LANDING GEAR

INSTALLATION AND SERVICE

eurohitch

Installation, Operating and Maintenance Instructions

WARNING

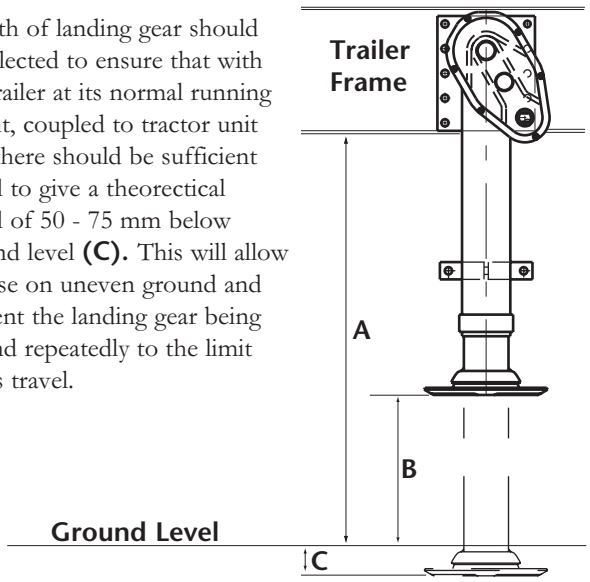
Mounting must be carried out in accordance with Holland instructions

CORRECT LANDING GEAR SELECTION

Holland landing gear are available in various different ranges, with each range available in up to six lengths and with five alternative foot groups. In order to obtain optimum performance it is essential to fit the correct landing gear for your application

Length :

Length of landing gear should be selected to ensure that with the trailer at its normal running height, coupled to tractor unit **(A)** there should be sufficient travel to give a theorectical travel of 50 - 75 mm below ground level **(C).** This will allow for use on uneven ground and prevent the landing gear being wound repeatedly to the limit of it's travel.



Consideration should be given to ground clearance **(B)** using knowledge of operating conditions and practices for the trailer concerned. Where a possible problem is perceived consider using the Mega series leg with optimized height to lift ratio

WARNING

Repeated winding of landing gear to it's physical stops can cause damage
do not use force

Holland reserves the right, without prior notice, to change specifcations and dimensions

Type :

The standard LGE series landing gear is suitable for the majority of road transport applications, however, the heavy duty EH series is recommended for more ardous operations such as forestry and quarry work.

The EH series is also recommended for trailers regularly used on unaccompanied Ro-Ro ferry operations and trailers which are normally loaded when supported only by the landing gear, either by forklift truck, particularly when heavy spot loads are placed in front of the landing gear, or by overhead crane.

The EF Series uses the latest technology and has a high speed gearbox, is manufactured from high grade special steel for higher side loads and incorporates the floating nut to eliminate stress and damage which can be caused by 'dock walk'.

The Mega series is designed specifically for low deck, high cube trailers with its optimized height to lift ratio.

Footgroup :

When parked, trailers with air suspension can suffer from loss of air pressure from the system causing the air springs to deflate and resulting in forward movement of the trailer. This forward movement places stress on the landing gear and can lead to damage. Therefore air suspension trailers should be fitted with either rocking feet or Kompensator feet which allows for this forward movement without any stress being placed on the legs. **Landing gear with wheels are not suitable for this application.**

Where the characteristics of the operation do not allow either rocking or Kompensator feet to be used on an air suspension trailer then heavy duty EH series legs **must** be used for this application - but see note on EF series below

Skidfoot or Self Level Foot are suitable for use on soft or uneven ground but please take note of the above if using on air suspension trailers.

The EF series is also available with the **R**ubber **C**ushion **F**oot which absorbs 50% more shock loads than other footware and with the floating nut is suitable for air suspension trailers

INSTALLATION

Prior to installation ensure that both legs are fully retracted to avoid the possibility of unequal length and therefore uneven loading when in operation.

When mounting legs they must be perpendicular to the trailer frame structure, in alignment and parrallel to each other.

The cross shaft should be cut to the correct length to give a minimum of 5 mm and maximum of 10 mm free play from side to side.

