# Secure Disconnect Lock Kit Installation Instructions
## Replaces Part #: SDL900, SDL920

**NOTE:  Keep cable away from hot or moving objects.  Failure to do so will cause damage to the cable and will void the warranty.**

## Operation:

**Engagement** – Put the transfer case in 4 wheel drive.  Push the button on the cable and pull the cable out completely.  If the cable does not move freely roll the vehicle at 1-2 mph to align the splines on the inner and outer axle shafts.  Do not force the cable to move as this may damage the shift fork or cable.

**Disengagement** – Put the transfer case in 2 wheel drive.  Push the button on the cable and push the cable in completely.  If the cable does not move freely roll the vehicle at 1-2 mph to relieve any stress on the inner and outer axle shafts.  Do not force the cable to move as this may damage the shift fork or cable.

## Installation Instructions:

1. Ensure all components in kit are accounted for.
2. Remove the vacuum harness and the wiring from the disconnect housing.  Trace all vacuum lines back to their source.  Plug the line coming from the engine as close to the engine as possible with the provided vacuum cap (#14) and remove all other hoses without disrupting any other vacuum-powered components.
3. Place a drain pan under the disconnect housing to catch any fluid that may leak.  Remove disconnect housing from axle.  (**See Figure 1**)
4. Clean any sealant or gasket material from the axle housing using a razor blade or gasket scraper.  (**See Figure 2**)
5. Disconnect the shift fork from the vacuum motor shaft by removing the e-clips that are holding them to the shaft.  Remove the vacuum motor and slide the shift fork away from the disconnect housing and vacuum motor.  Check the shift fork for any abnormal wear or damage.  If the fork is worn or damaged replacement is suggested.  A heavy duty fork is available: **5252599HD**
6. Select a location where the cable bracket (#7) will be mounted on the dash.  Ensure there is a vacant place on the firewall where a 5/8"
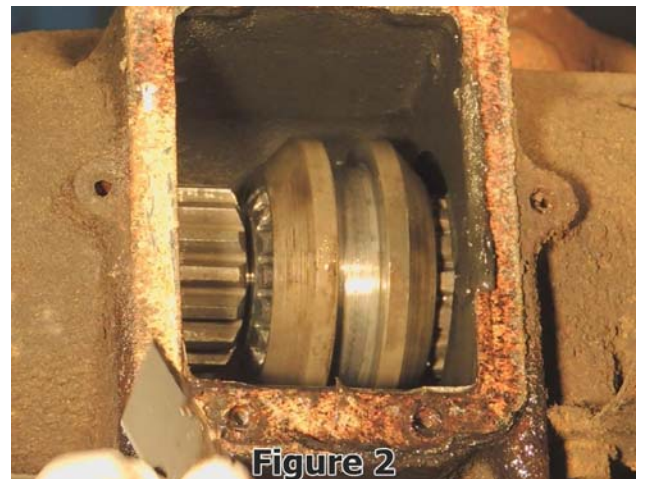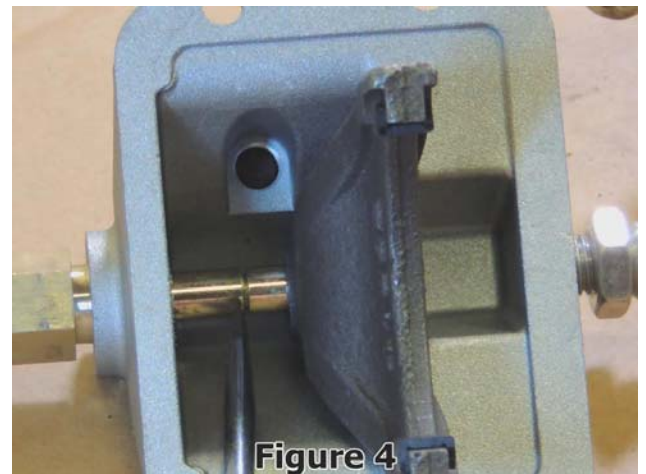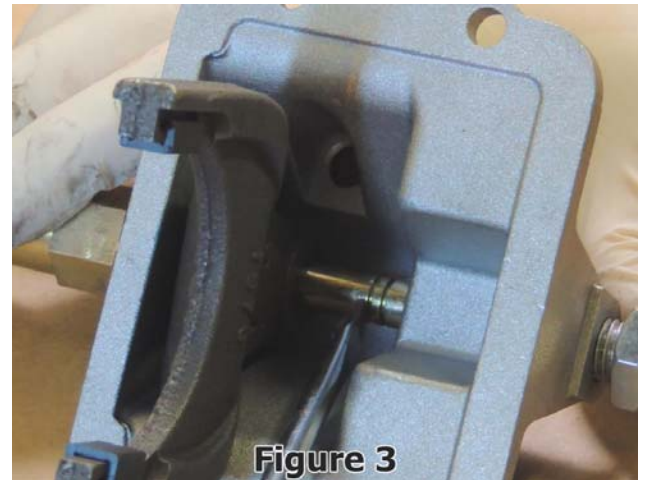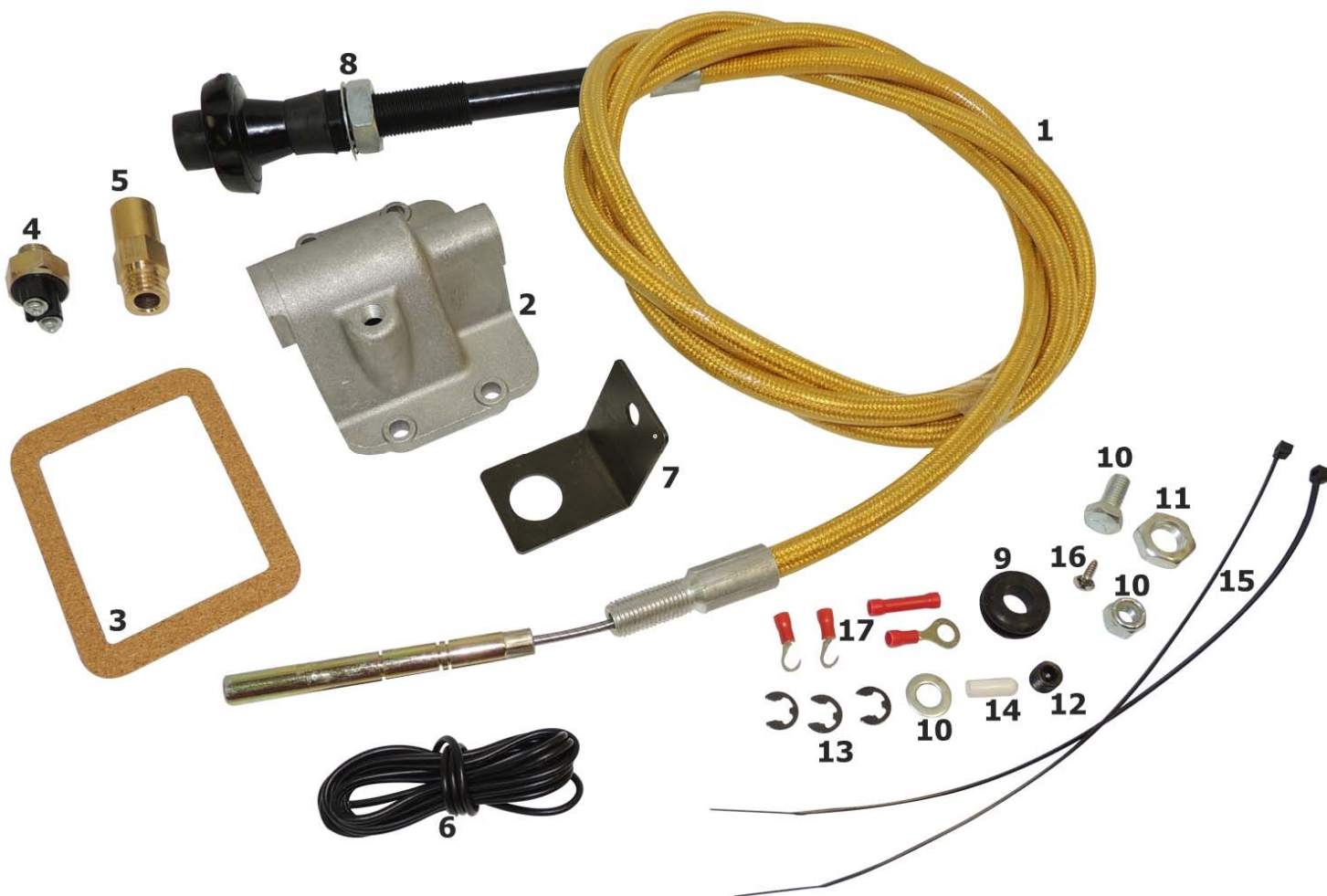
Figure 1

