



14 Steps to Transition Your Fleet to Delo 400 ZFA

The rewards of lower operating costs and greater competitive advantage are well worth transitioning your fleet to Delo 400 ZFA. Begin your transition process today.

1 Make your case.

Ensure management buy-in with facts about this fuel-savings decision. Large fleets can save an average of \$1 million per year in fuel and servicing savings by moving to FA-4 engine oils. At an incremental cost of only \$60 per year per truck, transitioning to the more fuel-efficient FA-4 engine oil is one of the least expensive aftermarket methods to improve fuel mileage.

2 Check with your OEM.

The FA-4 oil category was designed to help engine makers meet tightening emissions standards. However, FA-4 oils might not be appropriate for all engines.

In late 2016, the lubricant industry launched two new API categories of diesel engine oils: CK-4, which is backwards-compatible with older vehicles, and FA-4, which was designed primarily for newer vehicles with engines built to today's more rigorous fuel economy and emission standards (greenhouse gas 2017). Chevron has developed a program that will allow use of its Delo® 400 ZFA 10W-30 oil in some engines model year 2010 and newer. See No. 14 for more information.

3 Develop a plan for operating your service shops using FA-4 engine oils.

Items 4-12 below could be part of your plan. Having goals and concrete steps everyone in your organization understands is key, and you can accomplish this with a well-written and communicated plan.

4 Train your technicians and provide them with resources.

Educate technicians about the differences in CK-4 and FA-4 oils and about why FA-4 is best for some engines. If technicians appreciate why a transition is needed, they are much more likely to buy into the plan and adhere to its steps. Also provide technicians with materials, products and incentives that will facilitate the transition process.

5 Work with your oil vendor to transition bulk tanks to FA-4.

Your vendor can advise you with regards to converting CK-4 tanks to FA-4 or purchasing new bulk tanks. If you will convert existing tanks, follow industry best practices such as drawing tanks down to a 10% heel before filling with FA-4. To maximize the fuel-economy benefits of the first tank fill, the lower the heel the better. A vendor that can supply product quickly can enable a smaller heel.

6 Provide a well-organized work area with clearly labeled containers and tanks.

Some fleets will need to operate their shops with both FA-4 and CK-4 oils until all their vehicles are approved to use FA-4 (unless they are leveraging a program that enables FA-4 use across their fleets; see step 14). During this phase, labeling oil containers with product names and indicators is critical to preventing misapplication.

Differentiate containers, whether they be bulk tanks, totes, drums or handheld bottles, in as many ways possible. Consider investing in oil-storage containers that are bilingual and color and shape coded. You can add identifiers yourself as well, using paint, tags and even writing on containers which truck makes and models use the oil inside.

Some engine oil manufacturers like Chevron offer labeling programs to mitigate contamination risk and help ensure your trucks get the right oil.



Delo®

7 Label dispensing equipment.

Dispensing equipment should signal oil type as well, and you can do this by tagging nozzles/delivery heads with product information and painting them with your color theme.

8 Place decals on engines.

Create vinyl stickers that you can put on your trucks' engines, near oil fill ports. The stickers should note the type of oil to be used in the engine and can also include your color and shape codes.

9 Update service systems.

Many shops have digital systems to track the servicing of each truck, including the products it uses. Ensure this system is updated with the FA-4 product and assess whether the service interval should be extended (see step 12).

If your fleet supplements its in-house servicing with preventive maintenance from a truck stop, work with the truck stop to ensure the FA-4 product is available at locations your trucks visit regularly. Ensure a note is included in the truck stop's service system to only provide FA-4 product for the trucks you indicate.

10 Create charts with names/photos of truck models and their corresponding oil products.

These reference charts could go on a wall near bulk containers or you could attach posters directly to bulk tanks to show which trucks should receive the oil in particular tanks.

11 Educate drivers about oil types.

Drivers sometimes need to add engine oil while on the road, so it's important to make sure drivers know which oil products should be used in the rigs they drive.



12 Choose a brand with a solid oil analysis program.

Oil analysis should be a standard operating procedure. Regular oil analysis monitors both your oil and engines' health. It also lets you know if you can extend oil-change intervals. Longer intervals are another way FA-4 oils can give your fleet a competitive advantage. Chevron test fleets have significantly extended OEM-recommended intervals, with stellar results. For convenience and efficiency, select an oil partner that provides digital analysis and an app. Notify your lab of the change to FA-4 oil either directly or through your lubricant supplier.

13 Regularly evaluate your plan and make necessary adjustments.

Measure your plan by calculating changes in fuel efficiency, collecting oil samples, monitoring whether employees followed the steps of the plan, and checking for misapplication through oil analysis and oil-inventory audits. Measure fuel efficiency by keeping accurate fuel logs or downloading information from ECMs. When using ECMs, analyze fuel consumption before the switch, then reset the fuel-consumption data when you transition trucks to FA-4. Assessing fuel economy across a large number of vehicles provides the best information. A good oil-analysis provider will tell you about any oil/engine mismatches. If numbers don't line up when you audit your oil supplies, this is another indication technicians are misapplying products. If your evaluation turns up problems, take corrective actions in the areas of labeling, training, etc., as specified.

14 Select the oil partner that allows you to use FA-4 oil across your fleet.

The bigger the fleet portion you can convert to FA-4 oils, the lower your operating costs and the easier the transition process will be. At Chevron, we've developed an industry-leading program that gives your fleet the opportunity to take advantage of Delo 400 ZFA 10W-30 in Daimler HD engines 2010 or newer, Cummins HD engines 2017 or newer, and additional engines 2013 or newer.

Our goal is to remove barriers to FA-4 adoption. If your supplier can't assist you with the steps above, contact Chevron today to learn how we can be your transition partner.