



**E46 Hydraulic  
Handbrake Guide  
Remote Reservoir**

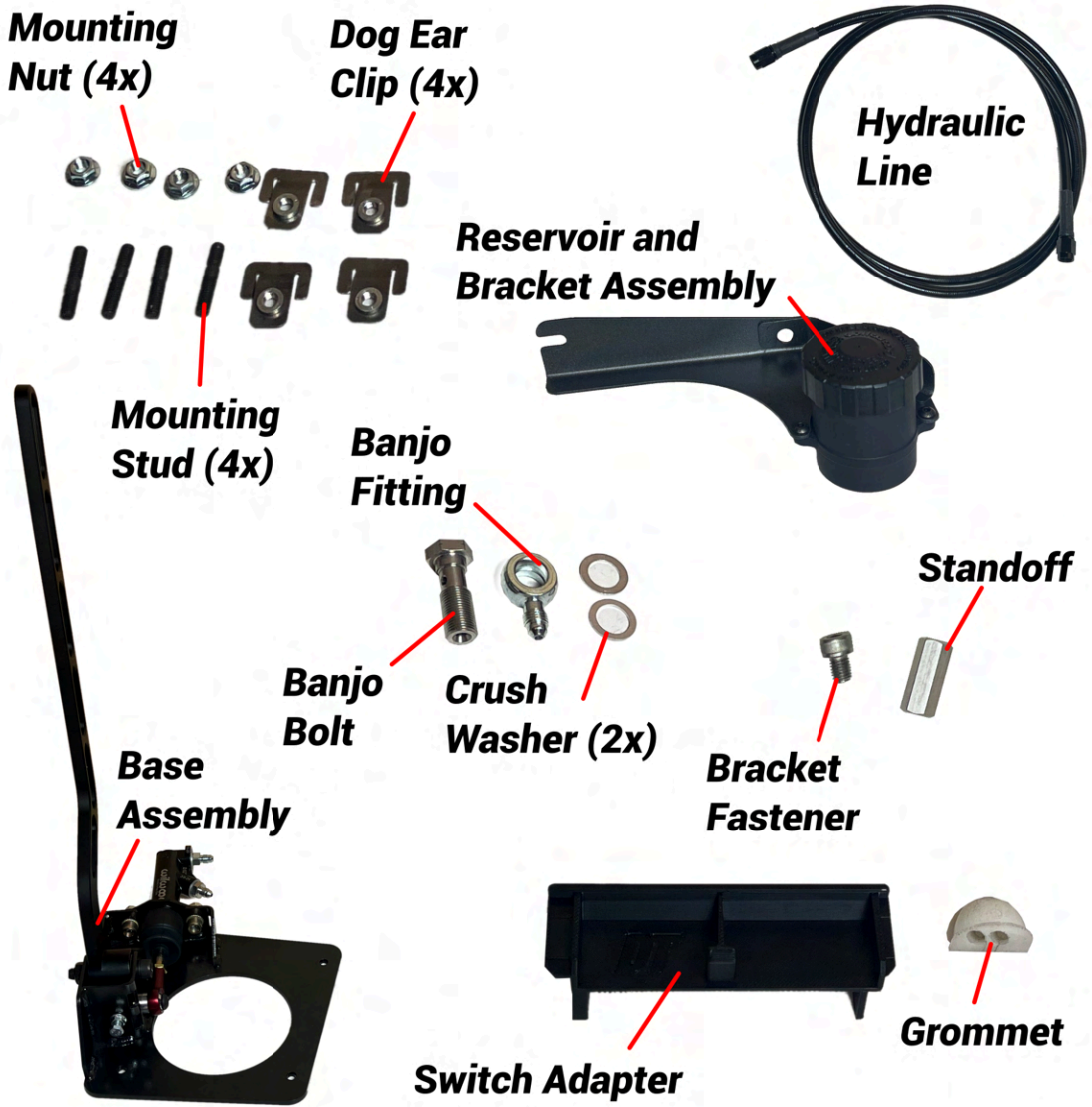




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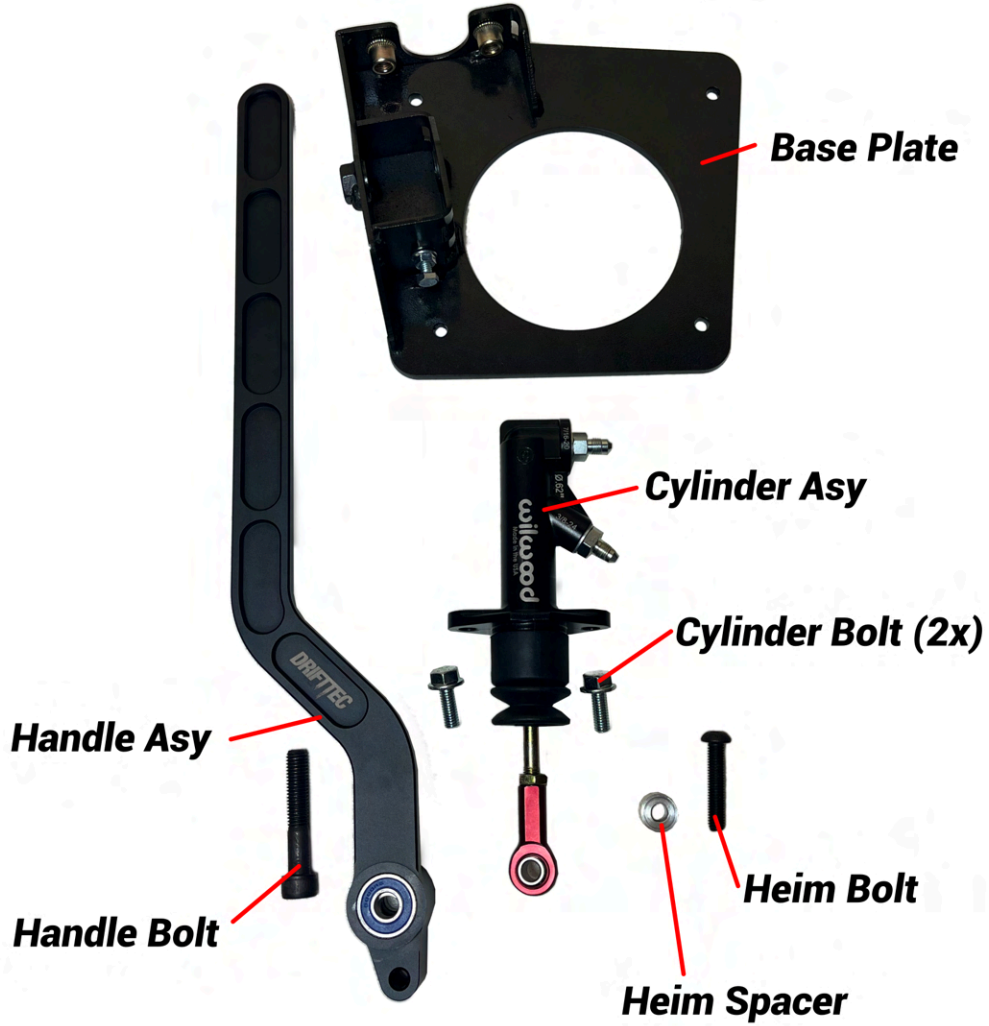
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## Overview





## Base Assembly



## Reservoir and Bracket Assembly



**Reservoir Bracket**



**Reservoir**



**Reservoir Fastener (3x)**



## **Disclaimer & Safety**

This handbrake kit is intended for off road use in controlled environments

This kit is intended to be installed by a qualified mechanic. If you or your mechanic have any questions please contact [info@drifttec.co](mailto:info@drifttec.co)

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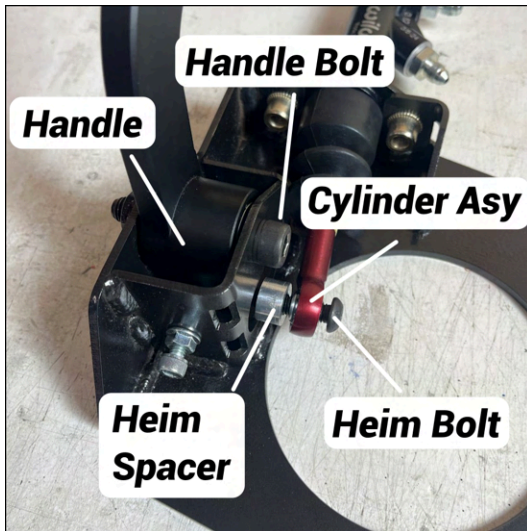
## Preparation

Bench bleed the supplied master cylinder before installation.

