

BALLAST CHEAT SHEET

Tractor Ballast, Sized Right

Stop the loader from tipping. Keep all four wheels planted.

THE 30 - 45% RULE

Total rear ballast = 30% to 45% of loader's rated lift capacity at 24" forward of pin.
If rear tires still lift when raising a full bucket, add more. The tractor stays planted at all times.

The four ballast types

| Type | Where | Typical weight | Trade-off |
|--------------------|---------------------|--------------------|--------------------------------|
| Suitcase weights | Front bracket | 42 - 70 lbs ea | Easy on/off. Limited capacity. |
| Wheel weights | Bolt to rear wheels | 75 - 500 lbs ea | Permanent. Big traction gain. |
| Loaded rear tires | Fluid fill (tube) | 200 - 600 lbs/tire | Lowest CoG. Permanent. |
| Ballast box (3-pt) | Rear 3-point hitch | 300 - 800 lbs | Removable. Blocks 3-pt. |

Loaded-tire fluids compared

| Fluid | Lbs / gal | Freeze pt | Notes |
|-----------------------|-----------|-----------|---|
| Beet juice (RimGuard) | 11.0 | -35 F | Non-corrosive. Non-toxic. Best overall. |
| Calcium chloride | 11.3 | -50 F | Heaviest. Corrosive to rims. |
| Windshield washer | 7.6 | -20 F | Cheap DIY. Lighter per gallon. |
| Plain water | 8.3 | 32 F | Avoid. Freezes, splits tires. |

Target rear ballast (quick reference)

| Loader rated lift (24" fwd, lbs) | Target rear ballast (lbs) |
|----------------------------------|---------------------------|
| 750 | 225 - 340 |
| 1,000 | 300 - 450 |
| 1,250 | 375 - 560 |
| 1,500 | 450 - 675 |
| 1,800 | 540 - 810 |
| 2,200 | 660 - 990 |