



LANDING GEAR

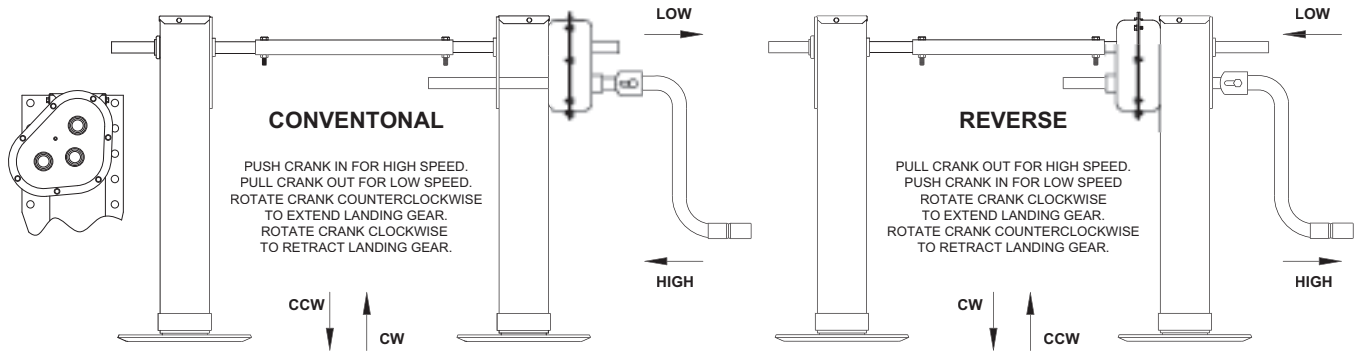
OPERATING INSTRUCTIONS & MAINTENANCE PROCEDURES



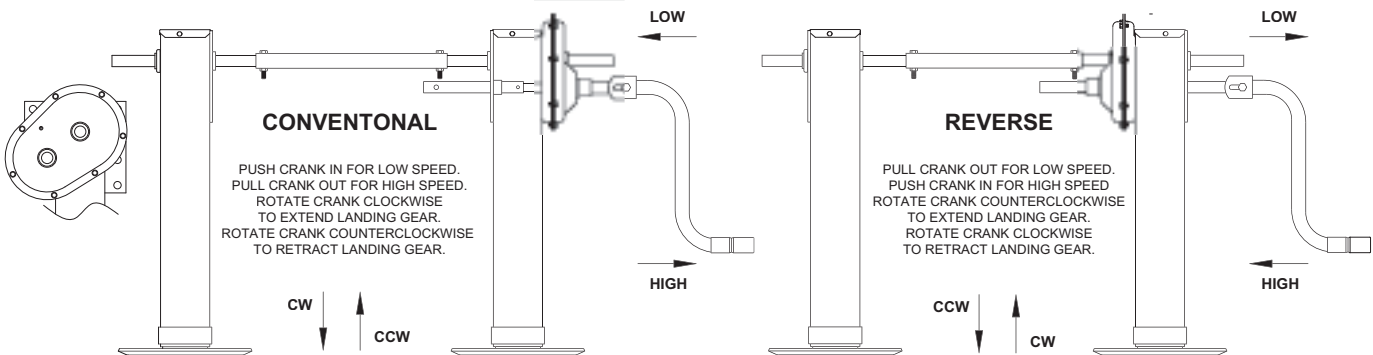
Challenger Series - Model 50000
Contender Series - Model 51000
Fast Gear Series - FG4000



OPERATION Model 51,000 (8 Bolt) Model 50,000 (10 Bolt)



OPERATION Fast Gear



TO REMOVE TRACTOR FROM TRAILER:

1. Position the trailer so that the landing gear shoes will rest on a firm level surface when landing gear is extended.
2. Shift landing gear to high gear and extend landing gear until shoes contact ground.
3. Shift landing gear to low gear and lift trailer approximately (1) inch.
4. Unlock fifth wheel, uncouple air lines, and drive the tractor out from under the trailer.

TO CONNECT TRACTOR TO TRAILER:

1. Ensure that the trailer is at a sufficient height to allow coupling of the tractor and trailer.
2. Connect air lines from tractor to trailer, then lock trailer brakes and back tractor under trailer, then lock fifth wheel.
3. Retract landing gears to fully retracted position.
4. Store crank on the crank holder.