Install the handle, and linkage assembly to the base. Do not mount the master cylinder to the base. It should be hanging loose attached to the handle.

*Handle Bolt - (55 ft\*lb, 75 N\*m)*

*Heim Bolt - (20 ft\*lb, 27 N\*m)*





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Pull up on the shift knob to remove.



Remove the shift boot by squeezing the sides.







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Remove the shifter bezel by removing the 2 screws towards the rear of the car. Disconnect the window switches.



Pull out the center storage cubby and remove the 4 screws in the panel. Disconnect the connectors behind the panel.





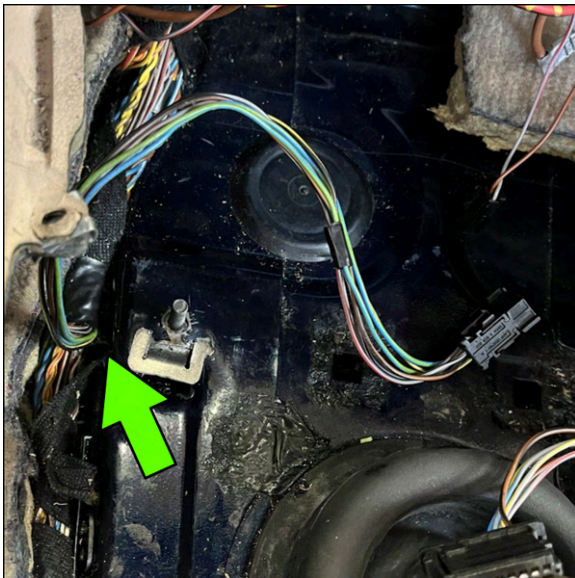
## E46 Hydraulic Handbrake Guide Remote Reservoir

Cut away carpet in the center console area following the diagram below. Take care to not cut any wires.

