

## **Rough Terrain Forklift**

Used Rough Terrain Forklift Richmond - Forklift trucks utilize two forks to transport pallets and load and unload cargo. Forklifts fall into two main categories, industrial forklifts and rough terrain forklifts. The first category of forklifts, industrial forklifts, are mostly used in warehouses and at loading docks on surfaces that are relatively smooth and level. Rough terrain forklifts are better suited for rocky environments and uneven surfaces. Commonly found at exterior construction sites, rough terrain forklifts have the tires, size and weight capacity to handle heavy loads. The main difference between industrial and rough terrain forklifts is that industrial forklifts are fitted with cushion tires, a common, over-the-road type tire. Rough terrain forklifts, on the other hand, are fitted with pneumatic tires, a type of tractor tire allowing for better traction and flotation properties. Internal combustion engines can power industrial forklifts; however, more often they rely on an electrical source such as a fuel cell or better. Rough terrain models typically rely on an internal combustion engine.

### Types of Class 7 Rough Terrain Forklift Trucks

The three types of Class 7 Rough Terrain Forklift Trucks include the rotating telehandler forklifts, telehandler forklifts and straight mast forklifts. Regardless of its type, all rough terrain forklift trucks are designed to handle, as their name suggests, natural rough terrain and disturbed rough terrain typical of construction and military sites. The rough terrain models travel and perform well in difficult locations. In the case of rough terrain forklift operations, extra consideration must be given while raising loads in these rough, variable conditions to prevent tip-over. For safety reasons, it is vital the forklift maintains stability before moving, lifting or lowering. Stability of ground and knowledge of proper lifting technique is essential for safe operation of rough terrain forklifts.

### Straight Mast Forklifts

The straight mast forklift design enables easy transport around rough terrain locations including construction and demolition sites. These forklift trucks provide increased maneuverability and accessibility because it is fitted with big, heavy-duty pneumatic cushion tires. Pneumatic tires allow the machine to successfully traverse difficult terrain. The majority of straight mast forklifts come in both two wheel and four wheel drive capabilities. Even though these machines are better utilized in exterior locations, many straight mast forklifts operate with propane or diesel, enabling them to be used indoors for short timeframes. Both standard and straight mast forklifts offer similar lifting capacities weighing from 5000 to 36,000 pounds, depending on the model.

### Telehandler or Telescopic Handler Forklifts

Telehandler or telescopic handler forklift trucks are equipped with a telescoping boom, giving them their name. This specially designed boom allows the forklift truck to pick up loads and place them at differing heights in front of the unit. Better reachability delivers greater flexibility to the forklift operator while placing loads. Featuring two wheels found at the front and two wheels at the rear, the standard telehandler is a long and low machine. A telescopic boom is mounted at the rear of the forklift on a pivot that is fixed several feet higher than the forklift frame. The left side of the machine houses the cab and the hydraulic fluid tank and the fuel tank are found opposite to the cab. The forklift engine and transmission are situated along the center of the machine. This common configuration allows for a balanced forklift which is necessary for the basic stability of the machine which lifting, transporting and lowering loads. Telehandler forklifts provide much greater lift heights when compared to a standard forklift. Otherwise known as high-reach telehandlers or compact telehandlers, these models perform. Compact telehandlers can extend their full load capacity from eight-teen feet and the high-reach models to fifty-six feet. The load capacities of these machines range from five thousand pounds to twelve thousand pounds. All-terrain forklifts rely on all-wheel steering to deliver better maneuverability and stability. The power-shift transmission and steering features allow the operator to move the forklift into a safe and successful working proximity. The latest telehandler models feature ergonomic upgrades for ultimate operator comfort. Spacious cabs and tilted steering are some of the items redesigned for the ultimate comfort and productive features. High in demand at job sites, these ergonomic options reduce operator fatigue and repetitive stress injuries. A single joystick is a common design for most telehandlers. The joystick is essential

for controlling the boom functions and the hydraulics responsible for forward operation. These machines can use non-marking tires to allow them to be suitable for maintenance in stadiums and on buildings or billboards and sign operations. Rotating Telehandler or Roto Telescopic Handler Forklifts The basic telehandler forklift has much in common with rotating telehandlers and roto telescopic handler forklifts. The rotating telehandler can lift excessive loads to extreme heights safely and efficiently. This unit's added turntable and rotation flexibility increases the types of jobs it can complete. Not having to reposition the forklift saves time and money. The rotating models have access to 360 degrees, creating a much greater workspace with immediate access. Because of this additional feature, rotating telehandlers often have a second joystick to allow operation of the rotation function apart from the lift function. Power-assist steering minimized slip differential on the rear axle for additional traction and four-wheel drive are some of the extra features offered on rotating telehandlers and standard telehandler models. With the added rotating ability of these forklifts, comes additional safety considerations. Stabilizers are a rough terrain forklift feature that rotating telehandler models rely on to increase safety while handling rotating loads that are swinging back and forth from each side of the machine. There are some rotating telehandlers that are designed to move heavy weights without stabilizers to reduce the time it takes to reposition the forklift for work in other areas of the jobsite. Rotator telehandlers are usually smaller than their fixed cab counterparts, the standard telehandler. Because of this, their load capacities are also smaller than the standard telehandler. Load capacities for rotating telehandlers usually range between 4,000 and 10,000 pounds, with lift heights ranging from 15 to 80 feet. Standard and rotator telehandlers can double as a crane when outfitted with specific winch accessories. These forklift attachments can save time and money by preventing a separate crane rental to be required. Advancements for Rough Terrain Forklifts Many attachments are currently available for rough terrain forklifts, such as booms, winches, rotating fork carriages and articulating booms. Forklift attachments are vital for diversifying the machine. They will continue to be developed for years to come. The majority of advancements will be delivered as safety features built to enhance the rough terrain models. Automatic load restriction units and certain safety features have started being implemented. These systems automatically weigh a load and then calculate the safe reach distance of that load, taking into consideration the angle and extension of the boom. An alarm will go off once the safe distance is reached. This alerts the operator that immediate adjustments need to be made to the boom angle, reach distance or load weight.