LUBRICATION – STANDARD:

When manufactured, the landing gears have been adequately greased with high quality lubricant. It will be necessary to periodically supplement this lubricant to maintain satisfactory performance. Use a molybdenum type grease with appropriate temperature range for your operating conditions. Gearbox leg has (3) grease fittings; leg without gearbox has (2) grease fittings.

1. Prior to lubrication, extend legs approximately (2) inches from maximum retracted position.
2. For optimum performance, every (6) months lube both legs at all grease fittings.
3. Add 1/4-lb grease at each grease fitting.

LUBRICATION – NoLube:

No additional grease is required.

TROUBLE SHOOTING:

In normal trailer operating service, certain components such as shafts, bushings, bearings, gears, and screw and nut assemblies are subject to wear and will require replacement.

However, under extreme usage condition exceeding AAR-931 Durability Requirements the same components may require replacement more frequently.

Landing gears hard to crank—check the following:

PROBLEM

1. Cross driveshaft in a bind or tight between shafts.
2. To determine which leg turns hard
3. Inadequate lubrication.
4. Alignment.
5. Upper housing or retracting tube may be bent.
6. Screw and nut assembly may have excessive wear and be hard to turn or inoperable.
7. Check for proper clearance between pinion and bevel gear.
8. Excessive wear or damage to pinion, bevel, input, idler and/or output gears.
9. Landing gear jack shafts and/or shift shaft binding.
10. Bent retracting screw.
11. Damaged thrust bearing.
12. Damaged collar.
13. Damaged shift lock boss and/or shaft bearing boss.
14. Weld blow through where strut bracket is welded to housing. (With no-load on landing gear, the retract tube should have free play inside housing.)
15. Impact to jack shaft end has pressed bearing boss into gearbox half.

SOLUTION

- Bolts must be loose and cross driveshaft free to move in slots provided.
- Remove cross driveshaft bolt and crank each leg on the jack shaft.
- (See Lubrication Instructions).
- Legs must be timed together, parallel to each other and perpendicular to the trailer crossmembers.
- Replace damaged part.
- Disassemble and inspect for wear. If screw and/or nut show considerable wear, then replace entire retracting tube assembly.
- Minimum end play 1/32".
- Replace damaged gears.
- Check to see if trailer mounting bracket has sufficient size clearance hole to miss landing gear boss or shift shaft.
- Replace entire retracting tube assembly.
- Replace.
- Replace.
- Replace.
- Grind weld as required and re-weld.
- Press boss back into position.

Trouble Shooting/General:

- | | |
|---|--|
| 1. Right-hand leg (gearbox leg) operates but left-hand leg does not move. | Broken cross driveshaft bolt or damaged cross driveshaft. Replace damaged part. |
| 2. Legs will not operate when turning jack shaft. | Damaged pinion or bevel gear. Replace damaged part. |
| 3. Right-hand leg will not operate, shift shaft will turn but jack shaft does not turn. | Damaged input, idler, and/or output gear. Replace damaged part. |
| 4. Leg locked and will not turn. | Bent retracting screw or damaged riser nut and screw. Replace entire retracting tube assembly. |
| 5. Right-hand leg will not stay fully shifted in low gear. | Shift lock ball and shift lock spring missing or damaged shift lock spring. Replace missing or damaged part. |
| 6. Noisy gearbox. | Check that shift shaft movement is 1" when shifted between gears. |

CAUTIONS:

Landing gears are designed to meet I.T.M.A. recommended practice RP-4 and A.A.R.-931 requirements.

When operating the landing gears, it is necessary to observe some cautions. By doing so you will ensure long trouble free service.



CAUTION

1. Do not over extend or over retract landing gears.
2. Never drop trailer on landing gears. Always extend landing gears until sand shoes contact ground, then lift trailer approximately 1 inch before removing tractor from trailer.
3. Always ensure that landing gear shoes or foot pads will rest on a hard ground surface or concrete pad. If necessary, place shoes on a support plank to prevent the landing gears from sinking into the ground surface. (This is especially important with liquid cargo where a shift in the contents could overturn the trailer!).
4. Always retract landing gears fully before moving the trailer.
5. Always store the crank on the crank holder after extending or retracting the landing gear.
6. Replace all damaged or missing parts.
7. Failure to replace worn or damaged riser nut and retracting screw assembly could cause a failure.



GO THE DISTANCE.

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