*Note: Using sharp items poses a cut risk. You must use cut resistant gloves and sleeves to ensure safe working conditions.*



De-loam the driver's side window switch. Apply electrical tape in place of removed tape.



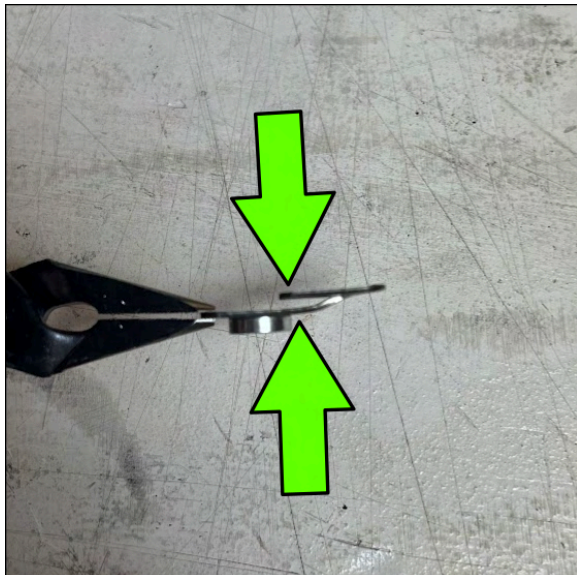


## Base Installation

Insert the 4x dog ear clips into the transmission tunnel centering the threaded hole to the circular hole in the tunnel.



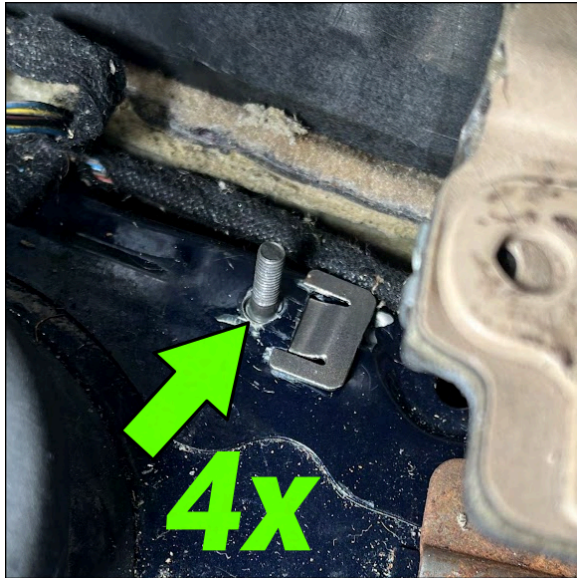
The clips should have a fair bit of resistance sliding into the chassis. If the clips are loose, bend the ears of the clip down until they are snug with the transmission tunnel.



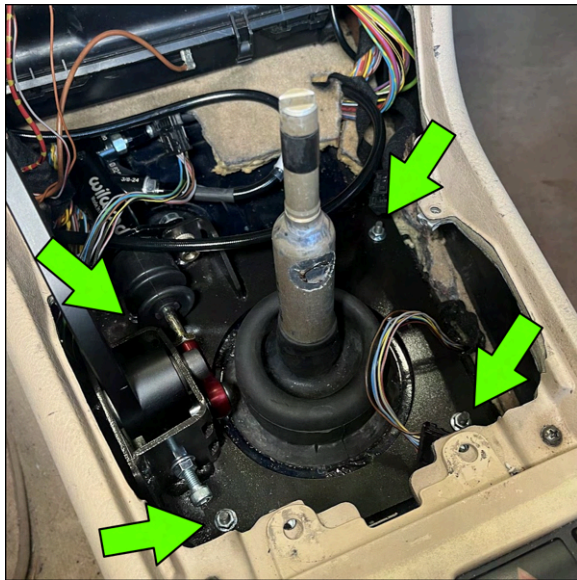


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Thread the studs through the transmission tunnel and into the clips.



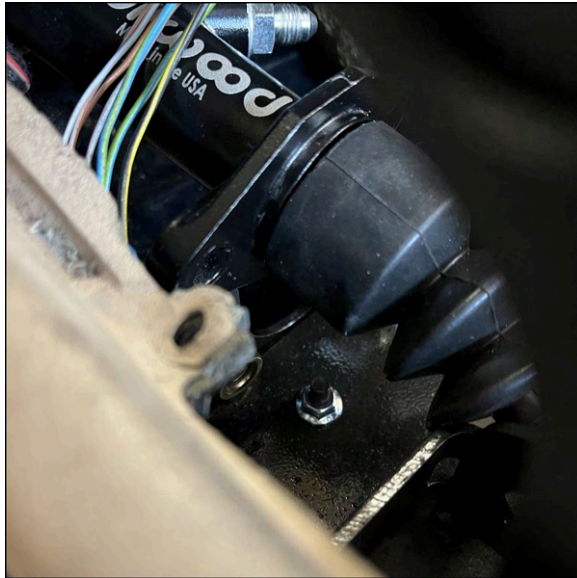
Slide the Handbrake mounting plate over the studs and install the 4x nuts onto the studs.  
*Mounting Nut - (6.2 ft\*lb, 8.5 N\*m)*



