1991-1995 TOYOTA MR2

COIL ON PLUG KIT

INSTALLATION GUIDE PART NO. RXF-010601

INSTALL TIME: 2 - 3 hours
DIFFICULTY LEVEL: 4
TOOLS NEEDED: socket driver
10 mm socket
7/16” socket
8 mm allen socket
6 mm allen socket
5 mm allen socket

1. Safely raise and support rear of vehicle, remove RH rear wheel. This will allow access to the engine crank pulley. Bring cylinder #1 to top dead center (TDC). **We highly recommend using a dial indicator for this process as the OEM cover can vary roughly 1 to 3 degrees from true TDC.** (Fig 1)

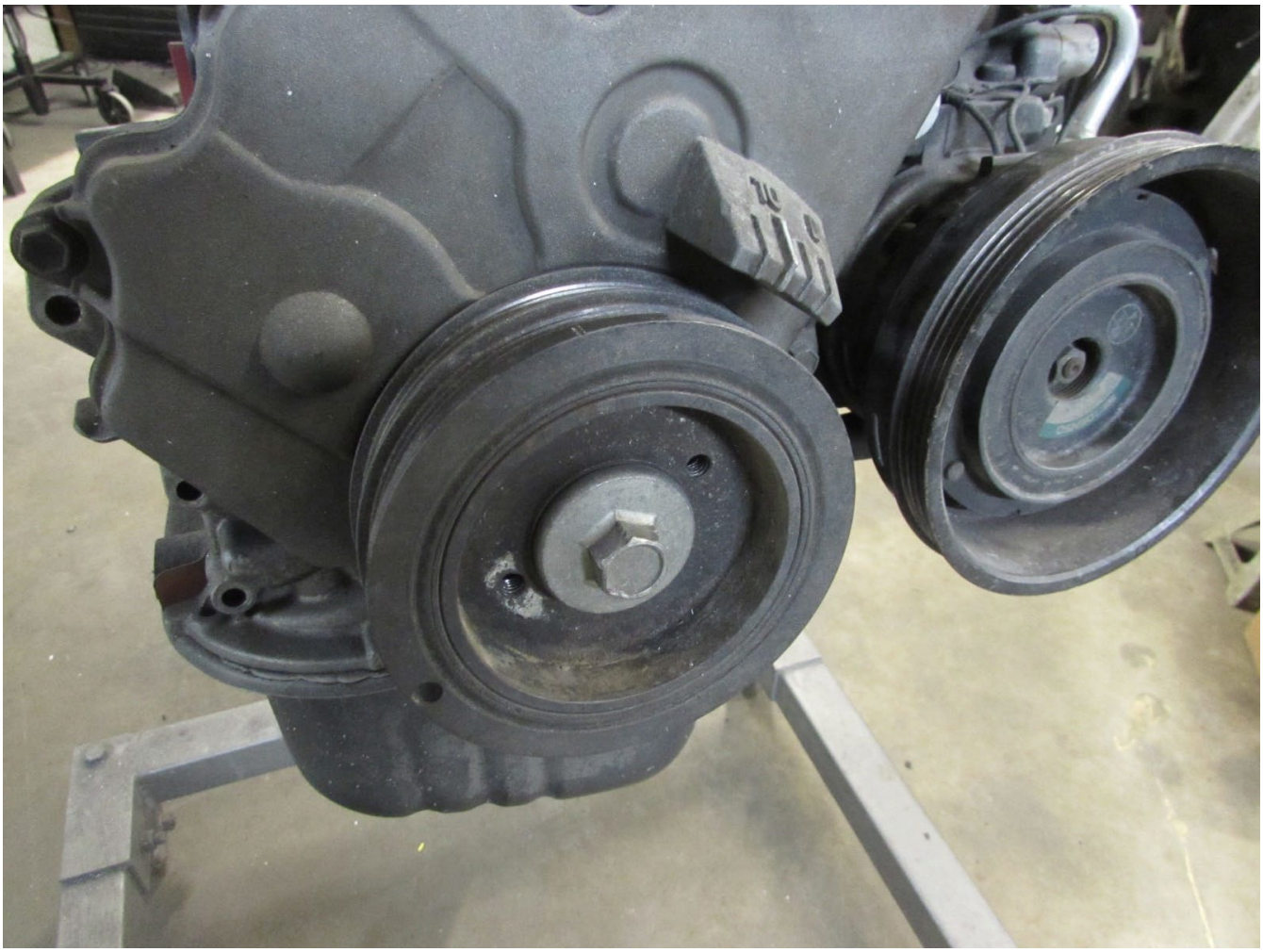

Figure 1

2. Remove the (2) M6 bolts using a 10 mm socket on the oil pump assembly. (Fig 2)

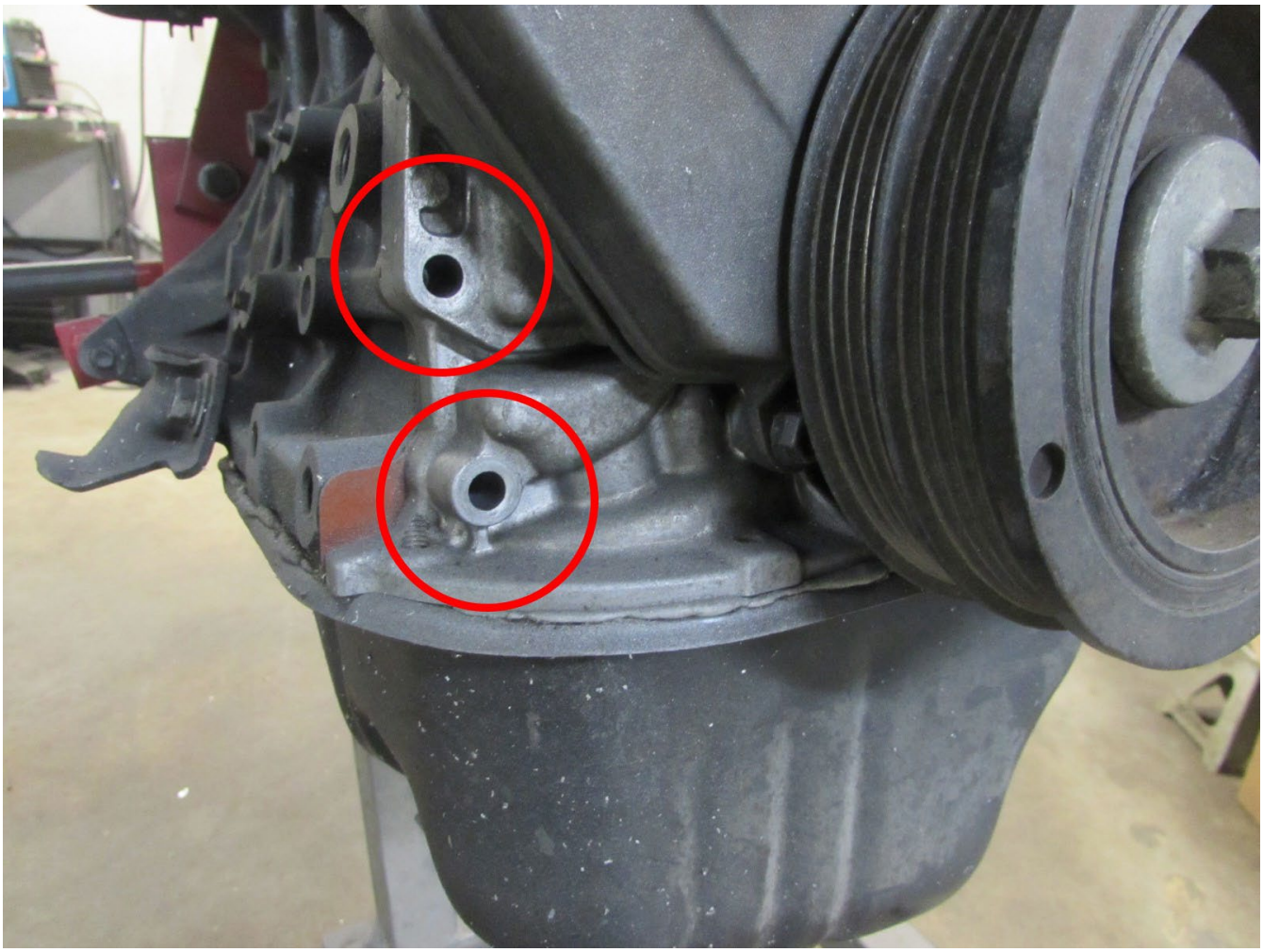

Figure 2

3. Install the crank trigger wheel adapter using a 6 mm allen socket. **Tighten to 33 ft-lbs**. (Fig 3)

TIP: Clean out the threads on your crank pulley before installing the supplied M8x1.25 25mm bolts.

