

The Gear Gazette

Standard Transmissions * Differentials * Drivelines * Clutches * Flywheels Removal & Replacement * Axle Shafts * For Mid-Range and Heavy Duty

Number 17 – December 2012

Mounting Pressures on Fleet Managers

Fleet management is a complex job. In addition to constant concerns for downtime, fuel mileage and maintenance costs, fleet managers have to keep tabs on the ever-changing world of state and federal regulation.

From low-rolling-resistance tires, to muffler regen issues, to warranty related down time, to trailer skirts and many other impending regulations, a job that was a careful management of time, money and resources now requires the consideration of dozens of unknowns:

- Will my new trucks go back and forth from the dealership for warranty issues?
- Will trailer skirts improve or worsen my fuel mileage?
- How much downtime will my trucks have for filter regen?
- Will this get worse as the trucks age?
- Do I have enough budget to replace all my tires?
- What will the next set of regulations require me to purchase for my fleet?

Even when a fleet is running at maximum efficiency, unanticipated regulations can cause unexpected downtime and maintenance costs to skyrocket.

Call Toll-Free:

(800) 432-7348 #1

Local # (562) 921-7754



Auto-Shift Transmission Common Problems

Fuller's auto-shift transmissions are a boon to drivers but sometimes a headache for mechanics.

Auto-shift transmissions use what is essentially an ordinary manual transmission with an electric-motor-driven shifter assembly and an on-board electronic control unit (ECU).

Additionally, many have a second device that facilitates communication between the engine ECU and the transmission ECU.

Working on auto-shift transmissions requires extensive troubleshooting procedures before the mechanic begins changing parts, and we often see some new parts on auto-shifts that have made it to our shop after the regular mechanic gives up.

Very often, we'll find that the mechanic replaced the ECU, the X-Y shifter and sometimes the shifter assembly in the cab, even though the troubleshooting procedures indicate there's nothing wrong with these parts.

Often the real problem is a bad wiring harness or sensors or worn parts in the transmission.

The other common problem is that the complaint the driver is reporting doesn't happen consistently. Perhaps it only happens once or twice per week or per month. This makes it difficult to know if the problem has been located and repaired.

Make Checking for Clutch Pedal "Free Play" Part of Your Routine

The most common cause of failure for clutches, apart from ordinary wear and age, is operating the clutch out of adjustment.

Pull-type clutches with mechanical linkage should always have some "free play" in the clutch pedal. That is, you should be able to depress the clutch pedal and inch or so before you feel resistance as it begins to disengage the clutch.

As a clutch wears, the throw out bearing gradually moved forward toward the clutch assembly, and this causes a slow decrease in free play.

Free play indicates that there is a gap between the throw out bearing and the clutch release fork (which is attached to the clutch release linkage).

Once the free play is gone, the clutch release fork actually begins to prevent the clutch for fully engaging, as it is holding the throw out bearing back.

Eventually, as the free play goes away and the throw out bearing continues to try to move forward, the pressure on the clutch discs is decreased to the point that the clutch begins to slip.

Once the clutch begins slipping, it's only a matter of time until the heat from the slippage severely damages the clutch assembly.

A quick regular check for clutch pedal free play can avoid a costly repair down the road.



Call Toll-Free: (800) 432-7348 #1

Local # (562) 921-7754

Do You Know if CARB Regulations Affect You?

The California Air Resources Board (CARB) requires that anyone who directs the operations of trucks or busses subject to the Truck and Bus Regulation must verify compliance.

Even those who do not own the vehicles but only direct their operation must verify CARB compliance.

More information and details are available by contacting CARB at (866) 6DIESEL, (866) 634-3735 or checking their web site at www.arb.ca.gove/dieseltruck.



CALIFORNIA CLUTCH & GEAR Standard Transmissions Differentials * Drivelines * Clutches Flywheels * Axle Shafts Removal & Replacement For Mid-Range and Heavy Duty

The Gear Gazette is published as a service of California Clutch & Gear, Inc. All information contained within this document is provided for general information purposes only and on the understanding that none of the content herein constitutes professional advice.

Copyright 2012 California Clutch & Gear, Inc. All rights reserved. No part of this publication may be reproduced without express permission of the publisher. All submissions become the property of California Clutch & Gear, Inc.