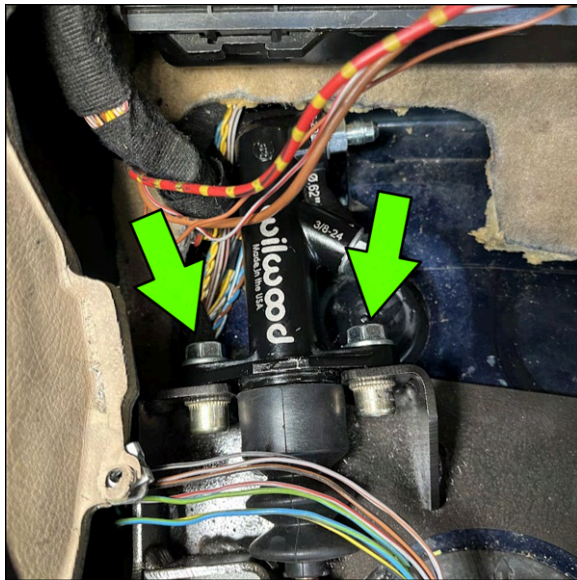


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Access is limited to the left front mounting stud. Lift the cylinder to access the stud below.



Install the cylinder bolts through the cylinder and into the base.  
*Cylinder Bolt - (18 ft\*lb, 25 N\*m)*





## Feed Line

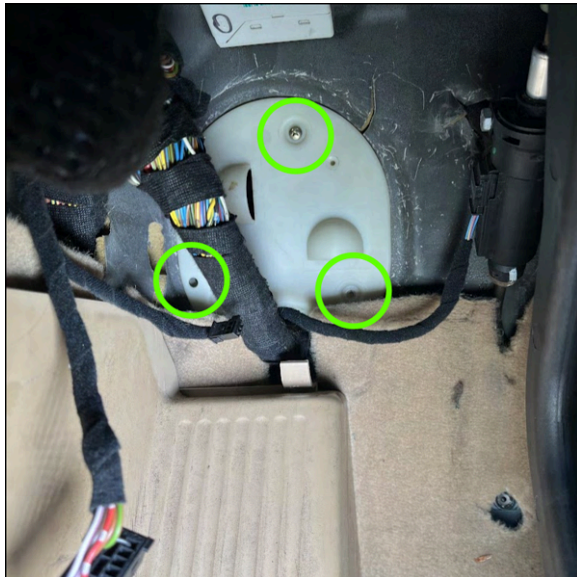
Remove the under dash panel.



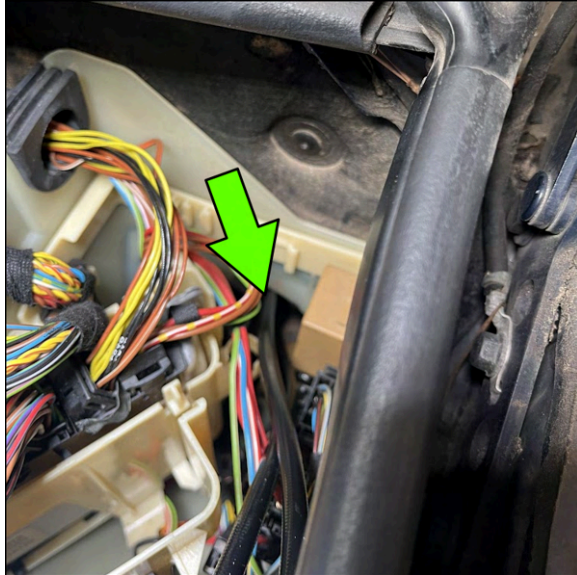
Unplug the OBD port and under dash light connectors.



Remove the firewall plate from the e-box.