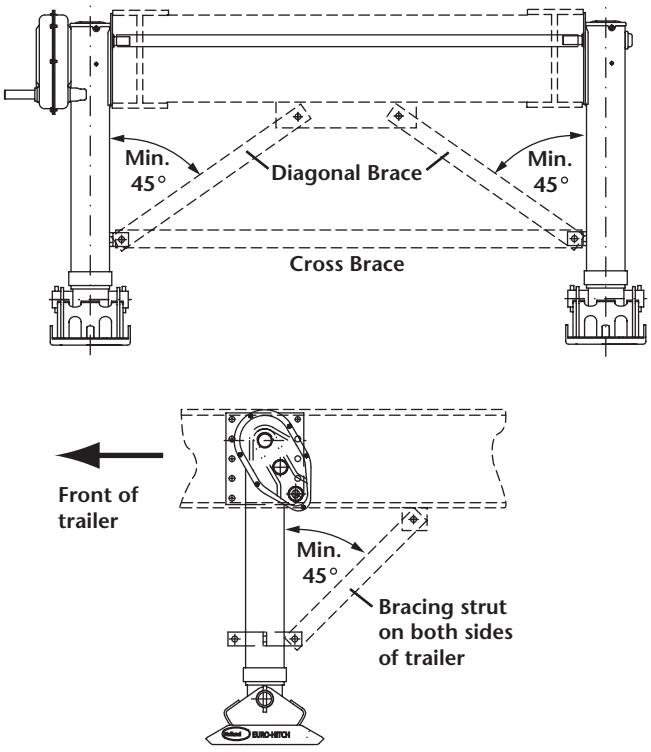
WARNING

Cross shafts which are too long will cause binding of the gearing in the leg resulting stiff operation and excessive wear to bushes, etc.

Holes cut in the trailer frame to allow for the cross shaft to pass through must be correctly aligned and large enough to prevent any binding of the shaft during rotation - **Check clearance after installation.**

Attach each mounting plate with a minimum of 8 x M14 grade 8.8 bolts.

Fit cross brace and diagonal support struts as shown in the diagram below, attach with M16, grade 8.8 bolts.



Holland recommends the use of steel angle for all bracing struts, not tubular braces, which can be weaker at the point of transition from tube to flat

Attach crank hanger to lowest bolt on the mounting plate on the crankshaft side of the gearbox leg. This position can be adjusted to suit different lengths of handles, etc.

OPERATION

WARNING

Before attempting to operate the landing gear you must read and understand the following

Peform all procedures in a well lit area clear of obstacles and other personnel

Always grip the crank handle securely with both hands

Maintain a proper footing at all times

Never attempt to shift gear while the landing gear is under load

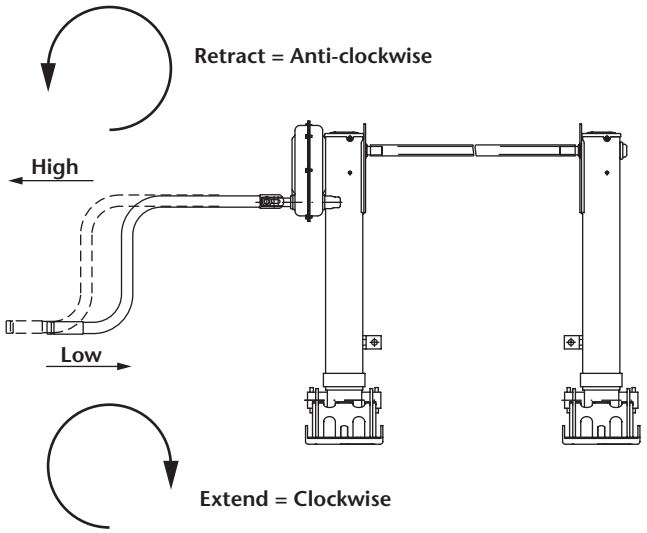
Lifting and lowering of the trailer must always be done in **low gear**

Do not attempt to lift or lower the trailer in high gear, serious personal injury could occur

