

HyLine Replacement TJ/LJ Fenders Jeep Wrangler

Installation Instructions

Disclaimer: Some under-hood components will require modifications and/or manipulation in order to be remounted. Others may require relocation. We suggest laying out all components before drilling any mounting holes.

Congratulations for purchasing TNT bolt-on replacement HyLine tube fenders for your Jeep Wrangler. Begin by unpacking your kit and comparing the contents to the packing list provided as attachment "A" to this manual. Please observe proper shop safety procedures when performing this install. Use proper eye and hearing protection as required and use safe jack stands/supports, placed appropriately for supporting the vehicle while you work on it if needed.

We strongly suggest fitting the fenders to the vehicle and performing the install procedure before you trim the hood and prep and paint the fenders. The fenders are shipped bare steel, please use caution during the prep and paint process, as the chemicals involved with that operation can be dangerous.

An aftermarket air intake system is required to fit these fenders properly.

Turn signal mounting is not provided with these fenders. Check with your local authorities to determine what your local law enforcement requires for front turn signals.

Some aftermarket rocker panel protection may have to be modified slightly to accept the TNT HyLine replacement fender. Our fenders have a much larger wheel opening than the stock fender/flare combination. Minor trimming maybe required to the aftermarket rocker panel protection that is installed on your vehicle. Please check fitment and compatibility carefully prior to painting your fenders.

During the removal of your factory fenders please retain all the factory hardware you remove as some of it will be reused.

STEP 1:

Disconnect and remove the battery from the vehicle.

STEP 2:

Begin by removing the factory air induction system per the direction supplied with your aftermarket induction system.

STEP 3:

Remove the wiring harnesses that run through the front of the inner fender to the turn signal and marker light. Pull the harness through the fender and secure to the grill support rods on each side. Remove all plastic mounting clips securing the wiring harness and air conditioning lines to the factory fenders. Secure the wiring harness to the grill support rod as needed. Disconnect the wiring harness from the horn(s), and washer bottle pump motor(s). Disconnect the rubber supply lines from the washer pump motors. Remove the windshield washer bottle from the Drivers side fender and set aside.

STEP 4:

Remove the factory battery tray and, note that there is a sensor in the battery tray, disconnect the wiring harness.

STEP 5:

Unbolt all the emissions equipment from the Drivers side fender and carefully move this equipment onto the intake manifold, secure out of the way as needed.

NOTE: 2003 and newer models equipped with an automatic transmission, carefully remove the connector from the transmission control module mounted on the Drivers side fender. Remove the module from the mounting bracket and set module aside.

CAUTION: Vehicles equipped with air conditioning take care removing the plastic clips that secure the compressor lines to the passenger side fender. These lines are fragile.

When satisfied that all items are removed from the factory fender, remove both fenders.

STEP 6:

Remove the fender to firewall supports from the firewall. Inside the factory fender support for the Passenger side you will find a rectangular shaped vacuum canister, remove the vacuum line and then remove and retain the canister.

STEP 7: Hold the passenger side fender in place on the firewall. Install a couple of mounting bolts to make sure the fender is properly aligned. Mark the upper fender mounting hole on the cowl and remove fender.

STEP 8:

The upper most mounting hole in the fender requires a rivet-nut. To install the rivet-nut, drill a 17/32" hole where you marked in the previous step. Slide the provided 10mm nut onto the supplied 5/16" x 1.5" bolt, then thread into the rivet. Insert rivet into the 17/32" hole that was drilled into the cowl. Using a wrench to hold the nut, tighten the 5/16" bolt until it will no longer tighten using moderate torque. This compresses the rivet so that the included 5/16" bolts can be threaded into them. Repeat this process for drivers side fender.

STEP 9:

Install the TNT fender on the Passenger side of the vehicle.

CAUTION: The upper air conditioning compressor line will need to be reformed slightly to get the new fender into position. We recommend forming this line by hand in small increments until it is positioned in such a way that the new fender will slip into position.

Bolt the fender into position starting with the firewall end of the fender first. Secure the fender to the firewall reusing 3 of the factory fasteners removed earlier and the supplied 5/16" bolt for the rivet-nut. Next, swing the grill mount of the fender into the grill and position so that it can be bolted on, again reusing 3 of the factory fasteners.

Note: Some grills already have a threaded clip in the grill for the uppermost grill mount. If yours does not, a clip can be sourced from one of the inner braces that were previously removed.

STEP 10:

Install the provided battery tray support. Unhook computer harness and unbolt the computer from the firewall. Drill existing computer mounting bracket holes with a 9/32" drill bit. Using the supplied ¼" bolts and nuts mount the computer to the underside of the battery tray using the pre-punched mounting holes in the tray. Slip the support over the 2 studs in the firewall and attach the support to the firewall with 2 of the factory nut and washer fasteners. Mark the inner fender of the Passenger side inner fender assy. using the battery tray support as a guide. Remove the battery tray support assy. and drill the inner fender with a 3/8" drill bit. After painting the battery tray support, bolt the battery tray to the inner fender with 2ea 5/16" X 1" bolts and nylocks before installing. (Note: On models with the fan motor protruding from the firewall thread the included 8mm threaded coupling onto the factory studs then bolt tray to stud using the 8mm bolts provided.)