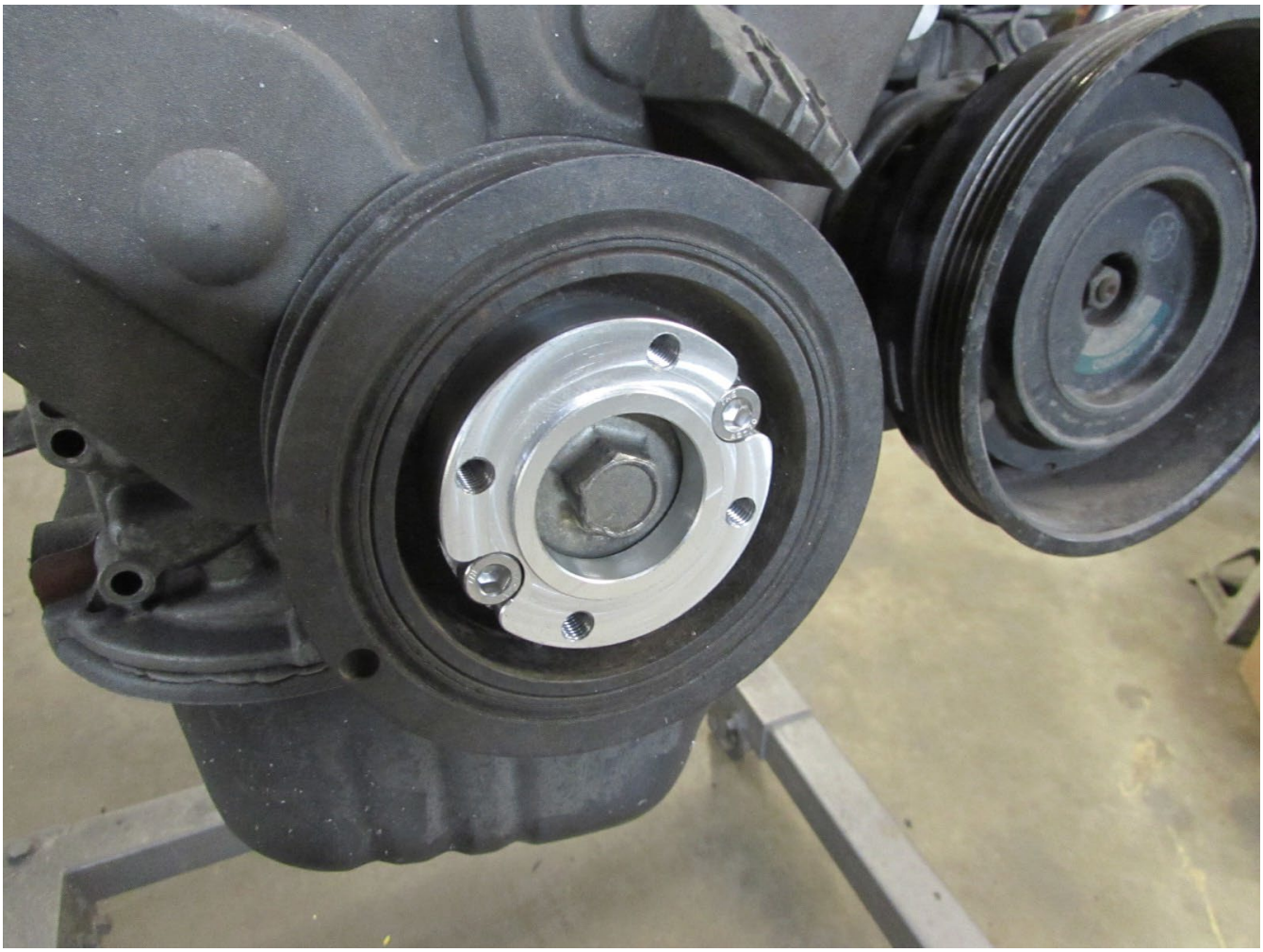

Figure 3

4. Install the crank trigger wheel on the crank adapter. Finger tighten the supplied M8x1.25 16mm length bolts with loc washers. (Fig 4)

