

# TCM ADAPTIVE RELEARN PROCEDURE FOR 2008–2010 FORD F-250/F-350 SUPER DUTY (6.4L POWER STROKE DIESEL) USING A SOPHISTICATED SCAN TOOL LIKE FORD IDS, FORSCAN (WITH EXTENDED LICENSE), OR SNAP-ON VERUS/MODIS.

TCM Adaptive Relearn – Professional Procedure  
For 2008–2010 Ford Super Duty 6.4L Power Stroke Diesel

Tools Required:

- Ford IDS (dealer software), Forscan with extended license, or a Snap-On scan tool with Ford TCM support.

## Step 1: Battery Disconnect (Optional, for Clean Start)

- Disconnect both negative battery cables.
- Touch cables together for 30 seconds to fully clear KAM (Keep Alive Memory).
- Reconnect batteries and verify voltage is stable (12.6V+ key off, 13.5–14.8V running).

## Step 2: Connect Scan Tool & Identify Vehicle

- Launch scan tool and connect to vehicle OBD-II port.
- Let the tool auto-ID the VIN or manually select the correct year/make/model/powertrain (6.4L Diesel).
- Wait for all modules to populate and run a full health check.

## Step 3: Clear DTCs (If Present)

- Navigate to “Read Codes” and clear all current and stored fault codes in the PCM and TCM.
- Ensures adaptive strategies aren’t being blocked by stored errors.

## Step 4: Reset TCM Adaptive Strategy / KAM

- Go to TCM or Transmission menu.
- Select:
  - “Reset TCM Adaptive Strategy”
  - Or “Clear Transmission KAM”
- (Name may vary depending on tool)
- Confirm reset. You may see a note that a drive cycle is now required.

In Forscan:

Go to “Service Functions” ☒ Select “TCM – Reset Adaptive Tables” ☒ Run and follow on-screen prompts.

## Step 5: Perform TCM Drive Relearn Cycle

Follow these exact driving conditions:

### Phase A – Light Throttle Shifts

- From a stop, accelerate gently using 15–25% throttle.
- Let the truck shift smoothly through all gears up to 45–55 MPH.
- Keep engine RPM between 1,500–2,200 RPM.
- Coast to a stop.
- Repeat 3–5 times.

### Phase B – Moderate Throttle Shifts

- Accelerate using 30–50% throttle to about 60 MPH.
- Allow full range shifting (1st through overdrive).
- Keep RPMs under 2,800 RPM.
- Coast or brake to a full stop.
- Repeat 2–3 times.

### Phase C – Steady Highway Cruise

- Drive at a steady 55–65 MPH for at least 5–10 minutes.
- Helps the TCM learn converter lockup and steady-state shift behavior.

### Phase D – Low-Speed Shifts

- Drive in slow traffic or simulate stop-and-go.
- Repeatedly shift between 1st–3rd gears.
- Drive at 10–30 MPH with gentle acceleration and deceleration.
- Do this for at least 10–15 minutes.



## Step 6: Monitor Adaptation (Optional)

- Use live data to monitor shift times, solenoid pressure commands, and learned values (available in Ford IDS or high-end Snap-On tools).
- Confirm shifts become smoother after each cycle.

### Tips & Best Practices

- Avoid towing or aggressive driving during the relearn period.
- If shifts are still harsh after several cycles, recheck TCM/PCM calibration strategy and update if needed.
- If Forscan is used, make sure to install Ford’s extended PID packs for deeper diagnostics.