Sixth Generation Factory R/H Drive 2016 on Mustang Fitted with the Coyote 5.0 & 5.2 litre 4 valve V8 engine
PACEMAKER HEADERS part no. PH4182

IMPORTANT: Pacemaker headers part number PH4178 has been superseded by PH4182 these instructions will be suitable for all model Mustangs from 2015 and on.

IMPORTANT: Read the following instructions carefully before proceeding. You will need the aid of a hoist as it is necessary to support the engine while the engine mount spacer plate is removed during the install **IMPORTANT: for your convenience, PACEMAKER HEADERS have provided new regular hex head bolts and washers to replace the factory studs.**

From the top

Disconnect battery

Remove air intake(s) (for 2024 models and on, both) up to the throttle body(ies). (R/H side will require the removal of the fuse box & its mounting bracket, see pictures page 1)

Remove the strut brace

Undo the coolant reservoir mounts and swing it in front of the engine out of the way (See pictures page 2)

Lift the A/C line up out of the way & secure it to prevent it from falling back down (See pictures page 3)

Remove the top bolt from the steering shaft & slide the knuckle off of the shaft

Undo all top nuts from R/H & L/H manifolds

From underneath

Unbolt exhaust system and slide back

Unplug all 4 x O2 sensors

R/H SIDE

Unbolt the engine pipe and cat assembly and remove

Remove the bottom bolt from the steering shaft & remove the shaft

Remove starter motor and place to one side (NOTE: this only to make it easier access engine mount brace. Once the engine mount assembly has been reassembled, the starter motor can be refitted)

Remove the bottom manifold nuts except No.2 nut

Important: To remove the remaining No.2 bottom nut, you must jack up the R/H side of the engine to take the weight off of the engine mount, remove the brackets holding the trans cooler lines to the engine mount (front bracket pictured on pictures page 4, must be removed completely and discarded. Use a flat head screw driver to gently pry the hose clasp part of the bracket & open enough to remove from the lines, then cut plastic clip holding starter motor wires) Remove the engine mount bolts from the side of the engine block and undo from engine mount rubber, then jack the engine up by 15-20 mm to remove the remaining No.2 bottom nut

Remove OEM manifold from vehicle

Once the manifold has been removed, unscrew and remove all studs from the cylinder head

Continue page 2.

R/H side continued.

Place all four bottom bolts (note don't leave them out too far) **Important:** If you intend to reuse the standard gasket or any aftermarket gasket then place the gasket onto cylinder header using the bottom bolts to hold it in place

Replace starter motor & fasten the bolts tight

Fasten engine mount to engine block tight, lower the engine back down and fasten to the engine mount rubber

Re-route the starter motor wires behind trans cooler lines & re-attach to starter motor (see pictures page 5)

Plug in O2 sensor loom extension

Insert Pacemaker Headers PH4182R & let hang on bottom bolts

L/H SIDE

Remove the cat extension pipe

Remove the remaining bottom manifold nuts then remove the OEM manifold

Once the manifold has been removed, unscrew and remove all studs from the cylinder head

Screw the 4 bottom bolts into the cylinder head about half way with the gasket in place

Unclip O2 sensor plug & cut the zip tie holding it in place so it can be pulled down beside the transmission (See pictures page 6)

Insert Pacemaker Headers PH4182L & let hang on the bottom bolts

From the top

Screw the top bolts in & systematically tighten (some of the bottom bolts can be accessed from the top so take this opportunity to tighten them as well)

Return coolant reservoir to its original position and tighten it in place

Return air intakes first then the fuse box to their original positions and tighten in place