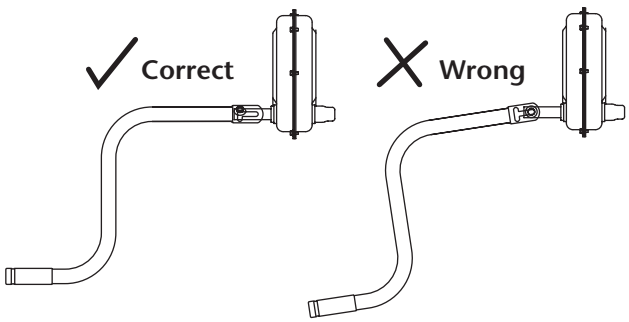
Always secure the crank handle when not in use.

Handle Operation :

- Push Handle in for low speed
- Pull Handle out for high speed
- Turn crank anti-clockwise to retract
- Turn Crank clockwise to extend

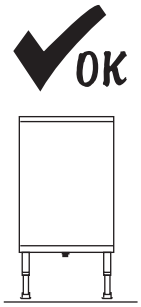


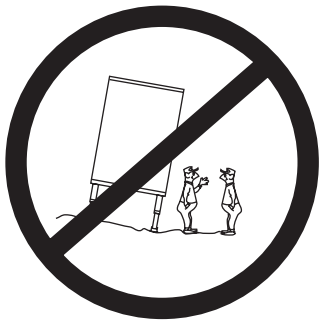
Before any winding operation handle 'T' slot must be fully engaged on attachment bolt.



UNCOUPLING INSTRUCTIONS

Position tractor and trailer on firm level ground, clear of persons and obstacles.





1) Set trailer brakes

2) Slowly back tractor tightly against trailer

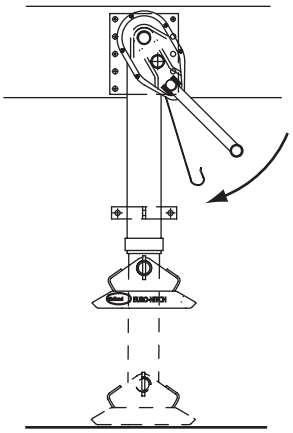
3) Set tractor brakes

4) Chock trailer wheels

5) Unhook crank handle and pull out to select high gear

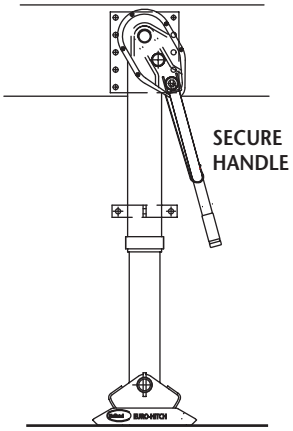
6) Fully engage handle on crankshaft and 'T' slot

7) Wind handle clockwise and extend landing gear until feet just touch the ground



USE HIGH GEAR UNTIL FEET TOUCH THE GROUND

8) Push handle in to select low gear and turn an additional 4 - 8 turns to take trailer weight on landing gear and place handle in stowage position



USE LOW GEAR

9) Release fifth wheel handle, disconnect airlines, etc. release tractor brakes and slowly drive away from trailer

COUPLING INSTRUCTIONS

Ensure that tractor unit air suspension is at correct ride height before starting coupling procedure

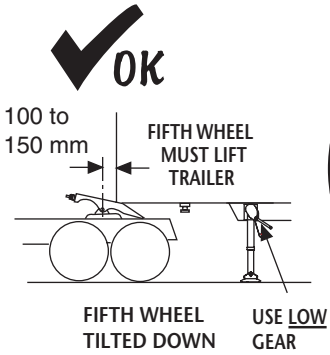
1) Back up close to trailer, centering king pin on the throat of the fifth wheel

2) Chock trailer wheels and connect brake lines, etc.

3) Set trailer brakes

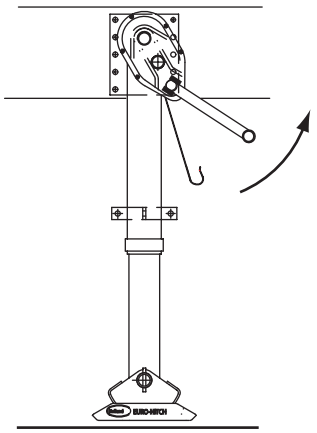
4) Unhook crank handle and make sure that the landing gear is in low gear.

