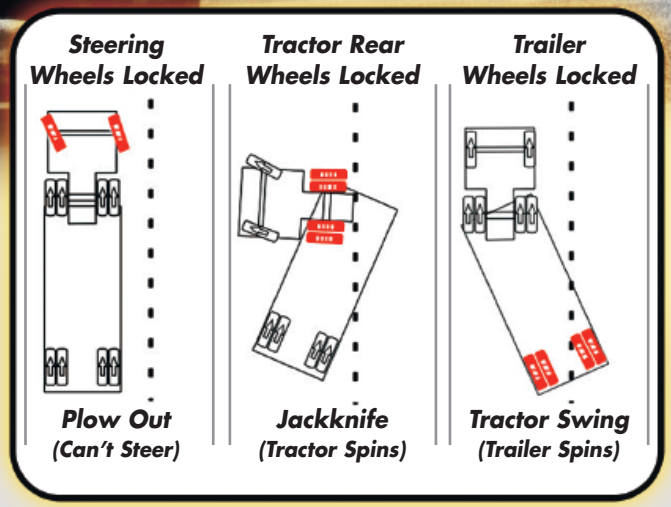
ABS: LOOK BEFORE THEY LOCK

Operation Airbrake

UNDERSTANDING YOUR VEHICLE'S ANTILOCK BRAKING SYSTEM (ABS)



ABS—Helping You Brake Safely

Every day on the road you can be faced with situations where you need to take quick, decisive action. Knowing in advance that your vehicle has ABS and confirming that the ABS is working properly can be critical in helping you brake safely and effectively.

A vehicle equipped with ABS helps you maintain steering control and avoid skidding, jackknifing and trailer swing-out during emergency or slippery road surface braking situations. When you apply the brakes, the ABS senses when a wheel is about to lock and releases just enough brake force to get the wheel rolling again while maintaining as much braking force on the wheel as possible. It may repeat this sequence several times a second and may control each wheel differently, helping to keep the vehicle in control.

ABS Indicator Lamps

ABS indicator lamps are amber-colored and marked with the letters "ABS." They are there to tell you that the ABS is working properly. Know where the ABS indicator lamp is on every vehicle you operate and how to check that it's working properly. The lamps are located on the instrument panel of trucks, buses and truck tractors ('dash-mounted') and on the exterior of trailers, near the red side marker lamp on the left rear side ('trailer-mounted'). Converter dollies have a lamp located on their left side. If the vehicle you drive was built after March 1, 2001 and is equipped to tow a trailer, it will actually have two ABS lamps on the dash: one for the towing vehicle and one for the trailer(s).

How ABS Indicator Lamps Work

When ABS is working properly, each time the vehicle ignition switch is turned on and kept in the on position, the ABS indicator lamps will turn on for a few seconds and then turn off. One exception is for combinations equipped with constant power supply (even with key off) needed for safety or security on certain trailers or loads, such gasoline tankers, munitions loads, and others. In this case the ABS indicator lamp check can be accomplished by disconnecting and reconnecting the power connector (while following appropriate precautions for the powered systems).

When power is supplied to the ABS controller, the ABS indicator lamps momentarily turn on as the ABS automatically conducts a self-test. If the lamp does not come on at all, there could be a problem with the indicator lamp, the wiring, or the ABS controller. When an ABS malfunction is detected, the ABS indicator lamp stays on. If no malfunctions are detected, the lamp turns off after a few seconds.

ABS on trailers also receives backup power through the brake lamp circuit. In some cases, with certain types of malfunctions, this can cause the ABS indicator lamp to turn on each time the brake is applied. While the ABS may be partially working in this condition, it is not working properly. Whenever the ABS indicator lamp turns on when you are driving, there is an ABS malfunction present that requires repair. Make sure you have any ABS problems fixed as quickly as possible. Remember, if the lamp does not work you will never know if the ABS stops working.

