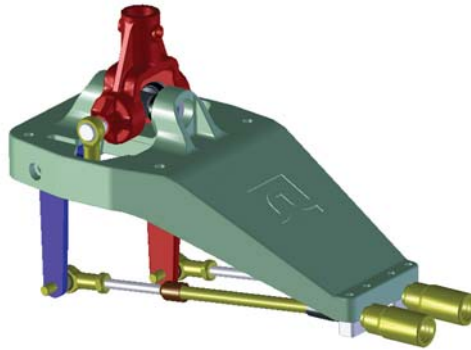
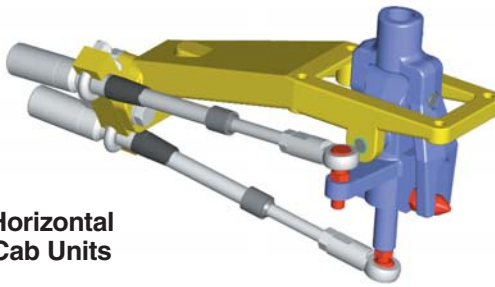
- Less Noise
- Cleaner Cab
- Improved Heating and Air Conditioning



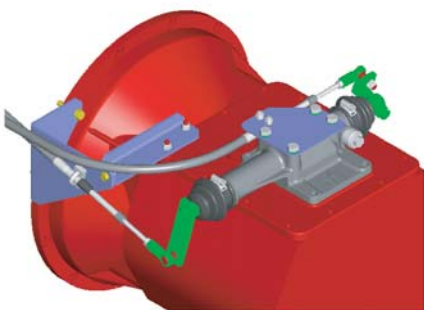
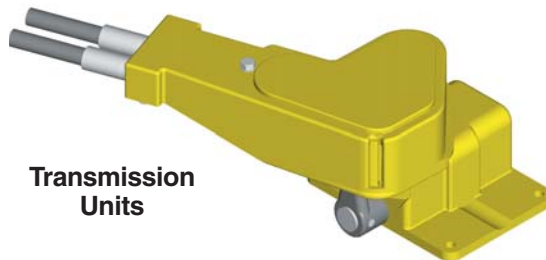
**Vertical
Cab Units**



**Horizontal
Cab Units**



**Transmission
Units**



**Transmission
X-Y Kits**

MTS Application Questionnaire

(Simply complete and mail, or fax to 44 1323 845848)

CUSTOMER:

ESTIMATED ANNUAL QUANTITY:

In addition to photos and/or drawings, please provide the following information:

1. Type of vehicle: (cab over truck, front or rear engine bus/coach, or other)

2. Transmission brand and model number:

3. Knob to be used: (if other than transmission manufacturer's standard; provide drawing)

4. Are you aware of any special clearance problems around the top of the transmission, or around the shift lever area of the operator's position?

5. Show, on a diagram to the right, the relative position of the following:

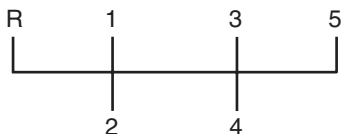
- A. Engine
- B. Transmission
- C. Driver's seat
- D. Axles or wheels

sketch here

6. What type of shift lever or cab unit is preferred?

- Vertical — Pedestal or Bracket Mount (short lever)
- Horizontal — Pedestal or Bracket Mount (short lever)
- Horizontal — Floor Mount (long lever)

7. Shift pattern



A. Estimate desired movement at knob (if other than normal)

- 1. _____ (fore & aft)
- 2. _____ (side to side)

B. Estimate the approximate length of the lever desired

- 3. _____

8. Estimate the approximate length of cables required:

ZF Transmissions

For ZF transmissions, provide drawings of the particular version of the transmission you plan to use. These drawings should show:

- A. The location and orientation of the shift control shaft.
- B. The direction of the control shaft movement when selecting the reverse and/or first gear rail.

* Please refer to the cautions/warnings and appropriate installation usage information in the Technical/Application Data sheet
* For application assistance/technical questions, please contact us at the appropriate location listed below or through our website at www.tuthillcontrols.com



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& Control...
The Tuthill
Solution