5) Check that trailer height is correct for coupling, adjust trailer height using low gear if necessary



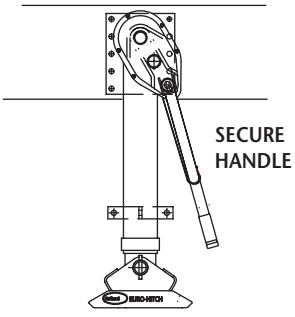
6) Couple tractor and trailer and carry out visual check to ensure that fifth wheel is locked correctly around kingpin

7) While still in low gear retract landing gear until pads just come off the ground



USE LOW GEAR UNTIL FEET JUST COME OFF THE GROUND

8) Switch to high gear fully retract landing gear and secure crank handle in stowage position



USE HIGH GEAR AND FULLY RETRACT LANDING GEAR TO ENSURE MAXIMUM GROUND CLEARANCE

Lubrication:

Lubrication should be performed at least every six months and more frequently in applications where the landing gear are exposed to excessive moisture, waterspray, dust, or if they are not used for extended periods. Lubricate with the trailer securely coupled to a tractor unit.

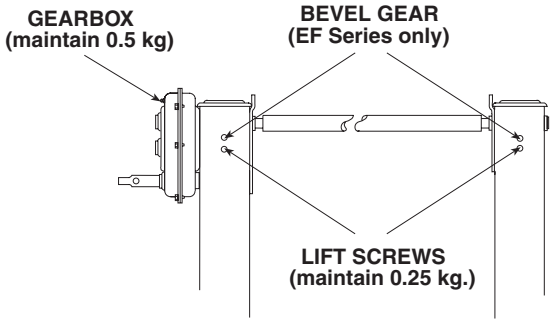
Use a lubricant compatible with the original type of grease:

Standard - Lithium based EP-2
Low temperature - Lithium based low temperature grease

1) Fully retract landing gear, then using high gear extend 2-3 turns

2) Lubricate through grease fittings shown

3) Extend and retract the landing gear to apply grease to the entire length of the screw



WARNING

Do not use landing gear which are bent, damage or mis-aligned. This may put drivers and other personnel in danger

Repair or Replace as necessary

Inspection:

A full inspection of the landing gear should be carried out at regular servicing intervals but in any event this should be done every three months

1) Tighten or replace mounting bolts as necessary

2) Inspect mounting plate for cracks or other signs of damage

3) Repair or replace any broken or damaged part of the landing gear assembly or mounting structure

4) Inspect the crank handle bolt and lock nut. Tighten or replace as necessary

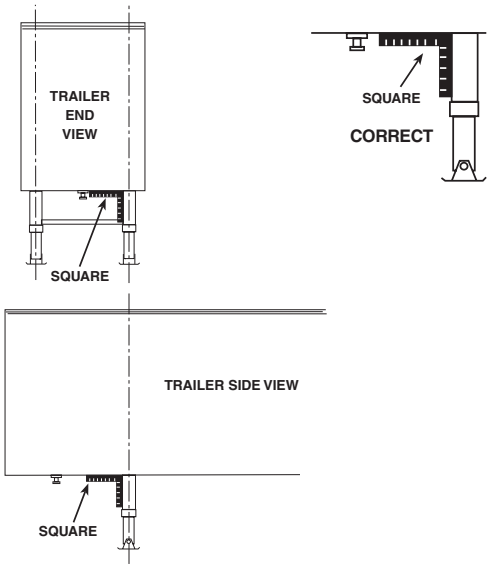
5) Check cross shaft for security and ensure that there is side to side play in the cross shaft

6) Check for proper crank shaft engagement in both high and low gear

7) Landing gear with excessive play should be rebuilt or replaced

Alignment:

During inspections use a square to check that both landing gear are square to the trailer and parallel with each other as shown. Bent or damaged legs are an indication of possible damage to the lift screw, lift nut or other internal components and should be replaced



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