STEP 11:

Using the bottom edge of the Passenger side inner fender as a guide, position the vacuum canister approximately 1" from the bottom edge of the inner fender so that the vacuum port is facing up and mark the mounting holes in the canister onto the inner fender. Drill holes to 9/32"

STEP 12:

Position the fuse block assembly onto the inner fender of the passenger side fender, ensure the fuse block is mounted in such a way that the hood will clear it as it closes. Mount the fuse using the included strips of double sided tape.



STEP 13:

Position all other accessories that you had previously installed on the Passenger side inner fender and mark their mounts to be drilled as required. Remove the Passenger side fender from the vehicle and drill all holes marked in previous steps to 9/32".

STEP 14:

Repeat steps 8 & 9 for beginning installation of drivers' side Hyline fender.

STEP 15:

Position the windshield washer bottle on the rear of the inner fender and mark the mounting holes in the inner fender using the washer bottle as a guide. Drill holes to 9/32".

Note: Depending on year and model some modifications to unit or unit mounting may be required to mount washer bottle unit.

A minor modification will need to be performed to the connector and wiring harness to relocate the reservoir to this new location. Locate the connector originally installed on the pump motor for the front windshield washer pump motor. Remove the originally installed tape and wire loom as needed along the length of the harness until you encounter a large multi pin connector originally secured to the back of the factory fender's inner fender.

Start at the pump connector and follow the black wire back in the harness until you encounter the splice in the ground wire for this connector. At that splice cut the ground wire out of the factory splice and seal the bare end of the wire at the splice. Carefully thread the connector and wiring for the windshield pump motor out of the harness it was originally installed in. You will find this wire is twisted in and through the factory harness. Pull the connector and wiring all the way back to the multi pin connector it originates from.

Reinstall the tape and wire loom on the harness once you have removed the pump motor wiring and connector.

From the hardware pack locate the crimp ring terminal and heat shrink sleeve. Strip the end of the black wire and crimp the ring terminal to the wire, heat shrink the ring terminal. Mount this ring terminal under the lower mounting bolt for the windshield washer reservoir. Secure the excess wire.

NOTE: 2003 and newer models equipped with an automatic transmission only, perform STEP 16. All others proceed to STEP 15

STEP 16:

Carefully connect the connector from the engine wiring harness to the transmission control module. Position transmission control module on the inner fender, ensure that adequate slack is available in the wiring harness to account for engine to body movement. Connector will face the engine. Mark the mounting holes for the control module on the inner fender, using the module as a guide. Drill holes to 9/32"

NOTE: Transmission control module will now be mounted directly to the inner fender, no mounting bracket is required. We suggest running a $\frac{1}{4}$ - 20 tap through the mounting holes in the control module. The factory used a self tapping $\frac{1}{4}$ - 20 fastener that may or may not have cut good threads into the aluminum housing of the module.

Carefully set the control module on the intake manifold, ensure the module is secure that no damage occurs to the module, connector or wiring harness.

STEP 17: Position horn(s) on the front of the inner fender and mark mounting holes using the horn(s) as a guide. Drill holes to 9/32".

STEP 18:

*** All other under hood accessories and equipment may require manipulation, modification and/or relocation for re-installation.

STEP 19:

Remove both fenders and prep and paint them as desired.

STEP 18:

Reinstall painted fenders. Attach all accessories to the locations you drilled.

LED Light Installation

1997-2001 Models

When wiring lights as directed below, they will flash opposite of each other when used as a turn signal. When used as a marker (3) of the front LED's will light up as well as the ³/₄" LED's.

Drivers & Passenger Side

- 1. Locate the factory wire that is black w/ yellow stripe; connect it to the black wire coming from the ³/₄" LED.
- 2. Take the green wire from the factory harness and tie it into both the yellow wire coming from the triangle light and the white wire form the ³/₄" LED.
- 3. Locate the factory black wire and connect it to the black wire from the triangle light.

2002-2006 Models

When wiring lights as directed below, they will flash opposite of each other when used as a turn signal. When used as a marker (3) of the front LED's will light up as well as the ³/₄" LED's.

Drivers Side

- 1. Locate two factory wires that are black w/ yellow stripe, connect them to the black wire coming from the ¾" LED.
- 2. Take the gray wire from the factory harness and tie it into both the yellow wire from the triangle light and the white wire from the ¾" LED.
- 3. Locate the factory solid black wire and connect it to the black wire coming from the triangle light.

Pass. Side

1. Locate the factory wire that is black w/ yellow stripe; connect it to the black wire coming from your ¾" LED.

- 2. Take the factory tan wire, connect it to both the yellow wire from the triangle light and the white wire coming from the ¾" LED
- 3. Locate the factory black wire and connect it to the black wire coming from the triangle light.

Appendix A

Parts List:

- 1- Drivers side HyLine replacement fender
- 2- Passengers side HyLine replacement fender
- 3- Battery support tray

Hardware kit:

4ea, 5/16" X 1" bolts and nylock nuts 10ea, 1/4" X 3/4" bolts and nylock nuts 6 ea, 1/4" x 2 1/2" bolts and lock washers 1ea, heat sealing crimp ring connector

- 2- 5/16" rivet zerk
- 2 8mm threaded couplings
- 2 8 mm x . 5 bolts
- 1- 12" strip two-sided tape

Rivet Zerk Install tool:

- 1- 5/16" bolt
- 2- 10mm nut

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