

Clutches

CLUTCH TROUBLE SHOOTING

CONDITION	POSSIBLE CAUSE	CORRECTION
<p>► Chattering or Grabbing</p>	<ol style="list-style-type: none"> 1) Incorrect Lever Adjustment 2) Oil or Grease on Facings 3) Loose "U" Joint Flange 4) Worn Input Shaft Spline 5) Binding Pressure Plate 6) Binding Release Lever 7) Binding Disc Hub 8) Glazed Facings 9) Unequal Pressure Plate Contact 10) Bent Clutch Disc 11) Uneven Spring Pressure 12) Incorrect Transmission Alignment 13) Loose Facings 14) Warped Pressure Plate 15) Worn Pressure Plate, Disc or Flywheel 16) Clutch Disc Hub Sticking on Shaft 17) Worn or Binding Release Levers 18) Broken or Weak Pressure Springs 19) Sticking Clutch Pedal 20) Incorrect Disc Facing 21) Engine Loose in Chassis 	<ol style="list-style-type: none"> 1) Adjust Clutch 2) Check for Oil Leaks 3) Check "U" Joint Flange and Tighten 4) Replace Shaft 5) Check for Binding, Replace as Necessary 6) Free Binding Levers or Replace 7) Replace Disc and Adjust Clutch 8) Replace Disc After Checking Pressure Plate and Flywheel for Scoring. Replace as Necessary 9) Check Release Lever Clearance, Disc Thickness, and Pressure Plate for Parallelism with Flywheel 10) Replace Clutch Disc 11) Adjust Spring Tension 12) Check Clutch Housing Alignment 13) Replace Clutch Disc 14) Replace Pressure Plate if Warped More Than .015" 15) Replace When There are Signs of Excessive Wear, Heat Checking or Scoring 16) Check Shaft for Excessive Wear or Burrs, Check Shaft for Distortion and Replace as Necessary 17) Replace Levers and Release Bearing 18) Replace Springs 19) Check for Worn or Misaligned Components 20) Replace Clutch Disc 21) Check Motor Mounts and Replace or Tighten
<p>► Spinning</p>	<ol style="list-style-type: none"> 1) Dry or Worn Bushings 2) Misaligned Clutch Housing 3) Bent or Distorted Clutch Disc 4) Warped Pressure Plate 5) Excessive Pedal Free Play 	<ol style="list-style-type: none"> 1) Replace Bushings 2) Check Clutch Housing Alignment 3) Replace Clutch Disc 4) Replace Pressure Plate 5) Readjust Pedal Free Play

CLUTCH TROUBLE SHOOTING (Cont.)

CONDITION	POSSIBLE CAUSE	CORRECTION
<p>► Dragging</p>	<ol style="list-style-type: none"> 1) Oil or Grease on Facings 2) Incorrect Lever Adjustment 3) Incorrect Pedal Adjustment 4) Dust or Dirt on Clutch 5) Worn or Broken Facings 6) Bent Clutch Disc 7) Clutch Disc Hub Binding on Shaft 8) Binding Pilot Bushing 9) Sticking Release Bearing Sleeve 10) Warped Pressure Plate 	<ol style="list-style-type: none"> 1) Replace Clutch Disc, Check for Oil Leaks 2) Check for Damage and Readjust Lever 3) Adjust Pedal 4) Disassemble Clutch and Clean Thoroughly 5) Replace Clutch Disc 6) Replace Clutch Disc, Check for Cause 7) Check Shaft for Burrs or Gummed Splines 8) Replace Pilot Bushing 9) Free Sleeve, Check for Scoring or Rough Spots 10) Replace Pressure Plate if Worn More Than .015"
<p>► Rattling</p>	<ol style="list-style-type: none"> 1) Weak or Broken Release Lever Spring 2) Damaged Pressure Plate 3) Broken Clutch Return Spring 4) Worn Splines in Clutch Disc Hub or Transmission Input Shaft 5) Worn Clutch Release Bearings 6) Dry or Worn Pilot Bushing 7) Unequal Release Lever Contact 8) Incorrect Pedal Free Play 9) Warped Clutch Disc 	<ol style="list-style-type: none"> 1) Replace Spring 2) Replace Pressure Plate and Adjust Clutch 3) Replace Return Spring 4) Replace Clutch Disc or Transmission Input Shaft 5) Replace Release Bearing, Check Tips of Release Levers for Wear, Replace as Necessary 6) Lubricate or Replace Pilot Bushing 7) Readjust Release Levers 8) Adjust Pedal Free Play 9) Replace Clutch Disc, Check Pressure Plate for Wear and Replace as Necessary
<p>► Slipping</p>	<ol style="list-style-type: none"> 1) Pressure Springs Worn or Broken 2) Worn Facing 3) Incorrect Clutch Alignment 4) Oil or Grease on Facings 5) Warped Clutch Disc 6) Warped or Scored Pressure Plate 7) Binding Release Levers 8) Binding Clutch Pedal 	<ol style="list-style-type: none"> 1) Replace Springs 2) Replace Clutch Disc 3) Adjust Clutch 4) Replace Clutch Disc, Fix Oil Leaks 5) Replace Clutch Disc 6) Replace Pressure Plate if Scored, Heat Checked, or Warped More Than .015", Test Spring Tension and Replace Clutch Disc 7) Free Release Lever 8) Check for Worn or Misaligned Parts

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CLUTCH TROUBLE SHOOTING (Cont.)

CONDITION	POSSIBLE CAUSE	CORRECTION
► Squeaking	<ol style="list-style-type: none"> 1) No Lubrication in Release Bearing 2) Worn Release Bearing 3) Dry or Worn Pilot Bushing 4) Pilot Bearing Turning in Crankshaft 5) Worn Input Shaft Bearing 6) Incorrect Transmission Alignment 7) No Lubrication Between Clutch Fork and Pivot 8) No Lubrication in Torque Shaft 	<ol style="list-style-type: none"> 1) Lubricate 2) Replace Release Bearing 3) Lubricate or Replace Pilot Bushing 4) Replace Pilot Bearing 5) Replace Input Shaft Bearing 6) Check Clutch Housing Alignment 7) Lubricate 8) Lubricate
► Heavy, Stiff Pedal	<ol style="list-style-type: none"> 1) Dry or Binding Linkage Components 2) Sticking Release Bearing Sleeve 3) Dry or Binding Pedal Hub 4) Pedal Interference With Floorboard or Mat 5) Rough, Dry or Binding Pivot Ball, or Fork Pivots 	<ol style="list-style-type: none"> 1) Lubricate Linkage Components 2) Check Release Bearing Sleeve for Wear, Burrs or Roughness on Mating Surface 3) Replace Bushing or Bearings in Pedal Hub and Lubricate 4) Check for Pedal Interference 5) Lubricate All Moving Points
► Grinding	<ol style="list-style-type: none"> 1) Dry Release Bearing 2) Worn or Dry Pilot Bearing 3) Worn Input Shaft Bearing 	<ol style="list-style-type: none"> 1) Replace Release Bearing 2) Lubricate or Replace Pilot Bearing 3) Replace Input Shaft Bearing
► Whirring	<ol style="list-style-type: none"> 1) Incorrect Pedal Free Play 2) Incorrect Transmission Alignment 	<ol style="list-style-type: none"> 1) Adjust Pedal Free Play 2) Check Clutch Housing Alignment