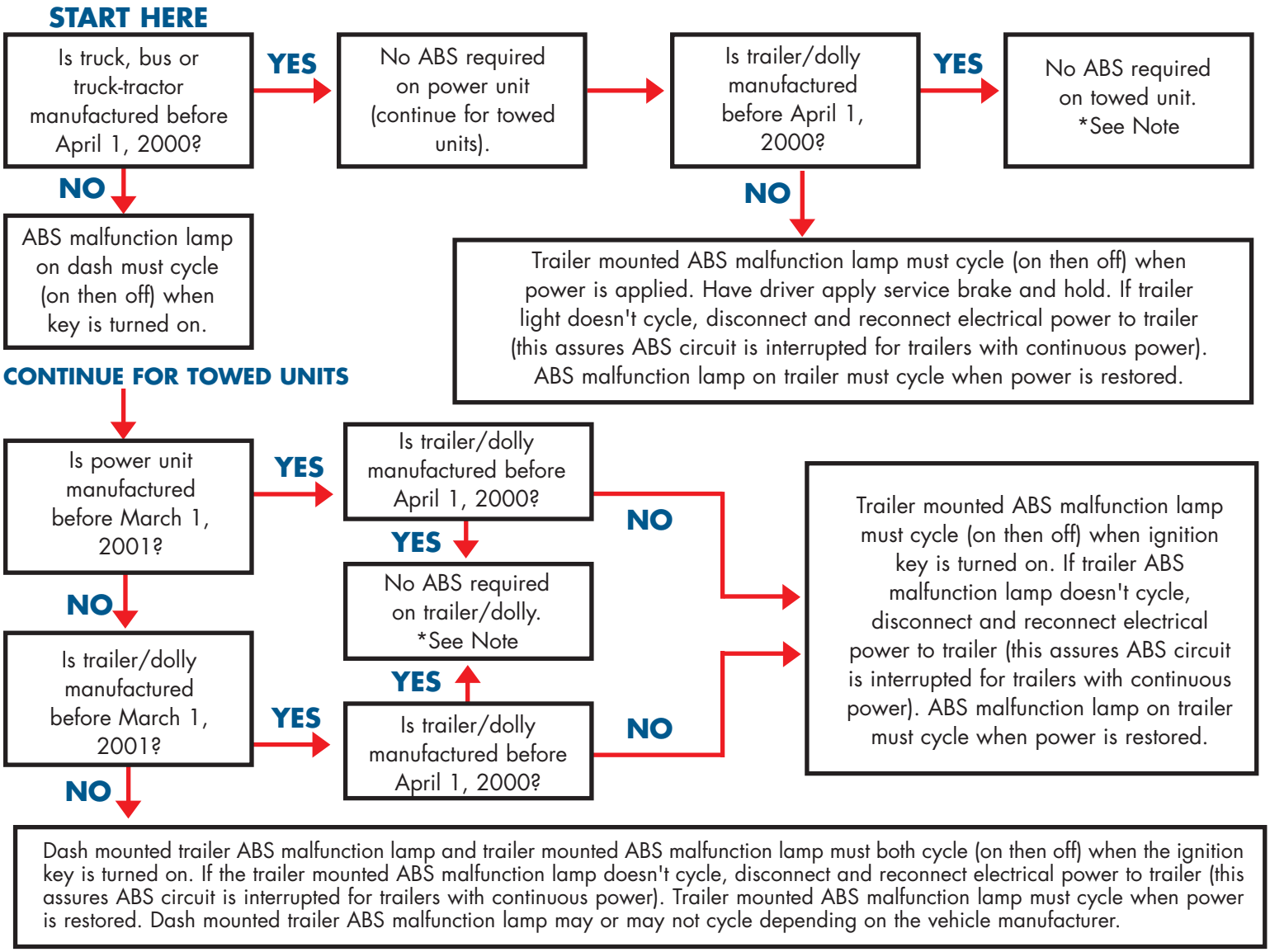
Know Your ABS Is Working—Check It During Your Pre-trip!

Knowing your ABS is working can give you peace of mind that it can help you when you need it. Always confirm that your ABS is working—see that your ABS lamp(s) turn on then off when power is applied—during your pre-trip inspection.

For assistance in determining whether your vehicle is required to be equipped with ABS, refer to the flowchart on the back of this page. Vehicles manufactured before ABS was required may have ABS but the malfunction lamps can function differently. In this case, contact your brake service professional for guidance. The chart may seem complicated, but the actual ABS check is very easy. Once you do it a few times on your vehicle it will become second nature and will take very little extra time during your pre-trip inspection. And remember that an ABS malfunction is a violation if your vehicle is required to be ABS equipped.

ABS Inspection Procedure
Canadian Field Reference
Air Brake Equipped Vehicles

Performing ABS inspections, whether on a single unit or combination vehicle, requires determining applicability of regulations using the date(s) of vehicle manufacture, powering the ABS system off and on and confirming whether the ABS malfunction lamps show violations. Additional steps are included for inspection of vehicles requiring ABS that are in combination with vehicles not requiring ABS as well as trailers towed by power units that provide continuous power to trailers. The flowchart below summarizes the regulatory applicability, including effective dates, and the procedures for inspecting ABS on all vehicles and combinations in Canada. When required ABS malfunction lamps do not function or remain on, please refer to the ***Antilock Brake System (ABS) Inspection Bulletin*** for additional information on how to record and assign violations.



***NOTE:** If multiple units are being towed, any unit that is required to have ABS and is towed behind a vehicle manufactured before April 1, 2000, or a vehicle exempt from ABS requirements must have functional ABS (unit ABS malfunction lamp cycles on then off) upon service brake application.

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