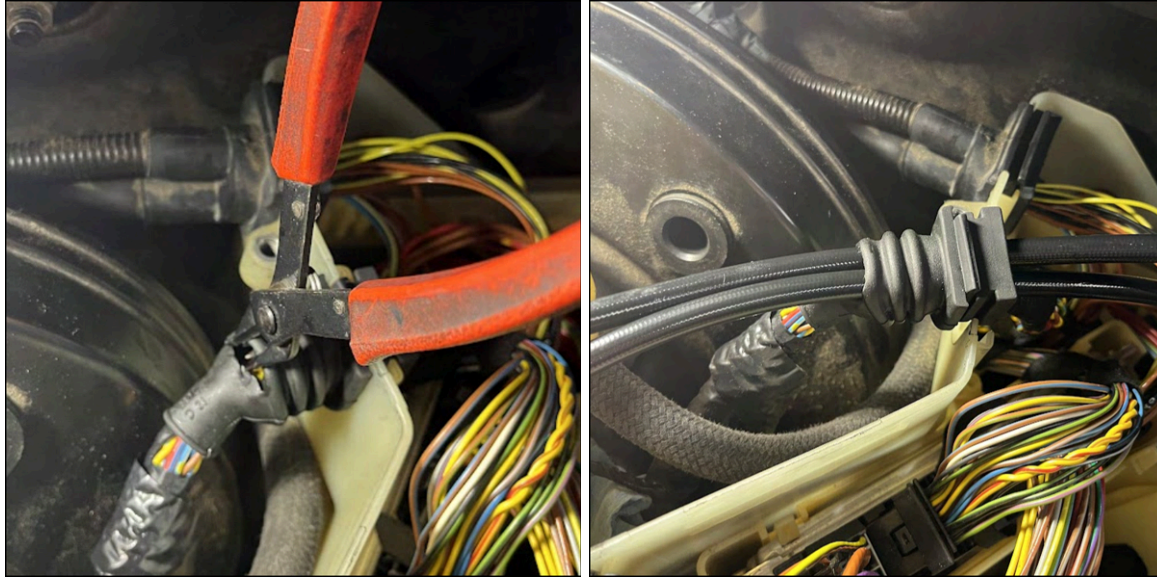
Route the line to the cabin through the firewall hole and then through the e-box panel. There is only 1 line to route for this kit.





Cut a slit into the ABS wire loom grommet with care to not cut any wires.

Pass the brake line through the wire loom grommet hole. There is only 1 line to route for this kit.



Mount the reservoir to the reservoir bracket. Torque fasteners to *2ft\*lb, 2.7N\*m*



Attach banjo fitting and 2X crush washers to the reservoir. Line up the end of the banjo fitting with the scallop on the reservoir.

*Banjo bolt - (20 Ft\*lb, 27 N\*m)*



Attach the hydraulic line to the banjo fitting on the reservoir

*Reservoir Line - (8.3 Ft\*lb, 11.3 N\*m)*



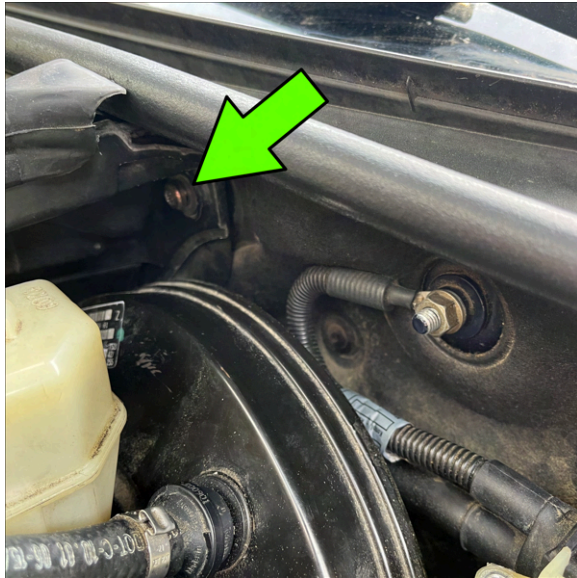
Remove the ground nut from the firewall



Install the bracket standoff. Torque to *12ft\*lb (16.2N\*m)*



Loosen firewall panel (T27 torx)



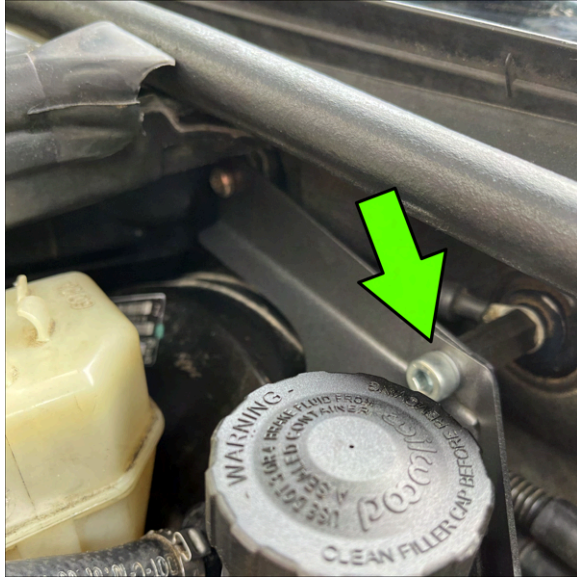
Slide the reservoir bracket between the firewall screw and firewall washer.