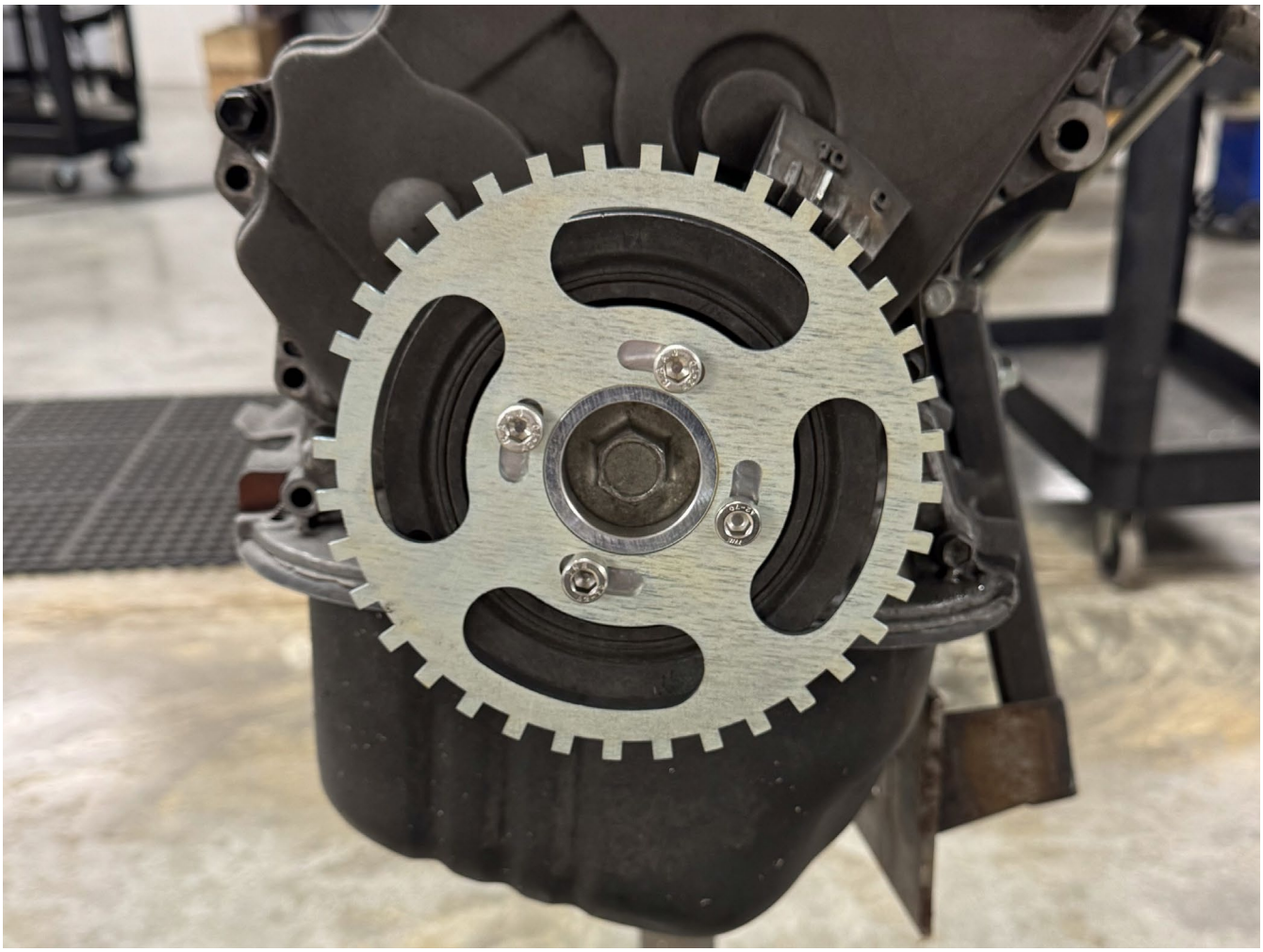

Figure 4

5. Install the crank sensor adapter. The M6x1 65mm bolt will locate towards the top of the engine with the longer spacer. The M6x1 70mm bolt and shorter spacer go below. Align with the trigger wheel and **tighten to 69 in-lbs** using a 5 mm allen head socket. (Fig 5)