Return the strut brace to its original position & tighten in place

From underneath

L/H SIDE

Tighten the remaining bolts

Screw O2 sensor into the collector cone & tighten then plug it in

R/H SIDE

Tighten the remaining bolts

Return the steering shaft & tighten the bottom bolt

Screw O2 sensor into the collector cone & tighten then plug it in

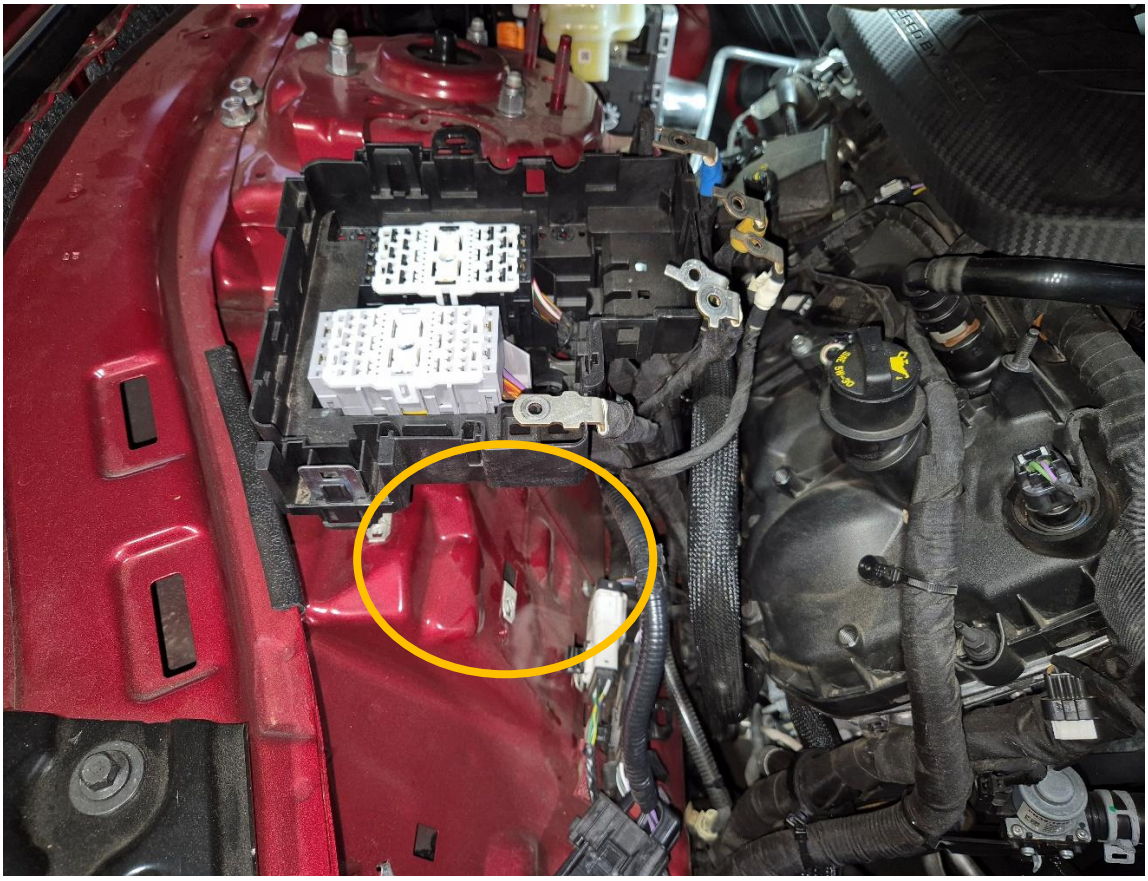
From the top

Slide the knuckle back onto the steering shaft & tighten the bolt

Return the A/C line to its original position

Re-connect the battery

Pictures page 1



Above circled in orange you can see where the fuse box mounting bracket was removed from.

Below shows the fuse box mounting bracket.



Pictures page 2



Above shows the coolant reservoir swung out of the way.