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Install the reservoir bracket fastener through the reservoir bracket and into the standoff. Torque reservoir bracket fastener to to  $10\text{ft}\cdot\text{lb}$  ( $13.5\text{N}\cdot\text{m}$ )



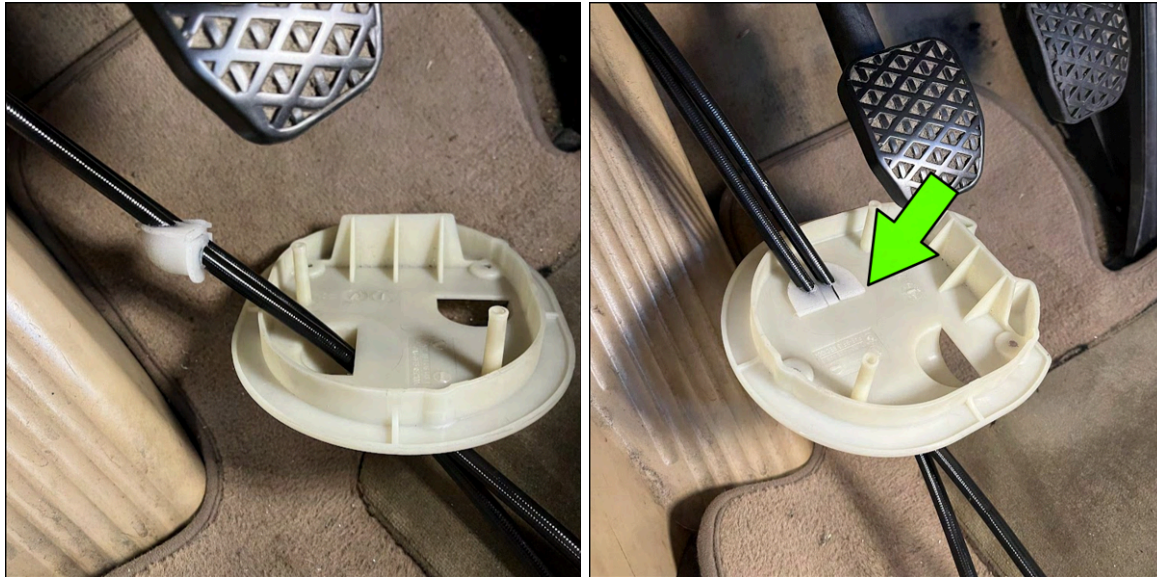
Torque firewall fastener to to  $2.6\text{ft}\cdot\text{lb}$  ( $3.5\text{N}\cdot\text{m}$ )



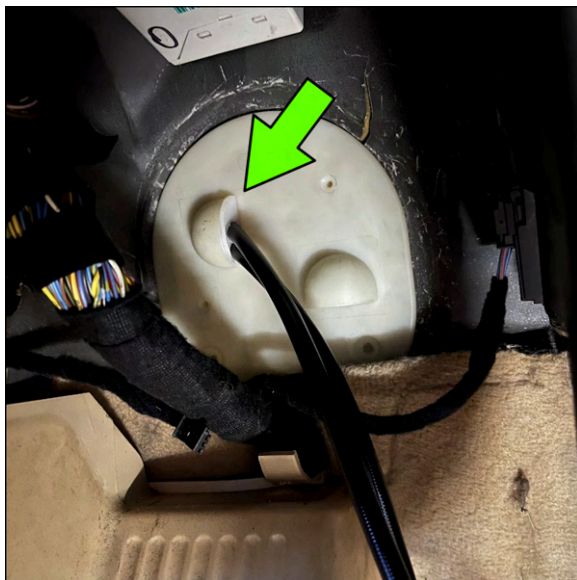


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In the cabin, install the rubber grommet around the line and slide the grommet into the e-box panel. Be sure that the flanges are fully seated. There is only 1 line through the grommet for this kit.



Slide the e-box panel into position.





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Pull slack by carefully pulling the line from the interior.

Route the line along the dash below the steering column and to the center console area.



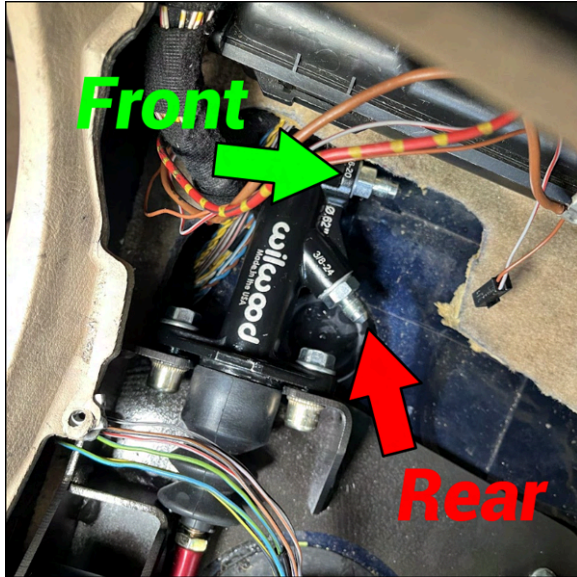


## E46 Hydraulic Handbrake Guide Remote Reservoir

Torque the fittings on the master cylinder.