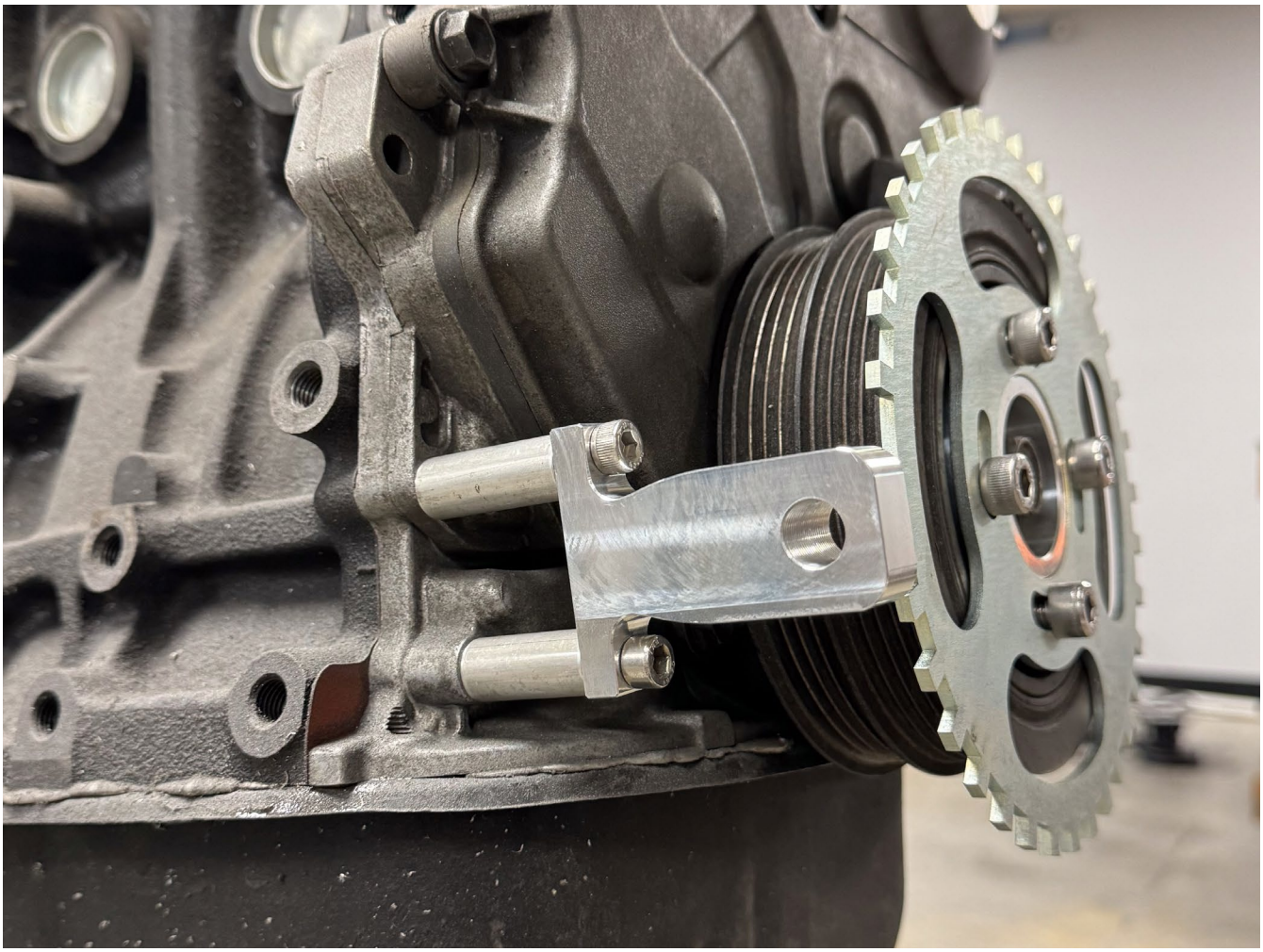

Figure 5

6. Thread the sensor into the crank sensor adapter. Bring it close to the trigger wheel and align it with the rising edge of the nearest tooth. Tighten the trigger wheel assembly using a 6 mm allen head socket to **33 ft-lbs**. If the crank and trigger wheel assembly moved during this turn, crank clockwise until you reach the same tooth for TDC (marking this tooth with a sharpie is helpful). Finally, touch the sensor to the crank trigger tooth and then back the sensor off 2 full revolutions. This is the recommended spec from Cherry Hall which is roughly 0.062”. (Fig 6 and Fig 7)

