NEW HOLLAND

REPAIR MANUAL

MZ14H
MZ16H
MZ18H



87045363 2/04

MidWestTech | New Holland MZ14H, MZ16H, MZ18H Mower Tractor Service Manual | Publication 87045363

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	MZ14H	MZ16H	MZ18H
Track Width	32.9 in. (83.6 cm) center to center of rear tires 31.6 in. (80.3 cm) center to center of castor tires	32.9 in. (83.6 cm) center to center of rear tires 31.6 in. (80.3 cm) center to center of castor tires	34.6 in. (87.9 cm) center to center of rear tires 31.6 in. (80.3 cm) center to center of castor tires
Deck Width	45.4 in. (115.3 cm) w/ deflector down	50.7 in. (128.8 cm) w/ deflector down	55 in. (139.7 cm) w/ deflector down
WEIGHT			
Net Weight.....	505 lbs. (229 kg.) (estimated)	516 lbs. (234 kg.) (estimated)	535 lbs. (243 kg.) (estimated)
DECK	Right side discharge, 38 in cut, two blade mid-mounted rotary. Drawn 13 gauge steel deck with welded mounting brackets. Frame supported.	Right side discharge, 42 in cut, two blade mid-mounted rotary. Drawn 13 gauge steel deck with welded mounting brackets. Frame supported.	Right side discharge, 44 in cut, two blade mid-mounted rotary. Drawn 13 gauge steel deck with welded mounting brackets. Frame supported.
DEFLECTOR	Pivoting deflector (spring loaded) (H.D.P.E.).	Pivoting deflector (spring loaded) (H.D.P.E.).	12 gauge formed, held down by torsion springs at pivot bracket.
ANTI-SCALP ROLLERS	Optional kit	Optional kit	Two Front - left and right
HEIGHT OF CUT	Adjusts from 1.5" to 4.5" (38 mm to 114 mm) (7 positions)	Adjusts from 1.5" to 4.5" (38 mm to 114 mm) (7 positions)	Adjusts from 1.5" to 4.5" (38 mm to 114 mm) (7 positions)
UNCUT CIRCLE	0" uncut circle	0" uncut circle	0" uncut circle
ENGINE TO DECK DRIVE	HA-section Kevlar cord "V" belt from engine clutch sheave to deck spindle sheaves. Spring loaded idler for belt tension and take-up	HA-section Kevlar cord "V" belt from engine clutch sheave to deck spindle sheaves. Spring loaded idler for belt tension and take-up	HA-section Kevlar cord "V" belt from engine clutch sheave to deck spindle sheaves. Spring loaded idler for belt tension and take-up
SPINDLE ASSEMBLIES	Two 17-mm diameter spindles turning in permanently lubed ball bearings. Die cast aluminum spindle housings.	Two 17-mm diameter spindles turning in permanently lubed ball bearings. Die cast aluminum spindle housings.	Two 17-mm diameter spindles turning in permanently lubed ball bearings. Die cast aluminum spindle housings.

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DESCRIPTION AND OPERATION

This section includes the transaxle general description, hydraulic schematics, technical specifications, servicing and troubleshooting procedures.

The transaxle normally will not require servicing during the life of the vehicle in which it is installed. Should other servicing be required, the exterior of the transaxle will need to be thoroughly cleaned before beginning most procedures. Do not wash the transaxle while it is hot. Do not use a pressure washer to clean the unit.

GENERAL DESCRIPTION

The transaxle is a self contained unit designed for the transfer and control of power. It provides an infinitely variable speed range between zero and maximum in both forward and reverse modes of operation.

This transaxle uses a variable displacement pump with a maximum displacement of 10cc per revolution, and motor with a fixed displacement of 10cc per revolution. The variable displacement pump features a trunnion mounted swashplate with a direct-proportional displacement control. Reversing the direction of the swashplate reverses the flow of oil from the pump and thus reverses the direction of the motor output rotation. The pump and motor are of the axial piston design and utilize spherical nosed pistons which are held against a thrust race by internal compression springs.

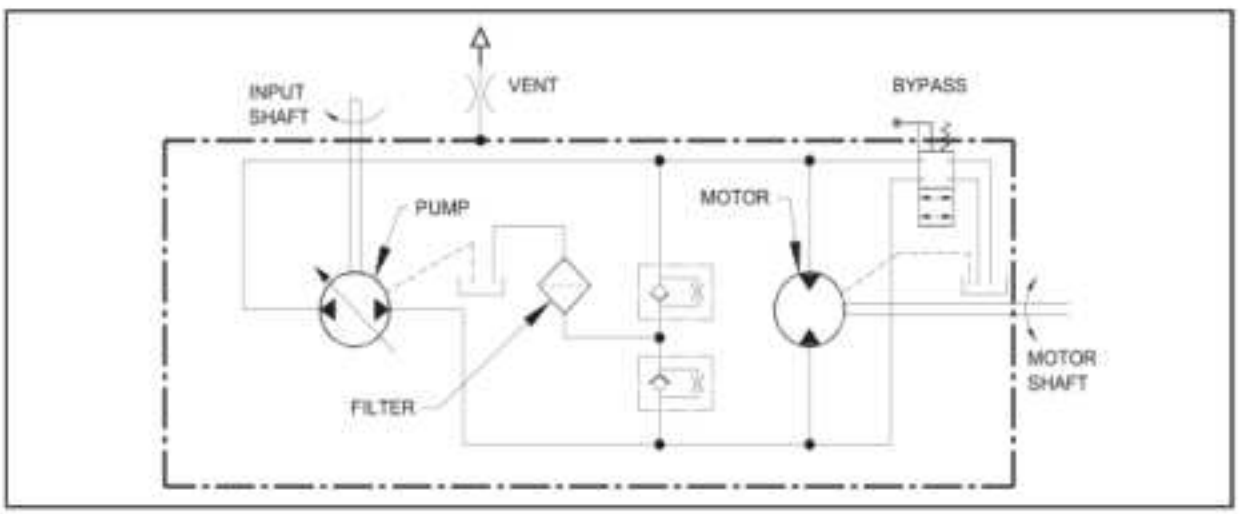
The transaxle has a self contained fluid supply and an internal filter. The fluid is forced through the filter by a positive "head" on the fluid in the housing/ expansion tank with an assist by the negative pressure created in the pump pistons as they operate.

The check valves in the center section are used to control the make-up flow of the fluid to the low pressure side of the loop.

A cam style, block lifting bypass is utilized in the transaxle to permit moving the vehicle for a short distance at a maximum of 2 m.p.h. (3.2 km/h) without starting the engine.

WARNING

Actuating the bypass will result in the loss of hydrostatic braking capacity. The machine must be stationary on a level surface and in neutral when actuating the bypass.



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SCHEMATICS

The remaining pages contains the main wiring diagram followed by circuit diagrams for the MZ14H, MZ16H, and the MZ18H Series tractors. All circuit diagrams should reference the legend shown below.

LEGEND	
Black	Blk
Blue	Bu
Brown	Bn
Green	Gn
Grey	Gy
Orange	Or
Pink	Pk
Red	Re
Tan	T
Violet	Vio
White	W
Yellow	Y

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