

Overseas Units Thumb Their Nose At Mud, with these Traction Devices for Trucks

Truck drivers who tried to out-battle the Italian mud often had to walk. Six-wheel drive didn't help. The wheels spun and made a smooth mold around the tires. Chains didn't help. They just whipped up a head on the mud. Only the Army's new traction devices thumb their nose at the mud. Clamp these steel tracks around the tires on 2½- to 4-ton trucks, and you go through like a commando.

The traction devices are a string of separate steel shoes (figure 1) cleated on the face. Each shoe clasps to the next giving you a complete track around the tire. The two bolts on each shoe are for securing the track—1) the connection bolt (figure 2) that helps hold the ends of the track together, and 2) the adjusting screw (figure 10) that takes up slack in the track by drawing up the ends of the chain into the guide.

Listen to us talking about traction devices. If your outfit's in the States now, chances are you won't see a set—not till you're overseas, anyway. Their priority's sky-high. None are even available here for

training, at present. Every set of traction devices made is rushed to the POE, booked for shipment with a using outfit. So don't try to requisition them, unless you're overseas right now. You can tell if your outfit will eventually get the tracks by browsing through your TO & E, under the heading **Motor Transport Equipment**. If you find this in the **Item** column: **Traction Devices, Set of 6**, you'll get them. That **Set of 6** is for one truck—3 pairs, packed one pair in a box. Twenty-two single track shoes in each box make up a pair. That's divvied out on the truck this way: one pair is for the right and left front duals, one pair for the two right rear duals, one pair for the two left duals.

You won't always need a full pair of 22 shoes. The tracks will fit around any of the following tires: 6.50x20, 7.00x20, 7.50x20, 8.25x20, and 9.00x20. You'll have shoes left over when putting the tracks on the smaller size tires. Here's a tip: the first time you try the tracks on, if the last shoes barely connect, add another shoe. You should have slack equal to at least a full shoe when you start

the tightening job (Figure 10). Then you can save any extra shoes in case you break or bend one.

You'll see from the photographs on the next pages that the tracks are simple to put on and take off. It's a two-man job—two men and 24 boys. The real work is getting the tracks put on the **first time** . . . connecting all the shoes, fitting them to your truck, tightening and adjusting the track, and getting the feel of them. If you wait till an emergency—when you need them bad—you'll have trouble, **unless** you've put them on before. Reaching up from a foxhole to tighten on several hundred pounds of iron is a job we don't like. We'd prefer to uncrate the whole set and try them on right away. Maybe we'll have a smooth stretch to use, and a compressor to bring the tires up to standard air pressures. Get used to the tracks. Try them on a few times. Then when you need them fast, and no fouling around, you'll know the tricks and be all set. Follow the pictures and learn some of the tricks we picked up doing the job a couple of times ourselves.

Figure 1. This job and the one at right you'll do only once—the first time. The shoes come packed unjoined. You'll start out by stringing them together in sections. First, fit the end the top glove's holding (hook end) down into the yoke end (bottom glove).

Figure 2. A hammer helped fit the ends together. Like everything else, they were tight the first time. The connection bolt he's turning doesn't need much muscle. More important: hook end should fit ALL THE WAY down on the bolt.