Figure 6

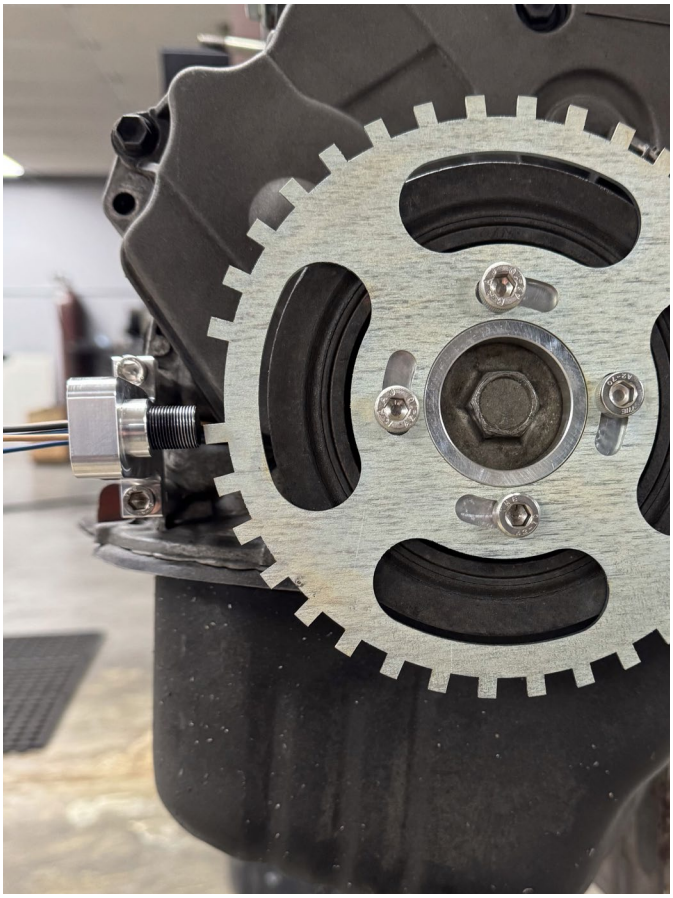

Figure 7

7. Remove the distributor assembly. **Please follow the BGB for this procedure.** (Fig 8)

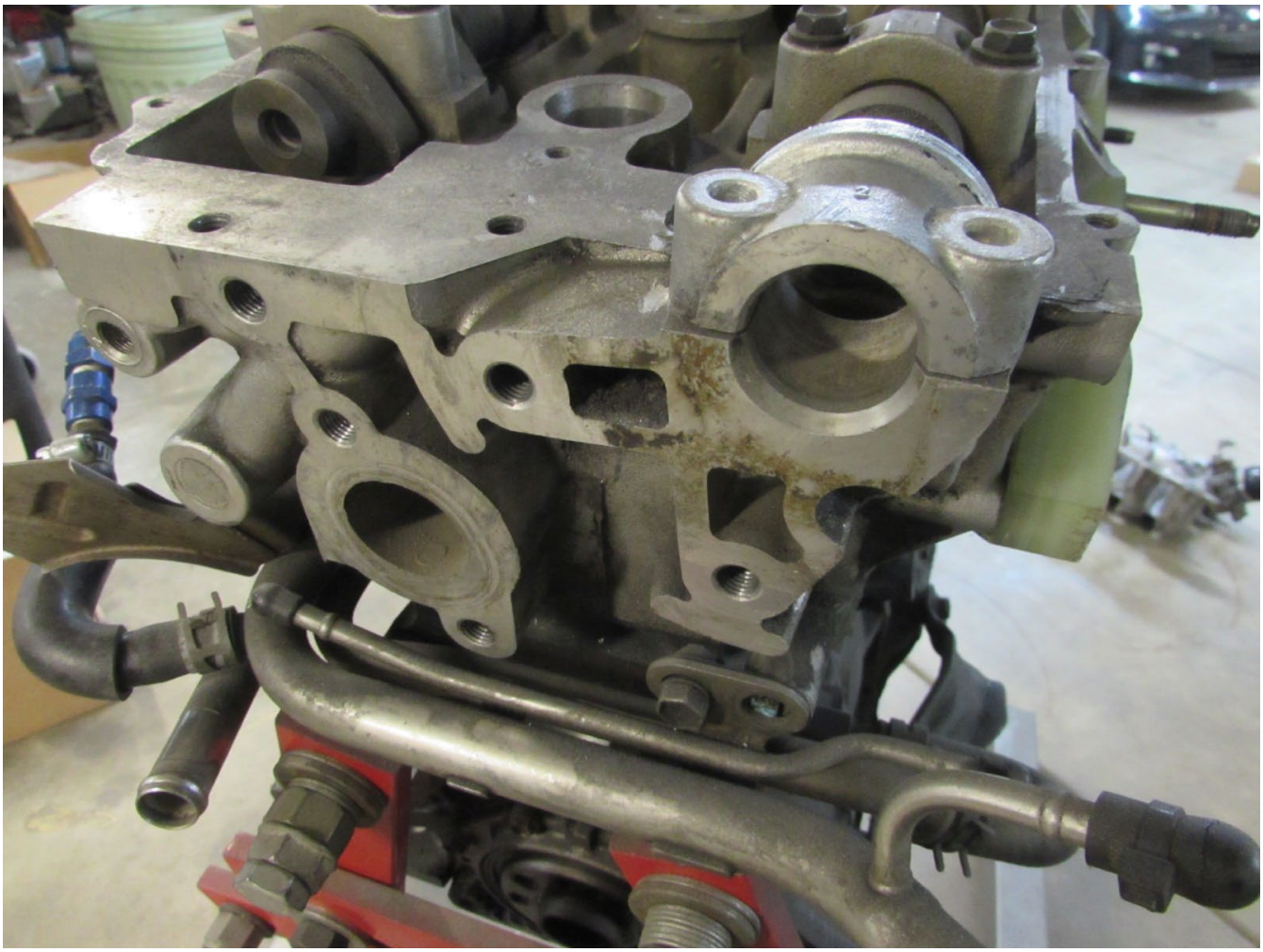

Figure 8

8. Install the cam trigger assembly into the intake cam key. Be sure the cam trigger is in the correct orientation, as the trigger is slightly offset. (Fig 9 and Fig 10)

