

## **Rough Terrain Forklift**

Used Rough Terrain Forklift Yukon - Forklifts rely on two forks to unload, load and transport items. Forklifts fall into two main categories, industrial forklifts and rough terrain forklifts. Ideal for working on surfaces that are level and smooth, industrial forklifts are mostly utilized for warehouse applications and loading dock situations. 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 tire type is one of the key differences between rough terrain and industrial forklift units. Common road tires, cushion tires are the main kind found on industrial forklifts. Rough terrain forklifts, on the other hand, are fitted with pneumatic tires, a type of tractor tire allowing for better traction and flotation properties. Industrial forklifts can be powered by internal combustion engines but are more frequently powered by an electrical source, such as battery or fuel cell whereas rough terrain forklifts are almost always powered by an internal combustion engine.

**Types of Class 7 Rough Terrain Forklift Trucks** There are three main types of Class 7 Rough Terrain Forklift Trucks: 1. Straight mast forklifts; 2. Telehandler forklifts; and 3. Rotating telehandler forklifts. Every rough terrain forklift truck is designed to operate on disturbed ground and difficult locations commonly found in military and construction atmospheres. A rough terrain forklift also offers increased maneuverability and performance. 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. As with all forklift operation, the machine must be in a position to remain stable before lifting, transporting or lowering a load. Stability of ground and knowledge of proper lifting technique is essential for safe operation of rough terrain forklifts.

**Straight Mast Forklifts** Designed to facilitate safe transport along difficult terrain such as demolition sites and construction locations, straight mast forklifts can complete the job safely and efficiently. Better accessibility and maneuverability are offered by these units thanks to their pneumatic cushion tires. Uneven ground and rough surfaces are no match for pneumatic tires. It is common for straight mast forklifts to come with 2-wheel or 4-wheel drive. 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. Straight mast forklifts have a similar lift capacity compared to standard forklift models; ranging from 5K to 36K lbs.

**Telehandler or Telescopic Handler Forklifts** The distinct telescoping boom on telehandlers and telescopic handler forklifts contribute to the unit's 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. Standard telehandler forklift units are long and low. They are designed with two wheels located at the front of the forklift with a different pair of wheels found close to the end of the unit. Mounted at the back of the forklift, the telescopic boom is on a pivot that is located many feet above 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. Within the frame itself, the transmission and engine are located along the center-line of the forklift. This popular design showcases a balanced forklift which is ideal for the machine's stability with lifting, moving and lowering items.

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. Load capacities are between 5K to 12K pounds. All-terrain forklifts often include all-wheel steering which allows for greater maneuverability. This, along with power shift transmission and other steering features, means that the operator can move the lift in as close proximity to the work area as possible. More recently, Telehandler forklift models have included additional features that incorporate the latest in ergonomics. Spacious cabs and tilted steering are some of the items redesigned for the ultimate comfort and productive features. These ergonomic upgrades have been shown to lessen repetitive stress injuries and lessen operator fatigue. A single

joystick is a common design for most telehandlers. The joystick is responsible for the hydraulic system and the boom operations. Non-marking tires are a feature that telehandler forklifts can benefit from by allowing these units to be utilized for maintenance on billboards and signs and on stadiums and buildings. Rotating Telehandler or Roto Telescopic Handler Forklifts Rotating telehandler or roto telescopic handler forklifts have many features in common with the standard telehandler forklift. Telehandlers are capable of rotating heavy-lift weights to tremendous heights. This unit's added turntable and rotation flexibility increases the types of jobs it can complete. The rotating function allows the forklift to swivel a full 360 degrees around, enabling access a much larger work area without having to reposition the forklift. Commonly, rotating telehandlers have another joystick to handle the rotation portion separately from the lift function. Useful additional features may be added to your standard telehandler or rotating telehandler including 4WD, increased traction via minimized slip differential on the rear axle, and power-assist steering. 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. Certain rotating telehandlers operate without stabilizers; minimizing the time it takes to reposition the machine and move to other workplace locations. 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. Rotating telehandlers offer load capacities ranging from 4000 to 10,000 lbs. and lift heights between fifteen to eighty feet. Standard and rotator telehandlers can double as a crane when outfitted with specific winch accessories. These units can enable job sites that require a crane to get the job done without having to rent and transport a separate machine. Advancements for Rough Terrain Forklifts Numerous attachments can be found for rough terrain forklifts including articulating booms, rotating fork carriages, booms, winches and similar items. Because of the importance of forklift attachments in their ability to adapt forklifts to many different types of specific jobs, it is expected that the creation and availability of new rough terrain forklift attachments will continue to increase. Most of the proposed advancements will consist of included safety features within the rough terrain forklifts. Some new safety features have already been developed such as automatic load restriction devices. This system weighs a load automatically and then calculates the safe reach distance of the load while considering the extension and boom angle. An alarm sounds once the safe distance is reached, warning the operator to make load weight, reach distance or boom angle adjustments.