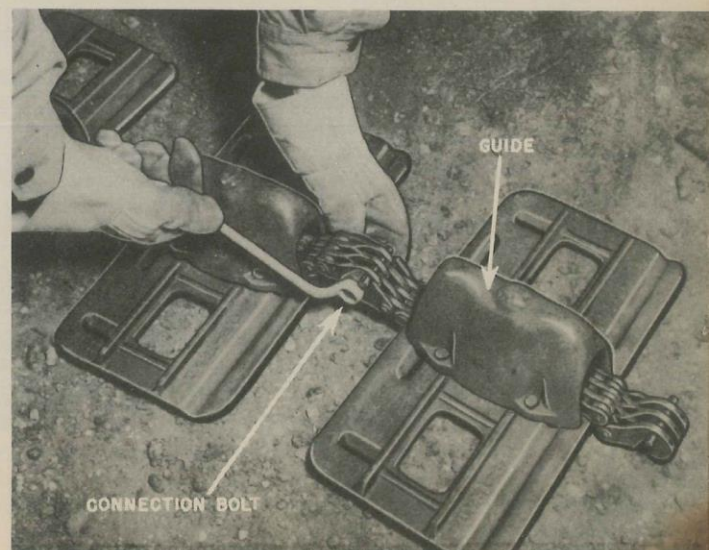
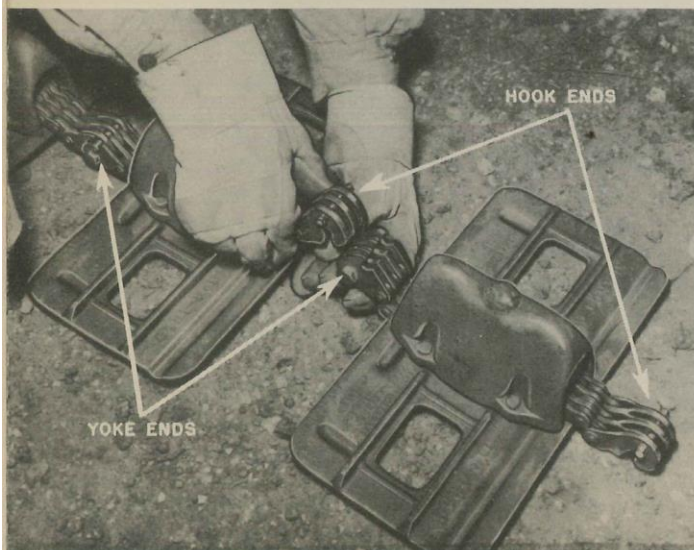




Figure 3. Two bruisers just dragged the track around back of the truck. Place the track so the edge of the shoe with the **SHORT CLEATS FACES** the tire; the edge with the **LONG** cleat faces **AWAY** from the tire.

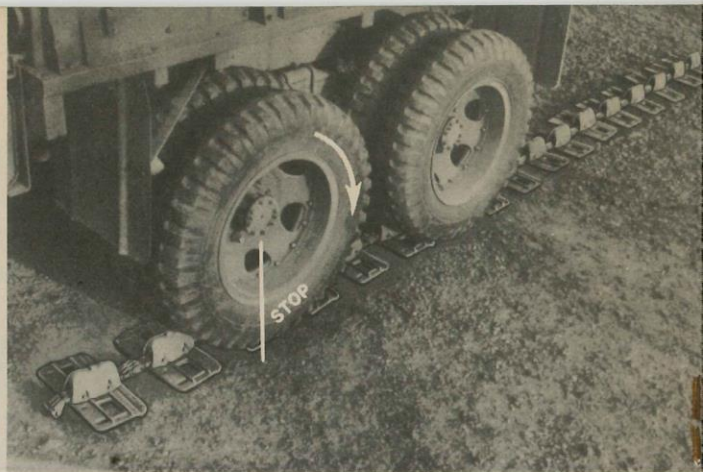


Figure 4. Back it slooowww . . . aiming the truck so the track guide snuggles up between the duals. Keep on backing till you get one or two shoes sticking out. Stop the truck moment while . . .



Figure 6. As the tire revolves it winds the track on. Simple—no struggling. Take out as much slack as you can by holding the track **LEVEL** while it's reaching across to the other tire.



Figure 7. Still inching the truck back. The **last shoe** over and will go around the other side fast now, like a chisel. He's watching his own shoes, too, staying well away from the track.



Figure 9. See what happens to the last two shoes . . . they get hitched. Be sure the hook end sits down around the connection bolt, and the yoke end up around the pin. Tighten the connection bolt.



Figure 10. Mark the shoe you start on, and go around the track giving each adjusting screw 10 or 15 turns. Keep it up till the slack's taken out of the track. Three adjusting wrenches come with each set.



Figure 5. Joe tilts up the first few track shoes and holds them firm against the tire. When he's all set—feet away from the track—he yells, "Gung ho!" and the driver backs up some more . . . slow.



Figure 8. This is what your truck looks like if you've lagged along through the first photos. The truck is stopped right here, so only TWO shoes are left sticking out from under the tire.



Figure 11. The sway back is gone. The track FEELS snug. It even LOOKS tight. A road test will really tell. Hold your horses till you get tracks on the other rear bogie and on the front duals.

