

Saddle Hills County Operating Procedures
5.5 yd, 8.5 yd and 13.5 yd Scrapers

Specs:

	Leon or Steiger 5.5 Yard	Leon 850 8.5 Yard	Cat 70 13.5 yard
Minimum Truck Power Required to Tow Scraper	1 ton truck	1 ton truck	110 HP tractor, preferably 4-wheel drive
Tractor Horsepower Required to Pull Scraper	125 – 130 HP 90 HP with 4-wheel drive	150 HP minimum	180 HP 4-wheel drive minimum
Maximum Operating Speed	4 mph (no rocks) 3 mph (rocks present)		3 – 3.5 mph
Maximum Cut Depth	8 inches	8 inches	8 inches

Maintenance:

1. Before operating, ensure the scraper is greased at all grease fitting points.
2. After connecting the hydraulic hoses to the tractor, retract the lift cylinders and remove the transport lock pins.
3. Take care to keep dirt out of the oil when connecting or disconnecting any oil line, as dirt contributes to failure of hydraulic components.
4. Before operation, ensure all bolts, especially wheel bolts, are checked and tightened.

Sequence of Operation:

To fill the bucket:

1. Open the front gate (apron).
2. Lower the bucket to desired digging depth while moving forward.
3. When full, raise the bucket and close the front gate to prevent spillage.
4. Transport to required dumping area.

To empty the bucket:

1. Lower the bucket to give required spread depth.
2. Open the front gate.
3. When the front gate is fully open, then the rear push gate will operate and eject the load.
4. Spread depth is controlled by the height of the bucket and tractor speed.

Operating Tips:

1. Plan work to load the scraper downhill.
2. Eliminate excess turns.
3. Load scraper in direction of where load is to be dumped.
4. Do not spend unnecessary time trying for heaping loads – you may sacrifice this gain in cubic yards by a longer time cycle.
5. Do not cut too deep – deep cuts increase the voids and reduce pay load. Large chunks in the scraper make poor spreading material.
6. Maintain a downslope in the cut – don't cut horizontal layers off the top.
7. On side hill cuts keep the inside of the cut lower than the outside.
8. Maintain a smooth hauling road.
9. Don't raise the bowl any higher than necessary when hauling – increasing bowl height reduces scraper stability.
10. In constructing a fill, keep shoulders high and centre low – this provides drainage toward center and prevents the scraper from sliding over the side of the fill.

Scraper Safety Precautions:

1. Before transporting, ensure safety chains are properly fastened.
2. While transporting, ensure the scraper is raised high enough to clear roadway and obstructions.
3. While operating this equipment, do not hit mounds or ridges at high ground speeds.
4. Operate with caution while on slopes where there is a possibility that the tractor could drop in a hole or ditch or overturn.
5. Keep all persons clear of this machine while in operation.
6. Do not ride or permit others to ride on this implement.
7. Do not carry children or other persons on the tractor while operating.
8. Wear a hard hat while operating this machinery.
9. Never attempt to clear jams or service machine while it is running.
10. Set brakes before dismounting from tractor.
11. Keep tractor in level position when making implement adjustments to prevent hazardous movement due to implement weight.
12. When storing the scraper, lower the power lift and set the implement on the ground.
13. If you have any questions or concerns, please contact Saddle Hills County at (780) 864-3760.