*Fitting close to front of the car - (20 Ft\*lb, 27 N\*m)*

*Fitting close to rear of the car - (13 Ft\*lb, 17 N\*m)*

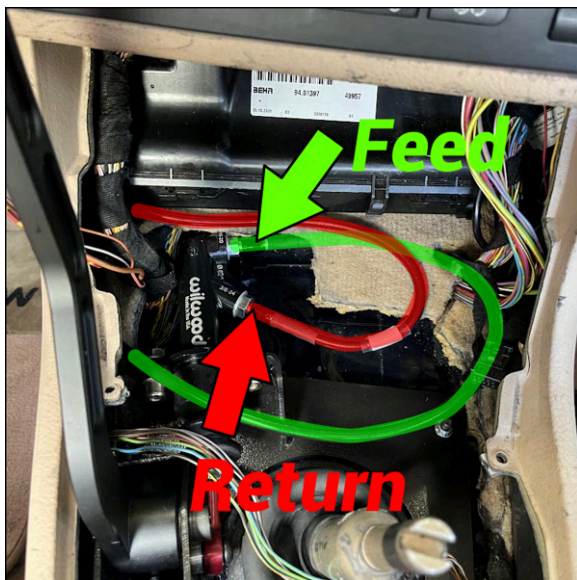


Attach the line from the reservoir to the handbrake fitting closer to the front of the car.

*Feed Line - (8.3 Ft\*lb, 11.3 N\*m)*

Install the calipers and rear lines to your car (not included)

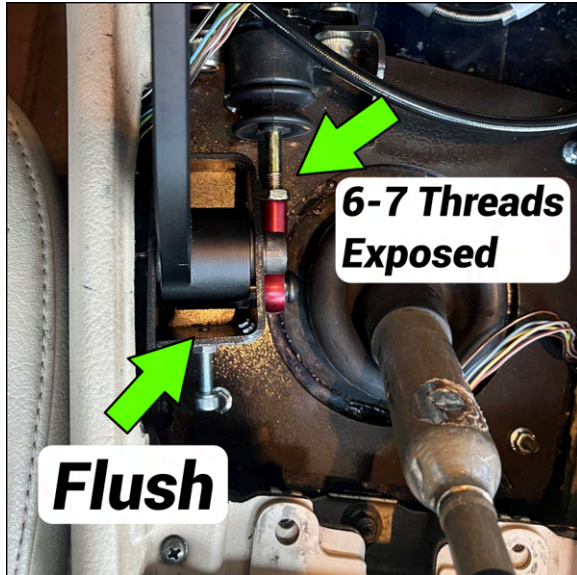
Attach your return line (goes to calipers) to the handbrake fitting closer to the rear of the car.





## Bleeding

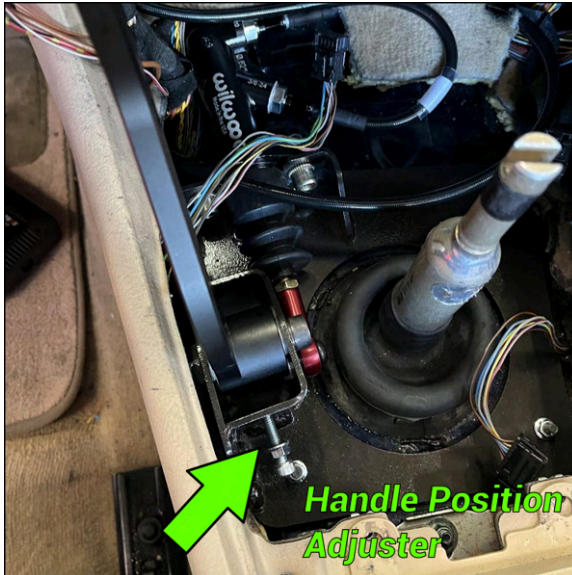
The handle position adjuster screw should be flush to the base and the handle free play adjustment linkage should have 6-7 threads showing.



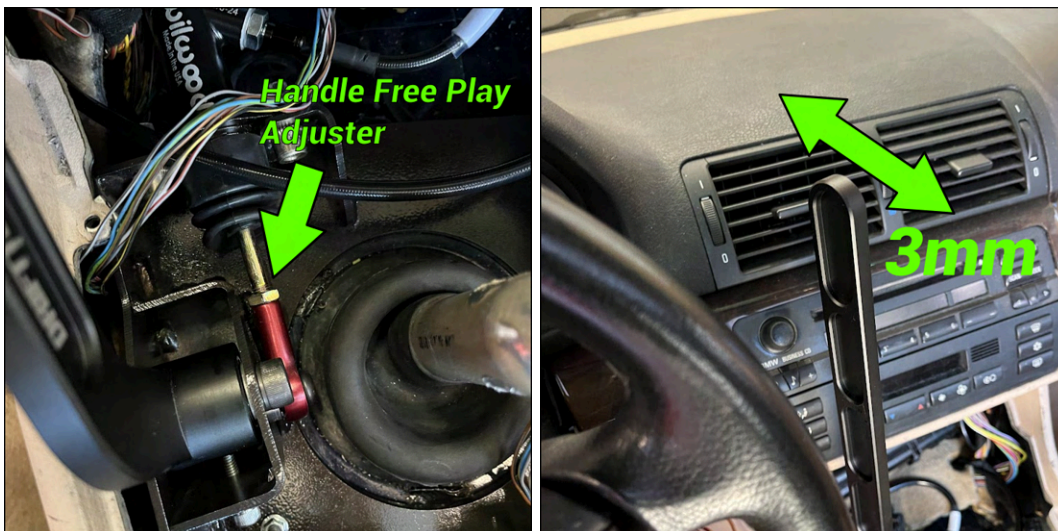
1. Bleed the rear Calipers again following the 2 person method.  
Person 1 will be opening and closing the rear bleeder screws.  
Person 2 will be in the car operating the handbrake lever.
  - a. Person 1 - Start at the passenger side caliper. Attach a clear tube to the brake bleeder to monitor for bubbles.
  - b. Person 2 - Pump handbrake 3 times.
  - c. Person 2 - Hold pressure on the handbrake
  - d. Person 1 - Open bleeder screw
  - e. Person 2 - Pull the handbrake slowly to full travel.
  - f. Person 1 - Close bleeder screw
  - g. Person 2 - Return the handbrake handle to the forward position.
  - h. Repeat a-g until there are no air bubbles coming from the brake caliper
  - i. Repeat a-h with Person 1 alternating from driver to passenger side several times and until no air bubbles come from the brake bleeders.

