WHITE by MTD Service Bulletin W-103

Models 247D523B190 & 247D585C190 LOG SPLITTERS

Date May 7, 1997

Subject CYLINDER SERVICE

Hydraulic cylinders on log splitters are designed to be reliable and easy to service If a cylinder should leak, follow the rebuilding instructions below

Model 247D585C190 Log Splitters are equipped with one of two manufacturers of cylinders ***Fisher or Best*** When working on this particular model, the manufacturer of the cylinder can be determined by referring to the chart at the end of this bulletin

OBSERVE ALL WARNING AND CAUTIONS WHEN SERVICING LOG SPLITTER

1 Remove cylinder and drain all fluid

2 With the body of cylinder held firmly, place a sleeve over rod and tap cap inward The rod cap must be pushed inward into cylinder body enough to clear retaining ring NOTE To remove rod cap without retaining ring, unscrew threaded cap using a spanner wrench or carefully use a punch and hammer The *Best* cylinder will utilize a threaded rod cap

3 Pry retaining ring out of the groove in cylinder body Discard and order new retaining ring

4 Grasp end of rod and pull piston and rod assembly from tube

5 Remove all seals being careful not to scratch any parts

6 Inspect all components and seals for uneven wear and/or contamination Small scratches in cylinder tube or on rod may be removed with fine emery cloth Replace cylinder if components show excessive roughness

NOTE Do not re-machine cylinder components because of the safety risks involved Any alterations are not only dangerous to the cylinder, but to any persons in the vicinity of the log splitter

7 If the piston needs to be removed from rod, secure rod in a vise using soft brass jaws and remove piston nut turning counterclockwise Remove piston and O-ring from cylinder rod

8 Wash all parts with clean solvent and wipe dry with a clean lint-free cloth KEEP PARTS CLEAN Thoroughly clean inside diameter of the tube assembly and all seal grooves

9 Remove new O-rings and seals from packaging and place on a clean dry surface Before installing O-rings and seals, lubricate with clean hydraulic fluid

10 If piston was removed from rod, install O-ring on the piston rod shank

11 Slide piston onto shank being careful not to damage O-ring or threads Insure piston shoulders are fully against rod

12 With rod held firmly in a soft brass jawed vise, tighten piston nut to 60 to 70 ft-lbs Using original punch marks on nut, center punch the inside diameter of the threaded portion of nut to keep nut in position

13 Install ring and backup washer in the piston seal groove

14 Lubricate inside diameter of the tube assembly and outside diameter of piston assembly with clean hydraulic fluid and slide piston into tube

15 Install rod wiper in the rod cap, as shown below, by tapping it in place with soft mallet Next, install rod seal in the center groove in rod cap Then install U-ring in rod cap groove In the outside groove of rod cap, install the O-ring and backup washer NOTE The U-ring and O-ring faces the pressure side of the cap

16 Prior to installing rod cap, check rod end for burrs or nicks that would damage the seals and polish smooth

17 Lubricate rod cap seals and rod Slide rod cap over rod With a soft mallet, tap rod cap into cylinder body enough to clear the rod cap locking ring groove

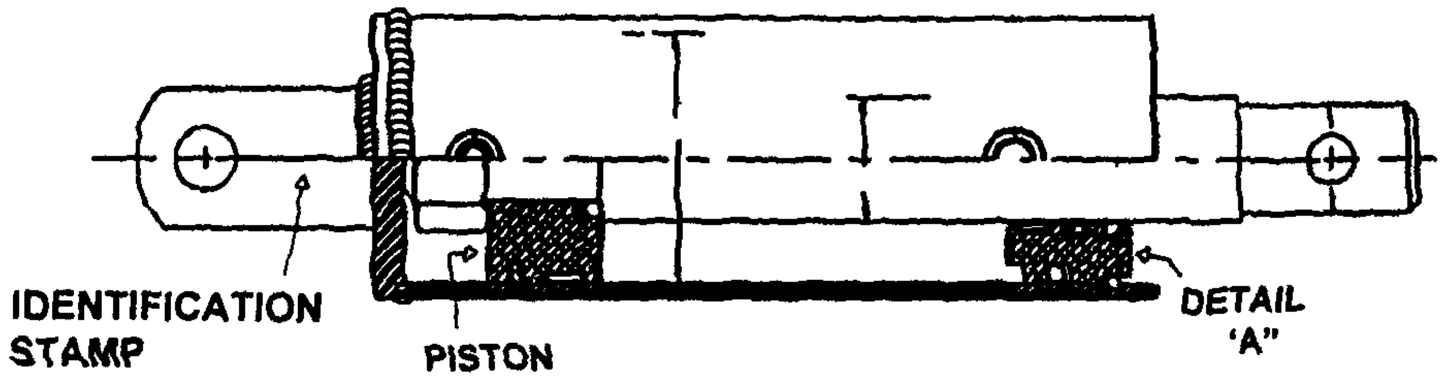
21 Carefully secure with <u>new</u> locking ring into the groove making sure ring is fully seated in the groove

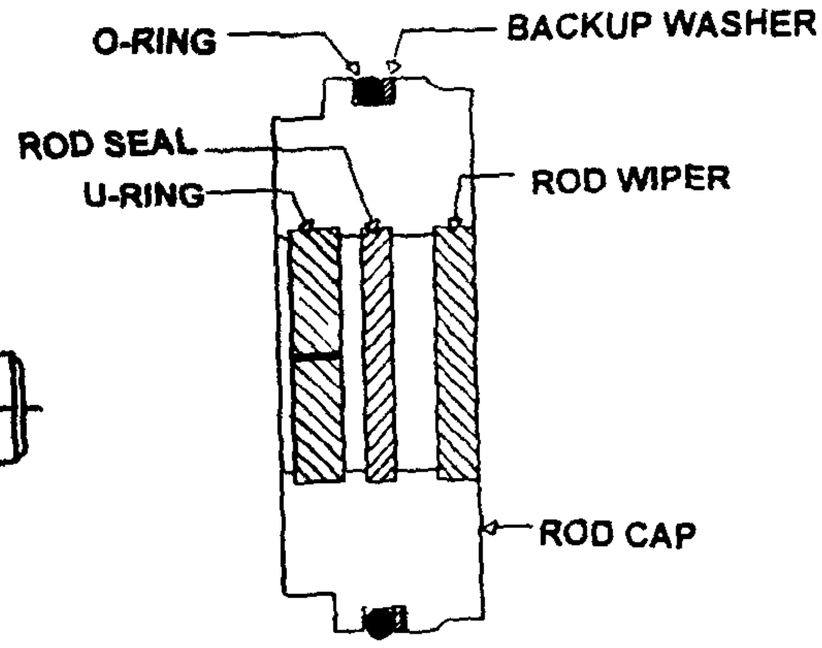
22 Install cylinder on unit

23 Upon reassembly, cycle unit to reseat and properly position rod cap in cylinder body This procedure should be done before returning the unit to service

Seal Kit Chart

247D523B190	[illegible]	247D685C190
use 753-0637 Seal Kit	*FISHER* CYLINDER (ID STAMP "F") use 753-0564 Seal Kit	*BEST* CYLINDER (ID STAMP "B") use 753-0691 Seal Kit





DETAIL A

Warranty Allowance Normal warranty terms will apply

Service Manager	Parts Manager	Service Tech	Service Tech	Service Tech

Circulate and Initial