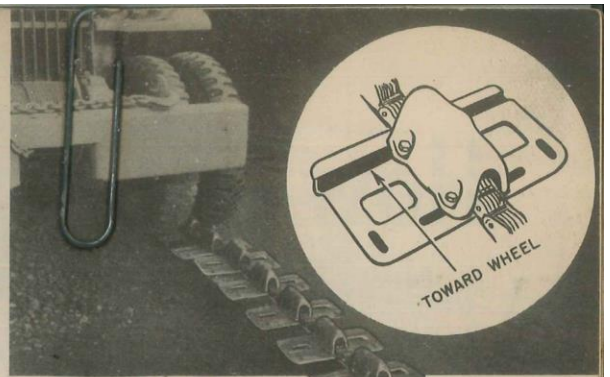


Figure 12 (upper photo) Nothing's special about slipping the track on the front tires. First put on the spare wheel. That's easy . . . just drive the front wheel up on a board. That's to get clearance enough to put on the spare wheel. Stretch the tracks out in front, and hop to it. (Lower photo) The same system used in Figure 5, but with the truck moving FORWARD, brought the track around to here. Now Joe's joining up the last shoe on the ground. Next he'll tighten each shoe (as in Figure 10), till the track's snug.

Now you've decked out all 6 wheels* with the tracks, try 'em out. First thing you'll probably notice is down in the low gears the truck shakes and jerks. Don't sweat. Just keep on shifting up. She should smooth out soon as you get over the 15-mile-an-hour hump.

If you can't get your truck up to regular speeds no matter how you twirl the gearshift, it's the tracks. They're too tight. Loosen the adjusting screws on several shoes, each track, and then try

*The experts tell us to always use the tracks around all the wheels. Not just around the front duals, or the rear bogies. Changes No. 2 to TM 31-200 says: "If vehicle has front axle drive and the tracks are installed on rear duals only, then the front drive must be completely disengaged while tracks are on the vehicle. Otherwise, front tires will become badly scuffed. . . . Tracks must not be installed on front wheels alone."

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TRACTION DEVICES

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again. When a track is too loose—you can tell it two ways. You'll hear the looseness as the shoes clack and clang against the ground. And you'll notice the wheels spin in the tracks. The right tension lets the tracks creep on the tires a little the way chains do. When you see the creep marks across the tire tread, you've adjusted them right.

New tracks need to have the tension checked after you've driven them a few miles. They whirl themselves a little slack. Just give them a second tightening. Later when you've broken the tracks in, you can forget this annoying little job.

Driving along with the tracks on is no different. For example, steering's the same—except at low speeds. Then the duals on the front plus the tracks make it a little more work. Throwing the tracks isn't liable to happen unless

you do this: take the truck diagonally across a ditch, letting each of the rear wheels dip down, one at a time. The bogie action stretches and twists the two belts . . . and zang, you've got trouble. Take all the ditches straight head-on—even the small ones, so both wheels hit at the same time. That'll keep your tracks on all the livelong day.

When you do want them off, here's how: pick out a shoe halfway up the tire, loosen the connection bolt, and loosen several adjusting screws on the adjoining shoes (turn screw to **left** to loosen). Wiggling the chain up and down should work the clasp loose. As you drive off the tracks, have an assistant on the lookout to see that you don't ride over any tangled up sections.

Next, you'll probably want to divide each track into links of 5 or 6 shoes so you won't bust a gut loading them on the truck. When you're loading cargo, remember

to take into account the weight of the pile of traction devices stowed in the body. Each shoe weighs 17 pounds. A complete set for a truck (3 pairs of 22 shoes each) weighs 1,122 pounds.

So far you've got the rosy side of the traction devices . . . the high flotation and super traction they give your transformed truck. The dark side is the extra maintenance the truck demands. Like track vehicles, your truck now has an extra half-ton of iron around the tires. This means extra loads and extra strains in the spring suspension system, in the axles, the bearings, the power train. That's nothing to cause gooseflesh. It means that neglecting items like greasing the wheel bearings, and keeping up the lube level in differential and transfer will cause a failure **quicker**, when you're using traction devices. It's a fair exchange . . . the traction devices give you extra traction, you've got to stay awake on the maintenance job.