### Adjustment

1. Adjust the handle position adjuster screw until the handle is in the desired forward resting position and tighten locking nut



2. Adjust the handle free play adjuster until there is 3mm of free play at the top of the handle.



3. Lock the handle free play linkage by fastening the jam nut.
4. Pull and release the handbrake with heavy force. Be sure the brakes are not dragging while the handle is released.



## Reassembly

Using the provided cable ties, fasten the line to the bottom of the dash.



Remove the metal clip from the location shown below.



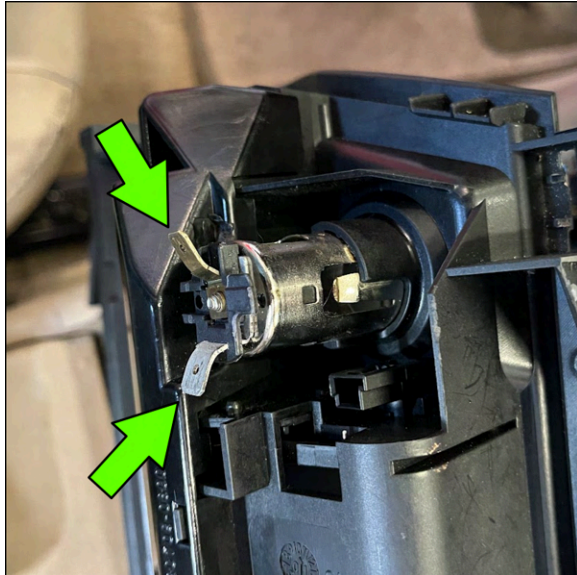


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Reinstall under dash panel. You will not use the screw associated with the above clip.



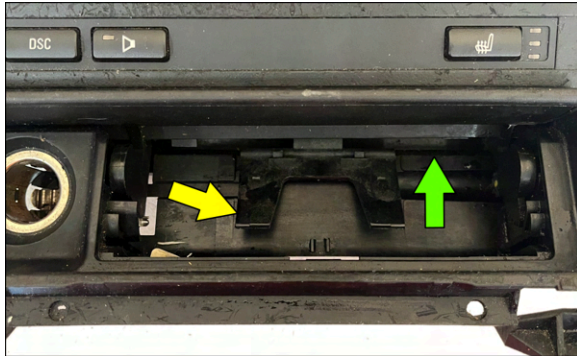
Bend the tabs on the 12v plug to clear the handbrake cylinder.





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Remove the ashtray tab by twisting upward.



Clearance the center console panel using the supplied template.  
Match the corner cutout with the center console protrusion.



Wrap the handbrake to protect it from scratches.

Push the top of the center console panel into the dash, and plug in the rear console connectors.



Pull the handle back and pivot the center console panel down into position.





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Install the drivers side window switch into the window switch adapter.



Install the switch and adapter into the center console panel.



Re-attach the electrical connections to the driver's side window switch.

Install the shifter bezel with the handbrake handle passing through the hole for the driver's side window switch. Connect the passenger's side window switch connector.



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Reinstall the shift boot and push on the shift knob.







## Troubleshooting

Symptom	Possible Cause	Solution
Rear brakes not locking	<ul style="list-style-type: none"><li>- Worn/insufficient pads</li><li>- Worn or glazed rotors</li><li>- Air in lines</li><li>- Caliper binding</li></ul>	<ul style="list-style-type: none"><li>- Recommended pads: OEM/Moderate Grip: OEM grade semi-metallic pads High Grip: Hawk HP+ or EBC yellows</li><li>- Replace rotors</li><li>- Bleed system</li><li>- Check and lube slide pins</li></ul>
Handle feels spongy	<ul style="list-style-type: none"><li>- Air in system</li></ul>	<ul style="list-style-type: none"><li>- Bleed system</li><li>- Check for leaks</li></ul>
Handle is stuck and pads are dragging	<ul style="list-style-type: none"><li>- Pressure not being relieved from the handbrake cylinder.</li></ul>	<ul style="list-style-type: none"><li>- Adjust handle stop. Refer to the “adjustment” section.</li></ul>

### Other issues? We're here to help!

If there are any questions that can not be solved by the above table, contact us at [info@drifteco](mailto:info@drifteco) with a brief description along with your contact information.