Pictures page 3



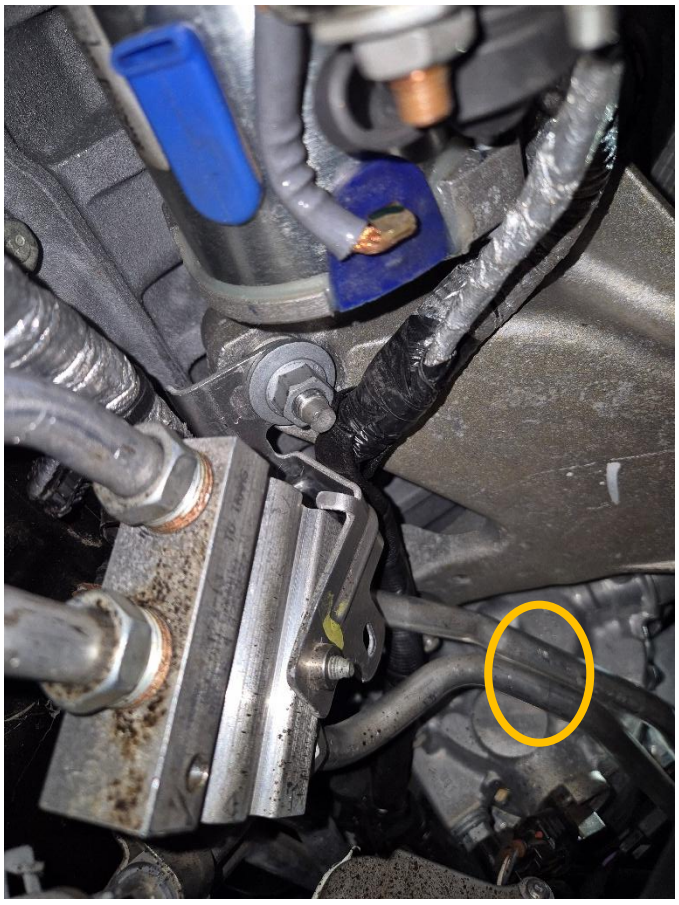
Circled in orange you can see the A/C line zip tied up out of the way.

Pictures page 4



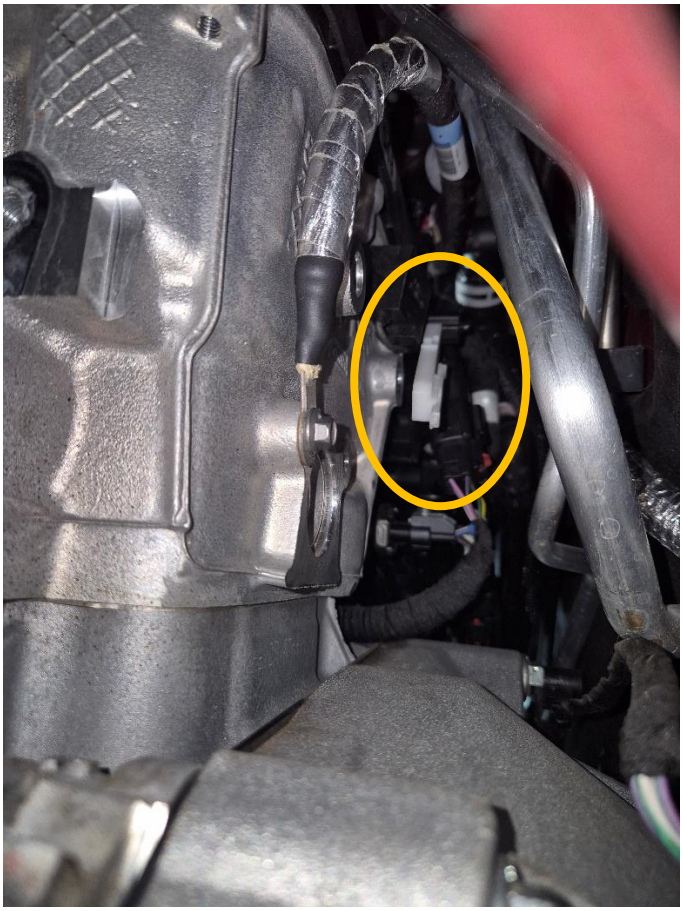
Above shows the front trans line bracket (circled in orange is the clasp part that wraps around the lines)

Bellow circled in orange shows where the above bracket clasp wraps around the lines





In this picture you can see how the starter motor wires have been re-routed behind the trans cooler lines. It’s important to tuck the wires right into the cavity circled in orange. We recommend using a zip tie to hold them in there so they don’t fall out & come into contact with the header.



Above circled in orange shows where the O2 sensor plug is unclipped from.

Below circled in orange shows the O2 sensor plug hanging down beside the transmission.