Figure 2

hole can be drilled.  The hole in the dash and the location of the bracket should keep the cable as straight as possible; this will ensure proper operation.  Drill a 5/8" hole in the firewall.  A step bit is useful in this step.

7.  Install the supplied cable bracket to the dash using the supplied bolt, washer, and nut (#10).  The bracket should be mounted with the large hole facing the driver's seat.

8.  Remove the nut and washer (#8) that is pre-installed on the cable (#1).  Slide the grommet (#9) onto the cable and slide the end of the cable through the bracket but not through the firewall. Loosely thread the washer and nut onto end of the cable with handle.  The cable can now be slid through the 5/8" hole in the firewall.   Install the grommet into the 5/8" hole in the firewall to prevent chafing and leaks.

9.  Route the cable down to the mounting location of the disconnect housing.  Keep the bends in the cable as gradual as possible and keep the cable away from hot or moving objects as well as anywhere it may contact trail obstacles.

10.  Install the 4WD switch extension (#5) into the disconnect housing (#2) and install the 4WD switch (#4) into the switch extension.  Be careful not to over-torque.

11.  Thread the supplied jam nut (#11) onto the cable until it is bottomed out. Install the shift fork into the disconnect housing with the fork offset toward the cable.  Slide the cable into the disconnect housing and thread it in 3/4".  Be sure that the cable passes through the shift fork and into the 4WD switch extension.


Figure 3

12.  Install the 3 supplied e-clips (#13) onto the cable, starting with the groove farthest from the 4WD switch.  The first and second e-clip should go on one side of the shift fork (**See Figure 3**) and the third should go on the other side of the shift fork (**See Figure 4**).  Put the cable in the engaged position and adjust the cable in or out of the disconnect housing so the first e-clip contacts the cable but the shift fork does not.  Once this is achieved the Jam Nut can be tightened to the disconnect housing.

13.  Install the disconnect housing onto the axle housing without the gasket to ensure proper operation.  Test the operation of the unit to ensure it connects and disconnects the inner axle shaft to the outer axle shaft.  Rotating the propeller shaft or wheel may be necessary to get the splines on both axle shafts to align.

14.  Remove the disconnect housing from the axle housing and re-install with the supplied gasket (#3).  Install the supplied housing plug (#12)  into the face of the disconnect housing.


Figure 4

15.  Cut the plug from the factory 4WD switch wiring and install the supplied electrical terminals (#17).  Install the wires onto the 4WD switch.  The 6' section of wire (#6) is included if the factory harness needs to be extended.

16.  Check the differential fluid level and add if necessary.

17.  Use the supplied zip ties (#15) to route the cable away from any hot or moving objects.  Articulate the suspension on the vehicle to ensure it stays away from hot or moving objects.  If needed a section of rubber hose can be installed over the sheathing of the cable to prevent chafing.

## Kit Contents

| | | | |
|---|---|---|---|
| Stainless Cable | (#1) | Bolt w/ Washer & Nylock Nut | (#10) |
| Disconnect Housing | (#2) | Jam Nut | (#11) |
| Disconnect Housing Gasket | (#3) | Housing Plug | (#12) |
| 4WD Switch | (#4) | E-Clips (Qty: 3) | (#13) |
| 4WD Switch Extension | (#5) | Vacuum Cap | (#14) |
| 6' Section of Wire | (#6) | Zip Ties (Qty: 2) | (#15) |
| Cable Bracket | (#7) | Screw | (#16) |
| Nut & Washer | (#8) | Electrical Connections | (#17) |
| Grommet | (#9) | | |