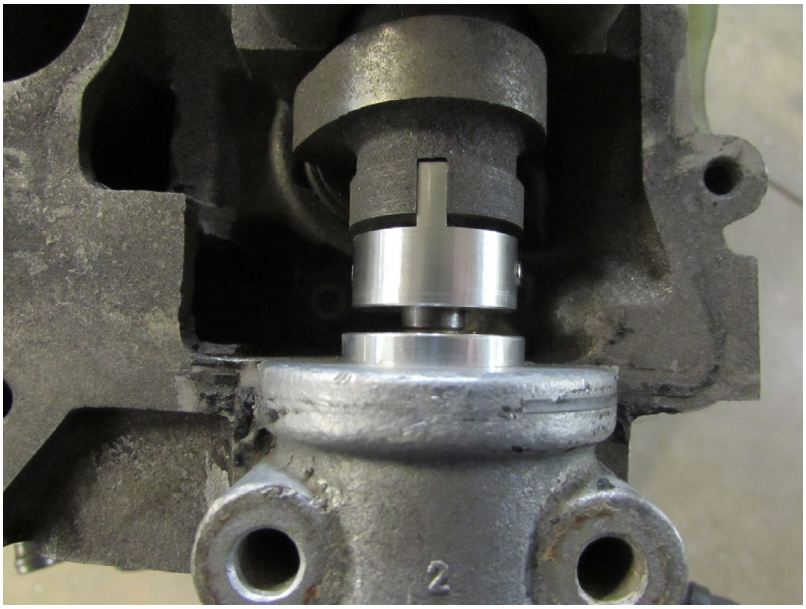

Figure 9

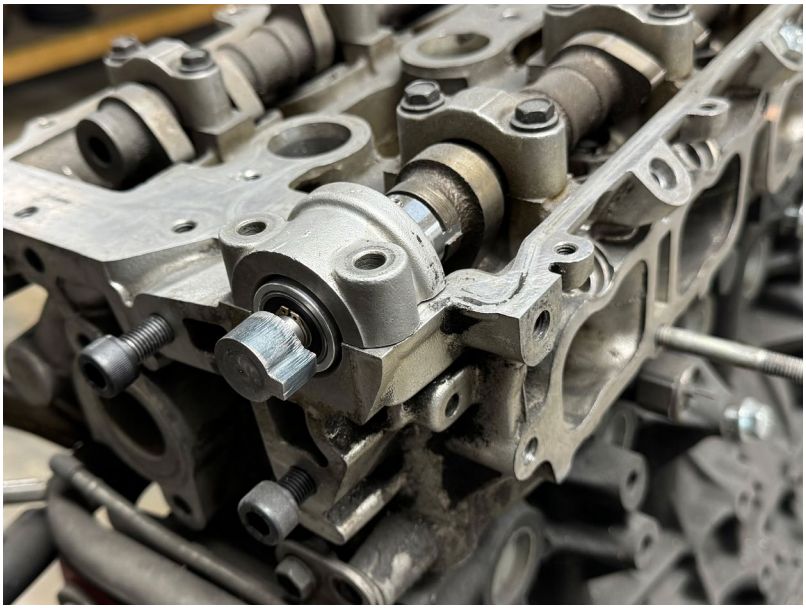

Figure 10

9. Install the cam trigger cover. Tighten the supplied M10 bolts using an 8 mm allen head socket to **29 ft-lbs**. Finally, thread the Cherry Hall sensor until it touches the cam wheel's external tooth, then turn it counterclockwise 2 full revolutions. This will set the gap at 0.062". Then, tighten the sensor jam nut. (Fig 11 and Fig 12)

Figure 11

Figure 12

10. Remove the 3 bolts located in the center of the valve cover. Then install the 1ZZ coil adapter plate using the supplied hardware. The longest M6x1 bolt will be used on cylinder 1. Tighten the 1/4”-20 nuts on the 1ZZ adapter plate to set the clinching studs, then remove the nuts. (Fig 13)

