

## **Rough Terrain Forklift**

Used Rough Terrain Forklift Utah - Forklifts rely on two forks to unload, load and transport items. Forklifts fall into two main categories, industrial forklifts and rough terrain forklifts. Industrial forklifts are mainly used in loading docks and warehouse applications with smooth and level surfaces. Ideal for uneven terrain and rocky locations, rough terrain forklifts travel well in difficult environments. Due to size, tires, and weight capacity, a rough terrain lift is primarily used outdoors, often at construction sites. 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. Pneumatic tires are utilized by rough terrain models. They are similar to tractor tires that offer more traction and flotation. 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 kinds of Class 7 Rough Terrain Forklift Trucks. The rotating telehandler forklift, straight mast forklifts and rotating forklifts are in this category. Every rough terrain forklift truck is designed to operate on disturbed ground and difficult locations commonly found in military and construction atmospheres. 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. Pneumatic cushion tires allow this forklift better maneuverability and accessibility around difficult terrain. Uneven ground and rough surfaces are no match for pneumatic tires. Most straight mast forklift units have 2WD or 4WD configurations. The majority of straight mast forklifts rely on propane or diesel fuel to equip them for interior short-term jobs. However, these machines are best suited for outside jobs. 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. The reachability of the forklift provides the operator with greater flexibility when placing a load. Featuring two wheels found at the front and two wheels at the rear, the standard telehandler is a long and low machine. The telescopic boom can be found at the back of the forklift, mounted on a pivot that is attached many feet higher than the frame of the unit. 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. Creating a balanced machine is essential for a well-designed forklift. Having this particular configuration generates a stable environment for lifting, lowering and transporting loads. Compared to standard forklifts, telehandlers deliver higher lift heights. Also called compact telehandlers or high-reach telehandlers, these forklift trucks can lift their full load capacities from 18 feet, for the compact telehandlers, to 56 feet, for the high-reach telehandlers, into the air. Load capacities are between 5K to 12K pounds. All-wheel steering is popular for all-terrain forklifts and provides increased 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. Operator comfort is enhanced via larger cabs and tilted steering. Increasingly, these types of ergonomic features are in demand at worksites as they have been shown to improve productivity by decreasing operator repetitive stress injuries and operator fatigue. Most telehandler forklifts rely on a single joystick. 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. 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. With rotating telehandlers, one joystick handles the lift capacity and a second joystick is responsible for the rotation factor. 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. Certain rotating telehandlers operate without stabilizers; minimizing the time it takes to reposition the machine and move to other workplace locations. Rotator telehandler units are typically smaller than standard telehandlers with their fixed-cab design. Understandably, rotator telehandler machines can handle smaller load capacities compared to their standard telehandler counterparts. Ranging between four thousand and ten thousand pounds, rotating telehandlers can reach lift heights from 15 to 80 feet. Both telehandlers and rotator telehandlers can be used as a crane when fitted with a winch attachment. 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. More rough terrain forklift attachments will be unleashed onto the market in future years thanks to their ability to make the forklift more multi-purpose than ever before. However, the bulk of advancements are expected to be in the form of safety features, built-in to manufactured rough terrain forklifts. Automatic load restriction units and certain safety features have started being implemented. By automatically weighing a load, these systems calculate the loads' safe reach distance while taking the boom angle and its' extension into account. 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.