TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	CORRECTION
1. Excessive clutch pedal free-play or loss of adjustment reserve.	1. Worn clutch disc. 2. Clutch linkage out of adjustment.	1. Replace disc. 2. Adjust linkage.
1. Clutch noisy when free.	1. Defective release bearing. 2. Defective clutch pilot bearing.	1. Replace bearing. 2. Replace bearing.
1. Clutch slipping.	1. Incorrect pedal free-play. 2. Worn disc facings. 3. Clutch pressure springs weak from overheating.	1. Adjust free travel. 2. Replace disc. 3. Overhaul or install new clutch assembly.
1. Clutch fails to engage smoothly.	1. Defective clutch. 2. Defective pressure plate assembly. 3. Worn clutch pilot bearing. 4. Defective flywheel.	1. Replace disc. 2. Replace pressure plate assembly. 3. Replace bearing. 4. Replace flywheel. See "Flywheel Removal/Assembly" procedures.
1. Difficulty in engaging gears.	1. Pedal free travel out of adjustment. 2. Damaged or out of adjustment release levers.	1. Adjust pedal free travel. 2. Repair, replace, or adjust release levers.
1. Pedal will not return completely to release position.	1. Broken clutch pedal return spring.	1. Replace spring.

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1. Clutch fails to engage smoothly.	1. Defective clutch. 2. Defective pressure plate assembly. 3. Worn clutch pilot bearing. 4. Defective flywheel.	1. Replace disc. 2. Replace pressure plate assembly. 3. Replace bearing. 4. Replace flywheel. See "Flywheel Removal/Assembly" procedures.
1. Difficulty in engaging gears.	1. Pedal free travel out of adjustment. 2. Damaged or out of adjustment release levers.	1. Adjust pedal free travel. 2. Repair, replace, or adjust release levers.
1. Pedal will not return completely to release position.	1. Broken clutch pedal return spring.	1. Replace spring.

SPECIFICATIONS

	MODEL - HST 9 × 3 (2WD)	MODEL - 9 × 3 (4WD)
ITEM	**SINGLE CLUTCH**	**DOUBLE CLUTCH**
No. of Clutch Plates	**1 (2 Facings)**	**2 (4 Facings)**
Facing:		
Outside Diameter	225 mm (8.86″)	215 mm (8.46″) PTO 225 mm (8.86″) Transmission
Inside Diameter	150 mm (5.90″)	150 mm (5.90″)
Thickness	3.2 mm (0.1259″)	3.2 mm (0.1259″)
Height of Release Lever	35.5 +/- 1.0 mm (1.40″ +/- 0.04″)	96.5 +/- 0.7 mm (3.80″ +/- 0.276″)
Clearance Between Driveshaft and Clutch Disc	0.50 - 1.00 mm (0.0078 - 0.0137″)	0.050 - 0.1 mm (0.0028 - 0.11″)
Allowable Clearance Limit	0.6 mm (0.0236″)	0.25 mm (0.0098″)
Clearance Between Driveshaft and Clutch Disc in the Rotational Direction	0.2 - 0.35 mm (0.0019 - 0.0039″)	0.050-0.1 mm (0.0019 - 0.0039″)
Allowable Clearance Limit	0.8 mm (0.0098″)	0.25 mm (0.0098″)
Clearance Between Retainer and Hub	0.025 - 0.1 mm (0.009 - 0.0039″)	0.025 - 0.1 mm (0.009 - 0.0039″)
Allowable Clearance Limit	0.8 mm (0.0314″)	0.8 mm (0.0314″)
Length of Release Hub Return Spring	1.28″ (32.5 mm)	1.28″ (32.5 mm)
Thickness of Clutch Disc	8.0 mm (0.315″)	8.1 mm (0.32″) Main and PTO
Allowable Limit	7.2 mm (0.28″)	7.2 mm (0.28″)
Depth of Clutch Rivets	1.2 mm (0.0472″)	1.2 mm (0.0472″)
Allowable Limits	0.3 mm (0.012″)	0.3 mm (0.012″)
Height of Release Lever from Flywheel Surface	35.5 mm (1.40″)	96.5 mm (3.80″*)
Allowable Limit	34.5 - 36.5 mm (1.36 - 1.44″)	35.8 - 37.2 mm (3.77 - 3.83″)
Deflection of Clutch Disc	Max. 1.0 mm (0.039″)	Max. 1.0 mm (0.039″)
Standard Clutch Pedal Free-Play	19 - 30 mm (0.79 - 1.18″)	19 - 30 mm (0.79 - 1.18″)
Flywheel Surfacing Maximum Limit	1.27 mm (0.050″)	1.27 mm (0.050″)

SPECIAL TOOLS

Gauge - Lever height adjustment double clutch ..... FNH 01267

Alignment arbor - Single clutch ..... FNH 01260

Alignment arbor - Double clutch ..... FNH 00077

BOLT TORQUES

Flywheel Mounting Bolts ..... 59 - 96 N·m (43.4 - 51 ft. lbs.)

Clutch Mounting Bolts ..... 22.6 - 28.4 N·m (16.6 - 21 ft. lbs.)