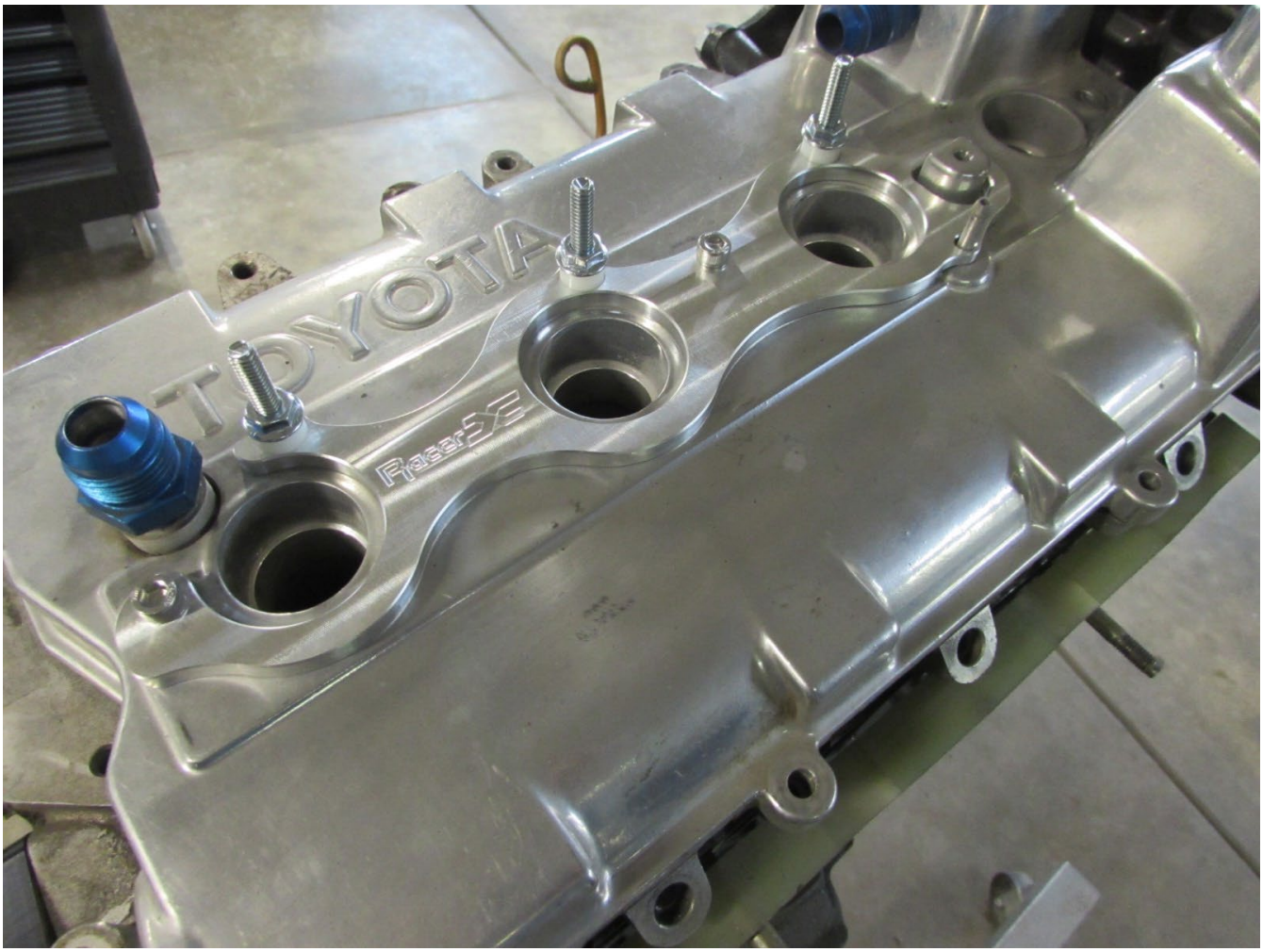

Figure 13

11. Install the 1ZZ coils and tighten 1/4”-20 nuts, do not over tighten nuts. Finally, install coil number 1 with the 1/2” spacer below the coil and M6x1 allen head bolt. This completes the mechanical installation of the 1ZZ coil on plug kit. (Fig 14 and Fig 15)

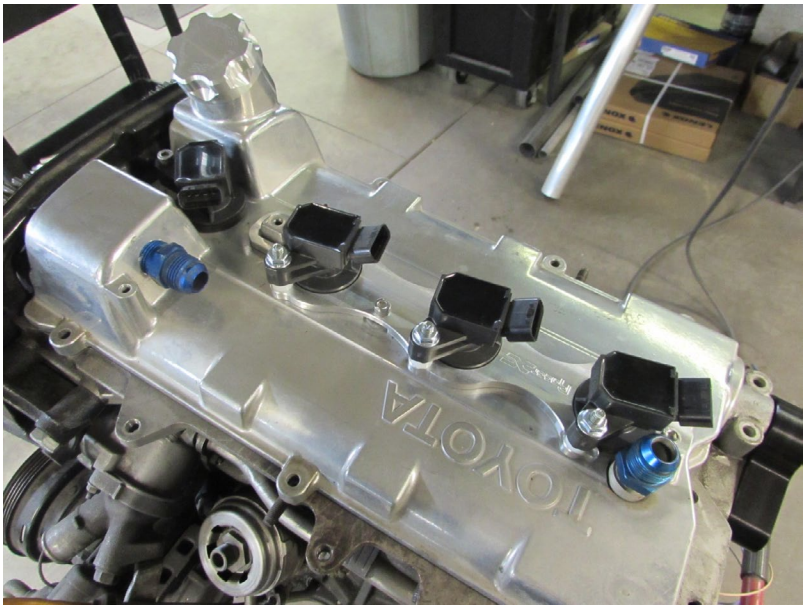

Figure 14

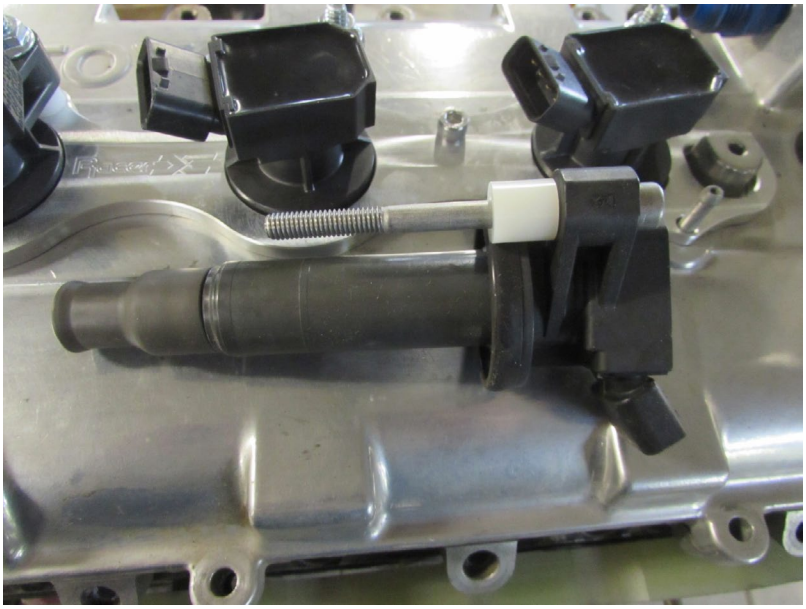
Figure 15

For wiring specifications please reference Cherry Hall part number GS1007.

Cherry Hall is now ZF Electronics. Please see the following link for wiring specifications:

http://switches-sensors.zf.com/us/wp-content/uploads/sites/7/2012/05/Datasheet_GS1005-GS1007_EN_29_11_17.pdf

****IMPORTANT:** **The sensors require 2.4K ohm pull up resistors which are supplied with the kit.**